



A New Neighbourhood at Channels

Why are we consulting?

We want to explain the work we have carried out and our ideas for a new neighbourhood at Channels.

This is your opportunity to tell us what you think of the design proposals. We want to take your comments into account as we develop our plans for the submission of an outline planning application to Chelmsford Borough Council.

Background and planning context

Chelmsford Borough Council's Adopted Core Strategy and Development Control Policies Development Plan Document have put forward broad locations for development growth to assist meeting future housing. employment, recreation and leisure needs for the Borough to 2021.

The Core Strategy proposes two new neighbourhoods to the north of Chelmsford to provide at least 4,000 new homes, with a significant development to the north east of Chelmsford. The Council has said that the north east neighbourhood will have the key advantage of concentrating development in an area where transport and other infrastructure can be delivered. It is intended that the Council's North Chelmsford Action Area Plan (NCAAP) will allocate the land for the new neighbourhoods.

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The North Chelmsford Area Action Plan (NCAAP)

The Council has prepared the NCAAP. It has been the subject of extensive public consultation and will be subject to independent examination by an Inspector appointed by the Secretary of State later this year. The main features of the NCAAP for north east Chelmsford are as follows:

• A minimum of 3,200 houses

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- . 64,000 sqm of new business floorspace north of Boreham interchange and new road access point at Regiment Way.
- Provision of landscaped setting to Grade I Listed New Hall,

- A landscape structure for development.
- . A network of walking and cycling routes and links to a new park and ride being built.

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- A road network with link/distributor road . connecting Boreham interchange, White Hart Lane and Essex Regiment Way via Belsteads Farm roundabout with a safeguarded route for North East Chelmsford by-pass.
- New railway station at Boreham interchange
- The extraction of mineral resources north of New Hall
- Three primary schools and one secondary school
- A provision of local centre to serve the neighbourhood.



Channels - within the NCAAP context

Channels - existing features Recreation

Rural / agricultural land

Clubhouse - cafe, lodge, functions

Channels - development principles

New neighbourhood

Vibrant mixed-use space

Public green space

Proposed park 'n' ride

 NCAAP residential-led development NCAAP school / dual community use

NCAAP key landscaped links

Natural green

Sport / leisure

**** Key routes

Existing residential Industrial

Reserve

School

Waterbody

BIDWELLS

A New Neighbourhood at Channels

Land at Channels Golf Club

Land at Channels Golf Club is identified in the NCAAP as land north and south of Belsteads Farm and Channels Golf Course within the north east neighbourhood. The leading land use is shown as residential supported by leisure, conference facilities with access for new link/ distributor road, landscaping and retention of the lakes. Land for a traveler Site is shown beyond the south western boundary of Channels Golf Course. Land at Pratts Farm, to the north of the Golf Course complex is shown for retention/remodelling of the golf course.

The NCAAP expects that the development would include or contribute to affordable housing and infrastructure provision including transport, health care, leisure, education, open space, flood defence and community facilities.

Progress on the Proposals for NE Chelmsford

North Beaulieu Park: Countryside Properties have already submitted an application for outline planning permission for a substantial part of the new neighbourhood, suggesting up to 4,000 dwellings, business park, retail, hotel and leisure development, education and community facilities and related infrastructure. A separate planning application has been submitted for a new railway station.

Channels: The landowners and developers have been carrying out detailed work on the opportunities and constraints in consultation with the Council and other agencies to be able to bring forward the proposals for the Belsteads Farm and Channels Golf Club Site. It is intended that an outline planning application for residential, open space and leisure development will be made soon.







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(if required)







1875

1955



The History of Channels

There is a history of settlement in the area dating back to the Roman and Anglo Saxon times and archaeological remains have been found throughout the surrounding area.

The land would have changed quite considerably through the period of enclosure around the end of the 18th Century. The pattern of trees and hedgerows we see in much of the countryside stems from this time. The landscape changed very little between 1875, when the Ordnance Survey (OS) drew the first maps of the country, and the 1950s.

The **1875** map shows Belsteads Farm Lane, Domsey Lane and Pratts Farm Lane. It also shows a lane running in an east to west direction to the west of Channels and Blueposts with the parish boundary to the south east of Blueposts. This map shows the previous field pattern with mostly rectilinear fields. The fields to the west of Channels were long and narrow, orientated in an east-west direction. The location was very rural with few residences.

Many field boundaries were lost after the First and Second World Wars, as was common in the period, and fields became larger. The **1924 map** shows some rationalisation of the field pattern. Belsteads Farm and Channels remained as the main settlement within the Site.

The greatest changes within the Site have occurred since the Second World War. It is possible to see the start of the quarrying operations in the north west of the Site as early as the 1950s. Since this period, massive changes have taken part on the Site, with the majority of the Site being quarried. Comparing the **1955 map** and a **present day** satellite aerial shows the amount of quarrying undertaken on the Site, evidenced by the remaining areas of water filled pits. The contours over most of the Site are mostly man made. The golf course (developed from 1969 onward) has changed the landscape, adding new trees and areas of planting and new buildings have been added and roads changed and removed.

The landscape of the Site is set to change again, with its change from a golf course to new areas of housing and open space. The proposed masterplan protects historic elements of the landscape, including the shape of historic pathways and tracks, hedgerows and parish boundaries. This is to ensure that, although the use of the Site is changing again, its historic framework remains intact.





Present day



- View southwest across bowls club area and 5th & 7th fairways (1980) View across football pitch to fishing lake (1979) View east from fishing lake (1981) & 1982(b)) View west across fishing lake (1981)
- View south from Belsteads Farm Lane across lake and bowls club area (1983)
- area (1983)
 View east towards Channels across the 18th lake (1983)
- View of Channels buildings (1983)
 View south towards Channels (1983)

















Location



View north-west over Char



Site views





Process to date

Design workshop

A design workshop was held in May 2010 to provide an opportunity for the Council and the design team to establish a shared vision for Channels. Officers of Chelmsford Borough Council were invited to attend and participate in a design workshop which explored Channels' physical, social, historical and ecological context.

The workshop addressed the key issues the various parties anticipated, as well as the opportunities and aspirations they had for the Site.

Following the briefing session and Site visit, the team divided into specialist groups to investigate key areas including:

- Transport and infrastructure;
- Landscape and ecology;
- Architecture and character; and
- The way forward.

The vision for Channels was explored and defined through this process and established the basis for the Masterplan proposals shown here today.

A Vision for Channels

To develop a well-connected new neighbourhood to the north of Chelmsford guided by the existing landscape and historic character.

The Channels neighbourhood aims to create a locally distinctive, sustainable and successful community, set within a network of open space, and mature planting. A high-quality design-led environment will assist in fostering a sense of place within the neighbourhood, making it an attractive place for people to live and work. The new neighbourhood will achieve high levels of connectivity with Chelmsford town centre, integrating well with existing and new neighbourhoods, and providing new community facilities for the benefit of both existing and new residents. The facilities will become hubs for the local community, both in terms of service provision and sustainable transport.

The development of the neighbourhood will seek to minimise environmental impacts through the retention and enhancement of biodiversity networks including 'green corridors' and 'aquatic corridors'. The neighbourhood will also be characterised by green space that could be used for a wide variety of outdoor recreation uses.

Moreover, whilst the vision for Channels Neighbourhood is innovative and exciting, it is both well-planned and deliverable









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Understanding the context of Channels

This series of diagrams illustrates the Site features and surrounding area which have been analysed and understood as part of the design process. The existing Site has shaped and informed the emerging masterplan for Channels. The design concept is based upon the objectives of the North Chelmsford Area Action Plan (NCAAP) and the vision for a new neighbourhood established at the design workshop.





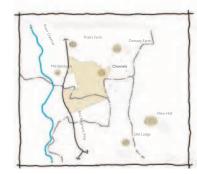
Key

- Key views
- Field pattern and grain
- Significant slope
- Significant vegetation and cluster of trees



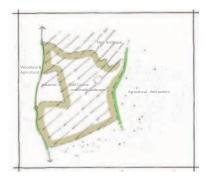
Channels within the North Chelmsford Area Action Plan (NCAAP)

The designated development areas will create new neighbourhoods to the north-east of Chelmsford with strong green links through and into open green space surrounding Channels. A green wedge / corridor extends from the open countryside in the north into the new residential neighbourhood. The green wedge separates Channels from the residential area to the east.



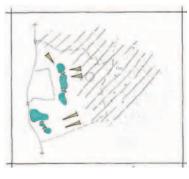
Historic context

The parish boundaries and early farm or lodge settlements shown (c1880s) are still visible in and around the Site. Many of these historic parish boundaries are marked by established hedgerows and woodland. Retaining and reflecting historic features in the concept ensures a sense of place and identity for the new neighbourhood.



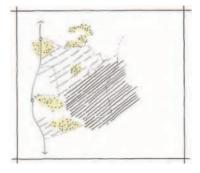
The Site

The character of the Site and surrounding area is primarily open green landscape, however it is has varied characteristics. The Site is currently a golf course with a collection of historic buildings clustered to the north-east (Channels). The golf course landscape is man-made with pockets of relatively new trees, hedgerows and water bodies. The area to the east is agricultural land and to the west is natural woodland and agricultural areas.



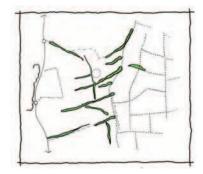
Land form

The numerous lakes and water bodies within the manmade contours of the Site create interesting and undulating terrain. The land falls east-west towards the lakes in a number of areas. This includes the land from the Channels complex down to the lakes in the north of the Site and near the southern edge. The area to the south and south-east is relatively flat.



Impact of previous / former land use

Former uses of the Site include agriculture, quarrying and landfill which have created variations in ground conditions, form and character. For example, the area to the south-east is stable 'terra firma' and flat, while pockets of land around the northern edges are undulating, comprising former landfill.



Field pattern / grain

The Site's eastern edge is orientated along an historic parish boundary and it is here that the landscape pattern changes orientation. Historic field boundaries to the east create a distinctive NW to SE pattern on the agricultural landscape. While woodland and tree belts within the Site, including those along parts of Belsteads Farm Lane & Pratts Lane, are orientated in a NE to SW orientation.



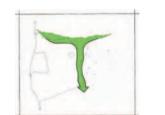
Concept Development - The Green Network

A new neighbourhood at Channels needs to retain and enhance the landscape character by utilising this asset in its green network. From the existing context and Site features outlined, a concept has been developed which responds to the NCAAP and reflects the unique features of the existing landscape. These diagrams illustrate how the concept of the masterplan has been developed and establishes strong green links through the development area and around the residential edges.



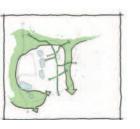


- Major green link
- East-west link road "The Avenue"
- Mage The Drives
- The Lanes
- 📁 Built form
- Channels
- Existing bowls club
- Industrial



Connecting north-south

A new neighbourhood at Channels will incorporate a green wedge along the eastern boundary to connect the wider green network and open countryside in the north into the new residential neighbourhood to the south. This is in response to the NCAAP's desire for comprehensive green links north-south through Channels and into other development areas.



Incorporating & enhancing Belsteads Farm Lane: Lanes

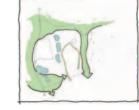
The character of Belsteads Farm Lane is retained and incorporated as a key component of the development and movement pattern. It provides an important east-west link which then leads up to Channels on its existing north-south axis. The lane will be extended to the east to connect into the green wedge. It will retain the intimate, landscaped character and connect into the wider network of existing lanes in and around the Site.



Connecting to the wider context

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The existing green area to the west of the Site also forms an important part of the green network. Existing connections across Essex Regiment Way link to this green area which includes a series of walkways to a reserve of established woodland, the River Chelmer and beyond to open agricultural land.



New routes to capture the character of channels: Drives

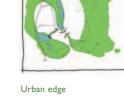
Two new drives will connect the Channels complex to the neighbourhood in a north-south orientation. Each road has a distinctive character and connects across the Link Road. 'Lakeside Drive' sweeps past the lakes and connects with the existing east-west hedgerow leading from the lakes to Channels.' Green Drive' follows along the green wedge edge providing a network for cars, pedestrians & cycles.

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East-west meets north-south

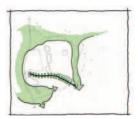
The strong north-south green wedge of the NCAAP is enhanced by the existing east-west orientated hedgerows and tree dusters which run across from the eastern boundary. Key intersections in the green network are created where north-south and east-west landscape features meet. It is important to utilise the existing east-west grain to bring new hedgerows / green corridors into the Channels Site.



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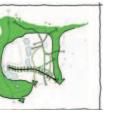
Urban edge & countryside

The new neighbourhood at Channels will sit within a wide and well-connected green network within this landscape setting. The network connects the existing lakes to establish a green corridor or biodiversity corridor that runs through the Site.



Creating character along the east-west link road : Avenue

The NCAAP requires that a Link Road (the Avenue) is incorporated which will serve as a key vehicular route linking the new residential developments. The Avenue is aligned with the parish boundary. The Avenue will be landscaped to accommodate required traffic flows and provide pedestrian, cycle and bus movement safely and effectively.



Movement pattern & hierarchy

The key components of the movement network is the Avenue, the Lanes and the two Drives. Within this network is a series of residential streets and shared surfaces which will extend and connect the wider pedestrian network.



Enhancing landscape through development Pattern / Grain

The east-west grain of landscape is a strong element in the Site and informs the pattern of development on many levels. Blocks and buildings will reflect the natural orientation of landscape features.



Creating a new neighbourhood in the landscape

- North-South development responds to topography by aligning with naturally occuring slopes and peaks.
- East-West responding to landscape features; vegetation and waterbodies
- Buildings clustered to preserve views and minimise impact on the landscape.



Masterplan - Vision for Channels

- Channels Complex (Existing buildings retained, proposed new building overlooking lake, Central plaza – active with a mix of uses)
- 2 Falcon Bowls Club
- 3 Village Green (including cricket pitch)
- 4 Open Green Space
- 5 The Avenue
- 6 Lakeside Drive
- 7 Green Drive
- 8 Historic parish boundary
- 9 Allotments
- Green space with ecological features
- Exclusive lakeside homes
- 12 The Lanes pedestrian/cycle network
- 13 Residential plaza
- Lakeside open space and jetty
- 15 Landmark lakeside house
- 16 Access from Essex Regiment Way
- Access to future residential areas
- 18 NCAAP residential-led development
- 19 Park & Ride
- 20 Regiment Way Golf Course
- 21 Business use
- 22 Gas pumping station
- 23 Existing houses





Aerial view to north-west of new neighbourhood at Channels





How will the new neighbourhood reflect and respond to the landscape character?

Understanding the Landscape Character

- ٠ Defined at different levels from the strategic National Character Areas to more detailed local assessments;
- Used to identify important features that make the area distinct;
- . Helps inform the masterplan design.

National Character Areas (NCA)

- . Top level of Landscape Character Assessment, used as a basis for more detailed assessments;
- Divides England into 159 areas;
- Shows differences in character between different areas of the Country, i.e. what makes an area unique;
- North East Chelmsford is in Character Area 86, 'South Suffolk and North Essex Clavlands'
- Broadly flat plateau broken up by small-scale river valleys;
- Mainly arable farmland with a wooded appearance;
- Irregular field pattern and remaining Ancient Countryside;
- Scattered farms, deep ditches and moats;
- Villages and hamlets around commons or greens;
- Timber framed buildings, colour washed, sometimes faced with red brick;
- Large villages and frequent towns;
- . Winding roads:
- Trees and woods appear to join together to create a wooded horizon

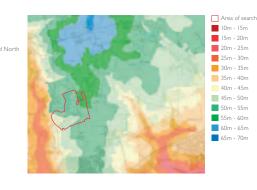
Essex Landscape Character Assessment

- Builds on the NCA:
- . Explores the differences in character at a more detailed level than the NCA:
- Divides County into 7 'Character Types'
- North East Chelmsford is in the Character Type 'Glacial Till Plateau';
- Divides Character Types into 35 'Character Areas';
- North East Chelmsford is in Character Area BI 'Central Essex Farmland'
- Gently undulating plateau dissected by major river valleys;
- Mainly arable farmland, with some wooded areas and an irregular field pattern;
- Scattered farmsteads, hamlets and large villages, and relatively few towns:
- Historic buildings are frequent features in the landscape these include timber-framed and colour-washed houses, and a rich selection of historic barns;
- Woodland blocks and hedgerows visually link together to form an often wooded skyline;
- Winding road pattern away from major routes, with verges and strong hedgerows.

Site Character Areas

- Site assessment further defines differences in character within the proposal Site.
- Identifies 15 key character areas:
- Differences relate to topography and vegetation, usually related to the existing land uses.

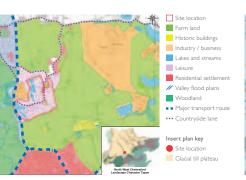




Landscape Setting

Topography and Hydrology

- The Site is on the edge of one of the ridges between river valleys identified in the character assessments;
- The river valley is located to the west of the proposal Site;
- Falls just outside the area defined as 'Valley Flood Plains';
- Height range is approximately 58m in the north east to 40m in the west
- Topography within the Site varies due to the existing land uses but is generally undulating;
- The bodies of water create distinct areas of character within the Site.



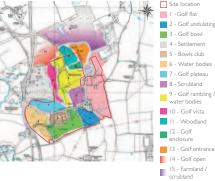


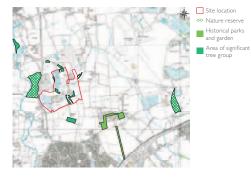
Designations (to be updated as haven't seen CWS info)

- No designations within the Site;
- Closest designated area is Local Nature Reserve in the Chelmer Valley in Chelmsford:
- Scheduled Ancient Monument at Little Waltham.



- There are a few areas of significant tree planting in the vicinity of the Site.
- Some of these areas are nature reserves;
- There is an area of woodland related to the historic parkland of New Hall:
- There are significant tree groups within the proposal Site;
- These tree areas in the Site relate mainly to the golf course.





listed buildings

Area of search - Bridleway Footpath // Valley flood plains Grade I and II

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How will the new neighbourhood celebrate the landscape character?

The existing character of the area around Channels is a complex one. This is partly due to the extensive area of quarrying and remedial works which have taken place leaving an undulating, complex landscape dominated by large water bodies currently used for golf. The area gives the impression of a rural, mostly unpopulated area with few residences. The area is well tree'd with most of the trees associated with the planning and implementation of the golf course. Water bodies created from the quarry working have considerable presence in the overall character.

The landscape strategy for the proposal aims to capitalise on important and significant landscape features, retaining them where possible and using them as the foundation of the masterplan. In this way the development will be planned round the landscape allowing it to sit comfortably within the wider landscape as well as creating great amenity and biodiversity value for future residents and visitors to the area with the open space providing formal and informal recreation opportunities.

There are a number of landscape features and areas of green space which will be of considerable benefit to the new neighbourhood, helping to create a sense of place and identity. These include:

- The water bodies; The lanes:
- The green wedge and village green to the south of Channels;
- Historic elements including buildings and landscape features; and
- Eco-corridors.

Where possible key features will be retained and augmented, providing a link to the previous use of the Site as well as a new character for the development. The character of Chelmsford's open space has been considered to ensure that the green spaces created with the new development will add to and be in keeping with the character of the greater area.



The Water Bodies

Each water body within the man made contours has a different character creating interesting and special places. The development proposals will capitalise on these areas, creating open space around the lakes to the west of Channels and in the south west corner.

This shows how the open space close to the lakes could look, providing a space for informal recreation as well as being a space with high amenity and biodiversity value.

The Lanes

The character of Belsteads Farm Lane is retained and incorporated into the development retaining its intimate character.

The character of the lanes will be retained where possible through their retention as foot and cycle ways which only allow vehicular access which only allows vehicles limited access to private residences. Speeds will be restricted.





Eco-corridors

Green Wedge and the Village Green

A new green wedge to the east of the Site and to the

network, to the new residential neighbourhood to the

'village green' will be created to the south of Channels

linking into the green wedge to the south. It is proposed

Springfield Hall Park space has similar dimensions to the

proposed green wedge south of Channels. The green

wedge could incorporate elements of the use and

landscape of this Chelmsford space.

south of Channels will connect into the wider green

south and to open countryside to the north. A new

to have a cricket pitch in the new village green.

Water is an important element in the current and proposed Channels landscape. Where possible, drainage will utilise Sustainable Drainage techniques, creating swales and other small water bodies with will augment and link the existing water bodies creating valuable habitat. Similar open spaces and habitats in Chelmsford were used as a reference as to how these areas could be planned and developed.

Springfield Hall Park. Similar areas could be created in the green spaces of the new neighbourhood, helping create a mosaic of habitats which would be beneficial to biodiversity.



Historic Elements

There are a number of historic elements in the proposed development area, including a number of Listed Buildings and a relict parish boundary. The Listed Buildings, the setting to the Buildings and the relict parish boundary will be retained.

The main Listings are:

- Belsteads Farm is a Grade II listed barn to the south of Belsteads Farmhouse. 17th Century five-by barn with 18ty century wing and 20th Century outshuts; and
- Channels farmhouse, a Grade II listed 17th Century timber-framed house.





What kind of open spaces will there be?



1&2. Childrens' play area 3,4&5.

More formal open space 6&7. More natural open space

8&9. Allotments

10&11. Natural and ecological open space



What will happen to the Golf Course?

Channels currently comprises an 18 hole course and a 9 hole course. Construction of any housing at Channels will not commence until mid 2012, so the courses will remain as existing until then. It is expected that Phase I of development will result in the loss of holes 5, 6, & 7 of the 18 hole course. Phase 2 would then commence and holes 6, 7 & 8 of the course would be affected. Further phases would require the land of additional holes. The club is exploring the possibility of new golf holes in the wider area.

Planning context

The submission draft of the North Chelmsford Area Action Plan (NCAAP) proposes an area of land to the north of the application Site for golf course provision, and allows for the re-planning of the existing golf course to extend northwards. The southern part of the golf course at Belsteads Farm Lane forms an area to be developed as part of the new neighbourhoods and will contain the radial distributor road and land for development.

The re-planning of the golf course will be the subject of separate proposals. Although some golf course land is proposed to be developed as part of the Channels Application, the Channels golf club will continue to operate an 18 hole course for as long as possible.

The NCAAP provides a positive planning framework for the re-provision of the golf club facilities. The objective of NCAAP Site allocation for the golf course is as follows:

"to define land as planned landscape for use as a golf course and associated ancillary development to enable replanned golf course at Channels Golf Club to provide formal recreation and ancillary facilities and have a positive relationship with the landscape and built heritage".

The NCAAP also outlines the design principles for the new golf course.





Existing

2010 - Existing Channels Golf Course (18 Hole & 9 Hole) remains as existing until mid 2012 (approx.)





From mid 2012 - Phase I to commence resulting in the loss of holes 5, 6 & 7 of the 18 hole course.

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Phase 2

Vision

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Following this, Phase 2 to commence, resulting in the loss of holes 4 & 8 of the 18 hole course and 6, 7 & 8 of the 9 hole course.



Proposed development phase I
 Proposed development phase 2
 I8 hole course
 9 hole course

Further phases - exploring the possibility of new golf holes in wider area



How will the new neighbourhood retain and enhance the ecological assets?

In order to compensate for the areas of the Site to be lost to the development, a Conservation Management Plan will be produced. The aim of the Plan will be to enhance those areas of the Site to be retained and of the new habitats to be created so that the overall ecological value of the Site will be increased in the long-term. It is anticipated that the Plan will be circulated and agreed with Chelmsford Borough Council and its consultees. Elements to be included (and shown in the images at the bottom of the sheet)are:

I. Area of Wildlife

Area of informal Public Open Space to be managed for wildlife. Provision of designated walkways and information boards for public.

2. Bat Boxes

Provision of bat boxes on existing trees to provide roosting opportunities for existing bat populations using the Site and to attract new species.

3&4 Bird Boxes

Provision of bird boxes to provide nesting opportunities for existing bird populations and to attract new species.

5. Mammal Tunnel

Installation of mammal tunnel beneath road to permit safe crossing of local species and provide link between adjacent newt and reptile habitats.

6. Hedgerow Enhancement

Protection and enhancement of existing hedgerow boundaries. Planting of native species of value to local wildlife.

7. New Ponds

Creation of new ponds to attract local wildlife. Ponds to be naturally colonised and kept fish-free for suitability for newts.

8. Hibernacula

Construction of hibernacula suitable for hibernating reptiles and amphibians. Offers protection to a range of species including invertebrates.

9. Wildlife Corridors

Provision of wildlife corridors between development to retain areas of established vegetation and maintain links between areas of ecological value for local wildlife. To include supplementary planting with species of value to local wildlife.

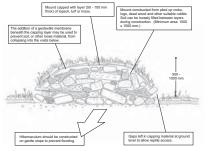
10. Floating rafts

Provision of floating wildlife rafts for use by local birds and wildfowl. Surfaced with reeds and local species to provide water-edge habitat.











Images 1-9 supplied by AA Environmental LLP

1: Sortar wan johigi yantai jutua 2: Sortar wan johigi yantai jutua 3: Sortar wan johigi yantai ku 4: Sortar wan johigi yantai ku 5: Sortar wan ku jutua 7: Sortar wan ku jutua 6: Sortar wan ku jutua 7: S

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How will our movement and transportation strategy fit into the wider context

Within the Area Action Plan - North East Chelmsford Movement Philosophy

The movement and access philosophy of the allocation has been formulated in the context of promoting a balance between the essential requirements of access and the desire to provide a high quality infrastructure network that compliments the landscape and the development it serves.

The movement infrastructure has been developed using the mode hierarchy principle considering the requirements for access in the following order:

Pedestrian and Cycle

Spaces and corridors for pedestrian movement have been devised in consideration of the likely desire lines and also in the context of the aspiration to provide attractive and safe routes for walking that will positively encourage walking as the primary mode of transport within the development.

The routes proposed provide connections to essential facilities, local amenities and services, between development areas and into neighbouring existing and planned developments. These routes have been designed to take advantage of and respond to both the natural and built environment ensuring they are attractive and pleasant to use.

The walking routes have, where possible, been planned and designed to accommodate the needs of cyclists, providing safe, convenient access throughout the development with connections into the surrounding pedestrian and cycle infrastructure.

Public transport

Public transport access has been developed to ensure that as much of the development as possible is within a reasonable walking distance of the proposed bus services with safe, convenient and attractive routes being provided.

Servicing

The essential needs of service vehicles have been accommodated in the Masterplan area through the provision of suitably designed routes and movement areas.

- I. Indicative cross section through 'The Lanes' pedestrian and cycle routes
- Indicative cross section through 'The Avenue' and lake near the Essex Regiment Way access
- 3. Indicative cross section through 'The Avenue' at the parish boundary
- green space 4. Example of an 'Avenue' - a distributor road which incorporates good
- quality space for pedestrian and cyclists5. Example of a slip road which provides safe access to houses and on to the distributer 'Avenue't

Vehicular

The movement needs of private vehicles within the development areas is secondary to those of walking, cycling and public transport and the movement infrastructure design reflects that approach with many of the routes forming part of wider landscaped shared surface areas where a significant emphasis is placed on form as opposed to function.

The principal East West Avenue has been designed in recognition of its function as a part of the Chelmsford North East Relief route. In this sense it is predominantly a vehicular traffic route where the function of the route is that of carrying traffic both to and through the development area. The road has been designed to accommodate both strategic and development traffic. Notwithstanding its primary purpose, the design seeks to balance the tension between form and function by providing a route that responds to the environment and built form around it in a positive way, providing an attractive green corridor where the needs of pedestrians, cyclists and residents are paramount.





Channels within the wider cycle & pedestrian network

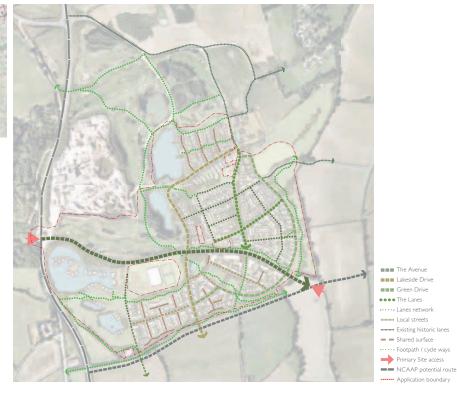
- National Cycle Route 16 part of the national Cycle Route Network this section of the route runs from Witham to Stansted. The National Cycle Network is made up of approximately 12,600 miles of walking and cycling routes across the UK with serval hundred more miles of proposed routes. This includes a mixture of quiet lanes, on-road routes and traffic free paths. For further information on the National Cycle Network log on to www.sustrans.org.uk. one of the UK's leading SUStainable TRANSport charities.
- On-road Route signed on-road cycle route (some on-road routes have dedicated cycle paths).
 Off-road Route - dedicated, marked and signed
- Off-road Route dedicated, marked and signed off-road cycle route.
 Bridleway/Public Right of Way - Bridleways are
- open to pedestrians, cyclists and horse riders. PROWs are suitable for pedestrians only. • Advisory On-road Route - is usually a route on a
- Advisory On-road Route is usually a route on a quite road with low traffic volumes considered suitable for cyclists.











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How will the new neighbourhood deal with surface water drainage?

Surface water drainage methods that take account of quantity, quality and amenity issues are collectively referred to as Sustainable Urban Drainage Systems (SuDS). These systems are more sustainable than conventional drainage methods because they:

- Manage storm water runoff to minimise the risk of flooding associated with development and best mimic 'greenfield' conditions.
- Protect or enhance water quality.
- Are sympathetic to the environmental setting and the needs of the local community.
- Provide a habitat for wildlife in urban watercourses.
- Encourage natural groundwater recharge.

At Channels a SuDS strategy has been developed which is highlighted in the plan to the right. The key elements are as follows:

- SuDS devices controlling flow and infiltrating storm water at source. Devices include swales, soakaways, permeable paving and rainwater harvesting tanks. See right.
- Surface water unable to be controlled at source to drain via swales and below ground network to attenuation lakes.
- 3: Attenuation lakes to control flows.
- 4: Open water links between lakes.
- 5: Below ground link between upper and lower lakes.
- 6: Existing out fall to River Chelmer retained.
- 7: Infiltration swales and additional attenuation ponds to open spaces.

I. Swales

Grass swales are designed to be dry for the majority of the time and will store surface water runoff during and after heavy storms which then infiltrates into the underlying soils. Swales can also be used to divert storm flows to ponds and infiltration basins.

2. Rainwater Harvesting

Rainwater harvesting tanks capture surface water and store it for re-use in flushing toilets or irrigation of landscaped areas. The surface water runoff should be free from contamination and is therefore limited to utilising run off from roofs.

3. Permeable Paving

Permeable paving allows surface water to drain through the surfacing to mimic the green field condition. Storage layers of granular fill can be provided below the surfacing for attenuation and filter layers can be incorporated to remove potential surface contaminants

4. Open Water Links

Watercourses will be formed to enable water to flow in a controlled manner between lakes. These will not only form part of the drainage strategy, but also give ecological and amenity benefits.









Character Areas - 'Channels'

The Channels buildings create a wonderful setting for a community 'hub'. As part of the overall vision it is proposed that the Channels complex would accommodate a mix of uses including cafes/restaurant, the lodge with its hotel and functions role, leisure & recreation, small-scale shops and possible work space.

The plaza area would become a community focus providing social space for community events, such as a local farmer's market.

The new Village Green creates a focus for the community and a open green space setting for historic Channels buildings. This Green is contained by detached homes overlooking the space, which could host cricket games and other informal leisure uses.

- Channels as the 'hub' of the community Offering small-scale shops, cafes, recreation, workspace around a 'market square'
- View of cricket match on the village green
 View of possible new building overlooking ponds and Market quare







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Character Areas - Rural Green Edge and The Lanes

The retained historic Belsteads Farm Lane and existing landscape features are the focus of this area. The neighbourhood is a series of local streets and shared spaces which retain many of the existing clusters of treess and vegetation. The east-west streets create vistas out to the open landscape of hedgerows and field boundaries to the east and across the lakes to the west and north-west

The housing is higher density through the centre of the area, including mews and terraced housing of 2-3 storeys. The housing along the eastern edge, facing Green Drive would be lower density, including larger, 2 storey detached dwellings with front garden and green space between the buildings.

- 1. Views of housing overlooking green space
- Views of housing overlooking green space
 View of new housing overlooking green rural edge looking up to
- historic Channels buildings 4. Indicative view of housing overlooking green space





















Character Areas - The Lakes

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Lakeside homes will be large 2 storey, detached dwellings with impressive views and a tranquil waterside setting. Waterside homes on the northern lake will sit at the eastern lake edge with immediate water access. The small cluster of homes along Lakeside Drive are set back from the water with rear garden access to the lake. The large lake to the south-west will be the setting for clusters of houses on or around the water.

By clustering the homes around limited areas of the lakes, the natural setting around much of the water bodies is retained for all to enjoy and access.









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Sustainability

Code for Sustainable Homes:

The Code for Sustainable Homes replaces the Government's Eco Home Strategy to improve sustainable credentials of residential developments. The Code for Sustainable Homes introduces minimum environmental standards in the areas indicated in the below diagram.

Energy Efficiency and Renewable Energy:

The approach to sustainable development will be to first improve the energy efficiency of the buildings beyond the requirements of Building Regulations. This follows the most recognised method of achieving sustainability through the energy hierarchy.

- Priority I; Energy Conservation changing
 wasteful behaviour for reduce demand
- Priority 2; Energy Efficiency careful detailing and the use of technology to reduce energy losses
- Priority 3; Use Renewable Energy
- Priority 4; Use non-renewable Low
 Carbon Energy
- Priority 5; Use conventional resources as we do now

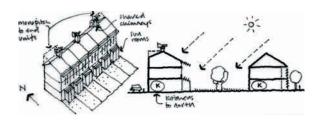
The building fabric will be improved significantly beyond current Building Regulation standards through improved insulation, high performance windows and doors, careful detailing to avoid air leakage and thermal bridging and careful consideration of passive solar design. Energy efficiency measures will ensure a reduction in CO2 emissions compared with current Building Regulations between 25% and 44% for early phases of development and up to 100% for the later phases of development.

Code for Sustainable Homes Scoring Criteria

ECOLOGY WATER WATER MATERIALS SURFACE WATER RUN-OFF

Sketch showing orientation concept

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Passive House

An example of a Code 5 or 6

Examples of local community heating systems







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Code 5 d House.

entering the boiler Mechanical Heat Recovery systems provide a whole house ventilation system and recover and re-distribute heat from the extract system Additional solar thermal panels and PV panels to

Further enhance the renewals Enhanced passive solar design incorporating solar shading and utilising thermal mass.

During the early stages of development Code for

Sustainable Homes Level 3 and 4 housing may utilise a

mixture of solar thermal panels and photovoltaic panels

to reduce carbon emissions through the provision of

or apartments may utilise a local community heating system such as biomass boilers or solar thermal arrays preheating water to a high efficiency community boiler.

During the later stages of development CfSH Level 5

and 6 housing will have further enhancements to the

Triple glazed windows and high performance

Flue gas heat recovery systems with a flue to

recover heat from the flue and pre-heat water

building fabric and further technologies may be

incorporated such as:

doors

renewable energy. Areas of more high density housing

The use of community heating and power networks may become more viable for later stages of the development and the use of biomass boilers or medium scale wind turbines may be more appropriate and be more cost effective than large roof top scale mounted solar thermal photovoltaic systems.t



Next Steps

TIMELINE FOR CHANNELS	
Summer 2007	North Chelmsford Area Action Plan (NCAAP) Issues and Options Public Consultation
11 February 2008	Adoption of Core Strategy and Development and Control Policies Document
17 September 2009	Outline Application for Greater Beaulieu Park submitted
December 2008 – February 2009	NCAAP Preferred Options Public Consultation
October 2009 – December 2009	NCAAP Submission Document Public Consultation
June 2010	NCAAP submitted for examination
3rd / 4th September 2010	Pre-application engagement for Channels Proposals
October 2010*	NCAAP Pre-examination Meeting
October 2010	Submission of Outline Planning Application for Channels
October 2010-November 2010	Consultation Period for Channels Outline Planning Application
December 2010*	NCAAP Independent Examination Hearing Sessions
January 2011*	Target Date for a decision of Outline Planning Application for Channels
April 2011*	NCAAP Inspectors Final Report
May 2011*	NCAAP Adoption
August 2011	Submission of Reserved Matters Applications for Channels
November 2011	Decision on Reserved Matters Application
Spring / Summer 2012	Construction of Phase I Channels

* Dates are indicative as Examination Timetable has not yet been confirmed

Please take a broadsheet with you for further reading.

If you would like to comment, please write your comments here today or send them to us by post or email **leva Ansaberga:** ia@jtp.co.uk

The exhibition material is available to view and download at **www.jtp.co.uk**





Team Profile - Bidwells

The Bidwells Team has successfully delivered development projects for a wide range of clients. We have a long and successful track record of leading and working with project teams to plan for and deliver complex development proposals. Our Planning, Landscape and Urban Design, Transport and Engineering Services team work on behalf of and alongside local authorities, development agencies, institutions key stakeholders and private developers.



Haverhill

Bidwells Planning Team has submitted a planning application to St Edmundsbury Borough Council for a new urban extension and relief road to the north-west of Haverhill, Suffolk. The planning application relates to a residential-led mixed use scheme including up to 1,150 new dwellings, relief road, primary school, local centre and associated infrastructure including vehicular, pedestrian and bridleway access, open space and drainage works.

The submission of the application followed the development and approval of a Masterplan for the development of the Site by St Edmundsbury Borough Council produced by Bidwells and which was the culmination of extensive discussion and negotiations following the promotion and identification of the Site as a strategic growth location within the Adopted Local Plan.

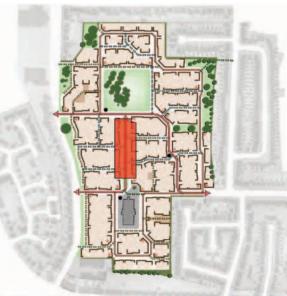
Bidwells led the development of the scheme and masterplanning process and the subsequent preparation of the planning application, coordinating a team of consultants providing highways, drainage, noise, air quality, archaeology and sustainability advice. This also involved the coordination and management of an Environmental Impact Assessment in relation to the proposals and production of the associated Environmental Statement



Whitehouse Farm, Blue Boar Lane Sprowston, Norwich

Bidwells acted for a consortium of developers in the early identification and promotion of a 76ha Site for an urban extension to Norwich. Once the allocation in the Broadland Local Plan was achieved, Bidwells continued working jointly with Broadland District Council to produce a Development Brief and accompanying Sustainability Appraisal.

An Outline Planning Application was submitted for I,230 dwellings including 40% affordable housing, a primary school, a link road, extended bus service, sports provision and associated infrastructure, accompanied by an Environmental Impact Assessment, to address the wide ranging issues. The application required extensive negotiations on SI06 matters.



Land Registry Nottingham

Bidwells are appointed by the Land Registry to submit an application to redevelop the existing 13.4 hectare employment Site for residential development comprising 450-475 dwellings. An integrated and multi-disciplinary team created a design concept with the emphasis on place-making for family orientated accommodation within the existing suburban context. A circulatory bus service is proposed together with innovative and sustainable drainage systems including green roof, a central swale forming an attractively landscaped avenue and a community garden.

Bidwells undertook an exhaustive liaison and consultation process with local residents, stakeholders, statutory consultees, independent review panels and the City Council. This ongoing dialogue has helped to shape and evolve the masterplan process culminating in an exhibition of the draft proposal to members of the public and employees over a three day period.

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Team Profile - John Thompson & Partners

John Thompson & Partners are architects and urbanists with substantial experience of delivering large-scale residential and mixed-use projects throughout the UK and across Europe. We are renowned for our skills in sustainable placemaking, and for a consensuled approach to projects that simultaneously brings about social, economic and environmental change.

We place great importance on developing long-term relationships with all of our clients; and work with them to deliver commercially viable schemes that improve quality of life for the wider population. We are highly successful at negotiating planning consents, and are frequently commissioned to work on schemes of a highly complex or sensitive nature.





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Queen Elizabeth Park, Guildford

High density, mixed-use residential development

John Thompson & Partners' award-winning mixed-use development on the former Queen Elizabeth Barracks in Guildford has been carried out on behalf of Laing and Linden Homes.

The project began with a community planning exercise that gave local residents and other stakeholders an opportunity to express their concerns and aspirations for the development. The masterplan responds to the existing trees and natural features of the Site and integrates the new housing with the established residential neighbourhoods that surround the Site.

More than 525 new homes including private, affordable, rented, and shared equity properties have been arranged into a series of distinct character areas, along with other mixed uses. A new village green gives the development a clear focus, and a network of green routes within the parkland has been provided for pedestrians and cyclists.

Carr Lodge - Doncaster Massing diagram



Pauls Malt, Wallingford

Mixed-tenure residential development

The redevelopment of Pauls Malt arose from the regeneration of a brownfield industrial Site close to the centre of Wallingford. The current use has ceased and the Site was allocated for housing provision. Through extensive local neighbourhood, planning and district council consultation, along with an open planning consultation event, we prepared a scheme providing 149 dwellings on the residential part of the Site with an overall density of 41 dwellings per hectare.

The scheme offers a mix of housing type, size and tenure across the Site, based around a series of squares, mews courts and a new village green integrating with the local cycle and pedestrian network Part of the Site was taken up by the Cholsey and Wallingford Railway Preservation Society with an area allocated for a potential commuter link between Cholsey and Wallingford.





The Village at Caterham, Surrey

Mixed-use Development on Brownfield Land

John Thompson & Partners' award-winning, mixed-use project for Linden Homes is one of the first examples of a private developer using consensus-led masterplanning to create a new sustainable community.

Over 1000 local people were involved in the initial visionbuilding exercise held on the Site, a former army barracks with several Grade II listed buildings. The scheme as built is an economically-integrated, mixed-use neighbourhood that includes residential accommodation, a supermarket, offices, a veterinary hospital, a doctor's surgery, an indoor skateboard and BMX centre, as well as new landscaping and open space.

Of the 366 new homes created, 28% are affordable units provided by The Guinness Trust, and distributed within each phase of the development alongside those for private sale. A Community Development Trust is managing leisure and business facilities on the Site and using its assets to create jobs for local people.