

DUBLIN CITY'S INDUSTRIAL HERITAGE IN A CHANGING URBAN LANDSCAPE

Introduction

Ireland is the most westerly island of the Continent of Europe, the Irish Sea separating us from our neighbour - Great Britain.

Dublin, the capital city, is situated on the east coast at the mouth of the river Liffey.

Ireland's economic growth has been making headlines in Europe. Its capital city Dublin has been experiencing a phase of development over the past 15 to 20 years that is unprecedented since the 18th century when it was regarded as the largest city of the British Empire, and the sixth largest city in Europe. With commuters living up to eighty kilometres from the city centre and being forced to spend up to four hours a day travelling to and from their place of work, quality of life issues are top of Dublin City Council's agenda. It has been recognised that urban expansion must be controlled and one of the key ways of doing this is through increasing the supply of land within the city. Areas of the city, which had formerly been at the centre of industrial activity, are now lying idle and derelict and have become the focus for redevelopment.

Growth of the Trading City

To briefly describe the Dublin context: it was archaeological excavations at Wood Quay on the south side of the river Liffey that revealed evidence for Dublin's early port development, with the construction of a series of earthen banks, timber revetments and stone walls which steadily pushed the high-tide waterfront northwards, ending about the year 1300 with a stone wall almost along the line of the modern quays.

At the beginning of the 18th century the city first began to seriously tackle the problems of its inadequate port and harbour. The shallow channel which existed for the river between two large shifting sandbanks, known as the North and South Bulls, provided very limited access at high tide to the city quays. The first record of enclosing the north shore of the Liffey was in 1712 when lines of wicker baskets filled with stones were laid down which it was reported withstood winter floods. Within a few years work commenced on the south bank: initially wooden piles were driven into the sands from Ringsend to the 'Piles End'. By 1735 these were replaced by a double stone wall, the intervening space filled with rock and gravel, and a

road built on top. Wooden piling continued out into the bay but was ineffectual in retaining the shifting sands of the South Bull.

One of the major achievements of the 18th century was the construction of the Great South Wall, completed in 1792. Built from blocks of granite extracted from the quarries south of the city and brought across the bay from Dalkey and Dun Laoghaire, it was one of the longest and best-constructed breakwaters of its kind in the World, extending for a distance of approximately six and a half kilometres. However, access to the port continued to be a problem for shipping, and a number of experts were consulted, among the most famous being Capt William Bligh of Mutiny on the Bounty fame, who mapped the port. A second sea wall was completed in 1817, the North Bull Wall, which had the desired effect of increasing the depth of the channel by natural scour. The construction of the quay walls and the breakwaters meant that large tracts of tidal lands both north and south of the estuary could be reclaimed.

Transport infrastructure continued to be developed with the building of the Grand Canal and its double docks on the southside of the river Liffey and the Royal Canal on the northside, which with their bridges and locks, still form part of the city's infrastructure. In the late 18th-century these two canals, which were linked to the port through sea-locks, effectively encircled the city, and provided a trade route from the port of Dublin to the extensive Shannon navigation system.

Initially supplementing the canals as a transport system, but eventually accelerating their demise, railways began to be constructed running south, west and north from the port, the earliest being the Dublin to Kingstown or Dun Laoghaire Railway which opened in 1834. The coming of the railways led to a major expansion of Dublin port and the integration of rail and shipping services was central to that development. During the mid-nineteenth century Dublin outstripped not only its rival ports in Ireland such as Cork and Belfast in its percentage growth, but also the major British ports of Glasgow and Liverpool-Birkenhead. Railway termini and warehouses dominated the North Quays area right into the latter half of the twentieth century, when road freight transport began to dominate...

Industrial Development

During the nineteenth century manufacturing industry developed in line with infrastructural improvements. A street ballad of the

period *The Dublin Jack of All Trades*, names various streets and recalls the local specialisation in industries and trades which was to be found in the city -

*‘.....
In Summerhill a coach-maker
In Denzil Street a gilder
In Cork Street was a tanner
And in Brunswick Street a builder’*

Traditionally much of Dublin’s industry was situated in an area to the south-west which had access to water power from the rivers Liffey and Dodder. A report of 1854 notes the use of steam power in the region for iron manufacture, cotton spinning, brewing and malting, calico printing, distilling, saw mills, corn and flour milling, paper mills, as well as chemical and manure industries. Many important flour production plants were located around the canal docks, such as the Dock Milling Company and Bolands Mills. Bolands was one of the major contributors to the baking and confectionery business which was the strongest component of the Dublin food industry. In 1888 the firm’s total employment, including their flour mill at Ringsend and their bakery in Capel Street, had reached eight hundred workers.

On the south side of the city, and adjacent to the port, a Huguenot settlement in Ringsend had a traditional association with a busy boat-building industry. Malton’s illustration of 1790 shows Cardiffs shipyards beside the Hibernian Marine School where young boys between the ages of 9 and 14 were trained for the British Navy and Mercantile Marine. Children from the School were also brought to local ropemaking works as part of their training where ropewalk spinning was carried out in narrow enclosed sheds. However the Ringsend docks were small and suited only to small-scale operations and in 1860 a large graving dock, built by William Dargan, was opened on the north side of the river. Walpole Webb & Bewley operated the shipyards, producing their own ships boilers and commissioning engines from the local firm of Courtney, Stephens & Co. The last major company operating the yard was Scott and Skellie Ltd. when employment rose to 1,000 shortly before the yard’s closure in the 1920s.

During the nineteenth century cast-iron became a major element in the building industry and the work of the internationally renowned Dublin iron master, Richard Turner,

can be seen in the recently restored curvilinear range of glasshouses of the National Botanic Gardens, Glasnevin, Dublin.

The most publicised area of industrial success was the city's distilling and brewing industry, and in particular it is the fortunes of Guinness's brewery that attracts the most attention, which today spans an area of approximately 24 hectares west of Christ Church Cathedral. Although the first brewing of stout in Dublin in around 1750 has been attributed to a Brewery in the Liberties area of Dublin, as early as 1810 Guinness's had become the largest brewery in the city, and by 1833 was the leading Irish brewery. Much of their success was due to the fact that they adopted new technology, introducing machinery during the 1860s that mechanised processes previously carried out by hand. Throughout the following decade they expanded their business, completely reconstructing the brewery, and taking over a massive area between James's Street and the R. Liffey. The tall brick tower windmill, which had powered the former Roe Distillery, still stands on the site.

Statutory Protection

An area of the city which was once at the centre of the 19th century brewing industry, has now become the focus of modern development. This raises the question of what statutory protection is provided to structures of industrial heritage significance?

The principal legislative measures which exert some form of control and protection for industrial heritage sites are the National Monuments Acts and the Planning Acts. Under the National Monuments Act all sites identified in the Archaeological Survey of Ireland (ASI) are included in the Record of Monuments and Places (RMP) and accorded Statutory Protection. This ensures that any proposed development at a site listed in the RMP must be notified to the Department who, in conjunction with the local authority will arrive at a decision on how the site should be dealt with. Conditions can be included in the planning permission which will guarantee some form of protection. This would be excellent protection if all industrial sites were included, however the ASI has mainly concentrated on pre-1700 AD sites and as a result most industrial sites are not included.

Recently new planning legislation has been introduced, the Local Government Planning Act 2000, which has changed the criteria whereby sites are included in the Record of Protected Structures

(RPS) a listing compiled by Local Authorities including Dublin City Council. In the past buildings with industrial functions were under-represented in the official listings mainly because they were not perceived as possessing sufficient architectural merit. Now groups of structures and their setting which are considered to be of special *historical, archaeological, artistic, cultural, scientific, social, technical interest, and/or architectural* can be included in the lists. The listing also extends statutory protection to a structure's fixtures and features such as machinery. This broader approach means that where industrial sites are considered, it is now more likely that they will warrant inclusion.

Local Authorities

Dublin City Council has gone a step further and has included a specific Policy Objective in their Development Plan to protect buildings and features of industrial heritage significance, and encourage their re-use where possible.

To implement this Policy Objective the City Council has begun the fundamental task of cataloguing their industrial heritage stock. The initial desktop survey has identified over 1200 sites. With the intention of building up a broad and thorough understanding of the issues facing the future planning of the city, the identification and evaluation of the surviving sites has now commenced. A sample area in the southwest inner city, known as the Newmarket District, which was the centre of uninterrupted industrial activity from medieval times up until very recently, has been chosen for a rapid field survey.

Archaeological excavations have revealed a great deal of evidence for radical civil engineering schemes involving re-routing of streams through the area from as early as the 12th century. What became known as the City Watercourse was initially a channel diverted by the monks of the Augustinian Abbey of St Thomas from the river Poddle by means of a 'stoneboat or tongue', and was used as a source of power to service the abbey's mills. Following the Dissolution of the Monasteries in the 16th century, the area continued as a centre of commercialised industry, the ready water supply powering mainly agriculturally-based industries. The raw materials such as wool and hides, were traded in the New Market which was opened in 1673. An Act of Parliament which encouraged new communities to establish themselves in Ireland, resulted in an influx of economic and religious refugees, in particular Anglican weavers from the west of England and Protestants from the

continent fleeing persecution. With their industrial skills and continental business contacts, these immigrants helped in the development of textile production, and in particular the more specialised silk and poplin industry which became established in the area. However it was the brewing industry that developed and thrived throughout the 18th and 19th century.

Of the IH sites identified in the desktop survey of the Newmarket area, there has been a 43% survival rate, a remarkably high figure, particularly given the scale of development in the city over the past 20 years.

While some manufacturing and service-based operations have been lost to high-rise apartment buildings, others, such as a former maltings and warehouse, were converted for re-use as office accommodation and sales outlets in the 90s; the skeletal remains of others, one proudly exhibiting the initials of the brewery owner John Busby on the cast-iron water tank, are now the subject of planning applications. Among the plucky competitors of the famous Guinness Brewery was the once extensive Watkins, Jameson, Pim & Company Brewery on Ardee Street. The entire complex, including the 19thc Brewers' house and stone warehouse which are protected structures, stand awaiting the planning decision of the City Council regarding their future.

In the north Dublin county area, Fingal County Council has also been proactive in the protection of their industrial heritage. A recent example is at the most impressive site of Shackletons Mill, standing on the banks of the river Liffey, which was destined for demolition and redevelopment as a large apartment complex. Following an objection by the IHAI, Fingal Co County decided to purchase the mill and commissioned a Conservation Plan to advise them on the future of the complex. The mill retains its entire 1940s roller milling plant, water turbines, and most importantly its complete archive. The archive has now been completely catalogued and the IHAI, in co-operation with the Council, are in the process of engaging a team to carry out necessary conservation work.

Regeneration

Solving industrial heritage concerns needs imaginative solutions, for example, in exploring inventive ways to retain and present important industrial archaeology while still accommodating new development. The challenge is also in finding suitable and sustainable new uses for industrial buildings where the original

use is obsolete. The economic question has recently been looked at by Dublin City Council and The Heritage Council: a study on the sustainable reuse of buildings has found that constructing new buildings on industrial, or brownfield sites, is more expensive than retaining and re-using existing buildings, except where the degree of repair and refurbishment is very high. The study also found that the re-use of buildings has greater value for the environment and with increased regulations limiting building waste, it is likely that in the future re-use will become even more economic.

While in Dublin we have our share of IH sites standing derelict awaiting answers - an example is the Pigeon House coal-burning electricity generating station which, in 1903, was the first in the world to generate 3-phase electricity - we also have some interesting examples of re-use and adaptation.

The **Storehouse** of what must be one of our best-known industries, the Guinness Brewery, was originally built in 1904 as a fermentation plant. This impressive building was constructed in the style of the Chicago school of Architecture, with massive wrought-iron beams providing the support for the structure of the building. It now ranks as one of the major tourist destinations in the city, housing the company archives, as well as displaying the Guinness story throughout the six floors of the building. At the end of the tour the visitor is brought into the circular glass-walled addition on top of the building, the Gravity Bar, where you get a 360° view of the complex and the city, and of course get an opportunity to sample the brew!

Many tall brick **chimney stacks** of past industries have been retained as landmark features in the centre of new developments. The late 19th century boiler house chimney stack of the former Jameson's Distillery in Smithfield was conserved and re-used as a viewing point in the regeneration of this former run-down area of the city. The distillery's bonded warehouse and kiln were also adapted as offices by the Bar Council of Ireland in 1998.

Located between the quays and the Grand Canal Docks, the red-brick stack of the Dublin Gas Company is the only surviving structure of this complex which once supplied gas to the whole of the city. Contamination issues were contributory factors in the acceptance by Dublin City Council of demolition of the other buildings on the site.

A building on Pearse Street, which housed the city's earliest gas company, has been faithfully conserved and now provides office accommodation. Many Dubliners were totally unaware of its existence as it was hidden for many years behind the façade of the Academy Cinema, having luckily survived the unsympathetic developments of the 1970s and '80s.

Another red-brick chimney stack dominates the site of Ireland's earliest main drainage Scheme - one of the most unglamorous of our public utilities, but nevertheless a most essential element in the growth of modern society. The **Pumping Station** at Londonbridge Road, Ringsend was part of the sewage drainage operation undertaken for the townships of Rathmines and Pembroke in 1881. When the Station was no longer required as part of the city's infrastructure, it fell into a state of dereliction. Unfortunately the plant and machinery have not survived but information contained in the site archives give a complete record of the technological changes that were introduced over the course of the 100 years the Station was in operation. Thanks to an enlightened approach from the Housing Architects of Dublin City Council, planning permission has just been granted to maintain the granite walled enclosure as a unit within a residential area, to adapt the station building for social housing, and retain the tall, tapering, free-standing chimney which has become a focal point in the local landscape.

And finally a recent example of exciting and inventive re-use can be seen in the residential conversion of a nineteenth century **gasholder** at the former Alliance Gasworks in Ringsend, built in 1865 by the Irish Engineering Company. With its ornate cast iron columns linked by girders and cross-bracing enclosing a glass-walled building which mimics the original bell, it now houses some of the most desirable private apartments in the City.

This development, which is part of the regeneration of the South Docks Area, clearly indicates that in the thriving city of Dublin there are few sites which would not attract development or investment attention, and highlights the urgency of formulating informed planning policies for what remains of our industrial heritage. As industrial heritage enthusiasts we might be forgiven for putting our concerns at the top of the agenda where the issues of urban transformation and the effects on industrial buildings and settings are concerned. However, we must recognise that there are many other issues involved in planning for historic urban settings - not least of which are traffic management, contamination, tourism, obsolescence, and

complex ownership arrangements - and the challenge for industrial heritage practitioners and promoters is, I believe, to become more actively involved in the process.

Thank you very much for your attention

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Vice-President

Industrial Heritage Association of Ireland

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