Re-Imagining Smallbrook Ringway

A Counter-Proposal for Adaptive Re-use

Prepared by Brutiful Birmingham,
Birmingham Modernist Society,
Zero Carbon House with the support of
C20 Society

December 2022

Smallbrook Ringway Centre shortly after opening in 1960, before the pedestrian subway to Hurst Street was removed.

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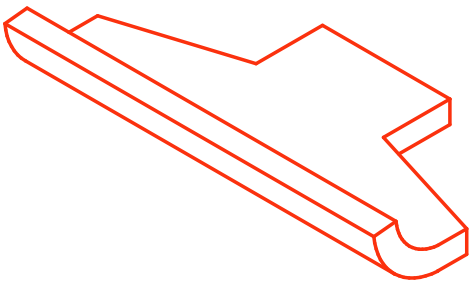
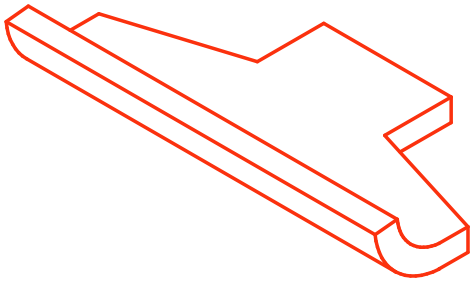


“Two thirds of people in UK want action now to save the planet”. Creative and accountable reuse of existing buildings is one of the most tangible ways of achieving this.

“There needs to be a total shift in mindset and culture – a shift from an extractive, degenerative, linear mindset to a regenerative, circular, low carbon mind set.”

Source: UK Architects Declare Practice Guide (2021)

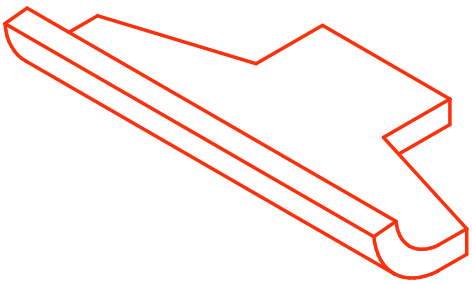


Introduction

This document has been prepared to supplement the open letter of December 2022, and is the result of work by Brutiful Birmingham, Birmingham Modernist Society, Zero Carbon House, C20 Society in consultation with others.

The counter-proposal is intended to encourage debate about the historic built environment in Birmingham, a city that has been synonymous with progress at numerous points in its history. Birmingham once again finds itself at moment of dramatic and profound change, raising urgent questions about the social and environmental sustainability of development, as well as the ongoing dialogue around modernist heritage. The city has lost too many important buildings of this era, and we believe that to reimagine Smallbrook Queensway would establish a global example of responsible stewardship of the built environment. In an article for the Guardian (12th September, 2022), architecture critic Oliver Wainwright raised the prospect that “the city could become a model of creative postwar conservation”.

The counter-proposal consists of the open letter, this document which includes indicative illustrations for the retention and extension of the existing building along with commentary by the group and photographs. It was also the subject of an article in the Birmingham Post (24th November 2022). Of course, there are many options available for the creative and responsible reuse of existing buildings such as this. The group has not been paid or appointed by others to prepare this information. No consultation has taken place with the City’s planning department at this stage. The proposals have not been subject to a development appraisal and would require substantial further work and consultation. However, the proposals have been prepared in good faith with civic and commercial interests in mind in the duty of heritage principles along with social and environmental sustainability.



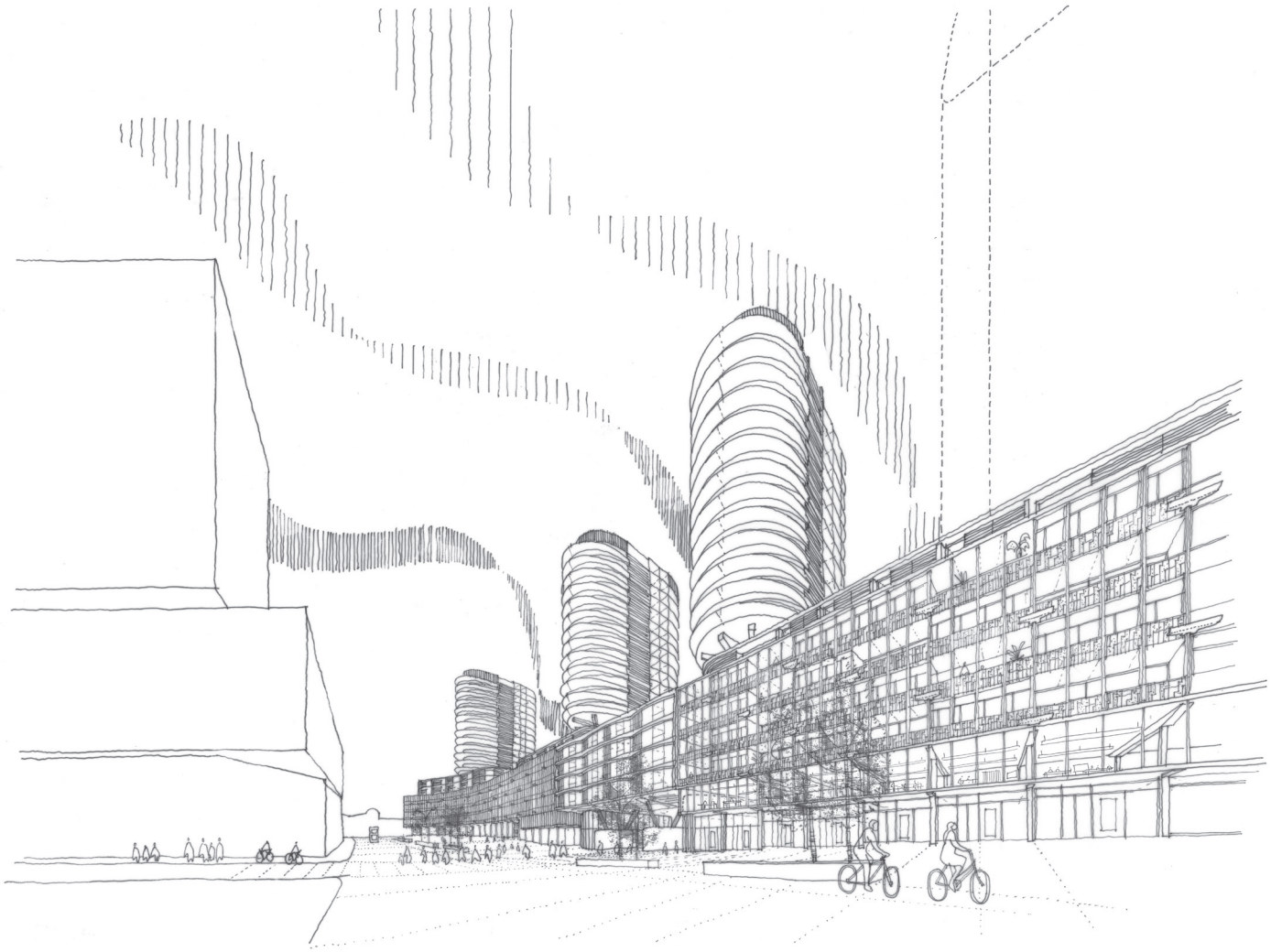


Illustration of the counter-proposal looking towards Hurst Street from Suffolk Street Queensway.

“The city could become a model of creative postwar conservation”

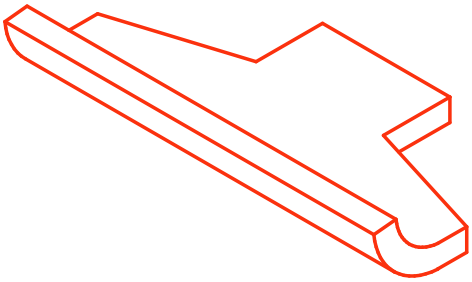
architecture critic Oliver Wainwright In an article for the Guardian
(12th September, 2022)

Architectural & Urban Principles of the Counter-Proposal

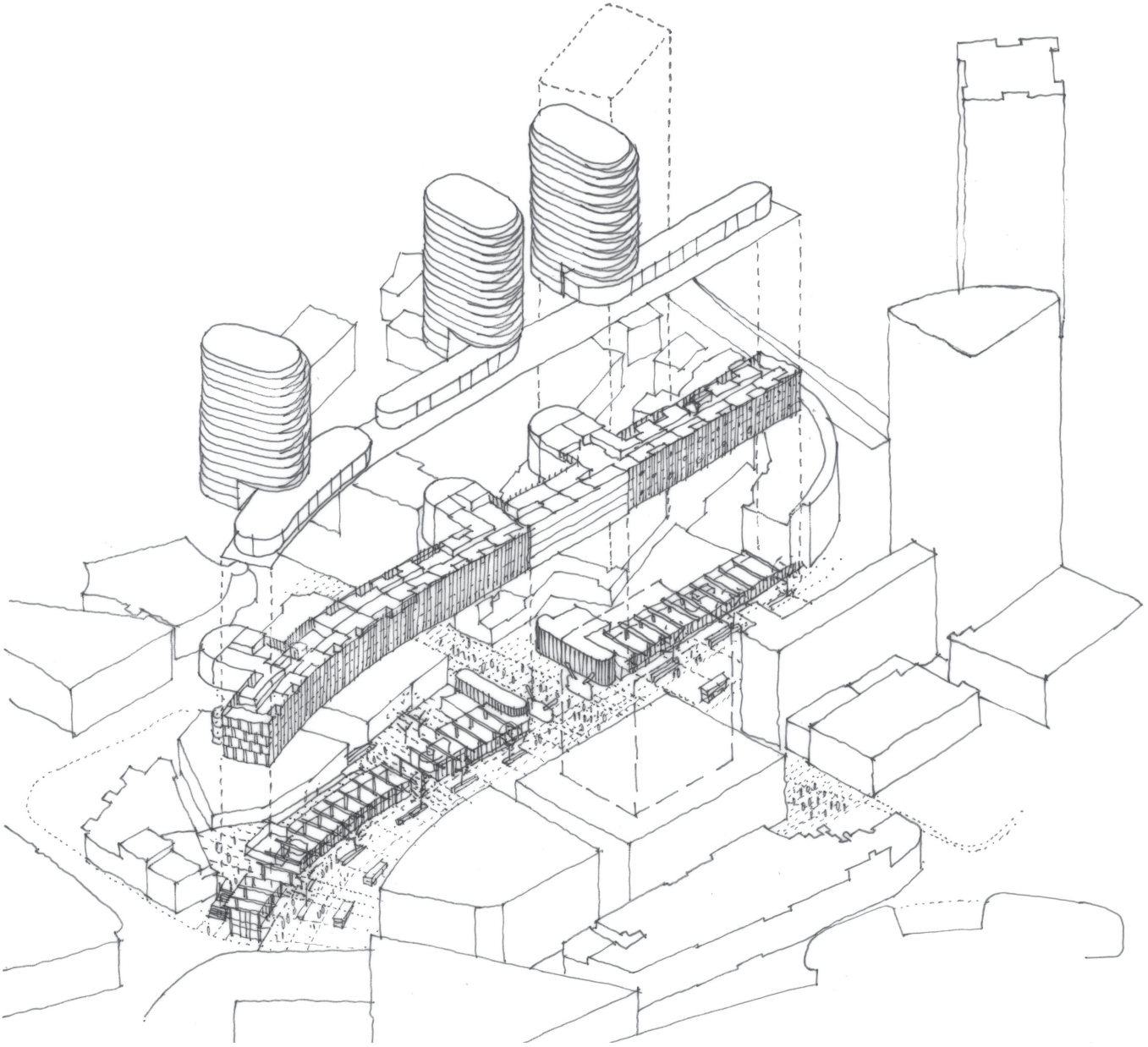
1

Smallbrook Ringway Centre is one of the most striking and exceptional buildings of the era and represents a very particular response to the conditions of post-war, mid twentieth century Birmingham. Built between 1958 and 1960, it was one of a number of buildings which addressed the need for renewal according to changing patterns in living, mobility and the application of new technologies. The city had long been blighted by traffic, and the inner ring road and accompanying development of its margins was seen as a necessary measure. Forming a central spine to James Roberts' urban ensemble[1], the Ringway Centre was conceived as a regional version of London's Regent Street, the first to be built along the ring road. Forming one whole side of the street, the building's horizontal articulation and lively patterned façade reflected the dynamic movement of the road, providing retail destinations along its length with offices over. Despite years of neglect, the original fabric of the building is largely intact and appears in good condition. Of particular note are the cast concrete light sconces, spandrel panels and close centred vertical mullions that recall the *art brut* and *op art* movements.

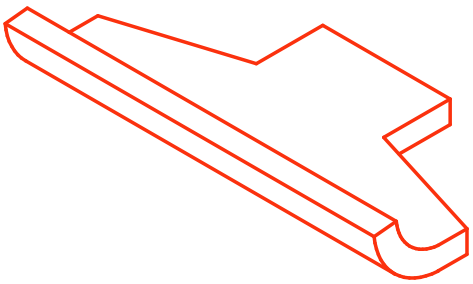
Our proposal counters the idea that the building acts as a "wall" or boundary between the city centre and adjacent quarters. Rather, we conceive it as a border for interaction between areas, providing new uses, amenities and connections. This aligns with the City's Birmingham Design Guide: Healthy Living and Working Places City Manual (2022). At ground level, we propose a reordering of Smallbrook Queensway and Hurst Street to provide more accessible space for pedestrians and cycleways in a landscaped street, linking through the block to Dudley Street and Wrottesley Street via reinstated accessible passages lost during the original development. Double height retail units with contemporary frontages make use of the vertical depth of the site with further basements available for car parking and cycle storage, though given the sites proximity to a range of transport options we would advocate for minimal parking provision. The dramatic bridging to Hurst Street is reimagined with new ground floor frontages that replace the ad-hoc additions, creating a sense of location and a gateway to the Gay Village and Chinese Quarter beyond.



1 Roberts also designed the two 32 storey towers the Sentinels (1968-71), Bethel Presbyterian Church of Wales (1968), the adjoining Scala House (1962-64), the Albany Hotel (1962) opposite, and the nearby Rotunda (1965).



Axonometric Illustration of the counter-proposal.

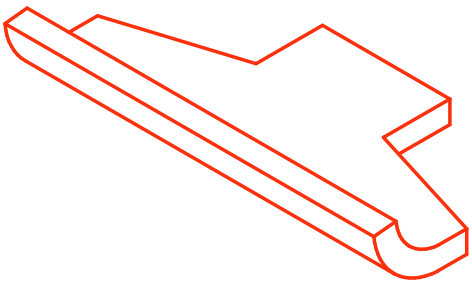


Architectural & Urban Principles of the Counter-Proposal

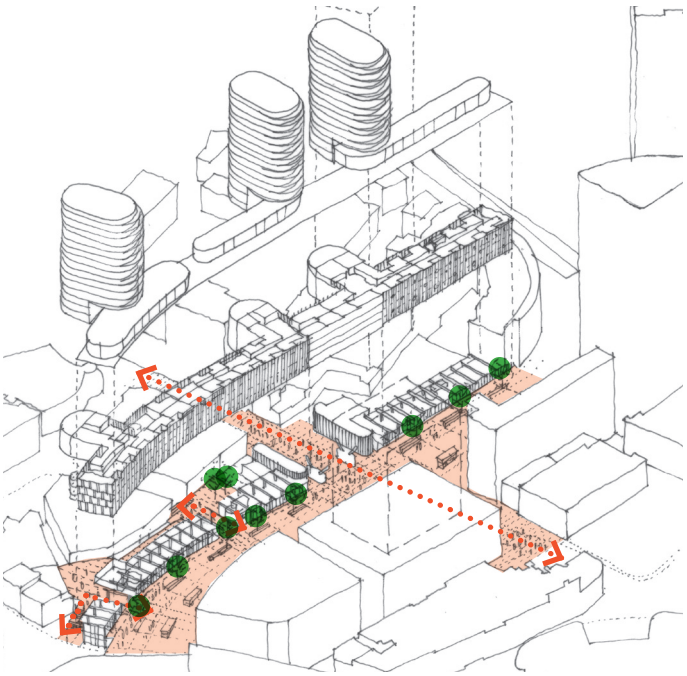
1

At the heart of the counter proposal is a change of use to residential apartments [2]. By reusing the existing upper four floors and creating three new towers behind and over, we envisage around 450 apartments of varying types and size, accessed from four entrances from Smallbrook Queensway. By retaining as much of the existing fabric as feasibly possible, and working with existing floor levels and circulation, our scheme reinforces the spatial and material qualities of the building whilst retaining the embodied carbon of the existing structure.

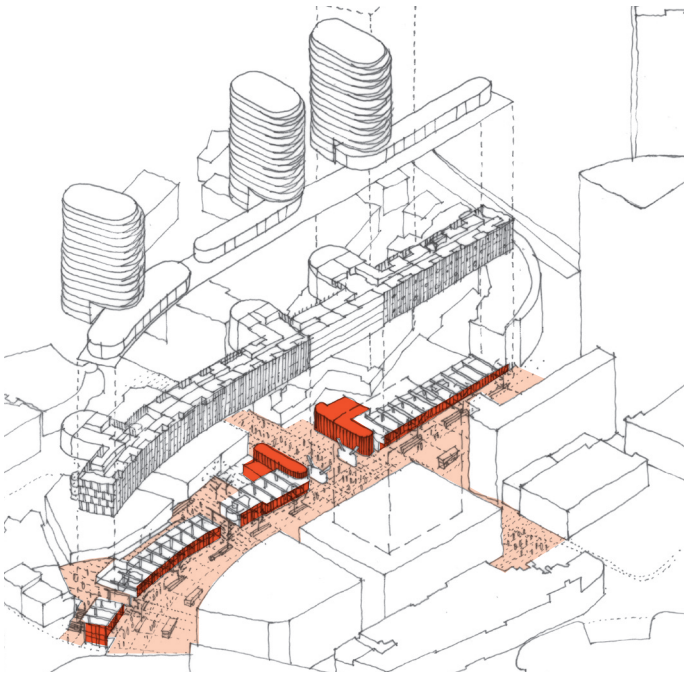
The principles are discussed in further detail in section 3, but our proposal advocates consideration of the whole life energy efficiency of overall building, through improved façade performance, the avoidance of high-embodied-carbon materials such as aluminium, and the provision of a layered façade to control the interior environment through balconies and winter gardens to apartments. The towers are kept to 20 storeys both on grounds of construction and structural efficiency and to promote social cohesion – the taller the residential building the more difficult it becomes to build and maintain a sense of community. Our scheme also takes account of the city centre location and it's available social infrastructure, countering what we believe to be overdevelopment in the submitted scheme. The diagrams on the following pages outline these main principles.



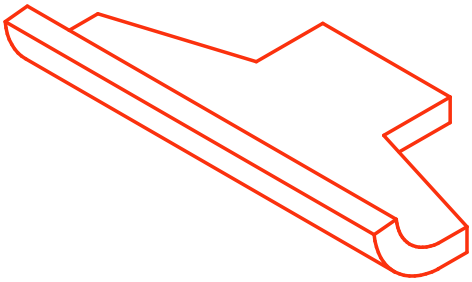
2 The principles of residential accommodation would be designed to meet and exceed nationally described space standards (2015).



New passages provide accesible routes from a landscaped Smallbrook Queensway through the existing ground floor to Dudley Street and Wrottesley Street, with Hurst Street prioritised as a pedestrian link to New Street Station and Victoria Square beyond.

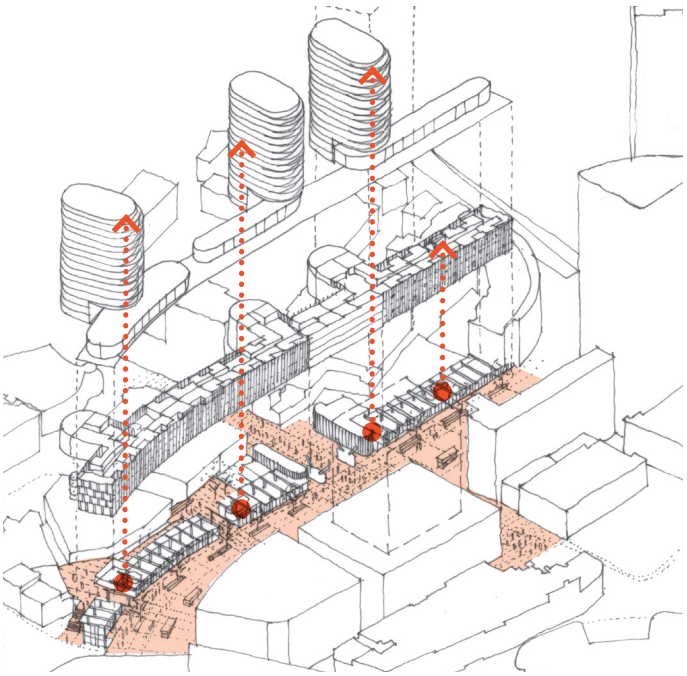


Smallbrook Queensway and the junction to Hurst Street is reanimated with new commercial frontages.

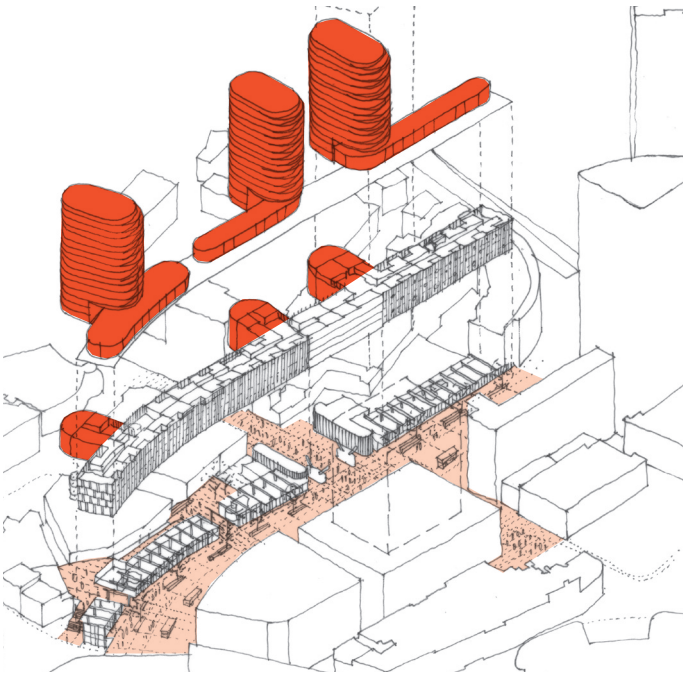


Architectural & Urban Principles of the Counter-Proposal

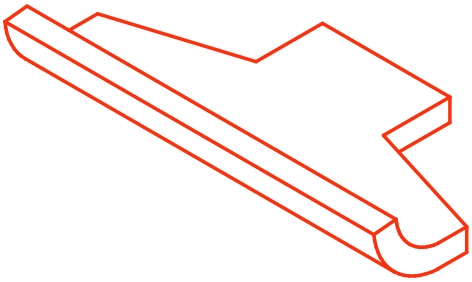
1



Residential entrances line a reanimated Smallbrook Queensway, where possible reusing existing lift and staircores, to link to the towers which rise behind the existing building.



Three new residential towers rise behind the existing building, which together with two storey rooftop extensions provide around 450 apartments.



David Rowan ©

“The best piece of mid-C20 urban design in the city”

Andy Foster in *Birmingham Pevsner* (2005, p.201)

Heritage & the Modernist City

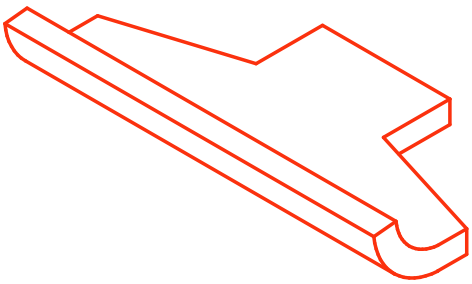
2

The Twentieth Century Society have provided the following assessment of Smallbrook Ringway;

> "The Ringway Centre is a very important part of the post-war cityscape of Birmingham. It is an impressive Brutalist building and historically significant as the first part of the post-war inner ring road development. Its inclusion on Birmingham's local list and identification as a Non-Designated Heritage Asset is recognition of its heritage value. Great weight should be given to its conservation of the Ringway as a unique heritage asset.
>
> The Ringway Centre will be included on the Twentieth Century Society's Buildings at Risk list for 2022/23 which is a campaign that receives national press attention. The Society has long considered the building to be a major post-war building in Birmingham and continues to strongly oppose proposals for its demolition."

C20 Society cite several paragraphs from the National Planning Policy Framework (NPPF, 2021) along with the Birmingham Development Plan (BCC, 2017) in support of their assessment. These are included in Appendix 1.

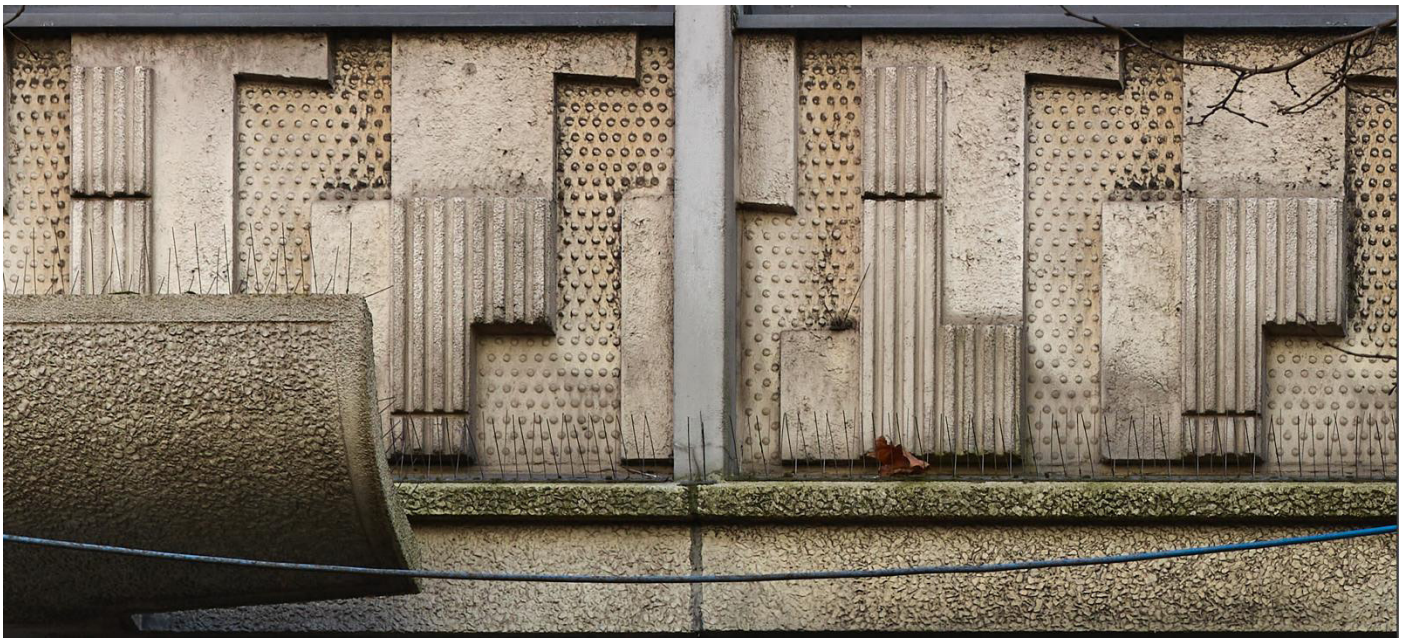
Additionally, the building has received many plaudits over its lfetime, these are included in Appendix 2.



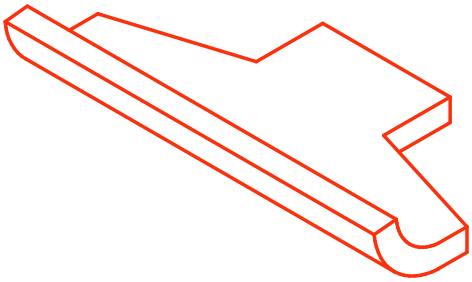
“In the UK, 49% of annual carbon emissions are attributable to buildings.”

“A significant portion of the built environment in 2050 (c. 80 percent) already exists and will need an equal amount of attention by the industry, in order to fulfil our responsibility towards the climate emergency”.

Source: LETI (London Energy Transformation Initiative) *Climate Emergency Design Guide*



David Rowan ©



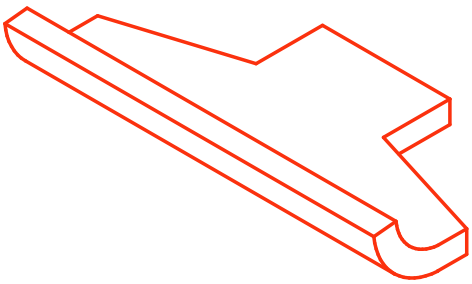
Environmental & Social Sustainability

3

Until recently, the conservation of architecture was based upon aesthetic and historical aspects of a building alone. Buildings were valued on the basis of their appearance and their history. These aspects themselves were narrowly defined. Firstly, for a building to qualify for conservation it had to be designed in a “high art” manner: vernacular buildings did not qualify. Secondly, to qualify for conservation, the older the better: only fairly recently did mid-20th century buildings come to be considered for statutory listing. Both of these aspects have since become considerably wider in their scope. Smallbrook Queensway is now locally listed as a significant heritage asset; therefore City policy is for it to be “valued, protected, enhanced” as its contribution to local distinctiveness and character is widely recognised and documented.

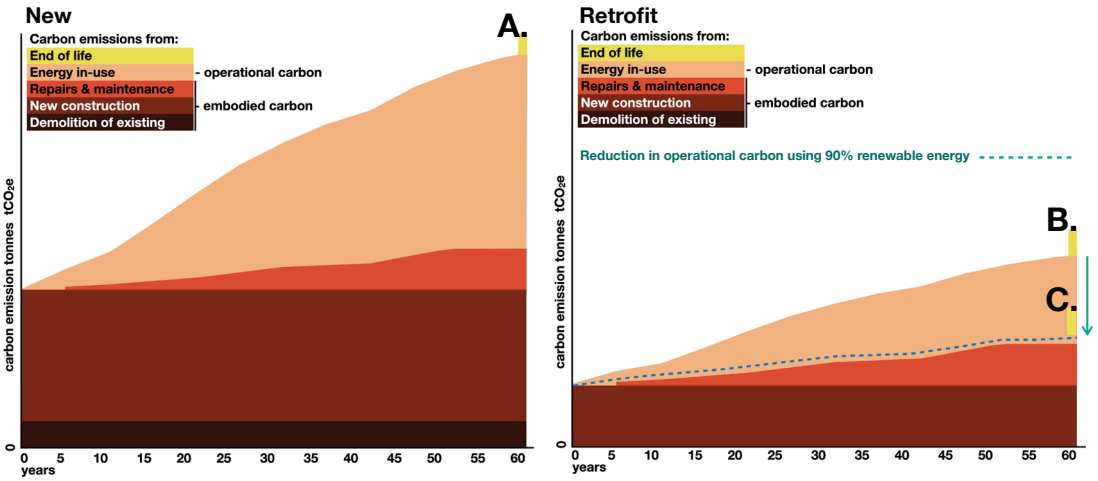
The climate emergency has introduced a radical new criterion for architectural conservation: carbon retention. The demolition of an existing building and its replacement by a new building both release large amounts of carbon into the atmosphere. Buildings and construction are responsible for 49% of UK CO2 emissions. As a result, there is an increasing demand that existing buildings be retained and repurposed, rather than be replaced. The Architects’ Journal *RetroFirst* campaign cites former AIA president Carl Elefante’s statement that “The greenest building is the one that already exists”, exemplifying this demand.

The planned replacement for the Smallbrook Ringway building with three very tall towers has two features which particularly disqualify it in terms of carbon emissions. One is the huge amounts of excavation which the three towers would necessitate. Excavation, the accompanying large amounts of steel and concrete used in the foundations, and the tanking of the excavated surfaces, rates extremely highly in terms of carbon emissions. The other feature is the three tall towers themselves (44, 48 and 56 storeys), both in terms of the energy- consuming materials required to construct them, and in terms of their energy consumption in use.



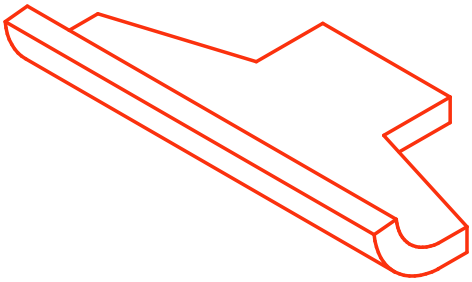
The true equation for the building's whole life carbon is:
Embodied carbon +
Operational carbon +
End of life (demolition/reuse/disposal) =
Whole Life Carbon.

Smallbrook Ringway: carbon emissions over 60 years



A. Planning application: demolition and new construction to Building Regulations.
B. Counter-proposal: energy-efficient retrofit with extensions and alterations.
C. As B with renewables supplying 90% of operational energy.

Indicative illustrations of the cumulative carbon emissions over 60 years. The counter-proposal retrofit (B) is likely to have much lower carbon carbon emissions than demolition and new buildings (A).
When coupled with renewable energy (C), whole-life carbon could be further reduced to a small fraction of (A).
Note these comparisons are indicative, and require verification with a detail scheme, but show the significantly reduced carbon emissions inherent in a low-energy retrofit.



Environmental & Social Sustainability

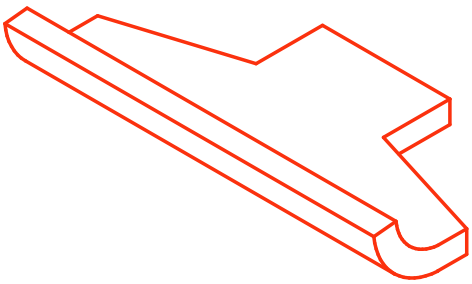
3

Tall buildings are disproportionately inefficient in their use of resources, when compared to lower ones. Firstly, the taller the building, the more concrete and steel is needed per square metre of floorspace provided. The manufacture of concrete and steel generates huge amounts of carbon. Secondly, the taller the building, the greater is the consumption of electricity per square metre of floorspace. Buildings over 20 storeys high can consume 2.5 times more electricity per unit of floorspace than a seven-storey building.

The proposed demolition is inconsistent with national and local policies. *Birmingham Development Plan* targets 60% carbon reduction by 2027 - ahead of Government plans - and therefore rightly requires "the highest sustainability standards" including carbon reduction. In particular, the Plan supports "initiatives and opportunities to mitigate the effects of climate change by seeking the reuse of historic buildings ... to reduce carbon emissions and secure sustainable development". National Planning Policy (NPPF) also requires "radical reductions in greenhouse gas emissions" through "the reuse of existing resources, including the conversion of existing buildings". Best practice recommendations align with and reinforce these policies.

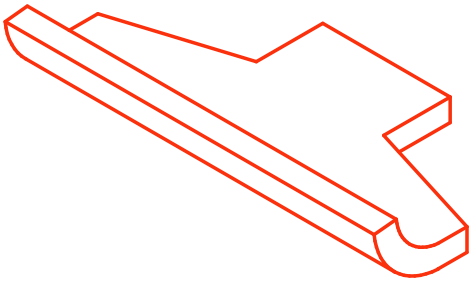
Examples include the LETI *Climate Emergency Design Guide*'s first "primary action", to "build less", asking "is a new building necessary"? LETI's *Embodied Carbon Primer* prioritises "making use of the site and retrofitting existing buildings rather than building anew."

Policies and recognised standards cover all carbon emissions, both "operational" (day-to-day energy use) and "embodied" (construction including materials, transport, maintenance, repair, etc). The true equation for the building's whole life carbon is: Embodied carbon + Operational carbon + End of life (demolition/reuse/disposal) = Whole Life Carbon. As the graphs presented on here present, up to 75% of the whole life carbon impact of a building can be the embodied carbon in the building/construction itself. When this is properly included, demolition and extensive new construction are revealed particularly damaging, as they would both cause large and immediate "spikes" in carbon emissions. Far from reducing carbon, as City and UK policy requires in the next few years, the proposals would result in a significant increase in emissions.



“What is at issue at this public inquiry in 2022 is, are we acting as if there is a [climate] emergency? In my view, throwing a huge carbon bomb unnecessarily into the atmosphere – as this project proposes to do – is definitely not acting like there is an emergency. It misunderstands the urgency of our situation. What the science tells us is that what we do in the next eight years is critical.”

Julia Barfield, Public Inquiry into demolition and replacement of M&S building, Oxford Street, November 2022.



Environmental & Social Sustainability

3

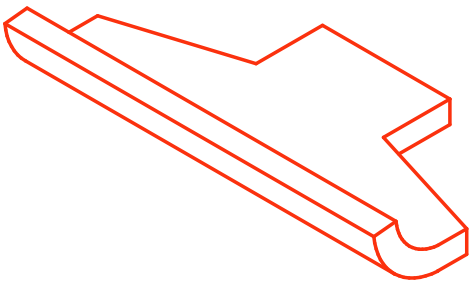
An energy-efficient comprehensive retrofit of the Ringway buildings would be significantly lower carbon than the proposed demolition and new building. Retrofit of the existing building could still achieve energy performance better than Building Regulations standards. The counter-proposal demonstrates that retrofit would not preclude significant extension, if required. In contrast with imaginative deep retrofit of these heritage buildings, wholesale demolition and rebuilding - even to BREEAM standards - would represent "business as usual": a wholly inadequate response to climate targets and policy. The UN Secretary General said recently "we are on a highway to climate hell, with our foot still on the accelerator". The counter-proposal signposts another way forwards for this unique area of Birmingham.

So in summary, both of the criteria that demand a conservation approach to development – the architectural/historic quality criterion, and the new carbon criterion – are met in the case of the Ringway building counter-plan. In conclusion, it is worth mentioning that there is also a third argument for the building's retention and conversion. Just as we require a stable temperature on earth in order to sustain human life, currently threatened by global warming, there is evidence to show that a stable physical environment is also necessary to sustain a stable existence. An environment which is constantly in flux, which Birmingham's physical form notoriously is, is more likely to produce alienation in those who live inside it. Physical stability has its correlation in psychological stability.

John Christophers ©

Ringway from the north, looking south down Hurst Street towards the Hippodrome.

The "Rainbow Bridge" to the LGBTQ+ & Chinese Quarters frames the existing pedestrian and cycle routes with a thoughtfully conceived gateway. The counter-proposal includes new ground floor uses to replace the ad-hoc additions. The existing building does not block this important route, but celebrates it with a vibrant piece of city.



Appendix 1

Policy and Guidance for the Historic Environment that informed Twentieth Century Society Assessment

The National Planning Policy Framework (NPPF, 2021) includes;

- Paragraph 189: 'Heritage assets range from sites and buildings of local historic value to those of the highest significance [...] These assets are an irreplaceable resource, and should be conserved in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of existing and future generations.'
- Paragraph 197: 'In determining applications, local planning authorities should take account of: a) the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation; b) the positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and c) the desirability of new development making a positive contribution to local character and distinctiveness.'
- Paragraph 203: 'The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.'
- Paragraph 152: 'The planning system should support the transition to a low carbon future in a changing climate [...] It should help to [...] encourage the reuse of existing resources, including the conversion of existing buildings'.

Birmingham Development Plan (2017). Chapter 6, 'Environment and sustainability', TP12 'Historic environment':

- 'The historic environment [...] includes locally significant assets and their settings in addition to designated and statutorily protected features. It will be valued, protected, enhanced and managed for its contribution to character, local distinctiveness and sustainability and the Council will seek to manage new development in ways which will make a positive contribution to its character.'
- 'Initiatives and opportunities to mitigate the effects of climate change by seeking the reuse of historic buildings, and where appropriate, their modification to reduce carbon emissions and secure sustainable development - without harming the significance of the heritage asset or its setting - will be supported.'
- 'Innovative design which retains the significance of the heritage asset(s) and is integrated with the historic environment will be encouraged.'

The Ringway Centre is a Non-Designated Heritage Asset of high significance and great weight should be given to its conservation. There should be a strong presumption against demolition.

Appendix 2

Published Texts on Smallbrook Ringway Centre

The building was and continues to be highly reviewed in newspapers, architectural publications and in discussions about modern architecture:

- In an episode of Front Row on BBC Radio 4 focusing on Brutalist architecture (25/10/2022) John Grindrod – the architectural historian and author of *Concretopia* and *Iconicon* – spoke of his admiration for the Ringway as part of a post-war 'landscape', built up around the inner ring road by a local architect. Grindrod declared 'I think it's an amazing building', with 'interesting details' and sense of 'fun' to the design.
- Owen Hatherley's *Modern Buildings in Britain* (2022, p.311) notes that the building's "terrific, sweeping curve conveys an excitement to the pedestrian as well as the driver, with a rhythm of abstract concrete reliefs and Corbusian bullhorn canopies, as the cars charge down towards tunnels and overpasses beyond", highlighting its metropolitan character.
- In an article for the Guardian (12th September, 2022), architecture critic Oliver Wainwright described Smallbrook Queensway as "one of [Birmingham's] most important buildings", concluding with the prospect that "the city could become a model of creative postwar conservation".
- In *Public Ways, Private Means: James A. Roberts, J. L. Godfrey and speculative development along Birmingham's Ringway 1956-64*, architectural historian Geraint Franklin singles the Ringway Centre out as a major building in the post-war reconstruction of Birmingham and important piece of 'carchitecture', enjoyed by pedestrians and motorists alike (Twentieth Century Architecture, Vol. 14, 2020).
- According to Dr Elain Harwood (architectural historian and senior architectural investigator at Historic England), Roberts pioneered British commercial Brutalism at Smallbrook Ringway (original name of the building), placing it amongst some of the most important post-war buildings in Britain . In her seminal book *Space, Hope and Brutalism* (2015, p.323), Harwood noted that the "ribbon-like" building had been "described as 'the longest shopping frontage in the country' and an early example of a speculative modernism whose 'op art' textures easily admitted signage, window displays and frequent alteration."

- Adrian Jones and Chris Matthews's *Towns in Britain* (2014, p.64) state that Smallbrook Queensway is "by far the best" section of the Inner Ring Road scheme, noting that "it was conceived as a boulevard rather than a motorway and is on a grand scale with arcaded shops". They add; "the careful massing of the blocks, the subtle curve of the street and the deeply modelled facades with super trough uplighters make this an underappreciated masterclass in urban design."
- Andy Foster's *Birmingham Pevsner* (2005, p.201) highlights Smallbrook Queensway as "the best piece of mid-C20 urban design in the city", designed on a "grand urban scale, and a good balance between thin concrete mullions, bands of windows, and relief panels. Projecting concrete trough uplighters give it excellent relief".
- Ian Nairn's essay on Birmingham in his *Nairn's Towns* (1967, republished 2013, p.5) noted that "there are not nearly enough architects like Mr Roberts, particularly in the provinces, and he does much more than produce projects with ideas. The best building besides the ring road, the Ringway Centre, is his. To go and have a look at the delicate yet strong details of the concrete piers and beams that carry the Centre over Hurst Street is an education in what modern architecture could and should mean but so rarely does". (See also 'Britain's Changing Towns 1: Birmingham' in The Listener, 20 June 1960).
- In an Architectural Review article, *Birmingham, Liverpool, Manchester* (August 1960), Nairn wrote that ''The sum of rebuilding in the three largest English provincial cities [ie.,Birmingham, Liverpool and Manchester] is just two decent big buildings – Ringway Centre in Birmingham and Albert Bridge House in Manchester [...] the one really hopeful building in Birmingham is Ringway Centre [...] the total effect, easily apparent here, is to create a wall with gates in.'
- The Daily News London (22 September 1960) described the then new Ringway as 'good [...] imaginative design with tidy street manners'. And the Birmingham Daily Post (25 August 1960) wrote that it was 'the most important factor in the new Birmingham of which Smallbrook is such a promising example'.

Appendix 3

Selected References on Carbon and the UK Built Environment

ACAN Architects Climate Action Network. The carbon footprint of construction
https://www.architectscan.org/_files/ugd/b22203_c17af553402146638e9bc877101630f3.pdf?index=true

Architects Declare Practice Guide (2021)
https://www.architectsdeclare.com/uploads/AD-Practice-Guide-2021-v1_3.pdf

Architects' Journal RetroFirst campaign
https://www.architectsjournal.co.uk/news/retrofirst

IPCC. Sixth Assessment Report: Mitigation of Climate Change
https://www.ipcc.ch/report/ar6/wg3/

LETI Low Energy Transformation Initiative. Climate Emergency Design Guide
https://www.leti.london/cedg

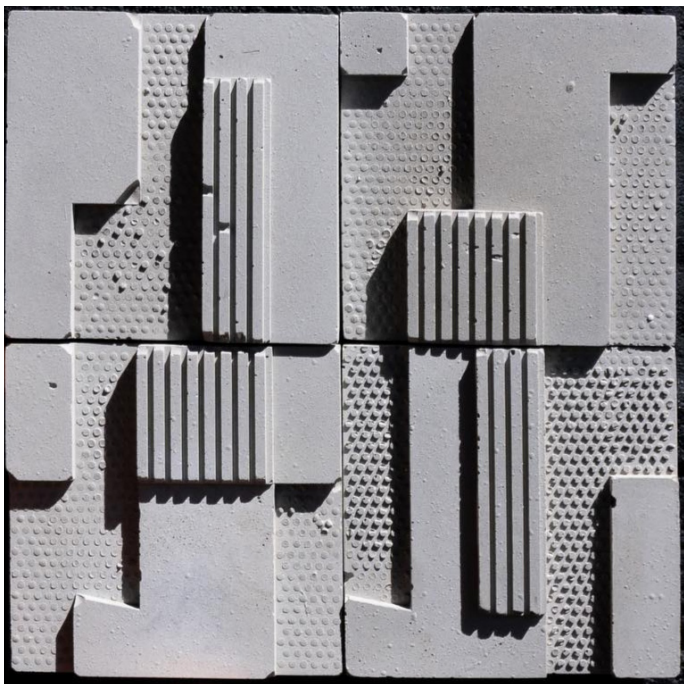
LETI Low Energy Transformation Initiative. LETI Embodied Carbon Primer
https://b80d7a04-1c28-45e2-b904-e0715cface93.filesusr.com/ugd/252d09_8ceffcbcafdb43cf8a19ab9af5073b92.pdf

RIBA Royal Institute of British Architects. Embodied and whole life carbon assessment for architects https://www.architecture.com/knowledge-and-resources/resources-landing-page/whole-life-carbon-assessment-for-architects

RIBA 2030 Climate Challenge (2021)
https://www.architecture.com/-/media/files/Climate-action/RIBA-2030-Climate-Challenge.pdf

Save Britain's Heritage. Evidence presented to Public Inquiry, Marks & Spencer Oxford Street November 2022
https://www.savebritainsheritage.org/news/item/837/SAVE-Britains-Heritage-Evidence-Documents-MS-Inquiry-October-2022

United Nations. Secretary-General's remarks to High-Level opening of COP27 07 November 2022
https://www.un.org/sg/en/content/sg/speeches/2022-11-07/secretary-generals-remarks-high-level-opening-of-cop27



Cast tiles based on the facade of Smallbrook Ringway by Birmingham creative studio Spaceplay. The studio has an international reach and Smallbrook is widely celebrated as an icon of modernist architecture. © Spaceplay

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