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Category

Architectural Writer



Title of Work

Architectural Writer of the Year - Robert Wilson - Architects' Jc

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IBP Awards 2020

Architecture writer of the year entry

Robert Wilson, architecture editor, Architects' Journal

Rob is a writer who brings a consistently distinctive voice to his journalism. His is a writing style which provides a rich but pithy take on architecture and construction, one honed over the last two decades as both journalist and curator and which draws deeply on his previous experience as a practising architect.

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Supporting material 1/3

Raising The Standard: Orms retrofits Camden Council offices into hotel

12 September 2019

In researching projects to cover in depth, Rob has a track record of choosing examples that bring new angles to key subjects such as here - retrofit. With too many building reviews on the subject focussed on bare stripped-back aesthetics, his choice to look at the renovation and rework of this building – an ex-Council office converted into a boutique hotel - shows his ability to illuminate not only the technical but the social, historical and civic side of the story too.

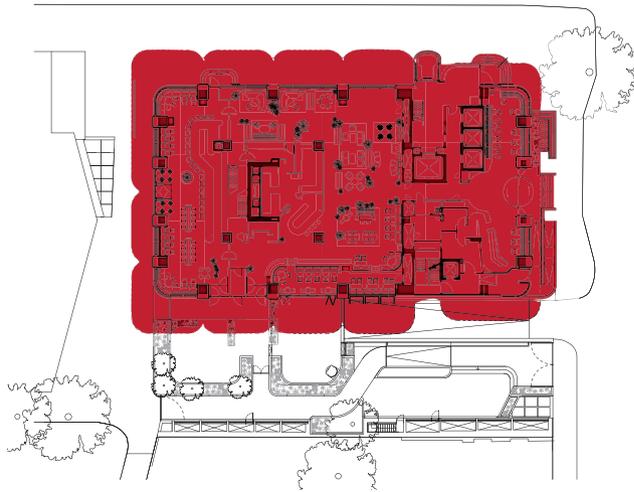
It was the first in-depth analysis of a project that has since become recognised as a model for the commercial end of 'maximum retention of fabric', transforming what was a once-denigrated structure slated for demolition. This is an article that gets to the guts of retrofit: but also celebrates the value and vintage glamour that can be created – the means to get more clients salivating at the potential of transforming old buildings, not just ripping them down to start again.

www.architectsjournal.co.uk/buildings/raising-the-standard-orms-retrofits-camden-council-offices-into-hotel

Building study

Raising The Standard

With its assured conversion of a 1970s former town hall annexe into a hotel, Orms has given a new lease of life to an unpromising building, applying the principle 'maximum retention of existing fabric'



Orms' initial brief was to analyse the development potential of a 1970s Brutalist building in London's King's Cross and assist developer Crosstree Real Estate Partners in preparing their bid to purchase the site. The retrofit was relatively complicated, due to constraints arising from the way it was constructed. It was concluded that the building was not suitable to adapt as Grade A offices but that it should be retained, refurbished and enhanced to become a hotel.

Words Rob Wilson
Photography Tim Charles, Timothy Soar and David Cleveland

The retrofit of a 1970s Brutalist council office into a boutique hotel sounds a bit like a triumph of style over substance, a conversion from public use to private asset symptomatic

of neoliberal encroachment. The former annexe to Camden Council's town hall with its *à-la-mode* crinkled and scalloped concrete façade is, on the face of it, a perfect match for The Standard hotel chain. It's a brand that specialises in resuscitating old buildings as hotels, or constructing new ones with a vintage feel. They riff on a Mid-century Modern vibe, each tailored to its locale.

In this case a 'London' meme is signalled as you approach by a vivid, pillar-box red capsule lift, which rides up the outside of the building. Looking like the cloned backside of a Routemaster bus, this is part of a broader homage to London Transport developed in the fit-out by Shawn Hausman, who has designed all Standard hotels, working here with interiors specialist Archer Humphryes Architects. However, the story behind this ballsy retrofit by Orms, which sits







prominently on the Euston Road opposite St Pancras Station, is more nuanced than this. It's an instructive case study in how to massively repurpose a building with, as Orms director John McRae puts it 'maximum retention of existing fabric'. It's also an intelligent matching of new function to a structure that was facing demolition.

Notwithstanding its elegant, exposed-aggregate surfaces, the existing building was no outstanding gem. Built in 1977 to house administrative offices above a ground-floor public library, its façade design mimicked that of Richard Seifert & Partners' International Press Centre of 1968. 'It's a rip-off Seifert, but a good one,' concedes McRae. Presumably its designers, Camden Council's in-house architecture team, were busy putting all their creative energy into the housing for which they are justly renowned.

Indeed the building was rather 'old-hat' when completed, its rounded-off, space-age Brutalism – sometimes compared to an egg

box – already looking dated in comparison with contemporary offices, such as Foster Associates' Willis Faber & Dumas building in Ipswich with its sinuous glass curtain wall.

The façade here, though, was not just a wrap, but an integral part of the structure, and this, together with the two-way-spanning waffle-slab floorplates, kept the requirement for internal columns to a minimum. This enabled deep, open-plan floor plates, and advances in air-conditioning and fluorescent lighting of the day were felt to eliminate any need for internal lightwells or windows to open onto the motor traffic-polluted Euston Road.

Forty years on, the sealed, artificial environment that this approach created made these office floors the very opposite of what Camden Council required in terms of workplace wellbeing for its staff. The building's relatively low floor-to-ceiling heights deterred insertion of horizontal service voids for any upgrade to modern

office standards; and improvements such as new lifts were deemed too costly to install, given the expense of cutting through structural waffle-slabs. In 2011, such considerations led Camden Council to sell the building, using some of the money raised – close to £60 million – to relocate its staff to the Bennetts Associates-designed Five Pancras Square in the King's Cross development. This incorporates not just a new public library but a public swimming pool and leisure centre. Rated BREEM Outstanding, it also saves the council up to half a million pounds a year in running costs.

With the original annexe building not listed, indeed deemed as making a 'negative contribution' in the local conservation area plan, nearly all the bids received proposed demolition, given its limiting structural features. One of a few exceptions was that by Crosstree with Orms: to retain the building and retrofit it as a hotel.

'Its ceiling heights and glazing pattern suggested that, rather than an office, a hotel could work really well – especially given its location by King's Cross St Pancras,' recalls McRae. The scheme got wings when The Standard hotel chain signed up as a partner.

The layout of Orms' design has a simple logic. The seven storeys of the original cast-concrete body of the building form the hotel bedroom floors. These sit above a recessed, raised ground floor (where the public library was previously located) arranged with the main reception at the western end and a bar at the other. These are independently accessible from the street, while a restaurant and lounge sit between. Service rooms are located in the basement.

The primary – and very prominent – new addition is a three-storey set-back 'crown', as McRae terms it. The lowest floor of this element is recessed further, making room at this level for small terraces with outdoor bathtubs – a Standard signature, though as yet relatively untested in London weather, compared with the Los Angeles originals.

Above this level rise two further lofty, steel-faced floors, PVD-coated and mildly scalloped to echo the concrete below, but in more massive dimensions and a darker aesthetic key. The lower of the two contains larger-than-average bedroom suites, while that above, with its 5m-high ceilings, provides a fitting, if predictable, top-floor climax of restaurant and bar, served and able to operate independently by means of the aforementioned red exterior lift. The size of the glazing for these upper storeys – including a curved corner over 5m high – required steel façade elements to be sourced in Germany from MBM Konstruktionen, as the expertise to fabricate them did not exist

It's an instructive case study in how to repurpose a building with maximum retention of existing fabric





30





Its cues seem to be 1970s cartoons, late Biba store and an imagined version of Michael Caine's flat in *The Italian Job*

outcrop from the Beaux-Arts town hall, to which its Brutalism only ever made a token nod in terms of colouring. This new-found independence is built-on generously at ground floor level, without any of the messy back-of-house feel found at the rear of most hotels. Thus the ground-floor façade is clad all the way around in timber, with a new bar entrance, new restaurant terrace opening out at the back and landscaped public walkway behind, restoring some sense of a public garden that had previously occupied the site. Below this, the main service ramp dips neatly down to the basement, adjacent to, but all-of-a-piece with the ramping and steps serving the main entrance on the west side of Argyle Street.

Around this entrance the interior 'pops out' as McRae puts it, both literally and figuratively. The lobby's blue ceramic tile finish spreads out from under a new canopy as the language of the interior designer begins to take over. It creates a busy palette of competing materials – timber, ceramics and textured concrete – a fussiness that is not helped by a canopy that looks spindly and provisional in the context of the chunky Brutalism rising above.

Once inside, though, it all makes sense, with a mash-up of finishes, patterns and vintage furniture that is so full-on and overstimulating it somehow works, skirting kitsch. Its cues seem to be 1970s children's cartoons, late Biba store and, as someone commented, an imagined, pumped-up version of Michael Caine's flat in *The Italian Job*. It's nicely blowsy, early 1970s style gone to seed, leavened with chunky curvy detailing in circulation spaces reminiscent of municipal London Transport design circa 1975 – or, indeed, Berlin Tegel airport today.

The level of thought, research and material sourcing is impressive, with the London Transport theme picked up in bedspreads commissioned from manufacturers of the jacquard of Tube train seats, while the extensive use of classic Harris tweed was apparently the weavers' biggest order since the QE2. The detail even extends to the second-hand books sourced for the lounge libraries, including a selection of political and left-leaning titles curated to honour the ghost of the council-run public library.

The main bedroom floors have plans which conform to the regular corridor layouts of most hotels, if here slightly acid-tinged, rose-pink ones, with rainbow shapes worked into the carpet.

However, there is a nice attempt to mitigate this claustrophobic default setting by providing fire separation, not with fire doors, but with concealed drop-down fire curtains running down the centre of corridors,

closer to home. Apart from this, however, much of the subcontracting work was sourced in the UK as far as possible. This included the replacement glazing for the original rounded-corner windows, which was sourced from a yacht manufacturer. Even given the ubiquity today of rooftop spaces in today's London, the views from the upper storeys are impressive: high enough, yet embedded in the city. The face of St Pancras Station's clock looms with an almost cinematic allure to the north.

McRae points to modernist precedents for the set-back 'crown'. Think NatWest Tower. Here, though, on a shorter shaft, it predominates more – a tad ungainly, but lending the building's massing a certain heft and a rooftop 'head' providing an equivalent centre of gravity when viewed against the Gothic finials of St Pancras.

The 'crown' is steel-framed to reduce its weight but the building still required major structural work to support the imposed load.

This was refined by structural engineer HTS to just four steel columns, threaded down within the thickness of partition walls to the first-floor transfer slab. Following Orms' 'maximum retention of existing fabric' ethic, this tactic required minimal cutting of the concrete waffle-slab.

Another key structural intervention arose from the demolition of a connecting staircore and link to the main Camden Council building to the west. This required new structure to stiffen up the building envelope. Compared with the keyhole surgery intervention to support the roof extension, this has been less successfully achieved, resulting in a blank vertical strip of concrete like an incongruous sticking-plaster on the west elevation.

The demolition of the bridge has, however, restored the pre-1970s line of the street between, which had been reduced to a cut-through alleyway. It means the building now has a pleasing, in-the-round autonomy and no longer appears as an uncomfortable

allowing them to double their width. Inside rooms, other clever detailing takes up the givens and idiosyncracies of the structure. Thus, while waffle-slab ceilings are left exposed, maximising floor-to-ceiling height, their irregularity relative to partition walls is concealed by a neat coving detail. The depth of the plan, meanwhile, is nicely played-with, in bathrooms left relatively open, like mirrored alcoves throwing light back into the rooms.

Similarly, where bay windows have had to be divvy-ed up between two rooms, mirrors again maximise light and caught views. This smoke-and-mirrors staging, however, will be tested to the limit in a bank of windowless rooms at the centre of the deep floorplates, which are marketed as 'Cosy Core' rooms to louche-up their permanently day-less state.

But, overall, the interiors have a humour to them and a lightness of touch that plays with the colourful and even ugly, rather than the stifflingly ubiquitous beige and grey of most contemporary hotels. It's a lightness and deftness in detailing and sensibility that extends down from the larger moves in this gutsy re-use scheme – which is a real case of giving potential and life back to an unpromising building.

Architect's view

The building was designed by Camden Council's in-house architects and built as an annexe to the town hall in the 1970s. After completion, it was described as 'self-effacing civic pride and order', articulated by its 'trendy 60s quadrant cornered bays'. The building was not listed but identified as one which detracted from the character and appearance of the local conservation area. However, we felt that it was under-appreciated and, along with the client, Crosstree Real Estate Partners, developed ideas to retain it. The client chose hotelier The Standard Hotels as their partner.

Adding new accommodation on top of the existing structure was key to Orms' vision of giving the building more stature. To realise the additional weight of three new floors, Orms collaborated with structural engineers Heyne Tillett Steel. New steel columns were threaded like needles down through the existing waffle slabs to the first-floor transfer slab and concrete columns below. These needed to be carefully aligned with the waffles on each floor and incorporated into the build-up of the new dividing walls between bedrooms.

The rooftop extension is clad in PVD-coated stainless steel and deliberately profiled to form a solid, sculpted roof element, catching the light throughout the day. On the eighth floor, façades constructed in timber and glass allow the interior materials of the bedrooms to 'flow out' onto their private terraces, which feature outside baths. Above this floor, the ninth and 10th floor bays cantilever out, matching the profile of the existing building below, to host the new restaurant and bar, and providing a roof terrace above.

Multiple entrance points and a reinstated public garden to the south, previously closed due to anti-social behaviour, connects the hotel to the local streetscape and the hotel's bar and restaurant. Providing an escape from the bustle of Euston Road and featuring board-marked concrete planters and seating areas, the garden boasts lush new planting with 'feature' trees and lighting. A new, permanent, east-west route for pedestrians and cyclists has been reinstated through the garden between Argyle Street and Tonbridge Walk.

John McRae, director, Orms





Client's view

Our brief to Orms was to consider office, hotel and residential uses for the former Camden Town Hall Annexe with a focus on maintaining the existing Brutalist structure, which we felt could be successfully repurposed. After initial input from our planning consultants at Savills, we became focused on a hotel as the most compelling proposal. Having looked at several other projects in London with The Standard and thinking there was a strong fit for the King's Cross submarket, we began working on the feasibility of renovating the Annexe as a hotel.

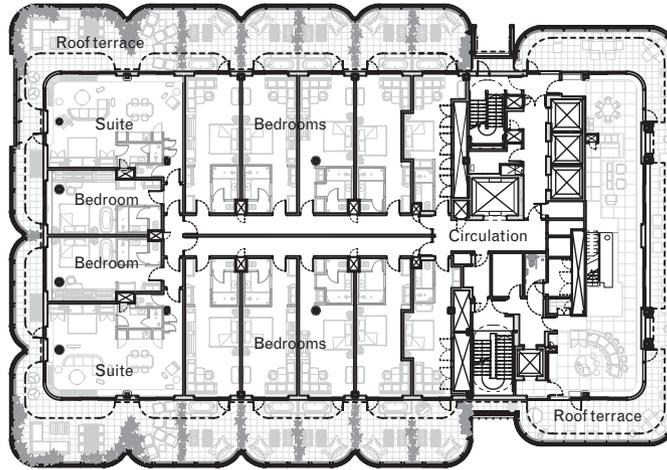
We spent the best part of a year developing our proposals and successfully acquiring the building from Camden Council. Orms led the planning and exterior architecture, and The Standard brought in long-time collaborator Shawn Hausman to lead the interior design.

An important part of the planning process was convincing Camden Council's planning department that retaining and enhancing the existing structure and adding a new extension to 'finish' the building was appropriate for what was considered a building 'detrimental to the conservation area' in their local plan and directly opposite the Grade-I listed St Pancras Chambers. Our strategy included significant local resident consultation, appointing *Financial Times* architectural critic Edwin Heathcote to write a piece on the relevance of Brutalist architecture in the 20th century canon of buildings in London, as well as organising an architectural design panel of peers to review the Orms proposals.

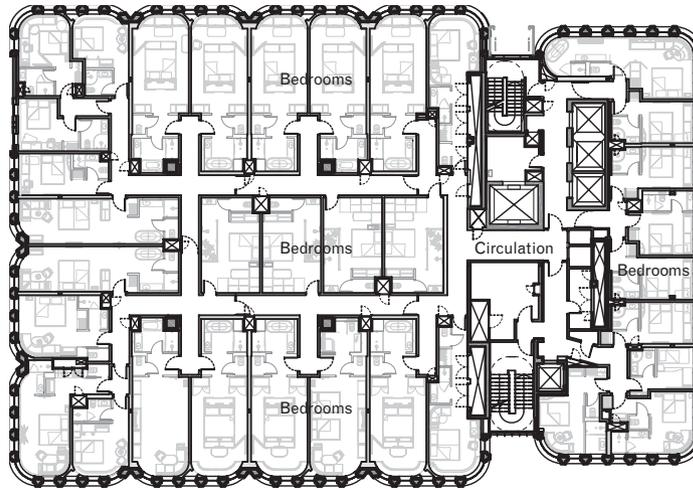
In addition to the new rooftop extension, which houses hotel rooms, a restaurant, bar and roof terrace, the other major intervention

to the building was the removal of the western external stair core. This created permeability from Euston Road into Tonbridge Passage and the new publicly accessible garden in the rear, providing an oasis of calm off the busy Euston Road (and transforming a space that had been closed for over 10 years).

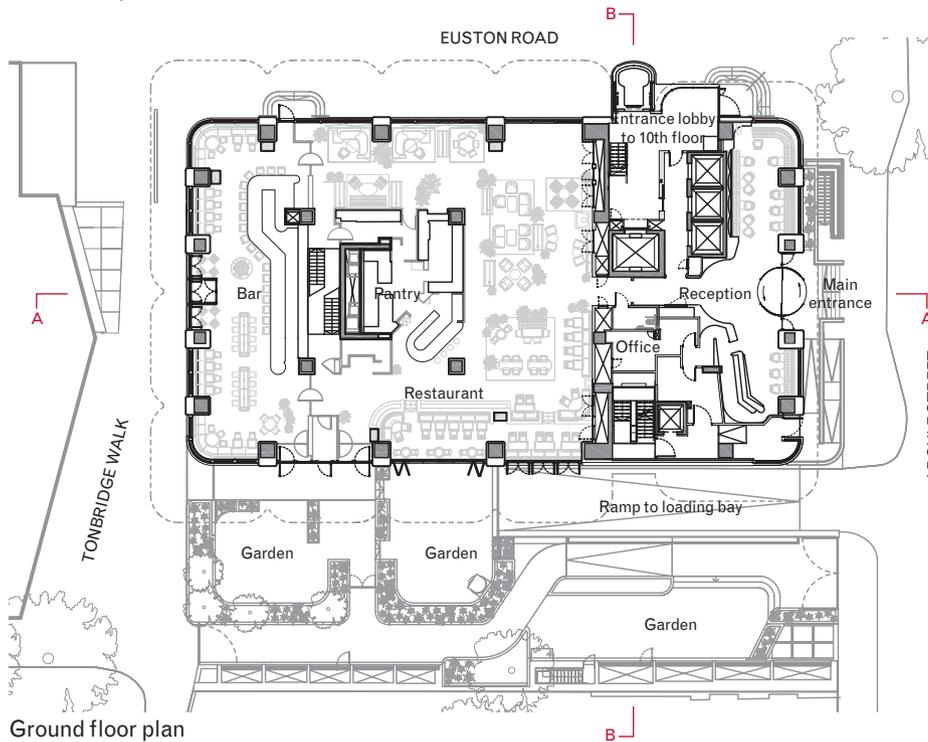
We are extremely proud of the results of the collaboration with Orms, The Standard and the entire design team, and feel we have delivered an iconic new hotel development for London. It is an excellent example of the merits of working with and improving existing unloved buildings to create something that successfully marries the past with the contemporary. *Matt Mason, partner and head of development, Crosstree Real Estate Partners*



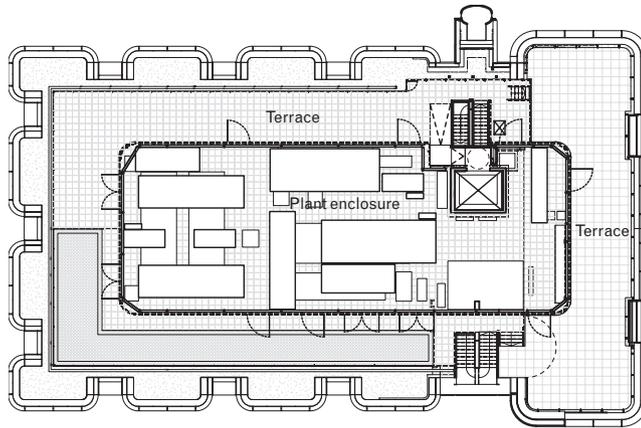
Eighth floor plan



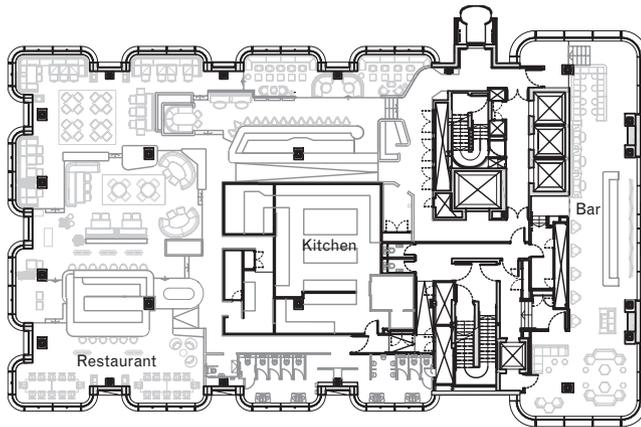
Sixth floor plan



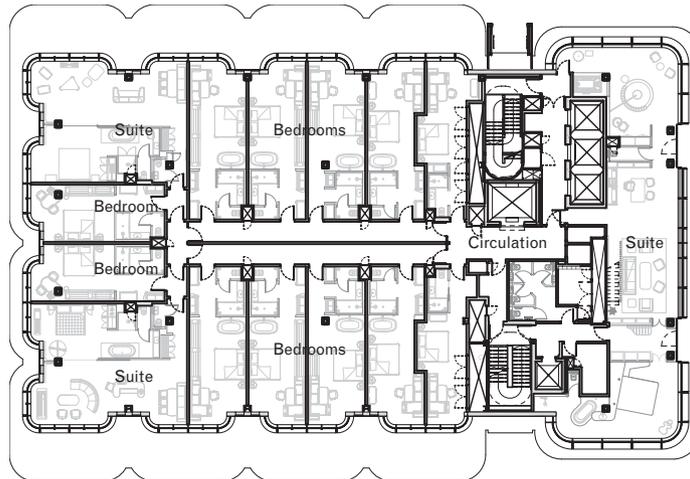
Ground floor plan



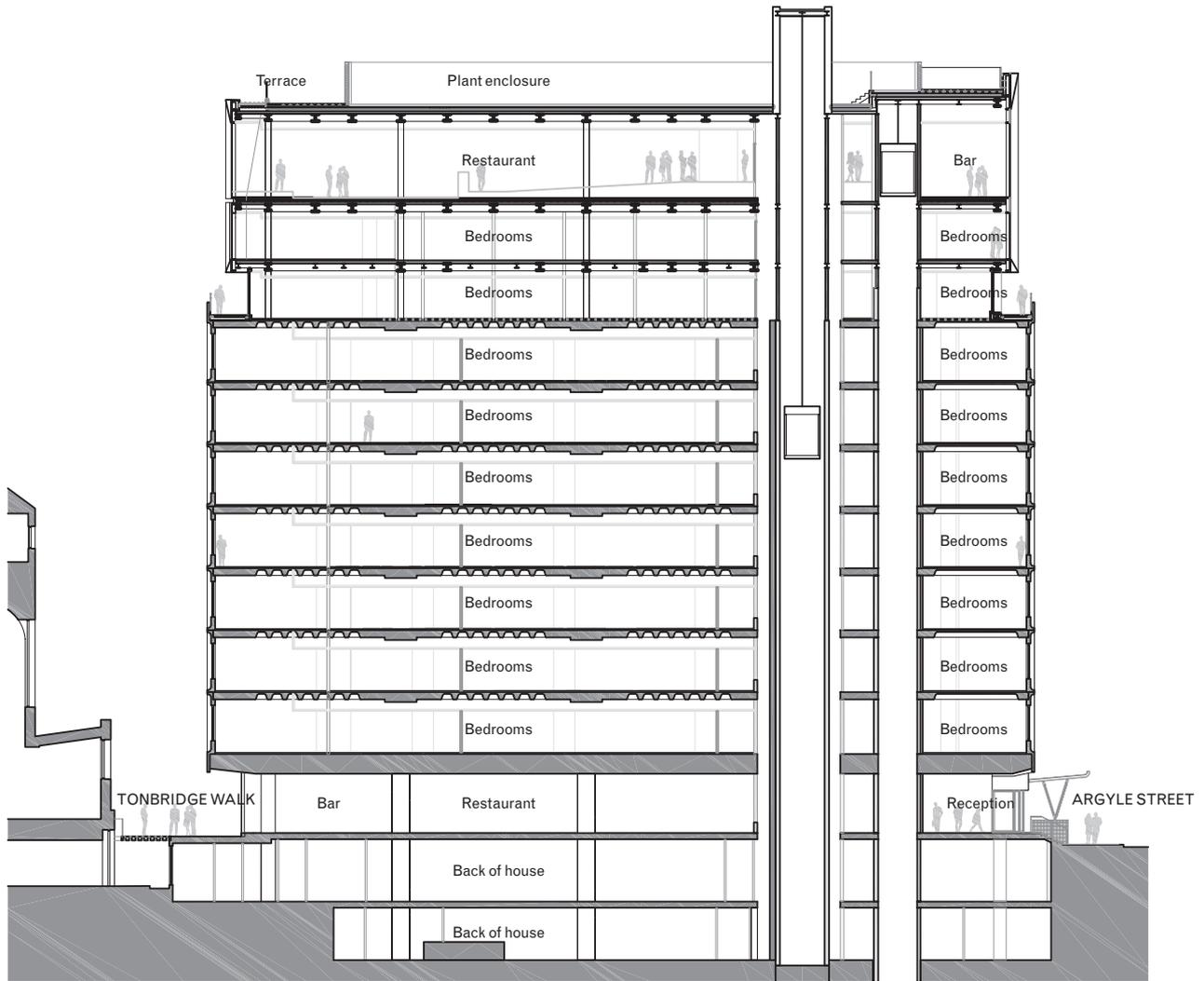
Roof plan



Tenth floor plan



Ninth floor plan



Section A-A

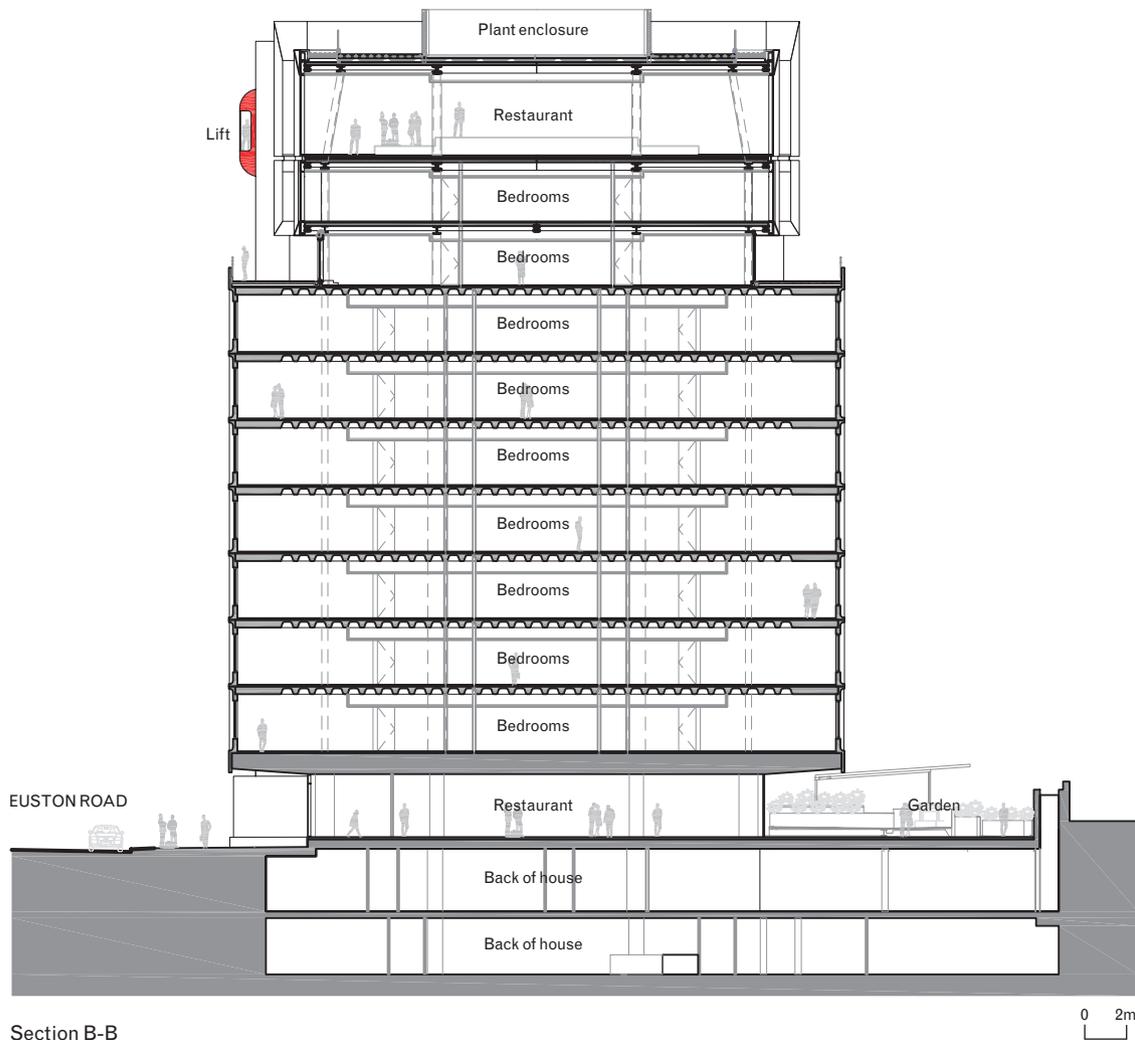
Project data

Start on site March 2016
Completion June 2019
Gross internal floor area 17,277m²
Construction cost Undisclosed
Architect Orms
Structural engineer Heyne Tillett Steel
M&E consultant Arup
Quantity surveyor Gardiner & Theobald
Project manager Tower Eight
CDM co-ordinator Jackson Coles
Approved building inspector
 Butler and Young
Main contractor McLaren
Façade consultant Montessoro Partnership
Kitchen consultant Humble Arnold
Interior designer Shawn Hausman

Fire engineer Bureau Veritas
CAD software used Revit
Embodied/whole-life carbon 7,931 kgCO₂eq
Estimated design life 60 years

Performance data

On-site energy generation None, due to tight urban site with limited roof space
Heating load 14.26 kWh/m²/yr
Hot water load 172 kWh/m²/yr (as built)
Total energy load 237.69 kWh/m²/yr (as built)
Estimated annual carbon emissions (all)
 66.6 kgCO₂eq/m²/yr
Annual mains water consumption 22,600m³
 (based on 200 litres per room, 266 rooms and 3,400 litres per day for restaurants)
Airtightness at 50pa 5m³/hr/m² (as built)
Overall thermal bridging heat transfer coefficient (Y-value) 0.049 W/m²K (10 per cent allowance based upon U-value below Part L (2A) methodology)
Overall area-weighted U-value 0.49 W/m²K



Section B-B

0 2m

Engineer's view

We built a full Revit model of the existing building from archive drawings before our client had completed the purchase of the building. We therefore knew the risks and opportunities residing in the existing structure and the potential benefits its retention gave. Most of the other bidders were considering a brand-new rebuild. This made our earliest advice the most critical on the project.

We exhausted all archives, including a biopic of *Carry On* actor Kenneth Williams, which revealed the original crane location. We intrusively tested the structure, foundations and ground to sweat the capacity of all structures to achieve

their full potential. Although it had been designed with a restrained imposed load, uncharacteristic for its age, we were confident we could push the potential of the building's reinforced concrete frame and under-reamed piles.

We added three storeys to the building with discreet strengthening to only four columns and added 30 per cent of additional load to existing foundations.

We wanted to get work on site quickly while allowing the hotel design to evolve for the main contract. This suited our approach of total engineering: taking responsibility for all design from the existing structure through to enabling, temporary and permanent works.

New floors needed to be lightweight and shallow in depth, while also adhering to tight hotel vibration criteria and a long-span existing office grid below. We designed out all internal structural cores and bracing to the upper floors. The host structure was completely re-cored.

The external lift and entrance canopy became unique modular components, where we designed bespoke fabrication and erection processes which bely their simple appearance. This is the next chapter in this structure's life and exemplifies true sustainability: research, remodel, repurpose. *Mark Tillet, founding director, Heyne Tillet Steel*



Working detail

The top two floors of the building are formed of a new steel frame and composite slab construction. The façade is broken down into projecting curved bays that mirror the form of the host building below. These two-storey bays have a chamfered metal cladding at top and bottom to create a sculptural form and add solidity to the roof mass.

The bays are glazed with floor-to-ceiling double-glazed units held in a Schüco curtain walling system. The double-glazed units are up to 5m high and 2m wide and have a high acoustic specification and many curved elements, making them technically very challenging.

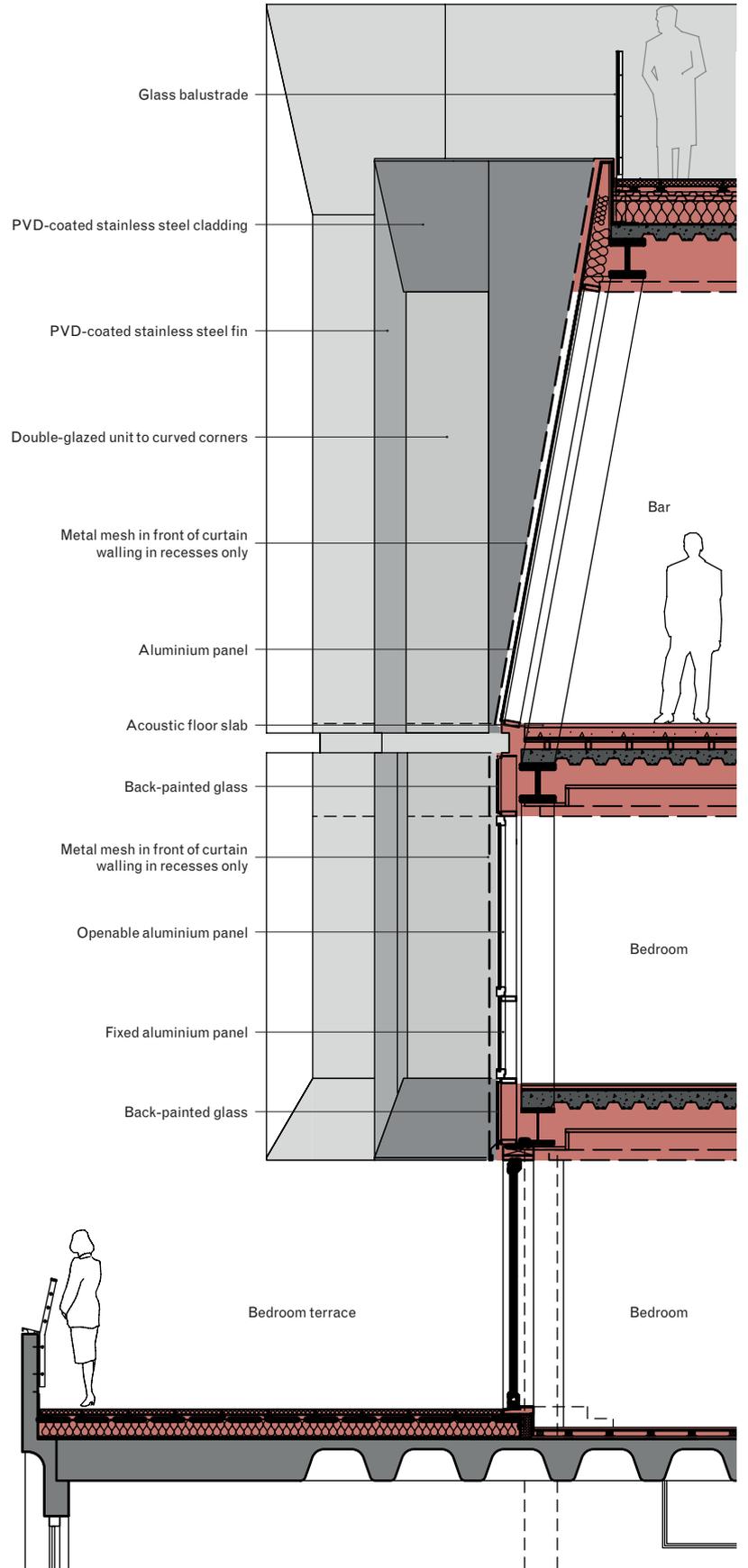
Vertical metal fins have been overlaid onto the façade to break down the scale of the elevations, adding more verticality, responding to the local context and window proportions of St Pancras Renaissance Hotel opposite. These fins also provide a degree of solar shading.

All of the metal cladding to the bays and fins are PVD-coated stainless steel, which gives a distinct richness to the material, adding character and interest.

The recesses between the bays are solid aluminium panels, with concealed openable vents. These are over-clad with a bespoke perforated mesh (the perforation matches the shape of the original window openings in the host building below), adding depth and texture to the façade. The top floor of these recesses leans back to add more depth and articulation to the roof's profile.

A feature recessed channel allows the ninth and 10th floor façades to be both visually and acoustically broken to prevent noise transfer from the busy bar and restaurant at 10th floor transferring to the bedrooms on the floor below.

Simon Whittaker, associate, Orms



Detail section through new extension (floors 8-11)

IBP Awards 2020

Architecture writer of the year entry

Robert Wilson, architecture editor, Architects' Journal

Supporting material 2/3

Tailored to fit: HAT Projects, Gort Scott Architects and Moxon

16 January 2020

With the AJ's annual 'In Practice' issue having typically been dedicated to the work of a single bigger name architect, Rob's decision to interrogate the culture of practice by looking at three small-to-medium practices who have designed/constructed their own offices, produced an inspired and insightful article that got under the skin of the day-to-day business of making buildings.

Based on studio visits and interviews with the three firms' founders, the piece provided a sharp-eyed interrogation of practice, illustrating the issues and concerns of architects revealed both through their words and by their set up, providing an analysis of their design approach through the space and detailing of their own workspaces. Despite starting with a simple premise, this article ended up providing a multi-angled and revealingly hands-on portrait of what it means to practice as an architect today.

1. www.architectsjournal.co.uk/buildings/hat-projects-studio-tour-its-important-for-architects-to-be-a-presence-on-the-high-street
2. www.architectsjournal.co.uk/buildings/gort-scott-studio-tour-it-was-important-for-us-to-retrofit-despite-demolition-being-easier
3. www.architectsjournal.co.uk/buildings/moxon-studio-tour-being-client-architect-and-contractor-on-the-project-gave-us-a-huge-amount-of-freedom

Building study

TAILORED TO FIT

The AJ visits HAT Projects, Gort Scott Architects and Moxon: three practices that have recently designed their own offices

HAT PROJECTS

Founded 2007

Number of employees 6

The ur-space of architecture for most practitioners is perhaps not the Primitive Hut but their own studio, a workspace which, ideally, they'll have designed themselves and which epitomises their design approach, acting as a shop window for clients.

'As architects you want to be in a space you designed. Otherwise, it's a bit like fashion designers not wearing their own clothes,' laughs Hana Loftus, one of the directors of HAT Projects.

The practice, founded in 2007, recently converted a former-Christian Science church in the centre of Colchester, designed in the 1970s by local architect Brian Thomas, into Trinity Works, its studio, incorporating a café and Makerspace alongside.

'We originally started, like many people, in a spare bedroom, then later did the typical thing of renting a small office space, then a slightly bigger one. But a rented space never really represents you; you don't have control over its management,' says Loftus.

Having previously been in first-floor offices above shops, the practice also felt it important to find a space more connected to the surrounding town.

'We didn't want to buy a small building and just be ourselves in it. We liked the idea of cross-fertilisation, of having other people in it: of making a contribution to the town. We wanted to put our money where our mouth



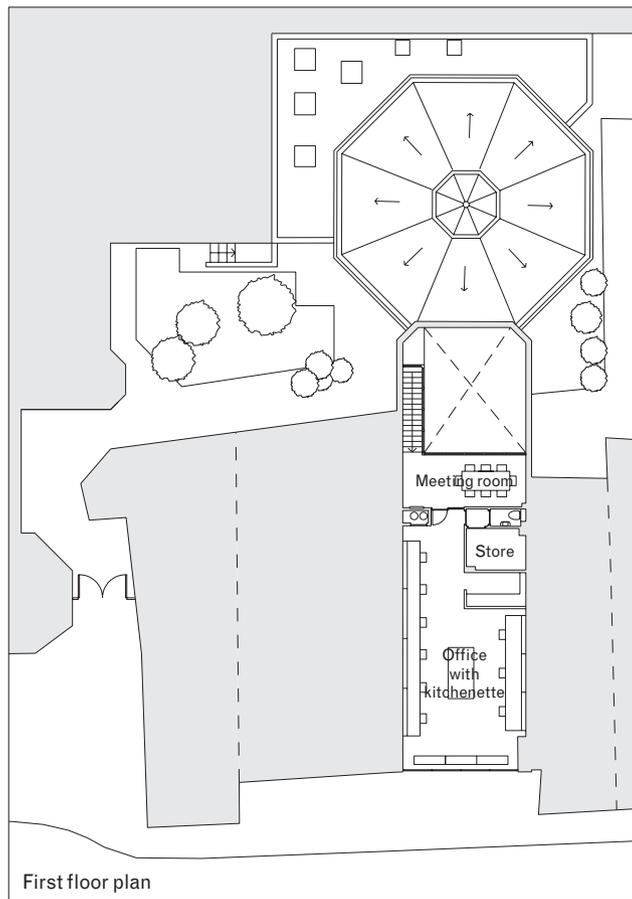


‘IF WE HAVE ANY SKILLS AS ARCHITECTS IT IS TO TAKE UNPROMISING SITES AND BUILDINGS AND MAKE SOMETHING UNEXPECTED THAT MAKES PEOPLE GO “WOW, I NEVER THOUGHT THIS WAS POSSIBLE”’

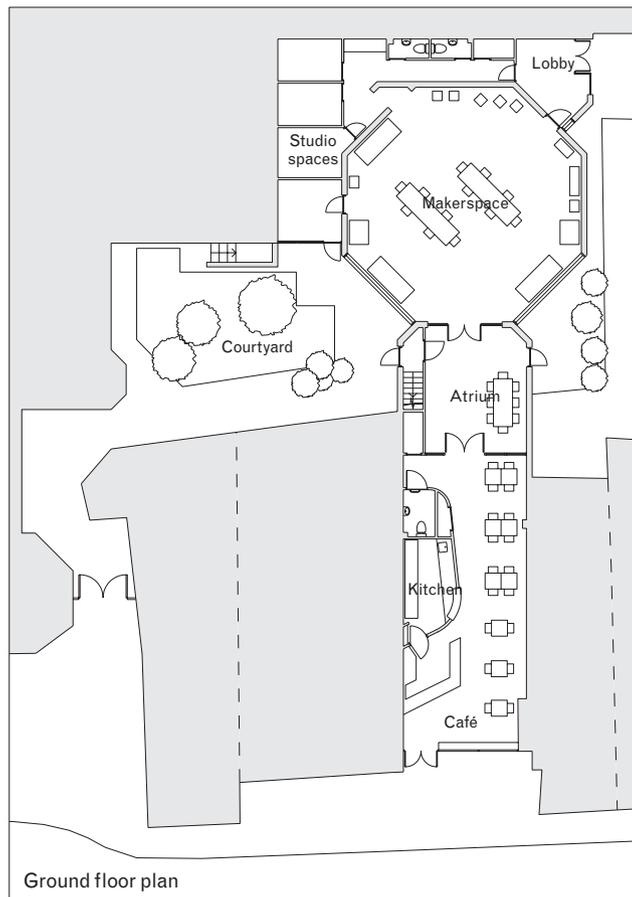
is. Everyone talks about the decline of retail and the town centre, but the problem is often a lack of creativity – not being more imaginative about what town centres could be like. If we have any skills as architects, it is to take unpromising sites and buildings and make something unexpected that makes people go “wow, I never thought this was possible”. Take here for example: this was a great building but an odd one. No one knew how to make it work.’

HAT opened up what had been the ground floor entrance passage and church offices to form a single café space. They placed their new offices above this, stripping out the octagonal church at the rear to form an airy, flexible space – now rented as a makerspace. All elements look onto and can be accessed off a shared glazed covered courtyard.

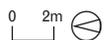
‘The key thing was finding activities to suit the building, rather than forcing the building to suit activities,’ says Tom Grieve, HAT’s other director. ‘We had to do minimal intervention to make it work: more opening-up spaces than imposing on them. The one strong design gesture has been the insertion of the curved timber wall around the kitchen: we carefully modelled this to read like an object in the space, maintaining site lines through, and not creating a corridor feel to the surrounding café.’



First floor plan



Ground floor plan





Project description

Trinity Works is a light-touch retrofit which celebrates and extends the language of the existing building's original early 1970s architecture. We chose to purchase the building in part because of the strong and very different architecture it had, compared with many town centre buildings – a fully glazed shopfront over two floors, sawtooth roofs over the front portion, a double-height brick atrium (originally a 'garden court') and the big octagonal auditorium to the rear.

It is difficult to imagine a similarly designed street frontage being granted

planning permission today, in the heart of the town centre conservation area and surrounded by jettied Tudor buildings. Yet it feels fully appropriate. The first floor itself projects out over the ground.

However, the potential for the shopfront to allow great views through the whole building, to the 'garden court', was denied in the original because of the cellular layout. As a result, few people had any idea of the extent of the building.

When we opened it up, stripping out all the ground floor partitions, it was a wonderful

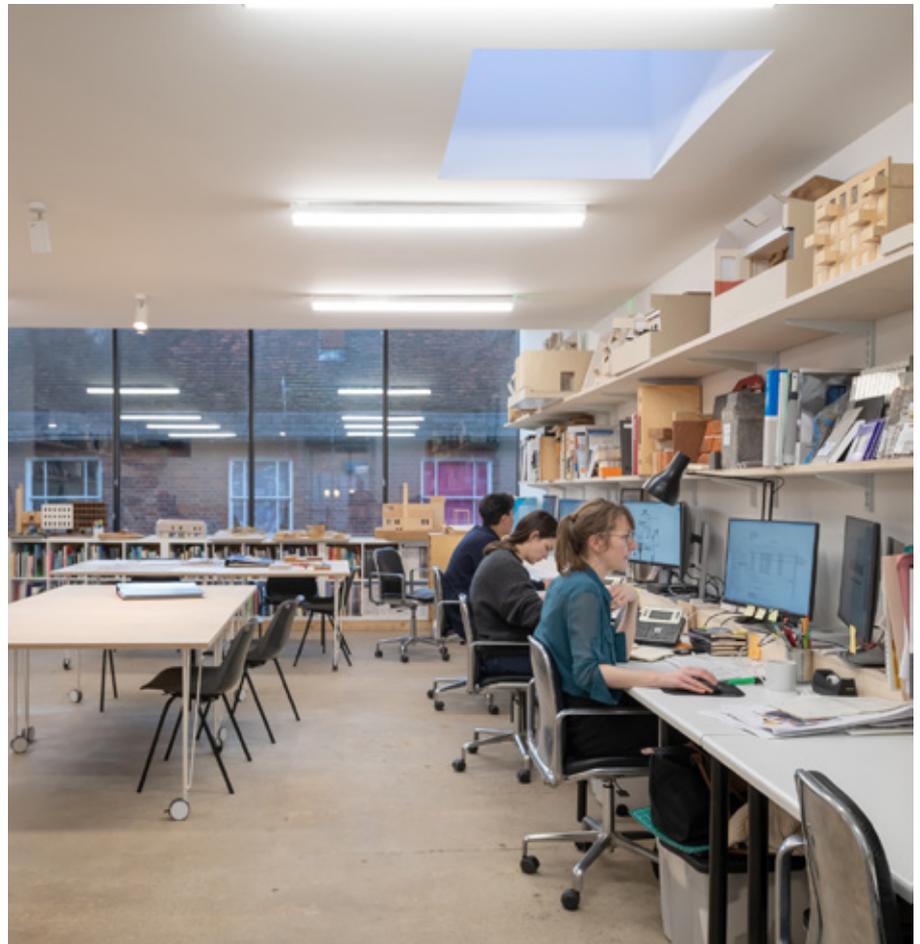
surprise to find the atrium and octagon beyond. The new layout we created balanced the need for flexibility with the specific needs of each tenant. It ensures that each tenant has separate, secure, 24/7 access while sharing the main entrance during most of the working day.

We did the minimum amount necessary to bring the building back into productive use, while designing each element to be attractive in a simple studio aesthetic with the odd flourish.

Hana Loftus, director, HAT Projects

'We funded the project privately – with a little bit of capital saved up. The purchase price was less than the value of such a building to build, so we felt instinctively this was a good purchase. But the key thing was getting the business plan right. It's now funding itself, people are paying us rent, we are paying ourselves rent and it's paying off that debt. It's pretty standard but not something that would have been possible in London.'

HAT's project is typical of a trend for many new architecture offices to present a more public face, to be more embedded in their surroundings. It's a shift epitomised at a grand scale by Squire and Partners' 2018 conversion of a former department store in Brixton to their practice office. Whereas in the past a big practice like Squire's might be expected to design a signature look-at-me new-build, something along the lines of Fosters' Battersea home, perhaps, here their conversion/ restoration has deliberately created a palimpsest of the building's past. Now this reworked fragment of the existing urban fabric houses their offices, as well as retail spaces, a ground-level restaurant and rooftop club/bar.



Project data

Start on site April 2018

Completion September 2018

Gross internal floor area 366m²

Construction cost £130,000

Construction cost £355/m²

Architect HAT Projects

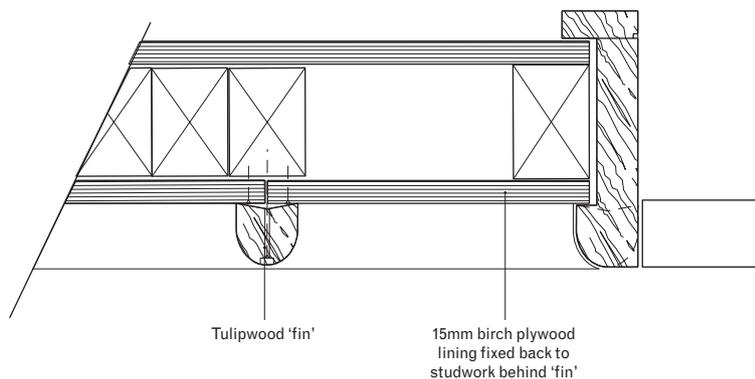
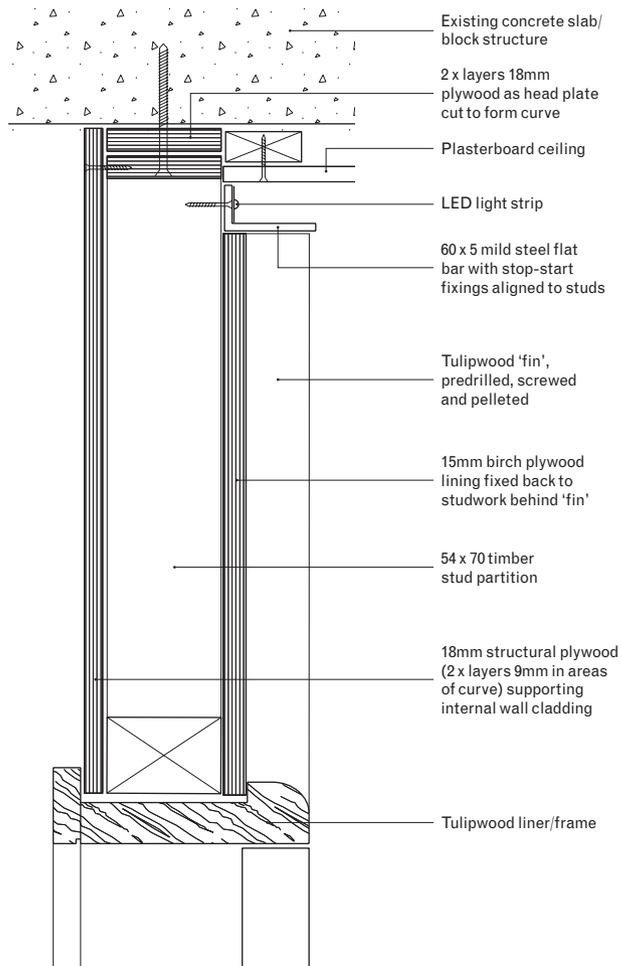
Client HAT Projects

Structural engineer

Momentum Engineering

Approved building inspector LABC

CAD software used MicroStation



Curved timber wall detail in section & plan

0 50mm

Specification

We adapted and extended the existing material palette very simply and practically. Working with local fabricators, we ensured that the retrofit could be achieved economically and on time. Products were selected for a combination of cost, durability and aesthetics. Almost all are generic products, with the exception of the lighting. We like simple, often self-coloured materials, given character by their treatment.

A coat of white paint brightened the buff brickwork of the atrium and created a bright heart to the building. Keeping the brick texture in combination with white-painted timber-framed screens glazed with wired fire-resistant glass created a plain, light, studio aesthetic. In the atrium we reused the wonderful 1970s chandelier light fittings – in a very fashionable champagne bronze finish – from the auditorium.

In the café, the curved wall that surrounds the kitchen and WC creates an enclosure without sharp corners. This improves the sightlines for the staff and avoids any sense of creating a corridor or dividing the café into zones. It is something special and joyful – a reinterpretation of Aalto's ribbed ceramics in timber – which gives a distinctive character to the space. We are very glad that the café tenant suggested a serving hatch in the curve – this gives a lovely glimpse into the warm, busy kitchen. The rest of the furniture – all purpose-made for us by local fabricators – is simple and plain: black tabletops on untreated mild steel table legs; a practical stainless steel counter top over a scuff-resistant black base; white shelves that hold leaflets from local venues, cookbooks, ceramics for sale by makerspace artists, flowers and plants. The lighting in the café was very carefully considered and the only product we spent good money on.

The makerspace required virtually no alteration – just practical batten lighting and plenty of power outlets for equipment. The makerspace team themselves adapted, recycled and made their own work benches, shelving and other fittings, exactly as it should be.

Upstairs, our office is simply fitted with birch ply shelves and kitchenette and desks brought from our last office. Again, simple batten lighting is used with a few spot lamps over meeting tables. We had the mild steel balustrade purpose-made by our usual local fabricator, David Wesbroom, with a lovely curve at the top of the stairs.

Hana Loftus, director, HAT Projects

GORT SCOTT ARCHITECTS

Founded 2001

Number of employees 30

26

Gort Scott's new office in Bermondsey is a reworked former factory. The practice has given it a bold new street presence by revealing the original brick façade and added two matching brick-faced upper storeys, modelled to echo the old. Internally, the new exposed steel frame of the upper floors reprises the 19th century cast iron columns below. It feels as though the project has amplified the bones of the original building in a contemporary take.

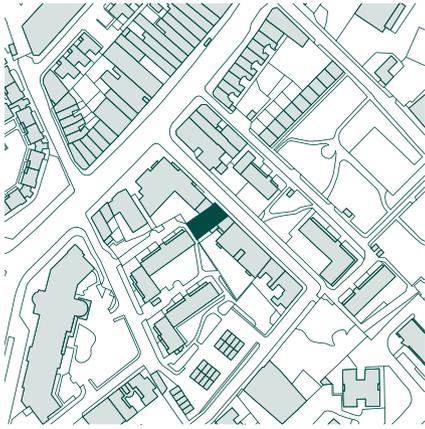
'It's true of many of our projects: that we want to maintain a strong connection with the context and the site by taking on the detailing and DNA of the existing building,' says Jay Gort, one of the practice's two directors.

'One contractor suggested we pull it down and start from scratch: it would be cheaper,' adds Fiona Scott, the other director. 'But you can't recreate the character that is there: our ethos is to keep what you find if you can – of course there's a carbon saving inherent in this, too. We've always had an interest in remaking pieces of city and contributing to the public realm, not just focusing on the thing itself but on how what you do is going to change the thing – socially and economically – in a positive way.'

**'OUR ETHOS IS
TO KEEP WHAT YOU
FIND IF YOU CAN'**







‘THERE’S A DYNAMIC NATURE TO THE SPACE. FLEXIBILITY SUITS US’

The new upper storeys contain open-plan workspaces augmenting the original first floor space, each independently accessible off a reworked stair. At ground floor level there’s a commercial retail unit, now let to a solicitor.

The practice relocated last year from a rented space in Dalston. ‘We needed more space but it was more about autonomy and security. Rents in Dalston were going through the roof,’ says Scott. ‘We didn’t set out to design a vanity project. We originally thought we’d just take on an old light industrial space around there and convert it. We knew people who’d done this five to 10 years before. But, by the time we came to look, it was impossible.’

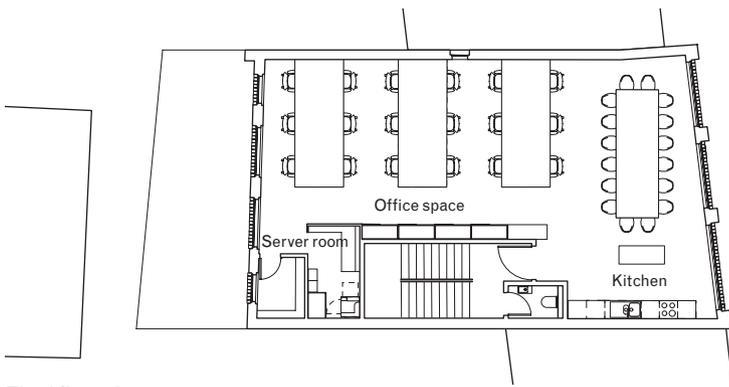
It wasn’t just a question of affordability. ‘What we discovered’, says Scott, ‘was that you often can’t buy a commercial space unless you are a developer. It wasn’t the money – at one point we had a cash offer on a place – but somehow for someone like us with a personal interest in the property it was all a bit too complicated.’

In the event they looked further afield, found the building in Bermondsey, and went in half-and-half with an existing client to buy it. Gort Scott owns the top two floors and a roof terrace above, planned to complete for the summer.

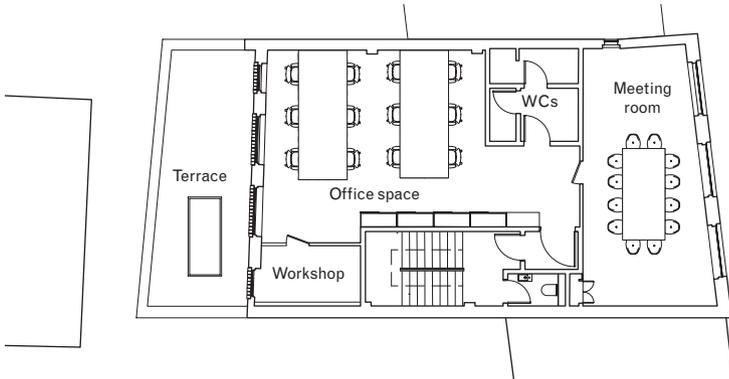
‘It’s largely open-plan, maintaining the good natural cross-ventilation. We have a kitchen on the top floor with a large table where every Thursday we cook together,’ says Gort.

Beyond these spaces, more enclosed ones open out, housing a workshop, telephone room, showers and bike storage. But Gort Scott is already reconsidering the layout, as the practice is growing and already looking to expand into the first floor. ‘There’s a

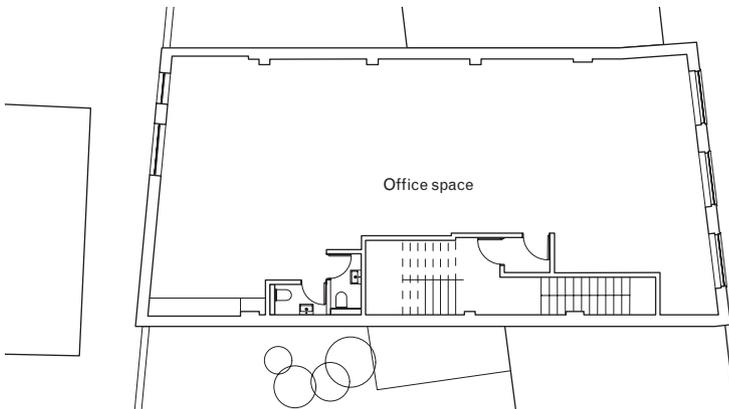




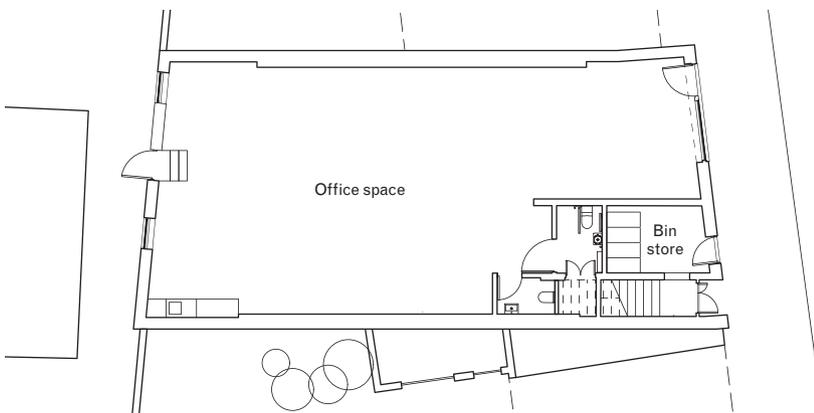
Third floor plan



Second floor plan



First floor plan



Ground floor plan



Project description

Gort Scott's new offices in Bermondsey occupy what was once a decaying industrial building, now refurbished and extended to provide 469m² of commercial space. Two of the building's four storeys house functional studio spaces for Gort Scott's expanding practice. At ground and first floor, flexible, commercial space is provided for complementary tenants.

Our approach began with the removal of metal cladding which was incongruent with the material palette of the surrounding area. Underneath, a rich, texturally varied brickwork and a simple visual hierarchy was discovered and would come to inform the architectural principles for renovation.

The design raised the roofline to match the adjacent buildings, allowing for a roof terrace above the additional floor. Remodelling the original façade, the original red brickwork was restored and repointed. New brickwork added to the main elevation continues the existing rhythm and order. Window openings have been enlarged, to create office spaces with high levels of natural daylight. The reordering of the façade is enhanced by a tight series of dentil brick courses above windows. To the rear, another two mixed brick sets have been used, differentiating between old and new. *Jay Gort, practice director, Gort Scott Architects*

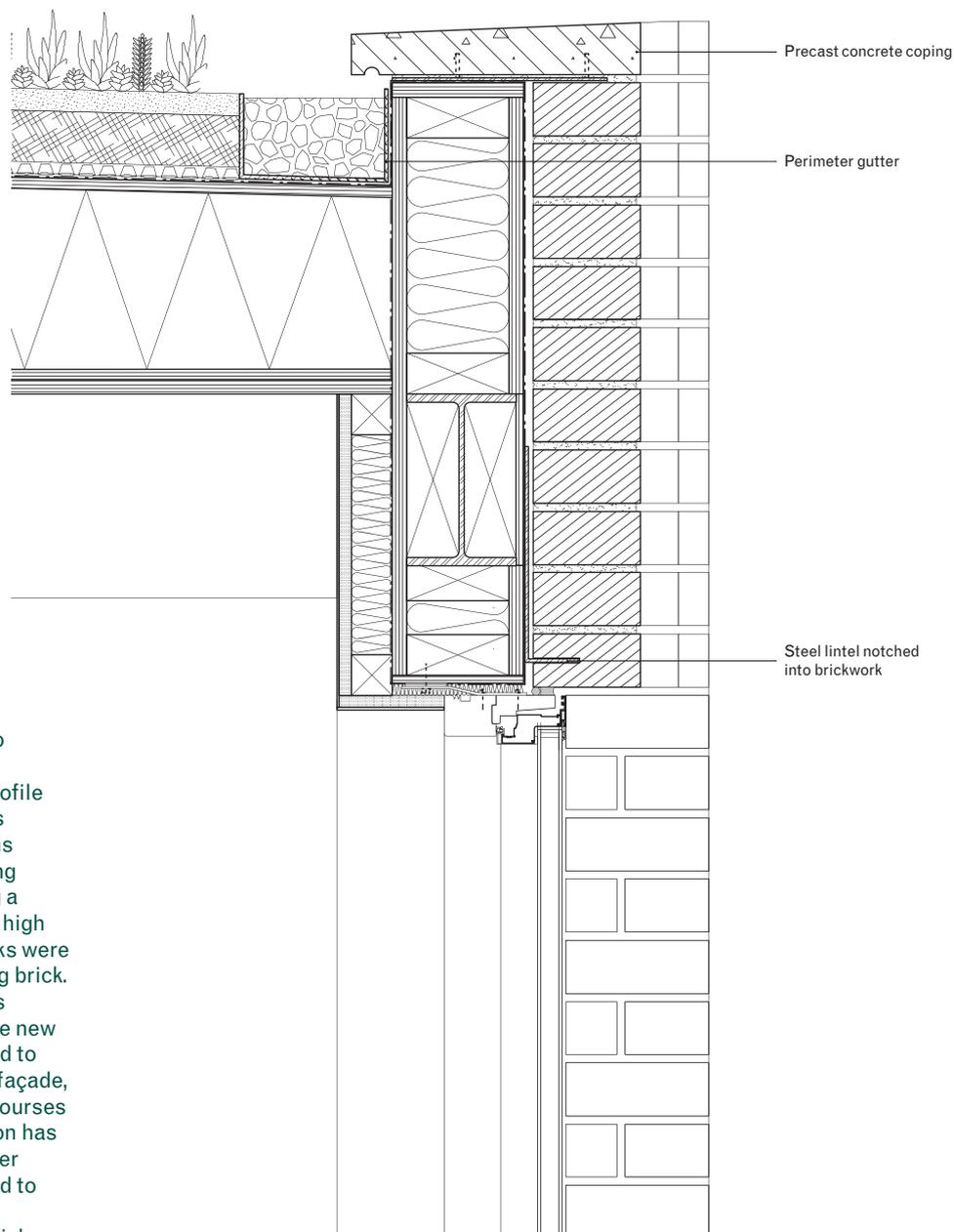
dynamic nature to the space. Flexibility suits us,' says Scott.

The project was funded by 'saving up money, a loan and a friendly bank' but proved a learning experience. Gort says: 'We started out saying we'd do it cheap-as-chips but found it's just expensive to build things – something you realise when you are the client, developer, architect and contractor to an extent as well.'



Project data

Project name 55 Leroy Street
Start on site September 2016
Completion date October 2018
Gross internal floor area 469m²
Form of contract JCT Traditional
Construction cost Undisclosed
Structural engineer engineersHRW
M&E consultant Or Consulting
QS Appleyard & Trew
Right to light consultant Right
Of Light Consulting
CAD software used Vectorworks
Predicted design life 100 years



Specification

The precast parapet to the building has been colour-matched and cut to the profile of the dentil brick course below to maintain the distinctive profile against the sky. We chose materials for the alterations and new additions to the building to respect the existing and streetscape, while establishing a presence that can be seen from the high street. Three different types of bricks were selected to complement the existing brick.

Close attention was paid to areas where new brickwork meets old. The new brickwork was laid in a Flemish bond to continue the rhythm of the existing façade, and in a tight series of dentil brick courses above windows. Where the extension has added floor space to the rear, another two mixed brick sets have been used to distinguish it from the original.

Timber herringbone strutting, which was discovered in the existing building once the dropped ceiling was removed, was also re-introduced in the new ceilings. These are visible from the street through the large windows and become a key decorative element of the internal studios.

We have created an internal aesthetic of exposed raw materials using brick, timber and metal. Red oxide colour beams and fenestrations accent this. A bespoke kitchen island on wheels helps to make the open-plan kitchen a flexible space and enables big communal lunches, shared between employees.

*Jay Gort, practice director,
Gort Scott Architects*

MOXON

Founded 2004

Number of employees 16

32

Moxon is in the process of completing a new premises for its Scotland Office, located at Craithie in the Cairngorms. It is a new-build structure which sits in the bowl of a disused quarry, adjacent to the road between Balmoral and Braemar. In this case, the practice had a contracting arm, Tor Contracting, which Moxon director Ben Addy says made things easier budget-wise.

'Being the client, designer and builder – contractually a closed loop – the commercial aspects are under our control,' he says. 'Of course, the risk is ours but, because of this control, we're comfortable taking it.'

'We were able to make savings with subcontractors, producing fabrication information ourselves directly from our BIM model. The steel frame, for instance, was obtained cost-effectively from an agricultural barn supplier, despite its non-standard connection details.'

When the practice originally set up in London, its first premises were originally 'living rooms and kitchens of rented flats'. The London office is now based in Great Western Studios in Paddington, but in 2012, Moxon decided to open a Scottish office and converted a small hilltop farmstead for the purpose. But a growth in workload rapidly proved too much for the six desk spaces it provided.

'It became a significant constraint on the practice,' says Addy. With no larger building available in the area, in







2017 Moxon bought the disused quarry to develop it as a more flexible and accessible base.

As with HAT and Gort Scott's new premises, Moxon's new office also incorporates the idea of 'public face'. 'We made the decision to split the office in two, with a public face to the road,' says Addy. 'This contains a café, separated from necessarily quieter, more private activities of the studio to the rear.'

In layout, the main studio space forms the largest volume, broken down internally into progressively smaller spaces through the use of a partially open timber screen. This studio block then connects by a covered walkway to the café.

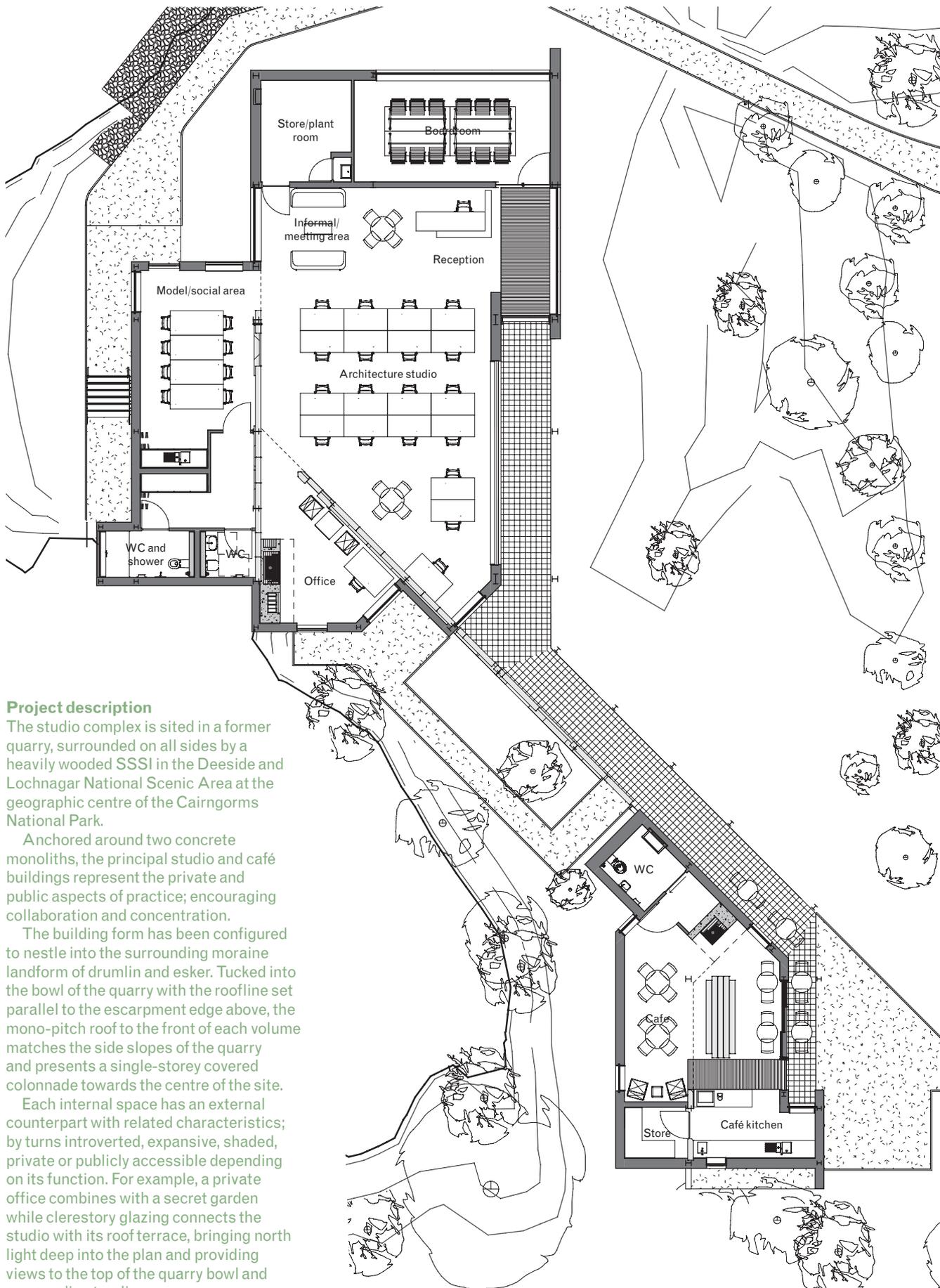
'We obtained planning consent for public use last year and the company to operate the café has been set up: it should be open for business in late spring of this year,' says Addy. 'We're extremely keen to get people into the site, using the building, seeing what we are up to. We're even planning to have mini-exhibitions.'

The whole studio complex is formed of a lightweight hybrid steel/timber frame construction to simplify erection and minimise foundations. Where concrete is used, it is to form two 'pillars' that anchor each building around a wood-fired stove, providing thermal mass within the lightweight shell. The envelope is highly insulated, with space and water heating for all parts of both buildings provided by ground source heat pumps using a borehole sunk 250m down into Cairngorms granite.

Addy saw the project as a valuable test case for the practice. He says: 'Being able to set priorities across the project both in terms of the investment and management on site is hugely

'WE'RE EXTREMELY KEEN TO GET PEOPLE INTO THE SITE, USING THE BUILDING, SEEING WHAT WE ARE UP TO'





Project description

The studio complex is sited in a former quarry, surrounded on all sides by a heavily wooded SSSI in the Deeside and Lochnagar National Scenic Area at the geographic centre of the Cairngorms National Park.

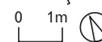
Anchored around two concrete monoliths, the principal studio and café buildings represent the private and public aspects of practice; encouraging collaboration and concentration.

The building form has been configured to nestle into the surrounding moraine landform of drumlin and esker. Tucked into the bowl of the quarry with the roofline set parallel to the escarpment edge above, the mono-pitch roof to the front of each volume matches the side slopes of the quarry and presents a single-storey covered colonnade towards the centre of the site.

Each internal space has an external counterpart with related characteristics; by turns introverted, expansive, shaded, private or publicly accessible depending on its function. For example, a private office combines with a secret garden while clerestory glazing connects the studio with its roof terrace, bringing north light deep into the plan and providing views to the top of the quarry bowl and surrounding treeline.

Ben Addy, founding director, Moxon

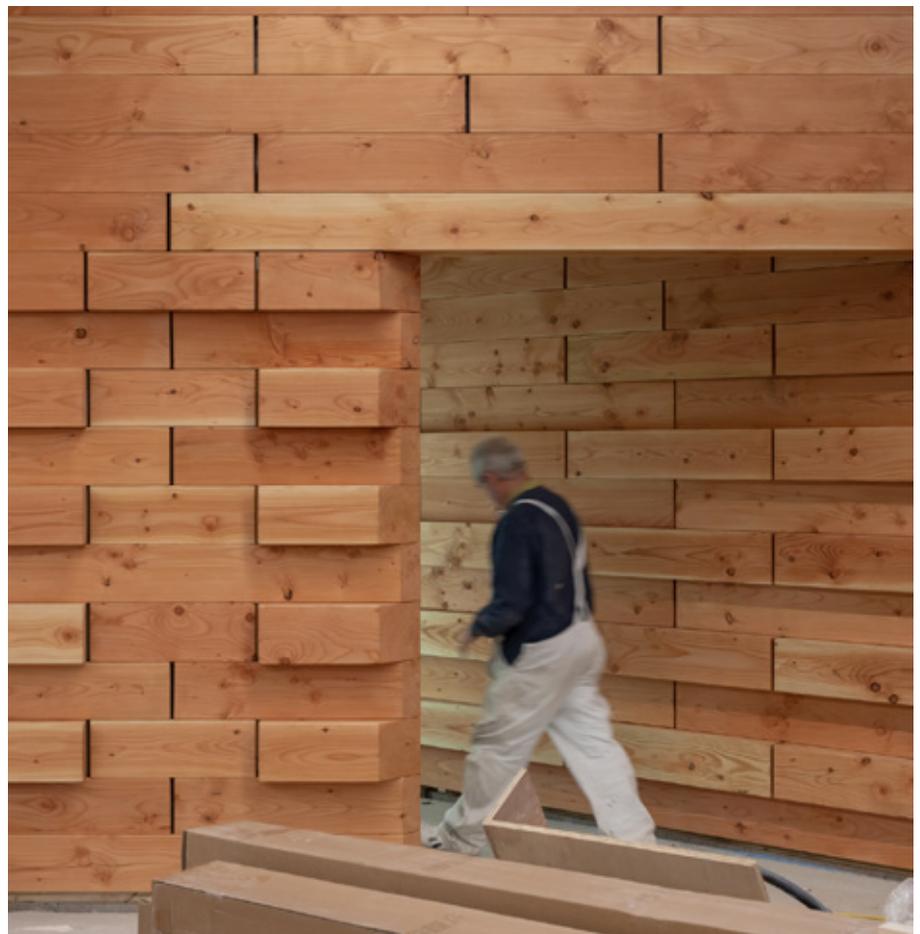
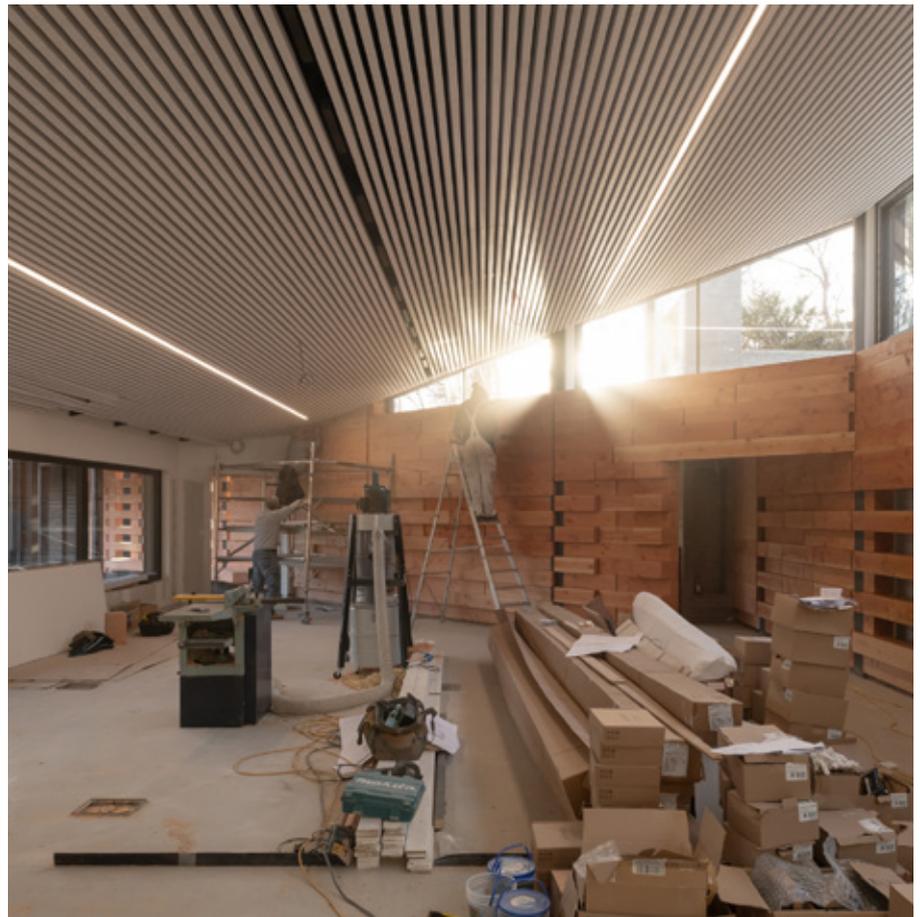
Ground floor plan



liberating, to the extent that we are looking to reprise the dual role of architect/client as soon as we can.'

Indeed, having spoken with all three practices, while designing their own office might seem to have been a dream project, it also proved a highly valuable learning experience, pushing them outside their normal comfort zone in the construction process and their role in it. And it's one that seems to give them the taste to do it again.

'We are now interested in doing more self-initiated development projects: [building our own office] was a springboard for that,' says Hana Loftus of HAT Projects. 'On a more strategic level it has shown we have something we can contribute to the strategic debate about our towns. Too often as architects, we don't think of ourselves as investors and businesses, but we are. It gives us a different level of credibility in the town to speak as investors in it, having made this project a success.'



Project data

Start on site April 2018

Completion March 2020

Gross internal floor area 400m²

Architect Moxon

Client Moxon

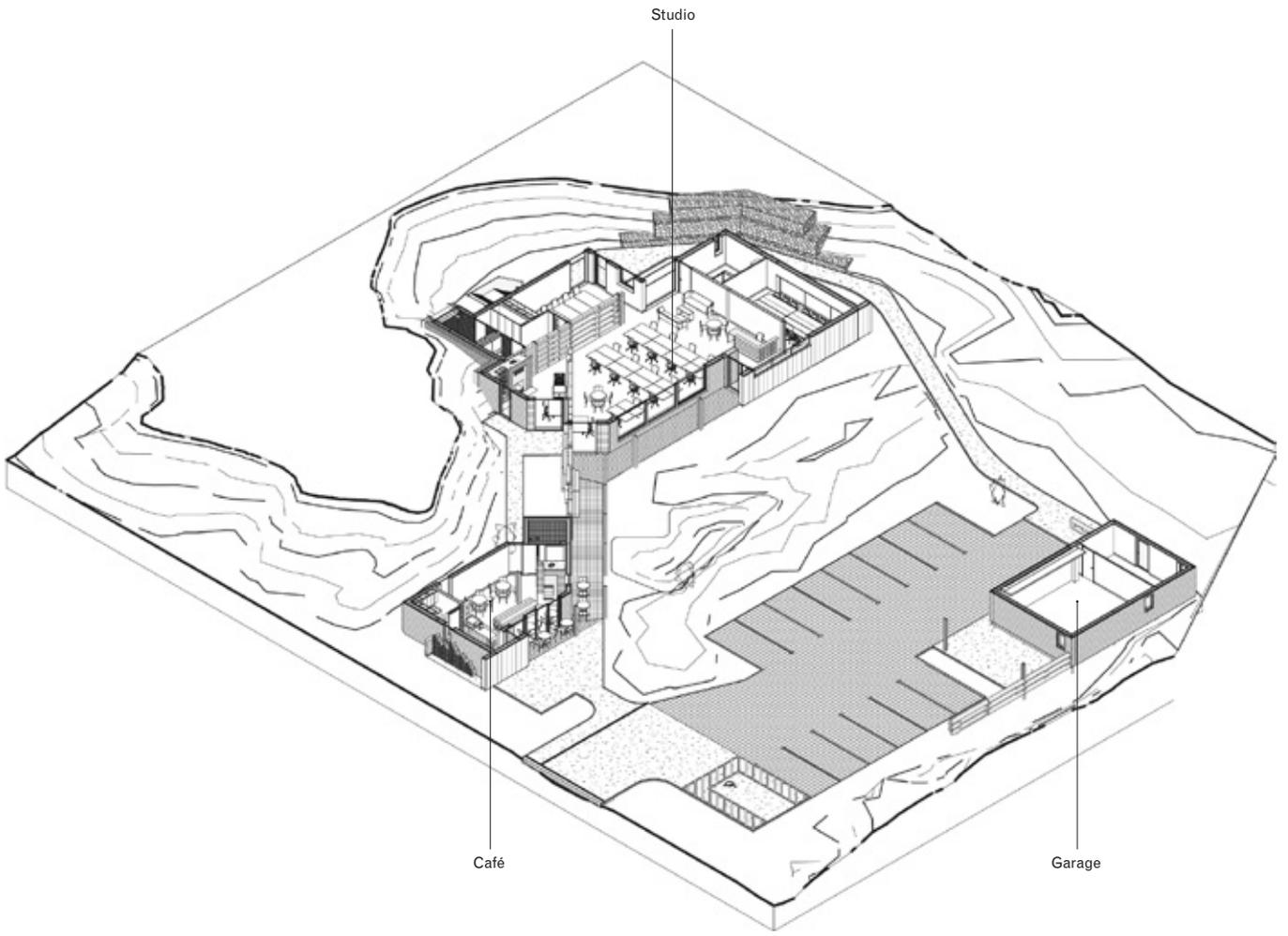
Structural engineer Graeme
Craig Consulting

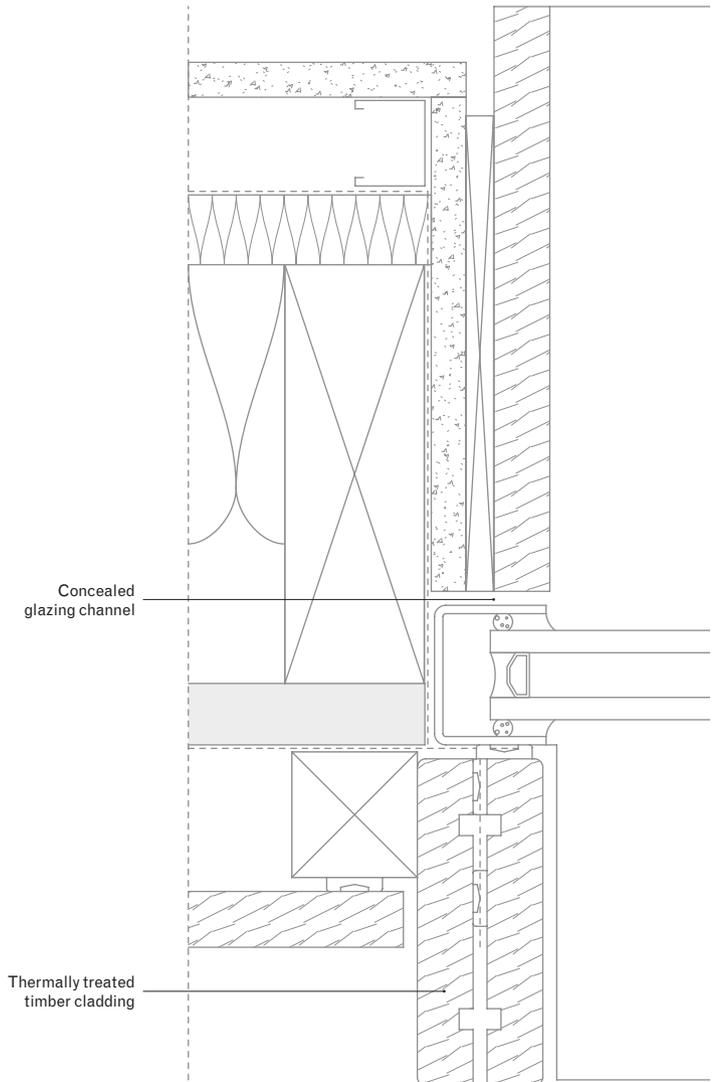
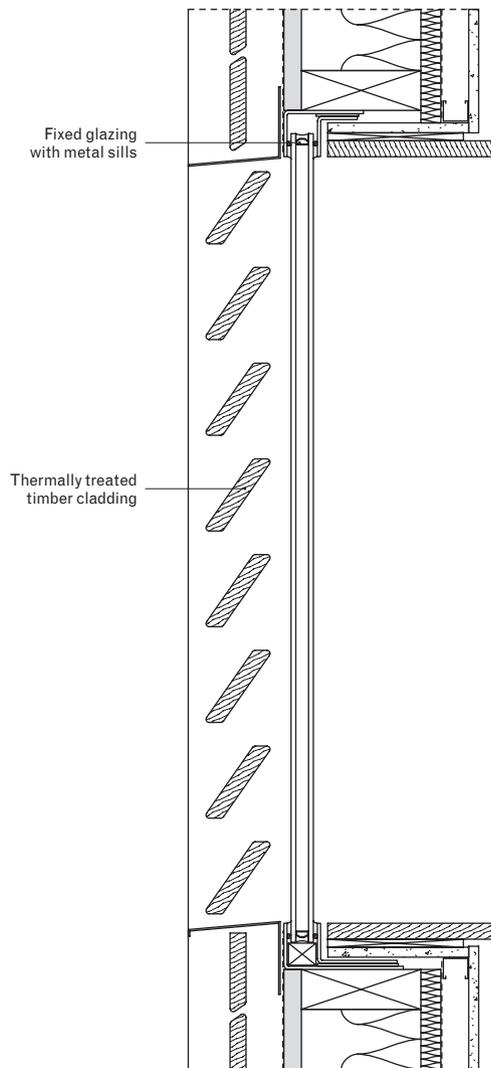
Project manager Moxon

CDM co-ordinator GWS Architects

Main contractor TOR Contracting

CAD software used Revit, 3DS Max





Window and cladding detail sections

0 0.1m

Specification

The building is conceptually fixed in the landscape by two main elements; vertical concrete chimneys acting as a counterpoint to the low profile of the roof and a massive timber wall that intersects each volume. Around these, the hybrid steel and timber frame, aluminum roof and black timber walls are wrapped.

The timber walls are formed from 200 x 200mm Douglas fir sections supplied in 4.8m lengths. The site is located close to several specialist timber yards, which felled and partially seasoned the material locally.

The timber was further milled, shaped and planed on site before being stacked in place using the primary structure of the building as kingposts.

The concrete chimneys relied on the skill of our joiners. Pine shutters were fabricated on site and erected in sequence for three concrete pours, delivered in quick succession. They offer a visual cue on arrival which can be revisited internally, where the marks from the timber formwork can be closely appreciated.

Ben Addy, founding director, Moxon

IBP Awards 2020

Architecture writer of the year entry

Robert Wilson, architecture editor, Architects' Journal

Supporting material 3/3

Doncaster Council rolls out the housing

12 March 2020

This article came out of Rob's intensive research around the current state of council housing around the country, focused specifically on recent completed projects.

He selected three contrasting schemes across the UK that exhibited differing models of delivery as well as distinctive approaches in their architecture, commissioning building studies on each of them for the same issue. One of them was this illuminating piece he wrote himself on house building in Doncaster, the programme of which is unusual in the UK today for having maintained an in-house council-led architecture team.

Rob brings an insightful architectural eye and rigorous technical analysis to a standard housing type here. It's a scheme which in its architecture might appear at the more 'toy-town' end of the architectural scale but which exhibits no less valuable design lessons as those seen in architect-designed council schemes, like Goldsmiths Street in Norwich, which received considerable media attention.

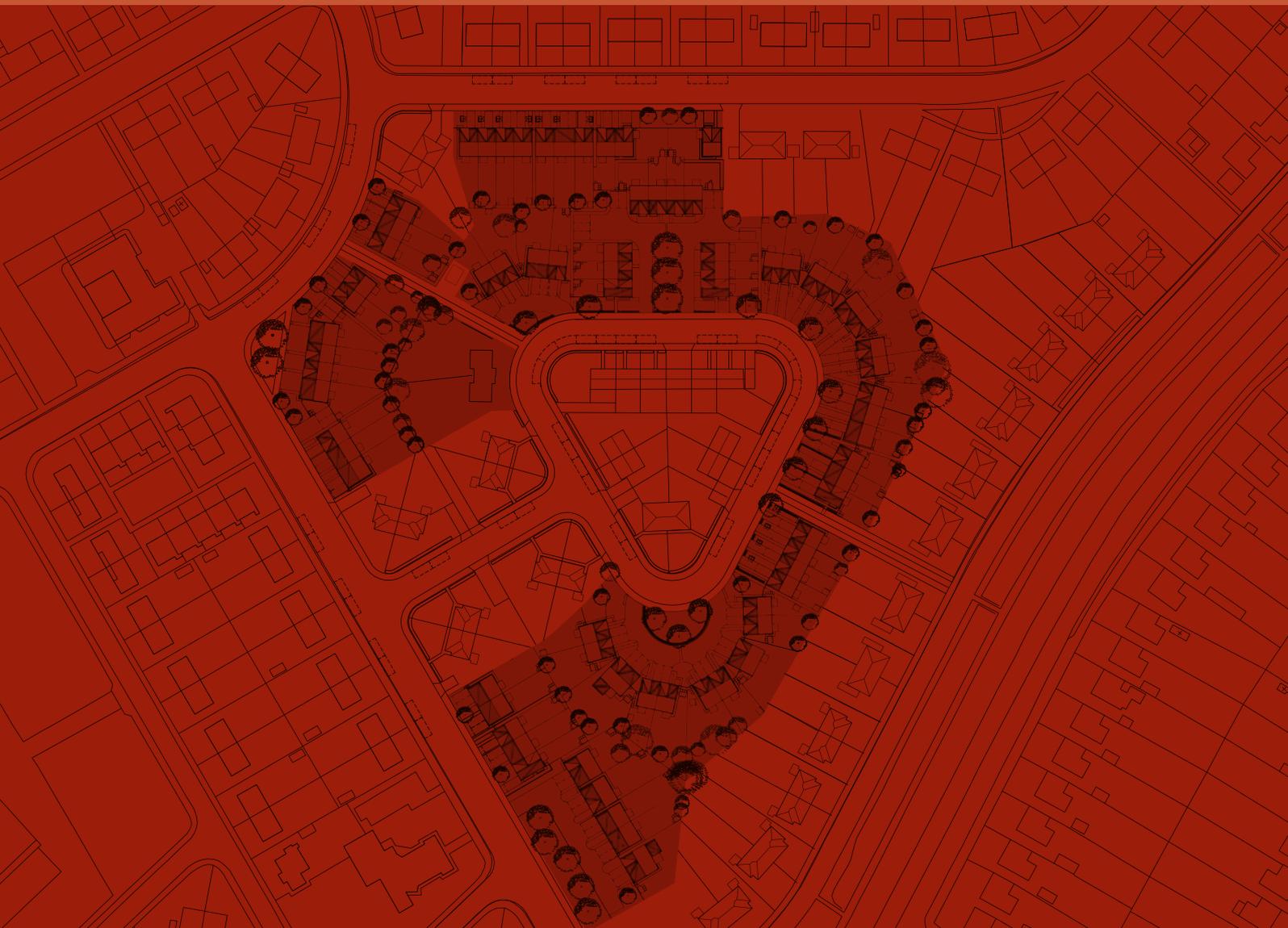
By providing an informed look in detail at a single scheme, this piece manages to throw a perspective on how its delivery model could be more widely applicable by councils.

www.architectsjournal.co.uk/buildings/doncaster-council-rolls-out-the-housing

Building study

Doncaster rolls out the housing

Since 2013, the local authority has completed 1,200 affordable homes, including 450 council homes. Its 79-home Bristol Grove scheme, designed by an in-house team, is among the latest iterations of its standardised house types



Improvement of a site of 50 non-traditionally constructed 1950s 'Howard' properties was ruled out due to the inability to thermally improve the dwellings and remove extensive asbestos. The council chose to demolish them all and build new properties in their place. The Bristol Grove site was designed by the council's in-house architects, with 79 new houses to be completed in three construction phases, so tenants of existing phase three houses could move into completed phase one houses. The site would use the typologies developed by the in-house team on previous Doncaster sites.

Words Rob Wilson
Photography Graham Oakes

'It's the range of house types we've developed that has been the secret of our success,' says architect Matthew Clarkson, design and construction services manager at Doncaster Council, who led on the design of its new council houses. 'It has allowed for standardisation of elements and specification and been a way of securing price and consistency.'

On visiting three different schemes across the city, this type-based standardisation becomes clear. Each has very different site conditions – from an infill gap along a street to a steeply sloping site with crescents and cul-de-sacs laid out next to open countryside. But all the dwellings consist of short rows of the same relatively repetitive house forms with small variations, all with the identifying familial feature of a large, heavily-framed 'oriel' window, as Clarkson calls it, at first floor level.

At first sight, they riff more than a touch on the toytown, with their graphically prominent roofs and gables, blander in their forms compared with the mannered twists and carefully modelled corner

turns seen in the more architecturally garlanded schemes of, say, Mikhail Riches in Norwich or Peter Barber in London. But, where many other councils' schemes are one-off clusters or terraces, tailored to their locations, here type trumps site.

'We didn't set out to design "magazine-turning" types,' says Clarkson. 'That's not what we're about; it's about simplifying delivery. The more bespoke route can't turn around the numbers quickly enough to get people off the housing list.'

Indeed, this type-not-site approach has paid dividends. For, while many councils have only recently started re-dipping their toes into home-building after a 40-year lull, Doncaster has already delivered more than

450 new-build council dwellings over the past eight years. And, where many other schemes are mixed tenure, these are 100 per cent social-rent, managed for the council by its arm's-length organisation, St Leger.

The programme, as elsewhere, is in response to need. With numbers of council properties depleted by Right to Buy, the waiting list for housing in the city stands at more than 7,000 people. Even now, despite its building programme, the council is still losing units. 'We built about 120 dwellings last year, but nearly 250 tenants applied for right-to-buy,' says Karen Kellett, programme manager for the council's Strategic Housing team. To mitigate against the new homes just being bought and flipped, a clause in tenancies for the new properties means if new tenants want to buy their properties within the first 15 years, they cannot claim the Right to Buy discount but pay the total build cost, including fees.

Initially, the council fully self-funded the programme; but now a percentage per house is provided by Homes England, its delivery partner. 'They see us as a reliable partner,' says Kellett, 'as I think many councils apply for grants from them and then don't deliver.'

A key part of this consistency of delivery has come from the fact that the palette of house types has been developed in-house by the design team of the council's Property Services team – although 'in-house' is a relative term, as the department is self-funding and fee-earning (its current workload includes an £8 million sixth form college). Indeed, when the building programme started in 2011, the first four sites were designed by external architects, each design bespoke to its site. The Property Services team became aware of the programme in 2012 and lobbied to design the last site of Phase 1 and then standardised the house type designs for Phase 2. 'Of course, the same procurement rules applied, but we offered consistency,



speed, cost certainty and economies of scale through the use of house types,' says Clarkson. Each scheme proceeds through a framework agreement using NEC3-type design and build contracts (the contractor is Willmott Dixon), with the Property Services team designing RIBA Stages 1 to 3 and then Stages 4-7 being let out. The working drawing packages are prepared by Ingreen Architectural Services in County Durham.

The design team that Clarkson leads consists of three architects, a Part 1 and a Part 2 architectural assistant, and also includes a landscape architect, two M&E engineers, two project managers and, until recently, a structural engineer. 'We're having difficulty filling that post,' admits Clarkson. Indeed, rather than growing, the team has contracted in size since Clarkson joined 10 years ago.

Doncaster is one of the authorities leading on the delivery of new-build council homes, and this seems as much a result of the individuals involved – such as Clarkson and Kellett – as of any specific policy. Importantly, these individuals include the elected mayor, Ros Jones. First elected in 2013, she was re-elected in 2017 with an increased majority and her enthusiastic support for the programme seems to have been a key driver in pushing it forward.

'She basically said: you build them to the quality of what you would consider living in yourself or putting a close family member in,' says Kellett. 'That was the brief from the start.'

'Doncaster's mayor said: build them to the quality of what you would consider living in yourself or putting a close family member in'

Axometric section of typical two-bed type



Clarkson concurs. 'We have definitely looked to design-in quality, not least to protect them as our assets,' he says, pointing to details such as solid wood doors and features such as a water-stop switch under the kitchen sink, easy for tenants to turn off in the event of leaks. All the houses are traditional build. 'We're cautious of modular or non-traditional construction techniques that people can't get mortgages on,' says Clarkson. 'While we appreciate the quality possible in factory-assembly and avoiding wet trades, the benefits of speed, a key driver for using modular for housebuilders, is not the same priority for us.'

This caution is put in perspective on visiting the Bristol Grove scheme in Wheatley, an example of demolition and decant. Here, it was not tower blocks that

Architect's view

The council's in-house design team was appointed in 2013 to develop a range of six house types. The designs were subject to an extensive consultation exercise including ward members, St Leger Homes (the council's arms-length organisation), tenants and residents associations and the Urban Design Committee. They were also required to meet the Homes & Community Agency (now Homes England) housing quality indicators.

Two pilot sites were designed and, once built, the design team was commissioned for another seven sites, construction part funded by Homes England. With 155 homes built by 2015, Doncaster's in-house design department embarked on a complete review and redesign of the types. Another consultation exercise reviewed the use, ability to furnish, construct and future adapt the houses. The process coincided with the release of the government's nationally described space standards, so all 14 typologies were designed to meet these.

The authority considers that council housing has historically been well-built and generous in proportion, so invested its finances producing houses that met this philosophy, while providing future upgrade potential for when the relevant systems and products become cheaper and more widely used.

The challenge on the Bristol Grove site was to maximise the land's potential. Fifty houses were to be demolished to make way for 79 new two to five-bedroom properties. The demolished houses were close to the road and had very long rear gardens. By pushing the new houses back, the design makes extensive use of private driveways in a variety of forms to create interest and make better use of the land.

Matthew Clarkson, design and construction services manager, Doncaster Council



With ease of adaptation a key aim, half the roofs have attic trusses for future loft uses

were demolished but suburban-type semi-detached 'Howard' system steel-framed houses, dating from the 1950s. Very advanced for their day, with prefabricated two-storey bathroom pods that were craned in, they were 'asbestos-riddled' and deteriorating rapidly – costly to live in and to maintain for tenant and council. Fifty homes were replaced by 79, although, surprisingly, only one tenant opted to move back.

Bristol Grove is typical of most of the schemes – built on existing council-owned sites that needed redevelopment. Old Road in Conisbrough, for another example, was previously a social education centre for adults that was 'surplus to requirements'.

The mix at most sites consists mainly of two and three-bedroom houses, the most common of the initial six types developed. The number of types has expanded over time from bungalows for over-55s to larger five-bed, seven-person houses, although some types evidently didn't prove economic. 'We wouldn't do the one-bedroom house again,' says Clarkson. All the units, whatever their size, are the same depth, allowing flexibility within given plot widths for an adaptable mix of type. Units are built in short runs, cheek-by-jowl, with parking in off-road bays perpendicular to the houses and incorporated into short strips of amenity space in front – a clear indicator these are not generic executive homes.

The dwellings are designed in line with the South Yorkshire Residential Design Guide, which externally suggests such quasi-traditional aspects such as 1:2 roof-to-base proportions and gardens of 50m² with 'usable shape' for two-bed properties and 60m² for three-bedroom properties and above. Apparently, prominent roofs fit with 'the community's perception of quality', although there are also more pragmatic reasons, since flat roofs can be tricky to get insurance for. With ease of adaptation a key aim of the scheme, half the roofs have attic trusses for future loft uses – although in general attic spaces are not made easily accessible to prevent them becoming overflow storage, with attendant squashed insulation and increased fire risk.



MATTHEW CLARKSON



MATTHEW CLARKSON

Sill-less French doors

Contractor's view

Working with Doncaster Council through the Scape Framework enabled Willmott Dixon to communicate with the customer from the beginning of its second programme of new-build council housing. Doncaster's approach in having their own house types made a real difference as the customers already had expectations of what the housing in their area should look like. Doncaster was realistic in its ambition and knew what additional factors it should consider when building homes fit for the future.

The journey started through an open workshop to which all parties brought with them the requirements needed to create an exemplary project. Creating well-designed homes that could be plotted on various sites meant that, once the supply chain was established, the hardest part of any future project was finding out the substructure requirement.

'Lessons learnt' workshops were held throughout the construction phase and any details could easily be changed for future projects based on real-life examples.

Willmott Dixon has showcased housing projects in Doncaster to other customers that are just starting their council house build programme delivery. *Charlotte Johnson, residential sector manager (public), Willmott Dixon Construction*

The exteriors have wilfully random colouring, a mix of black, red and tan Ibstock brick, though this is less stark in reality than it sometimes appears in the photography. 'It helps identify individual houses,' says Clarkson – although one can't help thinking coloured front doors would have done the job.

But there is a straightforwardness to the design, a big-boned, broad-brush feel to them that is generous where it needs to be and solid-looking, from the prominent 'oriel' window to the detailing of the inset porch, the brick wrapping under the soffit using a 'pistol' brick special.

The designs meet Building Regulations standards plus 10 per cent but are also future-proofed for increased thermal performance if it becomes affordable, with 350mm-thick wall cavities, windows designed to take triple glazing, and ample roof space for photovoltaic panels.

Feedback, economics and pragmatics have gradually winnowed and refined the designs. Some details have been added – the kitchen window now turns the corner to overlook the porch – but more have been dropped – the timber-look panelling which lined early porches didn't prove robust enough, and the chimney-like solar pipes needed expensive craning-in. Costly solid-brick bin storage 'docks' were also replaced by off-the-peg steel-framed models. Most notably, the original projecting 'oriel' window design proved tricky to install from

a health and safety point of view, requiring fitting by crane after the scaffolding came down. Now a powder-coated aluminium frame remains as an echo of it – a fictive element that sits oddly with the pragmatics elsewhere. A dark brick surround would still do enough to maintain the familial line.

Material and product simplification has also streamlined supply chain organisation. There's just one distribution warehouse for spare parts and fewer more universal maintenance procedures – although single product monopolies create their own problems for price and supply. 'We had "boilergate" a few years back, when the one model we used and its spare parts were discontinued,' says Clarkson.

Inside, the houses are designed to National Space Standards, which definitely shows. While small, they have good-sized, simple rooms, with key aspects such as space for a dining table and ample cupboards. 'Some of our basic principles were generous natural daylight, a clear route to the front door and good storage,' says Clarkson.

Accessibility and ease of future adaptation are also evident, with sill-free sliding French doors to the garden and stairs designed in straight runs, 1m-wide for fitting of stair-lifts. A shower tray and fittings are embedded in the downstairs bathroom to aid future conversion for later living, while upstairs a knock-out section of a bedroom wall is framed out to allow a door between it and the bathroom, the ceilings above reinforced to take a hoist. Further design tweaks include adding a power socket on the landing, as its generous space makes it a favourite place to iron. 'The feedback loop from tenants to designers is much quicker, with us in the same building as the designers,' says Kellett.

It is not precious housing, but an example of architects working to combine quality with simplicity; and to a large extent they have succeeded. Laying out houses in symmetrical crescents does not replace the richness of detail and modelling the architecture of these houses lacks, but the sets of housing



have a density yet generosity to them that successfully toes the line between the semi-suburban and terrace, lending an urbanity and centre of gravity to developments.

The council is not resting on its laurels. It is now looking to develop smaller garage sites, more mixed-tenure schemes and, citing the examples of councils such as Mansfield, is looking at provision for dementia sufferers and children leaving care. Indeed with Doncaster itself providing a good model for deliverability of high-quality council housing, other councils are now visiting its homes, demonstrating the growing momentum and feedback loop between local authorities. From the evidence of the Doncaster housing, this is really pushing up the quality of new council housing provision.

Performance data

On-site energy generation Nil
 Annual mains water consumption 39.4m³/occupant
 Airtightness at 50Pa 4.19 m³/hr/m²
 Overall thermal bridging heat transfer coefficient 0.088 W/m²/K
 Predicted design life 60 years

Project data

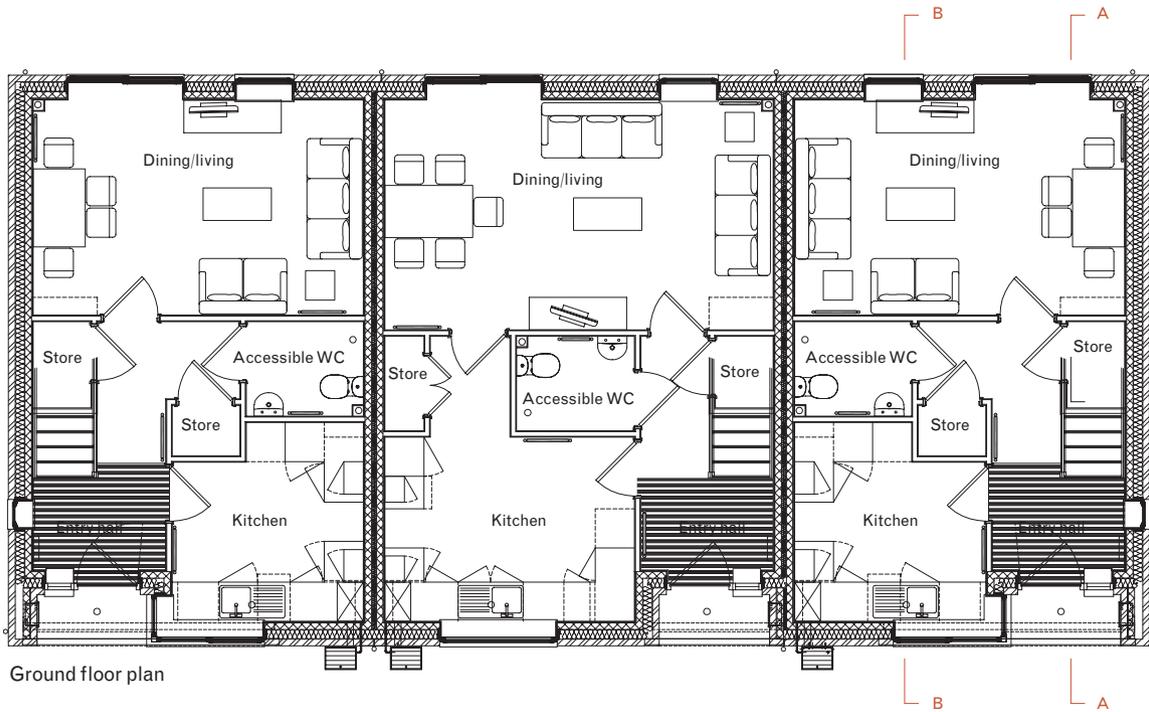
Bristol Grove
 Start on site April 2017
 Completion of site June 2019
 Gross internal floor area 6,719.6m²
 Construction cost (excl professional fees & demolition) £9.2 million
 Construction cost per m² £1,379
 Architects Doncaster Council Property Services – Design Department (RIBA Stages 1-3), Ingreen Architectural Solutions (RIBA Stages 4-7)
 Client Doncaster Council – Strategic Housing and St Leger Homes
 Main contractor Willmott Dixon
 Employers agent and quantity surveyor Ryder Levett Bucknall
 Civil and structural engineer Peter Brett & Associates
 Building regulation LABC – Doncaster Council
 Mechanical designer Yorkshire Plumbing & Heating Services
 Electrical designers JP Glasby
 CAD software used AutoCAD with Architectural Desktop
 Building For Life 12 score 10



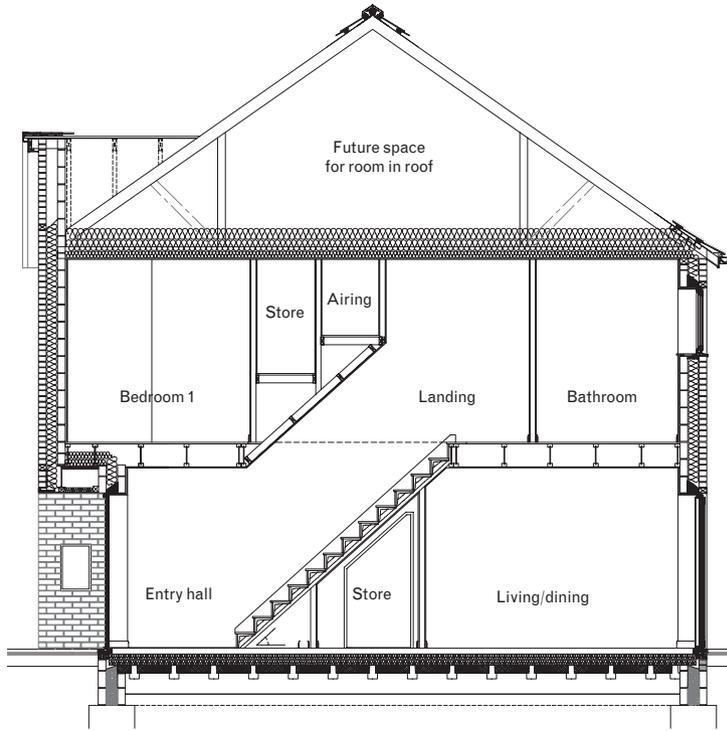
Typical two and three-bed terrace



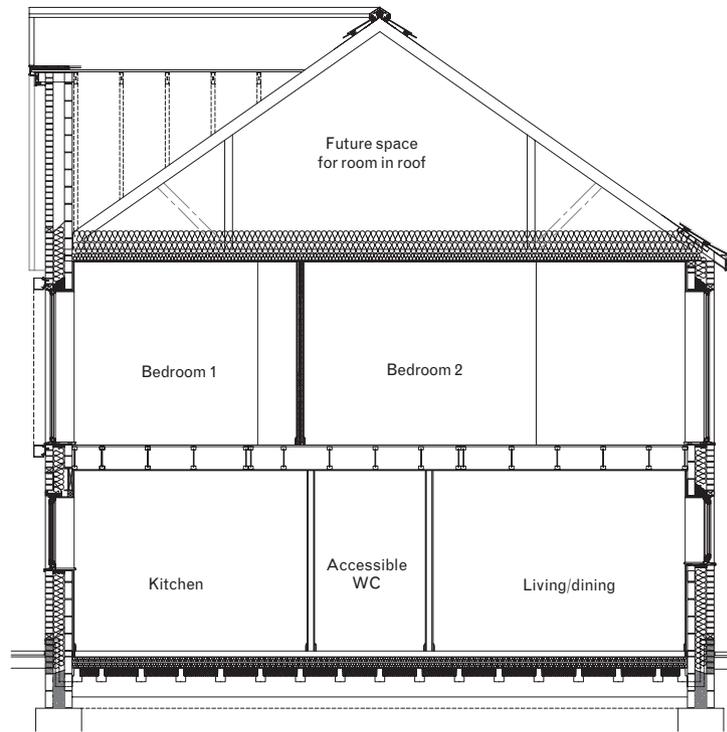
First floor plan



Ground floor plan



Section A-A



Section B-B



Housing scheme at Old Road

Client's view

Doncaster Council's strategic housing team commenced a council house building programme in 2013, constructing new homes and purchasing empty properties to bring back into use. The capital programme and Homes England grant funding was used to fund the build and purchase schemes and continues to be the funding stream.

From the outset, the team recognised the programme's success depended on ensuring that the specification was right. We used our own in-house architects who had an extensive housing background. We didn't want the properties to look or feel like traditional 'council' houses. They had to feel light and airy and with plenty of space to allow for full occupancy.

Our architects developed a suite of standard house types with various external

finishes to suit the local vernacular. All house types are designed to satisfy the Lifetime Homes standard.

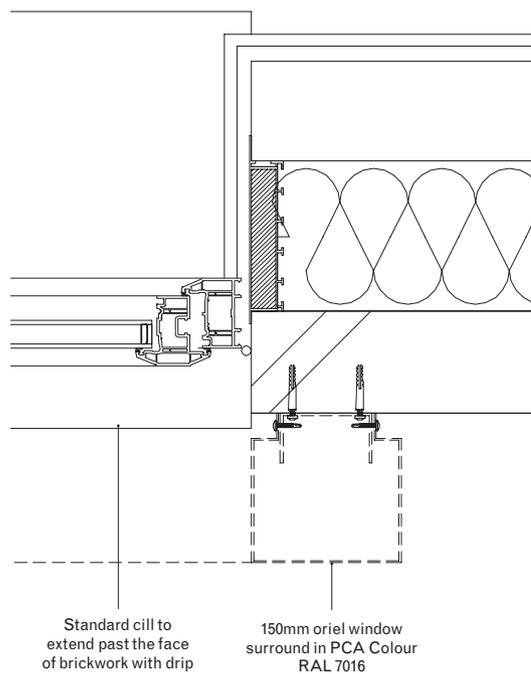
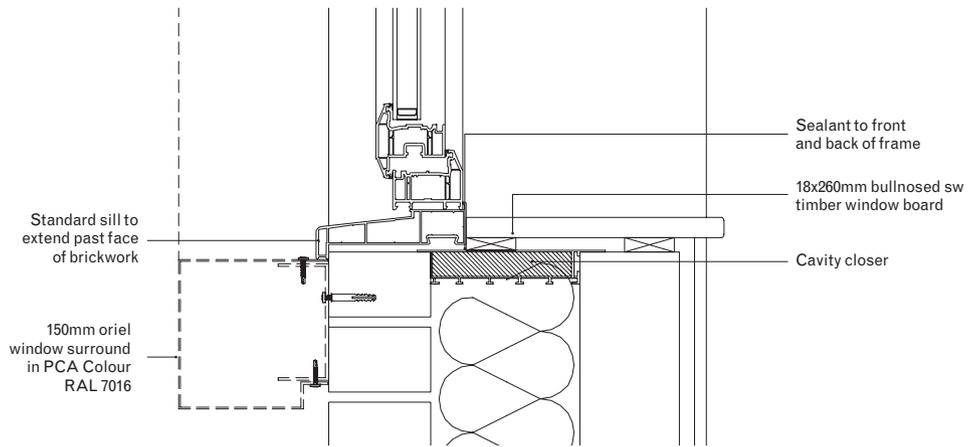
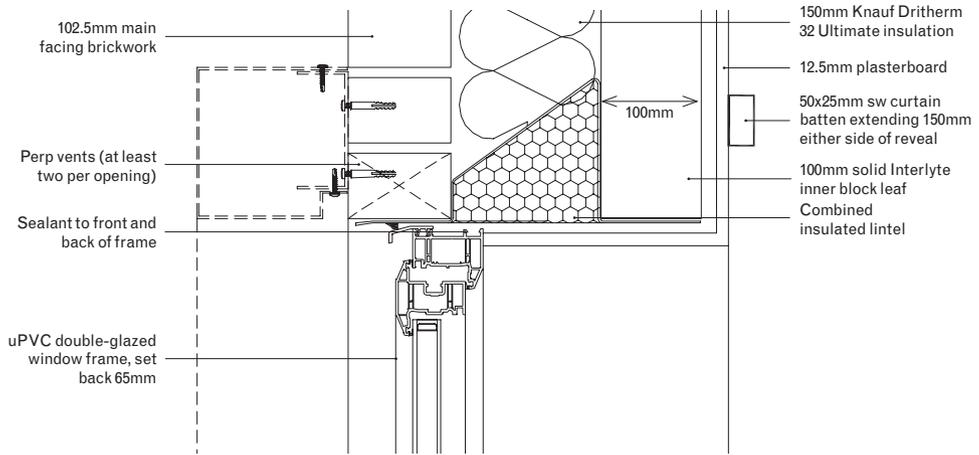
Features have been incorporated that, although increasing the build cost, add value and enable future adaptation. For example, a number of two-bed properties have been built with room in the roof trusses that can be converted to a third bedroom.

The internal layouts ensure each house type meets the new nationally described space standards, including internal storage requirements. Enhanced external wall thickness improves thermal insulation, reducing energy consumption. We are continuing to explore opportunities for using modern methods of construction to reduce build time and costs while improving the precision and quality of the build.

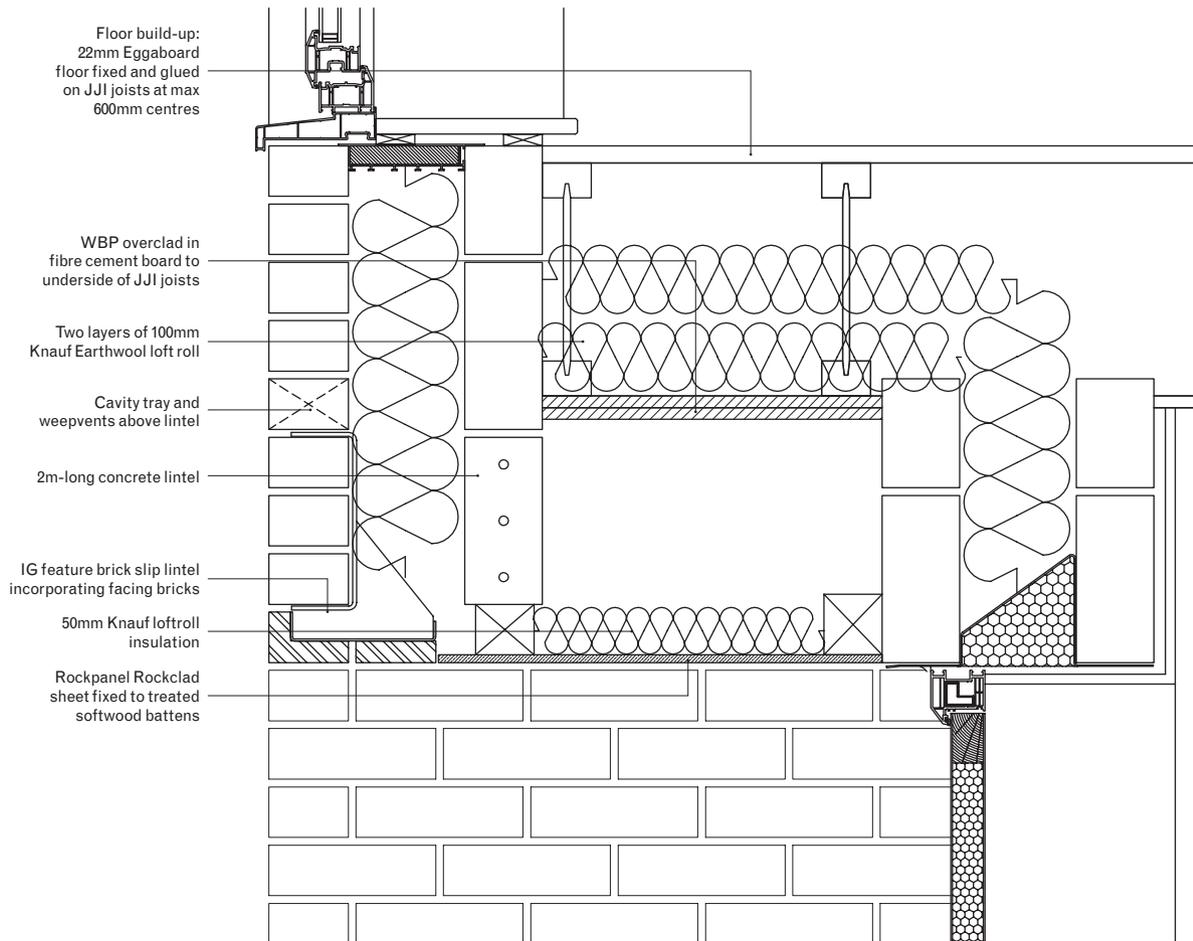
The programme can be used to develop different types of sites, from estate renewal to unused vacant assets, to small infill sites. Bristol Grove comprised 50 Howard-type properties with steel-frame construction and high levels of asbestos. We developed a programme of acquisition/relocation and transformed the areas.

Since 2013, we have completed 1,200 affordable homes in Doncaster, including around 450 council homes. We have ambitious plans to ensure there is enough appropriate new housing in Doncaster to meet both current and future needs, including housing for older people and people with physical/learning disabilities and autism.
Karen Kellett, housing programme manager, Doncaster Council

Head, sill and jamb details for 'oriel' window



Recessed porch section



57

Working detail

The brief for the design was for homes that were tenure-blind in appearance, using quality materials, with resilience and long life, adaptability and ease of maintenance. The council intends to keep the dwellings for a minimum of 60 years, and needed all the resilience it could afford. The properties will be maintained by its arm's-length organisation, St Leger Homes, so consultation with its maintenance operatives when the original specifications were being written was crucial, and many products are kept in stock for replacement and repair.

Wherever possible, the design of the houses was used to lengthen their lives.

All houses have built-in wardrobes in at least one bedroom, to prevent damage encountered by large wardrobes being taken upstairs. All houses have solid-core internal doors, water-stop devices, fused spurs for stair lifts, plumbed and buried shower drains in the ground floor WC and level-threshold sliding patio doors instead of French doors. All these are fitted because the potential damage caused by not fitting them has historically cost the authority a lot of money. Adaptability is achieved in several ways: 150mm-wide, partially filled cavities in external walls enable future thermal improvement as do the window frames capable of replacement triple glazing inserts.

Many houses are built with attic trusses, with the steeper pitched roofs permitting a future room in the roof conversion.

The footprint of each house was also carefully considered to enable ease of plotting and flexibility to make amendments throughout the design process. All houses on this site have a common plan depth, which enables them to be terraced in any configuration. If the mix of house sizes changes during design and development of the site, plot substitutions are easily accommodated, as each house simply gets wider the more bedrooms it has. *Matthew Clarkson, design and construction services manager, Doncaster Council*