

Illustrative masterplan within the context of Welwyn Garden City

3 Masterplan

The Redevelopment combines both a masterplan for the Site, at the strategic level, as well as detailed planning proposals for bringing forward development of a large proportion of the wider SPD area.

The illustrative Masterplan (shown opposite) indicates the area of development covered by both listed building applications and detailed planning submissions that form part of this application for the Redevelopment. All other areas are illustrated here with a view to obtaining outline consent.

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3 MASTERPLAN

Power Energy & Waste Minimisorion & Public Buildings Heating & Hot Water Main Utility Water Store Commercial & Public Buildings Public Buildings Residential & Care Homes Sustainable Urban Drainage System Landscape & Brown Roofs

Sustainability

3.1 Objectives

One of our key objectives is to ensure that the Site will be regenerated as an exemplar sustainable development.

A vision for sustainable development

The new quarter will build on Ebenezer Howard's vision of the Garden City as a sustainable community. It will aim to articulate the original vision and ethos of the garden city and create an environmental and socially sustainable development. It will establish an efficient land use pattern and create a network of streets and places that facilitate walking and cycling.

In the Redevelopment we have also sought to significantly reduce average energy consumption and deliver energy in an environmentally efficient way through the provision of an energy centre.

Sustainability principles

It is our intention that the Site will be regenerated on truly sustainable principles, ensuring that the Redevelopment is aligned with the past and present aspirations and values of the local community. Our focus on sustainability is not only about placing leading edge environmental technology at the heart of the design, but also about improving access to community services and opportunities.

The Redevelopment creates the opportunity to manage impacts on the environment in many areas. This includes integrated energy provision, waste management and recycling, improving the use of water and reducing the impact of the Redevelopment on drainage. In addition the plan will enhance biodiversity providing plant and animal habitats whilst encouraging more sustainable means of transport

The sustainability objectives include:

- Providing an attractive development that reflects the character and spirit of Sir Ebenezer Howard's original vision for the town to further enhance the town's local, national and international visitor profile.
- Finding viable uses for the existing buildings on the Site, including re-using the boiler house as the energy centre for the Redevelopment and preserving and securing those specific listed buildings which provide an important sense of place for Welwyn.
- Assisting the development of and connection to the Peartree Ward, which is currently one of the most deprived areas of the town
- Constructing attractive new homes, including affordable homes, tailored to the Welwyn market, on this brownfield site and reduce the pressure to build on Green Belt land.
- Providing facilities that improve the attraction of Welwyn Garden City as a shopping centre and extend the evening economy
- Improving leisure facilities and community spaces
- Enhancing east-west links across the Site and encouraging pedestrian and cycle movement between the eastern side of the town, the town centre and station
- Accommodating the traffic associated with the Redevelopment without increasing congestion in the area
- Developing a Green Travel Plan to reduce car use and accommodate the traffic associated with the Redevelopment without adding to congestion in the area

 Finding ways to reduce the Redevelopment's environmental impact, including reducing energy consumption and minimising waste from demolition and construction

Benchmarks for Sustainability

The Redevelopment will establish meaningful measures of sustainability based on public policy and current best practice. The benchmarks will inform the detailed design to deliver a high standard of energy efficiency, environmental protection and social and economic benefits.

Renewable Energy

An Energy Centre will be installed, housed in the original boiler house of the Shredded Wheat Factory. Combined Heat and Power will be used in the Energy Centre to supply a district energy system for the entire Redevelopment. The system will link the retail units, commercial buildings, leisure centre and other public buildings and residences to the Energy Centre. The Leisure Centre and swimming pool will form an essential element of the system by providing a load to balance the demand of the retail and commercial units for maximum energy efficiency.

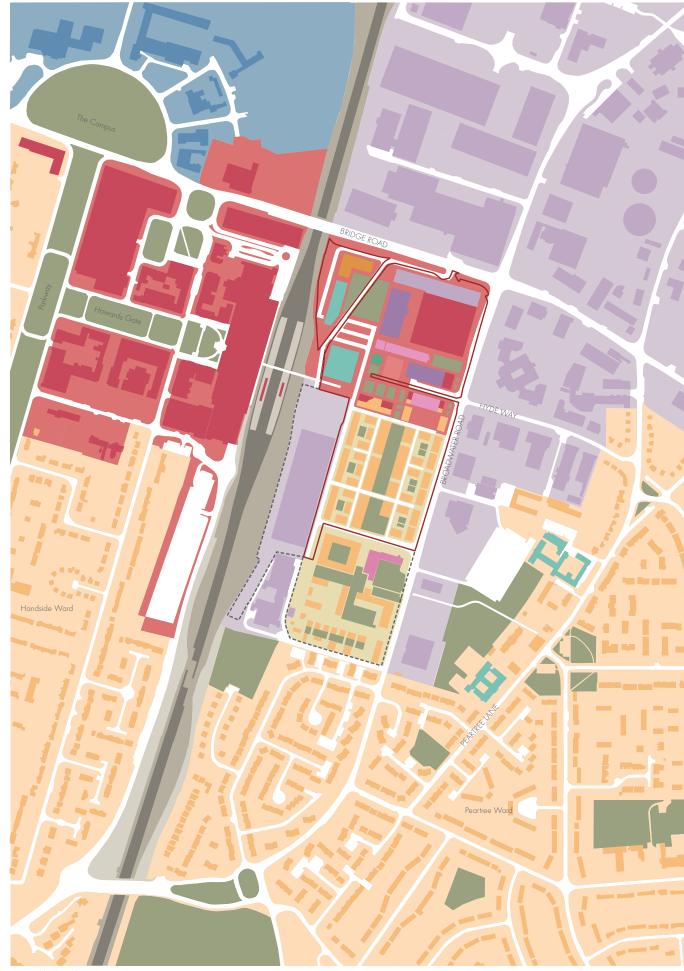
In conjunction with the Energy Centre, a range of renewable energy sources will be installed that will be linked to the district heating system. These help to achieve the established Development Plan objective of reducing potential carbon emissions and thus achieving the equivalent of 10% renewables, in this case by 26%

To ensure that the sustainability objective is achieved, a comprehensive Energy Strategy is being prepared to demonstrate the benefits of the available options.

Building energy efficiency modelling and passive design measures would reduce overall energy demand and ensure that the most effective use is made of the renewable heat and power.

A construction phase environmental plan is being prepared to minimise and mitigate negative environmental impacts and systematically secure and deliver the environmental targets. This includes consideration of enhancements to biodiversity and the provision of green spaces, locally sourced materials, on-site use of reclaimed materials, structured demolition and site clearance and site waste management plan.

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Proposed landuse plan

28/29 3.1 Objectives

In addition to the intentions of the BRW SPD outlined on page 22/23 the Redevelopment focuses on further key objectives:

- Providing an exemplar sustainable development including a new central energy centre
 Creating an integrated part of Welwyn Garden City by keeping within the Garden City spirit and principles
 Connecting existing communities to the town centre and repair the fractured environment
 Maximizing the potential of the bridge link to the town centre
- Creating a clear and legible urban structure and hierarchy of routes
- Providing a sequence of public open space including a new civic square for multi-functional use
 Establishing continuous network of streets, cycleways and
- roads to support the Redevelopment
- Retaining and refurbishing listed structures (Shredded Wheat Factory)
- Creating an appropriately scaled development of generally
 4-5 storeys across site with low rise residential buildings as a
 transition to the residential area to the south
 Encouraging a mix of uses including an existing range of retail,
 leisure, community and cultural facilities to encourage local
- community interaction









BROADWATER ROAD WEST, WELWYN GARDEN CITY I SEPTEMBER 2010 3 MASTERPLAN



Proposed open space network

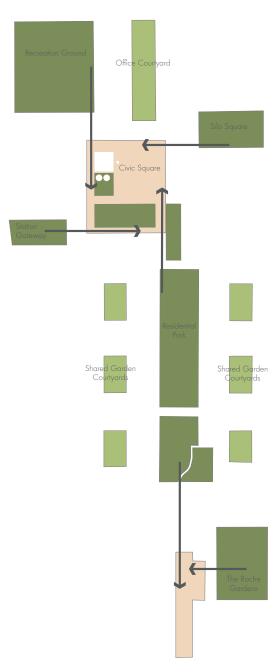
3.1 **Objectives** 30/**31**

Providing spaces with character

The Redevelopment proposes buildings around a sequence of green spaces whose scale is appropriate to the existing landscape structures and Garden City ethos.

To ensure that this area west of Broadwater Road becomes a vibrant new part of the town we have proposed a hierarchy of different spaces - parks, gardens and streets are designed to lead people safely through the Redevelopment and connect to the adjacent proposed developments and neighbouring areas.

The listed Shredded Wheat factory will become an integral part of this new civic structure. It has a huge impact on the scale of the major space. The silos are the equivalent of ten residential storeys tall and form the back drop to a multifunctional Civic Square which directly links to the station and Broadwater Road. Further studies of the character of the specific green spaces are developed in the 'Landscape and Public Realm Design and Access Statement'.



Spatial definition diagram

Major green spaces

Main civic space

Green gardens

Connections and linkages

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llustrative landscape plai

3.2 Illustrative Masterplan

Illustrative landscape layout

The Redevelopment will be centred around a new civic square which will be connected to the existing town centre via the pedestrian bridge across the railway. It is the focus of the Redevelopment adjacent to the listed silos and the original supporting structures.

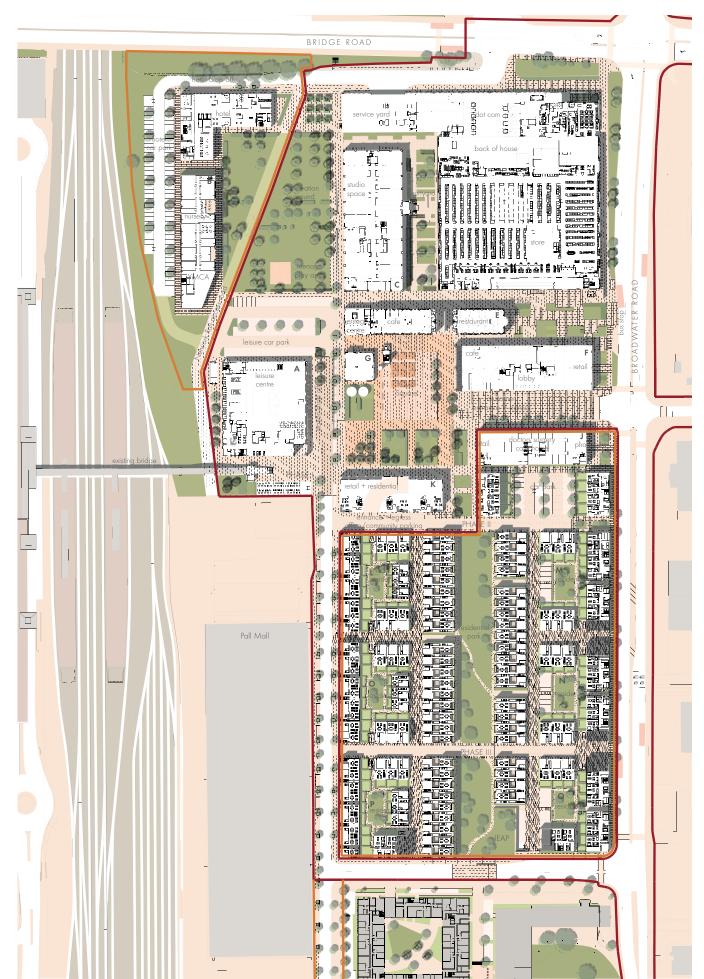
Just beyond the new station drop off a new open space recalling the recreation ground of the original Shredded Wheat Factory provides the setting for further leisure and community uses as well as a hotel.

A new park to the south of the Civic Square links the listed Silos to the Roche Factory and is edged on either side, in the Welwyn tradition, by private houses. The park provides a green and attractive setting for the new residential area and a valuable amenity for the wider community.



Photograph of sketch model of the proposed Redevelopment

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Illustrative ground floor plan

Illustrative ground floor layout

The Redevelopment proposes a variety of uses including residential, office, hotel and a range of leisure and community facilities including an extra care home, a YMCA, a nursery, a heritage centre and food store.

The main part of the civic and public buildings are grouped around the Civic Square and will include a doctor's surgery and retail space at the base of the office and residential buildings to provide active frontages. To the west of the Civic Square will be a hotel, a leisure centre and a YMCA facility which will contain a range of public uses.

The Shredded Wheat Factory will accommodate office space and a heritage centre within the retained listed building, and will also include a new food store with the sales hall occupying the site of the production hall extension which was added in the 1930s.

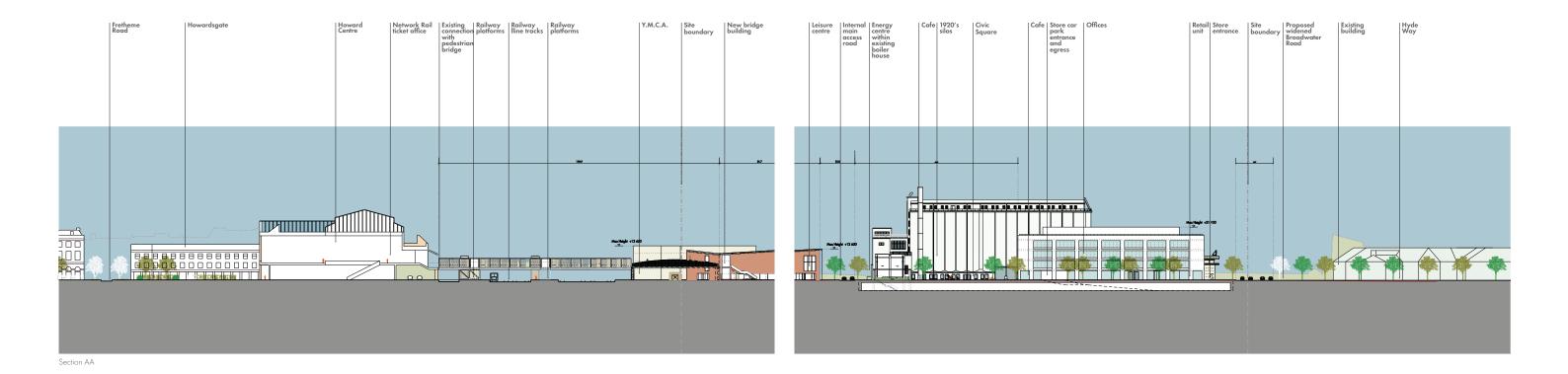
The residential development, including sheltered and affordable housing, is located at the southern end of the Site, at an average density of 88 dwellings per hectares. This is planned as a series of courtyard buildings set around a linear park linking with the proposed adjoining residential scheme to the south, and to the existing Peartree Ward to the east.



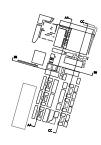
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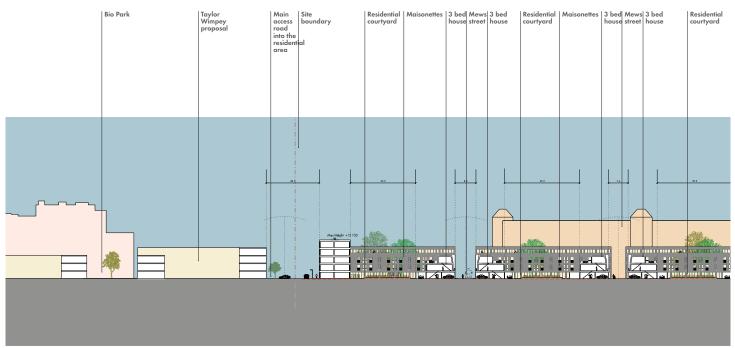


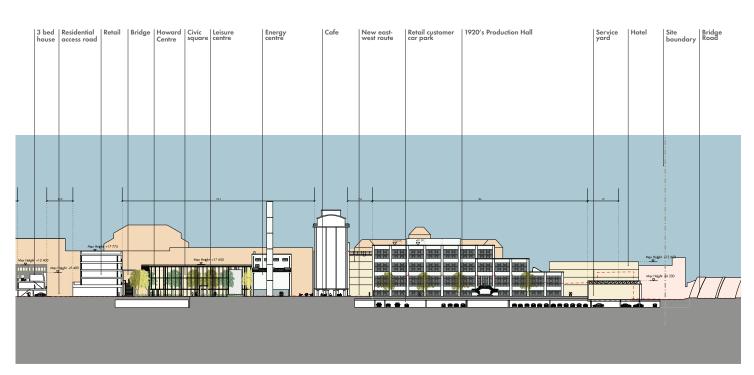
3.3 Illustrative Site Sections



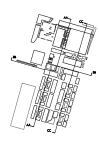
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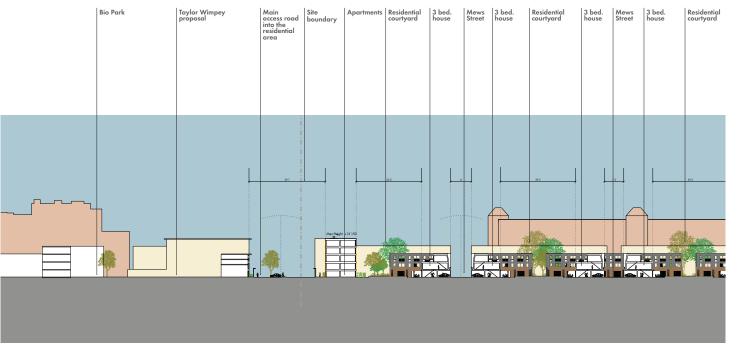


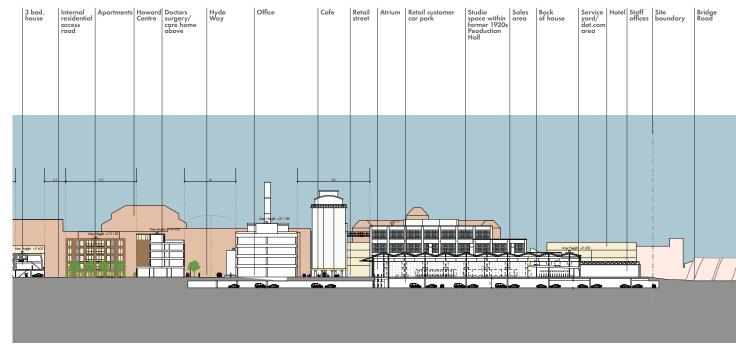




Section BB







Section CC

3.4 Schedule of accommodation

Detailed planning application

	PHASE I (Shredded Wheat Factory, piazza, residential building K + leisure centre)									PHASE II					
USE CLASS	BLOCK		Α	С	D	E	F	G	I	K	Total	J	L	M	Total
A1	Retail - food store (GEA) excludes service yard and dot com	sqm/sqft			8027/ 86402						8027/ 86402				0/0
A1-A5	Small retail (GEA)	sqm/sqft					340/ 3660			366/ 3940	706/ 7599	93/ 1001			93/ 1001
C3	Residential	sqm/sqft									3561/ 38330				12883/ 138671
	Appartments	sqm/sqft								3561/ 38330	3561/ 38330	2690/ 28955		3060/ 32938	5750/ 61892
	Town houses	sqm/sqft									0/0		4761/ 51247	2372/ 25532	7133/ 76779
C2	Care homes (72 residents)	sqm/sqft									0/0	4150/ 44670			4150/ 44670
C1/C2 /D1/D2	YMCA	sqm/sqft									0/0				0/0
C1	Residential clusters	sqm/sqft									0/0				0/0
D2	Resident's community	sqm/sqft									0/0				0/0
D1	Nursery	sqm/sqft									0/0				0/0
C2	Youth + community Centre	sqm/sqft									0/0				0/0
C1	Hotel (80-bed, 2 star)	sqm/sqft									0/0				0/0
В1	Office	sqm/sqft		8005/ 86165			5952/ 64067				13957/ 150232				0/0
D1	Doctor's surgery (9 GPs + pharmacy)	sqm/sqft									0/0	939/ 10107			939/ 10107
D2	Other Community	sqm/sqft									0/0				0/0
D1 (sui generis)	Heritage centre (grain house)	sqm/sqft				627/ 6749					627/ 6749				0/0
D2	Leisure centre	sqm/sqft	3390/ 36490								3390/ 36490				0/0
A3	Cafe	sqm/sqft				809/ 8708	190/ 2045				999/ 10753				0/0
(sui generis)	Energy centre	sqm/sqft						235/ 2530			235/ 2530				0/0
	TOTAL	sqm/									31502/				18065/

Outline planning application (Illustrative scheme)

Outline planning application (Illustrative scheme)

Outline planning application (Illustrative scheme)

Figures for outline parameter scheme

PHASE III						PHASE IV			
I	0	P	Q	Total		В	3	В	
				0/0					
				0/0					
				20479/ 220434					
3060/ 32938		880/ 9472	3755/ 40418	7695/ 82828					
2550/ 27448	4761/ 51247	4287/ 46145	1186/ 12766	12784/ 137606					
				0/0					
				0/0					
				0/0		3400/ 36597			
				0/0		1000/ 10764			
				0/0		500/ 5382			
				0/0		900/ 9688			
				0/0			3200/ 34444		
				0/0				(
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				0/0				0/0	
				0/0				0/0	
				0/0				0/0	
				20479/ 220434				9000 9687	

	Total
Retail food store	8027/ 86402
Small retail	800/ 8611
Residential	37000/ 398264
-	-
-	-
Care homes	4200/ 45208
YMCA	5800/ 62431
-	-
-	-
-	-
-	-
Hotel	3200/ 34444
Office	13957/ 150232
Doctor's surgery	950/ 10226
-	-
Heritage Centre	627/ 6749
Leisure Centre	3390/ 36490
Cafe	1000/ 10764
Energy Centre	235/ 2530