BDP Manchester Studio



**BDP** Manchester Studio



# Foreword

BDP has grown from North West roots to one of the largest design practices in the world, and it enjoys both an impressive national reputation and a growing international renown.

Manchester has benefited hugely from the world-class inter-disciplinary talent within BDP. The firm's urbanism, design and engineering expertise have graced the city centre at key schemes such as Piccadilly rail station, Cathedral Street and Cathedral Gardens.

With the opening of BDP's new Manchester studio, now the city has another fine building to enjoy - one as delightful to work in and visit, as it is to view from Ducie Street or Piccadilly, or from across the water within the revived Piccadilly Basin.

As much as we celebrate the regeneration achievements of Manchester in recent decades, the City Council is aware of its responsibility to ensure we grow its future sustainably. Our Green City programme is about Manchester's quest to become Britain's greenest city, driven by the knowledge that the success of a city is based around many factors, including social, economic and environmental well being. A greener city is a more attractive place for residents, workers, visitors and investors alike.

With this BREEAM Excellent building, BDP demonstrates an innate understanding of how these objectives can be met, by making high quality architecture and sustainability work hand in hand.

Manchester City Council is delighted to have such a wonderful example of high quality, modern office accommodation in this increasingly important part of the city.

I congratulate BDP on this splendid new addition to Manchester's built environment, and I wish the practice every success in its new home.

Sir Howard Bernstein Chief Executive, Manchester City Council



# Home Truths

Catch any of the numerous property programmes on television, where young couples talk earnestly about their experiences in buying and developing property, and you will see ample evidence of the truism that moving home is one of the most stressful situations people encounter in life, along with bereavement and divorce.

It is also true for businesses seeking to move. The factors to consider are numerous, location, economics, quality, quantity, identity, logistics, continuity, never mind the associated risks.

Imagine then how much more difficult it must be for a design practice, particularly a building design practice, intending to design its own home, knowing that every nuance of every line will be subject to an almost molecular level of scrutiny by a hyper-critical, design-literate audience, keen to imbue each and every aspect of the project with a real (or imagined) significance. And then there are those from outside the practice...

Which is why, no doubt, so few practices do take on the challenge. Although the prize is great, the pitfalls are legion.

You will also know that most of these programmes end with the couple staring, hollow-eyed and exhausted towards the camera, and proclaiming that, in spite of everything, 'it was all worthwhile'. And now, speaking from experience, I know they are right. We have moved into our new home in Piccadilly Basin, and it is fantastic. It is everything we hoped it would be, and more. 7

Working with colleagues, partners and friends we have been able to design our own studio from scratch, starting 'literally' with a blank sheet of paper and, in doing so, collate, develop and express many of the ideas and themes that have been running through our work for the past decade or so.

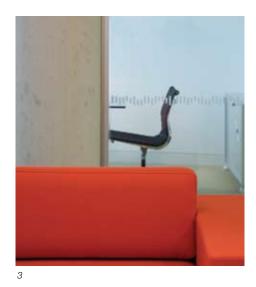
These themes are many and complex. They are interwoven and multi-layered. And really they deserve a far greater and more detailed explanation than I can hope to achieve here, even with the help of our guest contributors Tony Juniper and Phil Griffin.

However, if I have to distil everything we feel passionate about, everything that motivates and excites us, and everything we having been striving to achieve for the past decade into a single sentence, it would be 'designing environmentally friendly places for people'.

The twin themes of sustainability and place-making are at the core of everything we do, and our new home embodies and exemplifies our thinking about them in a way which is far more articulate and telling than I could ever hope to be.

Gavin Elliott Chairman, Manchester Studio

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# Blueprint for a Sustainable Future

The area in which BDP's new Manchester studio stands, now called Manchester's Northern Quarter, has a global significance. It is difficult to overstate the historic importance of the district, and not only from a UK perspective, because this part of Manchester city centre is the cradle of the modern world.

Arkwright opened a steam powered mill here in the 1790s. By 1816 there were 85 more, and 108 in 1853. This rapid industrial development was later quite rightly described as the start of a revolution.

The establishment of centralised production employing the latest technology and powered increasingly by coal was truly a mould-breaking leap, and not only from an industrial and social point of view. Profound environmental consequences resulted that have today brought humanity to a crossroads.

Global demand for fossil energy since the start of the industrial period has caused dramatic changes to the composition of the Earth's atmosphere. Today carbon dioxide concentrations have rocketed up from about 280 parts per million in the late 1700s to 387 last year.

This has already caused climatic changes which could later this century spiral out of control, leading to large-scale ecosystems damage, serious economic impacts and humanitarian disasters on a scale never before witnessed. Global demand for fossil energy continues to soar. In parallel with atmospheric changes have come large-scale losses of natural habitats. Principally because of rising demand for food and space to accommodate cities and infrastructure, a rate of species loss is now underway at a pace estimated to be some 1000 times faster than the natural 'background' rate of extinction. Pressure on land continues to intensify, as for example meat consumption increases and as countries promote the production of biofuels.

The pace and scale of both climate change and the loss of natural diversity are linked to our continuing population explosion. Industrialisation generated the wealth and technologies that enabled our population to grow very fast. Better food and medical care have not only allowed our numbers to expand but to extend our lifespans and increase our average per capita consumption. When Arkwright opened his Manchester mill there were less than one billion of us. People were mostly poor and lived only about half as long as now. In July this year our number rocketed to above 6.68 billion.

The resulting ecological overshoot is not only of concern from an environmental perspective. Several recent reports, including the UN's Millennium Ecosystem Assessment and the Stern Review on climate change, tell us that we are nearing critical thresholds that if breached will undermine economic development and human wellbeing. Fortunately, however, there is a way through. It is called sustainable development, and if we did it right we could promote people's welfare and economic progress while at the same time preserving the ecosystem services upon which humankind depends. It's a complex and challenging equation, but it can add up if there is a willingness to do things differently.

The sustainability crunch is often presented as a factor of how many of us there are, but the other side is about how we live and work, including in our fast-expanding cities.

In July 2007 the United Nations announced that for the first time in human history more than half the world's population lived in cities (in 1800 the proportion was 3 per cent). If we are to have a chance of achieving a sustainable society, then the future development of cities is at the core of the challenge.

The melting of ice caps and extinction of rainforest animals might seem very remote to increasingly urbanised societies, but the causes are, however, actually very close to home: literally.

Cities are comprised largely of buildings. And while it is cars, planes and power stations that have tended to attract attention in the modern blitz of environmental concern, some developed country pollution inventories attribute nearly a half of carbon dioxide emissions to buildings: and most include only emissions from building use, not their construction.

In addition to heating and powering homes, offices and industrial premises, and the carbon dioxide emissions that result, there is an inevitable demand for different resources for construction and thus impacts on the natural environment before anyone moves in to sit behind a desk or switch on a light. These impacts are linked to, for example, demand for timber and cement and thus to deforestation and vast carbon dioxide emissions.

Sustainability in the built environment, is thus a modern imperative for the design, building and architectural professions. This is not least because it won't be half of us living in cities by 2050, but more like three quarters, and at that point, there won't be nearly 6.7 billion of us, but a projected 9 billion. The question is not *if* we need to make a leap toward more sustainable cities, it is one of *how*.

In over 20 years of environmental campaigning I have seen an ever stronger engagement emerge between the sustainability imperative and the building and architectural worlds. But while the direction of travel has been positive, it is unfortunately still the case that many new buildings are very far from sustainable.

So how will it be possible to break that trend and to render cutting edge design for sustainability the norm rather than the exception? I have come to the conclusion. that a key driver of change will be through practical examples which by doing things differently inspire new ways of thinking. Here in the UK it is perhaps fitting that one new source of inspiration is found within sight of Arkwright's first Manchester mill. The cutting edge green building in question is not the work of a fringe 'green' design outfit, but the new headquarters for the Manchester office of Europe's largest integrated building design practice. As a practical and tangible statement the Manchester HQ of the Building Design Partnership is powerful.

I have visited the building, and am impressed. It embodies the latest design to minimise energy use for heating and lighting. It stores and uses rainwater. The timber is sourced from properly managed forests. Recycled aggregate is built into the structure. On the roof, there is a stony area set out to attract one of the country's rarest birds – black redstarts.

It is all the more encouraging given the influence of BDP through the broad role it plays with thousands of clients working in all aspects of built environment, from the development of apartment blocks, schools, hospitals and commercial properties, to regeneration and spatial planning and urban development.

The building is certainly a technical achievement, having reached an 'excellent' standard in the Building Research Establishment's Environmental Assessment Method (BREEAM). In some ways more important still is how the building is inspiring to look at and great to be in. One rather neglected but critical aspect of sustainability is how to encourage people to want to take that path rather than more familiar but unsustainable routes toward meeting our needs. If the choices we make to achieve a more sustainable society are seen as largely negative, then they simply won't happen, especially in democracies where the views of the public count in decision-making.

Diminished quality of life, lowered comfort and higher costs are almost automatically seen as natural partners of greener living. I have found that moving past these barriers of perception can best be done by demonstrating the opposite with practical examples. Seeing is, after all, believing.

The impact of cities is not only about buildings, it is in large measure about how we move between them. In this respect as well Manchester is in a position to inspire new thinking through leadership. The debate about new public transport and congestion charging linked to the city's Transport Innovation Fund offers a topical case in point. While decisions that imply major change are usually controversial, this is no reason not to press ahead, because without practical leadership under difficult circumstances we are not going to get to where we need to be, which in the case of carbon dioxide is to slash emissions by at least 80 per cent lower than now by 2050.

Importantly, there is also a competitiveness dimension to sustainability that forward-looking cities can exploit: if they have sufficient vision. Planning, design and development that is sustainability-led will soften the impact of future resource constraints and help stimulate the development of businesses better able to compete in the markets of the future – which increasingly will be driven by cultural and regulatory forces that place a premium on greener living.

The emergence of a sustainable society will entail changes as significant as those which occurred at the start of the industrial revolution. In common with that period the new revolution holds economic opportunities of unprecedented scale. Could it be that the city which led the world toward the modern age might be a leader in taking it toward the next great stage of human development, by helping demonstrate how people and businesses can thrive on low carbon, environmentally aware and resourceefficient development?

## Tony Juniper Environmental campaigner and former Chief Executive of Friends of the Earth







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# 11 Ducie Street, Piccadilly Basin

## Data

## Site

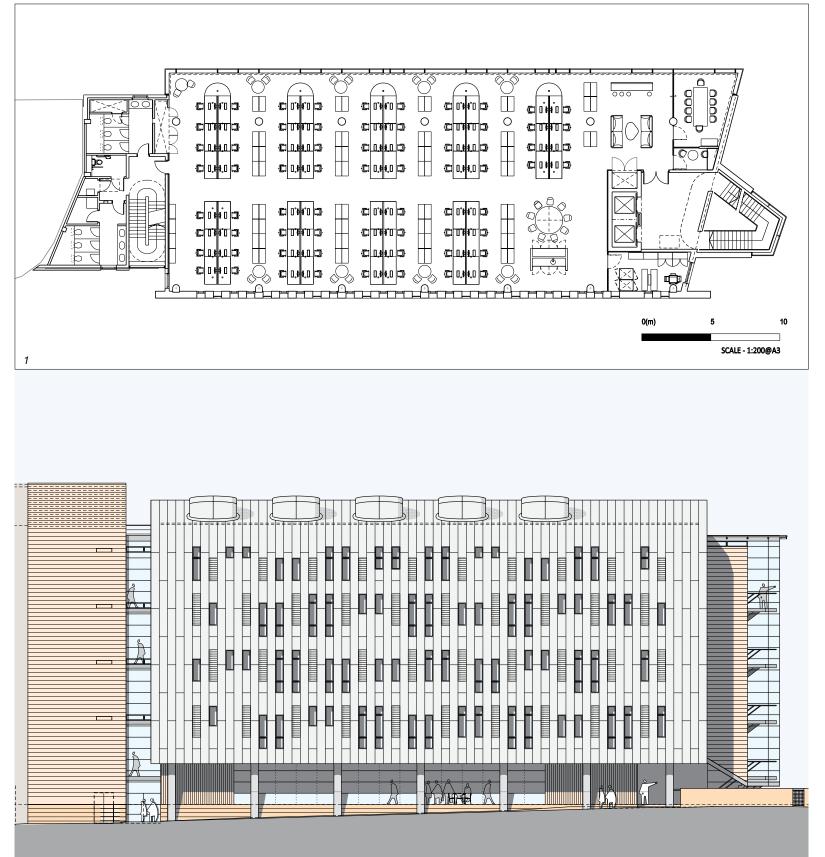
- Size: 42m (L) x 12.5m (W)
- Area: 525m<sup>2</sup>

## Building

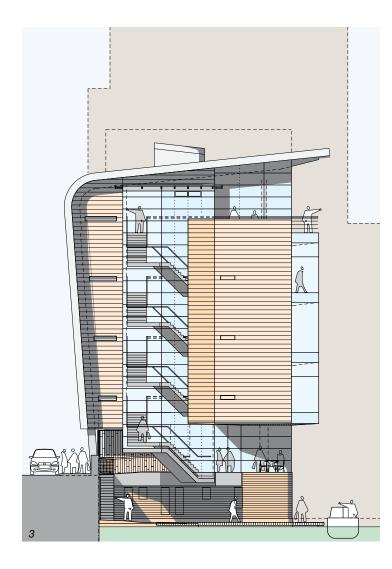
- Size: 42m (L) x 12.5m (W) min 47m (L) x 15.5m (W) MAX
- Height: 20m
- Area: 41,300sq.ft gross 33,000sq. ft nett
- Nett to Gross: 80%
- Number of Occupants: 260
- Area per person: 10m<sup>2</sup>
- Number of Work Settings: 500
- Volume of Internal Space: 12,500m<sup>3</sup>
- Weight: 6,000 tonnes
- Cost: Shell and Core: £7.5m Fit-out: £2.5m

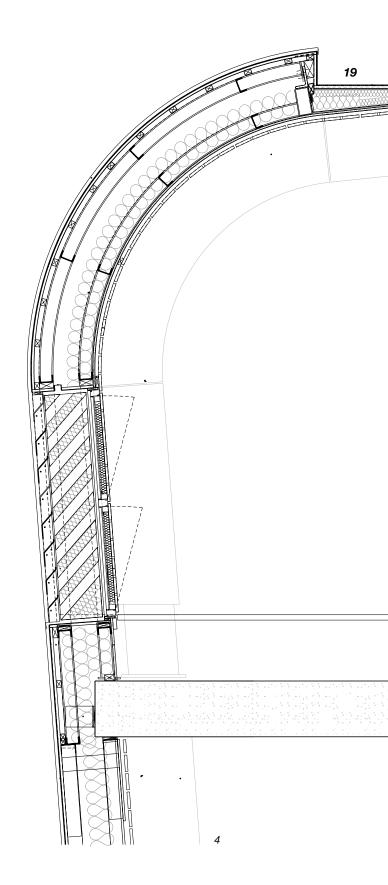
- Sustainability
- BREEAM Excellent environmental assessment status, 74.16% – first naturally ventilated office building in Manchester to achieve this
- Low energy design approach
- Naturally ventilated studio spaces, with manual and actuated ventilation system
- Night-time cooling, using 'coolth' from the mass concrete frame
- Acoustically attenuated façade to Ducie Street
- Showers and drying room, with locker storage for cyclists
- Rainwater harvesting supplying water for wc flushing
- 'brown' rubble/bio-diverse roof to the ancillary tower, designed following discussion with the Greater Manchester Biodiversity Project

- Sustainable approach to
  building material specifications
- Air tightness pressure test achieves 4.83 m^3/ (h.m^2) @50Pa
- Proximity to Piccadilly rail station
- GGBS (Ground granulated blast furnace slag) used as cement replacement/recycled aggregate
- BER (building emission rate) of 46kgCO<sup>2</sup>/sq.m/year against benchmark good practice A/C building of 120kgCO<sup>2</sup>/sq.m/year
- Carbon neutral development during construction and occupation for the first 20 years of tenancy, certified by the CarbonNeutral Company.



- 1. Typical Upper Floor Plan
- 2. South Elevation
- 3. East Elevation
- 4. External Wall Detail





# The Team



Stephen Redfern Executive Director BDP North Responsibilities: The whole thing...

Role in new office project? Client and 'minder' to design team Best bit of new office? The whole integrated solution – but if I had to choose a 'bit'... the 2 storey concrete wall.

Worst experience whilst working on new office? Choose any of the following: receiving tenders 50% over budget, being handed building five months late, being in over the final weekend worrying about whether our servers would work...

# How you think it will change what we do? Fundamentally probably the most important decision ever taken by the Manchester office. We now have a studio environment that we are truly proud of, that reflects the design ethos of BDP.

What's next? To create for our clients with common goals ever more inspiring, sustainable environments. and to attract staff, clients and engage with other stakeholders who share common goals.



## Gary Wilde Architect Director

**Responsibilities:** Leading the Manchester studio's Workplace group. **Role in new office project?** Project architect and design team leader, from inception to completion.

**Best bit of new office?** Being able to work within the space we've created – with thankfully no complaints! The best bit visually is probably the Ducie Street façade-playful and elegant.

### Worst experience whilst working on new office?

Were there any bad experiences? All now erased from memory! How you think it will change what we do? The building will act as a showcase for our design approach and our thought leadership in the creation of sustainable buildings. What's next? Hopefully more of the same or better – credit crunch permitting!



# **Mike Whitehurst** Environmental Engineer Director

Responsibilities: Trying to get a team of environmental engineers to communicate with and integrate their design thoughts into the rest of the building design team. Sometimes this happens with spectacular success – like this office. Role in new office project? Environmental tour guide! Best bit of new office? The fact that the space we have created stimulates the design process and give its occupants enthusiasm for passive low energy building design. **How you think it will change what we do?** Communication between design professionals will increase and ultimately lead to perfectly integrated building design solutions – it's good to talk. **What's next?** We will soon be designing spaces for people that benefit the environment they belong to instead of taxing it.



# Brian Jones Associate Project ManagerResponsibilities: Internal management of projectsand quality assuranceRole in new office project? Project Manager andContract Administrator of the fit out worksBest bit of new office? Working with the fit out

contractor and seeing four years of planning taking shape.

How you think it will change what we do? In the short time we have been here, I have noticed a general change in everyone's attitude. Everyone is proud of what we have achieved and I think this will set the standard for our design and quality of service on all our projects.

What's next? We need to use the office as our showroom. To do that we need to keep it looking like it did on the first day it was open.



Jonathan Pye Civil and Structural Engineering Director Responsibilities: Joint leadership of C&S Engineering, BDP North Role in new office project? C&S Director Best bit of new office? The "pointy" North East end to the upper floors which cantilevers 6 metres out over the canal, and the "look no hands" feature stair which sits alongside.

Jasper Sanders Interior Design Associate Responsibilities: Always making design better. Role in new office project? The making of 'workplaces' Best bit of new office? Beautiful concrete – by far the cleverest 'thing'. Worst experience whilst working on new office? Discovering that the Ardwick geological fault runs directly beneath the site...more or less directly below Stephen Redfern's desk!

How you think it will change what we do? Hopefully it will inspire some of our younger architects and engineers to do creative and beautiful things with concrete. What's next? To do some more beautiful things with concrete.

## Worst experience whilst working on new office? All now erased from memory!

How you think it will change what we do? Cements our position of design leaders in Manchester. What's next? Making the rest of the world a better and more sustainable place.



David Ritter Sustainability Associate Responsibilities: Head of the sustainability team in Manchester.

Role in new office project? Leading the project towards the highest environmental performance standards. Best bit of new office? The whole and the details. It's great to see an iconic building that's strongly shaped by its surrounding microclimate and the environmental strategy within.



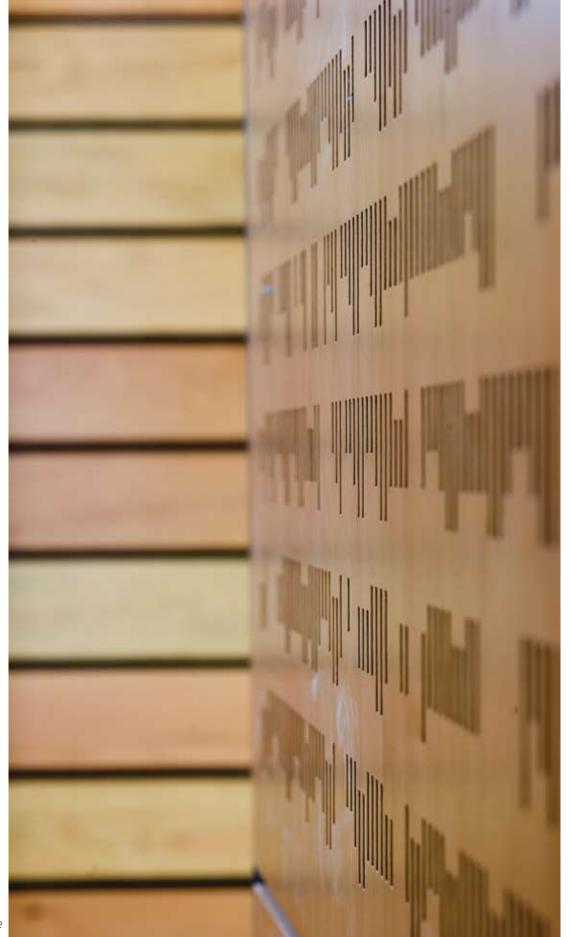
Laura Bayliss Lighting Associate Director Responsibilities: Leading the Manchester lighting team - ensuring innovative, sustainable, peoplecentred lighting schemes with high conceptual integrity are designed and delivered. Role in new office project? Overseeing the design and implementation of the lighting scheme.

#### How you think it will change what we do? As

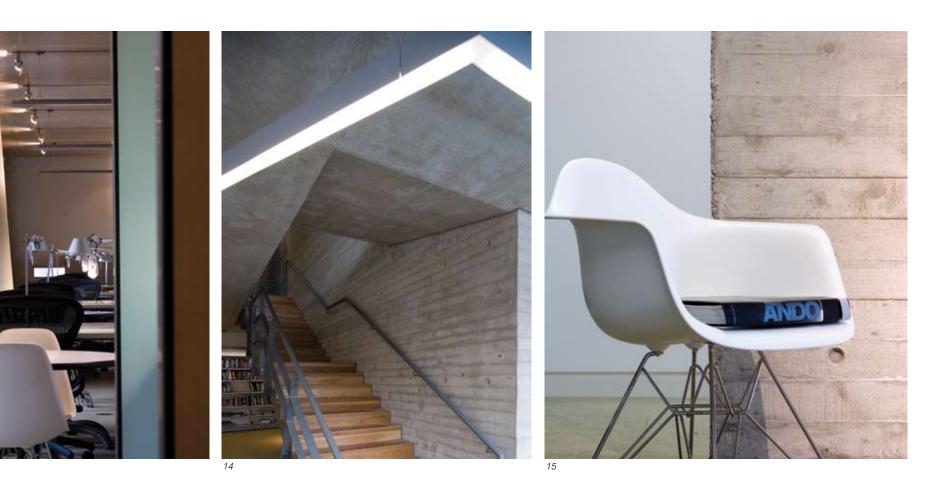
designers it's our role to show. We can be proud that we have created a space that is not only a delight to work in but one which exemplifies our approach to addressing climate change.

What's next? The performance of the new building is going to be monitored for carbon emissions, water and waste as part of BDPs Environmental Plan and in collaboration with local universities.

Best bit of new office? I'm biased of course, but it's the lighting for me! Not only does it look great but the lighting system responds to daylight conditions and occupancy to save energy, as well as giving local user control. Worst experience whilst working on new office? Being jealous of the happy bargers going past the window.









# Original. Modern. BDP.

Words move in and out of fashion. This will be obvious if you dip into Sherlock Holmes or Cranford. Here are some words that have been current in the last decade: Apartment – who would want to live in a flat? Heritage – something more sociable than inheritance. Equity – part of a house you never knew you owned. Regeneration – an activity undertaken by property developers who have employed PR consultants. Spin – what PR consultants do for property developers, but which is no longer sustainable. Sustainable – pertaining to our capacity to survive.

Cities grow, mature, grow old and die. Bucking this historilogical certainty is like cryogenics or blasting yourself into orbit post mortem. Existentially, sustainability is futile. So saying, survival is exciting stuff. You don't need to throw yourself from a plane over an active volcano to get the buzz (try opening a bar in the Northern Quarter). Energy, during the last couple of decades in Manchester, has been largely generated by our awakening instincts for survival. This is partly Darwinian, partly Malthusian and partly 24-hour party hype.

For BDP, building a new studio in Piccadilly Basin, with a view over the Rochdale Canal to Manchester's oldest canal warehouse (Carver's), the world's first aeroplane factory (A V Roe at Brownsfield Mill), and the oldest industrial suburb (Ancoats), is positively retro. Building a hyper-sustainable (BREEAM Excellent) new studio overlooking the crucible of the environmental ravishes of global industry is more than a touch ironic. The practice has entered a new phase in its relationship with Manchester. There was work with Granada TV in the 1980's, when they helped recreate 221B Baker Street, the best-known London address after Number 10 and Buckingham Palace, in Manchester's first railway yard. A dozen years later BDP's landscape division created a green sanctuary for Goths, Moshers, Emos and other proto-nihilists in the shadow of Manchester Cathedral.

DJ Sasha runs his highly successful Warehouse Project in arches below Piccadilly Station. It's one of the biggest club nights in the country. In the run-in to the 2002 Commonwealth Games BDP, equally successfully, completely remodelled the station itself. Routing out the under-croft and relocating vehicle access to a new entrance and traffic circulation and interchange on Fairfield Street transformed the station and has set up the possibility for an entirely new development zone of the future. Piccadilly Station, now universally regarded one of the best in the country, is fundamental to Manchester's TIF ambitions that BDP fully support. Rising up the escalator from the Fairfield Street entrance is a vivid example of the work that architects do. A beautiful Victorian clock, strategically and elegantly relocated from the main concourse, where it might too easily have been lost in the visual blizzard of LED destination boards.

Following the IRA bomb in 1996, BDP created New Cathedral Street, the all-new axial pedestrian route from St Ann's Square to the cathedral. The building now shared by M&S and Selfridges is a benchmark in modern retail design. In a number of respects this has been the template for such as Liverpool One and Victoria Square, Belfast, where the practice has reaffirmed the primacy of the street as city realm. The link from New Cathedral Street through to Cathedral Gardens reasserts the shared waterfront of the River Irwell between Manchester and Salford. Across the river, and acting as a marker for Ask Developments' Greengate masterplan, BDP designed Abito apartments for people who are particular about their beds. So un-Tracey Emin are these Abito dwellers, they tuck their beds away of a morning. Genuine innovation in apartment design has not been a 21st century characteristic of UK cities. With its distinctive balcony treatment, canopied atrium and uncompromising interiors, Abito successfully added an original and modern niche to the city residential sector.

Having contributed to the growth of Manchester United as a world brand by designing new press facilities at the Theatre of Dreams, BDP has just thrown a shiny new ball at the time-worn wicket of Lancashire County Cricket Club. Old Trafford, recently demoted from Test hosting status, is looking to bounce back, with deep red grandstands and shameless hospitality. BDP's plans for the future of cricket in Old Trafford look to be distinctly more 20-20 than County, more Flintoff than Grace. There's a healthy streak of irreverence running through recent work, which includes the brazen new grandstand at Aintree.

16 M&S 26

No rider ever romped home in the Grand National by exercising restraint. The Aintree Grandstand is blingingly more WAGs than Ascot Ladies Day. I guess the architectural term is "know your market."

2009 sees the 30th anniversary of Unknown Pleasures, the debut album by Joy Division. The album, released by Factory Records, has an iconic sleeve designed by Peter Saville. Four years ago Saville was appointed Creative Director for Manchester. In his role, and after long research and development, Saville created a hallmark for the city. In respect of its undeniable place in history as the first massmanufacturing industrial city Peter Saville branded Manchester with two incorruptible words, Original Modern. He might have been looking from the windows of the new Manchester Studio, across Piccadilly Basin to Carver's, Brownsfield and historic 1798 Murray's Mill on Redhill Street in Ancoats, where BDP has successfully completed restoration and environmental work. Some in Manchester have had difficulties embracing Saville's motif for the city. BDP has gone and made an entire building out of it. The Original Modern Manchester Studio.

Phil Griffin Writer and Journalist



17 Piccadilly Station

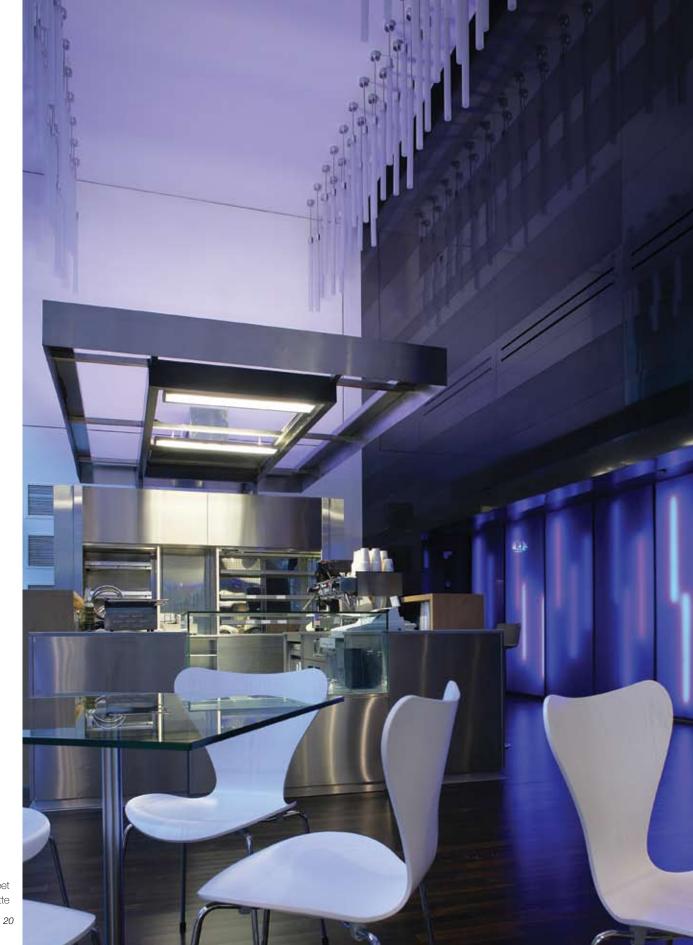






18 Abito Apartments





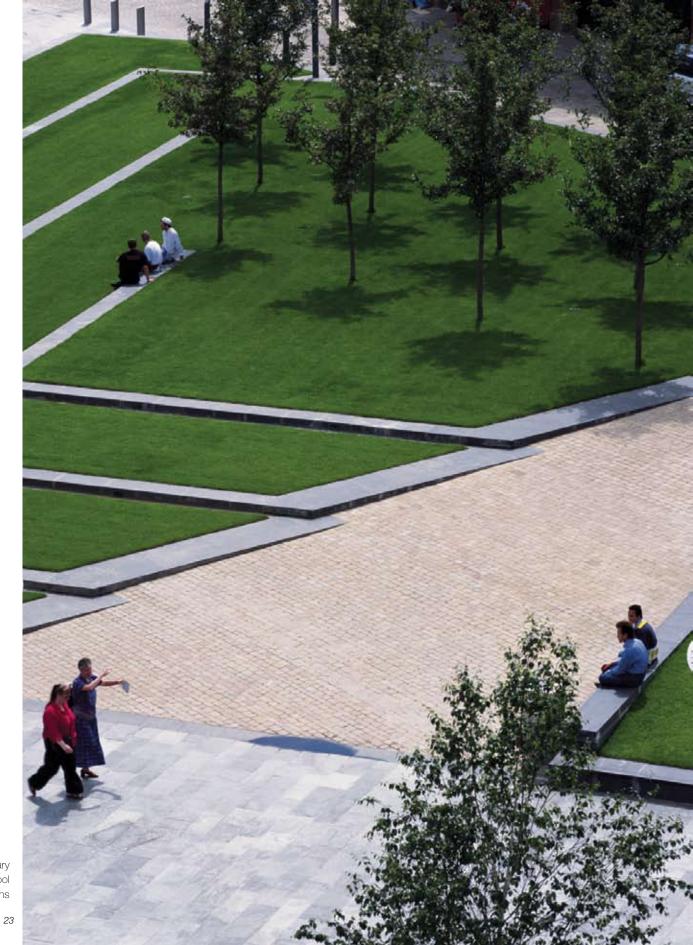
Left: 2 Hardman Street Right: Deloitte





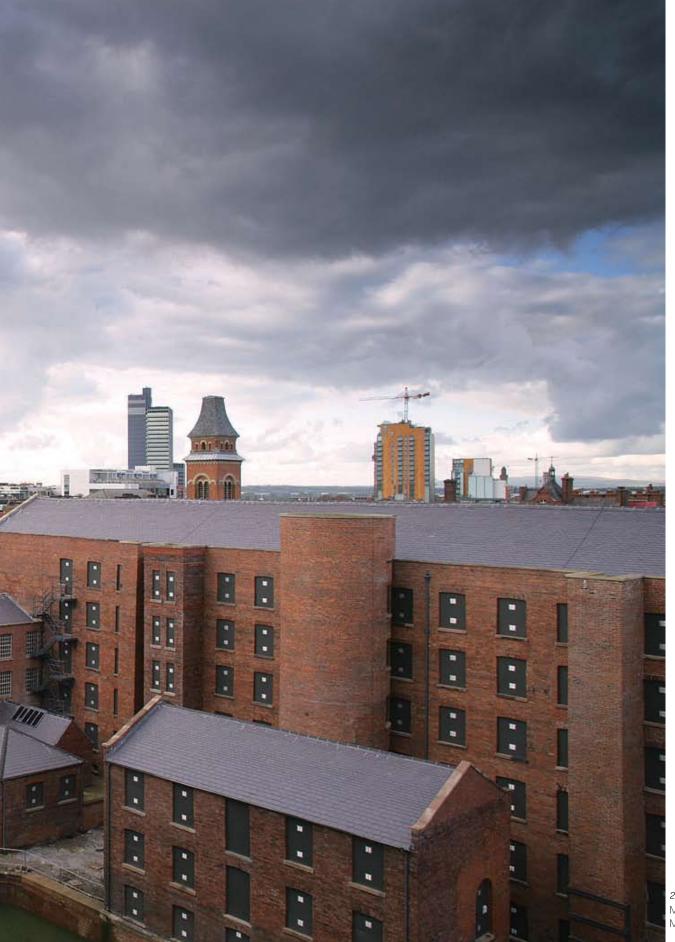
*21* Aintree Racecourse





Left: Devonshire Primary School, Blackpool Right: Cathedral Gardens





24 Murrays' Mills



Left: Manchester United FC South Stand Right: Ask Developments, George Leigh Street







# The Studio Must be Built

As a devotee of late night trash radio, I was recently listening to yet another interminable 'vox-pop' phone-in, which, on this particular occasion, was 'broadcast live from Manchester'. In my semi-conscious state I was fascinated to hear callers discussing why Manchester was better than Madrid. Seemingly it all boiled down to four things: music, football, the weather (no, really!) and the people, and, while some may argue this is a slight over -simplification, there is definitely something in it.

Looking back on my own time spent living in Manchester (from University days onwards), I realised that many of my memories were inextricably linked with those four themes.

The opening of the Hacienda in 1982, and its transformation from empty venue to global epicentre of cool. Oasis at Maine Road, where the crowds sang so loud they even drowned out Liam and Noel's squabbling. Manchester United's transformation from nearly men to treble winning Champions of Europe and now, more incredibly still, Manchester City becoming the richest football club in the world! The resilience of the people of Manchester in the aftermath of the IRA bomb, and their rightful celebration at the successful staging of the Commonwealth Games.

And then there's the weather.... As the caller said, "who wants the sun anyway, the City looks beautiful in the rain!" However I think the caller missed the fifth characteristic of the City – change. Manchester is a restless city, a city of ambition and energy, constantly adapting and reinventing itself for the future and the new challenges of an ever changing world. And it is here, even more than the music, the football, the weather and the people that we find our true common bond with the City, as agents of change within it, and people changed by it.

The design of our new Manchester Studio exemplifies this principle. It is BDP building, giving expression to many of the themes which have been present in our work over decades, such as sustainability, and creating places for people. But it is also a distinctively 'Mancunian' building giving expression to those themes in a way which is uniquely of the place and the moment.

The principle applies equally to our people. Our team is young, talented, creative and energetic, and we now have a place to work which matches our ambition. Many have grown up in Manchester or come to University here, and have now chosen to live and work in the City. They are a product of the City. Shaped by it, but also re-shaping it into something new and different.

So there it is, the symbiotic relationship between Cities and people. Ever changing, adapting and growing, in ways we cannot even imagine.

Gavin Elliott Chairman, Manchester Studio

LCCC, Old Trafford Redevelopment

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# Gavin Elliott

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# **Photographer Credits**

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# Additional Text

Gavin Elliott

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