# Former Nabisco Shredded Wheat Factory

Bridge Road, Welwyn Garden City, Hertfordshire

Heritage Statement

Januarty 2018



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## 1 Introduction

- 1.1 This report has been prepared to support the applications for planning permission and listed building consent for the former Shredded Wheat Factory, Bridge Road, Welwyn Garden City.
- 1.2 The purpose of this report is to set out the history and heritage significance of the site, and to assess the impact of the development proposals. The report should be read in conjunction with the other documents that make up this application.
- 1.3 The drafting of this statement was undertaken by Nick Collins BSc (Hons) MSc MRICS IHBC. Nick has been a Principal Inspector of Historic Buildings & Areas in the London Region of English Heritage. Most recently he was a Director of Conservation at Alan Baxter & Associates. Nick has extensive experience in dealing with proposals that affect the historic environment and also has a background in research, in policy analysis and in understanding historic buildings and places.
- 1.4 Historical research for this report was undertaken by Dr Ann Robey FSA, a conservation and heritage professional with over twenty years experience. She has worked for leading national bodies as well as smaller local organizations and charities. She is a researcher and writer specialising in architectural, social and economic history, with a publication record that includes books, articles, exhibitions and collaborative research.
- 1.5 The buildings form part of a larger, partly vacant site, to the east of the main north-south railway line that runs through Welwyn Garden City. The site is located in close proximity to the rail overbridge that provides pedestrian access to the railway station and on to the town centre.

Notes on research, analysis and sources

1.6 It should be noted that in common with many historic buildings and sites, it is not always possible to provide a

truly comprehensive analysis of the historic development of a building. The research and analysis set out in this report is as thorough as possible given the type and number of archival resources available.

1.7 This desk-based and archival research has been combined with a visual assessment and appraisal of the building. Further sources and evidence that add to our knowledge and understanding of the building and its history may become available at a future date The report has also been informed by the Historic Building Recording Report carried out by Archaeological Solutions Ltd in April 2014.

## 2 Site Location & Description

- 2.1 The site lies within Welwyn Garden City in the centre of Hertfordshire. It occupies a central position, to the east of the A1 (M) motorway and main railway line bounded by Broadwater Road, Bridge Road and Hyde Way and land adjoining the railway.
- 2.2 At the time of writing previously consented demolition works are being carried out which will considerably reduce the amount of development on the site.
- 2.3 The site is rectangular in plan and the topography is mainly flat. Until recently approximately half of the site was developed, with the original factory complex facing the railway line.
- 2.4 The complex is built in a predominantly functional architecture of painted concrete/rendered walls and metal windows. The most important, original, element of the site was largely enclosed in views from Broadwater Road and Bridge Road by the more mediocre additions to the complex in the 1930s and 1950s. Between 1937 and 1939 a new single storey production hall and an additional 27 silos were added. In the 1950s there were further extensions to the production facilities and office accommodation added fronting Bridge Road.
- 2.5 The term 'designations' relates to the level of statutory protection that applies to a site or building. A designated heritage asset can be a listed building or a conservation area. The extent of a designated conservation area is straightforward to determine given that the boundary is set at the date of designation or later extension. The extent of a listed building can be less clear as listing often applies to other lesser elements that are attached to a listed building or form part of its curtilage. Determining whether other structures form part of the listing involves consideration of whether structures are fixed, whether these are ancillary to the main building and whether these formed part of the land before 1 July 1948.

Designations

- 2.6 The grade II listed former factory forms one element of a wider site, currently occupying roughly its northern half. The factory building was listed in 1981. As a listed building, consent may be required in order to undertake certain works to the building which could affect the building's architectural or historic interest.
- 2.7 The full list description for the complex reads as follows:

1925. Architect Louis de Soissons. Two concrete ranges, at right angles with links. Southern range consists of giant range of cylindrical concrete drums 15 bays long with flat oversailing capping with railings right over the whole top. Behind this is a plain attic storey with 28 plain windows with plain capping over. On one end elevation is a 3 bay projecting tower rising just above the main roof level.

At the west end of the range is a 2 bay wing with large windows, the southern bay of 3 storeys and the northern of 4. Flatroofs. Adjacent is a 7 bay, 4 storey block, with large windows divided by narrow piers and small scale structural divisions between the storeys, making it almost wholly glass. Flat oversailing capping at roof level.

- 2.8 The list description is intended to provide sufficient detail for identification purposes only. It does not for example provide the history of the building or identify any particular features as having a greater or lesser significance.
- 2.9 The site is not situated within a conservation area but is in close proximity to the Welwyn Garden City Conservation Area. This conservation area covers a large area of the town centre to the west of the site and its residential hinterlands. Whilst the impact of the scheme on its character and appearance will be considered within this report, as far as this site is concerned, there is something of a barrier between the site and the conservation area caused by the breadth of the railway lines and siding and the Howard Centre to the west.

2.10 The closest listed building to the site is located to the south of the Shredded Wheat Factory (figure 1). This is the grade II listed former office block to the Roche Factory (now demolished). This building was constructed in the late 1930s.

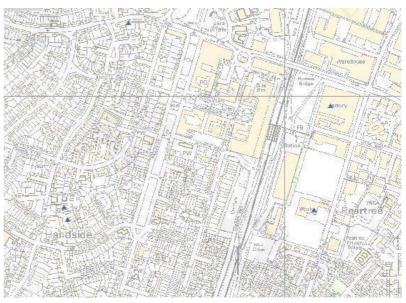


Figure 1: Plan showing listed buildings within close proximity to the site. The blue triangles indicate a listed building.

## 3 Historical Development

3.1 The following section provides an overview of the historic development of the former Shredded Wheat Factory Site.

#### Overview

- 3.2 For almost ninety years the distinctive white silos of the Grade II listed former Shredded Wheat Factory have been a prominent landmark to rail travellers passing the station in Welwyn Garden City. The factory was designed by Canadian-born Louis de Soissons (1890-1962), the principal architect of Welwyn – the country's second Garden City, which was established on agricultural land just twenty-one miles from London by planning pioneer Ebenezer Howard in 1919-20. In April 1920, Welwyn Garden City Limited was formally established as the owner and developer of the 2,378 acre estate, as a new garden city for 40-50,000 inhabitants. Louis de Soissons was appointed as the principal architect and planner in April 1920 and he presented a 'master plan' for the new 'city' in June of the same year (figures 2&3)<sup>1</sup>. It was the first major commission of the Louis de Soissons Partnership, the practice he had set up with George Grey Wornum. Louis de Soissons and the partnership were actively involved in Welwyn's planning, architectural design and growth for over 60 years.
- 3.3 The development company Welwyn Garden City Limited – allocated land for industrial and business purposes, as well as for privately owned houses, granting leases with restrictive covenants<sup>2</sup>. De Soissons had total control of the plan of Welwyn Garden City – all plans of buildings had to be submitted to him under the provisions of the *Building and Other Regulations in Force on the Welwyn Garden City Estate* of 1923. Welwyn Garden

<sup>&</sup>lt;sup>1</sup> Welwyn Garden City Conservation Area Appraisal, Conservation Architecture & Planning Ltd. (2006)

<sup>&</sup>lt;sup>2</sup> J. Tyrwhitt, *Life and Works in Welwyn*, (1939), p.2

City Limited successfully controlled the appearance of the town, and built about 40% of the buildings themselves.

3.4 The new Garden City was to be self-sufficient; it was to be a carefully planned settlement combining industry and agriculture into a distinct whole, a self-contained community with an industrial area providing jobs in 'clean' manufacturing industries. This was to prevent the town becoming merely a dormitory town for London. The limits on its growth were ultimately set by the surrounding green-belt and any trees already in the landscape were retained in the initial plan. A follower of garden city philosophy wrote in 1911 'The object of a Garden City is to draw away from overcrowded localities or to intercept the ever-increasing flow from the country by establishing new industrial towns in the country: towns which shall always stand in their belt of agricultural land'<sup>3</sup>.



Figure 2: OS Map of 1898 showing the site of the future Welwyn Garden City

<sup>&</sup>lt;sup>3</sup> Sir Ralph Neville, 'Garden City and Garden Suburb', in *Garden Cities and Town Planning*, n.s. Vol. 1, No. 1 (1911)

3.5 To the west and north of the town centre were residential districts, and to the east of the railway line were areas reserved for industry and business, beyond which were further areas of housing. (Figure 4). The industrial area was beside the London and North Eastern Railway (LNER) and the branch line to Hertford which swept northeastwards (now closed). This fairly level land close to the railway was recognised as the best site for industry. Most of the factories were eventually located off Broadwater Road, which ran in a north-south axis (figures 5,6 & 7).



Figure 3: Louis de Soissons' Master Plan of June 1920



Figure 4: A town plan by de Soissons dating from 1921

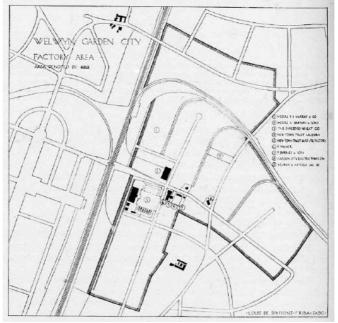


Figure 5: Plan by Louis de Soissons of the Factory Area in 1925

#### Shredded Wheat

- 3.6 The first firm to occupy a site in the new Factory Area at Welwyn was Archibald D. Dawnay & Sons Ltd, constructional engineers and structural steel fabricators who took a site near Hunter's Bridge which crossed the railway (No.2 on figure 5). They were quickly followed by the American company Shredded Wheat which leased seven acres just to the south in an excellent position right by the railway line<sup>4</sup> (No.3 on figure 5). Shredded Wheat was attracted to the town for several reasons – the close proximity to London, but without the 'smoke, grime and fog, that London is apt to indulge in'; the convenience of getting 'suitable railway siding accommodation for receiving goods to other parts of the country'<sup>5</sup>. But of equal importance was the prospect of having a factory in a new healthy environment where the workforce could profit from all the social and economic benefits of 'the happy Shredded Wheat Family'<sup>6</sup>. The company believed that 'all food for human consumption should be manufactured under the most rigid sanitary conditions and amidst surroundings that are cleanly, healthy and pleasant'. Welwyn Garden City was chosen as 'more nearly conforming to these ideals than any of the other sites offered'<sup>7</sup>.
- 3.7 De Soissons drew up plans for the new Shredded Wheat factory between March and July 1924 and construction work on the factory started in May in the same year<sup>8</sup>. The Shredded Wheat Company of America was established in the 1890s by Henry Perky, a health food enthusiast and the inventor of Shredded Wheat.

<sup>&</sup>lt;sup>4</sup> Maurice de Soissons, *Welwyn Garden City: A town designed for healthy living* (1988), p.58

<sup>&</sup>lt;sup>5</sup> Hertford Local Studies Library, Industry Moves Out (n/d), p.19

<sup>&</sup>lt;sup>6</sup> Shredded Wheat publicity brochure on Welwyn Garden City Heritage Trust website

<sup>&</sup>lt;sup>7</sup> Industry Moves Out, (n/d), p.19

<sup>&</sup>lt;sup>8</sup> Herts Archives & Local Studies UDC/21/77/130; UDC/21/77 132 (1&)



Figure 6: Shredded Wheat Factory in Buffalo, close to Niagara Falls, (demolished in the 1950s)

- 3.8 Perky's bright, ultra-modern factory, opened in Niagara Falls in 1901, and was an exemplar in architecture of the healthy lifestyle promoted by its product and was regarded as a model factory.
- 3.9 Much was made about the cleanliness of the factory and manufacturing process and the factory was built there to take advantage of the hydroelectric power supplied by the Niagara River. The five-storey factory was called the 'Palace of Light' because of the vast numbers of windows and because it was clean and modern (figure 6). Over 100,000 tourists a year visited the factory to admire its hygienic operations, its employee showers and reading rooms, the fine recreational and social facilities offered to staff and to sample the product. The tour demonstrated 'both the wonders of technology and the benefits of enlightened management'<sup>9</sup>.

<sup>&</sup>lt;sup>9</sup> William Irwin, *The New Niagara: Tourism, Technology and the Landscape of Niagara Falls 1776-1917*, (1996), p.181; The employees, who were mainly female, received four breaks during the day and were the first known recipients of 'coffee-breaks'.



Figure 7: Plan of Factory Area in 1929

- 3.10 The growth in demand for 'cereal-based' breakfast foods in the early 20<sup>th</sup> century saw the company expand to England, setting up offices in Aldwych, London in 1908. After looking at many locations, they chose to build their first European factory in Welwyn Garden City<sup>10</sup> because the company wished to come to a new town in order to provide ideal working and living conditions for their employees<sup>11</sup>.
- 3.11 From the very start Welwyn Garden City did all it could to attract industrial manufacturers to the town, placing adverts in 1920 in magazines such as Punch and in the daily newspapers, and covering huge hoardings with adverts. An undated promotional brochure produced by Welwyn Garden City Ltd. Entitled *Industry Moves Out* stated 'factory sites in Welwyn Garden City must appeal

<sup>&</sup>lt;sup>10</sup> *The Times*, 28 Jun 1924

<sup>&</sup>lt;sup>11</sup> Maurice de Soissons, *Welwyn Garden City: A town designed for healthy living* (1988), p.58

strongly to firms who want their products made in the healthiest and cleanest atmosphere right away from the smoke and fog, by workers living under conditions which make for both well-being and contentment'<sup>12</sup>. In fact the Shredded Wheat Company stated that 'we expect both our office and factory staff to live in Welwyn Garden City, so that they and their families may have the benefit of the new and ideal housing conditions in the town, and also that the cost of transportation to and from work should be minimised<sup>13</sup>.

Work began on the original three-storey Production Hall 3.12 block fronting the railway line of the Shredded Wheat Factory in May 1924<sup>14</sup>. There was a boiler house, garage and wheat elevator, all designed by de Soissons (see plan of 1924 in figure 8). De Soissons submitted the official building application for the factory on 28<sup>th</sup> July 1924<sup>15</sup>. The foundation, footings, external party and cross walls were all built in reinforced concrete with a damp course of Bituminous felt (figure 9)<sup>16</sup>. The flat roof was covered in Asphalt. The factory was built by the flat-slab construction method, a technique that had been developed in Europe and America which had flat floor plates resting on columns without any down stand beams, its structural behaviour depending upon the arrangement of reinforcing within the slab. American clients in Britain were amongst the first to accept this construction method in the mid-1920s. The Shredded Wheat Factory was amongst the first buildings to use it. the work being undertaken by the Trussed Concrete Steel Company, who at the same time were working for Wallis Gilbert and Partner on the Wrigley Factory at Wembley<sup>17</sup>

<sup>&</sup>lt;sup>12</sup> Industry Moves Out, (n/d), p.17

<sup>&</sup>lt;sup>13</sup> Industry Moves Out, (n/d) p.19

<sup>&</sup>lt;sup>14</sup> Roger Fuller, A History of Welwyn Garden City, (1986), p.130

<sup>&</sup>lt;sup>15</sup> Herts Archives, UDC/21/77/132 (1)

<sup>&</sup>lt;sup>16</sup> ibid

<sup>&</sup>lt;sup>17</sup> David Yeomans, Owen Williams, (2001), p.88

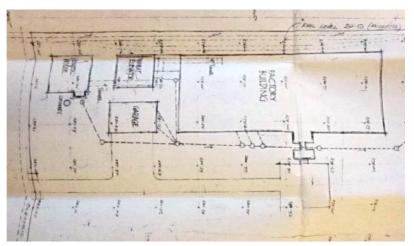


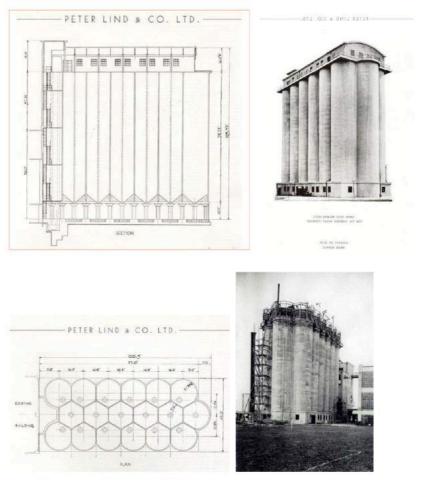
Figure 8: Plan of new Shredded Wheat Factory in 1924 [© Hertfordshire Archives & Local Studies]



Figure 9: Showing the construction of the reinforced concrete Shredded Wheat Factory c.1924 [© Welwyn Garden City Heritage Trust website]

3.13 The Shredded Wheat Factory became almost a symbol of Welwyn, being one of the first new factories built there in a modern style – a dramatic contrast to the neo-Georgian that de Soissons used for the design of housing and civic buildings elsewhere in Welwyn<sup>18</sup>. De Soissons showed

<sup>&</sup>lt;sup>18</sup> Roger Fuller, A History of Welwyn Garden City, (1986), p.127



that he could work in a Modernist idiom with the Shredded Wheat Factory<sup>19</sup>.

Figures 10-13: The silos under construction and the design by Peter Lind & Co. Ltd. [© Welwyn Garden City Heritage Trust website]

3.14 Much of the machinery such as shredding machines were housed on the first floor, including the heavy ovens that were located at the northern end (see figures 14 & 15) – and probably accounts for the extra thickness of floor slab at this end of the building.

<sup>&</sup>lt;sup>19</sup> Elsewhere in Welwyn, there were a few architect-designed homes in the Moderne style including properties in Coneydale and Pentley Park by Eugene Kauffman and Paul Mauger.

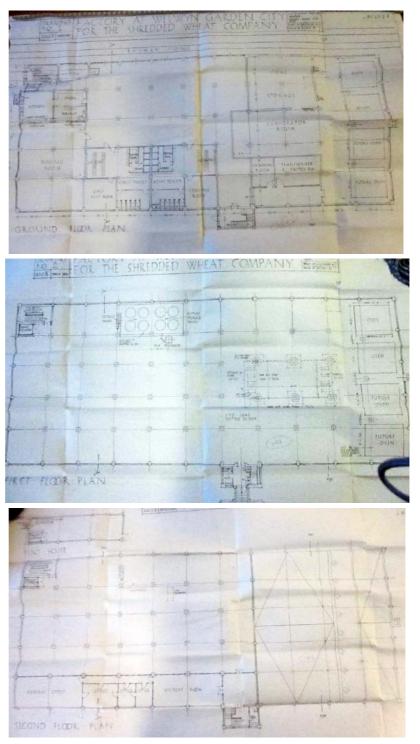


Figure 14 and 15: Ground and first floor plan of the original factory building. Figure 16: Second floor plan of the original factory building.

3.15 The opening ceremony brochure stated that 'the factory has been constructed by Messrs. F.P. Henderson, Ltd, the

well-known building contractors of London, from plans and under the direction of the architect Mr. Louis de Soissons, OBE, FRIBA of Welwyn Garden City, assisted by Mr. Arthur Kenyon, FRIBA, of 22 Surrey Street, Strand<sup>20</sup>. The 18 grain silos were designed and built by Peter Lind & Co. of London (figures 10,11,12,13).

3.16 The building was described as a 'model factory' with a clean healthy image, enhanced by the use of the white ceramic tiles in which the building was encased 'like ivory' and the vast clear windows that sparkled like 'clusters of diamonds' (see figure 17). Inside, the white-painted reinforced concrete workrooms and offices were flooded with sunlight and it was said that it 'was impossible to imagine workrooms more airy, bright and pleasant'<sup>21</sup>.



Figure 17: Shredded Wheat Factory showing the original factory with projecting main entrance and canopied entrance, with the silos beyond [© Welwyn Garden City Heritage Trust website]

3.17 The new factory began production in 1926. At the 5<sup>th</sup> Ordinary Meeting of Welwyn Garden City Ltd, it was reported that 'the factory of the Shredded Wheat Co., with its extraordinary efficient equipment will be brought

<sup>&</sup>lt;sup>20</sup> Shredded Wheat Factory Opening Souvenir Brochure (1925) on Welwyn Garden City Heritage Trust website

<sup>&</sup>lt;sup>21</sup> ibid

into operation as their first European plant<sup>22</sup>. It was officially opened by Lord Salisbury on 12 March 1926.<sup>23</sup> So striking and modern was the new building, that the company used an image of the factory on every packet of the cereal, on their delivery vans and in all their printed publicity and advertisements.

- 3.18 The design of the Shredded Wheat Factory was so unashamedly modern (especially with the white concrete silos) that it was perhaps the most avant-garde building in Britain at the time of its completion in 1925. The influence of American design at the factory was clear. The mammoth reinforced concrete elevators or silos were first built in Buffalo (the home of Shredded Wheat) in 1906. Architect Walter Gropius wrote in his 1913 essay The Development of Industrial Design, that 'The grain elevators of Canada and South America...are almost as impressive in their monumental power as the buildings of ancient Egypt'.<sup>24</sup> Gillian Darley's book *Factory* states that the nearest English replication of the monumental silos of Buffalo was Welwyn Garden City's Shredded Wheat Factory with its concrete, white-rendered simple geometry.<sup>25</sup>
- 3.19 When building the grain silos, Peter Lind & Co. Ltd had to use innovative methods of construction. They used sliding shutters that enabled concreting to go on continuously day and night until the work was finished. Night shifts worked under floodlights, and the operation called for a high degree of organization and supervision. Shredded Wheat had a 5,700 tons capacity silo, with

<sup>&</sup>lt;sup>22</sup> The Times, 20 June 1925

<sup>&</sup>lt;sup>23</sup> The Times 13 Mar 1926

<sup>&</sup>lt;sup>24</sup> Early 20<sup>th</sup> century architects were mesmerised by concrete silos both in America and in Europe. Concrete had been used to construct grain silos in Europe as early as the 1890s and the Belgian reinforced concrete pioneer Francois Hennebique was well known for his silos. In 1927, le Corbusier called "American grain elevators and factories, the magnificent first-fruits of the new age", in *Towards a New Architecture* and praised the engineers that built them and admired the concrete structures that combined form and function.
<sup>25</sup> Gillian Darley, *Factory*, (2004)

eighteen storage bins that towered above the factory. Which at a total height of over one hundred feet, was a dramatic sight.

3.20 In 1928 the Shredded Wheat Co. Ltd. became associated with the National Biscuit Company of America (Nabisco) which produced not only Shredded Wheat but also numerous varieties of branded biscuits and wrapped bread.



Figure 18: The factory in its recreation grounds

- 3.21 Extensions took place to the factory between 1937 and 1939. These included a new single storey production hall fixed to the east of the multi-storey original production hall and an increase in the number of silos from 18 to 45. The additional 27 storage bins were designed by Louis Wirsching Jnr (the Nabisco company architect) and constructed by Peter Lind & Co. Ltd. The capacity increased by 8,500 tons. The new silos, whilst at first glance appearing to be fully integrated to the original ones are actually separate, independent, structures that simply 'butt up against' the originals. A conveyor system was also introduced. In 1937 a penthouse was added to the top of the main building in reinforced concrete.
- 3.22 1941 to 1947 were difficult business years, because, under the Government zoning scheme, the Shredded Wheat Company was excluded from selling in certain areas where sales were strongly established. Zoning came to an end early in 1947 and from then onwards the

company steadily increased its share of the cereal market. In the early 1950s there was a large extension towards Broadwater Road that increased production facilities, but reduced the recreation ground. Another extension in 1957 improved production and increased administrative facilities. The factory was extended again in 1959 and these extensions covered the whole site with buildings and obscured the silos from the view of the road that passes the factory.

3.23 In 1960 the company bought a further 5.5 acres and Cromac House was built for the research, sales development and warehousing departments.<sup>26</sup> In 1961 Charles W Fox FRIBA drew plans for renovations to the west elevation of the original factory building. This work involved the addition of Seaporcel panels (green). The columns that originally rose above the roof were cut down to be level with the top of a new parapet.

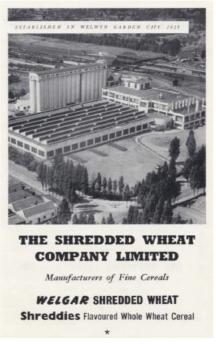


Figure 19: The factory as shown in the Welwyn Garden City – The official handbook & Directory 1953/54

<sup>&</sup>lt;sup>26</sup> Roger Fuller, A History of Welwyn Garden City, (1986), p.133



Figure 20: The Folly Arch - the entrance to the 'Home of Shredded Wheat'

### The Site Today

- 3.24 Production at the site stopped in 2008 and since then the factory complex has been shut.
- 3.25 Some of the original process flows for the production of Shredded Wheat and other products may be discerned in the existing layout and minor components of redundant plant remain, but essentially the northern half of the complex is largely derelict. The southern half is a cleared site.
- 3.26 The northern site today comprises the accumulation of the three main phases of development, with the majority of the land now filled with buildings. Much of the original factory is hidden behind the later, less interesting buildings, including the 1930s production hall and the 1950s range of administrative offices along Bridge Road.
- 3.27 In 2015, Spen Hill Developments Ltd (then the owner of the site) submitted a planning application for the redevelopment of the site. The scheme, which was consented, comprised:
  - New build and change of use to include up to 850 dwellings, workspace, a healthcare facility, a hotel, Class A1, A3 and A4 units and a community building;
  - The demolition of non-original silos and factory and the refurbishment and change of use of the original

silos, Production Building, Grain Store and Boiler House.

- The provision of landscaping to include a linear park, a Multi-Use Games Area (MUGA), allotments, green walls and a neighbourhood square; and
- Highways works, to include the widening of footway and the provision of cycleways to Broadwater Road, and Bridge Road, together with works to Hyde Way and the erection of a new footbridge from Bridge Road leading directly into the scheme.
- 3.28 In more detail, with regards the listed complex, consent was granted for:
  - Restoration of the eastern elevation with the reinstatement of the original grand entrance stair.
  - Repair, restoration and redecoration of the main concrete structure. This includes reinstating the original glazed tiles and painted brickwork and the removal of the 1960s Seaporcel green panels. Replacement of the existing mix and match of windows with new double-glazed uniform metal units to the original proportions.
  - Removal of extraneous and redundant industrial equipment that remained in the external elevations, including the external fire escape to the north – returning the building to its simple original modernist form.
  - Permission was granted for the eastern wall of the second floor to be moved out to the east to enable the insertion of a new circulation lightwell, with plant consolidated and located above this and hidden by a metal plant screen.
  - Internally an open plan layout was consented with demolition of more recent partitions and sub-divisions allowing a better appreciation of the space as conceived and in particular the architectural columns holding up each floor. A new circulation core – providing access to all floors and light to the centre of

the building was permitted and a new stair added to the western side of the building to provide access from the west and necessary circulation and fire escape routes.

- With regards the Grain House, Boiler House and Silos, permission was granted for the removal of internal partitions and structures that related specifically to now-redundant processes to enable viable future uses for the spaces and the single storey connection between the Grain House and Production Hall was approved.
- Permission was granted for the reduction in number of the silos to the original eighteen. As part of the consented scheme, the remaining silos would be converted to hotel use, with floors inserted and metal windows inserted in the recesses between each silo. The top floor was to be converted to residential use.
- 3.29 Consent was granted for the demolition of all other buildings on the site and this has now taken place.

## 4 Assessment of Significance

4.1 Assessing 'significance' is the means by which the cultural importance of a place and its component parts are identified and compared, both absolutely and relatively. This is essential for effective conservation and management. The identification of areas and aspects of higher and lower significance, based on a thorough understanding of a heritage asset, enables policies and proposals to be developed which protect, respect and, where possible, enhance its character and cultural values.

## The relevant heritage assets

4.2 In terms of the assessment of the proposals for the site, the heritage assets most relevant to considering the effect of the scheme are the listed building itself, other nearby listed buildings and the setting of the Welwyn Garden City Conservation Area. The effect of the proposed scheme on these assets will be first and foremost on the special architectural and historic interest of the building itself, and then secondly on the setting of other listed buildings and conservation area. The site is not located within a Site of Archaeological Importance, nor an Archaeological Priority Area

Assessing heritage significance

- 4.3 The Grade II listed former Shredded Wheat factory, the listed buildings nearby and the Acton Town Centre Conservation Area are 'designated heritage assets', as defined by the National Planning Policy Framework (the NPPF). Other buildings and structures that make a positive contribution to the conservation area can be considered as 'undesignated heritage assets'.
- 4.4 'Significance' is defined in the NPPF as 'the value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic'. The Historic England

'Planning for the Historic Environment Practice Guide' puts it slightly differently – as 'the sum of its architectural, historic, artistic or archaeological interest'.

- 4.5 'Conservation Principles, Policies and Guidance for the sustainable management of the historic environment' (Historic England, April 2008) describes a number of 'heritage values' that may be present in a 'significant place'. These are evidential, historical, aesthetic and communal value.
- 4.6 Archaeological Significance
- 4.7 Until the creation of Welwyn Garden City in 1920, Figure 2, an OS map of 1898, shows that the land upon which the Factory is built was farmland. The site lies between two areas designated on the Welwyn Hatfield Local Plan as Areas of Archaeological Significance (AAS). These include AAS 26, (centred on Church Road) and AAS 30 (Salisbury Gardens/Shotlands Green). Both designated due to potential for evidence relating to Iron Age/Roman occupation. This site is not in a designated area, it is therefore unlikely that there will be any evidence of past human activity worthy of expert investigation lying below the site.
- 4.8 Architectural & Artistic (Aesthetic Interest)
- 4.9 Despite the piecemeal development of the site throughout much of the middle of the 20<sup>th</sup> century, each new additional development left the previous phase remarkably intact. There is no longer any plant remaining in any of the buildings and the site is now largely derelict.
- 4.10 The original (and remaining) part of the Factory complex, designed by Louis de Soissons and built between1924-1926 remains largely as built including the main factory, boilerhouse, and first 18 wheat elevators (silos). Architecturally this element of the complex is regarded as being of the highest significance.
  - Designed by an architect of note, and particularly associated with Welwyn Garden City, Louis de Soissons

showed with this factory, that he could design in the Moderne as well as neo-Georgian styles.

- Most of the original 1920s buildings remain largely complete, including details such as staircases, railings, and the silo 'shoots'.
- The factory was built using a pioneering flat-slab construction method with American clients such as Shredded Wheat and Wrigley being the first to accept and use it in Britain from the mid 1920s.
- The architecture and materials reflected the clean and hygienic principles of the Shredded Wheat Company regarded at the time as a 'model factory'. The sense of bright, light and airy spaces remains today within the original factory building.
- The monumental nature and form of the first 18 silos made these an instant landmark and required an innovative construction approach by Peter Lind & Co.
- 4.11 By virtue of the architectural style, the internal finishes, where these remain, are utilitarian and simple. Those that do remain, however are of significance – such as the staircases. As all the buildings have been stripped of their content and machinery, where elements do remain these are significant as evidence of the former use of the buildings however their interest is lessened by their 'unconnected' nature.
- 4.12 In places alterations and additions have taken place which have lessened the significance of these original buildings. Most noticeably where the later single storey production hall addition was built directly against what was, originally, the front elevation of the factory building. This led to the blocking of some windows and the loss of the formal entrance. The staircase, internally, however still remains. The consented scheme provides the opportunity to better reveal the significance of the building following the removal of elements of lesser significance.

**Historical Interest** 

- 4.13 As one of the first factories to be built in Welwyn Garden City, the former Shredded Wheat factory is historically important. The original 1924-1926 factory complex is of especially high significance historically:
  - The factory was one of the first to be built in the newly designated 'industrial zone' in Welwyn Garden City.
  - As well as locational benefits, Welwyn was chosen because the principles of the Garden City Movement matched those of the Shredded Wheat Company. The Company believed that food should be produced in an environment that was 'clean, healthy and pleasant' and it was felt that the new Garden City conformed to these ideals.
  - The factory was built of historically pioneering construction methods as previously mentioned.

### Communal & Social Interest

- 4.14 The Shredded Wheat factory complex has played a significant part in the physical and employment life of Welwyn Garden City since its inception in the 1920s. This significance is derived from a number of key factors:
  - One of the first factories, and therefore large-scale employers in the newly created Welwyn Garden City.
  - Built in a new and 'avant-garde' architectural style, deemed so 'modern' that the factory appeared on cereal packets, delivery vans and printed publicity.
  - The company encouraged staff to live healthily in a healthy environment hence the original provision for open space and gardens around the factory. This was not lost totally until the 1950s.
  - The silos are a local landmark visible for many miles.
  - The factory complex has been part of architectural landscape of Welwyn Garden City for nearly 90 years, located as it is, directly next one of the principal link routes from east to west across the railway and next to the station.

4.15 As mentioned above, the later phases of development subsumed the former recreation ground, which had been an important element of the original concept. These more recent parts of the complex have therefore weakened the communal and social significance of both Shredded Wheat and Louis de Soissons' vision over the past 80 years.

## 5 The policy context

5.1 This section of the report briefly sets out the range of national and local policy and guidance relevant to the consideration of change in the historic built environment.

The National Planning Policy Framework

- 5.2 The legislation governing listed buildings and conservation areas is the Planning (Listed Buildings and Conservation Areas) Act 1990. In 2012, the Government published the new National Planning Policy Framework (NPPF), which replaced Planning Policy Statement 5: 'Planning for the Historic Environment' (PPS5) with immediate effect.
- 5.3 The NPPF says at Paragraph 128 that:

In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance.

- 5.4 A detailed description and analysis of the heritage significance of the site is provided earlier in this report.
- 5.5 The NPPF also requires local planning authorities to 'identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this assessment into account when considering the impact of a proposal on a heritage asset, to avoid or minimise conflict between the heritage asset's conservation and any aspect of the proposal'.
- 5.6 At Paragraph 131, the NPPF says that:

In determining planning applications, local planning authorities should take account of:

- the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;
- the positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and
- the desirability of new development making a positive contribution to local character and distinctiveness.
- 5.7 Paragraph 132 advises local planning authorities that 'When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation. The more important the asset, the greater the weight should be. Significance can be harmed or lost through alteration or destruction of the heritage asset or development within its setting'.
- 5.8 The NPPF says at Paragraph 133 'Good design ensures attractive, usable, durable and adaptable places and is a key element in achieving sustainable development. Good design is indivisible from good planning.' Paragraph 133 says:

Where a proposed development will lead to substantial harm to or total loss of significance of a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply:

- the nature of the heritage asset prevents all reasonable uses of the site; and
- no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and

- conservation by grant-funding or some form of charitable or public ownership is demonstrably not possible; and
- the harm or loss is outweighed by the benefit of bringing the site back into use.
- 5.9 Paragraph 134 says that 'Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use.
- 5.10 Further advice within Section 12 of the NPPF urges local planning authorities to take into account the effect of an application on the significance of a non-designated heritage asset when determining the application. It says that 'In weighing applications that affect directly or indirectly non designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset'.
- 5.11 Paragraph 137 of the NPPF advises local planning authorities to 'look for opportunities for new development within Conservation Areas and World Heritage Sites and within the setting of heritage assets to enhance or better reveal their significance. Proposals that preserve those elements of the setting that make a positive contribution to or better reveal the significance of the asset should be treated favourably'.
- 5.12 Paragraph 138 says that:

Not all elements of a World Heritage Site or Conservation Area will necessarily contribute to its significance. Loss of a building (or other element) which makes a positive contribution to the significance of the Conservation Area or World Heritage Site should be treated either as substantial harm under paragraph 133 or less than substantial harm under paragraph 134, as appropriate, taking into account the relative significance of the element affected and its contribution to the significance of the Conservation Area or World Heritage Site as a whole.

Welwyn Hatfield Borough Council: Local Policy

- 5.13 The current planning policies for Welwyn Hatfield are set out in the statutory development plan which comprises: saved policies of the Welwyn Hatfield District Plan adopted 2005, the Hertfordshire Waste Core Strategy and Development Management Policies Document adopted 2012, Hertfordshire Minerals Local Plan adopted 2007, and the saved policies of the Hertfordshire Waste Local Plan adopted 1999.
- 5.14 A Local Plan is currently being prepared, which will replace the District Plan and will set out the planning framework for the Borough for the period up to 2031.
- 5.15 The saved Polices of the District Plan of relevance include:

R27 Demolition of Listed Buildings: Listed Building Consent for the complete or partial demolition of any building of special architectural or historic interest will not be granted other than in the following exceptional circumstances:

i) Clear and convincing evidence has been provided that it is not practicable to continue to use the building for its present or previous use and that no viable alternative uses can be found, and that preservation in some form of charitable or community ownership is not possible; ii) The physical condition of the building has deteriorated, to a point that it can be demonstrated that demolition is essential in the interests of public safety. A comprehensive structural report will be required to support this criterion; iii) demolition or major alteration will not be considered without acceptable detailed plans for the site's development. Conditions will be imposed in order to ensure a contractual obligation has been entered into for the construction of the replacement building(s) and/or the landscaping of the site prior to the commencement of demolition; and (iv) where,

exceptionally, consent is granted for the demolition or major alteration to a listed building, before any demolition or major alteration takes place, applicants will be required to record details of the building by measured drawings, text and photographs, and this should be submitted to and agreed by the Council.

D1 Quality of Design: The Council will require the standard of design in all new development to be of a high quality. The design of new development should incorporate the design principles and policies in the Plan and the Guidance contained in the Supplementary Design Guidance.

D2 Character & Context: The Council will require all new development to respect and relate to the character and context of the area in which it is proposed. Development proposals should as a minimum maintain, and where possible enhance or improve the character of the existing area.

D4 Quality of the Public Realm: The Council will expect new development where appropriate to either create or enhance public areas and the public realm.

# 6 The proposed scheme and its effect on heritage significance

- 6.1 This section of the report should be read alongside the other documentation submitted as part of the application, in particular the Design & Access Statement prepared by Collado Collins and the Planning Statement prepared by Iceni Projects.
- 6.2 In summary, the proposals are for the:

Creation of a mixed-use guarter comprising the erection of up to 1,340 residential dwellings including 414 (31%) affordable dwellings; 114 extra care homes (Use Class C2); the erection of a civic building comprising 494 sq.m of health (Use Class D1), 1,232 sq.m of office (Use Class B1) and 646 sq.m of retail (Class A1/A2/A3/A4/A5); alterations, additions and change of use of Grade II Listed Building and retained Silos to provide 5,096 sq.m of flexible business floorspace (Use Class B1), 265 sq.m Combined Heat and Power (Sui Generis), 2,494 sq.m International Art Centre (Use Class D1), 1,226 sq.m Gymnasium (Use Class D2), 1, 576 sq.m of restaurant/coffee shop/bar (Use A1/A3/A4/A5). Creche/Day Nursery of 644 sq.m as well as a Network Rail TOC Building of 364 sq.m; plus associated car parking, access, landscaping, public art and other supporting infrastructure.

# Production Hall, Silos, Grain House, Boiler House and associated buildings

- 6.3 As described in Section 3, planning and listed building consent has been granted for the demolition of the later structures that formed the factory complex as well as the restoration and conversion of the remaining, most significant, listed buildings.
- 6.4 These proposals build upon the principles established in that consent in order to enhance areas and facilitate new uses. As well as commercial, community and leisure uses

within the former factory building, a new Energy Centre is proposed on the site of the former garages and it is proposed that the Boiler House and Grain House are converted into a unique Art/Museum Hub with multidisciplinary indoor and outdoor space.

Production Hall/Former Factory Building

- 6.5 Externally, it is proposed to introduce a ramp and stair along Reiss Walk to provide a main entrance into the new central atrium on the west elevation. This will provide more flexibility without impacting on the unencumbered views of this elevation.
- 6.6 Internally, the majority of the proposed subdivision is located on the ground floor. Partitions relate to the existing column grid to ensure the structural and architectural integrity of the building can still be read. This floor is also where, amongst other facilities the swimming pool will be located.
- 6.7 A degree of subdivision is vital to achieve the multitude of uses necessary to give the building a sustainable future. This scheme focusses the majority of the necessary subdivision on a single floor that which for the past 80 years this floor had very little natural light with most windows bricked up, and a considerable amount of industrial sub-division.
- 6.8 On the upper floors, the full open plan nature of the spaces can be fully appreciated. The office spaces will be separated by the atrium space with full height glazed walls ensuring noise but not visual separation.
- 6.9 On the second floor art studios will be created at the southern end that will connect with the proposed art centre via a new glass bridge.
- 6.10 The central atrium space will contain a feature stair and lift core. The proposed atrium stair construction will be a contemporary blend of glass treads and metal runners in order to create an open and light environment. It will also minimise the visual impact internally, allowing occupiers and visitors to read the open office floor plate.

The lifts, which provide access to all floors, will also provide panoramic views of the space when moving up through the building.

- 6.11 As consented in the previous permission, it is proposed that the facades of the building will be carefully restored and/or reinstated. It is also proposed that internally the building will receive an insulated lining in order to improve thermal efficiency. This will be painted white which will ensure it has no visual impact on the character of the space.
- 6.12 The proposed glass bridge link between the Grain Store and Factory building has been inspired by that of the Royal Opera House in Covent Garden. It is proposed to add a modern twist to the building that is obviously an addition, but that does not detract from the architectural importance of the original building. Its purpose is to give the Arts Centre the capacity to expand from one building to the other – an important part of providing a sustainably flexible future for the listing buildings.
- 6.13 It should be remembered that the factory building has never been entirely without division or heavy equipment and was always a utilitarian, working space. The effect of the proposed works to the Production Hall will be to restore and better reveal the most important historic and architectural elements of the building, whilst providing services, circulation and modern accommodation that will give the building a viable long term future.

The Grain House and Silos

- 6.14 Unlike the previously consented scheme, it is proposed to convert the Grain House and Silos into an Art/Museum Hub. It is proposed that the existing machinery still remaining in the Grain House will be renovated and cleaned to retain the building's industrial character and could be used within exhibitions as well as serving as a visual reminder of the history of the building.
- 6.15 The silos will be repaired and restored and the base of them opened up allowing the hollow space to be used for

art installations. It is proposed that the building on top of the silos will be converted to a restaurant and bar with views across Welwyn Garden City. Access will be by a stair and lift located within two of the silos.

- 6.16 The structure between the Grain House and Silos
   (previously consented for removal) will be retained –
   providing at ground floor, the entrance to the Arts Centre.
- 6.17 This use is a considerably more light-touch approach to that previously consented and will allow for the retention of much more historic fabric within these buildings. It will also allow for a fuller appreciation of the scale and nature of the space and should be regarded as a major heritage benefit in comparison to the previous scheme.

#### The former Garages

- 6.18 The former garages, previously consented for replacement, will still be replaced, and house a restaurant/café, facing out onto the newly created Goodman Square and also the Energy Centre – which will be glazed so that passers-by can look in and see the various parts of the plant at work. The energy centre will make use of the existing chimney.
- 6.19 Behind the new building will be a covered courtyard which will link to the silos and provide a more open indoor space to appreciate the scale of the adjacent silos.

## The Wider Proposals

- 6.20 In heritage terms, the wider proposals have been designed to ensure that the remaining listed structures are better revealed both architecturally and in terms of use and ensure that they become a key focal point of the masterplan.
- 6.21 The building heights and their distribution in the proposed scheme are broadly similar to those of the consented scheme and to the north of the listed buildings are lower. Where it has been deemed necessary, an additional storey has been added to the proposed

buildings along the western and eastern edges of the site – furthest from the listed buildings.

- 6.22 The importance of the dominance of the silos continues to be recognised, with new buildings being located so as to give selected views of the silos from strategic and carefully considered points around the site. Their pre-eminence will be fully respected.
- 6.23 The spaces around the listed buildings have been designed to give visitors, users and occupiers a better appreciation of the complex and the use of these spaces designed to create activity and vibrancy. This is an important benefit with the scheme, as much of the communal significance of the complex relates to the 'healthy living' approach promoted both by the founders of Shredded Wheat and the Garden City.
- 6.24 The proposed new Goodman Square adjacent to the Boiler House/Grain House and silos at the end of Hydeway will be a key public space linking the east and west of the town, with the listed structures forming the principal backdrop to the north.
- 6.25 The proposed Louis de Soissons Civic Building will be one of the first buildings seen by pedestrians approaching the new residential and cultural quarter from the town centre and train centre. The appointment of Louis de Soissons Architects to design it further provides a historical link between the past and the future.
- 6.26 The De Soissons Gardens to the eastern front of the Production Hall will reinstate a formal open space providing a suitable setting for the reinstated grand entrance to the building and restoring the integrity of the 'front' of the building back to its original place as illustrated in the historical photographs in figures 17 & 20.
- 6.27 To the west of the listed former Production Hall, Reiss Walk will incorporate the historic railway lines and provide a hard landscaped access to this elevation of the

listed building – appropriate to its industrial past – as well as a thorough fare through the development.

- 6.28 The design rationale articulated in the Design & Access Statement and Landscape Strategy demonstrates how the architecture and landscape have drawn from the historic Garden City principles as well as more recent guidance and strategy and the consented scheme. The heights of the buildings have been carefully considered to ensure the continued dominance of the listed factory complex and opened up views not experienced since the 1930s. As described earlier, the heights of the buildings have been re-configured and in many cases reduced since previous iterations of the scheme better revealing both the silos and Production Hall building.
- 6.29 The wider scheme offers huge community benefits to the town. As an integral part of this wider proposal these benefits are symbiotic for the listed complex with the buildings playing a part in providing the mix of uses and facilities that contribute to additional community facilities such as the creche and workspace and also benefiting from a restoration and repair of its modernist architecture and a long term sustainable and viable use.
- 6.30 The integration of public art throughout the site is also a considerable public benefit increasing the cultural importance of Welywn Garden City as well as the site and historic complex.
- 6.31 Similar to the consented scheme, the visibility of the proposals from Grade I listed Hatfield House has been investigated and it has been concluded that the primary element of the scheme that is visible are the already standing silos. It is therefore felt that the proposals will not have a detrimental impact on the views from the House.
- 6.32 In terms of the impact on the Welywn Garden City Conservation Area, the proposals will be negligible and will not affect the special character of the area. The railway line provides (and always has done) a very definite

divide from east to west, and the back of the Howard Centre creates a dominant 'back' to the town centre. Just as the proposed development has been designed to respect the setting of the listed buildings from the site itself, this approach was key when considering how it will be seen from glimpsed views from the conservation area.

## 7 Compliance with policy and guidance

7.1 This report has provided a detailed description and analysis of the significance of the former Shredded Wheat factory site and its heritage context as required by Paragraph 128 of the National Planning Policy Framework. In addition, the report also describes in Section 6 how the proposed scheme will affect that heritage significance.

The level of 'harm' caused by the proposed scheme

- 7.2 As outlined in Section 5, the NPPF identifies two levels of potential 'harm' that might be caused to a heritage asset by a development: 'substantial harm...or total loss of significance' or 'less than substantial'. Both levels of harm must be caused to a *designated* heritage asset in this instance, the listed former Shredded Wheat Factory and the conservation area, and its setting.
- 7.3 The proposed scheme, in our considered view, preserves the special architectural and historic interest of the listed building and thus complies with s.66(1) and s.72(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990. It does not lead to 'substantial' harm to the listed building. The changes to the listed building, individually or cumulatively, do not reach the threshold of harm that would cause the scheme to fail to preserve the special interest of the listed building or conservation area.

The National Planning Policy Framework

- 7.4 In respect of Paragraph 131 of the NPPF, the proposed scheme can be described as 'sustaining and enhancing the significance of heritage assets and putting these to viable uses consistent with their conservation'.
- 7.5 The proposed scheme complies with Paragraph 133 of the NPPF it does not lead to 'substantial harm to or total loss of significance of a designated heritage asset'. It also complies with Paragraph 134 for the reasons given earlier in this report. The proposals enable the restoration of the

most important remaining elements of the Shredded Wheat factory, reinstating its most important elevational features, removing utilitarian elements that detract from an appreciation of the architecture and using high quality, contextual materials.

7.6 The interventions – individually and taken as a whole – help secure the 'optimum viable use' of the listed building. The scheme very definitely strikes the balance suggested by Paragraph 134 of the NPPF – it intervenes in the listed complex in a manner commensurate to its significance as a listed building.

Local Policy: Welwyn Hatfield Borough Council

- 7.7 In positively addressing the requirement of the National Planning Policy Framework, the works should also meet the policy requirements of Welwyn Hatfield Borough Council.
- 7.8 In addressing Policy R27, the elements of the listed building that make up its special architectural or historic interest have been clearly identified. These proposals aim to retain and adapt these elements of the complex for new sustainable future uses. The factory complex has now been redundant for many years. The proposals represent alternative uses that will give the most significant elements of the site a viable and sustainable future. The physical condition of the buildings has deteriorated considerably and the proposals offer the opportunity to repair and restore the main elements of the retained buildings.
- 7.9 The proposals for the listed buildings can be seen in the context of the wider development proposals for new buildings and landscaping and a full recording of all of the buildings to be demolished will be undertaken.

## 8 Conclusions

- 8.1 The proposed scheme builds upon that already consented to provide a viable and considered scheme that will repair, restore and help secure the future of the most significant parts of the former Shredded Wheat complex in sustainable and viable uses, and this represents a great benefit in heritage terms. The proposal overall will still deliver substantial public benefits to the community and the works to the listed buildings are an integral part of that. The scheme will re-stitch this derelict part of the town centre back into full use, joining the two halves of the town back again.
- 8.2 The proposed development will not harm the character or appearance or the setting of the adjacent Conservation Area, which very clearly 'turns its back' on the site with the Howard Centre development and railway line. Where there are glimpsed views of the site from within the conservation area, no harm to its setting will be caused by the proposals.
- 8.3 The proposals offer substantial public benefits overall. These benefits relate not just to giving the remaining factory complex a future use and better revealing its significance, but also the wider public benefits to be delivered by the whole scheme.
- 8.4 Overall, the scheme offers a unique opportunity to reinvigorate the site and better reveal the significance of the original buildings and wider site. For this and the reasons given in the report, the proposed scheme complies with the law, and national and local policy and guidance for listed buildings and conservation areas.

The former Shredded Wheat Factory, Welwyn Garden City: Heritage Assessment

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