Land North West of Croft
Technical Appendix

Peel Holdings (Management) Ltd

September 2017

Turley

LANDSCAPE ARCHITECTURE
ENVIRONMENTAL PLANNING
MASTERPLANNING
URBAN DESIGN

RANDALL THORP
CHARTERED LANDSCAPE ARCHITECTS

Land North West of Croft

Landscape Sensitivity Assessment of Croft and Landscape Appraisal of Proposed Development on Land North West of Croft

September 2017

Prepared for:

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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 North West of 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 major settlement extension to Croft *"would effectively result in the creation of a new outlying settlement. It would totally transform the character of Croft… and would impact on the Green Belt objective."*

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-east, by Southworth Lane to the south, Heath Lane to the east and Stone Pitt Lane to the north. 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 North West of 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.

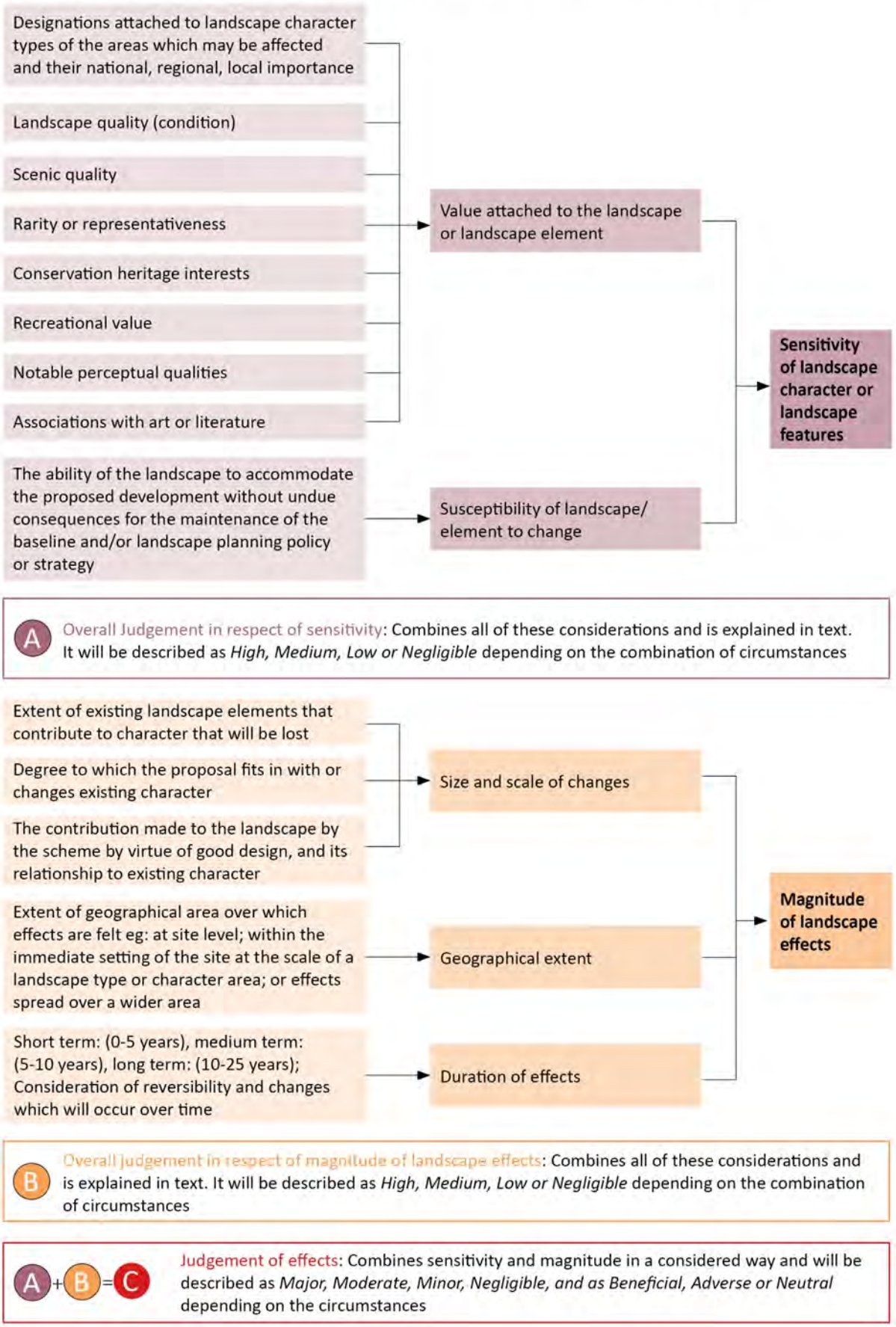
Methodology for the Site Specific Landscape Appraisal

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 North West of Croft 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 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 a major settlement extension to Croft *"would effectively*

result in the creation of a new outlying settlement. It would totally transform the character of Croft… and would impact on the Green Belt objective." The landscape of the Study Area is considered to be a ***Medium – Low*** sensitivity and the Undulating Enclosed Farmland character type includes larger settlements such as Culcheth.

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 located at the north western edge of Croft and is currently in use as arable farmland with a medium to large scale irregular field pattern. The majority of the existing field boundaries are formed by small mounds or ditches with very few hedgerows, which have left a number of semi-mature/mature trees and small blocks of deciduous woodland as isolated features within the landscape.

5.3. The southern boundary of the site is formed by Southworth Lane, Smithy Brow and Lord Street, with the existing settlement of Croft located adjacent to the south eastern corner of the site. The eastern boundary is formed by Heath Lane which includes the northern extent of Croft, and has scattered individual residential properties located alongside it further north within the Study Area. The northern boundary is formed by Stone Pit Lane and the hamlet of New Lane End. Stone Pit Lane becomes Sandy Brow Lane at the north western corner of the site, which leads to the A579 and the M6 motorway. The western boundary of the site is formed by a combination of existing field boundaries and Cockshot Brook, which flows from north to south, meandering inside and outside of the site. There are four small ponds scattered within the site.

5.4. There are a number of existing residential properties within the site, associated with the roads that form the northern, eastern and southern boundaries. These properties generally back onto the surrounding landscape with hedgerows or tree belts helping to define their curtilage. One property is located more centrally within the western part of the site, accessed via Wildings Old Lane and the existing Public Right of Way.

5.5. Two Public Rights of Way run through the site, following existing field boundaries on a north to south, and an east to west alignment. These routes connect Croft to Stone Pit Lane from either Smithy Brow or Heath Lane, and provide links to the wider Public Right of Way network within the northern parts of the Study Area.

5.6. The topography of the site gradually falls from north east to south west towards Cockshot Brook on the western boundary. This sloping topography, coupled with the large scale field pattern and a lack of hedgerow boundaries creates a simple agricultural landscape with *"wide, open vistas"*.

Landscape Sensitivity of the Site

5.7. The sensitivity of the land surrounding the settlement of Croft is appraised in Chapter 4.0 of this assessment. The site is broadly representative of the Study Area and therefore its landscape sensitivity is considered to be ***Medium - Low***.

Magnitude of Change

5.8. 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 settlement extension.

Size and Scale

5.9. There would be a loss of arable farmland as a result of developing the site, although this farmland is described as being *"intensely cropped"* and is therefore not considered to be of high value. Existing landscape features such as trees, woodlands, hedgerows, ponds and watercourses would be retained as much as possible.

5.10. The proposed masterplan would result in a large extension to the settlement of Croft but this is not out of character with the wider context, which includes settlements such as Culcheth. The site is connected to the north western edge of Croft and would create a logical expansion in terms of sustainability.

5.11. The landscape is simple in its composition due to its large scale field pattern and a lack of vegetated field boundaries. Although the site has some sensitivities in its *"wide, open vistas,"* the landscape of the site is not identified within the Warrington Landscape Character Assessment as having any elements of high value. Development within the site would not result in the loss of valued features. The Character Assessment itself also identifies that small pockets of woodland and landscape features can *"help to create backdrops and form a more interesting landscape, breaking down the long, interrupted views."* Proposed landscape structure associated with the development would create a more varied and diverse environment whilst also retaining key long distance views. A landscape buffer could be established along the more sensitive western boundary.

5.12. 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 throughout the site. A development focused around a new village green in the south eastern corner of the site would become a focal community space for the existing residents of Croft as well as the residents of the new development. The existing Public Rights of Way would be set within green corridors and provide recreational links within the public open space network.

Geographical Extent

5.13. 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 slightly as the site forms part of the wider arable farmland landscape within the Study Area around Croft. The existing landscape pattern and landscape features would be retained as much as possible with new tree and woodland planting complementing the existing character. This could achieve the relevant recommended management and landscape objectives identified within the Warrington Landscape Character Assessment.

Duration and Reversibility

5.14. 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.

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

Landscape Effects of development

5.16. The masterplan demonstrates that the site could be developed, and with good design contribute to the landscape and its existing character. The relevant recommended management and landscape objectives within the Warrington Landscape Character Assessment are:

- *Conserve and manage existing woodlands to encourage habitat diversity;*
- *Conserve and manage remaining hedgerows;*
- *Consider additional native woodland planting; and*
- *Consider the use of native planting to soften and screen new development.*

5.17. Maintaining the existing trees and vegetation within the public open space network and complementing this with new woodland planting along the western boundary of the site would help to contain the development in keeping with the relevant management and landscape objectives of the Warrington Landscape Character Assessment. Although the site is located within the Green Belt, it would not result in the coalescence of Croft with another settlement outside of the Green Belt, and would therefore not impact on "*the strategic importance of the Green Belt*"

5.18. There is no reason why a well-designed development that preserves the existing landscape features within a green infrastructure network would have any significant effects on the character of 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 site is broadly representative of the character of the Study Area and is well located next to the existing settlement of Croft and the strategic motorway network.

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 North West of Croft site to be a sustainable and achievable location to be allocated for new housing development within the new Warrington Borough Local Plan without significantly impacting on the *"strategic importance"* of the Green Belt or the character of the Study Area.

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North West Croft

Landscape Sensitivity Assessment of Croft and Landscape Appraisal of Proposed Development on North West Croft

Appendices

September 2017

Prepared for:

PEEL

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CHARTERED LANDSCAPE ARCHITECTS

North West Croft

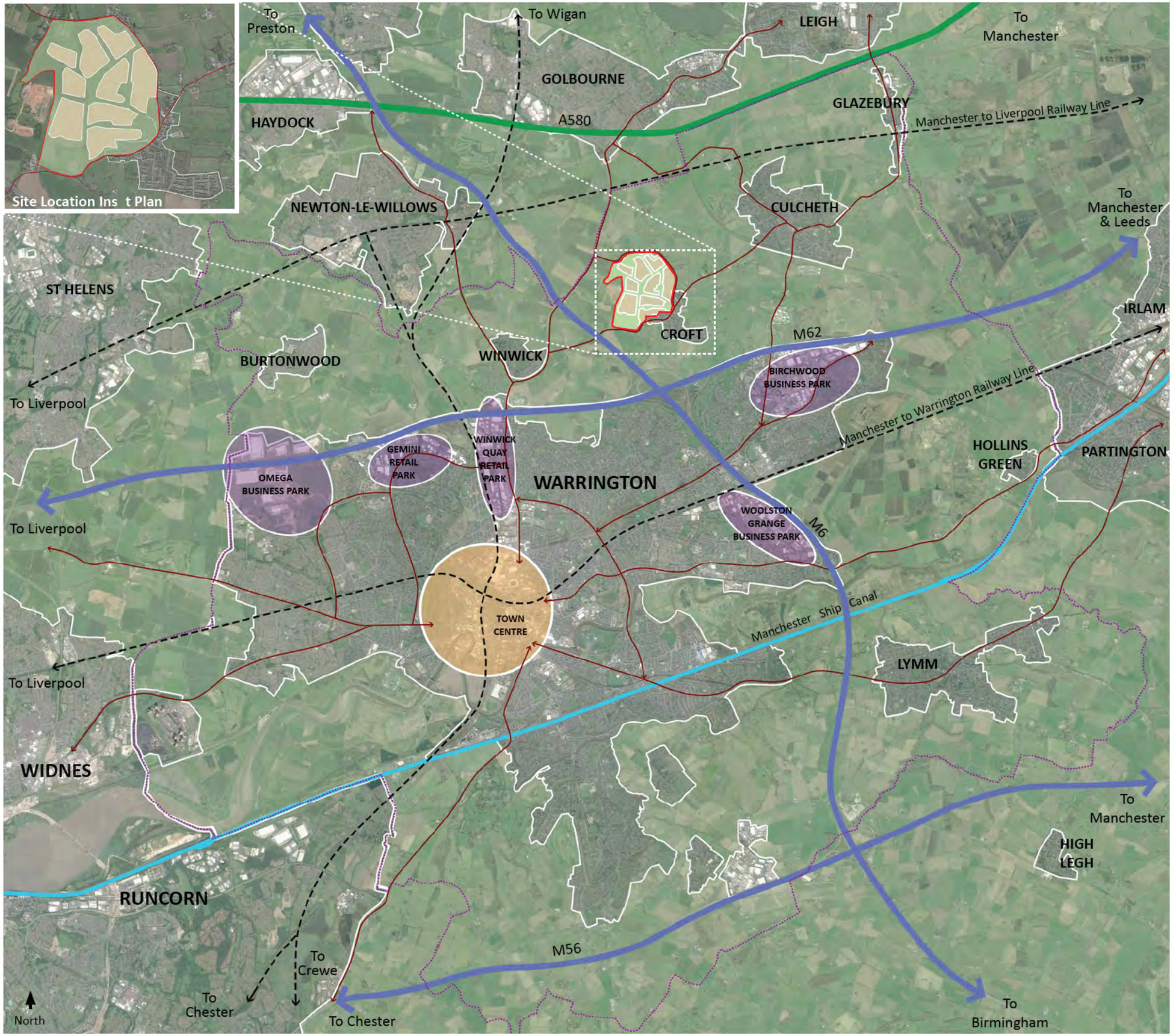
Landscape Sensitivity Assessment of Croft and Landscape Appraisal of Proposed Development on North West Croft

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

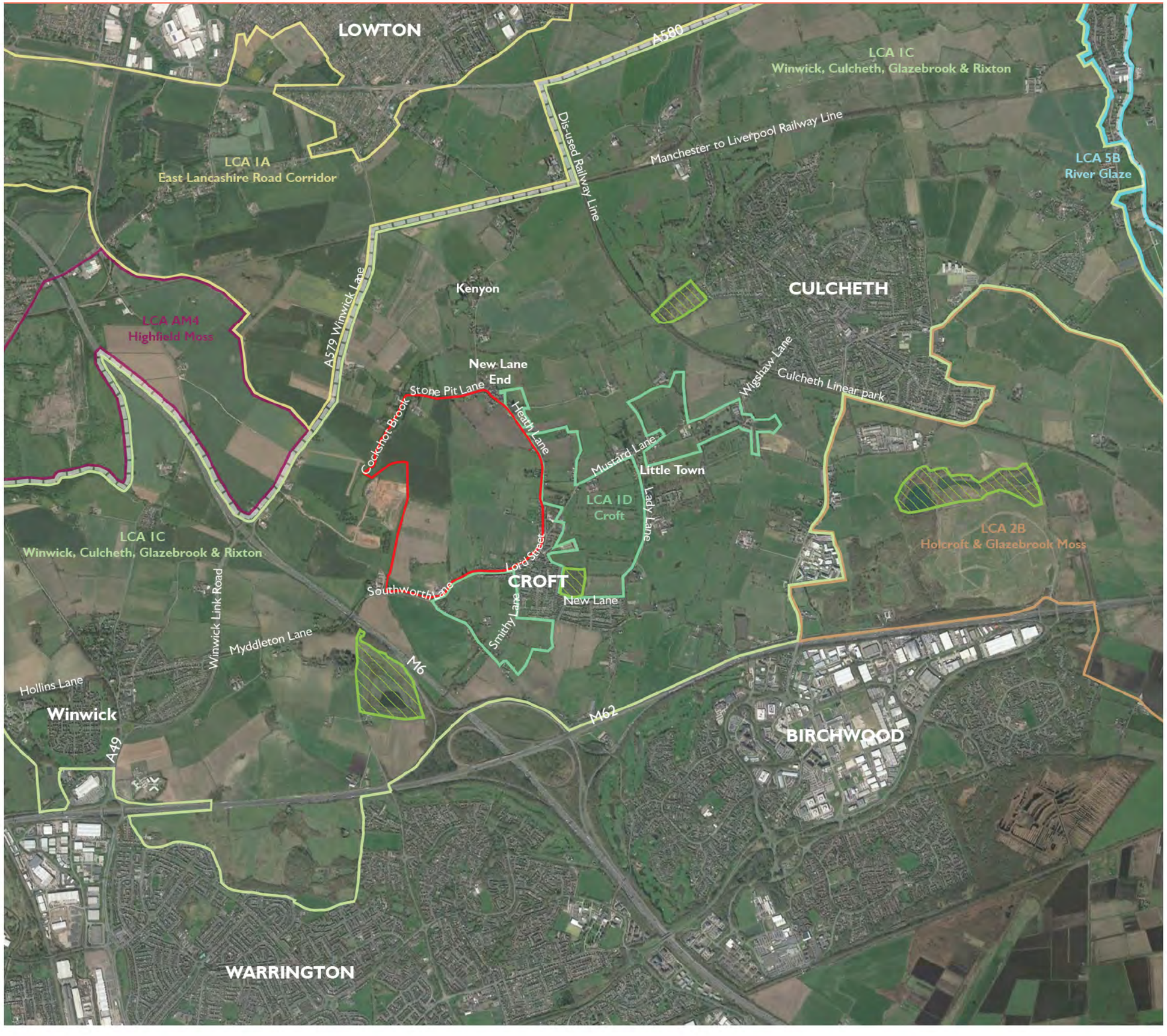
Warrington Local Plan Sites

Land North West of Cro

Appendix A: Figure 1
Warrington Context

Drwg No: 630CB-06A
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

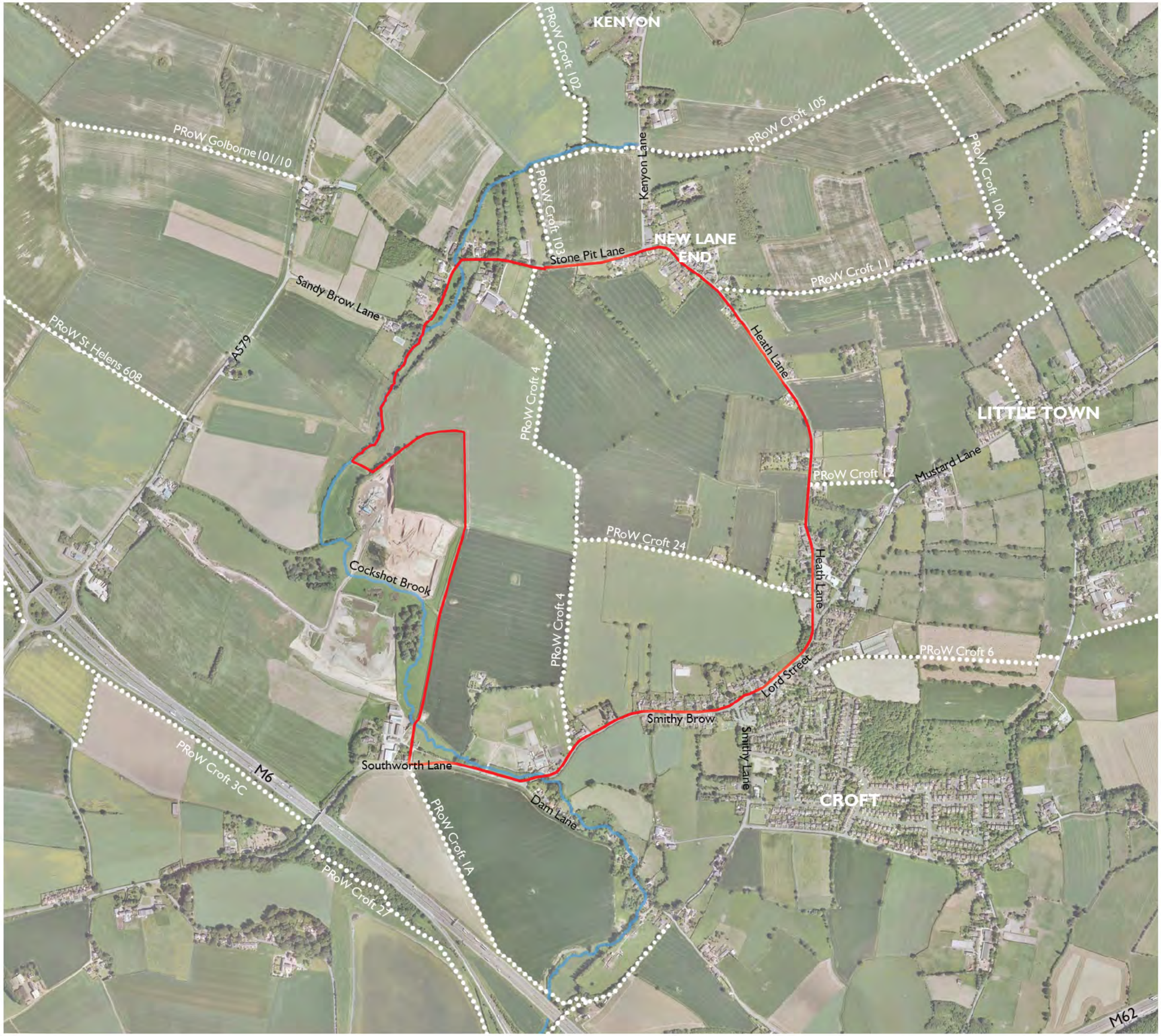
Warrington Local Plan Sites

Land North West of Cro

Appendix A: Figure 2
Landscape Character of the Study Area

Drwg No: 630CB-04
Drawn by: MF
Rev by:
QM Status: Checked
Scale: 1:25,000 @ A3

Date: 13.09.17
Checker: SR
Rev checker:
Product Status: Confide tial eview



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KEY:

- Site boundary
- Public Right of Way
- Cockshot Brook

PEEL

Warrington Local Plan Sites

Land North West of Cro

Appendix A: Figure 3
Site Features Plan

Drwg No: 630CB-09	Date: 14.09.17
Drawn by: MF	Checker: SR
Rev by:	Rev checker:
QM Status: Checked	Product Status: Confide tial eview
Scale: 1:5,000 @ A3	

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CHARTERED LANDSCAPE ARCHITECTS

North West Croft

Landscape Sensitivity Assessment of Croft and Landscape Appraisal of Proposed Development on North West Croft

Appendix B
Extract from the Warrington Landscape Character Assessment

September 2017

Prepared for:

PEEL

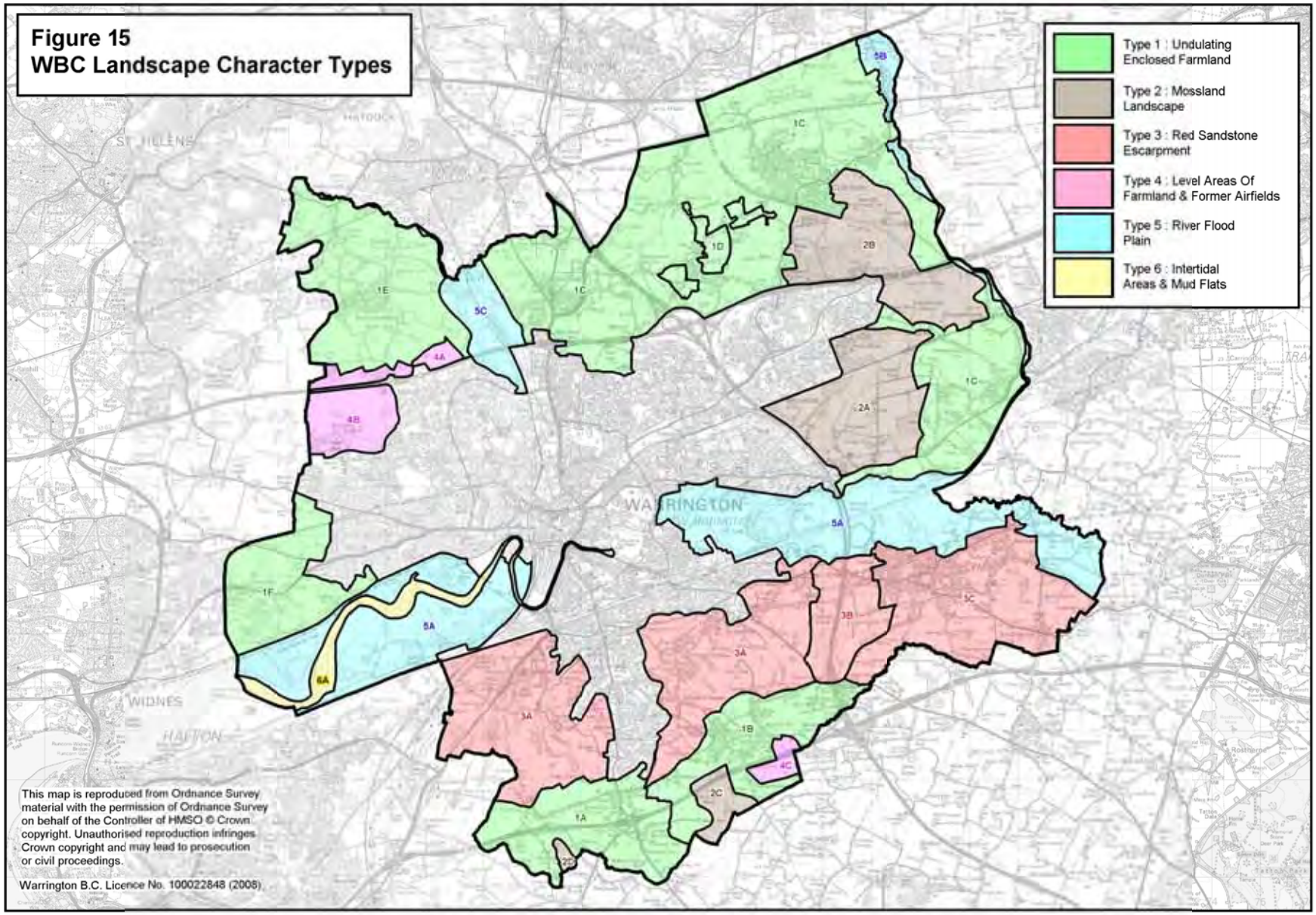
Figure 15
WBC Landscape Character Types
Type 1 : Undulating Enclosed Farmland
Type 2 : Mossland Landscape
Type 3 : Red Sandstone Escarpment
Type 4 : Level Areas Of Farmland & Former Airfields
Type 5 : River Flood Plain
Type 6 : Intertidal Areas & Mud Flats
ST HELENS
WARRINGTON
WIDNES
HALTON
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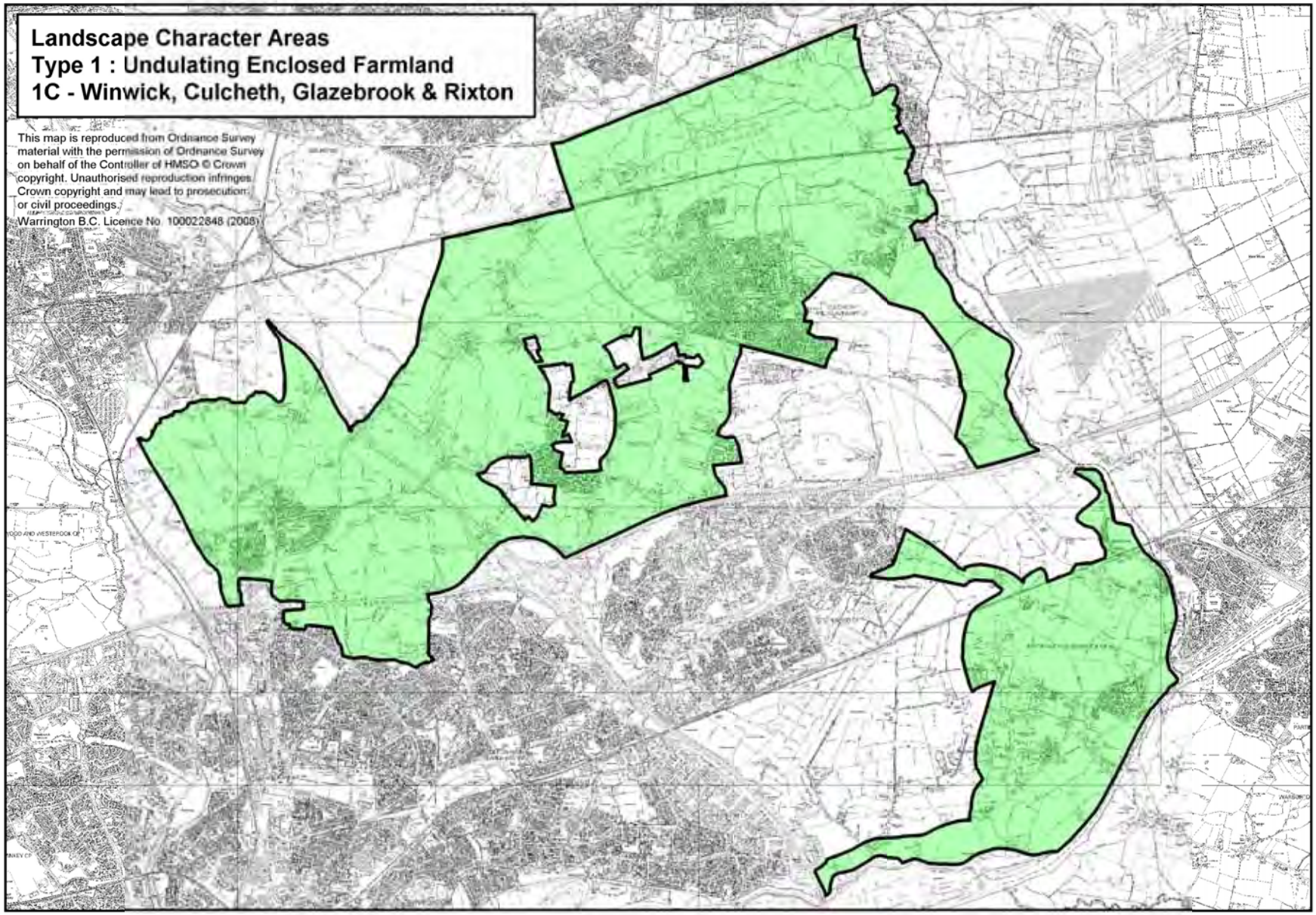
Landscape Character Areas
Type 1 : Undulating Enclosed Farmland
1C - Winwick, Culcheth, Glazebrook & Rixton
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TYPE 1. UNDULATING ENCLOSED FARMLAND

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.

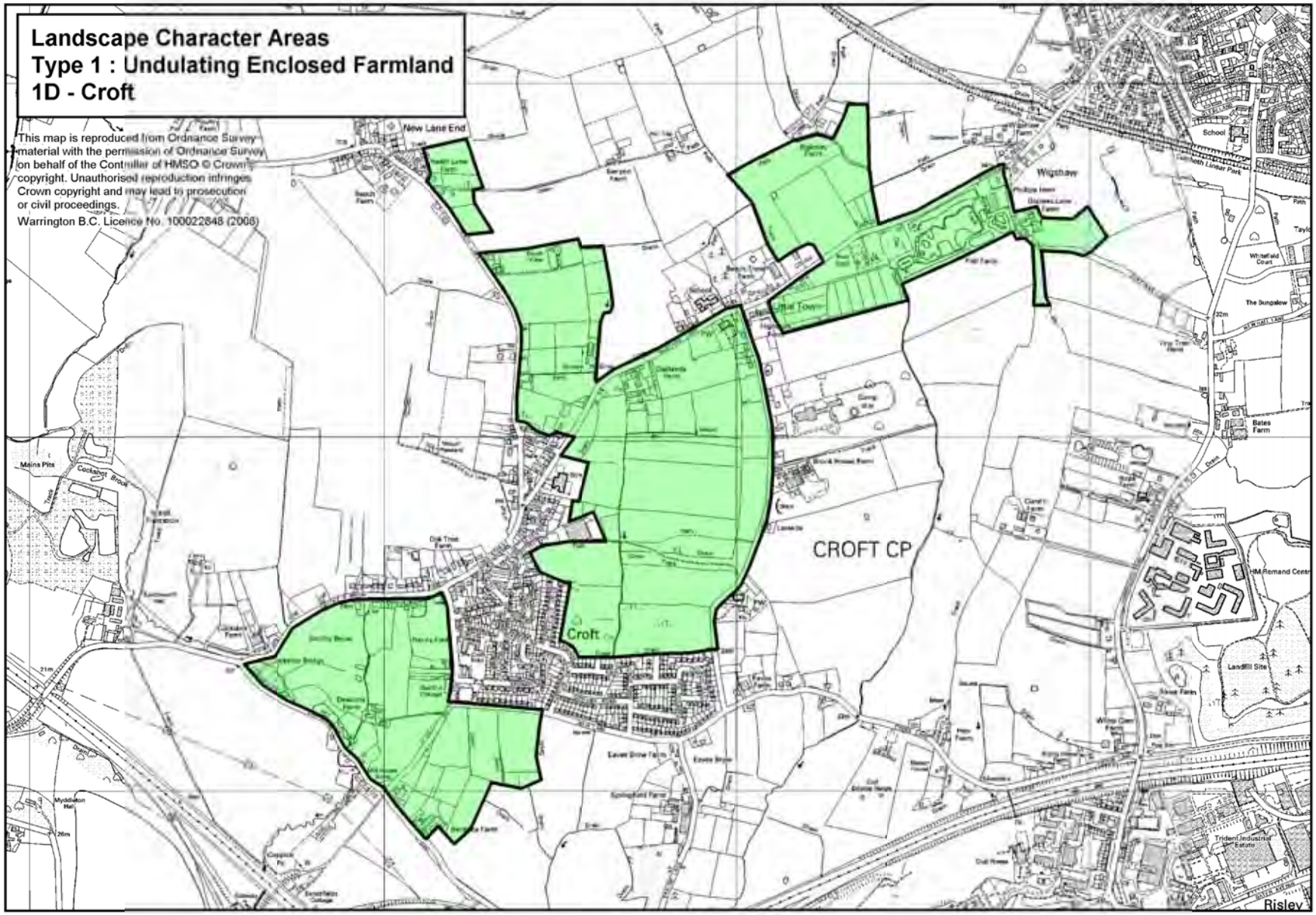
Buildings of note in the countryside around Winwick include Myddleton Hall c 1658, Listed Grade II*, Myddleton Hall Farmhouse c. 1656, Listed Grade II, the Manor House, Golborne Road c. 1717, Listed Grade II, Church House Farmhouse, Golborne Road, early C17th, Listed Grade II and Ivy House, Delph Lane 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

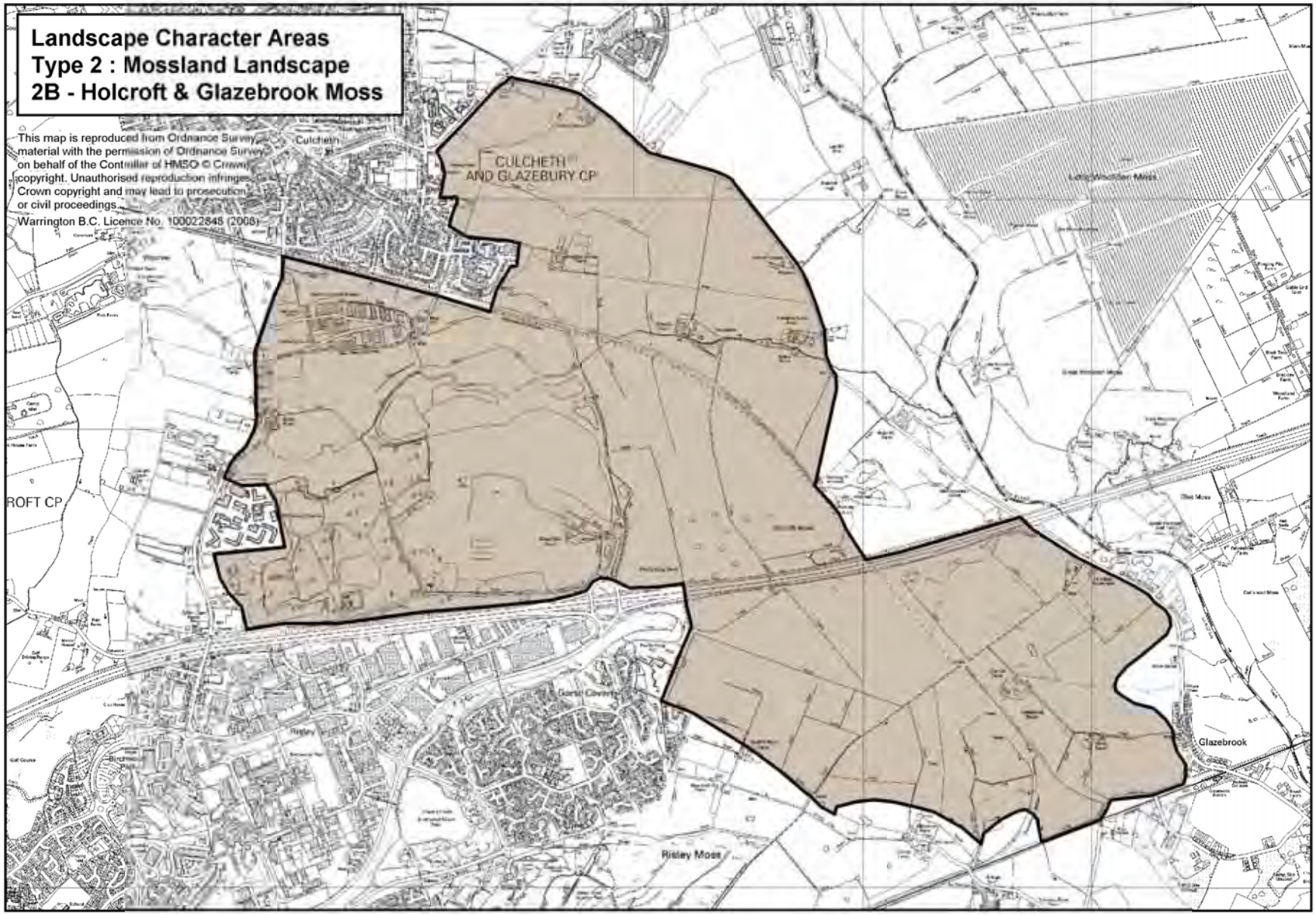
- Promote the restoration and replanting of local orchards

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

North West Croft

Landscape Sensitivity Assessment of Croft and Landscape Appraisal of Proposed Development on North West 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.

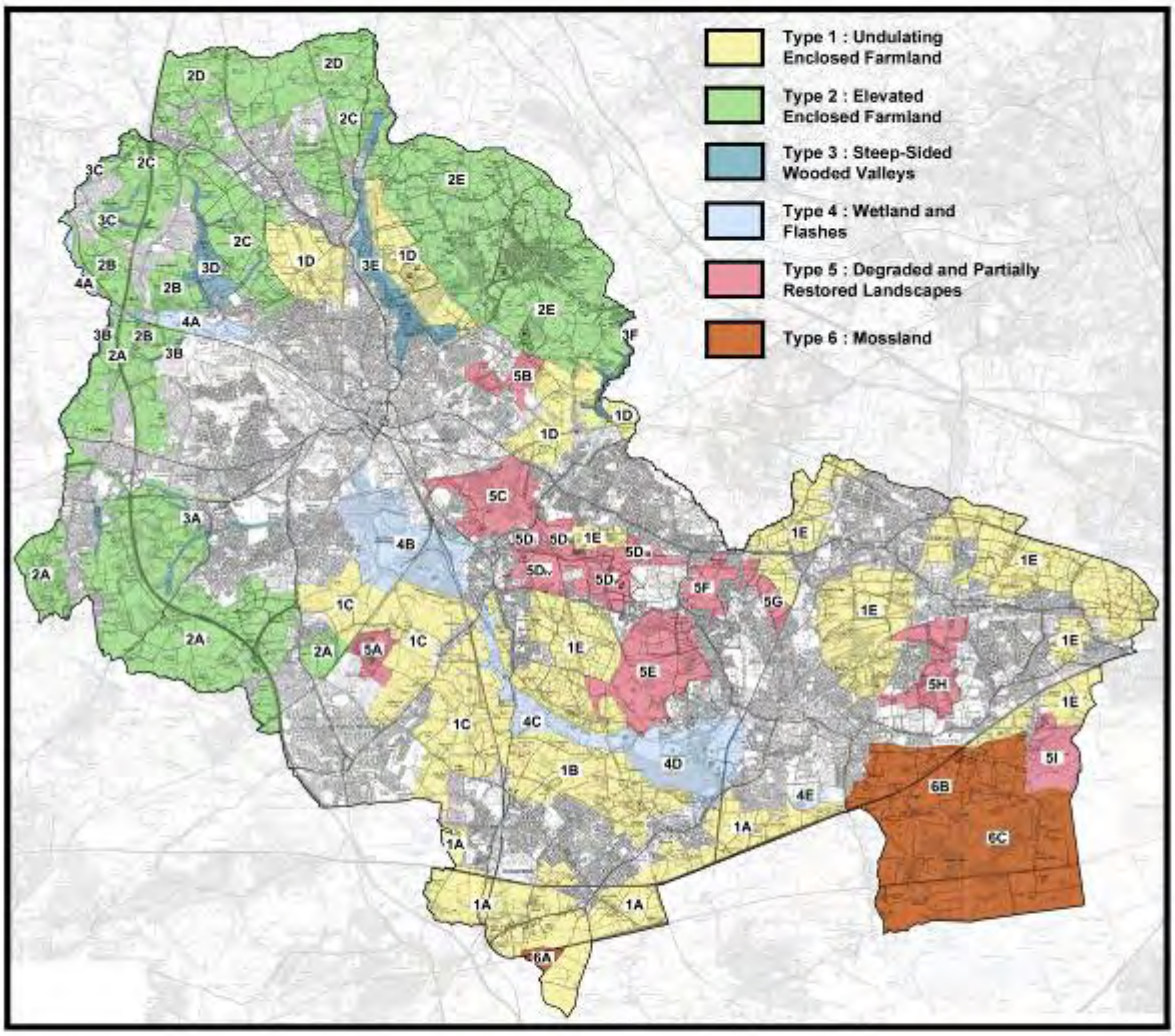
This section continues to discuss landscape sensitivity and change:

- 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.

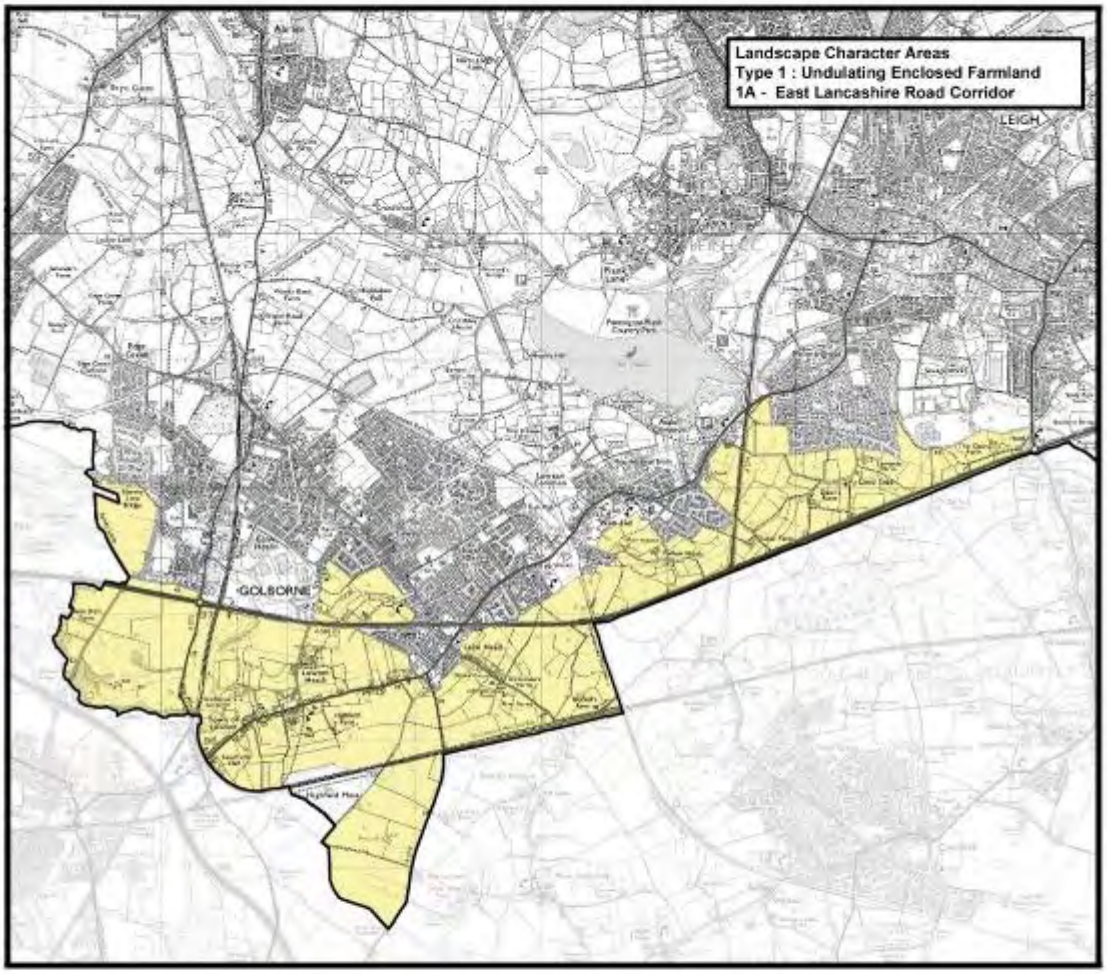
Photo. 12 View east from Warrington Road.

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

North West Croft

Landscape Sensitivity Assessment of Croft and Landscape Appraisal of Proposed Development on North West Croft

Appendix D
Extract from the St Helens Landscape Character Assessment

September 2017

Prepared for:

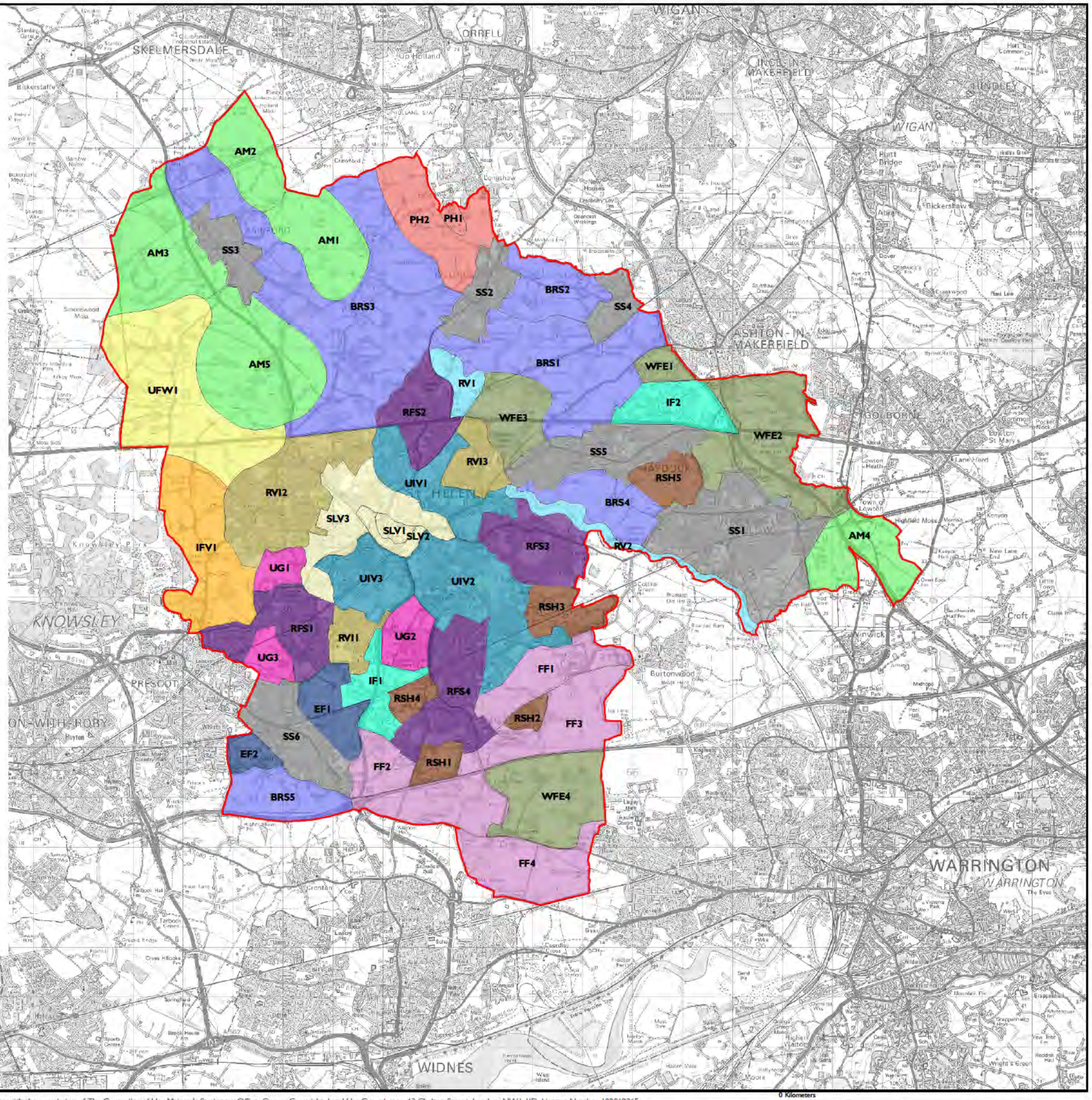
PEEL

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

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;

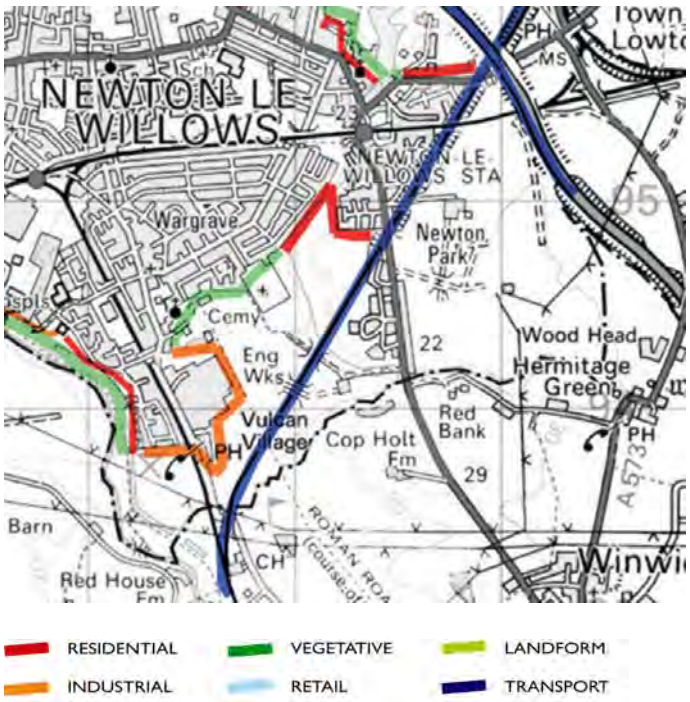
- there is a large regular field pattern historically part of the Parkside and Newton Parks landscape bordered by small maintained hedgerows with isolated trees and small pockets of scrub woodland. Often, informal earth footpaths follow the line of the hedgerows;
- access within the moss landscape is 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;

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CHARTERED LANDSCAPE ARCHITECTS

North West Croft

Landscape Sensitivity Assessment of Croft
and Landscape Appraisal of Proposed Development
on North West Croft

Appendix E
Illustrative Masterplan

September 2017

Prepared for:

PEEL

Area measures:

Total site area:	*124.5 ha*
Total net developable area:	*54.6 ha*
Total infrastructure areas:	*5.8 ha*
Total green infrastructure:	*43.3 ha*
Total existing p operties within si e boundary / non-developable land:	*20.8 ha*

This site could deliver between 1,638 and 1,911 homes depending on development density.

LANDSCAPE ARCHITECTURE
ENVIRONMENTAL PLANNING
MASTERPLANNING
URBAN DESIGN

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0161 228 7721 mail@randallthorp.co.uk www.randallthorp.co.uk

KEY:

- Site boundary
- Existing egetatio
- Existing atercourses & waterbodies
- Existing s ttleme t
- Existing public rig ts of way
- Existing oads
- Proposed vehicular access
- Proposed development area
- Proposed primary road
- Proposed secondary road
- Potential prima y school locatio
- Potential se ondary school locatio

  } Subject to requirements
- Proposed focal green spaces
- Proposed tree/woodland plantin
- Proposed key pedestrian & cycle links within green corridors
- Proposed retail / commercial / medical
- Potential futu e link to A579

PEEL

Land North West of Cro

Conceptual Masterplan

Drwg No: 630CB-01B
Drawn by: SB
Rev by: AH
QM Status: Checked
Scale: 1:5000 @ A3

Date: 11.09.17
Checker: DL
Rev checker: SR
Product Status: For Issue

LANDSCAPE ARCHITECTURE
ENVIRONMENTAL PLANNING
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CHARTERED LANDSCAPE ARCHITECTS

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Consulting Engineers

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LAND NORTH WEST OF CROFT
WARRINGTON

FLOOD RISK AND UTILITIES APPRAISAL

Shepherd Gilmour Infrastructure Ltd.

40 Peter Street

Manchester

M2 5GP

C1283/NM/DOR/EAJ/2017116

Shepherd Gilmour
Consulting Engineers

Report Title: *Land North West of Croft, Warrington*
Flood Risk and Utilities Appraisal

Client: *Peel Investments (North) Ltd*

Report Status: *Version Rev – V2*

Date of First Issue: *8th September 2017*

Date of Last Issue: *28th September 2017*

Prepared by: [redacted]

Checked & Approved:

Version	Date	Initials	Comments
-	08.09.2017	NM	First Issue
V1	15.09.20017	NM	Revised as per amended masterplan
V2	28.09.2017	NM	Revised as per amended 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 a development on Land to the North West of Croft in Warrington.

SITE LOCATION

1.2. The proposed site is located to the northwest of the village of Croft in Warrington. The site is approximately 125 ha in total and consists of agricultural fields and pockets of woodland.

- Nearest Postcode: WA3 7DQ
- OS Coordinates: 362801E, 394147N
- OS Grid Reference: SJ 628941

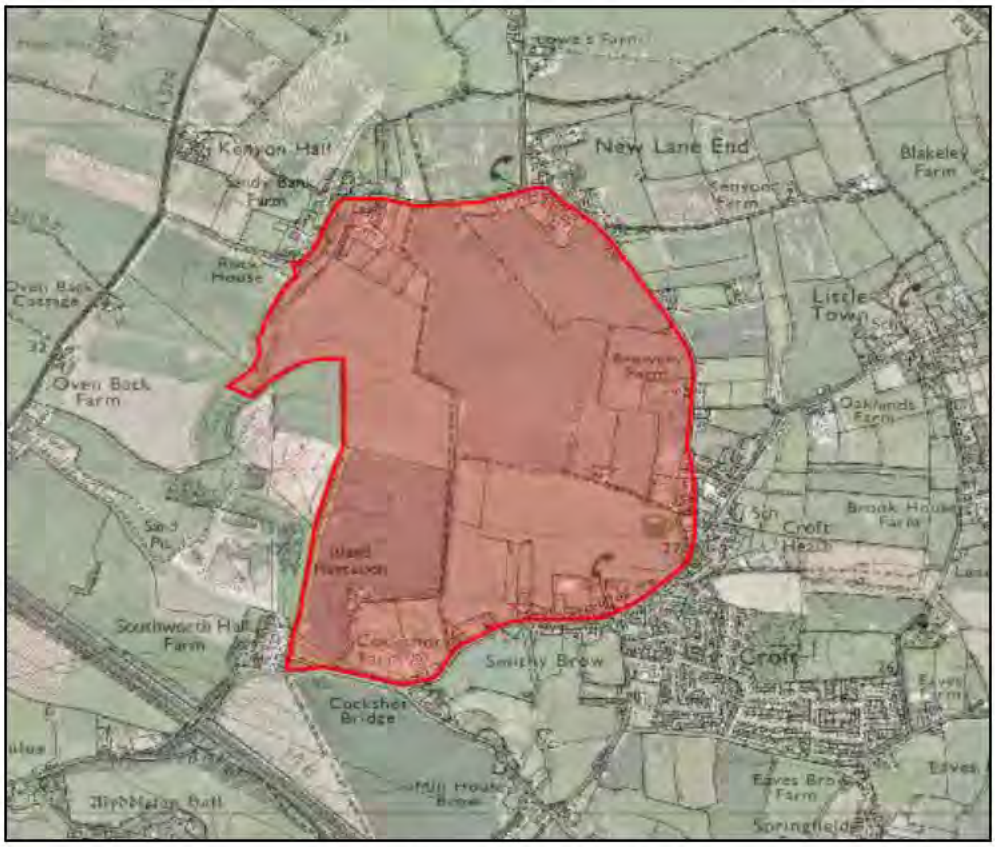

Figure 1.1 Red Line Boundary

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TOPOGRAPHY

1.3. Based on the Ordnance Survey maps the site ranges in level between 20-35m AOD. The site appears to generally falls in level from Heath Lane (eastern boundary) to Cockshot Brook (western boundary).

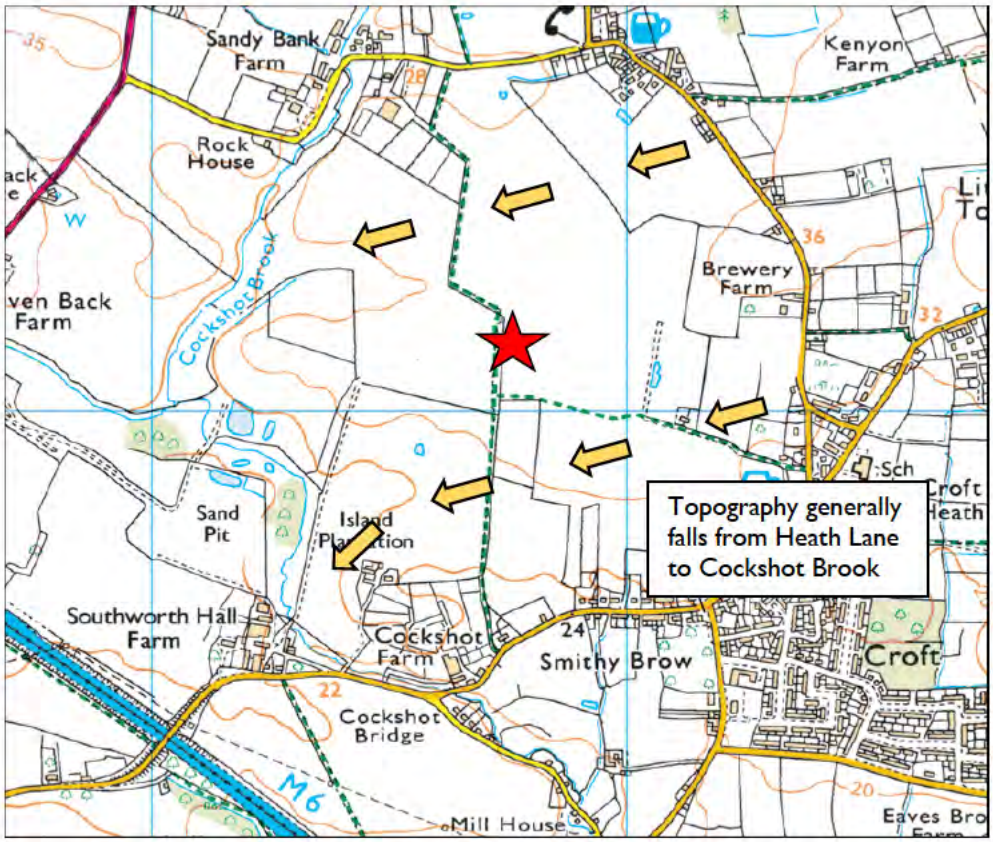

Figure 1.2 Site Plan (OS Map)

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PRELIMINARY PROPOSALS

1.4. The client's conceptual masterplan is shown in **Figure 1.3** proposes a new green village with between 1600 and 1900 dwellings and associated infrastructure.

1.5. A full-sized masterplan has been 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 Maps provide initial information on any flood zoning onsite. These maps indicate that the majority of site is located within Flood Zone 1 (low probability of fluvial flooding) with some small areas of Flood Zone 3 along the southern and western boundary (high probability of fluvial flooding).

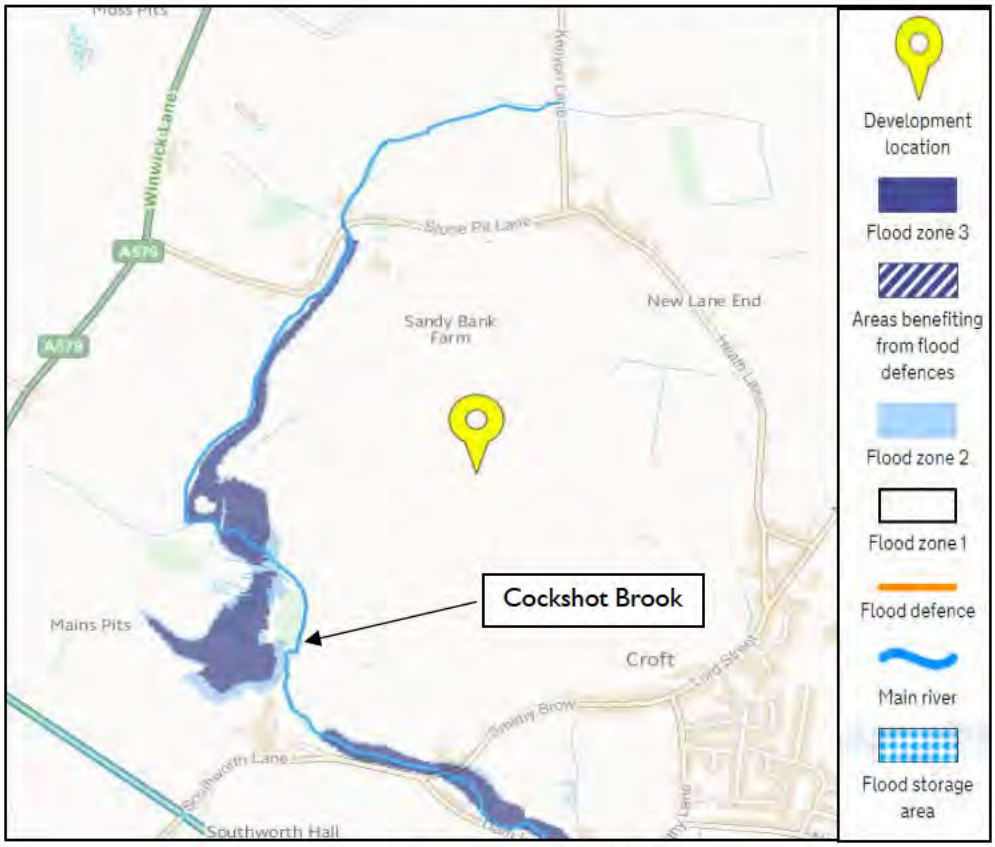

Figure 2.1 Gov.UK Flood Map

ENVIRONMENT AGENCY DATA

2.2. The latest flood data and maps has been requested from the Environment Agency (EA) and indicate similar flood zoning **(Figure 2.2)**. The data also includes estimated flood levels which can be used in conjunction with a topographical survey during the detailed design stage. This information has been included within **Appendix B**.

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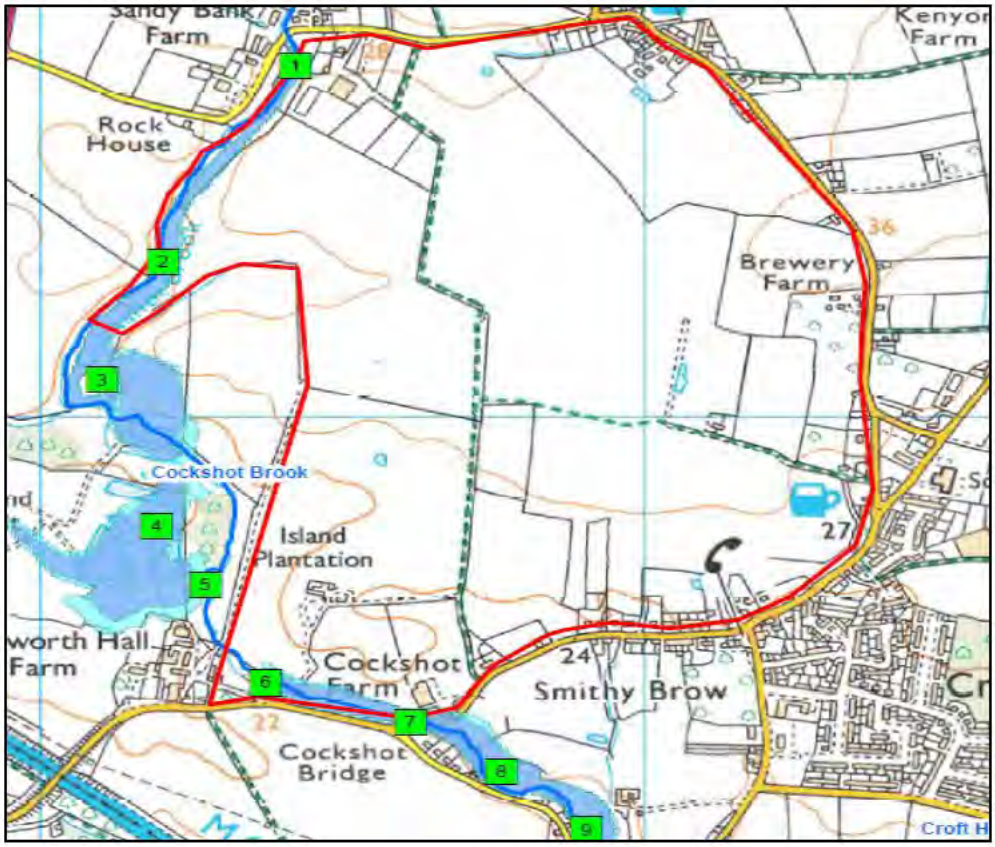

Figure 2.2 Detailed Flood Map (EA)

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

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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 (**Appendix A**) 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.

2.5. The estimated flood levels and detailed development proposals will require further analysis once a topographical survey is available.

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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 C** of this report.

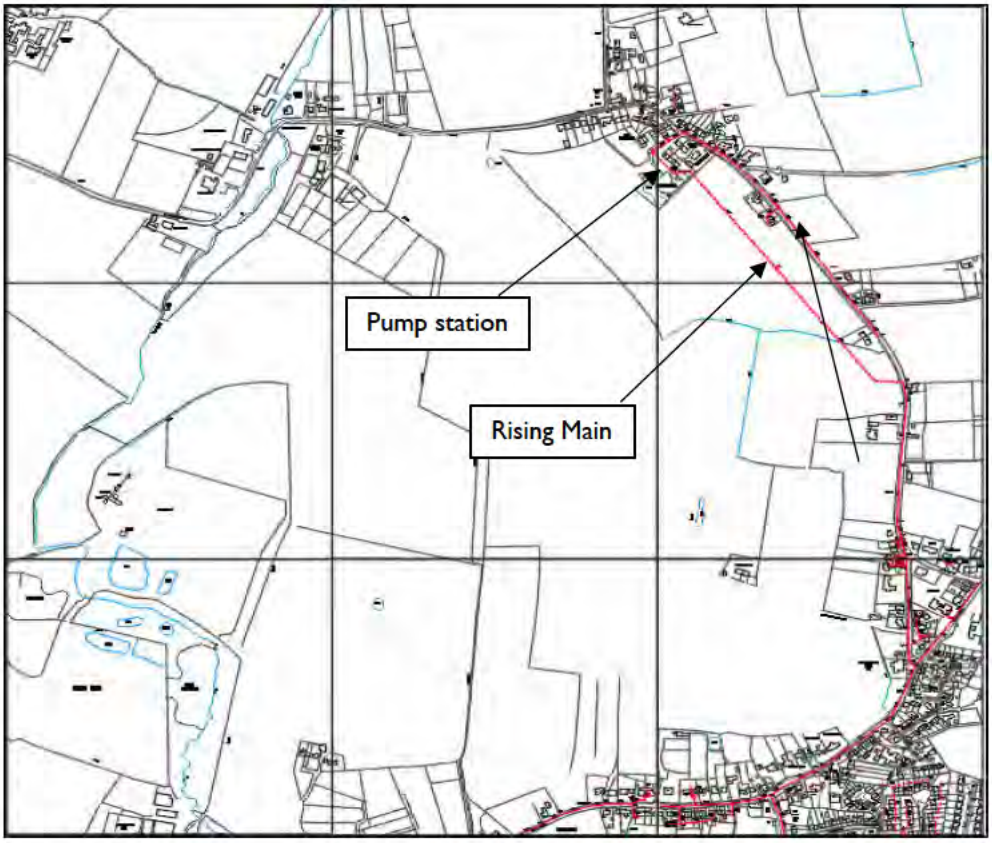

Figure 3.1 UU Sewer Plan

Surface Water Sewers

3.2. According to United Utilities records there are no surface water sewers onsite. There are some sewers to the south east which serve the residential dwellings but these would not be suitable for this development.

Foul Water Sewers

3.3. According to United Utilities records there are no foul water sewers onsite. There are some small sewers to the north east and south east which serve the residential dwellings which ultimately discharge into larger combined sewers.

Combined Water Sewers

3.4. Records indicate is a 100mm diameter rising main passing through the north-east corner of the site from the small pump station off Stone Pitt Lane. The rising main

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pumps the effluent through the site and reconnects into the combined sewer within Heath Lane.

3.5. The rising main is likely to have an easement each side of the centreline. At this stage the offset distance is unknown, and consultation with UU will be required to ascertain this distance.

3.6. A 225mm to 375mm combined sewer flows around the site to the southern boundary via Lord Street and continues south via Smithy Lane.

PRIVATE DRAINAGE

3.7. There is no known private drainage onsite.

PRELIMINARY DEVELOPMENT DRAINAGE

Surface Water Drainage

3.8. Based on the topography and development proposals/location it should be possible to discharge any runoff to Cockshot Brook. This arrangement is aligned with the runoff destination hierarchy set out in Paragraph 080 of the Flood Risk and Coastal Change Guidance document.

3.9. Note that any surface water runoff rates must be agreed by the Environment Agency.

Foul Water Drainage

3.10. Foul effluent generated by the development should be able to connect into the combined sewer within Lord Street. At this stage the need for off-site reinforcement is unknown and United Utilities should be consulted as soon as practically possible.

Sewer Diversions

3.11. At this stage, it is difficult to assess if any sewer/rising main diversions would be required. More information is required and any diversion can be addressed at a later stage.

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SECTION 4 UTILITIES INFRASTRUCTURE

ELECTRICITY

Electricity North West

4.1. The electricity in the area is supplied by Electricity North West (ENW). With the exception of an 11kV cable serving New Lane End, there is very little electrical assets/infrastructure in the area supplied by ENW.

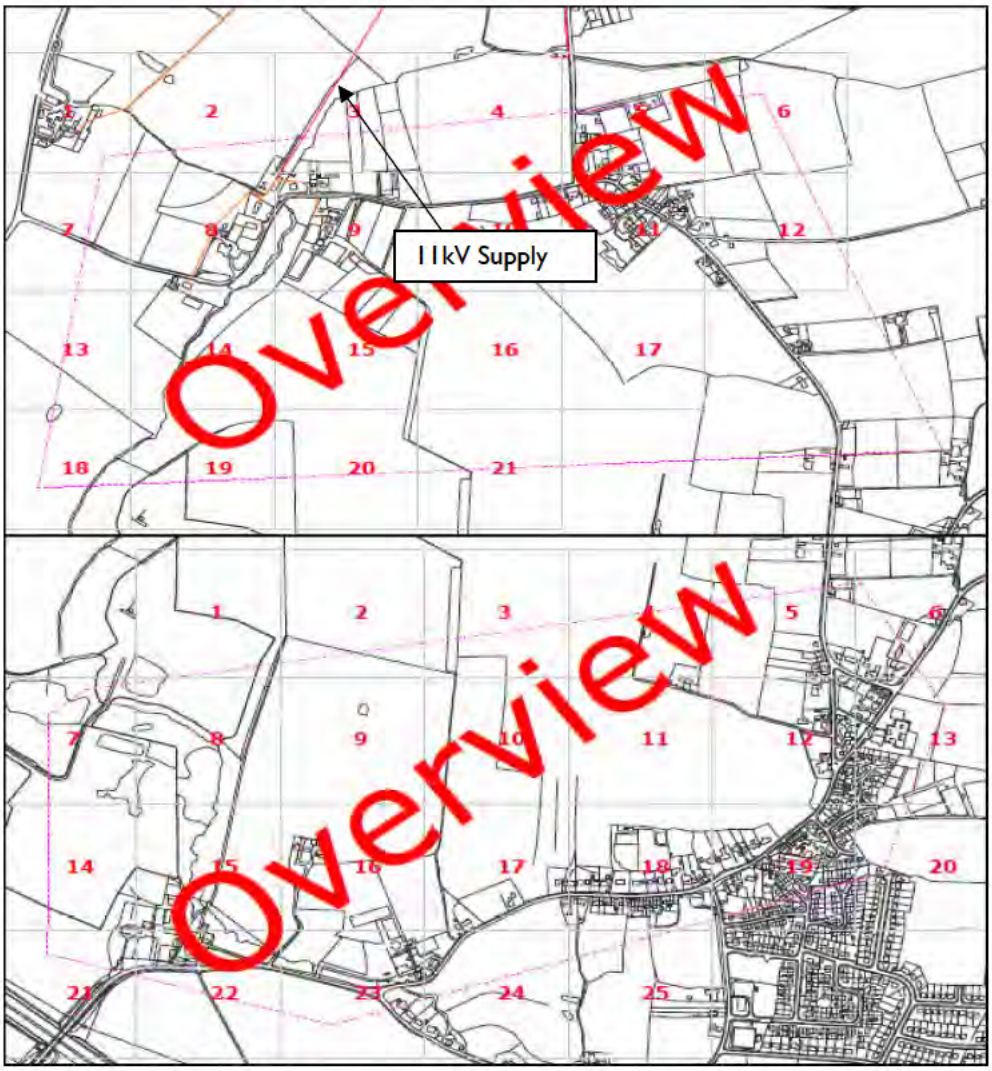

Figure 4.1 Electric Infrastructure (ENW)

4.2. A copy of ENW records has been included within **Appendix D**.

Scottish Power Manweb

4.3. Scottish Power Manweb (SP Manweb) also have electricity assets within the vicinity of the site. Records identify a high voltage (11kV) cable running within Southworth Lane before cutting across the south of the site around Cockshot Farm Stables

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overhead. It then goes underground again within Smithy Brow and up to Croft Primary School along Lord Street.

4.4. There is also a high voltage overhead line that runs in a south to north direction on the eastern side of the site. An underground spur from this line serves properties beyond the north-eastern boundary of the site.

4.5. A copy of the SP Manweb records is also included in **Appendix D**.

Figure 4.2 Electricity Infrastructure (SP Manweb)

4.6. The need for any offsite reinforcement to meet the power demands of the development is unknown. Discussions with Electricity North West and Scottish Power Manweb should be undertaken as soon as practically possible.

TELECOMMUNICATION

4.7. 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

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but there may not be sufficient capacity. Discussions with Openreach should be undertaken as soon as practically possible.

4.8. A copy of Openreach records has been included within **Appendix E**.

MAINS WATER

4.9. United Utilities records indicate a 3" water main within the highways that form the south, east and north boundaries. The need for offsite reinforcement to meet the water supply demands of the development is unknown. Discussions with UU should be undertaken as soon as practically possible.

4.10. A copy of United Utilities records has been included within **Appendix C**.

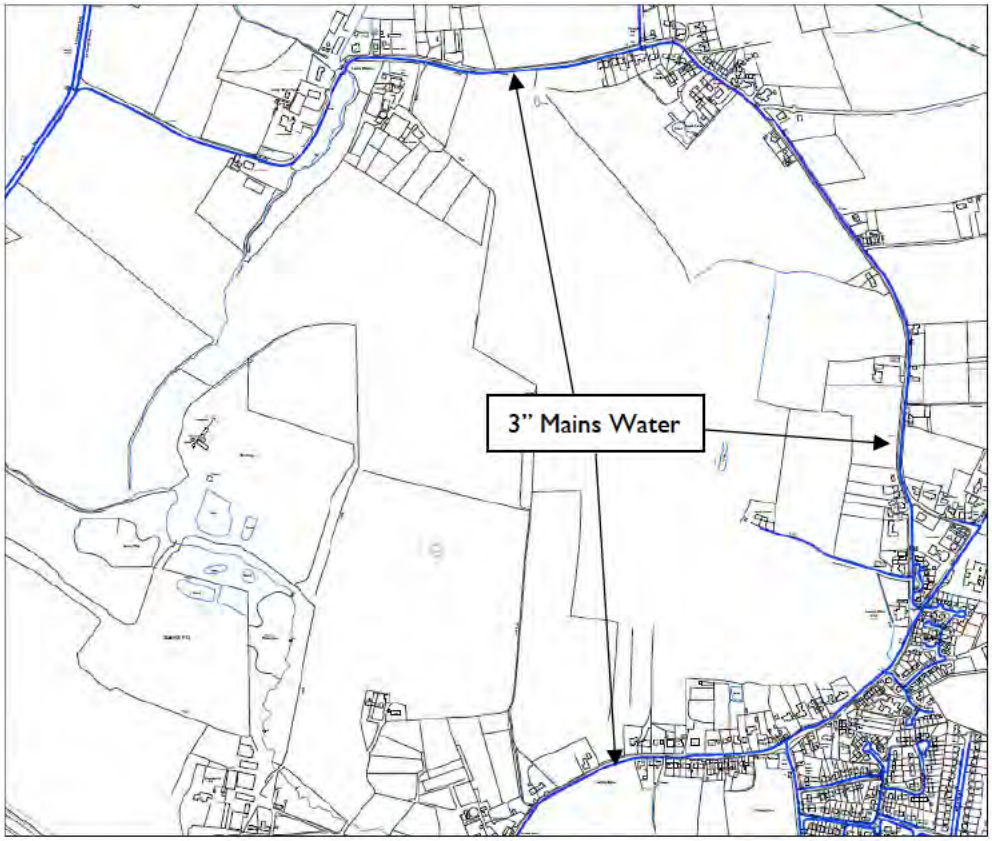

Figure 4.2 Water Infrastructure (UU)

GAS

4.11. Cadent/National Grid records indicate medium pressure main within Smithy Brow that serve the low-pressure mains of the Croft area. Due to the scale/quality of the records any further information such as size, depth etc. is obscured.

4.12. 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.

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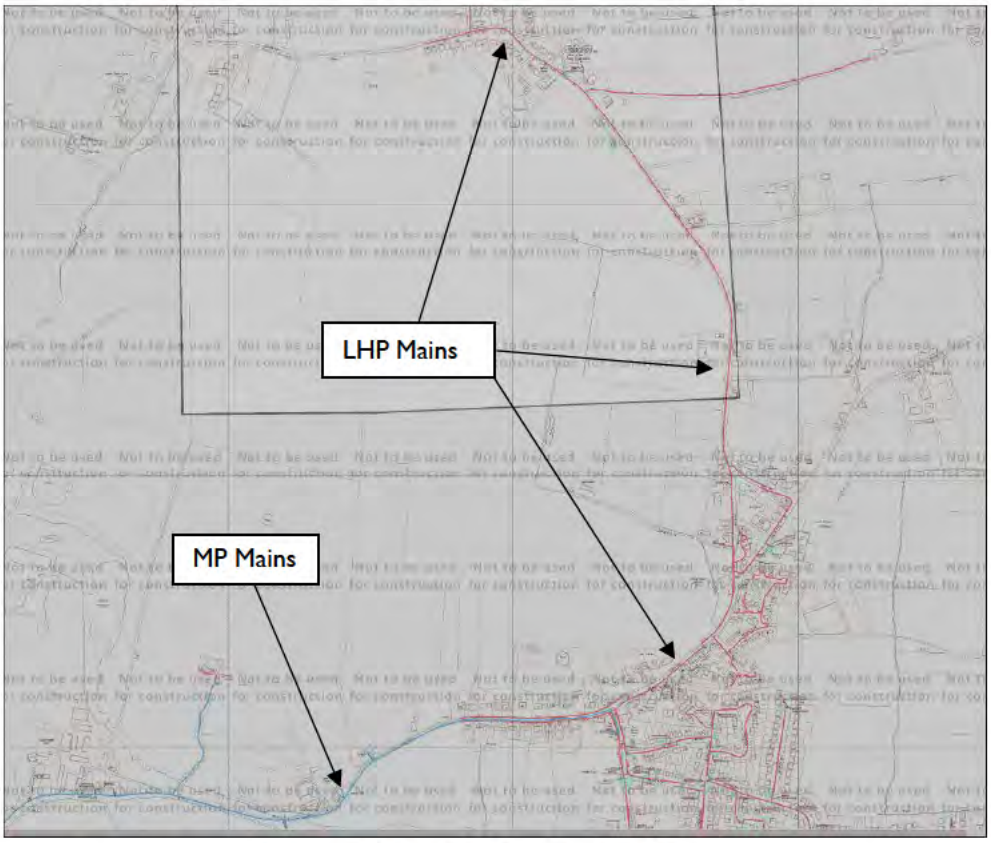

Figure 4.3 Cadent Gas Record Plans

4.13. A copy of Cadent/National Grid records has been included within **Appendix F**.

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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 HSE response records has been included within **Appendix G**.

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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 residential areas are located within Flood Zone 1 (low probability). In accordance with the Flood Risk and Coastal Change Guidance the development 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 to be agreed with the Environment Agency.

c) The proposed foul water effluent will discharge to United Utilities adjacent public sewers. Flow rates and any offsite/onsite upgrade works are to be agreed with United Utilities.

d) Early discussions with Electricity North West and SP Manweb are required to establish the proposed electricity route(s) to the site.

e) The existing Openreach infrastructure that surrounds the site could 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 in the vicinity of the site.

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APPENDIX A

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Area measures:

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Total net developable area:	*54.6 ha*
Total infrastructure areas:	*5.8 ha*
Total green infrastructure:	*43.3 ha*
Total existing p operties within si e boundary / non-developable land:	*20.8 ha*

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PEEL

Land North West of Cro

Conceptual Masterplan

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Checker: DL
Rev checker: SR
Product Status: For Issue

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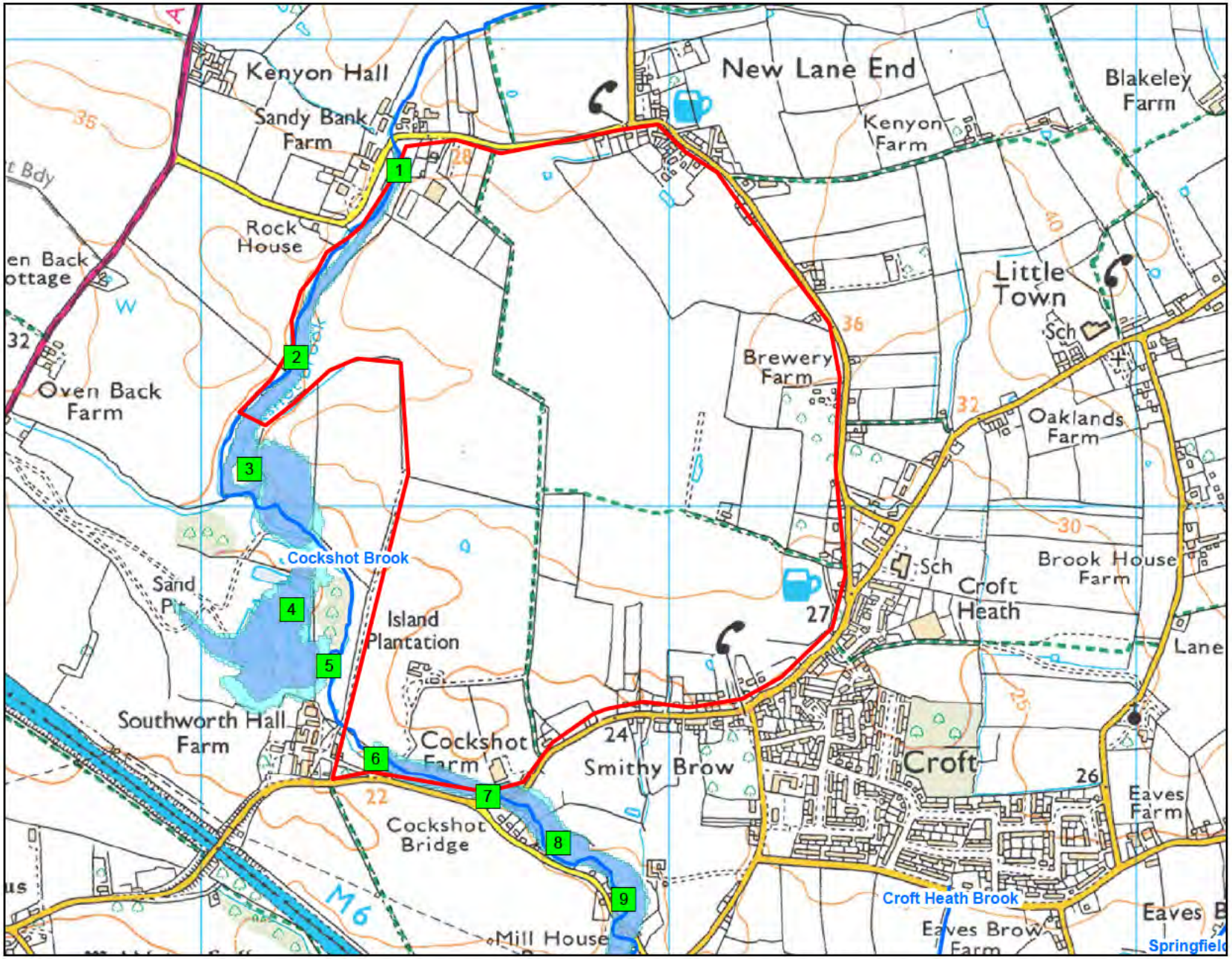
APPENDIX B

Detailed Flood Map centred on Land near Croft, Warrington. Created on 08/08/2017 [GMMC55879AB]



Environment Agency

1:12,000

N

Legend

- Site Location
- J-Flow
- Main River
- Flood Zone 2
- Flood Zone 3

Contact Us: National Customer Contact Centre, PO Box 544, Rotherham, S60 1BY. Tel: 08708 506 506 (Mon-Fri 8-6). Email: enquiries@environment-agency.gov.uk

					Undefended	
Map Reference	Model Node Reference	Easting	Northing	Data	1 % AEP (1 in 100 year)	0.1 % AEP (1 in 1000 year)
1	J-Flow	362422	394717	Modelled Water Level (m aodN)	27.15	27.48
2		362202	394317	Modelled Water Level (m aodN)		24.47
3		362102	394077	Modelled Water Level (m aodN)	23.05	23.17
4		362193	393777	Modelled Water Level (m aodN)	9.95	11 38
5		362273	393657	Modelled Water Level (m aodN)		19.66
6		362373	393457	Modelled Water Level (m aodN)	21.19	21 39
7		362613	393377	Modelled Water Level (m aodN)	20.34	20.45
8		362762	393277	Modelled Water Level (m aodN)	19.84	19 93
9		362902	393157	Modelled Water Level (m aodN)	18.69	18 82

Please note: J-Flow is broadscale National Generalised Modelling and as such is not sufficiently accurate for use in Flood Risk Assessments.

Model data taken from the National Generalised Modelling (JFLOW) (2004) Study

AEP - Annual Exceedence Probability

m aodN - metres above ordnance datum Newlyn

cumecs - cubic metres per second

Climate Change Scenario - We do not hold climate change measurements at this location. For fur her guidance on climate change within the GMMC area please see the attachment 'Flood risk assessments: Climate change allowances'. Particularly section 3, table B which shows the Local precautionary allowances for potential climate change impacts.

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APPENDIX C

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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: LAND NW OF CROFT- NORTH
Our Ref: [redacted]
Date: 21/8/2017

Shepherd Gilmour Infrastructure
SGi Consulting Colchester House
40 Peter Street

Manchester
M2 5GP

FAO: [redacted]

Dear Sirs

Location:

I acknowledge with thanks your request dated 18/08/17 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 0370 7510101.

Yours Faithfully,

[redacted]

[redacted]
Property Searches Manager

TERMS AND CONDITIONS - WASTERWATER & WATER DISTRIBUTION PLANS

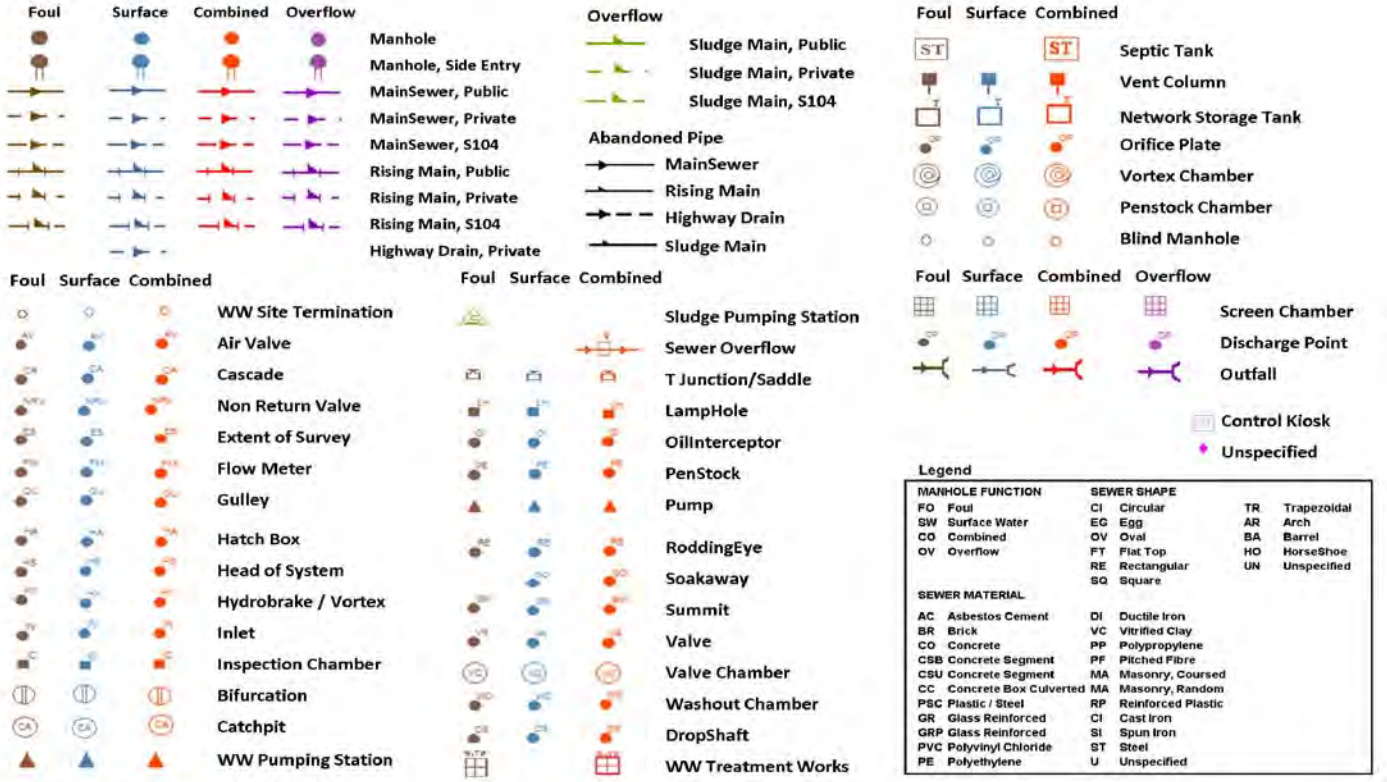
These provisions apply to the public sewerage, water distribution and telemetry systems (including sewers which are the subject of an agreement under Section 104 of the Water Industry Act 1991 and mains installed in accordance with the agreement for the self-construction of water mains) (UUWL apparatus)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

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		

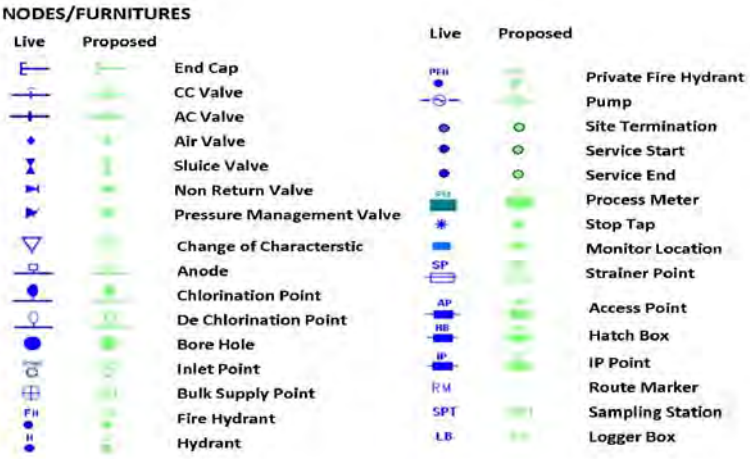
SEWER MATERIAL			
AC	Asbestos Cement	DI	Ductile Iron
BR	Brick	VC	Vitrified Clay
CO	Concrete	PP	Polypropylene
CSB	Concrete Segment	PF	Pitched Fibre
CSU	Concrete Segment	MA	Masonry, Coursed
CC	Concrete Box Culverted	MA	Masonry, Random
PSC	Plastic / Steel	RP	Reinforced Plastic
GR	Glass Reinforced	CI	Cast 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



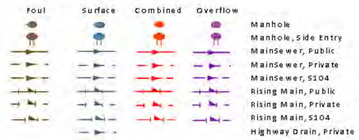
PROPERTY TYPES

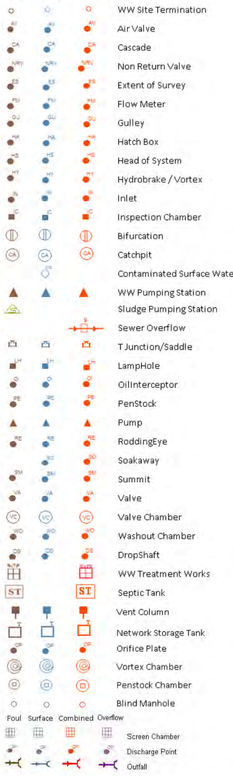
Legend

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		

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

WASTE WATER SYMBOLOGY





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

OS Sheet No: SJ6295SW
Scale: 1:1250 Date: 21/08/2017
0 Nodes
Sheet 1 of 1

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SEWER RECORDS

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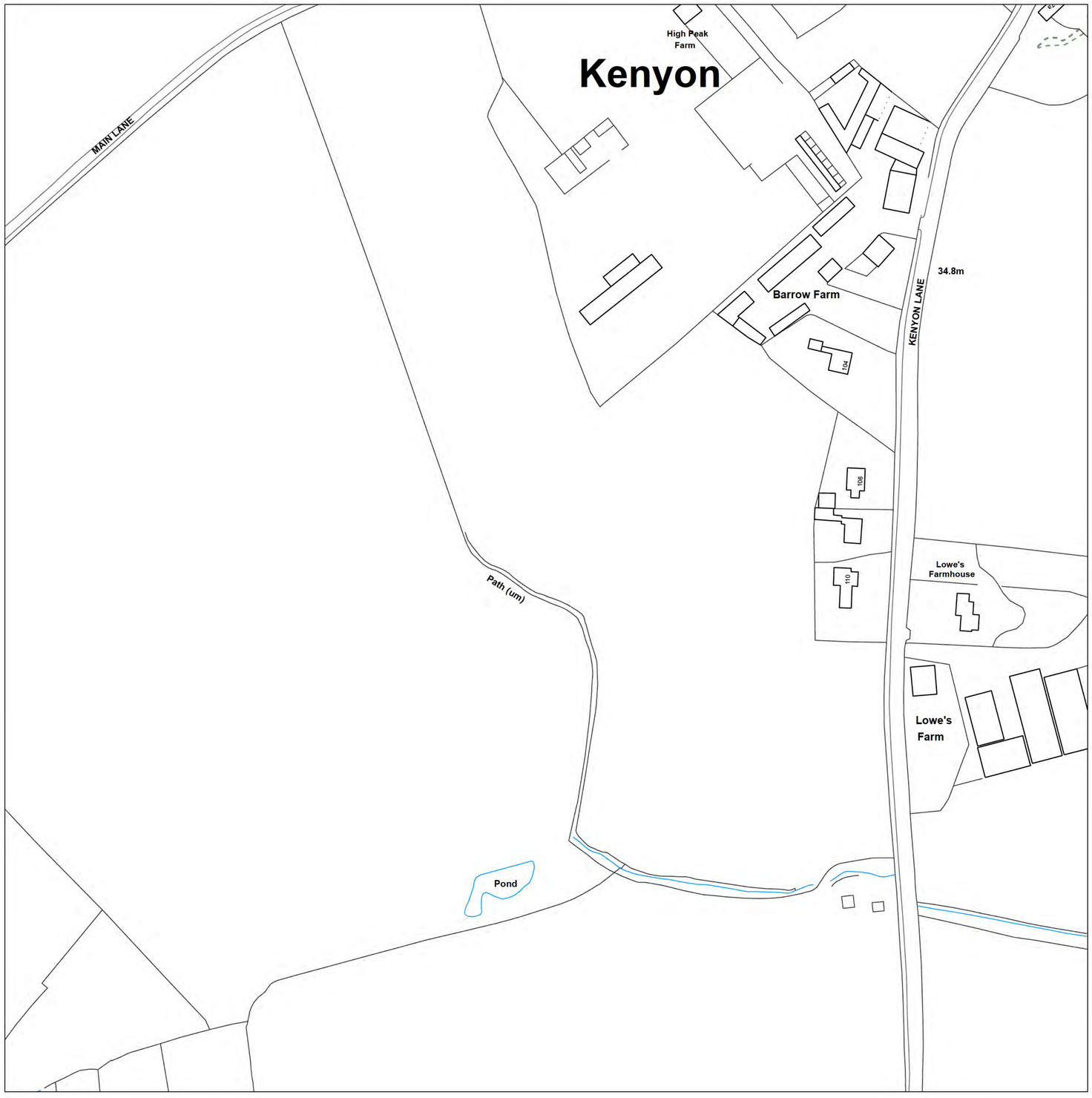
OS Sheet No: SJ6295SW

Scale: 1:1250 Date: 21/08/2017



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: SJ6295SE

Scale: 1:1250 Date: 21/08/2017

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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

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GRC	Glass Reinforced Concrete	MAR	Masonry, Random
GRP	Glass Reinforced Plastic	U	Unspecified

OS Sheet No: SJ6295SE
Scale: 1:1250 Date: 21/08/2017
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

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Scale: 1:1250 Date: 21/08/2017

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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
TJunction/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
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OS Sheet No: SJ6395SW
Scale: 1:1250 Date: 21/08/2017
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

OS Sheet No: SJ6294NW

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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

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GRP	Glass Reinforced Plastic	U	Unspecified

OS Sheet No: SJ6294NW
Scale: 1:1250 Date: 21/08/2017
0 Nodes
Sheet 1 of 1

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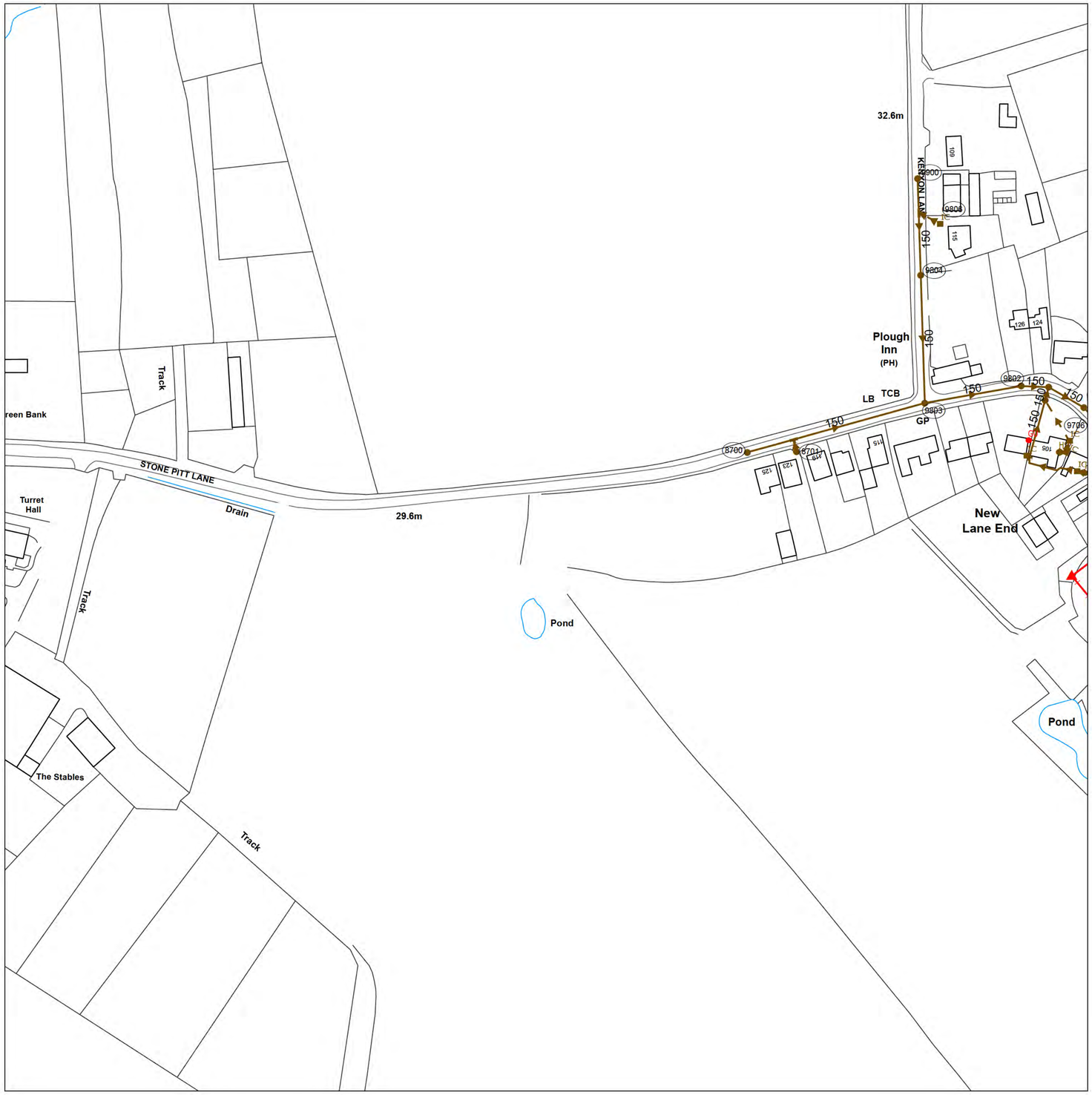
SEWER RECORDS



Refno	Cover	Func	Invert	Size x	Size y	Shape	Matl	Length	Grad
8700		FO	0	150		CI	VC	85.03	
8701		FO		100		CI	VC	5.77	
9703		FO							
9704		FO							
9705		FO							
9706		FO							
9800		FO							
9801		FO	29.62	150		CI	VC	18.78	94
9802		FO	29.75	150		CI	VC	12.75	98
9803		FO							
9804		FO	30.8	150		CI	VC	59	
9805		FO		150		CI	VC	6.27	
9806		FO							
9900		FO	31.3	150		CI	VC	44.58	89
9701		FO							
9702		FO							
9707		CO							
9709		FO							
9710		FO							
9901		FO							
8702		FO							
9708		FO		150		CI	VC	27.03	
9902		FO							
9700		CO	0	100		CI	DI	593.1	

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

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

OS Sheet No: SJ6294NE
Scale: 1:1250 Date: 21/08/2017
24 Nodes
Sheet 1 of 1

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SEWER RECORDS

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OS Sheet No: SJ6294NE

Scale: 1:1250 Date: 21/08/2017

Refno	Cover	Func	Invert	Size x	Size y	Shape	Matl	Length	Grad
0700		CO	0	150		CI	VC	30.27	
0701	32.74	CO	30.04	150		CI	VC	37.74	
0702	32.3	CO	30.36	150		CI	VC	28.77	
0703	32.22	FO							
0705		CO	0	150		CI	VC	21.79	
0706		CO							
0709		SW							
0801		CO							
1601	34.3	CO	31.35	150		CI	VC	70.65	116
1602		CO	0	150		CI	VC	25.76	
1701	33.6	CO	30.72	150		CI	VC	25.75	117
1702	33.3	CO	30.45	150		CI	VC	22.62	
2501	34.97	CO	33.18	150		CI	VC	111.24	129
2502	34.79	CO	32.3	150		CI	VC	48.6	
0704		CO	0	150		CI	VC	7.66	
0708		CO							
0901		SW							
0803		CO							
2500		CO	0	150		CI	VC	12.59	
0707		CO							
0804		CO		100		CI	VC	4.84	
1603		CO							
0707		CO							

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

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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
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GRC	Glass Reinforced Concrete	MAR	Masonry, Random
GRP	Glass Reinforced Plastic	U	Unspecified

OS Sheet No: SJ6394NW
Scale: 1:1250 Date: 21/08/2017
23 Nodes
Sheet 1 of 1

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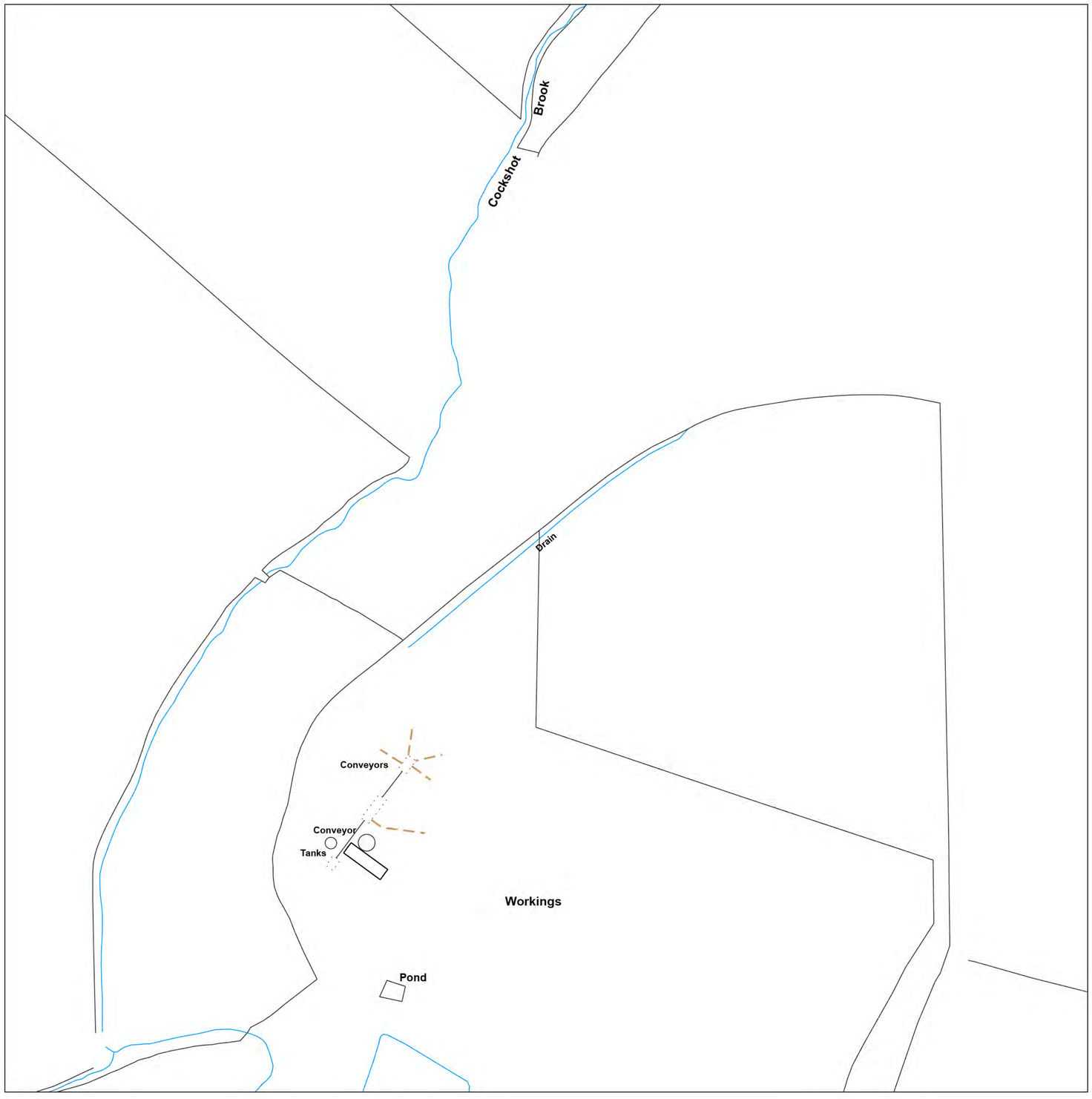
SEWER RECORDS



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

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Scale: 1:1250 Date: 21/08/2017

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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
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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
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OS Sheet No: SJ6294SW
Scale: 1:1250 Date: 21/08/2017
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

OS Sheet No: SJ6294SE

Scale: 1:1250 Date: 21/08/2017

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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
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Septic Tank
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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
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OV	Overflow

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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

OS Sheet No: SJ6294SE
Scale: 1:1250 Date: 21/08/2017
0 Nodes
Sheet 1 of 1

United Utilities
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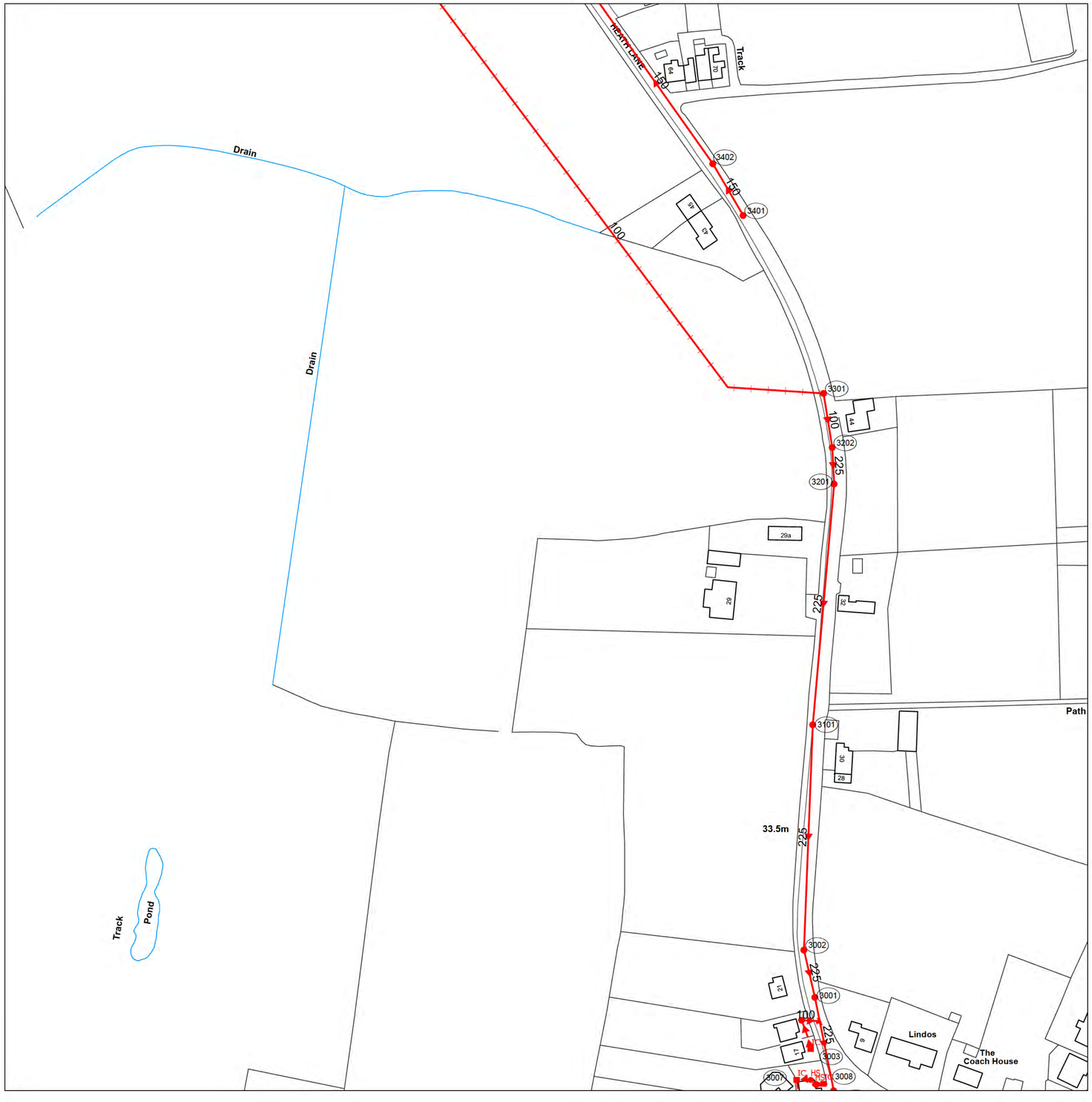
SEWER RECORDS



Refno	Cover	Func	Invert	Size.x	Size.y	Shape	Matl	Length	Grad
3001	32.41	CO							
3002	32.92	CO							
3003		CO							
3004		CO		100		CI	VC	8.37	
3007		CO							
3008		CO							
3101	34.3	CO	32.4	225		CI	VC	104.08	87
3201	35.75	CO	0	225		CI	VC	111.59	
3202	36.02	CO							
3301	36.09	CO							
3401	35.89	CO	34.35	150		CI	VC	27.73	116
3402	35.73	CO	34.08	150		CI	VC	91.71	107
3005		CO							
3009		CO							
3010		CO							
3006		CO							

OS Sheet No: SJ6394SW

Scale: 1:1250 Date: 21/08/2017

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
TJunction/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
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OS Sheet No: SJ6394SW
Scale: 1:1250 Date: 21/08/2017
16 Nodes
Sheet 1 of 1

United Utilities
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SEWER RECORDS

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: LAND NW OF CROFT- NORTH
Our Ref: [redacted]
Date: 21/8/2017

Shepherd Gilmour Infrastructure
SGi Consulting Colchester House
40 Peter Street

Manchester
M2 5GP

FAO: [redacted]

Dear Sirs

Location:

I acknowledge with thanks your request dated 18/08/17 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]

Property Searches Manager

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.
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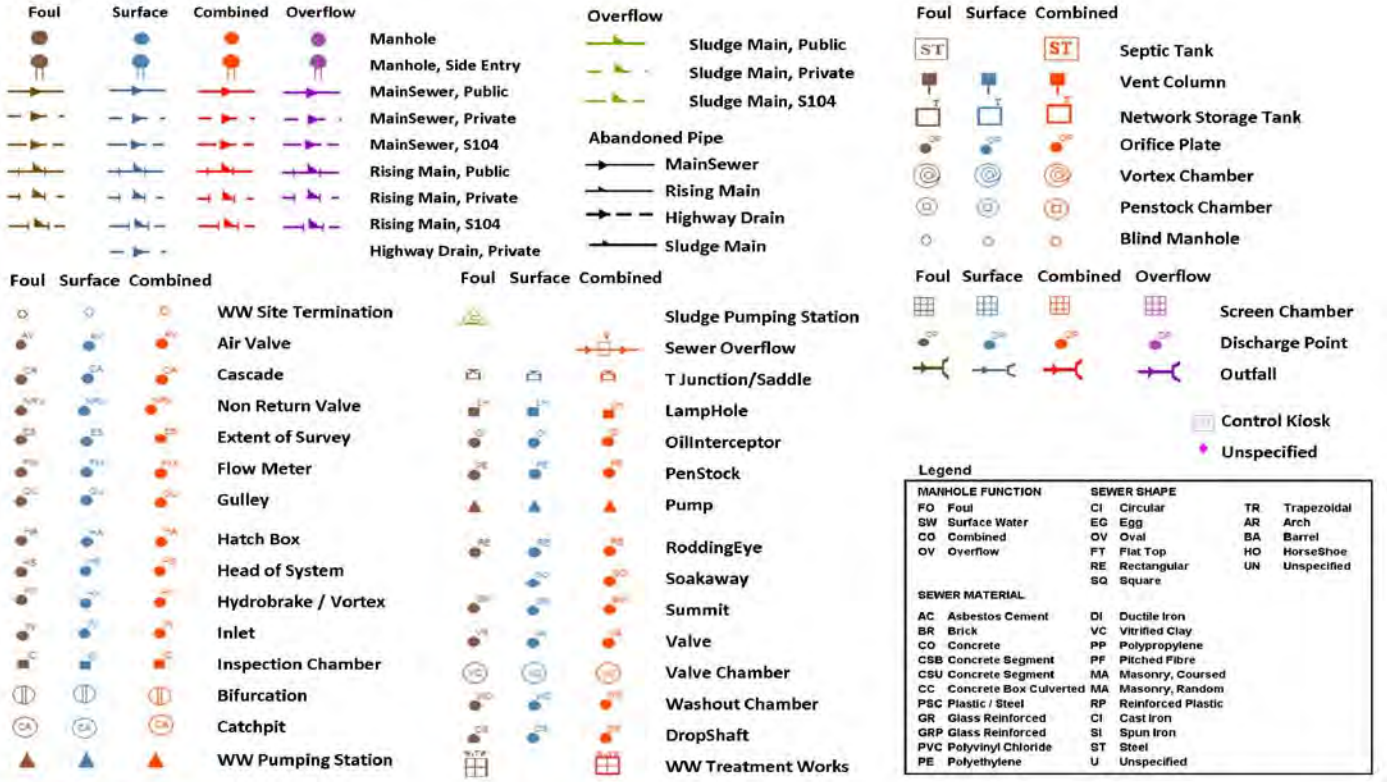
7. No person or legal entity, including any company shall be relieved from any liability howsoever and whensoever arising for any damage caused to UUWL apparatus by reason of the actual position and/or depths of UUWL apparatus being different from those shown on the Map and any information supplied with 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.

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
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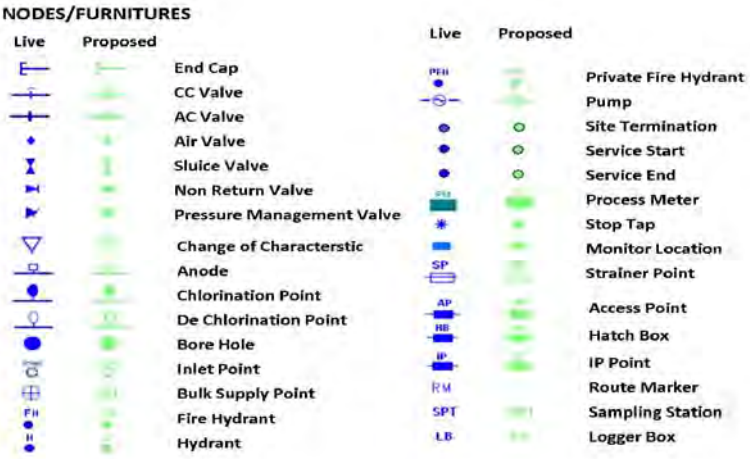
PE	Polyethylene	U	Unspecified

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		

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.

Land NW of Croft - North

Printed By: Property Searches Date: 21/08/2017

DO NOT SCALE

Approximate Scale: 1:5000

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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: LAND NW OF CROFT- SOUTH
Our Ref: [redacted]
Date: 21/8/2017

Shepherd Gilmour Infrastructure
SGi Consulting Colchester House
40 Peter Street

Manchester
M2 5GP

FAO: [redacted]

Dear Sirs

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Yours Faithfully

[redacted]

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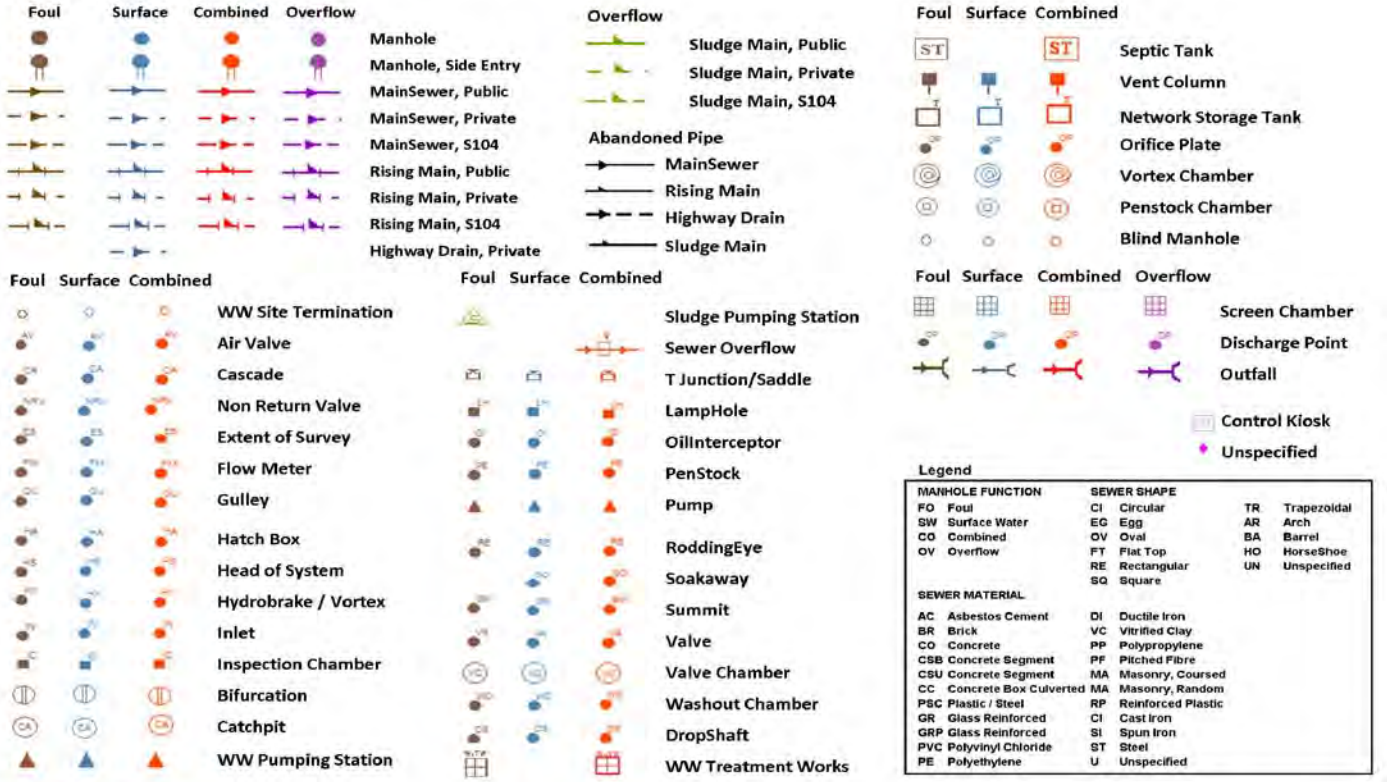
United Utilities

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
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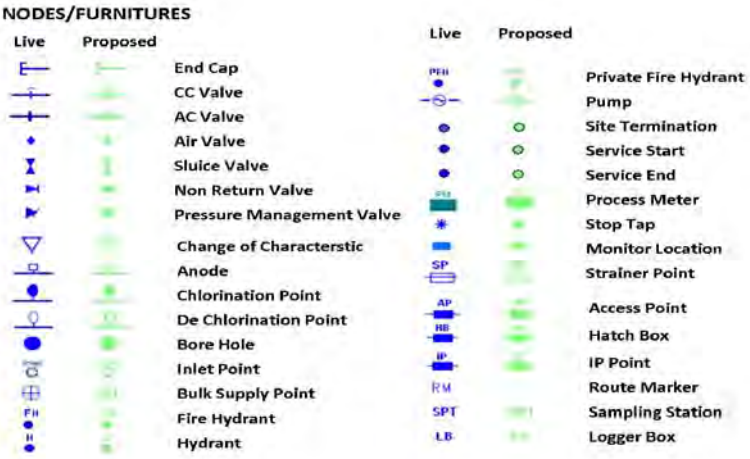
GRP	Glass Reinforced	SI	Spun Iron
PVC	Polyvinyl Chloride	ST	Steel
PE	Polyethylene	U	Unspecified

CLEAN WATER SYMBOLOGY

PIPE WORK

ABANDONED PIPE

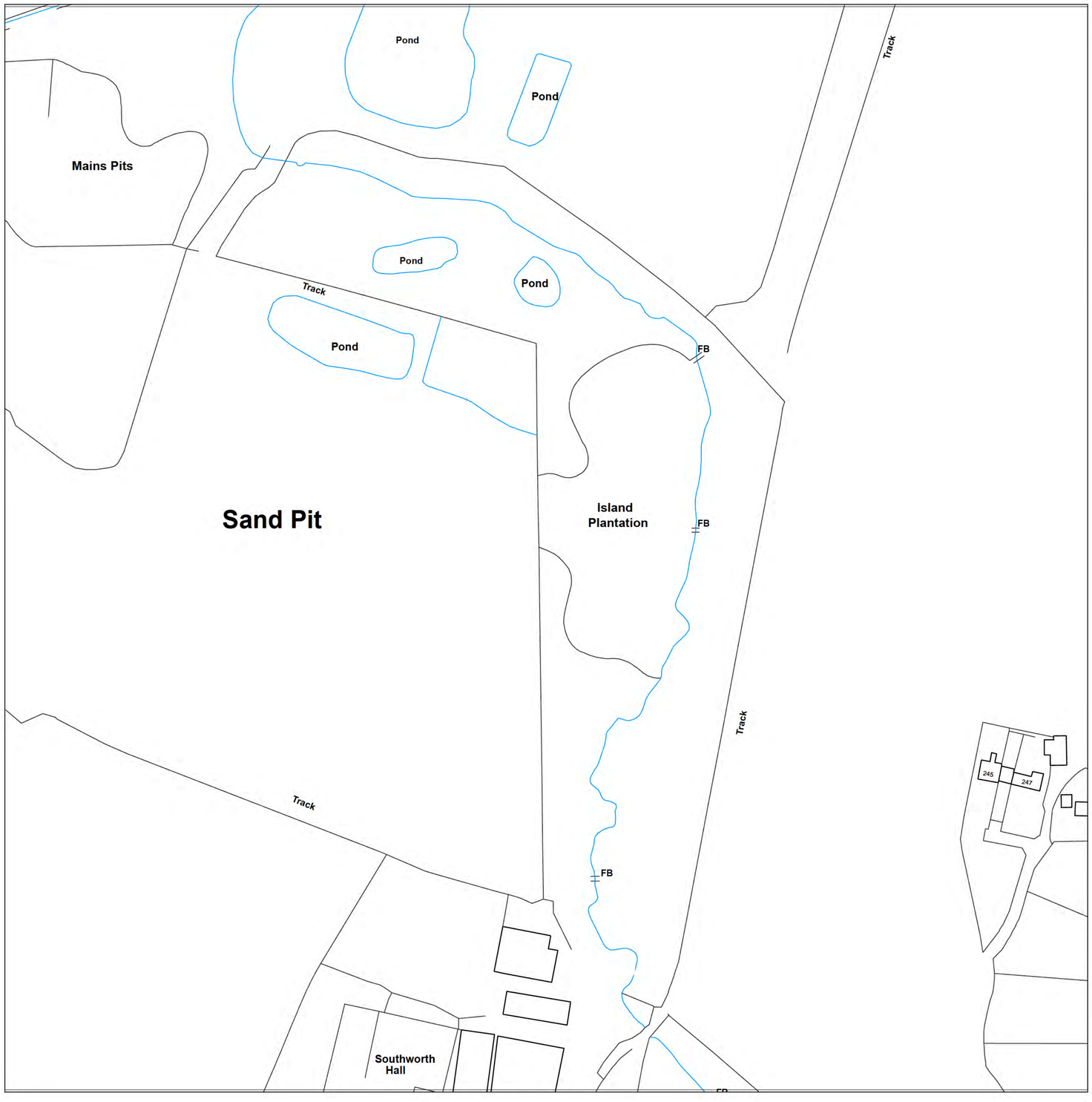
NODES/FURNITURES



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		



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: SJ6293NW

Scale: 1:1250 Date: 21/08/2017

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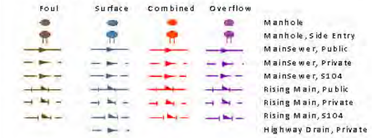
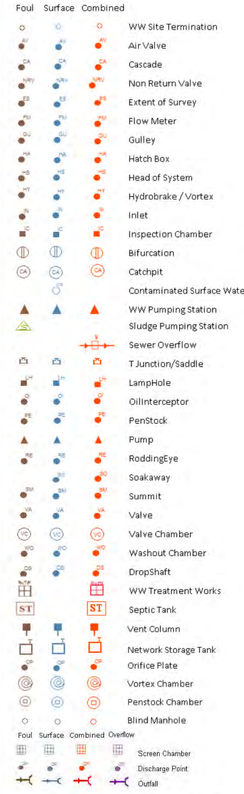
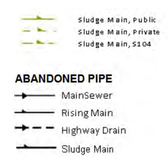
WASTE WATER SYMBOLOGY







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
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GRP	Glass Reinforced Plastic	U	Unspecified

OS Sheet No: SJ6293NW
Scale: 1:1250 Date: 21/08/2017
0 Nodes
Sheet 1 of 1

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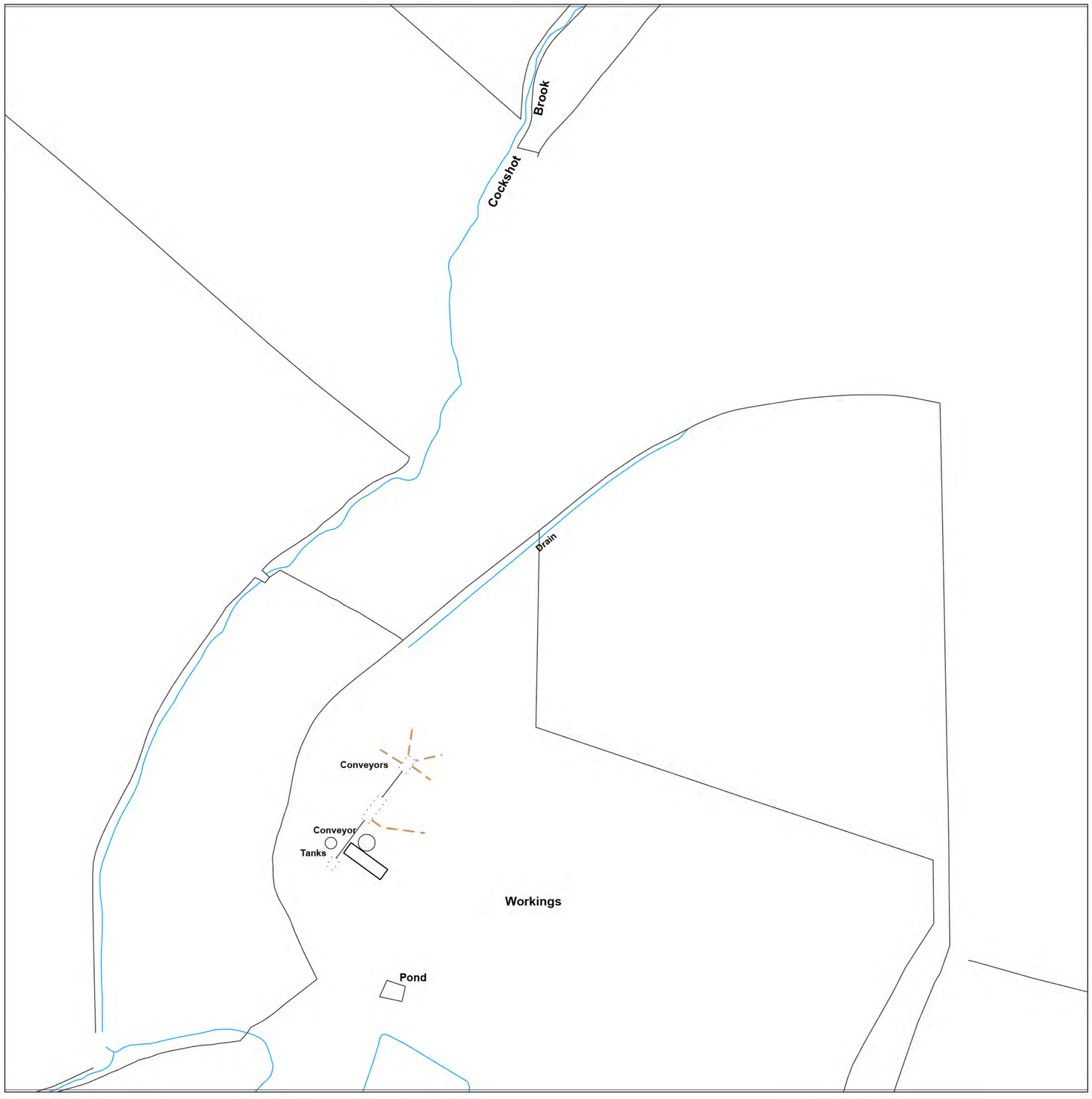
SEWER RECORDS



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

OS Sheet No: SJ6294SW

Scale: 1:1250 Date: 21/08/2017

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

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
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OS Sheet No: SJ6294SW
Scale: 1:1250 Date: 21/08/2017
0 Nodes
Sheet 1 of 1

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SEWER RECORDS

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

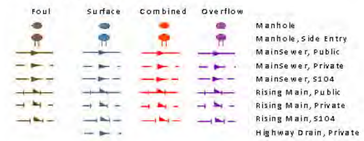
Refno Cover Func Invert Size x Size y Shape Matl Length Grad

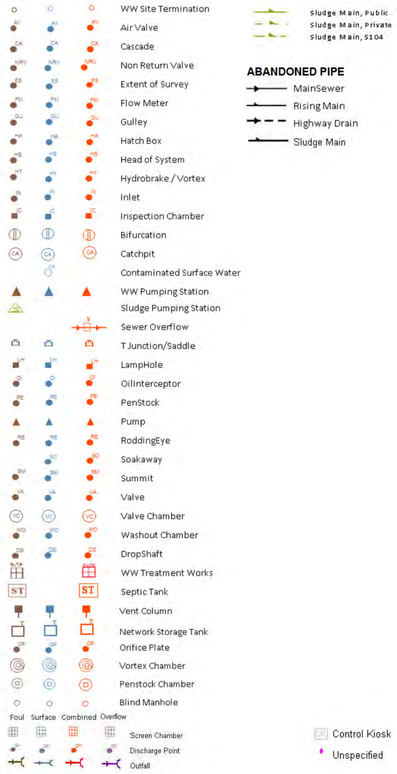
OS Sheet No: SJ6294SE

Scale: 1:1250 Date: 21/08/2017

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
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OS Sheet No: SJ6294SE

Scale: 1:1250 Date: 21/08/2017

0 Nodes

Sheet 1 of 1

United Utilities

helping life flow smoothly

SEWER RECORDS

Refno	Cover	Func	Invert	Size.x	Size.y	Shape	Matl	Length	Grad
8501	22.84	CO	21.27	225		CI	VC	66.46	47
8502	23.61	CO	21.69	225		CI	CO	27.36	144
8503	23.77	CO	21.85	225		CI	CO	37.34	267
9501	23.65	CO	21.93	225		CI	CO	34.38	573
9502	23.28	CO	21.99	225		CI	CO	34	850
9503		SW		100		CI	VC	6.39	
9505		CO		150		CI	VC	13.24	
9507		CO							
9508		CO							
8504		CO	21.5	225		CI	VC	27.55	145
9509		CO							
9511		CO							
9505		CO							
9510		CO							

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

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
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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

OS Sheet No: SJ6293NE
Scale: 1:1250 Date: 21/08/2017
14 Nodes
Sheet 1 of 1

United Utilities
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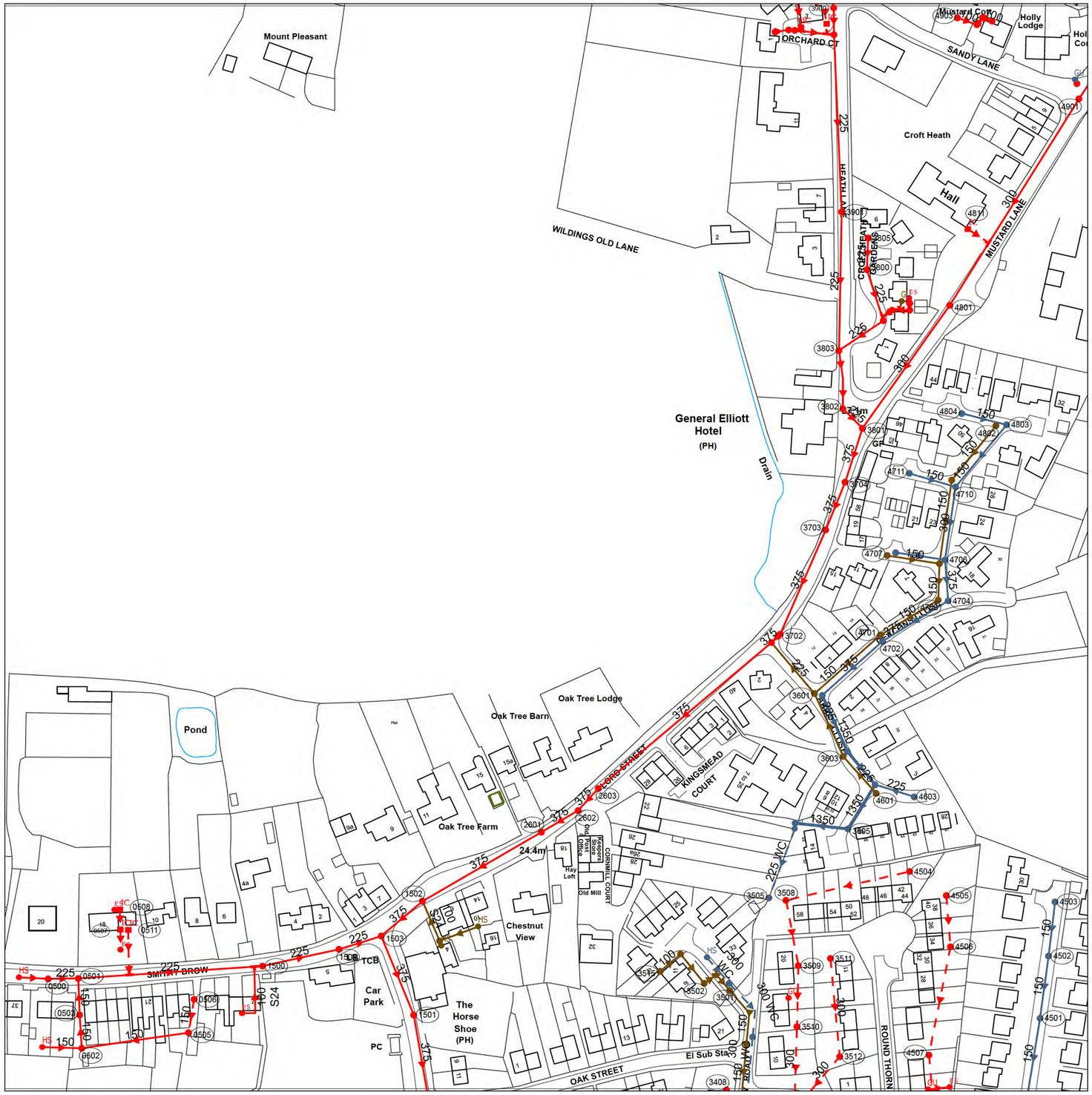
SEWER RECORDS

Printed By: Property Searches

OS Sheet No: SJ6293NE

Scale: 1:1250 Date: 21/08/2017



Refno	Cover	Func	Invert	Size.x	Size.y	Shape	Matl	Length	Grad
0500		CO							
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							
2602	24.65	CO	0	375		CI	CO	19.74	
2603	24.75	CO	0	375		CI	CO	13.87	
3501		FO							
3502		FO							
3503		FO		150		CI	VC	17.34	
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							
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							
3904		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

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BR	Brick	PVC	Polyvinyl Chloride
PE	Polyethylene	CI	Cast Iron
RP	Reinforced Plastic Matrix	SI	Spun Iron
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CC	Concrete Box Culverted	PF	Pitch Fibre
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GRC	Glass Reinforced Concrete	MAR	Masonry, Random
GRP	Glass Reinforced Plastic	U	Unspecified

OS Sheet No: SJ6393NW
Scale: 1:1250 Date: 21/08/2017
113 Nodes
Sheet 1 of 1

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SEWER RECORDS

OS Sheet No: SJ6393NW

Scale: 1:1250 Date: 21/08/2017

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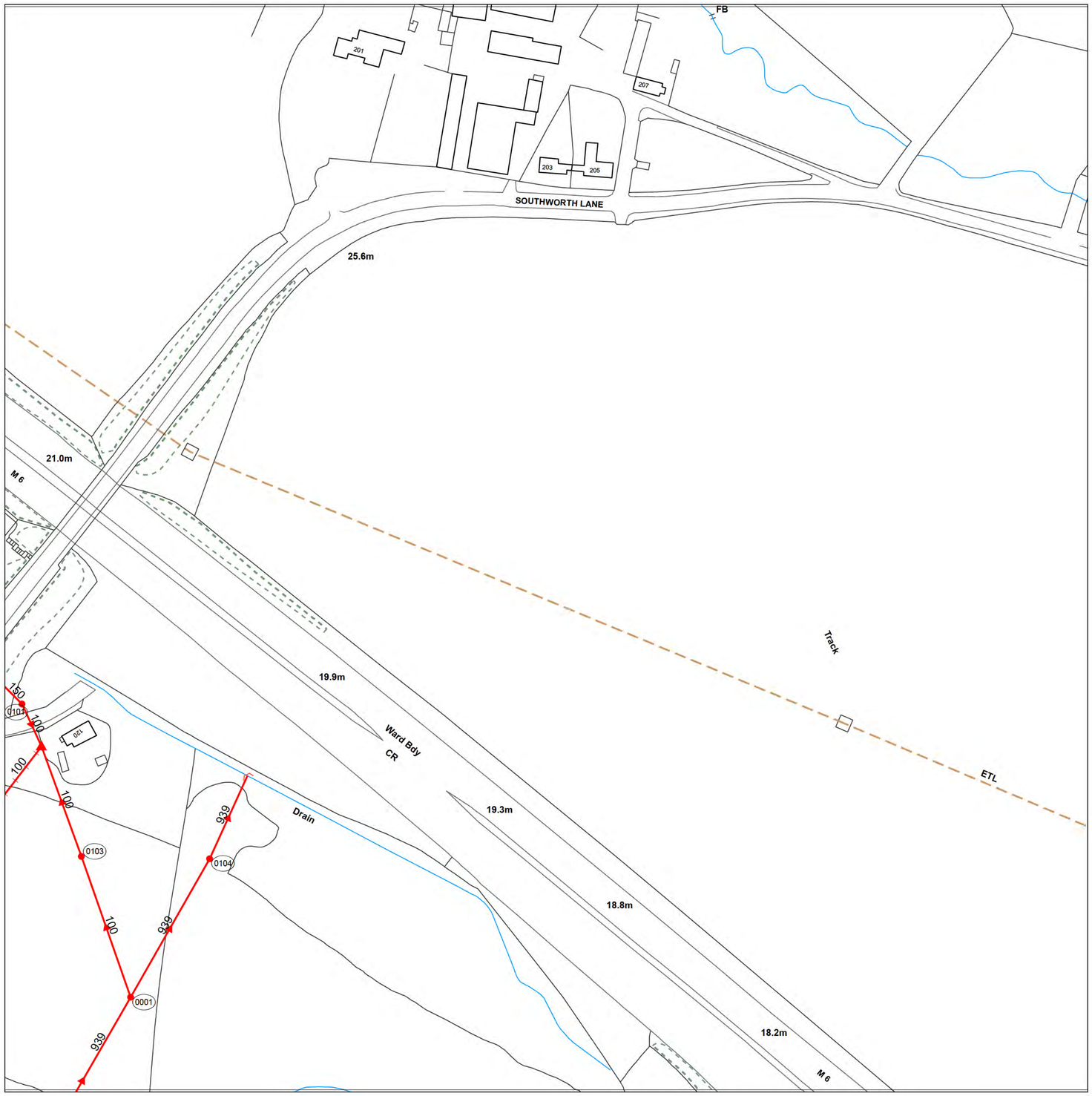

Refno	Cover	Func	Invert	Size.x	Size.y	Shape	Matl	Length	Grad
0001		CO							
0101		CO	0	100		CI	CO	21.45	
0103		CO							
0104		CO							
0102		CO	0	100		CI	PVC	211.44	

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

OS Sheet No: SJ6293SW

Scale: 1:1250 Date: 21/08/2017

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

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

OS Sheet No: SJ6293SW
Scale: 1:1250 Date: 21/08/2017
5 Nodes
Sheet 1 of 1

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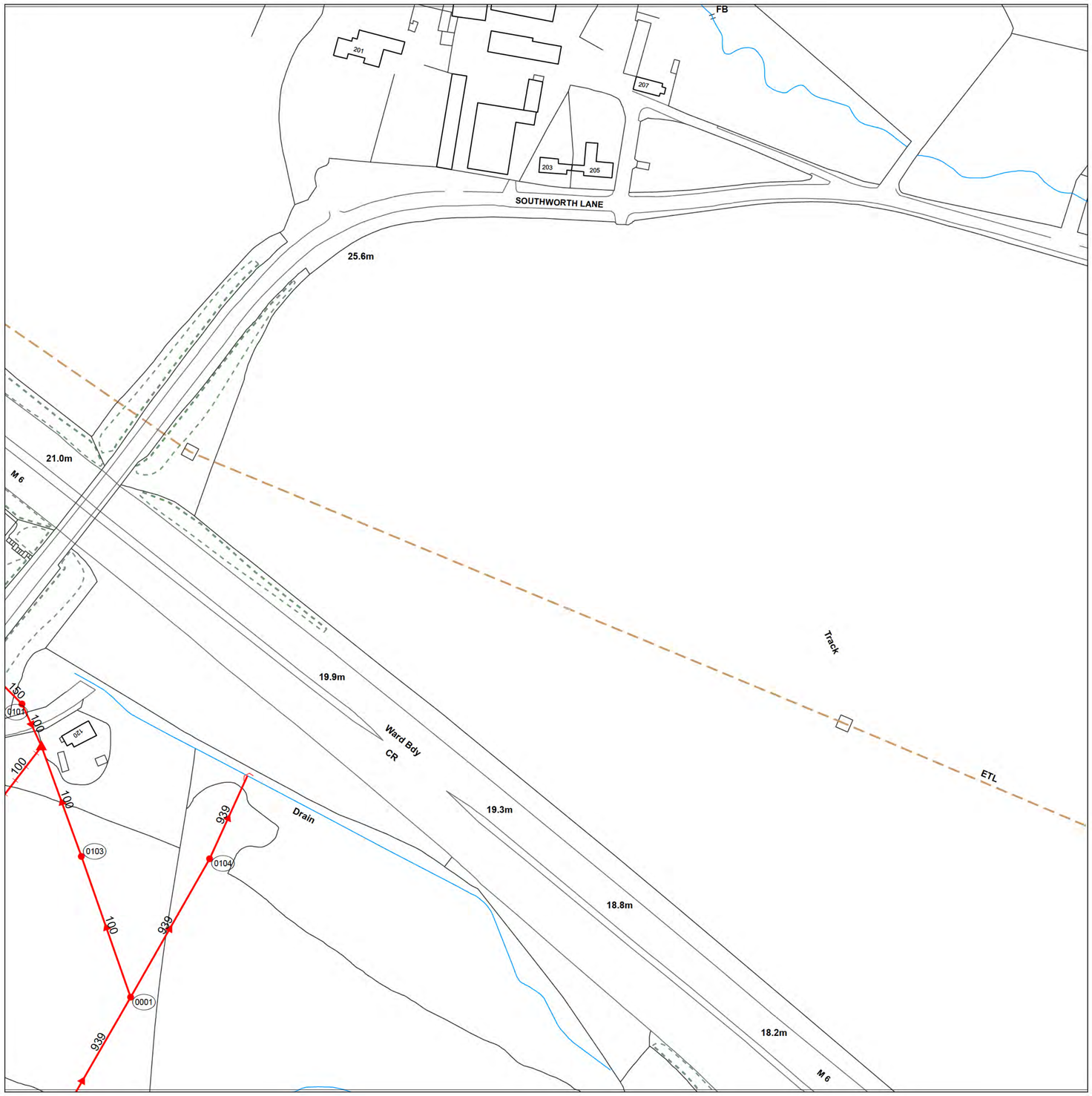
SEWER RECORDS



Refno	Cover	Func	Invert	Size.x	Size.y	Shape	Matl	Length	Grad
0001		CO							
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0103		CO							
0104		CO							
0102		CO	0	100		CI	PVC	211.44	

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

OS Sheet No: SJ6293SW

Scale: 1:1250 Date: 21/08/2017

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

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		

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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

OS Sheet No: SJ6293SW
Scale: 1:1250 Date: 21/08/2017
5 Nodes
Sheet 1 of 1

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SEWER RECORDS

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.

Land NW Of Croft - South

Printed By: Property Searches Date: 21/08/2017

DO NOT SCALE

Approximate Scale: 1:5000

United Utilities
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Kenyon
Morris's Farm
Barrow Farm
Lowe's Farmhouse
Lowe's Farm
Kenyon Hall
Kenyon Hall Cottage
Garden Centre
Poultry Farm
Brown Bank
Kenyon Bridge
Tunnel Hall
Tunnel Hall Cottages
Sandy Brow Lodge
Sandy Bank Farm
The Bungalow
Rock House
The Stables
Cockshot Brook
Pond
Plough Inn (PH)
New Lane End
Cheshire House
Woodbine House
Beech Farm
Heath Hirsers
Track
Path (um)
Drain
Workings
Conveyors
Conveyor Tanks
Malins Pits
Island Plantation
Sand Pit
Southworth Hall
SOUTHWORTH LANE
GREAT MEALEY LANE
KENYON LANE
Smithy Brow
Issues
Meadow
Moor Pleasant
Croft Heath
South View
The Coach House
London
General Elliott Hotel (PH)
Oak Tree Lodge
Oak Tree Farm
Oak Tree Barn
Car Park
The Horse Shoe (PH)
WILDINGS OLD LANE
Ditch
Dam
Ford
FB
STL

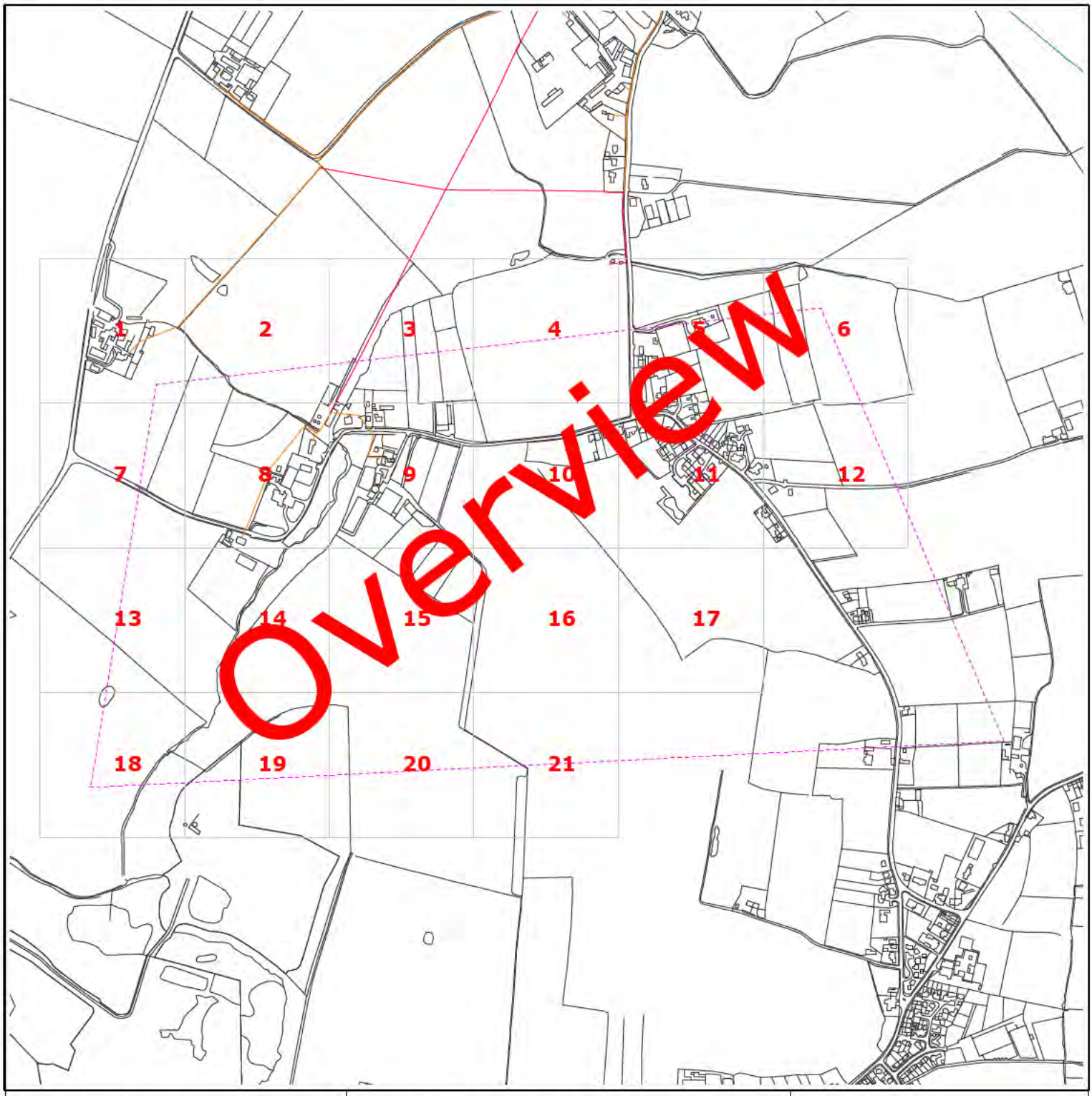
Shepherd Gilmour
Consulting Engineers

Colchester House, 40 Peter Street, Manchester M2 5GP

(44)0161 837 1500

www.shepherd-gilmour.co.uk

APPENDIX D



Requested by: Shepherd Gilmour
Company: Shepherd Gilmour Infrastructure L
Date Requested: 08/08/2017
Job Reference: 10977683
Your Scheme/Reference: Land North-West o

Dig Sites:

Area Line

Operating Voltage	Colour Code	Line Colour
132kV	Black	
33kV	Green	
22kV-25kV	Yellow	
11kV	Red	
6kV-6.6kV	Blue	
1kV-6kV	Violet	
LV	Orange	
Unknown Voltage	Brown	

electricity north west

Data Management
Electricity North West
Linley House
Dickinson Street
Manchester, M1 4LF
Phone: 0800 195 4141
Email: planrequest@enwl.co.uk

Scales on A4 paper:
1:1250 Area dig site
1:250 Line dig site

Requested by: Shepherd Gilmour
Company: Shepherd Gilmour Infrastructure L
Date Requested: 08/08/2017
Job Reference: 10977683
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Dig Sites:

Area Line

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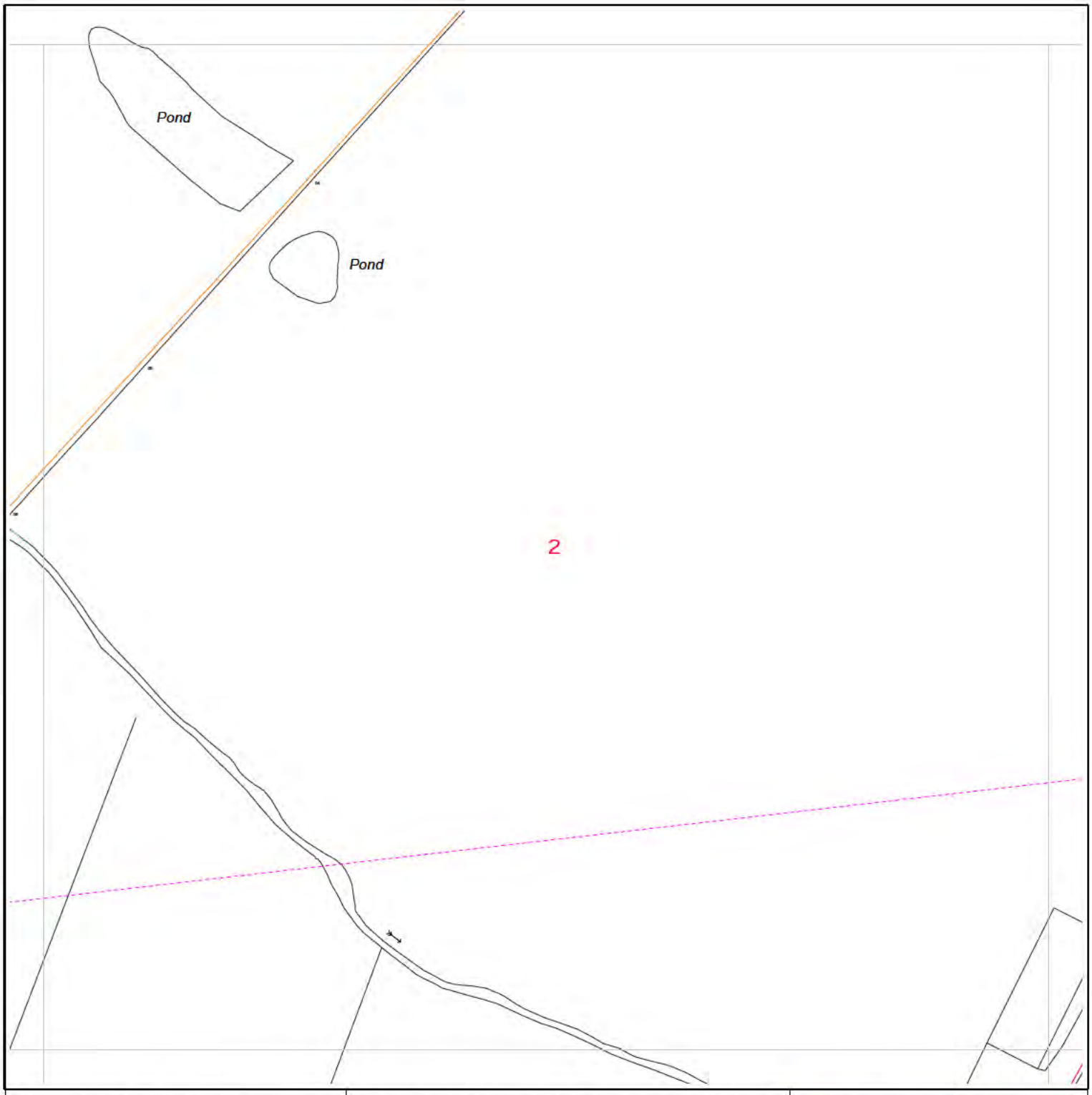

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Dig Sites:

Area Line

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electricity north west

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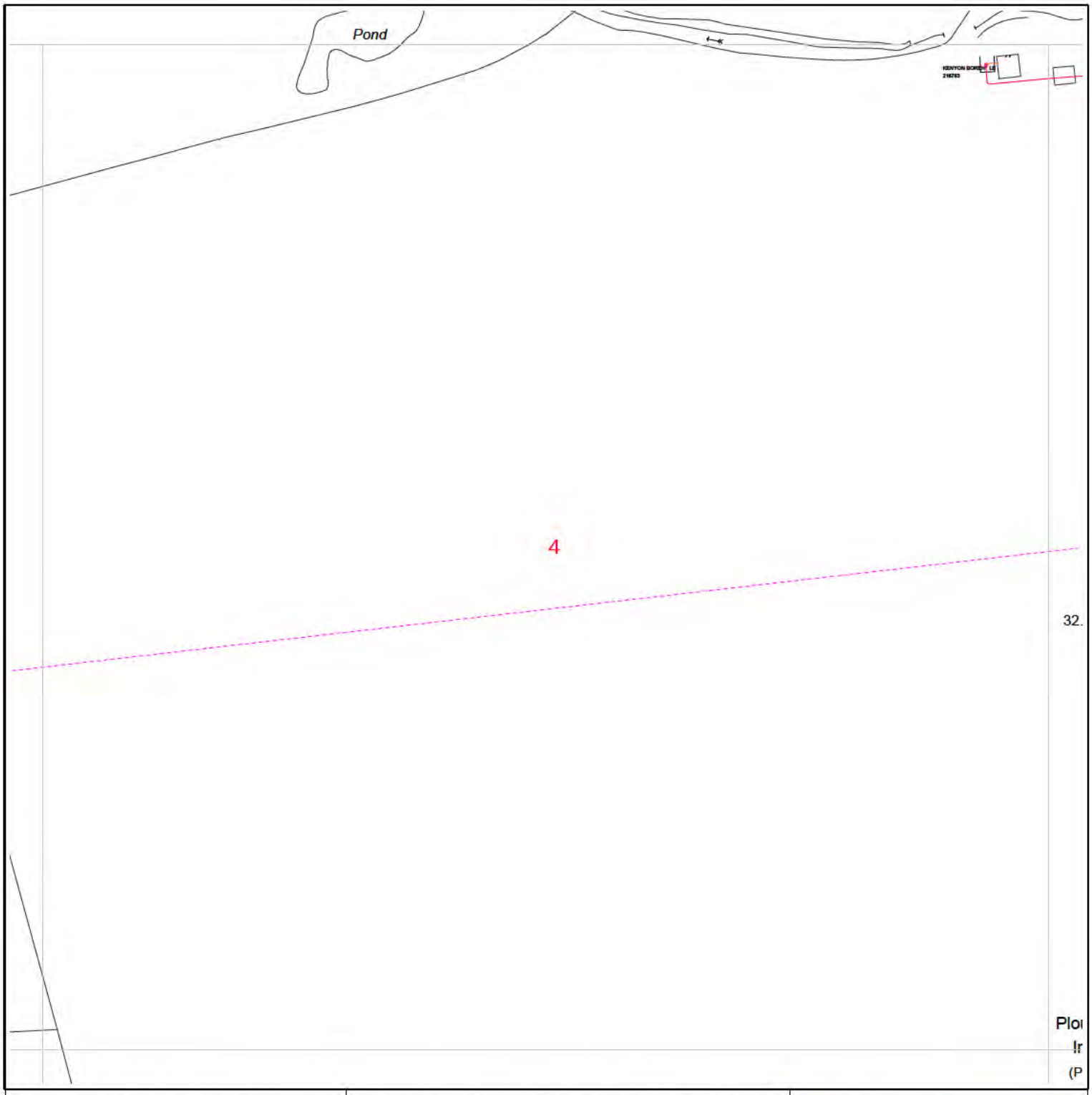

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Date Requested: 08/08/2017
Job Reference: 10977683
Your Scheme/Reference: Land North-West o

Dig Sites:

Area Line

Operating Voltage	Colour Code	Line Colour
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electricity north west

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Scales on A4 paper:
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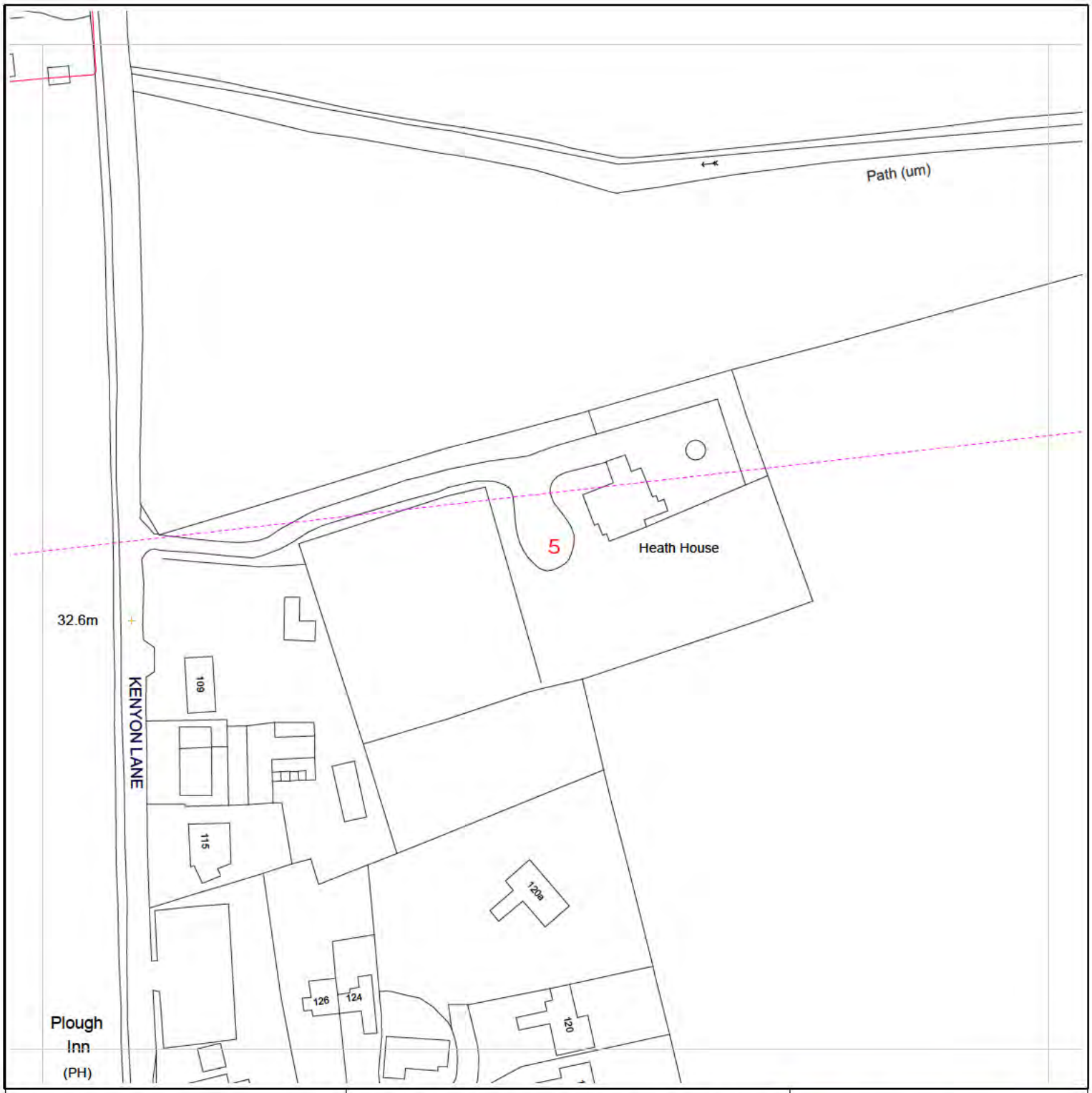

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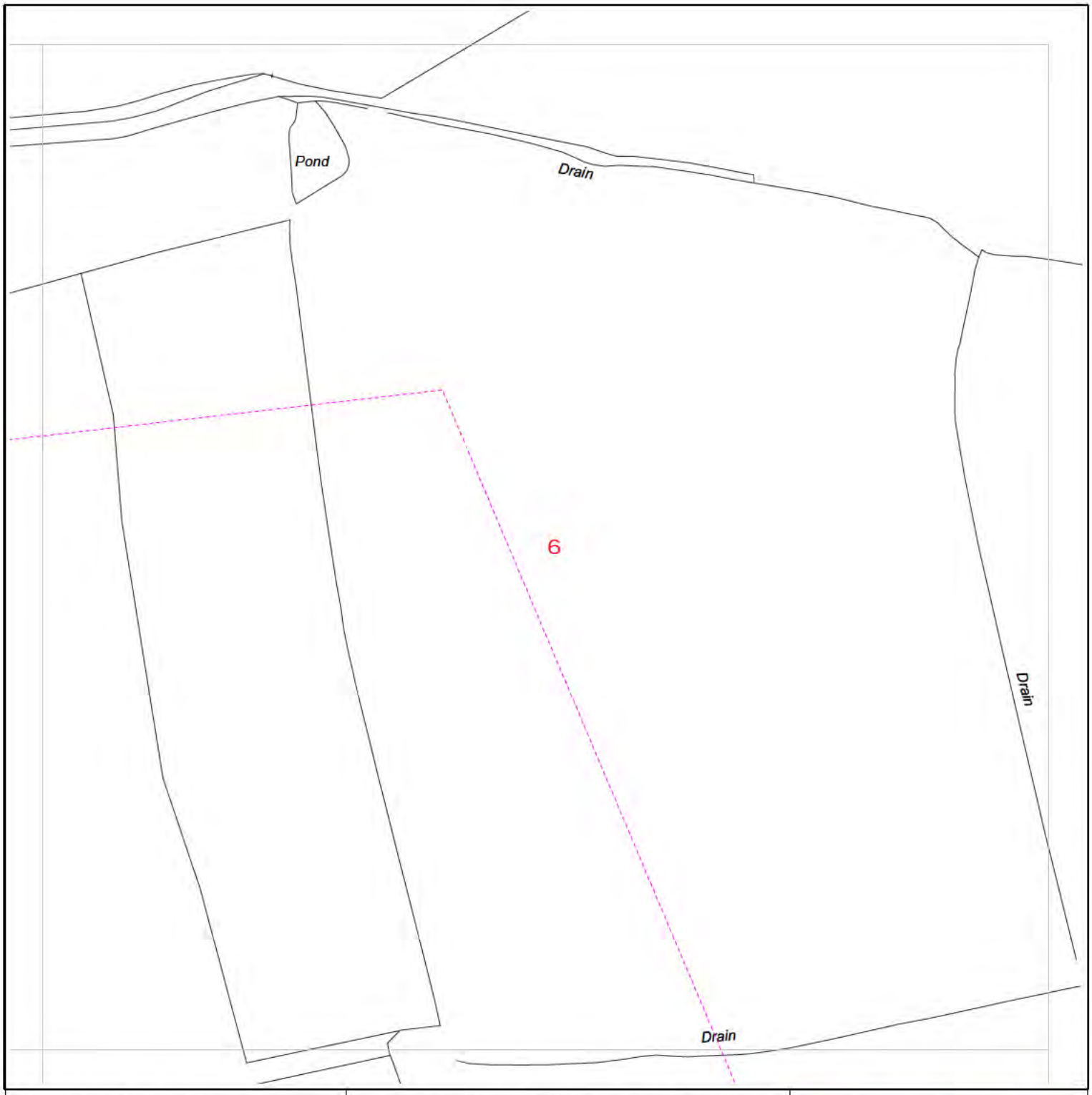

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Company: Shepherd Gilmour Infrastructure L
Date Requested: 08/08/2017
Job Reference: 10977683
Your Scheme/Reference: Land North-West o

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Area Line

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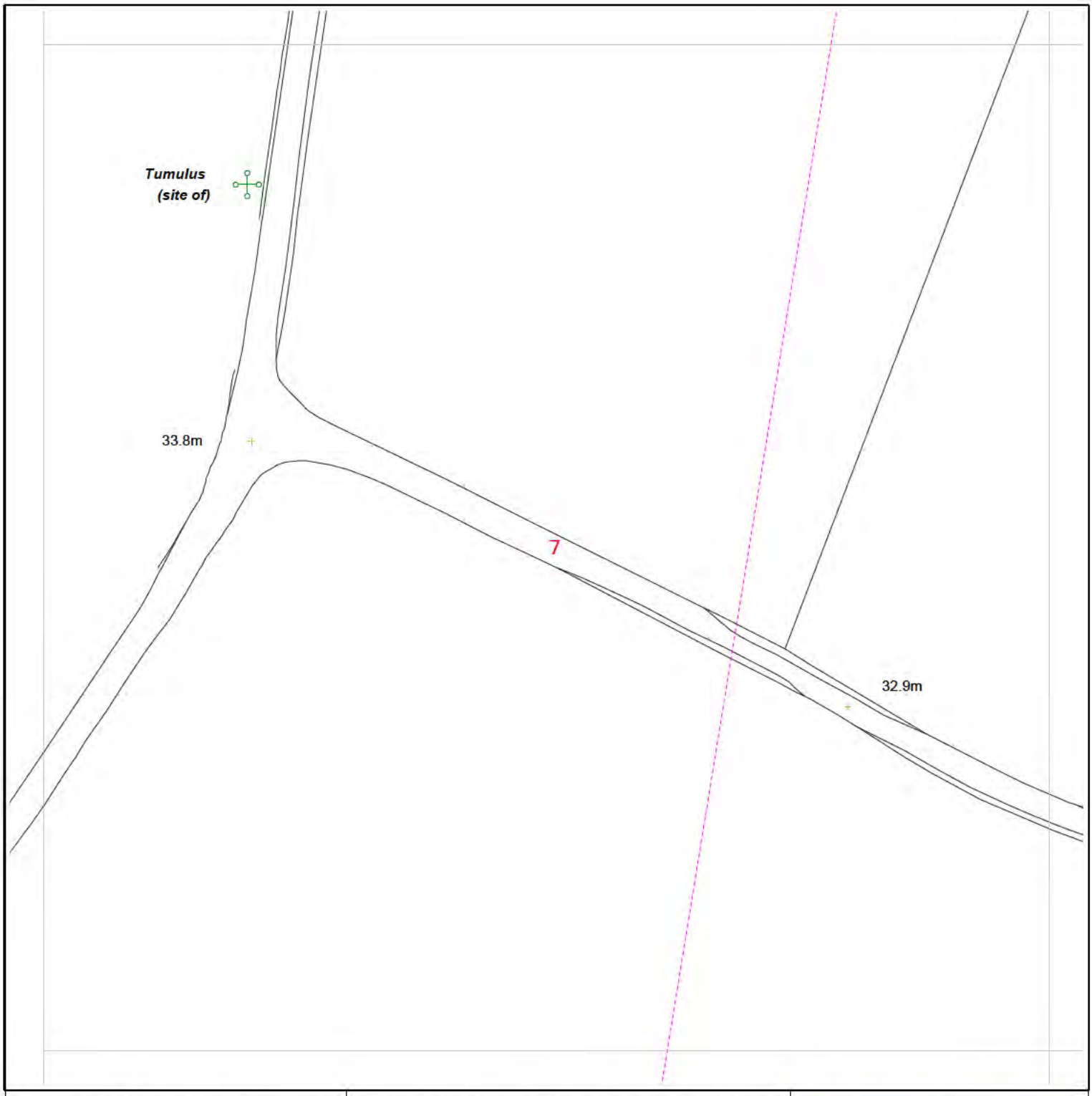
11kV	Red	
6kV-6.6kV	Blue	
1kV-6kV	Violet	
LV	Orange	
Unknown Voltage	Brown	

electricity north west

Data Management
Electricity North West
Linley House
Dickinson Street
Manchester, M1 4LF
Phone: 0800 195 4141
Email: planrequest@enwl.co.uk

Scales on A4 paper:
1:1250 Area dig site
1:250 Line dig site



Requested by: Shepherd Gilmour
Company: Shepherd Gilmour Infrastructure L
Date Requested: 08/08/2017
Job Reference: 10977683
Your Scheme/Reference: Land North-West o

Dig Sites:

Area Line

Operating Voltage	Colour Code	Line Colour
132kV	Black	
33kV	Green	
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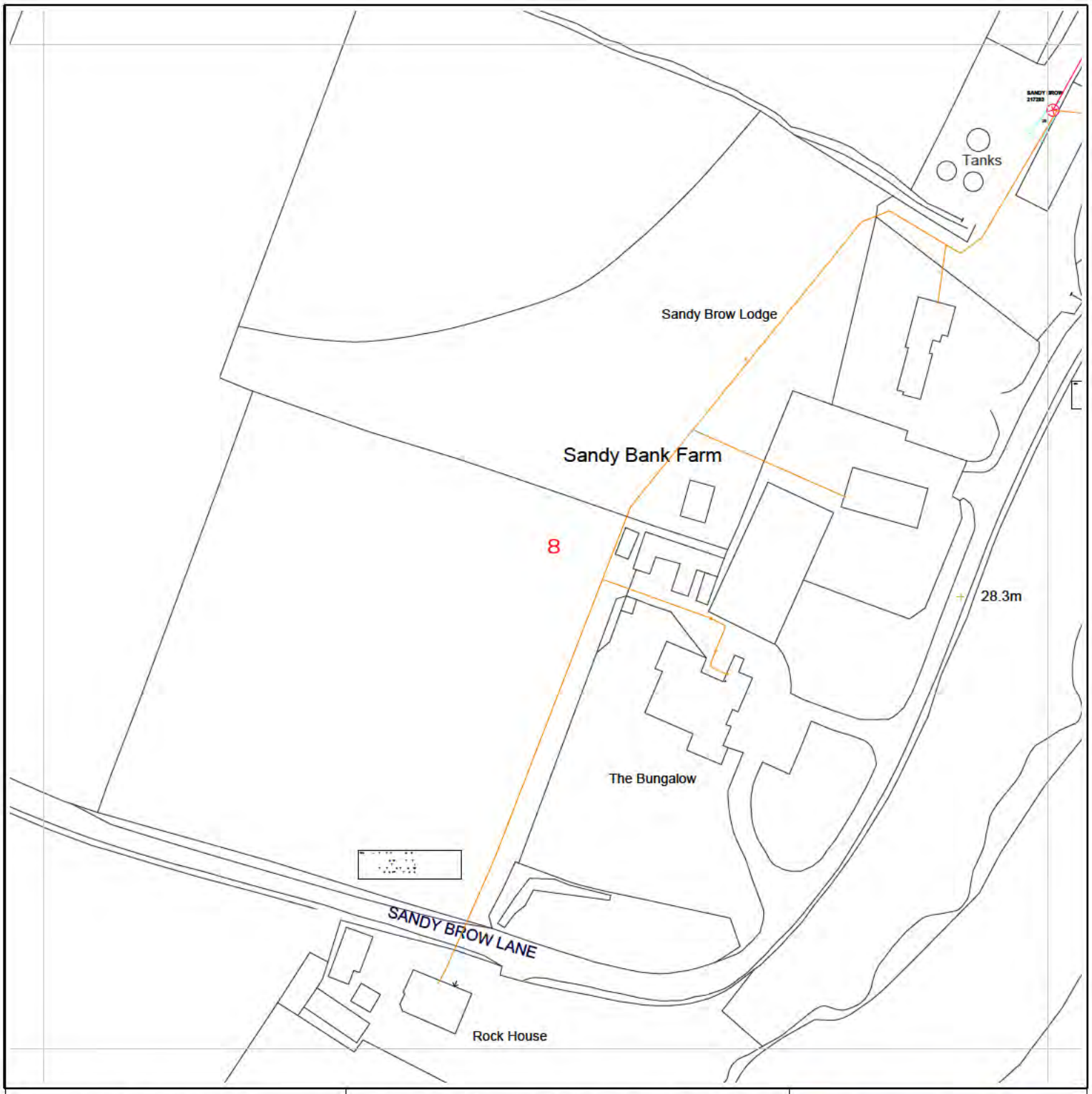

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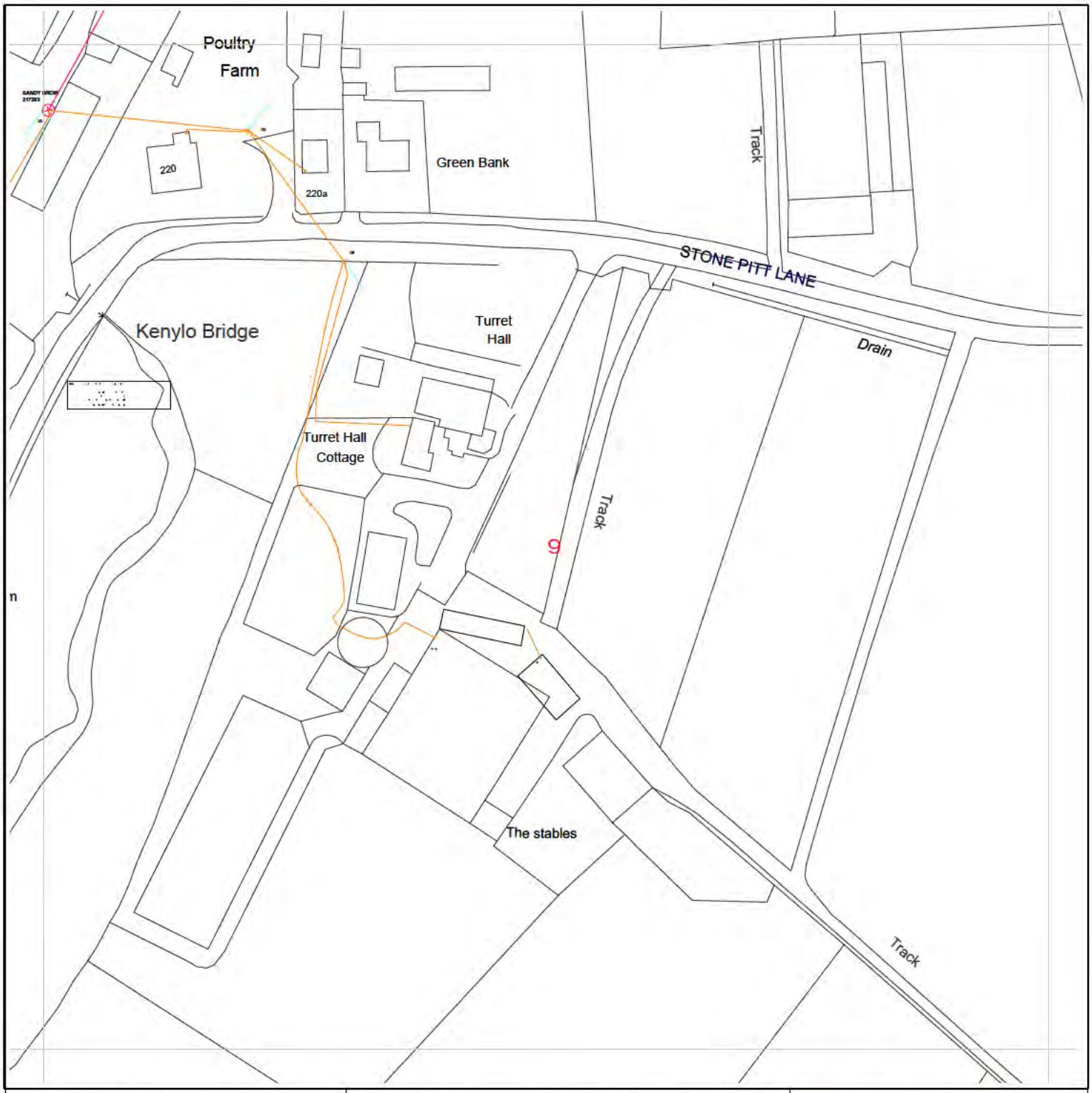

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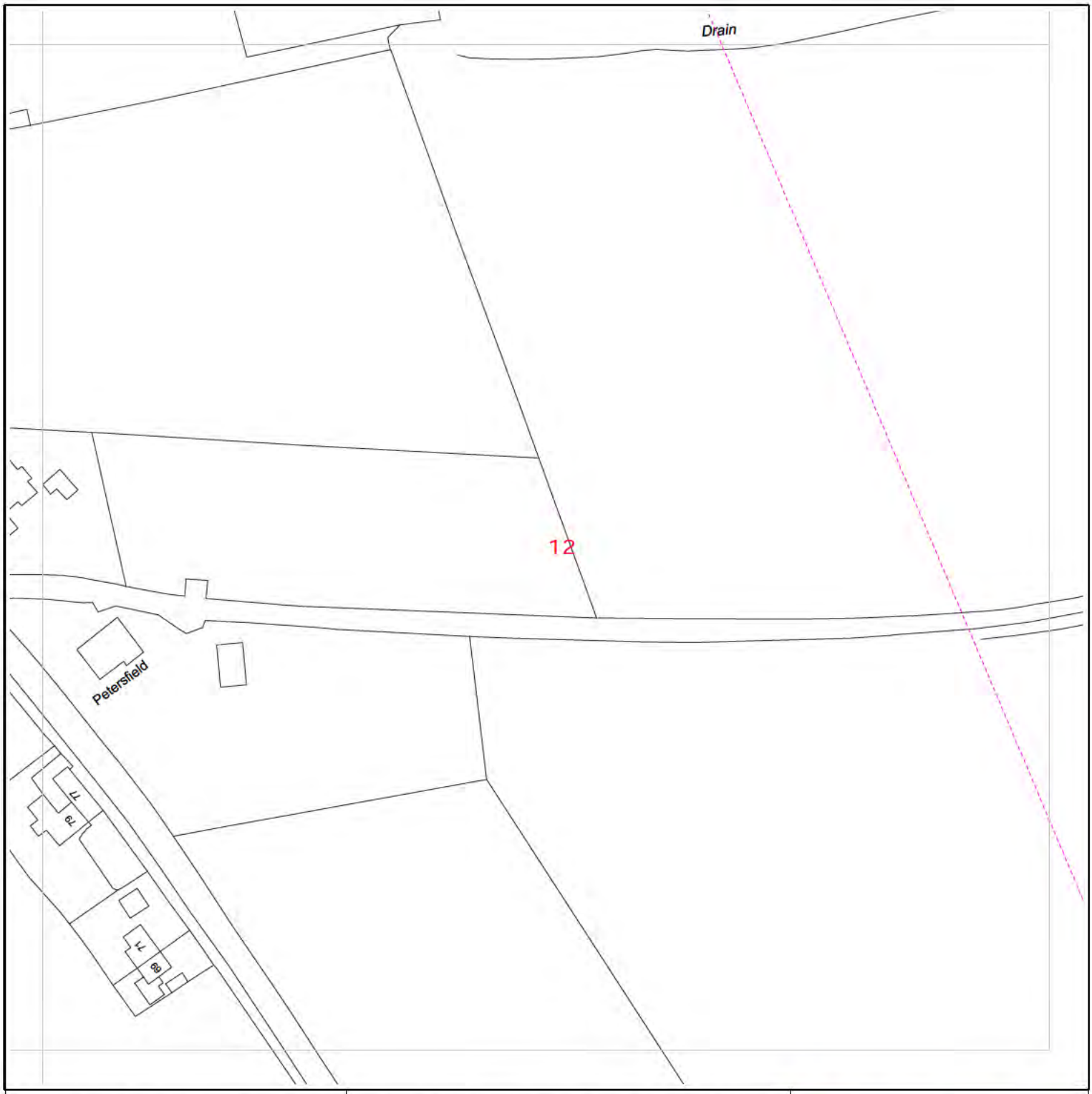

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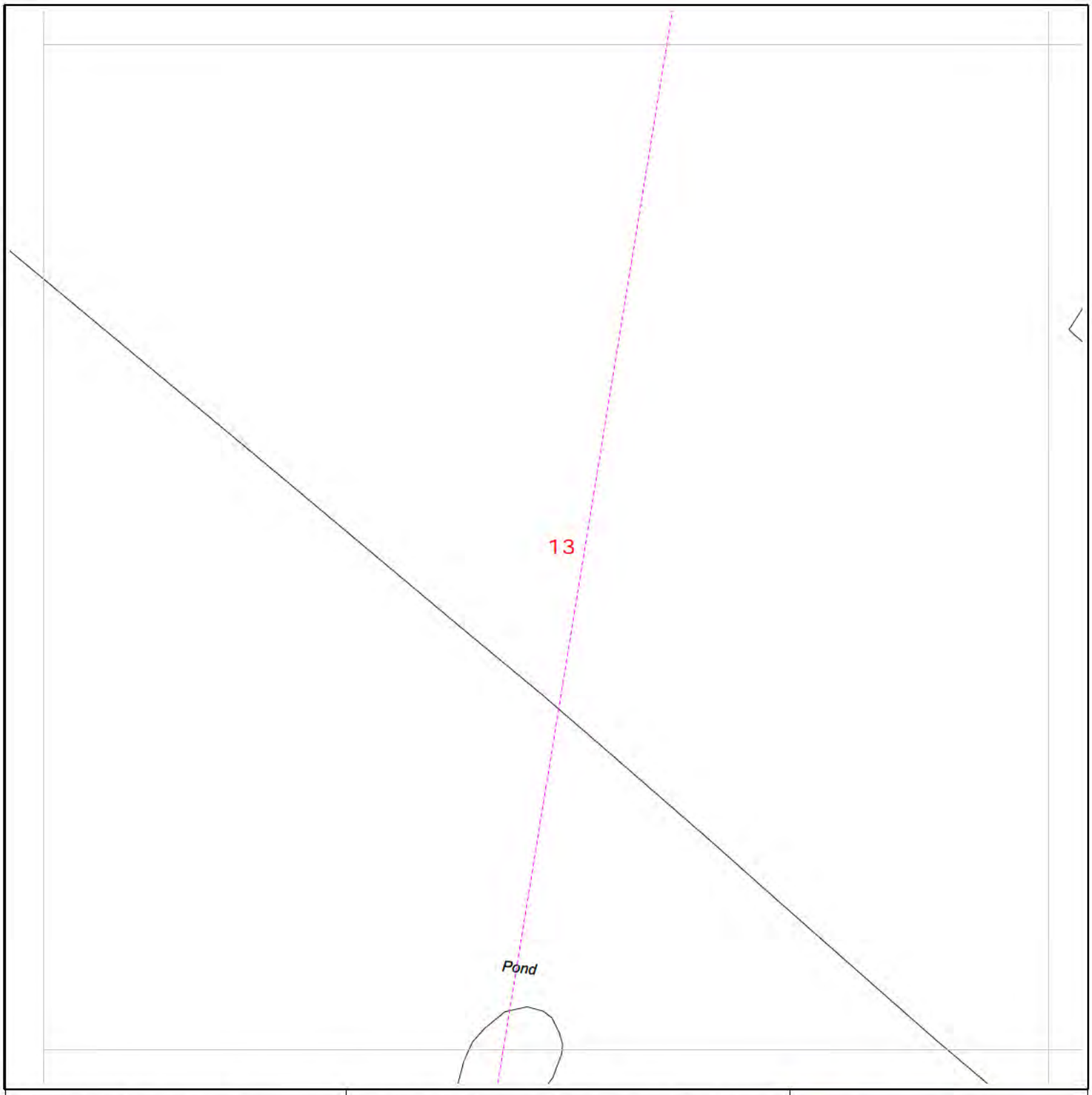

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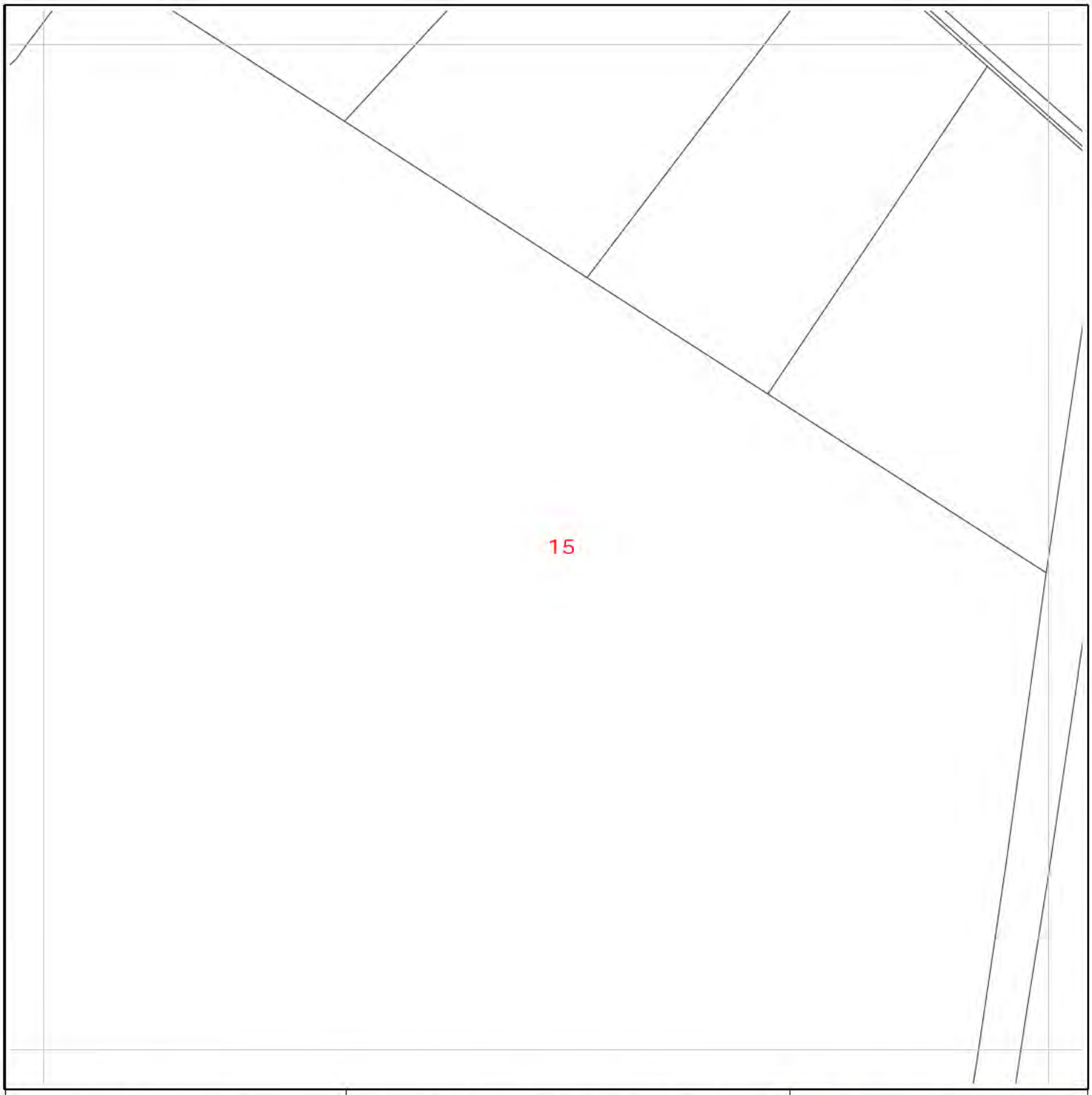

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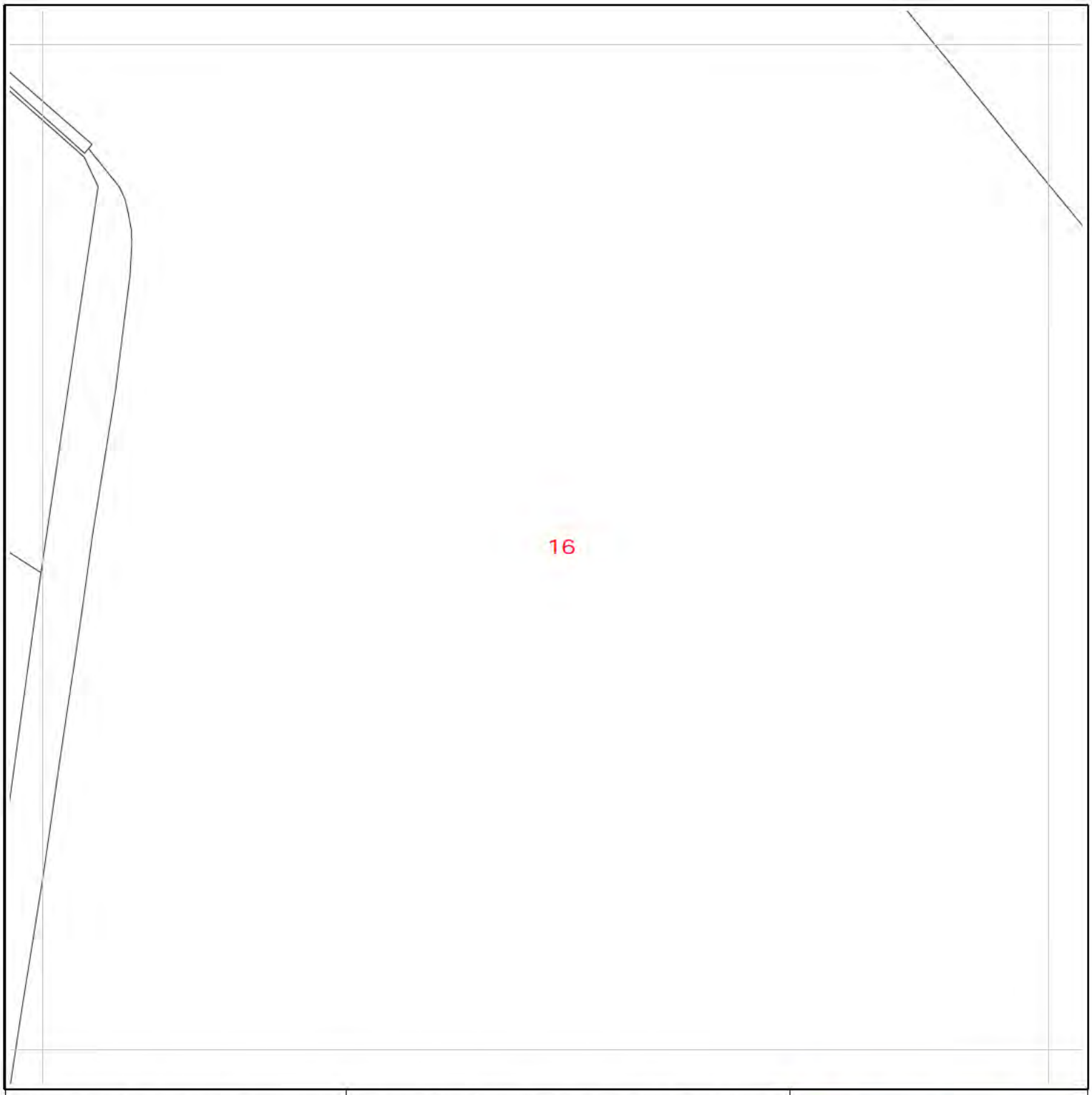

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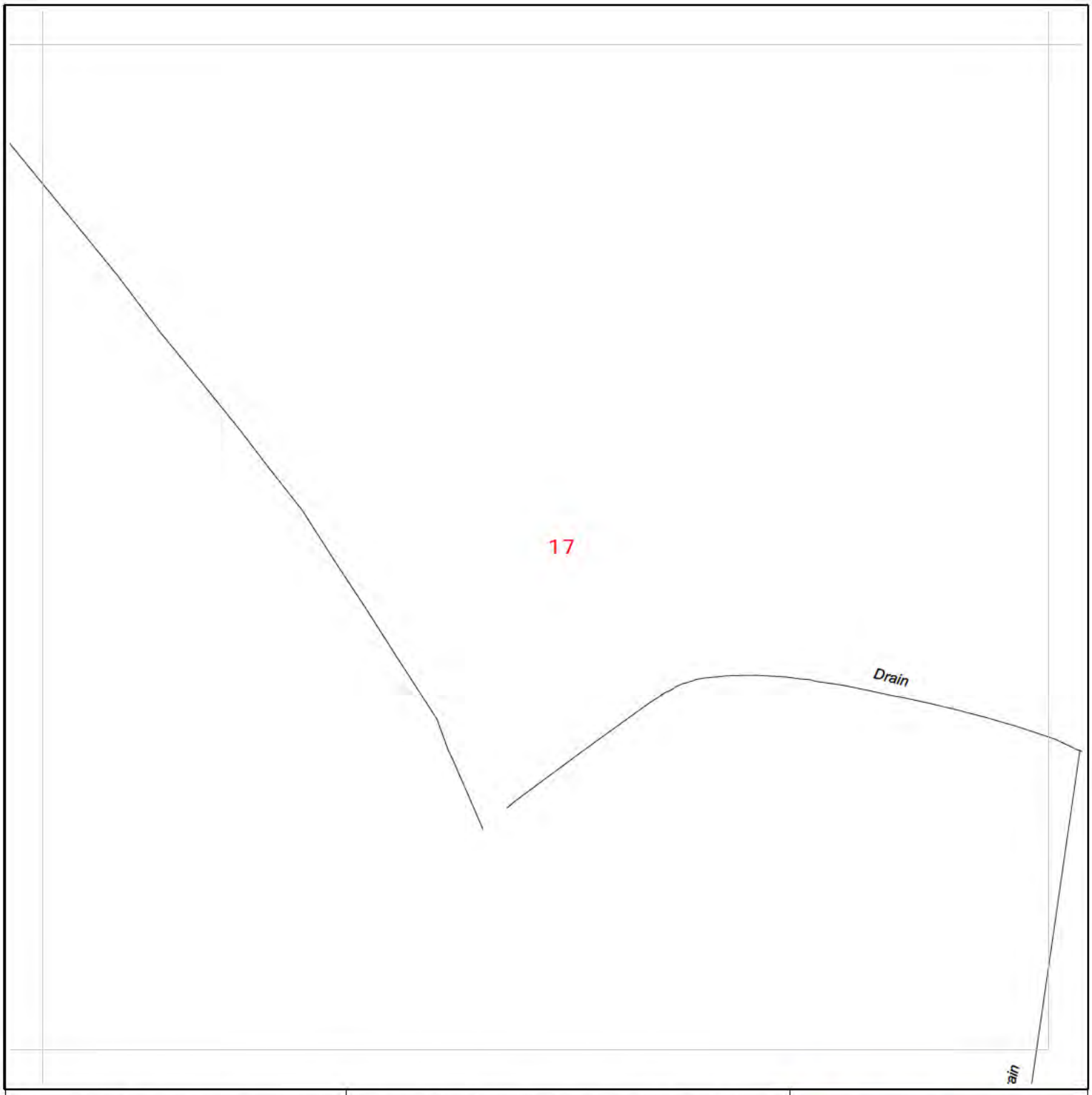

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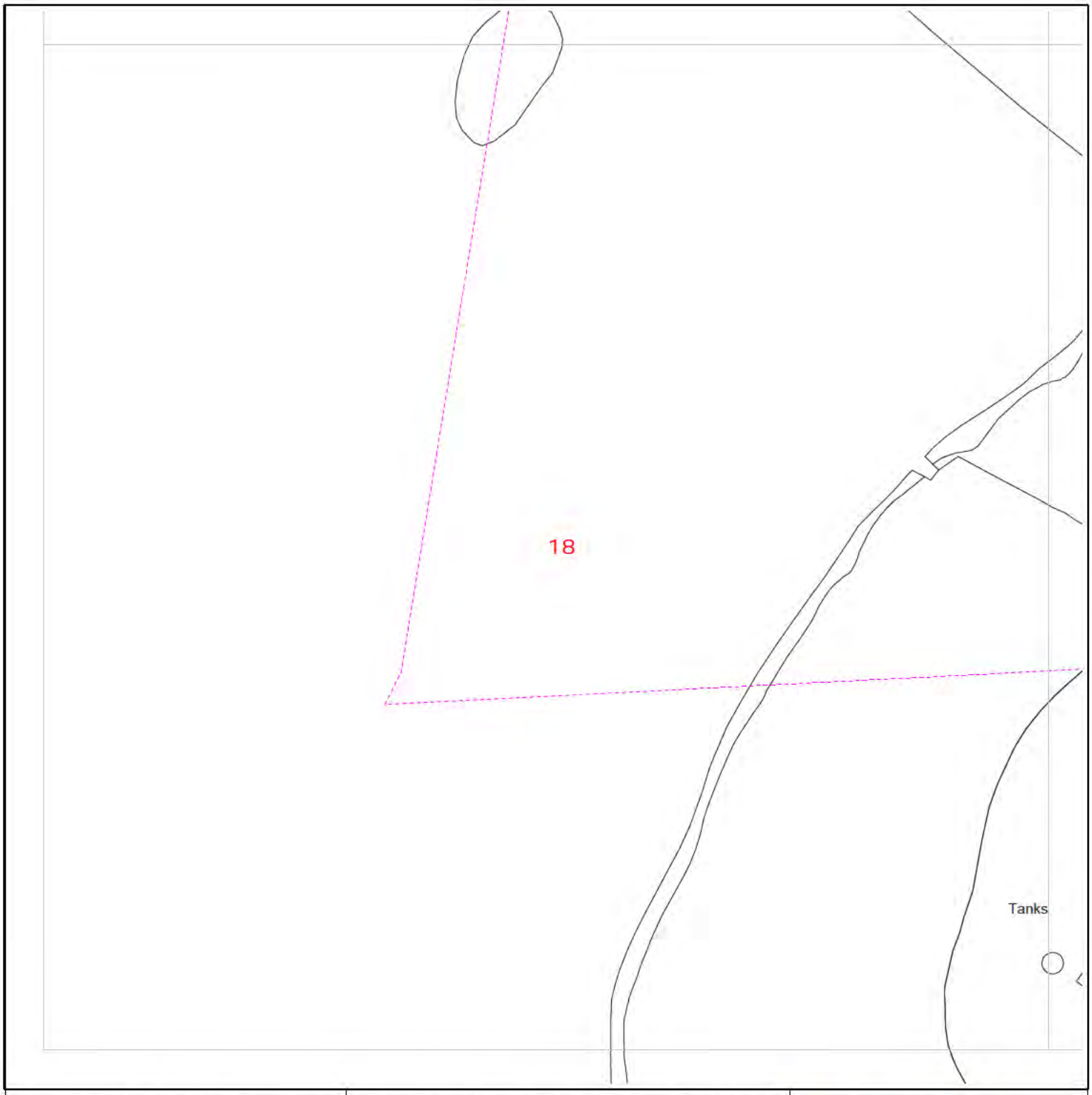

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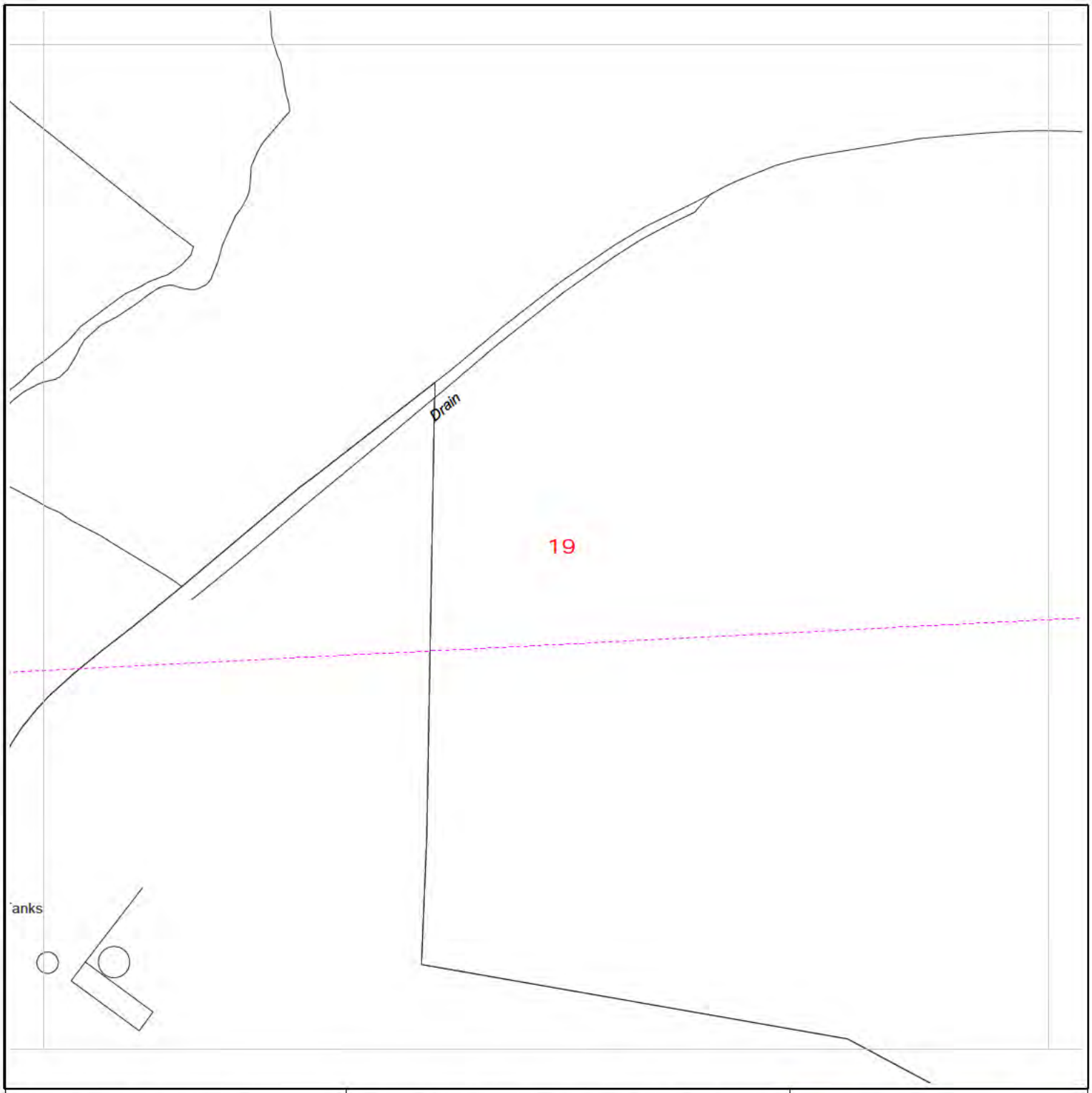

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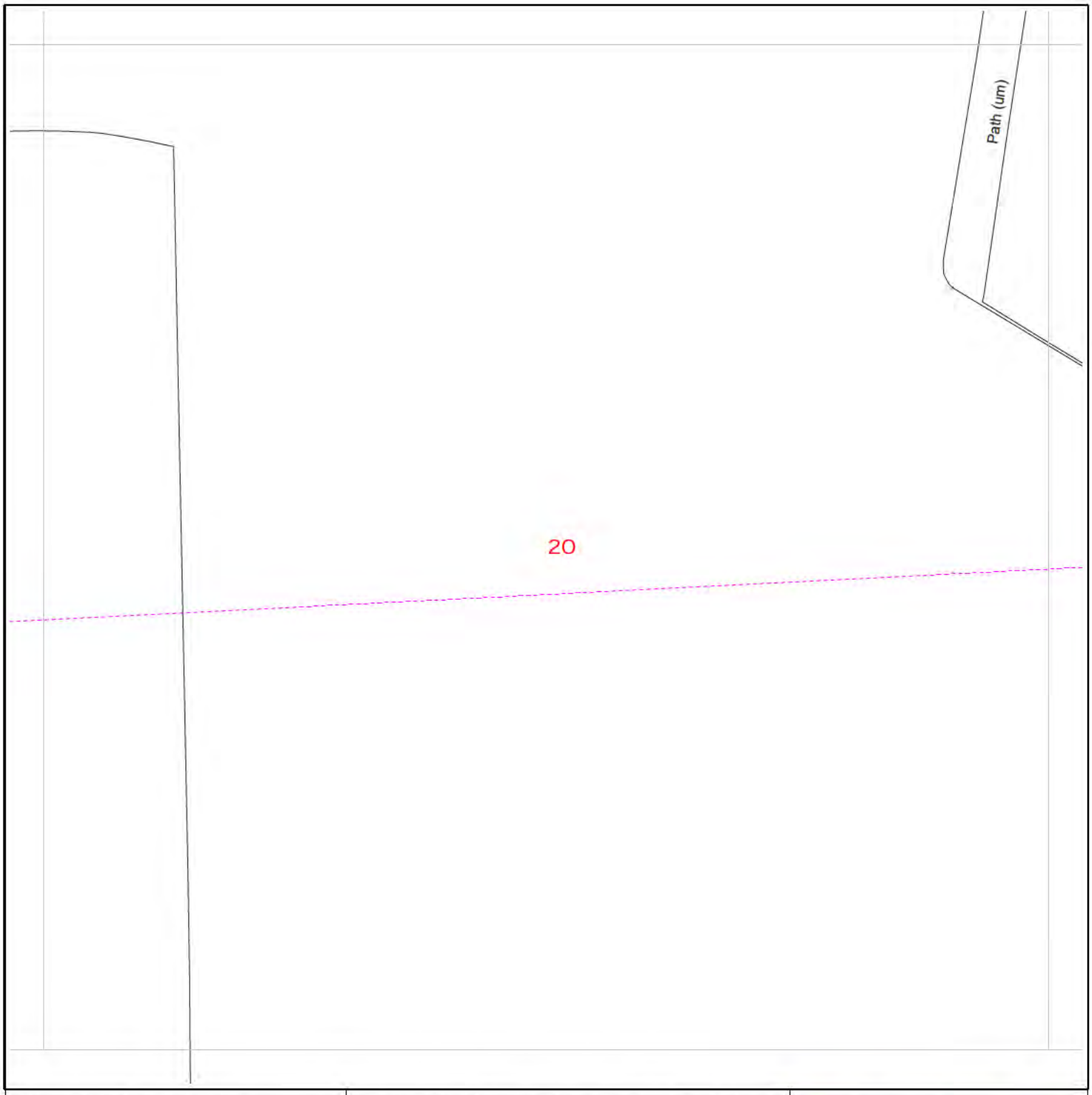

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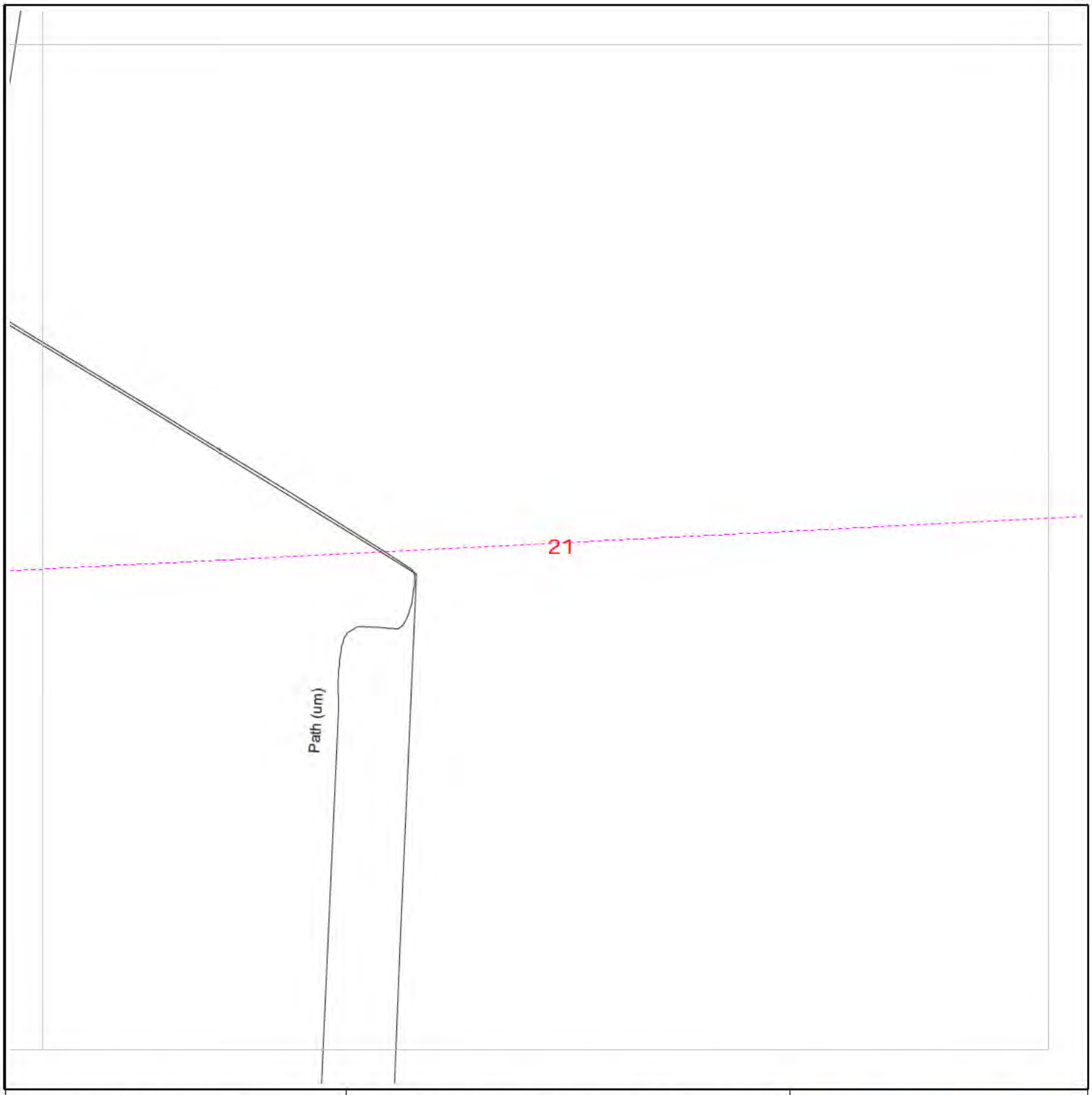

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The position and depths of underground and overhead apparatus as indicated on this plan are approximate and are intended for guidance only. The depths may have changed if the land surface levels have altered. You are also informed that the plan may 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).

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 : 7,000
MAP REFERENCE	362,641 393,947

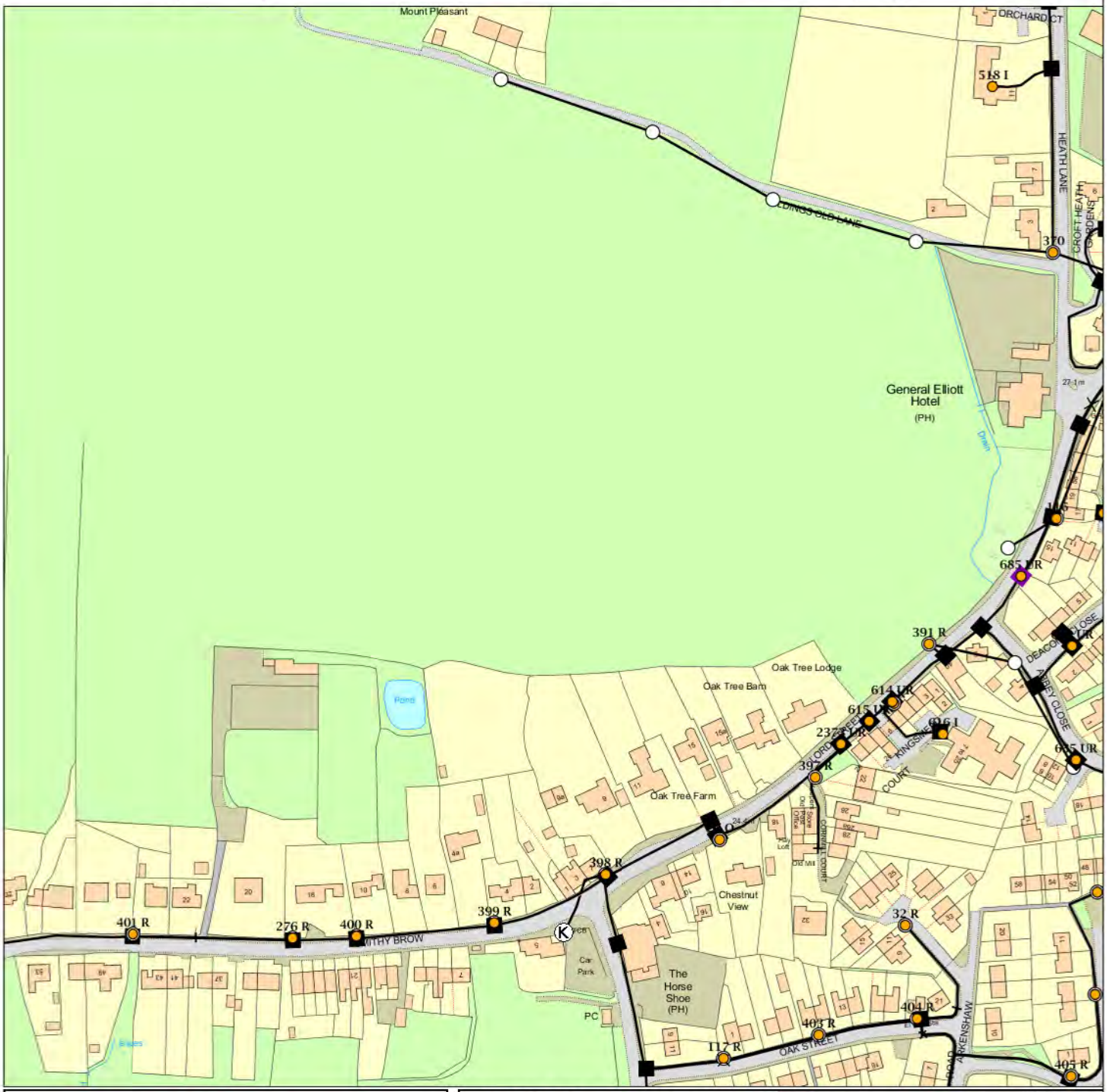
0 20 40 80 120 160 Metres

Shepherd Gilmour
Consulting Engineers

APPENDIX E

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

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

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 Ref : GEI10314F
Map Reference : (centre) SJ631569373
Easting/Northing : (centre) 363156,393
Issued : 08/08/2017 10:31:13

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

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

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Information valid at time of preparation

openreach a BT Group business BT

BT Ref : NZX10329Z
Map Reference : (centre) SJ6328494034
Easting/Northing : (centre) 363284,3940
Issued : 08/08/2017 10:33:01

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

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openreach BT

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

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	K	Planned Manhole	
Hatchings		Cabinet	
		Planned Cabinet	

Other proposed plant is shown using dashed lines.
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Information valid at time of preparation

openreach
a BT Group business

BT Ref : HNH10339S
Map Reference : (centre) SJ6320794347
Easting/Northing : (centre) 363207,3943
Issued : 08/08/2017 10:34:13

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

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openreach BT

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

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 Ref : QJE10349N
Map Reference : (centre) SJ6304094666
Easting/Northing : (centre) 363040,394
Issued : 08/08/2017 10:34:38

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

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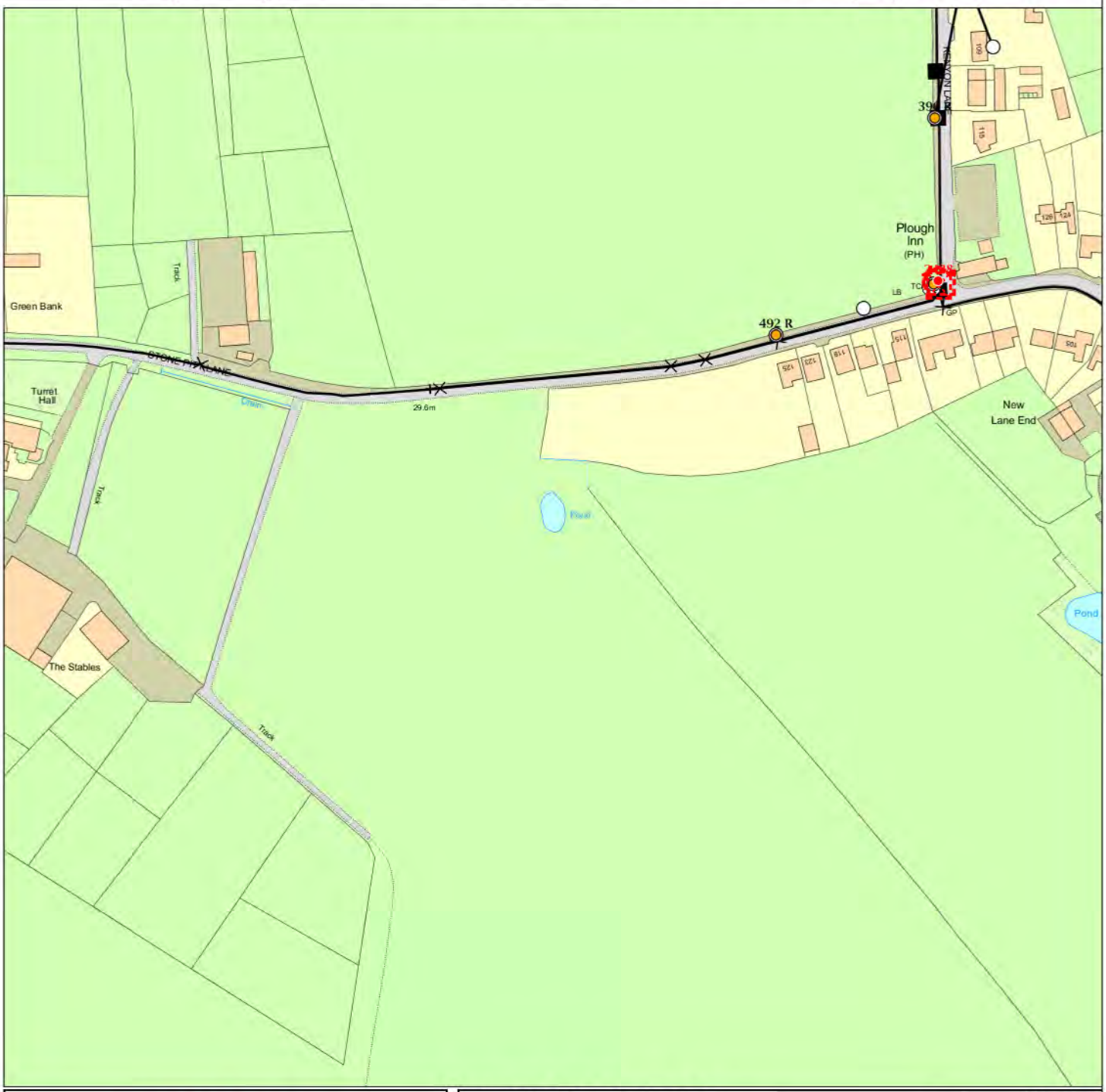

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Planned PCP		Change Of State	+
Built		Split Coupling	X
Planned		Duct Tee	▲
Inferred		Planned Box	
Building		Manhole	
Kiosk	K	Planned Manhole	
Hatchings		Cabinet	
		Planned Cabinet	

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BT Symbols not listed above maybe disregarded.
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Information valid at time of preparation

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BT Ref : LBV10387K
Map Reference : (centre) SJ6274494701
Easting/Northing : (centre) 362744,394
Issued : 08/08/2017 10:38:43

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.

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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

KEY TO BT SYMBOLS

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

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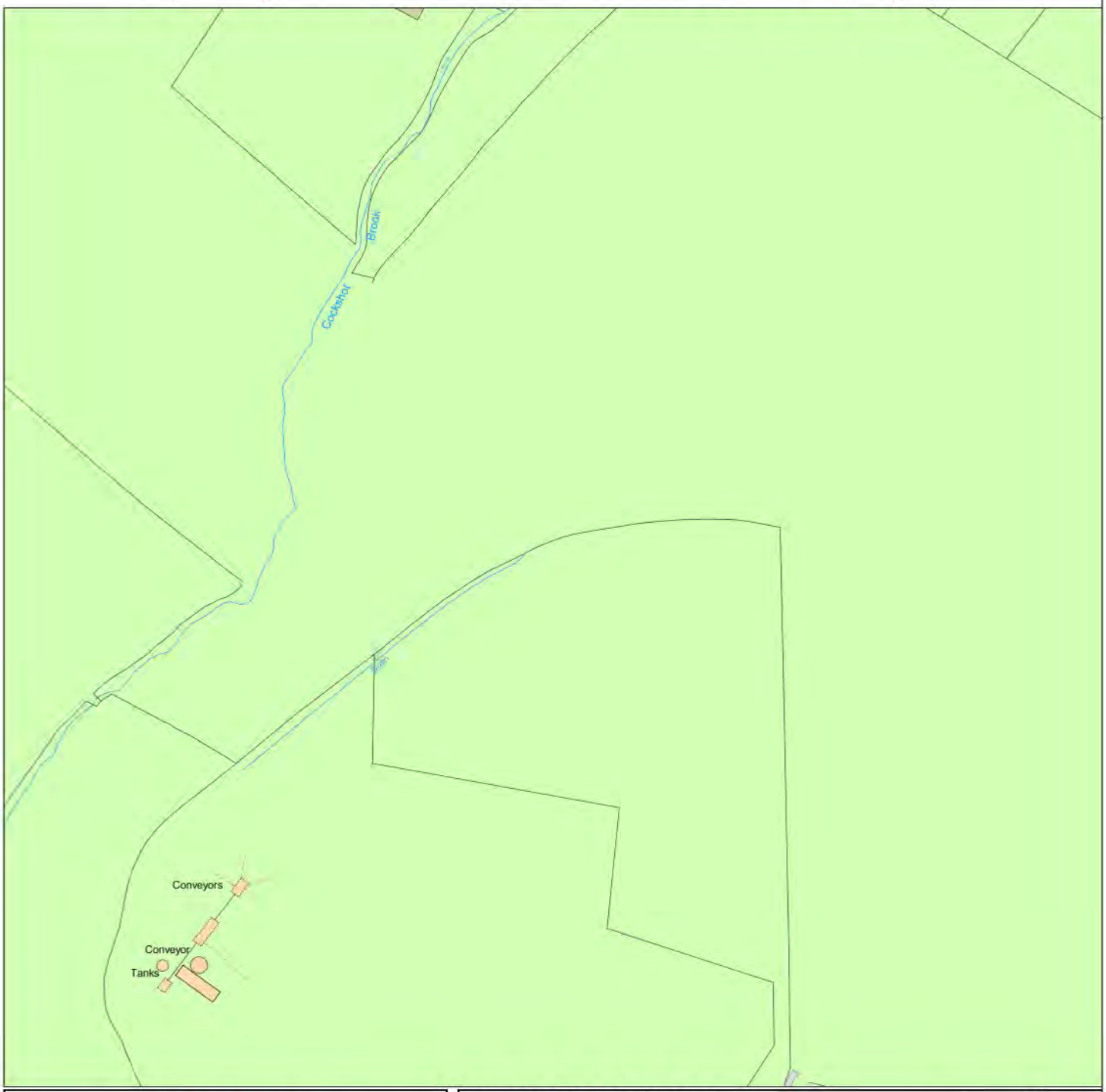
a BT Group business

BT Ref : FSJ10391Q
Map Reference : (centre) SJ624769468
Easting/Northing : (centre) 362476,394
Issued : 08/08/2017 10:39:33

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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KEY TO BT SYMBOLS

DP	
Planned DP	
PCP	
Planned PCP	
Built	
Planned	
Inferred	
Building	
Kiosk	K
Hatchings	

Pole	
Planned Pole	
Joint Box	
Change Of State	+
Split Coupling	X
Duct Tee	
Planned Box	
Manhole	
Planned Manhole	
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 Ref : XQP104030
Map Reference : (centre) SJ6232894308
Easting/Northing : (centre) 362328,3943
Issued : 08/08/2017 10:40:57

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

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www.openreach.co.uk/cbyd

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

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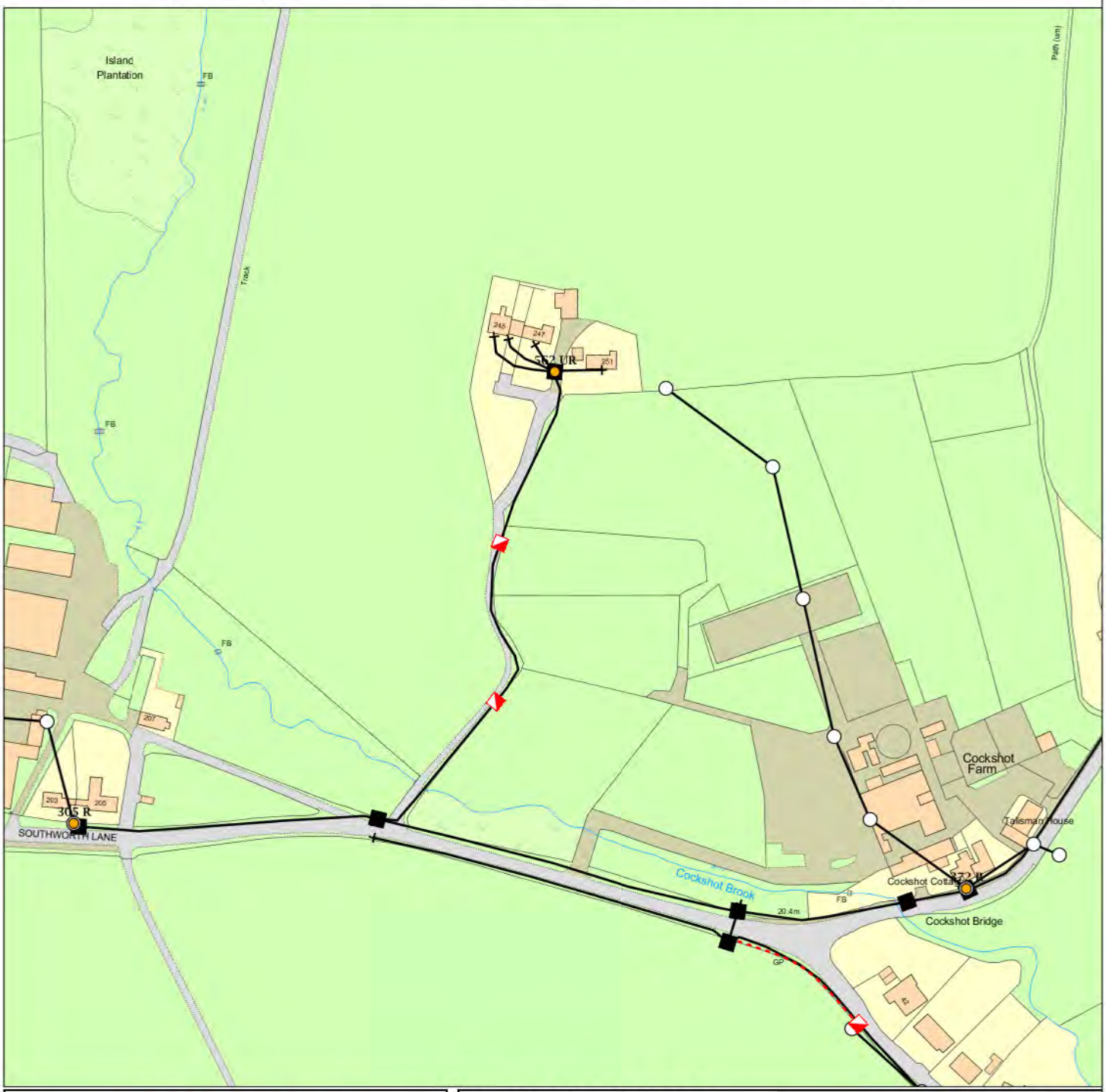
a BT Group business

BT Ref : TVA10418J
Map Reference : (centre) SJ6252893962
Easting/Northing : (centre) 362528,393
Issued : 08/08/2017 10:41:28

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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www.openreach.co.uk/cbyd

KEY TO BT SYMBOLS

DP		Pole	
Planned DP		Planned Pole	
PCP		Joint Box	
Planned PCP		Change Of State	+
Built		Split Coupling	X
Planned		Duct Tee	▲
Inferred		Planned Box	
Building		Manhole	
Kiosk	K	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 Ref : MMT10273U
Map Reference : (centre) SJ6247993544
Easting/Northing : (centre) 362479,393
Issued : 08/08/2017 10:27:59

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

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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	X
Planned		Duct Tee	▲
Inferred		Planned Box	
Building		Manhole	
Kiosk	K	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 Ref : XWE10296L
Map Reference : (centre) SJ6282493621
Easting/Northing : (centre) 362824,3936
Issued : 08/08/2017 10:30:04

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