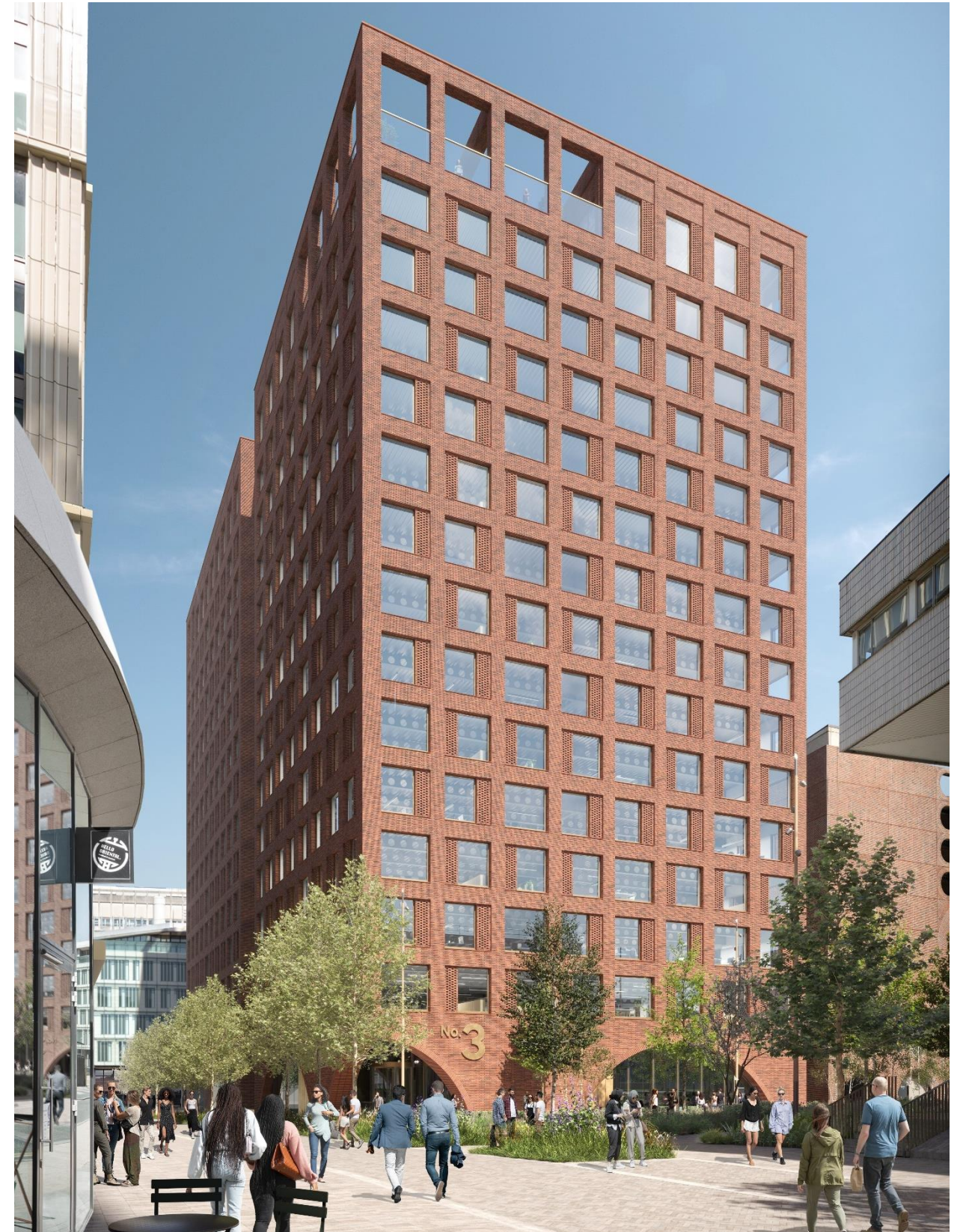




No.3 Circle Square , Manchester| Brick selection report

1.1 Introduction to the brick selection report

This report has been prepared to demonstrate the options considered for the proposed facade brickwork to No3 Circle Square, Manchester; a new ground plus 14 storey office development with ground floor commercial uses, and associated landscaping and gardens adjacent to the building.

The content of the report was presented to Dave Roscoe of Manchester City Council Planning Department at a meeting on 1st February 2023.

The document supports the partial discharge of condition 3 attached to planning permission 134288/FO/2022. An application to support the partial discharge has been submitted to MCC under planning portal reference PP-11703612.

The report serves to describe the design development process relating to the selection of bricks for the building facades, and that the proposed brick selection has emerged from a comprehensive assessment of available options to find the best solution for this key Manchester City Centre site.



Existing site panorama from Symphony Park

1.2 Approved application; site context

The principle of a brick building on the site was first established following extensive pre application discussions with Manchester City Council. The justification for the use of brick is further described in the Design and Access statement submitted to support the scheme.

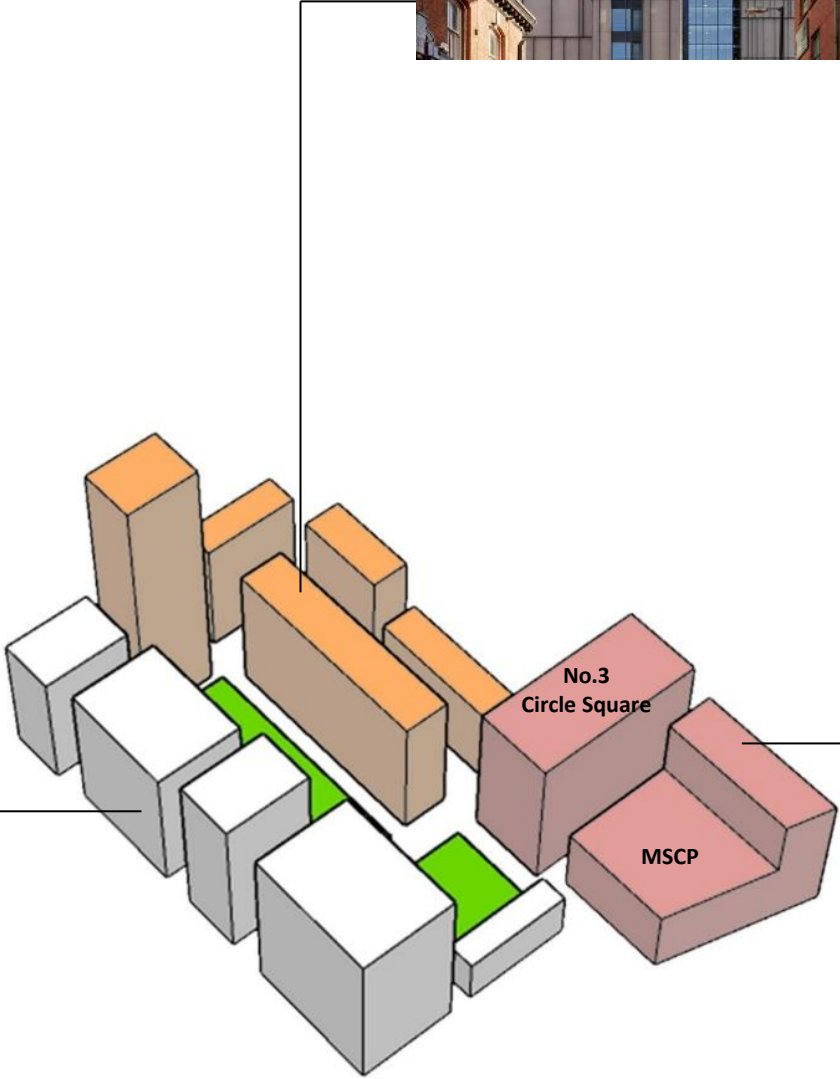
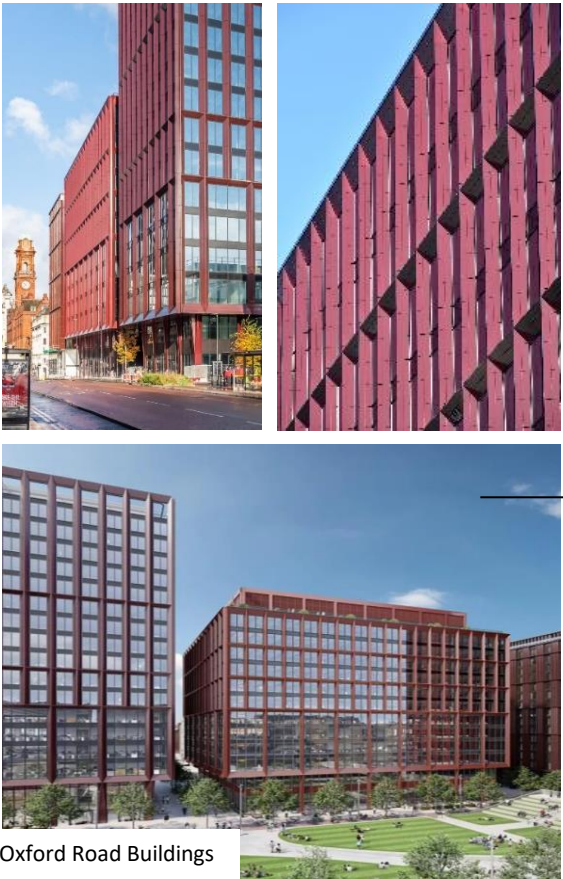
The scheme was approved under planning permission 134288/FO/2022 on 4 November 2022, which included the proposed use of a red multi brick to the building facades in both long and short formats.

The use of a red multi brick on the development was considered appropriate in the context of Circle Square for reasons summarised as follows:

1.2.1 Circle Square site and Masterplan context

The surrounding context of Circle Square has been informed by the historical city centre context but has a distinct character, scale and materiality that is established and defined by the Circle Square Masterplan

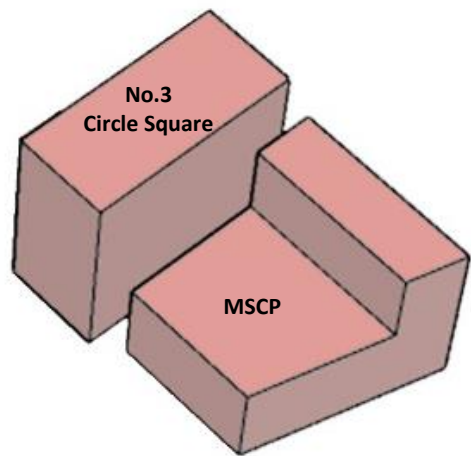
The Circle Square Masterplan identifies 3 character zones within the development,. The existing built forms within each zone are characterised as follows:



1.2 Approved application; site context

1.2.2 “Sibling” buildings

The two buildings facing onto Princess Street at the north-west of the Masterplan area are of similar proportion and lend themselves to sharing a similar character. The existing car-park is predominantly clad in brick, with overt circular and arched features incorporated into its design. The design of No.3 Circle Square reinforces the established character zone



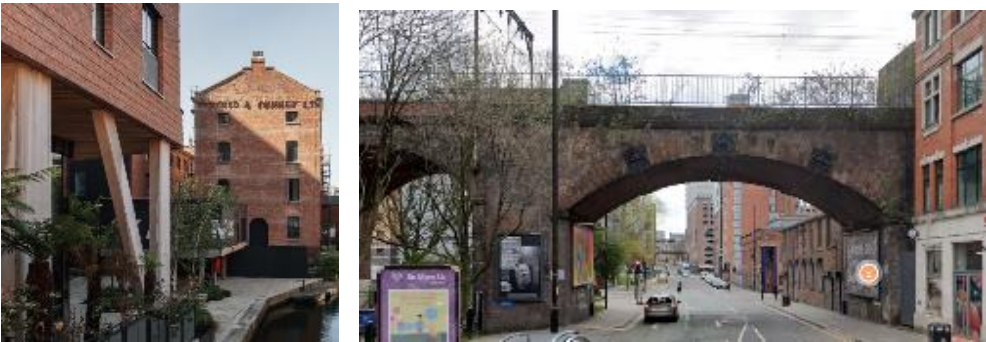
1.2.3 Manchester Locale/ historic context/ Whitworth Street Conservation Area

The design response to the site is heavily influenced by it’s locale. The predominance of brick architecture in the city centre in both historic and contemporary buildings provides the city with a strong visual identity.

Other local features characterise the city, including its industrial brick mills and warehouses with their repetitive window fenestration patterns. In addition the city’s many bridges and railway viaducts of repeated arches define key routes into and around the city. The predominant character of Manchester city centre is that of Victorian Manchester. The solid, heavy masonry construction of warehouses, commercial and civic buildings make use of brick, stone and glazed brick and ceramic tiles with metal detailing.

Circle Square is located close to Whitworth Street Conservation Area, which encompasses the former Refuge Assurance Company (now Kimpton Clocktower Hotel) by Alfred Waterhouse, as well as a wealth of converted Victorian warehouse buildings along Whitworth Street and Princess Street. The Conservation Area Appraisal confirms that the Whitworth Street/Princess Street Conservation Area is uniquely Mancunian in character

This historical part of Manchester provides a rich urban context. Whilst Circle Square is located just outside the boundaries of the Conservation Area, the architectural language and materiality of this adjacent context and listed buildings have provided inspiration for the new scheme.



1.3 Approved application; illustrative CGIs showing red-multi brick

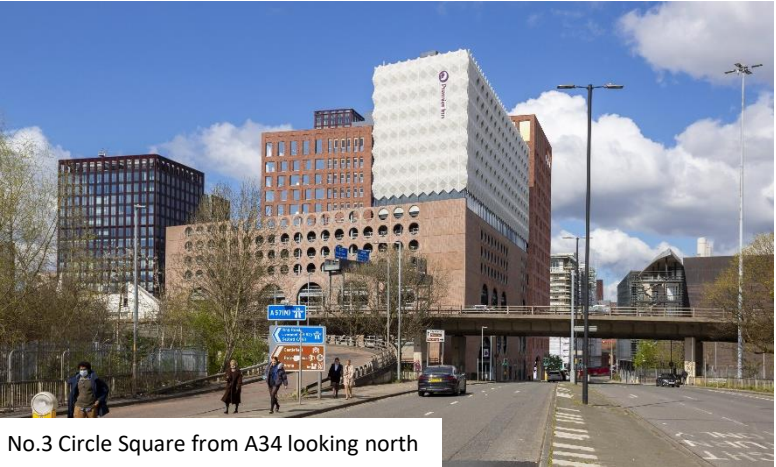
The CGIs submitted to support the approved planning application for the scheme illustrate the proposed use of red multi brick to the building facades.



No.3 Circle Square from Symphony Park



No.3 Circle Square from Oxford Road looking east

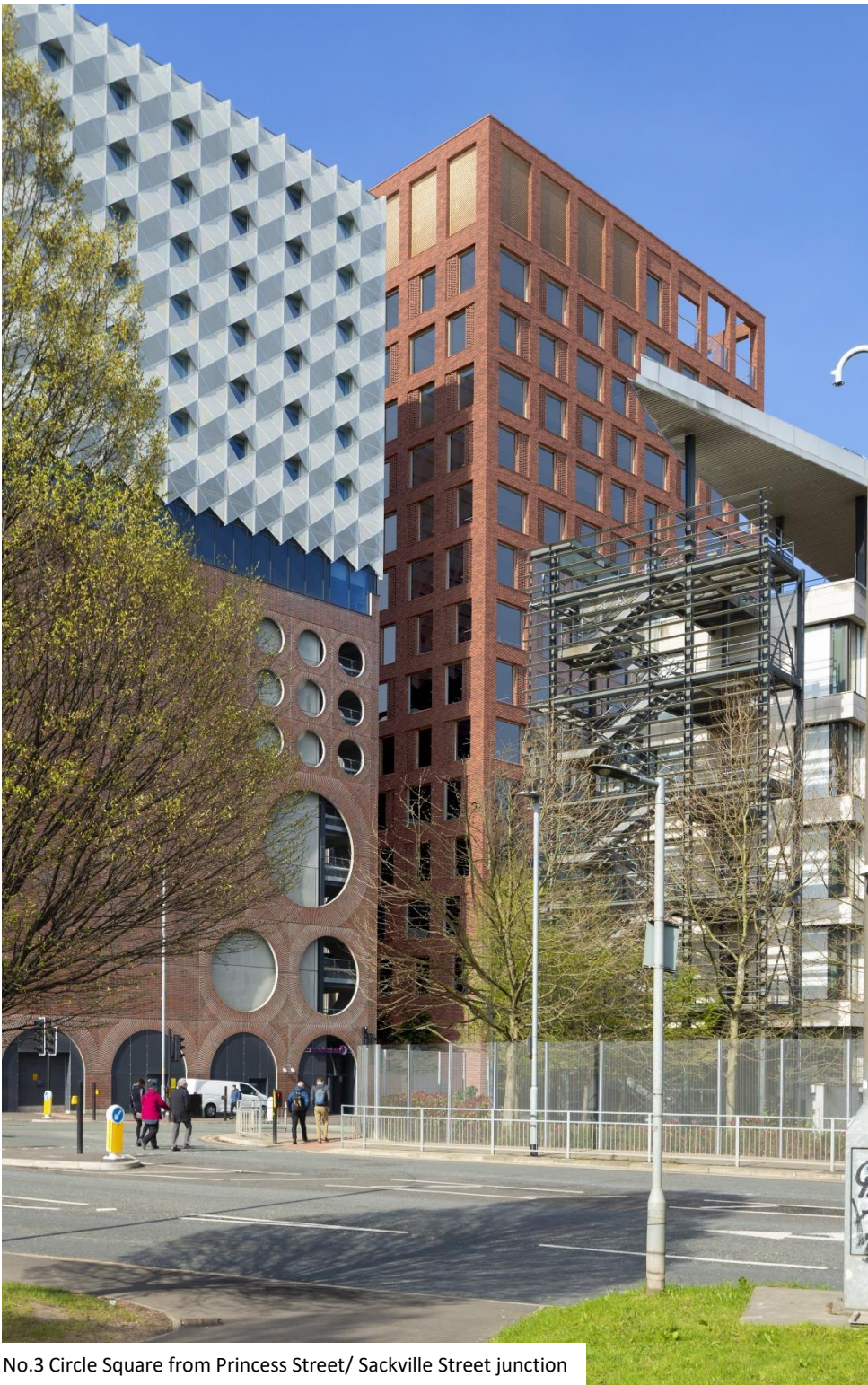


No.3 Circle Square from A34 looking north

1.3 Approved application; illustrative CGIs showing red-multi brick



No.3 Circle Square from Nobel Way



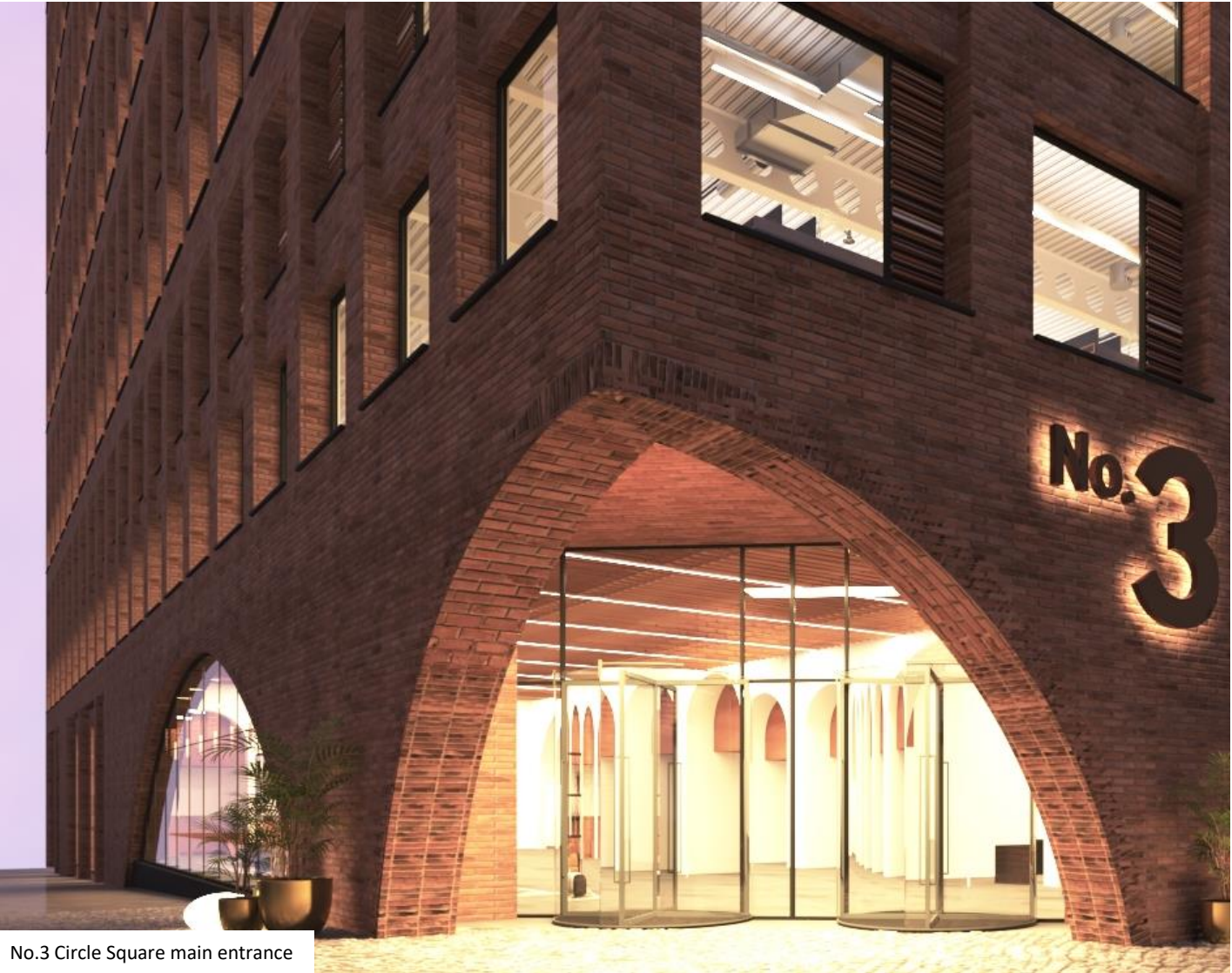
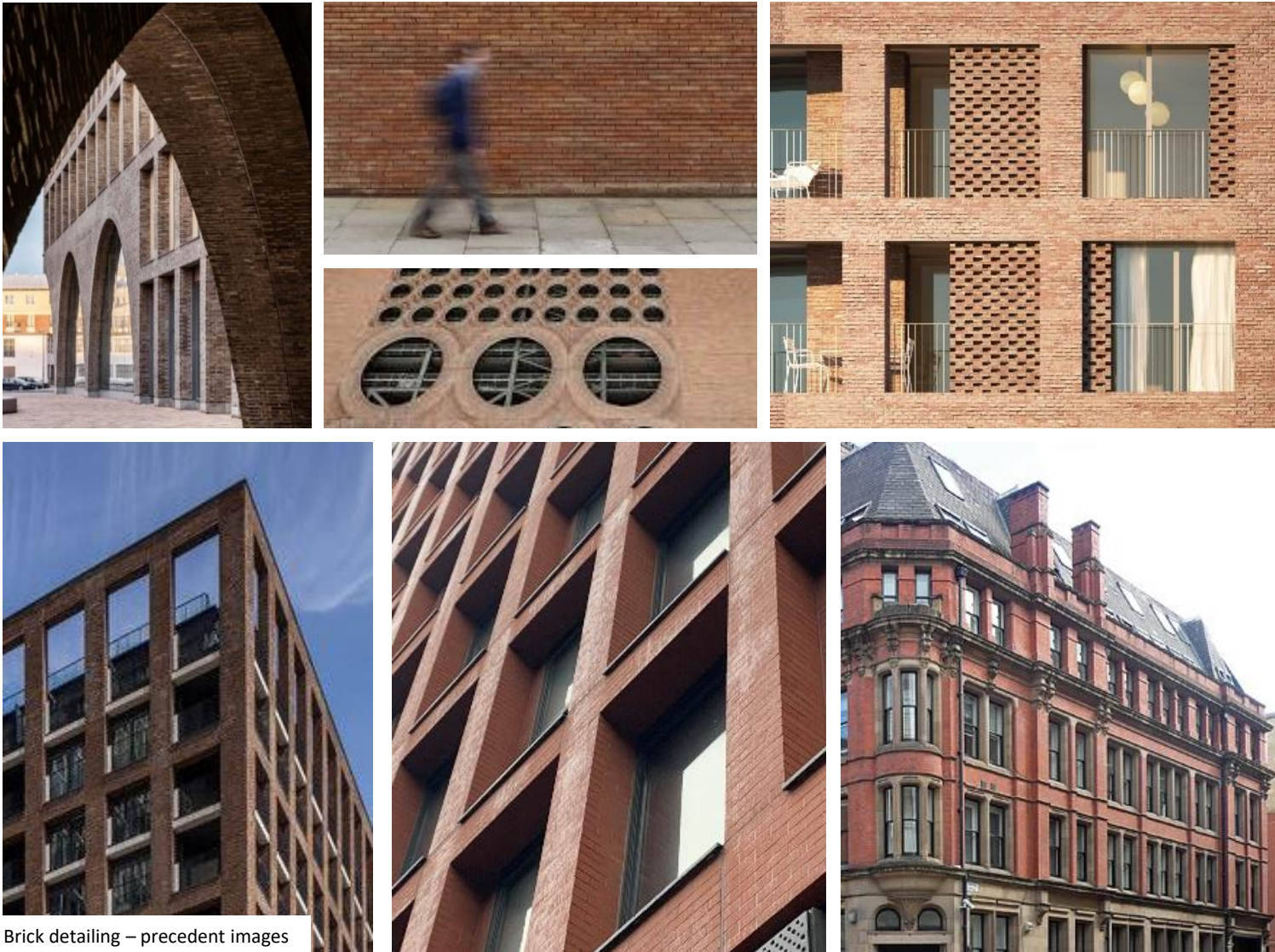
No.3 Circle Square from Princess Street/ Sackville Street junction

1.4 Approved application; the importance of brick detailing

In response to the site location in Manchester, and the adjacent ‘sibling building’ of brick construction, a high quality, long-format red brick is proposed as the primary material for the design.

A monolithic approach to use of a brick has been taken, whereby the massing has been carved out to form the entrance, arches, roof terraces and ground floor opening. Windows have been punched-out from the façade in a repeated manner, reminiscent of Manchester’s warehouse architecture. Additional visual detail is provided through soldier courses, perforation to the brick ventilation recesses and sections of projected brick relief pattern.

In development of the detail design the choice of an appropriate high quality brick is critical to achieving the desired detailing, particularly in relation to openings, reveals, mortar jointing, corner detailing, soldier course detailing and formation of the brick vent recesses.



2.1 Brick selection appraisal criteria

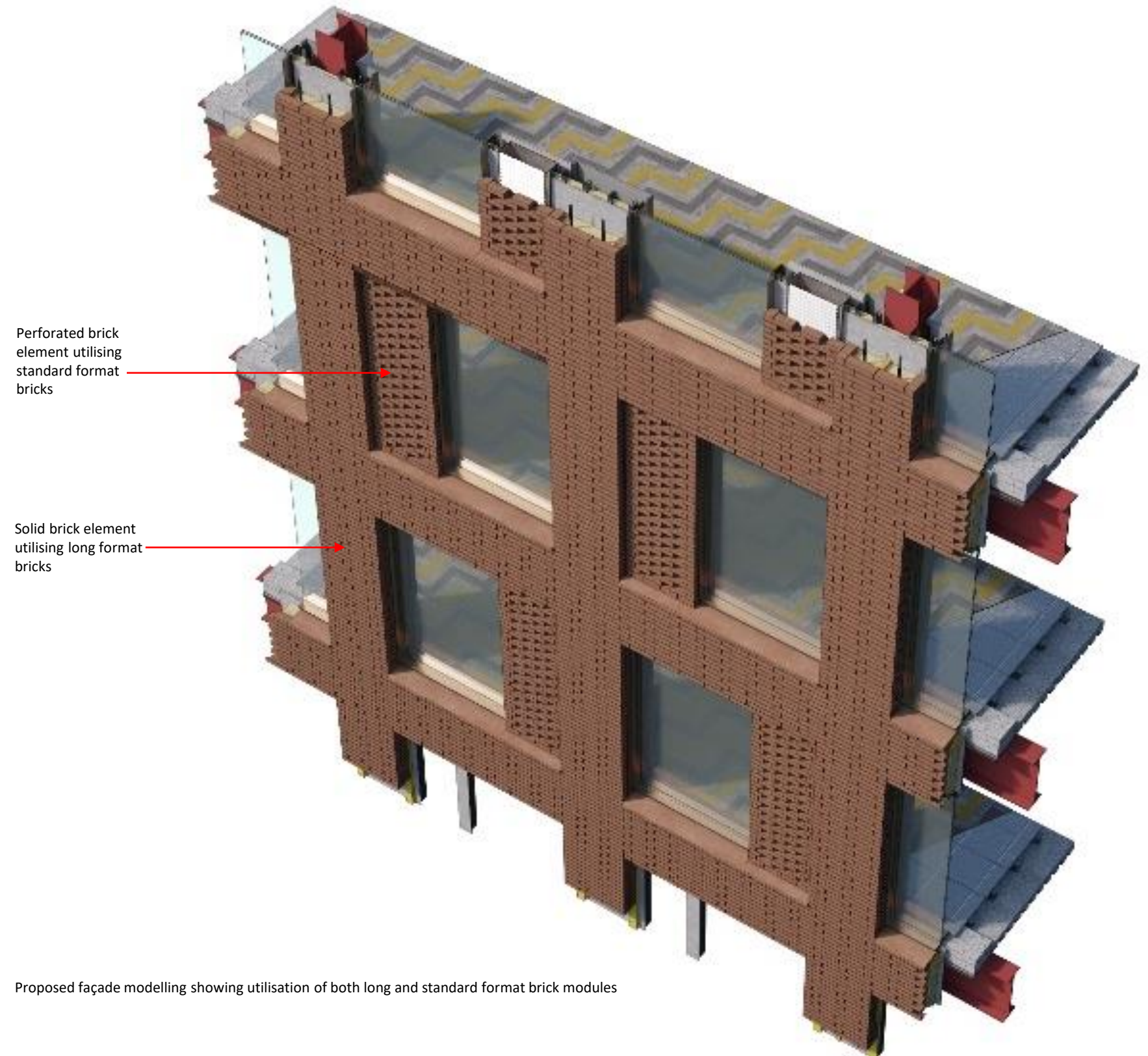
Following the granting of planning permission, as part of the further detailed design process an options appraisal has been undertaken to determine the most appropriate brick for the building. The brick selection process for the facades has been driven by the following interrelated factors:

- **Aesthetic; colour and texture:**

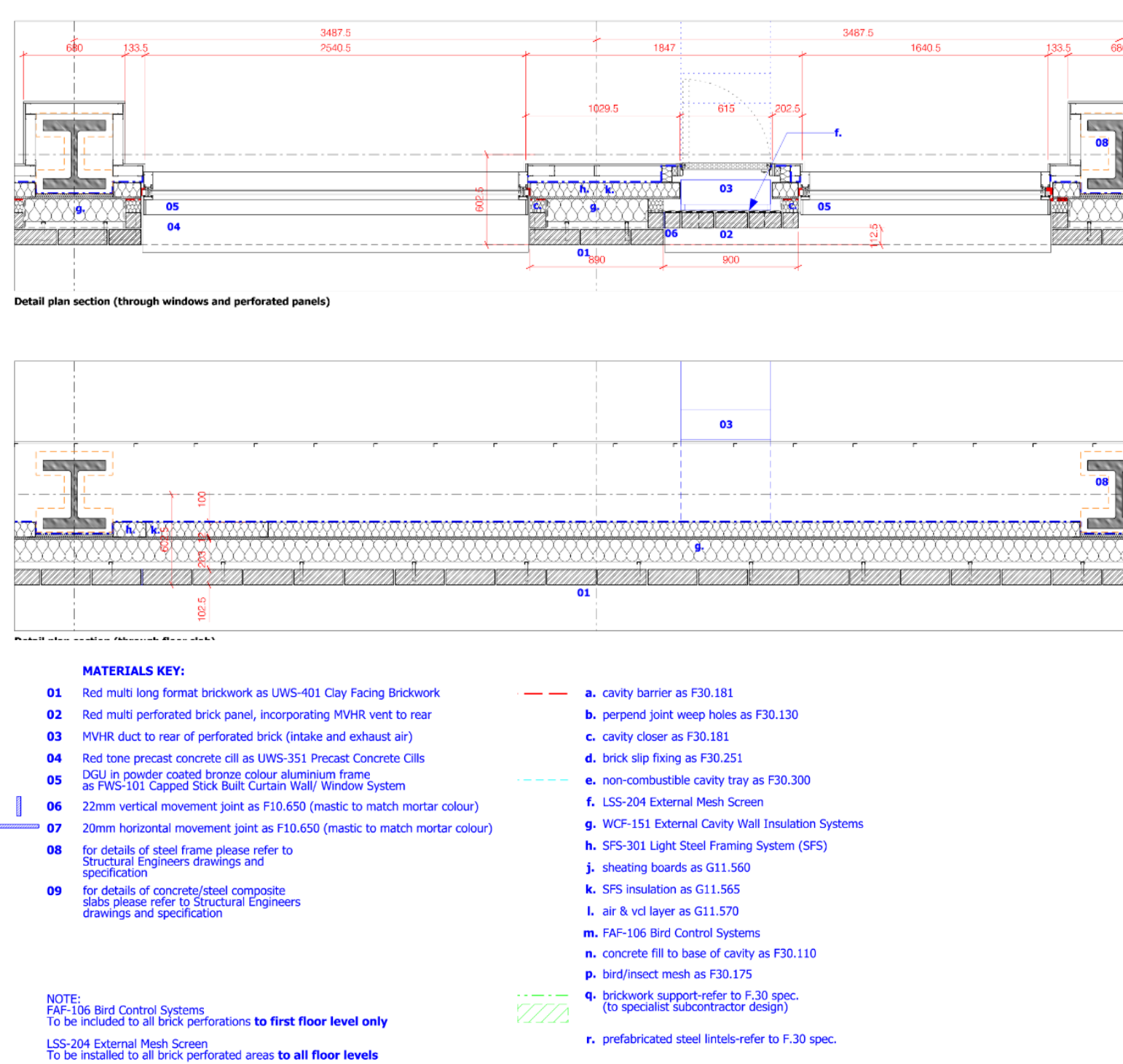
A red multi brick has been sought to align with the aspirations as set out in the Design and Access Statement

- **Availability of long format AND standard format bricks within the selected range:**

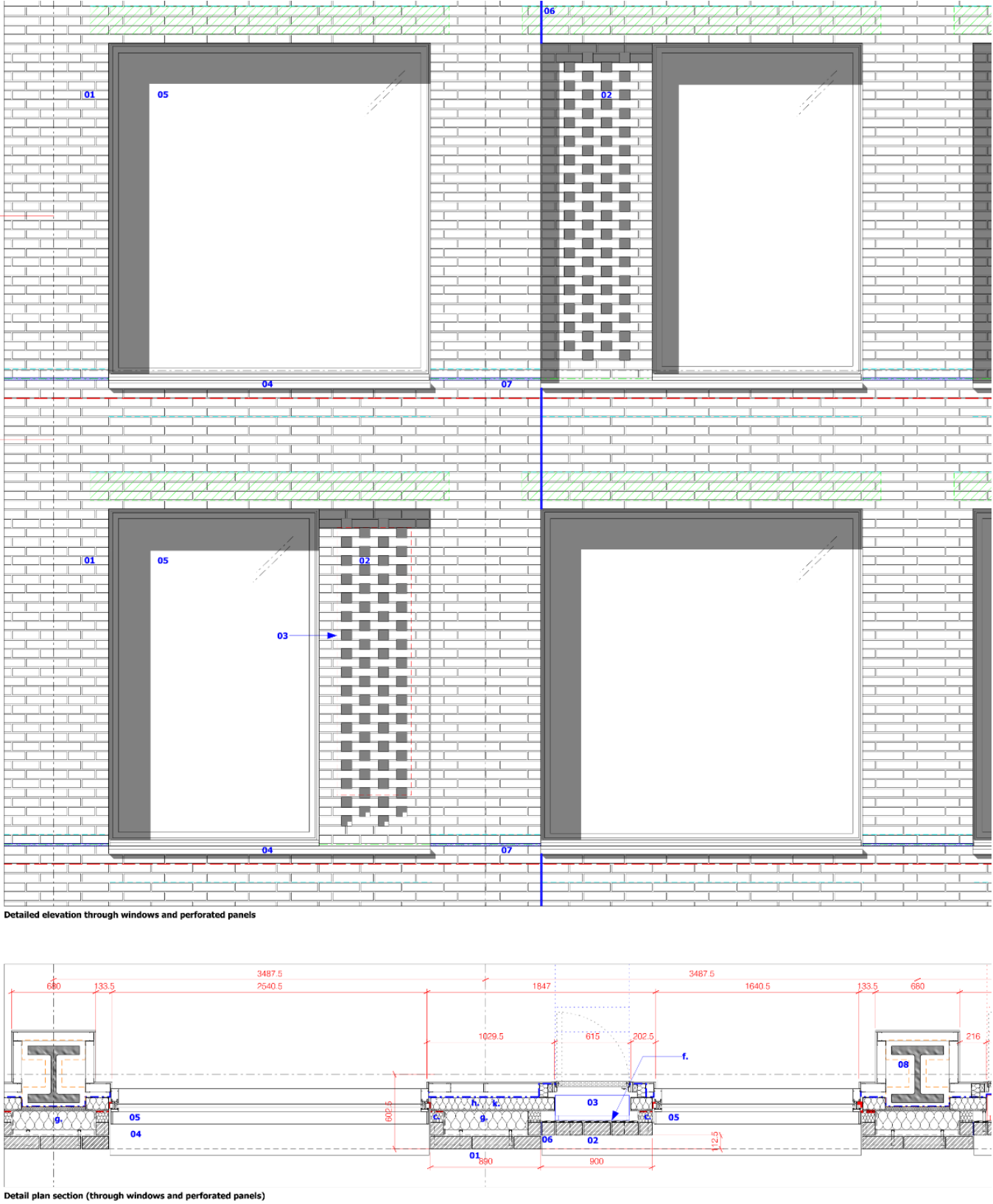
This is critical in order to achieve the proposed detailing on the brick facades; where standard format bricks are required to achieve the detailing necessary to create the open vent area to the proposed perforated brick elements, with long format bricks used on the solid elements of the façade.



2.1 Brick selection appraisal criteria



Developed design showing façade detailing incorporating standard and long format bricks



2.1 Brick selection appraisal criteria

- **Site context and relationship with material and colour palette of adjacent buildings:**
with reference to the wider Circle Square development and the MSCP adjacent
- **Brick durability and buildability:**
considered specifically in the context of proposed deep reveals, mortar jointing, corner detailing, soldier course detailing and formation of the brick vent recesses
- **Carbon credentials:**
in manufacture (to meet embodied carbon targets) and in transport
- **Availability of EPD (Environmental Performance Declaration) from manufacturer:**
required to meet BREEAM standards
- **Social and ethical values relating to manufacture:**
to align with Bruntwood’s Environmental, Social and Governance (ESG) principles
- **Procurement route, manufacturer ability to supply quantities required to meet programme and manufacturer quality control across production batches**
- **Financial viability**

3.1 Review of brick options considered

In sourcing appropriate bricks, options have been considered from various manufacturers with production in the UK, Belgium, Netherlands, Turkey and India.

Brick options were initially reviewed with regard to aesthetic requirements for a red-multi brick and availability of long and standard format options within the same range.

The other selection criteria were then used to narrow the choice of bricks down

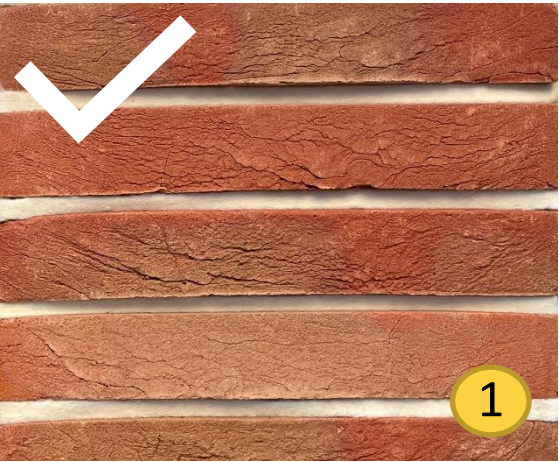
The following pages summarise the bricks initially under consideration and the primary reasons for being discounted or further considered, before going on to demonstrate how and why the preferred brick has been selected.



No.3 Circle Square from Newman Street

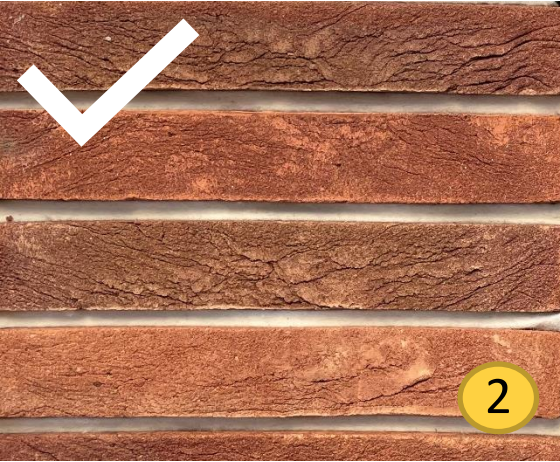
3.1 Review of brick options considered – Stage 1

The long list of brick options considered at the initial selection stage was as follows. Options remained ‘under consideration’ or were discounted for reasons as noted



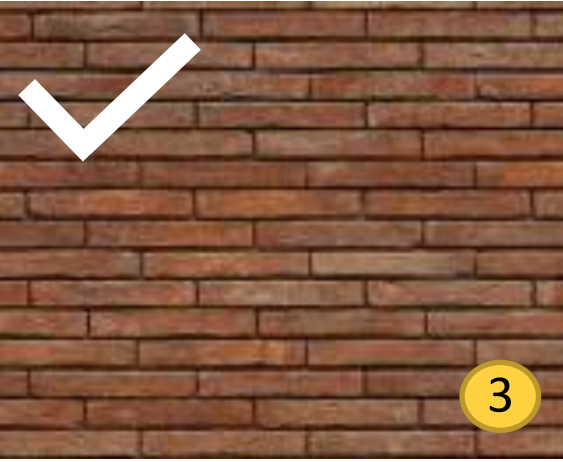
Brick manufacturer/ product reference:
LBT/ Lancrete Blend B

Under consideration
long format 327x102x65 and standard 215x 102x 65 formats available



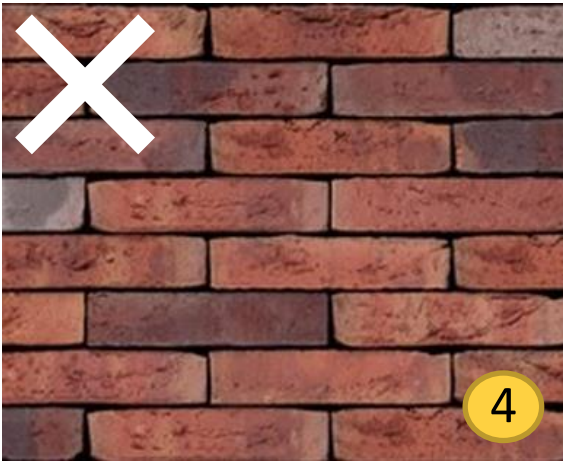
Brick manufacturer/ product reference:
LBT/ Lancrete Blend C

Under consideration
long format 327x102x65 and standard 215x 102x 65 formats available



Brick manufacturer/ product reference:
Imperial Brick/ Halle blend

Under consideration
long format 327x102x65 and standard 215x 102x 65 formats available



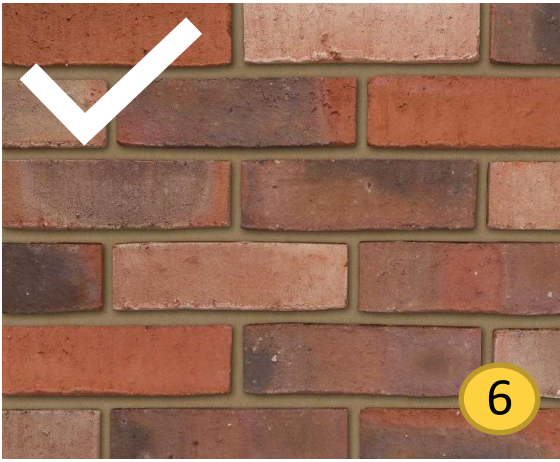
Brick manufacturer/ product reference:
Vandersanden/ Billund

Discounted
only available in long format 210x100x50
Standard format not available



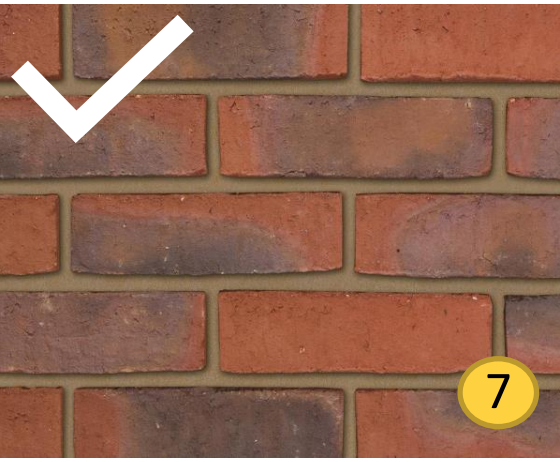
Brick manufacturer/ product reference:
Manchester Brick/ Didsbury Antique

Discounted
only available in standard format
long format not available



Brick manufacturer/ product reference:
Ibstock/ Beamish Blend

Under consideration
long format 327x102x65 and standard 215x 102x 65 formats available



Brick manufacturer/ product reference:
Ibstock/ Birtley Olde English

Under consideration
long format 327x102x65 and standard 215x 102x 65 formats available



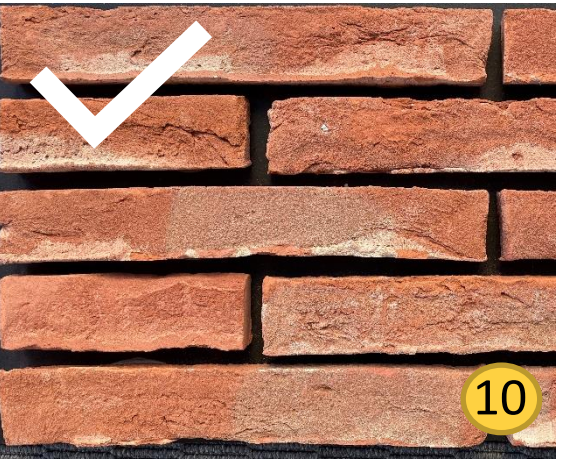
Brick manufacturer/ product reference:
Terca/ Roman Fortuna

Discounted
only available in long format 400x100x40
standard format not available



Brick manufacturer/ product reference:
York Handmade/ Thirkleby blend

Under consideration
long format 327x102x65 and standard 215x 102x 65 formats available

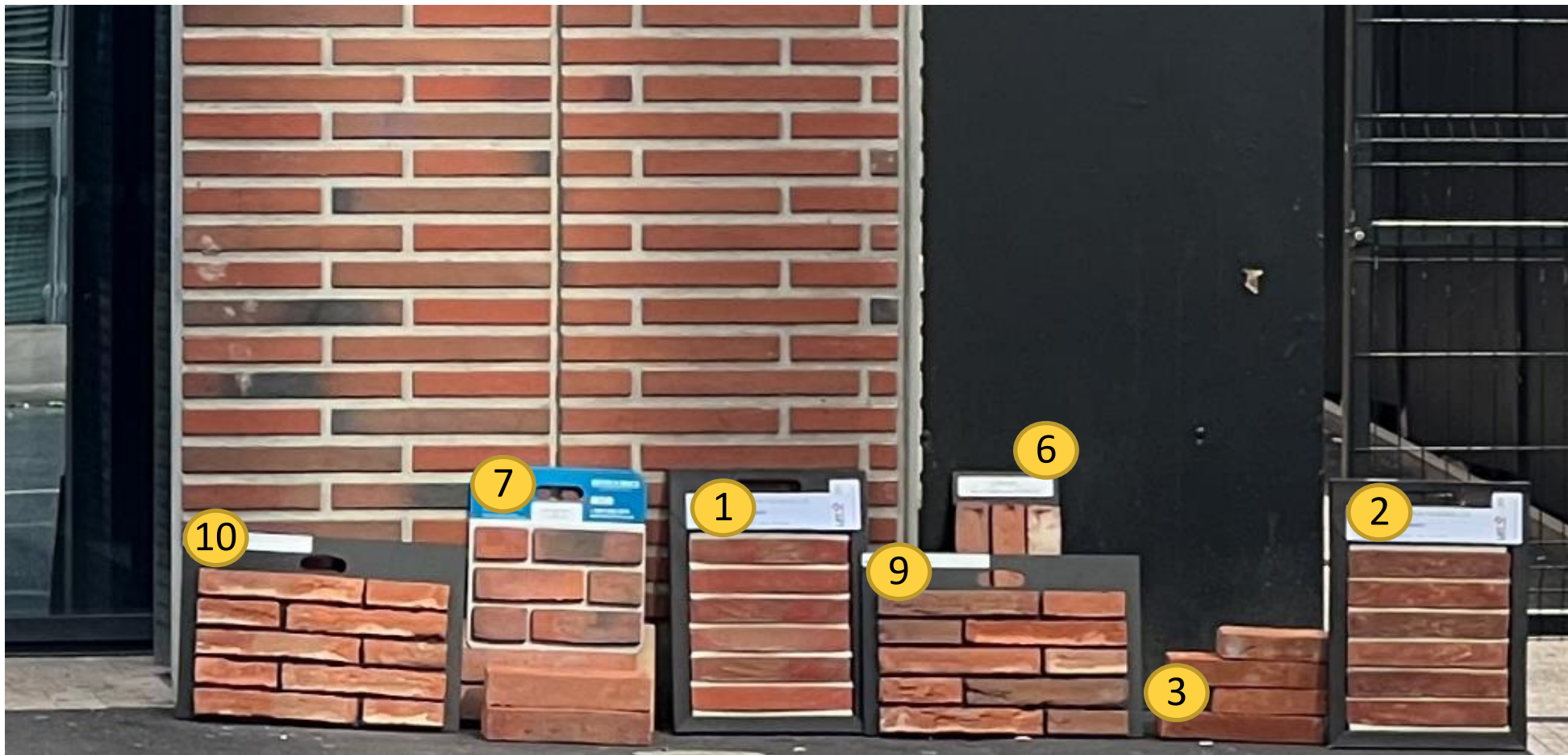


Brick manufacturer/ product reference:
York Handmade/ Hambleton blend

Under consideration
long format 327x102x65 and standard 215x 102x 65 formats available

3.1 Review of brick options considered – Stage 2

From the options remaining under consideration, to further narrow the brick selection, brick hand samples were reviewed on site in the context of the MSCP brick facades to determine complimentary colour tones and brick texture. Further brick options were then discounted as noted below.



No.3 Circle Square brick hand sample panels shown adjacent to the MSCP



No.3 Circle Square edited selection of brick hand sample panels shown adjacent to the MSCP

KEY:

- 1. LBT - Lancrete Blend B
- 2. LBT - Lancrete Blend C
discounted due to too many brown tones in brick and concerns re: rustic texture in city centre context
- 3. Imperial Brick – Halle Blend
- 6. Ibstock – Beamish Blend
discounted due to too many buff tone bricks in blend
- 7. Ibstock - Birtley Olde English
- 9. York Handmade - Thirkleby Blend
discounted due to too many brown tones in brick and concerns re: rustic texture in city centre context
- 10. York Handmade - Hambleton Blend

3.2 Preferred brick analysis – Stage 3

The preferred remaining 4 brick options were then assessed in accordance with the wider selection criteria as follows.

Larger sample panels then were then constructed on site of the two preferred options to test the impact of the brick aesthetic with the introduction of mortar.

1 Brick manufacturer/ product reference:
LBT/ Lancrete Blend B



Selection criteria	
Aesthetic/ site context	Colour mix good Concerns re: rustic texture/ appearance in city centre context
Availability of standard and long format bricks within same range	✓
Availability of EPD	✗
Manufacturer location/ carbon in transport	Turkey
Social/ Ethical	Ethical concerns re: manufacture
Durability/ dimensional tolerances	Potential issues with long format bricks
Cost	£

OPTION DISCOUNTED
Due to lack of EPD and ethical concerns

3 Brick manufacturer/ product reference:
Imperial Brick/ Halle Blend



Selection criteria	
Aesthetic/ site context	✓
Availability of standard and long format bricks within same range	✓
Availability of EPD	✗
Manufacturer location/ carbon in transport	India?
Social/ Ethical	Ethical concerns re: manufacture
Durability/ dimensional tolerances	
Cost	£

OPTION DISCOUNTED
Due to lack of EPD and ethical concerns

3.2 Preferred brick analysis – Stage 3

10 Brick manufacturer/ product reference:
York Handmade/ Hambleton Blend



Selection criteria	
Aesthetic/ site context	Colour good Concerns re: rustic texture/ appearance in city centre context
Availability of standard and long format bricks within same range	✓
Availability of EPD	✓
Manufacturer location/ carbon in transport	Yorkshire, UK
Social/ Ethical	✓
Durability/ dimensional tolerances	Potential issues with pointing due to variable texture
Cost	£ £



Precedent image

3.2 Preferred brick analysis – Stage 3

York Handmade/ Hambleton Blend: site sample panel



Hambleton Blend:
site sample panel with hand sample

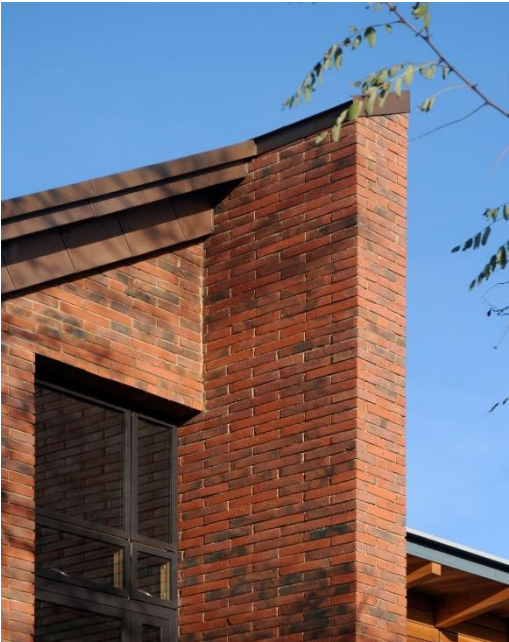
Sample has been discounted for the following reasons:

- Large portion of white/buff coloured bricks within blend, which does not complement the colour mix of existing Circle Square context
- Rustic texture appears too rural/ suburban in the Manchester city centre context
- Irregular brick faces, results in higher proportion of visible mortar to joints
- Irregular brick faces raises concerns with crispness of detailing to open vent areas and to header courses around brick arches
- Reported concerns from bricklayers regarding softness of brick



3.2 Preferred brick analysis – Stage 3

7 Brick manufacturer/ product reference:
Ibstock/ Birtley Olde English



Selection criteria	
Aesthetic/ site context	Colour mix good Texture appropriate to city centre context
Availability of standard and long format bricks within same range	✓
Availability of EPD	✓
Manufacturer location/ carbon in transport	Tyne and Wear, UK
Social/ Ethical	✓
Durability/ dimensional tolerances	Good
Cost	£ £



Precedent images

3.2 Preferred brick analysis – Stage 3

Ibstock/ Birtley Olde English: site sample panel



Birtley Olde English:
site sample panels in long and short formats

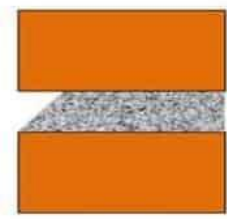
Sample has been selected as preferred façade brickwork for the following reasons:

- Colour mix and tones complement the colour mix of existing brick buildings in the area, and in particular the Circle Square context
- Distressed waterstruck texture appropriate to Manchester city centre context
- Regular brick faces, results in even appearance of mortar joints
- Regular brick faces facilitate crispness of detailing to open vent areas and to header courses around brick arches

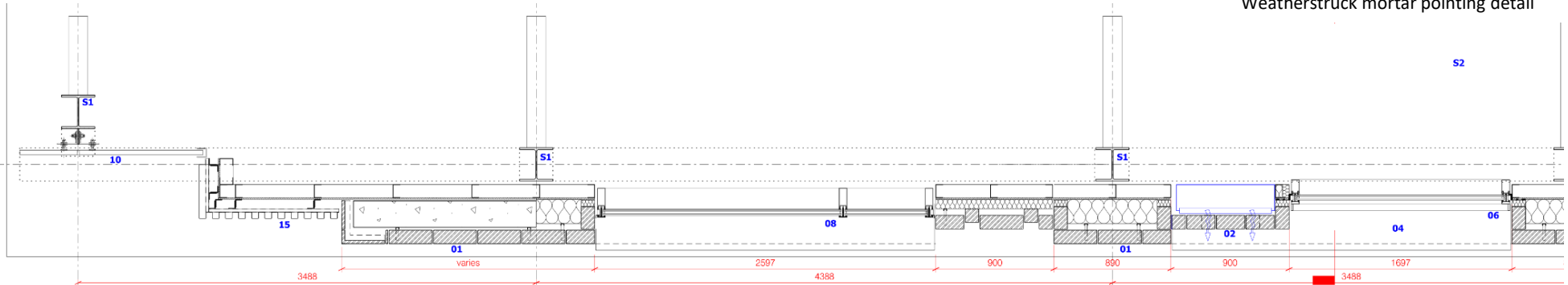


4.1 Next steps

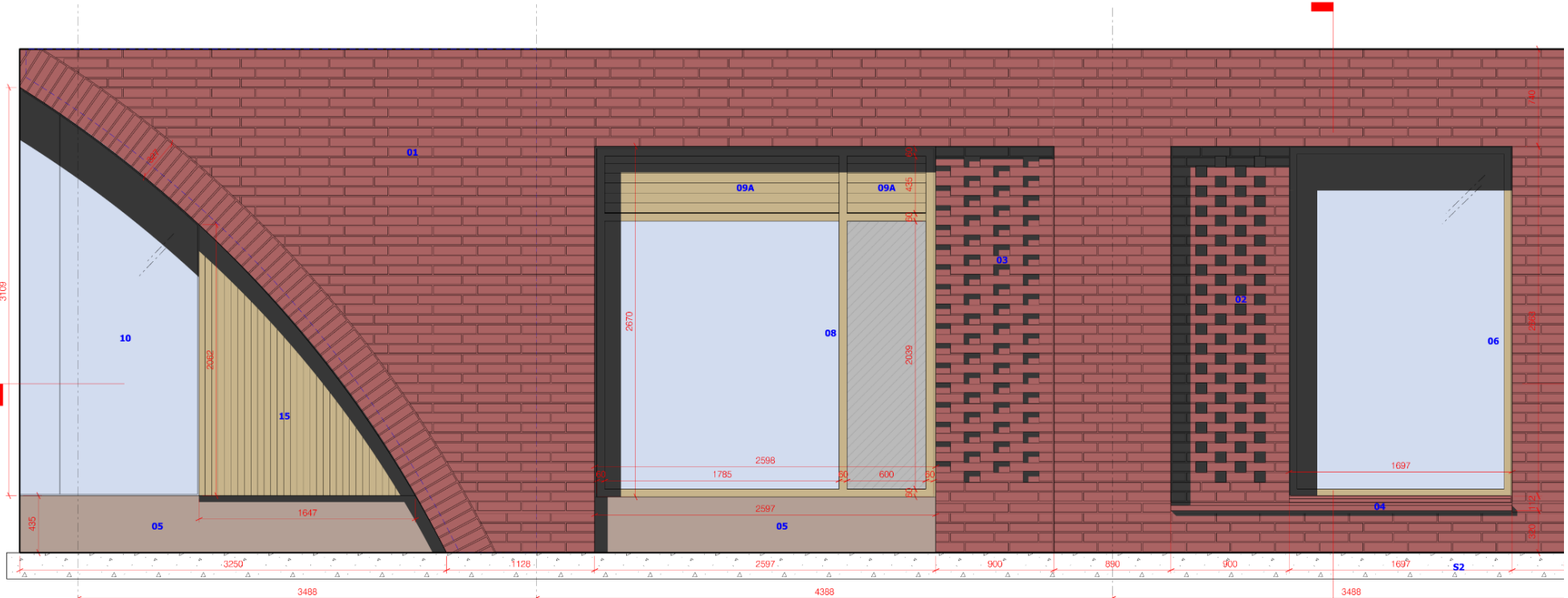
- Construct VMU (to be approved by LPA) in preferred Birtley Old English brick, to demonstrate the requisite craftsmanship in construction of the façade.
- Explore mortar colour options and illustrate alternatives via sampling on the VMU
- Review weatherstuck mortar joint profile via sampling on the VMU (bucket handle joint on current site samples) to add visual interest to brick detail and ‘shadow’ lines to express linear brickwork



Weatherstruck mortar pointing detail



Mock-up panel - plan



Mock-up panel - elevation