

## MASTERPLAN VISION AND DELIVERY STUDY LAND NORTH OF TUTTLES LANE EAST, WYMONDHAM

MARCH 2018



**URBAN DESIGN STUDIO** 

#### Quality Assurance

Site name: Land North of Tuttles Lane East

Client name: Welbeck Strategic Land III Ltd

Type of report: Masterplan Vision and Delivery

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Date: 20.03.2018

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Date: 21.03.2018

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## 1.0 EXECUTIVE SUMMARY

The executive summary gives a high-level overview of the project, outlining the purpose of the visioning document.

This masterplan vision study proposes a residential development of 1,044 dwellings and associated public space covering an area of approximately 55 hectares. The site is located in Wymondham, South Norfolk.

The proposed masterplan responds to the sites rural location on the outskirts of a main town, incorporating a planted boundary screen to the developments northern edge. The proposed housing area faces onto the existing settlement of Wymondham to the south.

A series of public open spaces permeate through the housing layout providing recreational facilities for all residents, including provision of a circular walk to the development edge. Furthermore, the landscape strategy provides opportunities for SuDS and Green Infrastructure (GI) corridors in accordance with Wymondham and South Norfolk GI strategy.

Vehicular and pedestrians access points to the proposed development are strategically located to maximise connections with Wymondham town and to encourage use by pedestrians and cyclists.

This document provide evidence that the existing site and its context are suitable to achieve he proposed development and that this can be successfully integrated. The appraisal focuses on identifiable opportunities for the creation of a sustainable community that would respect, enhance and complement the existing character of Wymondham and its surroundings.





Figure 1; Masterplan Strategy





# 2.0 INTRODUCTION

This section provides an overview of the document contents and scope, in accordance with the site assessment and delivery requirements.

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On behalf of Welbeck Strategic Land III Ltd, this document has been prepared to demonstrate the development potential of a parcel of land north of Wymondham, at Tuttles Lane East. The document commences with a site assessment and leads onto a masterplan vision and delivery document.

The masterplan follows a process of assessment and evaluation to establish site opportunities and constraints, followed by the development of a masterplan strategy.

The document is comprised of the following sections:

#### SITE CONTEXT:

A description of the site in its local and wider context, highlighting local amenities, including schools, doctors and transport connections. Also, the planning context provides a summary of the planning framework through which the site has been proposed for development, and which policies have been considered as part of the assessment.

#### **BASELINE STUDY:**

A photographic study of the site and its context, determining key receptors and identifying the opportunities and constraints of the site; followed by an assessment of the site's mapping data including topographical and flood risk mapping to determine the key considerations and constraints of the site.

#### **DEVELOPING A VISION:**

An overview of the opportunities and constraints related to the development of the site, leading to a strategy diagram showing indicative open space, access and a housing area. This is detailed further within a development brief which indicates densities, numbers and area calculation for each developed parcel, in accordance with Local Plan Policy,

#### **CONCLUSION AND NEXT STEP:**

Conclusions and benefits of the site assessment are included in this section, together with indicative design principles to be applied to the masterplan.







# 3.0 SITE CONTEXT

This section of the document gives an overview of the site location, local amenities and connectivity.

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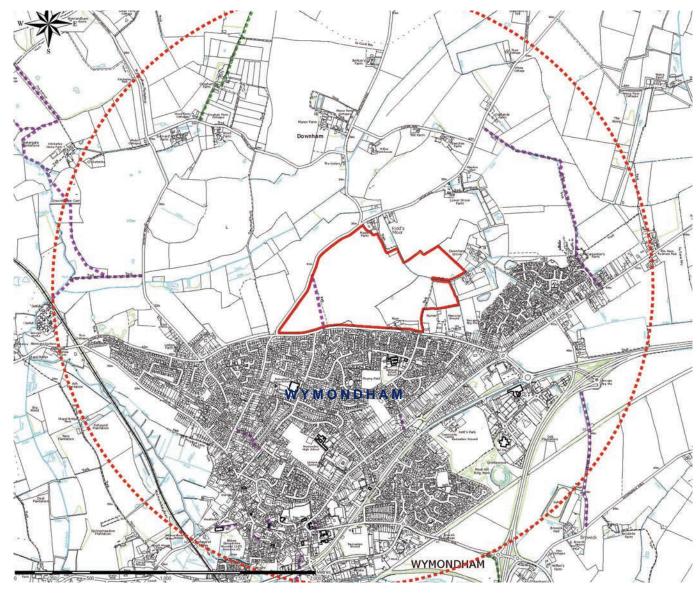


Figure 2; Site Location

The application site covers an area of approximately 55 hectares of land north of Wymondham, off Tuttles Lane East (the B1135), which leads to the A11 dual carriageway.

The site location allows for good connections to Wymondham settlement as well as Norwich. Proximity to the A11 also guarantees access to the wider context including Cambridge.

There is one public footpath connecting Tuttles Lane West to Melton Road that crosses the site area, however the public right of way network surrounding the site is sparse and lacking connections with the site.

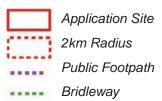




Figure 3; Site Context

Wymondham centre, which develops around Market Street, is located more than 1km away from the site. Nevertheless, the site is located within range of a comprehensive number of essential facilities.

#### LEGEND



Bus stops with routes to Norwich, Broadland Business Park and Norfolk & Norwich University Hospital



Figure 4; Wider Connectivity

#### The site is well located and in proximity to a number of primary infrastructure routes, offering easy access to the wider area.

Two train stations are located to the south and west of Wymondham (approximately 9 minute and 7 minute cycling distance from the site), providing connections to Thetford and East Dereham.

The A11 highway runs south of Wymondham and is easily accessible from Tuttles Lane East. This main road leads directly to Norwich centre to the north and to Cambridge via Thetford and Newmarket going south.

#### LEGEND



Application Site

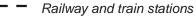
Settlements



a start

Water bodies and rivers

Roads



. Hospitals

Universities

Football stadium

The site is located within South Norfolk Council and therefore subject to its planning policies. Also, South Norfolk, is working with Broadland District Council, Norwich City Council and Norfolk County Council to prepare the Greater Norwich Local Plan (GNLP).

The adopted South Norfolk Local Plan is made up of various documents, which along with the Supplementary Planning Documents and Advice Notes defines the planning policies concerned with the proposal of new developments. The following documents are of relevance for the assessment of the site landscape planning context.

## JOINT CORE STRATEGY FOR BROADLAND, NORWICH AND SOUTH NORFOLK

(Greater Norwich Development Partnership, Adopted March 2011, amendments adopted January 2014)

The currently adopted Joint Core Strategy (JCS) for this area was delivered as part of the GNLP. This sets out the long-term vision and objective for this area, including strategic policies for steering and shaping developments. Of particular relevance for the site are the following policies.

## Policy 1: Addressing climate change and protecting environmental assets

 Make the most efficient appropriate use of land, with density of development varying according to the characteristics of the area, with the highest densities in centres and on public transport routes

- Minimise the need to travel and give priority to low impact modes of travel
- Improve the resilience of ecosystems to environmental change

Development and investment will seek to expand and link valuable open space and areas of biodiversity importance to create green networks.

Policy 1 stresses the importance to protect designated sites and landscapes, but also lists new developments requirements in case of un-designated sites:

- Minimise fragmentation of habitats and seek to conserve and enhance existing environmental assets of acknowledged regional or local importance. Where harm is unavoidable, it will provide for appropriate mitigation or replacement with the objective of achieving a long term maintenance or enhancement of the local biodiversity baseline
- contribute to providing a multifunctional green infrastructure network, including provision of areas of open space, wildlife resources and links between them
- help to make provision for the long term maintenance of the green infrastructure network

#### Policy 2: Promoting good design

All development will be designed to the highest possible standards, creating a strong sense of place.

In particular development proposals will respect local

distinctiveness including as appropriate:

- the landscape setting of settlements including the urban/rural transition and the treatment of 'gateways'
- townscape, including the city and the varied character of our market towns and villages
- the need to ensure cycling and walking friendly neighbourhoods by applying highway design principles that do not prioritise the movement function of streets at the expense of quality of place.

#### DEVELOPMENT MANAGEMENT POLICIES DOCUMENT

(South Norfolk Local Plan, Adoption version October 2015)

The Development Management Policies (DMP) will determine how the Council carries out its development management responsibilities to promote sustainable development and how it will determine planning applications.

The following policies are of particular relevance for the site planning context.

## Policy DM 4.5 Landscape Character and River Valley

All development should respect, conserve and where possible, enhance the landscape character of its immediate and wider environment.

Development proposals that would cause significant

adverse impact on the distinctive landscape characteristics of an area will be refused.

All development proposals will be expected to demonstrate how they have taken the following elements (from the 2001 South Norfolk Landscape Assessment as updated by the 2012 review) into account:

- The key characteristics, assets, sensitivities and vulnerabilities;
- The landscape strategy; and
- Development considerations.

## DM 4.7 Strategic Gaps between settlements within the Norwich Policy Area

Development will be permitted in the Strategic Gaps identified on the Policies Map, between the development boundaries of the Settlements listed below, where it would not erode or otherwise undermine the openness of the Strategic Gap, and complies with other Development Plan policies.

- Cringleford Hethersett
- Hethersett Wymondham

#### WYMONDHAM AREA ACTION PLAN

(South Norfolk Local Plan, Adoption Version October 2015)

The Area Action Plan (AAP) provides a specific planning framework for places where significant

change or conservation is needed. Of particular relevance for the site are the following policies.

#### Policy WYM 8: General Green Infrastructure requirements for new developments within Wymondham AAP Area

New development in Wymondham will be required to maintain, protect and enhance green infrastructure.

Where appropriate new developments will be required to provide ecological links to the nearest green infrastructure and provide effective ecological buffers, the design of which to be negotiated with South Norfolk Council and other relevant bodies to ensure adequate protection of important ecological sites and maintenance of habitat connectivity.

#### Policy WYM 9: General Green Infrastructure requirements for new development in the north of Wymodham

Where appropriate new development in the north of Wymondham will be required to maintain, protect and enhance green infrastructure.

In particular, where relevant, new development must consider the following:

- Improved public access to the countryside
- Improved recreational provision
- Planting of hedgerow/parkland trees along Tuttles Lane, from east to west creating an ecological corridor

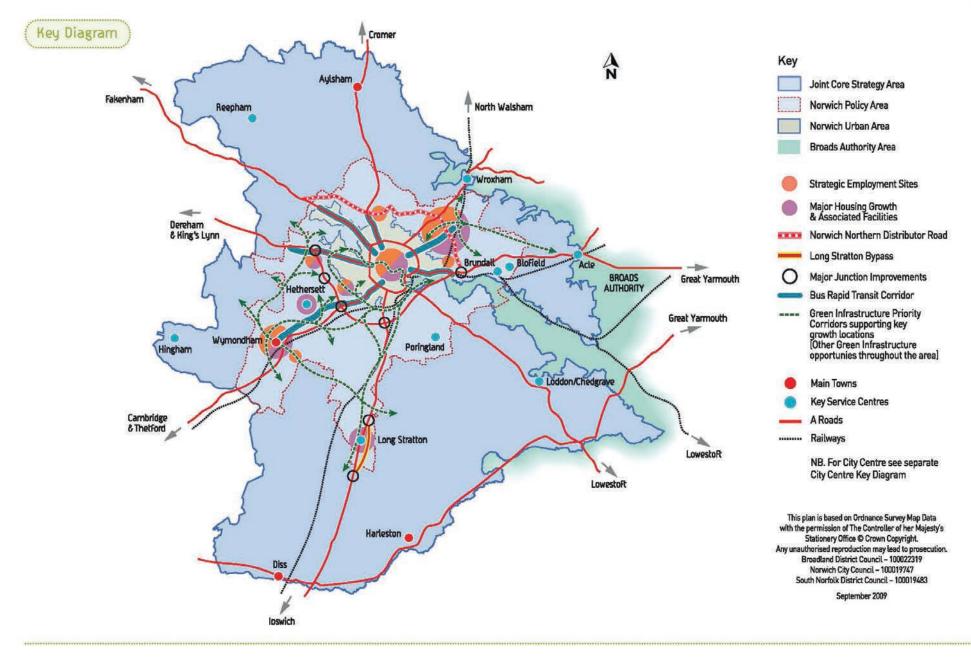
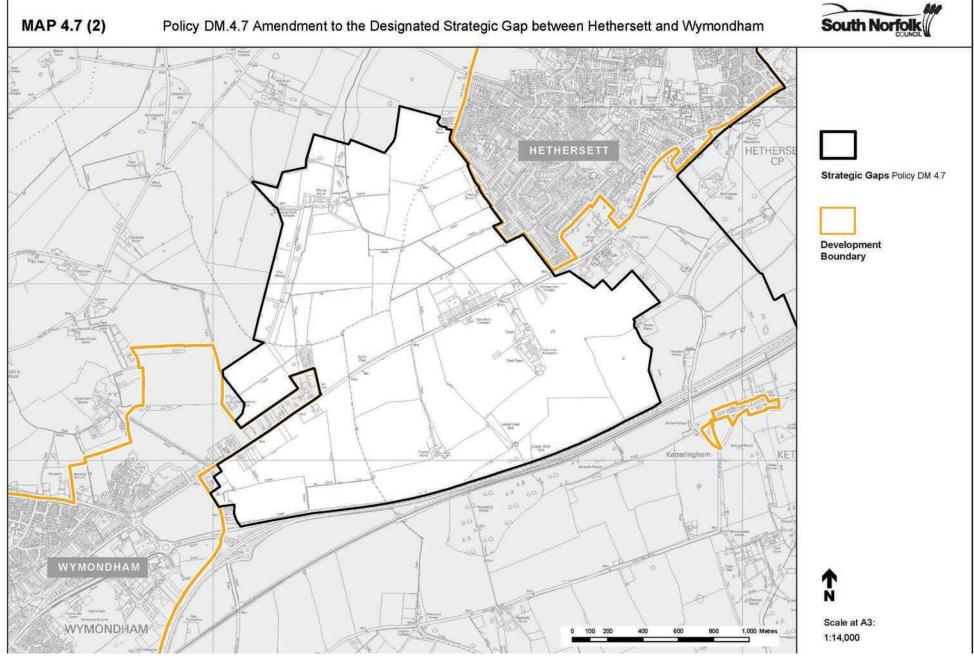
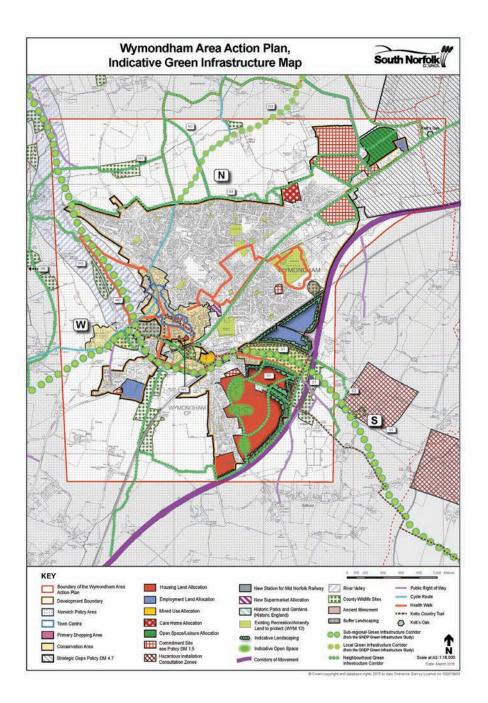


Figure 5; Join Core Strategy Map



#### Figure 6; DMP Strategic Gap



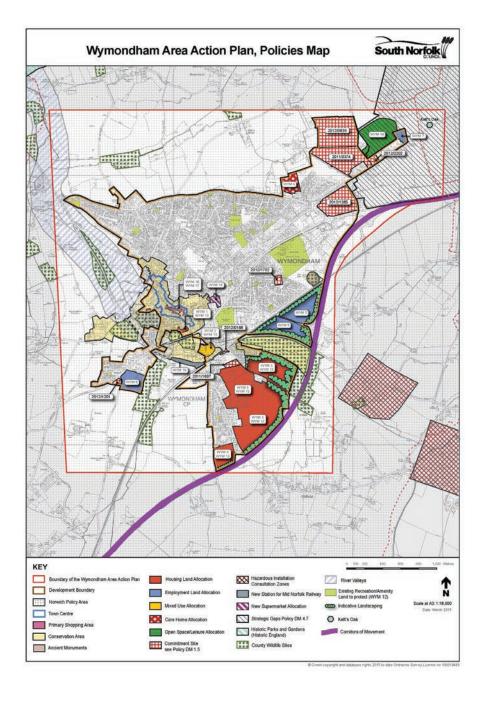


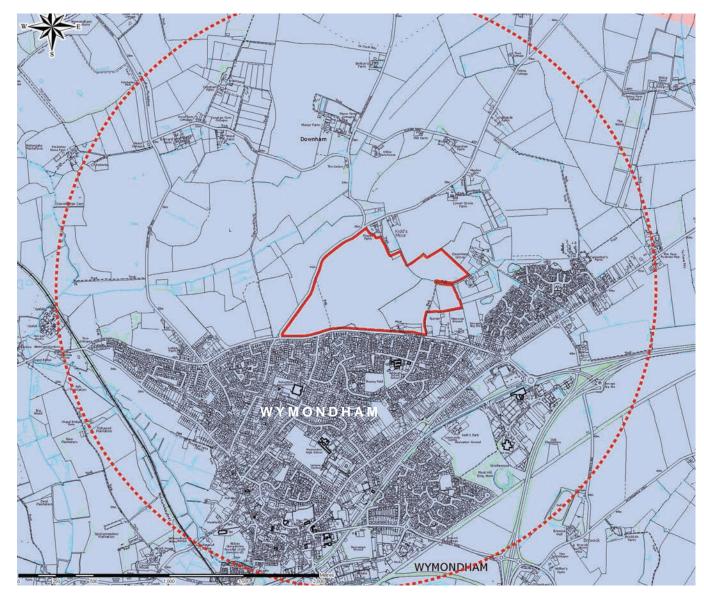
Figure 7; Wymondham AAP Maps





## **4.0** LANDSCAPE APPRAISAL

The baseline mapping study of the site includes site topography, designations and historical mapping studies, in order to inform the opportunities and constraints of the site.



#### Figure 8; National Landscape Character

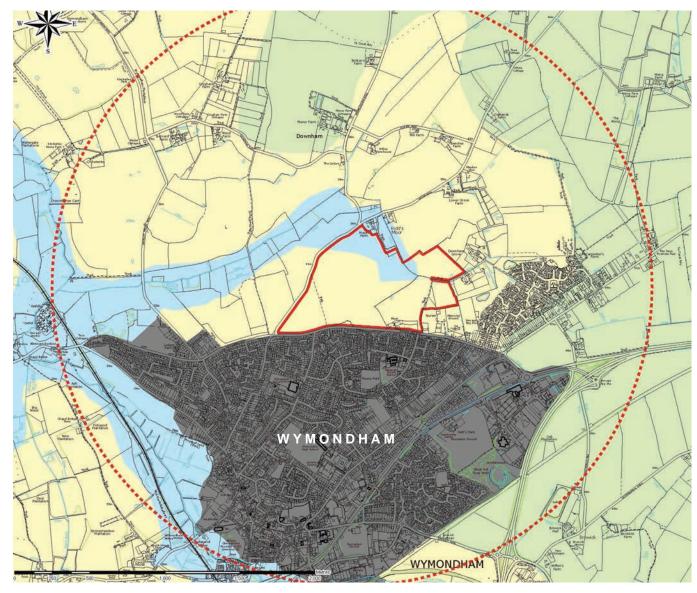
## South Norfolk and High Suffolk Claylands National Character Area (NCA).

The site is located on the north eastern edge of this NCA. This is predominately flat clay plateau, incised by numerous, small-scale, wooded river valleys with unexpected complex slopes.

Woodlands are still a notable feature in the landscape, although quite sparse, along with hedges and hedgerows trees they serve to restrict the typically open views. Within the valley the landscape is quite confined and views are intimate.

The settlement pattern of this NCA is a mix of nucleated villages, dispersed hamlets and moated farmsteads. A common feature to all these settlement typologies are the interconnected village greens or commons.





#### Figure 9; Regional Landscape Character

#### Valley Meadowland.

This landscape typology characterises the northern edge of the site. It is typically made up of low lying valley floors occupied by pastoral land. Watercourses and rivers are notable features.

'The presence of water, limited settlement and often extensive areas of grazed water meadows create a tranquil, rural landscape.'

#### Valley Settled Farmlands

Most of the site lies within this typology, which is characterised by gently sloping valleys. The majority of this landscape typology is arable land with mixed-used, peri-urban areas.

'Woodlands are limited to the upper part of the slopes, but hedgerows have a strong visual impact on this landscape.'



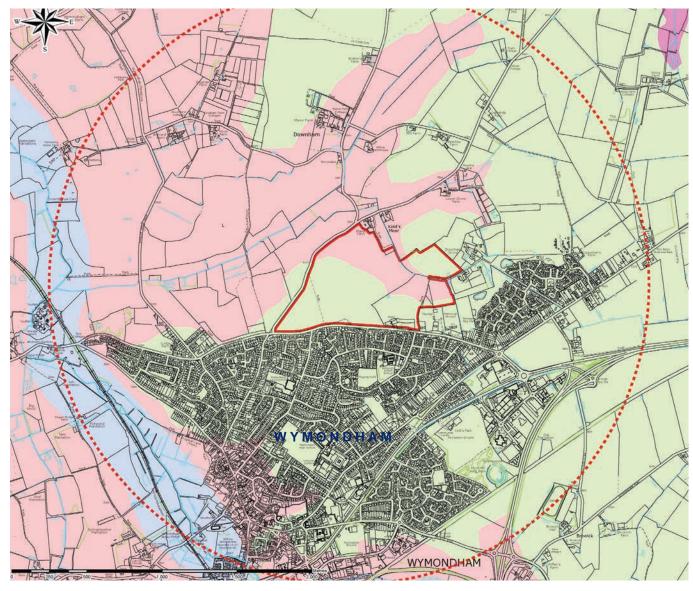


Figure 10; Local Landscape Character

#### Tiffey Tributary Farmland.

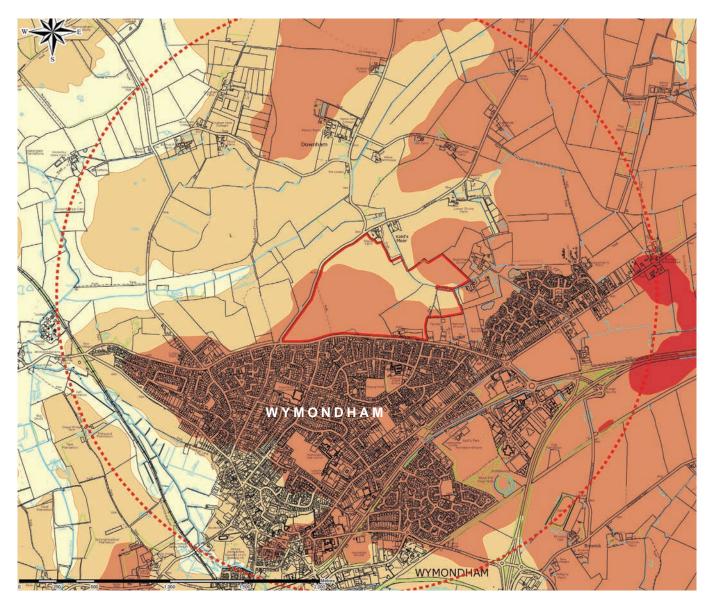
This is 'a flat, shelving to gently undulating landscape incised by small hidden tributary streams and their small-scale shallow valleys.' The majority of the landscape is large scale fields used for rural working purposes with sparse settlements. Woodland cover is limited but creates wooded horizon outlines.

Cross valley long views are typical and feature some important landmarks.

#### Wymondham Settled Plateau Farmland.

This is 'a settled landscape with large edge-of-plateau towns (including market towns and those of more modern origin) and villages plus smaller, nucleated settlements which are dispersed across the plateau. Wymondham, a well-preserved medieval settlement, dominates the western edge.' The countryside is mostly large-scale open fields.



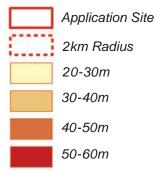


#### Figure 11; Topography

The river valley is clearly identifiable from the topographical map of the site.

The higher ground to the east and south is incised by the River Tiffey and associated land drains. The river wraps around the southern edge of Wymondham and branches out into a number of drains that collect water from surrounding arable fields. Slightly further to the west is located Dyke Beck valley.





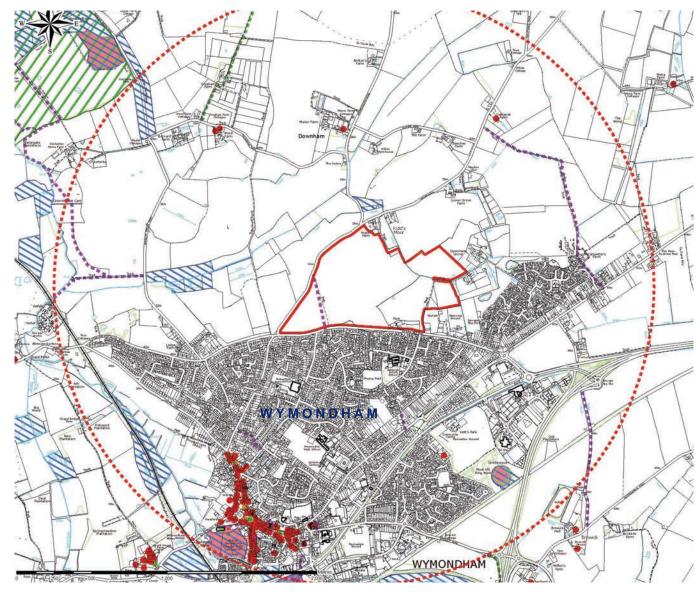


Figure 12; Landscape Designations

Except for Country Wildlife Sites, there are no landscape or heritage designations within the site boundary, nor within it's proximity. Most constraints are located two or more kilometres away from the site.

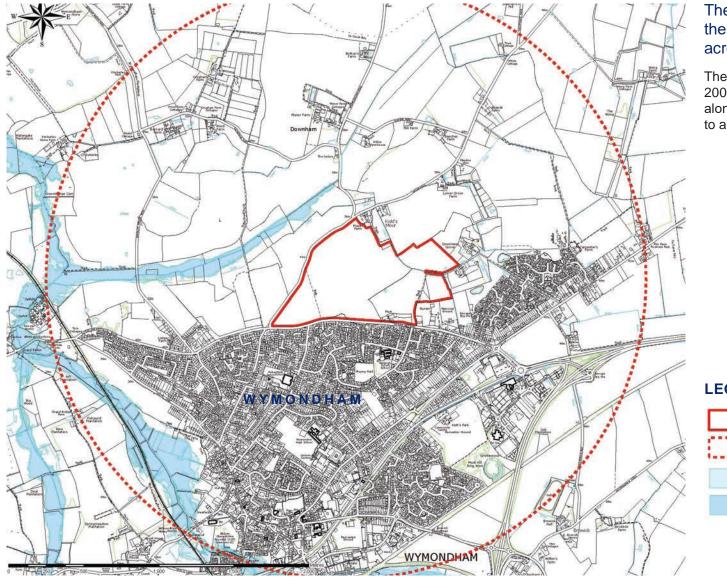
The majority of the listed buildings are concentrated to the south of Wymondham within the Conservation Area, including Wymondham Abbey Scheduled Ancient Monument (SAM). Moot Hill SAM is located to the east.

Manorial Site SAM, which is located within Kimberley Hall Grade II\* Registered Park and Gardens, is located more than 2km away from the site to the north west.

#### LEGEND



Grade II Listed Buildings



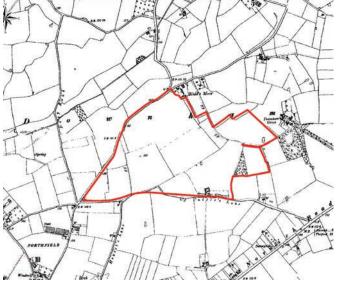
#### The Flood Zones surrounding the site relate to the River Tiffey, Dyke Beck and main drains across arable land.

The north western edge of the site is approximately 200 metres away from Flood Zone 2, which extends along the field drain. This is the closest point of the Site to a Flood Zone.

LEGEND



Figure 13; Flood Risk



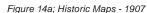


Figure 14b; Historic Maps - 1938

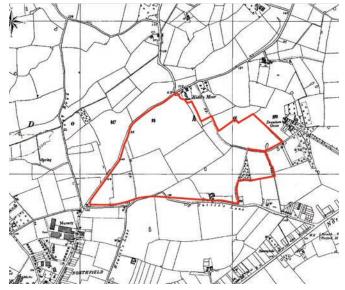


Figure 14c; Historic Maps - 1957

## The three maps above show the evolution of the site and its context in the early 20th century.

Within these 50 years no changes appear within the site boundary, which has been retained as agricultural fields with a traditional enclosure pattern. Up until 1957 Wymondham settlement had not reached Tuttles Lane East, but some initial urban expansion is notable to the south west of the site.



The baseline mapping analysis reveals a number of constraints located within the study area, however only a few of them are in proximity to the site.

As summarised in the adjacent table, there are few landscape designations within the study area. Two designated County Wildlife Sites are located in the proximity of the site to the north. The majority of the heritage designations are concentrated within the Wymondham Conservation Area 780 metres to the south, including most of the Listed Buildings and Schedule Monuments.

The public footpath Wymondham FP6, which crosses the site in the south west corner, is a key constraint for further consideration.

DESIGNATIONS / PROTECTION	STUDY AREA STATUS
National Park	None within the study area.
Area of outstanding Natural Beauty	None within the study area.
Area of High Landscape Value (or similar local designation)	Yes. Seven County Wildlife Sites are located within the study area, with two in the site proximity: Melton Road Meadow and Deep Road Meadow.
	One Local Nature Reserve (Toll's Meadow Wymondham) is located on the southern edge of the study area.
Green Belt	None within the study area.
World Heritage Sites	None within the study area.
Schedule Monuments	Yes. Three Schedule Monuments are located within the study area: Moot Hill, the Market Cross and Wymondham Abbey.
Conservation Area	Yes. Wymondham conservation area is located to the south of the study area.
Listed Buildings	Yes. A number of Listed Buildings are located within the study area, mostly gathered within the Conservation Area.
Registered Parks and Gardens	None within the study area. However Kimberley Hall is located on the edge of the study area to the north west.
Tree Preservation Order (TPO)	Yes. There are a number of TPOs within the study areas, but none within the site or its proximity.
Public Right or Ways	Yes.
	Footpaths - Wymondham FP31, FP5, FP26, FP28, FP7, FP11, FP8, FP38 and FP6 (within the site)
	Bridleway - Wymondham BR27





# 5.0 VISUAL STUDY

The visual study of the site includes photography showing the site and its context and a series of viewpoints that identify relevant visual receptors.

## The following photos show the site and its immediate context.

The site slopes towards its north eastern boundary, where water is collected in existing drains and ponds. The built edge of Wymondham defines the southern boundary, whilst blocks of woodland and field edge planting enclose the rest of the site. The horizon line is mostly filtered by existing planting, although there are occasional long views through woodland gaps.





Figure 15; Photos Locations



View of properties within Wymondham which front onto Tuttles Lane West.



Sloping topography along the northern boundary of the site.



View along Melton Road to the northern site boundary.



Long view across the site looking north.



View across the north east of the site towards Downham Groove buildings.



View along Melton Road at the arrival into Wymondham.



View from the southeast corner of the site looking north.



View from the southeast corner of the site towards the Rugby Club.



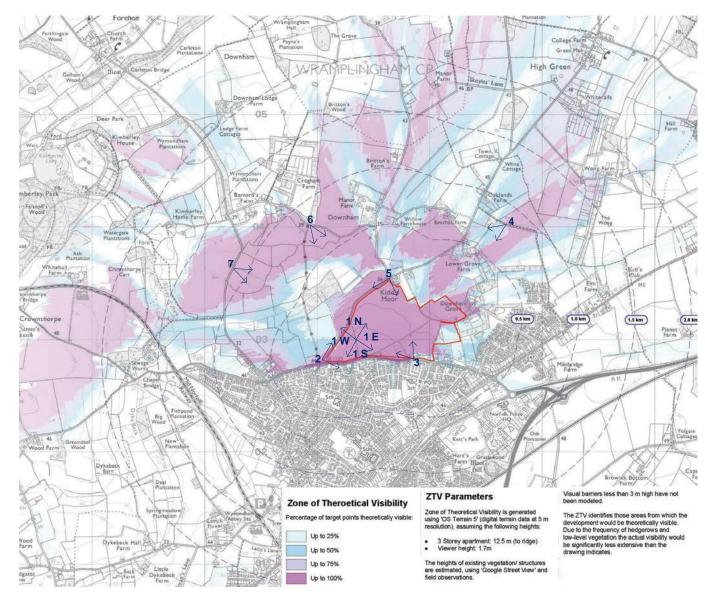
View looking northwest from the southern site boundary.



Field drain to the eastern edge of the site.



Access road into Wymondham settlement.



# The area of land from which the development is potentially visible is shown on the Zone of Theoretical Visibility (ZTV) map (left).

The ZTV is modelled assuming the worst case scenario of three storey high development (12.5m). Wymondham settlement limits views of the site from the south.

Within the ZTV a number of visual receptor were recorded and the following viewpoints aim to be representative of the visual experience of different type of viewers.

Most of the identified visual receptors are road users on country roads surrounding the site. The site is also visible from two public footpaths and from Tuttles Lane East, a busy main road. The sensitivity of visual receptors along the footpaths is expected to be high, whilst less sensitive are road users on the country roads and Tuttles Lane East.

Given the lack of designations or other notable landscapes the value of identified views is generally low. Therefore, it is expected that despite the substantial scale of the development, the overall visual effects of the proposal will be manageable through coordination of an appropriate landscape strategy.

It is worth noting that photography was taken in March 2018, so the winter views represent worst case scenario in terms of visibility.

Figure 16; ZTV and Viewpoints



**Viewpoint 1 North** - View looking north across the site from a public footpath (Wymondham FP6). The footpath crosses the south west corner of the site, linking Tuttles Lane West to Melton Road. Arable fields occupy the foreground view. The wooded horizon line is largely filtered by existing planting with some glimpsed long views. Receptors associated with this view are pedestrians using the public footpath.



**Viewpoint 1 East** - View looking east across the site from a public footpath (Wymondham FP6). The footpath crosses the south west corner of the site linking Tuttles Lane West to Melton Road. Arable fields occupy the extents of the view. The horizon is made up of wooded slightly elevated ground, although isolated dwellings and the Garden Centre buildings are visible between existing trees. Receptors associated with this view are pedestrians using the public footpath.



**Viewpoint 1 South** - View looking south across the site from a public footpath (Wymondham FP6). The footpath crosses the south west corner of the site linking Tuttles Lane West to Melton Road. The site cultivated fields take the whole of the foreground. The horizon outline is largely defined by the houses along Tuttles Lane, Wymondham settlement northern edge. Receptors associated with this view are pedestrian walking on a public footpath.



**Viewpoint 1 West** - View looking west across the site from a public footpath (Wymondham FP6). The footpath crosses the south west corner of the site linking Tuttles Lane West to Melton Road. The site cultivated fields take the whole of the foreground. The horizon outline is heavily dominated by Wymondham houses to the left of view, whilst to the right, wooded hills and rows of field edge trees are predominant. Receptors associated with this view are pedestrians walking the public footpath route.



**Viewpoint 2** - View looking east at the site from the southern end of Melton Road. The site arable fields is located at the centre of the view, to the right are the houses of Wymondham settlement. The horizon line, in the far background, is softly defined by woodlands and trees. Receptors associated with this view are road users at the intersection of a quiet country road with Tuttles Lane, a busy main road.



**Viewpoint 3** - View looking north at the site from Tuttle Lane West. The sites arable fields are visible at the centre of the view framed by a mature hedgerow to the left and the Garden Centre access to the right. The horizon is softly defined by woodlands and trees. Receptors associated with this view are road users, including pedestrians travelling along the road.



Viewpoint 4 - View looking west at the site from public footpath (Wymondham FP26). The field in the foreground is recently been turned into a water basin. The site is located behind the existing field edge planting and woodlands. Glimpses of the Garden Centre poly-tunnels are visible amongst the existing planting. Receptors associated with this view are pedestrian on a public right of way, which is part of the Beeches Farm country walk provided under the Countryside Stewardship, Environmentally Sensitive Areas and Stewardship Schemes.



**Viewpoint 5** - View looking south west across the site from Melton Road. In the view foreground is the site, currently cultivated; to the right is Melton Road. This viewpoint is located on the lower corner of the site and Wymondham houses roofs are visible just above the field. The Garden Centre complex is visible to the left of the view. Receptors associated with this view are road users on a quiet country lane.



**Viewpoint 6** - View looking south east towards the site from Youngmans Road. The arable field in the foreground is defined by a clipped hedgerow. Behind the hedgerow to the right is a dense block of trees, to the left of this a long view reaches Wymondham settlement edge. The site is visible in this long view, but moving more to the left views of it and Wymondham houses are filtered by existing field edge planting. Overall, the horizon is softly define by trees and woodlands. Receptors associated with this view are road users travelling on a quiet country road.



**Viewpoint 7** - View looking east towards the site from Barnham Broom Road. The site is partially visible in the background, a block of woodland filters views on the left. Wymondham settlement houses clearly define the horizon line, broken by the occasional tree canopy and the woodland block. Receptors associated with this view are road users travelling on a quiet country road.





# 6.0 CONSULTANT REPORTS SUMMARY

The following section provides a summary of reports undertaken for:

- Arboricultural appraisal
- Ecology
- Flooding
- Archeology
- Utilities
- Transport

Oakfield Arboricultural Services have produced an Arboricultural Appraisal which identifies the arboricultural constraints that exist on site in relation to the proposed development.

The desktop survey taken from the 'My South Suffolk' website indicates there are no Tree Protection Orders (TPOs) within the site or its proximity.

'The majority of trees on the site are oak, ash and sycamore species. The surveyed vegetation was in general of native species and for the most part confined to field and land boundaries. Overall the sites vegetation was typical in its agricultural makeup with large individual specimen trees within hedgerows or taller lapsed hedgerows.'

The survey uses a trees categorisation method defined as follows:

- Category A Trees of high quality and value that they are considered particularly good examples of their species and or essential components of groups such as dominant trees within avenues. Trees will have a minimum of 40 years life expectancy.
- **Category B** Trees of moderate quality that may have been category A but have been downgraded due to impaired features such as significant remedial defects or poor past management that make their retention unsuitable beyond 40 years. Trees will have a minimum of 20 years life expectancy
- Category C Trees of low quality that are unremarkable and have limited merit or such impaired

condition they do not qualify for higher categories. Tree will have minimum of 10 years life expectancy

• **Category U** - Trees of poor quality and are in such condition they have less than 10 years useful life expectancy. Trees in this category are generally recommended for removal regardless of any proposals.

Of the vegetation recorded within the site there is he following percentage split between categories: -

- Category B 57% 49 individuals or groups retention highly desirable
- Category C 42% 37 individuals or groups retention desirable
- Category U 1% 1 individual remove on arboricultural grounds

There are no urgent management actions identified for the existing trees, however once the development construction phase starts there is: -

'a need for a more pro-active management regime will likely be required. This would include such works as removal of dead, dying, damaged trees and or branches and other remedial works such as crown lifting so as to ensure health and safety obligations. This may also include management of areas of woodland that may be opened up to the public as usable open space.

Overall the tree constraints within the red line boundary are considered low due to their locations. In fact most vegetation should be deemed as an asset to the site as they will screen any development somewhat to the wider landscape, this is of particular relevance to the northern boundaries of the site.'

# Hopkins Ecology prepared a strategic ecological assessment of the site which identifies constraints and opportunities in the context of the proposed development.

The report suggests that there is no evidence of great crested newts in the site vicinity, nor locally. A small number of trees show low suitability for roosting bats and some of the farm buildings and dwellings with moderate potential suitability.

'The foraging habitat is largely restricted to the hedgerows and woodland blocks, and the assemblage of bats on the site is likely to be small and with few species.

Other species of conservation concern scoped-in as likely or possibly present are: widespread, declining birds such as skylarks and dunnock but with a small local assemblage and probably in low numbers; brown hares, hedgehogs and widespread, declining moths. The presence of water voles and reptiles are not wholly discounted but the habitat is of low quality.

Habitat loss is considered to be the principal pathway of adverse impact, with mitigation available for most species via appropriate soft landscaping and scheme masterplanning. Although mitigation of impacts on some species of open fields will be difficult, the overall scheme could deliver a net biodiversity gain with a net increase of non-arable habitat and creation of green infrastructure corridors.'

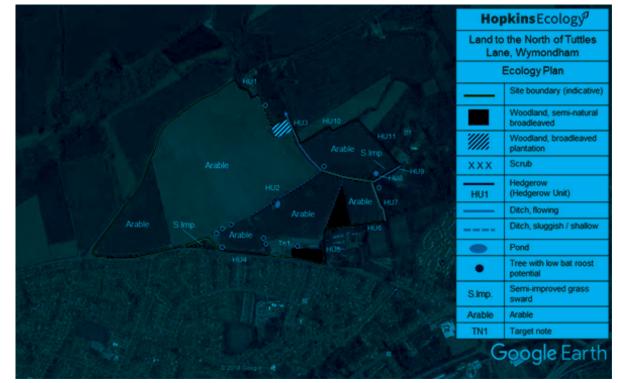


Figure 17; Ecological Constraints

The reports concludes: -

'that impacts on the majority of the species can be mitigated via an appropriate landscape and master plan design, with the potential to deliver ecological enhancement, such as the delivering of green infrastructure corridors. These should offer nearcontinuos belts of structural planting along with species that tend not to stray from cover will fly along; planting should also provide a diversity of local conditions and corridors should offer resources for a range of species, increasing the value of the corridors as stepping stones across the landscape.'

# 6.2 FLOODING

# Cannon Consulting Engineers prepared a supporting note for the allocation of the site, reviewing flood risk and associated impacts.

The entire site is located within Zone 1 (the low probability flood area).

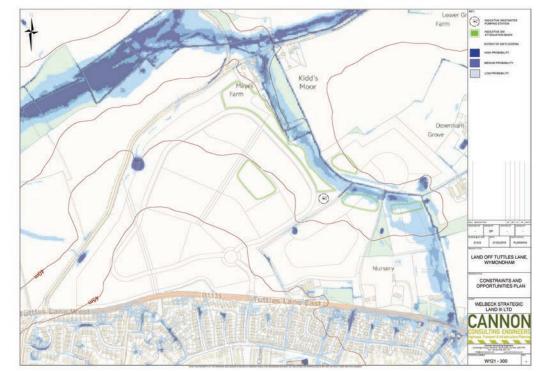
'The site is not therefore considered to be exposed to flooding as the result of overtopping of a Main River or other significantly sized watercourse.

Surface water flood mapping indicates areas where surface water runoff may pool and flow during and following various rainfall events. There are four bands of surface water flooding:

- High (indicates an area with greater than a 1 in 30 chance of flooding);
- Medium (indicates between a 1 in 30 and 1 in 100 chance of flooding);
- Low (indicates between a 1 in 100 and 1 in 1,000 chance of flooding); and
- Very Low (covers all other land i.e. less than a 1 in 1,000 chance of flooding).'

The majority of the site is located again in Very Low flood risk area. Only some isolated areas are at risk of flooding within the site, with bigger risk being located outside the boundary to the east in association with existing watercourses.

'The impact of surface water flooding on the proposed residential units should be readily manageable through appropriate masterplanning that makes space in the





layout for water (allowing for low impact flood routes along landscaped corridors for example).

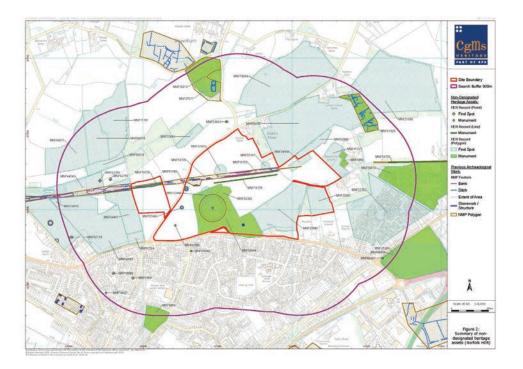
British Geological Survey (BGS) borehole records and mapping shows that the site is underlain by Boulder Clay with Chalk at depth. Groundwater flooding (flooding resulting from the emergence of a groundwater body at the surface of the site) is therefore not considered a realistic threat.'

Anglia Water plans show a network of surface water sewers running to the south of the site. Overflow of

the existing system could be dealt with by directing it towards Tuttles Lane East; any flows that enters the site could be managed within the on-site road network.

The proposed surface water management strategy includes a series of grassed attenuation basins 1m deep with 1 in 4m side slopes.

'The attenuation has been sized assuming that approximately 50 % of the site area becomes impermeable (i.e. provision roads, roofs, hard landscaping etc).'



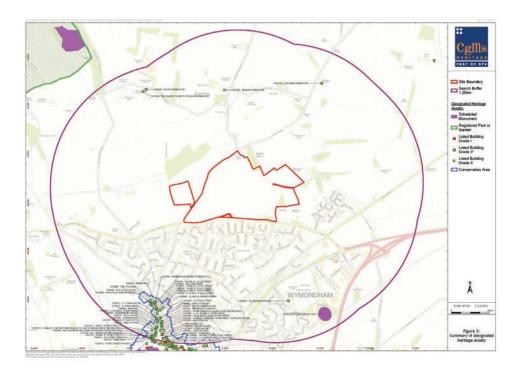


Figure 19; Non Designated Heritage Assets

# CgMs produced a cultural desk based assessment to identify archeological and heritage interest on the site.

Roman and Bronze Age remains are known to be located within the site.

'A moderate archaeological potential for Early Prehistoric, Neolithic, Iron Age and Medieval evidence, a low to moderate archaeological potential for Anglo-Saxon evidence and a low archaeological potential for Figure 20; Designated Heritage Assets

Post- Medieval evidence is also considered.'

The report findings are that the site is likely to have impact on locally significant non designated archeological remains.

'It is considered that the proposed development will not impact on the significance of any designated built heritage assets or the ability to appreciate them. Accordingly, there are no heritage constraints identified which would preclude the promotion of the site through the Greater Norwich Local Plan. The Assessment has established that the archaeological interest identified at the study site could be secured by an implementation of a program of archaeological mitigation measures in advance of redevelopment.' AECOM produced an Utilities Assessment that aims to establish if the existing utilities network is a constraint for the development of the site and, should that be the case, provide guidance and strategy to provide new capacity as necessary.

There is no gas apparatus within the site, but there is a network of low pressure (LP) gas main serving Wymondham south of Tuttles Lane East. This might need minor lowering or protection measurements to enable site access.

A number of electricity distribution apparatus are located within the site. Some would need diversion to accommodate development on the site and it would also need integrating with two new suppliers and four new substations.

Anglia Water records shows a 10inch asbestos cement water main along Tuttles Lane East. A 3 inch (75mm) cast iron main is present adjacent Melton Road which appears to provide supply to Mayes Farm to the north of the site.

BT Openreach records confirms the presence of existing overhead and below ground telecoms apparatus. 'There is also a ducted route present adjacent to the existing farm track adjacent to Tuttles Lane. In addition to the above, Mast Data have confirmed the presence of an operational mobile phone mast located to the north of Wymondham Garden Centre. Minor works to divert or lower the existing duct in the farm track adjacent to Tuttles Lane may be



# Figure 21; Utilities Constraints required if affected by site access works.'

At the frontage of Tuttle Lane, within the site, is located a gravity foul sewer. '*The sewer receives flows from 2 no. foul rising mains located in Tuttles Lane to the east of Grove Farm.*' Given the site topography it is expected that an on-site pumping station will be need in the northern and western corners of the site.

# AECOM produced a report to provide transport planning advice in relation to the site.

'The development site is provided with good links to existing facilities and amenities within Wymondham, with all services within a reasonable walking or cycling distance along existing routes conducive to both modes.'

Wymondham train station is also located within reasonable cycling distance.

Furthermore, the site is well served by bus stops on routes to Wymondham as well as Watton, Dareham, Attleborugh and Norwich. 'Many of these bus services will benefit from planned and ongoing improvements to the bus network, including a Bus Rapid Transit (BRT) route which has been identified within the Norwich Area Transport Strategy (NATS) along Norwich Road in Wymondham. There is potential for additional stops on Tuttles Lane East along the site frontage.

The proposed site would be linked to the proposed extension of the Blue Pedalway linking Wymondham with Sprowston via Norwich city centre. The Blue Pedalway will also link the development site with Thickthorn Park and Ride from which bus services to Norwich are provided every 15 minutes.'

Two accesses to the site are proposed on Tuttles Lane East. Both accesses are feasible thanks to the extensive site frontage and food forward visibility. 'A four armed roundabout would replace the existing *T-junction between Tuttles Lane East and Finderne Drive. A secondary/emergency access would be* 

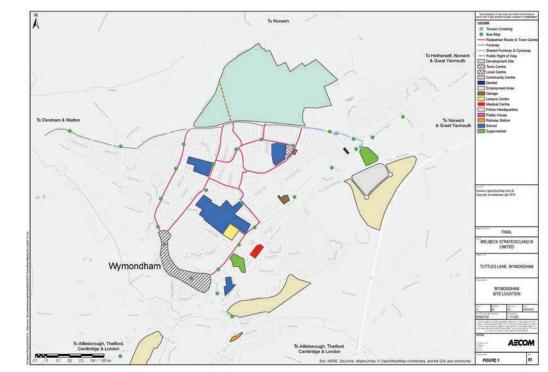


Figure 22; Connectivity Plan

provided in the form of a priority T junction further west along Tuttles Lane East.'

The following mitigation measurements are recommended in order for the development to come forward:

- Improvements to the pedestrian and cycle network along Tuttles Lane East;
- Provision of additional crossing facilities for

pedestrians and cyclists;

- Provision of new bus stop on Tuttle Lane;
- Provision of bus facilities within the site;
- Enhance facilities at nearby bus stops;
- Additional cycle parking at Wymondham Railway station or Thickthorn Park & Ride; e
- Implementation of a Travel Plan for all aspects of the proposed development.





# 7.0 DEVELOPING A VISION

This chapter proposes a suitable vision strategy for the site, including opportunity and constraints, a masterplan strategy and development brief in accordance with the local plan policy. The following is a summary of the established opportunities and constraints of the site, with reference to Figure 23.

## **SITE BOUNDARIES**

- **Southern Boundary** The site fronts onto the northern edge of Wymondham, which lies across Tuttles Lane to the south of the site.
- Eastern Boundary Treatment of the eastern site boundary is a key consideration in order to protect the amenity of an existing farm, residential properties and Wymondham Rugby Club which order the site. Also, in order to protect and enhance the existing block of woodland and mature hedgerows.
- North Western Boundary The north western site boundary borders onto Melton Road. The proposed treatment of this boundary is a key consideration due to the open aspect onto arable land to the north.
- Green Corridors A Local Green Infrastructure Corridor borders the northern site boundary and a Neighbourhood Green Infrastructure Corridor follows the southern site boundary and cuts through the western portion of the site. Protection and augmentation of these corridors is key consideration.

### **LEVELS & DRAINAGE**

 The site levels fall from Tuttles Lane East towards the north eastern site boundary. Ditches and ponds located in this part of the site retain surface water from the arable fields. This existing process of drainage should be inform the SuDS strategy for the site.

#### **ACCESS & CIRCULATION**

• A public right of way crosses the site to the west, linking Tuttles Lane West to Melton Road. This is a particularly sensitive feature due to its additional green corridor designation.

#### LAND USE

• The land is made up of predominantly open fields currently used for agriculture, with the exception of the garden centre business located alongside Tuttles Lane East.

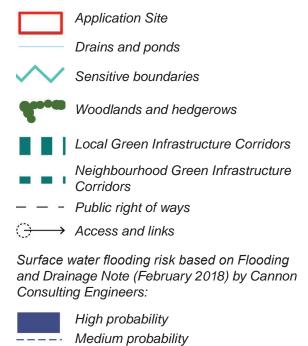
### VEGETATION

 The majority of existing vegetation is located long site boundaries, with some significant woodland blocks and mature hedgerows positioned to the east. These features provide habitat and help to contain views within the site boundary.



Figure 23; Opportunities and Constraints

# LEGEND



Low probability

# 7.2 MASTERPLAN STRATEGY

# Figure 17 shows the masterplan strategy which is informed by the opportunities and constraints assessment of the site.

The key features of the master plan include: -

- **Green Infrastructure** Introduction of a continuous woodland corridor along the northern site boundary which followed the designated Local Green Infrastructure Corridor.
- Provision of a continuous green edge along the southern site boundary bordering onto Tuttles Lane and along the norther-south PRoW. These green links follow the designated Neighbourhood Green Corridors.
- **Highways and Access** Two connections into the site are proposed off Tuttles Lane to the south, with the primary access being centrally located.
- A looped highway provides access around the main body of the site, with secondary access roads serving other areas.
- Walking and Cycling Routes Existing PRoW routes are proposed for protection and augmentation. A cycling and walking route is proposed alongside the main highway. The proposal creates a much more open site with access routes and green corridors working in harmony with each other.
- Public Open Space Publicly accessible green open space is proposed throughout the site, connecting along infrastructure corridors to offer equitable

access for all residents. Play spaces are strategically located within required walking distances.

**Sustainable Urban Drainage Systems** - SUDS proposals are informed by our analysis of the site in coordination with the drainage engineer. Existing land drains and low lying areas are proposed for the retention and storage of water during periods of heavy rainfall. Ecology measures would be considered and incorporated alongside the functional requirements for these features.



Figure 24; Masterplan Strategy

## LEGEND



NOTE: The proposed strategy would provide approximately 34 ha of developable area.

Total Site Area	53.86 hectares			
DEVELOPMENT TYPE	Total Area (Hectares)	Total Area (SQM)	Area % of Total Site	No. of Dwellings @ 35dph
Developable Area	33.9	339,030	62.77%	-
Road infrastructure (12% of developable area)	4.06	40,683	0.07%	-
Housing Area	29.83	298,320	55.24%	1,044.05
Public Open Space Provision	11.8	118.020	21.85%	-
Vegetative Buffer	6.6	6,6101	11.67%	-
Area Not Developable (Garden Centre and existing woodland)	1.7	16,849	0.91%	-
OPEN SPACE POLICY			Open Space (Ha)	
REQUIREMENT (Wymondham AAP)	1000 people	No. People (1044.05 x	Requirement	Provided
		2.4)		(11.8 + 6.6 ha)
Formal open space	0.98	2,505.72	2.45	
Children's and young people's play	1.96	2,505.72	4.91	
Natural/Semi-natural green space	5.08	2,505.72	12.72	
Total Open Space Provi	sion (Hectares)		20.08	18.4

The indicative development brief provides approximately 1,044 dwellings across the 29.83 hectares of proposed development land for housing, resulting in a density of 35 dwellings per hectare.

The Wymondham AAP includes policy requirements for public open space. These figures are shown in the development table opposite, as the number of hectares required per 1000 people. The policy also highlights the lack of three particular types of open spaces within the existing Wymondham settlement: formal open spaces, children's and young people's play and access to natural/semi-natural green spaces. These are defined as follows:

- Formal Open Space (formal parks, areas for community events and areas for sports/recreation

   other than formal pitches) – Formal open space sites provide accessible, high quality opportunities for a range of informal recreation, formal sporting opportunities and community events.
- Children's and young people's play (equipped areas, skate parks, etc) Provision for children and young people consists of equipped play areas and specialist provision for young people, including skateparks, multi-use games areas (MUGA's) and Teen Shelters. The provision of facilities for children and young people is important in facilitating opportunities for physical activity and the development of movement and social skills. Provision for children's play is sub-divided into categories in line with the National Playing Fields Association play area categories. These include Local Areas of Play (LAP), Local Equipped Areas of Play (LEAP) and

Neighbourhood Areas of Play (NEAP).

 Natural / Semi-natural green space (woodlands, commons, wildlife areas) – Natural and semi-natural green space has been categorised into woodland, commons, and natural green space.

It should be noted that the provision of Natural/Seminatural green spaces is not limited to the proposed vegetative buffer, woodlands and wildlife areas will be incorporated in the overall proposed public open spaces strategy.

In addition to Wymondham AAP policies, the following play requirements have also been considered.

# **PLAY ENGLAND**

Local Equipped Area for Play (LEAP):

- Min area 0.04ha
- Max walking distance 400m
- 10m to the boundary of the nearest property / 20m to the nearest habitable living space.

Local Area for Play (LAP):

- Min area 0.01ha
- Max walking distance 100m

## SOUTH NORFOLK PLAY REQUIREMENTS

Children Playspace for developments of over 50 dwelling:

- Min area 0.04 0.2ha (as appropriate)
- Max walking distance no more than 200m form any dwelling served
- To include an area of hard playing surface to one third of the total for 0.1ha areas
- To include items of suitable play equipment (3 or more items)

#### **HOUSING DEVELOPMENT**

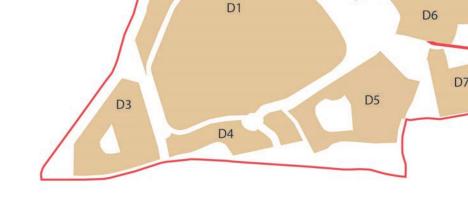
Approximately 55% of the overall site is proposed for housing development (29.83ha). Seven housing areas are identified around the grey and green infrastructure layout. Each area should be characterised by a specific set of design principles based on relationship with the surrounding landscape, built form and location within the site. The area of each development parcel is outlined below.

- D1 13.89ha
- D2 1.93ha
- D3 3.05-8ha
- D4 2.2ha
- D5 3.93ha
- D6 1.93ha
- D7 2.84ha

### **ACCESS AND INTERNAL CIRCULATION**

The main access to the site is located on Tuttles Lane East, mirroring the existing access into Wymondham to the south. Given the development size, a second emergency access is required off Tuttles Lane West. The location of the two access points aims to provide clear visibility and safe access into the site.

A primary looped highway with cycle and pedestrian routes is proposed to provide the main route around the site. This highway would be integrated alongside the green and blue infrastructure layout. Secondary roads serving development plots are looped where possible to avoid cul-de-sac arrangements.



D2

Figure 25a; Framework Plan - Housing Areas

Figure 25b; Framework Plan - Roads and Access



#### **PUBLIC OPEN SPACES**

A network of publicly accessible open space is proposed throughout the site, serving all residents. Walking and cycling routes are proposed, to work together with this green infrastructure.

Children's play space is proposed at strategic locations to offer compliant access for all residents.

SUDS features are positioned within the open space network.

## **PROPOSED BUFFER PLANTING AND GREEN INFRASTRUCTURE (GI)**

A 25 metre deep native woodland buffer is proposed along sensitive boundaries where visual and landscape constraints have been identified. This specifically applies to Melton Road and the north-eastern edge of the site and works together with the Local Green Infrastructure Corridor designation.

Melton Road and Wymondham FP6 footpath are identified in the Wymondham Area Action Plan as Neighbourhood and Local GI corridors, therefore enhancements to these green corridors is proposed. Existing hedgerows and specimen field trees along these routes are proposed for retention.



Existing woodlands and hedgerows



Proposed buffer planting



Figure 25d; Framework Plan - Buffer planting and GI

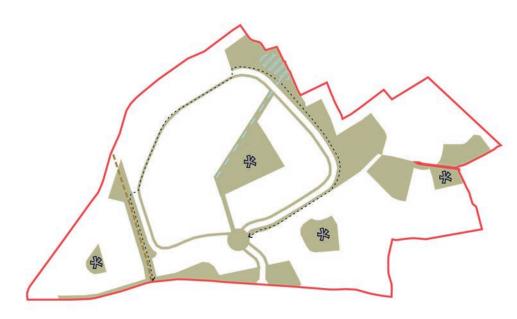


Figure 25c; Framework Plan - Public Open Spaces

Figure 26 shows how the proposed masterplan strategy could be implemented, should a Primary School be necessary as part of the development mix.

The adjacent table summarises the required areas and achievable dwelling numbers for this option.

Total Site Area	53.86 hectares				
DEVELOPMENT TYPE	Total Area (Hectares)	Total Area (SQM)	Area % of Total Site	No. of Dwellings @ 35dph	
Developable Area	33.9	339,030	62.77%	-	
Road infrastructure (12% of developable area)	4.06	40,683	0.07%	-	
Housing Area	27.92	279,218	51.70%	977.2	
Primary School	2.08	20,857	3.85%	-	
Public Open Space Provision	11.6	116,262	21.48%	-	
Vegetative Buffer	6.6	6,6101	11.67%	-	
Area Not Developable (Garden Centre and existing woodland)	1.7	16,849	0.91%	-	
OPEN SPACE POLICY	No. of hectares per	Indicative	Open Space (Ha)	Space (Ha)	
REQUIREMENT (Wymondham AAP)	1000 people	No. People (977.2 x 2.4)	Requirement	Provided (11.6 + 6.6 ha)	
Formal open space	0.98	2,345.28	2.29		
Children's and young people's play	1.96	2,345.28	4.49		
Natural/Semi-natural green space	5.08	2,345.28	11.91		
Total Open Space Provi	sion (Hectares)		18.69	18.2	



#### Figure 26; Masterplan Strategy - Primary School

### LEGEND







# 8.0 CONCLUSION

This chapter concludes the findings of the report and makes recommendations for next steps.

Land North of Tuttles Lane East, Wymondham, has been the subject of a contextual analysis encompassing the site and it's surrounding area, which when combined with a baseline mapping and visual study, informs the opportunities and constraints of the site.

The defined opportunities and constraints have subsequently informed the masterplan strategy and concept masterplan proposals for the site, which aim to create a sustainable and contextually appropriate extension to Wymondham.

The following are a series of conclusions regarding the masterplan:

**CONTEXT** - The built form of the existing village has been carefully considered when positioning development within the site boundary, with consideration given to the existing dwellings and issues of overlooking. The resulting proposal creates a sensitive extension to the north of Wymondham with a green frontage onto Tuttles Lane.

**DENSITY** - The masterplan (excluding the Primary School) achieves 1,044 new dwellings across a circa 55ha site, resulting in a gross density of 35dph. This is reflective of the local context.

ACCESS & ROADS - Access to the site is proposed

at two locations off Tuttles Lane. The internal roads branch out from the main circular road. A pedestrian and cycle route is proposed around the main circular road.

**OPEN SPACE** - Areas of public open space incorporating Children's Play Space, are positioned to form a continuous network. This will provide equitable access for all residents. A circular route around the site is proposed for use by the community of Wymondham.

**VEGETATION** - A wide open space is proposed alongside Tuttles Lane, to include hedgerows and field trees, creating an appropriate settlement edge.

A comprehensive planting scheme will increase habitat opportunities throughout the site from the existing agricultural use. The strategy will work alongside the retained hedgerows, trees and drainage elements.

**GREEN INFRASTRUCTURE CORRIDORS** - The Local and Neighbourhood Green Infrastructure Corridors will be significantly enhanced through implementation of new woodland corridors along these routes.

**MATERIALITY AND STYLE** - Any proposed development to be brought forward should be approached sensitively, ensuring appropriate references are drawn from the surrounding residential context, and constructed in a contemporary manner, without pastiche.

### RECOMMENDATIONS

In summary, we believe the masterplan proposals offer the following benefits:

- The development proposals will provide up to 1,044 dwellings, utilising a policy compliant mix, including social housing provision.
- The development will provide new facilities for the people of Wymondham, including accessible walking routes, public open space and Children's Play facilities. These are all identified features which Wymondham lacks.
- The development will serve to work with and enhance the Green infrastructure strategies of Wymondham and South Norfolk; and
- The site location is sustainable, within easy access of essential facilities and services in Wymondham.

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