

M1 Piccadilly, Store Street

Planning Addendum

5plus

1.1 Materiality Studies

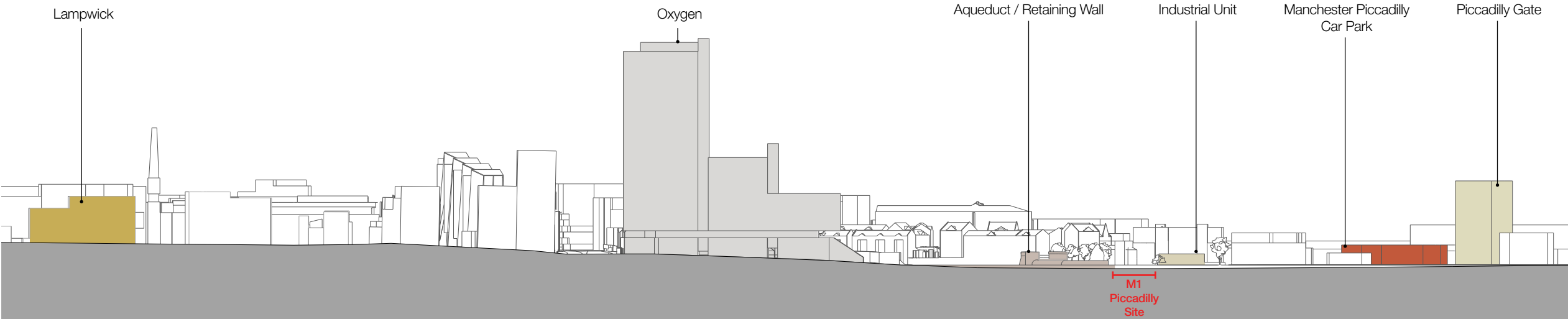
Contextual Façades

Existing Context

In the first instance, understanding the materiality of the existing buildings was key to developing a contextually appropriate material choice for M1 Piccadilly.

Store Street and its connecting streets are comprised of a diverse range of architectural styles and materials. This contextual facade study reviews six key buildings within the proposal's locality, to analyse and learn from these nearby buildings.

Distilling the key tones from each facade shows an eclectic mix of tones. A common theme amongst the majority of the swatches is a predominance of warm colours, ranging from warm grey to yellow / gold and orange/bronze tones.



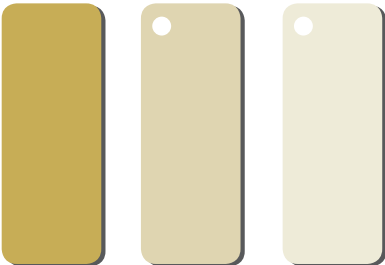
Preferred Tones

Reflecting the context as well as the client's aspirations for the proposal to have a clear identity with a luxury feel, the preferred gold - champagne tones are marked with a grey outline.

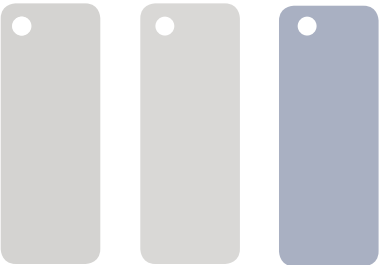
 Preferred contextual tones



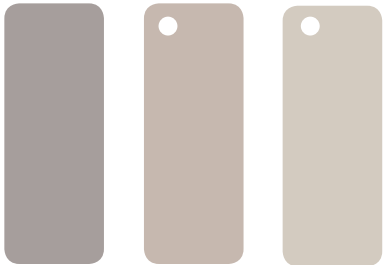
Lampwick
Old Mill Street



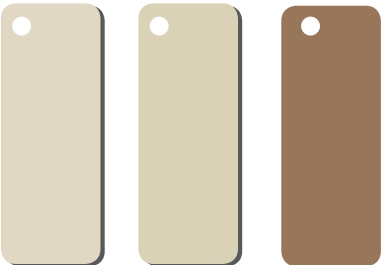
Oxygen
Store Street / Great Ancoats St.



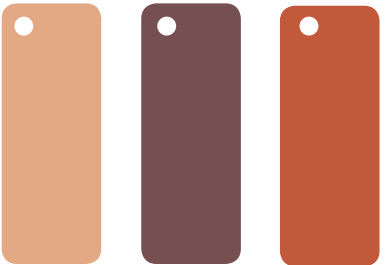
Aqueduct / Retaining Wall
Store Street



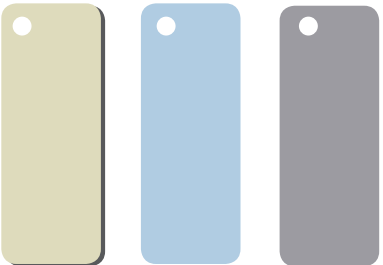
Industrial Unit
Store Street



Manchester Piccadilly Car Park
Boad Street



Piccadilly Gate
Store Street



1.1 Materiality Studies

Site Heritage

Development of the materiality has been informed by Store Street’s heritage as a place of industry.

Analysis of historical maps highlights numerous mills and works building within the context of the site, benefiting from Store Street’s proximity to the Ashton Canal Aqueduct. A number of foundries and ironworks were located around the area, with a brass and ironworks being formerly situated on what is now Piccadilly Village.

This historical research informed an approach to materiality to reflect the foundries of Store Street’s past.

Preferred Tones

Referencing the contemporary and historic context



Precedent Study

The proposal’s materiality complements the predominantly warm tones of the surrounding buildings, as well as referencing the area’s history as a centre for metalworking.

Initial precedent studies reviewed the tones, materials and finishes which could be used to deliver this contextual response whilst upholding the client’s aspiration for a luxury, quality development.



Foundries highlighted on a historic map from 1893.

M1 Piccadilly Site
Foundries



A typical Victorian foundry



Victorian cast brass ornamentation, such as this ceiling rose, remain popular today



Flat panels with a standing seam joint



Sheet materials with less uniformity giving variety to the finish



A highly reflective finish

1.2 Facade Development

Tone and Concept

Facade Development

Initial proposals tested a monolithic approach to the facade, utilising a relief terracotta panel. Several quick rendered detail studies were produced and reviewed, drawing on the preferred tones from the contextual study work.

Preferred Tones



Facade Concept

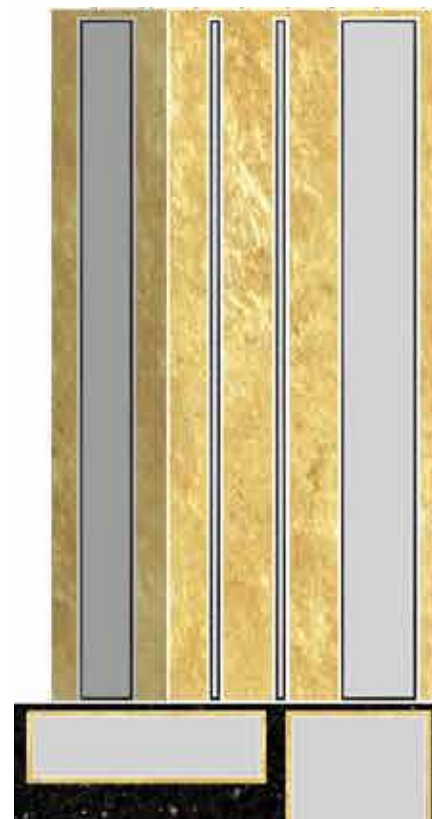
After review of the initial studies based on a monolithic approach, the massing of the proposal was further refined to accentuate the elegance and unique chamfered plan form.

In response to this, the facade concept was developed to utilise a variety of complementary tones and finishes, which could be composed to further accentuate the dynamism of the form.

Metalwork was selected as the primary material, for its colour, durability and finishing options, as well as the reference to the area's heritage.

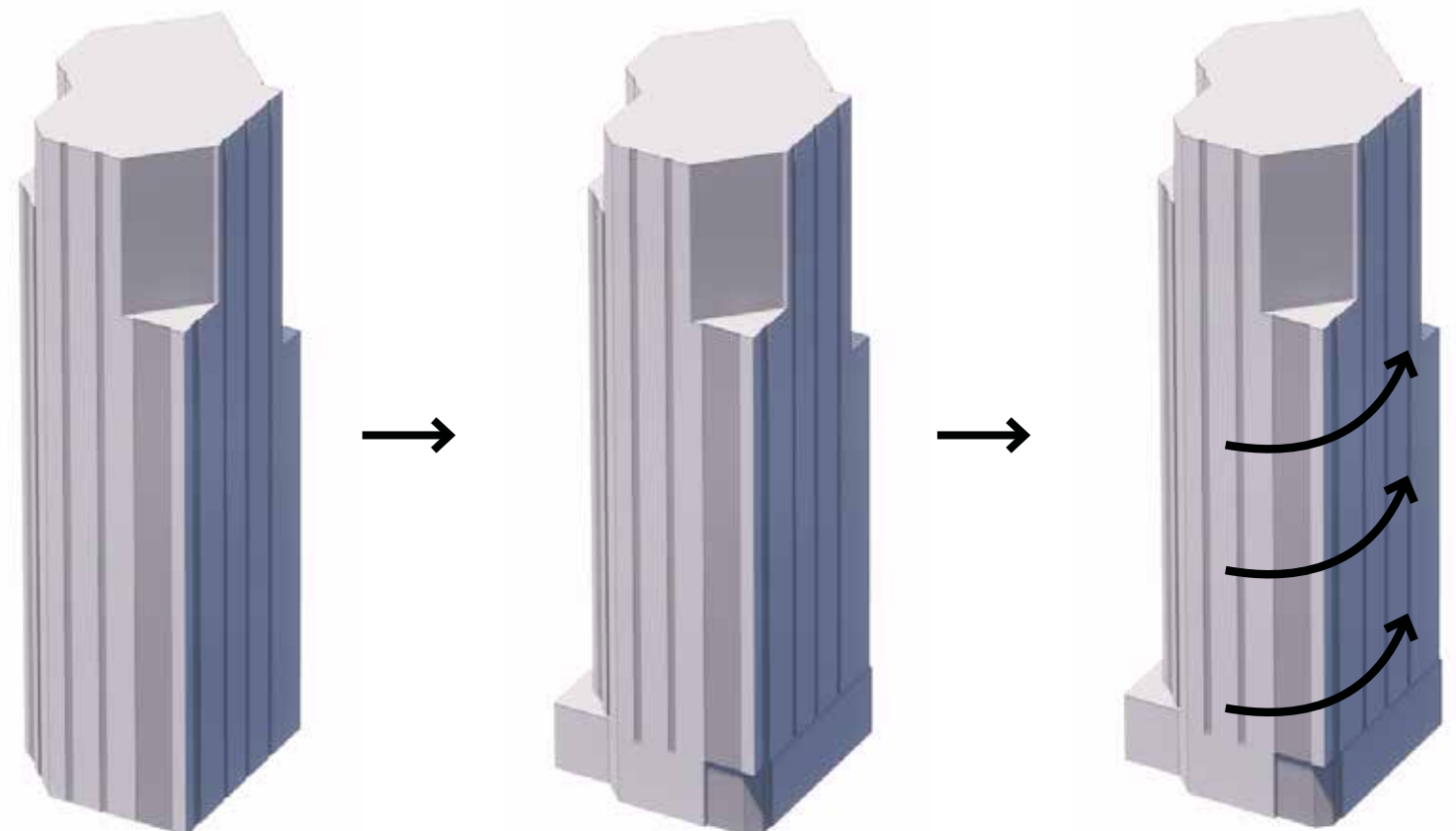
The proposal's visibility from a number of key vistas, as well as the lack of a traditional "back" to the building lead to studies into a shifting, varied composition of tones around the facade.

Initial Facade Concept



Initial concept diagram for a monolithic, gold-toned approach with a solid dark base

Developed Facade Concept



Stacked windows to accentuate verticality

Grounding with a solid base

Composing a varied facade treatment to give variety

1.2 Facade Development

Materiality

The facade is comprised of three panel types, composed to give variety and dynamism to complement the building’s form.

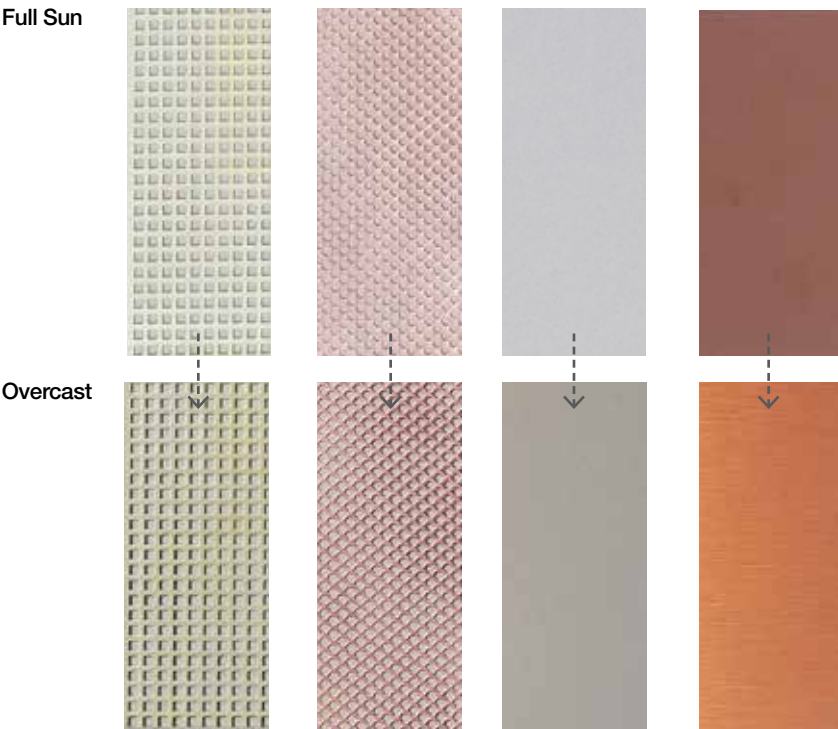
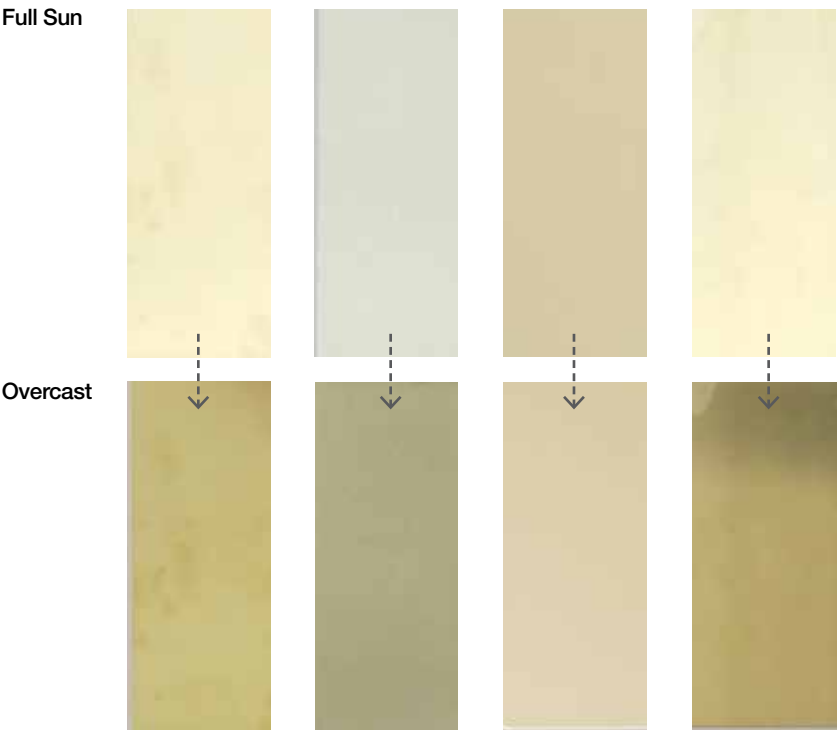
Precedent Studies

Reviewing different approaches to tones, finishes and perforations



Sample Review

Documenting and reviewing a several tones and finishes in a variety of light condition to understand how the facade will change throughout the day.



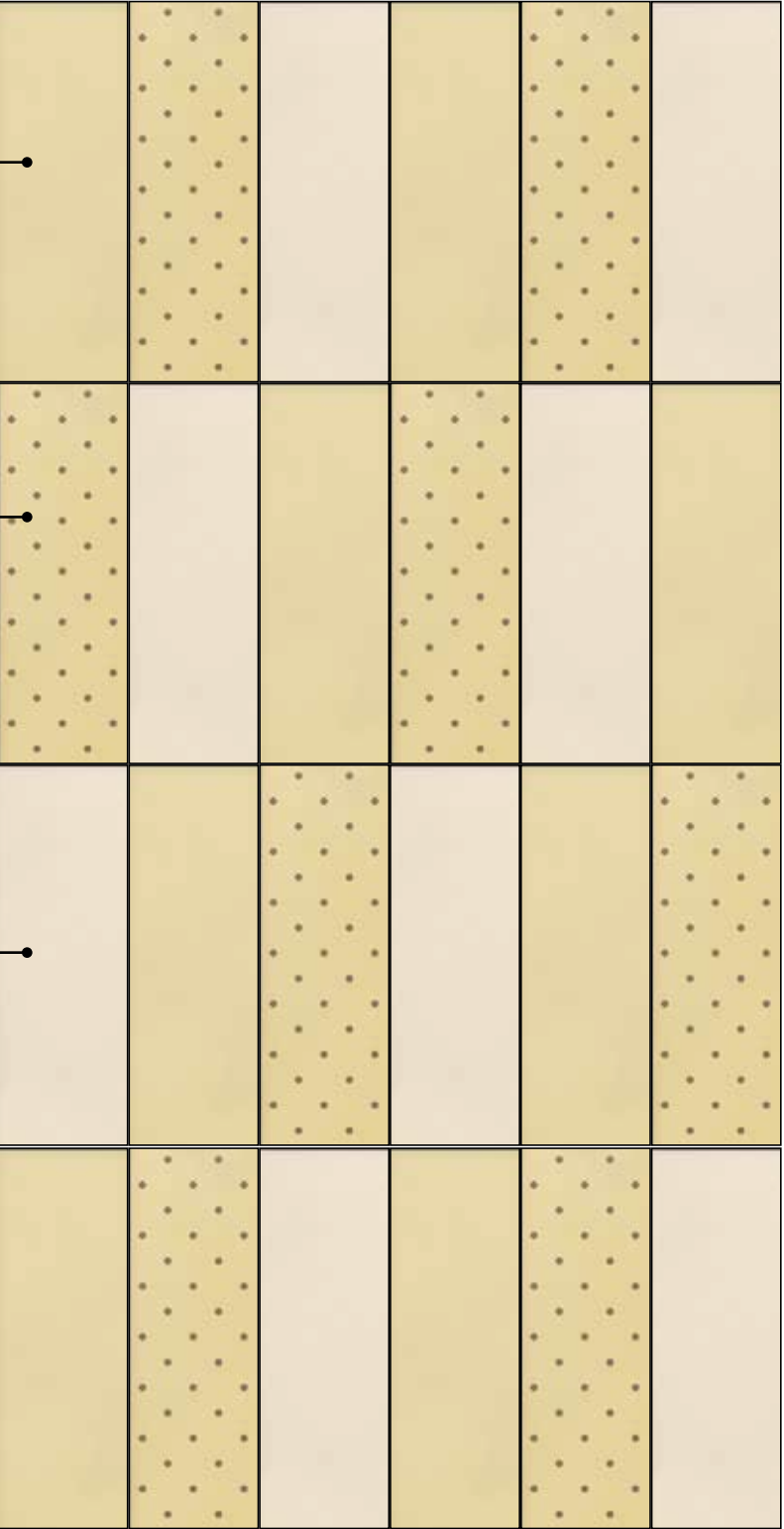
Composing the Facade

This concept diagram illustrates the three panel types and their composition to give a dynamic, twisting effect to M1 Piccadilly.

01 - Solid gold coloured panels comprises the majority of the facade. Samples have been selected based on their uniformity and flatness to give a consistent, cast look.

02 - A perforated or printed frit gold panel, colour-matched to the solid gold panel provides depth and shadow to the facade.

03 - Lighter solid champagne coloured panels compliment the gold. Proposals have considered a matte finish to these panels which would contrast the more metallic gold panels



1.2 Facade Development

Material Specification

Material Samples

Following feedback form Manchester City Council, a more detailed analysis of material samples has been undertaken. Samples from three manufacturers have been reviewed, each of which deliver the quality, tones and finish which M1 Piccadilly aspires to.

- › Alpolic produce high quality coatings for external use. The metallic range is intended to mimic an anodised finish whilst the prismatic range gives a complex depth of colour, which changes tone when viewed from different angles and in different lighting conditions.
- › Syntha Pulvin's Anodite range is an ultra matt polyester powder coated (PPC) finish, specifically designed to simulate the colours of anodising. Like anodising, the range is available in a spectrum of gold - bronze - grey tones.
- › United Anodiser's Anolok is a range of anodised finishes available in a spectrum of gold - bronze - grey tones.

Reviewing a range of samples from the above manufacturers, 5plus have suggested a shortlist of specific materials which would be suited to M1 Piccadilly. The samples have been photographed in sun and shade, as well as from below, mimicking the effect of looking up at the facade from street level.

The photography makes it clear that there are a range of tones within all of the samples, which change depending on the lighting and angle at which the materials are viewed. Whilst the photographs show some of the range, the samples are best viewed in person, and under natural light for the most accurate representation of the finish and tonal range.

Post planning, the external materials will be considered further to address the relevant planning conditions, alongside the RIBA Stage 3 and 4 design stages.

Range of Samples

All samples photographed in full sun

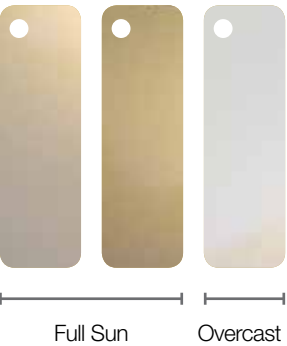
All samples photographed in shade



Preferred Tones

Alpolic

Prismatic Citrine



Bronze Metallic



Anolok

Anolok 545



Regency Gold 1

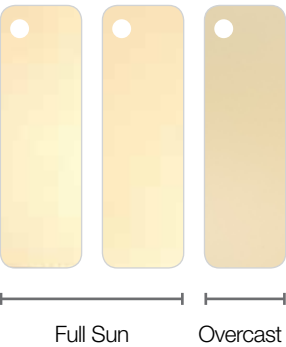


Syntha Pulvin

Pale Gold 541



Gold 2.5



1.2 Facade Development

Material Specification

Material Application

The recently completed refurbishment of John Dalton House, Deansgate, by 5plus architects utilised the Regency Gold 1 anodised finish shown overleaf. The material was used as a horizontal veil on the exterior of the building.

The spandrel panels are in an Anodic PPC aluminium, as detailed below, and complement the gold anodised veil.

Images of the completed building show the tonal range of the anodised and PPC finishes depending on the daylighting, weather and angle of the facade.

Material Specification

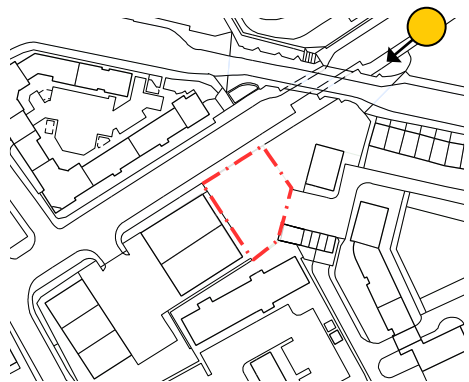
01 - Anodised aluminium extrusion
Material finish : Regency Gold 1

02 - Aluminium spandrel panel
Material finish :
Anodic PPC aluminium
Interpon D2525 Collection
Anodic Steel Bronze 1

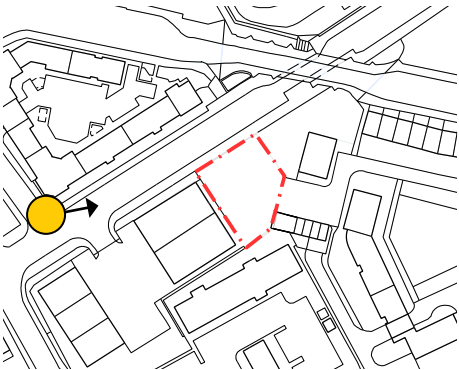


2.1 Visualisation

Store Street / Great Ancoats Street

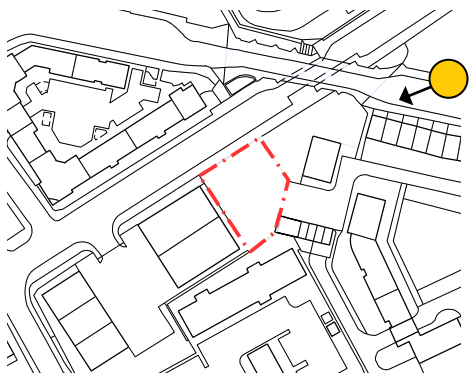


2.1 Visualisation
Store Street / Jutland Street Junction

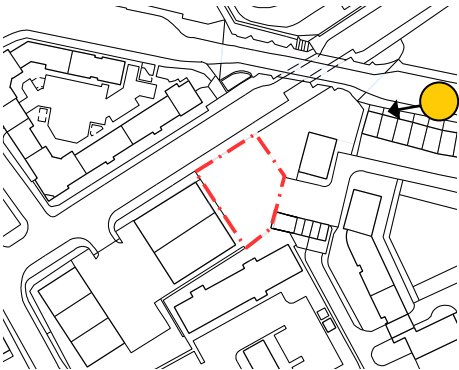


2.1 Visualisation

Aqueduct View

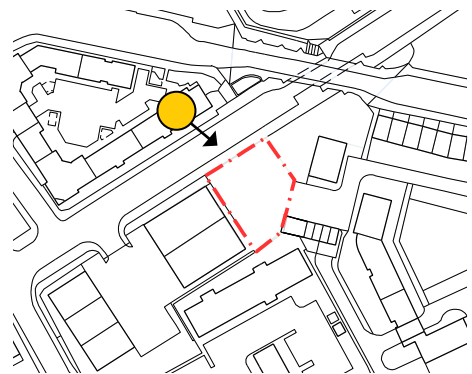


2.1 Visualisation
Cityscape View



2.1 Visualisation

Entrance View



3.1 Accessibility

Approach to Accessibility and Inclusion

M1 Piccadilly's approach to accessibility is to achieve an inclusive environment throughout. The design philosophy is based on a social model of inclusion, and seeks to achieve inclusive design that maximises access for all people. This satisfies the General Duty placed upon Manchester City Council under the Equality Act 2010.

Definition of Disability

When considering disability, the term has been viewed in its broadest sense. In the design of M1 Piccadilly, an accessible, inclusive environment has been designed with the following user groups in mind:

- Individuals with mobility, sight, comprehension or hearing impairment
- The ageing population
- People with temporary injuries
- People whose movement may be impaired or encumbered in any way i.e. pregnant women, people with young children or people with baggage.

Sources and Guidance

- The Building Regulations Approved Document Part M Volume 1
- The Building Regulations 2010 Protection from falling, collision and impact Approved Document K.
- BS 8300: 2009 + A1:2010 (Design of Buildings and their approaches to meet the needs of disabled people).
- Manchester City Council, Local Plan 2012
- Manchester City Council, Design for Access 2.
- Consideration of Equality Act issues



Design for Access 2 (2003)

Manchester City Council's aim is for Manchester to be recognised as the most accessible city in Europe. Design for Access 2 is Manchester City Council's best practice guidance of inclusive design standards. The guidance has been produced as a manual for architects, planners, engineers, landscape architects and other designers. It sets out the City's aspirations for inclusive development and is invaluable as a key reference for service providers, and to inform disabled people of the standards they should expect.

General Provisions

The entrance is level, step free, weather protected and provides direct access to the core.

The main entrance door from Store Street consists of a revolving door with an adjacent 1125mm wide glazed pass door. The pass door will have visible and permanent manifestations applied to the surfaces and tactile and visual circulation route signage will be provided. A suitably slip resistant floor finish and barrier mat will be selected as the design progresses.

Horizontal and vertical access within the building has been designed to the recommendations set out in Approved Document Part M and BS8300. Vertical access is by means of a single core containing two wheelchair accessible lifts, which provide step free access from Ground to Level 15. Each lift has a clear internal dimension of 1800mm x 1400mm and will be designed to the recommendations set out in Approved Document Part M, BS8300 and to BS EN 81-70 and BS EN 81- 1.

The escape stair has a width of 1000mm and has been designed to the parameters set out in Approved Document Part B and Part K. However, to assist ambulant disabled people,

Approved Document Part M features will be included. Handrails will be placed along both sides of the stair and have a 300mm overhang at landings. The handrails will also be continuous around the half landings.

A slip resistant, tactile nosing will be provided to the nose of each tread which will also provide colour contrast. The landings have a similar slip resistant, tactile finish to denote the bottom of flights. Internal floor finishes will be slip resistant, hard wearing, firm, level and easily maintained. The internal floor surfaces will not impede the movement of wheelchairs

Sanitary Provision

As well as an accessible bathroom on the entrance story of each one, two and three bedroom apartment, the ground floor provides step free access to a unisex wheelchair accessible WC. The unisex wheelchair accessible WC is designed to Approved Document Part M and BS8300 for use by visitors, staff or residents.

Dwellings (DfA2 Section 21)

21.1 Visitor Access

Level access is provided throughout with all apartments accessible via two communal passenger lifts. The majority of apartments (50) are on a single level, whilst the remaining duplexes and triplexes all have access to the communal corridor and lift from every level. All one, two and three bedroom apartments include an accessible bathroom accessed from the entrance area with an outward opening door, to facilitate use by a visitor. Further detail on design for visitable dwellings is provided within the Approved Document M section on this page.

21.2 Provision for Adaptation

Apartments have generally been designed to allow adaptability, with non-load bearing internal partitions, and a building structure capable of supporting equipment to suit a specific disability. Patressing could also be installed where required, to strengthen walls. We have also identified 6 apartments large enough to be capable of simple adaptation for wheelchair users as detailed within the Approved Document M section on this page.



Approved Document M Volume 1: Dwellings (2015)

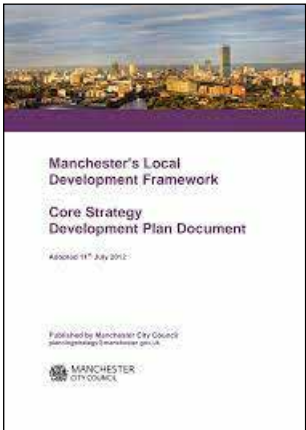
Approved Document M concerns the access and use of buildings, and provides guidance for compliance with Building Regulations. The document contains three sections:

- Requirement M4(1) – Category 1 – Visitable Dwellings
- Optional Requirement M4(2) – Category 2 – Accessible and Adaptable Dwellings
- Optional Requirement M4(3) – Category 3 – Wheelchair User Dwellings

Approved Document M and The Local Plan

When reviewing the statutory and optional requirements outlined in Approved Document M, the design team have referred to the Local Plan for guidance on the accessibility aspirations of the development.

The Local Plan Policy H1 states that new housing should “Contribute to creating mixed communities by providing house types to meet the needs of a diverse and growing Manchester population, including elderly people, disabled people, people with specific support requirements, BME communities, Gypsies and Travellers and Travelling Showpeople”.



Compliance with Approved Document M

Recognising the Local Plan, M1 Piccadilly has sought to better the minimum statutory requirements of the Building Regulations where possible, as below:

All one, two and three bedroom apartments meet Category M4(2), exceeding the minimum statutory requirements. This ensures that these apartments:

- Meet the needs of occupants with differing needs, including some older or disabled people
- Allow adaptation of the dwellings to meet the changing needs of occupants over time.

A further total of 6 apartments (11% of the total provision) have been identified as large enough to become adaptable into wheelchair user dwellings, reflecting Optional Requirement M4(3) – Category 3 – Wheelchair User Dwellings.

- Two apartments are currently designed to allow simple adaptation of the dwelling to meet the needs of occupants who use wheelchairs.
- Four apartments have sufficient space to become wheelchair adaptable dwellings if necessary.

4.1 Ventilation

Approach to Ventilation

Apartments are ventilated through a micro louvre the head of each window, which is also used to conceal the floor zone. This approach allows one panel, keeping a neat, simple approach to the facade and avoiding excess panel types, joints and different materials in the vertical stack of the window strips on the elevation.

The micro louvre comprises of very thin horizontal blades with the unit 'glazed' into the mullions / transoms of the strip of curtain walling. This means the micro louvre is flush with the glazing and will all be manufactured / installed by the same sub contractor.

01 - Micro louvres at window head as described

Detail of Proposed Visualisation



Precedent Image



Architecture
Masterplanning
Interiors
Graphics
Branding

5plus