IBP Architecture Writer 2020 entry

Elizabeth Hopkirk, Building Design

Elizabeth has a passion for uncovering the human stories behind whatever she is assigned to write about and sharing them with her readers. She enjoys digging out unexpected details and weaving these nuggets into an engaging narrative. She is always aiming to serve up the essential but sometimes dry technical information required by a specialist audience with a spoonful of sugar.

This selection of three punchily presented features for the architecture magazine Building Design illustrates her gift for storytelling.

“How we built a hospital in 10 days” is based on an interview with one of the designers of the first NHS Nightingale. She wasn’t the first to tell this remarkable story but she was the first to discover that James Hepburn was recovering from coronavirus which he caught on site – an exclusive that she span out from her feature for maximum impact. She also teased out the fascinating story of the friendship behind the build to capture the drama of a hospital the whole country was talking about. A few weeks later she interviewed the architects of Glasgow’s covid hospital, crafting a fast-paced and personal story that felt entirely different, despite the superficially similar subject.

“How No1 Poultry nearly lost its stripes” is the fascinating untold story behind one of the most distinctive and well-known buildings in the City of London. It is written in the voice of an architect Elizabeth met when she went to Mipim for the first time as an architectural ingenue a decade ago. “At a dinner he mentioned this extraordinary project he’d worked on after university,” she recalls. “I was enchanted by some of the details and when, years later, my boss announced a new feature called My First Project I knew immediately this was the perfect story to kick off the series.”

The final piece, on Ab Rogers’ Maggie’s Cancer Centre, was Elizabeth’s first full Building Study. She jumped at the chance and enjoyed blending interview and observation into her criticism. All eyes were on the building for many reasons, not least because it saw Ab Rogers pitched head to head with his famous father, Richard, who won the Stirling Prize for his own attempt at a Maggie’s Centre a decade earlier.

All three pieces shed light on the way good architecture is created, from the importance of the contract to the therapeutic benefits of light and materials to what can be achieved when a diverse team pulls together.

[405 words]

Story links:

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Maggie's Centre at the Royal Marsden, Sutton, by Ab Rogers Design

By Elizabeth Hopkirk | 21 February 2020

For his first complete building the designer has gone head-to-head with his father – but he was more intimidated by Rem Koolhaas, he tells Elizabeth Hopkirk

Source: John Short

The entrance, reached by paths through Piet Oudolf's landscaping

Were you to walk from the Royal Marsden's original red-brick Victorian home in Chelsea to the hospital's sprawling post-war campus in Sutton your arrival, some 12 miles later, would be heralded by the sudden and unexpected scent of pine trees.

The change in vegetation marks the boundary between London clay and the sandy heathland of Surrey. Belmont, a settlement of detached houses strung along roads with names like Golf Side and Sandy Lane and where the Institute of Cancer Research (ICR) is creating the world's second-biggest cancer research hub, is truly an edgeland.

As you head south through Motspur Park, mile after suburban mile of forgettable semis gives way to stables and sewage treatment works before London gathers itself for one last spasm of urbanness at Sutton, with its concentration of high street, station and high(ish)-rise flats. Just half a mile on, at Belmont, the city loosens its grip entirely, expiring into the green belt by way of a lavender farm.

At the very spot where the capital gives up the ghost, an unreadable excrescence of buildings scars the landscape. This is the Marsden-ICR campus which stretches for 20ha between golf courses and a pair of prisons.

When the hospital acquired the site in 1962 it squatted in a series of Victorian pavilions built as a school for daughters of the workhouse and later used as a sanatorium. Some of these are still occupied by hospital staff while others are boarded up pending demolition. Beyond this an impenetrable thicket of 20th-century buildings extends east around a series of miserable outside spaces, bereft of any sort of guiding hand.

Visitors searching fruitlessly for the hospital entrance will find themselves drawn to a large hangar of a building looming over the site on a slight incline to the north. But they would be heading in the wrong direction, for this is Feilden & Mawson's Centre for Cancer Drug Discovery, due to complete this year, the first of three new buildings forming an early phase of the London Cancer Hub. The low-profile entrance to the actual hospital is still 200m to the south as the crow flies, though frankly you wouldn't want to start from here.

It is into this confusing context that Ab Rogers Design has inserted its first completed building, a Maggie's cancer care centre, and quite the loveliest structure for miles around. The practice, led by Ab Rogers and Ernesto Bartolini, considered three sites, eventually choosing a spot on the western perimeter, facing a few houses on Cotswold Road. "We can't fix the mess of a hospital," admits Rogers. "If you enter at the back end of a hospital it is really scary."

Source: John Short

The largest of the terracotta-wrapped volumes, with the timber garden room behind the tree on the left

Its distance from the main hospital has proved slightly problematic in terms of patients finding their way but that is not the fault of the centre. When they finally arrive visitors, told to look for "a bright red building", will be in no doubt they have stumbled on the right place. Rogers describes it as a beacon, albeit one that is only two storeys at its highest point.

What are Maggie's centres?

Maggie's centres need little introduction to an architectural audience. There are now more than 20 in the grounds of hospitals across Britain, and three overseas. The charity was founded in 1995 by the late Maggie Keswick Jencks while she was being treated for cancer, and her husband Charles Jencks, the architectural historian who himself died last year aged 80.

They wanted to create places where people could digest the shock of a cancer diagnosis or receive

support and advice during treatment away from a clinical environment. Each centre is staffed by professionals but has a welcoming domestic feel, designed around a kitchen space and a garden with comfortable rooms that can be used for group activities or private counselling. Users can chat with others around mugs of tea at the kitchen table – or shut themselves away.

Famously, each Maggie's has been designed by a different architect, from Zaha Hadid to Norman Foster via dRMM and Dow Jones. Sutton's is the third in London, following those at Barts, designed by the American architect Steven Holl, and Charing Cross, designed by Ab's father's practice Rogers Stirk Harbour + Partners (RSHP). The latter won the Stirling Prize in 2009. No pressure, then.

Origins

Ab Rogers Design landed the covetable commission about seven years ago after working with the charity on smaller projects such as exhibitions and interiors. It is inevitable that comparisons will be made between the centres designed by Rogers father and son, but Ab (pronounced Abe) insists it was not something that hung heavily over his head as he started work.

"It was more the fear of designing a Maggie's knowing that Rem Koolhaas has done an amazing one and Frank Gehry has done an interesting one," he says.

"It's a little bit terrifying because you know who you are up against and that it will be noticed. There are a few Maggie's that are really underwhelming and you don't want yours to be another of those – especially as your first building."

The former cabinetmaker, who studied and later taught at the RCA, describes crits at his father's dining table and joint fundraising talks which helped clarify his thinking. "I spoke to my dad about it quite a lot, as I would any building, and he was very supportive," he says.

Superficially the two buildings have more in common than some other Maggie's since both are wrapped in a single vivid colour. Richard's bright orange perimeter walls, protecting the Charing Cross Maggie's from hostile Hammersmith traffic, are sometimes mistaken for hoardings by passers-by. For others it has the air of a modernist citadel.

Rogers Stirk Harbour & Partners' Maggie's West London. The congested Fulham Palace Road is immediately beyond the perimeter wall on the left

Ab's red wrappers, made from hand-crafted terracotta panels, are by contrast much subtler and less defensive. His building, in a significantly quieter location, addresses the street genially, where a couple of the houses coincidentally sport red front doors. He even removed a low wall so the only boundary is the landscaping of Dutch garden designer Piet Oudolf.

The decision to orient the building this way was partly informed by the uncertainty hanging over the rest of its setting since its nearest neighbours, the Victorian hospital buildings, are due to be swept away – but no one knows what will take their place or when.

It starts with a Rothko burnt umber and comes round to a vibrant post box red

Ab Rogers

The other reason was the sun. Rogers and Bartolini explain their starting point was how they wanted light to fall in the interior spaces, which dictated the form. They sketched four interlocking volumes fanning out from the kitchen, with glazed front elevations and clerestory windows to allow natural light to flood in. The glass proved an unexpected headache when Pilkington suddenly closed its UK factories. Without a watertight shell, work could not progress on the fit-out and the 12-month build programme slipped by four months.

There were also delays at the Florentine quarry and factory that made the glazed terracotta cladding but this did not affect the schedule because the panels could be attached at any point – even if "four days before completion rather than four months" was rather nerve-wracking.

"I had to keep reassuring the contractor that the panels would arrive," grins Bartolini. "British contractors need to control everything – time, quality, cost – which I understand but sometimes that's more important than the end result. In the end they trusted me but they were also ready to blame me if it didn't work."

Source: John Short

View out over the entrance from the mezzanine landing, with Rogers' glazed lights

Rogers and Bartolini, who are cousins, have been working together since the latter moved to the UK from Florence four years ago – "just before the referendum, but my wife and I are very happy to be here: London is amazing". The men first got to know each other in 1995 when Bartolini was avoiding military service, working for Richard Rogers by day and messing about in Ab's workshop at the RCA by night "doing crazy things".

The practice has mostly focused on interiors, with high-profile projects including Heston Blumenthal's Fat Duck, staff facilities at Selfridges and, more controversially, Erno Goldfinger's Balfron Tower, as well as a temporary pavilion in Thailand made from red parasols. It has also picked up a gratifyingly large amount of work in Melbourne through a relationship with Scape, liberally sloshing its student flats with block colours.

Exterior

Rogers, who is both wearing red and cooking a red lunch (roasted sweet potato soup with radicchio) when Building Design visits, says they chose terracotta for its haptic, hand-made quality and red to give the centre a distinctive visual identity. This was partly a reference to the brick of neighbouring houses – but mostly just because they like it.

"There are four shades as you go round," explains Rogers batting away suggestions that red is an insensitive choice for a medical setting. "It starts with a Rothko burnt umber and comes round to a vibrant post box red."

The cladding runs up the side of each volume, over the top and back down the opposite side, with guttering concealed beneath removable roof panels and every block angled for water run-off, something you're only aware of if you spot the fractionally wedge-shaped lintel over the walnut front door.

With its glazed ends and chamfered edges the centre has shades of the radical Zip-Up House designed by Rogers' parents in the late 1960s or its sibling 22 Parkside in Wimbledon where he lived with his family for more than a decade. But the Maggie's inhabits more dimensions, unfolding from the entrance like a Russian doll in reverse, each cranked volume taller than the last. There is

also a fifth volume separate from the rest, black timber on a concrete plinth: a garden shed for art classes, albeit with a fully glazed wall and a beautifully poured concrete floor.

Source: John Short

From a distance the ensemble resembles a collection of tin huts, entirely in keeping with the demountable nature of much of the hospital campus. But it quickly becomes clear that this is something special, and the corrugated cladding is only the start. Every element of the building is unique, down to the carved wooden door handles and the terracotta pendulum lights glazed by Rogers himself. The contractor thought the architect was crazy, but between them they have delivered a building of quality and delight.

"It wasn't about trying to create iconic architecture," says Rogers. "We were trying to create architecture with a purpose."

The project cost just over £4m or £8,000/sq m and was procured through a traditional contract.

"You can't use design-and-build for something so bespoke," explains Bartolini. "We drew every single nut and bolt. Even the plasterboard is bespoke – we couldn't use standard British gypsum."

Source: John Short

The kitchen is the heart of the building, with the staircase providing drama

Interior

The front door leads intuitively to the kettle without the need for a reception desk – one of Keswick Jencks' stipulations – but a manager, discreetly seated with a view of the door, is poised to scoop up anyone too timid to step beyond the threshold. Right there is one of the individually designed loos, big and comfortable enough to hide in while composing yourself.

Source: John Short

The top-lit loo by the entrance

Beyond is the kitchen with a view out to the courtyard. To the left are two open sitting rooms divided by a fireplace and, deeper into the plan, two more private rooms, known as the green and the purple.

Source: John Short

The purple room

Alternatively, visitors can walk straight up the stairs to another set of rooms and customisable spaces. Two intensely green high-backed benches on the landing can be wheeled to face each other, enclosing a vertical slot window and creating a micro room.

Source: John Short

This blonde timber staircase with its coral red balustrade sweeps dramatically round the kitchen like a sash. Moves like this make the interior a colourful experience, yet the background palette is muted: soft wood, silky concrete and white walls. And off-white net curtains on rails that can be whipped across a window for instant privacy, a feature notoriously absent from Rogers père's Neo Bankside flats behind the Tate.

"We wanted to create a contrast, with a calm interior," says Bartolini. "You are guided by colour, but there's always another way depending on how you are feeling. There are quieter spaces facing the garden, rather than being thrown into the busy kitchen." Wherever you wander there are pleasing views through the building and out towards trees.

Source: John Short

Arrival at the top of the stairs

>> Building study: Rogers Stirk Harbour's Maggie's Centre at Charing Cross Hospital

>> Interview: Maggie's Centre's Laura Lee on the healing power of architecture

"We are missing the project in the office," confesses Rogers. "For seven years it's been a live project with at least one full-time member of staff working on it and, towards the end, four." It took that long because of fundraising and, partly, hospital politics. "We said, 'we're going to turn your car park into a beautiful garden' and the initial response was, 'but where will we park?'," says Rogers. It shows how easily people become conditioned to working in horrible environments. But staff who have found their way to the completed building love it. And that is no surprise because, nestling invitingly in that promised beautiful garden, it is a small jewel box of a building.

Source: John Short

The large and small sitting rooms. Paintings, rugs and other artworks are scattered throughout the building

Project team

Client: The Maggie Keswick Jencks Cancer Caring Trust: Marcia Blakenham and Laura Lee

Architecture and interior design: Ab Rogers Design

Landscape design: Piet Oudolf

Structural engineering: Milk

QS: Gardiner & Theobald

Civil engineering: Wareham & Associates

Contractor: Sir Robert McAlpine Special Projects

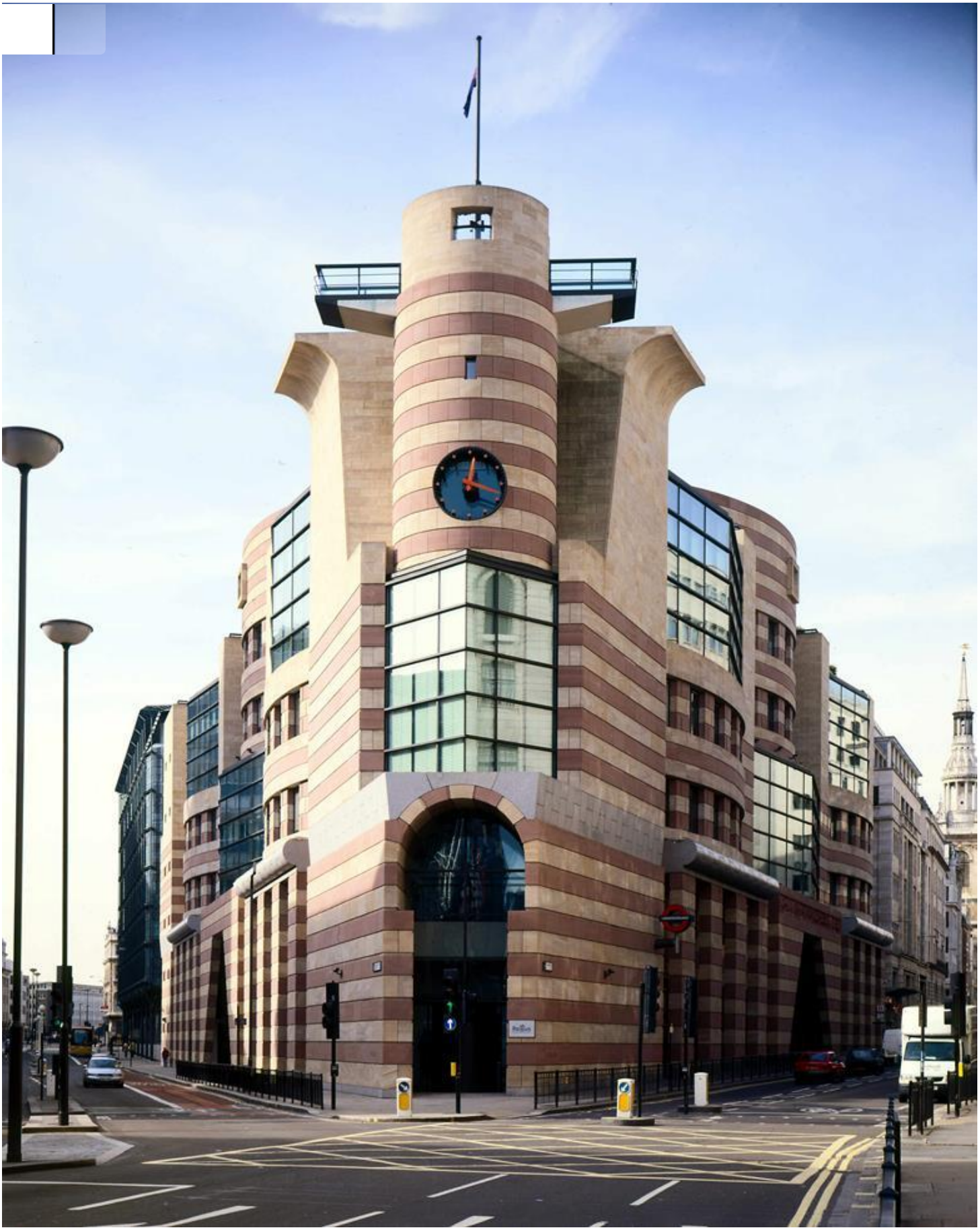
Terracotta cladding: Palagio Engineering

Facade and curtain walling: Prism Architectural

How No1 Poultry almost lost its stripes

By Elizabeth Hopkirk | 14 February 2020

Andrew Pryke's first proper job was in James Stirling's office. He recalls its unique atmosphere and the heady experience of becoming project architect on No1 Poultry



Source: Janet Hall / RIBA Collections

No1 Poultry stands on a prominent site in the City of London, facing Mansion House, the Royal Exchange and

the Bank of England

I had just left university and was working at a small practice in Soho when I got a call out of the blue one weekend from someone claiming to be Michael Wilford offering me a job.

Of course I thought it was a wind-up and kept asking: “Who is this?” But eventually he convinced me it was really him, James Stirling’s partner. He said he had spoken to my tutor and they needed someone to help on the Carlton Gardens competition they were just beginning.

I jumped at the chance and, a few days later, I arrived at the office, a five-storey Georgian terraced house on Fitzroy Square. There were about 25 of us and it was an unbelievable environment, more like an art gallery than an office. This was late 1988 but they did every drawing by hand – some of them were coloured by Jim himself – then framed them and hung them on the walls.

Andrew Pryke, now managing director of Bam Design

Perhaps I have romanticised it but it was like a 1930s architectural club. Jim would open a bottle of wine and tell us all these stories. You would find yourself rubbing shoulders with Frank Gehry and other eminent architects who would pop in if they were in London.

I started off working on Carlton Gardens, as well as competition entries for the Disney concert hall in LA and the Glyndebourne and Compton Verney opera houses. You would hope to get one of these opportunities in your lifetime!

You would hope to get one of these opportunities in your lifetime!

All the competitions were done in the same way – by drawing, not by waiting for a spark of genius.

Jim treated us almost like equals, nudging us. He would never sketch a design and say, “Draw it out”. He would sit at your drawing board and sketch with you. Or, at the meetings we had two or three times a day in his office, he would look at your sketches and say, “I like this and I like that – how about putting them together?”.

When the House of Lords finally gave the go-ahead to No1 Poultry after about 25 years in public inquiry, I was asked to lead it as project architect. My other project, the Lowry in Salford, had slowed down at just the right moment. I was given a team of eight people on the second floor of Fitzroy Square and told, “Off you go: deliver it”.

Source: Richard Bryant / arcaidimages.com

Aerial view showing the exuberant geometry

We only had 1:200 architectural drawings – no engineering or anything else. We had a project team seconded from Davis Langdon and, incredibly, Laing, the chosen contractor, agreed to build it at a guaranteed maximum price. There was quite a difference between that and what the QSs costed it

at. Laing were looking for key projects to enhance their brand, but it was one of three jobs that brought them down a few years later. Funnily enough it was O'Rourke, the piling contractor on Poultry, that later bought Laing for £1.

The job was done on a bespoke contract. It could have been quite daunting on the first project I was running after qualifying. Now, of course, I would think about all the things that could go horribly wrong, but when you are that young you just get on with it.

I had done quite a lot of contract law at university and I had some project management assistance from Arup so I wasn't completely on my own, but no one at Stirling Wilford had ever administered such a contract so I was really left to run the whole project on my own. That was quite something. It was one of the most prestigious projects in the City, so all eyes were on it.

Mies van der Rohe's unrealised Mansion House Square proposals for the site of No 1 Poultry

Lord Palumbo had spent years assembling the triangular site opposite the Bank of England – eight

listed buildings including the Mappin & Webb building. He initially appointed Mies van der Rohe in 1962, who designed a glass tower with a plaza in front. When that was thrown out in 1985 after a public inquiry, Palumbo appointed Stirling, but of course his proposals ended up at a public inquiry too, in 1988.

In the end Nicholas Ridley, the environment secretary, approved it, saying "it might just be a masterpiece". Then we had five years to make a material start on site, something opponents tried to take advantage of by forcing a third inquiry, into the closures of two of the roads running through the site (the third had to remain open throughout).

The first architectural instruction I ever wrote was to demolish all those listed buildings

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The south-west corner seemed most promising because there weren't any buildings there and we could get a small piling rig in. But there was the small matter of a plague pit on the site, so we had to exhume hundreds of bodies before managing to get some piles in just in time.

Laing's would not start demolition without a specific direction, so the first architectural instruction I ever wrote was to demolish all those listed buildings. They built it top-down, so we could carry on while 50 archaeologists worked underground surveying the Roman city. We needed miners to dig tunnels for them at the Bank apex because the space was so tight.

Jim died in 1992. Because the whole thing had dragged on for so long he had kept tinkering with the design. The last thing he told me was that he thought maybe it would be better all in beige. I agreed the stripes were a bit over-egged so was pushing for that but Tony Tugnet, one of the City planners along with Peter Rees, was dead against it, so we had to keep the stripes.

Royal procession of Charles II - detail of a frieze originally created by IC Kremer for the Victorian Mansion House Buildings but salvaged and incorporated into the facade of No1 Poultry

The client wanted a 120-year design life for the facade so we took a lot of trouble with the stone. I went to Australia and South Africa to review materials. We sourced the beige stone from Australia but the pink ended up coming from Gloucestershire. Not only was the English stone the most expensive but we also had numerous delays, which caused problems for the builders.

Laing were trying to find ways of reducing the price, which was going up and up. That is when we came up with the blue faience tiles instead of stone on the central drum. The coloured window frames were also one of our ideas, picking up on other Stirling schemes.

Atrium elevation

We thought we would have a bit of a play. I wasn't overly experienced at what you could and couldn't do so we just did it – and the planners agreed. Lord Palumbo gave us carte blanche to do whatever we wanted. I thought this was what every project was like.

If you start with a 1:200 scheme you still have a lot of designing to do. We took the triangle and circle of the plan and used them in so many details, from the ceiling tiles to the door handles and lift buttons. All on a maximum price contract.

The original plan was to reuse the Mappin & Webb clock on the prow, but it was too small so we had the idea of the see-through clock based on the Bulova Accutron Spaceview watch that Jim wore.

The whole thing was completed in 1998 and I moved on to work for John McAslan, but I had my leaving do at Coq d'Argent on the roof, which involved lots of champagne and some very happy

Bulova Accutron Spaceview watch, like the one worn by James Stirling. It was the inspiration for the clock at the prow of No1 Poultry

memories. We had all gone through this struggle together, like Band of Brothers.

Now I look at it and think it is probably overly complex. It is heavy, “sophisticated” architecture with a capital A and very much of its time. But it is a City landmark and to have been involved in a bespoke piece of abstract architecture at the very start of my career was astonishing.

Postscript

Andrew Pryke is managing director of Bam Design. He was speaking to Elizabeth Hopkirk

NHS Nightingale: How we built a hospital in 10 days

By Elizabeth Hopkirk | 9 April 2020

As the first patients arrive at London's coronavirus surge hospital, BDP's James Hepburn tells Elizabeth Hopkirk how they turned an empty exhibition centre into an intensive care unit for up to 4,000 patients

Source: BDP

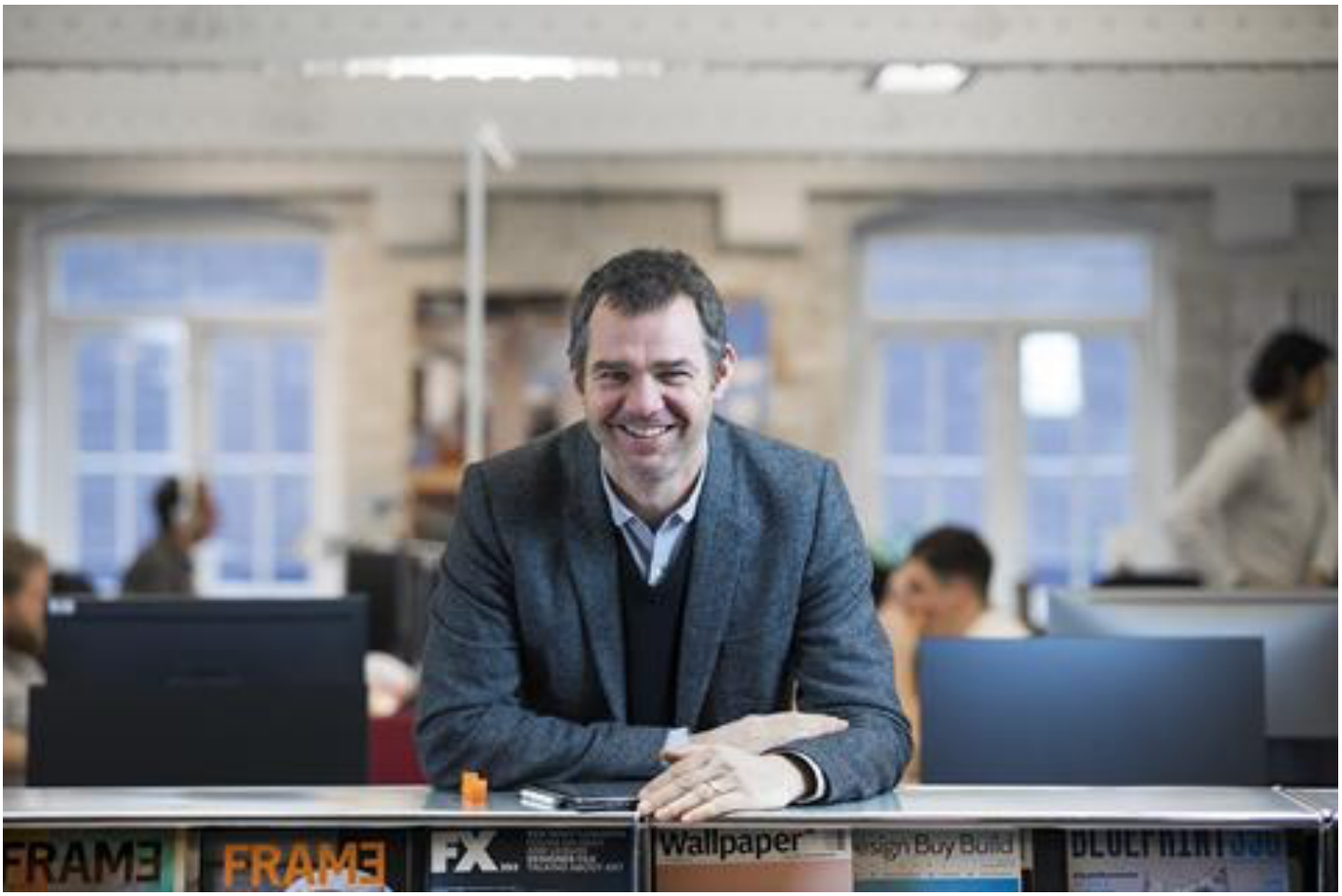
Intensive care beds at the ExCeL in east London - now renamed NHS Nightingale. The coronavirus surge hospital was created in 10 days by a team of 500 workers at the project's peak. Hundreds more beds are still being added

Late one March evening, a few days before Boris Johnson would tell the over-70s to isolate themselves, James Hepburn sat down with a beer in front of his computer for a Skype catch-up with his best mate, Matt.

The pair, both in their 40s, have been going on holiday for years, their kids are friends and their

partners are both anaesthetists who met at medical school. In fact Matt is a doctor too – he is Matthew Shaw, an orthopaedic surgeon and the chief executive of Great Ormond Street Hospital.

So it wasn't long before the chat turned to the growing coronavirus crisis and the alarming statistics coming out of Italy. "Matt started outlining where the shortages of beds in London were and what they were looking at. It was very interesting," recalls Hepburn, an engineer and principal at BDP.



Source: BDP

James Hepburn at work before the crisis

At work the next day, he called a few colleagues together. From their brainstorming, sketching and calculations emerged a short concept paper and Revit model outlining how exhibition centres might be repurposed to hold 400 or 500 beds. Hepburn sent this to Shaw the following day and carried on working up the ideas. It was already becoming clear that thousands, not hundreds, of beds would be needed and so he downloaded the floor plans for the ExCeL in east London.

In another late-night Skype call with Shaw he made the case. “It was the obvious venue because it was so much bigger and we calculated it could cope with 4,000 ICU beds,” he recalls. “I remember Matt’s partner being very grumpy and saying it was miles away and you’d struggle to get staff there. But it’s the only one that’s big enough.”

A couple of days later, Saturday 22 March, Hepburn got a call from Andrew Panniker, director of estates at the Royal Free Hospital in Hampstead which had been one of the first trusts to take covid patients. “Unknown to me, he and Matt had had a meeting at the ExCeL with the Army the day before,” says Hepburn. “He said could we help? I made a few phone calls to pull together some architects and engineers and we all turned up at the ExCeL on Monday morning to meet Andrew and Matt, not knowing what to expect.”

> The small group from BDP – three architects and three engineers – was encouraged to find some other engineers already there, from the Richard Stephens Partnership, as well as a main contractor, CFES, and the Army. Both firms had helped the Royal Free set up its covid isolation ward.

“I’d never worked with them before but everyone just rolled up their sleeves and started on it,” says Hepburn. “We were just a group of willing people who’d turned up to work out how to deliver this brief of creating 4,000 bed spaces. It was slightly surreal.”

He talks about how liberating it was to dispense with the usual process of carefully selecting the right team, signing off designs before construction and following responsibility matrices – and then to watch as a project that would normally take years to design and build began to appear in a matter of hours.

Source: BDP

Equipped bed bay at the NHS Nightingale

"It was incredibly collaborative," he says. "Everyone worked as a total team to deliver what we were tasked with. It was all a bit of a blur at the time but looking back it was amazing, if you can forget about the context – because of course it's rather macabre if you think that what you are designing is a shed for lots of intubated patients."

The project – which accepted its first patients this week while work continues to add 500 more intensive care beds every six days – was led by the Royal Free's Panniker as senior responsible officer, with the Army advising and providing some labour. Beneath him was a growing team of consultants specialising in everything from electrics and plumbing to fire risk and facilities management.

In such unusual circumstances, was there a jostling for power among the different groups? Not at all, says Hepburn, although boundaries between professions vanished and people stepped in to

help wherever it was needed. “A reporting structure was set up and different people took up leadership of different workstreams,” he says. “We were the space planning lead.”

He describes the team from main contractor CFES as “unflappable and an absolute pleasure to work with”. As was Les Hood, a medical gas fitter with a relatively small company. “He had a hell of a task on his plate as the oxygen is absolutely critical.”

Wilson James logistics staff at the NHS Nightingale

Daily meetings at 8am and 5pm were run by the Army and KPMG, with 40 people straining to hear each other as they tried to stand 2m apart. Every day the list of issues shrank as problems were overcome.

The push on the first morning was to work out how many bed bays they could fit into the ExCeL’s two vast, empty hangers and how they could be serviced using the infrastructure already embedded in the floor. “I’ve never designed an exhibition centre. They’re much better serviced than I

anticipated," says Hepburn – who doesn't normally design hospitals either, there being "enough NHS work in our household". His recent projects include Nicholas Hare's UCL Student Centre and Architype's Enterprise Centre for the University in Norwich.

The other looming question that first Monday was how exactly they were going to build the bays and how quickly they could get hold of the necessary materials. "Procurement was a real problem because factories and wholesalers were starting to shut down," says Hepburn.

Just then the ExCeL management introduced their regular exhibition set-up firm, GES, who told the team about the kit of parts they use to create stands when the exhibition centre is operating in its normal mode.

Wilson James coordinating deliveries for NHS Nightingale

"The next day we built a sample and it turned out to be perfect for the construction of bed heads, with just a little reinforcement," says Hepburn. "GES reckoned they could build them in a

ridiculously short amount of time because they were used to setting up trade shows in three days. We were all like: 'Really?' It sounded insane."

With all their normal jobs cancelled GES had no shortage of labour so they set to work laying the vinyl flooring and building bed heads and glazed walls using their existing materials. They could even do the primary electrical distribution.

Meanwhile Gerry Connor, Richard Stephens' electrical director, was urgently trying to procure distribution boards and generators. An uninterruptable power supply is essential for patients with invasive ventilation. Then he found all this useful stuff in the basement. "Anything that was already on site was a massive advantage so Gerry looked at how to modify things," says Hepburn. "His masterstroke was 3m sections of dado trunking with power outlets that could be prefabricated on site by electricians at workbenches."

And so it was that, just 24 hours after they arrived on site with 20 people, the floor was being laid and bed bays were marching across those enormous, 500m x 86m halls. "It was just so quick," says Hepburn. "We started on Monday and by the middle of the week you could see what everyone had been working towards taking shape. It was hugely rewarding, and a big relief. I've been an engineer for 20 years and normally find it hugely frustrating that it takes so long to do things."

Source: BDP

Nursing station and bed bays

The days were long and intense, beginning before the 8am meeting and finishing late in the evening, but the sense of everyone pulling in the same direction was palpable. “People were working an insane amount of hours – some of them overnight,” says Hepburn. “I’m lucky because I live in Tufnell Park [in north London] and could get a cab home every night but there were people who came down from Coventry to lay the floors and erect partitions who had to stay in hotels at the ExCeL. The number of people on site seemed to double every day, with 500 at its peak.

“When I bailed out [he contracted suspected coronavirus on day 8 despite strenuous distancing efforts, as did Shaw] there were a load of people who continued to work for another week. The stamina was just incredible.

“If you’d said six months ago you were going to design a hospital for 500 people in a week they’d think you were absolutely barking mad but the world has changed so much.”

Coordinating deliveries at NHS Nightingale in Newham, east London

Asked about his specific role he modestly calls himself “dogsbody and sicknote”, before adding: “I have absolutely no idea what we did every day. I was being dragged all over the place trying to sort stuff out. We were all just working flat out.”

Did he ever feel overwhelmed? “It sounded almost like an impossible task at the start, although I don’t think anyone had time to think, ‘Can I do this?’. We knew we would deliver something but the question was how compromised it would be. As it turns out we’ve delivered something pretty effective, although the test will come once it’s used in anger.”

That test begins this week. Once Hepburn is fully recovered from his bout of covid and his wife is allowed out of quarantine, they are both planning trips to the NHS Nightingale, as it has been christened.

Understandably Hepburn wants to see the completed project and talk to the handful of BDP

architects who are still down there, fine-tuning the designs in consultation with clinicians. It's a project he's very proud of and yet which he hoped would never have to open.

Now it has, and his wife, consultant anaesthetist Lucy Hepburn, is planning to answer a call for medical volunteers to care for the seriously ill patients it was built for. It won't be long before James Hepburn has a very clear understanding of just how effective this extraordinary project has been.

NHS Nightingale instruction manual

Hospital guidance documents are normally dry and indigestible. As the team began to take calls from overseas hospitals about the NHS Nightingale, they realised they had useful information to share.

BDP's architects produced an illustrated manual resembling an Ikea instruction sheet for how to turn an exhibition centre into an intensive care unit. It has been revised several times as work has progressed. You can download the latest version here.

Source: BDP

Above and below: Pages from the NHS Nightingale ‘instruction manual’ created by two BDP architects and made available for anyone to download after they took calls from Australia, Canada, Israel and other nations trying to deal with their own covid emergencies

>> Also read: BDP principal who led NHS Nightingale design is recovering from covid-19

BDP
@bdp_com

The rapid build of #NHSNightingale Hospital, London Excel is being achieved through the relentless determination of the military & interdisciplinary teams on site. Our team led by James Hepburn & Paul Johnson is working hard to deliver this vital project & we thank all involved.

11:40 AM · Mar 30, 2020

240 67 people are Tweeting about this

Richard Schilling
@Prof_Schilling

I find this photo of me waiting for our first patient both sad and moving. I wish we didn't have to be here.

8:39 PM · Apr 8, 2020

62.6K 9.3K people are Tweeting about this

Fr James Mackay
@james_m79

I was honoured to bless the #NHSNightingale yesterday in anticipation of its first patients. There are no words sufficient to express the dedication and love of every person involved in this incredible operation to save lives. Privileged to be a part of it. #NHSheroes

9:59 AM · Apr 7, 2020

976 204 people are Tweeting about this

Project team and partial cast list

Design and management

Royal Free London Property Services – Andrew Panniker – SRO – the man in charge

KPMG – Ben Garside, Ken Davey, Andy Simpson – project management team – ran meetings, sorted minutes and tried to connect people.

BDP – Paul Johnson, Jordon Lambert, Ehren Trzebiatowski, Brendan O'Reilly, Joao Diogo, Kevin Kelly, James Hepburn – space planning and architecture leads.

The Richard Stephens Partnership – Stephen Cowlin – mechanical lead, Gerry Connor – electrical lead

Mott MacDonald – Ian Watkins – externals and landscape

Eta Projects – Eugene Conroy, Stephen Endersby – utilities leads

DP9 – Chris Gascoigne – town and country planning advice

D&L Medical Ltd – Les Hood – medical gas lead

Mitie – Shaun McKenna – hard FM

Hoare Lea – Andy Vernon – commissioning and witnessing

ISS – Catherine Horne, Shannon Simpson – soft FM

NHS – Natalie Firminger – clinical lead

Fire – Gareth Bartlett – fire strategy

Mace – Frank Randles – Mace lead

The British Army

Build

CFES - Rob Doubtfire, John Davies, Hannah Churchyard – main contractor

GES – Jeff Lee, Rob Collins – floors, bed heads and electrical

Alpine Works – Adam Taylor, Doug Ansbro – medical gas, plumbing and electrical installations

D&L Medical – Les Hood – medical gas lead

ExCeL Centre – Brian Cole, Koreen O'Malley – these guys were really helpful as they know the ExCeL Centre backwards

Wilson James – Gary Sullivan, logistics

The British Army

Source: James Hepburn