Land at Lady Lane, Croft
Technical Appendix

Peel Holdings (Management) Ltd

September 2017

Turley

LANDSCAPE ARCHITECTURE
ENVIRONMENTAL PLANNING
MASTERPLANNING
URBAN DESIGN

RANDALL THORP
CHARTERED LANDSCAPE ARCHITECTS

Land off Lady Lane, Croft

Landscape Sensitivity Assessment of Croft and Landscape Appraisal of Proposed Development on Land off Lady Lane, Croft

September 2017

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1. Introduction

1.1. Randall Thorp LLP has been commissioned by Peel Holdings to produce an assessment of the landscape sensitivity of Croft; a landscape appraisal for a site, Land off Lady Lane, Croft; and provide advice in relation to the development potential of the site.

1.2. This report has been prepared in response to the Warrington Borough Council Local Plan Settlement Profiles – Outlying Settlements document, published in July 2017, which states that a sustainable settlement extension of Croft *"could have an impact on the character of the settlement and potentially the surrounding landscape."*

1.3. The settlement of Croft is located within the north eastern part of the Borough, close to the junction of the M6 and M62 to the south west. The site is located immediately adjacent to the settlement of Croft, enclosed by residential development to the south and west, and by Lady Lane to the east. The strategic location of Croft within the Warrington Borough and the site location are shown on **Figure 1, Appendix A**.

2. Methodology

Guidance

2.1. This Landscape Sensitivity Assessment has been prepared in accordance with "Guidelines for Landscape and Visual Impact Assessment" (GLVIA3), Third Edition. Chapter 5 of GLVIA sets out the methodology for the assessment of landscape effects.

Study Area

2.2. For the purposes of the report a landscape Study Area, which encompasses the wider landscape context of Croft has been adopted. **Figure 2, Appendix A** illustrates the Study Area.

Approach

2.3. The principle objectives of the assessment are:

Firstly

- To describe and evaluate the existing landscape character of the Study Area;
- To assess the value and sensitivity of the Study Area;

Secondly

- To describe and evaluate the existing landscape character of the Land off Lady Lane, Croft site;
- To assess the value and sensitivity of the site; and
- To advise on the development potential of the site taking into account the landscape assessment set out above.

Baseline Studies

2.4. The baseline study identifies the landscape character and components of the Croft settlement and of the site within the Study Area shown in **Figure 2, Appendix A**.

2.5. Analysis has been carried out to gain a first-hand understanding of the landscape surrounding the settlement of Croft; and to establish the contribution this landscape currently makes in terms of landscape quality, character, value, green infrastructure functions and accessibility.

2.6. The following documents have been reviewed as part of the desk study:

- Warrington Landscape Character Assessment – Prepared 2007
- Warrington Local Plan Core Strategy – Adopted July 2014
- Warrington Borough Council Local Plan – Settlement Profiles July 2017
- Wigan Landscape Character Assessment – Prepared 2009
- St Helens Landscape Character Assessment – Prepared 2006

Methodology for appraising the sensitivity of the landscape

2.7. The guidance in GLVIA3 underpins the complete process of landscape and visual impact assessment and states that the value of the landscape should be considered as part of the baseline studies. **'Landscape value'** and '**susceptibility to change'** are taken into account when establishing the overall **sensitivity** of a landscape prior to making an assessment of the landscape impacts. In broad terms landscape 'sensitivity' is defined as a considered combination of the value of the landscape with its susceptibility to change.

2.8. GLVIA3 suggests two approaches to determining landscape value, the first applies to areas where there are existing landscape characterisation studies and where there are landscape designations in place, and the second which applies when there is no existing evidence base. It goes on, however to suggest (para 5.29) that in practice a combination of these approaches is most effective.

2.9. In the case of this settlement there is a published assessment, Warrington: A Landscape Character Assessment (LCA) (Prepared in 2007), which sets out the key landscape characters in the Warrington Borough. This LCA does not attach any values to any particular landscape type or landscape area. It is an objective assessment of the 2007 landscapes within Warrington Borough.

2.10. In addition Box 5.1 on page 84 of GLVIA lists a range of factors that are generally agreed to help in valuing landscapes.

Box 5.1

Range of factors that can help in the identification of valued landscapes

- **Landscape quality (condition)**: A measure of the physical state of the landscape. It may include the extent to which typical character is represented in individual areas, the intactness of the landscape and the condition of individual elements.
- **Scenic quality**: The term used to describe landscapes that appeal primarily to the senses (primarily but not wholly the visual senses).
- **Rarity:** The presence of rare elements or features in the landscape or the presence of a rare Landscape Character Type.
- **Representativeness**: Whether the landscape contains a particular character and/or features or elements which are considered particularly important examples.
- **Conservation interests**: The presence of features of wildlife, earth science or archaeological or historical and cultural interest can add to the value of the landscape as well as having value in their own right.
- **Recreation value**: Evidence that the landscape is valued for recreational activity where experience of the landscape is important.
- **Perceptual aspects**: A landscape may be valued for its perceptual qualities, notably wildness and/or tranquillity.
- **Associations**: Some landscapes are associated with particular people, such as artists or writers, or events in history that contribute to perceptions of the natural beauty of the area.

Based on Swanwick and Land Use Consultants (2002)

2.11. The value of the landscape is assessed in this report using a combination of the considerations set out in Box 5.1 of GLVIA3 and the key characteristics identified in the Warrington Landscape Character Assessment.

2.12. 'Susceptibility to change' is defined at paragraph 5.40 of GLVIA3 which states:

> *"This means the ability of the landscape receptor (whether it be the overall character or quality/condition of a particular landscape type or area, or an individual element and/or feature, or a particular aesthetic and perceptual aspect) to accommodate the proposed development without undue consequences for the maintenance of the baseline situation and/or the achievement of planning policies and strategies".*

2.13. The level of susceptibility to change of any landscape will depend on both its existing characteristics and on the characteristics of the development being proposed. A landscape may have a high susceptibility to change if the elements are proposed which are completely new/alien in the context of the landscape, or where new elements would be highly visible in an open view. Likewise a landscape would have a low susceptibility to change if the site is not widely visible and the new elements proposed are already found in the existing environment.

2.14. In summary, when undertaking a landscape assessment, landscape sensitivity is the starting point, and this is determined by considering value and susceptibility together. The assessment of the effects on the landscape as the result of a particular scheme is then conducted by considering the magnitude of change to the baseline alongside the sensitivity of the landscape to reach a considered conclusion.

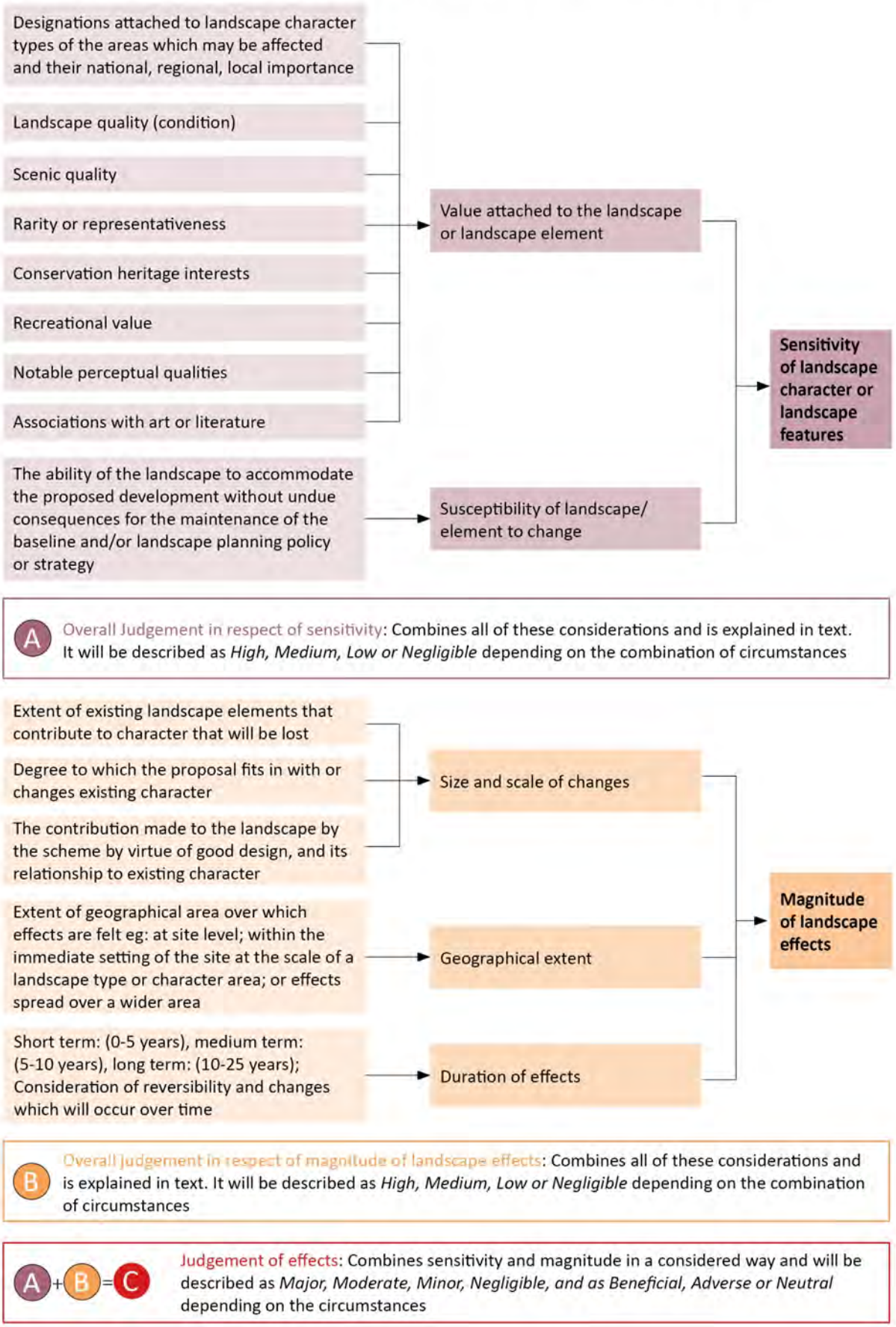
Methodology for the Site Specific Landscape Appraisal

2.15. The second part of the assessment uses the findings of the sensitivity appraisal of the Study Area to determine the sensitivity of the site, as well as the magnitude of change to the baseline as a result of a proposed residential development within the site.

2.16. In line with GLVIA3, the site assessment is based on the consideration of the sensitivity of landscape character, landscape features, and views/viewers to the type of development being proposed, (i.e. – residential development) and on the magnitude of change likely to occur. The sensitivity and magnitude are then considered together, and conclusions drawn on the likely effects on the landscape character.

2.17. The considerations contributing to establishing the significance of landscape effects are indicated in **Diagram 1**.

Diagram 1: Considerations contributing to establishing the significance of landscape effects.



3. Planning Policy and Baseline Landscape Character Assessment

Planning Policy

3.1. The Warrington Local Plan Core Strategy was adopted by Warrington Borough Council (WBC) on 21st July 2014 and replaced the previously Adopted Unitary Development Plan as the reference document for planning applications.

3.2. The majority of the landscape that surrounds the settlement of Croft and the Land off Lady Lane site is indicated as Green Belt, which is set out within Policy CS 5 – Overall Spatial Strategy – Green Belt.

3.3. This policy is not a landscape policy but a strategic planning policy and Green Belt designation cannot be considered to add landscape value in GLVIA terms.

3.4. Warrington Borough Council recognises the need for Green Belt release in order to accommodate the Borough's housing and economic requirements.

3.5. Within the Study Area surrounding the Croft settlement are four Local Wildlife Sites, designated and protected by Policy QE5 – Biodiversity and Geodiversity of the Local Plan. Croft Grasslands is located on the eastern edge of Croft, adjacent to the Land off Lady Lane site and is currently colonised by young woodland. Houghton Green Pool is located to the south west of Croft, adjacent to the western edge of the M6. Eleven Acre Common is located to the north east of Croft in open land between a disused railway line and the settlement edge of Culcheth, and Silver Lane Ponds are located to the east of Croft.

Landscape Character Assessment

3.6. **Figure 2, Appendix A** shows the extent of the Landscape Character Areas that surround the settlement of Croft within the Study Area, within which the sensitivity assessment is based on.

3.7. Warrington: A Landscape Character Assessment sets out and describes, on an area by area basis, the Borough's distinctive landscape, its cultural history, landscape sensitivity and landscape change, together with recommended management and landscape objectives. The Borough is divided into broad Landscape Character Types; these are then divided into more detailed Landscape Character Areas.

3.8. The settlement of Croft and the majority of the wider landscape are classified as Landscape Character Area 1C "Winwick, Culcheth, Glazebrook and Rixton." There are four small parcels of land immediately south west and north east of Croft, which fall under Landscape Character Area 1D "Croft." Both of these Character Areas are part of Landscape Character Type 1: Undulating Enclosed Farmland. The landscape to the east of Character Area 1C is classified as

Landscape Character Type 2 "Mossland Landscape" and Landscape Character Area 2B "Holcroft and Glazebrook Moss."

3.9. The landscape in the north west of the Study Area around Lowton and the M6 lies outside of the Warrington Borough boundary. The landscape surrounding Lowton falls within the Wigan Borough and is classified as Landscape Character Type 1 "Undulating Enclosed Farmland" and Landscape Character Area 1A "East Lancashire Road Corridor Lowton Heath to Lately Common." The landscape straddling the M6 is within the St Helens Borough and is classified as Landscape Character Type 2 "Agricultural Moss" and Landscape Character Area AM4 "Highfield Moss."

3.10. The Warrington Landscape Character Assessment describes the location of Croft as:

> *"Croft is sited on undulating, gently south sloping land, north-east of the wide, flat floored valley of Cockshot Brook, now almost entirely occupied and certainly dominated by the M6 and M62 motorway junction."*

3.11. The landscape of the Study Area surrounding Croft is dissected by a number of major transport corridors with a junction between the M6, which runs north to south and the M62, which runs east to west, located to the south west of Croft. The M62 forms part of the boundary to Landscape Character Areas 1C and 2B.

3.12. The Manchester to Liverpool railway line, which is raised on wooded embankments runs east to west to the north of Croft, with a now disused railway line sweeping around the south-western extent of Culcheth. Part of this disused line is currently used as Culcheth Linear Park.

3.13. A network of A and B roads cut through the Study Area providing good links to the wider area. Croft *"was a dispersed settlement which historically began to coalesce around Lord Street and later infilled along Smithy Lane and Lord Street."* It sits at the junction of Lord Street, Heath Lane and Mustard Lane, which provide connections to Winwick and the historic A49 route to the west, Kenyon to the north and Culcheth to the north east. Birchwood Technology Park and Warrington are located to the south of the M62.

3.14. **Appendix B** includes extracts of the relevant Landscape Character Area descriptions from the Warrington Landscape Character Assessment.

Landscape Character Area 1C – Winwick, Culcheth, Glazebrook and Rixton

3.15. The relevant key characteristics of Landscape Character Area 1C are:

- *Sweeping views to the north and east from the areas of Culcheth and Glazebrook;*
- *Sweeping views to the south from the Winwick area;*
- *Medium to often large-scale mainly arable fields;*
- *Lack of hedgerow trees;*
- *Hedgerows between fields often fragmented;*
- *Deciduous wooded backdrops;*

3.16. Landscape Character Area 1C is described within the Warrington Landscape Character Assessment as:

> *"These areas typify undulating enclosed farmland with a medium to large-scale field pattern. The area stretches in an arc from the River Mersey in the south, through Glazebrook to Culcheth in the north and finally wrapping around Winwick in the west."*
>
> *"The agriculture predominantly consists of arable fields, intensely cropped, with poorly maintained remnant hedgerow with few hedgerow trees. Small deciduous woodlands form backdrops to views within the landscape."*

Landscape Character Area 1D – Croft

3.17. The relevant key characteristics of Landscape Character Area 1D are:

- *Historic field patterns;*
- *Gently undulating landscape containing intimate scale linear strip fields;*
- *Gapped and fragmented hedgerows supplemented by post and wire fencing;*
- *Numerous hedgerow oaks in groups or isolated;*
- *Predominantly pastureland;*
- *Association of fields to adjoining properties or gardens or horse paddocks;*
- *Red brick and sandstone farms;*
- *Limited and often linear views;*
- *Settlement pattern of older properties reflected in the field patterns.*

3.18. Landscape Character Area 1D is described within the Warrington Landscape Character Assessment as:

> *"Its landscape comprises of a series of small, linear fields closely associated with the village and contrasts markedly with the larger, and more rectangular, field patterns of the surrounding land defined under Area 1.3 Glazebrook, Culcheth and Winwick."*
>
> *"Many of Croft's fields are long and narrow, bordered with ditches and divided by hawthorn hedges frequently containing groups of mature hedgerow trees. Views are linear and strongly contained between the field hedges. They are clearly medieval in origin, 'fossilised' in the landscape through later enclosure and exhibit the characteristic 'S' shape in plan as the result of years of ploughing by oxen or horses."*
>
> *"Judging from historical maps, it is clear that the small scale field pattern was once a lot more extensive but due to the removal of hedgerows and field boundaries in more recent times, a more expansive, large scale field system has developed to the surrounding areas."*
>
> *"The soil type around Croft is heavy clay with fields used both for arable and pasture farming. The smaller field system has, in many cases, led to larger extended linear*

gardens with a number of the pasture fields succumbing to the demand used for horse grazing."

Landscape Character Area 2B – Holcroft and Glazebrook Moss

3.19. The relevant key characteristics from Landscape Character Area 2B are:

- *"Level" basin form to mossland areas;*
- *Expansive views towards the Pennines;*
- *General absence of hedgerows and hedgerow trees;*
- *Predominantly expansive arable farmland;*
- *Visually dominant elevated sections of disused railway;*
- *Visually dominant landfill site at Silver Lane;*
- *Open and exposed;*

3.20. Landscape Character Area 2B is described within the Warrington Landscape Character Assessment as:

"Holcroft and Glazebrook Moss form a continuous area of mossland separated from Risley and Rixton Mosses to the south-west by a narrow causeway known as Old Hall Lane, situated on slightly higher land between Milverton Farm and New Hall Farm."

"Their landscape character is similar to that of the adjacent Rixton Moss, although field sizes become larger from south to north with fewer dividing ditches. Arable crops appear more extensive and less varied. The impression of 'isolation' within the area is less marked with views tending more towards the east and the Pennines."

"The edges of the mossland are indistinct, visually feathering into bordering areas."

"The landfill site at Silver Lane is a dominant and alien feature in an otherwise flat landscape. The site is currently active, although completed sections are now 'over soiled' and planted with mainly native woodland species."

3.21. **Appendix C** includes extracts of the relevant Landscape Character Area descriptions from the Wigan Landscape Character Assessment.

Wigan Landscape Character Area 1A – East Lancashire Road Corridor Lowton Heath to Lately Common

3.22. The relevant key characteristics of Landscape Character Area 1A are:

- *Medium to often large-scale fields, mainly cereal crops*
- *Lack of hedgerow trees*
- *Hedgerows between fields often gapped*
- *Deciduous wooded backdrops to the south and west*
- *Limited internal views*

- *The A580 road and its embankments*
- *Views of residential urban edge to the north*
- *Mainly flat land particularly to the east associated with Carr Brook and Pennington Brook*
- *Undulating ground to the west associated with Newton Brook and Millingford Brook*

3.23. Landscape Character Area 1A is described within the Wigan Landscape Character Assessment as:

> *"These areas form an agricultural landscape buffer to the densely developed residential areas of Golborne and Leigh to the north. Views within the area are limited due to the low-lying and relatively flat nature of the land and due to surrounding development and high hedgerows, particularly to the East Lancashire Road (A580). The East Lancashire Road is visually dominant throughout much of the area, particularly where it runs on embankments. Most of the land is closely associated with the East Lancashire Road and merges into larger areas of similar character to the south within Warrington Borough. The areas are typified by a medium to large-scale field pattern consisting of mainly arable land with poorly maintained remnant hedgerows with few hedgerow trees."*

3.24. **Appendix D** includes extracts of the relevant Landscape Character Area descriptions from the St Helens Landscape Character Assessment.

St Helens Landscape Character Area AM4 – Highfield Moss

3.25. The relevant characteristics of Landscape Character Area AM4 are described within the St Helens Landscape Character Assessment as:

- *The area is generally flat and open with an overriding horizontal composition enabling panoramic views across the surrounding landscape to immediate development horizons and the more distant hills;*
- *There is a large regular field pattern historically part of the Parkside and Newton Parks landscape bordered by small maintained hedgerows with isolated trees and small pockets of scrub woodland. Often, informal earth footpaths follow the line of the hedgerows;*
- *Although the area is of rural character large scale infrastructure is present such as the M6 which crosses the area orientated northwest to southeast. Railway lines which border the area to the west and north and a pylon line are also prominent signs of infrastructure in the landscape. In addition, a number of urban elements, such as kerbs, street lighting and security fencing, are present and these together with the infrastructure elements contributes to a degraded rural character;*
- *In particular the unnaturally straight alignment of the M6 running at elevation on an embankment present a dominant landscape feature which physically and visually divides the character area. The embankment severs many of the land use patterns including tree belts and field boundaries which fragments the landscape character, and subdivides the character area into 'pockets' of this character area east and west of the M6 corridor;*

- *This subdivision of the character area is further reinforced by the more degraded landscape character to the west associated with the significant landscape disturbance attributed to Parkside Colliery. The former colliery site disrupts the field pattern with large areas of hard standing. In addition screening bunds to the east of the colliery are marked small scale unnatural linear features which create a prominent horizontal visual horizon and interrupts views across the landscape. The degraded character is emphasised by the line of pylons which crosses the former colliery to the north;*
- *Small areas of woodland and / or shelterbelts are usually associated with these farmsteads including, in one example, a line of poplar trees that contrast with the horizontal form of the landscape. The presence of woodland increases to the west with wooded field boundaries to Newton Park Farm and along the incised Newton Brook which delineates the administrative boundary to the south. This increase in woodland subtly reduces the experience of openness in this landscape, in particular where it encloses views from the minor rural roads.*

4. Landscape Sensitivity of the Study Area

4.1. The landscape within the Study Area is not designated for its landscape value.

4.2. The value of the landscape surrounding the settlement of Croft is considered below using the guidelines of GLVIA3 Box 5.1.

Landscape Value

- **Landscape Quality (Condition):** The landscape to the north-west and south-east of Croft consists of "a*rable fields, intensely cropped, with poorly maintained remnant hedgerows with few hedgerow trees. Small deciduous woodlands form backdrops to views within the landscape."* The landscape closely associated with the north-eastern and south-western settlement edges of Croft are *"predominantly pastureland"* with *"historic field patterns."* Although the field boundaries have become *"gapped and fragmented hedgerows supplemented by post and wire fencing."* Weakening of field boundaries has occurred throughout the Study Area. The character and condition of the settlement of Croft is described as being: *"a dispersed settlement which historically began to coalesce around Lord Street and later infilled along Smithy Lane and Lord Street."*
- **Scenic Quality:** The landscape immediately surrounding Croft has a more *"intimate"* character with *"linear views strongly contained between the field hedges"* in places, suggesting that any scenic quality is held in short linear view corridors rather than the open expansive vistas experienced within the more *"intensely cropped"* landscape of the wider Study Area*."* The motorway corridors and particularly the M6 and M62 junction within the landscape to the south of Croft are dominant features. Small woodlands within the landscape of the Study Area can *"help to create backdrops and form a more interesting landscape, breaking down the long, interrupted views"* and providing attractive landscape features and some scenic quality in places.
- **Rarity:** The field patterns of parts of the landscape immediately surrounding the settlement of Croft have shown little change over time, the retention of *"the core of an old agricultural landscape is extremely rare within the Borough and a significant asset worthy of retention."* There are no elements within the wider Study Area that are considered to be rare.
- **Representativeness:** The landscape of the wider Study Area surrounding Croft is broadly representative of a large tract of land within the north Warrington Borough. It is *"largely open countryside, dominated by arable crops"* that *"leads to long wide vistas."* The landscape within the Study Area immediately surrounding Croft is representative of a small, linear, historic field pattern.
- **Conservation Interests:** There are a number of buildings within Croft with conservation interest. These include *"the Catholic Church of St Lewis, Mustard Lane, built in 1827 is Listed Grade II. St Lewis Presbytery, Mustard Lane, contemporary with the church is also Listed Grade II. The parish church of Christ's Church, Lady Lane, built in 1833 is Listed Grade II. Just south of Croft, Eaves Lane Farmhouse c.1703, on Spring Lane is Listed*

Grade II, as is Springfield Farmhouse, Spring Lane, a late C18th Grade II building." "Croft Grasslands" is a Local Wildlife Site and located on the eastern settlement boundary. Three other Local Wildlife Sites are located within the wider Study Area.

- **Recreation Value:** There are a number of Public Rights of Way within the landscape to the north and north east of Croft, providing connections to the surrounding landscape, including Culcheth Linear Park to the north east of Croft, which is located on the former railway line around the southern boundary of Culcheth.
- **Perceptual Aspects:** The motorway corridors and M62 and M6 junction to the south of Croft are dominant features within the Study Area. The landscape is therefore not valued for any wildness or tranquil qualities. There are some expansive views from the landscape to the north of Croft.
- **Associations:** There are no known associations of the Study Area with any published art, literature or folklore which would add to its landscape value.

4.3. The landscape value of the Study Area is therefore considered to be ***Medium - Low***.

Susceptibility to Change

4.4. The landscape of the Study Area is a tapestry of *"intensely cropped,"* large scale arable farmland with a lack of hedgerow boundaries and *"wide, open vistas"* coupled with *"small scale linear pasture fields bounded by hedgerows and hedgerow trees."* These smaller scale fields are characterised by *"linear views strongly contained between the field hedges,"* which create a more *"intimate"* character more closely associated with the settlement of Croft. The Study Area contains a mixture of visually enclosed and open landscapes. The susceptibility to change of the landscape surrounding Croft within the Study Area is therefore considered to be ***Medium - Low***.

Conclusion in respects of the Landscape Sensitivity of Croft

4.5. As can be ascertained from the descriptions, the landscape of the Study Area contains areas with a *"historic intimate character"* closely associated with the settlement of Croft, which demonstrate elements of rarity within the landscape, although these are on a relatively small scale within the Study Area and are visually enclosed by existing vegetation. This *"intimate"* landscape feathers out into a much larger scale, more *"intensely cropped"* agricultural landscape. It has a distinct lack of hedgerow boundaries, leaving a number of mature trees to become isolated features within this part of the Study Area, which in turn has become more exposed and is characterised by *"wide, open vistas."*

4.6. The landscape sensitivity of the Study Area results from the consideration of the landscape value and its susceptibility to change. As the ***landscape value of the Study Area is considered to be Medium - Low, and the susceptibility to change of the Study Area is considered to be Medium - Low***. The landscape sensitivity of the Study Area is considered to be ***Medium – Low***.

4.7. The Warrington Borough Council Local Plan: Settlement Profiles – Outlying Settlements Document (July 2017) states that whilst a sustainable settlement extension *"could enable*

sustainable development within Croft whilst respecting the overall Green Belt objectives. It could however impact on the character objective." This statement identifies that the ability of Croft to accommodate a sustainable settlement extension of up to 350 homes within Croft is not a Green Belt issue, but rather an issue of whether the character of the surrounding landscape would experience any significant adverse impacts as the result of a proposed sustainable settlement extension.

5. Site Description and Landscape Sensitivity of the Site

Site Description

5.1. **Figure 3, Appendix A** shows the site in relation to Croft and its landscape context.

5.2. The site is situated at the north eastern edge of Croft and is currently in use as arable farmland with a small scale, rectilinear field pattern. A locally designated Local Wildlife Site "Croft Grasslands" is located adjacent to the south-western corner of the site. This land is subject to representations by others for allocation as residential development under the new Warrington Local Plan. The combined southern and western boundaries of the site and the Local Wildlife Site are well contained by the existing settlement of Croft. The eastern boundary of the site is defined by Lady Lane and the northern boundary defined partially by existing field boundaries.

5.3. An existing Public Right of Way partly follows the northern boundary of the site along an east to west orientation, linking Croft and Lady Lane. Heathcroft Stud, an equestrian centre is located adjacent to the northern boundary of the site. The hedgerows within the site, the vegetation within Croft Grasslands Local Wildlife Site and along the boundaries with Lady Lane and the housing to the south help to create a sense of enclosure to the site.

5.4. The topography of the site generally slopes from north to south. A stream flows from north to south through the centre of the site before following the boundary of the Croft Grasslands Local Wildlife Site. Christ's Church, a Grade II listed building is located on Lady Lane, opposite the eastern boundary of the site and is well enclosed by mature trees.

Landscape Sensitivity of the Site

5.5. The sensitivity of the land surrounding the settlement of Croft is appraised in Chapter 4.0 of this assessment. The site is not wholly representative of the Study Area and carries a higher landscape value due to its historic field pattern and proximity to the Grade II listed building of Christ's Church. The landscape sensitivity of the site is therefore considered to be ***Medium***.

Magnitude of Change

5.6. The proposed Illustrative Masterplan for residential development is appended to this Assessment (**Appendix E**). This Illustrative Masterplan has been used to establish the potential magnitude of change to the site baseline as a result of a proposed sustainable settlement extension.

Size and Scale

5.7. There would be a loss of arable farmland as a result of developing the site. The landscape within and surrounding the site to the north is identified for its *"small scale linear pasture fields bounded by hedgerows and hedgerow trees"* which has some historic value. Existing landscape features such as trees, woodlands, hedgerows and watercourses would be

retained as much as possible.

5.8. The proposed masterplan would result in a sustainable settlement extension to Croft, however as the site is bordered by residential development to the south and west, and well enclosed by trees to the north and east, it would not alter the character of the surrounding area significantly. The eastern boundary of the site would respond to the setting of the Grade II listed Christ's Church, which sits on the opposite side of Lady Lane, by setting development back behind a green corridor.

5.9. The proposed masterplan would make a contribution to the landscape by providing a housing development within a well landscaped setting, with existing landscape features preserved within the public open space network in the central parts of the site. New hedgerow, woodland and tree planting along the northern boundary of the site and within the green corridor alongside Lady Lane would be in keeping with the relevant recommended management and landscape objectives identified within the Warrington landscape Character Assessment. The existing landscape pattern and landscape features would be retained as much as possible with new tree and woodland planting complementing the existing landscape character.

Geographical Extent

5.10. The geographical area over which the effects would be felt would be at a site level and within the immediate setting of the site, where residential development would replace arable farmland. At a Study Area scale, the effects would be reduced as the site forms a small proportion of the arable farmland landscape within the Study Area around Croft. Although the arable farmland that would be lost carries more historic value than the agricultural landscape to the north west of Croft, the effects on this *"intimate landscape"* are only felt over a small geographical area as any views within this part of the Study Area are *"linear"* and *"strongly contained between the field hedges."*

Duration and Reversibility

5.11. The construction effects of the proposed development would be temporary with effects upon completion permanent. Proposed landscape mitigation and tree planting would reduce these permanent effects as they mature.

5.12. The magnitude of change on the landscape as a result of the proposed residential development within the site is therefore considered to be ***Low***.

Landscape Effects of development

5.13. The field pattern, existing vegetation and watercourse are the more sensitive elements within the site due to their historic value, scenic quality and conservation interests. The relationship of the proposed development with the Grade II listed Christ's Church is also an important consideration.

5.14. The relevant recommended management and landscape objectives within the Warrington Landscape Character Assessment should form the basis of any landscape mitigation within

the proposed Illustrative Masterplan, and should aim to:

- *Retain existing hedgerows and hedgerow trees;*
- *Support and encourage traditional hedgerow management;*
- *Support and encourage new hedgerow and hedgerow tree planting to infill gaps and missing hedge sections.*

5.15. Planting new hedgerows and woodland around the northern and eastern boundaries of the site as part of the proposed Illustrative Masterplan would enhance woodland connectivity, strengthen existing field boundaries and appropriately respond to the location of the Grade II listed Christ's Church. Strengthening the existing field boundaries is a key objective of the Landscape Character Assessment and it would help to maintain the *"intimate"* character of this part of the Study Area.

5.16. There is no reason why a well-designed development that preserves the existing landscape features within a green infrastructure network, and responds sensitively to the setting of the existing Grade II listed Christ's Church adjacent to the eastern boundary of the site would have any significant effects on the character of Croft or the wider landscape of the Study Area.

6. Conclusion

6.1. The assessment of the Study Area and the land surrounding the settlement of Croft demonstrates a ***Medium - Low*** landscape sensitivity.

6.2. The assessment concludes that the Land off Lady Lane site is not wholly representative of the character of the Study Area as it is part of an *"intimate landscape"* with a small scale field pattern that carries degrees of rarity and historic value, closely associated with the existing settlement of Croft. The landscape sensitivity of the site is therefore considered to be ***Medium***.

6.3. Development of the site is considered to result in a ***Medium – Low*** magnitude of change. With appropriate good design and well-thought-out landscape mitigation measures the overall effects of development on the landscape are not considered to be significant.

6.4. For the reasons outlined above, this report considers the Land off Lady Lane site to be a sustainable and achievable location to be allocated for new housing development within the new Warrington Borough Local Plan without *"impacting on the character objectives"* of Croft which are alluded to in the Warrington Borough Council Local Plan: Settlement Profiles – Outlying Settlements Document (July 2017).

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Land off Lady Lane, Croft

Landscape Sensitivity Assessment of Croft and Landscape Appraisal of Proposed Development on Land off Lady Lane, Croft

Appendices

September 2017

Prepared for:

PEEL

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CHARTERED LANDSCAPE ARCHITECTS

Land off Lady Lane, Croft

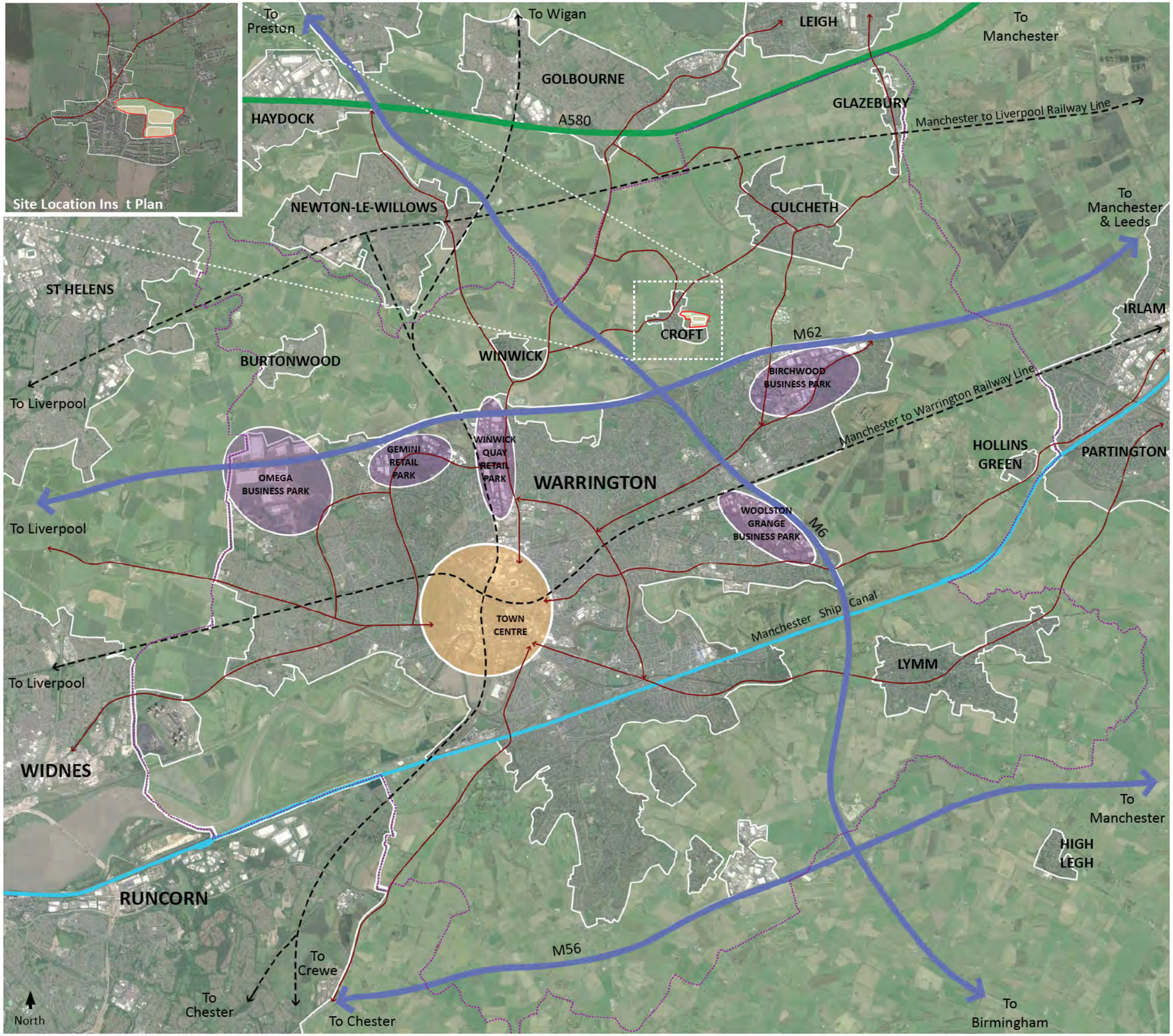
Landscape Sensitivity Assessment of Croft
and Landscape Appraisal of Proposed Development
on Land off Lady Lane, Croft

Appendix A
Figures 1 - 3

September 2017

Prepared for:

PEEL



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KEY:

- Urban area
- Primary employment areas
- Warrington town centre
- Manchester Ship Canal
- Warrington Borough boundary
- Motorway
- A580 East Lancashire Road
- Key A and B road connection
- Railway line
- Potential trategic housing sites (green belt release)

PEEL

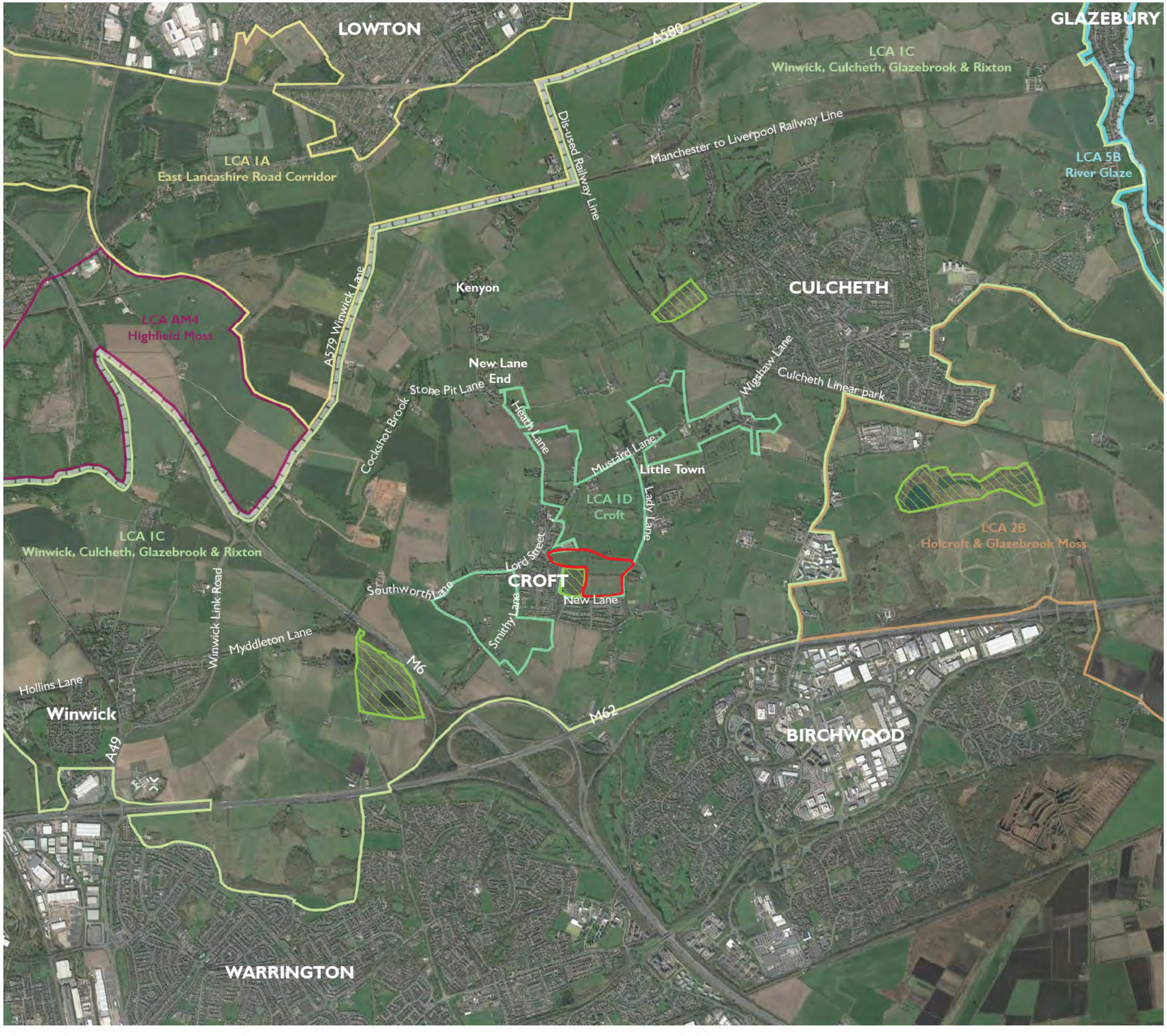
Warrington Local Plan Sites

Land off Lady Lane, C o

Appendix A: Figure 1
Warrington Context

Drwg No: 630CA-09A
Drawn by: SB
Rev by: MF
QM Status: Checked
Scale: NTS @ A3

Date: 13.09.17
Checker: SR
Rev checker: SR
Product Status: For Issue



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KEY:

- Site boundary
- Local Wildlife Sites (LPCS QE5 Biodiveristy & Geodiveristy)
- Warrington Borough Boundary

Warrington Landscape Character Type 1:
Undulating Enclosed armland

- Landscape Character Area 1C: Winwick, Culcheth, Glazebrook & Rixton
- Landscape Character Area 1D: Cro

Warrington Landscape Character Type 2:
Mossland Landscape

- Landscape Character Area 1D: Holcroft + Gla ebrook Moss

Warrington Landscape Character Type 5:
River Flood Plain

- Landscape Character Area 5B: River Glaze

Wigan Landscape Character Type 1:
Undulating Enclosed armland

- Landscape Character Area 1A: East Lancashire Road Corridor

St. Helens Landscape Character Type 2:
Agricultural Moss

- Landscape Character Area AM4: Highfield Mos

PEEL

Warrington Local Plan Sites

Appendix A: Figure 2
Land off Lady Lane, C oft
Study Area

Drwg No: 630CA-01
Drawn by: MF
Rev by:
QM Status: Checked
Scale: 1:25,000 @ A3

Date: 31.08.17
Checker: SR
Rev checker:
Product Status: Confide tial eview

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KEY:

- Site boundary
- Public Right of Way
- Croft G asslands QE5 Local Wildlife Site
- Christ's Church Grade II listed building

PEEL

Warrington Local plan Sites

Land off Lady Lane, C o

Appendix A: Figure 3
Site Features Plan

Drwg No: 630CA-02
Drawn by: MF
Rev by:
QM Status: Checked
Scale: 1:5000 @ A3

Date: 01.09.16
Checker: SR
Rev checker:
Product Status:
Confide tial eview

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CHARTERED LANDSCAPE ARCHITECTS

Land off Lady Lane, Croft

Landscape Sensitivity Assessment of Croft
and Landscape Appraisal of Proposed Development
on Land off Lady Lane, Croft

Appendix B
Extract from the Warrington Landscape
Character Assessment

September 2017

Prepared for:

PEEL

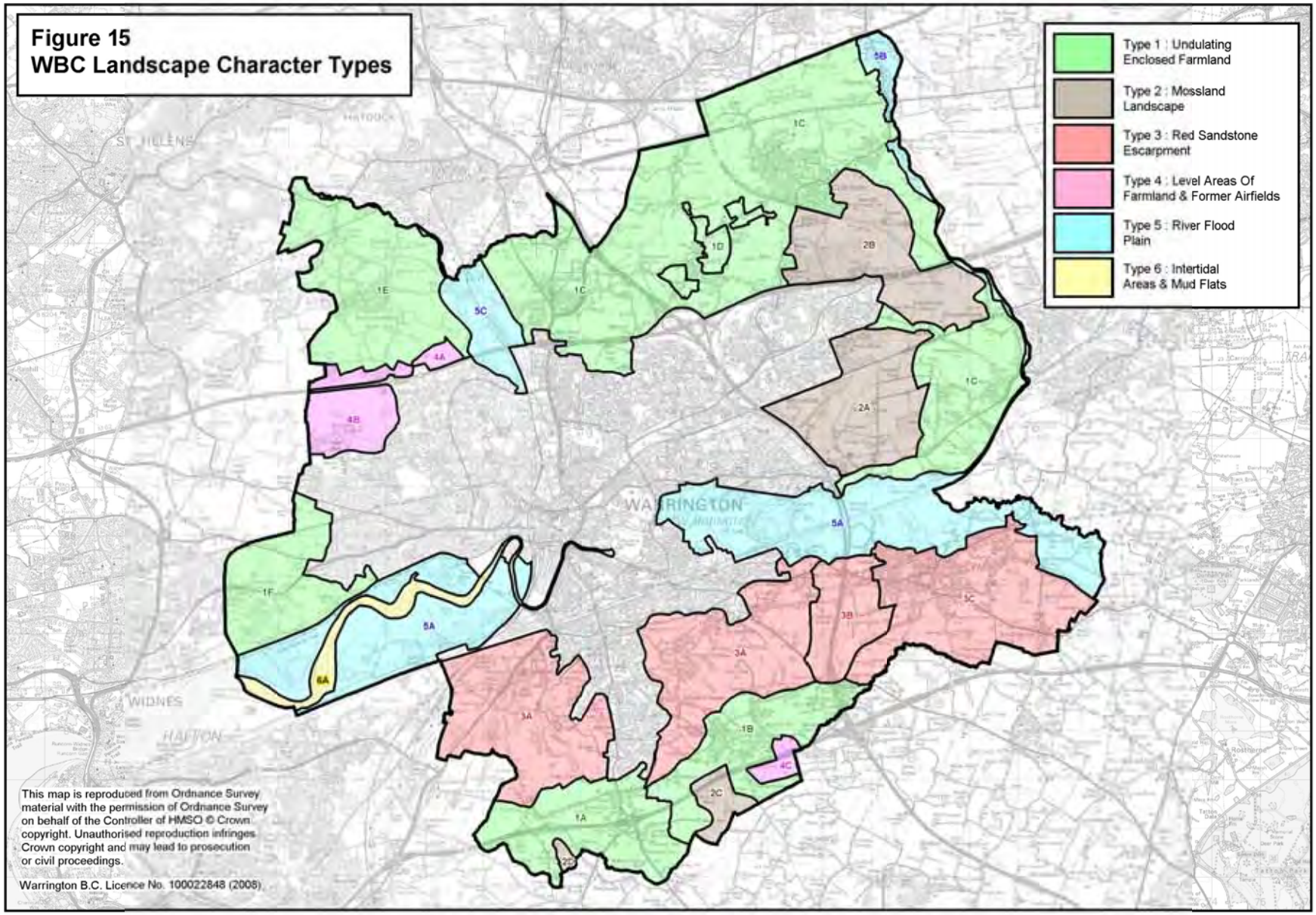
Figure 15
WBC Landscape Character Types
Type 1 : Undulating Enclosed Farmland
Type 2 : Mossland Landscape
Type 3 : Red Sandstone Escarpment
Type 4 : Level Areas Of Farmland & Former Airfields
Type 5 : River Flood Plain
Type 6 : Intertidal Areas & Mud Flats
ST HELENS
WARRINGTON
WIDNES
HALTON
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Landscape Character Areas
Type 1 : Undulating Enclosed Farmland
1C - Winwick, Culcheth, Glazebrook & Rixton
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TYPE 1. UNDULATING ENCLOSED FARMLAND

AREA 1.C WINWICK, CULCHETH, GLAZEBROOK AND RIXTON

Description

These areas typify undulating enclosed farmland with a medium to large-scale field pattern. The area stretches in an arc from the River Mersey in the south, through Glazebrook to Culcheth in the north and finally wrapping around Winwick in the west.

The agriculture predominantly consists of arable fields, intensely cropped, with poorly maintained remnant hedgerows with few hedgerow trees. Small deciduous woodlands form backdrops to views within the landscape.

Areas of heavy clay soils have necessitated comprehensive land drainage systems although these are not always effective, leading to ephemeral areas of standing water in low areas at times of heavy rainfall. Other areas of lighter soils, particularly those just east of the village of Winwick, around Southworth, are better drained and heavily cultivated.

The area contains three significant knolls to the north-west of this area, one is the large knoll on which Winwick Church stands; a second to the north, is defined by Cop Halt Farm and the third is at Wood Head Farm just west of the Parkside Road crossing of the M6. The A49 road north from Warrington runs just to the west of Winwick Church over the larger knoll and then just to the east of Cop Halt Farm before crossing Oswald's Brook at Red Bank. It therefore follows the line of higher ground.

Associated with these knolls is another unusual feature, Oswald's Brook, forming an anomaly within the gently undulating landscape. The Borough boundary to the north of Winwick follows the line of Oswald's Brook, a fairly deeply incised stream running from the east and discharging into Newton Brook which in turn discharges into Sankey Brook. The valley of Oswald's Brook is narrow, wooded and contains low exposed red sandstone cliffs.

West of Hollins Green are the Rixton Clay Pits, an area of disused clay pits, some flooded, some partially flooded and some partially filled; these pits have been colonised by native species, creating a rich melange of habitats and a visually complex series of intimate spaces.

Immediately north of Rixton Clay Pits and abutting Risley Moss to the west is Rixton Landfill Site. This is a domestic refuse facility, which currently presents a whaleback form with a high

ridge running north – south. The landfill site is visually very prominent in the landscape, particularly dominating Rixton Moss to the west. Views from the south however are screened by Rixton Clay Pits. There appears to be little or no mitigation works to reduce the impact of the site.

North of Southworth Hall is a large sand quarry, screened by mounding and planting. This sand pit adjoins an old colliery tip to the north and to the west, part of which (adjacent to the M6) has been reclaimed.

Photo 32a . South elevation of the historic Winwick Church - a very conspicuous landmark.

Key Characteristics:

- Sweeping views to the north and east from the areas of Culcheth and Glazebrook
- Sweeping views to the south from the Winwick area
- Medium to often large-scale mainly arable fields
- Lack of hedgerow trees
- Hedgerows between fields often fragmented
- Deciduous wooded backdrops
- Rixton Clay Pits
- Rixton Landfill Site

Cultural History

Two important roads pass north-south through this area, the A49 through Winwick and the B5212 Holcroft Lane / A574 through Glazebury. Winwick Road was a former Roman Road of great strategic importance leading down to the bridge over the Mersey in Warrington. Holcroft Lane, to the east, was of lesser strategic importance, but took people through the relatively narrow gap between the mosses of the north side of the Mersey occupied by the River Glaze. This was the route taken by the Duke of Cumberland in December 1745 in pursuit of the retreating army of Bonnie Prince Charlie. Holcroft Lane is to the west of the River Glaze valley leading from Wigan down to the ford of the River Mersey at Warburton. Both roads were also important from ancient times for the movement of salt northwards from the Cheshire saltpans.

A third important road runs east-west through the south of the area, the A57 Manchester Road. This road follows the high ground north of the River Mersey flood plain and to the south of the great basin formed by Rixton Moss. The road connects with the M6 to the west and with the B5212 to the east. It is a long-established road and has some important historic sites along it. Rixton Old Hall is just south of the road at the edge of the Mersey flood plain; Rixton New Hall is just to the east. Hollins Green, a small village just north of the road contains a churchyard on an ancient circular-plan site with a footpath called ‘The Weint’ running around it –suggestive of a pre-Roman origin. The lowest ford on the Mersey was at Warburton and the road from Warburton joins the A57 just west of Hollins Green.

A fourth, locally important road runs east – west to the north of the area, connecting Winwick, Croft, Culcheth and Glazebury. Although classed today as a minor road, it connects with the more important north-south roads referred to above and is significant in that a number of moated or high status sites are located either at the roadside or close to the route. These include Winwick Church, Myddleton Hall, Southworth Hall and the former sites of Old Kingnall Hall and Kingnall Hall. A tumulus is sited just north of the road near Myddleton Hall. This evidence suggests that the road is probably ancient.

Winwick, the local high point, has clearly been the site of habitation for some time. A group of five barrows or burial mounds have been discovered at Winwick, two in the late C19th and two in modern times. One of these barrows, much disturbed, revealed Beaker pottery.

Another barrow was discovered at Southworth Hall Farm, Croft, east of Winwick, comprising a more extensive cemetery of over 800 burials possibly focused on the Bronze Age burial mound.

There are also a number of medieval manors scattered throughout this area, based on local halls. These include Culcheth, Holcroft, Peasfurlong, Risley, Kenyon and Southworth, of which Culcheth was the principal manor. Parts of these manorial holdings reached into the adjacent mosslands and it is probable that the mosses were exploited for hunting and for fuel. There are references to Culcheth having four plough-lands in 1212. Holcroft and Hurst appear to have had a number of water mills, implying a fairly substantial area of cereals. The site of at least one mill is probably close to Holcroft Hall - to the south of the Hall in the southern arm of Crow Wood. The 1832 Tithe Map records the name of this arm of woodland as Mill Ground. The picture of medieval Glazebrook, Culcheth and Winwick appears to be of mixed farmland, as now, with cereals being grown on the lighter soils such as around Southworth and grazing being practised on the heavier clay soils.

Holcroft Hall is one of a chain of probably early medieval sites (many of the others being moated) which stood along the line of Pennington Brook / Glaze Brook and running north – south along the road between Wigan and the Mersey ford at Warburton. These building complexes would have had some strategic value as is confirmed by the recent discovery of a Bronze Age promontory fort and settlement at nearby Little Woolden Hall on the eastern side of the River Glaze (just outside the Borough boundary).

Photo 69. Holcroft Hall viewed from Holcroft Lane, Chat Moss in the distance.

Holcroft Hall has some local fame through its connection with Colonel Thomas Blood of Crown Jewels fame. Colonel Blood married Maria Holcroft in 1650, the daughter of the owner of Holcroft Hall, Colonel John Holcroft.

Colonel Holcroft was a staunch Parliamentarian and was in command of the garrison of Lancaster when the Earl of Derby besieged and took it in 1643. In 1648, Blood served under Colonel Holcroft, during the pursuit of the Scots Army, ultimately defeated by Cromwell at Worcester. On the death of Colonel Holcroft, Blood engaged in an unseemly and murderous struggle for the possession of Holcroft Hall, but was beaten to it by his brother-in-law, Thomas Holcroft.

The present building at Holcroft is the core of what was evidently a large manor house built around a central courtyard. Little remains of the original buildings, but part of the original structure is probably incorporated in an old barn to the west of the house, now in a ruinous state.

Winwick Church, standing on the elevated ground north of Warrington dominates much of the area. The present structure was built probably around the early 1300s and extensively rebuilt around 1530, the famous architect A.W.N. Pugin designed the chancel in 1847-8. The church is dedicated to St Oswald and the church site is probably far older than the existing structure. It certainly existed in the Domesday Book and commemorates King Oswald of Northumbria, a prominent Christian, killed in battle at Maserfield or Macerfeld (site unknown, possibly on or near St Oswalds Brook, bordering Ashton in Makerfield north on the A49.

Much academic argument states that it was most probably near Oswestry) fighting against the ferocious pagan King Penda of Mercia and his Welsh allies in 641AD. Winwick was in Saxon times the centre of a large ancient parish of eleven townships, forming the southern half of the hundred of Newton, including the royal estate centre of Newton itself.

The high ground around Winwick had great strategic importance as it was the nearest defensible ground north of the Warrington bridge over the River Mersey. Certainly King Penda and his army could have marched through here to attack King Oswald of Northumbria (if a battle did indeed take place at Ashton in Makerfield) and local legends of a great Saxon battle near here could be realistic. St Oswald's Well and Oswald's Brook to the north of the area could possibly commemorate such an action – on the same site as the battle of the Red Bank?

The strategic importance of the area again was emphasised in the Civil Wars, Warrington was held at this time by the Earl of Derby for the King, but the town was taken by Parliamentary troops in 1643. On 23rd May 1643, the Roundhead troops of Colonel Assheton routed a body of Royalists at Winwick. *'Whilst the duty (of prayer and fasting) was in performing tidings came of the taking of Winwick Church and steeple, they on the steeple standing on terms till God sent a deadly messenger out of a fowling piece to one of them; also a strong hall [the rectory] possessed by professed Roman Catholics and stored with provision, as if it had been purposely laid in both for our supply and ease';* Civil War Tracts (Chet. Soc.), 138.

From: 'Townships: Winwick with Hulme', A History of the County of Lancaster: Volume 4 (1911), pp. 140-42.

In 1648, a battle took place at Red Bank, adjacent to Newton Brook at the crossing with the A49 former Roman military road. The Duke of Hamilton invaded England at the head of an allied army of Scottish Covenanters and north country Royalists, having evaded Cromwell and his troops in Scotland. Cromwell dispatched troops to pursue the Scots, particularly his powerful cavalry, inflicting a heavy defeat on the Scots at Preston and destroying their allied Royalist cavalry, Cromwell's cavalry harried the until then largely unscathed Scots forces on their way south.

Unsurprisingly, the Roundhead cavalry on several occasions caught up with the Scots, who detached a powerful force to hold up Cromwell's cavalry while the main force marched through Warrington and broke the bridge to force Cromwell to a crossing further to the east .

Photo 40. Cop Halt Farm, the Scottish HQ in 1648, viewed from the north near Newton Brook.

The detached rearguard held a narrow pass on the A49 road at Red Bank, where the road crossed the small but steep sided Oswald's Brook valley via a small bridge, close to the confluence of Oswald's Brook with Newton Brook. The Scottish forces constituted of a group of pike and muskets, numbering at least 4,000, under command of Major-General William Baillie who traditionally is supposed to have his headquarters at Cop Halt Farm behind the Scots army's left flank. The south bank of Oswald's Brook / Newton Brook constituted a formidable obstacle to the Roundhead cavalry and so attacks were delayed until the Roundhead infantry came up. On 19th August 1648, there came a fierce battle where the infantry of both sides charged each other with pikes while musketeers of each side engaged on the flanks. The battle was resolved when the powerful Roundhead cavalry crossed Oswald's Brook to the east via a lane, (now the A573) and then turned right to take a line parallel to the course of the brook through the fields, crashing into the right flank of the Scots infantry. The Scots carried out a dogged retreat south until they reached an area close to Winwick Church, which they then defended until finally forced to surrender.

Cromwell's own account of the action was, *'We could not engage the enemy until we came within three miles of Warrington, and then the enemy made a stand at a pass near Winwick. We held them in some dispute till our army came up, they maintaining the pass with great resolution for many hours, ours and theirs coming to push of pike and very close charges, and forced us to give ground; but our men, by the blessing of God, quickly recovered it, and charging very home upon them, beat them from their standing, where we killed about a thousand of them and took (as we believe) about two thousand prisoners, and prosecuted them home to Warrington town';*
Civil War Tracts, 264.

Cromwell also stated, *'…and the commissioners deputed by me have received and are receiving all the arms and ammunition; which will be, as they tell me, about 4,000 complete arms: and as many prisoners: and thus you have their infantry totally ruined'.*

Civil War Tracts 287-8.

A further account states: *'The greatest stand they (the Scots) made was between Newton and Winwick, in a strait passage in that lane that they made very strong and forcible, so that Cromwell's men could not fight them. But by the information of the people thereabouts and by their direction they were so guided into the fields that they came about so that they drove them up to that little green place of ground short of Winwick church and there they made a great slaughter of them, and then pursued them to Warrington'.*

Lancs. War (Chet. Soc.), 66.

Photo 34. Church Green, Winwick, the site of mass slaughter of Scots by Cromwell's troops.

It is a local tradition that Gallows Croft, a small area on the Newton side of Red Bank was the spot where a number of Scots / Royalist prisoners were summarily hung at the end of the battle.

This is Warrington's only recorded battlefield. Although it is not on the English Heritage Register of Battlefields, the significance of what was clearly a substantial action – not a mere skirmish, in terms of casualties and prisoners - and the unspoilt nature of the area suggests that the site of the Red Bank Battle and pursuit should be afforded some protection.

Kenyon Hall, indicated on the 1849 O.S. is now incorporated into Leigh Golf Club, Culcheth and the extensive parkland is now a golf course.

Culcheth was originally a small village probably founded after 1066 (it is not mentioned in Domesday) but was certainly in existence in 1212 when the de Culcheths built a Hall. In 1246 the last male de Culcheth died, leaving his estate between four daughters, whose descendants became the Holcrofts, the Risleys and the Peasfurlongs, the remaining daughter retaining the name ‘de Culcheth’.

A water mill is mentioned in a deed of 1270, presumably powered by water from one of the local streams. It may be that it was on the site of Daisy Bank Mill, a cotton mill, (rare in this area) demolished in recent times. In 1751 an Enclosure Act enclosed some of the land around the village. Culcheth is unusual in that it retains its village green; although this is somewhat broken up, it is well used and popular.

In 1774, the last of the Culcheth family died without an heir and the estate was sold to the Withington family in 1824. The Withingtons planted many groves of trees in the area, including trees along Culcheth Hall Drive.

In 1560 a church was built in Culcheth, named New Church to distinguish it from the old church of St Oswald at Winwick, the original parish church. In 1903, New Church was burnt down and another church was built on the site to replace it. A workhouse was established near the village centre around 1660. In 1903, the Salford Board of Governors built the Culcheth Cottage Homes as an orphanage. It was converted to a hospital for mentally handicapped people after WWII, but this closed in the 1970s. The buildings have been refurbished and sold as private homes in recent times.

A local High School was built in 1932 at the junction of Withington Avenue and Warrington Road and this school is still flourishing.

Rixton was a small village held by Allan de Rixton from the Duke of Lancaster. His seat was a great hall at Rixton Hall, extended and improved in the C17th. In the period 1658 – 1748, New Rixton Hall or Little Hall, was built.

The Warburton family held the manor of Glazebrook, but in 1384, they ceded it to Hamo de Mascy, Lord of the manor of Rixton. The combined manors became known as Rixton-with-Glazebrook from then on. The Tempest family owned most of Rixton-with-Glazebrook, as well as Broughton Hall, throughout the C18th and C19th. By 1750, the Tempests were sharing the estate with the Patten family, while the Tinsley brothers owned Glazebrook Hall with 137 acres.

Thomas Patten bought Glazebrook Hall and 600 acres of woodland and 33 acres of farmland and the chapel. Thomas Patten died in 1874; Wilson Patten inherited the estate and further developed it in the 1880s.

The imposing structure of Mount Pleasant, close to the junction of Glazebrook Lane and Manchester Road, was built in 1851 for Charles Tempest, and had 40 acres of land attached.

Many of the local Lords of the Manor were Catholics and suffered at the hands of the Protestant majority between Elizabethan times and Roundhead times. These recusants were often deprived of their lands or fined by losing part of their lands. This caused some disruption to land holdings during this period.

The Manchester – Liverpool railway line, now operated as a secondary line, was opened in 1830, its creator being the great engineer George Stephenson. It crosses the area running east west just north of Culcheth, having run through Glazebury to the east on an embankment. Stephenson had great difficulties in crossing Chat Moss to the east with the railway. Originally designed as a cable railway i.e. with static engines at each end and cables between, it had particularly easy gradients of up to 1:2,000. When the ‘Rocket’ won the Rainhill Trials in 1829, it was assigned to this line, becoming the first locomotive powered railway in the world. Stations on this line originally stood at Kenyon Junction (built between 1833 and 1837, closed 1961) and at Glazebury and Bury Lane (closed 1958).

Photo 61a. Culcheth Carrs storage facility.

A second main railway line running east-west through the area and through Glazebrook was constructed later in the C19th by the Cheshire Lines Committee and is now the main line between Manchester and Liverpool. Two other railway lines, now disused, were also constructed in the C19th. One of these joined the main line just west of Glazebrook and ran through Holcroft Moss before emerging into this area again south of Culcheth. Part of this disused railway is now Culcheth Linear Park. The park unfortunately does not extend along the full length of the track. The other disused track is the Bolton and Leigh Railway, built in 1828 (before the Manchester – Liverpool line), which ran to the west of Culcheth Carrs. Both of these lines were extensively used for coal traffic.

The A580 trunk road was opened by King George V in 1934 and was England's first intercity highway, linking Manchester and Liverpool. The name East Lancashire Road refers to the original and unattained objective of ultimately extending the road into East Lancashire.

A section of the road adjoins the boundary of Warrington Borough north of Culcheth Carrs and runs east to the junction with Warrington Road at Lately Common. This is built on an embankment to overcome the marshy ground problems of Culcheth Carrs.

The M6 motorway now replaces the A49 and Holcroft Lane as the strategic route through the area. The M62 is a similarly important strategic route running east-west through the area and the junction between the two motorways occupies and visually dominates a substantial area.

In WWII, an ammunition storage facility was constructed on Culcheth Carrs, accessed from a railway line (now closed) to the west. This facility, now in private ownership, with its concrete bunkers surrounded with soil is still in use as storage. It now has a prominent row of lightening conductors along the roofs. The name Culcheth Carrs refers to the large marshy area in which the store was built, drained by Carr Brook flowing to the east.

There were a number of military camps in the villages in the area. In Croft there is a disused camp to the east of Lady Lane. In Glazebrook there are two disused and now heavily overgrown campsites south of Bank Street. In Culcheth, two camps were built in the village, Ariel East and Ariel West, Ariel West was occupied by the Fleet Air Arm. Culcheth Hall was occupied by the army throughout WWII.

Winwick Hospital, closed in 1998, was one of the largest mental health hospitals in Europe. Almost all of the original buildings have now been demolished and replaced by a large-scale development of private housing. The Winwick Hospital site is designated as a SBI (Site of Biological Importance) Grade C.

Rixton Clay Pits is an extensive area of excavations from which boulder clay was extracted and used in the local brickworks. Clay is still extracted from the north of the area, but the bulk of the workings, some 13.99 ha., ceased to be used for extraction in the 1960s. The resultant landform is a complex mosaic of ponds, mounds, woodland and clearings and is exceptionally rich in wildlife. The site was designated as an SSSI (Site of Special Scientific Interest) because of the presence of great crested newts (Triturus cristatus) and is locally designated as an SBI (Site of Biological Importance) Grade A. There are a number of wild flower species of some interest, including marsh orchids, sedges and centaury. The site is managed by Warrington Borough Council as a nature reserve.

Key cultural elements in the landscape:

- The A49 major historic route north south
- Historic Halls and associated with the River Glaze
- Winwick Church
- Ancient burial sites around Southworth Hall
- Red Bank (Winwick) English Civil War Battlefield
- Stephenson’s Manchester to Liverpool railway line and other historic railway lines
- A580 East Lancashire Road
- Culcheth Carrs WWII munitions storage site

- Kenyon Hall Parkland
- Winwick Hospital (site of)
- Rixton Clay Pits

Landfill and Mineral Extraction

There are no landfill operations within this area, however, there are visual impacts to the area from adjacent landfill sites. There are two active landfill sites adjacent to the area. The first at Silver Lane, has an impact on land to the north and east with a slightly lesser impact to the west. The second is at Rixton, having a visual impact on land to the east, around Hollins Green.

To the south of the area, within the River Mersey floodplain, there are two other landfill operations. The first is a non-hazardous wastes operation at Butchersfield, now complete, restored and planted. It has a high domed form and is visible from areas to the south up to the M62 motorway. The second is an adjacent landfill area to the west, formed from dredgings from the Manchester Ship Canal. This is now colonised by scrub, but permission has been sought to deposit additional material in this area and works have recently commenced.

Mineral extraction within the area comprises of sandstone extraction adjacent to Southworth Hall Farm and clay extraction west of Moat Lane and at Chapel Lane, Hollins Green. On completion of the extraction from the Southworth Hall site, which is well screened with planted embankments, the pit will be backfilled with inert fill and the land restored to agricultural use. Adjacent to the sand pit and close to the M6 motorway is a former colliery spoil heap which has now been reclaimed.

Map evidence suggests that the area around Winwick Church was widely used for quarrying on a small scale. These quarries appear to have been filled in during recent times. Other areas of land north-east of Winwick Chuch are possible small sand quarry sites, pre-dating the larger workings at Southworth Hall Farm. A substantial lake between Myddleton Hall Farm and the M6 is the result of gravel extraction in the recent past.

North-west of Hermitage Green is a colliery spoil heap which is sited outside the Warrington Borough boundary and therefore outside this character area. However, this spoil heap does have a visual impact on the character area. This spoil heap is a relic of the former Parkside Colliery and occupies an area of land formed by an elbow bend in Newton Brook. A planning application has recently been submitted (2007) for this area which impinges into the Warrington Borough.

Agricultural Land Classification

The bulk of the land around Winwick, Culcheth, Glazebrook and Rixton is Grades 2 and 3, reflecting a mixture of soil types, from sandy soils to the west to heavier clay soils (derived from brick earths) to the east. A further area of Grade 3 land is currently occupied by Rixton

Clay Pits together with a few fields to the east. A strip of land around the B5212 running south from Glazebrook down to Hollins Green is Grade 2.

Photo 54. View southwest from Sandy Brow Lane, showing the landscaped bunding around Southworth sand quarry in the left background.

Landscape Sensitivity

The Glazebrook, Culcheth and Winwick areas form a large tract of land with a similar character. The largely open countryside, dominated by arable crops, leads to long wide vistas. Although the land is gently undulating, any vertical structure or building stands out in the landscape as a dominant element. Views are also unrestricted by the scarcity of hedgerows and hedgerow trees, often suggesting a 'prairie like' simple landscape of waving crops or ploughed fields in winter. They are therefore generally visually sensitive to development.

Current visually intrusive elements to this landscape are the landfill sites within and adjoining these areas at Rixton, Butchersfield next to the River Mersey and at Silver Lane, Risley. These are huge, single mounds breaking through the surrounding gently undulating landscape and standing out incongruously as major features. The mounding associated with the sand extraction site at Kenyon is more subtly integrated into the landscape following a much lower and undulating profile.

Woodlands in the Glazebrook, Culcheth and Winwick areas tend to be the exception in the landscape and are generally on a small scale and isolated. Where woodlands are present, particularly in the Glazebury and north Culcheth areas, they help to create backdrops and form a more interesting landscape, breaking down long, uninterrupted views.

Key elements of landscape sensitivity:

- Wide, open vistas
- Simple, low, undulating landscape sensitive to vertical forms, particularly on local high points

Landscape Change

In common with the Stretton and Appleton areas, the landscape has tended towards the amalgamation of fields into larger units, with the resulting loss of hedgerows and hedgerow trees. The remaining hedgerows and hedgerow trees have little function within the arable, agricultural landscape and are often gapped and poorly maintained.

Photo 92b: An active clay pit at Rixton.

To maintain arable crop production, drainage to the clay soils has been essential, particularly at their margins with the adjoining mosslands of Holcroft, Glazebrook and Rixton Moss.

Woodland cover has also been reduced to maximise crop production and although often small and well scattered, woodlands now provide an important recreational resource. These are well used often with footpath connections to the surrounding villages.

Considerable landscape change has occurred locally in the Rixton area, through the extraction of clay for brick making. Most of these workings have left a landscape of discarded spoil and deep pit excavations now filled with water. The discarded spoil areas have naturally regenerated, largely with native trees and shrubs, and the area has become an important wildlife habitat and recreational resource for walking and fishing.

Communication routes have also substantially changed the landscape, carving it into ever-smaller parcels of land, requiring bridges, cuttings and embankments. The M62 and M6 motorways are particularly dominant features, cutting through the Winwick, Croft and Glazebrook areas with 2 main railway lines running east-west through Glazebury to the north and Glazebrook to the south – forming major obstacles to accessing farmland to either side.

A disused railway line runs from Wigan through Golborne and Culcheth to Glazebrook Moss, where it originally joined the main Manchester to Liverpool line. This has now been left as an historic feature in the landscape – easily recognisable by its linear vegetation clad embankments and cuttings running through the arable farmland. A section of the route has been utilised as a recreational footpath known as Culcheth Linear Park.

The construction of pylon routes have been additional impositions on the landscape and are common, intrusive features to the arable landscapes of Winwick and Kenyon.

Other landscape changes took place during the Second World War and can be evidenced today by the mounds and bunkers at Culcheth Carrs along the Borough's north-eastern boundary. Relatively new changes in the landscape have occurred in order to improve the viability of farming. Former agricultural land is now under consideration for alternative uses such as fishing ponds, golf courses, driving ranges and horse grazing. Fishing ponds and a driving range have now developed near Culcheth whilst demand for horse grazing paddocks is widespread adjoining the main village centres.

Landscape change to the area is summarised as follows:

- The imposition of landfill sites
- The past impact of roads and railways
- The past impact of pylons and power lines
- The enlargement of field sizes

- Substantial reduction in hedgerows and hedgerow trees
- Decline in management of remaining hedgerows and hedgerow trees
- Constant improvement of soil fertility for arable crops by drainage and fertilisers
- Pressure for horse grazing
- Changes from farmland to fishing and golfing facilities
- Disused railway lines
- Former Second World War munitions storage bunkers
- Clay extraction and restoration

Recommended Management and Landscape Objectives

Although much of the area's original small-scale field patterns have been lost, a strong framework of medium to large field boundaries is still present and forms a major part of the landscape's character. In order to retain this character, it is imperative to encourage the retention, enhancement and better management of the remaining hedgerows, together with the re-introduction of new hedgerow trees. Horse keeping should not be encouraged at the expense of traditional farming and in particular the destructive effects of horses browsing trees and frequently de-barking trees should be monitored.

The battlefield site of Red Bank should be preserved in its current, largely unspoiled state and opportunities should be considered for wider interpretation of this site, together with the associated Winwick Church.

The area's woodlands should be seen not only as important visual elements in an otherwise open landscape, but also as important recreational assets. The careful consideration of additional and woodland extension plantings should therefore be encouraged.

New development can be seen to have a major impact on the landscape, particularly where structures of mass and high elevations are concerned. The siting and size of such structures should therefore be carefully considered through visual impact studies and potential landscape mitigation.

The existing landfill sites currently form artificial dome or whaleback shaped profiles in the landscape. Flatter, lower and more undulating profiles appear to blend more sympathetically with the existing landscape. Elevations should be as low as feasibly possible, if necessary taking a greater area of land to minimise their visual impact. Restoration landscape schemes for such areas should not only consider wildlife and 'amenity space' but should also look to retain the land for productive use. Timber and biomass fuel production should be considered.

Management of the Landscape:

- Restore and enhance remaining field patterns by additional hedgerow planting

- Reintroduce hedgerow trees

- Conserve and manage existing woodlands to encourage habitat diversity

- Conserve and manage remaining hedgerows

- Consider additional native woodland planting

- Consider the use of native planting to soften and screen new development

- Investigate an extension of Culcheth Linear Park to the south, following the old railway line towards Glazebrook

Settlement

Settlements in the area include Hollins Green, Glazebrook, Glazebury, Fowley Common, Culcheth, Croft, Kenyon, Hermitage Green and Winwick.

Hollins Green is a small, nucleated settlement adjacent to the west side of junction of Manchester Road and Glazebrook Lane. There are very few older properties in the village, most are modern houses in a cul-de-sac development. The village occupies a generally flat site just north of the Mersey flood plain.

Glazebrook is a linear settlement along Glazebrook Lane, centred on the bridge over the Manchester/Liverpool railway line at Glazebrook station. It comprises of a small number of older properties and a number of modern houses and bungalows, occupying an area between Glazebrook Moss to the west and the edge of the flood plain to the River Glaze to the east.

Glazebury is essentially a linear settlement built along the A574 Warrington Road and sandwiched between the floodplain of the River Glaze and the extensive, formerly marshy area of Culcheth Carrs. It has a predominance of terraced housing built perhaps 100 years ago. There is a large garden centre, Bents, located to the east of the main road. At the northern end of the village, to the south-west of the junction between the A574 and the A580 (East Lancashire Road) is Lately Common, a flat area of common ground.

Buildings of note in the countryside around Glazebury include the north barn at Hurst Hall c. C15th, formerly a hall building Listed Grade II*; south barn at Hurst Hall c. early C17th, Listed Grade II and the Church of All Saints, Warrington Road, Glazebury, built 1851 and Listed Grade II. South of Glazebury, Holcroft Hall built in the late C15th – early C16th, with many alterations is Listed Grade II* and is the relict of a far larger courtyard site of the same period.

Fowley Common is a hamlet adjoining Glazebury, comprising of a small group of older properties and a public house with additional properties built after WWI. Fowley Common is located in a gently sloping south-east facing hollow, a tributary valley of the valley of the River Glaze. To the east of Fowley Common is a Local Authority housing estate built around Churchill Avenue. The estate comprises flat-roofed houses, which look particularly alien and locally quite visually dominant when viewed from the south.

Culcheth is a large nucleated settlement based around the junction of Warrington Road, Wigshaw Lane and Common Lane. Originally the settlement was close to the road junction, where a few older buildings are located. The settlement has been augmented by a series of conventional private housing estates of low architectural merit, many interconnected through a maze of loop roads. The village is sited on a generally gently north sloping area of undulating land.

Buildings of note in the countryside around Culcheth include Kenyon Hall, an early C19th building in Twiss Green, Listed Grade II, together with the contemporary Lodge to Kenyon Hall and associated gate posts, Listed Grade II. Brookhouse Farmhouse, Wigshaw Lane, built c. 1744 is Listed Grade II. On Warrington Road, south of Culcheth are a number of Listed buildings, including Hope Farmhouse, an early C19th farmhouse, Listed Grade II, the associated barn at Hope Farmhouse, a late C17th building Listed Grade II and Newchurch Old Rectory, a former rectory now a private house, Listed Grade II.

Croft was a dispersed settlement which historically began to coalesce around Lord Street and later infilled along Smithy Lane and Lord Street. A large estate occupies the area east of Pasture Drive and much of the village area is of similar housing type.

Croft is sited on undulating, gently south sloping land, north-east of the wide, flat floored valley of Cockshot Brook, now almost entirely occupied and certainly dominated by the M6 and M62 motorway junction. Within the village, the Catholic Church of St Lewis, Mustard Lane, built 1827 is Listed Grade II. St Lewis Presbytery, Mustard Lane, contemporary with the church is also Listed Grade II. The parish church of Christ's Church, Lady Lane, built in 1833 is Listed Grade II.

Just south of Croft, Eaves Lane Farmhouse c. 1703, on Spring Lane is Listed Grade II, as is Springfield Farmhouse, Spring Lane, a late C18th Grade II building.

Kenyon is an attractive collection of three small hamlets, Kenyon, New Lane End and Turret Hall. Both Kenyon and Turret Hall comprise of a small group of farm complexes. New Lane End is a similar group of farm complexes augmented with a few detached properties. Kenyon and New Lane End are located on almost flat ground, while the hamlet around Turret Hall is sited on the north-west side of Cockshot Brook.

Hermitage Green is a small hamlet on the junction between Hermitage Green Lane, Golborne Road and Parkside Road. In common with Kenyon, it is a small collection of farms augmented with some detached houses and a Public House. It is sited in a shallow valley, overlooking the steeper sided valley of Newton Brook to the north-west.

Winwick is a nucleated village standing to the east of the local high point, dominated by Winwick Church. The church is of great architectural significance, dedicated to St Oswald, it dates from the early C13th and has elements designed by Pugin in Victorian times. It is Listed Grade I. The oldest part of Winwick is clearly adjacent to the church. Generally, the older houses of the village are sited along Myddleton Lane and Golbourne Road. A series of infill estates have been built around the junction between these roads at various dates. A relatively modern bungalow estate forms the south-eastern edge of the village. The village has been greatly augmented with the development of the Winwick Hospital site, but this is detached from the body of the village and can almost be considered as a separate satellite development. Within the Winwick Hospital site is a Roman Catholic church, built c. 1900 and Listed Grade II.

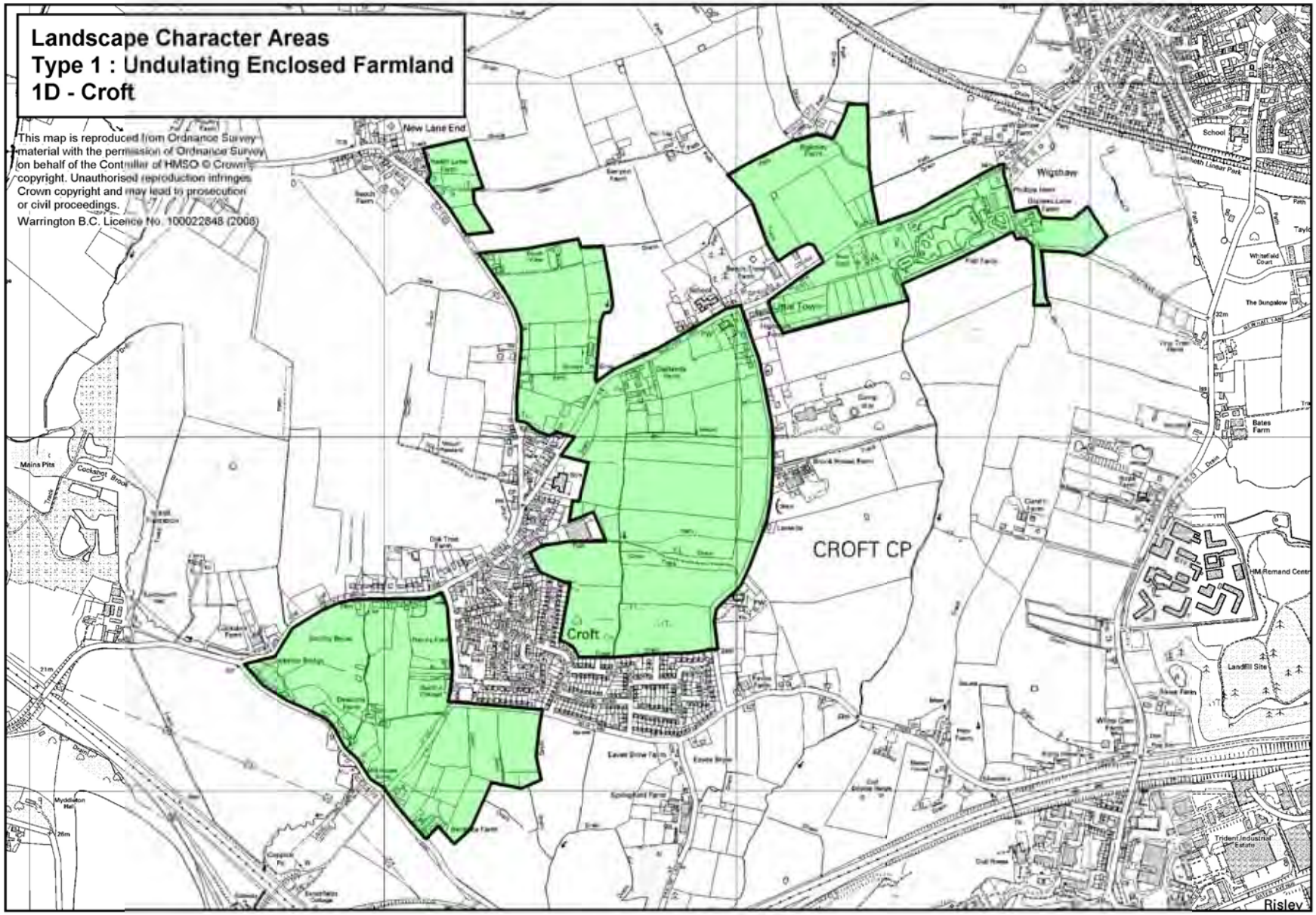
Buildings of note in the countryside around Winwick include Myddleton Hall c 1658, Listed Grade II*, Myddleton Hall Farmhouse c. 1656, Listed Grade II, the Manor House, Golborne Road c. 1717, Listed Grade II, Church House Farmhouse, Golborne Road, early C17th, Listed Grade II and Ivy House, Delph Lane 1840, Listed Grade II. Southworth Hall and Turret Hall near Winwick are also of some importance, being more recent buildings on older sites.

Farmsteads of note as aggregated groups of agricultural buildings include Clare's Farm in Croft, Mount Pleasant Farm in Rixton, Milverton and Ormerod Farms in Rixton, Hole Mill Farm in Holcroft and Dukinfield in Glazebury.

Cop Halt Farm, sited on a knoll south of Newton Brook and east of Sankey valley is a particularly visually dominant farmstead, seen from the Sankey Valley as well as from Winwick and from Wargrave to the north.

Within the area are three building complexes with significant landscape impact. Two of these are to the east of Warrington Road - Risley Remand Centre, with its high escape-proof walls, associated secure areas and car parking the and the Taylor Industrial Estate a gated private industrial estate. The third complex is the former Mental Hospital at Winwick, the original buildings of which have now been largely removed and replaced by a three storey housing complex.

Photo 94. An angler at one of the former clay pits at Rixton, now a tranquil and very beautiful pond.


Landscape Character Areas
Type 1 : Undulating Enclosed Farmland
1D - Croft
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CROFT CP
Croft
New Lane End
Wigshaw
Oak Tree
Bates Farm
Mains Pits
Cockshot Brook
Landfill Site
HM Remand Centre
Trident Industrial Estate
Risley

TYPE 1. UNDULATING ENCLOSED FARMLAND

AREA 1.D CROFT

Description

The village of Croft and its surrounding landscape is situated to the north of the study area between Culcheth and Winwick. Its landscape comprises of a series of small, linear fields closely associated with the village and contrasts markedly with the larger, and more rectangular, field patterns of the surrounding land defined under Area 1.3 Glazebrook, Culcheth and Winwick.

Many of Croft's fields are long and narrow, bordered with ditches and divided by hawthorn hedges frequently containing groups of mature hedgerow trees. Views are linear and strongly contained between the field hedges. They are clearly medieval in origin, 'fossilised' in the landscape through later enclosure and exhibit the characteristic 'S' shape in plan as the result of years of ploughing by oxen or horses.

Judging from historical maps, it is clear that the small scale field pattern was once a lot more extensive but due to the removal of hedgerows and field boundaries in more recent times, a more expansive, large scale field system has developed to the surrounding areas.

The soil type around Croft is heavy clay with fields used both for arable and pasture farming. The smaller field system has, in many cases, led to larger extended linear gardens with a number of the pasture fields succumbing to the demand used for horse grazing.

Key Characteristics:

- Historic field patterns
- Gently undulating landscape containing intimate scale linear strip fields
- Gapped and fragmented hedgerows supplemented by post and wire fencing
- Numerous hedgerow oaks in groups or isolated
- Predominantly pastureland
- Association of fields to adjoining properties or gardens or horse paddocks
- Red brick and sandstone farms
- Limited and often linear views

- Settlement pattern of older properties reflected in the field patterns

Photo 53. A view of one of the former strip fields at Croft with the characteristic ‘S’ shape to the hedgerow clearly visible.

Cultural History

The Manor of Croft was for many years held with the neighbouring Manor of Southworth by the lords of Makerfield. Towards the end of the C17th both manors were held as one. Like several other manors in the north of Warrington, some of the inhabitants appear to have been recusants and to have been duly punished or fined, sequestration of land occurring more than once. This may have contributed to the apparent plethora of ownerships in such a small village. In 1817 an Independent Methodist Chapel was built in the village, while in 1839 a small chapel was built by the Unitarians. A number of boundary disputes are recorded in the Parish of Croft, one at least dating back to 1287. The overall impression is that this Parish was very much divided and lacked a powerful lord, who would otherwise have been in a position to enforce enclosures.

The field patterns of this area are represented in the landscape as post medieval enclosure of a medieval strip system. Where in other villages the owners of the strips collaborated in the exchange of strips to provide themselves with a larger agglomeration of land, in Croft they clearly did not. The result was a series of long narrow fields.

This was probably not as entirely bad for farmers as it might suggest, since the heavy clay land was more appropriate for dairy farming than for arable farming.

Part of this area of Croft, known as Croft Grasslands is an SBI (Site of Biological Importance) Grade C.

Key cultural elements in the landscape:

- The post medieval strip fields

Landfill and Mineral Extraction

There are no landfill or mineral extraction operations within this area.

Agricultural Land Quality

This area is scheduled grade 3 agricultural land, with a small amount of grade 2 land to the extreme south.

Landscape Sensitivity

The linear, small-scale field patterns which characterise this part of the Croft area are dependent on the retention of the current hedgerows. The Croft landscape is therefore extremely sensitive to both the neglect and/or removal of hedgerows and their associated hedgerow trees. The distinctive Croft landscape occupies relatively small vestigial areas associated with the village. It is therefore very sensitive to the loss of land due to changes in land use, such as village expansion and new building.

Key elements of landscape sensitivity:

- Strong rural/historic agricultural character
- Small scale liner field patterns
- Hedgerows and hedgerow trees

- Loss of land due to changes in land use/building

Landscape Change

The Croft landscape and field patterns have, in essence, changed little from the Ordnance Survey map of 1854. This retention of the core of an old agricultural landscape is extremely rare within the Borough and a significant asset worthy of retention. Changes to the landscape are, however, slowly occurring resulting in a weakening of the field patterns. A number of the hedgerows are poorly maintained and gapped, some with hedgerow sections missing. The original field patterns can still be discerned however by remaining mature 'hedgerow' trees left in a linear form.

Photo 53b: Another view of the Croft fields showing the beginnings of deterioration as the hedge becomes gapped and posts and wire are used to make up.

Major landscape changes have occurred to all the agricultural areas surrounding Croft, due to the use of the land for arable crops. As a consequence, hedgerows have become less functional and fields have been enlarged. Croft however appears to have returned to its use of pasture land and grazing, with less demand for larger field sizes. Grazing patterns are now changing with an increasing demand for horse paddocks, particularly adjacent to the housing areas. This does not appear to be directly threatening the field patterns but is giving

rise to more post and wire fencing and an acceleration of the neglect in traditional hedgerow management and upkeep.

Hedgerow trees are browsed by horses and livestock generally, resulting in a landscape of mainly mature trees with few young trees to take their place. Trees left in pasture without their original hedgerow protection are exposed to damage to bark, roots and general 'poaching' and are also in decline.

Red brick and sandstone form buildings are now less used as working farms and in a number of locations have been restored or converted for private dwellings.

Landscape change to the area is summarised as follows:

- Slow but continual neglect of hedgerows and hedgerow trees
- Pressure to provide horse grazing paddocks with associated post and wire fencing
- Reduction in the number of working farms and their conversion to private dwellings

Recommended Management and Landscape Objectives

The main character of the area is based on small scale linear pasture fields bounded by hedgerows and hedgerow trees. The main landscape objective should therefore be to retain, enhance and restore the existing historic and intimate character of the landscape.

Management of the landscape:

- Retain existing hedgerows and hedgerow trees
- Support and encourage traditional hedgerow management
- Support and encourage new hedgerow and hedgerow tree planting to infill gaps and missing hedge sections
- Protect exposed mature trees in pasture from further damage by browsing stock
- Protect new hedgerow and tree planting from browsing damage by grazing stock
- Encourage the retention of traditional pastoral grazing as opposed to changing to horse grazing paddocks

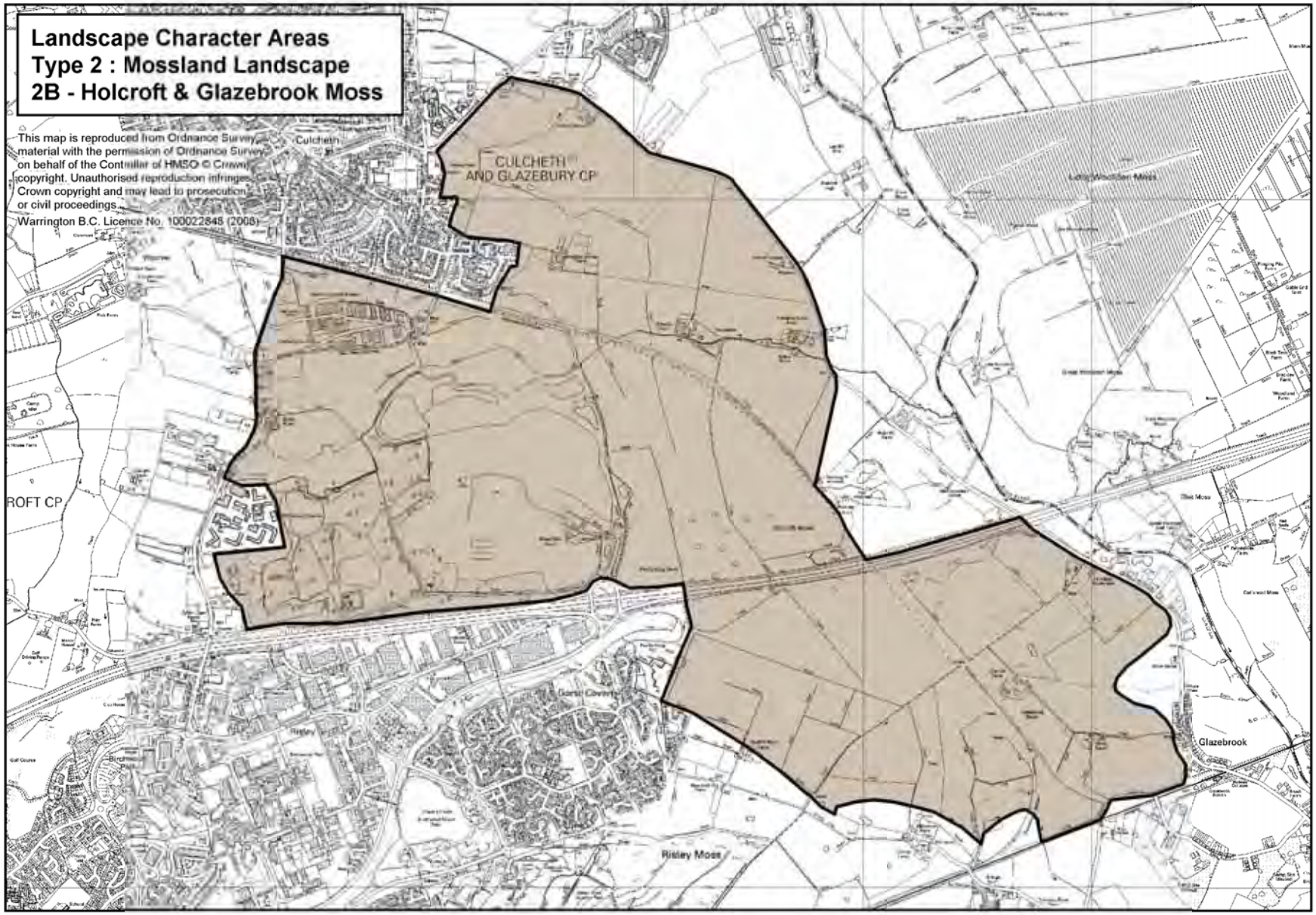
- Promote the restoration and replanting of local orchards

Settlement

The village of Croft is built around a triangle of roads, New Lane (to the south), Lady Lane (to the east) and Smithy Lane, Lord Street and Mustard Lane (to the west and north). Originally the core of the village was built around the latter three roads, but it has expanded from 1850.

Croft was a dispersed settlement which historically began to coalesce around Lord Street and later infilled along Smithy Lane and Lord Street. A large estate occupies the area east of Pasture Drive and much of the village area is of similar housing type. Croft is sited on undulating, gently south sloping land, north-east of the wide, flat floored valley of Cockshot Brook, now almost entirely occupied and certainly dominated by the M6 and M62 motorway junction.

The settlement associated with the medieval fields is east of Heath Lane and on the village perimeters. It often comprises of small farms with the medieval fields attached.


Landscape Character Areas
Type 2 : Mossland Landscape
2B - Holcroft & Glazebrook Moss
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CULCHETH AND GLAZEBURY CP
ROFT CP
Glazebrook
Risley Moss

TYPE 2 MOSSLAND LANDSCAPE

AREA 2.B HOLCROFT AND GLAZEBROOK MOSS

Description

Holcroft and Glazebrook Moss form a continuous area of mossland separated from Risley and Rixton Mosses to the south-west by a narrow causeway known as Old Hall Lane, situated on slightly higher land between Milverton Farm and New Hall Farm.

Their landscape character is similar to that of the adjacent Rixton Moss, although field sizes become larger from south to north with fewer dividing ditches. Arable crops appear more extensive and less varied. The impression of 'isolation' within the area is less marked with views tending more towards the east and the Pennines.

The edges of this mossland are indistinct, visually feathering into bordering areas.

The landfill site at Silver Lane is a dominant and alien feature in an otherwise flat landscape. The site is currently active, although completed sections are now 'over soiled' and planted with mainly native woodland species.

Key Characteristics:

- 'Level' basin form to mossland areas
- Expansive views towards the Pennines
- General absence of hedgerow and hedgerow trees
- Predominantly expansive arable farmland
- Visually dominant elevated sections of a disused railway
- Visually dominant landfill site at Silver Lane
- Open and exposed

Cultural History

At the core of the Holcroft and Glazebrook Moss area is Holcroft Moss, part of which was was bought by Cheshire Wildlife Trust in 1990 as a wildlife reserve. This is a relatively small area of woodland, scrub and rough grassland. It represents the only area of lowland bog in Cheshire which has not been cut for peat although the water level has been reduced by

drainage ditches. To the east of Holcroft Moss and just west of Hole Mill Farm is an area of former peat cuttings. Holcroft Moss is an important area for bird watching and possesses a number of rare mossland plant species.

Photo 78a. Hoyle's Moss Farm, near Risley Moss looking north across Holcroft Moss

In common with Risley Moss there were numerous small fields around the moss edge in 1845 with many lanes and tracks radiating out from the moss. Today there is little evidence of these and almost the whole area is farmed. The M62 cuts through the mossland areas and is in a cutting for much of its length, adversely affecting the conservation of the moss by increasing the effects of drainage and physically severing the mossland to either side.

A disused railway line also runs across the mossland, from Culcheth down to the southeast of the area, formerly joining the Manchester/Liverpool railway line near Glazebrook station. This line is broken by the M62 motorway route, running east-west across the area. To the north of the M62, the line is elevated on an embankment, whilst to the south it is approximately at ground level. The disused line becomes the Culcheth Linear Park to the north of the area.

Risley Remand Centre opened in 1964. In 1990, it was designated a Category C Male Training Prison and continues in that role. It has a high, roll-topped concrete perimeter security wall, with visitor parking to the Warrington Road frontage and is now partially screened from view to the south and east by the mass of the Silver Lane landfill site.

Taylor Business Park was originally built as a Ministry of Supply depot to house workers employed at the Risley Ordnance Factory. Known as the Newchurch site, it became a naval supply depot when Risley Ordnance Factory ceased production. In 1962, the Ministry of

Supply Department of Atomic Energy, who were then using the site, were moved to new premises at Risley as part of the newly established Atomic Energy Commission. The Taylor family then purchased the site to house their Lathom Engineering Company Ltd. The Taylor Business Park was formed on the sale of Lathom Engineering Co. Ltd some time shortly after 1970.

Key cultural elements in the landscape:

- The Holcroft Moss Nature Reserve
- The M62 motorway
- Silver Lane landfill site
- The disused railway line (connecting to Culcheth Linear Park)
- Disused peat cuttings
- HM Remand Centre, Risley
- The Taylor Business Park
- The Manchester – Liverpool main railway line

Landfill and Mineral Extraction

A very substantial area of landfill occupies land north of the M62 motorway to the north of Silver Lane. A large part of this site has already been seeded and planted, but there is currently no public access due to security problems associated with methane gas recovery and power generation. The landfill has been progressed from west to east and has involved covering listed buildings (see 'Settlement' below). The landfill operations are currently at the eastern end of the site, in clear view of observers throughout this landscape area. The landform has a major adverse impact when viewed from Junction 11 on the M62.

Peat-cutting operations have historically taken place on Holcroft Moss, but these have now ceased.

Photo 73. Landfill at Silver Lane, Risley viewed from the disused Culcheth railway line near Frank's Farm.

Agricultural Land Classification

The wet area of Holcroft Moss, centering on a zone around the M62, is unclassified. All around this area is a zone of Grade 1 agricultural land. North and south of this area is an area of Grade 2 agricultural land. To the north it is on the north-east side of the disused railway line. To the south there is a small zone of Grade 2, extending into the adjacent landscape area. The remainder of the area is Grade 3 agricultural land.

Photo 70: Suburban edge –Housing at Culcheth viewed from the footpath near Ratcliffe House farm – across a mossland landscape.

Landscape Sensitivity

The landscape sensitivity of the area is very similar to that of the adjoining Rixton, Woolston and Risley Mosses. The function of the arable land is totally dependent upon drainage and water level management, with potential problems of 'wind blow' erosion to exposed soils in dry, windy weather.

As with all mosslands, buildings are located around the mossland fringes, where firmer foundations can be more easily achieved. Large fields of mainly grain crops predominate with very few public footpaths. The scale and openness of the landscape does not appear welcoming to recreational use, although views out of the area towards the Pennines are extremely attractive. The flatness of the landscape is very prone to the impact of large scale mounding and it is therefore unfortunate that the mosslands have been selected for landfill, as evidenced by the very large site at Silver Lane, Risley.

Key elements of landscape sensitivity:

- Very sensitive to water levels and drying out
- Prone to windblow and erosion
- Prone to subsidence of structures and buildings
- Open, unrestricted views
- Potential footpath erosion on the peat
- Mossland woodlands and undisturbed areas are a haven for specialised wildlife but sensitive to disturbance.
- Sensitive to the imposition of high structures and/or mounding

Landscape Change

In common with the adjoining mosslands, these areas would originally have been seen as uninhabitable and dangerous prior to drainage, with the access road skirting the mossland fringe between Glazebrook and Culcheth (B5212). The construction of the main Manchester to Liverpool railway later in the C19th by the Cheshire Lines Committee and the more recent M62 motorway, have both been undertaken through the moss, largely in cuttings. This has further reduced the water table and created more workable and productive farmland.

A more visually prominent railway line through the area is the now disused line which ran from Leigh and connected with the Manchester to Liverpool railway near Glazebrook. Construction across the moss was undertaken here on an embankment, forming a notable linear feature, now tree clad, through the flat arable landscape.

The landfill site at Silver Lane, Risley is a more recent change in the landscape on a large and dramatic scale. This has fundamentally and unfavourably altered the flat landscape of the moss by introducing a visually intrusive, isolated high mound.

Landscape change is summarised as follows:

- Drainage of the mosslands altering the landscape from marsh and woodland to agricultural land
- Past construction of Liverpool to Manchester railway line and M62 motorway
- Past construction of Leigh branch line railway embankment

- The imposition of landfill

Recommended Management and Landscape Objectives

- Retain, monitor and adjust current water levels within the mosslands to avoid fluctuations, drying out and potential wind erosion

- Consider the balanced needs of both agriculture and wildlife habitat

- Consider the merits of higher water levels in areas of less productive mossland, promoting greater habitat diversity and wildlife value

- Retain the existing quiet and tranquil character of the mosses without encouraging recreational use or built development

- Consider methods of landscape mitigation to reduce the visual impact of the landfill site at Silver Lane, Risley

- Retain the basic landscape structure of the mossland fields and ditches, whilst encouraging a greater diversity of native flora to the ditches and trackway verges

Settlement

There is very little settlement within this area. A few small farms such as Franks Farm, Church Farm and Ratcliffe House Farm are scattered around the edges of the moss, in most cases on the drier, non-peaty soils. Old Abbey Farmhouse, Silver Lane was an early to mid C17th Farmhouse built on an earlier moated site and Listed Grade II. Associated with this was a nearby barn which was probably late C17th, also Listed Grade II. Both buildings have been covered by the landfill at Silver Lane.

Photo 73c: View across Holcroft Moss from the disused Culcheth railway line near Frank's Farm.

RANDALL THORP
CHARTERED LANDSCAPE ARCHITECTS

Land off Lady Lane, Croft

Landscape Sensitivity Assessment of Croft
and Landscape Appraisal of Proposed Development
on Land off Lady Lane, Croft

Appendix C
Extract from the Wigan Landscape
Character Assessment

September 2017

Prepared for:

PEEL

7.0 LANDSCAPE CHARACTER TYPES AND AREAS

Introduction

The landscape of Wigan has been characterised by the methods described within Chapter 2 Methodology.

After careful consideration, six distinct **landscape character types** have been discerned and are represented as follows:

Type 1	Undulating Enclosed Farmland
Type 2	Elevated Enclosed Farmland
Type 3	Steep-Sided Wooded Valleys
Type 4	Wetlands and Flashes
Type 5	Degraded and Restored Landscapes
Type 6	Mossland

Each landscape character type represents a part, or number of parts, of Wigan Borough which are readily recognisable by their homogenous character. This may be reflected in the area's topographical or geological characteristics, its ecology, land use or cultural history. In many cases it is a combination of all these factors.

Each of the landscape character types is composed of discrete **landscape character areas.** These bear all the fundamental characteristics of the landscape character type but also have a distinct recognisable local character and identity. The full list of landscape character areas is detailed below, under each landscape character type heading.

Type 1	**Undulating Enclosed Farmland**
Area 1.A	East Lancashire Road Corridor Lowton Heath to Lately Common
Area 1.B	Aspull Common, Leigh to Bamfurlong
Area 1.C	Edge Green to Land Gate
Area 1.D	Boars Head, Lower Haigh and Hindley Hall
Area 1.E	Fragmented areas including Alder Farm (Hindley), Bickershaw/Crankwood, Hag Fold, Howe Bridge/Atherton Hall, Shakerley / Mosley Common, Hindsford Brook, Garrett Hall and Higher Green(Astley).
Type 2	**Elevated Enclosed Farmland**
Area 2.A	Billinge and Orrell Ridge
Area 2.B	Douglas/Gathurst Valley
Area 2.C	Shevington and Standish Spurs
Area 2.D	Standish Crest
Area 2.E	Aspull Ridge

Type 3	**Steep-Sided Wooded Valleys**
Area 3.A	Smithy Brook
Area 3.B	Dean Brook and Ackhurst Brook
Area 3.C	Calico Brook, Hullet Hole Brook and Worthington Brook
Area 3.D	Mill Brook and Frodsham's Brook
Area 3.E	River Douglas (Adlington Park to Bottling Wood)
Area 3.F	Borsdane Brook
Type 4	**Wetlands and Flashes**
Area 4.A	Appley Bridge to Martland Mill
Area 4.B	Wigan Flashes
Area 4.C	Hey Brook Corridor
Area 4.D	Pennington Flash
Area 4.E	Hope Carr
Type 5	**Degraded and Restored Landscapes**
Area 5.A	The Three Sisters
Area 5.B	Kirkless
Area 5.C	Ince Moss/Amberswood Common
Area 5.D	Hindley Derelict and Reclaimed Land
Area 5.E	Bickershaw
Area 5.F	Dangerous Corner
Area 5.G	Pickley Green
Area 5.H	Gin Pit
Area 5.I	Astley Green
Type I	**Mossland**
Area 6.A	Highfield Moss
Area 6.B	Bedford Moss and Moss Side, Astley
Area 6.C	Astley Moss

Landscape Character Types

Landscape Character Types comprise of one or more Landscape Character Areas of broadly similar character. Each landscape character type is dealt with in turn and is identified by a location plan illustrating both the **Landscape Type** and sub-divisions of **Landscape Areas**, followed by a description of the landscape and its setting.

This is summarised by identifying the key characteristics which contribute to make the character type distinctive. The landscape description is followed by a brief overview of cultural history for the character type as a whole.

Landscape Character Areas

These provide a more detailed landscape description of the individual areas concerned and are again summarised by their key characteristics. This is followed by a more detailed description of each area's cultural history and its relationship with the landscape – summarised by the key cultural elements in the landscape.

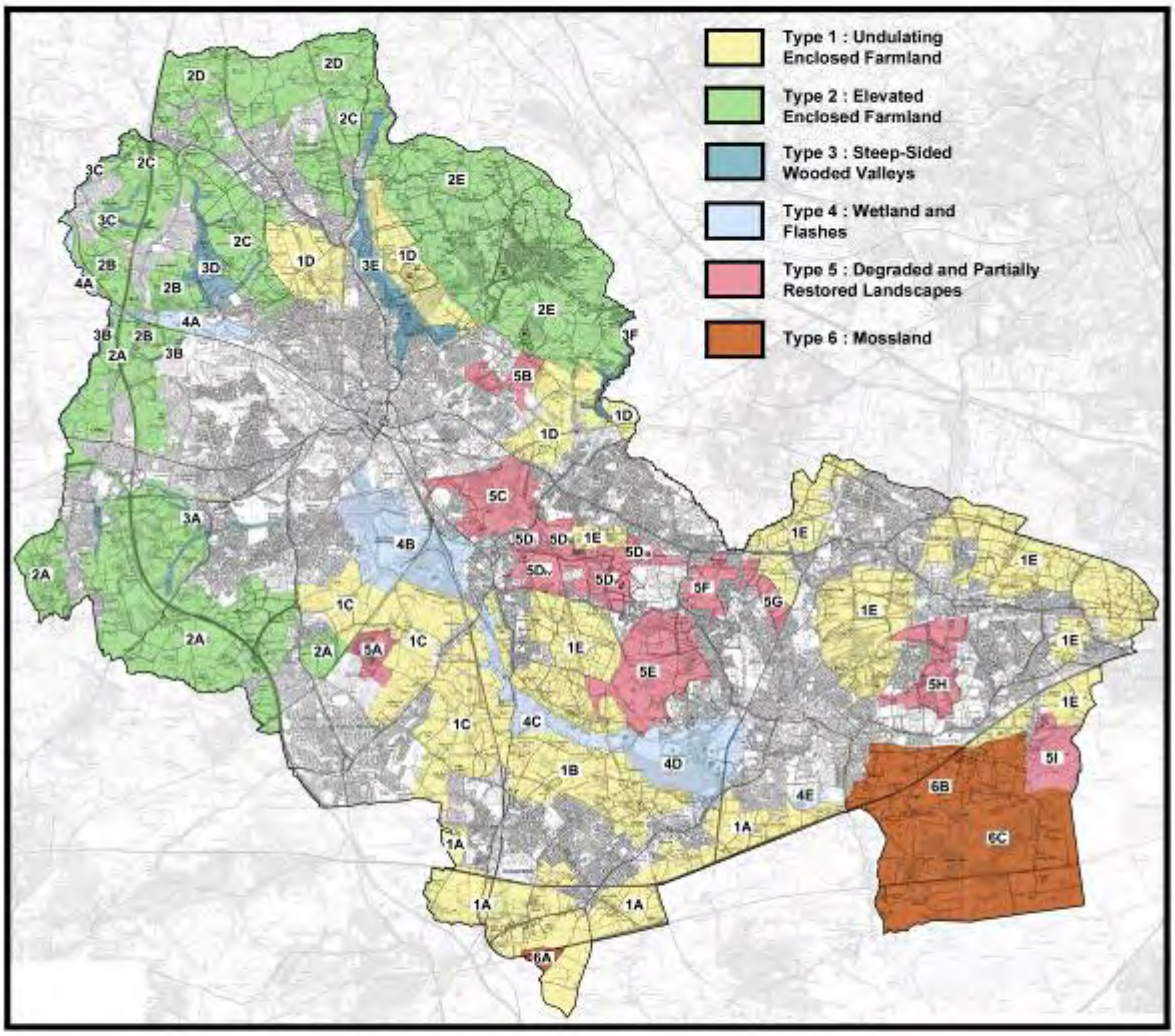
This section continues to discuss landscape sensitivity and change:

- Landscape sensitivity considers the physical and visual features in the landscape which, if lost or altered, would change the area's character. The key elements of landscape sensitivity are summarised.

- Landscape change discusses those elements which are in the process of changing and have changed or contain aspects of the area's landscape character. These have been observed on site and have also been considered from the data provided by the Countryside Agency's Countryside Quarterly counts (CQC).

- Recommended Management and Landscape Objectives. This section considers the existing merits and de-merits of the area's landscape in relation to its sensitivity and existing or potential change envisaged. A series of management recommendations are made to retain, alter or enhance the present landscape.

- Photographs taken as part of the field survey work have been selected to illustrate the main landscape type and character areas together with other features which may be important to the text.


Type 1 : Undulating Enclosed Farmland
Type 2 : Elevated Enclosed Farmland
Type 3 : Steep-Sided Wooded Valleys
Type 4 : Wetland and Flashes
Type 5 : Degraded and Partially Restored Landscapes
Type 6 : Mossland

AREA 1.A EAST LANCASHIRE ROAD CORRIDOR LOWTON HEATH TO LATELY COMMON

Description

These areas form an agricultural landscape buffer to the densely developed residential areas of Golborne and Leigh to the north. Views within the area are limited due to the low-lying and relatively flat nature of the land and due to surrounding development and high hedgerows, particularly to the East Lancashire Road (A580). The East Lancashire Road is visually dominant throughout much of the area, particularly where it runs on embankments. Most of the land is closely associated with the East Lancashire Road and merges into larger areas of similar character to the south within Warrington Borough. The areas are typified by a medium to large-scale field pattern consisting of mainly arable land with poorly maintained remnant hedgerows with few hedgerow trees.

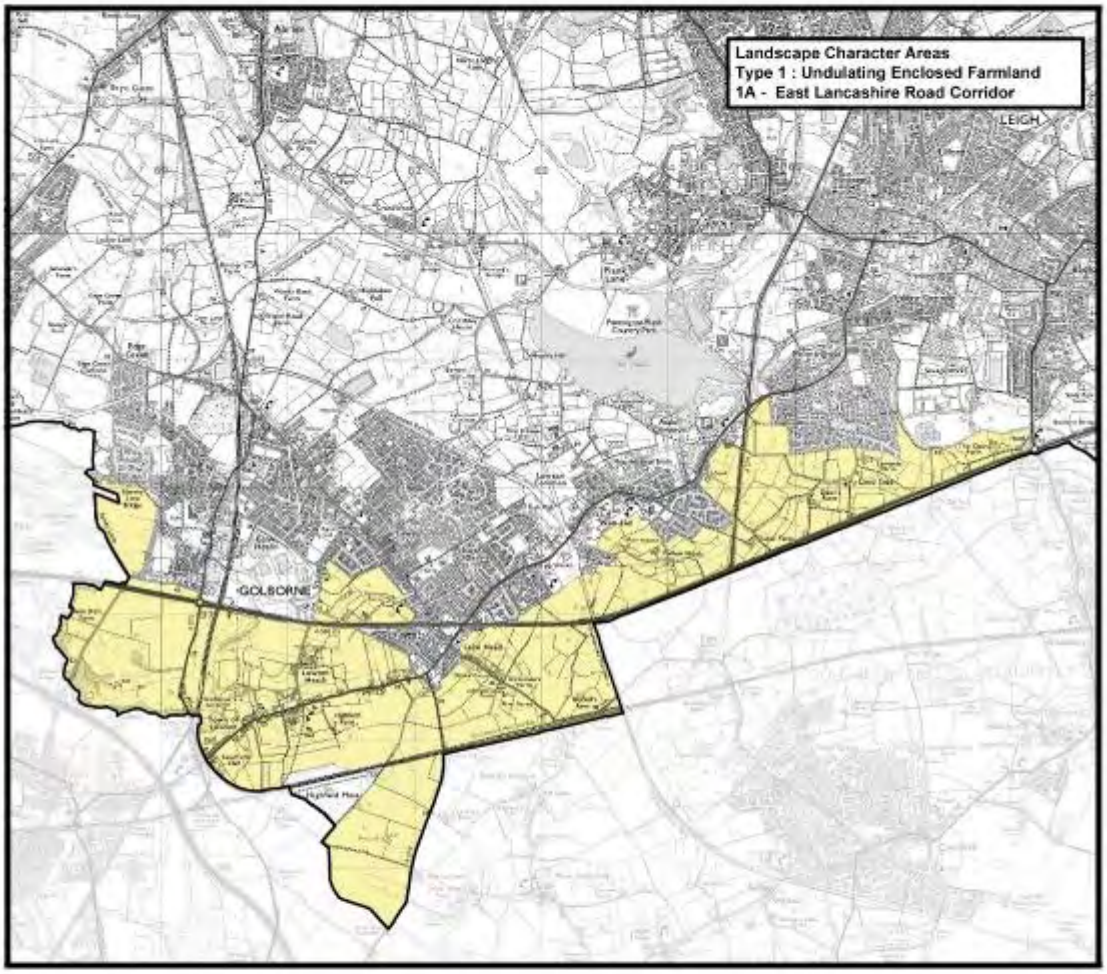
Photo. 12 View east from Warrington Road.

Small deciduous woodlands form backdrops to views within the landscape, mainly to the south at Haydock Park and along the course of Newton Brook. The land is relatively flat and low-lying to the east with more strongly undulating ground to the west. Along the western boundary the land drops steeply into the discrete valleys of Newton Brook to the west and its tributary Millingford Brook to the east. To the east of Golborne's Dale Bridge, Millingford Brook flows through a much more shallow valley profile. Carr Brook and Pennington Brook are located to the east of the area, forming minor stream tributaries to the River Glaze. The latter flow through low-lying areas of marshy ground and rough pasture.

The area is traversed by a large number of footpaths, including part of the Glazebrook Trail.

Key Characteristics:

- Medium to often large-scale fields, mainly cereal crops
- Lack of hedgerow trees
- Hedgerows between fields often gapped
- Deciduous wooded backdrops to the south and west
- Limited internal views
- The A580 road and its embankments
- Views of residential urban edge to the north
- Mainly flat land particularly to the east associated with Carr Brook and Pennington Brook
- Undulating ground to the west associated with Newton Brook and Millingford Brook


Landscape Character Areas
Type 1 : Undulating Enclosed Farmland
1A - East Lancashire Road Corridor
LEIGH
GOLBORNE

Cultural History

The East Lancashire road corridor contains a number of historic routes. The A572 Newton Road formed the early east/west route from Newton le Willows through to Leigh, in a north-east to south-west general direction via Lane Head, Lowton St Marys, Lowton Common and Pennington. The latter settlements were probably agricultural hamlets before the Industrial Revolution. The A573 Warrington / Wigan Road runs north-south through the area via Golborne.

It is probable that much of this area was concerned with textile production in the C17th and C18th, possibly producing flax and linen. By the C19th, with the repeal of the Corn Laws and the increasing amount of coal and associated industrial enterprises in the area, a local demand was created for wheat production. Increasing mechanisation in the C20th meant that farmers could dispense with many hedgerows and these were removed to produce the far larger fields present today.

The A580 trunk road was opened by King George V in 1934 and was England's first intercity highway, linking Manchester and Liverpool. The name East Lancashire Road refers to the original and unattained objective of ultimately extending the road into East Lancashire. A section of the road forms the boundary of Wigan Borough with Warrington Borough between Lately Common and Lowton St Marys. This section of the road was built on an embankment to overcome the marshy ground problems of Culcheth Carrs on the Warrington side of the road. Old Carr House, north of the road, is sited on the same marshy ground.

The Manchester – Liverpool railway line, now operated as a secondary line, was opened in 1830, its creator being the great engineer George Stephenson. It crosses the area running east west just south of Lowton Heath, having passed through Glazebury to the east on an embankment. Stephenson had great difficulties in crossing Chat Moss to the east with the railway. Originally designed as a cable railway i.e. with static engines at each end and cables between, it had particularly easy gradients of up to 1:2,000. When the 'Rocket' won the Rainhill Trials in 1829, it was assigned to this line, becoming the first locomotive powered railway in the world.

The main west coast railway line runs through the area just east of the A575 Warrington Road.

To the west of the area is Haydock Park. The racecourse at Haydock is within St Helens Borough. The racecourse was founded in 1752 at Newton-le-Willows on Golborne Heath and transferred to its current location in 1898. Haydock Park Golf Course occupies to site of Golborne Park, a site of some antiquity. Golborne Hall at the centre has substantially been demolished, but there are entrance lodges on the Golborne Road and the Warrington Road entrances. The parkland was designed on the north side of Millingford Brook and Ellam's Brook and like Haigh Hall appears to be mainly C19th plantation overlaid on semi-natural woodland in the river valley. South of the former Hall and in Newton-le-Willows is Castle Hill, a motte which may be related.

There are a number of colliery shafts in this area, although all mining activity has now ceased and all evidence of mining within the area is minimal. The Golborne Pit disaster of March 1979, when 10 miners lost their lives, is still very much in the memories of local people.

Key cultural elements in the landscape:

- Historic local roads
- Golborne Hall and Golborne Golf Course.
- The A580 East Lancashire Road.
- Stephenson's Manchester – Liverpool Railway line

Landscape Sensitivity and Change

The landscape at Lowton Heath to Lately Common has already illustrated its sensitivity to incremental development such as local housing expansion and golf course construction to the development of industrial and commercial estates and the construction of new roads such as the recently constructed Lowton St Marys by-pass (A579). These developments have all served to divide and fragment the agricultural land, reducing agricultural viability and leaving the area prone to further infill development, particularly to the north of the A580.

Arable land to the south of the A580 has had little need for hedgerows and hedgerow trees and these are consequently in a poor condition. Hedgerows are similarly in decline to the north of the A580 due to the increase in horse grazing, with barbed wire fencing relied upon for functioning field boundaries.

The area is particularly sensitive to views from the A580 and A573 (Warrington Road).

Key elements of landscape sensitivity:

- Subject to development pressure, further fragmenting the area
- Prone to pressure from the urban fringe, reducing agricultural viability
- Restricted views (mainly from A580)
- Continuing loss of hedgerows and hedgerow trees

Key elements of landscape change:

- Loss of agricultural land to development
- Declline of hedgerows and hedgerow trees
- Increase of barbed wire fences
- Increase of marginal land under urban pressure
- Enlargement of field sizes

Recommended Management and Landscape Objectives

Although much of the area's original small-scale field patterns have been lost, a strong outline of medium to large field boundaries are still present and form a major part of the landscape's character. In order to retain this character, it is imperative to encourage the retention, enhancement and better management of the remaining hedgerows, together with the re-introduction of new hedgerow trees. Mechanical cutting of existing hedgerows should not be at the expense of young hedgerow trees, which farmers should be encouraged to plant. Where possible, new hedgerows should be introduced, preferably along the line of former hedges, but in particular around the perimeter of the area adjacent to new development. Equestrian uses should not be encouraged at the expense of traditional farming and in particular the destructive effects of horses browsing and frequently de-barking trees should be monitored.

Woodlands are scarce in the area although they form a prominent and important part of the landscape character within the adjoining landscape to the south. Woodlands should be seen not only as important visual elements in an otherwise open landscape, but also as important recreational assets. They are also valuable in softening the often stark effects of new development abutting agricultural land, particularly where this has been rendered less viable by development. However, no large scale woodland planting should be undertaken within close proximity to the ecologically important wetlands of the Hey Brook Corridor and the Abram Flashes in Area 4C to the north. Therefore careful consideration of additional woodland planting should be encouraged only where biodiversity issues are fully explored. In particular, woodland 'edge' planting to existing woodland should be carried out using native species. Connectivity of hedgerows to small ponds, woodlands and other habitats should be an objective of both management and any proposed planting.

New development can be seen to have a major impact on the landscape, particularly where structures of mass and high elevations are concerned. The design, siting and size of such structures should therefore be carefully considered through visual impact studies and potential landscape mitigation. Views of new development from the East Lancashire Road (A580) are particularly important in this regard.

Management of the Landscape:

- Restore and enhance remaining field patterns by additional hedgerow planting
- Reintroduce new hedgerow trees.
- Encourage the rapid removal of eyesores such as derelict steel barns, tipped materials, refuse etc. particularly when these are easily viewed from major routes.
- Conserve and manage remaining hedgerows
- Conserve and manage existing woodlands to encourage habitat diversity
- Consider additional native woodland planting particularly in relation to the urban fringe.
- Consider the use of new or enhanced existing native woodland planting to soften and screen new development.

- Discourage horse grazing unless hedgerows and hedgerow trees have ensured protection and good management.

- Encourage maintenance and enhancement of visually prominent structures in and around the landscape area, such as old cotton mills, etc

- Encourage and monitor public access routes through the area, preferably along field boundaries rather than across open fields. Create, where possible, circular routes and ensure adequate waymarking. Use derelict railway lines where possible and link to similar routes outside the Borough.

- Discourage development to the south of the A580. Consider any desired development north of the A580 in association with landscape open space and woodland planting.

- No large scale woodland planting should be undertaken within close proximity to the ecologically important wetlands of the Hey Brook Corridor.

RANDALL THORP
CHARTERED LANDSCAPE ARCHITECTS

Land off Lady Lane, Croft

Landscape Sensitivity Assessment of Croft
and Landscape Appraisal of Proposed Development
on Land off Lady Lane, Croft

Appendix D
Extract from the St Helens Landscape
Character Assessment

September 2017

Prepared for:

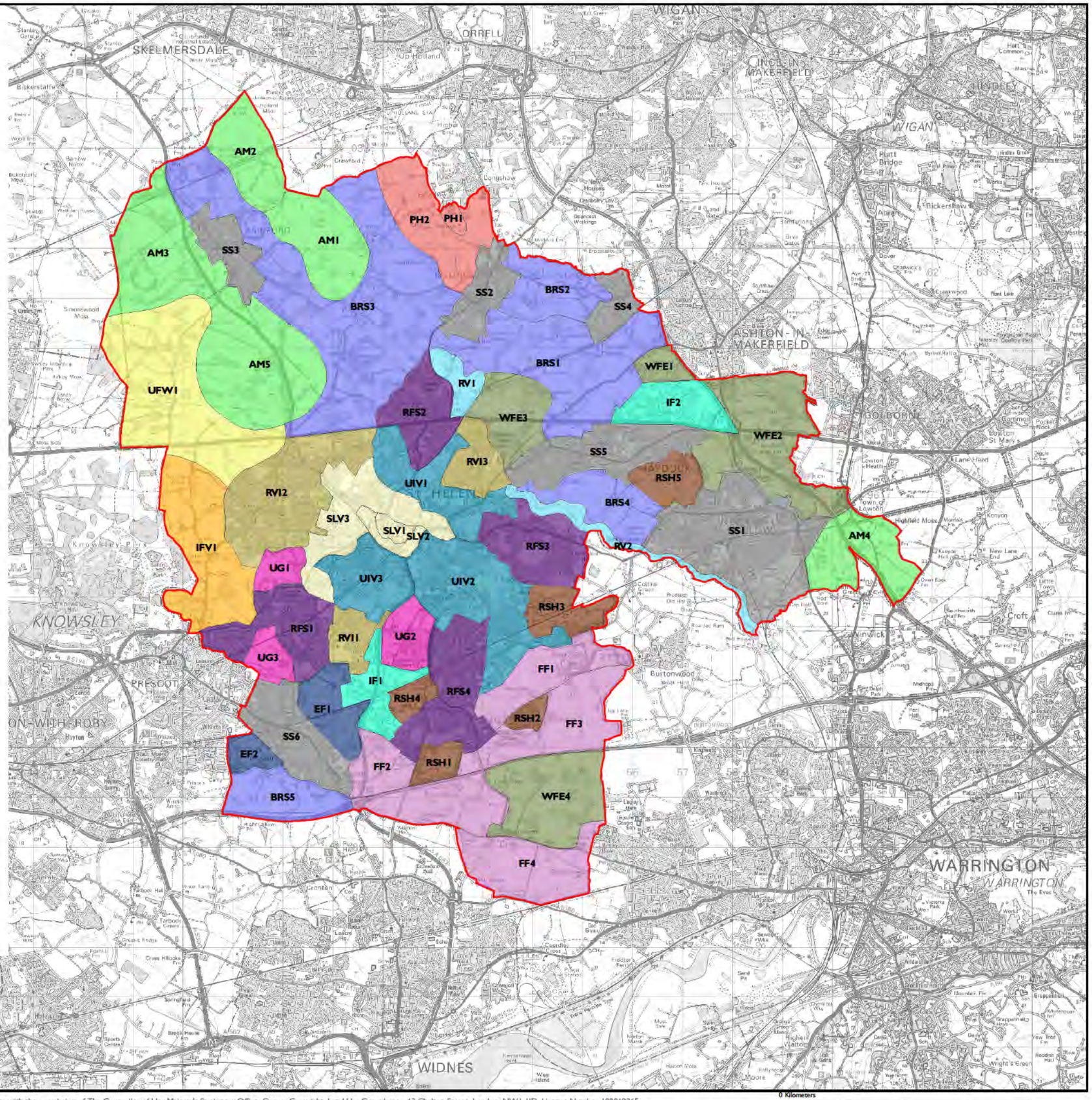
PEEL

ST HELENS LANDSCAPE CHARACTER ASSESSMENT

Landscape Character Types and Areas

Landscape Character Areas

PH1 Billinge Hill Summit
PH2 Billinge Hill Slopes
AM1 Holiday Moss
AM2 Holland Moss
AM3 Simmonswood Moss
AM4 Highfield Moss
AM5 Reeds Moss
BRS1 Arch Lane Slopes
BRS2 Weathercock Slopes
BRS3 Rainford Slopes
BRS4 Sankey Slopes
BRS5 Rainhill Slopes
RV1 Carr Mill Dam
RV2 Sankey Valley
WFE1 Garswood Park
WFE2 Haydock Park
WFE3 Old Garswood Park
WFE4 Bold Hall
EF1 Elton Head Hall Farm
EF2 Blundell's Hill
FF1 Sutton Fringe
FF2 Sutton Manor Fringe
FF3 Clock Face Farming
FF4 Bold Heath
UFW1 Agricultural Mossborough
IFV1 Agricultural Eccleston
RSH1 Sutton Manor
RSH2 Clock Face
RSH3 Sutton Moss
RSH4 Lea Green
RSH5 Lyme and Wood Pit
IF1 Link Road
IF2 Haydock Industrial Estate
SS1 Newton-le-Willows
SS2 Billinge
SS3 Rainford
SS4 Garswood
SS5 Haydock
SS6 Rainhill
SLV1 St Helens Historic Core
SLV2 St Helens Retail Ring
SLV3 St Helens Terraces
UG1 Big Dam
UG2 Sherdley Park
UG3 Rainhill Golf Course
RFS1 Grange Park
RFS2 Mossbank
RFS3 Derbyshire Hill / Parr
RFS4 Sutton
UIV1 Gerards Bridge
UIV2 Sutton Brook
UIV3 Ravenhead
RVI1 Thatto Heath
RVI2 Eccelston
RVI3 Laffak



St Helens District Boundary

Landscape Character Types

- Prominent Hill (PH)
- Agricultural Moss (AM)
- Broad Rural Slopes (BRS)
- River Valley (RV)
- Wooded Former Estate (WFE)
- Edge Farmland (EF)
- Floodplain Farmland (FF)
- Undulating Farmland with Woodland (UFW)
- Intimate Farmed Valley (IFV)
- Raised Spoil Heap (RSH)
- Industrial Fringe (IF)
- Separate Settlement (SS)
- Settled Lowlying Valley (SLV)
- Urban Greenspace (UG)
- Raised Fringe Settlement (RFS)
- Urban Industrial Valley (UIV)
- Residential Valley Infill (RVI)

Figure 8

Map reproduced from Ordnance Survey raster data with the permission of The Controller of Her Majesty's Stationery Office, Crown Copyright. Land Use Consultants, 43 Chalton Street, London, NW1 1JD. Licence Number 100019265

Scale 1:80,000

LAND USE CONSULTANTS

LUC 3526-008-r0

CHARACTER TYPE 2 AGRICULTURAL MOSS

Character Areas:

- Holiday Moss (AM1)
- Holland Moss (AM2)
- Simmonswood Moss (AM3)
- Highfield Moss (AM4)
- Reeds Moss (AM5)

Key Characteristics

- flat open agricultural land with limited changes in elevation of 40-45m AOD over wide areas;
- open views to surrounding landscape (especially to the north – Billinge Hill and in the distance The Pennines) to a variety of urban, fringe and rural landscapes;
- strong horizontal composition provides foreshortening of views and can make it difficult to judge distance;
- large scale, regular field pattern is emphasised where the smaller scale historical field pattern has been amalgamated. Landscape typically lacks historical vegetated field boundaries of hedgerows and woodland belts due to the poorly drained moss;
- drainage ditches often form field boundaries, emphasising openness of landscape, interspersed with remnant lines of some hedgerow and shelterbelt field boundaries;
- the dark brown and black cultivated soils of the mosses have a light texture suited to growing vegetable crops and contrast markedly with the lighter coloured soils and grassland on adjacent undulating slopes;
- undeveloped moss areas infrequently located within agricultural land – provides contrast of character with rugged texture and muted colours contrasting with uniform colour and smooth texture of arable landscape;
- open unwooded landscape character with a lack of dominant woodland blocks. Where present small blocks of woodland are set within the field pattern and can frame and enclose views;
- internal areas of the mosses are generally accessible by footpath or track which typically run along the field boundaries or along the historical straight roads;
- the area is largely uninhabited, with individual farm steadings and small clusters of settlement located on dry sites on the edge of the moss landscape at the transition with neighbouring character types.

Location and Boundaries

Relatively extensive character type where the main location of the moss landscape is to the northwest of the Borough, occurring in the flat low lying landscape either side of the Rainford ridge line. A smaller area of this character type is situated at the extreme eastern boundary of the Borough east of Newton le Willows. In both instances this character type runs up to the administrative boundary and is likely to extend across into the landscape of the neighbouring Council.

Holiday Moss (2 AM 1)

Area Description

- the area is a flat, horizontal, open landscape with little change in landform at 65m AOD giving a uniform composition. The character area is defined by the enclosing slopes of the adjacent character areas - Broad Rural Slopes to the west and south, and Billinge Hill Slopes which form a backdrop to the area to the east. The landscape is flat and open and extends northwards up to the Borough boundary;

- the large scale field pattern is emphasised by the amalgamation of the historically smaller scale fields. The majority of field boundaries are formed by ditches and drainage channels with rough access tracks located to the edges of the moss landscape. Lack of visually prominent field boundaries reinforces the experience of openness and scale;

- a large landfill site is located in the centre of the former moss area which is slightly elevated above a surrounding large arable field pattern. This is emphasised by the lack of field boundaries within the arable fields and the growth of pioneer scrub woodland on the elevated landfill site;

- there is minimal settlement within the area with only dispersed individual farmsteads and small clusters of housing on dry sites. The vernacular housing is of red brick with slate roofs and some building of blonde sandstone associated with small woodland copses. More recent housing is in contrast tot eh vernacular character with inappropriate scale and siting and materials used and is of increased prominence in the landscape;

Landscape Management Issues & Opportunities

Important in this landscape is balancing the openness of the moss landscape whilst maintaining and enhancing the woodland blocks, drainage, field boundaries and large field pattern.

Woodland Recommendations

Although the development of woodland within other moss areas is generally inappropriate due to the contrast with the open and flat characteristics, large woodland and plantations already exist within this area. Historically there is a lack of hedgerows or vegetative field boundaries although large blocks of mixed deciduous and coniferous plantations have been created. These interrupt the large scale agricultural field patterns creating a unique landscape pattern and where appropriate to the historical landscape character they should be conserved. The mixed tree belt that surrounds and creates a unique backdrop and sense of place to the former military depot should be maintained and sensitivity enhanced through the appropriate management of woodland species considering the landscape character and wildlife interests.

Small coniferous plantation woodlands to be sensitivity restructured to avoid impacting on the current balance of open to enclosed landscape.

Judgement about Potential to Accommodate Development

Change should be carefully managed in this character area, in particular landscape changes which could influence the existing balance of open to enclosed space, in particular changes to the extent of tree cover and species used. Some opportunities may exist for the incorporation of small scale development into the area. Although this will be constrained by the open flat landform and careful siting is imperative to mitigate potential impacts.

Highfield Moss (2 AM 4)

Area Description

- the area is generally flat and open with an overriding horizontal composition enabling panoramic views across the surrounding landscape to immediate development horizons and the more distant hills;

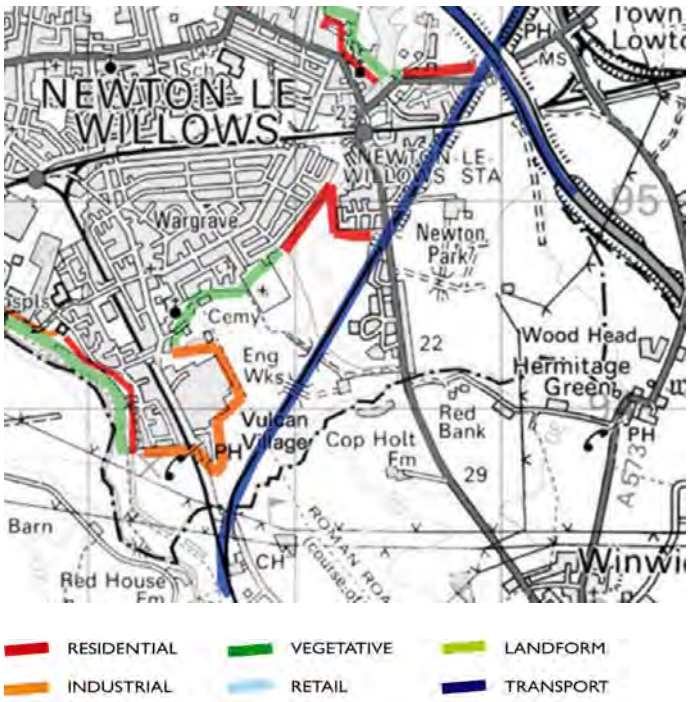
- there is a large regular field pattern historically part of the Parkside and Newton Parks landscape bordered by small maintained hedgerows with isolated trees and small pockets of scrub woodland. Often, informal earth footpaths follow the line of the hedgerows;
- access within the moss landscape is limited and where roads exist they are of a narrow rural character constructed in elevation above the surrounding moss landscape with soft verges;
- an area of undeveloped moss exists, comprising an area of rough grassland and scrub woodland;
- although the area is of rural character large scale infrastructure is present such as the M6 which crosses the area orientated northwest to southeast. Railway lines which border the area to the west and north and a pylon line are also prominent signs of infrastructure in the landscape. In addition, a number of urban elements, such as kerbs, street lighting and security fencing, are present and these together with the infrastructure elements contributes to a degraded rural character;
- in particular the unnaturally straight alignment of the M6 running at elevation on an embankment present a dominant landscape feature which physically and visually divides the character area. The embankment severs many of the land use patterns including tree belts and field boundaries which fragments the landscape character, and subdivides the character area into 'pockets' of this character area east and west of the M6 corridor;
- this subdivision of the character area is further reinforced by the more degraded landscape character to the west associated with the significant landscape disturbance attributed to Parkside Colliery. The former colliery site disrupts the field pattern with large areas of hard standing. In addition screening bunds to the east of the colliery are marked small scale unnatural linear features which create a prominent horizontal visual horizon and interrupts views across the landscape. The degraded character is emphasised by the line of pylons which crosses the former colliery to the north;
- there is minimal settlement within the area with only isolated scattered farmsteads. Vernacular buildings are constructed of red brick with slate roofs tied into the landscape pattern at field corners with small woodland copses and mature individual trees;
- small areas of woodland and / or shelterbelts are usually associated with these farmsteads including, in one example, a line of poplar trees that contrast with the horizontal form of the landscape. The presence of woodland increases to the west with wooded field boundaries to Netwon Park Farm and along the incised Newton Brook which delineates the administrative boundary to the south. This increase in woodland subtly reduces the experience of openness in this landscape, in particular where it encloses views from the minor rural roads.

Landscape Analysis`

Positive Features
Open rural landscape with retention of large rectangular historical field pattern.

Negative Features
The degradation of hedgerows and tree belts. Large scale infrastructure creates a degraded and fragmented rural character, in particular the prominent M6 route corridor which runs at elevation. inappropriate tree species such as poplar. Encroachment of unsympathetic structure and materials (i.e. pylons, steel railings along railway). Former colliery site imposing a degraded character to west of M6 corridor.

Developed Edge Analysis



The area is a rural with a partially developed edge with Newton le Willows, which abuts the railway cutting and has associated screen planting. Although the railway line creates a hard urban edge, this provides a robust settlement edge which has been assessed as **Strong**.

Landscape Evaluation

Landscape Sensitivity	**Low to Medium**
Strength of Typical Character	Moderate – overriding flat open historical agricultural landscape still predominant landscape character – impacted and modified by infrastructure development.
Condition / Intactness	Low. Disturbance from former colliery site and features such as the M6, pylons and railways significantly detract and fragment the rural character.
Aesthetic Character	Moderate. There is some quality in the open landscape to the east and remnants of the former landscape to the west with views to the hills to the north and a rural character beyond.

Visual Sensitivity	**Medium**
General Visibility	Medium. There is high visibility with the surrounding landscape as a result of the open flat landscape.
Population	Medium. There are a limited number of people that live and work in the area but large number of people cross this landscape.
Mitigation Potential	Medium – difficult to mitigate changes by infrastructure to flat landscape, but possible to mitigate changes to vegetation structure.

Landscape Strategy

From the combined assessment of strength of character and landscape condition the landscape strategy is defined as ***Restore & Enhance***.

Condition				
	Good	Strengthen	Conserve & Strengthen	Conserve
	Moderate	Strengthen & Enhance	Conserve & Enhance	Conserve & Restore
	Poor	Creation	Restore & Enhance	Restore
		Weak	Moderate	Strong
		Strength of Character		

Landscape Management Issues & Opportunities

Restore hedgerows and maintain existing hedgerows and woodland belts. Encourage native species and maintain moss. Encourage the use of more sympathetic rural materials in the landscape. Avoidance of further incremental encroachment of infrastructure with urban characteristics.
The former colliery site represents a major opportunity for the restoration of the underlying parkland landscape, which could be combined with opportunities for enhancement and landscape change. Any change proposed both development and/or landscape enhancement should carefully consider the relationship the current rural landscape to the south eastern edge of Newton-le-Willow. Currently the railway line represents a defined townscape edge which has retained a relatively compact settlement form. Further development could seek to visually and physically 'extend' the settlement up to the unnatural edge of the M6 corridor, which could heighten the impact of any development.

Woodland Recommendations

The development of extensive woodland within this area is generally inappropriate. Any woodland development would contrast and conflict with the open, flat characteristics and the strong horizontal composition. Large woodland blocks would restrict views towards the wider Pennines, which is an important characteristic of this area.

It is recognised that there is an increased wooded character to the west, which should be maintained. Further planting to reinforce these tree lines will maintain the experience of grandeur that the mature tree lines impart to this landscape. However, careful siting and design of woodland planting should seek to maintain the predominantly open character of this landscape.

The degraded small scale hedgerows should be restored and it is possible that 'wet woodlands' of predominantly Birch, Willow Ash and Alder should be created in association with moss pits and / or areas of poor drainage.

There is an opportunity to sensitively create more mixed broadleaf woodland cover in association with the M6 corridor where appropriate to the adjacent landscape patterns and the undulating landform on and adjacent to the land fill site at Parkside.

Judgement about Potential to Accommodate Development

To the east of the M6 corridor, there are constraints to further infrastructure development and inappropriate landscape enhancement that would emphasise the segregation and fragmentation of landscape character. There are potential opportunities for sensitive siting of small scale development, although this should use appropriate scale and types of materials to avoid further incremental encroachment of urban features into this landscape and should take into consideration the capacity of the landscape to accept further change. The western boundary of Newton le Willows should act as a constraint to the expansion of the settlement into this character area.

To the west, the existing disturbance caused by the former colliery site should be restored and enhanced. In any development and/or landscape enhancement proposals, careful consideration should be given to the visual and physical landscape relationship of the settlement edge of Newton-le-Willows and the defining linear form of the M6 corridor. It is recommended that should large scale landscape change be considered in this area that a more detailed landscape and visual assessment be used to inform any preliminary option appraisals.

Reeds Moss (2 AM 5)

Area Description

- large flat open landscape. Broad Rural Slopes to the east and Undulating Farmland with Woodland to the west contains the character area and offers some enclosure;
- predominantly large scale regular arable field pattern with minimal vegetative field boundaries. Some small maintained hedgerows are present although the majority of the field boundaries are formed by drainage ditches which have a limited contribution to the landscape pattern of the area;
- a limited number of relatively large geometric woodland blocks comprising both deciduous and coniferous tree species interrupt the flat agricultural land;

RANDALL THORP

CHARTERED LANDSCAPE ARCHITECTS

Land off Lady Lane, Croft

Landscape Sensitivity Assessment of Croft
and Landscape Appraisal of Proposed Development
on Land off Lady Lane, Croft

Appendix E
Illustrative Masterplan

September 2017

Prepared for:

PEEL

LANDSCAPE ARCHITECTURE
ENVIRONMENTAL PLANNING
MASTERPLANNING
URBAN DESIGN

RANDALL THORP

Canada House, 3 Chepstow Street, Manchester M1 5FW
0161 228 7721 mail@randallthorp.co.uk www.randallthorp.co.uk

KEY:

- Site boundary
- Existing ootpath
- Proposed footpath
- Existing building
- Existing egetation within si e
- Proposed SUDS feature
- Proposed woodland plantin
- Green infrastructure
- Proposed development area
- Potential ehicular access points
- Proposed primary road
- Proposed secondary road

Area Measures:
Total site area: 10.35 ha
Infrastructure roads: 0.7 ha
Green infrastructure: 2.9 ha
Total developable area : 6.75 ha

This site could deliver between 200 (@30 per ha) and 235 (@35 per ha) units.

PEEL

Land off Lady Lane, C o

Conceptual Masterplan

Drwg No: 630CA-04B
Drawn by: AH
Rev by: AH
QM Status: Checked
Scale: 1: 5000 @ A3

Date: 12.09.17
Checker: SR
Rev checker: SR
Product Status: For Issue

LANDSCAPE ARCHITECTURE
ENVIRONMENTAL PLANNING
MASTERPLANNING
URBAN DESIGN

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CHARTERED LANDSCAPE ARCHITECTS

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Consulting Engineers

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LAND AT LADY LANE
CROFT

FLOOD RISK AND UTILITIES APPRAISAL

Shepherd Gilmour Infrastructure Ltd.
40 Peter Street
Manchester
M2 5GP
C1283/NM/DOR/EAJ/2017115

Shepherd Gilmour
Consulting Engineers

Report Title: *Land at Lady Lane, Croft*
Flood Risk and Utilities Appraisal

Client: *Peel Investments (North) Ltd*

Report Status: *Version Rev V2*

Date of First Issue: *7th September 2017*

Date of Last Issue: *28th September 2017*

Prepared by:

Checked & Approved:

Version	Date	Initials	Comments
-	07.09.2017	NM	First Issue
V1	15.09.2017	NM	Updated to reflect amended site masterplan
V2	28.09.2017	NM	Updated to reflect amended site masterplan

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Limitations

All findings, recommendations and conclusions contained in this report are based on information provided to us during investigations. Shepherd Gilmour Infrastructure Ltd. has created the report based on the assumption that all the information is accurate and accepts no liability should additional information exist or become available.

Unless otherwise requested by the client, Shepherd Gilmour Infrastructure Ltd. is not obliged to and disclaims any obligation to update the report for events taking place after the date noted on the report.

Shepherd Gilmour Infrastructure Ltd. makes no representation whatsoever concerning the legal significance of its findings or the legal matters referred to in the report. The information presented and conclusions drawn are based on statistical data and are for guidance purposes only. The study provides no guarantee against the flooding of the study site or elsewhere, nor of the absolute accuracy of water levels, flow rates, and associated probabilities.

This report has been prepared for the sole use of the client. No other third parties may rely upon or reproduce the contents of this report without the written permission of Shepherd Gilmour Infrastructure Ltd.

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SECTION 1 INTRODUCTION

1.1. Shepherd Gilmour Infrastructure Ltd (SGi) has been engaged by Peel Investments (North) Limited (hereafter "the Applicant") to provide a Flood Risk and Utilities Appraisal in support of development known as Land at Lady Lane in Croft, Warrington. For the forthcoming representations to the Warrington Local Plan.

SITE LOCATION

1.2. The proposed site is located in the village of Croft in Warrington. The site is approximately 10.35 ha in total and consists of a mix of agricultural fields and woodland.

- Nearest Postcode: WA3 7JU
- OS Coordinates: 363707E, 393535N
- OS Grid Reference: SJ 637935

Figure 1.1 Red Line Boundary

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TOPOGRAPHY

1.3. Based on the Ordnance Survey maps, the site ranges in level between 23-30m AOD. The site appears to falls in level from the northeast (Lady Lane) to the southwest (Gerard Rd).

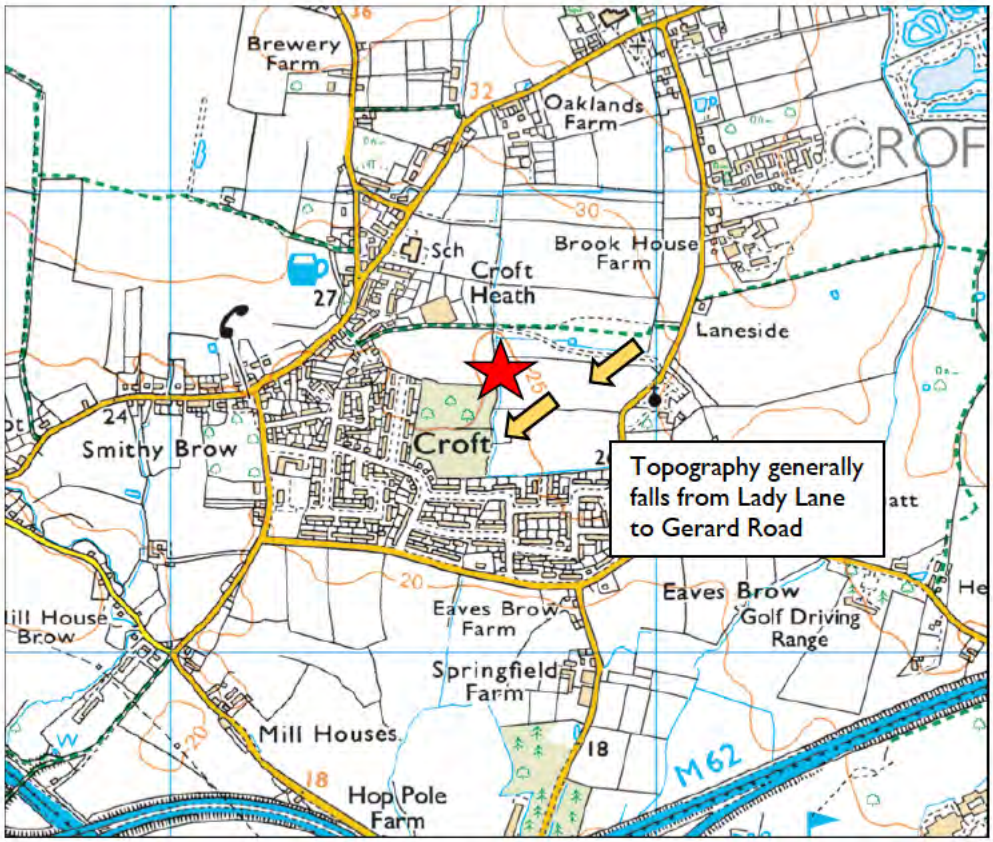

Figure 1.2 Site Plan (OS Map)

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PRELIMINARY PROPOSALS

1.4. The client's conceptual masterplan is shown in **Figure 1.3** between 200 and 235 dwellings with associated landscaping/greenspaces.

1.5. A full-sized plan of the below masterplan is included in **Appendix A**.

Figure 1.3 Conceptual Masterplan (Randall Thorp)

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SECTION 2 PRELIMINARY FLOOD RISK ADVICE

GOV.UK PLANNING ADVICE MAPS

2.1. The Gov.UK online Flood Map for Planning provide initial information on any flood zoning onsite. These maps indicate that the site is located within Flood Zone 1 (low probability of fluvial flooding).

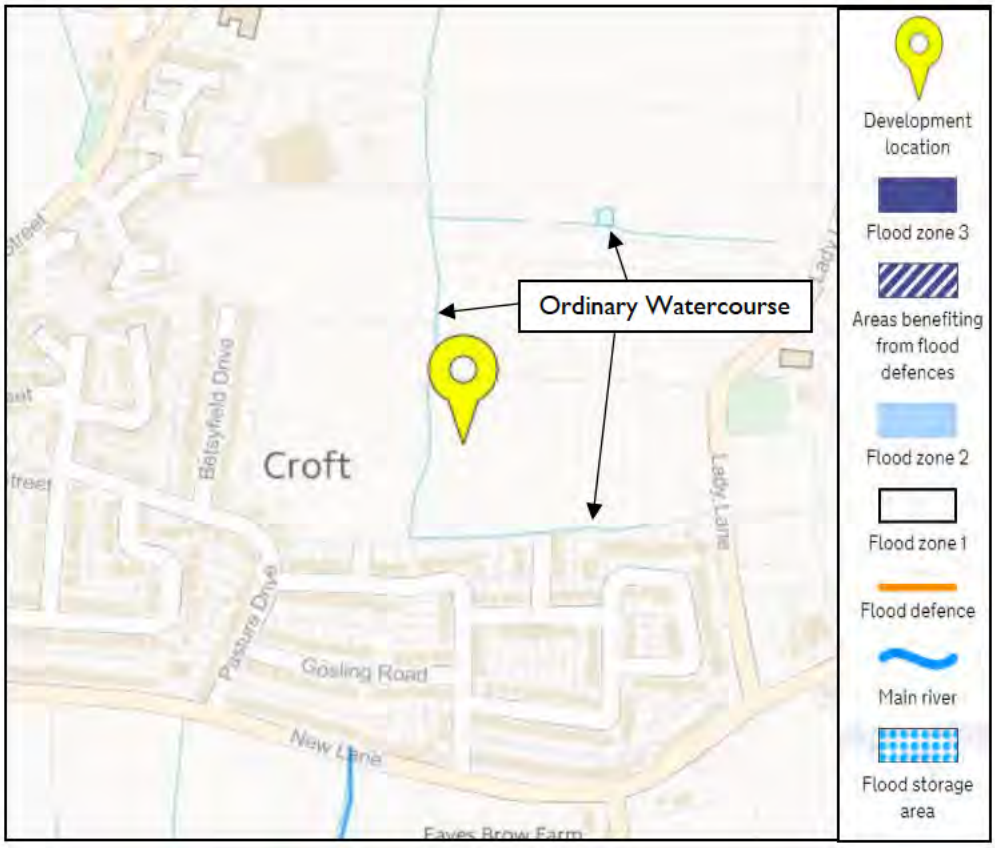

Figure 2.1 Gov.UK Flood Map

ENVIRONMENT AGENCY DATA

2.2. The latest flood data and maps has been requested from the Environment Agency (EA). However, since the site is located in Flood Zone 1, there is no nearby information available.

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FLOOD ZONE GUIDANCE

2.3. The Flood Risk and Coastal Change Guidance indicates which development type is suitable for each Flood Zone as shown in **Table 2.1 & 2.2**.

Flood Zone	Flood Risk Vulnerability Classification				
	Essential Infrastructure	Highly Vulnerable	More Vulnerable	Less Vulnerable	Water Compatible
1	✓	✓	✓	✓	✓
2	✓	Exception Test Required	✓	✓	✓
3a	Exception Test Required	x	Exception Test Required	✓	✓
3b	Exception Test Required	x	x	x	✓

Table 2.1 Flood Risk Classification

Highly Vulnerable	• Police stations, Ambulance stations and Fire stations and Command Centres. • Emergency dispersal points. • Basement dwellings. • Caravans, mobile homes & park homes intended for permanent residential use. • Installations requiring hazardous substances consent.
More Vulnerable	• Hospitals. • Residential institutions • Residential dwelling, student halls, drinking establishments/nightclubs and hotels. • Non–residential - Health services, nurseries and educational establishments. • Landfill and sites used for waste management facilities for hazardous waste.
Less Vulnerable	• Police, ambulance and fire stations which are not required during a flood. • Shops; financial, professional and other services; restaurants and cafes; hot food takeaways; offices; general industry; storage and distribution; non–residential institutions not included in 'more vulnerable'; and assembly and leisure. • Land and buildings used for agriculture and forestry. • Waste treatment (except landfill and hazardous waste facilities). • Minerals working and processing (except for sand and gravel working). • Water treatment works which are not required during times of flood. • Sewage treatment works.

Table 2.2 Development Types (Abstract)

2.4. The conceptual masterplan indicates that all residential developments (i.e. more vulnerable development) will be located within low probability areas (Flood Zone 1). Therefore, the client's preliminary proposals meet the requirements of the NPPF at this stage.

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SECTION 3 EXISTING DRAINAGE INFRASTRUCTURE

PUBLIC SEWERS

3.1. The public sewers in the vicinity of the proposed site are owned and maintained by United Utilities (UU). Copies of their records have been requested and are included in **Appendix B** of this report.

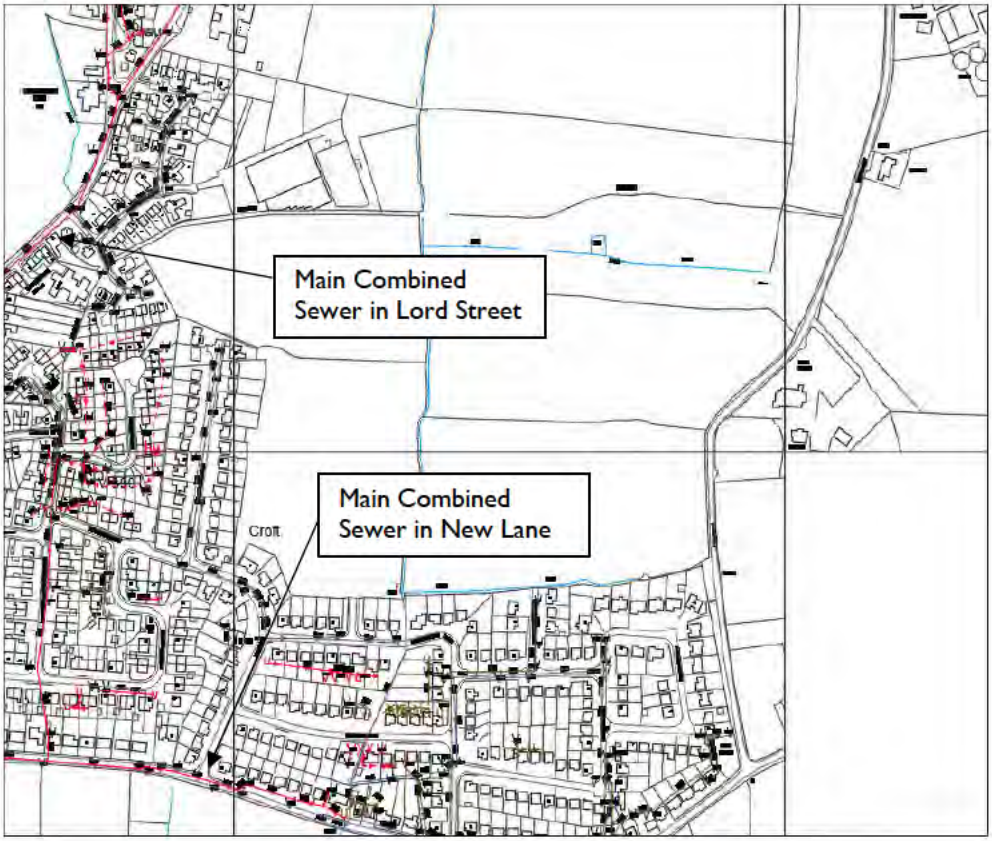

Figure 3.1 Sewer Infrastructure (UU)

Surface Water Sewers

3.2. According to United Utilities records there are no surface water sewers onsite. However, there are sewers in the vicinity which serve the adjacent residential developments. The sewers appear to discharge runoff into the nearby waterbodies either directly or via other means i.e. culverts.

Foul Water Sewers

3.3. According to United Utilities records there are no foul water sewers onsite. There are however sewers in the vicinity which serve the adjacent residential developments. The foul networks discharge effluent into the main combined sewer within Smithy Lane.

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Combined Water Sewers

3.4. There are no combined water sewers onsite but records indicate that effluent from the adjacent residential developments eventually discharges to the 375mm combined sewer within Smithy Lane to the west of the site.

3.5. The nearest combined water sewers to the site is the 225mm sewer within New Lane (south of the site) and the 300/375mm sewer within Lord Street (west of the site).

PRIVATE DRAINAGE

3.6. There is no known private drainage onsite.

PRELIMINARY DEVELOPMENT DRAINAGE

Surface Water Drainage

3.7. Based on the topography and development proposals/location it should be possible to discharge any runoff from the development into the onsite waterbodies. This destination is in accordance with the runoff destination hierarchy as set out in Paragraph 080 of the Flood Risk and Coastal Change Guidance document.

3.8. Note that any surface water runoff rates must be agreed by the Lead Local Flood Authority.

Foul Water Drainage

3.9. Foul effluent generated by the development should be able to connect into the nearby combined water sewers. Note that a third-party agreement might be required to reach these combined water sewers.

3.10. At the stage the need for off-site reinforcement is unknown and United Utilities should be consulted as soon as practically possible.

Sewer Diversions

3.11. Not applicable.

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SECTION 4 UTILITIES INFRASTRUCTURE

ELECTRICITY

4.1. The electricity in the area is supplied by Scottish Power Manweb (SP Manweb). These records identify a high voltage (11kV) overhead power supply crossing the site from within Eaves Brow Road to the south of the site. There are also a number of LV supplies in the vicinity which serve the existing residential areas to the south and west, and also within Lady Lane along the eastern boundary.

4.2. The need for any offsite reinforcement to meet the power demands of the development is unknown. Discussions with SP Manweb should be undertaken as soon as practically possible.

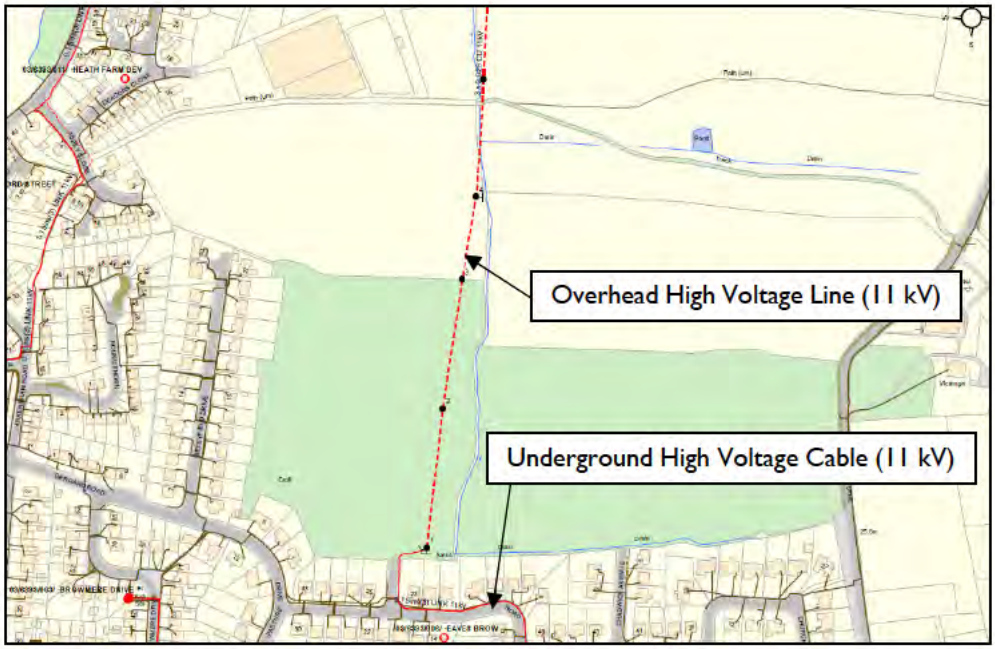

Figure 4.1 Electricity Infrastructure (SP Manweb)

4.3. A copy of SP Manweb's asset records has been included in **Appendix C**.

TELECOMMUNICATION

4.4. Openreach records show a number of assets in the vicinity of the site which serve the existing dwellings. A supply from the existing infrastructure might be possible but there may not be sufficient capacity. Discussions with Openreach should be undertaken as soon as practically possible.

4.5. A copy of Openreach records has been included within **Appendix D**.

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MAINS WATER

4.6. United Utilities records indicate 3" to 4" water main within the adjacent highways that could potentially be connected to. The need for offsite reinforcement to meet the water supply demands of the development is however unknown. Discussions with UU should be undertaken as soon as practically possible.

4.7. A copy of United Utilities records has been included within **Appendix B**.

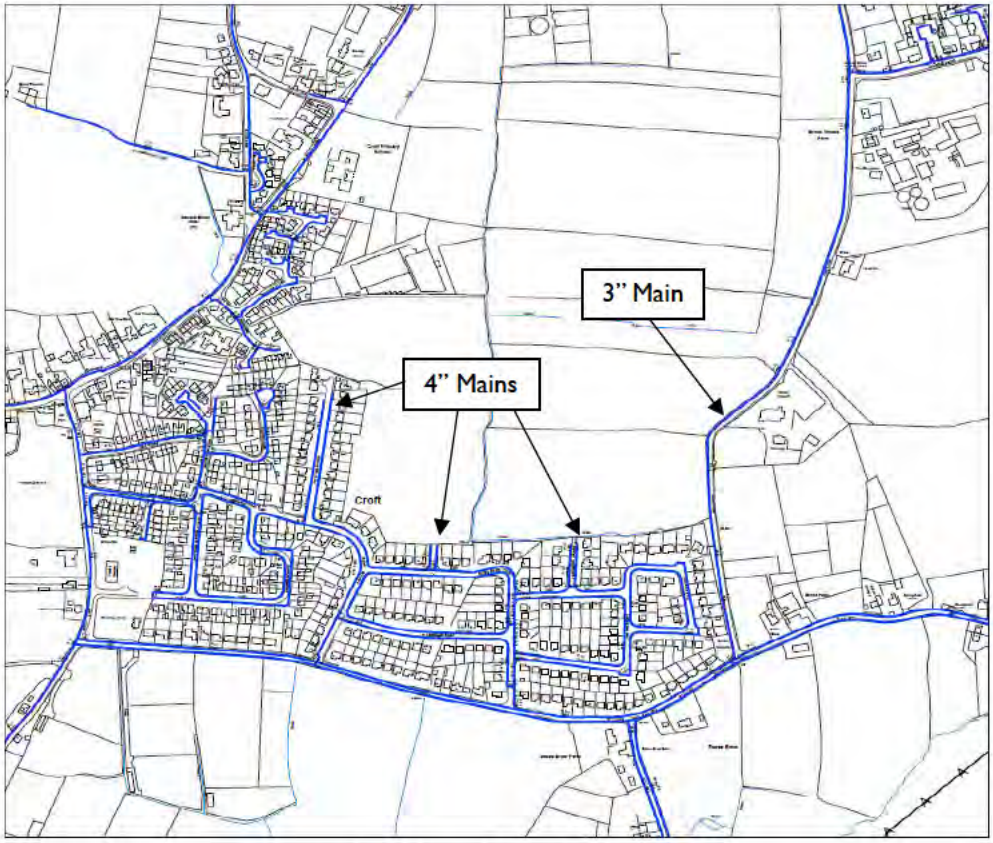

Figure 4.2 Water Infrastructure (UU)

GAS

4.8. Cadent/National Grid records do not show any assets onsite, however there are a number of LP gas mains serving the adjacent residential areas. Due to the scale/quality of the records any further information such as size, depth etc. is obscured.

4.9. The need for offsite reinforcement to meet the gas supply demands of the proposed development is unknown. Discussions with Cadent/National Grid should be undertaken as soon as practically possible.

4.10. A copy of Cadent/National Grid records has been included within **Appendix E**.

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SECTION 5 HEALTH AND SAFETY EXECUTIVE CHECK

5.1. A preliminary consultation with the Health and Safety Executive indicated that the no major hazard sites or major accident hazard pipeline in the area.

5.2. A copy of the HSE response has been included within **Appendix F**.

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SECTION 6 CONCLUSION

6.1. This flood risk and utilities appraisal provides an overview of the existing infrastructure on or around the proposed site and evaluates flood risk issues that may potentially influence the conceptual masterplan. In summary, the statement confirms that;

a) The proposed development is located within Flood Zone 1 (low probability of fluvial flooding). In accordance with the Flood Risk and Coastal Change Guidance, the preliminary proposals are acceptable in this zone.

b) The proposed surface water runoff generated by the proposals should discharge to one or more of the onsite waterbodies. Flow rates are to be agreed with the Lead Local Flood Authority.

c) The proposed foul water effluent will discharge to the United Utilities combined water sewers in Lord Street and New Lane. Flow rates and any offsite/onsite upgrade works if required are to be agreed with United Utilities.

d) Early discussions with Scottish Power Manweb are required to establish the proposed electricity route(s) to the site.

e) The existing Openreach infrastructure that surrounds the site may be able to cater for the site proposals. However early discussions with Openreach should be undertaken.

f) Early discussions with United Utilities are required to establish the proposed mains water route(s) to the site.

g) Early discussions with Cadent/National Grid are required to establish the future proposed gas main route(s) to the site.

h) Early discussions with Health and Safety Executive indicated no major hazard sites or major accident hazard pipeline within the vicinity of the site.

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APPENDIX A

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LANDSCAPE ARCHITECTURE
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PEEL

Land off Lady Lane, C o

Conceptual Masterplan

Drwg No: 630CA-04B
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APPENDIX B

United Utilites Water Limited

Property Searches
Ground Floor Grasmere House
Lingley Mere Business Park
Great Sankey
Warrington
WA5 3LP

Telephone 0370 751 0101

Property.searches@uuplc.co.uk

Your Ref: LADY LANE CROFT
Our Ref: [redacted]
Date: 10/8/2017

Shepherd Gilmour Infrastructure
SGi Consulting Colchester House
40 Peter Street

Manchester
M2 5GP

FAO: [redacted]

Dear Sirs

Location: **Land at Lady Lane Croft Warrington WA3 7JU**

I acknowledge with thanks your request dated 08/08/17 for information on the location of our services.

Please find enclosed plans showing the approximate position of our apparatus known to be in the vicinity of this site.

The enclosed plans are being provided to you subject to the United Utilities terms and conditions for both the wastewater and water distribution plans which are shown attached.

If you are planning works anywhere in the North West, please read our access statement before you start work to check how it will affect our network.
http://www.unitedutilities.com/work-near-asset.aspx.

I trust the above meets with you requirements and look forward to hearing from you should you need anything further.

If you have any queries regarding this matter please telephone us on [redacted]

Yours Faithfully

[redacted]

TERMS AND CONDITIONS - WASTERWATER & WATER DISTRIBUTION PLANS

These provisions apply to the public sewerage, water distribution and telemetry systems (including sewers which are the subject of an agreement under Section 104 of the Water Industry Act 1991 and mains installed in accordance with the agreement for the self-construction of water mains) (UUWL apparatus) of United Utilities Water Limited "(UUWL)".

TERMS AND CONDITIONS:

1. This Map and any information supplied with it is issued subject to the provisions contained below, to the exclusion of all others and no party relies upon any representation, warranty, collateral contract or other assurance of any person (whether party to this agreement or not) that is not set out in this agreement or the documents referred to in it.
2. This Map and any information supplied with it is provided for general guidance only and no representation, undertaking or warranty as to its accuracy, completeness or being up to date is given or implied.
3. In particular, the position and depth of any UUWL apparatus shown on the Map are approximate only and given in accordance with the best information available. The nature of the relevant system and/or its actual position may be different from that shown on the plan and UUWL is not liable for any damage caused by incorrect information provided save as stated in section 199 of the Water Industry Act 1991. UUWL strongly recommends that a comprehensive survey is undertaken in addition to reviewing this Map to determine and ensure the precise location of any UUWL apparatus. The exact location, positions and depths should be obtained by excavation trial holes.
4. The location and position of private drains, private sewers and service pipes to properties are not normally shown on this Map but their presence must be anticipated and accounted for and you are strongly advised to carry out your own further enquiries and investigations in order to locate the same.
5. The position and depth of UUWL apparatus is subject to change and therefore this Map is issued subject to any removal or change in location of the same. The onus is entirely upon you to confirm whether any changes to the Map have been made subsequent to issue and prior to any works being carried out.
6. This Map and any information shown on it or provided with it must not be relied upon in the event of any development, construction or other works (including but not limited to any excavations) in the vicinity of UUWL apparatus or for the purpose of determining the suitability of a point of connection to the sewerage or other distribution systems.
7. No person or legal entity, including any company shall be relieved from any liability howsoever and whensoever arising for any damage caused to UUWL apparatus by reason of the actual position and/or depths of UUWL apparatus being different from those shown on the Map and any information supplied with it.
8. If any provision contained herein is or becomes legally invalid or unenforceable, it will be taken to be severed from the remaining provisions which shall be unaffected and continue in full force and affect.
9. This agreement shall be governed by English law and all parties submit to the exclusive jurisdiction of the English courts, save that nothing will prevent UUWL from bringing proceedings in any other competent jurisdiction, whether concurrently or otherwise.

Extract from
Map of Water Mains

The position of the underground apparatus shown on this plan is approximate only and is given in accordance with the best information currently available

The actual positions may be different from those shown on the plan, private service pipes may be shown where a known record is available.

United Utilities Water will not accept liability for any loss or damage caused by the actual position being different from those shown. Crown copyright and database rights [2016] Ordnance Survey 100022432.

United Utilities Water Limited 2014
The plan is based upon the Ordnance Survey Map with the sanction of the Controller of H.M. Stationery Office.Crown and United Utilities copyrights are reserved. Unauthorised reproduction will infringe these copyrights.

Land at Lady Lane
Croft
Warrington
WA3 7JU

Printed By: Property Searches Date: 10/08/2017

DO NOT SCALE

Approximate Scale: 1:5000

United Utilities
helping life flow smoothly

Refno	Cover	Func	Invert	Size.x	Size.y	Shape	Matl	Length	Grad
0500		CO	0	225		CI	VC	13.87	
0501		CO							
0502		CO							
0503		CO	0	150		CI	VC	16.98	
0505		CO	0	150		CI	VC	49.85	
0506		CO		150		CI	UN	15.56	
0507		CO							
0508		CO							
0511		CO							
1500		CO	0	225		CI	VC	36.11	
1501	23.25	CO							
1502	24.3	CO	0	375		CI	CO	24.95	
1503	24.26	CO							
1504		CO							
2501		FO	0	100		CI	VC	20	
2601	24.45	CO	0	375		CI	CO	63.46	
2602	24.65	CO							
2603	24.75	CO	0	375		CI	CO	13.87	
3501		FO							
3502		FO		150		CI	VC	6.86	
3503		FO							
3505		SW							
3507		SW		300			VC	29.67	
3508		CO		0		CI		30.68	
3509		CO		300		CI	VC	28.18	
3510		CO							
3511		CO		300		CI	VC	45.36	
3512		CO		300		CI	VC	32.4	
3513		SW							
3515		FO		100		CI	VC	12.32	
3516		FO		150		CI	VC	26.47	
3601	25.38	FO	23.58	225		CI	CO	30.82	134
3602	25.38	SW							
3603	25.38	FO							
3604	25.4	SW	22.54	1350		CI	CO	19.89	398
3605	24.95	SW	22.4	1350		CI	CO	24.38	18
3606		SW	23.76	225		CI	CO	2.61	6
3701	25	CO							
3702	24.97	CO							
3703	25.43	CO							
3704	25.9	CO	0	375		CI	CO	23.77	
3800	10.7	CO	9.28	225		CI	VC	24.81	310
3801	27.25	CO							
3802	27.31	CO	24.73	225		CI	VC	12.73	45
3803	27.9	CO	26.07	225		CI	VC	13.36	49
3805	10.85	CO	9.06	225		CI	VC	14.52	
3901	29.31	CO							
3902	31.24	CO		0		CI		2.61	
3903	31.41	CO							
3904		CO							
3905		CO							
3906		CO							
3908		CO							
3909		CO							
4501	24.43	SW							
4502	24.78	SW	23.43	150		CI	VC	28.95	63
4503		SW	0	150		CI	VC	25.22	
4504		CO		0		CI		58.57	
4505		CO		0		CI		23.68	
4506		CO		0		CI		51	
4507		CO							
4601	25.23	FO	24.05	225		CI	CO	22.83	104
4602	25.28	SW	22.49	1350		CI	CO	24.04	267
4603	25.45	SW	22.64	225		CI	CO	18.87	126
4701	25.53	FO	24.02	150		CI	CO	40.77	93
4702	25.49	SW	23.89	375		CI	CO	37.35	170
4703	25.77	FO	24.26	150		CI	CO	31.09	130
4704	25.81	SW	24.1	375		CI	CO	35.54	169
4705	26.07	FO							
4706	26.1	SW							
4707	25.88	FO	24.67	150		CI	CO	24.37	94
4708	25.98	SW	24.88	150		CI	CO	23.05	34
4709	26.96	FO	24.67	150		CI	CO	38.98	150
4710	26.93	SW	24.63	300		CI	CO	34.01	76
4711	27.03	SW	25.5	150		CI	CO	22.22	26
4800	10.55	CO	9.5	225		CI	VC	24.68	
4801	27.79	CO	0	300		CI	CO	69.65	
4802	26.96	FO	24.99	150		CI	CO	32.42	101
4803	26.91	SW							
4804	27.13	SW	25.3	150		CI	CO	21.28	71
4805		CO							
4806		CO		100		CI	VC	3.32	
4807		CO		100		CI	VC	5.66	
4811		CO							
4901	29.01	CO							
4902	28.97	CO							
4903		CO		100		CI	VC	9.56	
4904		CO							
4905		CO							
4906		CO							
0504		CO	0	150		CI	VC	18.21	
0512		CO							
1101		CO	0	225		CI	VC	13.4	
2502		FO	0	100		CI	VC	19.01	
2503		FO	0	100		CI	VC	2.29	
3506		SW		300			VC	15.79	
3514		CO							
3804		CO	25.8	225		CI	CO	13.62	50
3907		CO		0		CI	VC	3.03	
3912		CO							
4812		FO							
4813		FO							
4815		FO		100		CI	PVC	1.73	
4907		SW							
0513		CO							
1506		CO							
3504		FO	0	150		CI	VC	9.38	
3910		CO							
3911		CO							
4808		CO							
4810		CO							
4814		CO							
3607		SW							

WASTE WATER SYMBOLOGY

Foul Surface Combined Overflow

Manhole
Manhole, Side Entry
MainSewer, Public
MainSewer, Private
MainSewer, S104
Rising Main, Public
Rising Main, Private
Rising Main, S104
Highway Drain, Private

Foul Surface Combined

WW Site Termination
Air Valve
Cascade
Non Return Valve
Extent of Survey
Flow Meter
Gulley
Hatch Box
Head of System
Hydrobrake / Vortex
Inlet
Inspection Chamber
Bifurcation
Catchpit
Contaminated Surface Water
WW Pumping Station
Sludge Pumping Station
Sewer Overflow
T Junction/Saddle
LampHole
OilInterceptor
PenStock
Pump
RoddingEye
Soakaway
Summit
Valve
Valve Chamber
Washout Chamber
DropShaft
WW Treatment Works
Septic Tank
Vent Column
Network Storage Tank
Orifice Plate
Vortex Chamber
Penstock Chamber
Blind Manhole
Foul Surface Combined Overflow
Screen Chamber
Discharge Point
Outfall

Sludge Main, Public
Sludge Main, Private
Sludge Main, S104

ABANDONED PIPE

MainSewer
Rising Main
Highway Drain
Sludge Main

Control Kiosk
Unspecified

LEGEND

MANHOLE FUNCTION

FO	Foul
SW	Surface Water
CO	Combined
OV	Overflow

SEWER SHAPE

CI	Circular	TR	Trapezoidal
EG	Egg	AR	Arch
OV	Oval	BA	Barrel
FT	Flat Top	HO	HorseShoe
RE	Rectangular	UN	Unspecified
SQ	Square		

SEWER MATERIAL

AC	Asbestos Cement	DI	Ductile Iron
BR	Brick	PVC	Polyvinyl Chloride
PE	Polyethylene	CI	Cast Iron
RP	Reinforced Plastic Matrix	SI	Spun Iron
CO	Concrete	ST	Steel
CSB	Concrete Segment Bolted	VC	Vitrified Clay
CSU	Concrete Segment Unbolted	PP	Polypropylene
CC	Concrete Box Culverted	PF	Pitch Fibre
PSC	Plastic/Steel Composite	MAC	Masonry, Coursed
GRC	Glass Reinforced Concrete	MAR	Masonry, Random
GRP	Glass Reinforced Plastic	U	Unspecified

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OS Sheet No: SJ6393NW
Scale: 1:1250 Date: 10/08/2017
113 Nodes
Sheet 1 of 1

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SEWER RECORDS

OS Sheet No: SJ6393NW

Scale: 1:1250 Date: 10/08/2017

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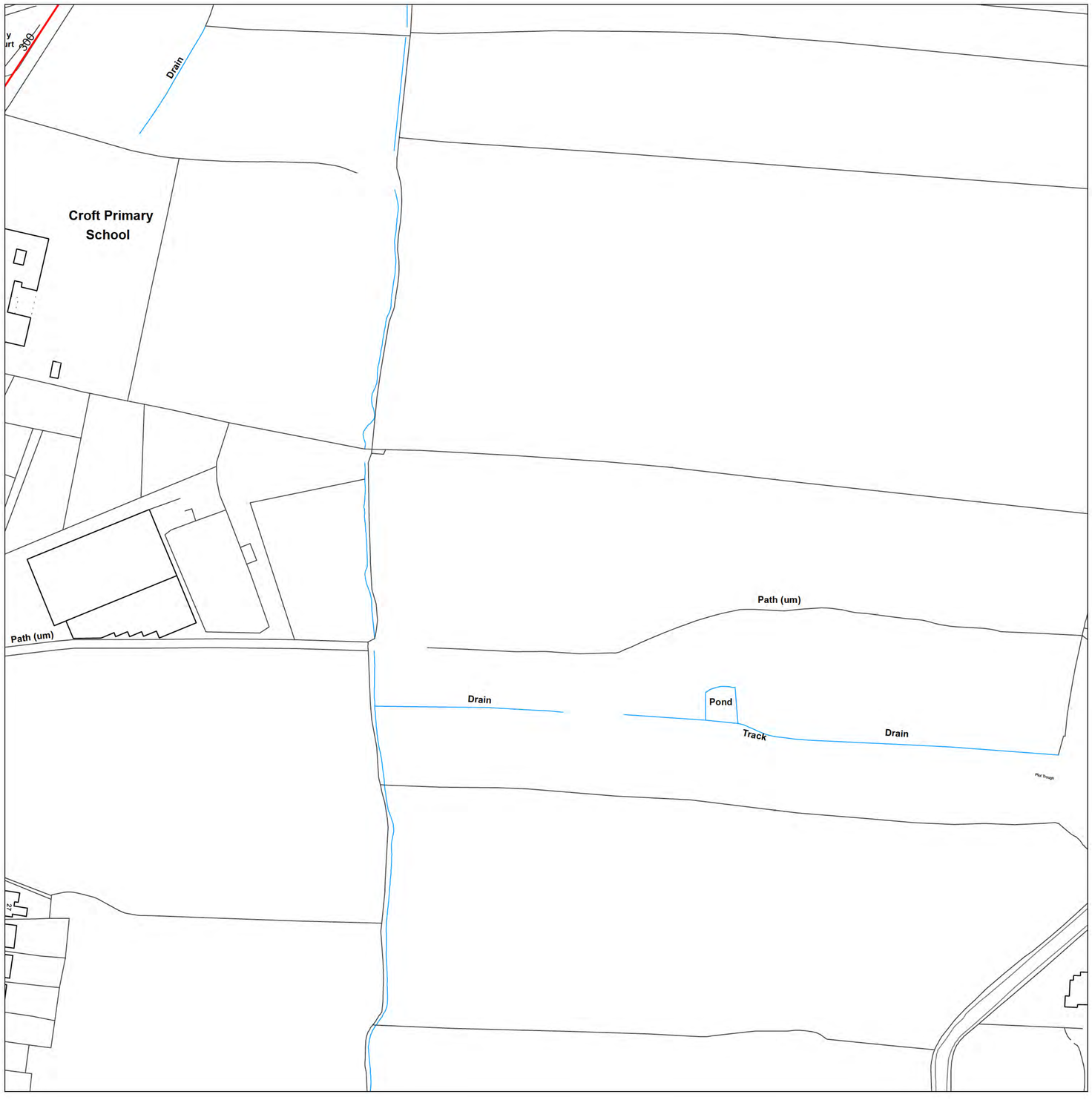

Refno Cover Func Invert Size x Size y Shape Matl Length Grad Refno Cover Func Invert Size x Size y Shape Matl Length Grad

OS Sheet No: SJ6393NE

Scale: 1:1250 Date: 10/08/2017

Printed By: Property Searches

WASTE WATER SYMBOLOGY

Foul Surface Combined Overflow

Manhole
Manhole, Side Entry
MainSewer, Public
MainSewer, Private
MainSewer, S104
Rising Main, Public
Rising Main, Private
Rising Main, S104
Highway Drain, Private

Foul Surface Combined

WW Site Termination
Air Valve
Cascade
Non Return Valve
Extent of Survey
Flow Meter
Gulley
Hatch Box
Head of System
Hydrobrake / Vortex
Inlet
Inspection Chamber
Bifurcation
Catchpit
Contaminated Surface Water
WW Pumping Station
Sludge Pumping Station
Sewer Overflow
T Junction/Saddle
LampHole
OilInterceptor
PenStock
Pump
RoddingEye
Soakaway
Summit
Valve
Valve Chamber
Washout Chamber
DropShaft
WW Treatment Works
Septic Tank
Vent Column
Network Storage Tank
Orifice Plate
Vortex Chamber
Penstock Chamber
Blind Manhole

Foul Surface Combined Overflow

Screen Chamber
Discharge Point
Outfall

Control Kiosk
Unspecified

Sludge Main, Public
Sludge Main, Private
Sludge Main, S104

ABANDONED PIPE

MainSewer
Rising Main
Highway Drain
Sludge Main

LEGEND

MANHOLE FUNCTION

FO	Foul
SW	Surface Water
CO	Combined
OV	Overflow

SEWER SHAPE

CI	Circular	TR	Trapezoidal
EG	Egg	AR	Arch
OV	Oval	BA	Barrel
FT	Flat Top	HO	HorseShoe
RE	Rectangular	UN	Unspecified
SQ	Square		

SEWER MATERIAL

AC	Asbestos Cement	DI	Ductile Iron
BR	Brick	PVC	Polyvinyl Chloride
PE	Polyethylene	CI	Cast Iron
RP	Reinforced Plastic Matrix	SI	Spun Iron
CO	Concrete	ST	Steel
CSB	Concrete Segment Bolted	VC	Vitrified Clay
CSU	Concrete Segment Unbolted	PP	Polypropylene
CC	Concrete Box Culverted	PF	Pitch Fibre
PSC	Plastic/Steel Composite	MAC	Masonry, Coursed
GRC	Glass Reinforced Concrete	MAR	Masonry, Random
GRP	Glass Reinforced Plastic	U	Unspecified

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OS Sheet No: SJ6393NE
Scale: 1:1250 Date: 10/08/2017
0 Nodes
Sheet 1 of 1

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SEWER RECORDS

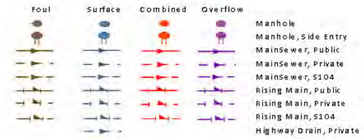
Refno	Cover	Func	Invert	Size.x	Size.y	Shape	Matl	Length	Grad	Refno	Cover	Func	Invert	Size.x	Size.y	Shape	Matl	Length	Grad
1902		CO																	

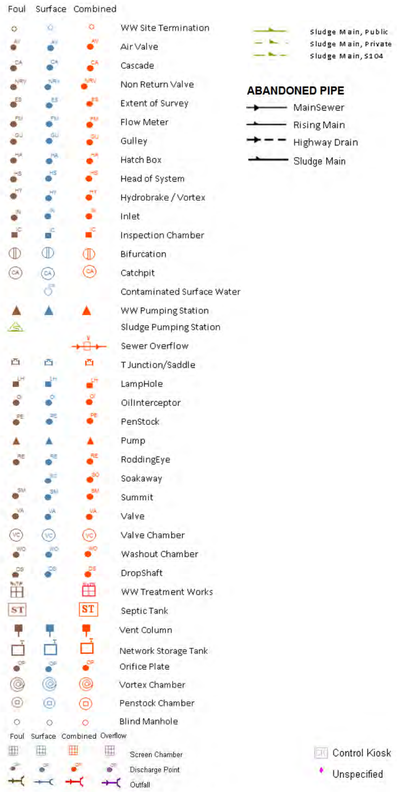
OS Sheet No: SJ6493NW

Scale: 1:1250 Date: 10/08/2017

Printed By: Property Searches

WASTE WATER SYMBOLOGY





LEGEND

MANHOLE FUNCTION

FO	Foul
SW	Surface Water
CO	Combined
OV	Overflow

SEWER SHAPE

CI	Circular	TR	Trapezoidal
EG	Egg	AR	Arch
OV	Oval	BA	Barrel
FT	Flat Top	HO	HorseShoe
RE	Rectangular	UN	Unspecified
SQ	Square		

SEWER MATERIAL

AC	Asbestos Cement	DI	Ductile Iron
BR	Brick	PVC	Polyvinyl Chloride
PE	Polyethylene	CI	Cast Iron
RP	Reinforced Plastic Matrix	SI	Spun Iron
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GRP	Glass Reinforced Plastic	U	Unspecified

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OS Sheet No: SJ6493NW

Scale: 1:1250 Date: 10/08/2017

1 Nodes

Sheet 1 of 1

United Utilities

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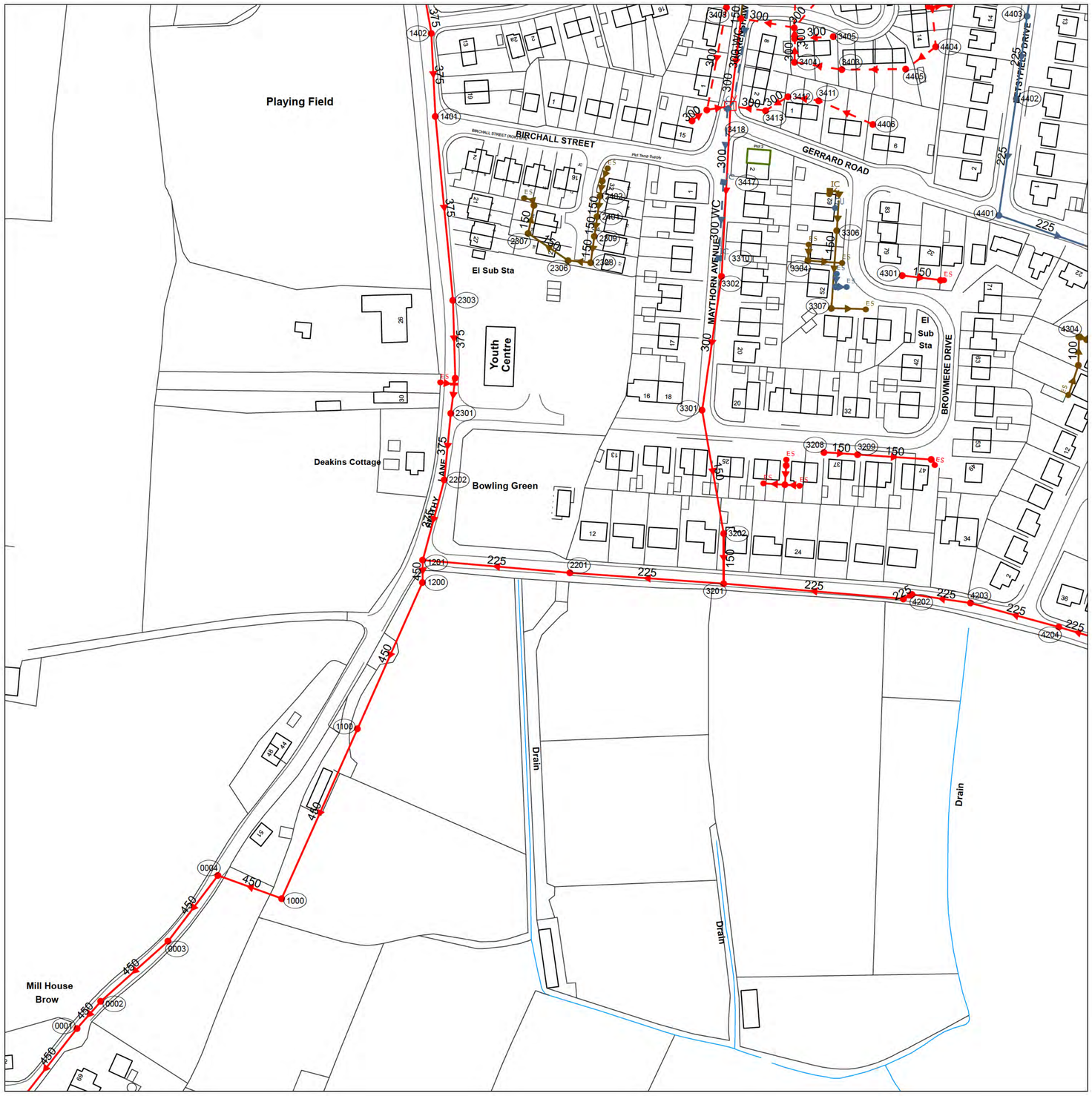
SEWER RECORDS



Refno	Cover	Func	Invert	Size.x	Size.y	Shape	Matl	Length	Grad
0001		CO	0	450		CI	VC	47.93	
0002		CO	0	450		CI	VC	16.48	
0003		CO							
0004		CO	0	450		CI	VC	38.11	
1000		CO	0	450		CI	VC	31.23	
1100		CO	0	450		CI	VC	85.64	
1200		CO	0	450		CI	VC	74.01	
1201	19.59	CO	17.15	450		CI	CO	10.24	
1401	22.02	CO							
1402	22.49	CO							
2201	20.26	CO							
2202	19.89	CO							
2301	20.22	CO							
2302	20.39	CO	18.43	375		CI	CO	16.29	148
2303	20.82	CO							
2306		FO		150		CI	VC	22.22	
2307		FO							
2308		FO							
2309		FO		150		CI	VC	12.28	
2401		FO		150		CI	VC	9.11	
2402		FO		150		CI	VC	9.52	
2403		FO		150		CI	VC	7.19	
2405		FO							
3201	20.81	CO							
3202		CO							
3204		CO		100		CI	VC	9.03	
3207		CO							
3208		CO		150		CI	VC	15.58	
3209		CO		150		CI	VC	34.13	
3301		CO							
3302	21.86	CO							
3304		FO							
3306		FO		150		CI	VC	36.05	
3307		FO							
3309		SW							
3310		SW							
3402	22.12	CO	21.3	300		CI	VC	40.76	
3403		CO		0		CI		22.08	
3404		CO		300		CI	VC	10.85	
3405		CO		300		CI	VC	17.89	
3406		CO							
3407		CO							
3408		CO		300		CI	VC	48.2	
3409		CO		300		CI	VC	8.45	
3410		CO							
3411		CO							
3412		CO		300		CI	VC	12.18	
3413		CO		300		CI	VC	16.35	
3414		FO							
3417		SW							
3418		SW		300		CI	VC	33.99	
4201	20.71	CO	17.86	225		CI	VC	83.29	490
4202	20.76	CO							
4203	20.87	CO	0	225		CI	VC	27.27	
4204	20.88	CO	18.01	225		CI	VC	42.26	
4205		CO		150		CI	VC	3.15	
4301		CO		150		CI	VC	17.82	
4302		CO							
4304		FO							
4305		FO							
4306		FO							
4401	22.94	SW							
4402	23.55	SW							
4403	24.03	SW	22.6	225		CI	VC	38.33	106
4404		CO							
4405		CO	0			CI		29.51	
4406		CO	0			CI		27.23	
3415		FO	100			CI	VC	10.23	
3416		SW							
3419		FO							
4407		CO		150		CI	VC	9.99	
2305		CO							
3401		CO							

WASTE WATER SYMBOLOGY

Foul Surface Combined Overflow

Manhole
Manhole, Side Entry
MainSewer, Public
MainSewer, Private
MainSewer, S104
Rising Main, Public
Rising Main, Private
Rising Main, S104
Highway Drain, Private

Foul Surface Combined

WW Site Termination
Air Valve
Cascade
Non Return Valve
Extent of Survey
Flow Meter
Gulley
Hatch Box
Head of System
Hydrobrake / Vortex
Inlet
Inspection Chamber
Bifurcation
Catchpit
Contaminated Surface Water
WW Pumping Station
Sludge Pumping Station
Sewer Overflow
T Junction/Saddle
LampHole
OilInterceptor
PenStock
Pump
RoddingEye
Soakaway
Summit
Valve
Valve Chamber
Washout Chamber
DropShaft
WW Treatment Works
Septic Tank
Vent Column
Network Storage Tank
Orifice Plate
Vortex Chamber
Penstock Chamber
Blind Manhole

Foul Surface Combined Overflow

Screen Chamber
Discharge Point
Outfall

Control Kiosk
Unspecified

Sludge Main, Public
Sludge Main, Private
Sludge Main, S104

ABANDONED PIPE

MainSewer
Rising Main
Highway Drain
Sludge Main

LEGEND

MANHOLE FUNCTION

FO	Foul
SW	Surface Water
CO	Combined
OV	Overflow

SEWER SHAPE

CI	Circular	TR	Trapezoidal
EG	Egg	AR	Arch
OV	Oval	BA	Barrel
FT	Flat Top	HO	HorseShoe
RE	Rectangular	UN	Unspecified
SQ	Square		

SEWER MATERIAL

AC	Asbestos Cement	DI	Ductile Iron
BR	Brick	PVC	Polyvinyl Chloride
PE	Polyethylene	CI	Cast Iron
RP	Reinforced Plastic Matrix	SI	Spun Iron
CO	Concrete	ST	Steel
CSB	Concrete Segment Bolted	VC	Vitrified Clay
CSU	Concrete Segment Unbolted	PP	Polypropylene
CC	Concrete Box Culverted	PF	Pitch Fibre
PSC	Plastic/Steel Composite	MAC	Masonry, Coursed
GRC	Glass Reinforced Concrete	MAR	Masonry, Random
GRP	Glass Reinforced Plastic	U	Unspecified

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OS Sheet No: SJ6393SW
Scale: 1:1250 Date: 10/08/2017
73 Nodes
Sheet 1 of 1

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SEWER RECORDS

Printed By: Property Searches

OS Sheet No: SJ6393SW

Scale: 1:1250 Date: 10/08/2017

Refno	Cover	Func	Invert	Size.x	Size.y	Shape	Matl	Length	Grad
5101	20.6	CO	0	225		CI	VC	47.13	
5102	20.3	CO	18.2	225		CI	VC	26.12	
5103		CO							
5201	20.81	CO	18.05	225		CI	VC	17.6	587
5202	21.1	CO	18.06	225		CI	VC	9.2	
5203		CO		150		CI	VC	14.48	
5301	22.6	SW	20.43	300		CI	VC	57.41	230
5302	22.84	SW							
5303	22.82	SW							
5304	22.82	SW							
5306		CO							
6101	19.88	CO	0	225		CI	VC	21.95	
6102	21.1	FO	0	225		CI	VC	7.04	
6103		FO							
6104	20.9	FO							
6105	20.93	SW							
6106		FO							
6108		FO		100		CI	VC	10.64	
6109		FO		100		CI	VC	7.92	
6110		FO		100		CI	VC	15.23	
6111		FO							
6200		SW	0	225		CI	VC	34.29	
6201		FO							
6202		FO							
6203		FO	0	150		CI	VC	17.08	
6204		SW	0	225		CI	VC	52.46	
6205	21.67	FO							
6206	22.26	FO		150		CI	VC	15.48	
6209		FO							
6210		FO							
6216		CO							
6218		FO							
6222		FO		100		CI	VC	23.44	
6223		CO							
6227		CO							
6228		CO							
6301	22.53	FO							
6303	22.33	SW							
6304		FO							
6305		CO							
7101	20.99	SW							
7102	21.13	FO	19.35	225		CI	VC	19.4	
7103	21.19	FO	19.1	225		CI	VC	26.3	
7104		FO							
7105	20.99	SW	19.22	300		CI	VC	48.59	221
7106	21.14	FO	19.33	225		CI	VC	14	70
7107	21.28	FO	18.66	225		CI	VC	11	367
7201	21.71	SW	20.24	225		CI	VC	12.7	
7202		FO							
7301	22.64	SW							
7302	23.32	SW							
7303	23.85	SW							
7304	23.96	FO							
7305	24.3	FO							
7306	24.94	FO	22.94	150		CI	VC	38.01	
7307	24.01	SW	22.45	150		CI	VC	6.81	
8000		CO	0	225		CI	VC	9.14	
8001		CO	0	225		CI	VC	89.85	
8101		SW							
8102	21.27	FO							
8103	20.61	FO	0	225		CI	VC	49.61	
8104	21.02	FO							
8105		FO	0	225		CI	VC	13.99	
8106		FO	0	150		CI	VC	20.02	
8107		FO	0	150		CI	VC	25.63	
8108		FO	0	225		CI	VC	19.02	
8109		FO	0	225		CI	VC	8	
8110		SW	0	300		CI	VC	19.83	
8111		SW		300		CI	VC	31.83	
8201	22.77	FO							
8202	24.03	FO	22.22	225		CI	VC	43	47
8203		FO							
8205		SW							
8301	25.41	SW							
8302	25.67	FO							
8303	26.02	SW	24.16	150		CI	VC	24.91	83
8304	26.13	FO	23.67	150		CI	VC	21.12	21
9200		FO							
9201		FO	0	150		CI	VC	67.19	
9202		FO	0	150		CI	VC	17.26	
9203		FO	0	150		CI	VC	16.02	
9204		FO		100		CI	VC	8.41	
5305		SW							
5306		CO		150		CI	VC	42.85	
6113		FO							
6212		SW							
6213		SW							
6214		SW							
6215		FO							
6220		FO							
6221		FO							
6225		CO							
6226		CO		150		CI	VC	4.31	
7203		FO							
7204		FO		150		CI	VC	11.59	
8204		FO	22.41	225		CI	VC	28.9	170
6207		SW							
6300		SW							
9205		FO							
8002		CO	0	225		CI	VC	176.02	

WASTE WATER SYMBOLOGY

Foul Surface Combined Overflow

Manhole
Manhole, Side Entry
MainSewer, Public
MainSewer, Private
MainSewer, S104
Rising Main, Public
Rising Main, Private
Rising Main, S104
Highway Drain, Private

Foul Surface Combined

WW Site Termination
Air Valve
Cascade
Non Return Valve
Extent of Survey
Flow Meter
Gulley
Hatch Box
Head of System
Hydrobrake / Vortex
Inlet
Inspection Chamber
Bifurcation
Catchpit
Contaminated Surface Water
WW Pumping Station
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Valve Chamber
Washout Chamber
DropShaft
WW Treatment Works
Septic Tank
Vent Column
Network Storage Tank
Orifice Plate
Vortex Chamber
Penstock Chamber
Blind Manhole

Foul Surface Combined Overflow

Screen Chamber
Discharge Point
Outfall

Control Kiosk
Unspecified

Sludge Main, Public
Sludge Main, Private
Sludge Main, S104

ABANDONED PIPE

MainSewer
Rising Main
Highway Drain
Sludge Main

LEGEND

MANHOLE FUNCTION

FO	Foul
SW	Surface Water
CO	Combined
OV	Overflow

SEWER SHAPE

CI	Circular	TR	Trapezoidal
EG	Egg	AR	Arch
OV	Oval	BA	Barrel
FT	Flat Top	HO	HorseShoe
RE	Rectangular	UN	Unspecified
SQ	Square		

SEWER MATERIAL

AC	Asbestos Cement	DI	Ductile Iron
BR	Brick	PVC	Polyvinyl Chloride
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RP	Reinforced Plastic Matrix	SI	Spun Iron
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OS Sheet No: SJ6393SE
Scale: 1:1250 Date: 10/08/2017
101 Nodes
Sheet 1 of 1

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SEWER RECORDS

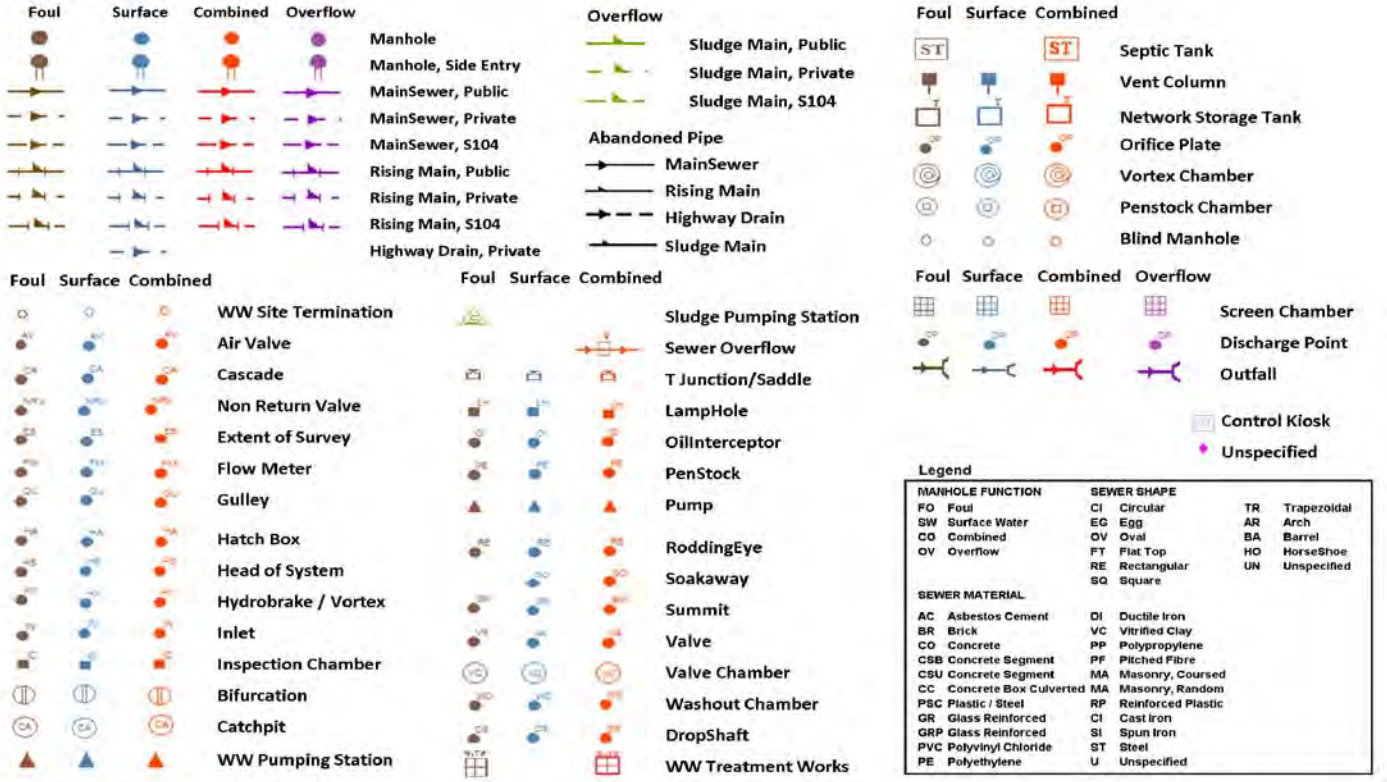
Printed By: Property Searches

OS Sheet No: SJ6393SE

Scale: 1:1250 Date: 10/08/2017

United Utilities

WASTE WATER SYMBOLOGY



Legend

MANHOLE FUNCTION		SEWER SHAPE			
FO	Foul	CI	Circular	TR	Trapezoidal
SW	Surface Water	EG	Egg	AR	Arch
CO	Combined	OV	Oval	BA	Barrel
OV	Overflow	FT	Flat Top	HO	HorseShoe
		RE	Rectangular	UN	Unspecified
		SQ	Square		

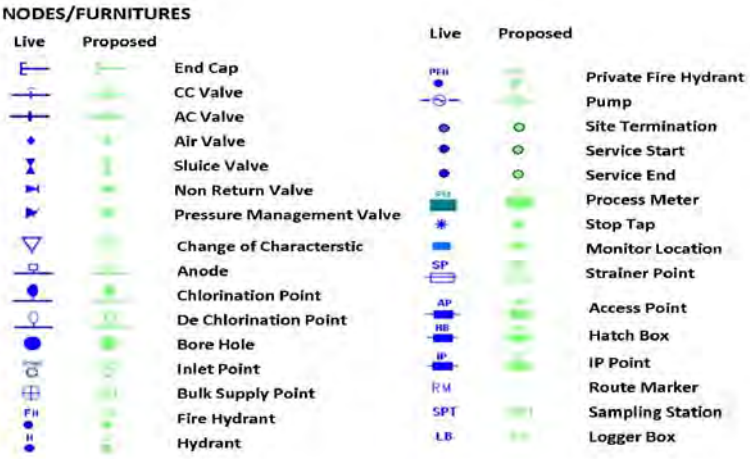
SEWER MATERIAL			
AC	Asbestos Cement	DI	Ductile Iron
BR	Brick	VC	Vitrified Clay
CO	Concrete	PP	Polypropylene
CSB	Concrete Segment	PF	Pitched Fibre
CSU	Concrete Segment	MA	Masonry, Coursed
CC	Concrete Box Culverted	MA	Masonry, Random
PSC	Plastic / Steel	RP	Reinforced Plastic
GR	Glass Reinforced	CI	Cast Iron
GRP	Glass Reinforced	SI	Spun Iron
PVC	Polyvinyl Chloride	ST	Steel
PE	Polyethylene	U	Unspecified

CLEAN WATER SYMBOLOGY

PIPE WORK

ABANDONED PIPE

NODES/FURNITURES



PROPERTY TYPES

Legend

MATERIAL TYPES		LINING TYPES	
AC	ASBESTOS CEMENT	CL	CEMENT LINING
CI	CAST IRON	TB	TAR OR BITUMEN
CU	COPPER	ERL	EPOXY RESIN
CO	CONCRETE		
DI	DUCTILE IRON	INSERTION TYPES	
GI	GALVANISED IRON		
GR	GREY IRON	DD	DIE DRAWN
OT	OTHERS	DR	DIRECTIONAL DRILLING
PB	LEAD	MO	MOLING
PV	uPVC	PI	PIPELINE
SI	SPUN IRON	SL	SLIP LINED
ST	STEEL		
UN	UNKONWN		
PE	POLYETHYLENE		

Shepherd Gilmour
Consulting Engineers

APPENDIX C

Colchester House, 40 Peter Street, Manchester M2 5GP
(44)0161 837 1500
www.shepherd-gilmour.co.uk

Maps by email Plant Information Reply

IMPORTANT WARNING

Information regarding the location of BT apparatus is given for your assistance and is intended for general guidance only. No guarantee is given of its accuracy. It should not be relied upon in the event of excavations or other works being made near to BT apparatus which may exist at various depths and may deviate from the marked route.

openreach BT

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email cbyd@openreach.co.uk

ADVANCE NOTICE REQUIRED
(Office hours: Monday - Friday 08.00 to 17.00)
www.openreach.co.uk/cbyd

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KEY TO BT SYMBOLS

DP	Pole
Planned DP	Planned Pole
PCP	Joint Box
Planned PCP	Change Of State
Built	Split Coupling
Planned	Duct Tee
Inferred	Planned Box
Building	Manhole
Kiosk	Planned Manhole
Hatchings	Cabinet
	Planned Cabinet

Other proposed plant is shown using dashed lines.
BT Symbols not listed above maybe disregarded.
Existing BT Plant may not be recorded.
Information valid at time of preparation

openreach a BT Group business BT

BT Ref : WKH100591
Map Reference : (centre) SJ6347893670
Easting/Northing : (centre) 363478,393
Issued : 08/08/2017 10:05:59

WARNING: IF PLANNED WORKS FALL INSIDE HATCHED AREA IT IS ESSENTIAL BEFORE PROCEEDING THAT YOU CONTACT THE NATIONAL NOTICE HANDLING CENTRE. PLEASE SEND E-MAIL TO: nnhc@openreach.co.uk

Maps by email Plant Information Reply

IMPORTANT WARNING

Information regarding the location of BT apparatus is given for your assistance and is intended for general guidance only. No guarantee is given of its accuracy. It should not be relied upon in the event of excavations or other works being made near to BT apparatus which may exist at various depths and may deviate from the marked route.

openreach BT

CLICK BEFORE YOU DIG

FOR PROFESSIONAL FREE ON SITE ASSISTANCE PRIOR TO COMMENCEMENT OF EXCAVATION WORKS INCLUDING LOCATE AND MARKING SERVICE

email cbyd@openreach.co.uk

ADVANCE NOTICE REQUIRED
(Office hours: Monday - Friday 08.00 to 17.00)
www.openreach.co.uk/cbyd

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KEY TO BT SYMBOLS

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Built	Split Coupling
Planned	Duct Tee
Inferred	Planned Box
Building	Manhole
Kiosk	Planned Manhole
Hatchings	Cabinet
	Planned Cabinet

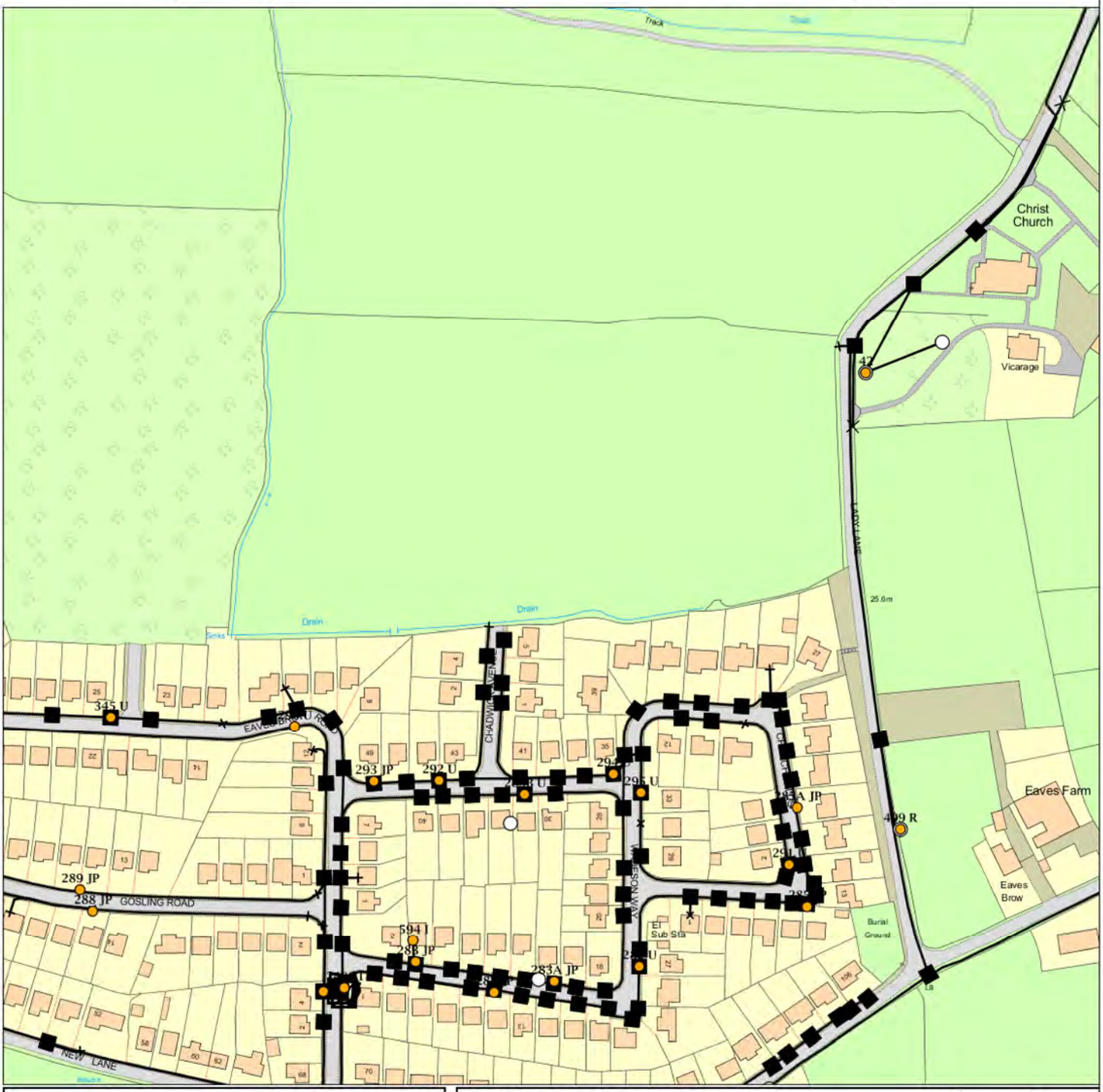
Other proposed plant is shown using dashed lines.
BT Symbols not listed above maybe disregarded.
Existing BT Plant may not be recorded.
Information valid at time of preparation

openreach a BT Group business BT

BT Ref : TQG10075Z
Map Reference : (centre) SJ6356693439
Easting/Northing : (centre) 363566,393
Issued : 08/08/2017 10:07:58

WARNING: IF PLANNED WORKS FALL INSIDE HATCHED AREA IT IS ESSENTIAL BEFORE PROCEEDING THAT YOU CONTACT THE NATIONAL NOTICE HANDLING CENTRE. PLEASE SEND E-MAIL TO: nnhc@openreach.co.uk

Maps by email Plant Information Reply



IMPORTANT WARNING

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openreach BT

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KEY TO BT SYMBOLS

DP	Pole
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PCP	Joint Box
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Built	Split Coupling
Planned	Duct Tee
Inferred	Planned Box
Building	Manhole
Kiosk	Planned Manhole
Hatchings	Cabinet
	Planned Cabinet

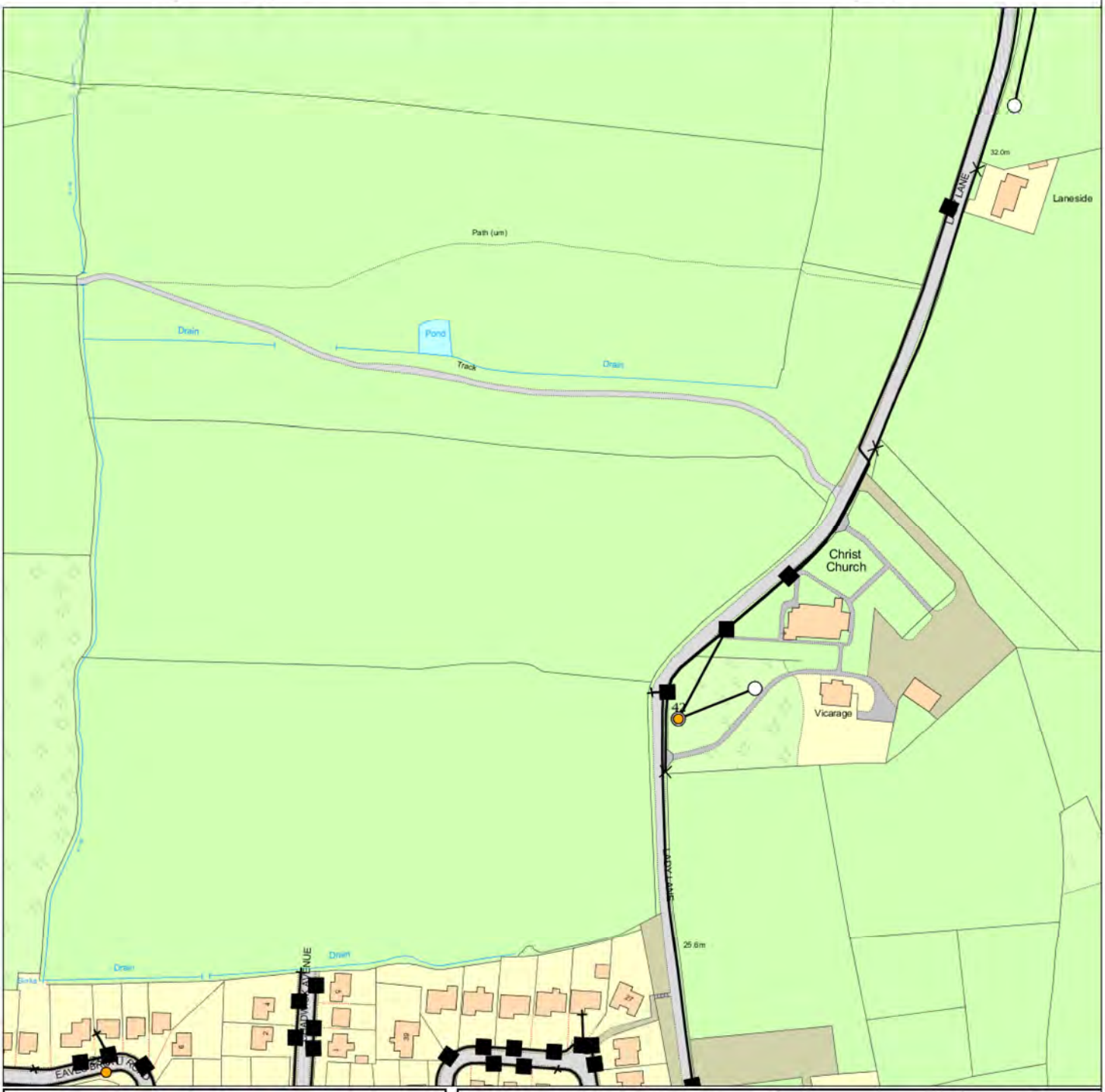
Other proposed plant is shown using dashed lines.
BT Symbols not listed above maybe disregarded.
Existing BT Plant may not be recorded.
Information valid at time of preparation

openreach a BT Group business BT

BT Ref : BDD10086K
Map Reference : (centre) SJ6379893421
Easting/Northing : (centre) 363798,393
Issued : 08/08/2017 10:09:05

WARNING: IF PLANNED WORKS FALL INSIDE HATCHED AREA IT IS ESSENTIAL BEFORE PROCEEDING THAT YOU CONTACT THE NATIONAL NOTICE HANDLING CENTRE. PLEASE SEND E-MAIL TO: nnhc@openreach.co.uk

Maps by email Plant Information Reply



IMPORTANT WARNING

Information regarding the location of BT apparatus is given for your assistance and is intended for general guidance only. No guarantee is given of its accuracy. It should not be relied upon in the event of excavations or other works being made near to BT apparatus which may exist at various depths and may deviate from the marked route.

openreach BT

CLICK BEFORE YOU DIG

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KEY TO BT SYMBOLS

DP	Pole
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PCP	Joint Box
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Built	Split Coupling
Planned	Duct Tee
Inferred	Planned Box
Building	Manhole
Kiosk	Planned Manhole
Hatchings	Cabinet
	Planned Cabinet

Other proposed plant is shown using dashed lines.
BT Symbols not listed above maybe disregarded.
Existing BT Plant may not be recorded.
Information valid at time of preparation

openreach a BT Group business BT

BT Ref : VFC10159Y
Map Reference : (centre) SJ6388493581
Easting/Northing : (centre) 363884,393
Issued : 08/08/2017 10:15:29

WARNING: IF PLANNED WORKS FALL INSIDE HATCHED AREA IT IS ESSENTIAL BEFORE PROCEEDING THAT YOU CONTACT THE NATIONAL NOTICE HANDLING CENTRE. PLEASE SEND E-MAIL TO: nnhc@openreach.co.uk

Maps by email Plant Information Reply

IMPORTANT WARNING

Information regarding the location of BT apparatus is given for your assistance and is intended for general guidance only. No guarantee is given of its accuracy. It should not be relied upon in the event of excavations or other works being made near to BT apparatus which may exist at various depths and may deviate from the marked route.

openreach BT

CLICK BEFORE YOU DIG

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KEY TO BT SYMBOLS

DP		Pole	
Planned DP		Planned Pole	
PCP		Joint Box	
Planned PCP		Change Of State	+
Built		Split Coupling	×
Planned		Duct Tee	▲
Inferred		Planned Box	
Building		Manhole	
Kiosk	Ⓚ	Planned Manhole	
Hatchings		Cabinet	
		Planned Cabinet	

Other proposed plant is shown using dashed lines.
BT Symbols not listed above maybe disregarded.
Existing BT Plant may not be recorded.
Information valid at time of preparation

openreach a BT Group business BT

BT Ref : HYE10158V
Map Reference : (centre) SJ6368993643
Easting/Northing : (centre) 363689,393
Issued : 08/08/2017 10:16:04

WARNING: IF PLANNED WORKS FALL INSIDE HATCHED AREA IT IS ESSENTIAL BEFORE PROCEEDING THAT YOU CONTACT THE NATIONAL NOTICE HANDLING CENTRE. PLEASE SEND E-MAIL TO: nnhc@openreach.co.uk

Shepherd Gilmour
Consulting Engineers

Colchester House, 40 Peter Street, Manchester M2 5GP

(44)0161 837 1500

www.shepherd-gilmour.co.uk

APPENDIX D

N
W E
S

03/6393/011/ -HEATH FARM DEV
03/6393/010/ -LORD STREET
03/6393/001/ -OAK STREET
03/6393/003/ -BROWMERE DRIVE
03/6393/006/ -EAVES BROW

0.15ins(3) UNK 11kV
0.3ins(3) UNK 11kV
3 x 0.025 CU 11kV

DEACONS CLOSE
ABBEY CLOSE
LORD STREET
KINGSMEAD COURT
OAK STREET
ARKENSHAW ROAD
ROUNDTHORN
BETSYFIELD DRIVE
GERRARD ROAD
MAYTHORN AVENUE
BROWMERE DRIVE
PASTURE DRIVE
CHADWICK AVENUE
CHURCHFIELD ROAD
LADY LANE

El Sub Sta

Path (um)
Drain
Pond
Track
Croft
Sinks
Old Mill Loft
Christ Church
Vicarage
25.6m

1
2
3
4

The position and depths of underground and overhead apparatus as indicated on this plan are approximate and are intended for guidance only. The depths may have changed if the land surface levels have altered. You are also informed that the plan may not show, or may inaccurately show, individual property services and services to street lighting installations. The onus of locating the apparatus precisely before commencing any excavations or other works in the immediate vicinity therefore rests entirely upon the person undertaking or responsible for those works. Before any such works are undertaken the precise location of the apparatus and cables should therefore be ascertained by suitable means. In the event of an emergency or for further assistance please contact 0800-092-9290 (ScottishPower area) or 0800-001-5400 (SP Manweb area).

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SP ENERGY NETWORKS
On behalf of SP Manweb plc

SP Manweb plc
Registered Office c/o PowerSystems
3 Prenton Way, Prenton, CH43 3ET
Registered in England and Wales No 2366937

OVERHEAD LINE
UNDERGROUND CABLES
In Use
Out of Use
Assumed route
VOLTAGE COLOUR KEY
EHV 132kV BLUE
33kV GREEN
HV RED
LV BROWN

Where cables have been laid SINCE 1 OCTOBER 1988, the following depths in mm apply (to the tops of cables or ducts) UNLESS OTHERWISE SHOWN, but see comments. (TO TOP OF CABLE, ADD 75mm FOR BOTTOM OF TRENCH)

	EHV	HV	LV
IN FOOTPATHS	775	600	450
ACROSS ROADS	775	700	600
ALONG ROADS	775	700	600
AGRICULTURAL	910	910	910

Your attention is drawn to the Health and Safety Executive Booklet HSG47, available from HSE.

DATE 14/09/2017
SCALE 1 : 2,000
MAP REFERENCE 363,651 393,514

0 5 10 20 30 40
Metres

Shepherd Gilmour
Consulting Engineers

APPENDIX E

Colchester House, 40 Peter Street, Manchester M2 5GP
(44)0161 837 1500
www.shepherd-gilmour.co.uk

Cadent
Your Gas Network

Plant Protection
Cadent
Block 1; Floor 1
Brick Kiln Street
Hinckley
LE10 0NA
E-mail: plantprotection@cadentgas.com
Telephone: +44 (0)800 688588

[redacted]
Shepherd Gilmour Infrastructure
4th Floor Colchester House
40 Peter Street
Manchester
Manchester
Greater Manchester
M2 5GP

National Gas Emergency Number:
0800 111 999*

National Grid Electricity Emergency Number:
0800 40 40 90*
* Available 24 hours, 7 days/week.
Calls may be recorded and monitored.

www.cadentgas.com

Date: 09/08/2017
Our Ref: NW_TW_Z1_3SWX_353079
Your Ref: Lady Lane, Croft
RE: Proposed Works, Lady Lane, Croft, Warrington

Thank you for your enquiry which was received on 08/08/2017.
Please note this response and any attached map(s) are valid for 28 days.

An assessment has been carried out with respect to Cadent Gas Ltd, National Grid Electricity Transmission plc's and National Grid Gas plc's apparatus. Please note it does not cover the items listed in the section "Your Responsibilities and Obligations", including gas service pipes and related apparatus.
For details of Network areas please see the Cadent website (http://cadentgas.com/Digging-safely/Dial-before-you-dig) or the enclosed documentation.

As your works are at a "proposed" stage, any maps and guidance provided are for information purposes only. This is not approval to commence work. You must submit a "Scheduled Works" enquiry at the earliest opportunity and failure to do this may lead to disruption to your plans and works. Plant Protection will endeavour to provide an initial assessment within 14 days of receipt of a Scheduled Works enquiry and dependent on the outcome of this, further consultation may be required.

In any event, for safety and legal reasons, works must not be carried out until a Scheduled Works enquiry has been completed and final response received.

National Grid is a trading name for:
National Grid Electricity Transmission plc
Registered Office: 1-3 Strand, London WC2N 5EH
Registered in England and Wales, No 2366977

National Grid is a trading name for:
National Grid Gas plc
Registered Office: 1-3 Strand, London WC2N 5EH
Registered in England and Wales, No 2006000

Cadent is a trading name for: Cadent Gas Limited
Registered Office: Ashbrook Court, Prologis Park,
Central Boulevard, Coventry CV7 8PE
Registered in England and Wales, No 10080864

Your Responsibilities and Obligations

The "Assessment" Section below outlines the detailed requirements that must be followed when planning or undertaking your scheduled activities at this location.

It is your responsibility to ensure that the information you have submitted is accurate and that all relevant documents including links are provided to all persons (either direct labour or contractors) working for you near Cadent and/or National Grid's apparatus, e.g. as contained within the Construction (Design and Management) Regulations.

This assessment solely relates to Cadent Gas Ltd, National Grid Electricity Transmission plc (NGET) and National Grid Gas plc (NGG) and apparatus. This assessment does **NOT** include:

- Cadent and/or National Grid's legal interest (easements or wayleaves) in the land which restricts activity in proximity to Cadent and/or National Grid's assets in private land. You must obtain details of any such restrictions from the landowner in the first instance and if in doubt contact Plant Protection.
- Gas service pipes and related apparatus
- Recently installed apparatus
- Apparatus owned by other organisations, e.g. other gas distribution operators, local electricity companies, other utilities, etc.

It is **YOUR** responsibility to take into account whether the items listed above may be present and if they could be affected by your proposed activities. Further "Essential Guidance" in respect of these items can be found on the National Grid Website (http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=8589934982).

This communication does not constitute any formal agreement or consent for any proposed development work; either generally or with regard to Cadent and/or National Grid's easements or wayleaves nor any planning or building regulations applications.

Cadent Gas Ltd, NGG and NGET or their agents, servants or contractors do not accept any liability for any losses arising under or in connection with this information. This limit on liability applies to all and any claims in contract, tort (including negligence), misrepresentation (excluding fraudulent misrepresentation), breach of statutory duty or otherwise. This limit on liability does not exclude or restrict liability where prohibited by the law nor does it supersede the express terms of any related agreements.

If you require further assistance please contact the Plant Protection team via e-mail (click here) or via the contact details at the top of this response.

Yours faithfully

Plant Protection Team

ASSESSMENT

Affected Apparatus
The apparatus that has been identified as being in the vicinity of your proposed works is:

- Low or Medium pressure (below 2 bar) gas pipes and associated equipment. (As a result it is highly likely that there are gas services and associated apparatus in the vicinity)

Requirements

BEFORE carrying out any work you must:

- Carefully read these requirements including the attached guidance documents and maps showing the location of apparatus.
- Contact the landowner and ensure any proposed works in private land do not infringe Cadent and/or National Grid's legal rights (i.e. easements or wayleaves). If the works are in the road or footpath the relevant local authority should be contacted.
- Ensure that all persons, including direct labour and contractors, working for you on or near Cadent and/or National Grid's apparatus follow the requirements of the HSE Guidance Notes HSG47 - 'Avoiding Danger from Underground Services' and GS6 – 'Avoidance of danger from overhead electric power lines'. This guidance can be downloaded free of charge at http://www.hse.gov.uk
- In line with the above guidance, verify and establish the actual position of mains, pipes, cables, services and other apparatus on site before any activities are undertaken.

GUIDANCE

Excavating Safely - Avoiding injury when working near gas pipes:
http://www.nationalgrid.com/NR/rdonlyres/2D2EEA97-B213-459C-9A26-18361C6E0B0D/25249/Digsafe_leaflet3e2finalamends061207.pdf

Standard Guidance

Essential Guidance document:
http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=8589934982

General Guidance document:
http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=35103

Excavating Safely in the vicinity of gas pipes guidance (Credit card):
http://www.nationalgrid.com/NR/rdonlyres/A3D37677-6641-476C-9DDA-E89949052829/44257/ExcavatingSafelyCreditCard.pdf

Excavating Safely in the vicinity of electricity cables guidance (Credit card):
http://www.nationalgrid.com/NR/rdonlyres/35DDEC6D-D754-4BA5-AF3C-D607D05A25C2/44858/ExcavatingSafelyCreditCardelectricitycables.pdf

Copies of all the Guidance Documents can also be downloaded from the National Grid Website:
http://www.nationalgrid.com/uk/Gas/Safety/work/downloads/

Not to be used for construction

ID: NW_TW_Z1_3SWX_353079

USER: [redacted]

DATE: 09/08/2017

DATA DATE: 06/08/2017

REF: Lady Lane, Croft

MAP REF: SJ6393
CENTRE: 363701, 393542

View extent: 2060m, 1220m

LP MAINS
MP MAINS
IP MAINS
LHP MAINS
NHP MAINS

0m 100m
Approximate scale 1:5000
on A3 Colour Landscape

Some examples of Plant Items:
Valve | Depth of Cover | Syphon | Diameter Change | Material Change | Out of Standard Service

Map not to be used for construction

This plan shows those pipes owned by National Grid Gas plc in its role as a Licensed Gas Transporter (GT). Gas pipes owned by other GTs, or otherwise privately owned, may be present in this area. Information with regard to such pipes should be obtained from the relevant owners. The information shown on this plan is given without warranty, the accuracy thereof cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc., are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by National Grid Gas plc or their agents, servants or contractors for any error or omission. Safe digging practices, in accordance with HS(G)47, must be used to verify and establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you on or near gas apparatus. The information included on this plan should not be referred to beyond a period of 28 days from the date of issue.

Map 1 of 1 (GAS)

MAPS Plot Server Version 1.9.0

Cadent
Your Gas Network

Requested by: Shepherd Gilmour Infrastructure

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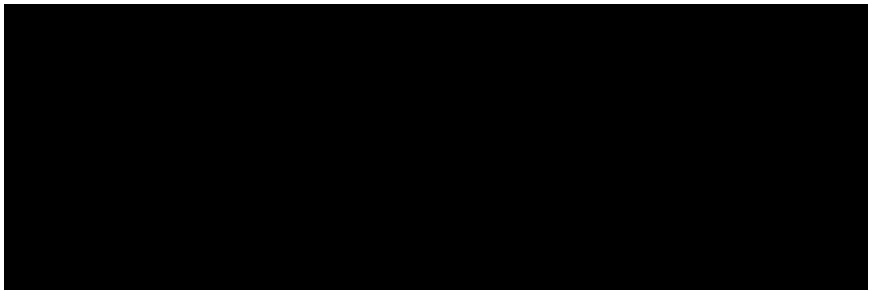
ENQUIRY SUMMARY

Received Date
08/08/2017

Your Reference
Lady Lane, Croft

Location
Centre Point: 363700, 393542
X Extent: 900
Y Extent: 580
Postcode: WA3 7JU
Location Description: Lady Lane, Croft, Warrington

Map Options
Paper Size: A3
Orientation: LANDSCAPE
Requested Scale: 2500
Actual Scale: 1:5000 (GAS)
Real World Extents: 2060m x 1220m (GAS)



Address: 4th Floor Colchester House, 40 Peter Street, Manchester, Manchester, Greater Manchester, M2 5GP

Description of Works
Currently only in the initial planning stages for potential housing development

Enquiry Type
Proposed Works

Activity Type
Development Project

Work Types
Work Type: Plans Only

Date Requested: 08/08/2017

Requested by: Shepherd Gilmour

Company: Shepherd Gilmour Infrastructure L

Job Reference: 10976337

Your Scheme/Reference: Lady Lane, Croft

Key for Mains & Service Pipework

Existing LP mains or services operating up to 75 millibar gauge

Existing MP mains or services operating between 75 millibar and 2 bar gauge

Existing IP mains or services operating between 2 bar and 7 bar gauge

Whilst ESP Utilities Group Ltd (ESP) try to ensure the asset information we provide is accurate, the information is provided Without Prejudice and ESP accept no liability for claims arising from any inaccuracy, omissions or errors contained in this response. The actual position of underground services must be verified and established on site before any mechanical plant is used. Authorities and contractors will be held liable for he full cost of repairs to ESP apparatus and all claims made against them by Third parties as a result of any interference or damage.

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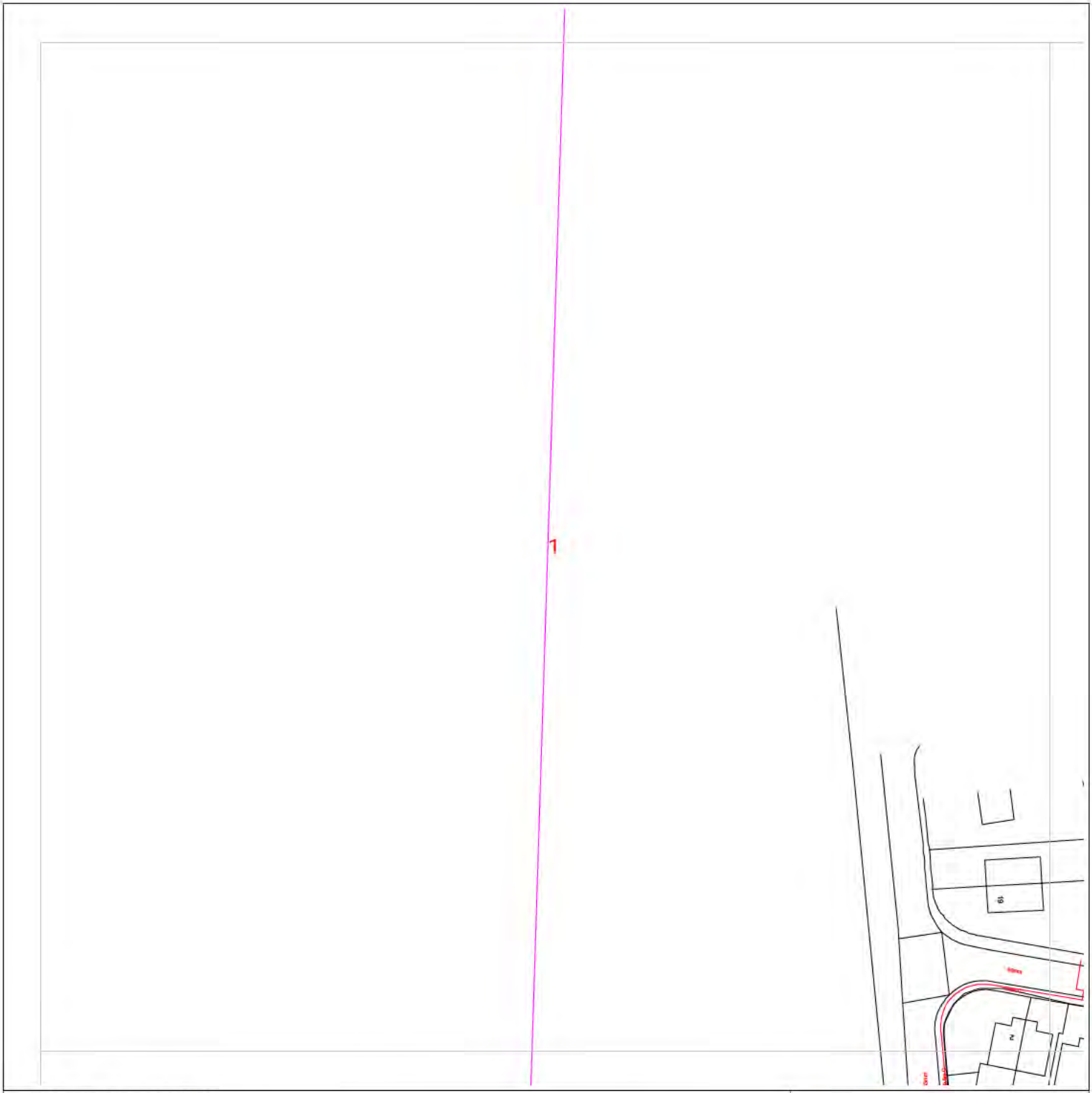
ESP UTILITIES GROUP

ESP Utilities Group Ltd
Bluebird House
Mole Business Park
Leatherhead
Surrey
KT22 7BA
Phone: 01372 587500
Email: info@espug.com

Dig Sites:

Area Line

Approx scale on A4 paper: 1:1000
(excluding Overview map)



Date Requested: 08/08/2017

Requested by: Shepherd Gilmour

Company: Shepherd Gilmour Infrastructure L

Job Reference: 10976337

Your Scheme/Reference: Lady Lane, Croft

Key for Mains & Service Pipework

Existing LP mains or services operating up to 75 millibar gauge

Existing MP mains or services operating between 75 millibar and 2 bar gauge

Existing IP mains or services operating between 2 bar and 7 bar gauge

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ESP UTILITIES GROUP

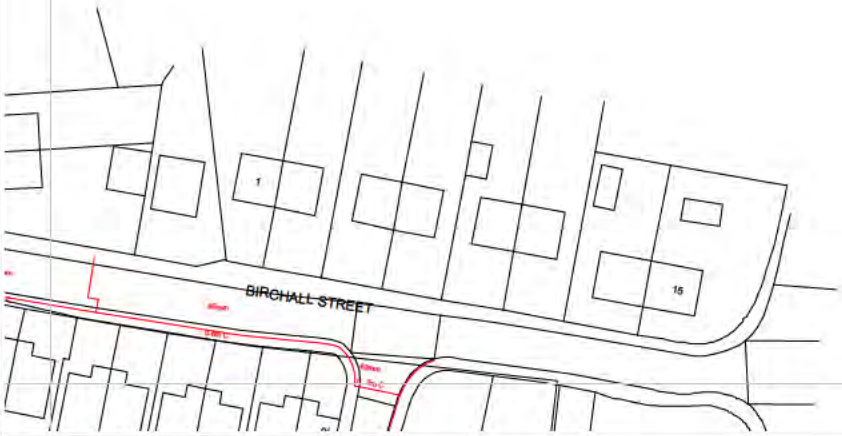
ESP Utilities Group Ltd
Bluebird House
Mole Business Park
Leatherhead
Surrey
KT22 7BA
Phone: 01372 587500
Email: info@espug.com

Dig Sites:

Area Line

Approx scale on A4 paper: 1:1000
(excluding Overview map)

2



Date Requested: 08/08/2017

Requested by: Shepherd Gilmour

Company: Shepherd Gilmour Infrastructure L

Job Reference: 10976337

Your Scheme/Reference: Lady Lane, Croft

Key for Mains & Service Pipework

Existing LP mains or services operating up to 75 millibar gauge

Existing MP mains or services operating between 75 millibar and 2 bar gauge

Existing IP mains or services operating between 2 bar and 7 bar gauge

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ESP UTILITIES GROUP

ESP Utilities Group Ltd
Bluebird House
Mole Business Park
Leatherhead
Surrey
KT22 7BA
Phone: 01372 587500
Email: info@espug.com

Dig Sites:

Area Line

Approx scale on A4 paper: 1:1000
(excluding Overview map)

Date Requested: 08/08/2017

Requested by: Shepherd Gilmour

Company: Shepherd Gilmour Infrastructure L

Job Reference: 10976337

Your Scheme/Reference: Lady Lane, Croft

Key for Mains & Service Pipework

Existing LP mains or services operating up to 75 millibar gauge

Existing MP mains or services operating between 75 millibar and 2 bar gauge

Existing IP mains or services operating between 2 bar and 7 bar gauge

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ESP UTILITIES GROUP

ESP Utilities Group Ltd
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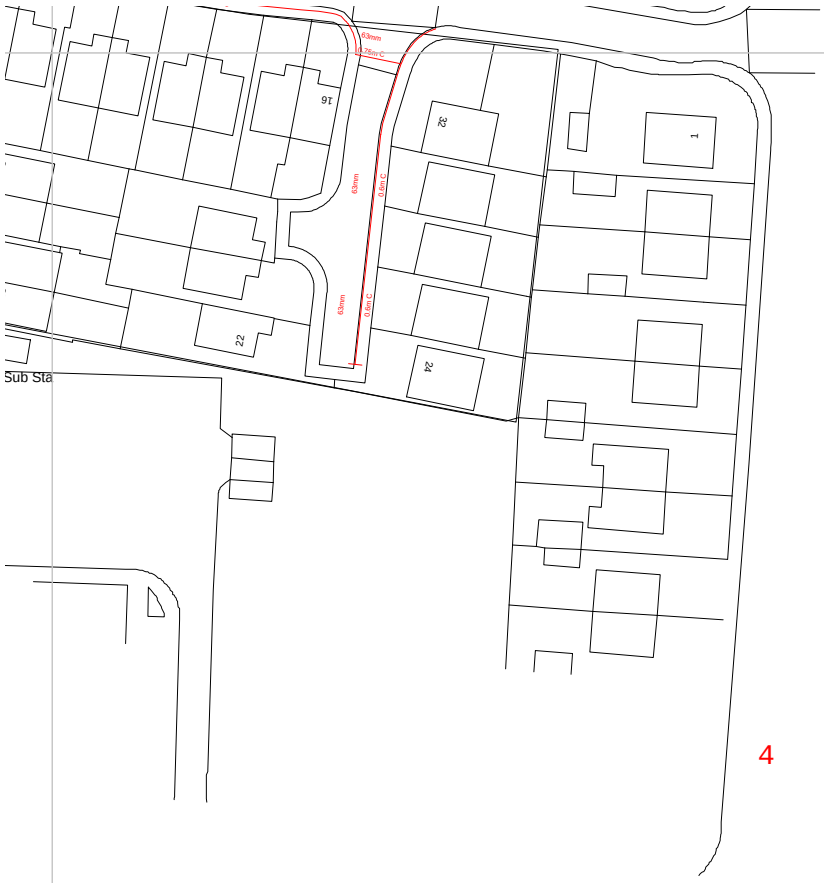
KT22 7BA
Phone: 01372 587500
Email: info@espug.com

Dig Sites:

Area Line

Approx scale on A4 paper: 1:1000
(excluding Overview map)



Date Requested: 08/08/2017

Requested by: Shepherd Gilmour

Company: Shepherd Gilmour Infrastructure L

Job Reference: 10976337

Your Scheme/Reference: Lady Lane, Croft

Key for Mains & Service Pipework

Existing LP mains or services operating up to 75 millibar gauge

Existing MP mains or services operating between 75 millibar and 2 bar gauge

Existing IP mains or services operating between 2 bar and 7 bar gauge

Whilst ESP Utilities Group Ltd (ESP) try to ensure the asset information we provide is accurate, the information is provided Without Prejudice and ESP accept no liability for claims arising from any inaccuracy, omissions or errors contained in this response. The actual position of underground services must be verified and established on site before any mechanical plant is used. Authorities and contractors will be held liable for he full cost of repairs to ESP apparatus and all claims made against them by Third parties as a result of any interference or damage.

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Dig Sites:

Area Line

Approx scale on A4 paper: 1:1000
(excluding Overview map)

Shepherd Gilmour
Consulting Engineers

APPENDIX F

Colchester House, 40 Peter Street, Manchester M2 5GP
(44)0161 837 1500
www.shepherd-gilmour.co.uk

Shepherd Gilmour Infrastructure
Castlefield House, 29 Ellesmere Street,
Manchester

M15 4LZ

Advice : HSL-170814102923-432 Does Not Cross Any Consultation Zones

Your Ref: Land at Lady Lane, Croft
Development Name:
Comments:

The proposed development site which you have identified does not currently lie within the consultation distance (CD) of a major hazard site or major accident hazard pipeline; therefore at present HSE does not need to be consulted on any developments on this site. However, should there be a delay submitting a planning application for the proposed development on this site, you may wish to approach HSE again to ensure that there have been no changes to CDs in this area in the intervening period.

This advice report has been generated using information supplied by [redacted] at Shepherd Gilmour Infrastructure on 14 August 2017.

Warrington Borough Council Local Plan
Preferred Development Option Regulation 18
Consultation

LAND OFF LADY LANE, CROFT
TRANSPORT APPRAISAL

Client: Peel Investments (North) Ltd
27 September 2017

i-Transport

Warrington Borough Council Local Plan
Preferred Development Option Regulation 18
Consultation

LAND OFF LADY LANE, CROFT
TRANSPORT APPRAISAL

Client: Peel Investments (North) Ltd
27 September 2017

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i-Transport Ref: SEE/dc/ITM13247-001A R

Date: 27 September 2017

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QUALITY MANAGEMENT

Report No.	Comments	Date	[redacted]
ITM13247-001R	Draft	15/09/17	
ITM13247-001AR	Final	27/09/17	

File ref: Z:\Projects\13247ITM Land at Lady Lane, Croft\Admin\Report and Tech Notes\ITM13247-001A R Transport Appraisal.docx

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SECTION 1 INTRODUCTION

1.1 Warrington Local Plan Review

1.1.1 Warrington Borough Council (WBC) is currently undertaking a review of its Local Plan which will guide development in the Borough to 2037. The Council has now prepared its Preferred Development Option (PDO) and is consulting on this.

1.1.2 WBC's consultation document of July 2017 sets out how the PDO was developed using a four stage process and then summarises the PDO. This identifies four main areas of growth: the city centre; the Waterfront; a Garden City Suburb in the south east quadrant of the town; and a south west urban extension. Further development is planned throughout the urban area and within Warrington's outlying settlements.

1.1.3 The PDO is summarised on Figure 9 of the consultation document, identifying the number of new dwellings and quanta of employment floorspace within the various development areas.

1.2 Peel's Land Interests

1.2.1 Peel is a major North West based investor and development company with a successful track-record in delivering growth and major projects including the Trafford Centre and Media City UK. Peel owns c.1.2million sqm of property and 15,000 hectares of land and water. Peel has significant interests in Warrington Borough including at the Waterfront, south west urban extension and in the outlying settlements.

1.2.2 Peel has specific interests at land off Lady Lane in Croft which is capable of delivering up to 235 new homes.

1.2.3 The main representations prepared by Turley explain how the site can make a significant contribution to meeting the housing needs of Warrington over the plan period.

1.3 Report Structure

1.3.1 This transport appraisal considers the key transport and highways related aspects of the sustainable development proposals at Croft.

1.3.2 The background to the consideration of sites by WBC and the overall policy position, focussing on transport, is set out in Section 2.0. Section 3.0 explains the development proposals. The key 'tests' of the National Planning Policy Framework (NPPF) paragraph 32 are then considered: Section 4.0 shows that the site will be accessible and sustainable; Section 5.0 demonstrates how access will be provided to the site; Section 6.0 outlines the broad scale of traffic impacts.

1.4 Conclusions

1.4.1 A summary of the overall conclusions is presented at Section 7.0. The key conclusions of this appraisal are:

i) A range of facilities and services will be available locally within walking and/or cycling distance in Croft village. These include two primary schools, a shop and two public houses. Buses already serve Croft and travel along the site's Lord Street frontage close to the site, providing connections to the many facilities and services in Culcheth.

ii) Therefore the development of the site will fully accord with the NPPF objective related to sustainable travel, with opportunities for such modes taken up.

iii) Access to the site is proposed in several locations and feasibility level designs have been produced. All will operate satisfactorily. Access to the site can be provided on land controlled by Peel and is deliverable and achievable. It is therefore also considered that satisfactory access can be provided in accordance with the NPPF.

iv) The residual cumulative traffic impacts of development on the site will not be severe and therefore, in accordance with NPPF, development should not be prevented on transport grounds.

1.4.2 Overall, it is therefore concluded that the site off Lady Lane at Croft is suitable for allocation in the Council's Local Plan and will form a sustainable development that can provide much needed housing.

SECTION 2 BACKGROUND

2.1 Transport Policy Context

2.1.1 This section considers both national and local policy related to transport and, in particular, how this frames the consideration of development proposals. Policy aspects of WBC's consideration of the PDO and allocation of sites are set out in Section 2.2 below and, where relevant, in Sections 4.0, 5.0 and 6.0 related to accessibility, access and traffic impacts.

National Planning Policy Framework (NPPF)

2.1.2 Paragraph 14 of the NPPF sets out the presumption in favour of sustainable development noting that at plan-making stage, local planning authorities should positively seek opportunities to meet the development needs of an area.

2.1.3 The specific transport policies of the Framework are contained within its Part 4, the section of the document related to Delivering Sustainable development.

2.1.4 Paragraph 32 sets out the key 'tests' for the consideration of the transport aspects of development, stating that:

> **'All developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Plans and decisions should take account of whether:**
>
> - **the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;**
> - **safe and suitable access to the site can be achieved for all people; and**
> - **improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.'**

2.1.5 Issues related to the sustainability of the site, access and traffic impacts are set out in Sections 4.0, 5.0 and 6.0 respectively.

2.1.6 Paragraph 30 notes:-

> **"Encouragement should be given to solutions which support reductions in greenhouse gas emissions and reduce congestion. In preparing Local Plans, local planning authorities should therefore support a pattern of development which, where reasonable to do so, facilitates the use of sustainable modes of transport"**

2.1.7 In addition, Paragraph 34 states that:

> **'Plans and decisions should ensure developments that generate significant movement are located where the need to travel will be minimised and the use of sustainable transport modes can be maximised.'**

2.1.8 These submissions will demonstrate that the proposals will facilitate and maximise the use of sustainable travel modes.

2.1.9 Paragraph 35 considers the location and design of developments, and notes that:

> **'Plans should protect and exploit opportunities for the use of sustainable transport modes for the movement of goods or people. Therefore, developments should be located and designed where practical to**
>
> - **accommodate the efficient delivery of goods and supplies;**
> - **give priority to pedestrian and cycle movements, and have access to high quality public transport facilities;**
> - **create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter and where appropriate establishing home zones;**
> - **incorporate facilities for charging plug-in and other ultra-low emission vehicles; and**
> - **consider the needs of people with disabilities by all modes of transport.'**

2.1.10 Paragraph 37 goes on to note:

> **'Planning policies should aim for a balance of land uses within their area so that people can be encouraged to minimise journey lengths for employment, shopping, leisure, education and other activities'**

2.1.11 The proposals off Lady Lane in Croft will be close to the facilities in the village such as primary schools, shop and public houses and connections to facilities and services in Culcheth are also available. This is considered in Section 4.0.

2.1.12 Planning Practice Guidance (PPG) sets out further guidance on how the policies in the Framework should be applied and this has been considered in the preparation of this transport appraisal.

Warrington Local Plan

2.1.13 The Core Strategy of the Warrington Local Plan was adopted by the Council in July 2014. Following a legal challenge, parts of the plan related to the housing target and new homes at Omega were overturned. All other policies within the Plan remain unaltered.

2.1.14 Policy CS1 'Overall Spatial Strategy – Delivering Sustainable Development' notes that development proposals that are sustainable will be welcomed. It goes on the note that, to be sustainable, development must accord with national and local planning policy frameworks, taking into account other material considerations, and notes that it must have regard to a range of issues/factors including:-

> **" • the need to develop sites, services and facilities in appropriate locations accessible by public transport, walking and cycling;**
>
> **• the need to make best use of existing transport, utility, social and environmental infrastructure within settlements, and ensure additional provision where needed to support development."**

2.1.15 Policy CS2 sets out principles related to the quantity and distribution of development and Policy CS4 Transport notes:

> **"Using the principles set out in Policy CS2, development will be located to reduce the need to travel, especially by car, and to enable people as far as possible to meet their needs locally."**

2.1.16 Thematic policies related to transport are set out in Section 11 of the Core Strategy 'Making the Place Work' with both objectives and policies defined. The objectives include:

> **"Objectives**
>
> **Ensure all new residential development is built in sustainable locations with walking, cycling and public transport access to employment, health, education, leisure facilities and fresh food (Objective T1).**
>
> **Ensure that any commuting into or out of the borough is as sustainable as possible, making best use of public transport including Strategic Park and Ride facilities and ensuring that transport hubs within the borough are linked to employment areas (Objective T4).**

Encourage walking and cycling for both utility and recreation on existing routes by making roads and other routes safer, convenient, and more enjoyable for walking and cycling and increase the functionality of Green Infrastructure to facilitate walking and cycling where appropriate (Objective T6).

Ensure new large scale development and existing development at key locations such as Warrington Hospital and schools are as sustainable as possible and explore demand management measures as part of travel planning to reduce dependence on the private car and improving accessibility to alternative modes of travel, particularly from deprived areas (Objective T7).

Ensure that opportunities are taken to extend and enhance the existing public rights of way network (Objective T10).”

with the General Transport Principles set out in Policy MP1:-

“To secure sustainable development the Council and its partners will support proposals where they:

- **reduce the need for private car use through its location, travel planning and marketing (smarter choices) and other measures to change travel behaviour.**
- **Consider demand management measures including the effective reallocation of road space in favour of public transport, pedestrians and cyclists.**
- **Adhere to locally determined car and cycle parking standards.**
- **Mitigate the impact of development or improve the performance of Warrington’s Transport network, including the Strategic Road Network, by delivering the site specific infrastructure which will support the proposed level of development.”**

2.1.17 Policy MP3 relates to Active Travel and notes:-

“Active Travel

The Council will expect that a high priority will be given to the needs and safety of pedestrians and cyclists in new development.

New development should not compromise and should contribute to enhancing and developing integrated networks of continuous, attractive and safe routes for walking and cycling including improvements to roads, Rights of Way and the Greenway Network (as shown on the Policies Map). This should include appropriate segregation of users and appropriate priority should be given to users at junctions. Where appropriate the Council will consider the use of conditions or planning obligations to secure such improvements.

Enhancements and improvements should look to increase accessibility and make the most of potential environmental, social and health benefits.

Particular priority will be given to routes linking residential areas (especially those in recognised areas of deprivation) with employment areas, transport interchanges, schools, Warrington hospital and other local services and facilities."

2.1.18 Policy MP4 considers Public Transport:-

"Public Transport

The Council will aim to secure improvements to public transport infrastructure and services (including bus, rail and taxi/private hire) in partnership with operators and delivery partners.

In accordance with the overall Spatial Strategy, development should be located in areas with easy access to public transport. Development should aim to make public transport a viable and attractive alternative by;

- **Integrating with existing public transport infrastructure and services as far as possible, and**
- **Providing additional public transport infrastructure and services that are reasonably related in scale to the proposed development where existing facilities are not available or are in need of improvement, provided this does not impact on the deliverability of the scheme.**

Where appropriate the Council will consider the use of conditions or planning obligations to secure these improvements."

2.1.19 These policies are considered throughout this appraisal and are referenced, where appropriate, in Sections 4.0 – 6.0.

2.1.20 The PDO consultation document includes strategic objectives for the Local Plan including:-

"W4 To provide new infrastructure to support Warrington's growth, reduce congestion and promote sustainable transport options, whilst reducing the need to travel and encourage active lifestyles."

Warrington Local Transport Plan

2.1.21 This document sets out the Local Transport Plan (LTP) strategy for the period 2011 – 2030. The objectives of the plan include:-

"To build and manage a transport network that:

- ✓ **Is integrated and customer focused and reduces the need to travel by car.**
- ✓ **Enables the regeneration of the Borough and supports economic growth.**
- ✓ **Maintains the highway, minimises congestion for all modes of travel and enables Warrington's 'smart growth'.**
- ✓ **Improves everyone's access to health, employment, education, culture, leisure and the natural environment.**
- ✓ **Improves everyone's access to the town centre by all modes of travel.**
- ✓ **Enhances accessibility for those in disadvantaged communities or groups.**
- ✓ **Improves neighbourhoods and residential areas.**
- ✓ **Improves safety and security for all modes of travel.**
- ✓ **Reduces the impact of traffic on air quality in Warrington and helps to reduce carbon emissions and tackle climate change.**
- ✓ **Makes Warrington safer, sustainable and healthier.**
- ✓ **Integrates with transport networks outside Warrington to enhance the sustainability of cross boundary travel."**

2.1.22 The plan includes seven themes related to different aspects of transport and these are considered in this report: Active Travel, Public Transport and Smarter Choices (Section 4.0 – Sustainability and Accessibility); Safety and Security (Section 5.0 – Access); and Managing Motorised Travel (Section 6.0 – Traffic Impacts).

2.2 Growth in Outlying Settlements

2.2.1 Peel's proposals to the at land off Lady Lane in Croft comprise the development of C.200 - 235 residential dwellings. The PDO proposes incremental growth in the outlying settlements with only 60 new homes identified at Croft. It is understood this is based on a 10% expansion of the existing settlement.

2.2.2 The four-stage process adopted by the Council to derive the PDO does not appear to take account of any numerical analysis of the transport system that would result in a cap on growth (of 10%) in Croft or the other outlying settlements.

2.2.3 Stage 1 identifies development needs and land requirements and Stage 2 sets the objectives for the Local Plan. Stage 3 assesses high level spatial options with option 3 being extension in one or more settlements with the remainder of the growth adjacent to the main urban area. The Council's 'Area Profiles and Options Assessment' Technical Note (July 2017) states:-

> **"For the outlying settlements, the Council applied the following assumptions in defining the growth scenarios:**
>
> **(i) 'Incremental growth' – based on a level of development that could be accommodated by existing infrastructure, subject to minor expansion of that infrastructure, up to 10% of settlement size."**

2.2.4 The process adopted, Figure 2 of the PDO document, states that the evidence base for stage 3 included a 'Transport Review'. Further detail is given at 4.46 and 4.47 of PDO document, noting:-

> **"In order to help inform the options appraisal process, the Council prepared Area Profiles for… each of the outlying settlements"** (4.46)

and

> **"these profiles provide a detailed assessment of the capacity of… the transport network."** (4.47)

2.2.5 Examination of the area profile for Croft includes consideration of the assessment criteria for objective W4, noting:

> **"Local Highways Network. Small amount of peak hour congestion in centre of village. No planned local highways improvements in village."**

Other criteria related to the strategic highways network, public transport and active travel do not raise specific constraints. Regarding active travel, WBC do note that there are very low levels of walking and cycling in this area. It is understood this is based on analysis of Census journey to work data. Section 4.0 below explains how active travel and public transport modes will be promoted, for all journey purposes, demonstrating that the site is capable of achieving sustainable travel patterns.

2.2.6 It is understood that the transport review did not include any quantitative analysis. No analysis of the capacity of the existing transport system, the impacts of traffic generated by development and the potential to introduce improvements to facilitate growth has been undertaken. Indeed, the PDO notes (5.49) that the development numbers in each settlement will depend on detailed assessment including transport impacts. It is understood this will be undertaken with the Council's new traffic model which is not yet available.

2.2.7 There is therefore no justification, based on sound evidence of transport capacity, to limit development in Croft (or the other outlying settlements) to an arbitrary 10% increase.

2.2.8 This report, which complements the main submissions prepared by Turley, identifies the potential of the site off Lady Lane in Croft to contribute to growth in the borough in a sustainable manner.

SECTION 3 DEVELOPMENT PROPOSALS

3.1 Site Location

3.1.1 The site is located adjacent to and immediately to the north and east of the existing built development at Croft and to the west of Lady Lane. The location of the site is shown on Figure 3.1.

3.1.2 Given its position, the site is very well related to the settlement of Croft with its western and southern boundaries adjoining the village. The site's western boundary is part-formed by residential development at Betsyfield Drive, Abbey Close and Deacons Close, its southern boundary by existing dwellings at Eaves Brow Road, Chadwick Avenue and Churchfields and its eastern boundary by Lady Lane. Its northern boundary is an equestrian centre off Deacons Close and field boundaries.

3.1.3 The site is c.13.5 hectares in size and currently comprises agricultural land. The site is designated as Green Belt within the Warrington Unitary Development Plan.

3.2 Masterplan

3.2.1 A concept masterplan of the site has been developed by Randall Thorp and is included in the main representations prepared by Turley. The masterplan shows residential development of up to 235 dwellings with woodland planting along the northern boundary.

3.2.2 Access to the site is considered in detail in Section 5.0 below: access can be provided in several locations including off Chadwick Avenue to the south, Lady Lane to the east and Abbey Close to the west. The masterplan shows that the accesses will be connected by internal site roads. A Public Right of Way (PRoW), footpath 6, runs east-west from Lady Lane to Abbey Close, for part of its length along the northern site boundary.

3.2.3 The design and layout of transport corridors within the site will focus on creating places; street and place design will start with pedestrians and cyclists having priority with managed car access. Street design will follow the principles of Manual for Streets and 'Living Streets' and will result in streets that are destinations worth visiting. Shared surfaces will be encouraged. Speed limits will be low with an appropriate hierarchy developed, making it the norm to travel slowly within the site which will also be designed for the mobility impaired with full account taken of 'Inclusive Mobility' requirements.

3.2.4 Thus the design philosophy of the masterplan will encourage sustainable travel with local trip making, contributing to the site forming sustainable development in the context of the NPPF.

3.3 Locational Benefits of the Site

3.3.1 The sites location, adjacent to the existing built area and in close proximity to public transport routes and existing facilities in Croft, means that the site presents an excellent opportunity to promote sustainable transport and reduce vehicular traffic generations.

3.3.2 The location of the site in the northern part of the Borough also has benefits in terms of its close proximity to the location of future jobs in, and close to, Warrington Borough. Much of the proposed employment related development in the Borough is located in and north of the town centre. In contrast, much of the residential development proposed (where workers are housed) is to the south east of the town. Development at Croft therefore presents an opportunity to locate workers (in new households) close to major centres of employment, thus minimising journey lengths.

3.3.3 Figure 3.2 indicates the proximity of the site to major areas of employment. Those on the northern side of the town include:-

- Birchwood – Only c.2.5km south-east of the site with c.17,000 jobs (source: 2011 Census, Journeys to Work to MSOAs).
- Omega – c.7.5km south west of the site with c.24,000 jobs (source: www.omegaopportunity.com).
- Parkside – in St Helens, c.2km west of the site with c.8,000 jobs (source: www.thisisparkside.co.uk / www.sthelens.gov.uk).

3.3.4 Thus locating a 'pool' of workers close to major employment areas will provide opportunities for reduced travel distances. Over time, it could be expected that jobs at Birchwood, for example, will be filled by workers in close proximity, such as at Croft, with reduced 'in-commuting' from outside the Borough. At present, the journey to work data for MSOAs in the Birchwood area indicates that only 32% of workers originate in Warrington Borough with the largest in flows from Wigan (10%), St Helens (6%), Cheshire West and Chester (5%), Hatton (4%) and Trafford (4%).

SECTION 4 SUSTAINABILITY AND ACCESSIBILITY OF THE SITE

4.1 Overview

4.1.1 Sustainable travel modes will be promoted at the site, consistent with the objectives and policies in WBC's Core Strategy, by:

i) Taking advantage of the site's location close to Croft village;

ii) Maximising opportunities for walking and cycling trips, particularly over shorter distances;

iii) Encouraging commuting trips to Warrington to be made by bus; and

iv) Mitigating the impacts of residual car borne trips by the introduction of highways mitigation improvements where absolutely necessary.

4.1.2 Measures for encouraging walking, cycling and public transport including those to be included in a Travel Plan are included in Sections 4.2 – 4.3 with the locational characteristics of the site and existing sustainable travel networks also set out. The accessibility of the site is then considered in Section 4.4.

4.2 Connectivity of the Site

4.2.1 As noted above, the sites lies immediately adjacent to the existing built development within Croft village thus affording the opportunity to make direct and high quality connections as noted above when considering the site masterplan. The adjacent streets within the village have footways and the site can connect to these via Chadwick Avenue and Abbey Close. The roads in Croft are generally lightly trafficked and suitable for cycling.

4.2.2 Improvements to the pedestrian/cyclist environment will be investigated in detail and, where appropriate, implemented in line with development coming forward. At this stage it is envisaged these could include: improvements to pedestrian provision in Croft village such as the introduction of dropped kerbs at crossing points and widening of footways or the introduction of new crossings. The above will be complemented by measures included in the Travel Plan for the site (see Section 4.3 below).

4.2.3 Nearby facilities and services, catering for everyday needs such as primary education, convenience shopping and public houses will be available close to the site and will therefore be readily accessible by active travel modes. The on-site street and layout design will facilitate this.

4.2.4 There are existing bus routes and services in the vicinity of the site as summarised on Figure 4.1 and in the table below.

Table 4.1 Existing Bus Services

Service No.	Route / Destinations Served	Frequency					
		Mon – Fri		Saturday		Sunday	
		Day	Eve	Day	Eve	Day	Eve
19	Leigh – Croft – Croft – Winwick – Warrington	60[1]	60[2]	60	-	60	-
192	Rixton – Croft – Croft – Birchwood	1 service					
193	Birchwood – Croft – Croft – Glazebury	4 services					

[1] Additional peak service; [2] Early Evening

4.2.5 Thus these are hourly bus services between Croft and Winwick, Culcheth and Warrington (and also Leigh) and limited services to Birchwood via the 192 and 193 bus services. The 19 bus route has an additional service in the peak hours.

4.2.6 As well as the above scheduled bus services, the 280/281/282 school bus services run between Croft and Culcheth High School, departing at 08:15 and arriving at the school at 08:27 and leaving the school at 15:10 and arriving back in Croft at 15:22.

4.2.7 The closest railway stations to the site are at Birchwood and Padgate albeit these are outside of walking distance.

4.2.8 Further measures to promote bus (and rail) use can be delivered as part of the Travel Plan, see below.

4.3 Promoting Sustainable Travel Choices

Overview

4.3.1 The development of the site will include the production of a comprehensive travel plan to support the proposals. This will primarily identify the delivery of 'soft' measures to encourage the use of sustainable modes.

Travel Plan Objectives and Targets

4.3.2 The detailed objectives and targets for the travel plan will be discussed and agreed with the Council and other key stakeholders, at the appropriate time. Broad objectives have been considered at this stage:

i) Bring together the design of the site and travel plan measures such that the need to travel is reduced.

ii) Provide measures and initiatives that are inclusive, promote cohesion and provide alternatives for all residents and other users on the site.

iii) Promote 'hard' and 'soft' measures such that sustainable modes are the first mode(s) of choice, rather than the car.

iv) Minimise the traffic generated by the development proposals.

v) Assist in developing a sense of place within the site.

vi) Promote healthy lifestyle choices through the use of non-car modes with emphasis on active travel.

4.3.3 Specific SMART targets will be developed for the plan focusing on two key aspects:

- First, meeting agreed modal share targets and a maximum proportion of car driver trips; and
- Secondly, ensuring that the actual traffic flows generated by the site are consistent with those adopted in future transport assessments, such that there is no severe impact (beyond that which is mitigated) from additional car trips.

4.3.4 Formal monitoring arrangements will be agreed to assess the achievement of objectives and targets on an on-going basis.

Travel Plan Measures

4.3.5 Detailed assessment and evaluation will be undertaken to establish the most appropriate measures for the site should it be allocated. A comprehensive package of initiatives will assist in achieving objectives and targets. There will be general measures to be applied across the site and all modes, specific measures to promote walking and cycling and public transport, measures to reduce residual vehicular trips and information/awareness raising that can be rolled out across the whole site. The measures are summarised below.

Generic Measures

4.3.6 These will include:

- Travel Plan Co-ordinator: the TPC will be responsible for the overall delivery of the plan including liaison with WBC. They will monitor the plan against objectives and targets and identify measures to promote sustainable travel.
- Personalised travel planning: the TPC will liaise with individual householders to plan specific journeys and show how these can be undertaken by sustainable modes.
- Welcome Packs: these will be provided to every new household and employee on the site and will set out the benefits of travel plan measures, details of sustainable travel modes (e.g. bus maps), the initiatives available on the site and contact details for any further information.
- Broadband: all homes will be equipped with broadband, enabling working from home etc.

Measures to Promote Walking and Cycling

4.3.7 Physical measures are considered above. Additional measures will include:-

- Bicycle user group: the TPC will investigate the potential for a BUG to be established at the site to encourage residents to meet and exchange tips on cycle routes and maintenance. The TPC will forge links with cycle shops to arrange discounts on purchases and repairs, if possible.
- Travel voucher: a voucher will be offered to each new household which can be used to purchase equipment or part purchase a bicycle.

- Cycle storage and stands: secure weather protected cycle storage and/or stands will be provided throughout the site.
- School walking bus: funding for the advertising of a walking bus scheme and the provision of fluorescent vests for children and walking bus 'drivers'.
- Cycling proficiency schemes at the primary school: funded for a period to be agreed with the Council.
- Cycle training: this will be offered to residents who are less confident regarding the use of a bike. The BUG can co-ordinate this.

Measures to Promote Public Transport

4.3.8 New bus services and supporting infrastructure will be delivered using the framework as set out above. Further measures will promote the use of buses including:

- Travel vouchers/travel cards/bus tickets: a monthly bus pass will be supplied to each household on first occupation. The TPC will seek to obtain discounts from bus operators for these tickets or tickets for extended periods.

- Bus buddying: this is used in other towns where trained volunteers provide one-to-one support to older people, learning disabled people, people with physical and sensory impairments etc. to aid their understanding of using public transport and to help them gain confidence.

Reducing Car Use

4.3.9 Residents will continue to seek to make some journeys by car but car sharing will be promoted from occupation of the dwellings by the TPC. A bespoke car sharing scheme could be developed or existing car sharing initiatives could be used.

Information and Awareness

4.3.10 Raising awareness of the measures and initiatives that will be available at the site is important and therefore information will be provided as follows:-

- Site specific travel guide: a foldable map, setting out the details of bus services and walk and cycle routes, will be developed. It will be included in sales literature and updated regularly for distribution by the TPC.

- Website: a Travel Plan website will be developed for the site giving residents access to up-to-date travel information.
- Notice boards: these will be located within sales offices and at strategic points around the development, displaying up-to-date information on sustainable modes and setting out the benefits of these and other travel plan measures.
- Campaigns: the TPC will hold events and campaigns related to national and local initiatives such as 'Bike to Work' day and local organised cycle rides.

4.3.11 The TPC and travel plan measures will be funded by the developer and/or their successors in title.

4.3.12 The Travel Plan measures will thus encourage both active travel and the use of public transport, consistent with the NPPF and the transport related objectives and policies MP1 (general transport principles), MP3 (active travel) and MP4 (public transport) of the Core Strategy.

4.4 Accessibility of the Site

Overview

4.4.1 Strategic objective W4 of the Local Plan includes the promotion of sustainable travel with the Sustainability Appraisal objectives including those related to reducing the need to travel and enhancing accessibility for essential services and facilities.

4.4.2 Local facilities and services within the vicinity of the site are shown on Figure 4.2 and the distance from the closest of the site accesses (with pedestrian/cycle connections) to the key destinations in the local area are set out in the table below.

Table 4.2 Distance to Key Facilities and Services

Use	Name	Distance and Mode
Primary School	Croft Primary School	0.4km – walk
	St Lewis Catholic Primary School	1.0km – walk
Secondary School	Culcheth High School	4.0km – School bus
Health	Culcheth Health Centre	2.6km - Bus
	Culcheth Medical Centre	2.9km – Bus
	Well Pharmacy	2.9km – Bus
	The Village Dental Practice	3.8km – Bus
Retail and Leisure	Elliots General Store	0.2km – Walk
	Public Houses in Croft	0.2km – 0.4km - Walk
	Sainsbury's	3.0km – Bus
	Culcheth Post Office	2.9km – Bus
	Culcheth Library	3.2km – Bus
	Shops in Culcheth	2.9km - Bus

Accessibility to Education

4.4.3 There are two primary schools within Croft, both very close to the site. Croft Primary School is located off Mustard Lane, only c.400m from the proposed access at Abbey Close and even closer to the potential pedestrian access at Wildings Old Lane. St Lewis Catholic Primary School is located further along Mustard Lane c.1.0km from the Lord Street access. There is a footway along the western side of Mustard Lane that connects the site to the school. There is a very good prospect of trips to the primary schools being made on foot as data from the National Travel Survey shows that where a distance to a primary school is less than 1 mile (1.6km) then 78% of pupils walk to school.

4.4.4 The site is c.4.0km from Culcheth High School, accessed via Mustard Lane and then through Culcheth village. Existing school bus services are available from Croft.

4.4.5 The accessibility to education facilities is therefore considered to be good.

Accessibility to Health Facilities

4.4.6 The nearest medical centres are within Culcheth, where there are two at Thompson Avenue and Jackson Avenue. There is a pharmacy at Lodge Drive and the Village Dental Practice is located off Warrington Road, both in Culcheth. Existing bus service 19 connects Croft with Culcheth, providing a connection between the site and medical facilities.

4.4.7 The accessibility to local health facilities is therefore also good with these catering for 'day-to-day' needs of residents on the site.

Accessibility to Retail and Leisure Facilities

4.4.8 There are facilities in Croft including a general store and two public houses, the General Elliot and The Horseshoe Inn. The centre of Culcheth to the north-east includes several retail and leisure facilities including Sainsbury's food store, Post Office and library and bus connections are available to Culcheth using the 19 bus service. Thus a range of facilities will be available locally, encouraging active travel. The accessibility of the site to these facilities is also concluded to be good.

Summary

4.4.9 In conclusion, a range of facilities and services will be available locally within walking and/or cycling distance in Croft village. These include two primary schools, a shop and two public houses. Buses already serve Croft and travel along the site's Lord Street frontage close to the site, providing connections to the many facilities and services in Culcheth.

4.4.10 It is therefore concluded that the site is sustainable and accessible via a range of travel modes and will therefore be in accordance with the NPPF and WBC's local policies and objectives for the Local Plan.

SECTION 5 SITE ACCESS ARRANGEMENTS

5.1 Access Proposals

5.1.1 The concept masterplan shows development across the site with accesses provided off Chadwick Avenue, Lady Lane and Abbey Close. Thus several accesses can be provided to and from the site, consistent with design guidance.

Chadwick Avenue

5.1.2 Access towards the centre of the site can be created by extending Chadwick Avenue into the site as shown on Figure 5.1 (drawing reference ITM13247-GA-002). Chadwick Avenue is a typical residential street of c.5.5m width and with footways on both sides. It forms a junction with Wadeson Way where satisfactory visibility is available. Such a connection will assist in integrating the new dwellings with the existing community to the south.

Lady Lane

5.1.3 A priority junction access can be created off Lady Lane at the eastern end of the site as shown on Figure 5.2 (drawing reference ITM13247-GA-003). A 5.5m wide access road is shown with a footway on its northern side, allowing for pedestrian movements to Christ Church. A verge is proposed on the southern side as pedestrian movements towards the village will be catered for at Chadwick Avenue and Abbey Close as well as the public footpath that leads to the latter. Visibility splays commensurate with the speed limit are shown albeit greater distances are available.

Abbey Close

5.1.4 Abbey Close runs from Lord Street and an access to the site's western end could be created by extending the head of the cul-de-sac into the site as shown on Figure 5.3 (drawing reference ITM13247-GA-004). This will also provide a pedestrian connection into the site.

Summary

5.1.5 The access arrangements will be agreed with WBC and will be subject to refinement and road safety audit at the appropriate time. At this stage it is concluded that access to the site is deliverable and therefore achievable.

5.2 Capacity of the Accesses

5.2.1 No traffic data is currently available within and close to Croft village but site observations indicate that peak hour traffic flows are relatively light. The traffic flows generated by the site are low, c.120 vehicles in the peak hours (two-way).

5.2.2 Development traffic flows will be spread across the site accesses and it is anticipated that the site access junctions as shown above will accommodate the traffic generations to/from the site.

5.2.3 It is therefore concluded that the site accesses will operate within capacity, confirming that satisfactory access to the land off Lady Lane in Croft can be provided in accordance with the NPPF.

SECTION 6 TRAFFIC IMPACTS

6.1 Overview

6.1.1 It is understood the Council has not undertaken any detailed assessment of the potential traffic impacts resulting from development in outlying settlements, including the proposed development off Lady Lane in Croft. It is understood such work will follow once the Council's new transport model is available. Peel is keen to engage with WBC to assess the site and demonstrate how the traffic flows generated by the development can be accommodated on the surrounding highway network.

6.1.2 In the absence of the transport model, this section considers indicative traffic flows likely to be generated by the proposals followed by consideration of the impacts of this traffic in broad terms.

6.2 Development Traffic Flows

6.2.1 Traffic flows have been calculated for a development of 235 residential dwellings.

Trip Generation

6.2.2 Trip generation rates for the proposed development have been derived from the TRICS database using the 'Houses Privately Owned' category for sites with at least 100 dwellings. At this stage, no allowance has been made for lower trip rates associated with affordable housing on the site and therefore the estimates of traffic generation are very robust.

6.2.3 The trip generation rates and the resultant generated traffic flows are shown in the table below for the morning and evening peak hours.

Table 6.1 Land off Lady Lane, Croft – Trip Generation

Peak Hour	Direction	Trip Rate (per unit)	No. Trips
AM Peak	Arrival	0.127	30
	Departure	0.377	89
	Total	0.504	119
PM Peak	Arrival	0.309	73
	Departure	0.164	38
	Total	0.473	111

6.2.4 Thus the development will generate only 110 - 120 vehicular trips in each of the peak hours, around two vehicles every minute (both directions combined).

6.2.5 TEMPRO has been used to identify the potential journey purposes travelled by residents. In the peak periods this identifies for the Croft area:-

Table 6.2 Land off Lady Lane, Croft – Journey Purposes of Car Travel

Trip Purpose	Proportion of Trips	
	AM Peak Period	PM Peak Period
Work	57%	44%
Employer's business	7%	6%
Education	12%	5%
Shopping	13%	18%
Personal business	5%	7%
Recreation/Social	3%	8%
Visiting friends/relatives	1%	9%
Holiday/day trips	2%	3%

6.2.6 Considering the above, there is potential for some of the peak hour trips to be made locally and by active travel modes rather than the car e.g. to the schools and shop within Croft village. In the AM and PM peak periods, 36% and 50% of trips respectively are made for reasons other than journeys to work or on employer's business.

Trip Distribution and Assignment

6.2.7 The potential routes of car trips within and out of the site have been derived using 2011 Census journey to work patterns from the local area. This will over-estimate trips on the surrounding highway network as, as noted above, there is potential for journeys to be made locally whereas work related trips tend to be made over longer distances.

6.2.8 The Census data shows the following general distribution of trips:

Table 6.3 Land off Lady Lane, Croft – Overall Trip Distribution

Destination/District	Proportion of Trips
Warrington Borough	42%
Salford	6%
Trafford	6%
Manchester	6%
Wigan	11%
Halton	3%
Cheshire West & Chester	2%
Cheshire East	2%
Other	22%
Total	100%

6.2.9 Of the trips to 'other' destinations, larger proportions are made to the rest of Greater Manchester (5%) and Merseyside (10%), with c. half of the latter to St Helens. The above does not take account of new job opportunities in the area (e.g. at Parkside, Omega).

6.2.10 Trips have been assigned to destinations using the fastest routes based on Google mapping with account taken of the different access points available. The resultant destination points on the road network surrounding the site are as follows:

Table 6.4 Land off Lady Lane, Croft – Trip Assignment

Location	Proportion
M62 East via Birchwood Way	24.5%
Mustard Lane to Culcheth	11.1%
Kenyon Lane	15.3%
M6 North via J22	2.8%
Myddleton Lane	2.7%
M62 West	13.3%
M6 South via J22	20.4%
Birchwood Park Avenue	9.9%
Total	100.0%

6.2.11 Indicative development traffic flows are given on Figure 6.1, noting these are considered to be an over-estimate for the reasons set out above.

6.3 Traffic Impacts

6.3.1 The local highway network in the vicinity of the site is shown on Figure 6.2. Lord Street runs through the centre of the village, becoming Mustard Lane as it routes towards Culcheth and Smithy Brow then Southworth Lane as it routes towards Winwick. Smithy Lane joins Lord Street at a 'T' junction in the centre of the village with this then providing a connection to New Lane which provides access to Birchwood via Cross Lane and A574. Heath Lane joins Lord Street/Mustard Lane at a 'T' junction and continues northwards, then turning west to become Stone Pit Lane then Stoney Brow Lane before connecting with A579 Winwick Lane. To the north this provides a route towards Leigh and, to the south, to M6J22.

6.3.2 In terms of traffic conditions in Croft, WBC's Settlement Profile notes with respect to the local road network:

> **"Small amount of peak hour congestion in centre of village. No planned local highways improvements in village."**

The profile also notes that Croft is in close proximity to M6(J22) and M62(J9 and J11).

6.3.3 It is understood the above is not based on detailed analysis of the road network. An indication of peak hour traffic conditions has therefore been obtained from Google traffic maps with these given in Appendix A for the AM and PM peak hours. Google uses four gradations to define traffic speeds from fast to slow: green, orange, red and dark red. These are relative to the speed limits with 'fast' indicating little delay/free flow traffic conditions.

6.3.4 The traffic maps indicate that most roads in and around Croft have 'fast'/free-flow traffic speeds. Only the roads in the centre of Croft village are graded orange. Winwick Lane towards M6 is shown as orange in the AM Peak hour and Cross Lane on the approach to Warrington Road is shown as red. In the PM peak hour, the northbound A579 towards A580 is graded red.

6.3.5 The indicative traffic flows shown on Figure 6.1 indicate that traffic to/from the site is likely to be dispersed across several routes, and that traffic flows generated by the site will be low. The highest flows are predicted on Cross Lane between Croft and Birchwood but these are only c.40 vehicles per hour two-way in each of the peak hours, less than one vehicle per minute. Some of the traffic on Cross Lane is destined towards Birchwood itself whilst some joins M62 at J4 using Birchwood Way.

6.3.6 Whilst impacts of the traffic increases as a result of the development in Croft village are expected to be minor, they will be assessed in detail when the Council's transport model is available and traffic forecasts are provided. Mitigation measures/highways improvements will be identified as necessary. These could include providing additional capacity at junctions or traffic management measures in Croft.

6.3.7 Development in any location in the Borough will increase traffic flows on the local road network surrounding it. Indications of traffic speeds in and around Croft show that traffic conditions could not be categorised as severe and the Council's own conclusion is that there is only a small amount of peak hour congestion.

6.3.8 On this basis it is concluded that, in accordance with the NPPF, development should not be prevented on transport grounds as the residual cumulative impacts of development will not be severe.

SECTION 7 CONCLUSIONS

7.1 This report has considered the transport and highways implications of Peel's land interests off Lady Lane at Croft. These are capable of accommodating c.200 – 235 residential dwellings.

7.2 The Council's proposed allocation at Croft is only for an additional 60 dwellings which it is understood is based on a 10% expansion of the existing settlement. No quantitative analysis has been undertaken to analyse the capacity of the transport system and the impacts of higher levels of development. There is therefore no justification, based on sound evidence, to limit development in Croft on transport grounds.

7.3 The site off Lady Lane in Croft is well related to local facilities including two primary schools, local convenience store and two public houses. These will all be within an easy walk or cycle ride of the residential dwellings and will therefore encourage active travel. Services further afield in Culcheth, including the secondary school and health facilities, can be reached by existing bus services which are within a short walking distance of the site.

7.4 The site will therefore meet the transport related objectives of the Council's Core Strategy as well as its policies related to general transport principles (MP1), active travel (MP3) and public transport (MP4).

7.5 It is therefore considered that the development of the site will fully accord with the NPPF objective related to sustainable travel, with opportunities for such modes taken up.

7.6 Access to the site is proposed in several locations and feasibility level designs have been produced. It is considered that all will operate satisfactorily. Access to the site can be provided on land controlled by Peel and is deliverable and achievable. It is therefore also concluded that satisfactory access can be provided in accordance with the NPPF.

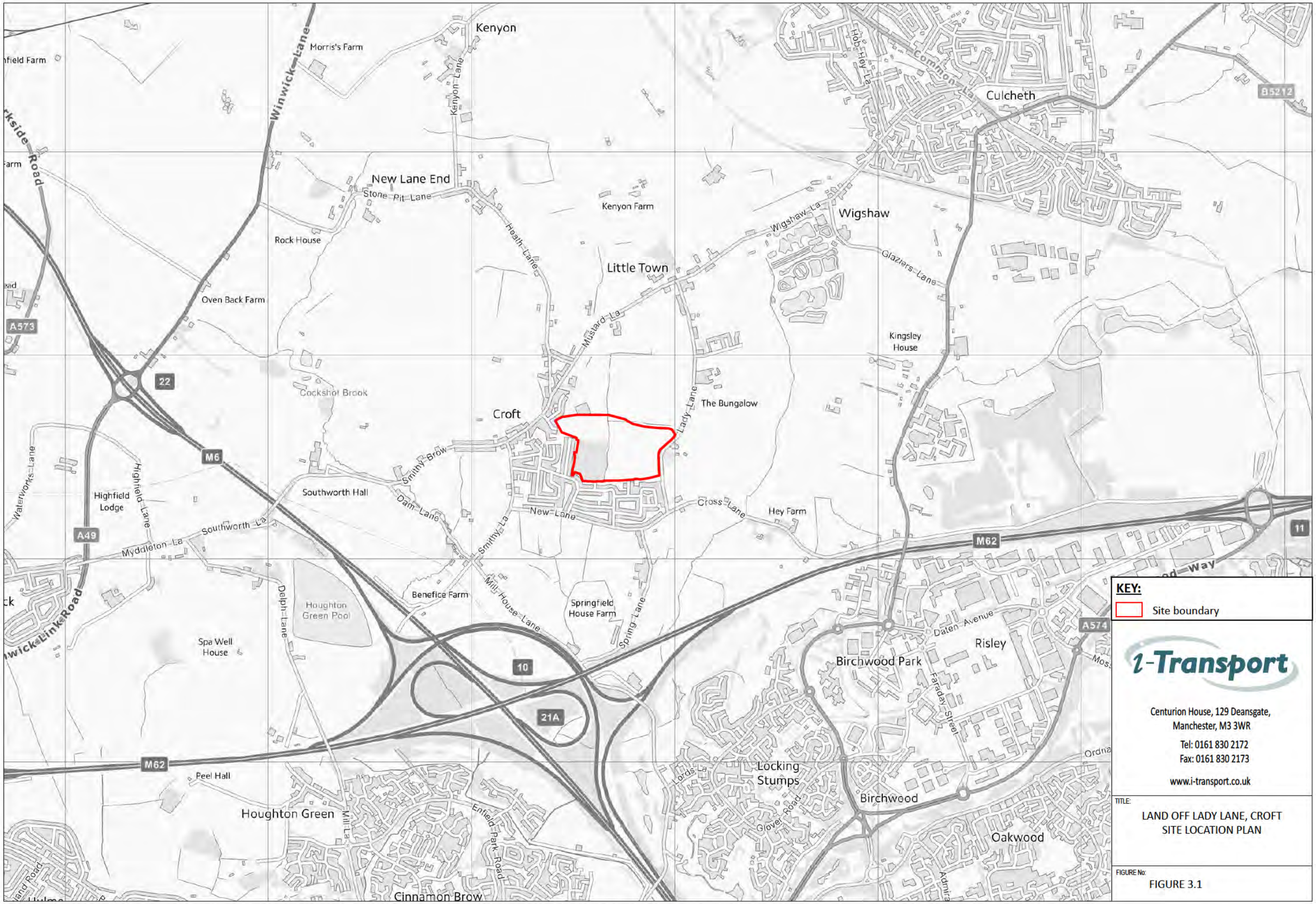
7.7 The traffic flows generated by the site will be low and are unlikely to result in any significant traffic issues in and around Croft village. The impacts of the traffic increases as a result of the development will be assessed in detail when the Council's transport model is available with mitigation measures/highways improvements identified as necessary.

7.8 Development in any location in the Borough will increase traffic flows on the local road network surrounding it. Indications of traffic speeds in and around Croft show that traffic conditions could not be categorised as severe and the Council's own conclusion is that there is only a small amount of peak hour congestion.

7.9 On this basis it is concluded that, in accordance with the NPPF, development should not be prevented on transport grounds as the residual cumulative impacts of development will not be severe.

7.10 Overall, it is therefore concluded that the site at off Lady Lane in Croft is suitable for allocation in the Council's Local Plan and will form a sustainable development that can provide much needed housing.

FIGURES



KEY:

Site boundary

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TITLE:

LAND OFF LADY LANE, CROFT
SITE LOCATION PLAN

FIGURE No:

FIGURE 3.1

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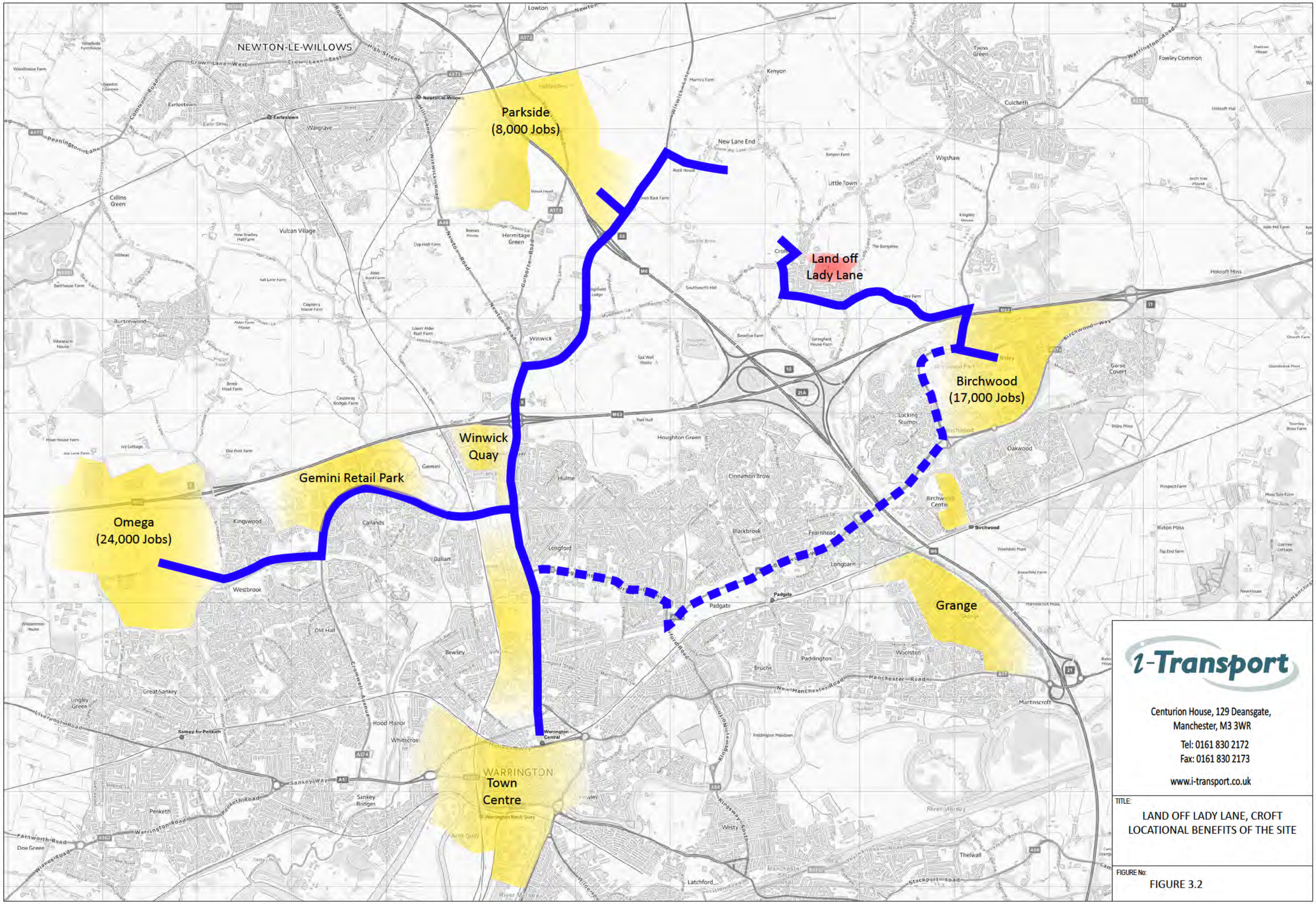

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TITLE:

LAND OFF LADY LANE, CROFT
LOCATIONAL BENEFITS OF THE SITE

FIGURE No:

FIGURE 3.2

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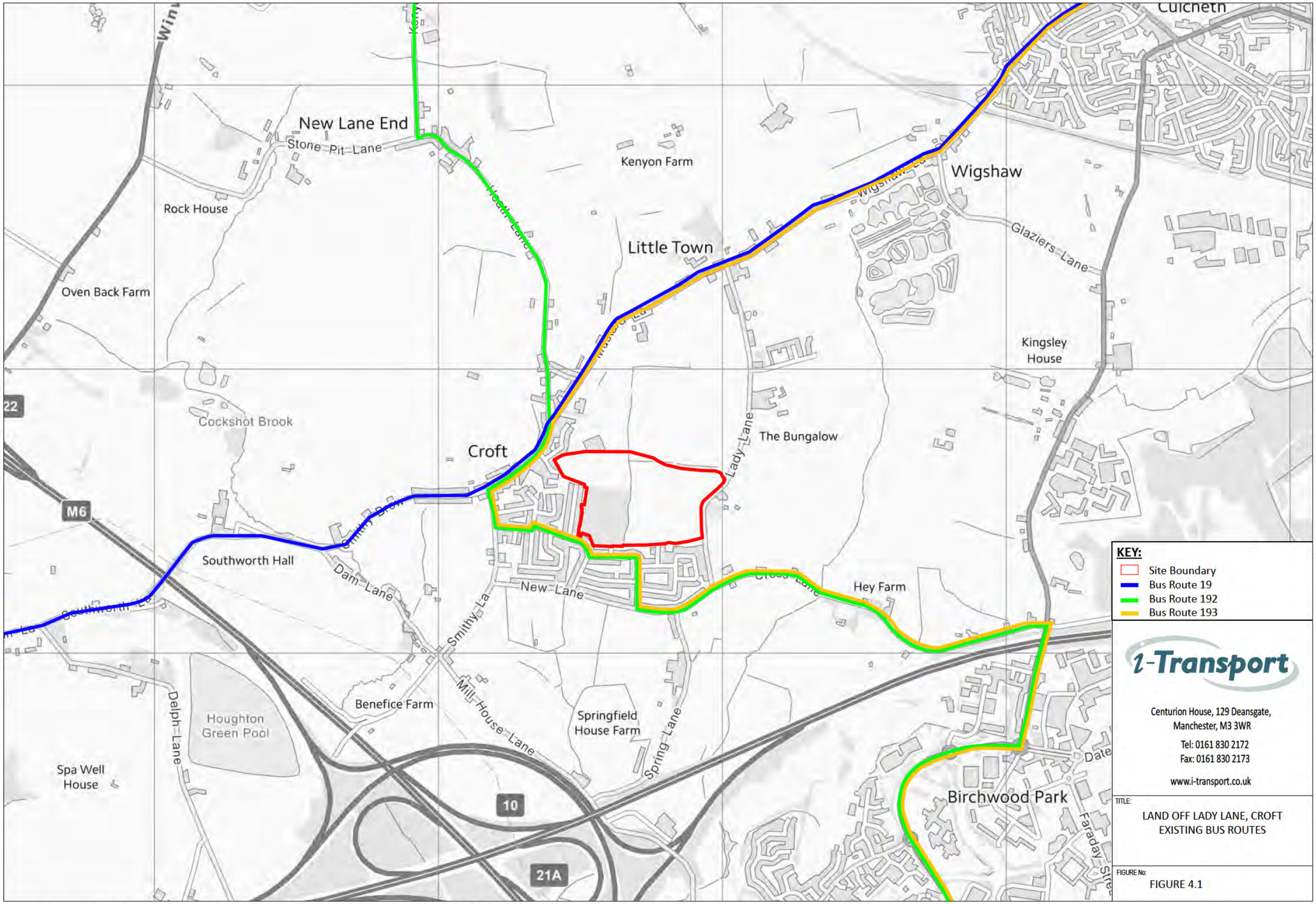

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TITLE:

LAND OFF LADY LANE, CROFT
EXISTING BUS ROUTES

FIGURE No:

FIGURE 4.1

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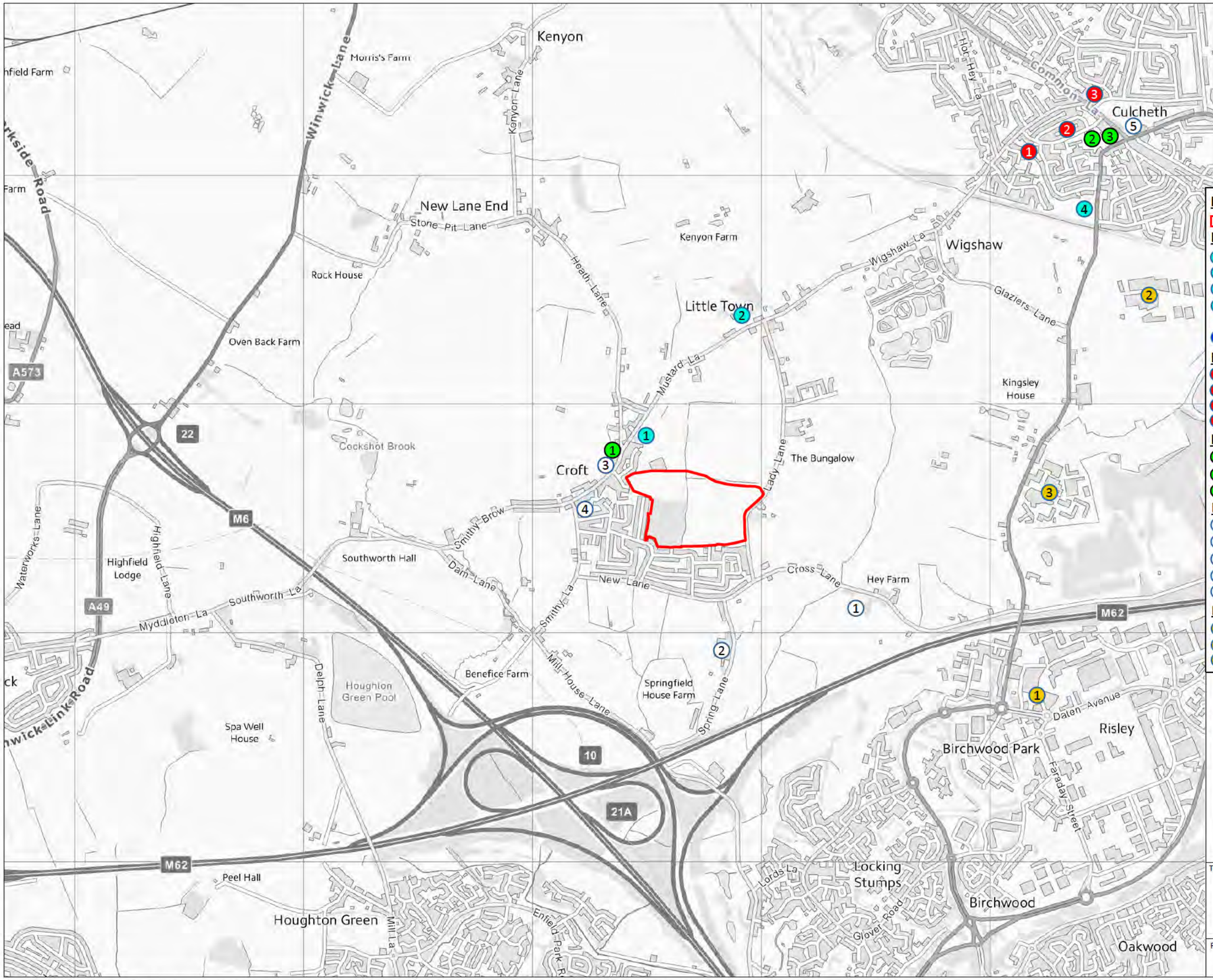

KEY:

Site Boundary

Education

1. Croft Primary School
2. St Lewis Catholic Primary School
3. Culcheth Community Primary School
4. Newchurch Community Primary School
1. Culcheth High School

Health

1. Culcheth Health Centre
2. Culcheth Medical Centre
3. Well Pharmacy, Culcheth
4. The Village Dental Practice

Retail

1. Elliots General Store
2. Sainsbury's
3. Culcheth Post Office

Leisure

1. Croft Golf Centre
2. Croft Riding Centre
3. The General Elliot Public House
4. The Horseshoe Inn
5. Culcheth Library

Employment

1. Birchwood Park
2. Taylor Business Park
3. HMP Risley

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TITLE:

LAND OFF LADY LANE, CROFT
LOCATION OF KEY FACILITIES AND SERVICES

FIGURE No:

FIGURE 4.2

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SCALE BAR @ 1:1000

0 20 40 60 80 100

HIGHWAY BOUNDARY

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REV	DATE	BY	DESCRIPTION	CHK	APD

STATUS: DRAFT

TITLE: POTENTIAL SITE ACCESS FROM CHADWICK AVENUE

PROJECT: LAND OFF LADY LANE, CROFT

CLIENT: PEEL INVESTMENTS (NORTH) LIMITED

SCALE @ A3:	CHECKED:	APPROVED:
1:1000	SEE	SEE
FILE REF:	DRAWN:	DATE:
ITM13247-GA-002	PH	24.08.2017

DRAWING No: FIGURE 5.1 (ITM13247 - GA - 002)

PROJECT No: ITM13247 REV: -

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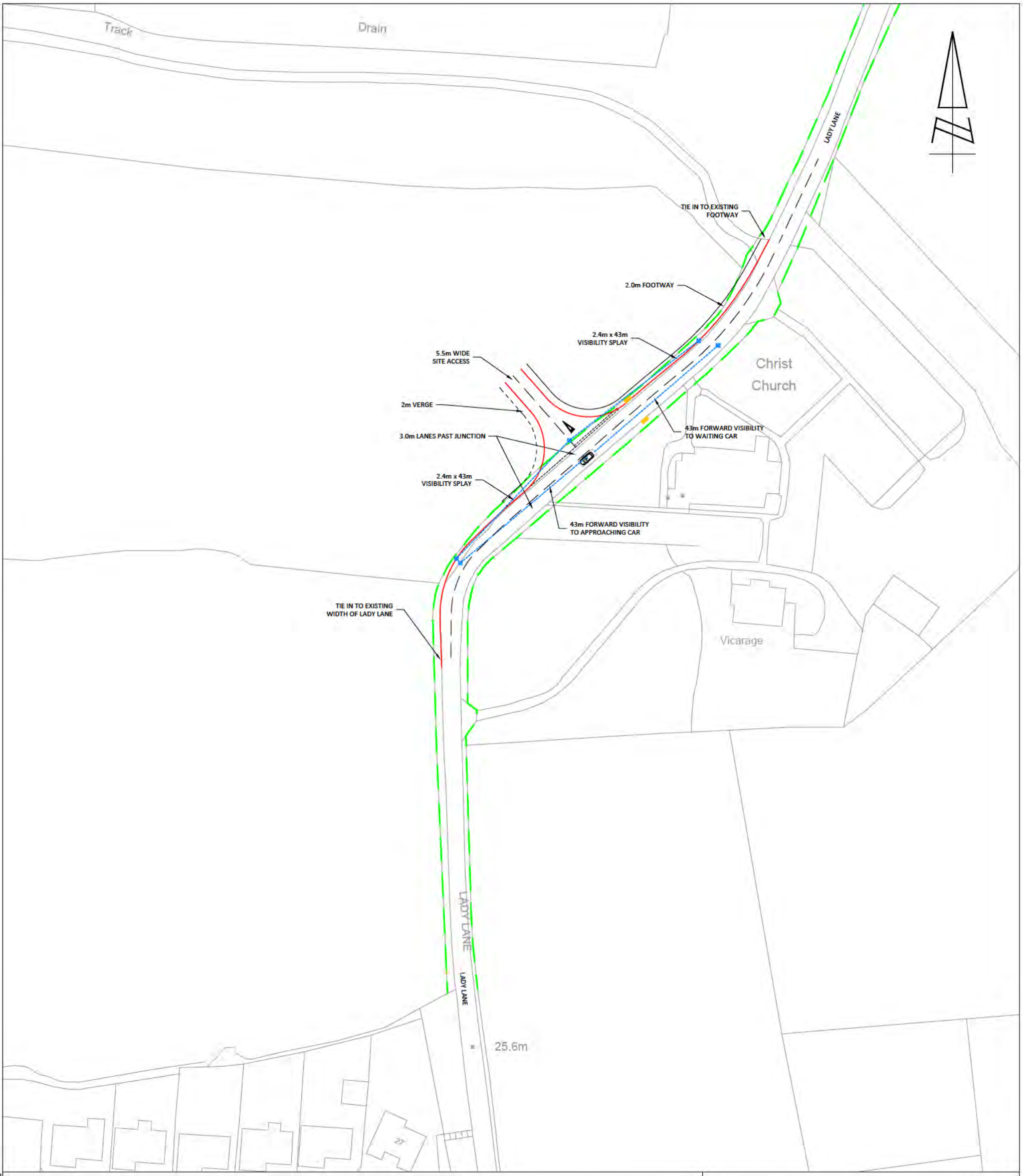

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HIGHWAY BOUNDARY

REV	DATE	BY	DESCRIPTION	CHK	APD
A	08.09.17	JB	MINOR MODIFICATIONS	SE	SE

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CLIENT: PEEL INVESTMENTS (NORTH) LIMITED

STATUS: DRAFT

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TITLE: POTENTIAL SITE ACCESS FROM LADY LANE

PROJECT: LAND OFF LADY LANE, CROFT

SCALE @ A3:	CHECKED:	APPROVED:
1:1000	SEE	SEE
FILE REF:	DRAWN:	DATE:
ITM13247 - GA - 003	PH	30.08.2017

DRAWING No: FIGURE 5.2 (ITM13247 - GA - 003)

PROJECT No: ITM13247 REV: A

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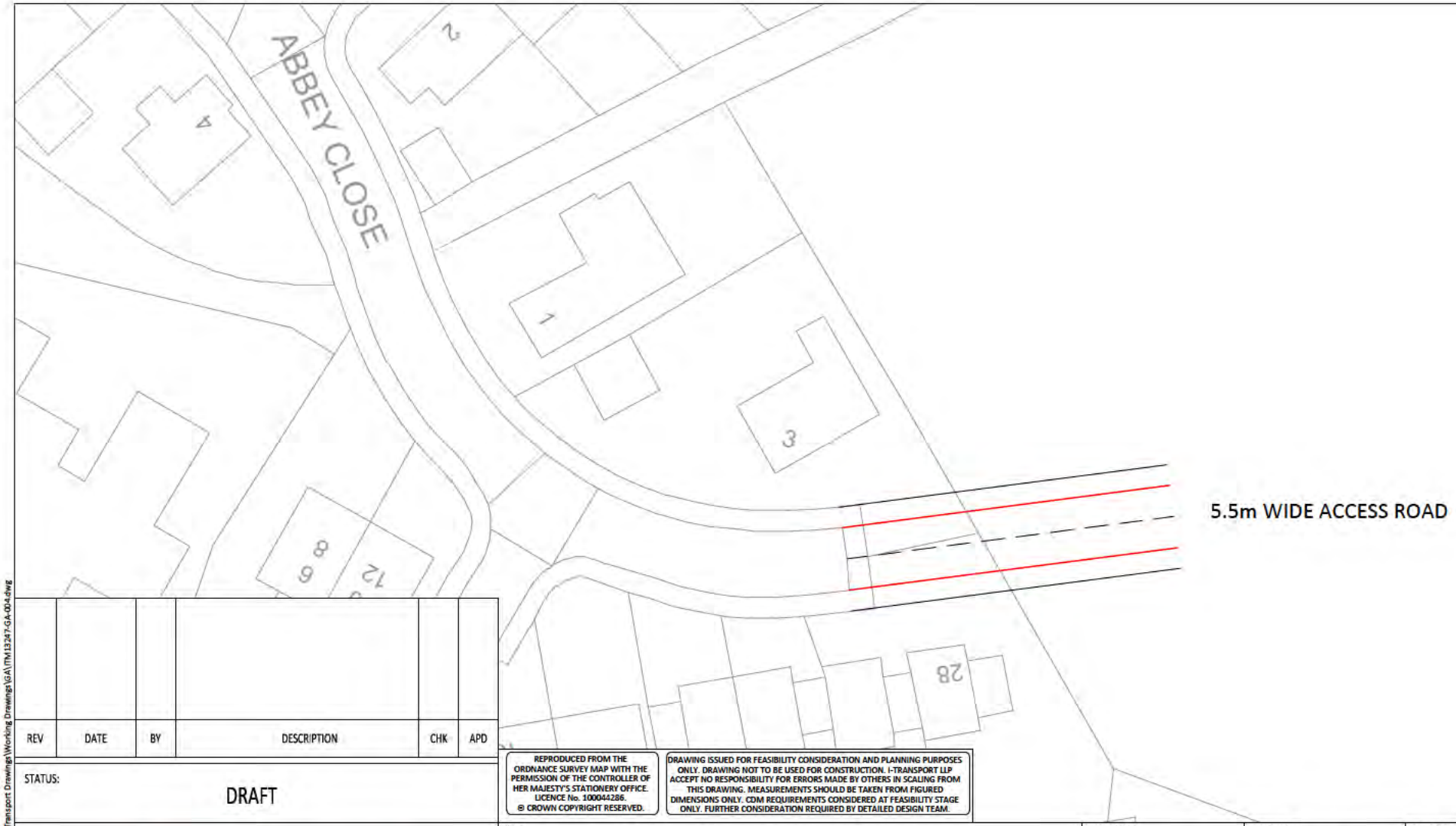

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STATUS: DRAFT

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TITLE: POTENTIAL SITE ACCESS FROM ABBEY CLOSE

PROJECT: LAND OFF LADY LANE, CROFT

CLIENT: PEEL INVESTMENTS (NORTH) LTD

SCALE @ A4:	CHECKED:	APPROVED:
1:500	SEE	SEE
FILE REF:	**DRAWN:**	**DATE:**
ITM13247	JB	13.09.17

DRAWING No: FIGURE 5.3 (ITM13247-GA-004)

PROJECT No:	REV:
ITM13247	

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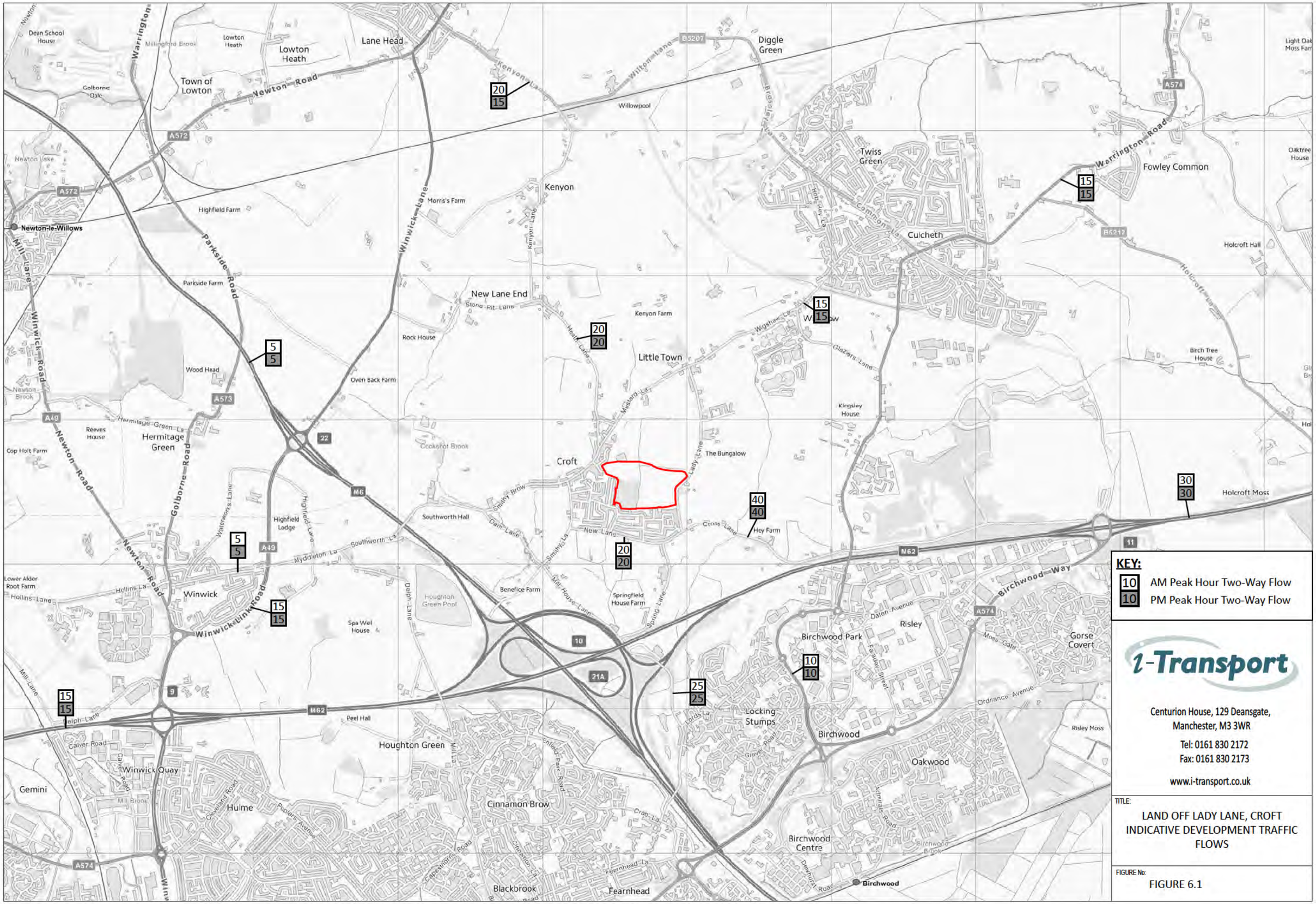

KEY:

10 AM Peak Hour Two-Way Flow
10 PM Peak Hour Two-Way Flow

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TITLE:

LAND OFF LADY LANE, CROFT
INDICATIVE DEVELOPMENT TRAFFIC FLOWS

FIGURE No:

FIGURE 6.1

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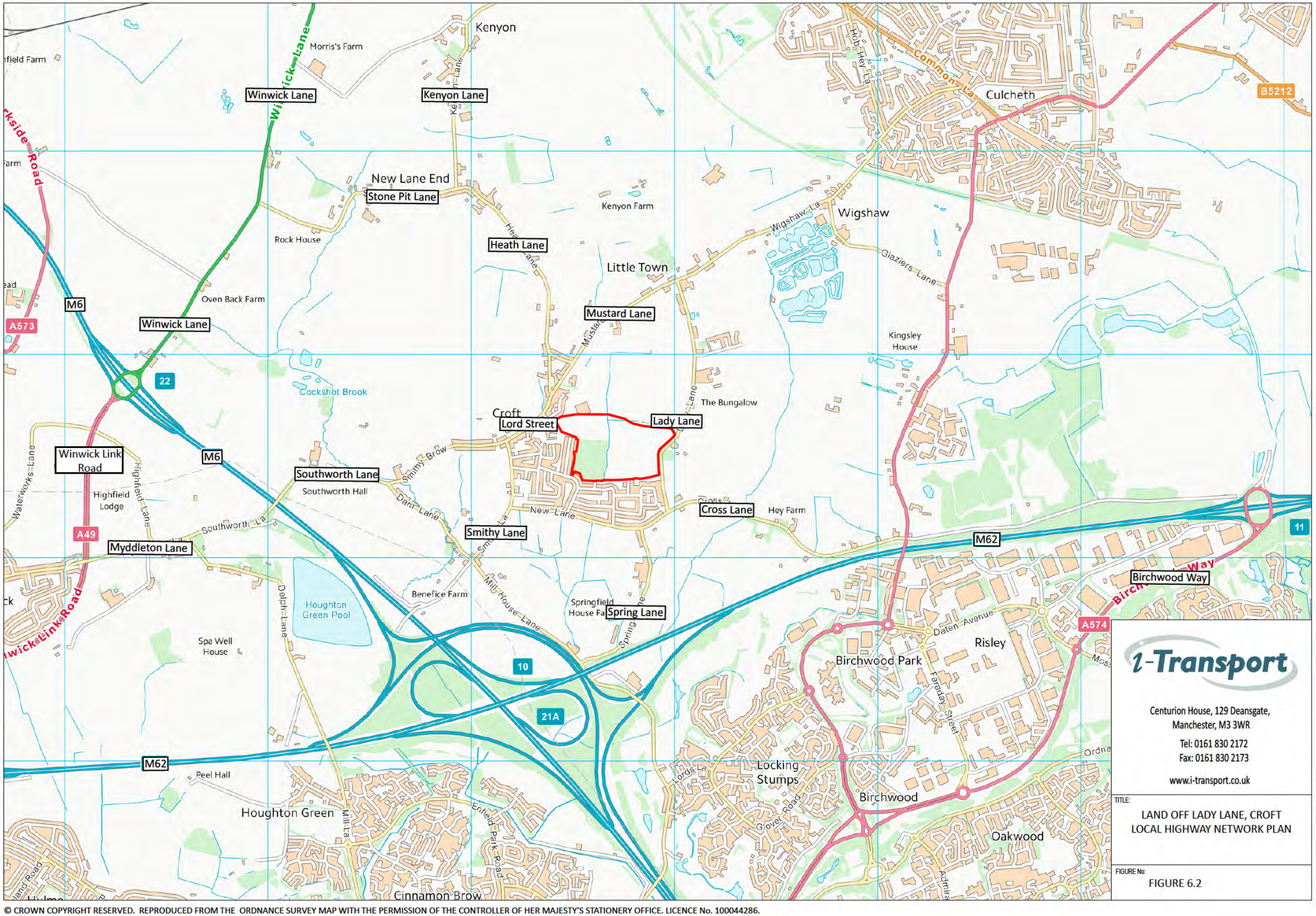

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TITLE:
LAND OFF LADY LANE, CROFT
LOCAL HIGHWAY NETWORK PLAN

FIGURE No:
FIGURE 6.2

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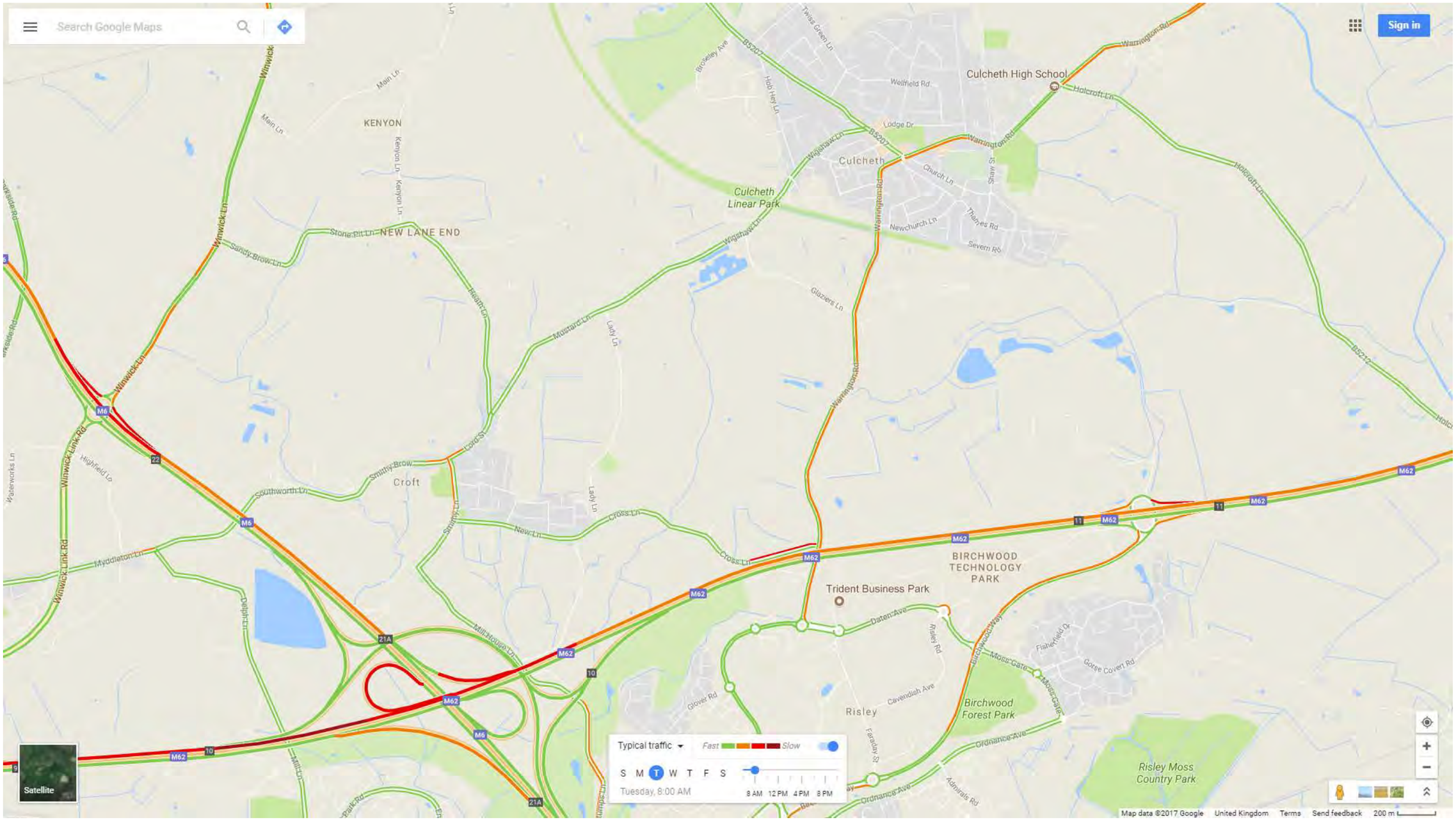
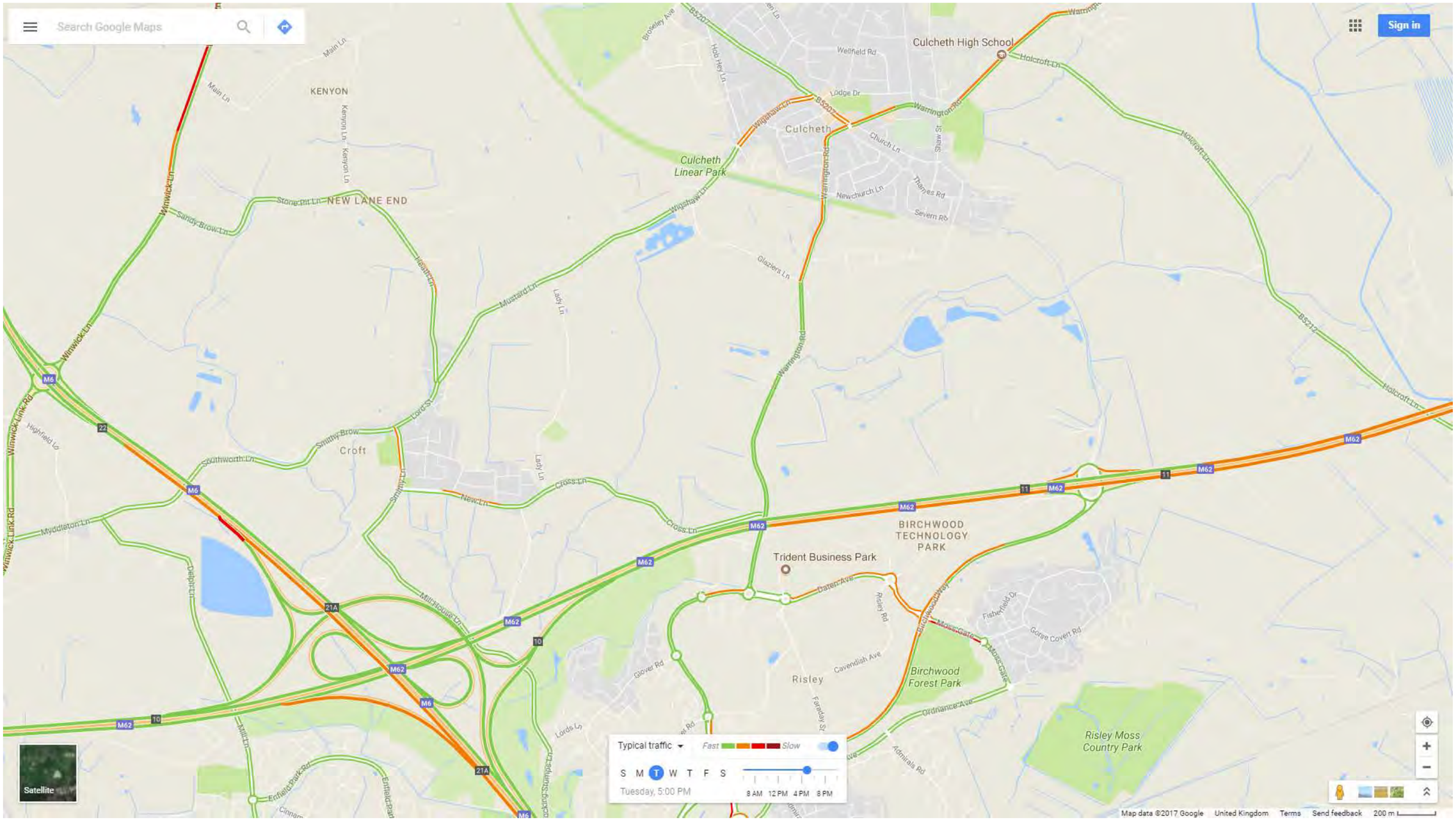
APPENDIX A Google Traffic Maps

Lady Lane, Croft – AM Peak (08:00)



Lady Lane, Croft – PM Peak (17:00)



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CONTENTS PAGE

APPENDICES

DRAWINGS

1.0 Overview

Summary

1.1 Based on the desktop assessment and site surveys described in the sections below, TEP's assessment indicates that there are no overriding ecological constraints which preclude sustainable development of Land at Lady Lane.

Introduction

1.2 TEP was commissioned by Peel Holdings (Land and Property) Ltd in August 2017 to provide an ecological representation for Land at Lady Lane (11.4ha) outlining potential ecological constraints and opportunities in relation to developing the site for housing.

1.3 The site is currently designated as Green Belt in the Warrington Unitary Development Plan (July 2014); however, Peel consider that the site would represent a sustainable location for residential development, capable of making a very significant contribution to meeting the housing needs of Warrington over the emerging plan period.

1.4 The Phase 1 Habitat Map and accompanying Target Notes are found in Appendix A. Areas of high, medium and low ecological constraint have been identified and are shown on Drawing G6612.02.002 Ecological Constraints Plan.

1.5 TEP's assessment indicates that there are no overriding ecological constraints which preclude sustainable development within suitable sections of the land.

Desktop and Background Study

1.6 Desktop data has been provided by the local records centre (rECOrd) covering both this development and land to the northwest of croft. Therefore, in places, the records extend out slightly beyond a 1km buffer.

1.7 Records for protected sites identified form Natural England data sets within 10km are listed below in table 1.

Table 1 - Name, location and designation of protected sites within 10km

Name	Location	Designations
Highfield Moss	1.5km NW	Site of Special Scientific Interest (SSSI)
Cunningham Clough Brook	10km N	Local Nature Reserve (LNR)
Eatock Lodge	10km N	LNR
Risley Moss	2.5km SE	LNR, SSSI
Holcroft Moss	4.5km E	SSSI
Pennington Flash	4.5km N	LNR

Name	Location	Designations
Paddington Meadows	4.6km S	LNR
Rixton Clay Pits	5.5km SE	LNR, SSSI Special Area of Conservation (SAC)
Abram Flashes	5km N	SSSI
Woolston Eyes	5km S	SSSI
Astley and Bedford Moss	6km NW	SSSI
Manchester Mosses	6km NW	SAC
Colliers Moss Common	7.3km W	LNR
Three Sisters	7.5km NW	LNR
Low Hall Park	8.5km N	LNR
The Wigan Flashes	8km N	LNR
Bryn Marsh and Ince moss	8km N	SSSI
Stanley Bank	9km NW	LNR
Parr Hall Millenium green	9.8km NW	LNR

1.8 Any impacts on these sites must be reviewed at the detailed design stage.

1.9 Two local wildlife sites were identified in the rECOrd desktop records. The first of these is Croft Grasslands which is located adjacent to the west of the site and appears to have succeeded from grassland to become fully wooded over. There is no significant areas of grassland remaining on the site.

1.10 The second local wildlife site is Houghton Green Pool. This is located 1.2km south west of site. It is separated by both extensive residential development and the M6 motorway. There will be no impacts on this local wildlife site from development.

1.11 The site falls within a Natural England SSSI Impact Risk Zone for Risley moss and Highfield moss. Residential developments are not listed in the SSSI impact risk categories. Therefore, consultation with Natural England is not required.

1.12 Records of protected species were returned in the desktop records including bird species listed under schedule 1 of the Wildlife and Countryside Act 1981 (as amended), Seciton 41 of the NERC Act 2006, the Local Biodiveristy Action Plan (LBAP) and Birds of Conservation Concern (BOCC). S41 reptiles and amphibians were identified within 1km including common lizard and common toad. Other protected species identified within 1km include brown hare, badger, west European hedgehog, bats, water vole and moth species.

1.13 A number of protected species records were returned specifically within the site boundary. Birds identified include swift, fieldfare, kestrel, whitethroat, song thrush, redwing and swallow. Mammals present include hedgehog, pipistrelle and hare and invertebrates include the cinnabar moth.

1.14 Full results of the desktop survey, including maps of designated sites, are found in Appendix B.

Site Description

1.15 The site is dominated by three improved grassland fields. Also present are some small areas of hardstanding with ephemeral vegetation.

1.16 A species poor intact hedgerow dominated by hawthorn *Crataegus monogyna* runs along the north-western boundary. A species poor intact hedgerow and scattered trees present along the western boundary dominated by English oak *Quercus robur* these collectively represent an S41 habitat of principal importance.

1.17 There is an area of tall ruderal vegetation in the west boundary with the woodland.

1.18 Several ditches are present on site. A small shallow running drainage ditch, which is bounded by tall ruderal vegetation, runs along the adjacent western woodland and southern boundary, where it has drier tendencies. The banks themselves are shallow and lack vegetation for the majority.

1.19 A dry pond was present along the tree line to the north of site and an area of standing water is present within the ditch along the southern boundary.

1.20 The invasive species cotoneaster species *Cotoneaster Sp.* ,and montbretia *Crocosmia aurea,* listed on Schedule 9 of the Wildlife and Countryside Act (1981, As Amended), were recorded in a number of places across the site. Locations of these species are shown on Drawing G6612.01.002.

1.21 The proposed development is only proposed on the improved grassland areas, with hedgerows and scattered mature trees to be retained.

1.22 An area in the north of the site boundary was not surveyed, due to lack of access. However, this area appears from aerial imagery to contain habitats similar to those across the rest of site, improved grassland with scattered trees, and is to be retained as a wildlife buffer and corridor. Retained areas must be suitably protected from harm during development.

2.0 Areas of Constraint

High Constraint

2.1 The following feature represents a High Constraint to development:

- Scattered Mature Trees;

2.2 These habitats act as foraging and potentially roosting habitats for bats and would be retained in the masterplan and be protected by habitat buffers. It is recommended that the buffers extend at least 10m from these features. A single access point is required through the mature trees running through the centre of site. The crossing location should be designed to minimise impacts on the mature trees.

2.3 The lighting scheme adjacent to the trees should be carefully planned to avoid light spill onto tree canopies (this can affect bat roosting and displace foraging bats). The existing plans show that these will be kept. It is recommended that these be kept with minimal loss and be subject to the above lighting scheme to avoid disruption to bat habitats.

2.4 If these areas are to be removed, given the extent of the site, there would be the opportunity to mitigate or compensate for losses of habitat linkages and roosting opportunities.

Medium Constraint

2.5 The hedgerows are Section 41 habitats. The tall ruderal vegetation close to the woodland and bordering the southern site, while not priority habitats, forms valuable habitat linkages along the site boundaries. These jointly represent a medium constraint to development.

2.6 If these areas are to be removed, given the extent of the site, there would be the opportunity to mitigate or compensate for losses of habitat linkages and roosting opportunities.

Low Constraint

2.7 The improved grassland and hardstanding/ephemeral vegetation offers little opportunity to local wildlife and is therefore classified as a low constraint.

Protected and Priority Fauna

2.8 Constraints relating to protected and Section 41 species are considered in Table 1.

Only areas currently in use as improved grassland are to be lost during development. All other habitat must be suitably protected throughout development to maintain availability for local wildlife.

Table 2. Summary of constraints related to Fauna

Fauna Group/ Species (Protected1)	Constraint	Details
Amphibians	Yes	There is one area of standing water on site and a dry pond which may hold water during the newt breeding season. OS mapping indicates there are a further two ponds within 500m of the proposed development site. Detailed amphibian surveys will be required to inform a planning application.
Reptiles	No	The site contains only limited habitat for reptiles and it is considered unlikely that reptiles are present on site. There are no implications for the development with regard to reptiles.
Birds	Yes	The habitats across the site provide breeding opportunities for a range of bird species. A number of Section 41 priority birds have historically been recorded from within the site. Breeding and wintering bird surveys will be required to inform a planning application.
Bats	Yes	A number of the scattered trees have potential for roosting bats. The network of habitats provide foraging and commuting opportunities for bat species. Bat roost and transect surveys will be required to inform a planning application.
Badger	Yes	The site contains habitat suitable to support badger. No evidence of badger was found during the site survey but due to the transient nature of badgers they may be present on site should it be taken forward. Further survey work is required to assess presence of badgers.
Water vole	No	The site contains only limited habitat for water vole and it is considered unlikely that water voles are present on site. The banks are shallow bare of vegetation in the majority. There are no implications for the development with regard to water voles.
Otter	No	The site contains no habitat suitable to support otters and it is considered unlikely that otters are present on site. There are no implications for the development with regard to otters.
Brown Hare	Yes	There is a single record of brown hare on site with further records in the wider area. Suitable habitat for brown hare is present within the site. There will be habitat loss as a result of the proposals, as brown hare makes use of a mosaic of habitats including grassland. Leaving grassland tall in buffer zones and keeping the hedgerows will retain some value in the site for brown hare.
Hedgehog	No	The site boundaries offer foraging and commuting opportunities to hedgehog. As these are to be retained during development no significant effect on hedgehog habitat will be incurred.
Invertebrates	No	The site does not contain a significant population of invertebrate food plants and as such is unsuitable to support an important invertebrate population.

[1] The rarest and most threatened species in England are listed under Section 41 of the 2006 Natural Environment and Rural Communities (NERC) Act. Protecting and enhancing S41 species is key delivering the Biodiversity 2020 strategy.

3.0 Opportunities

3.1 There are opportunities to enhance biodiversity through the process of development, in line with National Planning Policy Framework (NPPF) under Section 40[2] and Warrington Borough Council supplementary planning document on Design and Construction (2016).

3.2 The supplementary planning document on Design and Construction (2016) states that development of new sites in relation to ecology will need to adhere to the following:

- Existing attractive or valuable natural features must be retained and protected on a site and be the starting point for the development of building design and landscaping proposals. These could include trees, hedges, ponds or streams. They may be valuable because of their visual amenity or their wildlife or biodiversity value. The Council has identified significant areas for nature conservation within the borough. Development proposals on or close to designated wildlife sites will warrant special scrutiny and those that will have an adverse effect on these sites will not be permitted without mitigation to reduce the damage.
- Planting that enhances nature conservation, wildlife habitat and diversity will be encouraged, particularly on sites that are close to existing wildlife areas or enhance and expand “green corridors”.

3.3 The illustrative masterplan for the site indicates that all features of ecological value are to be retained and there are suitable areas available for enhancement.

3.4 The Overall Spatial Strategy - Delivering Sustainable Development (Policy CS 1) also identifies the need to sustain and enhance the borough’s built heritage, biodiversity and geodiversity. Biodiversity can be enhanced through appropriate planting and management of existing features.

3.5 Warrington Unitary Development Plan (July 2014) Policy QE3 on Green Infrastructure identifies goals in relation to:

- protecting existing provision and the functions this performs;
- improving the quality of existing provision, including local networks and corridors, specifically to increase its attractiveness as a sport, leisure and recreation opportunity and its value as a habitat for biodiversity;
- protecting and improving access to and connectivity between existing and planned provision to develop a continuous right of way and greenway network and integrated ecological system;

3.6 The retained areas on site provide important green corridors, particularly the tree lines along the top, middle and bottom of site. These corridors can be maintained and enhanced to further provide opportunities to both wildlife and the local community.

[2] Section 40 of the Natural Environment and Rural Communities Act 2016 places a duty on all public authorities in England and Wales to have regard, in the exercise of their functions, to the purpose of conserving biodiversity which in turn will seek to contribute to the achievement of the commitments of the Biodiversity 2020 strategy.

3.7 The non-native invasive species recorded within the site boundary should be controlled. There is the opportunity to enhance the existing green corridors and woodland blocks for wildlife by clearing the montbretia and cotoneaster which outcompete native vegetation.

APPENDIX A: Phase 1 Target Notes

Target Note 5

Tall ruderal area that lays in the corner of an arable field

Phalaris arundinacea	Reed Canary-grass	D
Agrostis capillaris	Common Bent	A
Cirsium arvense	Creeping Thistle	A
Juncus effusus	Soft Rush	A
Lolium perenne	Perennial Ryegrass	A
Persicaria bistorta	Bistort	A
Rumex obtusifolius	Broad-leaved Dock	A
Urtica dioica	Nettle	A
Chamerion angustifolium	Rosebay Willowherb	F
Dactylis glomerata	Cock's-foot	F
Rubus fruticosus agg.	Bramble	F
Senecio jacobaea	Common Ragwort	F
Digitalis purpurea	Foxglove	O
Galium aparine	Cleavers	O
Geranium robertianum	Herb-Robert	O
Heracleum sphondylium	Hogweed	O
Lathyrus pratensis	Meadow Vetchling	O
Sonchus asper	Prickly Sow-thistle	O
Carex sp.	Sedge species	R
Corylus avellana	Hazel	R
Dryopteris filix-mas	Male-fern	R
Eupatorium cannabinum	Hemp-agrimony	R
Hypochaeris radicata	Common Cat's-ear	R
Leucanthemum vulgare	Oxeye daisy	R
Quercus robur	English Oak	R
Trifolium pratense	Red Clover	R

Target Note 6

Improved grassland surrounded by hedgerows and trees

Lolium perenne	Perennial Ryegrass	D
Persicaria bistorta	Bistort	O
Senecio jacobaea	Common Ragwort	R
Trifolium repens	White Clover	R

Target Note 7

Field Boundary - Woodland above grain and tall ruderal vegetation.

Quercus robur	English Oak	D
Calystegia sp.	Bindweed species	A
Crataegus monogyna	Hawthorn	A
Rubus fruticosus agg.	Bramble	A
Urtica dioica	Nettle	A
Chamerion angustifolium	Rosebay Willowherb	F
Epilobium sp.	Willowherb species	F
Fraxinus excelsior	Ash	F
Juncus effusus	Soft Rush	F
Phleum pratense	Timothy	F
Ranunculus repens	Creeping Buttercup	F
Acer pseudoplatanus	Sycamore	O
Corylus avellana	Hazel	O
Digitalis purpurea	Foxglove	O
Galium aparine	Cleavers	O
Geranium robertianum	Herb-Robert	O
Hedera helix	Ivy	O
Heracleum sphondylium	Hogweed	O
Ilex aquifolium	Holly	O
Lythrum salicaria	Purple Loosestrife	O
Rosa arvensis	Field Rose	O
Sambucus nigra	Elder	O

Senecio jacobaea	Common Ragwort	O
Sonchus asper	Prickly Sow-thistle	O
Symphoricarpos albus	Snowberry	O
Anemone nemorosa	Wood Anemone	R
Buddleja davidii	Buddleia	R
Cotoneaster sp.	Cotoneaster species	R
Crocosmia x crocosmiiflora	Montbretia	R
Iris pseudacorus	Yellow Flag Iris	R
Lonicera nitida	Wilson's Honeysuckle	R
Lonicera periclymenum	Honeysuckle	R
Pilosella aurantiacum	Orange Hawkweed	R
Plantago lanceolata	Ribwort Plantain	R
Prunus laurocerasus	Cherry Laurel	R
Silene dioica	Red Campion	R
Vinca minor	Lesser Periwinkle	R

Target Note 8

Species poor intact hedgerow. Running at boundary of fields and residential properties. Less than 5m high

Crataegus monogyna	Hawthorn	D
Rubus fruticosus agg.	Bramble	F
Acer pseudoplatanus	Sycamore	O
Calystegia sp.	Bindweed species	O
Ilex aquifolium	Holly	O
Fraxinus excelsior	Ash	R

Target Note 9

Hardstanding with ephemeral vegetaion. In the corner of improved grassland fields.

Dactylis glomerata	Cock's-foot	D
Rubus fruticosus agg.	Bramble	F
Digitalis purpurea	Foxglove	O
Epilobium sp.	Willowherb species	O
Taraxacum officinale agg.	Dandelion	O
Agrostis capillaris	Common Bent	R
Cirsium arvense	Creeping Thistle	R
Heracleum sphondylium	Hogweed	R
Rosa arvensis	Field Rose	R
Senecio jacobaea	Common Ragwort	R

Target Note 10

Hedgerow and trees. Forms the boundary to site towards residential properties and the roadside.

Quercus robur	English Oak	D
Rubus fruticosus agg.	Bramble	F
Corylus avellana	Hazel	O
Crataegus monogyna	Hawthorn	O

Target Note 11

Species poor intact hedgerow wih scattered trees. Under 5m high

Crataegus monogyna	Hawthorn	D
Galium aparine	Cleavers	F
Acer pseudoplatanus	Sycamore	O
Fraxinus excelsior	Ash	O
Ilex aquifolium	Holly	O
Prunus spinosa	Blackthorn	O
Quercus robur	English Oak	O
Rubus fruticosus agg.	Bramble	O
Sambucus nigra	Elder	O
Carex pendula	Pendulous Sedge	R
Solanum dulcamara	Bittersweet	R

Target Note 12

Intact Hedgerow. Running alongside residential properties at the boundary edge of site. Less than 2m high

Ligustrum ovalifolium	Garden Privet	D

Prunus laurocerasus	Cherry Laurel	D

Target Note 13

Small area of marshy grassland within the improved grassland

Phalaris arundinacea	Reed Canary-grass	D
Juncus effusus	Soft Rush	A
Lolium perenne	Perennial Ryegrass	A
Ranunculus repens	Creeping Buttercup	A
Rumex obtusifolius	Broad-leaved Dock	F
Phleum pratense	Timothy	O
Epilobium sp.	Willowherb species	R
Persicaria bistorta	Bistort	R

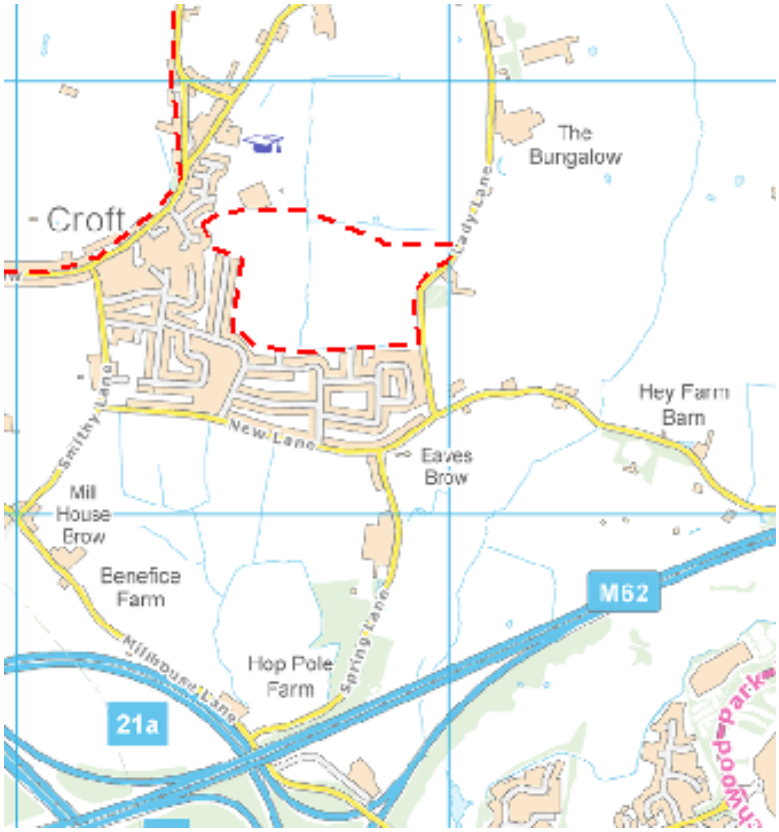
KEY - D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

APPENDIX B: Desktop Study

Desk Based Ecology Assessment
Land at Lady Lane, Croft
Approximate Central Grid Reference: SJ6278694056

Contents

Site Location Plan



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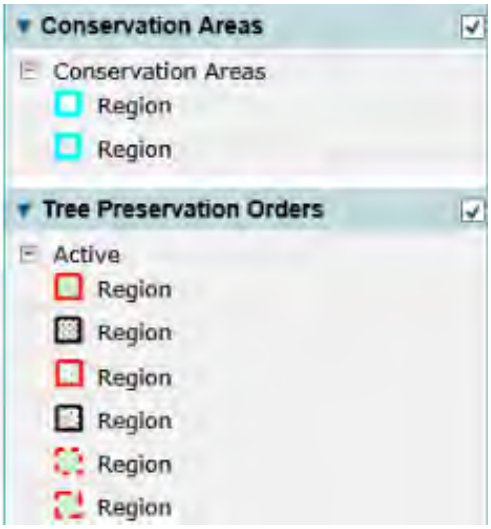
Extract of Warrington Borough Council Local Plan (adopted 2014) and Supporting Key

The site is within the local authority area of Warrington Borough Council, however approximately 1.6km to the north east is Wigan Metropolitan Borough Council and approximately 1.3km to the south east is Salford City Council.

The Warrington BC Core Strategy was adopted in July 2014. Warrington BC are currently undertaking a review on the adopted Local Plan Core Strategy. Consultation on the Local Plan Preferred Development Option is running from 18th July 2017 to 12th September 2017, which sets out the proposed approach to meeting Warrington's needs.

Warrington Borough Council – Core Strategy Policies Map



Designations

- Green Belt (Policy CS5) – Lime Green
- Overall Spatial Strategy for Green Belt (Policy CS5)
- Local Wildlife Site (Policy QE5)
- Active Travel Greenway Network (Policy MP3)

Tree Preservation Orders

Core Strategy – Planning Policies

Policy CS 1 - Overall Spatial Strategy - Delivering Sustainable Development

Throughout the borough, development proposals that are sustainable will be welcomed and approved without delay.

To be sustainable, development must accord with national and local planning policy frameworks, taking into account other material considerations, and must, in no particular order, have regard to:

- the planned provision made for economic and housing growth;
- the requirement to provide for recognised and identified development needs;
- the priority afforded to the protection of the Green Belt and the character of the countryside;
- the priority afforded to accommodating growth in Inner Warrington through the use of previously developed land;
- the importance of sustaining and enhancing the vitality and viability of the Town Centre and other designated centres that act as community hubs; the need to develop sites, services and facilities in appropriate locations accessible by public transport, walking and cycling;
- the need to make the best use of existing transport, utility, social and environmental infrastructure within existing settlements, and ensure additional provision where needed to support development;
- the need to address the causes of and be resilient to the effects of climate change;
- **the need to sustain and enhance the borough's built heritage, biodiversity and geodiversity;**
- the importance of prudently using resources and maximising re-use, recovery and recycling where possible;
- the need to safeguard environmental standards, public safety, and residential amenity;

- **the delivery of high standards of design and construction, that have regard to local distinctiveness and energy efficiency; and**
- The need to improve equality of access and opportunity.

The Council's approach will always be to work proactively with applicants jointly to find solutions which mean that proposals can accord with the development plan and be approved without delay wherever possible, and to secure development that improves the economic, social and environmental conditions in the area.

Where there are no policies relevant to the application or relevant policies are out of date at the time of making the decision then the Council will grant permission unless material considerations indicate otherwise - taking into account whether:

- Any adverse impacts of granting permission would significantly and demonstrably outweigh the benefits, when assessed against the policies in the National Planning Policy Framework taken as a whole; or

Specific policies in that Framework indicate that development should be restricted.

Policy CS 5 - Overall Spatial Strategy - Green Belt

The Council will maintain the general extent of the Green Belt for as far as can be seen ahead and at least until 2032, in recognition of its purposes:

- to check the unrestricted sprawl of large built-up areas;
- to prevent neighbouring towns from merging into one another;
- to assist in safeguarding the countryside from encroachment; and
- to assist in urban regeneration by encouraging the recycling of derelict and other urban land.

The boundaries of the Green Belt in Warrington, which is contiguous with the Green Belt in Merseyside, Greater Manchester, and North Cheshire, are shown on the Policies Map.

The strategic locations and proposals set out in Policy CS2 - Quantity and Distribution of Development provide for significant growth throughout and beyond the plan period. There is therefore no need to review Strategic Green Belt boundaries during the plan period.

A minor detailed change to the approved Green Belt boundary in the Warrington Unitary Development Plan has been made at Bents Garden Centre, Glazebury.

Development Proposals within the Green Belt will be approved where they accord with relevant national policy.

Policy CS 6 Overall Spatial Strategy – Strategic Green Links

The Council will work with partners to develop and adopt a strategic approach to the care and management of the borough's Green Infrastructure. A key focus of these efforts will be on reinforcing, and maximising the environmental and socio-economic benefits from, those Strategic Green Links which connect the borough to the wider sub-region such as:

- The Bridgewater Canal
- The Mersey Valley;
- The River Bollin;
- Sankey Valley Park and St. Helens Canal;
- The Transpennine Trail; and
- Bold Forest Park

The Council is committed to supporting wider programmes and initiatives which seek to connect the borough’s Strategic Green Links with employment areas, residential communities, and Green

Infrastructure Assets including the Manchester Mosses, Mersey Forest, Walton Hall Estate and the potential significant country park in the Arpley area when landfill operations have finished and restoration is complete. In accordance with Policy QE3 the Development Management Process will contribute to the objectives of this Policy.

Policy QE 3 Green Infrastructure

The Council will work with partners to develop and adopt an integrated approach to the provision, care and management of the borough's Green Infrastructure. Joint working and the assessment of applications will be focussed on:

- protecting existing provision and the functions this performs;
- increasing the functionality of existing and planned provision especially where this helps to mitigate the causes of and addresses the impacts of climate change;
- improving the quality of existing provision, including local networks and corridors, specifically to increase its attractiveness as a sport, leisure and recreation opportunity and its value as a habitat for biodiversity;
- protecting and improving access to and connectivity between existing and planned provision to develop a continuous right of way and greenway network and integrated ecological system;
- securing new provision in order to cater for anticipated increases in demand arising from development particularly in areas where there are existing deficiencies assessed against standards set by the Council.

Policy QE 5 Biodiversity and Geodiversity

The Council will work with partners to protect and where possible enhance sites of recognised nature and geological value. These efforts will be guided by the principles set out in National Planning Policy and those which underpin the strategic approach to the care and management of the borough's Green Infrastructure in its widest sense.
Sites and areas recognised for their nature and geological value are shown on the Policies Map and include:

- European Sites of International Importance
- Sites of Special Scientific Interest
- Regionally Important Geological Sites
- Local Nature Reserves
- Local Wildlife Sites
- Wildlife Corridors

The specific sites covered by the above designations at the time of publication are detailed in Appendix 3.

Proposals for development which may affect **European Sites of International Importance** will be subject to the most rigorous examination in accordance with the Habitats Directive. Development or land use change not directly connected with or necessary to the management of the site and which is likely to have significant effects on the site (either individually or in combination with other plans or projects) and which would affect the integrity of the site, will not be permitted unless the Council is satisfied that;

- there is no alternative solution; and
- there are imperative reasons of over-riding public interest for the development or land use change.

Proposals for development in or likely to affect **Sites of Special Scientific Interest (SSSI)** will be subject to special scrutiny. Where such development may have an adverse effect, directly or indirectly, on the SSSI it will not be permitted unless the reasons for the development clearly outweigh the nature conservation value of the site itself and the national policy to safeguard the national network of such sites.

Proposals for development likely to have an adverse effect on **regionally and locally designated sites** will not be permitted unless it can be clearly demonstrated that there are reasons for the development which outweigh the need to safeguard the substantive nature conservation value of the site or feature.

Proposals for development which may adversely affect the integrity or continuity of **UK Key habitats or other habitats of local importance**, or adversely affect **EU Protected Species**, **UK Priority Species or other species of local importance**, or which are the subject of **Local Biodiversity Action Plans** will only be permitted if it can be shown that the reasons for the development clearly outweigh the need to retain the habitats or species affected and that mitigating measures can be provided which would reinstate the habitats or provide equally viable alternative refuge sites for the species affected.

All development proposals affecting protected sites, wildlife corridors, key habitats or priority species (as identified in Local Biodiversity Action Plans) should be accompanied by information proportionate to their nature conservation value including;

- a site survey where necessary to identify features of nature and geological conservation importance; an assessment of the likely impacts of the proposed development proposals for the protection and management of features identified for retention;
- an assessment of whether the reasons for the development clearly outweigh the nature conservation value of the site, area or species; and
- proposals for compensating for features damaged or destroyed during the development process

Where development is permitted, the Council will consider the use of conditions or planning obligations to ensure the protection and enhancement of the site's nature conservation interest and/or to provide appropriate compensatory measures.

Policy QE 6 Environment and Amenity Protection

The Council, in consultation with other Agencies, will only support development which would not lead to an adverse impact on the environment or amenity of future occupiers or those currently occupying adjoining or nearby properties, or does not have an unacceptable impact on the surrounding area. The Council will take into consideration the following:

- The integrity and continuity of tidal and fluvial flood defences;
- The quality of water bodies, including canals, rivers, ponds and lakes;
- Groundwater resources in terms of their quantity, quality and the ecological features they support;
- Land quality;
- Air quality;
- Noise and vibration levels and times when such disturbances are likely to occur;
- Levels of light pollution and impacts on the night sky;
- Levels of odours, fumes, dust, litter accumulation and refuse collection / storage.
- The need to respect the living conditions of existing neighbouring residential occupiers and future occupiers of new housing schemes in relation to overlooking/loss of privacy, outlook, sunlight, daylight, overshadowing, noise and disturbance;
- The effect and timing of traffic movement to, from and within the site and car parking including impacts on highway safety;
- The ability and the effect of using permitted development rights to change use within the same Use Class (as set out in the in the Town and Country Planning (General Permitted Development Order) without the need to obtain planning consent.

Proposals may be required to submit detailed assessments in relation to any of the above criteria to the Council for approval. Where development is permitted which may have an impact on such

considerations, the Council will consider the use of conditions or planning obligations to ensure any appropriate mitigation or compensatory measures are secured.

Development proposals on land that is (or is suspected to be) affected by contamination or ground instability or has a sensitive end use must include an assessment of the extent of the issues and any possible risks. Development will only be permitted where the land is, or is made, suitable for the proposed use.

Additional guidance to support the implementation of this policy is provided in the Design and Construction and Environmental Protection Supplementary Planning Documents.

Policy CC 2 Protecting the Countryside

Development proposals in the countryside which accord with Green Belt policies set out in national planning policy will be supported provided that;

- the detailed siting and design of the development relates satisfactorily to its rural setting, in terms of its scale, layout and use of materials;
- they respect local landscape character, both in terms of immediate impact, or from distant views;
- unobtrusive provision can be made for any associated servicing and parking facilities or plant, equipment and storage;
- they relate to local enterprise and farm diversification; and it can be demonstrated that there would be no detrimental impact on agricultural interests

Extracts of Relevant Planning Policies and Supplementary Planning Guidance

Design and Construction SPD (2016)

Landscaping and the Environment

Almost all development sites will have some existing or potential value as wildlife habitat or public open space. The retention, protection and extension of areas of wildlife habitat will help conserve and enhance biological diversity and the richness of the natural environment. Good quality landscaping also helps make a development attractive and maintain its desirability and use.

- Existing attractive or valuable natural features must be retained and protected on a site and be the starting point for the development of building design and landscaping proposals. These could include trees, hedges, ponds or streams. They may be valuable because of their visual amenity or their wildlife or biodiversity value. The Council has identified significant areas for nature conservation within the borough. Development proposals on or close to designated wildlife sites will warrant special scrutiny and those that will have an adverse effect on these sites will not be permitted without mitigation to reduce the damage.
- Planting that enhances nature conservation, wildlife habitat and diversity will be encouraged, particularly on sites that are close to existing wildlife areas or enhance and expand “green corridors”.
- New landscaping should be designed for easy maintenance to ensure that the visual amenity continues into the long term and that the plants will thrive. Factors to consider include the appropriateness of species for the local climate, topography and soil; the landscape mix;

ensuring that there is sufficient space for plants to thrive without constant maintenance and attention; and minimising the requirement for importing topsoil and using artificial irrigation.

- New development should be designed to harvest rainwater which can be used for irrigation of the site's landscaping.
- New development with flat roofs can also be designed to be "green roofs" such as sedum roofs.
- These will help improve biodiversity and provide extra insulation to buildings without needing irrigation or significant maintenance.
- Hard landscaping should also be designed and constructed with thought to future maintenance and ensuring a long life. This includes considering the durability of materials, the ease and cost of providing and installing replacements and the route of underground services and access to repair and renewal.

Environmental Protection SPD (2010)

Section 4.6.4 Japanese Knotweed – "Neither the EA nor the Council are responsible for controlling Japanese knotweed, other than that growing on Council-owned land. Managing knotweed is the responsibility of the landowner of a site"

MAGIC Map search for SSSI Impact Risk Zones for Site Only

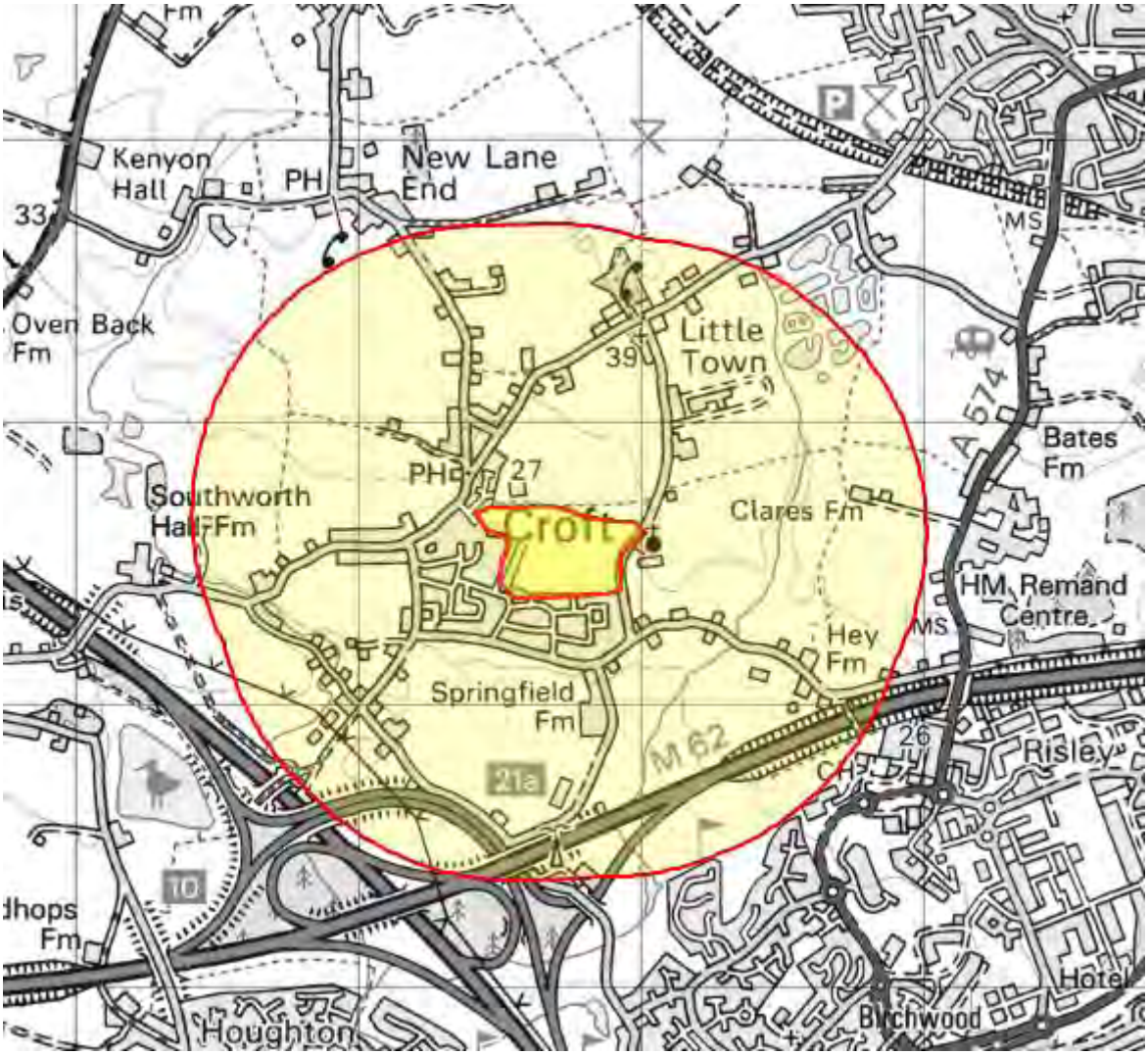
Site Check Report Report generated on Wed Aug 30 2017
You selected the location: Centroid Grid Ref: SJ637935
The following features have been found in your search area:

SSSI Impact Risk Zones - to assess planning applications for likely impacts on SSSIs/SACs/SPAs & Ramsar sites (England)

1. DOES PLANNING PROPOSAL FALL INTO ONE OR MORE OF THE CATEGORIES BELOW?	2. IF YES, CHECK THE CORRESPONDING DESCRIPTION(S) BELOW. LPA SHOULD CONSULT NATURAL ENGLAND ON LIKELY RISKS FROM THE FOLLOWING:
All Planning Applications	
Infrastructure	Airports, helipads and other aviation proposals
Wind & Solar Energy	
Minerals, Oil & Gas	Planning applications for quarries, including: new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction.
Rural Non Residential	
Residential	
Rural Residential	
Air Pollution	Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, pig & poultry units, slurry lagoons > 750m² & manure stores > 3500t).
Combustion	General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.
Waste	
Composting	
Discharges	Any discharge of water or liquid waste of more than 20m³/day to ground (ie to seep away) or to surface water, such as a beck or stream (NB This does not include discharges to mains sewer which are unlikely to pose a risk at this location).
Water Supply	
Notes	
GUIDANCE – How to use the Impact Risk Zones	/Metadata_for_magic/SSSI IRZ User Guidance MAGIC.pdf

MAGIC Map 1km Search Zone for Designated Wildlife Sites – Map

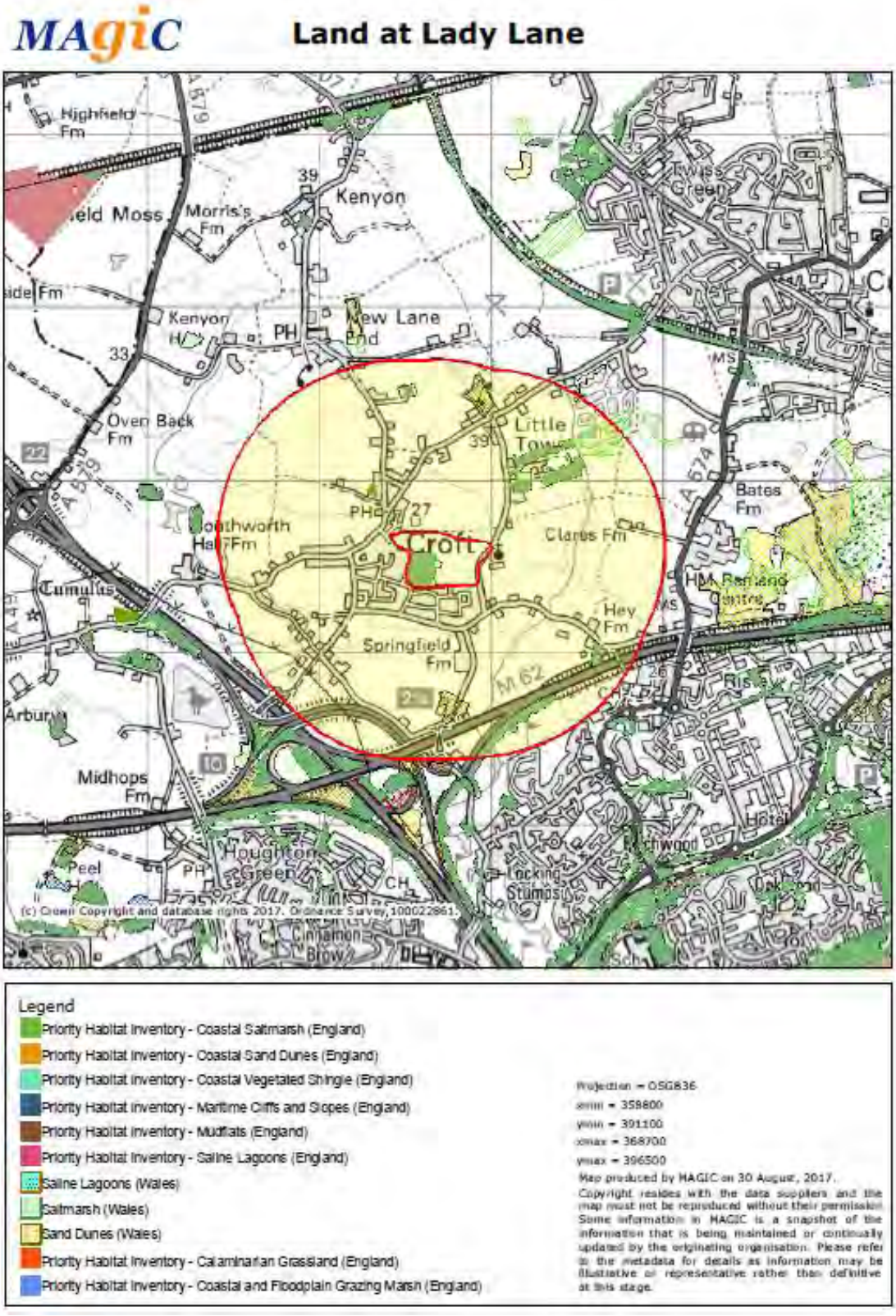
No designated wildlife sites with 1km



MAGIC Map 1km Search Zone for Designated Wildlife Sites - Report

No designated sites within 1km of the site

MAGIC Map 1km Search Zone for Habitat Inventory Data



Map Provided by RECORD of Site Designations within 1km

Site Boundary Report

Local Sites

Local Wildlife Sites

Croft Grasslands / WA006

Map

Site name	Croft Grasslands
Site code	WA006
Authority	Warrington Local Wildlife Sites Partnership
Site centroid	SJ6362693488

Regionally Important Geodiversity Sites

There are no Cheshire Regionally Important Geodiversity Sites within this search area

Statutory Sites

Due to changes to the NBN we are currently unable to provide Statutory Site location maps. You can access these by visiting the NBN Atlas https://spatial.nbnatlas.org/ or MagicMap http://www.naturalenglandmaps.naturalengland.org.uk/MagicMap.aspx (please be aware of the NBN Atlas guidance for using data https://nbnatlas.org/help/guidance-using-data/).

Other Sites of Conservation Interest

There are no Other Sites of Conservation Interest within this search area.

Houghton Green Pool / WA013

Map

Site name	Houghton Green Pool
Site code	WA013
Authority	Warrington Local Wildlife Sites Partnership
Site centroid	SJ6221392911

Extract of Species Data Provided by RECORD within 1km

Designated Species Summary

Taxa	Designation Name	Occurrence in Cheshire tetrads between 2006-2017 (%)	Occurrence in Cheshire tetrads all years (%)
Arctic Tern (Sterna paradisaea)	Birds of Conservation Concern [RSPB] - Amber	1%	8%
Black Tern (Chlidonias niger)	Wildlife and Countryside Act - Schedule 1, Birds of Conservation Concern [RSPB] - Amber	<1%	9%
Black-headed Gull (Chroicocephalus ridibundus)	Birds of Conservation Concern [RSPB] - Amber	23%	41%
Black-necked Grebe (Podiceps nigricollis)	Local Biodiversity Action Plan Species, Wildlife and Countryside Act - Schedule 1, Birds of Conservation Concern [RSPB] - Amber	2%	4%
Brown Hare (Lepus europaeus)	Local Biodiversity Action Plan Species, NERC S41, UK BAP Priority Species	21%	80%
Bullfinch (Pyrrhula pyrrhula)	Local Biodiversity Action Plan Species, Birds of Conservation Concern [RSPB] - Amber, NERC S41	20%	70%
Canada Goose (Branta canadensis)	Invasive Non-Native Species, Wildlife and Countryside Act Schedule 9	26%	53%
Canadian Goldenrod (Solidago canadensis)	Invasive Non-Native Species	2%	7%
Cinnabar (Tyria jacobaeae)	NERC S41, UK BAP Priority Species	13%	30%
Common Frog (Rana temporaria)	Wildlife and Countryside Act - Schedule 5	33%	63%
Common Gull (Larus canus)	Birds of Conservation Concern [RSPB] - Amber	9%	25%
Common Lizard (Zootoca vivipara)	Wildlife and Countryside Act - Schedule 5, NERC S41, UK BAP Priority Species	5%	9%
Common Toad (Bufo bufo)	Wildlife and Countryside Act - Schedule 5, NERC S41, UK BAP Priority Species	23%	41%
Corn Bunting (Emberiza calandra)	Local Biodiversity Action Plan Species, Birds of Conservation Concern [RSPB] - Red, NERC S41	2%	38%
Dot Moth (Melanchra persicariae)	NERC S41, UK BAP Priority Species	3%	14%
Dunlin (Calidris alpina)	Birds of Conservation Concern [RSPB] - Red	5%	15%
Dunnock (Prunella modularis)	Birds of Conservation Concern [RSPB] - Amber, NERC S41	29%	84%
Eastern Grey Squirrel (Sciurus carolinensis)	Wildlife and Countryside Act Schedule 9	31%	54%
Eurasian Badger (Meles meles)	Protection of Badgers Act 1992	59%	74%

European Water Vole (Arvicola amphibius)	Local Biodiversity Action Plan Species, Wildlife and Countryside Act - Schedule 5, NERC S41, UK BAP Priority Species	13%	52%
Fieldfare (Turdus pilaris)	Wildlife and Countryside Act - Schedule 1, Birds of Conservation Concern [RSPB] - Red	19%	39%
Gadwall (Anas strepera)	Birds of Conservation Concern [RSPB] - Amber	6%	12%
Golden Plover (Pluvialis apricaria)	Birds of Conservation Concern [RSPB] - Amber	5%	17%
Goldeneye (Bucephala clangula)	Wildlife and Countryside Act - Schedule 1, Birds of Conservation Concern [RSPB] - Amber	6%	14%
Great Black-backed Gull (Larus marinus)	Birds of Conservation Concern [RSPB] - Amber	6%	16%
Green Sandpiper (Tringa ochropus)	Wildlife and Countryside Act - Schedule 1, Birds of Conservation Concern [RSPB] - Amber	5%	17%
Greenshank (Tringa nebularia)	Wildlife and Countryside Act - Schedule 1	3%	12%
Grey Partridge (Perdix perdix)	Local Biodiversity Action Plan Species, Birds of Conservation Concern [RSPB] - Red, NERC S41, UK BAP Priority Species	8%	60%
Grey Wagtail (Motacilla cinerea)	Birds of Conservation Concern [RSPB] - Amber	14%	45%
Heath Dog-violet (Viola canina)	IUCN Global Red List - Near Threatened	<1%	4%
Herring Gull (Larus argentatus)	Birds of Conservation Concern [RSPB] - Red	11%	33%
Himalayan Cotoneaster (Cotoneaster simonsii)	Wildlife and Countryside Act Schedule 9	1%	3%
Hobby (Falco subbuteo)	Wildlife and Countryside Act - Schedule 1	9%	17%
House Martin (Delichon urbicum)	Birds of Conservation Concern [RSPB] - Amber	23%	67%
House Sparrow (Passer domesticus)	Local Biodiversity Action Plan Species, Birds of Conservation Concern [RSPB] - Red, NERC S41, UK BAP Priority Species	35%	84%
Indian Balsam (Impatiens glandulifera)	Invasive Non-Native Species, Wildlife and Countryside Act Schedule 9	24%	36%
Keroplatus testaceus (Keroplatus testaceus)	Nationally Scarce	<1%	<1%
Kestrel (Falco tinnunculus)	Birds of Conservation Concern [RSPB] - Amber	35%	80%
Lapwing (Vanellus vanellus)	Local Biodiversity Action Plan Species, Birds of Conservation Concern [RSPB] - Red, NERC S41, UK BAP Priority Species	28%	79%
Large Tortoiseshell (Nymphalis	Wildlife and Countryside Act -	<1%	<1%

polychloros)	Schedule 5		
Large-flowered Hemp-nettle (Galeopsis speciosa)	IUCN Global Red List - Vulnerable	1%	8%
Lesser Black-backed Gull (Larus fuscus)	Birds of Conservation Concern [RSPB] - Amber	12%	29%
Little Grebe (Tachybaptus ruficollis)	Birds of Conservation Concern [RSPB] - Amber	11%	29%
Little Ringed Plover (Charadrius dubius)	Wildlife and Countryside Act - Schedule 1	3%	13%
Mallard (Anas platyrhynchos)	Birds of Conservation Concern [RSPB] - Amber	42%	82%
Meadow Pipit (Anthus pratensis)	Birds of Conservation Concern [RSPB] - Amber	13%	45%
Merlin (Falco columbarius)	Wildlife and Countryside Act - Schedule 1, Birds of Conservation Concern [RSPB] - Amber	6%	14%
Mistle Thrush (Turdus viscivorus)	Birds of Conservation Concern [RSPB] - Amber	23%	82%
Montbretia (Crocosmia pottsii x aurea = C. x crocosmiiflora)	Invasive Non-Native Species, Wildlife and Countryside Act Schedule 9	6%	14%
Oystercatcher (Haematopus ostralegus)	Birds of Conservation Concern [RSPB] - Amber	13%	23%
Peregrine (Falco peregrinus)	Wildlife and Countryside Act - Schedule 1	11%	19%
Pink-footed Goose (Anser brachyrhynchus)	Birds of Conservation Concern [RSPB] - Amber	8%	15%
Pipistrelle (Pipistrellus pipistrellus)	Local Biodiversity Action Plan Species, Wildlife and Countryside Act - Schedule 5, Conservation (Habs and Sp) Regulations 2010 - Schedule 2	27%	54%
Pochard (Aythya ferina)	Birds of Conservation Concern [RSPB] - Amber	6%	19%
Redshank (Tringa totanus)	Birds of Conservation Concern [RSPB] - Amber	9%	22%
Redwing (Turdus iliacus)	Wildlife and Countryside Act - Schedule 1, Birds of Conservation Concern [RSPB] - Red	18%	38%
Reed Bunting (Emberiza schoeniclus)	Local Biodiversity Action Plan Species, Birds of Conservation Concern [RSPB] - Amber, NERC S41, UK BAP Priority Species	19%	73%
Ringed Plover (Charadrius hiaticula)	Birds of Conservation Concern [RSPB] - Amber	4%	15%
Ringlet (Aphantopus hyperantus)	Local Biodiversity Action Plan Species	14%	15%
Ruddy Duck (Oxyura jamaicensis)	Invasive Non-Native Species, Wildlife and Countryside Act Schedule 9	3%	14%
Sand Martin (Riparia riparia)	Birds of Conservation Concern [RSPB] - Amber	7%	35%

Shoveler (Anas clypeata)	Birds of Conservation Concern [RSPB] - Amber	8%	18%
Skylark (Alauda arvensis)	Local Biodiversity Action Plan Species, Birds of Conservation Concern [RSPB] - Red, NERC S41	20%	85%
Slavonian Grebe (Podiceps auritus)	Wildlife and Countryside Act - Schedule 1, Birds of Conservation Concern [RSPB] - Amber	<1%	3%
Snipe (Gallinago gallinago)	Birds of Conservation Concern [RSPB] - Amber	13%	54%
Song Thrush (Turdus philomelos)	Local Biodiversity Action Plan Species, Birds of Conservation Concern [RSPB] - Red	33%	87%
Starling (Sturnus vulgaris)	Local Biodiversity Action Plan Species, Birds of Conservation Concern [RSPB] - Red, NERC S41	30%	86%
Stock Dove (Columba oenas)	Birds of Conservation Concern [RSPB] - Amber	10%	65%
Swallow (Hirundo rustica)	Birds of Conservation Concern [RSPB] - Amber	44%	87%
Swift (Apus apus)	Birds of Conservation Concern [RSPB] - Amber	22%	81%
Teal (Anas crecca)	Birds of Conservation Concern [RSPB] - Amber	11%	28%
Tree Sparrow (Passer montanus)	Local Biodiversity Action Plan Species, Birds of Conservation Concern [RSPB] - Red, NERC S41, UK BAP Priority Species	10%	72%
Tufted Duck (Aythya fuligula)	Birds of Conservation Concern [RSPB] - Amber	13%	31%
Wall Cotoneaster (Cotoneaster horizontalis)	Wildlife and Countryside Act Schedule 9	2%	6%
West European Hedgehog (Erinaceus europaeus)	NERC S41, UK BAP Priority Species	24%	44%
Wheatear (Oenanthe oenanthe)	Birds of Conservation Concern [RSPB] - Amber	8%	32%
Whitethroat (Sylvia communis)	Birds of Conservation Concern [RSPB] - Amber	17%	70%
Willow Warbler (Phylloscopus trochilus)	Birds of Conservation Concern [RSPB] - Amber	18%	83%
Yellow Wagtail (Motacilla flava)	Birds of Conservation Concern [RSPB] - Red, NERC S41	5%	54%
Yellowhammer (Emberiza citrinella)	Local Biodiversity Action Plan Species, Birds of Conservation Concern [RSPB] - Red, NERC S41, UK BAP Priority Species	14%	77%

Species Report

AMPHIBIAN

Map

Common Toad (Bufo bufo) (1)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
M6 Junction 21a	SJ619933	1	14/05/2008-26/09/2008	None	Present	Field Record

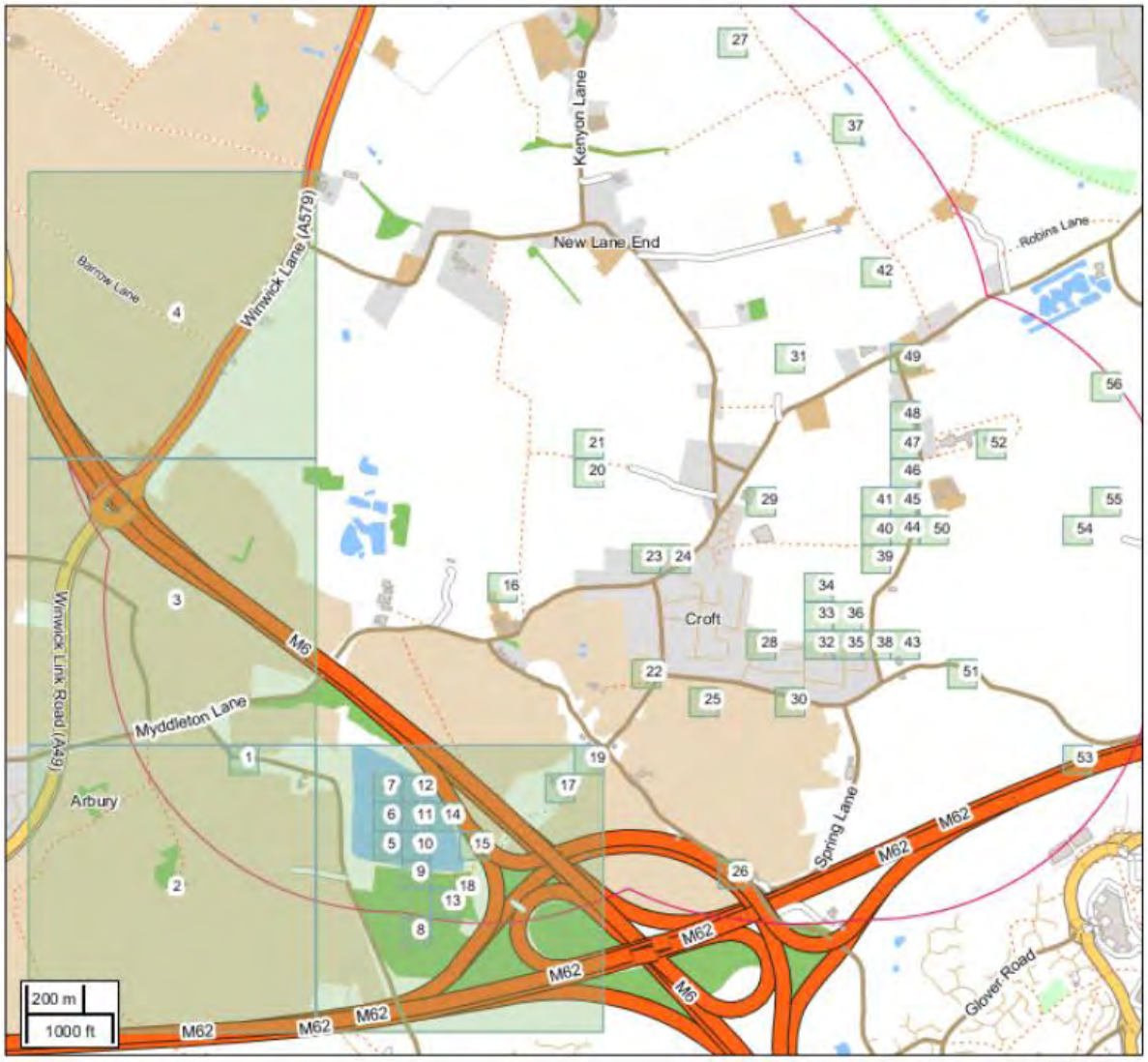
Common Frog (Rana temporaria) (1,2,3,4)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
M6 Junction 21a	SJ619933	1	14/05/2008-26/09/2008	None	Present	Field Record
M62 j11-12 (westbound)	SJ640930	4	14/05/2008-26/09/2008	None	1	Field Record
Croft, Garden, Wadeson Way	SJ637933	3	11/03/2013	Egg/Ovum	Present	Field Record
Croft, Wadeson Way - garden	SJ637933	3	16/04/2012	Adult	1	Field Record
Garden, Wadeson Way	SJ636933	2	08/08/2010	Adult	1	Field Record

BIRD

Map


Kenyon Lane
New Lane End
Robins Lane
Barrow Lane
Winwick Lane (A579)
Winwick Link Road (A49)
M6
Myddleton Lane
Arbury
Croft
Spring Lane
M62
Glover Road
200 m
1000 ft

Green Sandpiper (Tringa ochropus) (7)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ622928	7	15/04/2012	None	1	Field Record

Goldeneye (Bucephala clangula) (7)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ622928	7	29/02/2012	None	1	Field Record
	SJ622928	7	25/02/2012	None	1	Field Record

House Martin (Delichon urbicum) (9)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ623925	9	30/06/2012	Adult	1	Field Record

Dunlin (Calidris alpina) (7,11)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ623927	11	19/04/2013	Adult Male	1	Field Record
	SJ622928	7	06/02/2012	None	2	Field Record

Lesser Black-backed Gull (Larus fuscus) (7,10)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ623926	10	28/03/2013	Adult	5 Approx	Field Record
	SJ622928	7	22/02/2014	Adult	1	Field Record

Great Black-backed Gull (Larus marinus) (7)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ622928	7	04/02/2012	None	3	Field Record

Bullfinch (Pyrrhula pyrrhula) (2)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ6192	2	11/01/2012	None	3	Field Record

Golden Plover (Pluvialis apricaria) (2,7)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type

	SJ6192	2	13/12/2012	None	2	Field Record
	SJ622928	7	06/02/2012	None	26	Field Record

Meadow Pipit (Anthus pratensis) (2,7,18)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ6192	2	02/04/2012	None	2	Field Record
	SJ6192	2	13/12/2012	None	53	Field Record
	SJ6292	18	28/12/2006	None	13	Field Record
	SJ6292	18	28/12/2006	None	13	Field Record
	SJ622928	7	02/04/2012	None	2	Field Record

Grey Wagtail (Motacilla cinerea) (3,45)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Winwick, Houghton Green Pool	SJ6193	3	18/02/2011	None	1	Field Record
Croft, Off Lady Lane	SJ640938	45	15/03/2016	Adult	1	Field Record

Black-necked Grebe (Podiceps nigricollis) (3,6,7,11)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	3	26/07/2011	None	1	Field Record
Houghton Green Pool	SJ6193	3	09/04/2011	None	4	Field Record
Houghton Green Pool	SJ6193	3	06/04/2011	None	4	Field Record
Houghton Green Pool	SJ6193	3	05/04/2011	None	6	Field Record
Houghton Green Pool	SJ6193	3	02/04/2011	None	5	Field Record
Houghton Green Pool	SJ6193	3	01/04/2011	None	5	Field Record
Houghton Green Pool	SJ6193	3	26/03/2011	None	4	Field Record
Houghton Green Pool	SJ6193	3	20/03/2011	None	1	Field Record
Houghton Green Pool	SJ6193	3	19/03/2011	None	1	Field Record
	SJ622928	7	16/08/2012	None	1	Field Record
Houghton Green	SJ622927	6	20/03/2009	None	2	Field Record

PS, Warrington						
	SJ623927	11	23/03/2011	Adult	4	Field Record
	SJ623927	11	17/04/2011	Adult	3	Field Record

Black Tern (Chlidonias niger) (3)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	3	13/09/2011	None	2	Field Record
Houghton Green Pool	SJ6193	3	11/09/2011	None	1	Field Record

Merlin (Falco columbarius) (3)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	3	02/02/2011	None	Present	Field Record

Canada Goose (Branta canadensis) (3,7)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	3	08/09/2011	None	2	Field Record
Houghton Green Pool	SJ6193	3	26/07/2011	None	4	Field Record
	SJ622928	7	26/06/2012	None	21	Field Record
Hought Geen Pool SINC - pond	SJ622928	7	15/07/2012	None	20	Field Record
	SJ622928	7	25/02/2012	None	2	Field Record

Greenshank (Tringa nebularia) (3)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	3	07/09/2011	None	1	Field Record
Houghton Green Pool	SJ6193	3	31/08/2011	None	1	Field Record

Hobby (Falco subbuteo) (3)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	3	08/09/2011	None	1	Field Record

Gadwall (Anas strepera) (3)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	3	04/06/2011	None	4	Field Record
Houghton Green Pool	SJ6193	3	27/08/2011	None	8	Field Record
Winwick, Houghton Green Pool	SJ6193	3	17/02/2011	None	9	Field Record
Houghton Green Pool	SJ6193	3	19/08/2011	None	6	Field Record

Corn Bunting (Emberiza calandra) (2,3,7)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	3	30/05/2011	None	3	Field Record
Arbury	SJ6193	3	05/06/2011	None	1	Field Record
Winwick	SJ6192	2	26/04/2012	None	2	Field Record
	SJ622928	7	26/06/2012	None	2	Field Record
	SJ6192	2	23/04/2012	None	1	Field Record

Common Gull (Larus canus) (2,3,7)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	3	17/09/2011	None	2	Field Record
Houghton Green Pool	SJ6193	3	27/08/2011	None	2	Field Record
Houghton Green Pool	SJ6193	3	31/07/2011	None	1	Field Record
Houghton Green Pool	SJ6193	3	07/09/2011	None	1	Field Record
Houghton Green Pool	SJ6193	3	13/09/2011	None	3	Field Record
Houghton Green Pool	SJ6193	3	14/09/2011	None	4	Field Record
	SJ6192	2	21/09/2012	None	5	Field Record
	SJ622928	7	11/09/2012	None	2	Field Record
	SJ622928	7	04/02/2012	None	9	Field Record
	SJ622928	7	28/01/2012	None	6	Field Record
	SJ622928	7	14/01/2012	None	9	Field Record
	SJ622928	7	05/03/2012	None	2	Field Record
	SJ622928	7	03/03/2012	None	6	Field Record

	SJ622928	7	20/02/2012	None	3	Field Record
	SJ622928	7	18/02/2012	None	8	Field Record

Little Grebe (Tachybaptus ruficollis) (3,6)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	3	09/09/2011	None	7	Field Record
Houghton Green Pool	SJ6193	3	31/08/2011	None	5	Field Record
Houghton Green Pool	SJ6193	3	27/08/2011	None	4	Field Record
Houghton Green Pool	SJ6193	3	19/08/2011	None	3	Field Record
Houghton Green Pool	SJ6193	3	07/09/2011	None	5	Field Record
Houghton Green Pool	SJ6193	3	13/09/2011	None	3	Field Record
Houghton Green Pool	SJ6193	3	25/09/2011	None	4	Field Record
Houghton Green Pool	SJ6193	3	14/09/2011	None	3	Field Record
Houghton Green Pool	SJ62239278	6	29/09/2007	Adult	2	Field Record

House Sparrow (Passer domesticus) (2,3,7)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ622928	7	29/02/2012	None	26	Field Record
Houghton Green Pool	SJ6193	3	30/05/2011	None	20	Field Record
Houghton Green Pool	SJ6193	3	08/09/2011	None	60	Field Record
Houghton Green Pool	SJ6193	3	27/08/2011	None	175	Field Record
Houghton Green Pool	SJ6193	3	02/02/2011	None	30	Field Record
Arbury	SJ6193	3	25/09/2011	None	10	Field Record
Arbury	SJ6193	3	03/08/2011	None	25	Field Record
Houghton Green Pool	SJ6193	3	31/07/2011	None	71	Field Record
	SJ6192	2	02/04/2012	None	42	Field Record
	SJ6192	2	13/12/2012	None	19	Field Record
	SJ6192	2	16/08/2012	None	20	Field Record

	SJ6192	2	17/08/2012	None	12	Field Record
	SJ6192	2	11/01/2012	None	15	Field Record
Winwick	SJ6192	2	26/04/2012	None	20	Field Record
	SJ6192	2	23/04/2012	None	2	Field Record
	SJ6192	2	24/04/2012	None	57	Field Record
Winwick	SJ6192	2	25/04/2012	None	12	Field Record

Kestrel (Falco tinnunculus) (2,3,7,15,33,36,40,52,53)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ622928	7	23/04/2012	None	Present	Field Record
Houghton Green Pool	SJ6193	3	02/02/2011	None	1	Field Record
Houghton Green Pool	SJ6193	3	10/09/2011	None	2	Field Record
Houghton Green Pool	SJ6193	3	30/05/2011	None	1	Field Record
Houghton Green Pool	SJ6193	3	07/09/2011	None	2	Field Record
Houghton Green Pool	SJ6193	3	27/08/2011	None	1	Field Record
Houghton Green Pool	SJ6193	3	31/07/2011	None	1	Field Record
Houghton Green Pool	SJ6193	3	08/09/2011	None	2	Field Record
Houghton Green Pool	SJ6193	3	14/09/2011	None	Present	Field Record
Houghton Green Pool	SJ6193	3	03/08/2011	None	2	Field Record
Arbury	SJ6193	3	05/06/2011	None	Present	Field Record
	SJ6192	2	21/09/2012	None	1	Field Record
	SJ6192	2	13/12/2012	None	1	Field Record
	SJ6192	2	16/08/2012	None	2	Field Record
	SJ6192	2	22/09/2012	None	1	Field Record
Croft, Battlefiled	SJ638934	36	03/10/2012	None	1	Field Record
Culcheth, Glazebury & Croft - CP	SJ639937	40	18/03/2011	Adult	1	Field Record
Croft, HMS Gosling site	SJ643940	52	19/01/2013	Adult	1	Field Record
	SJ622928	7	11/09/2012	None	1	Field Record
	SJ622928	7	10/01/2012	None	1	Field Record

Culcheth, Glazebury & Croft - CP, By M6	SJ625926	15	26/12/2011	Adult	2	Field Record
Hey Farm Barn	SJ64699295	53	15/10/2011	None	1	Field Record
	SJ622928	7	06/02/2012	None	1	Field Record
	SJ622928	7	12/04/2012	None	1	Field Record
Battlefield"""	SJ637934	33	14/01/2012	Adult	1	Field Record
Winwick	SJ6192	2	26/04/2012	None	3	Field Record
	SJ639937	40	18/03/2011	Adult	1	Field Record

Little Ringed Plover (Charadrius dubius) (3,7)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ622928	7	25/04/2012	None	7	Field Record
	SJ622928	7	21/04/2012	None	1	Field Record
Houghton Green Pool	SJ6193	3	04/06/2011	None	1	Field Record
Houghton Green Pool	SJ6193	3	29/07/2011	None	1	Field Record
Houghton Green Pool	SJ6193	3	28/05/2011	None	2	Field Record
Houghton Green Pool	SJ6193	3	06/04/2011	None	2	Field Record
Houghton Green Pool	SJ6193	3	26/07/2011	None	2	Field Record
	SJ622928	7	16/08/2012	None	1	Field Record
	SJ622928	7	26/06/2012	None	3	Field Record
	SJ622928	7	12/04/2012	None	2	Field Record
	SJ622928	7	16/04/2012	None	7	Field Record
	SJ622928	7	11/04/2012	None	2	Field Record
	SJ622928	7	04/04/2012	None	2	Field Record
	SJ622928	7	15/04/2012	None	3	Field Record

Arctic Tern (Sterna paradisaea) (3,7)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ622928	7	25/04/2012	None	3	Field Record
Houghton Green Pool	SJ6193	3	09/09/2011	None	3	Field Record

Dunnock (Prunella modularis) (2,3,7,36)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ622928	7	09/05/2012	None	3	Field Record
Radley Plantation	SJ6193	3	29/08/2011	None	4	Field Record
Houghton Green Pool	SJ6193	3	12/02/2011	None	1	Field Record
Houghton Green Pool	SJ6193	3	30/05/2011	None	1	Field Record
Winwick	SJ6192	2	26/04/2012	None	4	Field Record
	SJ6192	2	16/08/2012	None	1	Field Record
	SJ622928	7	29/02/2012	None	2	Field Record
Battlefield	SJ638934	36	03/02/2012	Adult	1	Field Record
	SJ6192	2	02/04/2012	None	2	Field Record
	SJ6192	2	23/04/2012	None	1	Field Record
Winwick	SJ6192	2	25/04/2012	None	3	Field Record
	SJ6192	2	24/04/2012	None	5	Field Record

Mallard (Anas platyrhynchos) (2,3,5,7)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ622928	7	09/05/2012	None	1	Field Record
Houghton Green Pool	SJ6193	3	02/02/2011	None	55	Field Record
Houghton Green Pool	SJ6193	3	19/08/2011	None	70	Field Record
Houghton Green Pool	SJ6193	3	31/07/2011	None	27	Field Record
Houghton Green Pool	SJ6193	3	04/06/2011	None	4	Field Record
Houghton Green Pool	SJ6193	3	07/09/2011	None	66	Field Record
Houghton Green Pool	SJ6193	3	31/08/2011	None	42	Field Record
Houghton Green Pool	SJ6193	3	27/08/2011	None	82	Field Record
Winwick, Houghton Green Pool	SJ6193	3	17/02/2011	None	41	Field Record
Houghton Green Pool	SJ6193	3	12/02/2011	None	19	Field Record
Houghton Green Pool	SJ6193	3	13/09/2011	None	68	Field Record
Houghton Green Pool	SJ6193	3	25/09/2011	None	65	Field Record

Houghton Green Pool	SJ6193	3	17/09/2011	None	71	Field Record
Houghton Green Pool	SJ6193	3	03/08/2011	None	40	Field Record
Houghton Green Pool	SJ6193	3	26/07/2011	None	23	Field Record
Houghton Green Pool	SJ6193	3	08/09/2011	None	65	Field Record
	SJ6192	2	02/04/2012	None	1	Field Record
	SJ6192	2	21/09/2012	None	3	Field Record
	SJ622928	7	10/01/2012	None	57	Field Record
	SJ622928	7	04/02/2012	None	64	Field Record
	SJ622928	7	14/01/2012	None	48	Field Record
	SJ622928	7	28/01/2012	None	49	Field Record
	SJ622928	7	03/03/2012	None	21	Field Record
	SJ622928	7	29/02/2012	None	29	Field Record
	SJ622928	7	20/02/2012	None	28	Field Record
	SJ622928	7	18/02/2012	None	48	Field Record
	SJ622928	7	06/02/2012	None	66	Field Record
	SJ622928	7	11/09/2012	None	66	Field Record
	SJ622928	7	28/03/2013	Adult	10 Approx	Field Record
	SJ6192	2	23/04/2012	None	8	Field Record
	SJ622926	5	22/02/2014	Adult	8	Field Record
	SJ622926	5	08/02/2011	None	Present	Field Record

Herring Gull (Larus argentatus) (2,3,7)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ622928	7	03/03/2012	None	12	Field Record
Houghton Green Pool	SJ6193	3	26/07/2011	None	1	Field Record
	SJ6192	2	10/01/2012	None	1	Field Record
	SJ622928	7	14/01/2012	None	8	Field Record
	SJ622928	7	18/02/2012	None	10	Field Record

Grey Partridge (Perdix perdix) (2,3,7,9,11,12,18,30,44,46,55,56)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Croft	SJ647938	55	10/01/2010	Adult	12	Field Record

	SJ622928	7	14/05/2012	None	2	Field Record
Houghton Green Pool	SJ6193	3	14/09/2011	None	57	Field Record
Houghton Green Pool	SJ6193	3	30/05/2011	None	1	Field Record
Houghton Green Pool	SJ6193	3	13/09/2011	None	16	Field Record
Houghton Green Pool	SJ6193	3	10/09/2011	None	16	Field Record
Houghton Green Pool	SJ6193	3	25/09/2011	None	37	Field Record
Arbury	SJ6193	3	03/08/2011	None	16	Field Record
Houghton Green Pool	SJ6193	3	31/07/2011	None	15	Field Record
Houghton Green Pool	SJ6193	3	08/09/2011	None	67	Field Record
	SJ6192	2	02/04/2012	None	2	Field Record
Winwick	SJ6192	2	25/04/2012	None	2	Field Record
	SJ647938	55	10/01/2010	Adult	12	Field Record
Croft	SJ640937	44	14/06/2015	Adult	2	Field Record
	SJ623928	12	04/04/2015	Adult	2	Field Record
	SJ623928	12	30/06/2012	Adult	2	Field Record
	SJ623927	11	10/09/2015	Adult	12	Field Record
	SJ623927	11	15/08/2015	Adult	8	Field Record
	SJ623925	9	22/04/2012	Adult	2	Field Record
Croft, Stubble field	SJ636931	30	13/11/2016	Adult	9	Field Record
Willow / Birch Natural Regeneration, Peel Hall Area - Comp 12	SJ6292	18	28/12/2006	Adult	4	Field Record
	SJ622928	7	20/02/2012	None	2	Field Record
	SJ622928	7	06/02/2012	None	16	Field Record
Croft, Fields W of Lady Lane	SJ640939	46	08/01/2012	Adult	8	Field Record
	SJ6478294202	56	2007	None	7	Field Record
Croft, Lady Lane	SJ640939	46	25/04/2014	Adult	2	Field Record

Fieldfare (Turdus pilaris) (2,3,7,17,22,26,32)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Croft, Garden,	SJ637933	32	13/01/2010	Adult	1	Field Record

Wadeson Way						
Houghton Green Pool	SJ6193	3	11/02/2011	None	47	Field Record
Houghton Green Pool	SJ6193	3	02/02/2011	None	30	Field Record
Winwick, Houghton Green Pool	SJ6193	3	17/02/2011	None	35	Field Record
	SJ6192	2	13/12/2012	None	27	Field Record
Culcheth, Glazebury & Croft - CP, Chadwick Avenue	SJ637933	32	05/11/2013	Adult	12 Approx	Field Record
Croft, Fields along Smithy Lane	SJ631932	22	28/03/2013	Adult	6 Approx	Field Record
	SJ622928	7	06/02/2012	None	4	Field Record
Garden, Wadeson Way	SJ637933	32	13/01/2010	Adult	1	Field Record
Culcheth, Glazebury & Croft - CP	SJ628928	17	02/02/2014	Adult	15 Approx	Field Record
Croft, Hop-pole Kennels	SJ634925	26	26/12/2013	Adult	9	Field Record

Lapwing (Vanellus vanellus) (2,3,6,7,11,12,13,14,18,37,41)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ622928	7	20/10/2014	Adult	9	Field Record
	SJ622928	7	14/05/2012	None	6	Field Record
	SJ622928	7	09/05/2012	None	2	Field Record
	SJ622928	7	23/04/2012	None	Present	Field Record
	SJ622928	7	21/04/2012	None	2	Field Record
Houghton Green Pool	SJ6193	3	20/03/2011	None	3	Field Record
Houghton Green Pool	SJ6193	3	30/05/2011	None	2	Field Record
Houghton Green Pool	SJ6193	3	05/04/2011	None	2	Field Record
Houghton Green Pool	SJ6193	3	27/08/2011	None	18	Field Record
Houghton Green Pool	SJ6193	3	03/08/2011	None	1	Field Record
Winwick, Houghton Green Pool	SJ6193	3	17/02/2011	None	70	Field Record

Houghton Green Pool	SJ6193	3	26/07/2011	None	1	Field Record
Winwick	SJ6192	2	25/04/2012	None	2	Field Record
	SJ6192	2	13/12/2012	None	26	Field Record
Croft	SJ639938	41	04/08/2012	Adult	10	Field Record
	SJ622928	7	16/04/2012	None	2	Field Record
	SJ622928	7	04/02/2012	None	17	Field Record
	SJ624927	14	22/04/2012	Adult	1	Field Record
	SJ623928	12	17/03/2012	Adult	2	Field Record
	SJ622927	6	04/04/2015	Adult	2	Field Record
	SJ622928	7	10/01/2012	None	1	Field Record
	SJ622928	7	03/03/2012	None	16	Field Record
	SJ622928	7	29/02/2012	None	102	Field Record
	SJ622928	7	18/02/2012	None	59	Field Record
	SJ622928	7	06/02/2012	None	192	Field Record
	SJ622928	7	02/04/2012	None	1	Field Record
Adjacent field	SJ624924	13	28/03/2013	Adult	2	Field Record
Houghton Green Pool, Delph lane, Warrington	SJ6227792754	6	31/05/2013	Adult	8	Field Record
Near Kenyon Farm	SJ638951	37	02/05/2011	Adult	1	Field Record
	SJ623927	11	02/02/2014	Adult	50 Approx	Field Record
	SJ623927	11	20/01/2014	Adult	18	Field Record
	SJ623927	11	16/01/2014	Adult	27	Field Record
	SJ6292	18	08/02/2011	None	12	Field Record

Mistle Thrush (Turdus viscivorus) (2,3,7,19,21,23,24,31,42,46,47,49)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Croft, In tree on Lord St	SJ632936	24	14/11/2014	Adult	1	Field Record
Croft, Lady Lane	SJ640940	47	18/12/2011	Adult	1	Field Record
Radley Plantation	SJ6193	3	22/03/2011	None	2	Field Record
Houghton Green Pool	SJ6193	3	27/08/2011	None	1	Field Record
Houghton Green Pool	SJ6193	3	02/02/2011	None	3	Field Record
Houghton Green	SJ6193	3	11/02/2011	None	2	Field Record

Pool						
	SJ6192	2	13/12/2012	None	5	Field Record
Croft, Smithy Brow, garden opposite bus stop	SJ631936	23	04/01/2013	Adult	1	Field Record
	SJ622928	7	29/02/2012	None	1	Field Record
	SJ622928	7	02/04/2012	None	3	Field Record
Croft, Fields W of Lady Lane	SJ640939	46	14/01/2012	Adult	1	Field Record
Croft	SJ639946	42	10/06/2013	Adult	1	Field Record
Croft, N of Mustard Lane	SJ636943	31	18/12/2011	Adult	1	Field Record
Winwick	SJ6192	2	26/04/2012	None	1	Field Record
Croft	SJ629929	19	28/03/2013	Adult	2	Field Record
Croft, Lady Lane	SJ640943	49	28/11/2014	Adult	1	Field Record
	SJ629940	21	02/05/2011	Adult	1	Field Record

Black-headed Gull (Chroicocephalus ridibundus) (3,5,7,10,18,41)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Willow / Birch Natural Regeneration, Peel Hall Area - Comp 12	SJ6292	18	28/12/2006	None	35	Field Record
Houghton Green Pool	SJ6193	3	07/09/2011	None	12	Field Record
Houghton Green Pool	SJ6193	3	31/08/2011	None	24	Field Record
Houghton Green Pool	SJ6193	3	31/07/2011	None	5	Field Record
Houghton Green Pool	SJ6193	3	14/09/2011	None	138	Field Record
Houghton Green Pool	SJ6193	3	13/09/2011	None	46	Field Record
Arbury	SJ6193	3	25/09/2011	None	260	Field Record
Houghton Green Pool	SJ6193	3	17/09/2011	None	214	Field Record
Houghton Green Pool	SJ6193	3	09/04/2011	None	61	Field Record
Houghton Green Pool	SJ6193	3	19/08/2011	None	30	Field Record
Arbury	SJ6193	3	03/08/2011	None	150	Field Record
Croft	SJ639938	41	04/08/2012	Adult	Several	Field Record
	SJ623926	10	28/03/2013	Adult	20 Approx	Field Record

	SJ622928	7	22/02/2014	Adult	C. 60	Field Record
	SJ622926	5	08/02/2011	None	150	Field Record

Wheatear (Oenanthe oenanthe) (7,11)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ622928	7	21/04/2012	None	2	Field Record
	SJ623927	11	19/04/2013	Adult Male	1	Field Record

Stock Dove (Columba oenas) (2,3,7,18)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Willow / Birch Natural Regeneration, Peel Hall Area - Comp 12	SJ6292	18	28/12/2006	None	7	Field Record
	SJ622928	7	09/05/2012	None	2	Field Record
	SJ622928	7	21/04/2012	None	5	Field Record
Houghton Green Pool	SJ6193	3	11/02/2011	None	4	Field Record
Radley Plantation	SJ6193	3	29/08/2011	None	8	Field Record
Houghton Green Pool	SJ6193	3	07/09/2011	None	5	Field Record
Arbury	SJ6193	3	03/08/2011	None	4	Field Record
Houghton Green Pool	SJ6193	3	31/07/2011	None	4	Field Record
	SJ6192	2	02/04/2012	None	Present	Field Record
	SJ6192	2	22/09/2012	None	3	Field Record
	SJ622928	7	28/03/2012	None	1	Field Record

Slavonian Grebe (Podiceps auritus) (7)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Flash	SJ622928	7	13/02/2006	None	1	Field Record

Pink-footed Goose (Anser brachyrhynchus) (2)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ6192	2	13/12/2012	None	120	Field Record

Snipe (Gallinago gallinago) (46)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Croft, By road on small area of wet ground in the snow	SJ640939	46	09/01/2010	Adult	1	Field Record

Shoveler (Anas clypeata) (7)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ622928	7	06/02/2012	None	5	Field Record

Yellow Wagtail (Motacilla flava) (11)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ623927	11	19/04/2013	Adult	1	Field Record

Redwing (Turdus iliacus) (1,3,7,17,22,25,38,51)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Croft, Horse paddocks on New Lane	SJ633931	25	28/12/2014	Adult	Abundant	Field Record
Houghton Green Pool	SJ6193	3	12/02/2011	None	8	Field Record
Croft, Cross Lane	SJ642932	51	02/02/2013	Adult	Small Flock	Field Record
Croft, Fields along Smithy Lane	SJ631932	22	28/03/2013	Adult	6 Approx	Field Record
	SJ622928	7	29/02/2012	None	3	Field Record
Croft, Field next to Lady Lane	SJ639933	38	27/01/2014	Adult	30 At Least	Field Record
Croft	SJ628928	17	20/01/2014	Adult	6	Field Record
Culcheth, Glazebury & Croft - CP	SJ628928	17	02/02/2014	Adult	40 Approx	Field Record
	SJ617929	1	24/02/2011	None	2	Field Record

Pochard (Aythya ferina) (3,5,7,11)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ622928	7	02/05/2012	None	2	Field Record
Houghton Green Pool	SJ6193	3	08/09/2011	None	1	Field Record
Houghton Green Pool	SJ6193	3	14/09/2011	None	2	Field Record

Houghton Green Pool	SJ6193	3	13/09/2011	None	1	Field Record
	SJ622928	7	04/02/2012	None	9	Field Record
	SJ622928	7	14/01/2012	None	5	Field Record
	SJ623927	11	06/01/2012	None	6	Field Record
	SJ622928	7	09/05/2012	None	4	Field Record
	SJ622928	7	29/02/2012	None	2	Field Record
	SJ622928	7	18/02/2012	None	9	Field Record
	SJ622928	7	06/02/2012	None	13	Field Record
	SJ622926	5	22/02/2014	Adult Male	1	Field Record
	SJ622926	5	08/02/2011	None	Present	Field Record

Yellowhammer (Emberiza citrinella) (2,3,7,27)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Culcheth, Glazebury & Croft - CP, Kenyon	SJ634954	27	15/07/2012	Adult Male	1	Field Record
Houghton Green Pool	SJ6193	3	31/07/2011	None	1	Field Record
Houghton Green Pool	SJ6193	3	30/05/2011	None	1	Field Record
Winwick	SJ6192	2	26/04/2012	None	4	Field Record
	SJ622928	7	02/04/2012	None	6	Field Record
Winwick	SJ6192	2	25/04/2012	None	4	Field Record

Peregrine (Falco peregrinus) (18)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Willow / Birch Natural Regeneration, Peel Hall Area - Comp 12	SJ6292	18	28/12/2006	Adult Male	1	Field Record

Tree Sparrow (Passer montanus) (2,3,7,47,54)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	3	30/05/2011	None	2	Field Record
Winwick	SJ6192	2	27/04/2012	None	3	Field Record
Winwick	SJ6192	2	26/04/2012	None	7	Field Record

Winwick	SJ6192	2	25/04/2012	None	6	Field Record
	SJ6192	2	23/04/2012	None	4	Field Record
Croft, Lady Lane	SJ640940	47	17/04/2016	Adult	Several	Field Record
	SJ622928	7	02/04/2012	None	10	Field Record
	SJ6467693794	54	2007	None	Present	Field Record

Ringed Plover (Charadrius hiaticula) (3,7)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	3	26/07/2011	None	1	Field Record
	SJ622928	7	03/03/2012	None	2	Field Record
	SJ622928	7	25/02/2012	None	2	Field Record

Starling (Sturnus vulgaris) (2,3,7,16,18)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	3	30/05/2011	None	1	Field Record
Houghton Green Pool	SJ6193	3	11/02/2011	None	90	Field Record
Houghton Green Pool	SJ6193	3	27/08/2011	None	3	Field Record
Houghton Green Pool	SJ6193	3	02/02/2011	None	65	Field Record
Houghton Green Pool	SJ6193	3	22/09/2011	None	140	Field Record
Houghton Green Pool	SJ6193	3	08/09/2011	None	Present	Field Record
Arbury	SJ6193	3	25/09/2011	None	30	Field Record
	SJ6192	2	22/09/2012	None	180	Field Record
	SJ6192	2	02/04/2012	None	2	Field Record
	SJ6192	2	11/01/2012	None	17	Field Record
	SJ6192	2	21/09/2012	None	32	Field Record
	SJ6192	2	24/04/2012	None	2	Field Record
	SJ622928	7	29/02/2012	None	20	Field Record
	SJ622928	7	06/02/2012	None	70	Field Record
	SJ622928	7	02/04/2012	None	5	Field Record
	SJ6265193584	16	2007	None	45	Field Record
	SJ6292	18	08/02/2011	None	30	Field Record

Ruddy Duck (Oxyura jamaicensis) (3,7)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	3	04/06/2011	None	1	Field Record
	SJ622928	7	29/02/2012	None	1	Field Record

Whitethroat (Sylvia communis) (3,29,34)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	3	30/05/2011	None	3	Field Record
Arbury	SJ6193	3	03/08/2011	None	1	Field Record
Houghton Green Pool	SJ6193	3	31/07/2011	None	3	Field Record
Houghton Green Pool	SJ6193	3	29/07/2011	None	4	Field Record
"Battlefied"	SJ635938	29	29/04/2011	Adult Male	Several	Field Record
Battlefield	SJ637935	34	04/05/2009	Adult Male	Present	Auditory Record
Battlefield	SJ637935	34	04/05/2009	Adult Male	1	Auditory Record

Song Thrush (Turdus philomelos) (2,3,7,22,35,38)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	3	30/05/2011	None	3	Field Record
Houghton Green Pool	SJ6193	3	31/07/2011	None	1	Field Record
Houghton Green Pool	SJ6193	3	12/02/2011	None	3	Field Record
Radley Plantation	SJ6193	3	05/06/2011	None	4	Field Record
	SJ6192	2	11/01/2012	None	3	Field Record
	SJ6192	2	13/12/2012	None	2	Field Record
	SJ6192	2	24/04/2012	None	1	Field Record
Croft, Fields along Smithy Lane	SJ631932	22	28/03/2013	Adult	3	Field Record
	SJ622928	7	29/02/2012	None	2	Field Record
	SJ622928	7	02/04/2012	None	1	Field Record
Winwick	SJ6192	2	26/04/2012	None	1	Field Record
Croft, Wadeson Way	SJ638933	35	24/01/2010	Adult	1	Field Record

Croft, Lady Lane	SJ639933	38	01/07/2014	Adult Male	1	Auditory Record

Tufted Duck (Aythya fuligula) (3,5,7,10,11,18)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Houghton Green Pool	SJ6193	3	17/09/2011	None	32	Field Record
Houghton Green Pool	SJ6193	3	31/08/2011	None	37	Field Record
Houghton Green Pool	SJ6193	3	27/08/2011	None	31	Field Record
Houghton Green Pool	SJ6193	3	07/09/2011	None	36	Field Record
Houghton Green Pool	SJ6193	3	12/02/2011	None	45	Field Record
Houghton Green Pool	SJ6193	3	19/08/2011	None	25	Field Record
Houghton Green Pool	SJ6193	3	29/07/2011	None	32	Field Record
Houghton Green Pool	SJ6193	3	26/07/2011	None	14	Field Record
	SJ622928	7	11/09/2012	None	24	Field Record
	SJ622928	7	10/01/2012	None	28	Field Record
	SJ622928	7	04/02/2012	None	2	Field Record
	SJ622928	7	28/01/2012	None	16	Field Record
	SJ622928	7	14/01/2012	None	21	Field Record
	SJ623926	10	28/03/2013	Adult	4 Approx	Field Record
	SJ623927	11	06/01/2012	None	23	Field Record
Willow / Birch Natural Regeneration, Peel Hall Area - Comp 12	SJ6292	18	28/12/2006	None	10	Field Record
	SJ622928	7	03/03/2012	None	17	Field Record
	SJ622928	7	29/02/2012	None	10	Field Record
	SJ622928	7	18/02/2012	None	31	Field Record
	SJ622928	7	17/03/2012	None	13	Field Record
	SJ622926	5	22/02/2014	Adult Male	1	Field Record
	SJ622926	5	08/02/2011	None	30	Field Record

Teal (Anas crecca) (3,7,18)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type

Houghton Green Pool	SJ6193	3	09/09/2011	None	2	Field Record
Houghton Green Pool	SJ6193	3	02/02/2011	None	15	Field Record
Houghton Green Pool	SJ6193	3	31/08/2011	None	2	Field Record
Houghton Green Pool	SJ6193	3	27/08/2011	None	1	Field Record
Houghton Green Pool	SJ6193	3	14/09/2011	None	1	Field Record
Houghton Green Pool	SJ6193	3	07/09/2011	None	2	Field Record
	SJ622928	7	04/02/2012	None	3	Field Record
Burtonwood & Winwick - CP	SJ6292	18	19/01/2006	None	65	Field Record
	SJ622928	7	06/02/2012	None	3	Field Record

Redshank (Tringa totanus) (2,3,7)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ622928	7	21/04/2012	None	1	Field Record
Houghton Green Pool	SJ6193	3	20/03/2011	None	1	Field Record
	SJ6192	2	21/09/2012	None	1	Field Record
	SJ622928	7	03/03/2012	None	1	Field Record
	SJ622928	7	11/04/2012	None	2	Field Record
	SJ622928	7	28/03/2013	Adult	2	Field Record
	SJ622928	7	04/04/2012	None	2	Field Record
	SJ622928	7	13/02/2006	None	5	Field Record

Skylark (Alauda arvensis) (2,3,4,7,8,9,20,50)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ622928	7	23/04/2012	None	1	Field Record
Houghton Green Pool	SJ6193	3	20/03/2011	None	3	Field Record
Houghton Green Pool	SJ6193	3	30/05/2011	None	1	Field Record
Houghton Green Pool	SJ6193	3	10/09/2011	None	5	Field Record
Arbury	SJ6193	3	05/06/2011	None	1	Field Record
	SJ6192	2	02/04/2012	None	2	Field Record

	SJ6192	2	21/09/2012	None	11	Field Record
	SJ6192	2	26/06/2012	None	6	Field Record
Winwick	SJ6192	2	26/04/2012	None	5	Field Record
Culcheth, Glazebury & Croft - CP, Over field to NE of parish church	SJ641937	50	18/03/2011	Adult	1	Field Record
	SJ623923	8	08/02/2011	None	3	Field Record
	SJ622928	7	26/06/2012	None	4	Field Record
Croft	SJ629939	20	16/03/2015	Adult Male	1	Auditory Record
	SJ6192	2	23/04/2012	None	5	Field Record
Winwick	SJ6192	2	25/04/2012	None	3	Field Record
Over field to S	SJ623925	9	23/03/2011	Adult	1	Field Record
Over field to NE of parish church	SJ641937	50	18/03/2011	Adult	1	Field Record
Warrington	SJ6194	4	27/05/2009	None	Present	Field Record

Oystercatcher (Haematopus ostralegus) (3,6,7,11,12,45)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ622928	7	03/03/2012	None	2	Field Record
Houghton Green Pool	SJ6193	3	19/03/2011	None	1	Field Record
Winwick, Houghton Green Pool	SJ6193	3	15/02/2011	None	1	Field Record
Croft, Off Lady Lane	SJ640938	45	15/03/2016	Adult	2	Field Record
	SJ622928	7	20/02/2012	None	1	Field Record
	SJ622928	7	26/06/2012	None	1	Field Record
	SJ622928	7	11/04/2012	None	4	Field Record
	SJ623928	12	17/03/2012	Adult	2	Field Record
	SJ622927	6	04/04/2015	Adult	1	Field Record
	SJ623927	11	28/03/2013	Adult	2	Field Record
	SJ622928	7	11/09/2012	None	1	Field Record
	SJ622928	7	12/04/2012	None	2	Field Record
	SJ622928	7	29/02/2012	None	2	Field Record
	SJ622928	7	25/02/2012	None	1	Field Record
	SJ622928	7	17/03/2012	None	2	Field Record

	SJ622928	7	28/03/2012	None	2	Field Record
	SJ622928	7	05/03/2012	None	2	Field Record
	SJ622928	7	04/04/2012	None	2	Field Record
	SJ622928	7	02/04/2012	None	2	Field Record
	SJ623927	11	23/03/2011	Adult	1	Field Record
	SJ623928	12	22/02/2014	Adult	2	Field Record

Swallow (Hirundo rustica) (2,3,7,19,39,41,43,44,48)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ622928	7	19/05/2012	None	30	Field Record
	SJ622928	7	03/05/2012	None	60	Field Record
	SJ622928	7	02/05/2012	None	20	Field Record
	SJ622928	7	25/04/2012	None	70	Field Record
	SJ622928	7	21/04/2012	None	9	Field Record
Houghton Green Pool	SJ6193	3	27/08/2011	None	7	Field Record
Houghton Green Pool	SJ6193	3	30/05/2011	None	15	Field Record
Houghton Green Pool	SJ6193	3	28/08/2011	None	12	Field Record
Houghton Green Pool	SJ6193	3	08/09/2011	None	Present	Field Record
Houghton Green Pool	SJ6193	3	07/09/2011	None	30	Field Record
Radley Plantation	SJ6193	3	29/08/2011	None	29	Field Record
Houghton Green Pool	SJ6193	3	19/08/2011	None	20	Field Record
Houghton Green Pool	SJ6193	3	09/09/2011	None	12	Field Record
Houghton Green Pool	SJ6193	3	14/09/2011	None	4	Field Record
Houghton Green Pool	SJ6193	3	11/09/2011	None	60	Field Record
Houghton Green Pool	SJ6193	3	13/09/2011	None	11	Field Record
Houghton Green Pool	SJ6193	3	31/08/2011	None	22	Field Record
Houghton Green Pool	SJ6193	3	31/07/2011	None	51	Field Record
	SJ6192	2	21/09/2012	None	145	Field Record
	SJ6192	2	16/08/2012	None	10	Field Record

	SJ6192	2	22/09/2012	None	Present	Field Record
	SJ6192	2	26/06/2012	None	10	Field Record
	SJ6192	2	24/04/2012	None	Present	Field Record
Croft, Lady Lane	SJ639936	39	18/04/2013	Adult	1	Field Record
Croft, Fields by Lady Lane	SJ640941	48	29/04/2013	Adult	Frequent	Field Record
Croft	SJ629929	19	22/04/2012	Adult	1	Field Record
	SJ622928	7	23/04/2012	None	6	Field Record
	SJ622928	7	16/04/2012	None	55	Field Record
	SJ622928	7	12/04/2012	None	3	Field Record
	SJ622928	7	11/09/2012	None	34	Field Record
Croft	SJ639938	41	04/08/2012	Adult	5	Field Record
	SJ6192	2	23/04/2012	None	1	Field Record
Eaves Farm	SJ640933	43	18/09/2011	Adult	1	Field Record
Croft, Lady Lane	SJ640937	44	25/04/2014	Adult	3	Field Record
	SJ629929	19	16/07/2011	Adult	1	Field Record

Reed Bunting (Emberiza schoeniclus) (2,3,7)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ622928	7	09/05/2012	None	2	Field Record
Houghton Green Pool	SJ6193	3	30/05/2011	None	2	Field Record
Arbury	SJ6193	3	05/06/2011	None	3	Field Record
Houghton Green Pool	SJ6193	3	14/09/2011	None	1	Field Record
Winwick	SJ6192	2	25/04/2012	None	1	Field Record
	SJ6192	2	23/04/2012	None	4	Field Record
Winwick	SJ6192	2	27/04/2012	None	1	Field Record
Winwick	SJ6192	2	26/04/2012	None	2	Field Record
	SJ6192	2	26/06/2012	None	4	Field Record
	SJ6192	2	24/04/2012	None	1	Field Record
	SJ622928	7	26/06/2012	None	3	Field Record

Sand Martin (Riparia riparia) (3,6,7)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ622928	7	19/05/2012	None	18	Field Record

	SJ622928	7	14/05/2012	None	34	Field Record
	SJ622928	7	03/05/2012	None	30	Field Record
	SJ622928	7	02/05/2012	None	18	Field Record
	SJ622928	7	21/04/2012	None	6	Field Record
Houghton Green Pool	SJ6193	3	05/04/2011	None	30	Field Record
Houghton Green Pool	SJ6193	3	07/09/2011	None	5	Field Record
	SJ622928	7	25/04/2012	None	35	Field Record
	SJ622928	7	30/06/2012	Adult	Several	Field Record
	SJ622928	7	12/04/2012	None	8	Field Record
	SJ622928	7	11/04/2012	None	30	Field Record
	SJ622928	7	04/04/2012	None	4	Field Record
	SJ622928	7	15/04/2012	None	4	Field Record
Houghton Green PS, Warrington	SJ622927	6	11/05/2010	None	6+	Field Record

Willow Warbler (Phylloscopus trochilus) (2,3,7)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ622928	7	09/05/2012	None	1	Field Record
Houghton Green Pool	SJ6193	3	30/05/2011	None	2	Field Record
Arbury	SJ6193	3	03/08/2011	None	1	Field Record
Winwick	SJ6192	2	26/04/2012	None	1	Field Record
	SJ6192	2	24/04/2012	None	2	Field Record

Swift (Apus apus) (2,3,6,7,28)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ622928	7	14/05/2012	None	80	Field Record
	SJ622928	7	02/05/2012	None	50	Field Record
	SJ622928	7	25/04/2012	None	Present	Field Record
Houghton Green Pool	SJ6193	3	30/05/2011	None	141	Field Record
Houghton Green Pool	SJ6193	3	19/08/2011	None	2	Field Record
Houghton Green Pool	SJ6193	3	03/08/2011	None	20	Field Record
Houghton Green Pool	SJ6193	3	31/07/2011	None	64	Field Record

	SJ6192	2	26/06/2012	None	40	Field Record
	SJ622927	6	08/06/2009	Adult	30	Field Record
	SJ622928	7	03/05/2012	None	150	Field Record
	SJ622928	7	19/05/2012	None	95	Field Record
Over Eaves Brow Rd	SJ635933	28	01/06/2011	Adult	3	Field Record

FLOWERING PLANT

Map

Indian Balsam (Impatiens glandulifera) (1,2,5)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
At North end under wires	SJ636935	5	03/10/2012	Flowering	Small Patch	Field Record
Culcheth, Glazebury & Croft - CP, M6 slip road embankment	SJ626927	1	29/09/2012	Flowering	Occasional	Field Record
M6 bridge embankment	SJ627927	2	01/08/2009	Flowering	Abundant	Field Record

Large-flowered Hemp-nettle (Galeopsis speciosa) (6)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Culcheth, Glazebury & Croft - CP, Battlefied	SJ637935	6	17/08/2013	Flowering	Frequent	Field Record

Montbretia (Crocosmia pottsii x aurea = C. x crocosmiiflora) (7)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Culcheth Linear Park	SJ6494	7	24/01/2009	None	Present	Field Record

Himalayan Cotoneaster (Cotoneaster simonsii) (3,4)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ635935	4	19/07/2010	Fruiting	Rare	Field Record
Garden, Wadeson Way	SJ635933	3	13/06/2009	Flowering	Frequent	Field Record

Canadian Goldenrod (Solidago canadensis) (4)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ635935	4	19/07/2010	None	Occasional	Field Record
	SJ635935	4	19/07/2010	Flowering	Locally Dominant	Field Record

Heath Dog-violet (Viola canina) (5)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ636935	5	26/04/2009	Flowering	Several Clumps	Field Record
	SJ636935	5	26/04/2009	Flowering	Several Clumps	Field Record

Wall Cotoneaster (Cotoneaster horizontalis) (3)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Croft, Garden, Wadeson Way	SJ635933	3	13/06/2009	Flowering	1	Field Record

INSECT - BUTTERFLY

Map

Large Tortoiseshell (Nymphalis polychloros) (1,2)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
	SJ6273693589	1	2007	None	Present	Field Record
	SJ6272693669	2	2007	None	Present	Field Record

Ringlet (Aphantopus hyperantus) (3)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Southworth Hall, Croft	SJ6293	3	26/06/2012	None	1	Field Record

INSECT - MOTH

Map

Cinnabar (Tyria jacobaeae) (1,2,3,4,6)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Croft, Battlefield	SJ637934	6	09/08/2014	Larvae	Present	Field Record
Croft, Garden, Wadeson Way	SJ637932	4	11/06/2015	Adult	1	Field Record
	SJ625927	3	16/07/2011	Larvae	Frequent	Field Record
Edge of Houghton Green Pool	SJ621930	1	03/08/2012	None	Present	Field Record
	SJ625925	2	15/08/2015	Larvae	1	Field Record

Dot Moth (Melanchra persicariae) (4,5)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Croft, Wadeson Way	SJ637932	4	03/07/2014	Adult	1	Field Record
Croft, Wadeson Way, in house	SJ637933	5	09/07/2011	Adult	1	Field Record

INSECT - TRUE FLY (DIPTERA)

Map

Keroplatus testaceus (Keroplatus testaceus) (1,2)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Croft, Wadeson Way	SJ637932	1	18/08/2015	Adult Male	1	Field Record
Croft, Wadeson Way - garden	SJ637933	2	01/09/2012	Adult Male	1	Field Record

REPTILE

Map

Common Lizard (Zootoca vivipara) (1,2)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
M6 Junction 21a	SJ619933	1	14/05/2008-26/09/2008	None	Present	Field Record
M62 j11-12 (westbound)	SJ640930	2	14/05/2008-26/09/2008	None	1	Field Record

TERRESTRIAL MAMMAL

Map

Brown Hare (Lepus europaeus) (5,7,9,12,15,18)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Culcheth, Glazebury & Croft - CP, Kenyon	SJ636956	7	15/07/2012	Adult	2	Field Record
Culcheth, Glazebury & Croft - CP	SJ6351895532	5	2007	None	1	Field Record
Croft, Risley	SJ648936	18	09/03/2006	Adult	1	Field Record
Culcheth, Glazebury & Croft - CP, Field opposite Croft Church	SJ639935	12	08/04/2011	Adult	1	Field Record
Croft, Lady Lane	SJ640940	15	01/07/2014	Juvenile	6	Field Record
	SJ637937	9	29/03/2009	Adult	1	Field Record

Eurasian Badger (Meles meles) (1,2,4)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Culcheth, Glazebury & Croft - CP, Off A579 (In hedge line that borders the Quarry)	SJ621941	2	10/04/2013	None	Present	Badger Sett (Active)
A579	SJ61829455	1	10/06/2015	None	1	Dead On Road
slip road off M62 east to M6 South at Junction 10	SJ63549238	4	30/04/2015	None	1	Dead On Road

European Water Vole (Arvicola amphibius) (17)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Partridge Lakes	SJ644944	17	22/09/2008	None	Present	Field Record
Partridge Lakes	SJ644944	17	21/09/2009	None	Present	Burrow, Nesthole

Eastern Grey Squirrel (Sciurus carolinensis) (6)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Croft, Mustard Lane	SJ636942	6	03/12/2013	Adult	1	Dead On Road

Pipistrelle (Pipistrellus pipistrellus) (3)

RECORD

Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type

5 betsyfield drive croft	SJ63479343	3	14/06/2011	None	1	Aural Bat Detector

West European Hedgehog (Erinaceus europaeus) (8,10,11,13,14,16)

RECORD

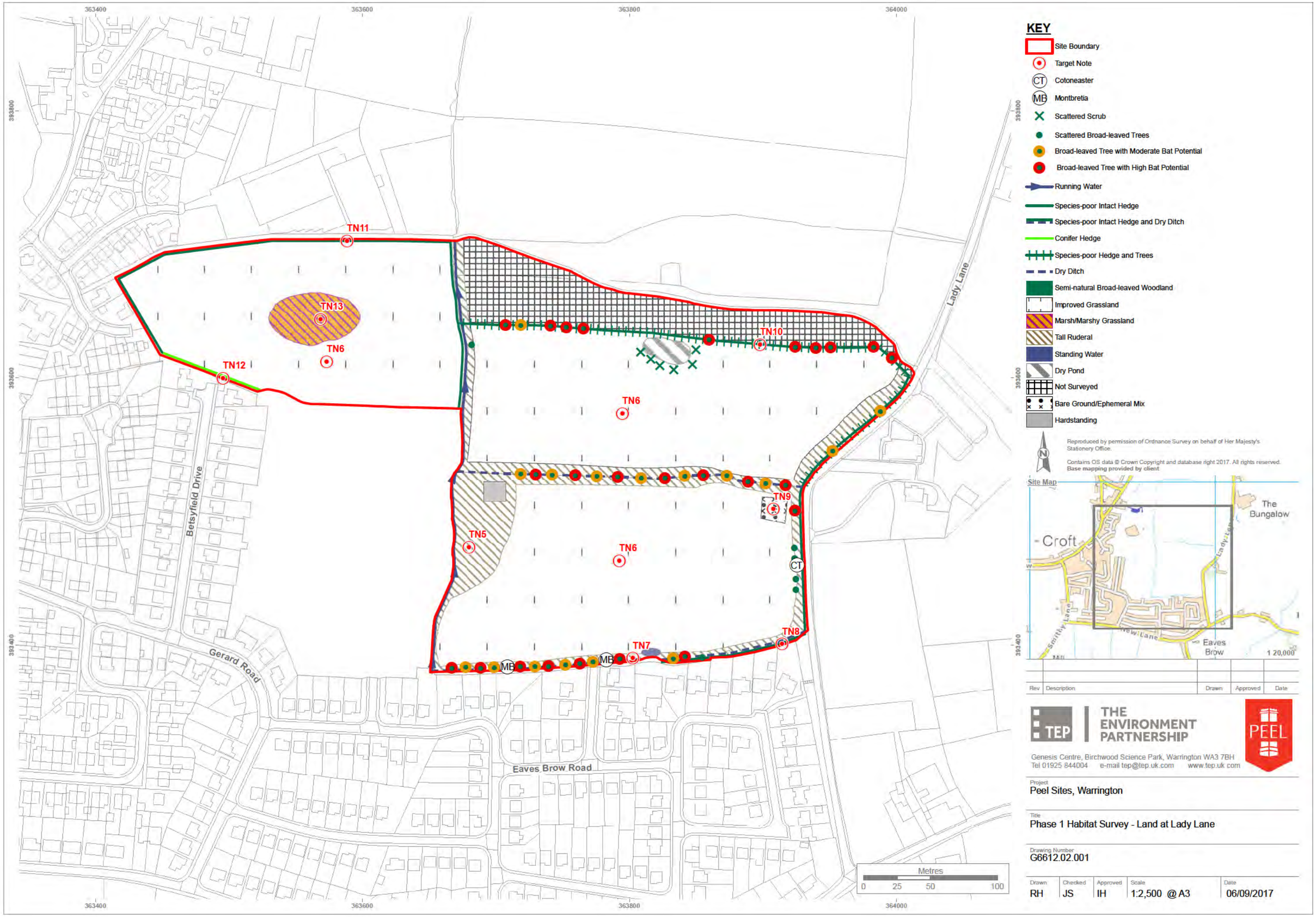
Location	Grid ref.	Grid ID	Date	Sex/Stage	Abundance	Record type
Croft, Lady Lane, by steps	SJ639934	11	04/08/2012	Adult	1	Dead On Road
Croft, Near HMS Gosling	SJ641940	16	04/08/2012	Juvenile	1	Dead On Road
Croft, Lady Lane	SJ639933	10	17/02/2012	Dead Adult	1	Field Record
Culcheth, Glazebury & Croft - CP, Wadeson Way, Garden	SJ637933	8	23/09/2011	Juvenile Dead	1	Field Record
Croft, Near Croft church	SJ640935	14	18/07/2009	Adult	1	Dead On Road
Croft	SJ640932	13	06/04/2014	Adult	1	Dead On Road

DRAWINGS

G6612.02.001 Phase 1 Habitat Survey Plan

G6296.02.001 - Ecological Constraints Plan

Illustrative Masterplan



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Rev	Description	Drawn	Approved	Date

TEP | THE ENVIRONMENT PARTNERSHIP

Genesis Centre, Birchwood Science Park, Warrington WA3 7BH
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PEEL

Project
Peel Sites, Warrington

Title
Phase 1 Habitat Survey - Land at Lady Lane

Drawing Number
G6612.02.001

Drawn	Checked	Approved	Scale	Date
RH	JS	IH	1:2,500 @ A3	06/09/2017

KEY

- Site Boundary
- Area A: High Constraint
- Area B: Moderate Constraint
- Area C: Low Constraint

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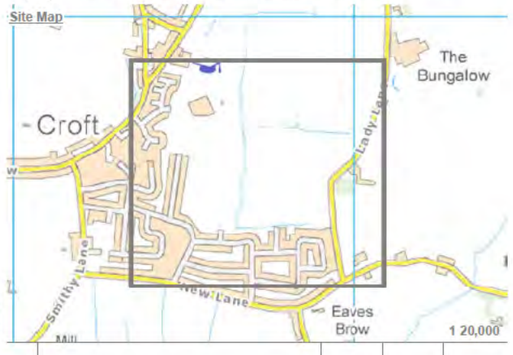
Site Map



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PEEL

Project
Peel Sites, Warrington

Title
Ecological Constraints Plan

Drawing Number
G6612.02.002

Drawn	Checked	Approved	Scale	Date
NG	JS	IH	1:2,500 @ A3	06/09/2017

LANDSCAPE ARCHITECTURE
ENVIRONMENTAL PLANNING
MASTERPLANNING
URBAN DESIGN

RANDALL THORP

Canada House, 3 Chepstow Street, Manchester M1 5FW
0161 228 7721 mail@randallthorp.co.uk www.randallthorp.co.uk

KEY:

- Site boundary
- Existing ootpath
- Proposed footpath
- Existing building
- Existing egetation within si e
- Proposed SUDS feature
- Proposed woodland plantin
- Green infrastructure
- Proposed development area
- Potential ehicular access points
- Proposed primary road
- Proposed secondary road

Area Measures:
Total site area: 10.35 ha
Infrastructure roads: 0.7 ha
Green infrastructure: 2.9 ha
Total developable area : 6.75 ha

This site could deliver between 200 (@30 per ha) and 235 (@35 per ha) units.

PEEL

Land off Lady Lane, C o

Conceptual Masterplan

Drwg No: 630CA-04B
Drawn by: AH
Rev by: AH
QM Status: Checked
Scale: 1: 5000 @ A3

Date: 12.09.17
Checker: SR
Rev checker: SR
Product Status: For Issue

Land at Lady Lane, Croft

Development Prospectus

Warrington Local Plan Review

September 2017

Client
Peel Holdings (Management) Ltd

Our reference
PEEM3056

Date of issue
September 2017

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Contents

1. Introduction

This Development Prospectus has been prepared on behalf of Peel Holdings (Management) Ltd in respect of land east of Lady Lane, Croft. It sets out a vision and masterplan for the sustainable development of the site and its allocation through the emerging Warrington Local Plan. It also presents an assessment of the site's suitability for development as proposed.

This prospectus is submitted in response to Warrington Council's Preferred Development Option (PDO) consultation on the Local Plan. It should be read in conjunction with the report entitled Representations to Warrington Local Plan (Regulation 18 consultation) ('main representations') submitted by Peel and dated September 2017.

This prospectus builds on the document entitled 'Site Prospectus' submitted in December 2016 which accompanied a 'Call for Sites' submission to the Local Plan.

Context

This prospectus is presented in the context of an acknowledged requirement that Warrington will need to identify a suitable and sustainable portfolio of sites, including existing Green Belt landto meet its future housing needs over the period 2017 to 2037. Peel agrees with this conclusion as set out in its main representations report. The main representation report provides general comments on the PDO document published by the Council in July 2017 and the associated evidence base. It considers the following:

- The proposed strategic housing requirement;
- The adequacy of the identified non-Green Belt land supply to deliver this requirement and the scale of Green Belt release needed to meet the housing requirement;
- The future spatial distribution of residential development and the type and range of development sites needed to meet the Borough's development needs.

Land at Lady Lane, Croft

The site is located to the immediate north of the settlement of Croft, located within the northern part of the Borough, close to the intersection of the M6 and M62 motorways. The site is well related to the settlement Croft with its southern boundary adjoining existing residential properties, which currently form the settlement boundary in this location, to the south. The site extends to 10.35 ha in total and currently comprises a mix of agricultural land and woodland.

The site is presently designated as Green Belt land within the Warrington Unitary Development Plan (June 2005). Peel consider that the site would represent a sustainable location for residential development, capable of making a significant contribution to meeting the housing needs of Warrington over the emerging plan period. Peel therefore proposes that the site be released from the Green Belt and allocated for residential development through the Local Plan.

This prospectus demonstrates that the site represents a sustainable opportunity capable of accommodating a desirable and high quality residential development. It will make a positive contribution to the settlement of Croft by integrating into the existing settlement retaining and enhancing important features within and surrounding the site.

Having regard to this context, the prospectus goes on to consider how the site could be developed in a manner which ensures the role and integrity of the wider Green Belt is maintained and endures over the long term, consistent with the requirements of the National Planning Policy Framework ('the Framework').

The remainder of the document is structured as follows:

- Overview of the relevant strategic and planning policy context;
- Description of the site and its context;
- An overview of the opportunities and constraints presented by the site;
- An assessment of the contribution which the site makes to the Green Belt;
- Initial proposals, including the site analysis and design process that has informed them;
- An assessment of site deliverability;
- Summary of the benefits that development will secure;
- An assessment of the proposals, to demonstrate that development of the site is sustainable and achievable;
- Summary and conclusions.

2. Strategic Context and Development Needs

National Planning Policy: National Planning Policy Framework

Sustainable development is at the heart of the National Planning Policy Framework ('the Framework'). In planning for Sustainable Development, Local Planning Authorities should meet objectively assessed needs (OANs), including for housing and affordable housing, with sufficient flexibility to adapt to rapid change.

LPAs should maintain a deliverable five-year supply of housing land and identify a supply of specific, developable sites or broad locations for growth beyond this timescale.

Green Belt boundaries may be altered (but only in exceptional circumstances) through the preparation or review of Local Plans. Consideration must be given to the permanence of the Green Belt when drawing the boundaries, avoiding the need for further alterations at the end of the plan period. Boundaries should, *inter alia*, reflect the Local Plan strategy for meeting sustainable development requirements and should reflect physical features that are *'readily recognisable and likely to be permanent'*.

Warrington Local Plan

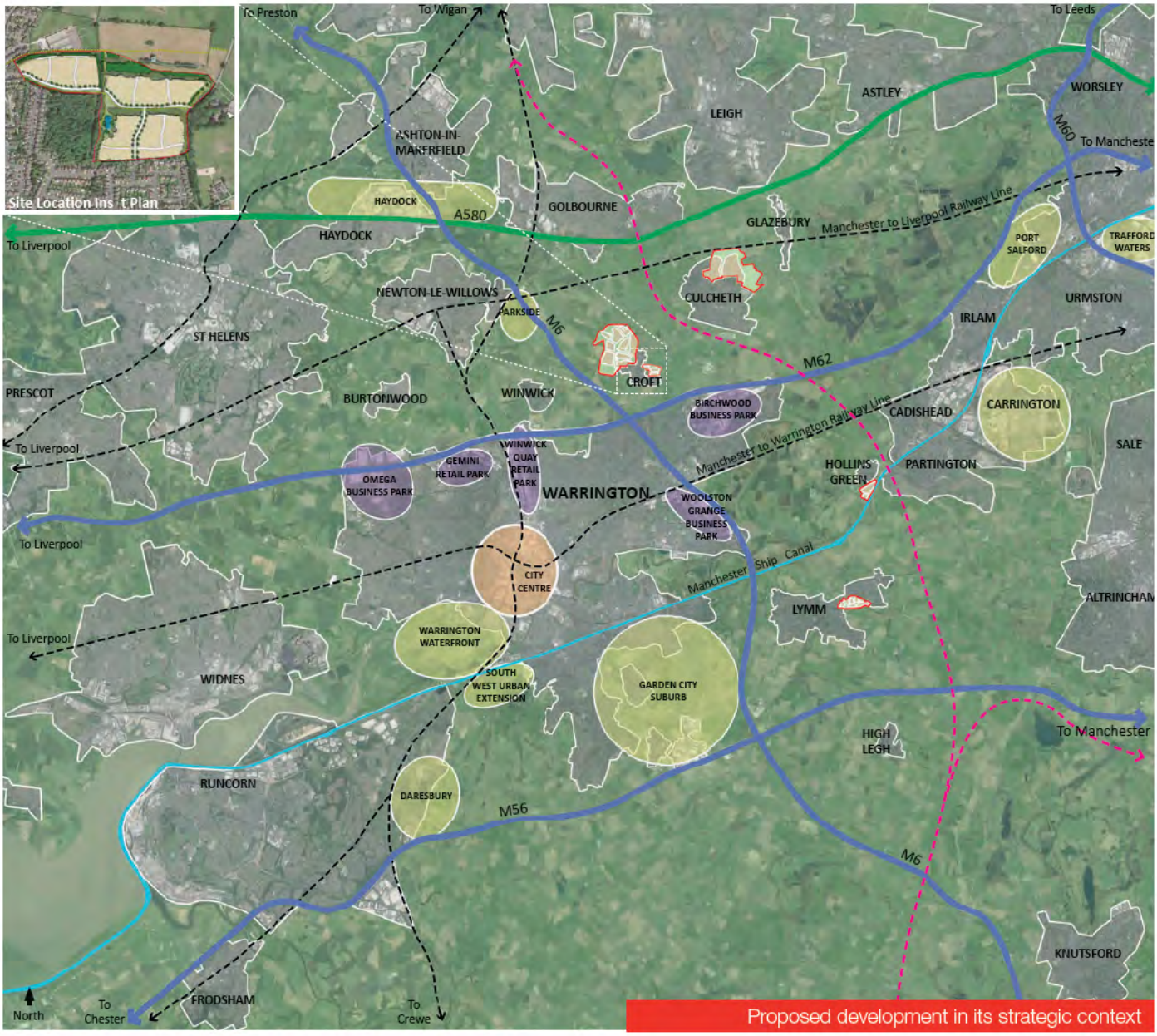
The Warrington Local Plan consultation invites comments on the preferred development option for the Local Plan, the published evidence base and the Council's initial conclusions on development needs to be met over the proposed plan period.

The WLP recognises the need for Green Belt release in order to accommodate the borough's housing and economic requirements. The main representations submitted on behalf of Peel deal with the questions of the extent and location of Green Belt release.

Peel welcomes the progression of the Warrington Local Plan (WLP). The realisation of the Warrington New City aspiration sits at the heart of this and underpins the spatial strategy and growth ambitions set out. Warrington New City is about the town realising its full potential; its transformation from a New Town into a New City at the heart of the Northern Powerhouse, capitalising on its strategic position between Manchester and Liverpool and at the intersection of four major economic growth and development corridors of national importance:

- The M62 Corridor;
- The M56 / A55 Corridor;
- The Manchester Ship Canal Corridor; and
- The M6 / HS2 Corridor

The figure to the right shows the proposed development site at Lady Lane, Croft in this strategic context.



Proposed development in its strategic context

Securing a sustainable future for the settlement of Warrington

Evidence prepared by Turley (see main planning representations) sets out a case for supporting an increased level of growth within the Outlying Settlements of the Borough to underpin their long term sustainability as places to live and supporting the realisation of New City providing the quality and choice of housing which Warrington and its settlements need to thrive.

The main planning representations also outline the opportunity which exists to achieve a more sustainable relationship between housing and employment through further consideration of the Borough's economic geography. Whilst there is a long term aspiration to transform the town centre to be the economic driver of Warrington, the Local Plan may need to better reflect the reality of a more dispersed economic footprint and the influence of areas outside of Warrington itself (e.g. on commuting patterns) in determining the most sustainable location for future residential growth. In this regard, it is noted that some of the Borough's key economic drivers, which have a significant bearing on travel patterns, are located in the north of Warrington (e.g. Omega, Birchwood Park and strategic road connections within Liverpool, Manchester and employment locations beyond Warrington, such as Trafford Park. An increased focus on residential development in the north of the Borough would realise significant sustainability benefits in this regard through a more effective co-location of housing and employment and strategic transport connections, reducing travel and congestion on the local and strategic road network in and around Warrington. A sustainable extension to Croft would clearly support that having regard to its strategic location in the Borough.

More generally, Peel's main planning representations have set out a case for a reconsideration of the level of growth which the Outlying Settlements should accommodate to secure a sustainable future for these locations. The evidence presented as part of this proposition is summarised below:

A changing local demographic profile

Census data indicates a changing age profile in many of the outlying settlements. With the exception of Lymm (which has accommodated new housing), the outlying settlements have accommodated only 139 additional economically active residents over the decade to 2011. Northern settlements in particular have largely remained static in this regard, with the settlements of Croft, Culcheth and Burtonwood all showing a decline in the size of their economically active population. This changing age profile will have significant implications for the vibrancy of individual settlements, the ability to sustain employment with a local labour force, and the vitality of social infrastructure.

Housing under Delivery

Over the past decade, the outlying settlements have accommodated only 5% of new build sales in the borough. This data highlights a declining contribution over this period. In 2007, outlying settlements accommodated around one in ten (11%) new build sales, falling to only 2% in 2016. This suggests an increasingly imbalanced development profile in the borough. Planning Practice Guidance recognises that local imbalances between housing supply and demand can manifest in worsening market signals, such as increasing house prices or deterioration in the relationship between earnings and housing costs.

Affordability

In the outlying settlements, an average of £290,016 was paid for housing in the calendar year of 2016, which is some 55% higher than the average price paid elsewhere in the borough (£187,328) – primarily consisting of the Warrington urban area. High house prices can inhibit the formation of new households, force local residents to move elsewhere or generate an additional need for affordable housing, where households are unable to access market housing.

Economic Drivers

Consideration must also be given to the Borough's economic geography and the proposed spatial distribution of new housing. An increased focus on residential development in the north of the Borough would realise significant sustainability benefits through a more effective co-location of housing and employment and strategic transport connections in north of the Borough (e.g. Omega, Birchwood Park and strategic road connections within Liverpool, Manchester and employment locations beyond Warrington, such as Trafford Park and Parkside). This has the potential to reduce travel and congestion on the local and strategic road network in and around Warrington.

Local service provision

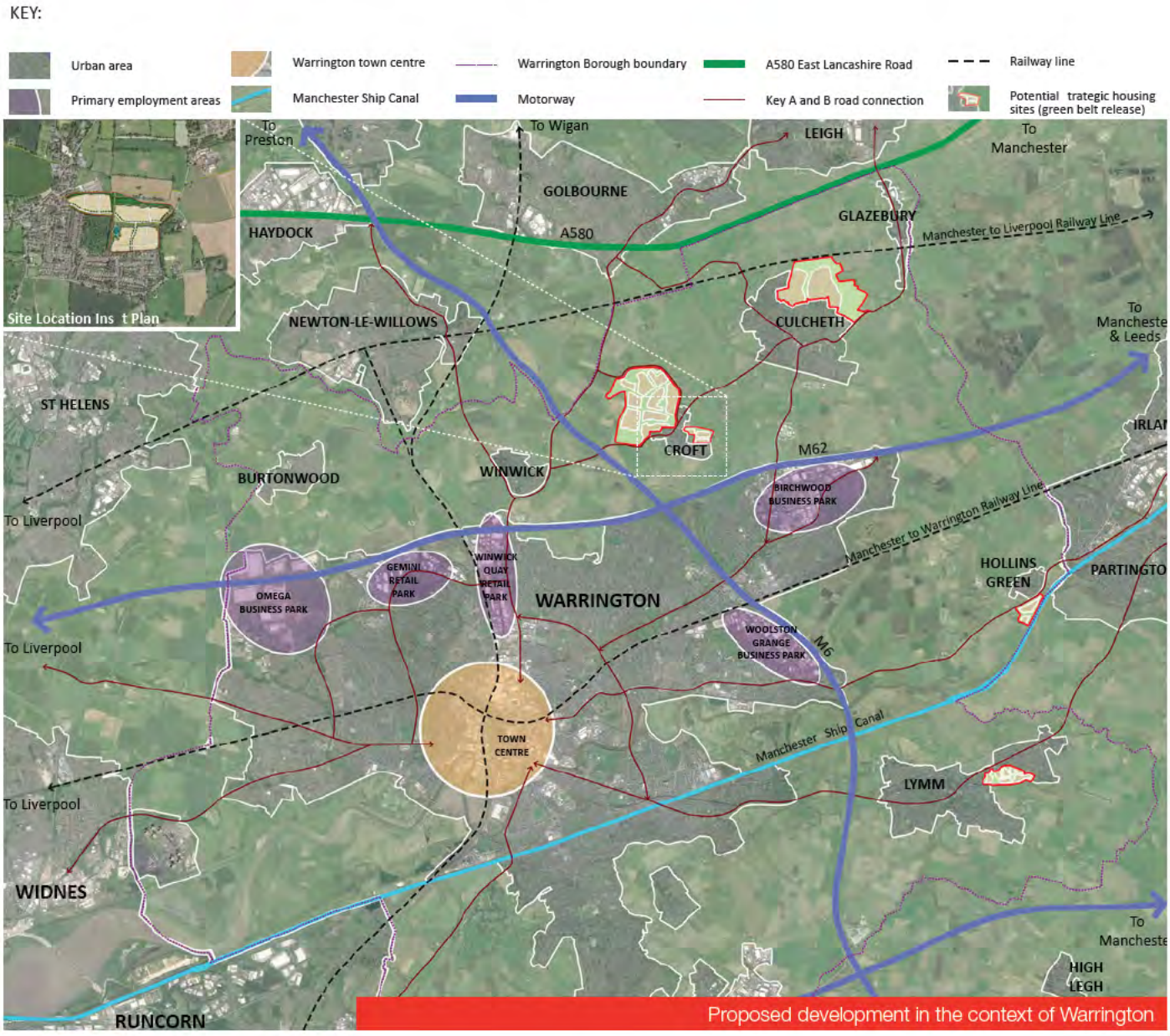
The growth of the outlying settlements is critical to ensuring the long term sustainability of service provision and securing the vitality and viability of local and neighbourhood centres through providing increased local spending capacity. This is critical to securing a sustainable future for all settlements.

Summary

The evidence shows that in the outlying settlements there is a significant level of locally derived housing need which is required to solve the challenges faced by the settlements.

Due to the absence of brownfield land within the outlying settlements, an additional supply of land is required on the edge of these settlements through the targeted release of Green Belt sites. The local housing need in these settlements reinforces the 'exceptional circumstances' to justify a review of the Green Belt around these settlements.

The site presented in this prospectus can meet a notable proportion of local needs in the outlying settlements. The subsequent sections of this prospectus show that the removal of this site from the Green Belt and its allocation for residential development is both suitable and deliverable.



Proposed development in the context of Warrington

3. Local Context and Site Sustainability

Warrington Borough is a Unitary Authority adjoining the city regions of Liverpool and Manchester. It is well connected to both by the strategic transport network and is therefore well placed to capitalise on the growth ambitions for these areas and the wider North, as articulated through the Northern Powerhouse ambition. It has its own plans and aspirations for growth.

The main town in the Borough is Warrington and its surrounding urban area. Croft is an established settlement located close (less than 1km) to the north-east of the urban area of Warrington. It lies north-east of the interchange of the M6 and M62 Motorways (known as the Croft Interchange) and close to Birchwood Park, one of the borough's flagship employment locations, recognised as being of 'sub-regional importance' in the adopted Local Plan Core Strategy.

Croft has a population of c.3,000 and a range of shops, services and facilities. These are focussed on the local centre. The range of facilities is considered further below.

Buses serve Croft, on a route between Leigh via Culcheth and Warrington via Winwick. There are also services to Birchwood Park.

The Site

The site encompasses an area of land adjoining the north-eastern boundary of Croft. The site comprises three fields currently used for agricultural purposes, separated by well-established hedgerows. An area of woodland is located to the south west of the site.

Surroundings

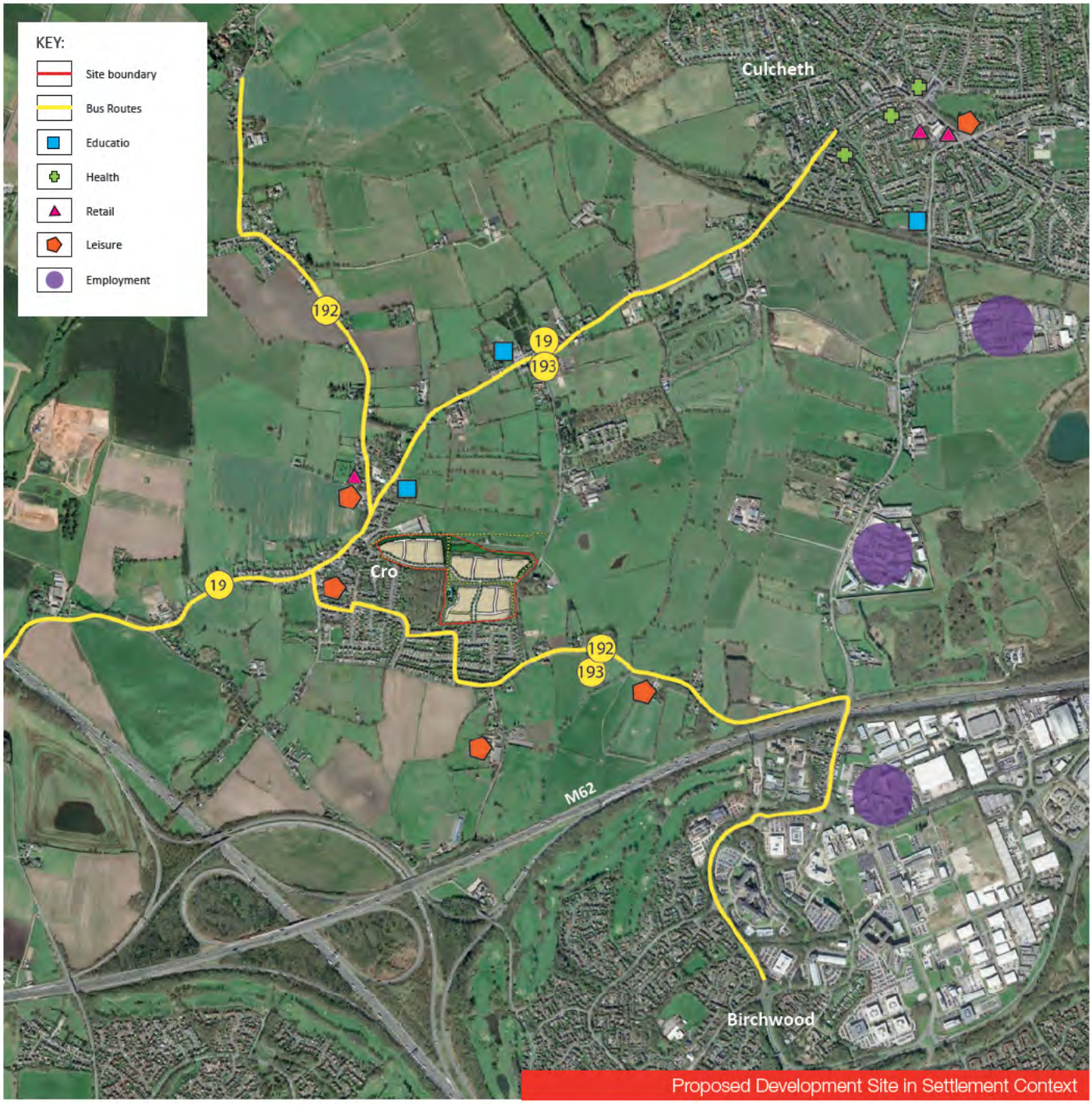
The site is bordered by existing housing to the south and west and Lady Lane runs along the eastern boundary. A hedgerow with mature hedgerow trees marks the northern site boundary.

The proposed location is well related to existing facilities serving the established local residential area, including two primary schools, a convenience store, public transport routes, a public house, youth centre and a range of recreational facilities.

The site lies within an area described in the Warrington Landscape Character Assessment (2007) as 'a series of small, linear fields closely associated with the village and contrasts markedly with the larger, and more rectangular, field patterns of the surrounding land'.

An area of woodland to the south-west of the site is designated as a 'Local Wildlife Site'.

The Grade II listed Christ Church is situated to the east of the site, off Lady Lane.

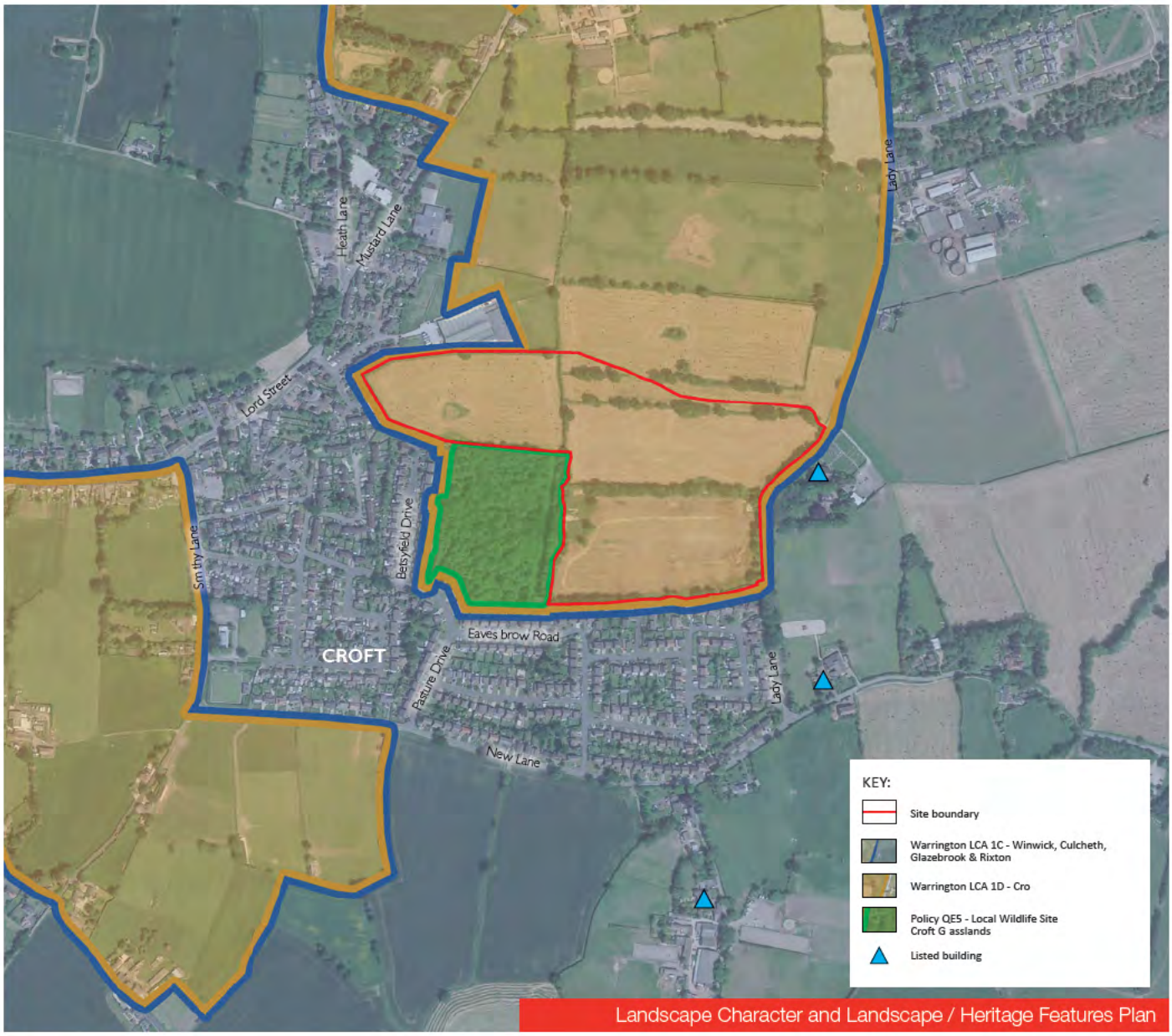


Proposed Development Site in Settlement Context

4. Opportunities and Constraints

The following plans have been prepared to show the opportunities and constraints relevant to development of the site. They have been informed by site visits and by reference to existing data such as the DEFRA Magic Mapping service and evidence base documents such as the Warrington Landscape Character Assessment 2007 and survey work presented in the technical appendix to this prospectus.

Site Features Plan



Landscape Character and Landscape / Heritage Features Plan

5. Green Belt Assessment

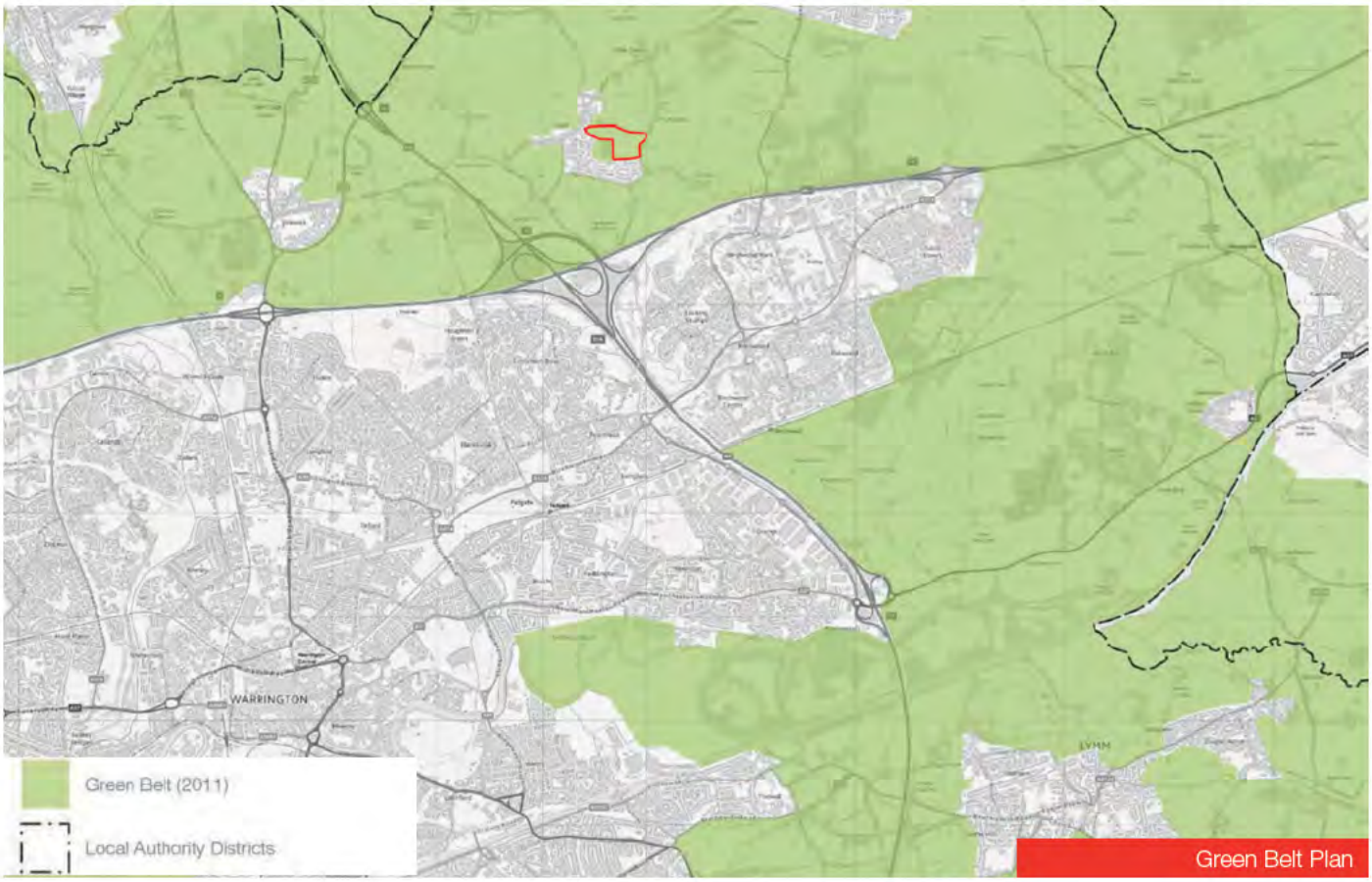
Croft is inset from the Green Belt, with the existing settlement boundaries defined by the extent of built development.

The Warrington Green Belt Assessment considers the site as part of a much larger parcel of land (ref. CR4). It makes an assessment of the site's Green Belt contribution based on a methodology which Peel consider to contain a number of flaws. The Green Belt review concludes that this parcel makes a moderate contribution to the Green Belt. Peel's December 2016 representations provide a number of comments on the conclusions reached with respect to the contribution this site makes to the Green Belt. Peel's submission demonstrates that the site forms part of a wider parcel of land which would, if redrawn along genuinely durable boundaries as is the expressed intention of the review, make an overall weak contribution to the Green Belt.

In considering the release of any site from the Green Belt and its allocation for development, alongside understanding the general Green Belt sensitivity of the site, it is necessary to have regard to the likely form and layout of the proposed development. This will enable a full understanding of impact to be established.

Of relevance is in this regard is the following:

- The form of development envisaged for this site has been informed by a detailed analysis of the site and its context, including its position – as part of the new proposed boundary of the settlement.
- The site has robust defensible boundaries which will be reinforced where appropriate, for example through the planting of woodland belt along the northern site boundary and features that serve to permanently contain the site.
- The draft masterplan incorporates areas of open space and that will be retained, thus limiting the extent to which encroachment will occur.



Green Belt Plan

6. The Proposals

The Land at Lady Lane site has the essential components of a high quality place. It has a strong landscape framework and can form a logical and sustainable expansion of the existing community.

The conceptual masterplan takes its cue from the existing landscape features both within and around the site; vegetation, landform, views, ecology, drainage and built form. The key opportunities of the site are explained through the following 'placemaking concept' steps.

1. Retain existing landscape features

- Existing trees, hedgerows and ditches within the site will be preserved and set within the publicly accessible greenspaces where possible.

2. Greenspace network

- Create a network of greenspaces and wildlife corridors throughout the site which integrate into the surrounding area.

3. Enhance connections

- Create a network of footpath routes that enhance the site as a recreational resource and link to the existing pedestrian routes in the surrounding area.
- The western section o f the existing PRoW to the north of the site would be set within a wide green corridor which preserves the existing trees and hedgerows and creates an attractive green route for pedestrians.

4. Development parcels

- Create development blocks where the housing is orientated to maximise attractive views over the surrounding countryside and internal open spaces - providing natural surveillance and an attractive outlook for residents.
- Where existing housing backs onto the site boundary, the proposed housing would also back onto the site boundary to create secure development blocks.

The Masterplan

The proposed development can deliver over 200 high quality dwellings set within a strong landscape framework and which achieves a successful intergration with the existing settlement.

KEY:

- Site boundary
- Existing ootpath
- Proposed footpath
- Existing building
- Existing egetation within si e
- Proposed SUDS feature
- Proposed woodland plantin
- Green infrastructure
- Proposed development area
- Potential ehicular access points
- Proposed primary road
- Proposed secondary road

7. Suitability

This section demonstrates that the site is suitable to accommodate residential development.

The following suite of investigations have been undertaken to inform this assessment:

- Ecological Appraisal (The Environmental Partnership)
- Preliminary Drainage Strategy (Shepherd Gilmour)
- Flood Risk Advice (Shepherd Gilmour)
- Landscape Sensitivity Assessment (Randall Thorp)
- Health and Safety Check (Shepherd Gilmour)
- Transport Appraisal (i-Transport)
- Utilities Infrastructure Assessment (Shepherd Gilmour)

These are provided in a separate technical appendix to this prospectus. They are summarised below.

Environment

Ecology	An initial high level Ecological Appraisal has been carried out to identify the ecological potential constraints and opportunities and the development potential of the site. The site is located in close proximity to two Local Wildlife Sites (LWS). The first of these is Croft Grasslands which is located adjacent to the west of the site and appears to have succeeded from grassland to become fully wooded over. There is no significant areas of grassland remaining on the site however the local wildlife site should be appropriately protected from harm during development. The second local wildlife site is Houghton Green Pool. This is located 1.2km south west of site. It is separated by both extensive residential development and the M6 motorway. There will be no impacts on this local wildlife site from development. Owing to the distances (>1km) of other statutory or non-statutory nature conservation designations in the wider area, and taking account of the residential nature of the development proposals, it is very unlikely the development would result in adverse effects here. The majority of the site has been identified as being of low ecological constraint, consisting of improved grassland, hardstanding, and ephemeral vegetation, and offer little opportunity to local wildlife. The Ecological Appraisal has identified some features of high and medium ecological value, such as scattered mature trees and hedgerows. The masterplan will retain those features of highest ecological value and will provide buffers to ensure such habitats continue to function as wildlife corridors for a range of species. Where possible the masterplan will retain less sensitive habitats, but if removal is unavoidable, mitigation or compensate will be provided. In terms of protected species, the site has potential to provide habitats for small numbers of nesting birds, bat roosts and habitat for foraging and commuting bats, standing water on site and nearby ponds that could support populations of great crested newts, and habitat for badgers, and brown hare.. These species can be accommodated by the adoption of relatively simple design principles which will be informed by future detailed survey work. There are opportunities to increase the biodiversity of the site through tree and hedgerow planting, drainage design, and provision of new habitat. The retained areas of habitat will also maintained and enhanced to further provide opportunities to both wildlife and the local community. The development can also secure the removal of non-native invasive species (such as Himalayan balsam) recorded within the site boundary which will enhance existing green corridors by removing species that exclude native vegetation. **There are no ecological reasons to prevent the site being allocated for residential development.**

Flood Risk	A desktop flood risk assessment has been carried out. The site is located within Flood Zone 1. The site is therefore within an area considered to have a low risk of flooding and is sequentially preferable to areas identified with a higher risk of flooding in the Borough. **There is no flood risk reason to prevent the site being allocated for residential development.**
Landscape	An appraisal has been carried out to evaluate the landscape character and assess the value and sensitivity of an established Study Area which includes the site. Following this, the appraisal uses the outcome of the sensitivity assessment to assess the sensitivity of the site and to advise on its development potential.. The appraisal states that the landscape surrounding Croft is a tapestry of large scale, visually open arable farmland with a lack of hedgerow boundaries coupled with small scale historic fields, which are more visually enclosed and closely associated with the settlement of Croft. The landscape within the study area is not designated nationally or regionally for its landscape value. The site is situated at the north eastern edge of Croft and is currently in use as arable farmland with a small scale, rectilinear field pattern. A locally designated Local Wildlife Site “Croft Grasslands” is located adjacent to the south-western corner of the site. This land is subject to representations by others for allocation as residential development under the new Warrington Local Plan. The combined southern and western boundaries of the site and the Local Wildlife Site are well contained by the existing settlement of Croft. The eastern boundary of the site is defined by Lady Lane and the northern boundary defined partially by existing field boundaries. The field pattern, existing vegetation and watercourse are the more sensitive elements within the site due to their historic value, scenic quality and conservation interests. The relationship of the proposed development with the Grade II listed Christ’s Church is also an important consideration. The proposed masterplan would make a contribution to the landscape by providing a housing development within a well landscaped setting, with existing landscape features preserved within the public open space network in the central parts of the site. There would be hedgerow, woodland and tree planting along the northern boundary of the site and within the green corridor alongside Lady Lane. The appraisal concludes that there is no reason why a well-designed development that preserves the existing landscape features within a green infrastructure network, and responds sensitively to the setting of the existing Grade II listed Christ’s Church adjacent to the eastern boundary of the site would have any significant effects on the character of the wider landscape of the Study Area. **There is no landscape reason to prevent the site being allocated for residential development.**
Trees and Hedgerows	The development can be designed to retain the boundary hedges and trees and where necessary supplement them with new tree planting. Trees can be retained within open space and footpath links. Development of the site will ensure that the trees are managed for the future and that they are retained as long term landscape features. **There are no arboricultural reasons to prevent the site being allocated for residential development.**
Land Quality	The site has been in agricultural use. The land has not been put to any specific uses that might pose insurmountable contamination risk in its current state, or if it were to be developed. **There is no contamination reason to prevent the site being allocated for residential development.**
Health and Safety	A preliminary consultation with the Health and Safety Executive indicated that there are no major hazard sites or major accident hazard pipeline in the area. **There is no health and safety reason to prevent the site being allocated for residential development.**

Infrastructure

Highways	An initial transport appraisal has been carried out to identify the potential constraints and opportunities relating to highways and the development potential of the site. The site is well related to local facilities, including two primary schools, local convenience stores, and two public houses. These will all be within an easy walk or cycle ride of the proposed development and will therefore encourage active travel. Services further afield in Culcheth, including the secondary school and health facilities, can be reached by existing bus services which are within a short walking distance of the site. The appraisal confirms that the proposed access points to the site are deliverable and evidence has been provided to demonstrate that they will operate without giving rise to unacceptable residual highways effects on the local network. Development in any location in the Borough will increase traffic flows on the local road network surrounding it. Indications of traffic speeds in and around Croft show that traffic conditions could not be categorised as severe and the Council's own conclusion is that there is only a small amount of peak hour congestion. On this basis it is concluded that, in accordance with the NPPF, development should not be prevented on transport grounds as the residual cumulative impacts of development will not be severe. **There is no highways reason to prevent the site being allocated for residential development.**
Drainage and Sewerage	A preliminary drainage strategy has been prepared. This confirms that the site is greenfield and that any surface water is likely to discharge into local watercourses and / or the Manchester Ship Canal. The masterplan will be designed to limit surface water to the greenfield run-off rate, and attenuate surface water volumes on site, including an allowance for climate change. Attenuation will be provided either above ground (i.e. swales, ponds and detention basins) or below ground (i.e. oversized pipes or geocellular modules). By restricting discharge rates, the post-development discharge rate will mimic the existing conditions. United Utilities (UU) asset plans indicate a network of foul and surface water sewers located in close proximity to the site. It is likely that any foul drainage generated by the development will connect into the nearby combined sewer. Further consultation will be conducted with UU. **There is no drainage or sewerage reason to prevent the site being allocated for residential development.**
Utilities	An initial assessment of utilities in the area has identified that existing electricity, gas, water, and telecommunications connections are available in the surrounding area and the proposed development can connect to those without adversely impacting on the provision to the wider community. Some minor works will be necessary to deliver services to the site, however this would not be insurmountable or hinder the delivery of the development. **The provision of services will not constrain the development of the site.**

Suitability Conclusion

This technical assessment demonstrates that the site is not affected by any insurmountable constraints. The masterplan as presented is therefore fully deliverable.

8. Benefits

Site: Land off Lady Lane, Croft
Proposed development: 235 residential dwellings

Construction Phase[1]

£24.5 million
Estimated investment in the construction of the proposed development

45 gross direct
FTE (full time equivalent) jobs per annum of construction (5 years)

30 direct net additional
FTE jobs including 15 in Warrington

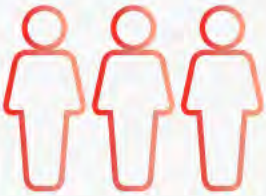
15 indirect/induced
FTE jobs, including 5 in Warrington

£12.0 million
Total GVA[2] economic output over a 5 year build period, including £5.5m in Warrington

Operational Phase[1]

£2.8 million
Uplift in annual retail expenditure

£1.6 million
Uplift in annual leisure expenditure



40 Jobs
Supporting retail and leisure related jobs annually

£1.1 million
Expenditure upon first occupation to make a 'house feel like home'

260
Working-age employed residents estimated to live on the new development

£6.2 million
Uplift in gross annual income from new employed residents

£350,000
Additional Council Tax revenue per annum for Warrington Borough Council

£2.4 million
Total New Homes Bonus payment to Warrington Borough Council

1 All impacts net additional

2 GVA (Gross Value Added) measure the value of output created (i.e. turnover) net of inputs used to produce a good or service (i.e. production of outputs). It provides a key measure of economic productivity. Put simply the GVA is the total of all revenue into businesses, which is used to fund wages, profits and taxes.

9. Sustainable and Achievable

New Homes for Croft

The site presents a sustainable and achievable development opportunity. It is capable of accommodating over 200 homes of mixed tenure (including affordable housing), size and type, with a focus on good quality family housing. It will make an important contribution to meeting Warrington's housing requirement and meeting the need for new homes in Croft whilst making a positive contribution to the long term sustainability of Croft and its local services and infrastructure.

The site has the potential to form an attractive and desirable addition to Croft which is integrated with it and respects its rural character and setting.

The concept masterplan provides a framework which responds to its context. It seeks to retain and enhance existing features, of the site and provide areas of open space. This includes reinforced boundary planting around the perimeter of the site (and particularly the northern boundary), retaining landscape features such as trees and hedgerows within the site, and providing attractive routes through the site which connect with the wider footpath network and allow access to the rest of the settlement and the surrounding countryside.

A Sustainable Opportunity

A sustainability checklist, based on the themes set out in the Warrington Local Plan Sustainability Appraisal is provided at Appendix 1. This demonstrates that the represents sustainable development, having regard to the economic, social and environmental dimensions of sustainability.

Delivery

Peel has a proven track record of promoting land to facilitate development and growth and working with house-builders (ranging from small to national) to ensure that important development is delivered.

An initial assessment of the site has identified that there are no environmental issues that would preclude delivery of the site. The site does not require the provision of significant or unusual infrastructure to enable it to be delivered. It is also situated in a strong market area, which experiences high demand for new homes. The site is therefore readily deliverable over the plan period.

10. Summary and Conclusions

This development prospectus sets out a vision and masterplan for the sustainable development of land at Lady Lane, Croft. It is submitted as part of Peel's representations to the Warrington Local Plan Preferred Development Option Consultation.

It demonstrates that the site represents a sustainable opportunity capable of accommodating a desirable and high quality residential development. It will make a positive contribution to the settlement of Croft by integrating into the existing settlement, retaining and enhancing important features within and surrounding the site and protecting and enhancing local service provision.

The concept masterplan presented within the document provides a framework which responds to its context. It seeks to retain and enhance existing features to provide a development which integrates with and enhances Croft.

The site presents a sustainable and achievable development opportunity. It is capable of accommodating over 200 homes (including affordable housing), with a focus on good quality family housing.

Appendix 1: Sustainability Checklist

(Based on sustainability themes set out in the Local Plan Sustainability Appraisal)

Economy and Regeneration	
Strengthen the local economy and ensure sustainable economic growth	The site will generate numerous temporary and permanent economic benefits as set out in this Site Prospectus.
Improve the education and skills of the population overall	The construction phase will provide an opportunity for skills and training to be offered to local residents.
Reduce poverty, deprivation and social exclusion and secure economic inclusion	The provision and supporting of jobs and the generation will contribute to achieving this objective.
Health and Wellbeing	
Improve physical and mental health and reduce health inequalities	The site will incorporate areas of open space and a network of walking / cycling routes (which allow access to the surrounding countryside). These facilities will contribute to physical and mental health wellbeing for future residents and others in Croft.
Reduce crime, disorder and the fear of crime	The detailed site layout and design of development can contribute to achieving this objective.
Enable groups to contribute to decision making and encourage a sense of community identity and welfare.	The development will provide a range of housing types and tenure, and new public open space, offering the opportunity for a mixed and socially inclusive community.
Provide, protect or enhance leisure opportunities, recreation facilities, green infrastructure and access to the countryside	The new open space and walking / cycling routes proposed can be used for recreation and which allow access to the surrounding countryside.
Accessibility	
Reduce the need to travel, especially by car, improve choice and the use of more sustainable modes	The site is located immediately adjacent to an established settlement (Croft). By providing good linkages between the site and the surrounding area future residents will have access to a range of facilities and services present in the town without the need to travel by car.
Protect and enhance accessibility for all the essential services and facilities.	An increase in population in Croft will support existing services and facilities, with potential for improved facilities and further investment in the future.
Housing	
Ensure access to good quality, sustainable, affordable housing	The site presents a sustainable and achievable development opportunity comprising residential development and public open space. It is capable of accommodating around 235 homes of mixed tenure (including affordable housing), size and type, with a focus on good quality family housing. It will make a very important contribution to meeting Warrington's housing requirement and meeting the need for new homes in Croft.

Natural Resources

Ensure the sustainable and prudent use and management of natural resources including the promotion of natural resources including the promotion of sustainable drainage and water conservation.	The concept masterplan provides a framework which responds to its context. Existing landscape features are retained and enhanced, with a particular emphasis on strengthening field boundaries throughout the development. The development is able to accommodate SuDS and will protect and enhance the sites ecological value.
Protect, manage and improve local environmental quality including land, air and controlled waters and reduce the risk of flooding.	Any future development will be subject to a rigorous assessment of the environmental impact of the development to ensure that is does not result in any unacceptable environmental effects. Initial appraisals presented in the technical appendix demonstrate that the site is not affected by any insurmountable environmental constraints.

Built and natural heritage

Protect and enhance places and buildings of historic cultural and archaeological value.	By responding to its context through a rigorous process of site analysis, the masterplan achieves a layout which is sympathetic to its position at the edge of the settlement. Additional safeguards over the quality and character of the development, including the public realm, can be achieved with detailed site layout and design. The masterplan present an appropriate framework for this.
Protect and improve the quality and character of places, landscapes, townscapes and wider countryside whilst maintaining and strengthening local distinctiveness and sense of place.	
Ensure high quality and sustainable design for buildings, spaces and the public realm that is appropriate to the locality.	

Biodiversity and Geodiversity

Protect and enhance biodiversity and geodiversity.	The supporting ecological appraisal provided within the supporting technical appendix demonstrates that the site of limited ecological value. The development provides the opportunity to enhance the site's ecological value through a careful and considered design approach.

Climate Change and resource use

Limit, mitigate and adapt to the impacts of climate change. Increase energy efficiency and production of renewable energy.	The site offers the potential to incorporate sustainable drainage measures (subject to further assessment) and to ensure that the development will not be susceptible to the effects of climate change.
Minimise waste and maximise reuse, recovery and recycling.	Development will seek to minimise the use of resources as far as possible and the construction process will be subject to a Site Waste Management Plan.