



East Cambridgeshire
District Council

Land off Bell Road,
Bottisham

MASTERPLAN
October 2014

Foreword



East Cambridgeshire
District Council

The District Council has proposed the allocation of the Bell Road site for new housing development to ensure the village continues to thrive as a sustainable community.

The Parish Council has agreed to work with the District Council in preparing this Masterplan.

This Masterplan has been prepared in conjunction with the representatives of the owners of the site and sets a framework – in the form of a number of ‘Principles’ and a ‘Parameters Plan’ – that will help guide the design of any development proposal and against which any such proposal will be assessed.

A handwritten signature in black ink, appearing to read 'Tom Hunt'.

Councillor Tom Hunt

Strategic Planning Champion,
East Cambridgeshire District Council

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Land off Bell Road, Bottisham

Introduction

Purpose of this Masterplan

This Masterplan sets out a framework for the development of land off Bell Road, Bottisham.

The adopted East Cambridgeshire Core Strategy (2009) identifies Bottisham as a Key Service Centre, at which there is a need for new residential development to meet local needs in the coming years. It specifically identifies land to the east of Bell Road as a location for the future development of 50 dwellings.

The Core Strategy (2009) allows for the Green Belt boundary around the village to be revised to accommodate new development at this location.

The Draft Local Plan (as proposed to be amended 2014) sets out a Vision for Bottisham, and includes an allocation off Bell Road for 50 dwellings. The Vision identifies a number of issues which should be addressed through a Masterplan for the Bell Road site.

Format of this Masterplan

This document is set out in the following format:

Part B: Appraisal

An appraisal of the site, its surroundings, and relevant policy and guidance.

Part C: Design Approach

A review of constraints and opportunities, the definition of a design rationale and concept, and a summary of the consultation exercise undertaken.

Part D: Development Framework

A description of the key elements of the Masterplan: the amount of development, its layout, scale and appearance, landscaping, and addressing matters of safety and sustainability; and the Principles against which any development will be assessed.

Part E: Accessibility

A consideration of all aspects of accessibility, including first principles, access to and around the site, and to individual buildings, and further Principles.

Part F: The Masterplan

The Combined Parameters Plan showing the Principles applied to the site, against which any development proposal will be assessed, and an Illustrative Masterplan showing one way in which the Bell Road site could be developed in accordance with the Principles.

Status of this Masterplan

Once adopted by the District Council this Masterplan will be an Informal Planning Document (IPD) and will be a material consideration in the determination of any planning application for the site.



Land off Bell Road, Bottisham

Appraisal

B1 Location

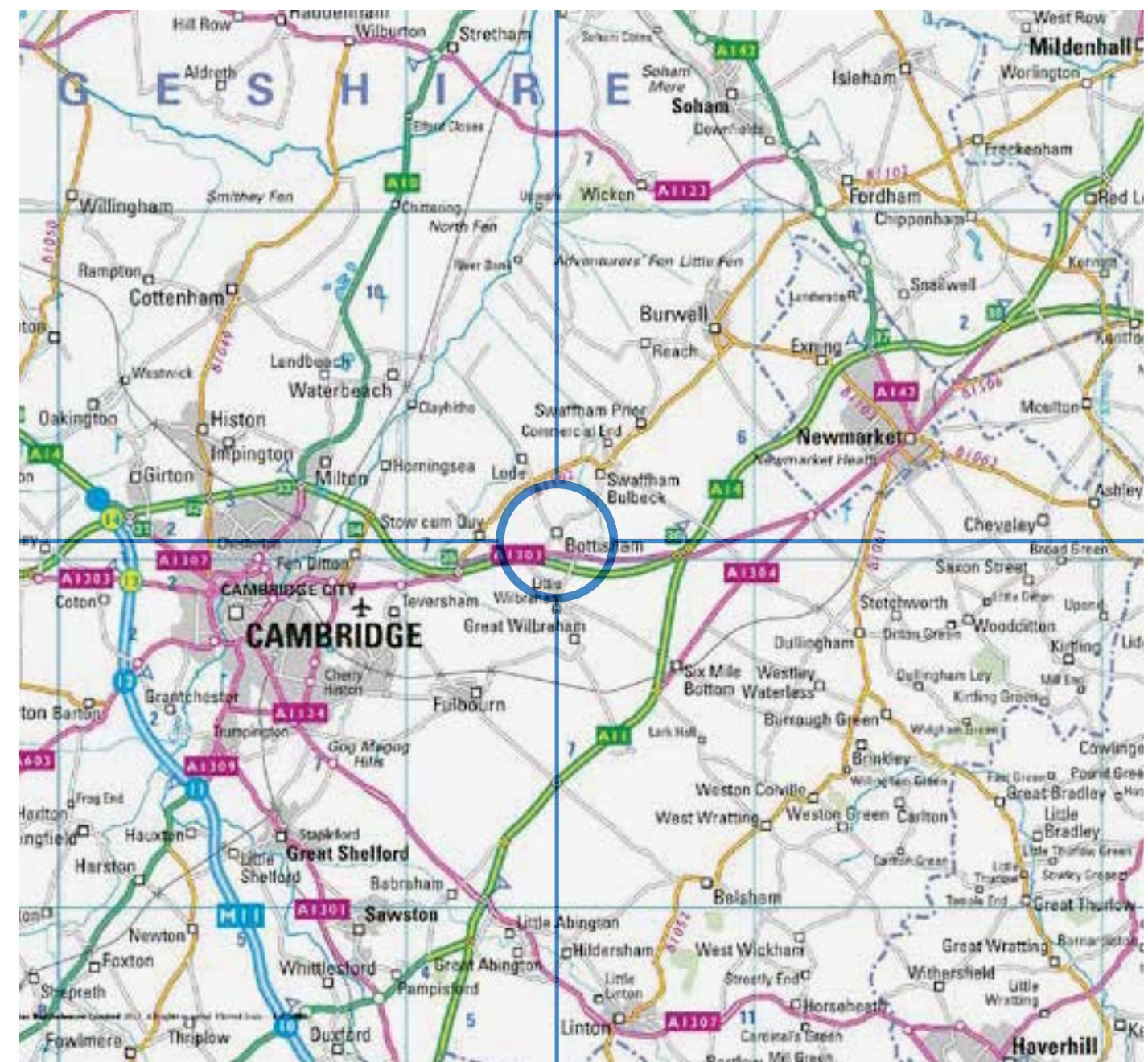
Bottisham

Bottisham is a relatively large village, with a population of almost 2,200, situated midway between Cambridge and Newmarket.

The village is based around a small historic core, which contains some fine 16th and 17th Century buildings along its high street.

The village has grown substantially in the latter half of the 20th Century and the ongoing need for housing in the area has led to further allocations for development in the East Cambridgeshire Core Strategy (2009) and Draft Local Plan (2014 as amended).

Bottisham's location within the Cambridge Green Belt restricts growth. The Core Strategy (2009) and Draft Local Plan (2014 as amended) aim to limit new development to allocations and infill development within the existing built area.



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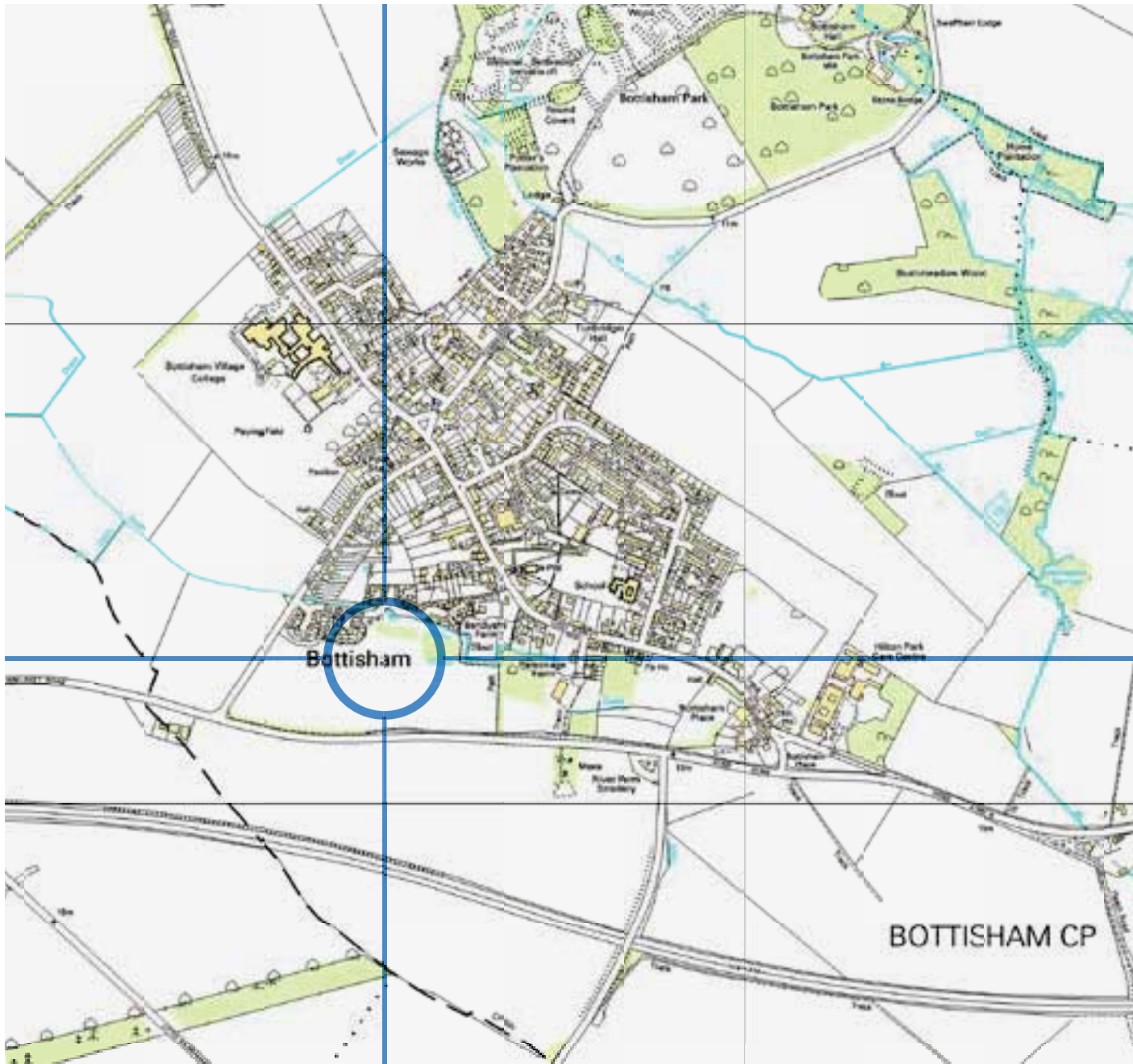


The Site

The site is situated on the southern edge of the existing village, around 400m to the south of the junction of Bell Road and Lode Road, around 300m to the south-west of the Holy Trinity Church, around 100m to the east of Bell Road and around 200m to the north of the A1303 Newmarket Road.

The site is accessible from Bell Road via St Peters Field and Ox Meadow and from High Street via a public footpath linking through Ox Meadow.

Land off Bell Road, Bottisham



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B2 Local Context

Society and Economy

Bottisham has grown substantially during the latter half of the 20th Century.

Its location, close to Cambridge, makes it a popular location for a wide variety of social groups, but particularly families and the retired. However, its location within the Cambridge Green Belt constrains growth. This has resulted in a high demand for housing but a limited supply.

Whilst many local residents travel to larger centres, such as Cambridge and Newmarket, for employment, shopping and entertainment, new development will help to support the sources of employment within the village, as well as the shopping, leisure and entertainment facilities, and ensure these are not lost.

New development will help meet the demand for new market housing and will also provide much needed affordable housing – i.e. housing of a range of types for those unable to buy or rent on the open market.





Amenities, Facilities and Services

Bottisham has a range of local amenities, facilities and services, including a Community Primary School and Village College, which provide education for local children up to the age of 16, together with an associated sports centre and swimming pool (some Village College facilities are publicly accessible). A range of extracurricular social, leisure and entertainment groups (e.g. scouts, Royal British Legion) operate within the village, as do various religious groups.

The County Council has indicated that the expansion of Bottisham primary school is being planned to accommodate increased pupil numbers within its catchment. A review of secondary school provision has also identified the need for the expansion of the Village College, and a scheme for a 1-Form-Entry (i.e. one class per school year) expansion is included in the County Council's capital programme for 2018/19.

The site is within relatively easy walking distance of the both the Primary School (around 800m via Ox Meadow and the public footpath linking to High Street), and the Village College (around 700m via the access off Bell Road).

The village has a range of shops, including convenience shopping, a pharmacy, Post Office, hairdresser, restaurant, take-away and a pub. It also has several local health care facilities, including a recently-constructed building housing the village's medical and dental practices, and two care homes. Bottisham Children's Centre, which provides services for parents and younger children is located within the Village College campus.

There are a number of local employers located within and close to the village, including those on the Tunbridge Lane Business Park, which is identified for expansion in the East Cambridgeshire Core Strategy (2009) / Draft Local Plan (2014 as amended), and along High Street.

There are a range of publicly accessible open spaces within the village. The open space adjacent the Village College is the largest area available, and is used for a wide range of events.

Immediately to the north of the site, within the recent housing development on Ox Meadow, is a small children's play area. There is no scope to expand this due to the adjacent land drain.

There is a relatively large, unequipped, children's play area immediately to the north of the Primary School, and an equipped play area alongside, within the Primary School grounds.

The Council has identified a need for new allotments, and the Draft Local Plan (2014 as amended) suggests that these should be provided as part of the proposed development off Bell Road.



Physical Character

Bottisham is a relatively compact village focused on a historic core along High Street. A large part of High Street is designated as a Conservation Area, within which many of the village's 16th and 17th Century buildings are located. Within the historic core is the Holy Trinity Church, a Grade I Listed Building. The Church tower can be seen from various locations around and outside the village.



A Scheduled Ancient Monument (SAM), comprising a former medieval moated site and fishponds, lies just to the east of the site.

The village has expanded beyond its historic core, most rapidly in the latter half of the 20th Century. Due to the speed of recent development, the physical character of the village is split between the small historic core and the remainder of the village. As a result, a large part of the village is characterised by large residential developments, such as the 1960s Park Estate to the north of High Street.

This residential development has continued to the present day, with the housing development on Ox Meadow immediately to the north of the site having been completed recently.

Along the historic parts of High Street and Lode Road, the road dominates the street scene, with most houses fronting onto the footpath with little or no front garden. Other buildings, such as garaging, stores, etc, combine with strong boundary treatments to further enclose the highway. Elsewhere there is a more dispersed and suburban street scene typical of much late 20th Century housing.





Recent housing developments – i.e. those from the 20th and 21st Centuries – have typically not reflected local styles and characteristics from the character of the historic core of the village. A wide variety of architectural styles can be found within the village, ranging from medieval thatched properties to a Victorian schoolrooms to modern suburban housing.

There is some variety in building heights within the village although the overwhelming majority of buildings are two storeys, with only a few three storey buildings. There are a few bungalows and a wide variety of single storey garages, stores and outbuildings.





Transport

Bell Road, High Street, Tunbridge Lane and Lode Road provide the main access routes into Bottisham from the south-west, south-east, north-east and north-west respectively.

The main thoroughfare is formed by the combined length of High Street and Lode Road, with other roads connecting in to this.

The No. 10 bus service between Cambridge and Newmarket operates an hourly service and runs along Lode Road and High Street, the closest stops being approximately 500m to the north of the site (via Ox Meadow and the public footpath linking to High Street, or 700m via Bell Road). The No. 11 and 12 bus services between Cambridge and Bury St Edmunds and Ely respectively operate hourly services stopping at the junction of High Street and the A1303 Newmarket Road approximately 900m to the east of the site (via Ox Meadow and the public footpath linking to High Street, or 1.3km via Bell Road).

National Cycle Route 51 connects Bottisham to Cambridge running on-road along Bell Road and then off-road along the A1303 Newmarket Road from Bell Road towards Cambridge. There are no other dedicated cycleways within the area immediately surrounding the site.

SustransEast

Supporters' NewsletterSpring 2004

<p>The Route</p> <p>Where: Cambridge to Bottisham</p> <p>National Route Number: 51</p> <p>Distance: about 7 miles each way</p> <p>Terrain: Flat and mostly traffic-free with a couple of short on-road sections</p> <p>Public transport: railway station at Cambridge</p> <p>Bike hire: available at the station (01223 307125) and many Cambridge bike shops</p> <p>OS Maps: Explorer 209 or Landranger 154</p> <p>Tourist information: Cambridge TIC - 0906 5862526 (calls charged at 60p per minute)</p> <p>Towns to search for on Sustrans website mapping: Bottisham, Teverham, Cambridge</p>	<p style="text-align: right;">Cambridge Cycle Trail </p>  <p>Cambridge is a city of cyclists and very much a University city, so it seems appropriate that the route begins at St John's College (founded in 1511), on Bridge Street. Many Cambridge colleges are open to visitors, but not during the exam revision season from mid-April to mid-June. The route follows the river Cam through the city; you may see punts on the river at the very beginning of the route, but thereafter the river usually belongs to rowing teams.</p> <p>Although this is an urban route in daily use by local cyclists, it is particularly green, and leaves the city via Jesus Green, Midsummer Common, Stourbridge</p> <p>Common and Ditton Meadows. The route passes the Museum of Technology in the old Pumping Station, which is well worth a visit.</p> <p>The route leaves the river, passes the airfield and the pretty village of Stou-cum-Quy, where the church dates back to 1340. Bottisham is another attractive village, and while you're there it is worth carrying on to Anglessey Abbey, a Jacobean house owned by the National Trust (closed on Mondays and Tuesdays). There is also a water mill which operates on the first and third Saturday of each month, subject to water levels.</p>
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B3 Site and Surroundings

Site Boundary

The site is situated on the southern edge of the village. Along its northern boundary the site, as identified on the Bottisham Vision Map in the Draft Local Plan (2014 as amended), is defined by the recent housing development on Ox Meadow, and in part by the housing on St Peters Field. Along its eastern boundary it is defined only by the proposed Scheduled Ancient Monument (SAM) buffer indicated on the Bottisham Vision Map and along its southern boundary only by the allocation boundary indicated on the Bottisham Vision Map.

The site as identified on the Bottisham Vision Map measures around 1.7ha (4.25 acres).

Unless otherwise stated, all references to 'the site' in this Masterplan refer to the development site (BOT 1) as identified on the Bottisham Vision Map in the Draft Local Plan (2014 as amended).

Extract from the Draft Local Plan showing the suggested Policy BOT1 site and SAM buffer (as amended).



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Access

The site is accessible by vehicles, cyclists and pedestrians from Bell Road via St Peters Field and Ox Meadow.

With the A1303 Newmarket Road located to the south of Bottisham, and no classified roads to the north, east or west, the majority of vehicular traffic from the site will turn south onto Bell Road and then onto Newmarket Road. Studies have demonstrated that both of these junctions are of a suitable design and have sufficient capacity to accommodate the level of traffic likely to be generated by development of the site.

A turning head has been constructed on Ox Meadow midway along the northern boundary of the site, as part of the recent housing development. This provides direct access to the site.

Pedestrian access to the site is also possible via the recent Ox Meadow housing development, the new permissive footpath around the south of the Scheduled Ancient Monument and the public footpath to the east, which links to High Street.

The main pedestrian route from the site will be from Ox Meadow / St Peters Field along Bell Road. Bell Road is lined with street lighting as far south as the junction with St Peters Field and has a good footway around 1.5m in width along both sides extending north into the centre of the village.





Land Use

The majority of the site comprises the northern part of an agricultural field currently in agricultural (arable) use, with the northernmost part of the site comprising an area of relatively young plantation woodland.

The removal of the site from the field of which it currently forms part will not result in any significant impact on the agricultural use of the remainder of the field.

Research has demonstrated that there have been no previous uses of the site or surroundings likely to have resulted in any contamination.



Landscape and Topography

The countryside around Bottisham is generally very gently undulating, with elevations above sea level (AOD – Above Ordnance Datum) varying by only a few metres around 10m AOD. The centre of the village is elevated above the site by a few metres, the Holy Trinity Church being built on the highest point within the village.

To the south, the A1303 Newmarket Road and A14(T) are located on a localised ridge beyond which the land falls gently towards Little Wilbraham River before rising towards higher ground. To the west and north (beyond the village) the land falls gently towards Quy Water and Swaffham Bulbeck Lode respectively. To the east the land rises towards a high point at around 50m AOD at Hare Park Stud to the east of the A11(T), approximately 3km from the site.

The site itself slopes very gently downwards towards the north, with less than 1m variation in elevation. The downward slope is towards the land drain that forms part of the northern boundary, to the north of which the land rises gently towards the centre of the village.

The area surrounding the site comprises a patchwork of agricultural (arable) fields surrounded by a fairly extensive network of often mature hedgerows and small areas of woodland, which largely serves to disrupt views and screen development.

There is a significant amount of existing vegetation around the field within which the site is located, including a number of mature hedgerows, which form important structural elements within the landscape. The overall quality of vegetation within the area surrounding the site is good, the field having a strong boundary structure that encloses it visually.

A Visual Impact Assessment has therefore found that, due to this strong landscape structure, and surrounding built development, the area from within which any development on the site would be visible is restricted to viewpoints within the field of which the site forms part, including the public footpath along the eastern boundary of this field, with limited opportunity for longer distance views or views from the adjacent highway network.



[TOP]

View looking east across the site from Bell Road; the recent housing development on the south side of Ox Meadow by Hastoe Housing can be seen on the left.

[BOTTOM]

View looking north-west across the site from the southern end of the public footpath adjacent to the A1303 Newmarket Road; the recent housing development on the south side of Ox Meadow by Hastoe Housing can be seen on the left.





The Assessment concludes that where any development on the site would be visible, it would generally sit against the existing built development and would therefore be viewed within the context of the existing settlement.

The Assessment also concludes that careful siting and design of any development, together with a sensitive planting scheme, should ensure that any development has the minimum effect on the wider views, provides a soft edge to the settlement and contributes to the landscape structure of the wider area.

Just to the east of the site is an area of semi-mature woodland that covers parts of the adjacent SAM.

There are no Tree Preservation Orders (TPOs) either on the site or within the surrounding area.

Vegetation cover within the site itself is limited due to its current land use as an agricultural (arable) field.

Tree cover on the site is limited to a single Ash on the north-eastern boundary, the area of relatively young plantation woodland within the northern part of the site, and a hedgerow along the north-western boundary along the rear boundaries of the properties on St Peters Field. All of these are described within the Visual Impact Assessment as being of moderate landscape value (rather than arboricultural or heritage value).

A Landscape Character Assessment has concluded that, overall, the site makes a neutral contribution to the local landscape character.





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Heritage Context

The historic core of Bottisham – along the High Street – is designated as a Conservation Area. The Conservation Area, which lies to the north-east of the site, contains most of the Listed Buildings within the village, although four lie further north-west along Lode Road, and two lie further to the east.

A Heritage Assessment has concluded that the development of the site would not affect the significance of these heritage assets due to their distance from the site and the screening effect of intervening built development.

Just to the east of the site is the Bendyshe Farm Moated Scheduled Ancient Monument (SAM). Roughly square in shape, a narrow strip of the SAM extends west from its south-western corner to abut the site, this area including a fishpond.

The main part of the SAM has been laid out as an area of informal public open space as part of the recent housing development on Ox Meadow; the moat around the SAM is largely wooded.

The Heritage Assessment concludes that development within the site, to the west of the SAM, should have no effect on the significance of the SAM or its setting.

The Assessment recommends that:

- › All development should be outside of the SAM boundary.
- › A buffer of open space should be provided around the western and southern sides of the SAM.
- › There should be no built development to the south of the SAM, and dense boundary planting or landscaping along the south of the moat and fishpond should be avoided in order to retain an open southern aspect.
- › Opportunities exist to improve understanding and appreciation of the fishpond as a part of the SAM: consideration should be given to use of open space and/or creation of additional footpaths that allow the form of the fishpond and its relationship with the moated part of the SAM to be more fully appreciated.

Consideration also needs to be given to the SAM in its wider landscape context. English Heritage has noted that the historical open agrarian setting of the SAM has been compromised by recent developments to the north, northwest and northeast, thus the retention of an open rural aspect to the south, southwest and southeast is all the more important. Development to the west of the SAM will result in less than substantial harm being caused to the significance of the SAM and its setting.

There is no recorded archaeology on the site; however the Heritage Assessment concludes that the site has a high potential for the presence of additional – as-yet undiscovered – medieval and later remains, a moderate potential for remains of early prehistoric and late Saxon date, and a low potential for Iron Age and Roman period remains. The Assessment recommends that further field evaluation of the site should be undertaken to identify any areas of belowground archaeology, but notes that on the basis of the information known to date, appropriate safeguards and mitigation measures, there is no over-riding constraint to development of the site.



Ecology

There are two statutory designated sites within 2km of the site – the Wilbraham Fens SSSI, located 1.9km to the south-west of the site, and the Stow cum Quy Fen SSSI, located around 2km to the north-west of the site. These SSSIs are designated for their fenland habitat including diverse aquatic and semi-aquatic plant species, and lowland grassland and standing water habitat respectively.

There are two County Wildlife Sites within 2km of the site – Bottisham Park (privately owned), located 0.7km north of the site, and Anglesey Abbey, located 2km to the north-west of the site. These two sites are designated for their flora and grassland habitat respectively.

None of these sites would be adversely impacted by development of the site.

The majority of the site comprises bare agricultural ground of little interest, with some semi-improved grassland inside the north-western boundary. Within the northern part of the site, the area of relatively young broadleaved plantation woodland provides suitable nesting and foraging habitat for wildlife including birds (both aerial and ground nesting species) and bats, although a Bat Survey found no evidence of roosts. The area is also suitable habitat for both reptiles and amphibians.

An area of semi-mature woodland is located just to the east of the site. One tree on the southern boundary of the woodland has potential for roosting bats, as do two adjacent trees to a lesser extent, although a Bat Survey found no evidence of roosts. This woodland, together with the roadside trees to the south of the site, provides suitable nesting and foraging habitat for birds, including both aerial and ground nesting species. The woodland also provides suitable habitat for both reptiles and amphibians.

There is evidence of water vole use of the land drain along the northern boundary of the site. The moat around the SAM to the east of the site provides potential habitat for newts and water vole. In contrast, it is unlikely that the dry ditch within the field to the south-east of the site supports water voles; a potential outlier badger sett has been identified midway along this ditch.

Otherwise, it is unlikely that the site or surrounding area support any other protected or notable species.

Should any existing planting and/or habitat be lost through any development proposal, new planting and/or habitat should be provided to compensate for this.

- Hard standing
- Buildings
- Arable crop - Wheat
- Broadleaved tree
- Broadleaved woodland
- Semi-improved grassland
- Tall ruderal vegetation
- Amenity grassland
- Target note

- 01 Habitat suitable for reptiles and amphibians - tall grassland amongst young trees
- 02 Three trees suitable for bats - two crack willow and one ash. Woodland also suitable for amphibians
- 03 Dry grassy ditch suitable for reptiles, low potential for water voles, and supporting a badger outlier sett
- 04 Offsite moat holding water all year. Suitable for amphibians. Marginal water vole habitat



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Flood Risk and Drainage

Bottisham and its immediate surroundings, including the site, lie within Flood Zone 1 (less than 1:1000 chance of flooding from tides or rivers), as designated by the Environment Agency. An area around 0.5 km to the north-east of the village, which is associated with a series of land drains, is identified as being at risk of flooding as is a much smaller area, also associated with a land drain, around 1km to the west of the village.

The area is relatively flat and level and at a low level, around 10–15m AOD, thus opportunities for gravity-led drainage will have to be carefully considered; however, research has demonstrated that the ground is highly permeable, and the use of SuDS (Sustainable Drainage Systems) – passive drainage systems that seek to replicate natural systems and thus have minimal environmental impact) is appropriate.

The area does not lie within any potable water Source Protection Zone.



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Land off Bell Road, Bottisham

Noise and Air Quality

The A14(T) lies approximately 400m to the south of the site and represents the only potential source of noise that could affect the development of the site.

However, the distance of the A14(T) from the site, together with the intervening mature vegetation along the A1303 Newmarket Road are such that satisfactory external and internal residential noise levels can be achieved through appropriate design measures.

The site does not lie within any Air Quality Management Area (AQMA) thus there is no constraint to development in this regard.



Utilities

Electricity Provision

UK Power Networks has confirmed that an electricity connection can be made to the existing low voltage network and that no network upgrades are required to accommodate the new homes.

Gas Provision

A service provider has confirmed that a connection can be made to the existing low pressure network and that there is sufficient pressure within the existing network to accommodate the new homes.

Water Supply

Anglian Water has confirmed that a connection can be made to the existing potable water supply and that no network upgrades are required to accommodate the new homes.

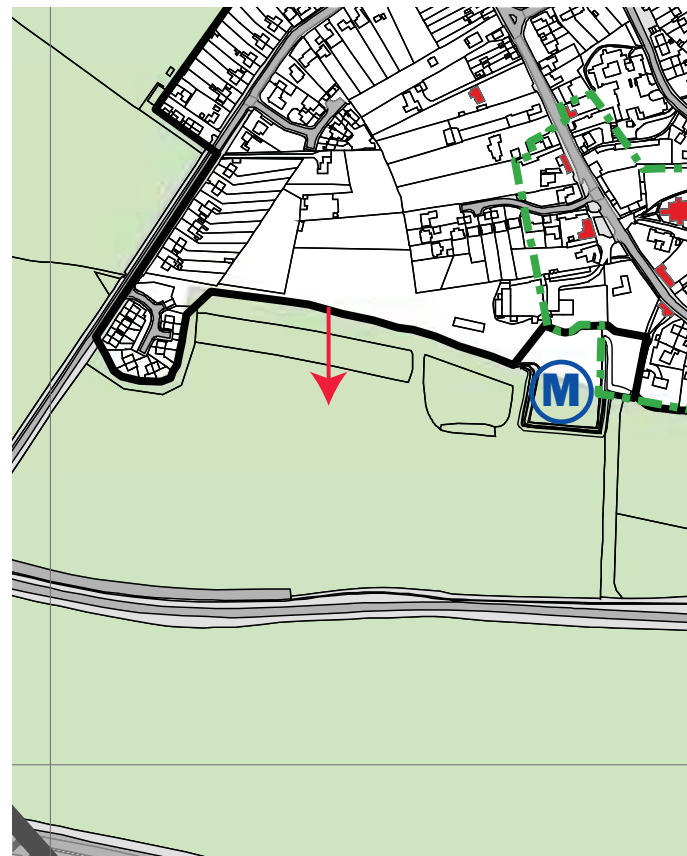
Foul Drainage

Foul water from the new homes will drain via the pumping station into the existing sewer network. Anglian Water has confirmed that there is sufficient capacity within the network, the pumping stations, and the sewage treatment works, to accommodate the new homes.

Telecommunications

It has been confirmed that the new homes could be connected to the existing telephone and broadband networks without the need for any network upgrades. A service provider has advised that an underground cable communications network exists in Bell Road.





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Extract from the adopted Core Strategy Proposals Map, showing Bottisham. The red arrow indicates the broad location for new residential development to the east of Bell Road.

The Core Strategy and Local Plan

The East Cambridgeshire Core Strategy was adopted in 2009. Core Strategy Policy CS2 (Housing) proposes that approximately 50 dwellings should be provided as a greenfield extension to the east of Bell Road. Core strategy Policy EN9 (Green Belt) explains that the detailed boundaries of the development site should be established in a future site-specific Development Plan Document (DPD).

The Draft Local Plan (2014 as amended) sets out a 'Vision' for Bottisham, which includes an allocation of approximately 50 dwellings on land off Bell Road (Policy BOT 1). The boundary of the proposed site/allocation is shown on the Bottisham Vision Map (see over on p25).

The Draft Local Plan was submitted to the Government in August 2013, and as at October 2014 is being examined by an independent Inspector. It is anticipated that the Local Plan will be adopted in late 2014.

The definition of the Green Belt boundary around the site will be confirmed through the adoption of the Local Plan.

Policy BOT 1: Housing allocation, land east of Bell Road

1.7 hectares of land is allocated for residential development for approximately 50 dwellings.

A Masterplan for the whole area will need to be prepared, and approved by the District Council in advance of any planning applications being submitted.

Development proposals will be expected to:

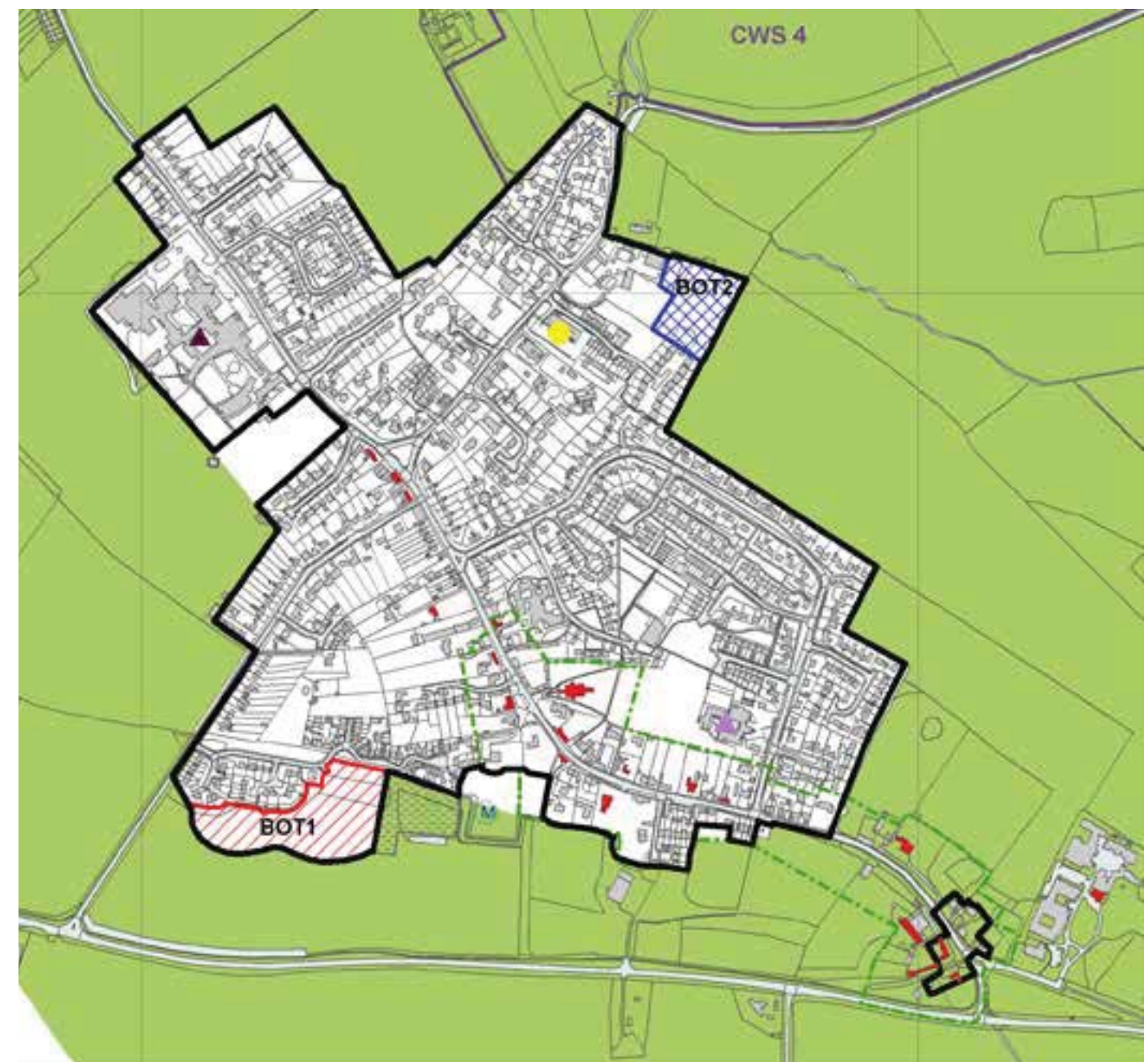
- › Provide an element of affordable housing (currently 40%) as required under Policy HOU 3, with priority being given to people in local housing need.
- › Provide a mix of dwelling types and sizes to reflect current evidence of need in Bottisham.

- › Have particular regard to the layout and the scale, height, design and massing of buildings, and landscaping, in order to minimise amenity impact on adjoining properties and to provide an attractive extension to Bottisham. Areas requiring particular attention include those areas of development facing the SAM and those on the eastern side of the site with views of Holy Trinity Church.
- › Provide appropriate evidence of the archaeological potential and significance of the site prior to the submission of a planning application.
- › Be sensitive to the Scheduled Ancient Monument (SAM) and avoid impact on its value as a designation and wider setting. As such, a buffer zone is required as indicated on Map 8.5. Appropriate uses for the buffer zone to the west of the monument could include suitable public open space or a nature conservation area. Proposals should also demonstrate an appropriate mechanism for the long-term management and maintenance of the monument and buffer area.

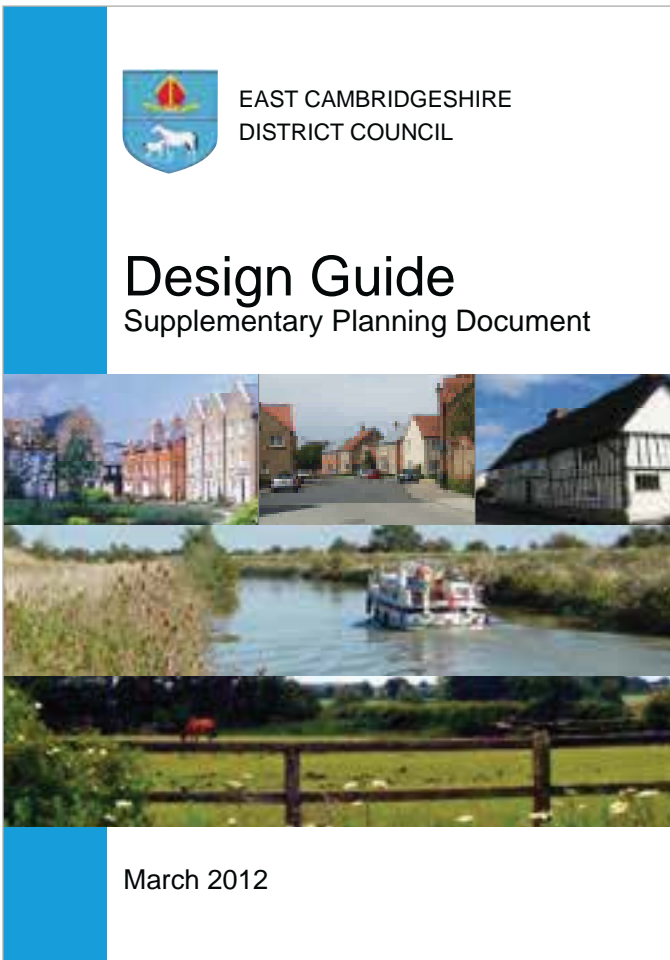
Extract from the Draft Local Plan showing the suggested Policy BOT1 site and SAM buffer (as amended).

- › Provide new allotments within the site or adjoining it to the south/south-west, for the use of the local community, as part of the open space provision for the site to meet the identified need for the village. The allotment land should be accessible by car, foot and cycle and include the provision of a water supply and a parking area.
- › Be accompanied by a Landscape Assessment and include measures to enhance the surrounding Green Belt and provide a well-defined and defensible boundary to the Green Belt on the southern and western boundaries of the site. The boundary treatment should also seek to reduce noise impact from the A14.
- › Exploit opportunities for new pedestrian and cycle links to the High Street and include measures to actively promote sustainable transport, including public transport, walking and cycling.

- › Provide the main vehicular access from Bell Road, via a spur off the existing access that serves St. Peter's Field (subject to a Transport Assessment demonstrating the adequacy of the Bell Road/Newmarket Road junction).
- › Demonstrate that there is adequate capacity in the sewage treatment works and the foul sewerage network; and
- › Comply with the other policies of the Local Plan.



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**EAST CAMBRIDGESHIRE
DISTRICT COUNCIL**

Design Guide
Supplementary Planning Document

March 2012

East Cambridgeshire Design Guide

This Masterplan has had regard to the Design Guide Supplementary Planning Document (SPD) prepared by the District Council.

The Design Guide aims to set out the Council's requirements in relation to design matters.

The various requirements set out within the Design Guide should be considered and addressed in the detailed design of any development proposal for the site.

Cambridgeshire and Peterborough Minerals and Waste Local Plan

- › Cambridgeshire and Peterborough Minerals and Waste Core Strategy and Proposals Map C: Mineral Safeguarding Areas, CCC (2011)
- › RECAP Waste Management Design Guide Supplementary Planning Document (SPD), CCC (2012)

Other Policy and Guidance

This Masterplan also had regard to various other policy and guidance, such as that listed below (in chronological order):

National Policy & Guidance

- › The Disability Discrimination Act, HMG (1995)
- › By Design: Urban Design and the Planning System – Towards Better Practice, DETR & CABE (2000)
- › Urban Design Compendium: Urban Design Principles, EP (2000)
- › Six Acre Standard, NPFA (2001)
- › The value of urban design, CABE, UCL & DETR (2001)
- › By Design: Better places to live – A Companion Guide to PPG3, DTLR & CABE (2001)
- › Planning and access for disabled people: a good practice guide, ODPM (2003)
- › Safer Places: The Planning System and Crime Prevention, ODPM & Home Office (2004)
- › Secured by Design Principles, ACPO (2004)
- › The principles of inclusive design. (They include you.), CABE (2006)
- › Code for Sustainable Homes, DCLG (2006)
- › Manual for Streets, DfT (2007)
- › Urban Design Compendium 2: Delivering Quality Places, EP (2007)
- › Manual for Streets 2 – Wider Application of the Principles, DfT (2010)
- › The National Planning Policy Framework, DCLG (2012)
- › National Planning Policy Guidance, DCLG (continually evolving)

Local Policy & Guidance

- › Developer Contributions Supplementary Planning Document (SPD), ECDC (2014 as amended)



Relationship to Green Belt

The East Cambridgeshire Core Strategy (2009) identifies the site for development and allows for the Green Belt boundary around the village to be revised to accommodate new development.

The Draft Local Plan (2014 as amended) sets out a Vision for Bottisham, and identifies the boundary of the Bell Road allocation site and Green Belt.

The fundamental aim of Green Belt policy is to protect the openness and permanence of the Green Belt. The five purposes of including land in Green Belts are:

- › to check and unrestricted sprawl of large built-up areas;
- › to prevent neighbouring towns form merging into one another;
- › to assist in safeguarding the countryside from encroachment;

- › to preserve the setting and special character of historic towns; and
- › To assist in urban regeneration, by encouraging the recycling of derelict and other urban land.

In this instance:

- › Development of the site will not conflict with the first purpose as the allocation of the site will itself prevent ‘unrestricted’ sprawl;
- › There are no neighbouring settlements, thus development will not conflict with the second purpose;
- › The careful design and incorporation of a sensitive, yet strong, landscape structure within the development will preserve the setting and special character of Bottisham, and development will not have any impact on the setting or character of any other settlement, thus development will not conflict with the fourth purpose; and

- › Development of the site will not have any impact on the fifth purpose – i.e. the recycling of derelict or other urban land – as this is in short supply and all opportunities for such development are generally taken in this area.

In summary, the one purpose for which the land including the site was included within the Green Belt that would be affected by development on the site is the third purpose: the safeguarding the countryside from encroachment.

The Landscape Character and Visual Impact Assessments conclude that the existing landscape is good quality, the site is visually well screened, and there are very few long distance views into the site.

Part C

Design Approach















C1 Constraints and Opportunities

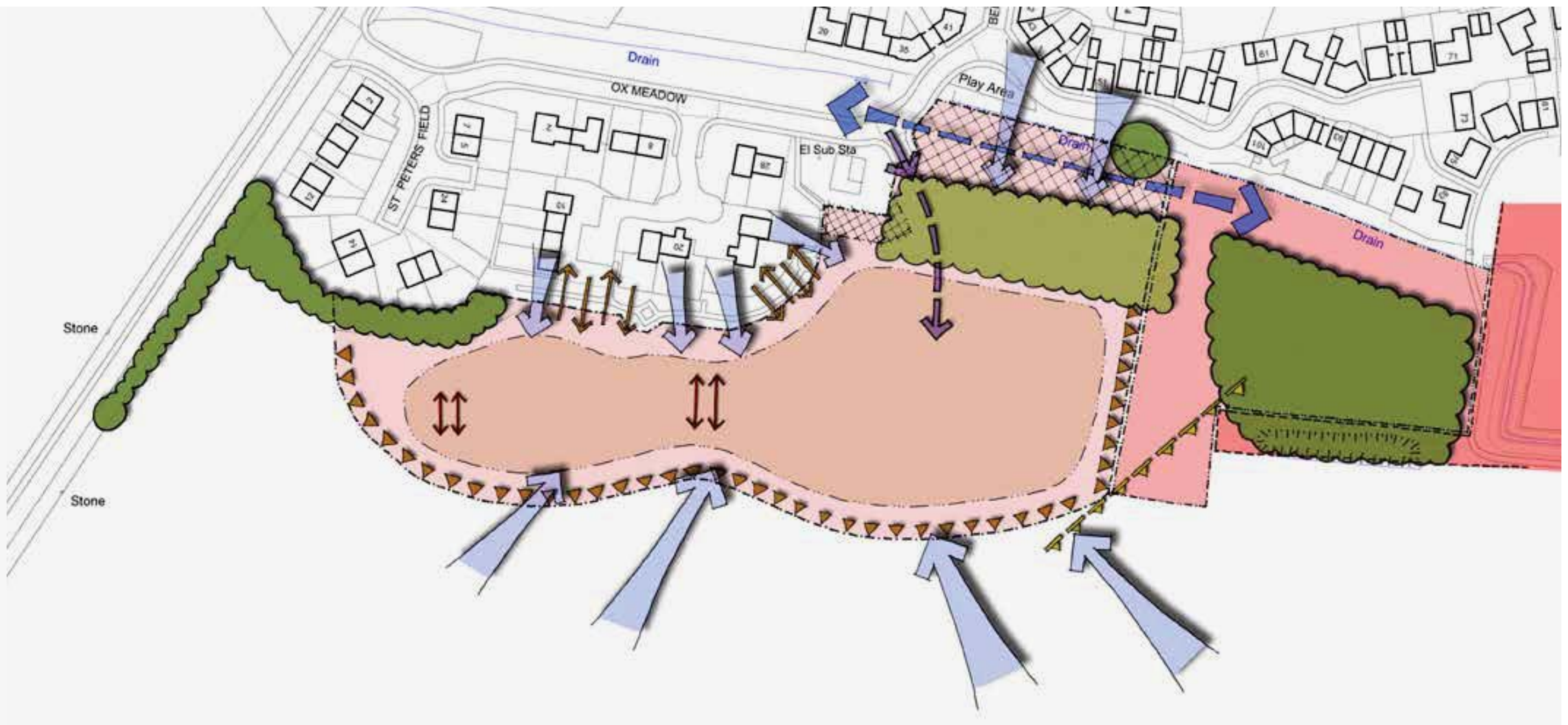
This Masterplan has identified a number of constraints that will influence how the site can and should be developed, and also a number of opportunities whereby the community can benefit from the development.

These include:

- › The Scheduled Ancient Monument (SAM) clearly represents a major constraint to the layout and form of any development. The Draft Local Plan (2014 as amended) proposes a buffer between the development site and the SAM itself.
- › No built development can take place within the land drain along the northern boundary of the site, although any necessary infrastructure works and public open space can be accommodated.

- › The existing semi-mature woodland within the proposed SAM buffer has been identified as containing ecological habitat and contributes to the setting of the SAM, providing physical and visual separation between the proposed development site and the larger part of the SAM; in contrast the area of relatively young plantation woodland is of lesser value and can be considered for development, although the retention of some better value tree specimens along the northern edge would help contribute a landscaped southern edge to the land drain.

-  Allocation
-  SAM Buffer
-  SAM
-  Setting of SAM
-  Existing Trees and Planting
-  Existing Plantation Woodland
-  Views into the Site
-  Relationship to Adjacent Development
-  Relationship to Open Countryside
-  Access
-  Constrained Development
-  Constrained Dimension



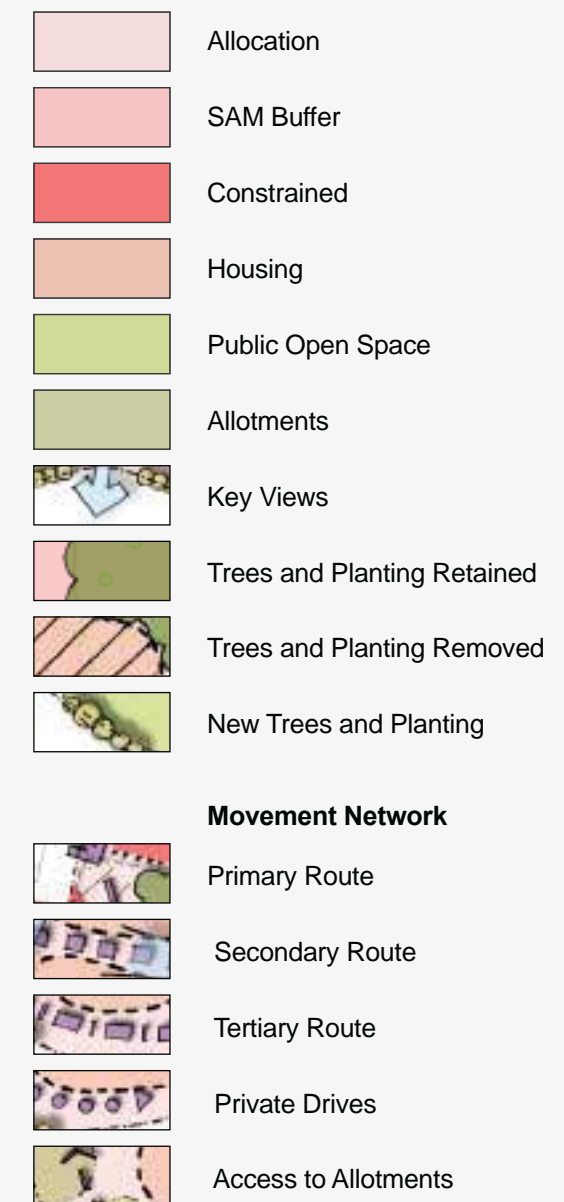
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C2 Design Rationale and Concept

The East Cambridgeshire Core Strategy (2009) and Draft Local Plan (2014 as amended) propose the development of approximately 50 dwellings on the site, the Draft Local Plan (2014 as amended) proposing that an allocation covering an area of 1.7ha. 50 dwellings on 1.7ha would result in a density of 30 dwellings per hectare; a density any higher would result in a development that was out-of-place. The Draft Local Plan (2014 as amended) also makes it clear that this Masterplan should consider an area wider than simply the draft site/ allocation boundary.

This Masterplan proposes that the outer edges of the residential development be formed of low-level frontage development (i.e. private drives rather than main streets), with housing orientated out towards the site's surroundings, avoiding an edge characterised by back garden fences and instead delivering an edge that is publicly accessible characterised by mix of landscaping and high quality built development.

This edge development can be served from a road network within the site, the majority of traffic and vehicles thereby not impacting on the external appearance of the development, this minimising the level of intrusive activity visible from the Green Belt.





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C3 Public Consultation

A public consultation exercise on the draft Masterplan was undertaken during September and October 2013.

Public presentations were given by the team that prepared the draft Masterplan to both the Parish and District Councils, a public exhibition held and leaflets distributed to all households in the village.

A six-week public consultation period followed, with the Masterplan being available in hard copy at the Parish and District Council offices and on-line, along with a consultation questionnaire.

A total of 92 completed questionnaires were received. The District Council then undertook a detailed analysis of the comments received (which is available separately and includes the District Council's response on each of the issues raised), which included:

- › Insufficient infrastructure in the village to cope with more housing

Response: The District Council will work closely with infrastructure providers to ensure that key services are in place to serve the development.

- › Concern about noise from the A14(T)

Response: This issue is recognised and a Noise Impact Assessment will be required with any planning application.

- › Need for a play area on site

Response: The majority of residents indicated they would prefer to see a play area provided elsewhere within the village.

- › Need for smaller properties / bungalows

Response: The final dwelling mix will be subject to negotiation with the applicant and based on the latest evidence on housing need.

- › Need more/adequate car parking

Response: The Masterplan requires that the District Council's maximum car parking standards be met in any proposed development.

- › Encroachment into the Green Belt should be minimised

Response: The Core Strategy requires the delivery of 50 homes on the site; the size of the site strikes a balance between an appropriate density and layout and minimising the impact on the Green Belt.

- › Draft Masterplan would impact on the SAM and buffer

Response: The Masterplan has been revised to ensure that no built development or allotments should be provided within the SAM buffer.

Many comments Amendments resulting from these comments were then made to the draft Masterplan.



D1 Use and Amount

This section sets out a number of Principles that will help guide the design of any development proposal and against which any such proposal will be assessed. Those Principles that relate to the layout of the site (as opposed to those that relate to the detailed design and specification of the individual buildings, plots, roads and open spaces) are shown on the Combined Parameters Plan in Section F of this Masterplan.

The Allocation

The East Cambridgeshire Core Strategy (2009) and Draft Local Plan (2014 as amended) propose that approximately 50 dwellings be provided on the site.

In addition to the development site, the Draft Local Plan (2014 as amended) requires that any development proposal consider the potential uses for the SAM buffer, and the provision of allotments.



Land off Bell Road, Bottisham

Affordable Housing

Of the approximately 50 dwellings proposed, the Draft Local Plan (2014 as amended) states that any development proposal would be expected to provide an element of affordable housing in line with policy (currently 40% subject to negotiation and/ or viability), with priority being given to people in local housing need.

Principle Affordable Housing

- 1 Any development proposal should seek to provide 40% of dwellings as affordable housing subject to viability and site specific circumstances. The precise mix in terms of tenure and dwelling size should be determined by local circumstances at the time any application is submitted. The allocation of affordable housing will give priority to people in local housing need.



Development Framework

Mix and Type of Housing

The Draft Local Plan (2014 as amended) states that any development proposal would be expected to include a mix of dwelling types and sizes. The Masterplan proposes this mix of dwelling types and sizes will predominantly be in the form of 2, 3 and 4 bedroom houses with some 5 bedroom houses. Some 1-bedroom dwellings could also be incorporated as part of the affordable housing provided if appropriate.



Principle **Housing Mix and Type**

- 2 Subject to detailed design considerations, there should be a mix of predominantly 2, 3 and 4 bedroom houses along with some 5 bedroom houses; some 1-bedroom dwellings could be incorporated as part of the affordable housing provided if appropriate.



Land off Bell Road, Bottisham

Density

The Draft Local Plan (2014 as amended) proposes approximately 50 dwellings on 1.7 hectares (ha). This equates to a density of approximately 30 dwellings per hectare (dph). For clarification, this Masterplan proposes that the built part of any development should be on no more than 1.7 ha (including roads and incidental landscaping), with associated landscaping, open space and the allotments on additional land if necessary.

Across the site, this Masterplan envisages that higher density development comprising smaller dwellings would be located on the northern part of the site, with lower density development comprising larger dwellings with larger gardens on the southern part of the site to enable the creation of a softer, greener, more informal outer edge to the development.

Principle **Density**

- 3 Subject to detailed design considerations, higher density development should be located on the northern part of the site and lower density development on the southern part of the site.



Overall Layout

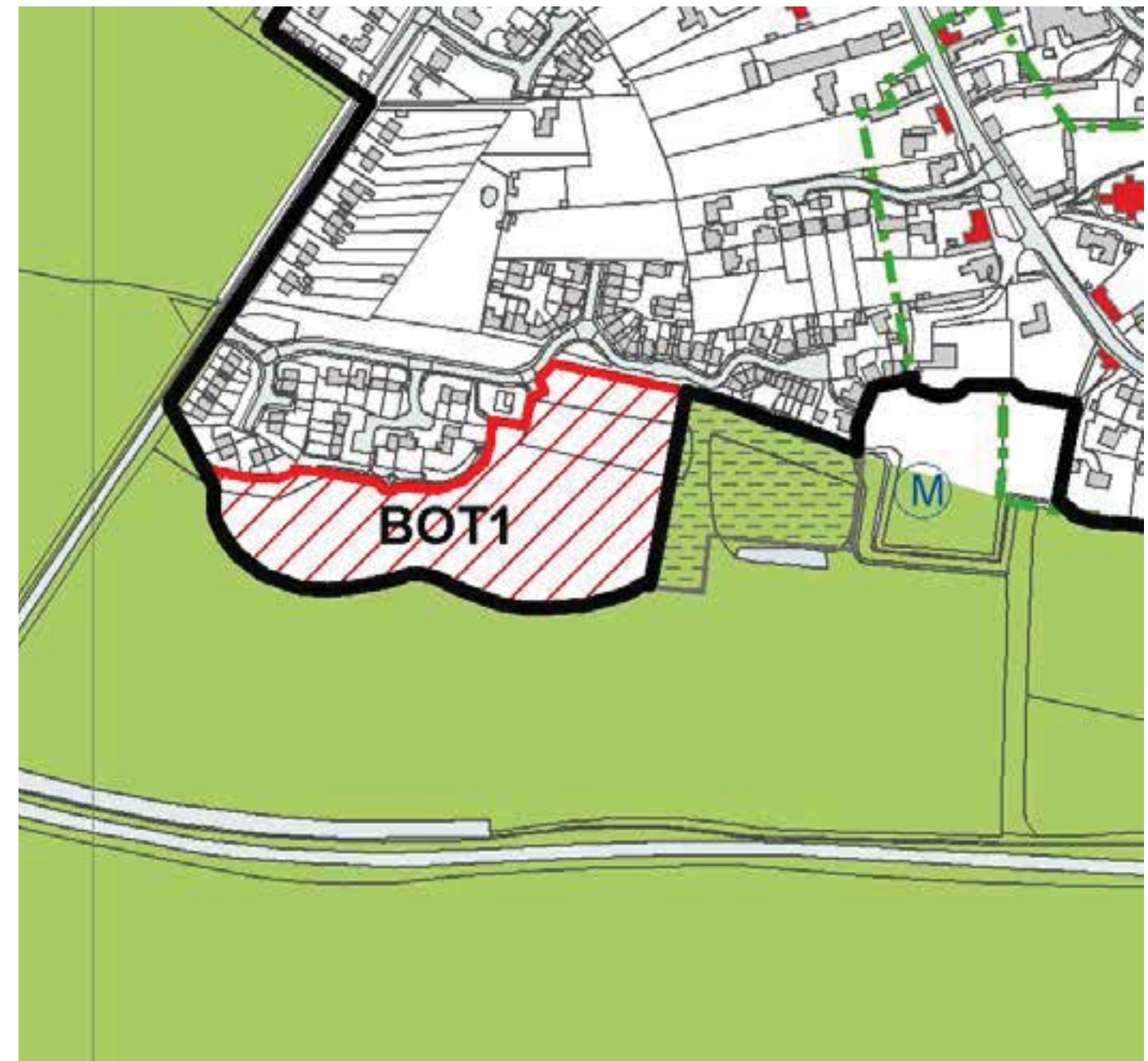
The 'site' comprises a number of areas.

- › In the west, to the south and east of the recent developments on Ox Meadow, the Draft Local Plan (2014 as amended) proposes a development of approximately 50 dwellings.
- › To the east of that, the Draft Local Plan (2014 as amended) proposes a 'buffer' between the new housing and the Scheduled Ancient Monument (SAM).
- › In addition to these areas, there will need to be provision for open space, landscaping and allotments, which are also required by the Draft Local Plan (2014 as amended).

Access

The only vehicular access to residential development on the site should be via a spur road from Ox Meadow. The allotments should be served either from the residential part of the site or directly from Bell Road by way of a separate access, subject to further technical feasibility work.

Extract from the Draft Local Plan showing the suggested Policy BOT1 site and SAM buffer (as amended).



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Pedestrian connections should be made to Ox Meadow to the north and via the SAM buffer and allotments, to the pedestrian footpath around the southern boundary of the moated part of the SAM to the east.

Principles of Placemaking

The approach taken to the design of any development proposal should be based on the concept of 'placemaking':

- › The creation of a distinctive sustainable residential community with an identifiable sense of place, in the context of the site's location and character and that of its surroundings.

The features of any successful layout, and thus place, include:

- › Legibility
- › Ease of movement
- › Active streets
- › A human scale
- › Safety
- › Variety

These features can be combined into two key elements:

› Legibility and Ease of Movement

The ease by which the layout of any site is understood can increase the sense of ownership felt by residents. This applies not just to the ease of movement throughout a site, but also the perception of public versus private space.

› A Variety of Safe Active Streets at a Human Scale

A sense of safety is paramount if people are to contribute to the life and activity within a street or place, as is the physical scale of that street or place – a lack of enclosure or definition can result in a perception of exposure, whilst excessive enclosure can be oppressive.

The layout of any residential development, and the resulting ease of legibility and movement, sense of use and activity, and thus safety, are governed by the relationship of the built development to the movement network and areas of open space, the orientation and positioning of the dwellings, and the treatment and enclosure of different areas of open space, whether public or private.

Reflecting the individual residential character found within Bottisham, this Masterplan envisages that all new dwellings should ideally front onto the movement network, areas of open space or the surrounding countryside, thereby providing visual interest to residents and passers-by, along with natural passive surveillance of the movement network and public areas of open space.

Principle Frontage Development

- 4 Ideally, all new dwellings should front onto the movement network, areas of open space or the surrounding countryside.



Movement Network

Too often, new developments can become confusing to those navigating them through a failure to adopt a clear hierarchy of streets and pathways. Thus, this Masterplan envisages a network of routes within the site in line with the following criteria:

A clearly legible **main street** connecting the site access through to the southern boundary of the site, providing residents and visitors with a visual connection to the surrounding countryside, characterised by:

- › taller buildings along both sides close to the footpath
- › buildings interspersed with driveways and garaging
- › limited soft landscaping or planting and enclosed front gardens, typically with low walls, railings or fencing.



A **secondary street** connecting the main street to the eastern boundary of the built development, providing residents and visitors with a visual connection to the historic SAM, characterised by:

- › built development along both sides generally lower in height than along the main street
- › some soft landscaping and planting, including the potential for limited tree planting if appropriate
- › semi-enclosed front gardens, typically with any enclosure formed by mid-level fences and hedges.



A **tertiary street** along the southern boundary of the site, with the atmosphere of a rural lane, characterised by:

- › frontage development along only one side comprising a mix of building types and styles
- › soft landscaping and planting including trees as a prominent feature within the streetscape
- › little enclosure of any front gardens other than with mid and low-level fences and planting.



A series of **private driveways** around the remainder of the periphery of the site, characterised by:

- › development on one side only, comprising frontage development where possible, rather than rear garden boundaries
- › informal soft landscaping and planting
- › limited enclosure other than with mid and low-level planting and the occasional section of fencing.



A network of **pedestrian routes** around the southern and eastern edges of the new housing, linking to the recent housing development on Ox Meadow to the north and via the SAM buffer to the pedestrian footpath around the southern boundary of the moated part of the SAM.

Ideally, all pedestrian routes should be designed to a suitable standard (e.g. as set by the County Council) for adoption.



Land off Bell Road, Bottisham

Technical advice has confirmed that none of the road network need be more than 4.8m in width, with the private drives being of varying width but no more than 4.2m wide.

To aid legibility and accessibility, footways should be provided along the main, secondary and tertiary streets where there is frontage housing. Footways are not required along private drives.



Development Framework

Principle **Movement Network**

- 5 Any development proposal should be laid out in accordance with the criteria relating to main, secondary and tertiary streets, private drives and pedestrian routes, as set out in this Masterplan.



1. Main street
2. Secondary street
3. Tertiary street
4. Private driveways
5. Access to and parking for allotments



Parking Provision

Parking provision is now as critical to the appearance and atmosphere of any residential development as the Movement Network and Greenspace Network. Failure to properly provide for the anticipated level of parking that will be required by residents and visitors can lead to a development visually dominated by parked cars. Equally, failure to locate car parking in locations and positions where it will be used can similarly result in unplanned on-street parking.

This Masterplan envisages that car parking and cycle storage will generally be provided in line with adopted standards, which at present require the provision of a maximum of an average of 2 spaces per dwelling for residents. Provision should also be made for a small amount of casual visitor parking. This need not be in the form of allocated spaces, as the pressure for parking on this site is unlikely to be excessive. Any on-street visitor parking should be integral to the design of the carriageway and not impede the free-flow of traffic.

Principle **Parking Provision**

Subject to detailed design considerations:

- 6 Parking should, where possible, be located within the curtilage of each dwelling, or otherwise in a shared parking court to the front of the associated dwelling(s).
- 7 Parking courts areas should accommodate no more than 6 to 8 properties.
- 8 Parking provided for casual visitors should be available to all and thus within the public domain.



Greenspace Network

By consequence, a number of areas of public greenspace will be created by any development proposal.

During the preparation of this Masterplan, the potential to include an equipped children's play area (often referred to as a LAP) was considered, however given the recently-provided play area on Ox Meadow it was decided that the provision of an additional equipped play area would be inappropriate.

This Masterplan envisages a network of spaces within the site in line with the following criteria:

A **landscaped corridor** along the northern boundary of the site, constraints associated with the existing land drain precluding any built development thus enabling the creation of a wide landscaped corridor, characterised by:

- › soft informal landscaping and planting conducive to nature conservation and biodiversity enhancement
- › some public access
- › frontage housing development, but set back behind private drives and/or screen planting.



Landscaped edges around the south and east of the site, frontage development providing the opportunity for pedestrian route linkages, characterised by:

- › soft landscaping and planting and fencing (eg post-and-rail) defining the site boundary
- › except where part of the tertiary street or a private drive, pedestrian access only
- › visual permeability with both the frontage housing and the open countryside/SAM buffer.



The **SAM buffer** to the east of the new housing, providing the opportunity for informal public open space and/or nature conservation, this area characterised by:

- › soft landscaping and planting within the northern part of the buffer but less planting within the southern part in order to maintain the important open aspect to the south of the SAM, thereby conserving its setting
- › unsealed surfaces to pedestrian routes.



Areas of **informal greenspace** within the western part of the site, providing the opportunity for informal public open space, characterised by:

- › grassed areas suitable for informal play
- › soft landscaping and planting
- › visual permeability with both the frontage housing and the open countryside.

The **allotments** to the west of the new housing, characterised by:

- › an open aspect with any enclosure provided only by wire fencing and planting.

Principle **Greenspace Network**

- 9 Any development proposal should be laid out in accordance with the criteria relating to the landscaped corridor, landscape edges, SAM buffer and allotments, as set out in this Masterplan.



D3 Scale and Appearance

Building Height

The majority of development in Bottisham is 2 storeys, with some 2.5 storey (often 2 storeys with accommodation in the roof) and 3 storey building.

Site specific constraints including the proximity of adjacent properties, the potential for impacts on views, especially of Holy Trinity Church, and the setting of the SAM and wider village, suggest that development on this site should not exceed this trend. This Masterplan proposes that this prevailing height of development is reflected in any development proposal.



Land off Bell Road, Bottisham

Principle Building Height

- 10 In the central and northern parts of the site, development should comprise a mix of up to 2, 2.5 and 3 storey buildings, whilst in southern and eastern parts of the site development should generally be restricted to 2 and 2.5 storey buildings, with potentially the occasional three storey building used to articulate the layout and provide increased legibility.



Development Framework

Building Form and Massing

In general, development in Bottisham does not form a continuous, uninterrupted line of built development. Instead, it is typically characterised by individual buildings, often positioned close to the highway, separated by gaps of varying widths. Larger properties are often located on identifiable plots, screened by walls, fences and/or hedgerows and surrounded by single storey ancillary buildings.

This Masterplan proposes that this prevailing pattern of development be reflected in any development proposal, with dwellings located close to the highway, with minimal front gardens, generally not forming an uninterrupted line of built development.

Building forms are generally of a rectangular plan form with standard pitched roofs facing the street, with gable ends, although there are some examples of hipped and mansard roofs. This Masterplan proposes that this form of building be that most reflected in any development proposal.

Within these typical building forms, a degree of variation is necessary to provide visual interest, aid legibility, and reflect the gradual historic evolution of different built forms across the village.

In addition, whilst less necessary within the housing area, the use of a mix of building forms and styles can reduce the visual impact of a new development, particularly in longer distance views.



Principle **Building Form**

- 11 Subject to detailed design considerations, new dwellings should be located close to the highway, with minimal front gardens, generally not forming an uninterrupted line of built development, and be of a generally rectangular plan form with a standard pitched roof orientated towards the street; limited use of hipped and/or mansard roofs should be considered to provide variation and to reduce the visual impact.



Land off Bell Road, Bottisham

Elevational Appearance and Materials

This Masterplan does not seek to prescribe the adoption of any particular architectural style or approach to the design of individual buildings, other than to establish certain parameters that should be used to help guide the detailed design process, such as those relating to building height, form and the need for development to front onto the movement network and open space.

As set out in Section B of this Masterplan, Bottisham does not have a single prevailing style, thus the architectural approach adopted to the detailed design of any development proposal should be fully justified, specifically in the context of the varied character of existing development in the village.

With regard to materials, the Masterplan envisages that these will be reflective of materials used in Bottisham and the surrounding area.

Development Framework

Principle **Elevational Appearance and Materials**

- 12 The architectural approach adopted to the detailed design of any development proposal should be fully justified, specifically in the context of the varied character of development in Bottisham.
- 13 Materials should be those used in Bottisham and the surrounding area



D4 Safety and Security

A sense of safety and security is paramount to people's enjoyment of any street or place; a lack of enclosure or definition can result in a perception of exposure, whilst excessive enclosure or lack of clear visibility can be oppressive and intimidating.

Natural passive surveillance generally provides the best form of security within residential developments and is strongly encouraged by this Masterplan, although care is needed to ensure that privacy within properties is not infringed.

Appropriate lighting, which need not be overly bright, extensive or visually intrusive, can be very effective in reducing both the fear and incidence of crime. Different lighting sources need to be considered for different parts of any development.

Principle **Safety & Security**

Subject to detailed design considerations:

- 14 Ideally, all dwellings should face onto the movement or greenspace networks; no pedestrian routes should be provided that are not appropriately overlooked by frontage housing.
- 15 Property boundaries to the side and rear, which adjoin public areas, should be secure and access points to the rear of buildings should be controlled, for example by means of lockable gates.
- 16 Car parking should be located close to and visible from the associated dwelling.
- 17 Appropriate lighting should be provided to all pedestrian routes and parking areas, with particular sensitivity given to the setting of the SAM.



Building Orientation, Form, Layout and Design

The orientation and positioning of buildings can, together with their form, layout and design, contribute greatly towards the creation of a good microclimate as well as assisting with energy saving.

The relatively low density of any development on the site together with a generally open aspect around the periphery, should be used to ensure that as many dwellings as possible can be provided with good views of the sky, especially from the main habitable rooms.

This Masterplan therefore proposes that all dwellings should be positioned, orientated and designed to include windows of appropriate orientation and size to deliver sufficient daylighting to create a light and bright internal environment, instil a sense of space and minimise the need for artificial lighting, but not be so large that the heat loss or solar gain is too great, or that resident's sense of privacy will be compromised.

In addition, this Masterplan proposes that each dwelling should be provided with access to external private amenity space that will receive direct sunlight for at least part of the day.

Each dwelling should be provided with access to external private amenity space that will receive direct sunlight for at least part of the day for a majority of the year.

Principle **Building Orientation, Form, Layout and Design**

Subject to detailed design considerations:

- 18 Dwellings should be designed to ensure that sufficient daylight is provided to rooms to create a light and bright internal environment.
- 19 As many dwellings as possible should have good views of the sky, especially from main habitable rooms.
- 20 Each dwelling should be provided with access to external private amenity space that will receive direct sunlight for at least part of the day for a majority of the year.

Energy Generation

There are many ways that renewable energy can be generated, on a residential scale. However, some of these are onerous and others effectively unviable.

This Masterplan requires that the possibility of incorporating renewable energy technology into any development proposal should be considered in line with Core Strategy (2009) Policy EN4, which requires any development of 10 or more units to provide at least 10% of its energy requirements from decentralised and renewable or low carbon sources.

In addition, the visual impact of including any such technology such be carefully considered; ideally technology should not have a negative impact on the appearance of the development; this does not mean that such technology should be invisible.

Principle **Energy Generation**

- 21 The incorporation of renewable energy technology, which would result in minimal visual impact, should be considered in any development proposal in line with Core Strategy Policy EN4.

Energy Efficiency and Consumption

Notwithstanding the potential for the on-site generation of renewable energy, the high levels of insulation required by the Building Regulations will minimise the demand for energy use in any development proposal.

In addition, the simplest and easiest method of reducing energy consumption is through the specification, installation and use of low energy fittings and appliances.

Principle **Energy Efficiency and Consumption**

- 22 All lights, both internal and external should be fitted with low energy bulbs.
- 23 If possible, any external lighting should be solar powered.

Surface Water Drainage

Although there is no anticipated risk of flooding, the proposed development will result in an increase in the impermeable area.

An approach to managing surface water utilising Sustainable Drainage Systems (SuDS) – passive drainage systems that seek to replicate natural systems and thus have minimal environmental impact) should form the basis of the surface water drainage arrangements for the site.

The surface water drainage arrangements should ensure that any protected or notable species (e.g. water vole within the land drain along the northern boundary) are appropriately protected.

Principle **Surface Water Drainage**

-
- 24 The surface water drainage arrangements for any development proposal should be based on SuDS.
-

Water Conservation

At present, much potable (drinking) water in the country is wasted on uses such as watering the garden, cleaning the car and flushing the toilet, where water of lesser quality is perfectly adequate.

To minimise this wastage, measures can be adopted such as the provision of rainwater butts for each dwelling and the initial specification of water saving/efficient sanitary ware, fittings and white goods.

Principle **Water Conservation**

- 25 Rainwater butts should be provided on the rear elevations of the proposed dwellings.
- 26 The initial specification of dual-flush toilets, low flow showers, aerated taps and shower fittings and water efficient white goods should be considered.
- 27 Soft landscaping and planting should focus on species requiring low levels of irrigation.
-

Construction Materials

This Masterplan envisages that any development proposal will as far as possible be specified in line with the following criteria:

- › Primacy should be given to using A-C rated materials, as defined in the Green Guide to Specification
- › Consideration should be given to the use of recycled materials
- › Timber products should be sourced from a sustainable source, such as those forests certified by the FSC or PEFC
- › Materials should be carefully specified to ensure the delivery of a 'healthy' building
- › Materials should be sourced from local sources/suppliers to minimise transport impacts.

Principle **Construction Materials**

28 Subject to detailed design considerations, any development proposal should be specified in accordance with the criteria relating to construction materials, as set out in this Masterplan.

Waste and Recycling

Currently, the local waste collection system operates using plastic sacks; however the potential for a system based on multiple wheelie bins should not be overlooked.

At the time of writing, the District Council is in the process of introducing a new system of recycling collection comprising two wheelie bins, but retaining black bin bags for general refuse.

This Masterplan envisages that the design of each dwelling will incorporate level, accessible external space sufficient to store at least two wheelie bins along with general refuse.

The design of each dwelling should also incorporate sufficient appropriate internal space for bins to enable the separation of waste and recycling prior to storage outside.

Principle **Waste and Recycling**

Subject to detailed design considerations:

- 29 Sufficient level, accessible external space should be provided to store waste and recycling bins.
- 30 Sufficient internal space should be provided for the separation and storage of waste and recycling.

D6 Implementation, Phasing and Delivery

It is likely that any development on the site will be implemented soon after the granting of planning permission and any other necessary permissions and/or consents. It is also understood to be likely that the development would be carried out in a single phase over several years.

Prior to construction, a Site Waste Management Plan will be prepared to facilitate the minimisation of construction waste and high levels of re-use and recycling of construction materials.

As the site is located adjacent to existing residential development, all contractors should be required to commit to best practice under the Considerate Contractors Scheme, which will help minimise disruption to the residents of the surrounding area and control vehicle movements in and out of the site.

Consideration should also be given to providing residents, on first occupation, with a Home User Guide.

This Guide would contain guidance on the operation of heating and ventilation systems, materials used in construction, utilities and metering, proximity and location of local facilities and services, public transport options, etc.

Such a Guide would enable residents to manage their home efficiently, and would encourage them to engage in a more sustainable lifestyle, as part of living in a more sustainable development.

Principle **Implementation, Phasing and Delivery**

- 31 All contractors should be required to commit to best practice under the Considerate Contractors Scheme
- 32 Consideration should be given to providing residents, on first occupation, with a Home User Guide.

D7 Management and Maintenance

It is expected that the maintenance of all dwellings will be carried out by their respective owners, including by any provider of affordable housing.

To ensure the effectiveness of surface water drainage arrangements, where the surface water drainage infrastructure provided is not adopted by an appropriate body, a maintenance regime should be established, which should be controlled by a management company established by the developer following the completion of the development.

A regime should also be established to ensure the appropriate management and maintenance of the SAM buffer and other public open space, which should also be controlled by the management company.

Principle Management and Maintenance

33 Where infrastructure is not adopted or existing maintenance regimes are already in place, long-term maintenance regimes, which should be overseen by a management company established by the developer, should be established to ensure the effectiveness of the surface water drainage arrangements, and management of the SAM buffer and other public open space.





E1 Approach

Accessibility should be considered at all stages, and in relation to all aspects of the design of any development.

If considered properly, it should be integral to all design decisions and should not stand out as something that has been considered late in the process or as an add-on to other design inputs.

The approach taken to the design of any development on the site should ensure maximum accessibility for all residents and visitors, whilst bearing in mind and taking account of all other constraints and influencing factors.

The design of any development proposal for the site should seek to comply with the following objectives:

- › **Inclusive** – so that everyone can use it safely;
- › **Responsive** – has taken everyone's views into account;
- › **Flexible** – so that different people can use it in different ways;

- › **Convenient** – so that everyone can use it without too much effort or separation;
- › **Accommodating** – for all people, regardless of their age, gender, mobility or ethnicity or circumstances;
- › **Welcoming** – with no disabling barriers that might exclude some people; and
- › **Realistic** – balancing everyone's needs.

Principle **Accessibility**

- 34 Subject to detailed design considerations, accessibility should be ensured for all residents and visitors, and matters of sight, hearing and mobility should be carefully considered and appropriately addressed.

E2 Accessible Site Layout

Most residential developments are relatively easily navigable by all users.

The new access from Ox Meadow should provide for all potential users, including service and emergency vehicles. The footpath connections onto Ox Meadow, via a sealed surface should also provide for all pedestrian and also wheelchair users. Consideration should be given to maximising the accessibility of the connection to the footpath around the southern edge of the SAM.

The movement and greenspace networks should be clearly legible and are not expected to include any likely impediments. Equally, the greenspace network should be enjoyable to all users, although careful consideration of planting can enhance this.

Gradients across the site are such that they should not represent any constraint.

Lighting of public areas as necessary for general safety and security should be sufficient to cater for the needs of all users.

Specialist signage is unlikely to be necessary due to the limited size of the site, although some consideration should be given to the provision of a sign highlighting the route to High Street via the footpath around the southern edge of the SAM. Some signage might also be required in association with the provision of the allotments.

Similarly, no specialist street furniture is necessary, although some consideration should be given to the provision of seating at one or more locations on the pedestrian movement network to provide respite.

Principle **Accessible Site Layout**

35 Access to the site and the movement and greenspace networks within the site should, as far as possible, provide for all users, maximise accessibility to all parts of the site, and be appropriately lit.

E3 Accessible Building Design

In general, matters pertaining to the detailed design of individual buildings, the specification of fixtures and fittings, and so on are covered by the Building Regulations.

However, beyond these requirements, it is important to ensure that entrances to individual buildings are not just easily accessible when located, but can be easily located, although this is often not a significant issue in residential developments.

Principle **Accessible Building Design**

Subject to detailed design consideration:

- 36 Entrances to individual buildings should be easy to identify and access for all potential users.
- 37 Consideration should be given to specifying door furniture and interior utility fittings that would increase accessibility.





F1 Combined Parameters Plan





Some of the Principles set out in this Masterplan, against which any development proposal will be assessed, relate to the layout of the site, whereas others relate to the detailed design and specification of the individual buildings, plots, roads and open spaces.

The Combined Parameters Plan opposite is based on the analysis of constraints and opportunities, and the identified design rationale and concept, and shows how those Principles that relate to the layout of the site should guide the preparation of a detailed development proposal.

Parameters:

- › **Access and Movement Network** (Principle 5): How this Masterplan envisages that the hierarchy of main, secondary and tertiary streets, private drives and pedestrian routes be arranged to provide a clear and legible movement structure.
- › **Greenspace Network and Landscape** (Principles 6 and 12): The network of spaces that this Masterplan envisages, including the provision of allotments and public open space.
- › **Density and Building Height** (Principles 3 and 10): The variation envisaged by this Masterplan in density and building height.
- › **Frontage Development** (Principle 4, and 14 to 17): The use of frontage development to create active and safe streets and space.




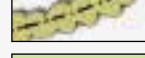


Housing

-  Lower Density
-  Higher Density
-  Key Buildings
-  Frontage Development

Movement Network

-  Main Street
-  Secondary Street
-  Tertiary Street
-  Private Drive
-  Access to Allotments

Greenspace Network

-  SAM Buffer
-  Trees and Planting Retained
-  Northern landscaped Corridor
-  Landscaped Edges
-  Informal Greenspace
-  Allotments



F2 Illustrative Layout

The Illustrative Layout opposite shows only one way in which the site could be developed in accordance with the Principles set out in this Masterplan, including those shown on the Combined Parameters Plan.

The interpretation shown closely follows the analysis of constraints and opportunities, the design rationale and concept and thus is in line with the Combined Parameters Plan.

A layout similar to that shown, which accorded with the Combined Parameters Plan, and the other Principles set out in the Masterplan in all other regards, should be considered as being in compliance with the requirements of this Masterplan.



Housing



Key Buildings



Public Open Space



Existing Trees



New Trees and Planting



Allotments



Land off Bell Road,
Bottisham

Masterplan



East Cambridgeshire
District Council