



ETIHAD STADIUM NORTH STAND EXPANSION **NON-MATERIAL AMENDMENT SUMMARY**

26/07/2024

NSE-POP-ZZ-ZZ-TR-A-008112

© 2024 POPULOUS

ETIHAD STADIUM NORTH STAND EXPANSION

NON-MATERIAL AMENDMENT SUMMARY

REVISIONS

Revision	Date	Prepared By	Approved By	Issue Status
00	26/07/2024	PH	MT	Information

CONTENTS

0.0 CONTENTS

1.0 PERFORATED PANEL DESIGN

- 1.1 Introduction
- 1.2 Precedent Images
- 1.3 Sample Panel
- 1.4 Proposed Design
- 1.5 Proposed Elevation

2.0 NORTH STAND FACADE

- 2.1 Introduction
- 2.2 Consented Planning Application
- 2.3 Proposed Elevation
- 2.4 Drawing Comparison

3.0 STAFF TERRACE

- 3.1 Overview

4.0 UPDATED LANDSCAPE DESIGN

- 4.1 Consented Planning Application
- 4.2 Proposed Layout
- 4.3 Sprinkler Tank Enclosure

5.0 COMMERCIAL BUILDING USAGE

- 5.1 Overview

PERFORATED PANEL DESIGN

1

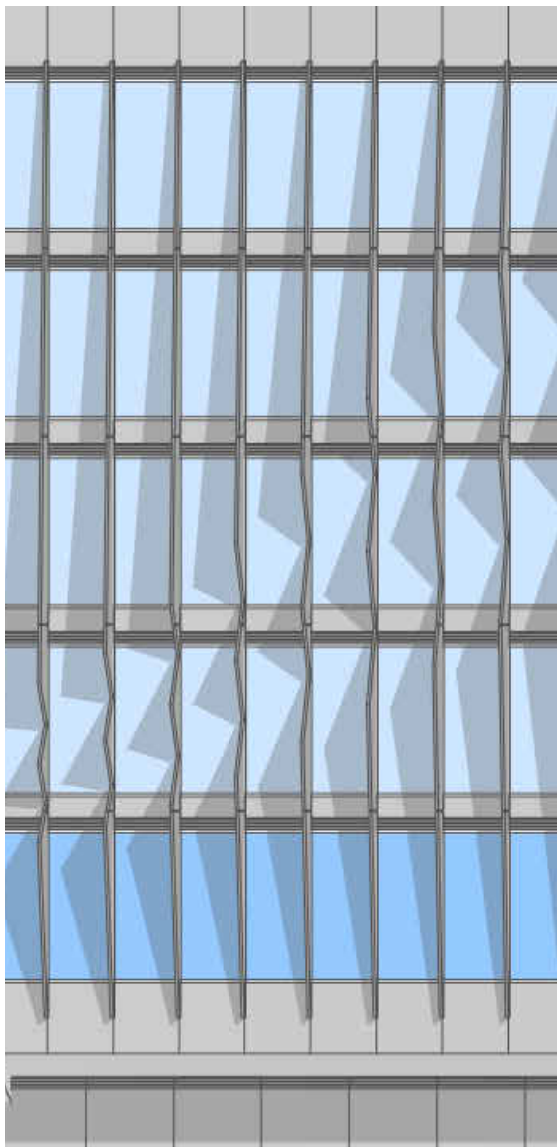
PERFORATED PANELS | INTRODUCTION

In the April 2023 planning application (REF 136763/O/2023) the Commercial and Hotel building facades featured narrow bands of louvres at each slab level that provided ventilation for internal spaces.

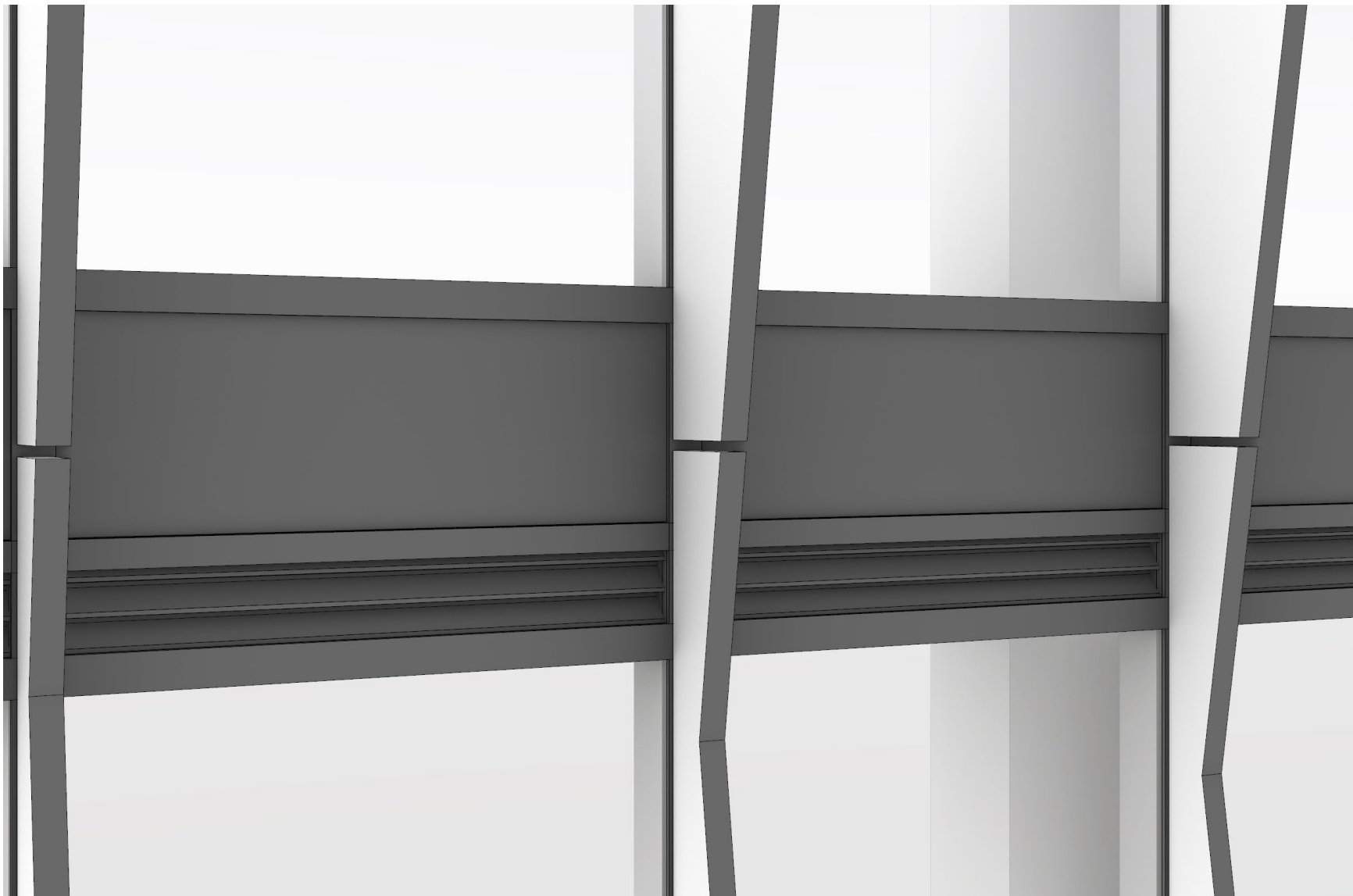
These louvres were subject to a condition that was, as part of a non-material amendment submitted in October 2023 (REF 138417/NMC/2023), amended to the following;

“Samples and specifications of the louvre screen strategy shall be submitted for approval in writing by the City Council, as Local Planning Authority in accordance with the programme dated 25th August 2023, prepared by Sisk and the Sample Panel Layout Plan (REF NSE-POP-CM-ZZ-DR-A-SK230102) prepared by Populous. The sample panel and specifications provided in line with the programme shall include the louvre screen strategy. The approved louvre screen strategy used shall then be implemented as part of the development.”

As part of the October 2023 amendment, a sample panel layout was submitted that featured the proposed perforated panel in the brick plinth area. The intention behind this section of the report is to clarify the proposed perforated panel strategy elsewhere in the facade - primarily in the areas of curtain wall that feature the aluminium fins.



Elevation of the original louvre design intent.



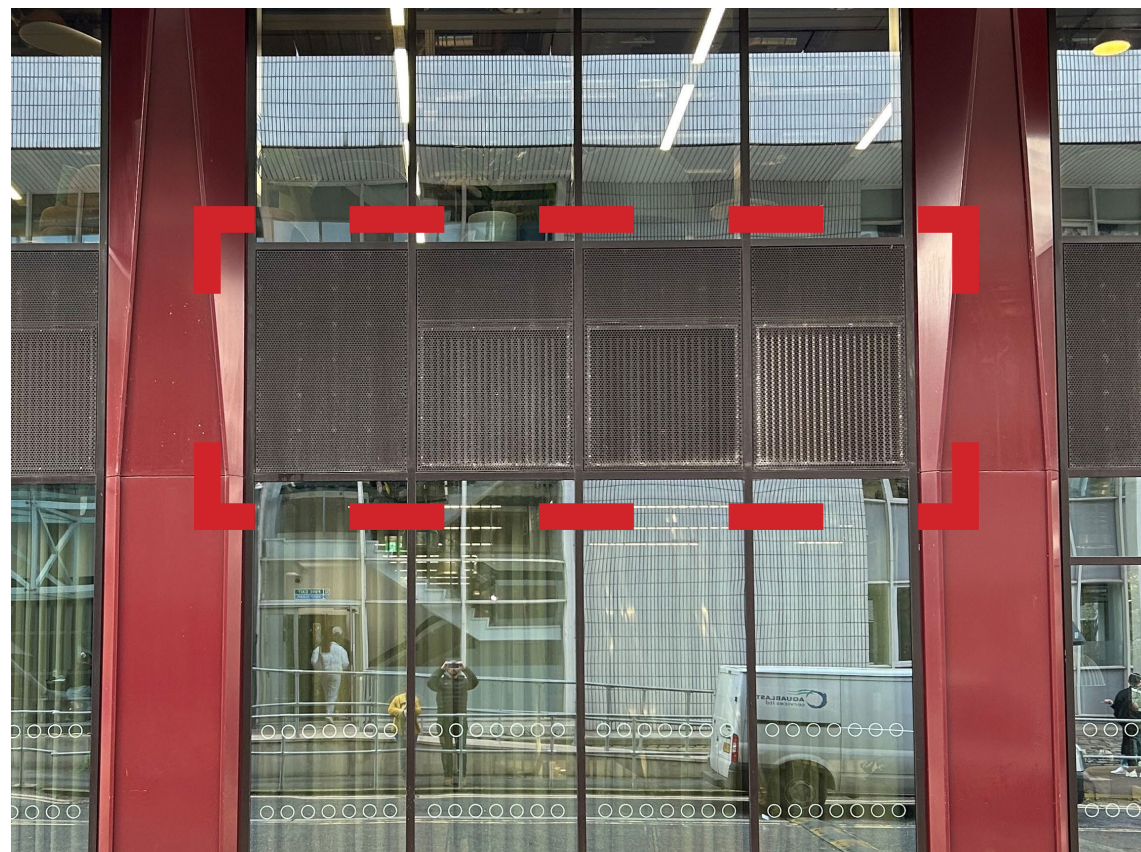
Visual of the original louvre design intent.

PERFORATED PANELS | PRECEDENT IMAGES

From seeing different approaches to perforated panels around Manchester, the design team's approach has been very clear - the panels should conceal as much as possible what happens behind them, whether that be blank panels or active plenums.

The example on the left, by having a very fragile mesh through which plenums are very visible - creating unsightly additions to the facade that have no correlation to other materials and datums.

The second example is much more successful. The perforations themselves have been more considered and an expression embraced within the design of the facade. The plenums behind will have been oversized to accommodate the reduction in free air, but the resulting impact on the facade is very beneficial.



- Panel is more solid than void and the backing panel behind becomes the dominant feature
- It is very obvious where there is a plenum behind and where there is a backing panel

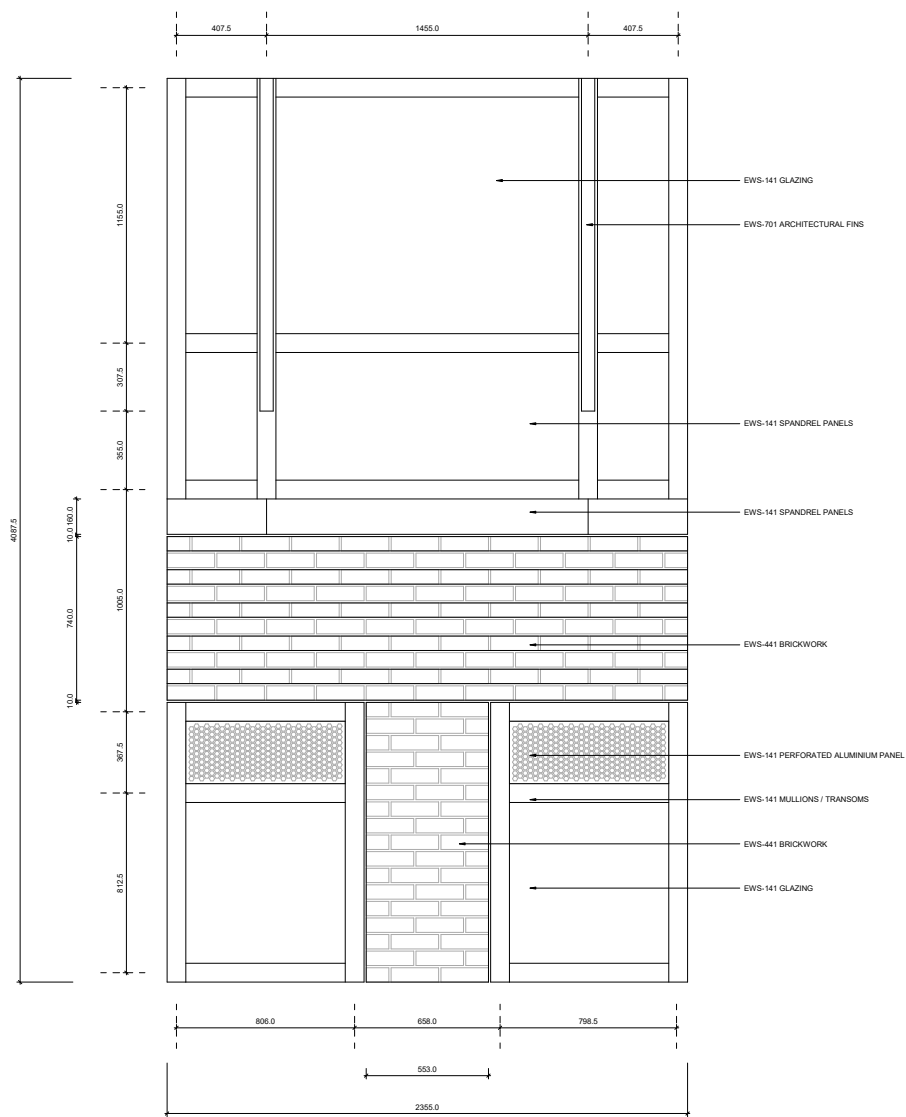
Example of plenums showing clearly behind perforated panels at Circle Square, Manchester.



- + Panel is solid enough to be visually dominant over perforations
- + Plenums or blanked panels are indistinguishable from each other, facade is more uniform

Example of more discreet plenums at Havelock, Manchester.

PERFORATED PANELS | SAMPLE PANEL



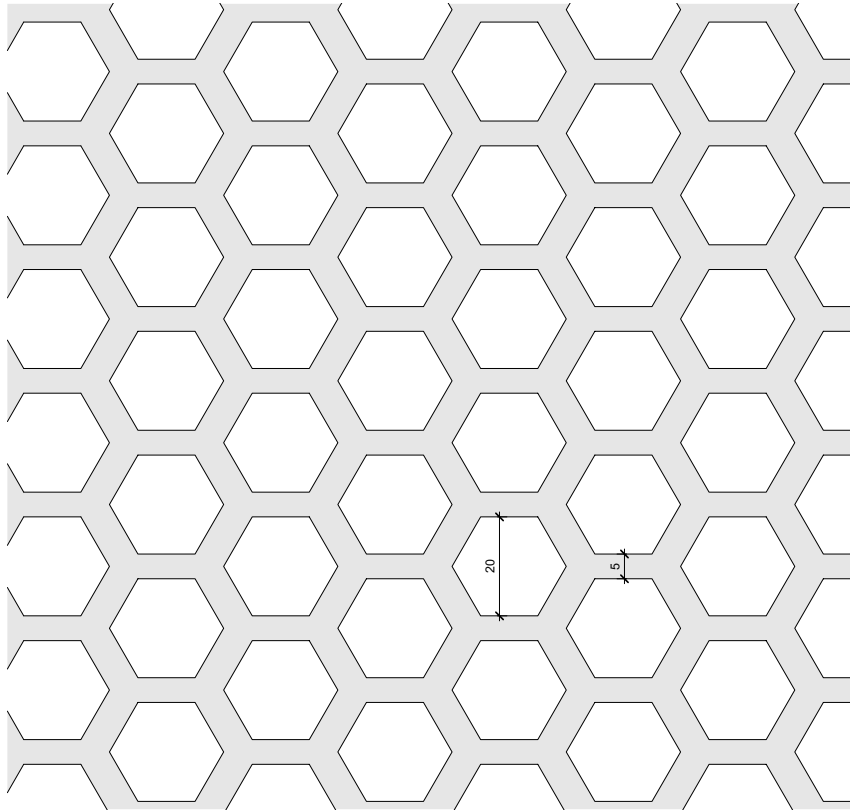
Elevation view of the agreed sample panel scope.



MCFC bee iconography.

For clarity, the drawing to the left shows the agreed scope of the sample panel, due to be completed on site in Summer 2024.

The perforations themselves are shown as a hexagonal 'honeycomb' pattern. This provides a subtle nod to Manchester's bee symbology and fulfilling the Club's brief



Honeycomb detailing for perforated panels.

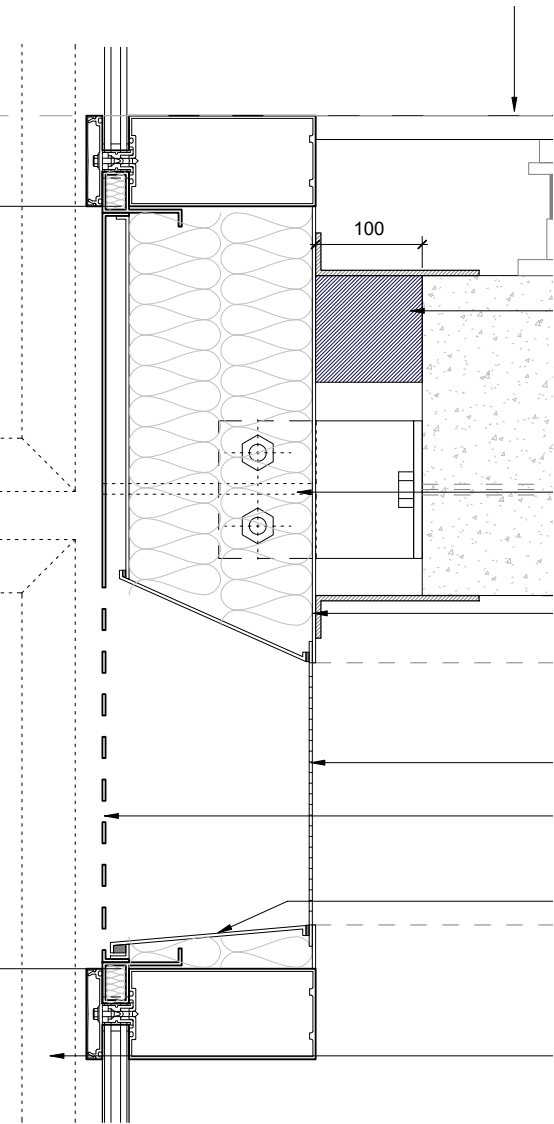
to respect the history of the city and the football club through softer means than more pronounced and obvious branding.

However, the 'slice' of the building that has been taken for a sample panel includes the perforated panel within the brick plinth and

not one within the feature fins part of the curtain walling.

As the panels in this latter area include slab edge detailing at each floor level, active plenums would only be behind a portion of each panel.

PERFORATED PANELS | PROPOSED DESIGN



Section detail through perforated panels.

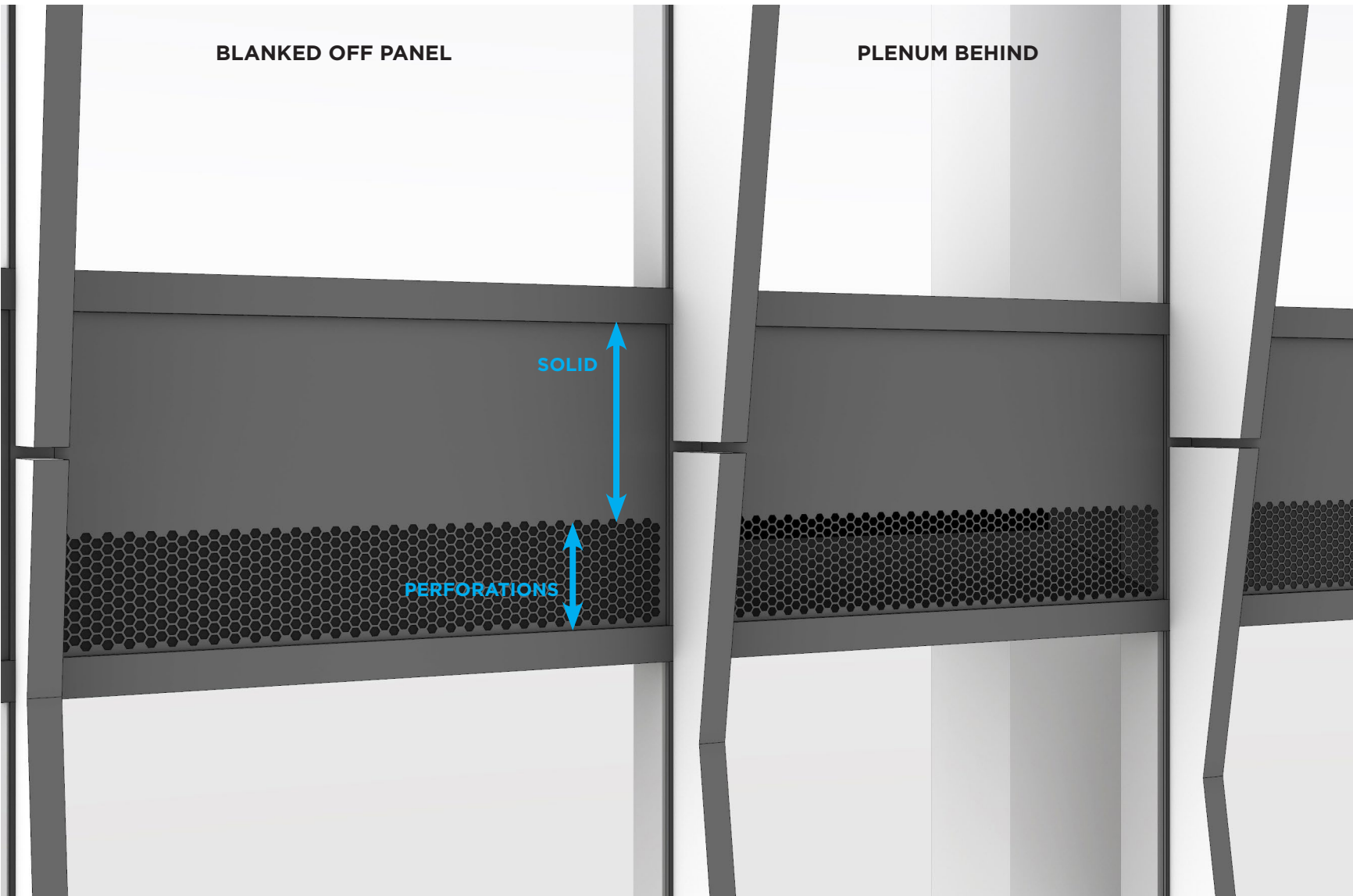
The proposed perforated panel accommodates the different appearances when the perforated panel is blanked off behind or when there is an active plenum behind the perforations.

By limiting the height of the band (as shown in the image to the right) and maintaining full-width plenums between curtain wall mullions, there is always separation between the two conditions.

The blanking off panel and the inside of the plenum will both be coloured black to further minimise the distinction between them.

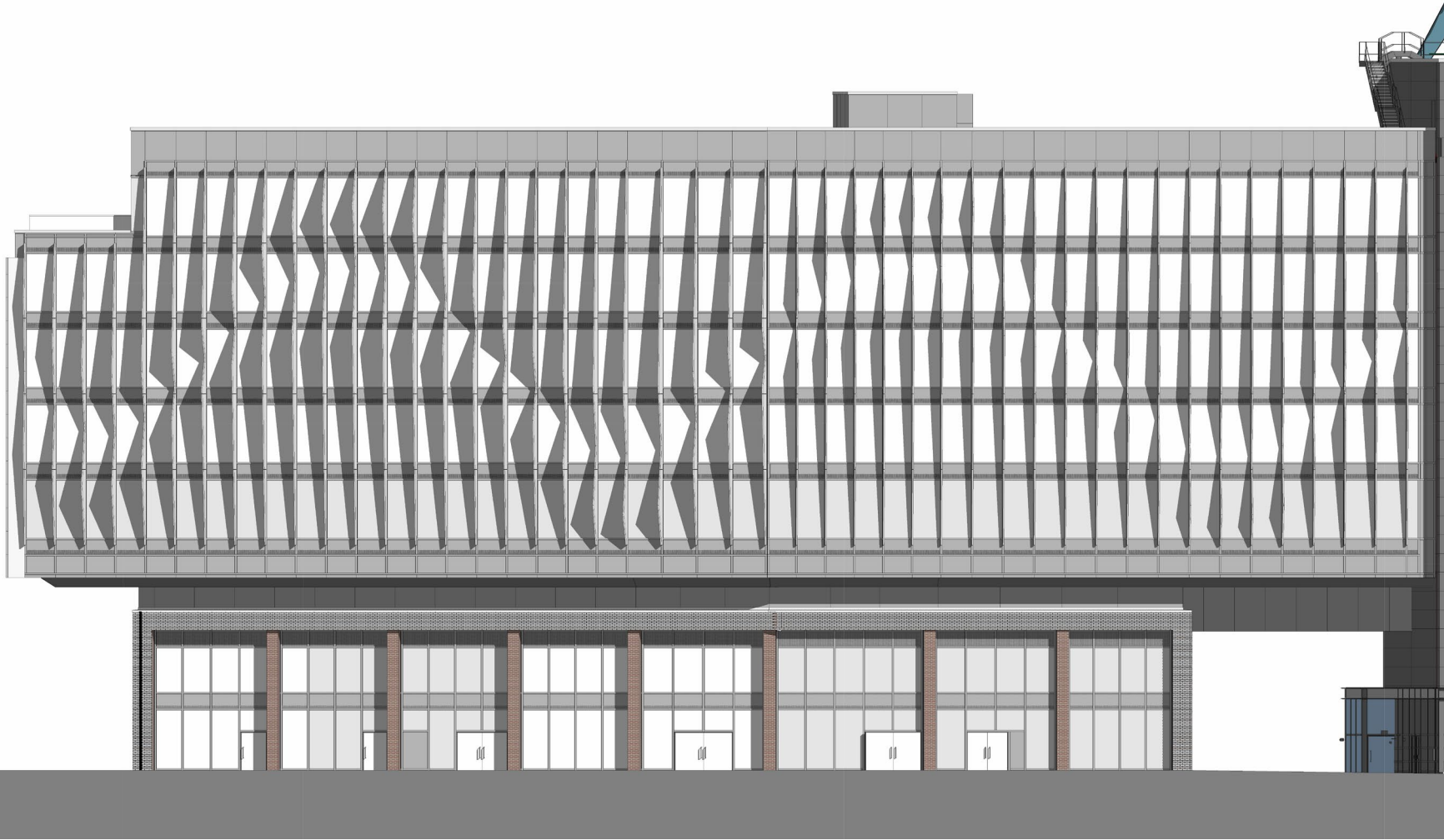
This design also reduces the mass of the cladding strip by breaking apart the appearance of the two parts (flat and perforated) of each panel, more closely mimicking the original intent of the louvres than a full-height perforated band would do. This also reduces the visual impact of a panel that is approximately 800mm high.

The perforations themselves are shown as a hexagonal 'honeycomb' pattern. This provides a subtle nod to Manchester's bee symbology and fulfilling the Club's brief to respect the history of the city and the football club through softer means than more pronounced and obvious branding.

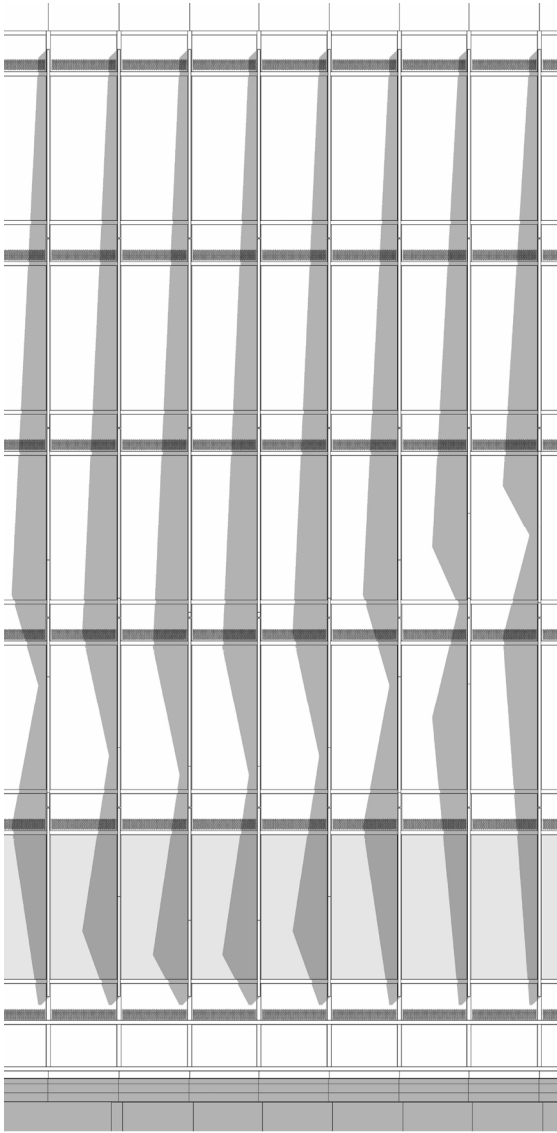


Visual showing the reduced contrast between a blanked off panel and one with a plenum behind.

PERFORATED PANELS | PROPOSED ELEVATION



Elevation of the Commercial Building (as an example) showing the impact on the overall building.



Elevation of the proposed perforated panels.

As a result of keeping the perforations to an elegant datum, very similar to that of the louvres that were shown in the original planning application, the overall impact on the facade of the update to perforated panels is negligible.

The adjacent images, given as examples at varying scales,

NORTH STAND FACADES

2

NORTH STAND FACADES | INTRODUCTION

In the consented scheme, there were three LED screens facing into City Square. One was to be mounted in front of the North Stand facade (above the City Square stage) and two more from the parapets above the bar areas (either side of the primary stage). Since this time, a more integrated alternative has been developed - with three screens replaced by one larger screen that the arrangement of the facade

around it can respond to in a more refined way.

The materiality of the facade has changed to reflect the adjacent cores with composite cladding panels, replacing the curtain walling system that mirrors systems used on the existing stadium. There is no direct relationship with the existing stadium in this location.

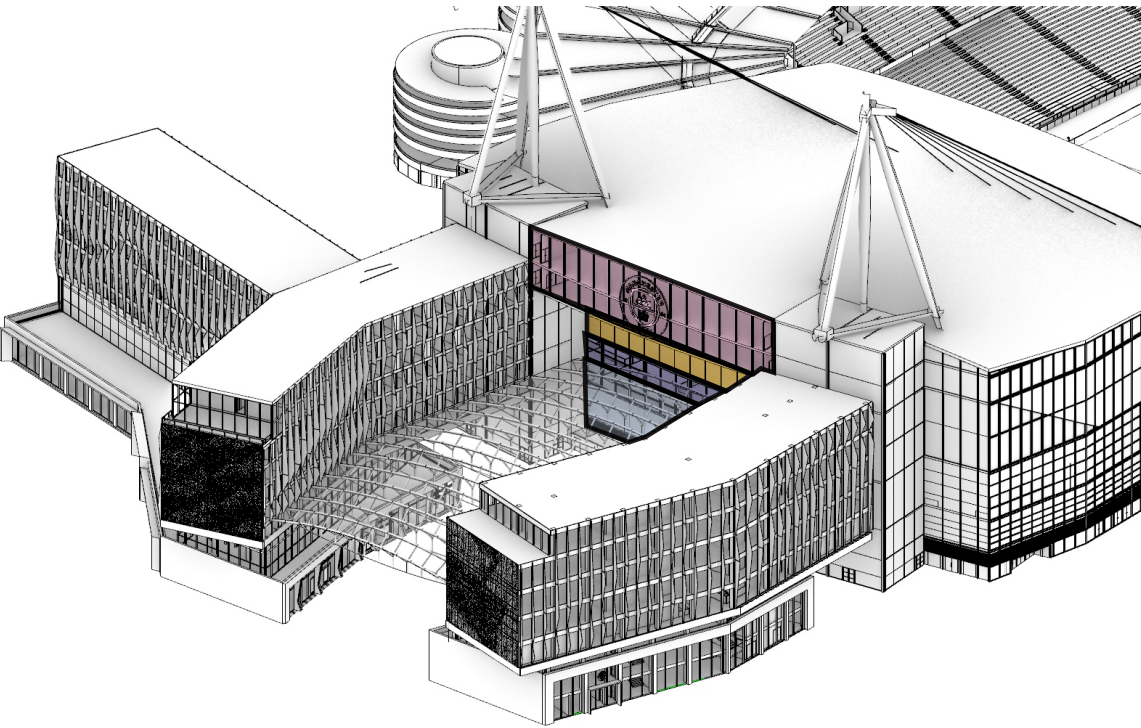


Diagram showing area of facade in question



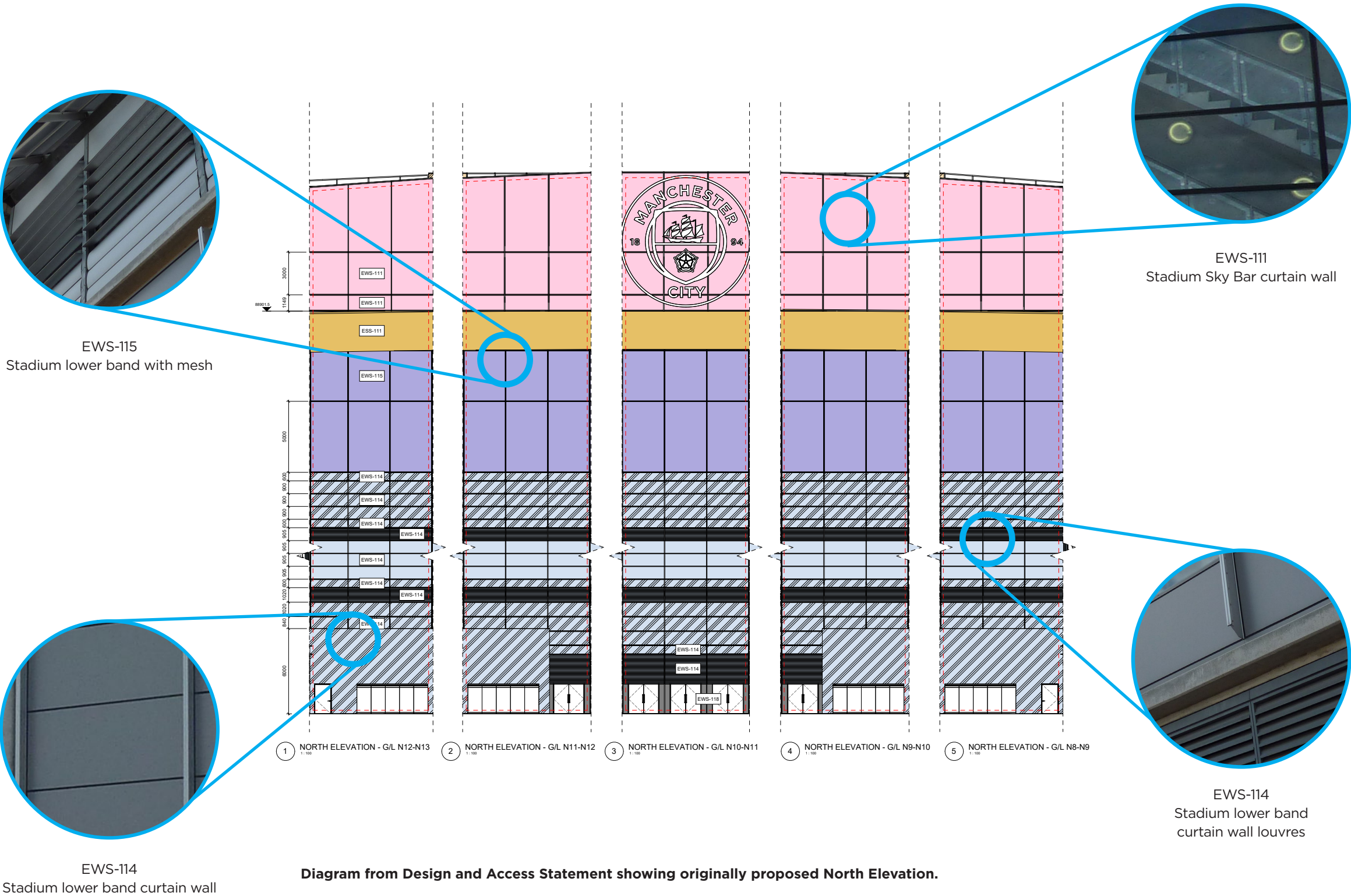
Visual from consented Planning Application showing LED screens facing City Square.

NORTH STAND FACADES | CONSENTED PLANNING APPLICATION

The adjacent diagram is taken from the Design and Access Statement, submitted as part of the North Stand planning Application in April 2023.

It shows the curtain walling system in place on the North Elevation of the North Stand, directly behind the City Square stage. This materiality aims to match the visual hierarchy of the existing Stadium.

However, the two circulation cores either side of this elevation cut this facade off from having a direct relationship with the remainder of the stadium so this continuation is unnecessary.

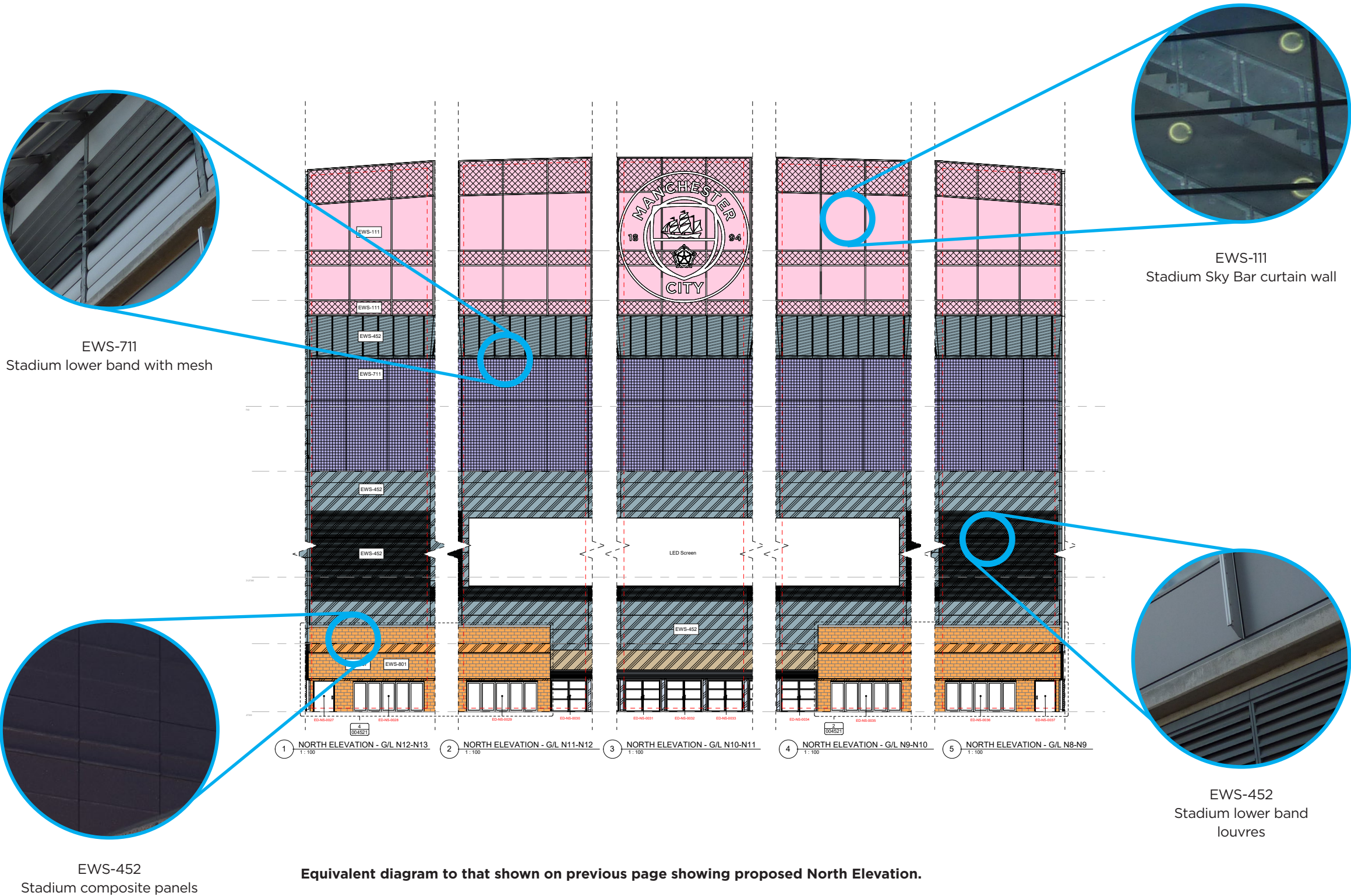


NORTH STAND FACADES | PROPOSED ELEVATION

The proposed elevation relates more directly to the materiality of the circulation cores on each side, with composite panels the same orientation and width.

Integrated into the centre of the facade is a large LED screen, framed by louvres that allow the natural ventilation of the spaces behind.

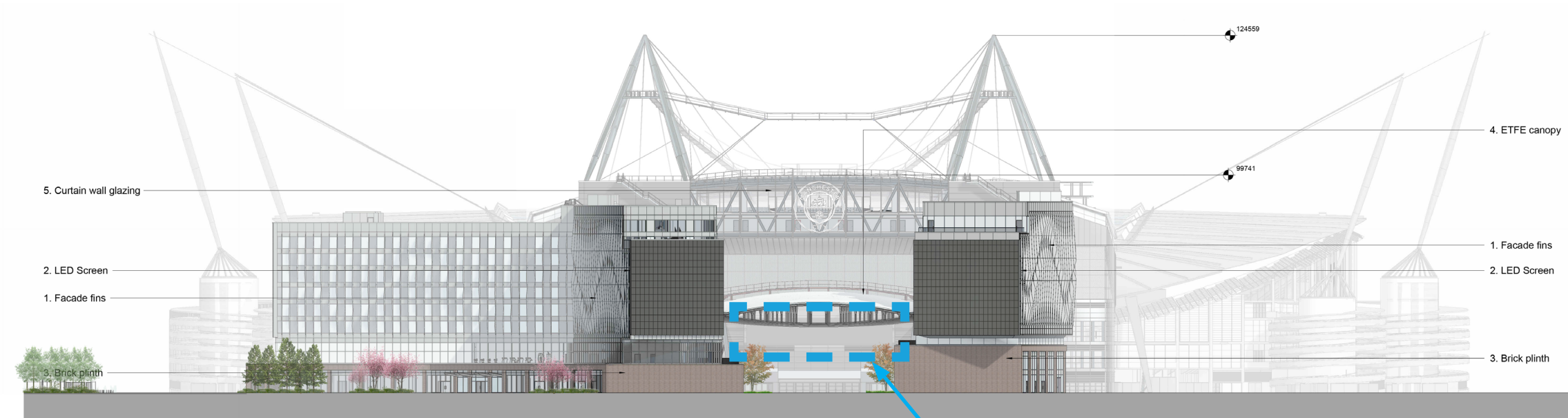
The design of the remainder of the facade has been refined but is fundamentally unchanged. Note that whilst some of the External Wall System codes have changed, the descriptions (apart from the composite panels) have not.



NORTH STAND FACADES | DRAWING COMPARISON



Extract from drawing NSE-POP-NS-ZZ-DR-A-000301, showing an overall site North Elevation from the consented Planning Application.



Equivalent extract as proposed now.

Area of proposed
City Square screen

The adjacent drawing extracts show the very minor nature of the amendment in the context of the wider project.

The bigger screen can be seen in the lower image, albeit very sheltered by the City Square ETFE canopy and the neighbouring hotel and commercial buildings. The material change itself is almost imperceptible from outside of City Square.

STAFF TERRACE

3

STAFF TERRACE | OVERVIEW

The hotel building features a sizeable flat roof at Level 01, only a small portion of which (on the west elevation facing City Square) is utilised for leisure purposes.

It is proposed to add a further terrace, in this instance facing south adjacent to the break space for hotel staff - providing

them with a private external space to enjoy their breaks away from event day crowds.

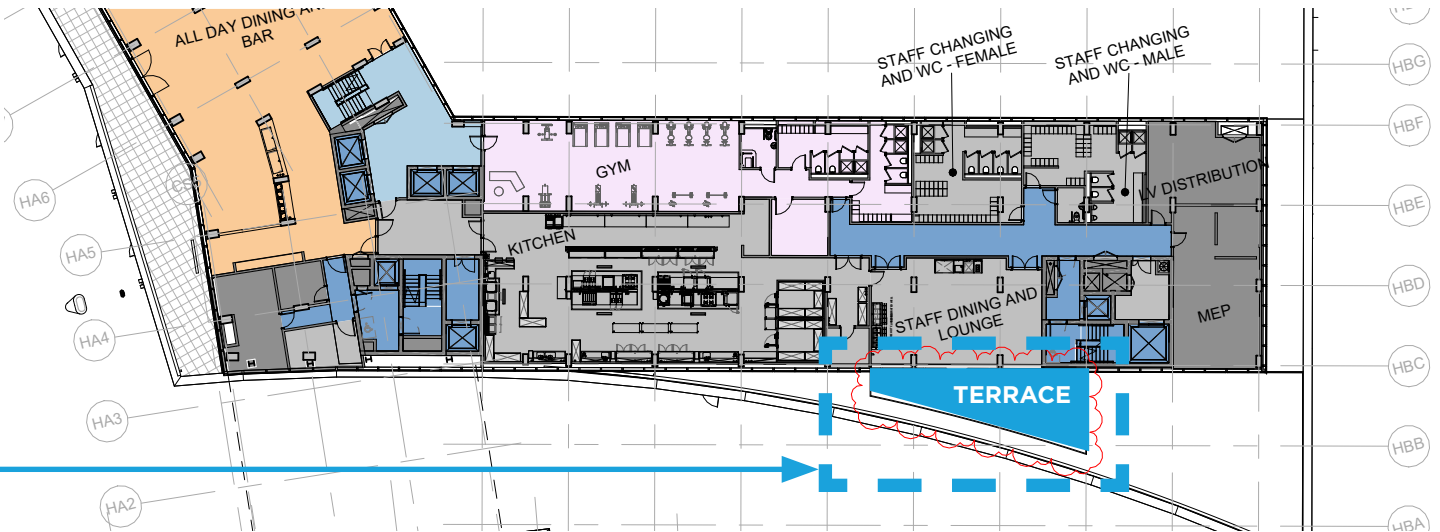
The railings that enclose this area have been deliberately pulled back from the edge of the roof to minimise disruption to the ground floor facade and make the terrace itself much more subtle.



Visual from consented Planning Application showing area of proposed staff terrace.



Extract from floor plan submitted as part of consented planning application.



Extract from proposed floor plan

UPDATED LANDSCAPE DESIGN

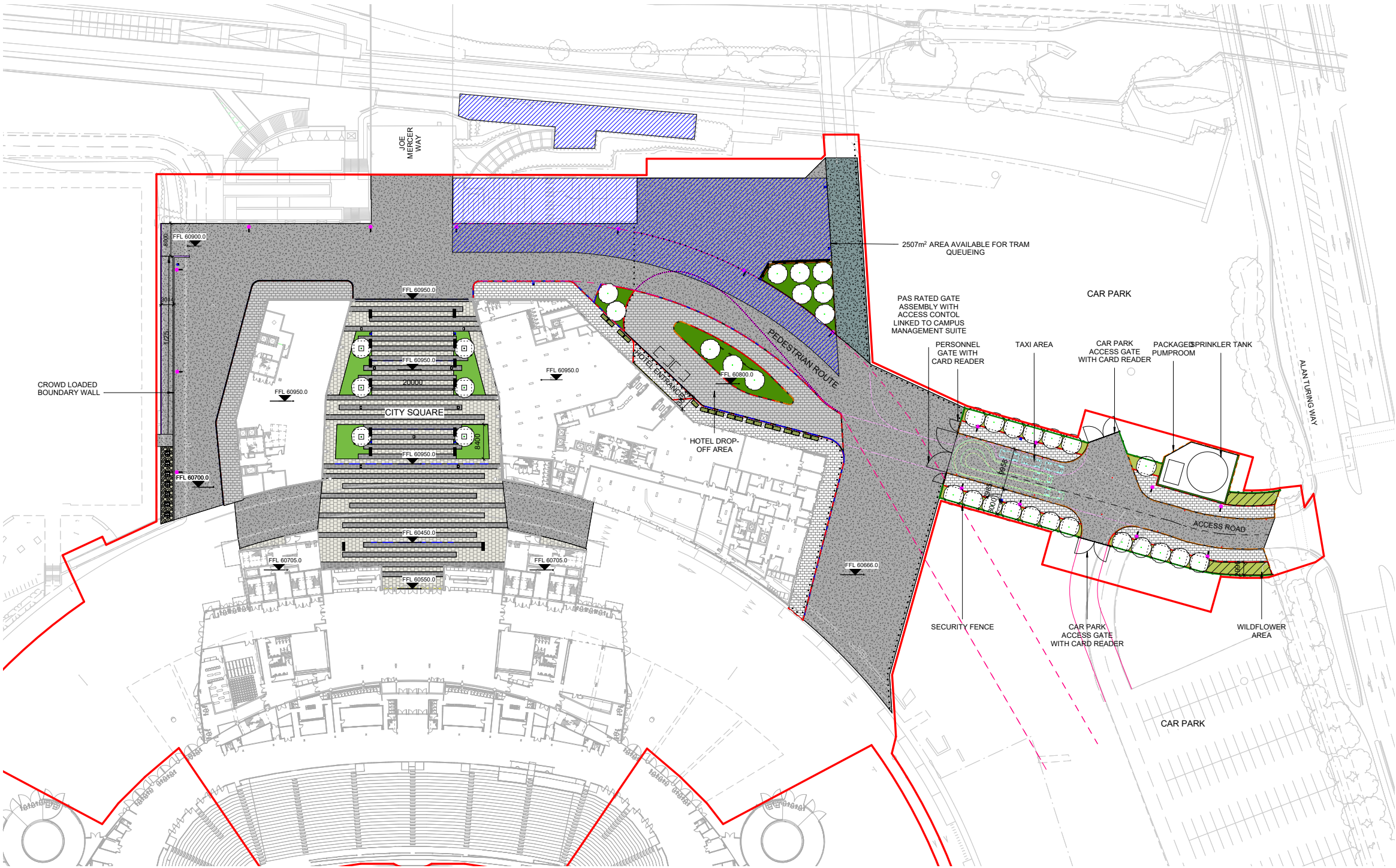
4

LANDSCAPE DESIGN | CONSENTED PLANNING APPLICATION

As initially discussed in the consented planning application, the concept for the landscaping strategy draws from two themes - firstly taking inspiration from the Garden City Movement, a 20th century planning movement that aims to draw together communities separated by greenbelts, and secondly that this site is known for its industrial heritage, made possible by the nearby Ashton Canal.

These characteristics of Manchester are portrayed in the landscaping, by having the green spaces infiltrating and breaking down the rigid pattern of the architecture that mimics the ship decking, through the brick plinth.

City Square, the heart of the scheme, becomes a green space between buildings, in a main hub for the city of Manchester.



Extract from drawing NSE-POP-NS-00-DR-L-000600, showing overall landscape general arrangement.

LANDSCAPE DESIGN | PROPOSED LAYOUT

In principle, the landscape strategy has remained the same from the Planning Application in April 2023.

The following items have been updated;

GENERAL UPDATES

- General drainage updates around the site to coordinate with the civil engineering team.
- Additional clarity provided to either side of the North Stand expansion itself.

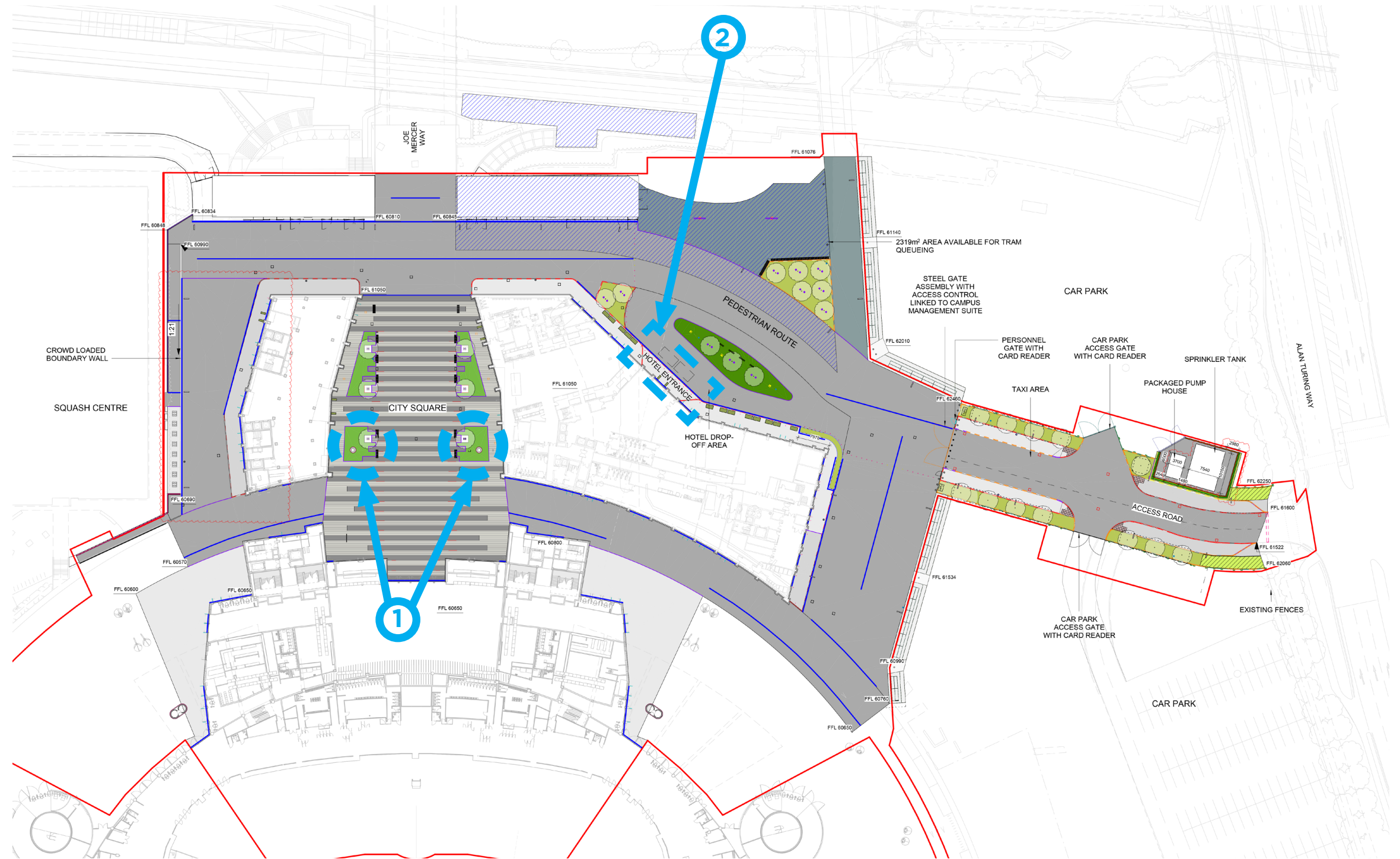
FURTHER UPDATES

①

Incorporation of feature drainage 'chutes' in City Square that match existing examples elsewhere around the stadium.

②

Planters around the Hotel entrance have been updated in coordination with other protective measures for pedestrians with outward-swinging egress doors.



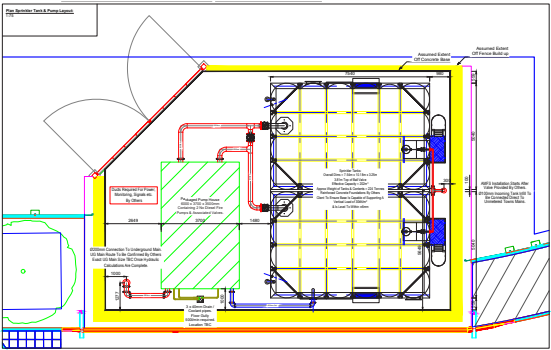
Proposed updates to drawing NSE-POP-NS-00-DR-L-000600, showing overall landscape general arrangement.

LANDSCAPE DESIGN | SPRINKLER TANK ENCLOSURE

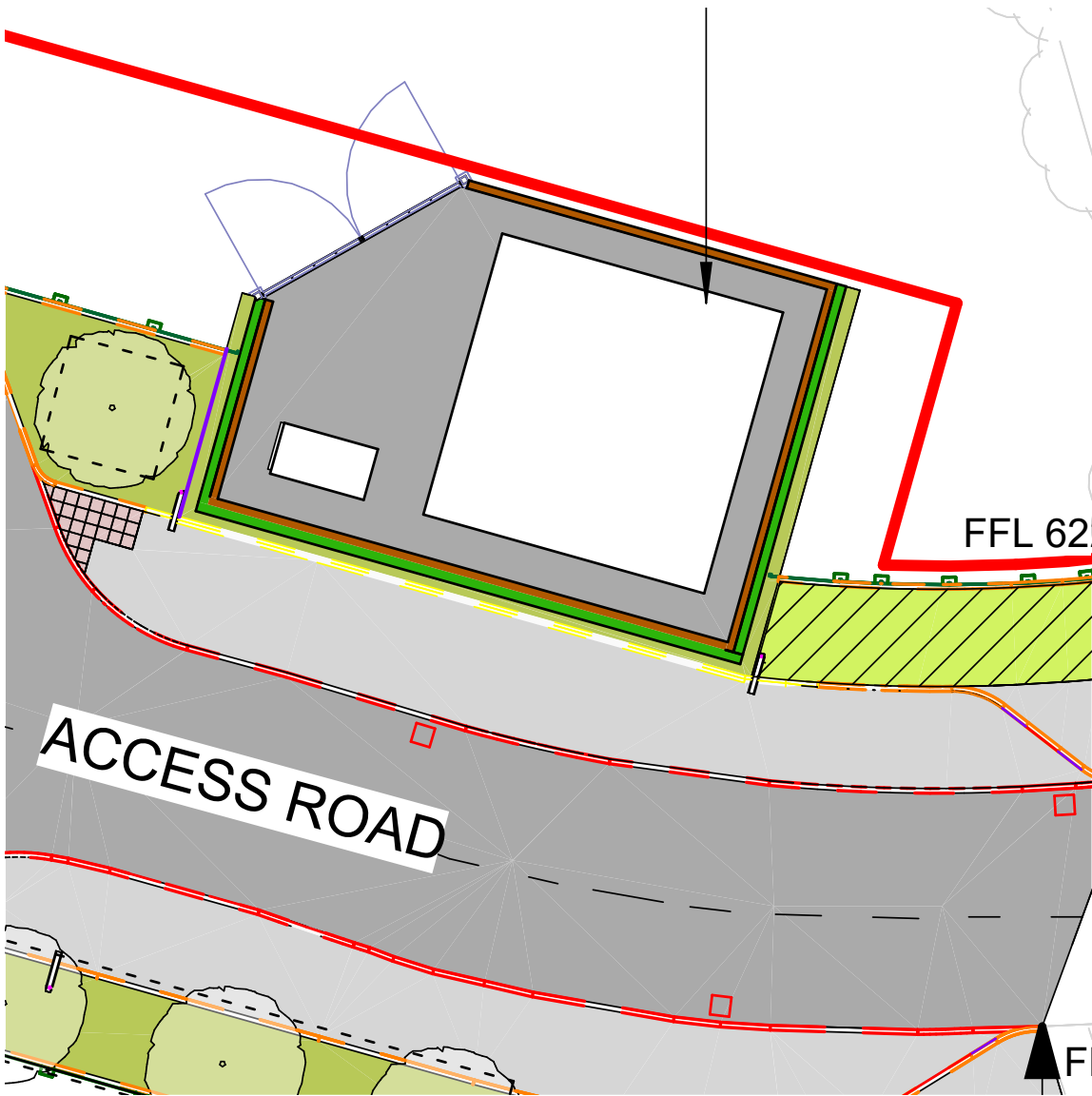
As the design of the sprinkler tank area has progressed with specialist input, it was established that the size of the enclosure would need to increase.

The previous enclosure could house the tank and pump equipment, but would not allow sufficient space for future maintenance.

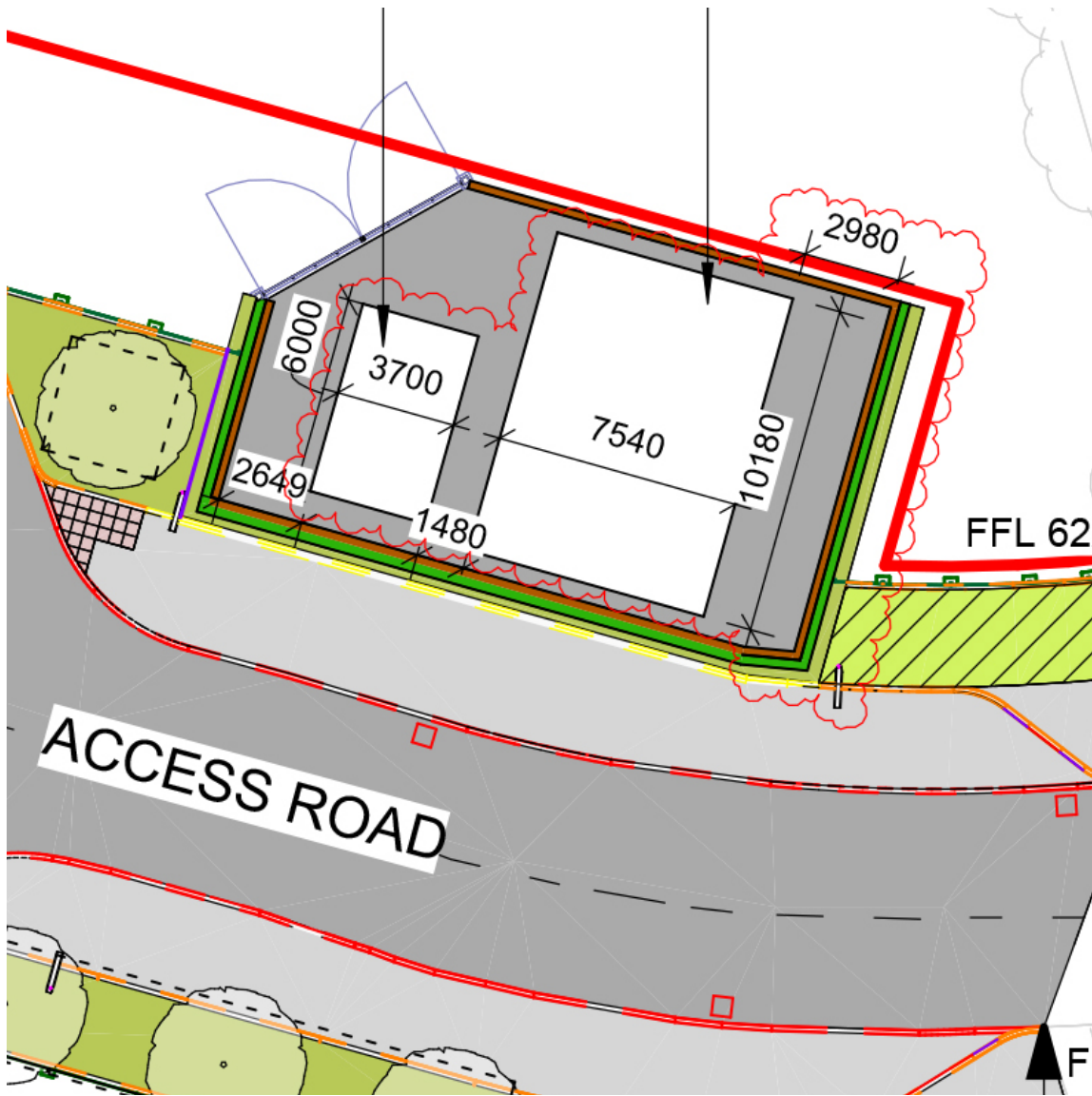
As a result of the slight expansion, the corner of the enclosure has been splayed to avoid encroaching on to the footpath.



Equipment layout in expanded enclosure.



Extract from NSE-POP-NS-00-DR-L-000600, showing tank enclosure in planning application.



Extract from NSE-POP-NS-00-DR-L-000600, showing proposed tank enclosure.

COMMERCIAL BUILDING USAGE

5

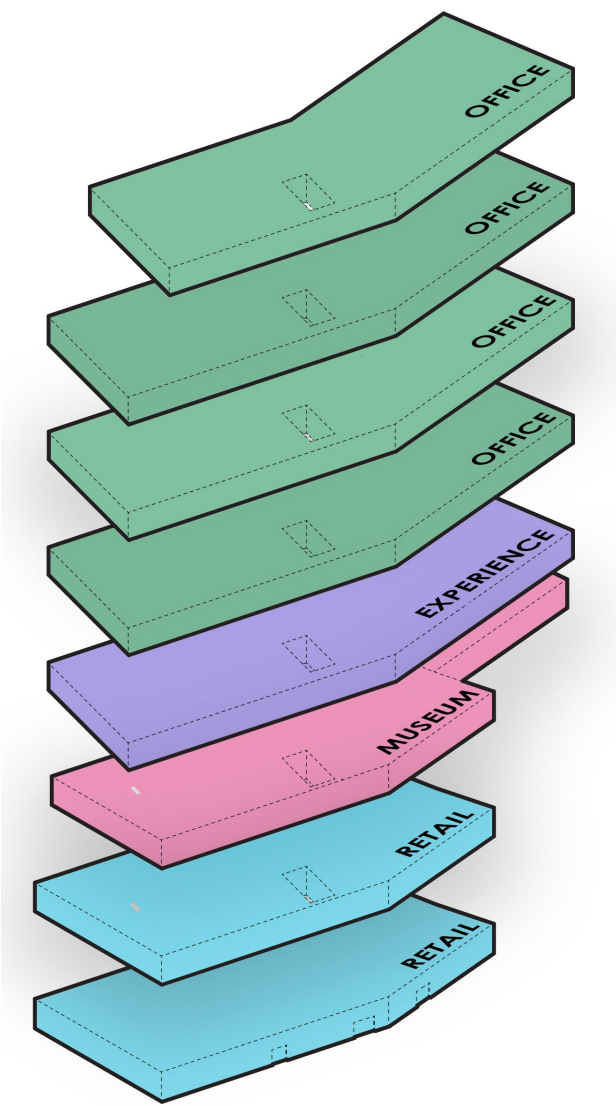
COMMERCIAL BUILDING USAGE

As the design of interior spaces within the Commercial Building has developed, some amendments to the use of some of the floors has been proposed to provide a greater fan experience.

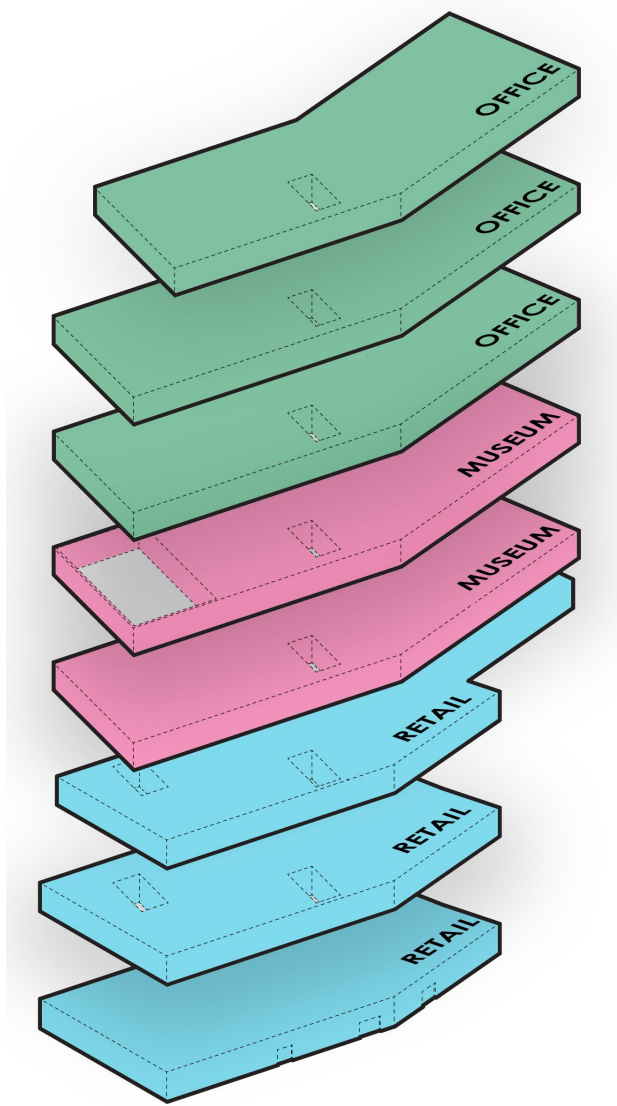
The retail space, originally located on Levels 00 and 01, is proposed to also include Level 02. The Museum would move to Level 03 and expand to include Level 04. Office spaces would remain on Levels 05, 06 and 07.

As part of these amendments, some additional voids within the structure are proposed to better link the spaces and provide some architectural drama to the spaces. These voids connect all three floors of the retail space, and a large double height space sits at the northern end of the Museum.

The external appearance of the building is primarily unchanged as a result of this potential amendment.



Exploded axonometric view of consented Commercial Building uses by level.



Exploded axonometric view of proposed Commercial Building uses by level.