



Marshall's Mill Holbeck



Design Statement

Revised 8th August 2004

Prepared by...

URBED

with Bauman Llyons Architects
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For
Igloo







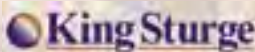
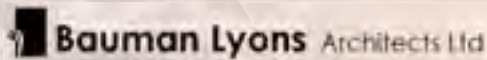
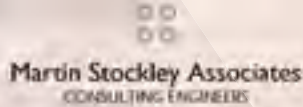
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Contents

Introduction	1	3b Masterplanning structure	19
PART 1: The Leeds context	2	3c Masterplan form	21
1a Leeds	3	3d Masterplan blocks	23
1b The development of Leeds	5	3e Masterplan massing	24
PART 2: The Holbeck Urban Village Area	6	3f. Masterplan townscape and Heritage	25
2a The development of Holbeck	7	3g. Proposed Uses	26
2b History of the Site	8	3h. Public Realm	27
2c The area today	11	PART 4: Transport Strategy	28
2c The area today (continued)	12	4a. The current situation	29
2d Townscape Analysis	13	4b. Access strategy	31
2e Policy context	14	4c. Parking and servicing	33
PART 3: Masterplan Development	16	PART 5: Socially Responsible Investment	34
3a Reconnecting Holbeck Urban Village	17	5a. Sustainable energy strategy	35
		5a. Daylight and overshadowing	37
		5b. Wind assessment	39





Introduction

This design statement has been produced in support of the outline planning application for the Marshall's Mill site that is being submitted to Leeds City Council by Igloo. This document has been prepared by URBED with inputs from Martin Stockley Associates, King Sturge and Bauman Lyons Architects.

The Marshall's Mill site – illustrated on the plan to the left – includes 2.1ha of land in the Holbeck area. The triangular site is bounded by Bath Road, Water Lane, Marshall Street and Union Place and lies within the Holbeck Conservation area. The site falls within the Holbeck Urban Village which is being promoted by Leeds City Council and Yorkshire Forward.

The masterplan for Marshall's Mill proposes a mixed-use, dense urban quarter that can contribute positively to the development of the wider urban village. This planning application has been prepared following discussions with Leeds City Council and Yorkshire Forward and in parallel with the emerging Supplementary Planning Guidance for Holbeck Urban Village. The proposals set out in this document are entirely in line with this emerging vision for the area.

The masterplan for Marshall's Mill proposes a mixed-use, dense urban quarter that can contribute positively to the development of the wider urban village

The Design statement is in five parts:

- ▷ **Part 1:** Looks at the Leeds context, the city today and its development.
- ▷ **Part 2:** Describes the Holbeck Urban Village area including its historical development, the area today, and the current policy context.
- ▷ **Part 3:** Describes the development of the masterplan including our analysis of the way that it fits within the planning context for Holbeck.
- ▷ **Part 4:** Describes the masterplan including the design form, block structure, height and massing, heritage and townscape, land use, public realm and access.
- ▷ **Part 5:** Describes the Socially Responsible Investment analysis developed for the Masterplan.



PART 1: The Leeds context



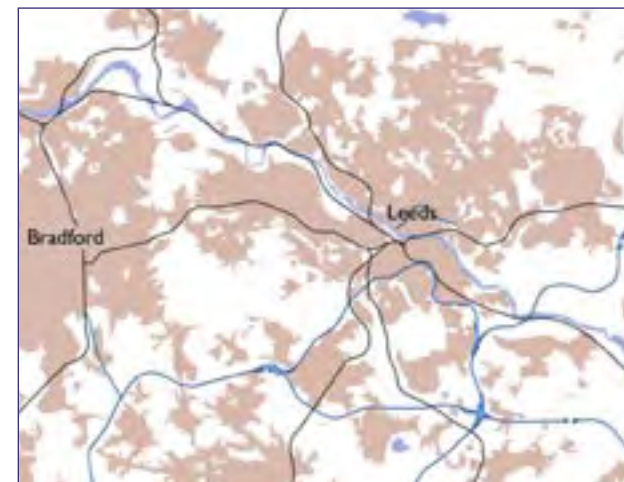


1a Leeds



Main Plan: The Leeds conurbation, one of the emerging plans from the Leeds City Masterplan.

Right: Proposed development at Bridgewater Place on the edge of the Holbeck area



Leeds is the second largest metropolitan district in the UK and is the regional capital of Yorkshire and the Humber.

The city has a population of 715,000 with 2.2m people living within a 30 minute driving time of the city centre. The working age population is forecast to rise by 8,000 over the next decade to 468,000 and the labour force will rise by 4,000 over the next decade to 374,000. Unemployment stands at around 12,500 and the unemployment rate has fallen from a 9.3% peak in 1993 to 2.8%.

Like many of the UK's provincial cities Leeds has been experiencing a period of economic growth which is reflected in the amount of construction taking place in the city centre. A number of major projects are planned and underway at the present time:

- ▷ The new £26m City Museum (due for completion 2007).
- ▷ The new £5 m theatre and arts centre in Millennium Square (due for completion 2005).
- ▷ The new £9m Northern Ballet Theatre and Phoenix Dance headquarters (due for completion 2004).

A large part of the growth in employment will be in creative and media industries. Holbeck Urban Village is one of the potential growth areas for these sectors

- ▷ The £26m Grand Theatre improvements.
- ▷ Feasibility work is also being undertaken into a possible new convention centre in the city.

Employment

There are 442,000 people working in Leeds including 55,000 self employed. The city has achieved sustained employment growth and low unemployment and between 1996 and 2001 more jobs were created in Leeds than in any major city outside London - 34,000 in total. 29% of the employment is in finance and business services, 35% in legal services, 13% in manufacturing



and 26% in print and publishing. The city is predicted to provide 37% of the regions additional employment by 2012. Forecasts predict job growth of 8.4% (an additional 36,000 jobs) in Leeds over the 2002-2012 period. A large part of the growth in the employment sector will be in the creative media industries with over 13,000 people and 1,700 employers. Holbeck Urban Village is one of the potential growth areas for these creative industries.

Property

Since 1992, £5.2bn has been invested, or is in the pipeline for major property schemes in Leeds. The commercial property market remains buoyant and at the beginning of 2002, property schemes valued at £650m were under construction in Leeds and £2.7bn of schemes were proposed. Of these, 70% and 58% respectively were city centre schemes.



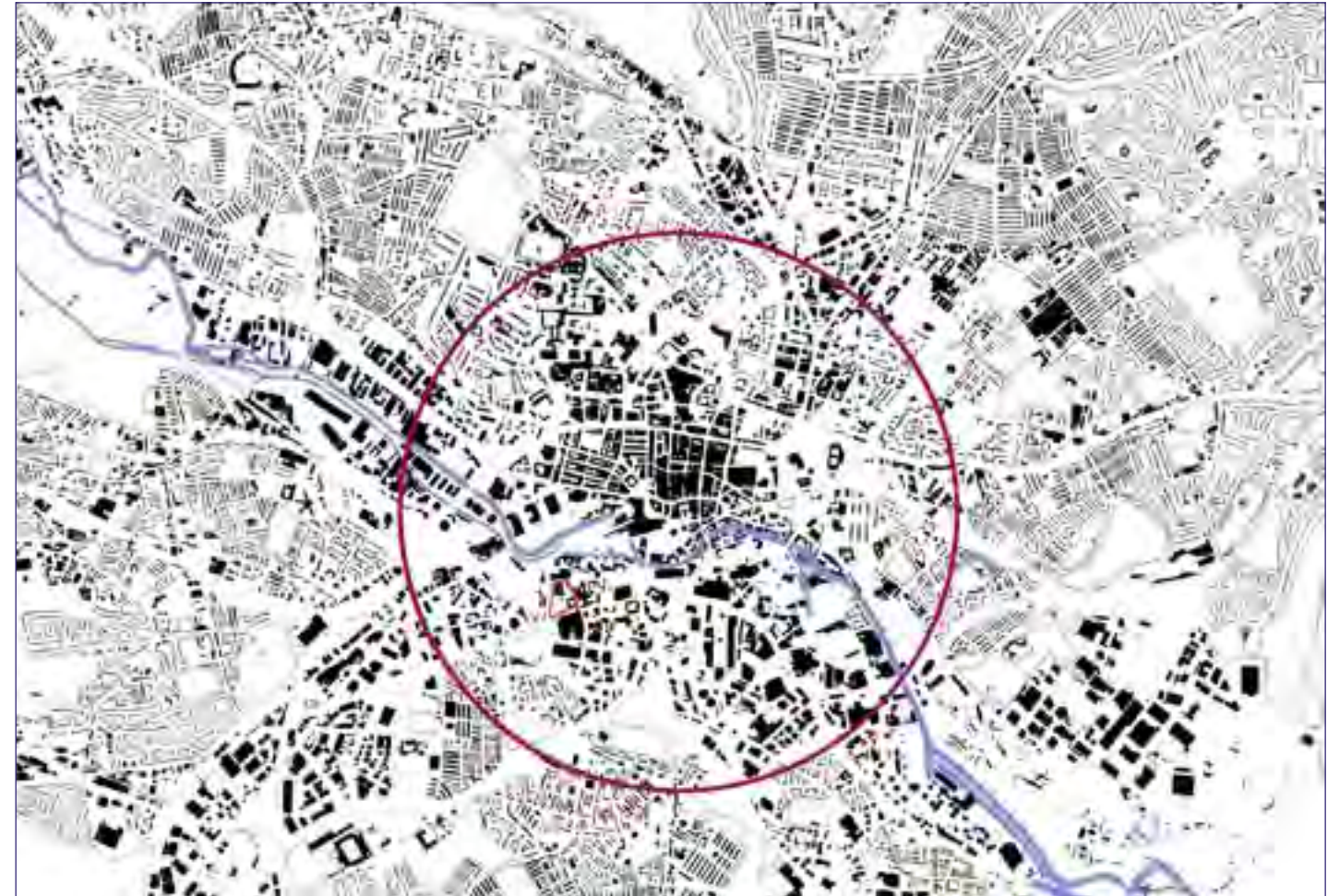
View of Holbeck
looking towards
Leeds in 1858



1821 Whole town Figure Ground Plan



Whole town Figure Ground Plan today



1851



1894



1909



1938



2002



1b The development of Leeds

URBED's approach to masterplanning is based on, what we call the 'Three Rs', Rediscovery, Repair and Renewal. For this reason our masterplanning work starts with a historical reading of the site to understand how and why it developed. We have therefore undertaken a historical review of the growth of Leeds as it affects Holbeck. This is set out on the sequence of 'figure ground' plans on the facing page.

Figure ground plans are a useful method to uncover the urban structure of an area. They show the density of development but also the way in which buildings enclose space. The larger plans show the whole city with the circle drawn at a mile radius from the city centre. The left hand plan is from 1821 and shows the historic shape of the city. This grew up as a 'T' junction between the Headrow and Briggate predominantly to the north of the River Aire. The single bridge over the Aire allowed the city to extend south of the river for a little way but this was limited to development around the junction of Dewsbury Road and Meadow Lane that formed a gate-

way to the city from the south.

The remainder of the area to the south of the river was originally market gardens serving the city. This was scattered with a number of villages including Holbeck, Holbeck Moor, Beeston Hill and Hunslet Moor. As Leeds developed, these market gardens were developed along the roads between these villages. The Round Foundry site and Marshall's Mills were some of the earliest sites to be developed in this way.

As the sequence of plans of Leeds city centre illustrates (below left with Marshall's Mill appearing in the bottom left corner) as Leeds grew there was a period when the Marshall's Mill site was connected to the city despite the severance effect of the river. It was during this period that many of the fine buildings of the area were erected. However as the city contracted, the Holbeck Urban Village area once more became isolated from the centre.

This is illustrated on the second whole-town figure ground which shows Leeds today. This shows that the historic structure of Leeds has persisted and

indeed been reinforced in the period between this and the earlier plan. However major transport infrastructure has been driven into the city on the line of least resistance along the river. The first piece of infrastructure was the canal but much more important were the railways that arrived in the 1840s. The main station was built over the river and the tracks were bought in on a series of elevated viaducts. This cut off the southern parts of Leeds even more from the city. The picture was completed by the M621 motorway that penetrated into this part of Leeds. The road infrastructure between the motorway and the City Centre served to further undermine the structure of this part of the city.

The effect of this can be seen clearly on the whole town figure ground plan. The city centre is shown as a coherent, densely built-up area. There is a small shatter zone to the north west and east of the centre. However to the south there is a complete lack of form and identity. This area has a low density of development and lacks a clear sense of structure or enclosure of urban space.



Above: Leeds 1851
Below: View of Holbeck 1785

The area developed as an industrial district in fields between Leeds the Holbeck, cut-off from the city north of the river. As Leeds reached its zenith, the area was briefly a functional part of the city before being left once more isolated as the centre contracted.

PART 2: The Holbeck Urban Village Area



2a The development of Holbeck

The development of the Holbeck area is described on the plans below which are based on the 1840 map (see previous page). In 1840 Marshall's Mill was part of a wider complex of buildings on a triangular site that extended to the listed wall that remains on the site today. To the west of this wall were two rows of

back-to-back houses and to the west of these there were two mill ponds that extended over the line of what is now Bath Road.

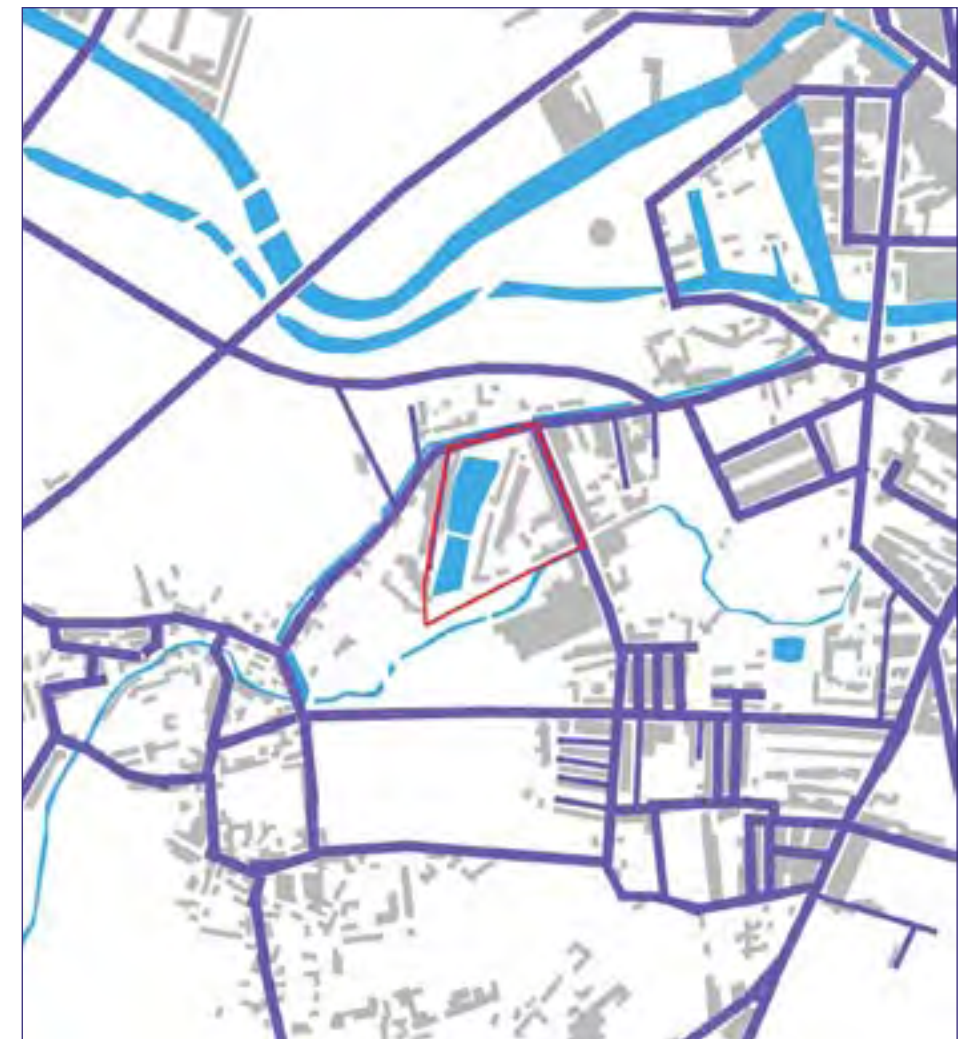
The Marshall's Mill complex developed in the gap between Holbeck Village and the city

1. **The Figure ground plan:** This shows the way that the Marshall's Mill and Round Foundry complex developed in the gap between Holbeck Village that can be seen to the south west of the plan and the city to the north-west. The regular plans of terraces can be seen developing along Sweet Street. The main part of Holbeck Village shown on this plan no longer exists. This is now part of a modern industrial area and there are only a few remnants of this village on the ground.

2. **Water:** The middle plan shows the water in the area including the two Holbeck Becks. It is likely that Little Holbeck Beck (which runs immediately to the south of Marshall's Mill) was the original line of the water course, now culverted. The northern water course which on the plan is called Holbeck Brook runs along Water Lane and appears to be a constructed watercourse, possibly to serve the mill ponds on the Marshall's Mill Site as well as the canal.

3. **Roads:** The next plan is an analysis of the roads in the area. This shows two types of roads. The winding routes, such as Water Lane, are the original lanes that ran between the villages. By contrast the straight routes like Sweet Street and Whitehall Road were newly built at the time that the map was drawn and to open up the area to development. However, despite these new roads, the roads structure is very coarse leading to very large development

blocks. The Marshall's Mill site in particular stretches from Water Lane to Sweet Street and from Marshall Street across to Holbeck Village. This has since been reduced in size by the introduction of Bath Road but it still constitutes a very large urban block, probably because it was based on field boundaries. The way in which we deal with this urban block structure has been an important part of the masterplan development.



Buildings on Sweet Street



Terraces to the rear of Marshall's Mill



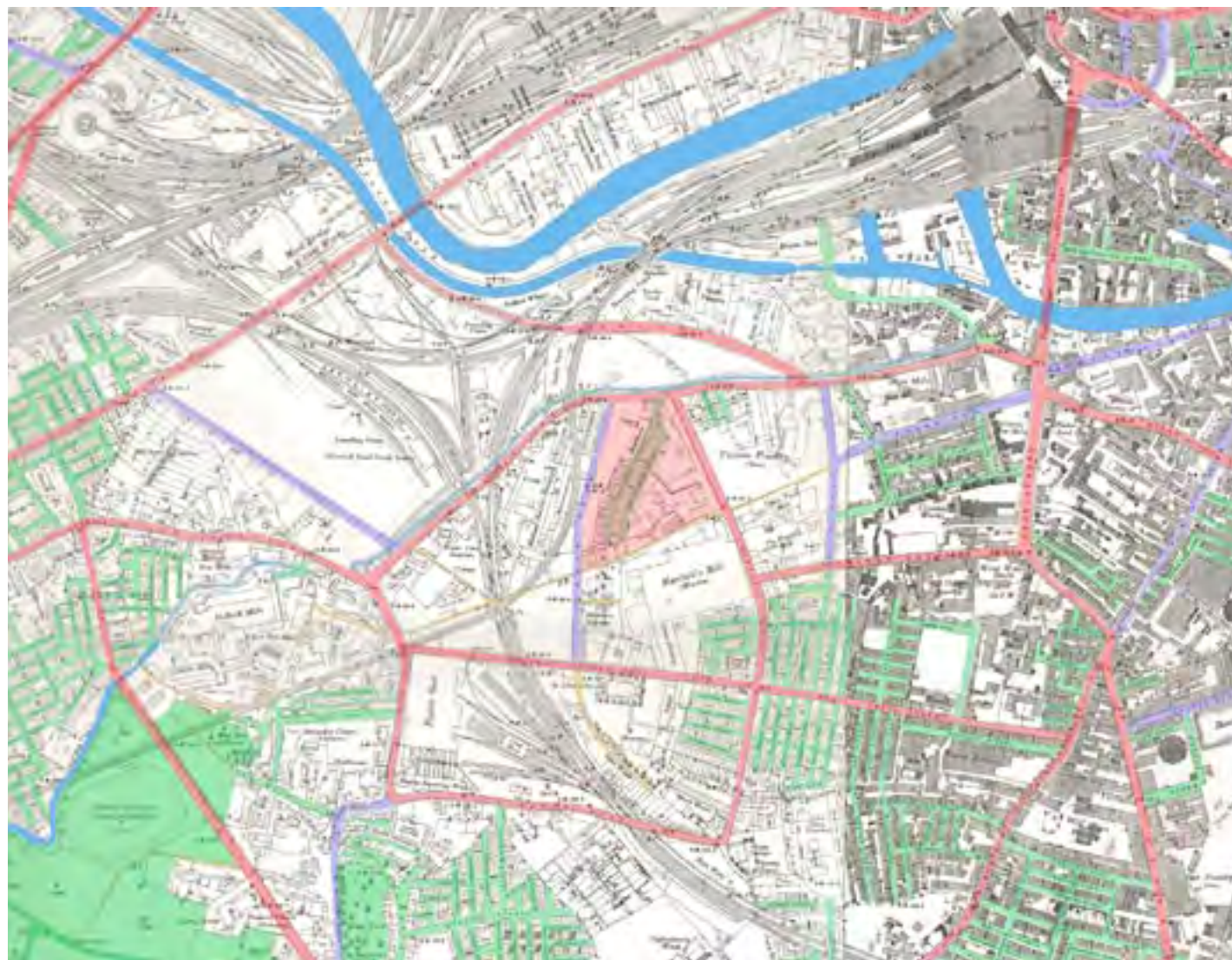
School promoted by Marshall



John Marshall



2b History of the Site



Above: Plan of the Holbeck area with road hierarchy, 1893

Right: View towards Leeds from Holbeck Junction



Marshall's Mill is named after John Marshall the mill owner, entrepreneur and philanthropist. John Marshall was born in 1765 to a linen draper. Educated in Halifax, he joined the family business when he was seventeen. At the age of twenty two his father died and John became the controlling partner in the family business as well as inheriting a new home, a warehouse and £7,500 in cash.

Soon after this he came across a new patent for a flax spinning machine invented in Darlington. He purchased the right to make copies of this machine and, with two partners, took a lease on Scotland Mill near Leeds where he began spinning flax. There were however problems with the quality of the yarn which was prone to breakage. Working with the engineer Matthew Murray, he developed an effective flax spinning machine and in 1890 he paid William Naylor £600 for an acre of land at Water Lane in Holbeck to build a spinning mill. After a shaky start the business prospered and grew into the buildings that are now Marshall's Place, Marshall's Mill and Temple Works.

Marshall took a keen interest in the well-being of his workforce. Overseers were forbidden to use corporal punishment and Marshall installed fans

into the factory buildings to regulate temperature. He believed that "the only way to promote the improvement of the rising generation was through education" and by 1822 he had persuaded other business men to establish a school in Holbeck teaching younger children during the day and the older children in the evening after their shift at the mill. He was also involved in founding the Mechanics Institute and the Literary and Philosophical Society and in 1826 began a campaign to establish the University of Leeds. Marshall was a member of the House of Commons from 1827 to 1930 when he stepped down due to ill health. He retired to the Lake District where he died in 1845.

Marshall's Mills buildings include:

Marshall's Court: This stands at the corner of Marshall Street and Water Lane and dates from 1808. It is the smallest and one of the earliest of Marshall's buildings and is a plain, unassuming three storey structure. It lay vacant for many years and was restored in 1997.

Marshall's Mill: This large, multi-storey mill the first part of which was built in

1815 for the spinning and bleaching of linen and flax. It made an early transition to steam power and became the world's first mechanised flax factory. It expanded over the century with the addition of the two wings to the rear and by 1903 employed over a thousand people. Marshall's Mill was also restored in 1997 and converted into office accommodation.

Temple Works: Temple Works (which lies outside the application site) was commissioned by Marshall to house improved spinning machines. It is the most outstanding industrial building in Leeds and its structure was unique and highly energy efficient for its time. Designed by Joseph Bonomi, the single story building covers two acres and was influenced by his travels to Egypt to the temple of Horus at Edfu. Workers benefited from the 65 conical glass domes in the roof and temperature and humidity, crucial to the spinning process, was maintained by a grass roof. For many years Temple Works had sheep grazing on the roof to provide wool and keep the grass short, a practice discontinued when a sheep fell through the one of the glass domes.

After a shaky start Marshall's business prospered and grew into the buildings that are now Marshall's Place, Marshall's Mill and Temple Works.



In addition to the Marshall's buildings, the site includes a number of other structures of historic interest:

Boundary Wall: The wall that forms the western boundary of the original Marshall's site is listed for part of its length. The northern section of the wall includes a small ancillary building which is part of the listing. The southern sections of the wall are not listed but are considered important as part of the listed curtilage of the main mill.

Water Lane Printing Works: This building was constructed in 1898 and was the premises of Knight and Illson.

The printing works was built of brick with two storey offices with a nine bay symmetrical facade, a central arched doorway and wide gable with a clock. Although the building is not listed it is recognised as Class 3 Archeological Value and lies within the Holbeck Conservation area.

The Flax Warehouse: Built in 1838 this building stands in the centre of the site. It was originally three storeys but had the top floor removed. It is built of fire proof construction with brick vaults. This structure is recognised by Leeds as a building of local importance.

In addition to Temple works, a number of the adjacent buildings are also historically significant.

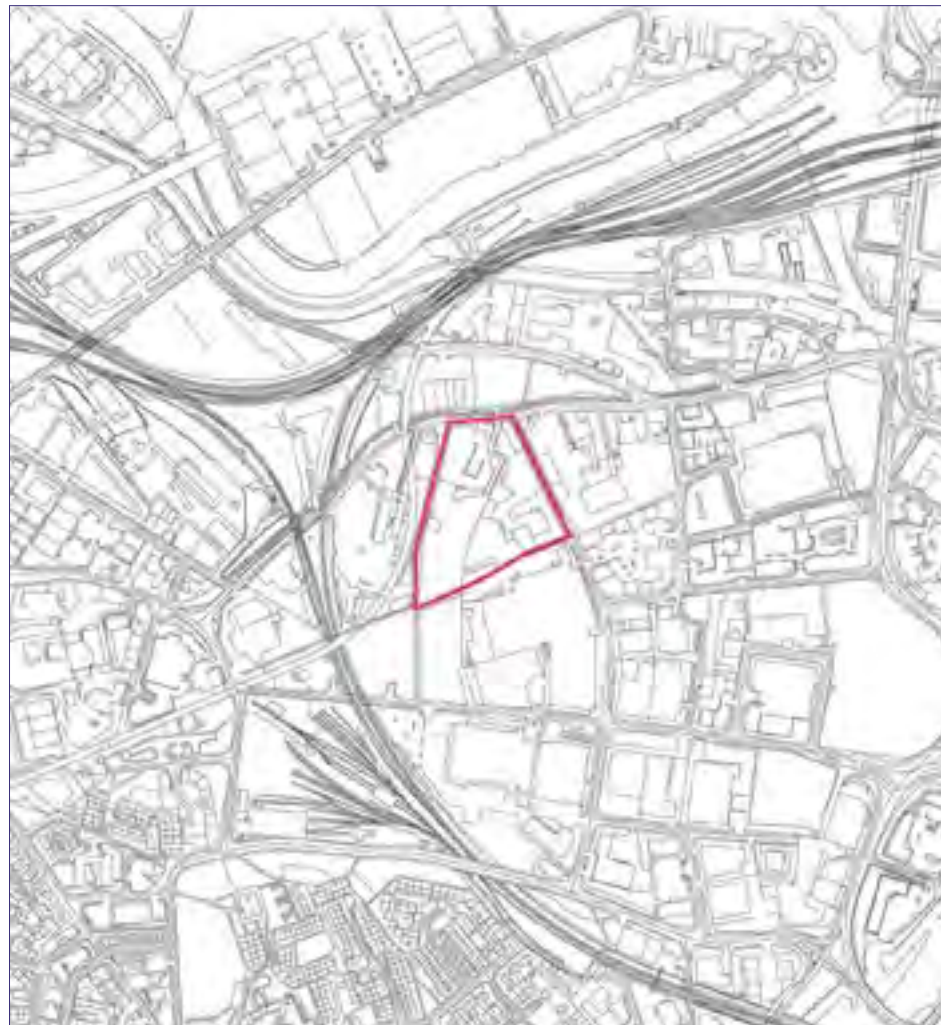
Round Foundry: Matthew Murray, the engineer employed by John Marshall to develop the flax-spinning machine, developed the Round Foundry in 1802. It was here that he manufactured textile machinery and steam engines. Murray earned himself an international reputation as an innovative engineer whose inventions drove forward the industrial revolution and was even commissioned to build a steam launch for the Tsar of Russia. The Round Foundry complex has been converted into series of media use offices and 88 apartments for sale.

Tower Works: This site is known for its three chimneys known as the Giotto Tower, the Verona Tower and the Little Tower. These chimneys were inspired by Giotto's Campanile in Florence and Verona's Lamberti Tower and are an important landmark on the approach to Leeds by train. They were used to extract dust from the factory which to manufacture cast steel pins, cards and combs until 1979.



Left: Aerial view of the area at the peak of its development
Below: Marshall's Street
Bottom left: An interior view of Temple Works







The historic street structure persists today, creating very large urban blocks and limiting permeability through the area.



2c The area today

This historical analysis has informed a review of the Holbeck Urban Village area today. This is set out on the plans running through this section.

Urban structure: The first of these plans is the contemporary figure ground plan that illustrates the built structure of the area. This can be usefully contrasted with the plan on the previous page. It shows that the structure of the Round Foundry and Marshall's Mill sites have remained but that the surrounding areas have been transformed. The housing to the south of the area and the whole of Holbeck Village have been swept away to be replaced with industrial and commercial development. The area has become an important employment location but operates as something of a backwater where low land values and land availability have allowed industry to develop.

Rail and water infrastructure: The figure ground plan shows large areas where there are no buildings. These make more sense when the water and particularly the rail infrastructure is shown on the plan. The main railway lines into Leeds Central station circle the area to the south, west and north. However the most prominent piece of

infrastructure is the disused elevated viaduct that bounds the area to the west. There are proposals to convert this viaduct into an elevated walkway and park so that it could become an important asset to the site. The other railway lines are however negative features in that they are at a lower level and so not easily crossed as well as being an intrusive source of noise.

Street network: The third plan shows the street network of the area (set within the context of the wider street network). This is based on a simple three level hierarchy. The blue routes are primary streets that carry traffic through the area. The green streets are secondary streets that cater for local traffic and the yellow streets are cul-de-sacs. This plan shows that the historic street structure described in the previous section persists today. This creates very large urban blocks and limits permeability through the area. A large amount of traffic is channelled onto the through routes while the remainder of the area feels disconnected from the rest of the city. Currently the main traffic movement through the area is on Water Lane and Globe Road connecting to the western Ring Road. There are plans to transfer this traffic onto Sweet Street with the



A large amount of traffic is channelled onto the through routes while the remainder of the area feels disconnected from the rest of the city.

improvement of the headroom on the Sweet Street bridge under the railway. This will improve the environment on Water Lane but may push more traffic down Marshall Street. This is described in more detail by Martin Stockley Associates in the accessibility section.

Footpath links: In addition to the street network there are a number of pedestrian routes through the area. The most important of these is the route that runs between Marshall's Mill and Temple Works. This is marked on the historic plans as a footpath between Holbeck and Leeds and was important enough to be preserved as a route under the railway viaducts (today sadly neglected and dangerous). This route also has the potential to link with the new footpath route on the railway viaduct. The viaduct also allows links to be made into central Leeds.

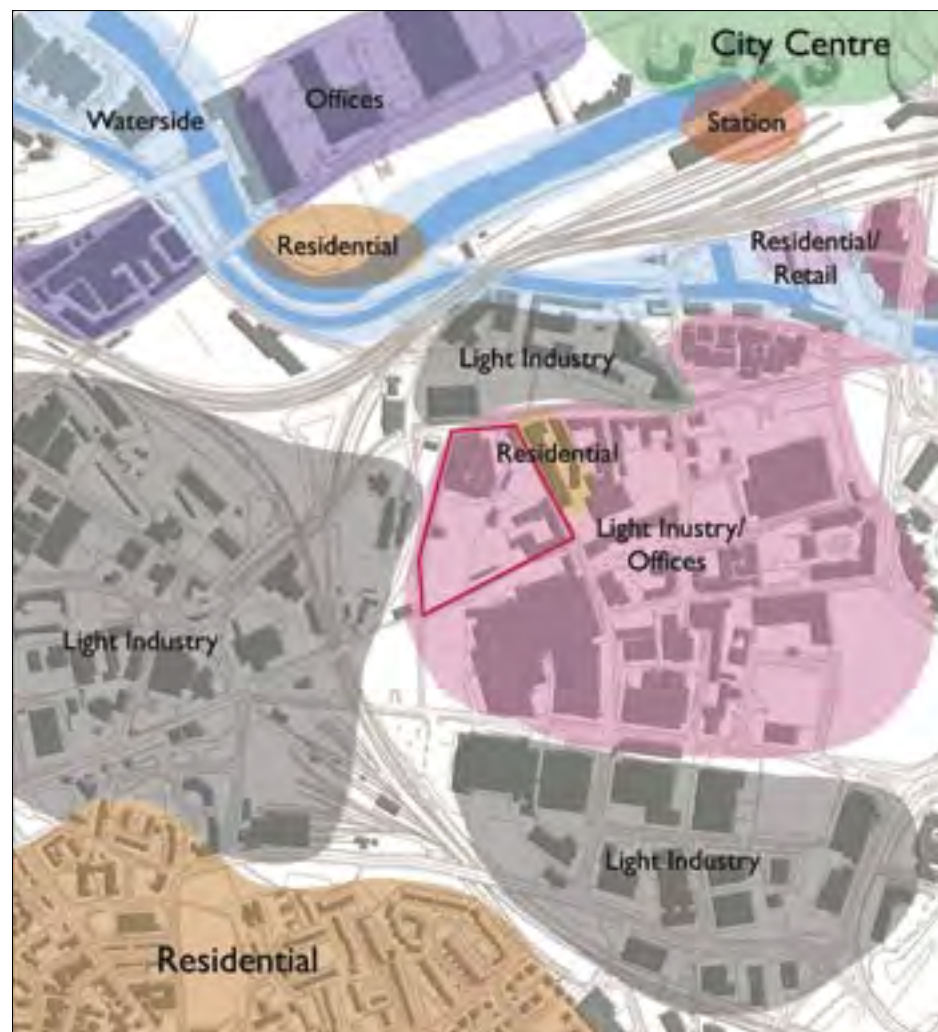
There are two other important routes into the area from the north. The first is the route under the Dark Arches and across the canal. This will become

more important as the arches become established and as the canal side sites are developed. There is also a possibility that this route will link to a new low level concourse for the station that is being suggested by the Leeds City masterplan. The second important route is the proposed new bridge across the River and the canal from the north. This will create a much needed pedestrian route from the new apartment developments and retail development north of the river. These pedestrian routes have the potential to once again knit the Holbeck Urban Village area into the wider city. They mean that the development will become much more accessible on foot to the city centre and will therefore become an increasingly attractive residential and business area.





2c The area today (continued)



Land use:

The area is characterised by a mix of commercial and industrial uses as detailed below:

- ▶ **Industry:** The area remains predominantly an industrial and commercial area. The land to the south, west and east of the site is characterised by small scale commercial premises.
- ▶ **Office development:** This is gradually changing with development of new office development along the canal and Victoria Road. These offices are gradually extending into the area. The conversion of Marshall's Mill and Marshall's Court in the late 1990s was a significant impetus to this.
- ▶ **Mail Order:** To the south of Marshall's Mill the predominant use is mail order including the Temple

Works and a series of very large premises to the south of this.

- ▶ **Creative industries:** New creative and multi media developments are starting to develop in the area, particularly in the Round Foundry and Marshall's Mills.
- ▶ **Housing:** There has not been residential property in the area for many years. The nearest housing is in Holbeck where there is a mix of property including extensive areas of back-to-back housing and tower blocks. However the recently completed Crosby scheme is the first residential incursion into the area.
- ▶ **Underused land:** There are a number of vacant sites in the area as shown on the landuse plan. These are prone to fly tipping. The area around the railway arches still has a number of yard uses which do little to enhance the area.

Development Proposals

There has been a major upsurge in developments in Leeds, including the areas that fall within the Holbeck Urban Village. A number of developments underway or recently completed in the area.

Round Foundry: The Round Foundry is being developed for creative industries and studio space. As part of this Crosby Homes have developed the site on the corner of Marshall Street and Water Lane for 88 residential units with offices, shops and bars.

Bridgewater Place: This major development on the corner of Water Lane and Victoria Road started on site in July 2003. It includes a 30 storey office tower at the southern gateway to the city centre and will become Leeds' tallest building. The ground floor of the building will include cafes and restaurants.

Blue, Granary Wharf: This striking building is under construction on a site next to the station. It will include 61 new homes with mixed uses on the ground floor. The building overlooks the Leeds and Liverpool Canal.

Tower Works: This site has planning consent for a scheme designed by Carey Jones Architects. The development will include public space realm at the foot of the towers along with 350 residential apartments, 5,500sq ft of office space and a mixture of cafes and restaurants.

Leeds Canal Basin: Isis are developing proposals for a mixed use waterside development between the canal and the Dark Arches. This will include two residential blocks and a commercial block.

Whitehall Riverside: Various developments are taking place at Whitehall Quay including The Thistle Hotel HQ, apartments, shops, restaurants and bars.



2d Townscape analysis

As part of the masterplanning process we have undertaken an assessment of the townscape of the area as illustrated on the plan to the right.

The character of the area is currently very mixed. The upper part of Marshall Street has a very urban enclosure and retains some of the grandeur that can be seen on the historical engraving on page 9. However, elsewhere there is very little character or enclosure to the streets and public spaces of the area, in part because it has been lost and in part because it never existed. Water Lane retains some of its character, a unique part of which is the beck that runs on its northern site edge and the bridges crossing this into the industrial premises. The road also has some good frontages, shown in blue on the plan, which follow a consistent building line. However the street is dominated by traffic and does not create a pleasant environment.

Listed Buildings: The area includes 17 listed buildings, foremost of which is the Grade 1 listed Temple Works. Marshall's Mill is Grade 2* and Marshall's Court is Grade 2. The northern section of the wall bounding the site to the west is also listed. Other listed buildings in the surrounding area include the Round Foundry and elements of tower works. In addition

In many respects the area's character is derived more from its landmarks than its form and street based character.

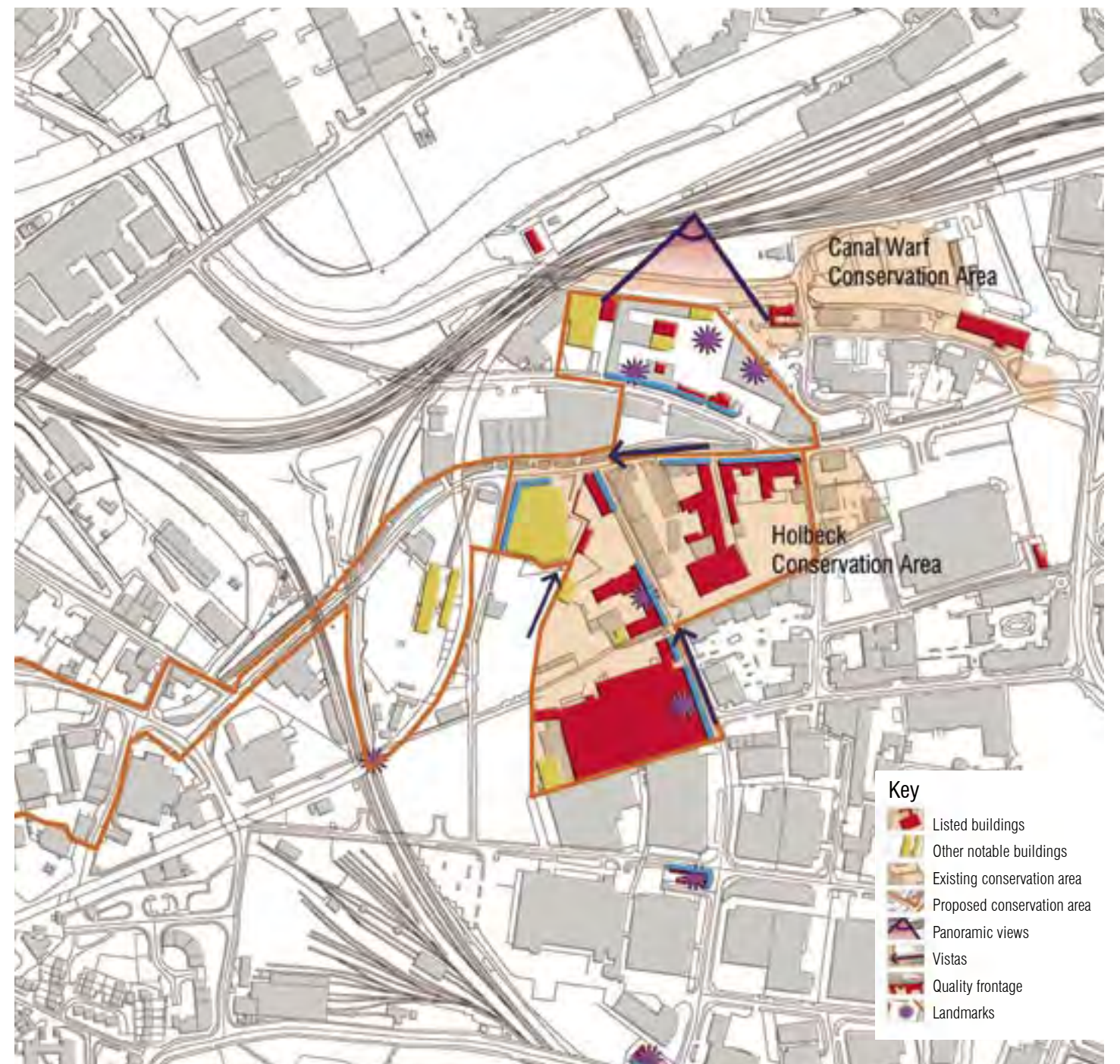
to this there are a number of buildings that are of local interest including the Flax warehouse, the Water Lane printing works and Midlands Mills, between the railway viaducts.

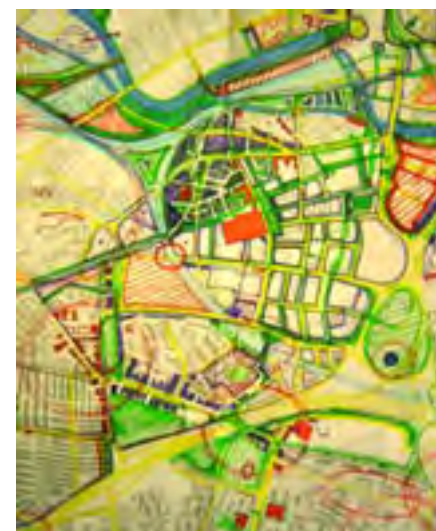
Conservation areas: There are two conservation areas in Holbeck, the Canal Wharf and the Holbeck Conservation area. The boundaries of these areas are drawn very tightly and the Holbeck area excludes Tower Works and Midlands Mills. The Council is planning to extend the Holbeck conservation area as shown on the plan. This will extend the length of Water Lane to include the remaining core of the original Holbeck Village. It will however still exclude the south west section of the Holbeck site.

Views and Landmarks: In many respects the area's character is derived more from its landmarks than its form and street-based character. It is known to millions of people because of the prominence of the tower works chimneys from the railway line. This view is an important panoramic view. Marshall's Mill and Temple works



are important local landmarks. However because of the street-based nature of the layout there are few really good vistas. Perhaps the most important is the view north along Marshall Street. There is also a view along the curve of Water Lane. However because the Marshall's mill site is on the inside of this curve it is not particularly prominent in this view. There is a view within the site towards one of the chimney/towers. This is not a traditional view and is over the roof of Marshall's Court and partly obscured by the new Crosby scheme. It does however provide a visual connection to the towers from the centre of the site.





The BDP masterplan for Holbeck prepared in February 2001

2e Policy context

Planning Policy Context

The adopted Leeds UDP (2001) recognises the importance of Holbeck as an area which formed the cornerstone of the industrial revolution in Leeds. It sets the priorities as the refurbishment and conservation of listed and historic buildings and the development of vacant sites. A wide variety of uses are considered appropriate in addition to the existing workshop and service uses. Holbeck Urban Village is recognised as a new community with Policy H3-1B identifying the area as a strategic site for residential and mixed-use development.

Leeds Vision Masterplan: As part of the Yorkshire Forward Renaissance Cities programme, Koeter Kim Associates have been working with Leeds City Council on a masterplanning framework for the entire council area. This is currently being written up. It is however likely to include the following elements of relevance to the Holbeck Urban Village area:

- ▷ The plan is based on a series of overlapping petals each representing a series of neighbourhoods linked to the City Centre. Holbeck forms one of these petals.

- ▷ A strategic open space network along the Aire Valley.
- ▷ The reorganisation of Leeds Station with the possibility of a new concourse at a lower level feeding into the Dark Arches.
- ▷ A network of strategic routes linking communities together and into the city centre.
- ▷ A tall building cluster to the east of Holbeck in the in the southern approaches to the town centre.
- ▷ Strong linkages to surrounding communities so that they can benefit from employment opportunities.
- ▷ The minimisation of car use.
- ▷ Energy efficient buildings to create an 'exemplar flagship development'.
- ▷ A diverse place with a mix of uses and a strong sense of community.
- ▷ A distinctive character based on restoring and reusing old buildings.
- ▷ Complimentary modern architecture that respects the historic footprint of old buildings.
- ▷ High quality public realm – 20% of the area to be publicly accessible open space.

Supplementary Planning Guidance

Planning guidance was produced for Holbeck Urban Village (SPG 12) in 1999 to guide the development of the area. This is currently being updated and revised guidance is to be the subject of consultation over the coming months. This guidance emphasises:

- ▷ Active ground floor uses with an emphasis on retail, food, drink and leisure uses.
- ▷ The relocation of incompatible uses on strategic sites.
- ▷ 25% affordable housing for rent, sale or shared ownership.

Plans to develop Holbeck as an Urban Village were first conceived in the mid 1990's. A masterplan was commissioned which was published in February 2001.



Urban Design Principles

- ▶ High quality materials such as sandstone, blue slate and red brick.
- ▶ High quality public realm.
- ▶ Entrances to be taken off the main streets.
- ▶ Developments should be at height, scale, plot ratio and massing to compliment adjacent buildings.
- ▶ Traditional building lines to be respected and new buildings built to back of pavement.

Urban Village Proposals

Plans to develop Holbeck as an Urban Village were first conceived in the mid 1990's. A masterplan of the area was commissioned from a team led by BDP. The BDP Masterplan and Development Framework was published in February 2001 (Illustration to the left) based on the work of a team including Jones Lang LeSalle and Martin Stockley Associates.

The Council and Yorkshire Forward subsequently commissioned a series of studies to explore the imple-

mentation of the urban village proposals. As part of this Gillespies prepared the Holbeck Urban Village Regeneration Study in November 2002 to set out a strategy for the public realm of the area. This included the following objectives:

- ▶ The creation of a unique sense of place with contemporary, simple, elegant design.
- ▶ A public realm that contributes to the diversity and excitement of the area.
- ▶ A public realm that respects the historic importance of the area.
- ▶ An enhanced pedestrian environment for residents and businesses.
- ▶ Useful, meaningful spaces that respond to the activities around them.
- ▶ Reduced traffic speeds and vehicular impact.
- ▶ Reduce crime and fear of crime.
- ▶ A network of strong pedestrian routes connecting Holbeck to the city and the surrounding communities of Holbeck and Beeston.

- ▶ A simple pallet of materials throughout the area with variety created through public art, light, texture and local detailing.

As part of this strategy Gillespies produced specific proposals for Bath Road and the railway arches which impact directly on the Marshall's Mill site. Their scheme envisaged that Bath Road would become an active street with a variety of activities taking place making it an important link into Leeds from the surrounding areas.

Another report completed at this time was the Holbeck Urban Village Implementation and Delivery Strategy (November 2002). This was prepared by GVA Grimleys and recommended:

- ▶ That a special purpose delivery vehicle be established as a partnership between Yorkshire Forward, Leeds City Council and other stakeholders.
- ▶ That Yorkshire Forward should use CPO powers to assemble strategic sites.
- ▶ That support should be provided to industrial uses to help them to move to alternative sites.

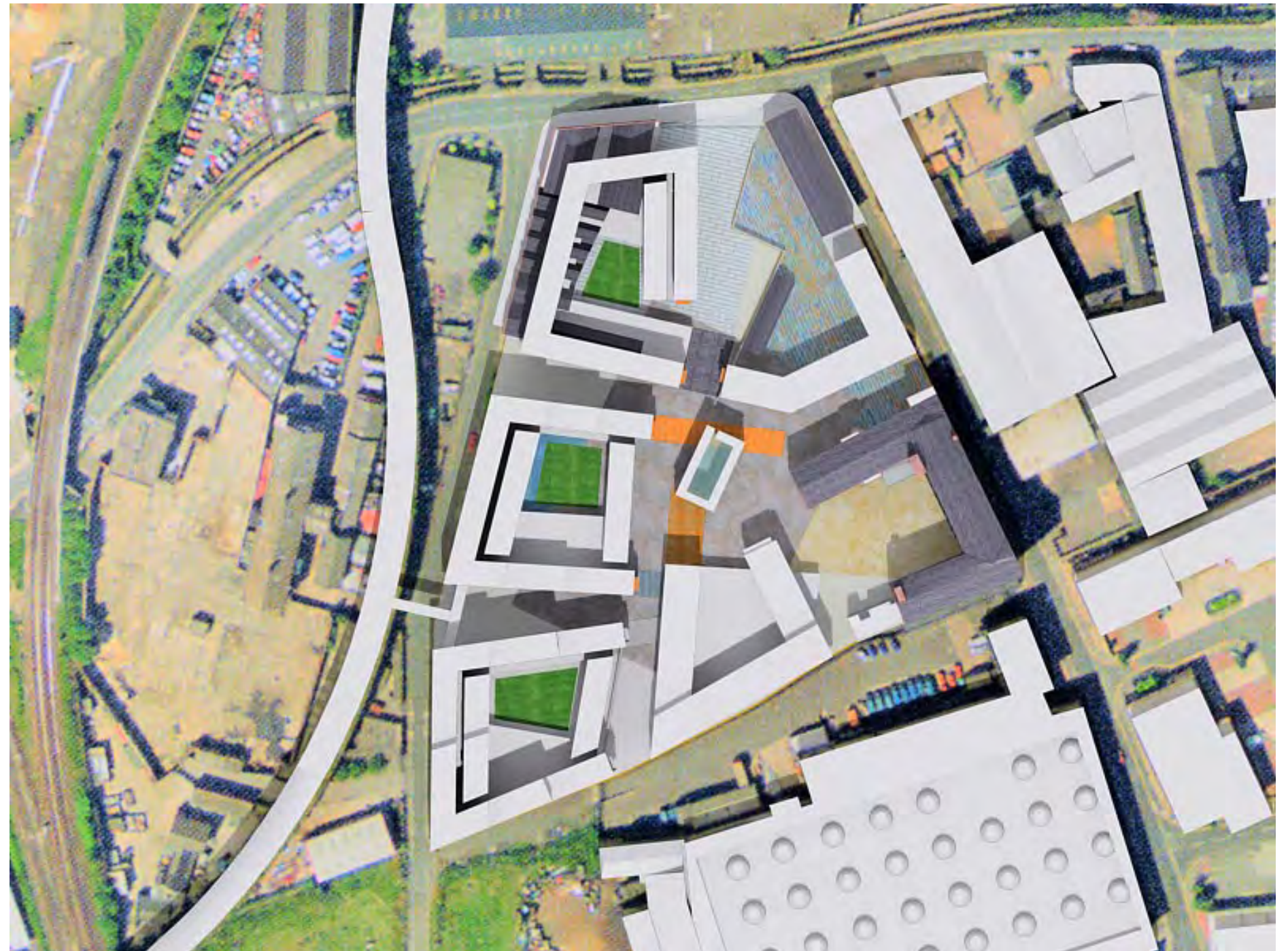
- ▶ That SPG 12 be re-written to reflect the vision for the area and to provide site-specific guidance for developers.
- ▶ That new housing schemes should incorporate 25% social housing to avoid stand-alone schemes.
- ▶ That affordable workspace should be provided to assist business start-ups.
- ▶ That business support be provided through a single point of contact to ensure local communities benefit and to attract, manage and distribute funding from various sources.

A further report was produced by GVA Grimleys in May 2003 to look at the development potential of the Marshall's Mills site. This investigated the opportunities and constraints of the site and its potential to contribute to the Urban Village. It recommended that it represented a major development opportunity for the area.

Plans and illustrations from Gillespie's work on the public realm of area.



PART 3: Masterplan Development



3a Reconnecting Holbeck Urban Village



In this section we describe the development of the masterplan for the Marshall's Mill site within the context of the urban village as a whole. We look first at the way in which Holbeck Urban Village can be integrated into the wider area. This is then developed into a hierarchy of routes for the area and a set of principles based on a 'super block' structure. These principles are then applied to the masterplanning of Marshall's Mill.

While it goes beyond the bounds of this masterplan, one of the exercises that we have undertaken has been to develop an understanding of how Holbeck Urban Village can start to function more effectively as a village. As we describe in the first part of this design statement, the area now referred to as Holbeck Urban Village was originally a piece of open land between Leeds and Holbeck Moor. Plan 1 illustrates the original pattern of settlements in the area and the roads that served them.

Plan 2 shows the same area today and illustrates how this part of Leeds has been carved up by infrastructure isolating each of the former villages. Holbeck itself has almost entirely disap-

peared with only the occasional remnants of the former village high streets visible on Holbeck Lane through the industrial area that stands there today.

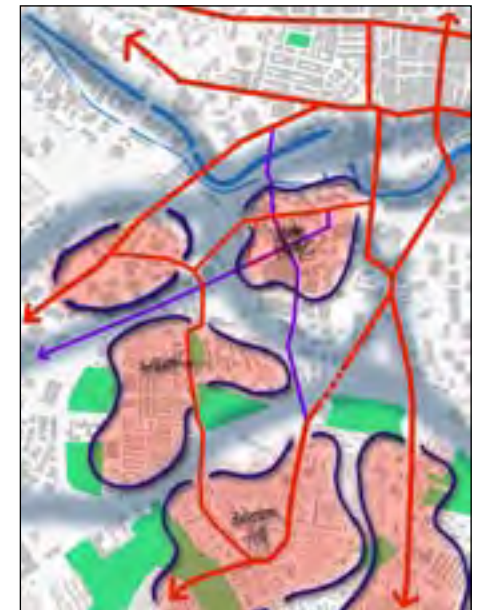
In a healthy urban area the former villages of South Leeds would have been engulfed by the expanding city and become the centres for urban neighbourhoods as has happened in North Leeds. This has happened to an extent in Beeston Hill and Hunslet Moor. However Holbeck Moor has become isolated from the city and Holbeck itself has disappeared. This is because the arteries that connected the villages (the red line on the plan) have been cut by the railways and the motorway. It is in this context of isolated and, in Holbeck's case, lost urban villages that we must approach the task of creating Holbeck Urban Village.

At the moment the best that Holbeck Urban Village can aspire to is to be a quiet urban backwater. This is not necessarily a bad thing. Some of the most beautiful districts of Paris and Berlin are just such havens of tranquillity – Rock pools away from the rush of the city streets. However an urban village implies more than this – it suggests a mix of uses, some ground floor retail and café uses, a degree of life and activity on the streets. Other than the traffic heading down Water Lane to the ring road this, in our analysis this is going to be difficult to achieve in Holbeck Urban Village.

It is therefore important to improve the connectivity and permeability of the area. This is partly about the number of connections to the surrounding area but it is also about the quality of those connections. The greatest potential to improve connections in this part of Leeds relates to pedestrian routes such as the viaduct project, the route under the dark arches and the new bridge over the Aire. We also believe that there is potential to make a new pedestrian connection across the railway

to the south into Holbeck Moor. This could greatly improve access by foot and encourage pedestrians and cyclists to use the routes through this area to get into Leeds City Centre.

Pedestrian footfall alone will not be sufficient alone to enliven the urban village and it will also be important to improve traffic access. Here the main proposal is the opening up of the Sweet Street bridge as a road access to the ring road. This will have the effect of reducing the traffic intrusion on Water Lane and increasing the permeability of the wider area. In our view this could allow the development of a route via Water Lane and Bridge Road to connect the city centre to Holbeck Moor. The key would be to populate this route with frontage development in order to create a supervised, pedestrian friendly route. Plan 4 shows a series of routes that have been improved in this way to reconnect the neighbourhoods of inner south Leeds. They would create network of attractive pedestrian, cycle and even vehicle routes into Leeds while avoiding the traffic-dominated areas around the motorway junction.





3b Masterplanning structure

The above analysis of potential routes in the Holbeck area has been used to inform a street hierarchy as illustrated on the plans below. This is based on a simple street hierarchy based on the following streets:

4. The local street network is used to create a more fine-grained framework of blocks. These will be lower in scale on the local street network. These local streets will also create new public spaces.



▶ **High Streets:** High streets carry much of the through traffic through an urban area and should be the important streets in terms of buildings and uses such as shops and public facilities. We are suggesting

that Water Lane, Globe Road as well as Sweet Street should develop over time as high streets.

▶ **Secondary Streets:** These are the streets that carry local traffic into the area. They generally sustain more local facilities. We are suggesting that Marshall Street and Bath Road should be developed as secondary streets through the area.

▶ **Local Street:** The other streets in the area are local streets that provide access to individual buildings. These include most of the other streets in the in the area. However one of the problems with Holbeck is that the network of local streets is very poorly developed.

▶ **Courtyard routes:** In certain urban areas there is another set of routes that pass through blocks. This can be seen at its most developed in Berlin but is not alien to the English tradition where there is often a network of alleys and ginnels that is overlaid on the broader street network. As part of the masterplan we have been keen to explore these routes in Holbeck.

The lack of a strong network of local streets in the Holbeck area reduces its permeability and has the effect of creating very large blocks.

The lack of a strong network of local streets in the Holbeck area reduces its permeability and has the effect of creating very large blocks. This happened because of the super block structure that is described earlier in this document. The Marshall's Mill site is part of a super block that stretches from Water Lane to Union Place and from Bath Road to Marshall Street. Indeed Union Place is partially a pedestrian route so that the block could be said to extend as far south as Sweet Street.

In preparing a masterplan for Marshall's Mills our aim has been to create a new network of local streets to open up the permeability of the area. However in doing this we also have sought to retain its 'super-block' structure which is part of its original character. This is described on the diagrams to the left and is based on the following principles:

▶ The masterplanning of the area should be based on a series of Su-

per-blocks that represent the original plot structure of the area (Plan 2).

▶ These super blocks are created by the High Streets and Secondary streets

▶ The height of buildings should be built-up around the edge of these super blocks to create a robust urban environment on the primary and secondary street network.

▶ An entirely new local street network should be created that divides up the super blocks into a series of development plots and also creates a series of intimate pedestrian friendly routes through the area (Plan 3). We have suggested how this network could be extended through the rest of the area to link to the new Aire Bridge, The Dark Arches and adjacent areas.

▶ The building scale should drop at the centre of the super blocks so that the local street network has a different and more intimate character (Plan 4).

▶ The local street network should include a range of small squares and public spaces that provide places to

linger and relax.

▶ Active frontage commercial uses such as shops and cafes should generally front onto the primary/secondary street network. However there is the potential for some units on the local street network (and double fronted units) to animate these more intimate spaces.

▶ The ground floor of the blocks on the secondary street network should be predominantly live/work and commercial space to animate the streets during the day.

▶ There should also be a number of courtyard routes, which cut through blocks. These should be gated at night but will contribute another layer to the public realm during the daytime. These are shown in blue on the plan.

These principles have been suggested as a way of guiding and giving structure to the overall Holbeck Urban Village area. More specifically they have shaped the Marshall's Mills masterplan as described on the following page.



Right: The illustrative masterplan for the site.
Above: The masterplan set within a potential wider framework



3c Masterplan - Form

The primary and secondary street network will generally allow for a series of long views through the area. The local route structure will however create a series of much more enclosed views.

The Marshall's Mill masterplan is illustrated by Plans on the following pages. This has been developed on the basis of the principles set out on the previous pages with the massing increasing at the edge of the block on Marshall Street, Bath Road, Water Lane and Union Place and stepping down towards a new local street network that penetrates the site. This scheme is described in more detail below:

Design form

Marshall's Mills is currently on a triangular site. The main mill building

stands on Marshall Street with a lower building at the corner of Marshall Street and Bath Road and two smaller ancillary buildings to the rear. The two rear buildings are linked to a wall, which is the original boundary of the site and is partially listed. The starting point for the masterplan has been to retain these built structures as far as possible. We have therefore created a new north south spine running through the site. This runs to the west of the wall in the northern part of the site and to the east of the wall to the south. This is connected to a new route running to the North of Marshall's Mills – which will put the mill entrance onto a road frontage.

At the intersection of these two routes we have created a new intimate public space – or inner court – while retaining the Flax Warehouse that stands in this part of the site. This creates a

The market square in Richmond



An illustration of the principle of a building in a square from Bacon



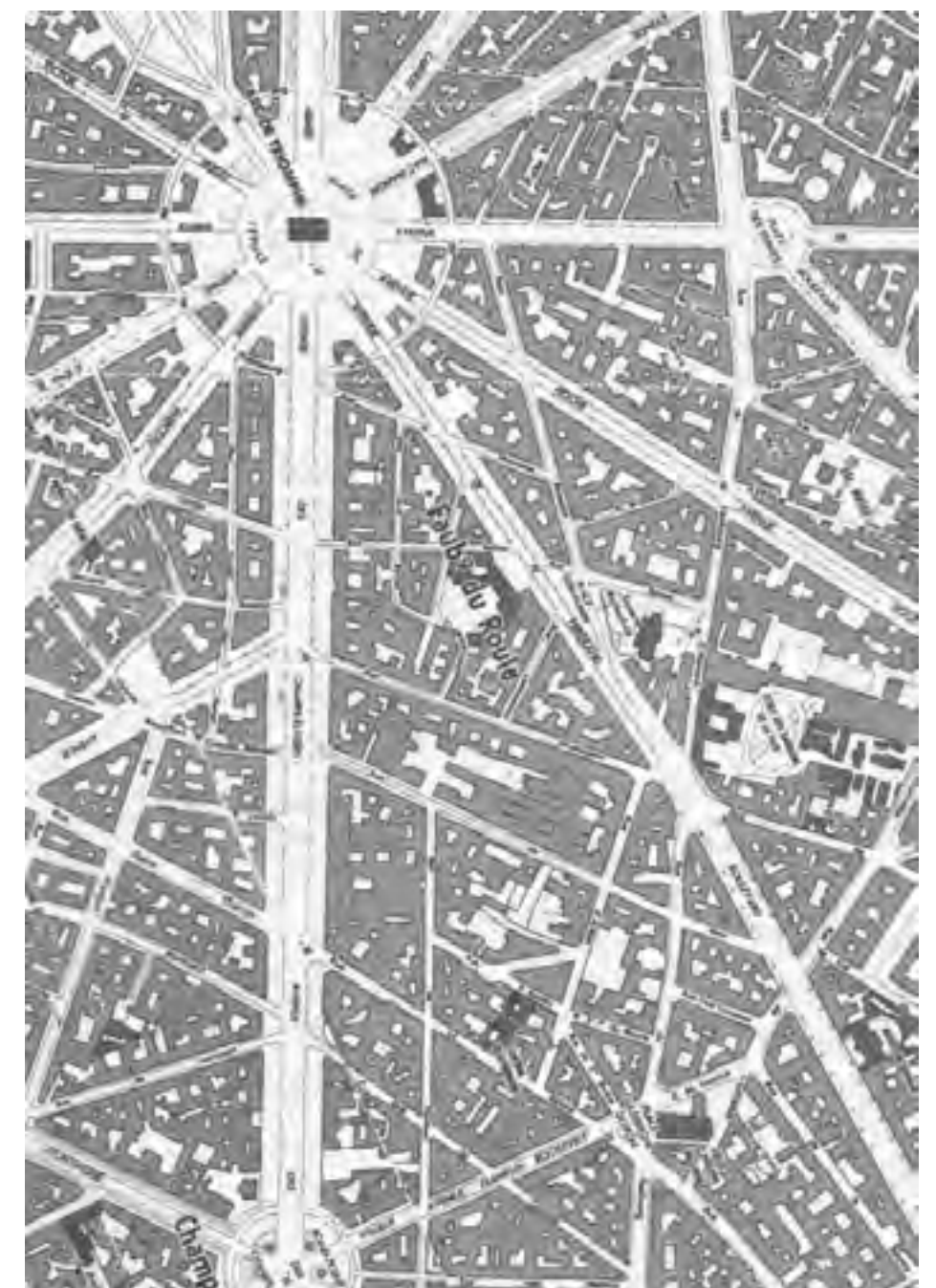
Each of the views into the site is closed in the manner described in Gordon Cullen's classic study of townscape. The deflection of the buildings; 'arouses expectations that it is doing this for some purpose, that there is a place at the end of the street as yet unseen'



Camillo Sitte-type square – with the building playing the role of the medieval church standing within the space. No changes are currently proposed in relation to this building which is currently used as a training centre. However, it will be important to ensure that the Flax Warehouse plays an appropriate role within the overall scheme. The building, which appears to have originally been built almost as a brick fortress with few window openings, has been altered in an unsympathetic way and its roof altered and lowered to a flat roof structure. It is therefore intended to make a separate application in due course for a public use on the ground floor such as a restaurant or gallery with a potential additional storey in the form of a lightweight glass box. Any application submitted will pay attention to the historical importance of the building and take account of the

views of West Yorkshire Archaeological Service and English Heritage in drawing up a detailed scheme. The western part of the site is set out with three blocks as described below. These create two east/west routes into the site. It is proposed that the northern route be a courtyard route that is gated at night and therefore becomes private to that block. The primary and secondary street network will generally allow for a series of long views through the area. The local route structure will however create a series of much more enclosed views. Each of the views into the site is therefore closed in the manner of a medieval town. However each view also leads the view on into the site drawing people in. The central square will therefore open up as people walk into the site and from within the square there will be limited views out. This is the type of serial vision described by the urban designer Gordon Cullen in his book Townscape.

This contrast of long views on the primary streets and serial vision within the super block is at the core of the scheme concept and draws lessons from many European cities which also have overlays of grand planning on the main streets of an earlier medieval structure.



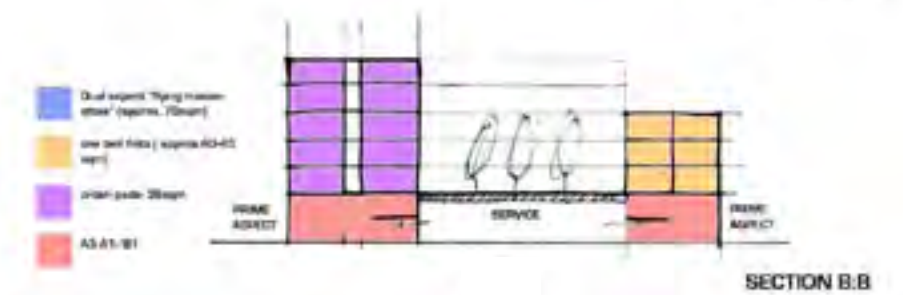
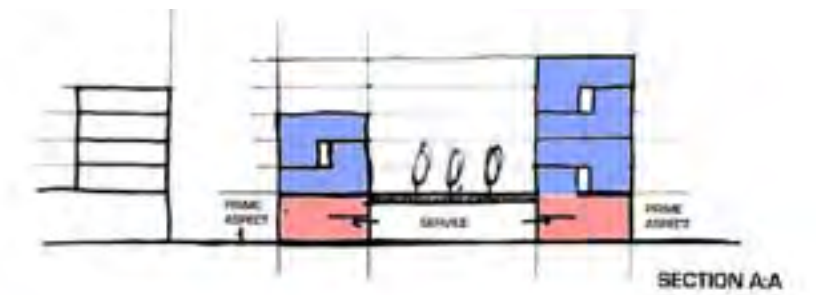
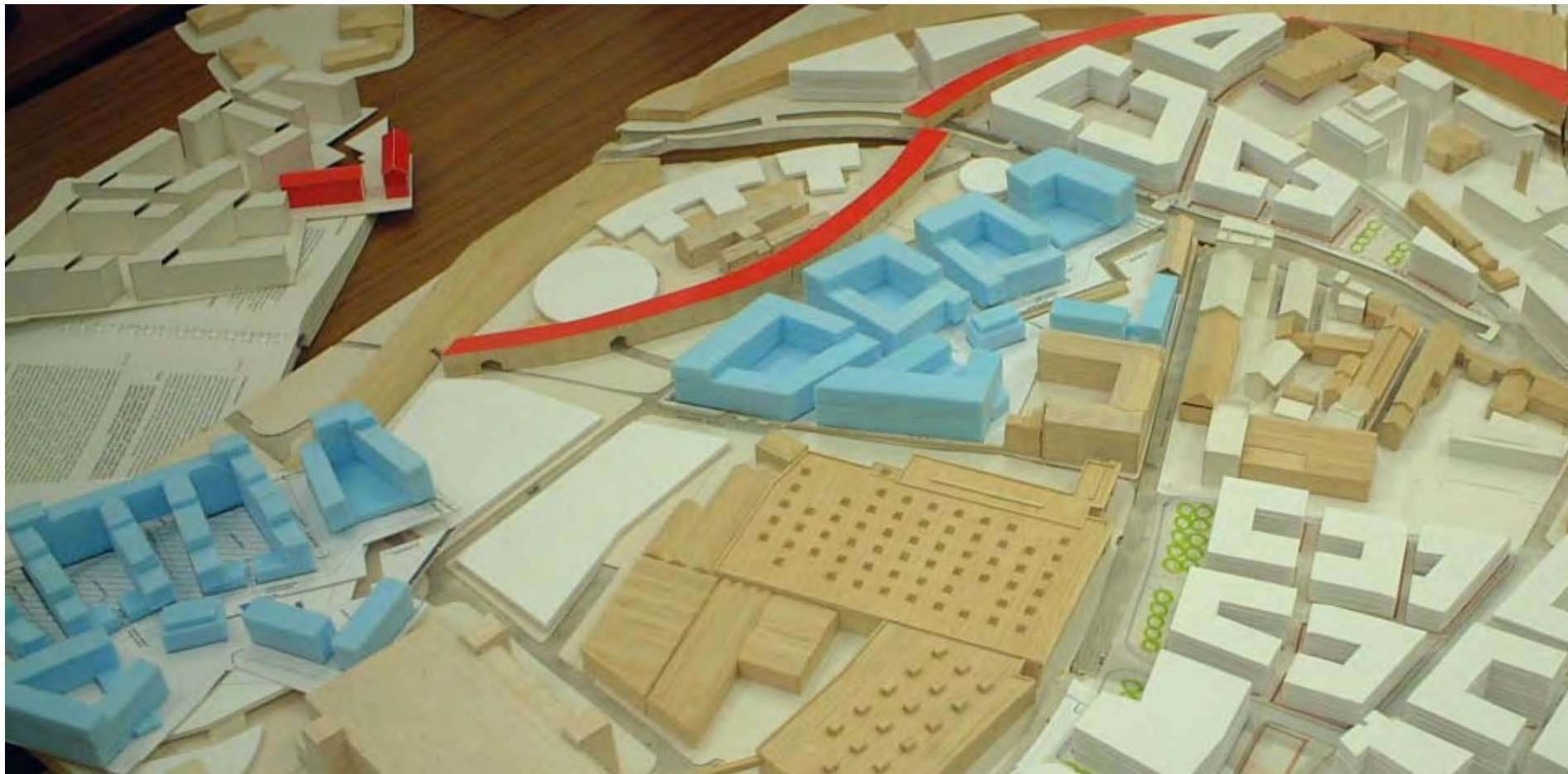
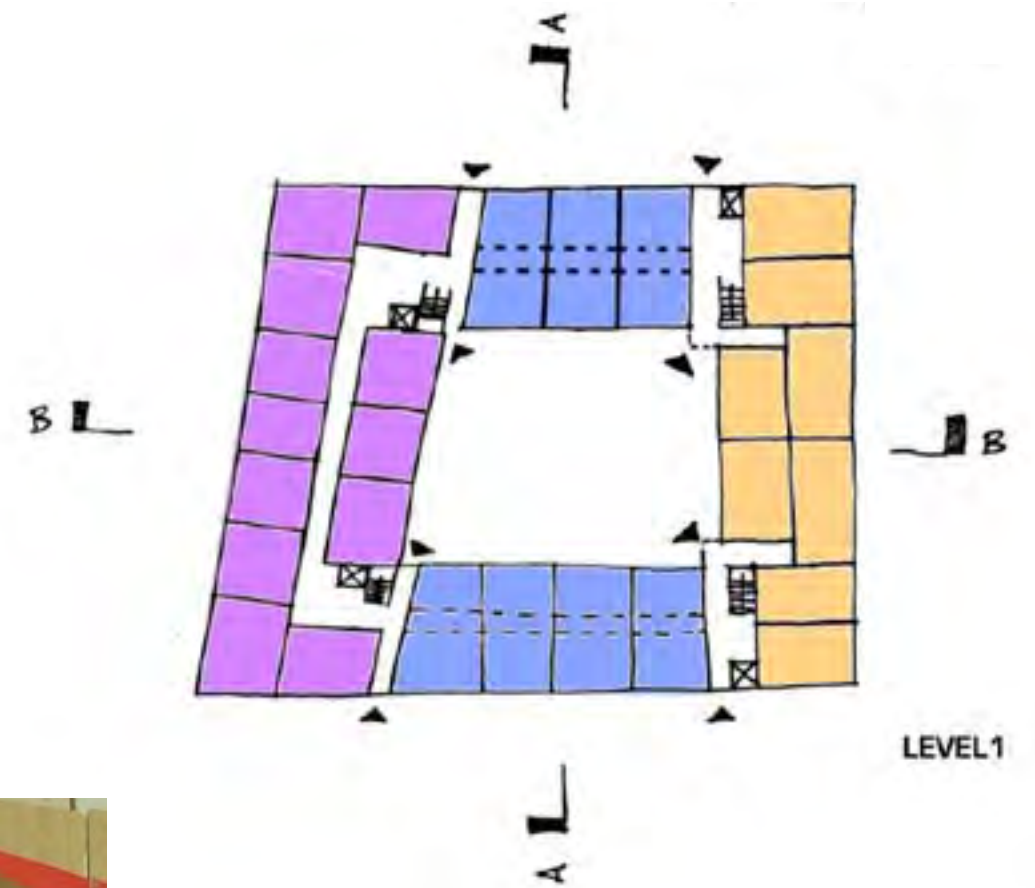
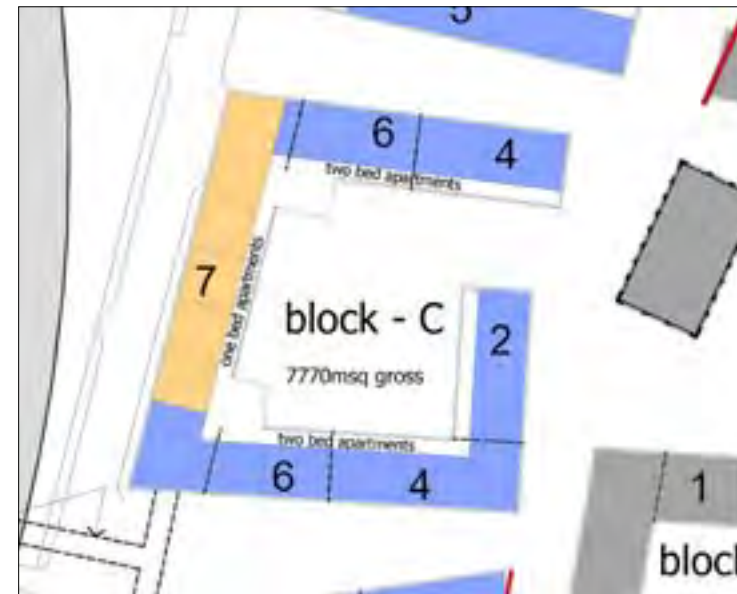
Paris is a mixture of formality on the major streets and a more 'crumbly' medieval structure on the minor streets.

Right: The Flax Warehouse stands within the central space (the Inner Court) like a medieval church or market hall



Far Right: Views into the site are closed and the buildings are angled to draw the viewer in.





3d Masterplan - Blocks

Block Structure

In order to achieve this layout we have engineered the urban blocks very carefully. Much of the urban development outside city centres is designed as perimeter blocks. This involves dual-aspect houses and apartments around a secure inner courtyard. It requires blocks that are at least 40m deep in order to achieve an internal privacy distance. This means that perimeter blocks are difficult to accommodate on tight city centre sites. There is also a limit to the density at which this type of perimeter block can be built which is around 200 units per hectare.

In city centres it is more common to develop flats as corridor blocks or 'double loaded' blocks. These involve single-aspect apartments off a central corridor and tend to be 20-25m deep. This is the way that many conversions of warehouses have been undertaken. How-

The blocks are based on a hybrid block form. The outer faces of the 'super block' have been double loaded while the east/west blocks are dual aspect.

ever for new-build schemes there can be problems with corridor blocks. Because the apartments are single aspect, there is a need to provide space around the block to achieve privacy, natural light and solar gain. There is also the problem that some apartments end up with a single northern aspect. It is therefore necessary to space blocks 20-25m apart. This is fine on large city streets (The Briggate for example is 20m wide). However it makes it difficult to create residential accommodation onto narrow urban streets.

While double-loaded blocks are very efficient internally, in terms of footprint (the coverage of the building on

the ground) the corridor block is therefore only marginally better than the perimeter block because of the space required around the building. This also leads to a modernist, object oriented layout.

On the Marshall's Mill site the character of the local street network that we are seeking to create is based on streets that are, in some places, as narrow as 8m. This means that we cannot rely on this space alone to provide light and privacy to apartments. We have therefore created a hybrid block form that is part perimeter and part corridor block.

While we are not seeking consent as part of the outline application for the internal arrangement of the blocks, URBED and Bauman Lyons Architects have explored in some detail how they can be realised as illustrated in the facing page. In these studies the outer faces of the 'super block' have been double loaded while the east/west blocks are dual aspect. The double loaded blocks are possible because they look out onto Bath Road where there is the width to

allow light and privacy even when the viaduct arches are developed. The inward facing apartments have a privacy distance across the courtyard and are able to receive light because the block steps down towards the centre of the scheme.

The remainder of the blocks are dual aspect and are accessed by balconies on the internal face of the courtyard. This balcony is linked to the corridor of the double loaded apartments and is accessed by cores that access both the street and the courtyard. The aim is for the courtyard to become the main means of access to the apartments. The block layout suggested by Bauman Lyons (opposite right) is based on similar principles except that the east west blocks are designed as 'sissor flats' (shown in blue). The east /west apartments could also be designed as walk-up blocks with individual staircases serving each pair of apartments.

These different forms have been tested by the masterplanning team (see photograph of the modelling options). From this work we are confident that there are a number of options for planning the blocks in line with planning policies. This achieved net residential densities of between 250 and 330 units per hectare depending on the layout chosen.

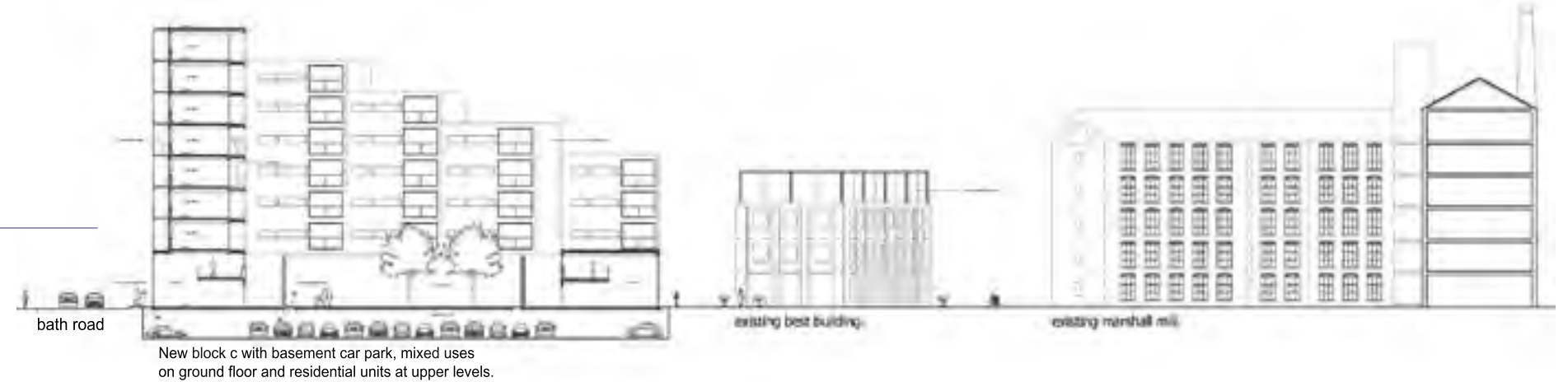
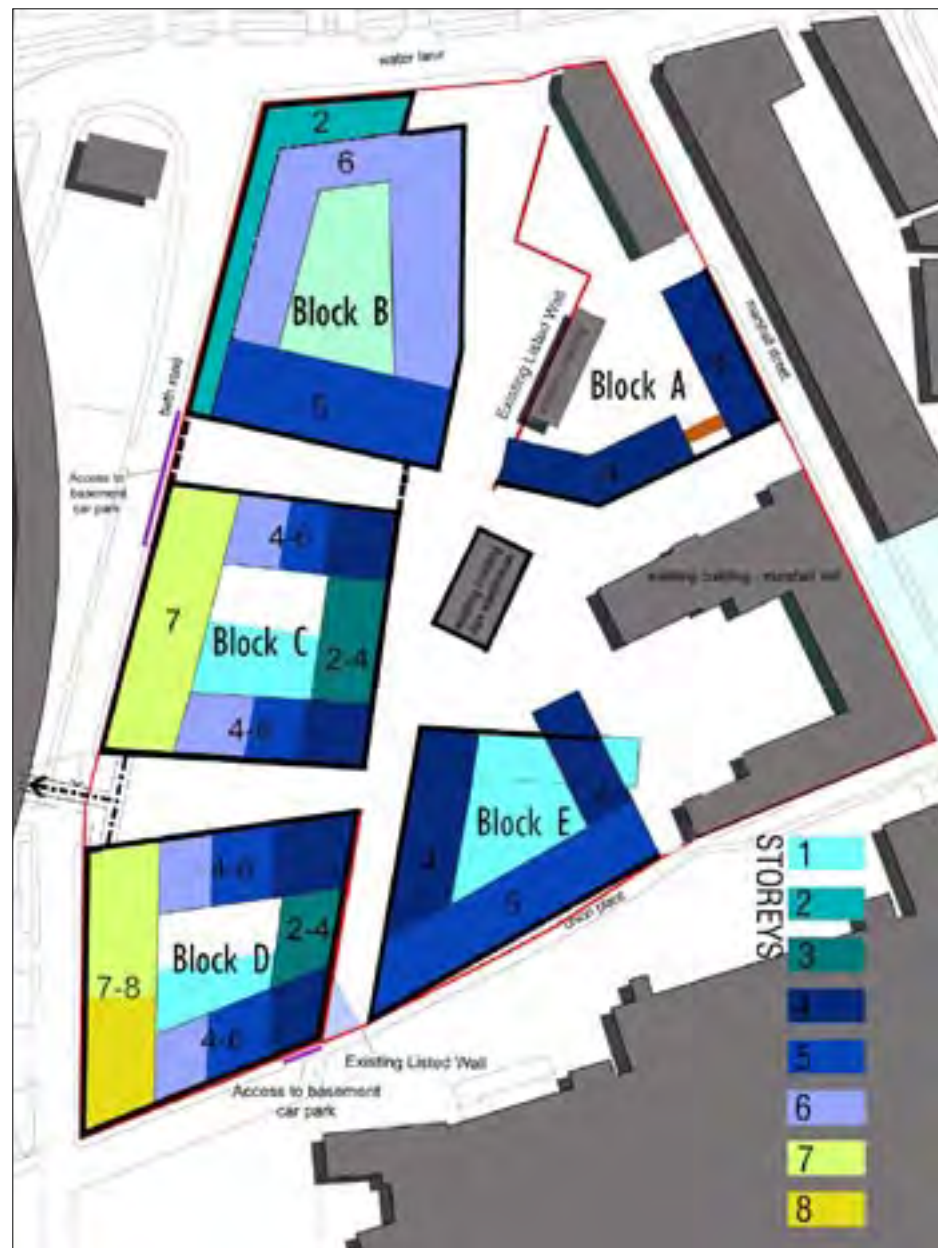


Right: The illustrative scheme shows the blocks stepping down towards the inner court



3e Masterplan - Massing

The massing has been designed to maintain the setting of Marshall's Mill. It has also been guided by the 'super block' principle with higher buildings around the edge of the site and lower buildings in the middle.



The proposed height and massing of the blocks within the masterplan is illustrated on the plan to the right. The colours on this plan relate to the illustrative scheme (below) while the numbers represent the flexibility sought as set out in the Regulatory Plan.

The massing of the scheme has been designed to maintain the setting of Marshall's Mill. It has also been guided by the 'super block' principle with higher buildings around the edge of the site and lower buildings in the middle. The blocks are designed as 'U'

shapes. At one point we considered leaving the inner face of these blocks open and enclosing the inner court space with the gables of the blocks. We were however concerned about the level of enclosure and have therefore closed this face albeit with lower blocks, shown on the illustrative plan at 3 storeys.

The illustrative layout does however maintain the notion of the gables of these buildings playing an important role in enclosing the central space. These gables project forward of the building line at first floor level in some cases

over the listed wall. The ground floor of the scheme is proposed as commercial, live/work accommodation and has a 6m ceiling height so that it can potentially accommodate a mezzanine level. There is a basement car park beneath blocks C and D but this does not project above the ground level.

The massing of the blocks is therefore as follows:

- ▷ **Block A:** These blocks are 4 storeys high in order to mediate the difference between Marshall's Mills and Marshall's Court.
- ▷ **Block B:** The hotel at the northern end of the site rises and is maintained at 2 storeys behind the retained facade of the Water Lane Printing Works. Behind this the hotel rises to six storeys. This is lower than some of the blocks in the southern part of the scheme despite this being an important street frontage. We have been concerned to relate this block to the more domestic scale of the Round Foundry frontage and the new residential scheme that has been completed on the corner of

Marshall Street.

- ▷ **Block C:** This building is on the central part of the Bath Road. The block rises to 7 storeys on Bath Road and then steps down into the site to 3 storeys fronting the inner court. This stepped building form creates the opportunity of a series of roof gardens and balconies.
- ▷ **Block D:** The block on the corner of Bath Road and Derwent Place is similar in form to Block C. This rises to 8 storeys on this corner then stepping down to 4 storeys adjacent to block E the east.
- ▷ **Block E:** This is to be a commercial block so that the floor to ceiling heights will be greater than the residential accommodation. The frontage of this block benefits from an existing planning consent and we have kept the massing within the envelop of this consent. The block therefore rises to five storeys at its highest point along Union Place.



3f. Masterplan - Townscape and Heritage



The masterplan area lies within the Holbeck Conservation area and Marshall's Mill and Marshall Court are listed buildings. Most significantly for the masterplan, the wall that runs through the site from Bath Road to Derwent Place is listed for part of its length. The building in the centre of the site is also recognised in the SPG for the area as a building of local importance and Water Lane Printing Works, while of little heritage importance, does have an attrac-



Right: The boundary wall running through the site, part of which is listed. The sections shown in red are those to be demolished.

The scheme requires applications for listed buildings consent for the demolition of part of the wall and conservation area consent for the demolition of the Water Lane Printing Works.

tive frontage. The site is also bounded by important heritage sites including Temple Works to the south, the towers site to the North, the Round Foundry to the east and the listed railway viaduct to the west.

This application is accompanied by a heritage statement prepared by Tom Hassall OBE, Archaeological and Heritage Management Consultant. It requires applications for listed buildings consent for the demolition of part of the wall and conservation area consent for the demolition of the Water Lane Printing Works.

The masterplan seeks to deal sensitively with all of these herit-



age issues. URBED's approach to masterplanning is based in part on a 'rediscovery' of a site's history and this has guided our approach here. The masterplan does this in the following ways:

- ▷ We have retained two significant sections of the wall running through the site. The northern section – which is listed forms the boundary to the north/south public route that runs through the site. A southern section of the wall is incorporated into Block D. This is incorporated into the external wall of the ground floor of the building and is used to disguise the ramp to the underground car park. The illustrative plan suggests that the upper floors may oversail this wall. It is proposed to demolish a small part of the wall to create the Inner Court Square. This is unavoidable in order to create



permeability through the scheme.

- ▷ We have used Block A to complete the blocks created by Marshall's Mill and Marshall's Court. The block fills the gap in the frontage onto Marshall Street and creates a new local street so that the entrance to Marshall's Mill is on a street frontage.
- ▷ We have retained the Flax Warehouse in the heart of the site as a feature in the middle of our new square. This is a plain but robust structure and at present the planning application retains it in its present use and form. However, it will be important to ensure that the building functions as an integral part of the Masterplan given its central location and discussions are taking place with the owners with a view to opening up the ground floor with a public use on the ground floor and a potential additional floor to

enhance its appearance and sense of importance at the heart of the square. Whilst it is not a listed building in its own right, it does lie within the curtilage of the listed Marshall's Mill and hence a detailed planning and listed building application will be submitted separately in due course.

- ▷ We have retained the façade and roof of the Water Lane Printing Works. While this frontage has limited heritage importance it is an attractive, well proportioned façade and will create a sense of continuity and history to this important corner of the scheme.

The scheme is also designed with reference to the surrounding heritage buildings. The north/south route through the site is on the line of the original street through the site and has the potential to link to the surrounding sites. The Long-established footpath route through Union Place is also retained and we have suggested that a new square be created in front of Marshall's Mill and Temple works to provide a fitting setting for these buildings.



ELEVATION OF WALL LOOKING EAST

Tight courtyard block with internal gallery access, Borneo, Amsterdam



Cafes trading into courtyards in Berlin



High density mixed use development in Oxford (left) and Coin Street, London



3g. Proposed Uses



The scheme is designed to create a dense, mixed-use quarter that will generate activity throughout the day as well as being able to adapt to the market as the Urban Village develops. The blocks have been designed to maximise active ground floor uses. To this end there is no residential accommodation at ground level which is made up of a combination of workspace, live/work and retail/cafe space. In developing these proposals we considered where the ground floor retail/cafe space should be located. It was tempting to locate this in the heart of the site and we have indeed suggested that there could be a cafe in the base of the Flax Warehouse. However the road hierarchy suggests that the active uses should be located around the edge of the super block to benefit from passing trade. We have therefore located the cafe/restaurant uses on Bath Road in anticipation of this developing as a lively route as set out in the Holbeck Strategies. These cafes have the potential to trade both into the street and the internal courtyard. The uses of the blocks are therefore;

- ▷ **Block A:** This is proposed as workspace buildings operated in a similar way to Marshall's Mill. It is proposed that the planning consent allows for the use of the ground floor of these blocks for gallery space.
- ▷ **Block B:** This is to be a mixed use block comprising of a total area of

There is no residential accommodation at ground level which is made up of a combination of workspace, live/work and retail/cafe space.

10,645m² incorporating the facade of the Water Lane Printing Works. The block will incorporate a 125 bed hotel and residential apartments on the upper floors. The reception and public facilities of the hotel will create active frontage onto the north/south route running through the site. The ground floor of the residential block will be workspace, live/work space.

- ▷ **Blocks C and D:** These blocks are similar in form. They include 225 units of residential accommodation on the upper floors. The ground floor of these blocks will include a range of uses to animate the public realm. These include café/restaurant space fronting Bath Road, entrance lobbies into the courtyard for the housing above, workspace and live work units. To accommodate these uses the ground floor will have a 4m ceiling height. The live/work units can be linked to the apartments on the first floor. These units together with the workspace will have entrances off the surrounding streets and shop frontages for the display and potential sale of goods. We are therefore seeking a flexible planning consent on these ground floor units that allows them to be used for workspace, retailing and café/bar use.

- ▷ **Block E:** This is a commercial block with 6058m² of commercial space on the upper floors. The ground floor is to include reception and communal facilities for the workspace.

Block	Area	Residential		Workspace	Hotel	Active Uses *1.
	Sq. m.	Sq. m.	Units	Sq. m.	Sq. m.	Sq. m.
Block A	2,772			2,772		
Block B	10,645	3,544	44	648*2	5,806*3	647
Block C	10,233	8,339	111	947*2		947
Block D	11,127	9,171	114	978*2		978
Block E	6,058			6,058		
TOTAL	40,835	21,054	269	11,403	5,806	2,572

At the heart of the site is the Inner Court, This is the focus for the local routes through the area and is designed as an intimate space within the urban structure.

Public Realm



This is a resolutely urban scheme so that the public realm is made up of a series of urban spaces that will accommodate urban life, as opposed to recreation play etc. There is a total of 4,838m² of public realm within the site constituting 23% of the site area. In addition to this there is 2,238m² of communal space within the blocks that will be available for use by the residents of those blocks. The public realm is made up of the following elements:

▶ **Inner court:** At the heart of the site is the inner court as described above. This is the focus for the local routes through the area and is designed as an intimate space within the urban structure. This is part of a predominantly pedestrian movement network and creates a haven of calm where people can rest and linger, associated with the public uses that populate ground floor space around the square. The stepping down of the buildings to this point will create a more open feel to this space.

▶ **Local routes:** The local routes will be a network of intimate, shared surface streets that criss-cross the site. These will be spaces with a very urban enclosure ratio. As described above, these spaces are also contained because the vistas along these routes are closed. These routes vary in width and the height of the enclosing buildings in order to create a variety of spaces and character. The largest of the spaces created is in the crook of the listed wall.

▶ **Courtyard Routes:** Two of the blocks are bisected by courtyard routes. These run between blocks B and C and between Block E and Marshall's Mill. These routes will add to the permeability of the area during the day but will be closed at night, thus becoming internal to the block.

▶ **Courtyards:** Within each of the blocks is a courtyard. This will be an actively used space because

it will be the main access to the flats above. The upper floors will be circled by a series of balconies giving access to the apartments. The ground floor will include seating and planting and can also have a frontage to the café/restaurant uses on the ground floor.

▶ **Roof gardens:** The stepped form of Blocks B-D would permit the creation of a series of 'hanging gardens', depending on the design of the detailed schemes.

▶ **Public square:** The above public

realm provides a variety of spaces within the scheme. However we are aware that Holbeck Urban Village also needs a more public space that can act as a focus for the public life of the area. We believe that there is potential for a public square on Marshall Street in front of the Marshall's Mill and Temple Works. This lies outside the application site but we would support its creation as a setting for these important listed buildings. The space could accommodate a range of uses and would require the redevelopment of the blocks around this new square to create enclosure and enlivening activities.

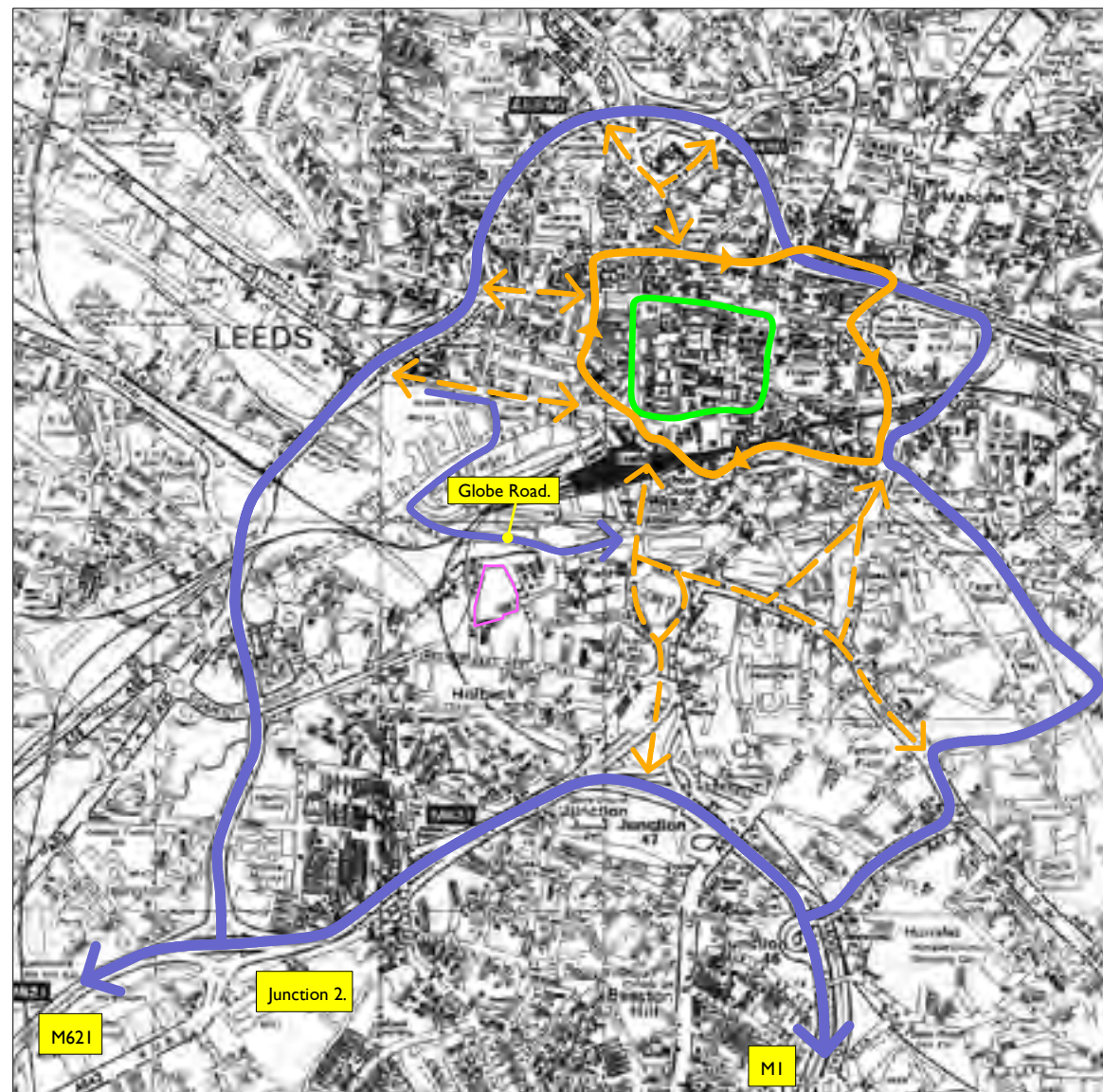


PART 4: Transport Strategy

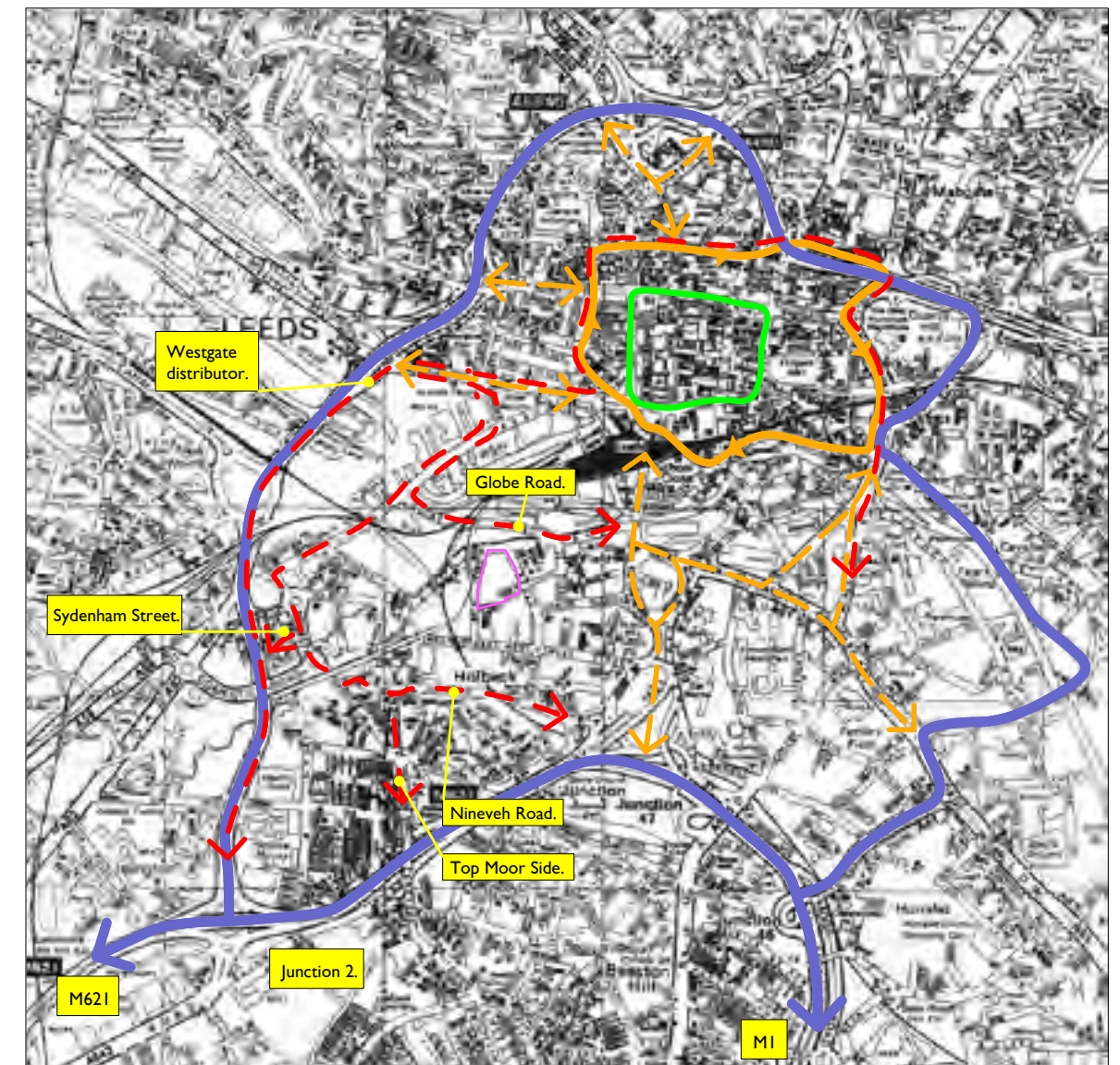
Martin Stockley Associates

Key - Existing Strategy and alternative routes to the motorway after traffic calming on Globe Road

- Public Transport Box Priority for buses, cycles and taxis.
- City Centre Loop, one way.
- Inner Ring Road.
- - - Alternative routes to the motorway after traffic calming measures along Globe road.
- Site boundary



1. Current Transport Strategy.



2. Alternative routes to the motorway after traffic calming measures along Globe Road.

4a. The current situation

As part of the masterplan development access issues have been addressed by Martin Stockley Associates. In this section we describe the conclusions of this work, the recommendations for the wider area and the proposed access arrangements for the scheme.

Marshall's Mill is at the heart of Holbeck Urban Village which is located immediately to the south of Leeds Central Main Line Railway Station. Studies carried out on walking distances (see walking contour plan) show that it is within easy reach of the station, of existing bus routes and of routes to the city centre.

The Main Line Station provides regular local, regional and national rail connections. The station has recently undergone major improvements and further works are planned to improve pedestrian access to the south, in particular to Holbeck.

In previous discussions with bus operators it was established that they would be keen to explore new routes within Holbeck in response to the regeneration of the area. It would be appropriate to have further discussions with the operators at a later stage as

the various plans for the area become established.

The area is readily accessible by bicycle because of its proximity to the centre but the quality of available cycle routes leaves much to be desired. Significant improvements are needed to the local streets to make them more usable for people on bicycles and on foot.

Movement on foot to the City Centre is currently limited to routes under the main railway viaduct or around via Globe Road to the West. However, there are plans for a new footbridge across the River Aire and the canal into the new development site on Whitehall, giving direct access to the centre. In addition, studies have been carried out to look at ways of improving pedestrian routes to the station via Dark Arches.

These improvements would be very significant in establishing the value of Holbeck as a high quality area in which to live and work and all efforts should be made to see that they are delivered. That said, in terms of movement and proximity Marshall's Mill is ideally suited to a scheme promoting the use of public transport and reduced dependency on private vehicles.



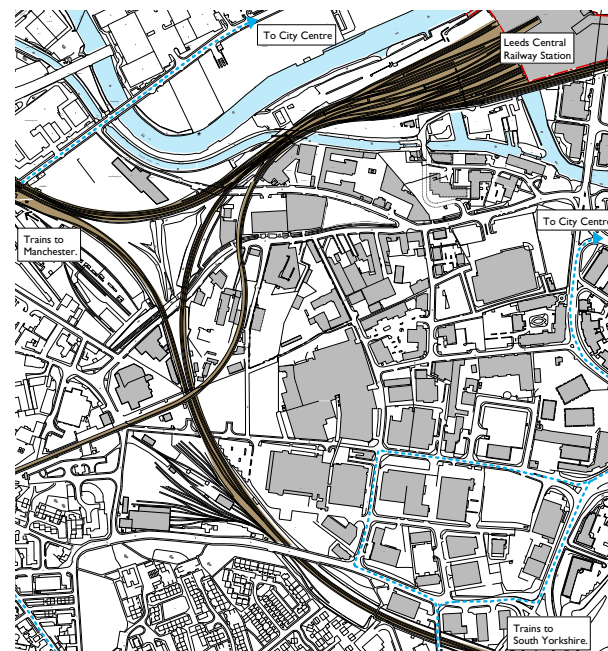
Local Movement

At present Holbeck is significantly under-occupied and under-populated and as a consequence there is very little locally generated movement. What does exist is small pockets of activity associated with businesses in area. As a result, quality of movement is generally very poor.

The existing public realm is a remnant of Holbeck's past uses and

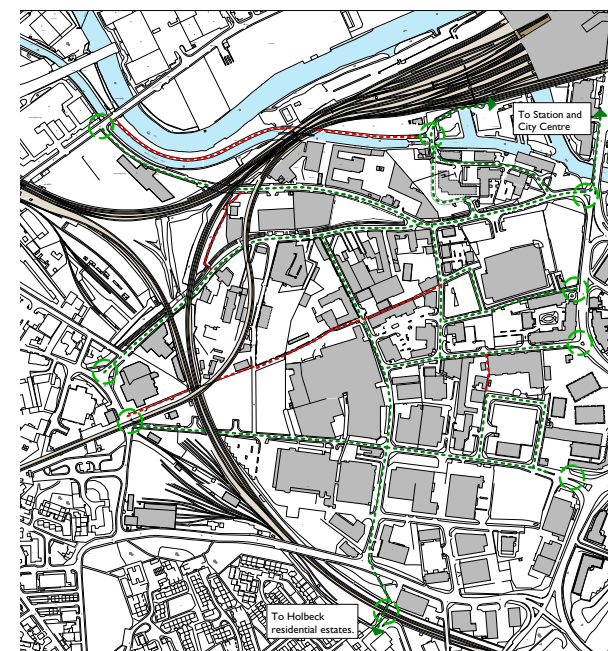
very little has been done to enhance it or adjust it for reuse in the emerging regenerated Holbeck. Footpaths are inadequate and poorly finished, lighting is inadequate in places and the lack of population means that there is very little natural surveillance. In addition, Globe Road is currently sign-posted and used as a main route to the motorway system to the South of Leeds. This means that at peak commuter times there are significant numbers of vehicles queuing

through the area. Outside of peak times the lack of local movement and of any physical speed controls means that vehicle movement on Globe Road, in particular is too fast and therefore represents an unacceptable risk to people on foot and on bicycles.



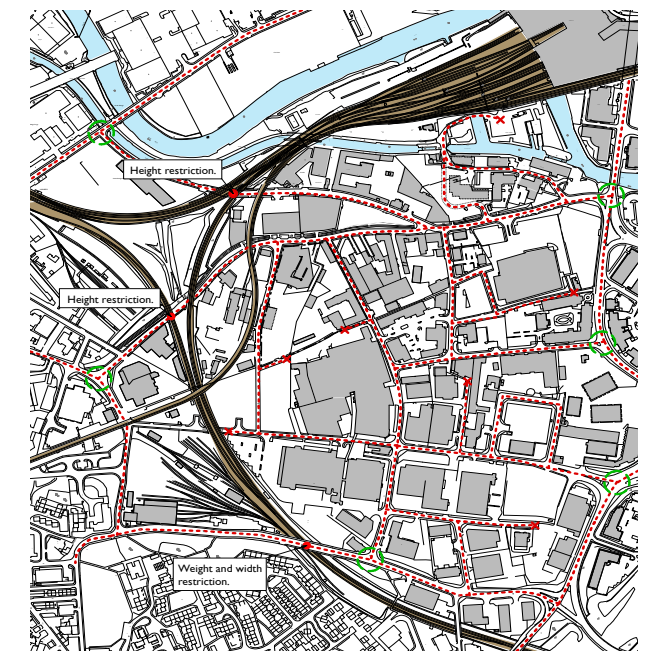
Key - Bus routes

- Bus route (existing)
- Site boundary



Key - Pedestrians and cyclists







- Pedestrian/cycle routes independent of road network
- Pedestrian/cycle routes on roads
- Pedestrian/cycle entrance to the urban village
- Site boundary









Key - Vehicle movement

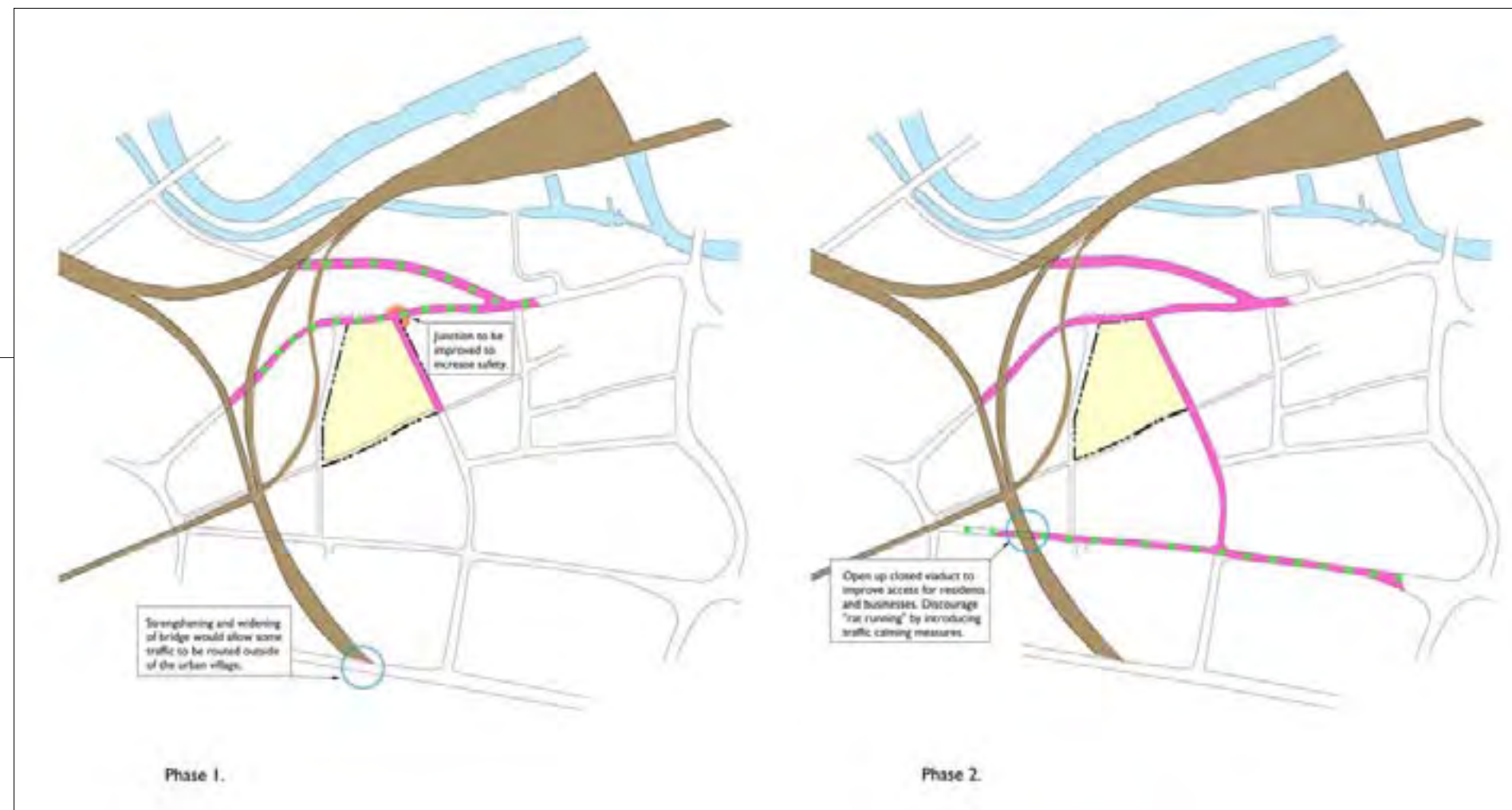
- Height, width and weight restrictions
- Existing vehicular routes within the area
- Vehicular entrances to the urban village
- Site boundary

Key - Potential improvements to vehicular movement








-  Main vehicular routes within the urban village
-  Traffic calming measures such as speed cushions and tables to be introduced to improve routes for pedestrians and cyclists
-  Junction improvements to increase safety
-  Bridges and viaducts to be strengthened and opened up to improve access
-  Railway
-  Site boundary

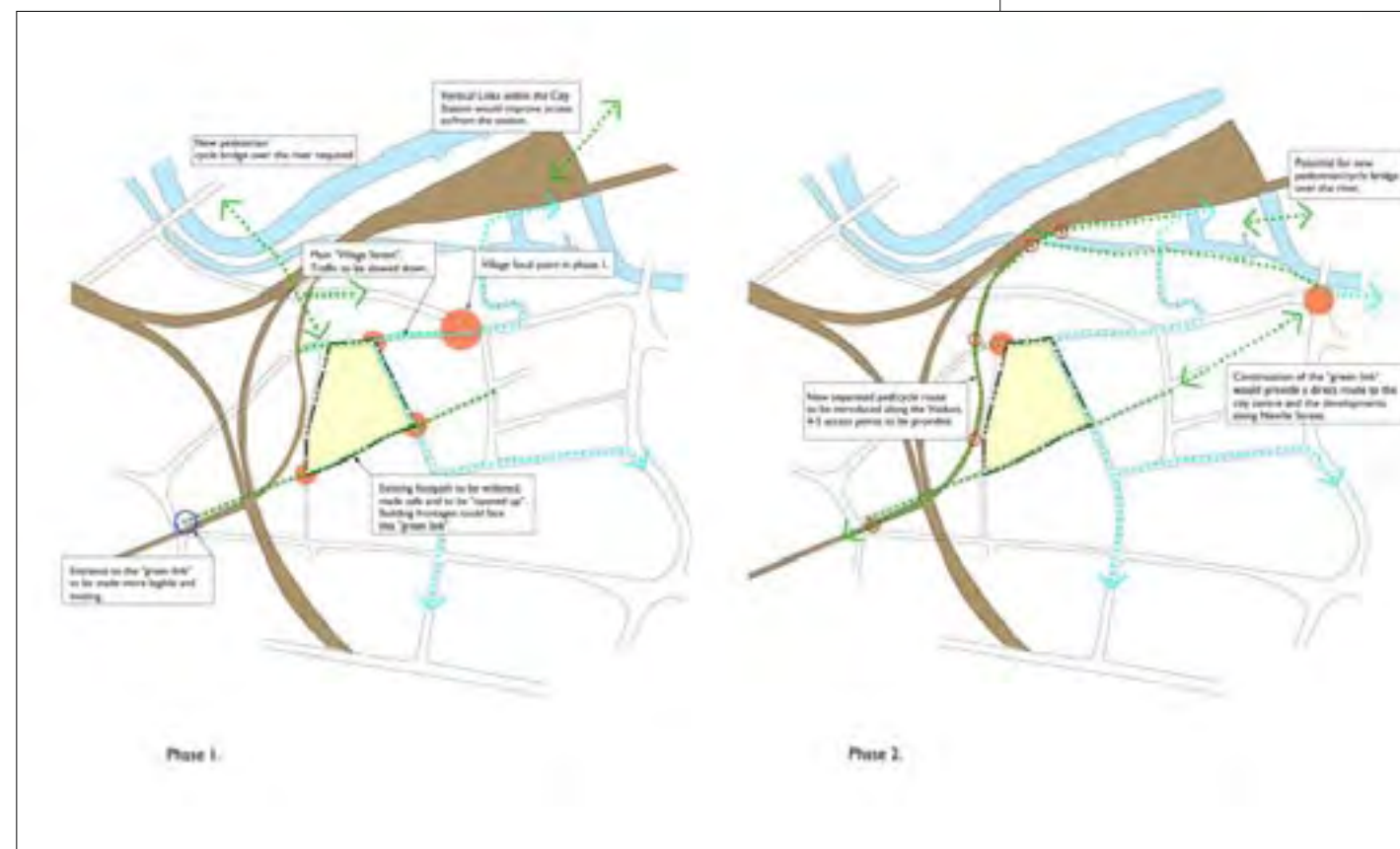
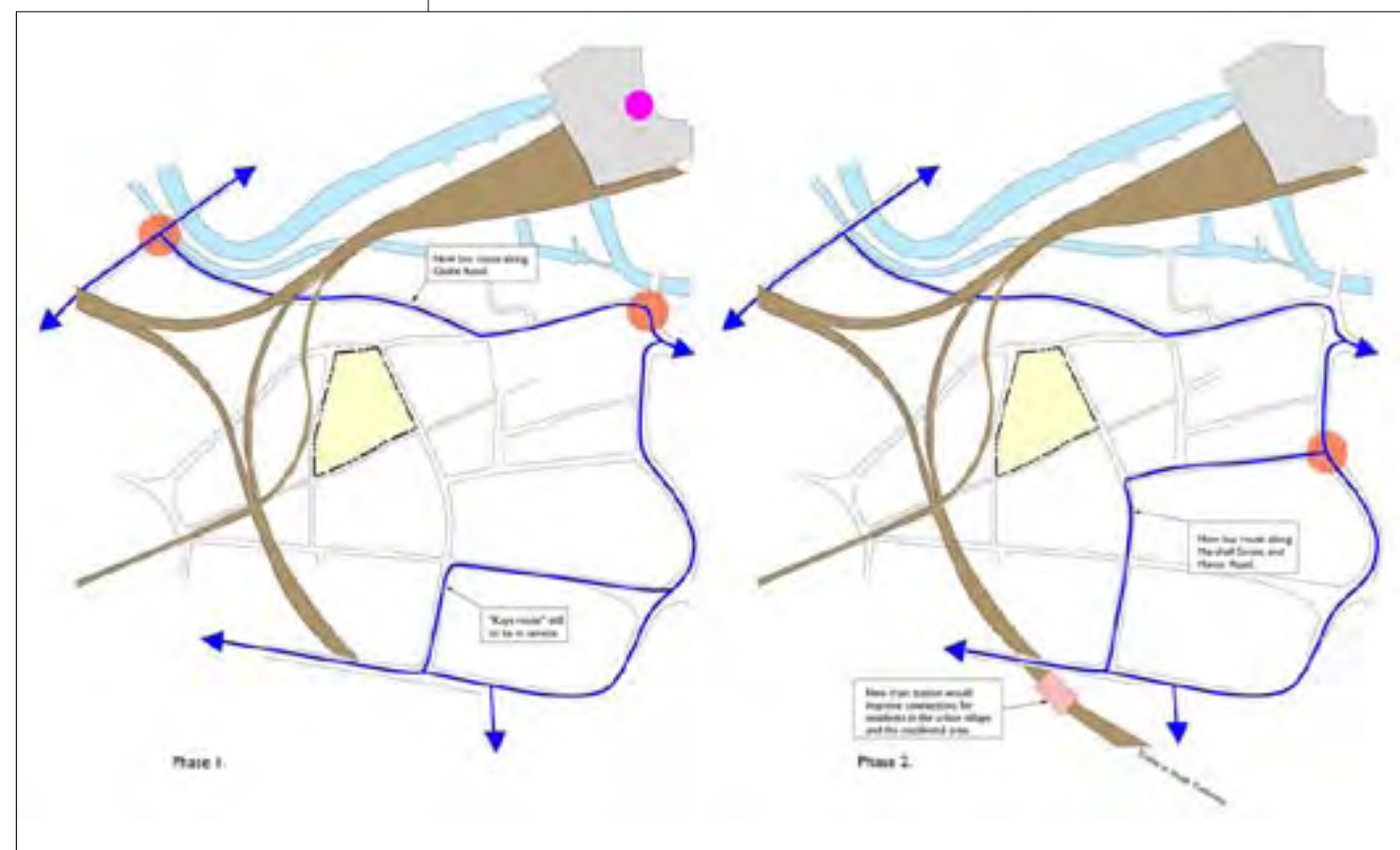
Key - Pedestrians and cyclists

-  Bus route
-  Junction improvements for bus priority
-  Bus and Rail interchange to be improved
-  New train station to be considered
-  Railway
-  Site boundary



Key - Potential improvements to existing pedestrian and cycle routes

-  Main pedestrian and cycle route
-  Leeds Link, existing pedestrian and cycle link
-  Access point to and from ped/cycle route along railway line.
-  Pedestrian and cycle priority in junction.
-  Speed to be slowed down to create a pedestrian and cycle friendly environment.
-  Railway.
-  Site boundary.



4b. Access strategy

Once Globe Road has been removed from the network routes it is possible to treat all of the streets in Holbeck, which essentially constitute the public realm in this area, as local streets for the use of local residents, businesses and visitors

At the heart of Leeds City Council's aspirations for Holbeck lies the aim to greatly improve the public realm and the overall environmental quality in the area. The Marshall's Mill Masterplan is fully supportive of this approach.

Fundamental to achieving this is the reclassification of Globe Road as a local area street and not a network route. Without this change the environmental quality of Holbeck will remain poor in the area of Globe Road and Water Lane and this will have a negative impact on the regeneration of the area generally. The continuing use of Globe Road as a network route encourages use of private vehicles for commuters and undermines the use of Public Transport, both of which are contrary to Central Government and Leeds City Council Policy.

Once Globe Road has been removed from the network routes it

is possible to treat all of the streets in Holbeck, which essentially constitute the public realm in this area (since there are no major parks or squares), as local streets for the use of local residents, local businesses and visitors to residents and local businesses. The nature of this type of movement is that it does not need to be fast moving, and can therefore be dealt with in a quite different way to the movement on faster, highly regulated network roads. The Marshall's Mill Masterplan advocates a change to a 'Shared Space' approach to the streets and Public Realm.

Shared Space recognises that in local areas priority must be given to the most vulnerable (people on foot and on bikes), that speeds must be below 20 mph, that surfaces can be shared (rather than providing separate zones for the different uses), that all users will co-operate in the use of the space. On-

street parking (short-stay) can be used to support local businesses and also to generate natural narrowing of routes for vehicles. At junctions, no priority is given so that all vehicles must initially give way. All streets, however narrow, are available for two-way movement so that routes are slow but direct.

Applied to Marshall's Mill this means that the four streets forming the main block and all internal streets could become shared space (see plan top left). Surfaces would be level (other than falls for drainage) with no raised kerbs to impede movement on foot, bikes, buggies etc. People not in vehicles can walk safely on any part of the street as they always have priority. On street parking is encouraged in particular areas to narrow the possible routes for vehicles. People on bikes can use all of the street surface so they are not forced into the highest risk area beside kerbs.

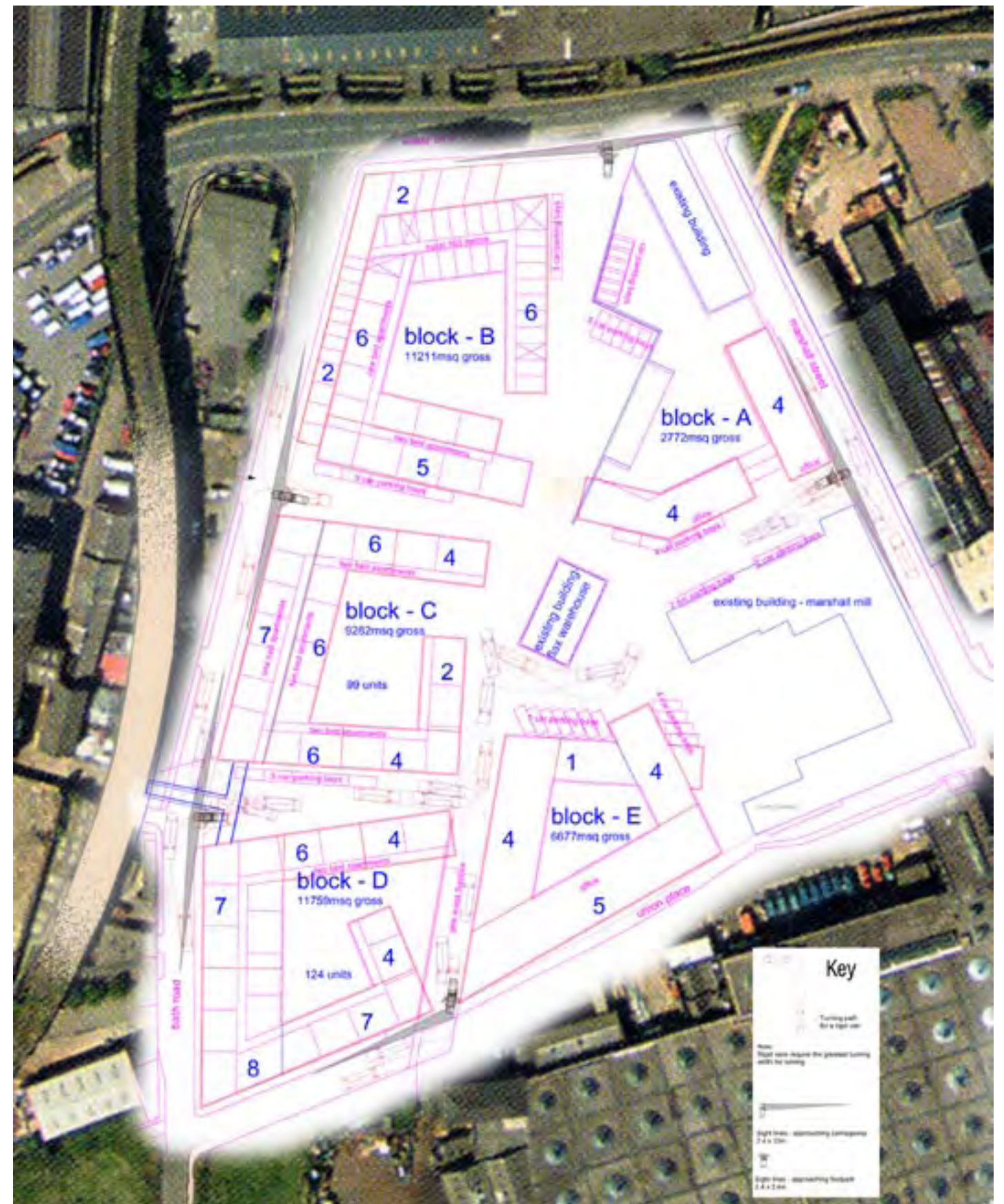
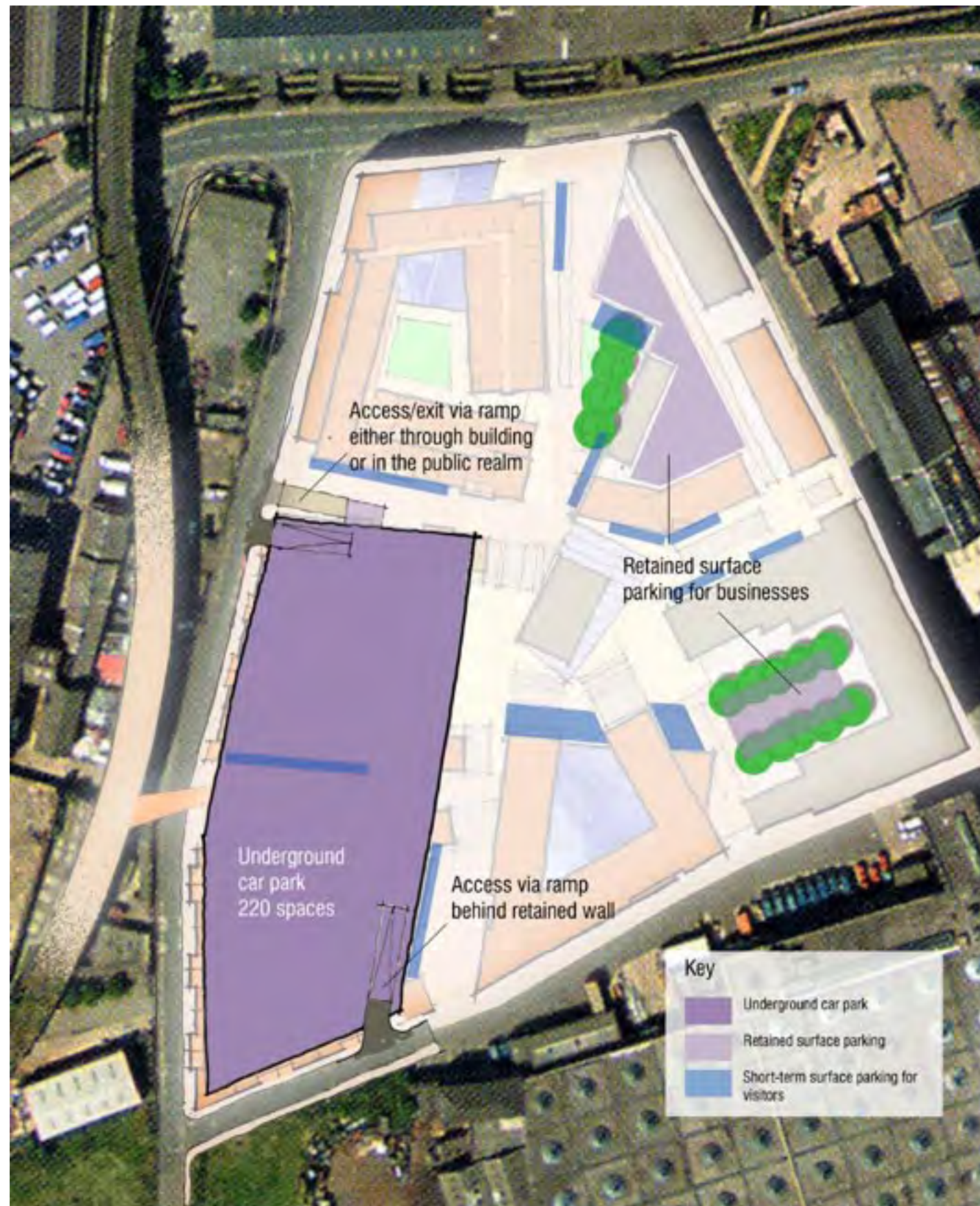
Vehicles are allowed to move through the area but must give way whenever necessary to other users.

The Masterplan also allows for a high level connection from the residential blocks to the adjacent viaduct in order to support the plan to create a park along the disused viaduct.

This overall approach means that Holbeck becomes a very high quality public realm. This encourages use of the streets by people on foot and on bikes, which in turn supports use of the readily available public transport.



Left: High Quality shared surface in a tight urban layout - Temple Bar in Dublin



4c. Parking and servicing



The proposals for Holbeck aim to generate a high-quality local neighbourhood close to a major regional city centre. Primary uses in the area are residential and small to medium commercial uses. So the parking strategy for the area needs to be aimed at providing car storage for residents and good short term parking for local businesses.

As noted above the Transport strategy is aimed at making best use of the very good and accessible public transport available. An Electric Car Pool is planned to enable residents to choose not to own a car and to use a pool car for the limited but regular trips for weekly shopping etc which are best done in individual vehicles. This means that the parking provision for residents is primarily storage of vehicles during the day time mid-week with occasional use at week-ends. This generates very low vehicle usage and is therefore not a problem in terms of local movement.

The Masterplan envisages provi-

So the parking strategy for the area needs to be aimed at providing car storage for residents and good short term parking for local businesses.

sion of 70% parking spaces for residents either beneath building footprints or in a nearby car park with designated spaces.

For local businesses it is recognised that small businesses are individually less robust than larger companies but collectively more sustainable because changes in fortune of individual small businesses have a very limited effect on the area as a whole. So there needs to be an acknowledgement that small companies are dependent on key individuals for their prosperity and good mobility and easy access to their business premises is often critical to their success. At Marshall's Mill therefore it is proposed that a certain number of long

term parking spaces are allowed for local businesses and that there is a provision of on-street, short term parking for the use of visitors to those businesses.

Commuter parking is not provided for and is discouraged generally in the area. As businesses begin to develop in the area they will be required to produce Green Travel Plans which are complimentary to the overall approach in Holbeck and in line with current industry standards.

Service Access

The shared space approach outlined above allows very straightforward servicing arrangements. All surfaces are designed to accommodate vehicle loading so access for deliveries, waste collection, removals, emergency services are relatively unlimited. Movement speeds are generally slow and the lack of speed humps avoids the unnecessary additional noise and disruption caused

by larger vehicles negotiating them.

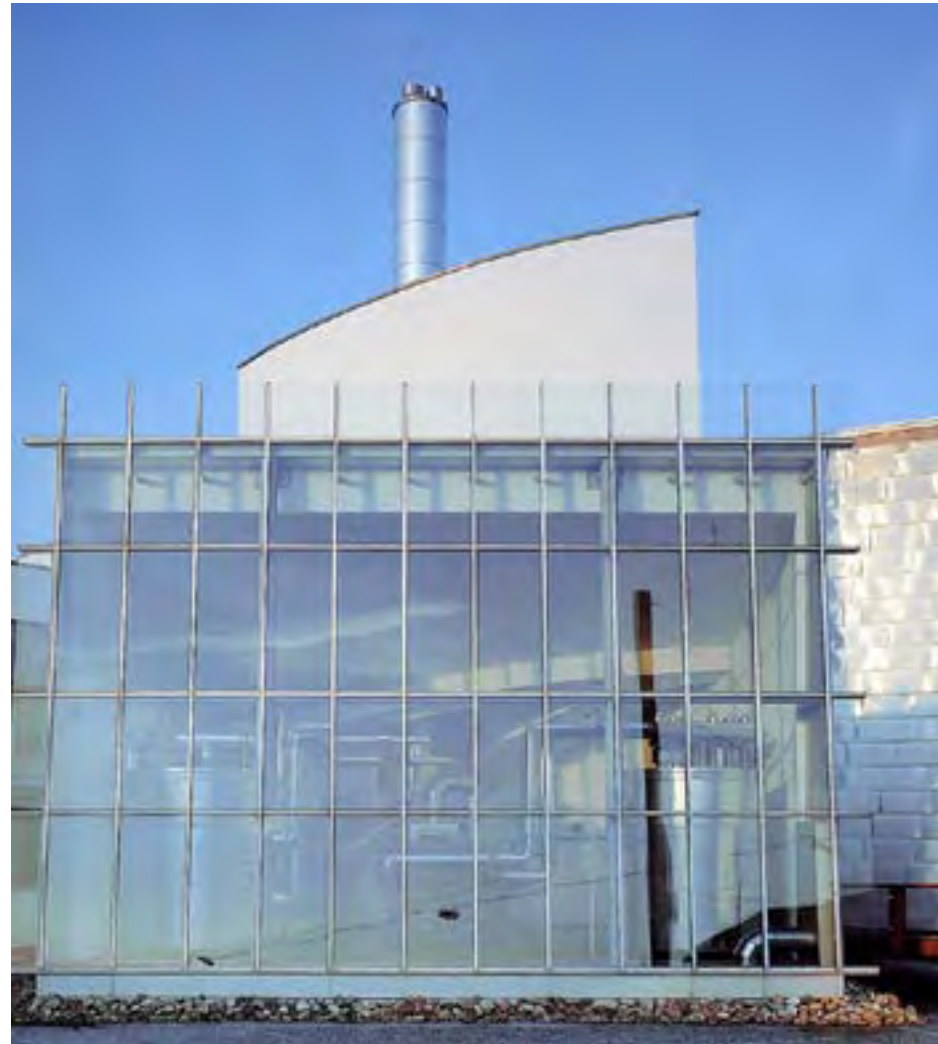
In conventional roads a delivery/collection vehicle parks on a carriageway and then crosses the footpath to deliver/collect. This impedes both vehicle and pedestrian movements and generates a cycle hazard. In shared space a delivery/collection vehicle can pull up very close to the delivery/collection point and other movements still have the whole remaining width of street

in which to pass. The system is regulated by individual good sense and civil behaviour rather than an imposed third party regulation to which nobody feels any empathy.

Vehicle swept paths are easier to achieve in smaller spaces because vehicles are not required to remain within a specific carriageway during manoeuvring.



An underground parking ramp emerging in a pedestrianised street in France



PART 5: Socially Responsible Investment

Socially Responsible Investment (SRI)

Igloo is committed to a policy of Socially Responsible Investment (SRI) that will deliver long-term social, economic and environmental benefits. In order to achieve this Igloo has developed an SRI policy which it uses to continually assess the performance of its schemes. The SRI policy considers performance against three themes:

- ▷ **Regeneration** – engagement with stakeholders to invest in the regeneration and renewal of the social, physical and economic fabric of urban neighbourhoods.
- ▷ **Environmental Sustainability** – the ecological imperative to ensure that resource use is compatible with the sustainability of environmental systems.
- ▷ **Urban Design** – contributing to an urban renaissance through the design of buildings and public realm that are distinctive, functional and urban in character.

These are based on the belief that Igloo's investments will perform better if they contribute to the regeneration of the area they are in (and therefore benefit from that regeneration), if they are environmentally sustainable (and therefore 'future-proofed', against higher energy costs for example), and if they are well designed (and therefore more attractive to occupiers).

An assessment process is used to establish a scheme's performance. This is a bespoke process in which schemes are scored based against 21 criteria – 9 for each theme. Igloo requires schemes to achieve at least a 'good practice' score for the headline SRI criteria. The policy differs from assessment methods such as BREEAM in three main respects:

- ▷ It is specifically tailored for mixed-use 'urban renaissance' schemes,
- ▷ It is designed to encourage strategic thinking,
- ▷ It benchmarks performance against best practice.

The assessment process is used throughout the development process, with the assessors highlighting strengths, weaknesses, actions and risks relating to a schemes performance.

An abridged Stage 2 assessment has been made of the schemes performance in preparation for the outline planning submission. This follows an earlier Stage 1 assessment which made a number of recommendations, including the establishment of a coherent masterplan and development of an energy strategy. The results of the Stage 2 assessment is available separately and is presented in the table to the left.

In summary, the results of the Stage 2 assessment are encouraging, with the revised masterplan now delivering a 'best practice' performance. The appointment of ESD to establish an energy strategy and initial work by Stockley Associates has ensured 'good practice' for environmental sustainability, though the construction process now needs addressing. The 'market practice' performance for regeneration requires further attention. The engagement process and lettings policy are to be developed further, with further exploration of the social and economic context.



Theme 1: Regeneration

1.1 Location and Connectivity			+1		
1.2 Engagement and Social Capital		0			
1.3 Economic Diversity and Competitiveness		0			
Market Practice		+1			

Theme 2: Environmental Sustainability

2.1 Primary Energy Use			+1		
2.2 Car Dependency			+1		
2.3 Construction Process		0			
Good Practice			+2		

Theme 3: Urban Design

3.1 Permeable Street Network			+1		
3.2 Density				+2	
3.3 Mix of and flexibility of use				+2	
Best Practice				+5	

5a. Sustainable energy strategy



The development is subject to Igloo Re-generation's policy for Socially Responsible Investment as described above.

As part of this Igloo expects schemes to achieve a 70% reduction in CO₂ emissions through development of an energy strategy. For each of the building types envisaged baselines relating to 'good performance' in 1995 have been constructed and a target has been set at 70% of these levels. The table below summarises these targets and sets an overall aspiration for the development of ~30kgCO₂/m².

It is important to note that the baselines and targets have been set on the expected composition of the development which may change or become further clarified over time and hence the baselines and targets may need to be updated in the future.

Achieving the proposed targets requires action on three main fronts:

1. Design and construction of building fabric and building services.
2. Use, operation and management of buildings and building services.
3. Selection and use of other energy consuming equipment.

The developer and project design team have primary responsibility for item (1) design and construction, and the ultimate owners and occupiers of the buildings will have primary responsibility for items (2) and (3). However the developer and design team will endeavour to influence the ultimate owners and occupiers by:

- ▶ Designing buildings that are easy to operate and control with systems that 'default to off'.
- ▶ Pre-installing low energy equipment

as far as possible and/or advising on such.

- ▶ Providing guidance on efficient use and operation of the buildings and building services.

The basic premise of the sustainable energy strategy is to:

- ▶ 1st minimise demand
- ▶ 2nd supply energy from low or zero carbon sources
- ▶ 3rd meet balance of demands from grid supplies

Energy demand will be minimised throughout by high standards of thermal performance and air-tightness, effective use of natural light and ventilation where appropriate and by minimising service power requirements and establishing effective control and management systems. The proposed layout and building form provide good access to natural

light and will facilitate extensive use of natural ventilation.

Consideration will be given to energy supplies from a community energy scheme (see below), on-site renewable energy technologies such as solar water heating, photovoltaics (solar electricity) and wind power. Consideration will also be given to off-site renewable energy supplies.

Community Energy

The broad mix of land uses at the Marshall's Mill site offers the potential for a low carbon community energy system providing all the site's energy needs from a central source.

Residents, businesses and other users of the site facilities will all benefit from low energy and maintenance costs with increased security of supply. Building safety and aesthetics will both be improved as it will not be necessary to route gas or individual boiler flues around the buildings.

The main components of the Community Energy system will be a central energy centre, distribution networks serving each building and the conventional heating, cooling, and electrical systems within the buildings.

Low temperature hot water,

chilled water, and electricity will all be generated on-site by a combination of boilers, Combined Heat and Power (CHP) units, absorption chillers and renewable energy devices.

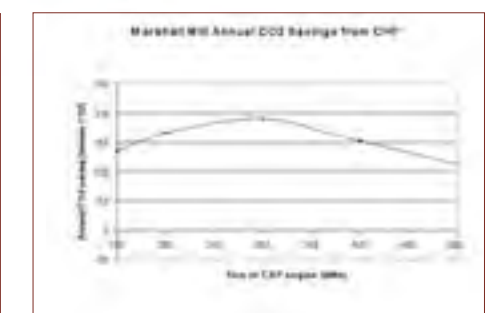
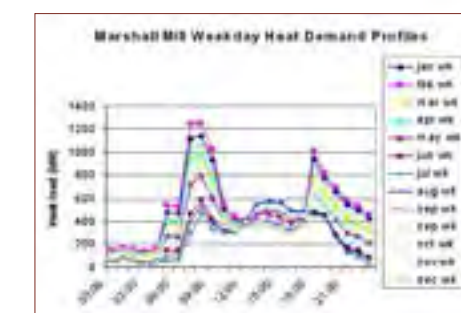
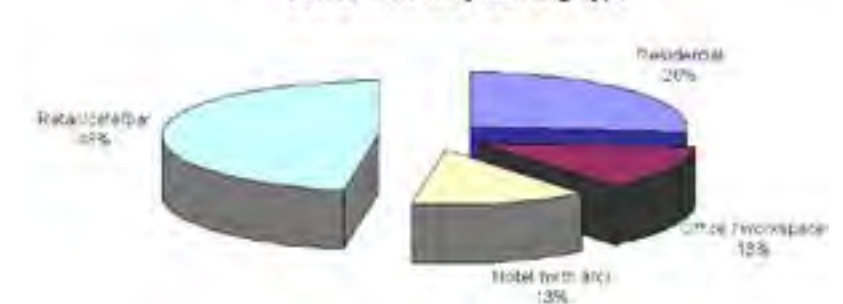
Any shortfall of electricity will be imported either from a 'green tariff' provider or directly from off-site generation, financed by the site but located in an area with greater renewable resources.

This energy supply mix will ensure that the site's carbon footprint is minimised through the effective use of both local and regional resources. It is estimated that gas-fired CHP alone will

save around 200 tonnes of CO₂ emissions every year providing a major contribution to the target described above.

There is the potential for further carbon savings with the inclusion of a carbon neutral fuel such as wood chips or biofuels. Biomass boilers and CHP systems are still an emerging technology in the UK, despite the large number of installations throughout Scandinavia, Germany and Austria. Provision will be made in the scheme for the future incorporation of biomass once the reliability and commercial viability of the systems has increased.

CO₂ Emissions by Building Type

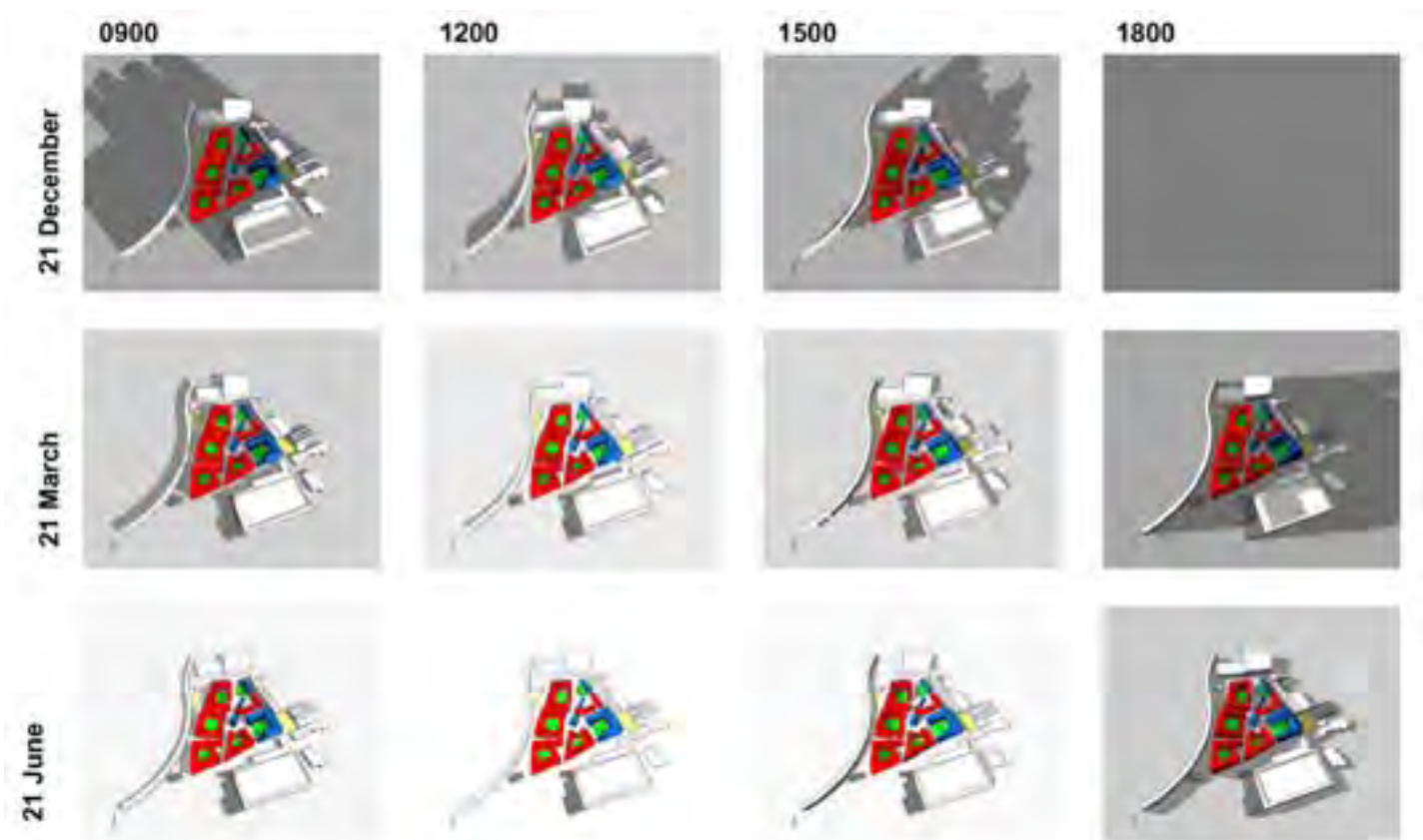
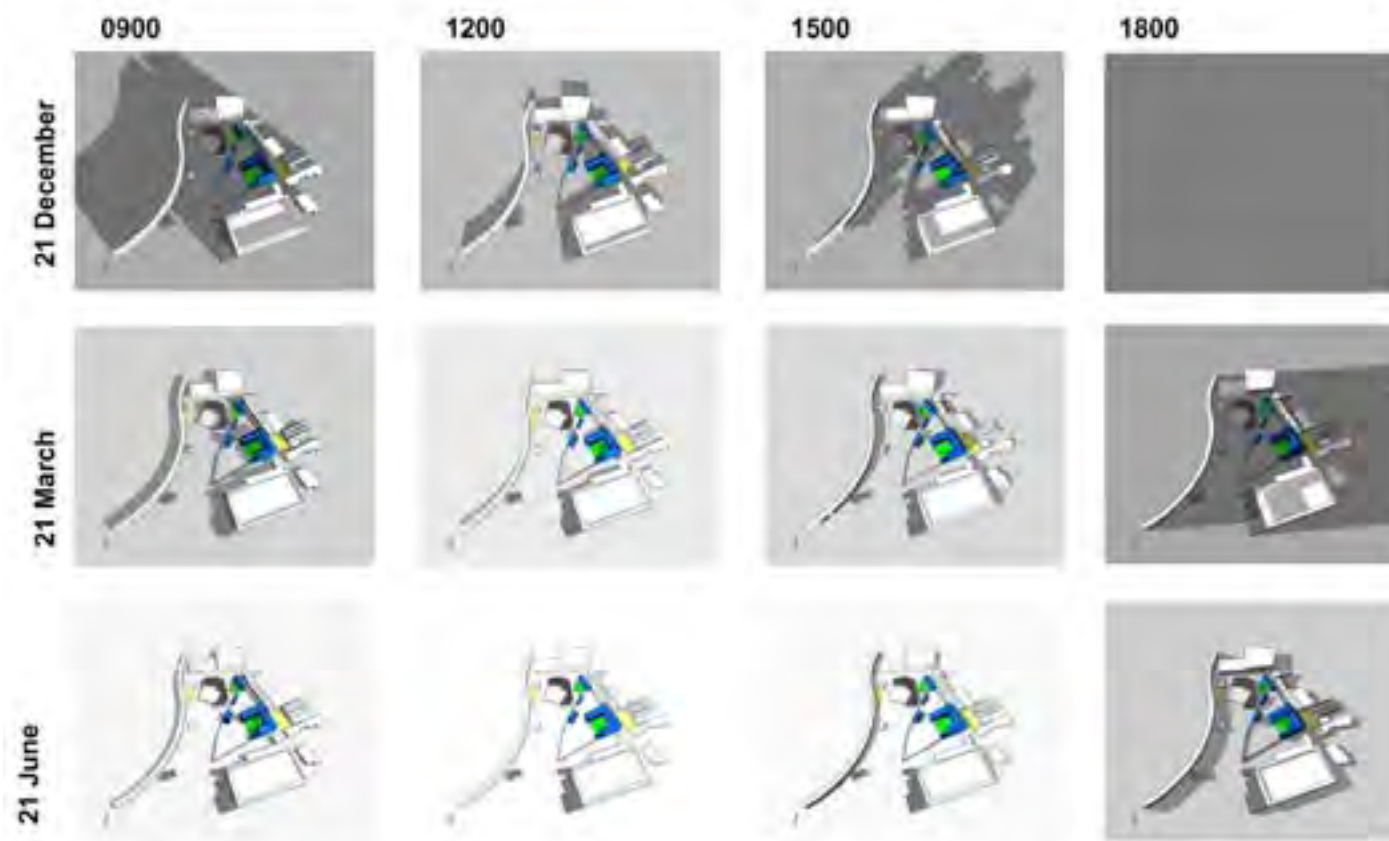


Target (70% reduction on Baseline)

	Fossil Fuel	Electricity	Fossil Fuel	Electricity	Total	Area	Total
	kWh/m ²	kWh/m ²	kgCO ₂ /m ²	kgCO ₂ /m ²	kgCO ₂ /m ²	m ²	kgCO ₂
Residential	49.2	12.0	9.3	5.2	14.5	19297	279961
Office / workspace	29.1	27.3	5.5	11.7	17.3	8000	138144
Hotel (with a/c)	78.0	36.0	14.8	15.5	30.3	4700	142410
Retail/café/bar	247.2	193.2	47.0	83.1	130.0	3900	507172
Totals						35897	1067686
Area weighted average					29.7		

Aerial view of the computer model indicating the shadow pattern of existing structure on buildings and open spaces for significant moments of the year.

Aerial view of the computer model indicating the shadow pattern of the proposed development on existing buildings and open spaces for significant moments of the year.



5a. Daylight and overshadowing

WSP Environmental have been commissioned to advise on daylight, overshadowing by the scheme on adjacent buildings and public open spaces. This has been based on BRE guidance 'Site Layout and Planning for Daylight and Sunlight: a guide to good practice'.

This guidance has been approved by the ODPM and is widely used by local authorities to help determine planning applications. In this study, the Vertical Sky Component (VSC) of the adjacent windows has been calculated to quantify the loss of light. This is defined as the ratio of the direct sky illuminance falling on the outside of a window, to the simultaneous horizontal illuminance under an unobstructed sky. The standard CIE Overcast Sky is used and the ratio is usually expressed as a percentage. The VSC on a window is a good measure of the amount of daylight entering it. The maximum VSC value is close to 40% for a completely unobstructed vertical wall.

The Vertical Sky Component calculation results indicate that the overall difference in the VSC of the lowest windows in the adjacent buildings before and after the proposed development is marginal. Furthermore all the values with the development in place are more than 0.8 times the current values, thus similar amount of sky light should

The scheme will not significantly overshadow surrounding property or existing spaces. The general layout of the scheme ensures reasonable solar access to open spaces.

be reaching the surrounding properties.

Open spaces, both new and existing will still benefit from adequate solar access as a result of the proposed Marshall's Mill development, especially between March and September. The BRE Guidance suggests that for an open space to appear adequately sunlit throughout the year no more than two-fifths (40%) and preferably no more than a quarter (25%) of any garden or amenity area should be prevented by buildings from receiving any sun at all on 21 March. If as a result of new development, an existing garden or amenity area does not meet these guidelines, and the area which can receive some sun on 21 March is less than 0.8 times its former value, then the loss of sunlight is likely to be noticeable.

The assessment indicates that the shading percentage of the Open Space 1

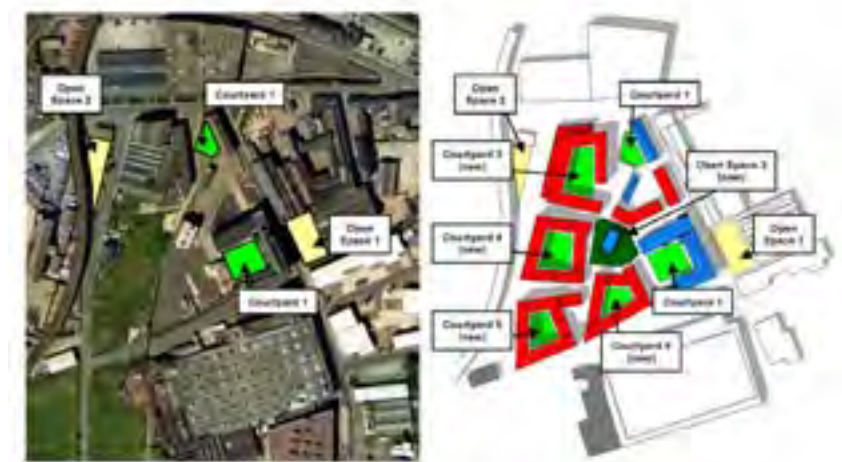
before the development is marginally higher than the BRE acceptable shading percentage. This is mainly caused by the existing Marshall's Mill converted warehouse. When the proposed development is in place, the shading percentage is marginally increased, but the shading ratio is higher than the BRE recommended shading ratio. Thus the overshadowing impact from the proposed development to this space is not significant.

In open spaces 2 and 3, although the shading percentage before the development is lower than the BRE acceptable threshold the shading percentage with the development in place is higher than the BRE acceptable threshold. The shading ratio is below the BRE recommended ratio, thus implying that the proposed development will have some overshadowing impact to this space.

In courtyards 1 and 2, the shading percentage before and after the proposed development is higher than the recommended values. Similarly, the shading percentage in the new courtyards proposed as part of the development is below the recommended value. However, these spaces still benefit from adequate solar access for most of the year.

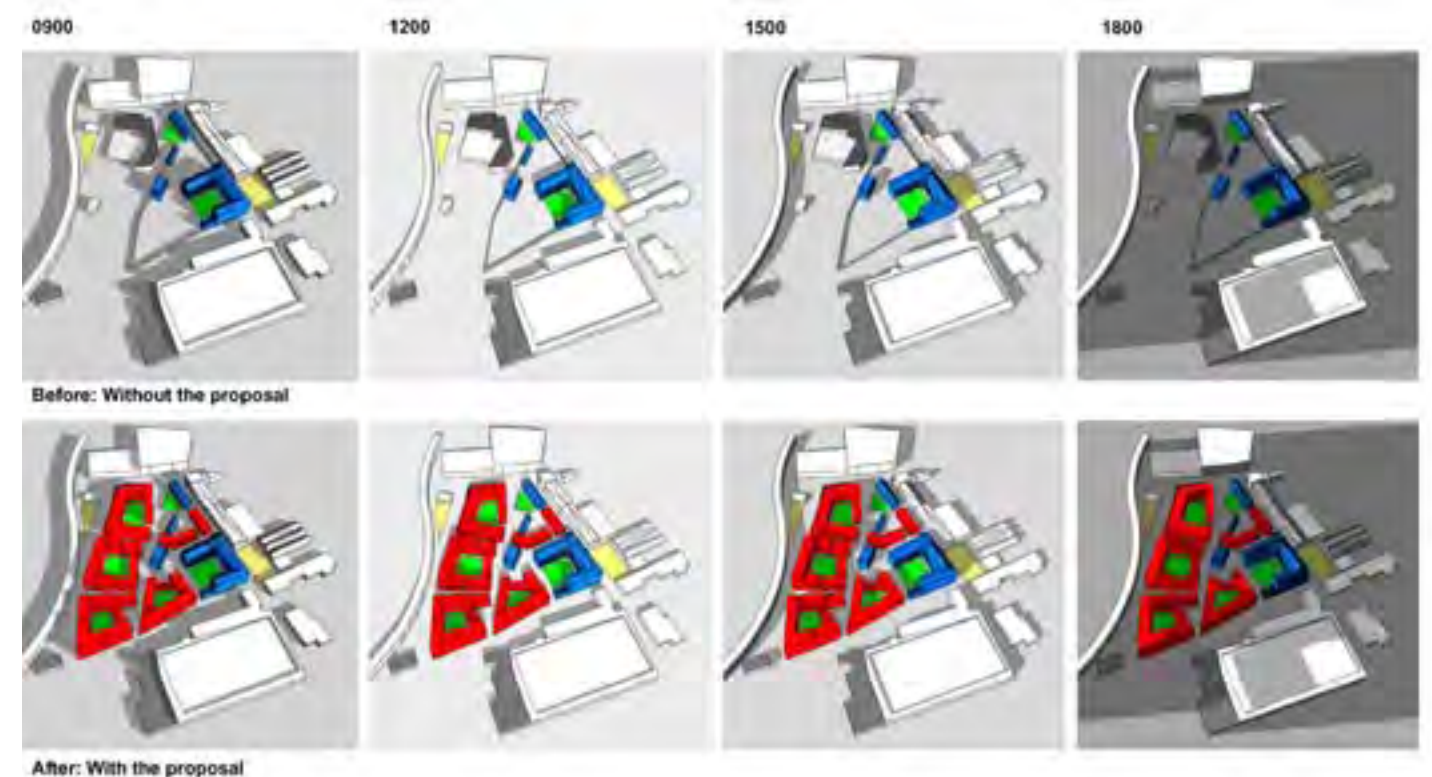
The scheme will not significantly

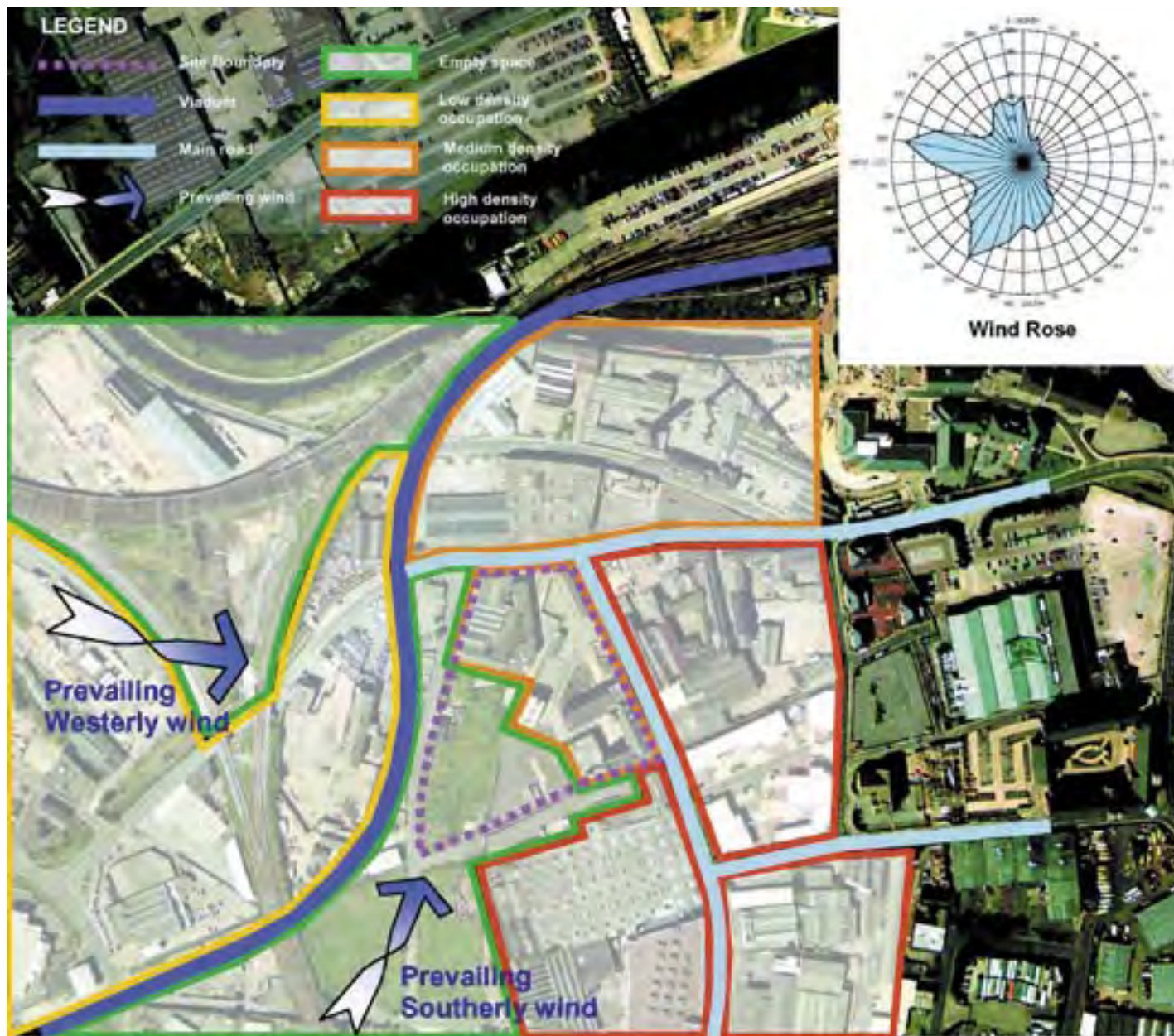
overshadow surrounding property or existing spaces. The general layout of the scheme ensures reasonable solar access to open spaces. There will be some overshadowing of the inner court and the building courtyards. This is an inevitable result of the urban nature of the scheme. To improve the scheme's performance some refinements have been made including the stepping down of the blocks towards the central space, the creation of gaps in the built structure and consideration of the buildings fronting these spaces.



Above: Plans identifying existing and new open spaces before and after the proposed development.

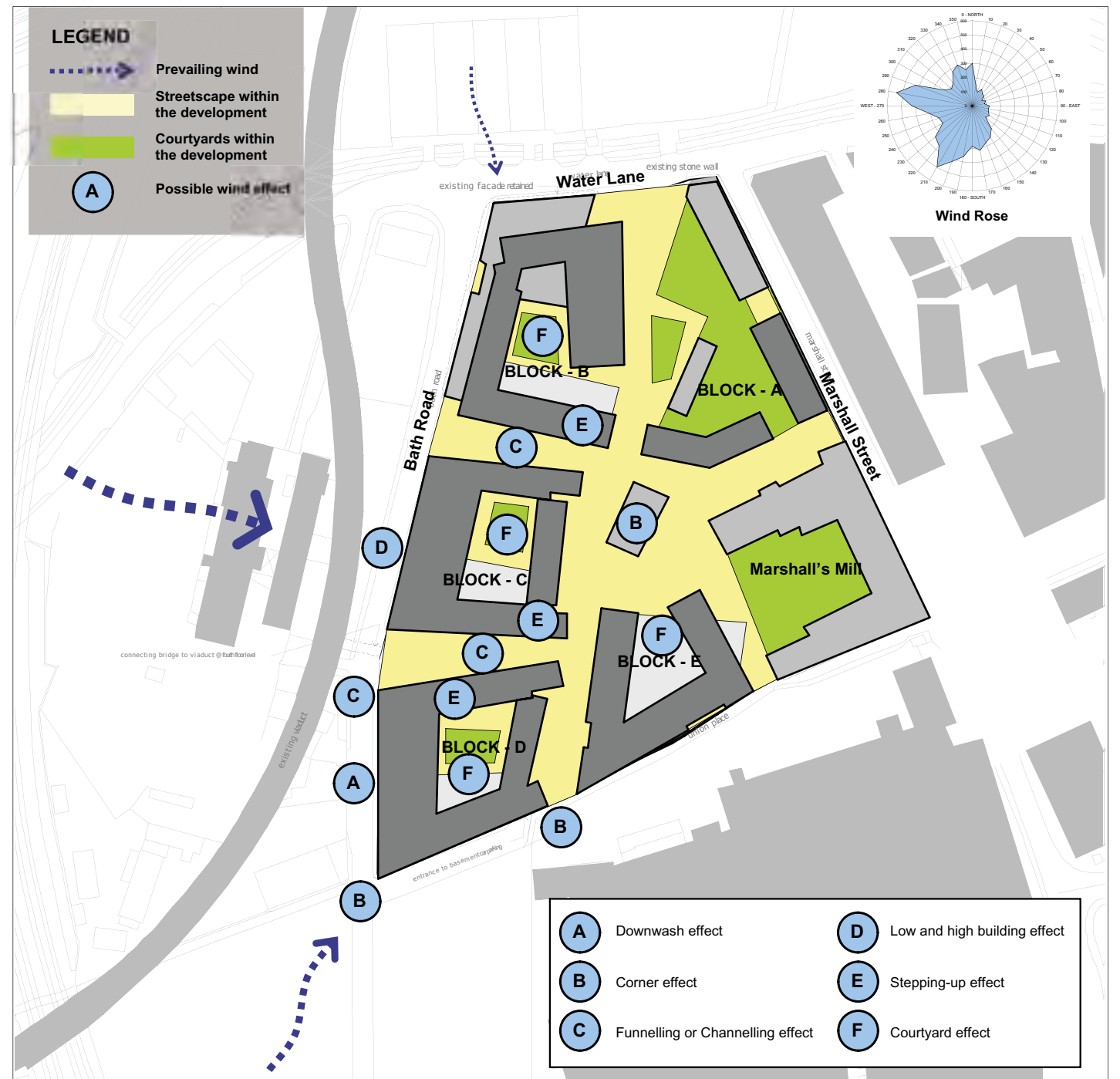
Below: Overshadowing study before and after the proposed development on 21st March.





Above: Prevailing wind condition of the site at present

Right: Possible wind effects around the development



5b. Wind assessment

WSP Environmental has also examined the likely pedestrian level wind environment around the proposed scheme and its effect on pedestrian's comfort and safety. The Wind environment is defined as the wind flow experienced by people and the influence it has on their activities. Structures have a significant impact on the wind environment at pedestrian level and the effect of the wind environment has taken increased importance in the design of new developments. It is not always practical to design out all the risks associated with the wind. It is possible at this stage of the design process to identify areas of risk and anticipate possible mitigation measures.

The method adopted for the study combines desktop assessment to predict airflow patterns around the building, the use of wind data and recommended comfort and safety standards (the Lawson criteria). In the first instance an assessment of the baseline conditions was carried out followed by an assessment of the wind environment of the site with the proposed development in place. This takes account of local wind data identifying the frequency of occurrence of wind speed and direction that make particular locations potentially uncomfortable or unsafe. It also includes the

effects of site location (open field, inner city, etc.) and the proposed buildings (height, geometry and proximity to other buildings). Tall buildings potentially deflect high-level winds towards ground level (known as the downwash effect) so that windy conditions can occur near tall buildings even on a relatively calm day. The corner geometry, the funneling and channelling of streets and the stepping of buildings and courtyards are other important factors to consider as these may generate adverse wind conditions. The study looks also at the orientation of building relative to the prevailing wind direction, the effect of topography and the proposed outdoor pedestrian activity (sitting, standing, strolling and fast walking) because these are tolerant of different wind conditions.

The scheme has been assessed by the widely applied Lawson Criteria which state the maximum velocity of wind to which pedestrians can be exposed while undertaking different activities and still feel comfortable. These criteria suggests that if the critical wind speed for each activity is exceeded for more than 20% of the time then mitigation may be required. If the percentage lies between 10% and 20% some

Table 1: Lawson's Comfort Assessment Criteria

Category	Pedestrian Activity	Threshold mean hourly wind speed not to be exceeded for more than 5% of the time	Typical Area of the development where activity is likely to occur
C1	Fast or business walking	10 m/s	Main surrounding streets
C2	Strolling or window shopping	8 m/s	Internal streets
C3	Standing	6 m/s	Building entrances
C4	Sitting	4 m/s	Internal courtyard

The Marshall's Mill development is most likely to generate long term beneficial effects on the local wind environment and it is not likely that areas of pedestrian level discomfort will arise from the proposed scheme.

discomfort may be experienced but mitigation can be avoided. A conservative value of less than 5% is considered acceptable.

Wind data has been used to assess the local wind conditions. In the absence of ready available wind data for Leeds, this was based on wind data from the weather station in Sheffield extracted from the TAS weather database (by EDSL). The prevailing winds are from southwest blowing for 49.6% of the year. The other relevant wind direction is from the northwest direction blowing for 18.7% of the year.

Impacts

The proposed development is an average of five storeys, similar to the surrounding area so that most of the incoming prevailing wind should flow through the path of least resistance, i.e.

over the top of the development. The tight urban structure of the scheme is upstream from the prevailing winds and is anticipated to be beneficial to the local wind environment both downstream to and within the development. It is possible that some funnelling occurs in the streets exiting from Bath Road as a result of their length and funnelling shape. However, it is anticipated that the viaduct upstream to these streets may provide some shelter, thus reducing the incoming wind speed. Also, the decreasing building height as these streets get narrower may drive the wind flow upwards, thus reducing wind speeds at pedestrian level even further. These streets will remain suitable for standing and strolling.

The open courtyards around stepping-up buildings could generate local turbulence. However, the overall heights and areas suggest that the courtyards will be relatively sheltered allowing for all types of pedestrian activities.

The presence of the viaduct on the windward side of block D could generate an area of possible pedestrian level wind turbulence on parts of Bath Road. The eight storey building may generate higher wind speeds as a result of a possible downwash effect. However

Table 2: Lawson's Safety Assessment Criteria

Category	Pedestrian Type	Threshold mean hourly wind speed not to be exceeded once per annum*
S1	Typical pedestrian	20 m/s
S2	Sensitive pedestrian	15 m/s

*'Once per annum' means that safety threshold will not be exceeded for 0.04% of the season.

Bath Road will remain suitable for standing strolling and fast walking.

The sharp-edged corners on some blocks could cause the wind flow to separate, thus inducing strong wind speed gradients. It is possible that the corner on Flax Warehouse could generate an area of discomfort on its leeward side. However it is anticipated that turbulence will be infrequent and most of the central area will be suitable for

sitting.

The remaining areas such as Marshall Street, Water Lane and other internal streets should be suitable for most activities as the rest of the development shelters them. In general terms the Marshall's Mill development is most likely to generate long term beneficial effects on the local wind environment and it is not likely that areas of pedestrian level discomfort will arise from the proposed scheme.

