

# 2 + 3 Angel Square

NOMA

NMA Update report  
September 2023

## 2&3 Angel Square Planning

# Summary of NMA Updates:

2 & 3 Angel Square was submitted for planning approval in July 2022 and in August, further refinements to the facade approach, following input from officers was presented.

Consent was granted in October 2022.

A number of design changes across the scheme following further design developments have been implemented to the public realm, minor internal changes in layout and a proposed reduction in building height of 200mm per typical floor level with minor amendments to the sill profile and aluminium finishes.

The justification of these changes is as follows:

- Architecturally we believe both buildings have maintained the same façade intent as per the original application. The façade strategy was developed to allow the elevational variation to be created at every floor.
- The building façade pattern shifts at every floor providing a balance of solid and glass to meet differing environmental performance requirements and to create interest, internally and externally and promote visual engagement.
- The gradation and finish of the cladding will ensure the terracotta elements will be read as the primary façade element. We believe the 'horizontal emphasis' is no more or less emphasised than the proposal previously submitted, as both sill and terracotta cladding profiles remain the same in depth and width on plan as the consented scheme all be it slightly reduced in height. for the terracotta and with a more consistent aluminium finish to the sills in line with the frames of glazing.
- The primary driver for the reduction in building height has been the omission of what is essentially unnecessary additional building fabric and volume. MEPC have set stringent embodied and in use carbon targets for 2 and 3 Angel Square to deliver a highly sustainable development to Manchester City Centre.
- As part of this exercise a thorough assessment was undertaken by the design team during the detailed design stage to assess the requirement for 4m floor to floor heights. A preferred structural concrete frame solution was arrived at that minimised structural depth, minimised embodied carbon in superstructure and for ceiling mounted servicing solutions, reduced external and internal fabric quantities whilst maximising future internal fit out flexibility. Above industry standard clear floor to ceiling heights have been maintained to improve the

internal environment and keep natural daylight levels high to reduce artificial lighting requirements. The height reduction in extent of glazing from the original proposal helps further reduce the extent of cooling energy required.

- Cundall have carried out an initial study that assesses the embodied carbon benefits from reducing typical floor heights. The study suggests for 2 Angel Square a decrease of 5% overall carbon intensity of the building per floor if the height is reduced by 20cm each floor and a total 9kgCO<sub>2</sub>e/m<sup>2</sup>. For 3 Angel Square this is a decrease of 6% overall carbon intensity and a total of 9kgCO<sub>2</sub>e/m<sup>2</sup>. It also creates a reduction in total building emissions during operation for both buildings.

2&3 Angel Square Planning  
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*\*Planit information\**

4.0

Summary

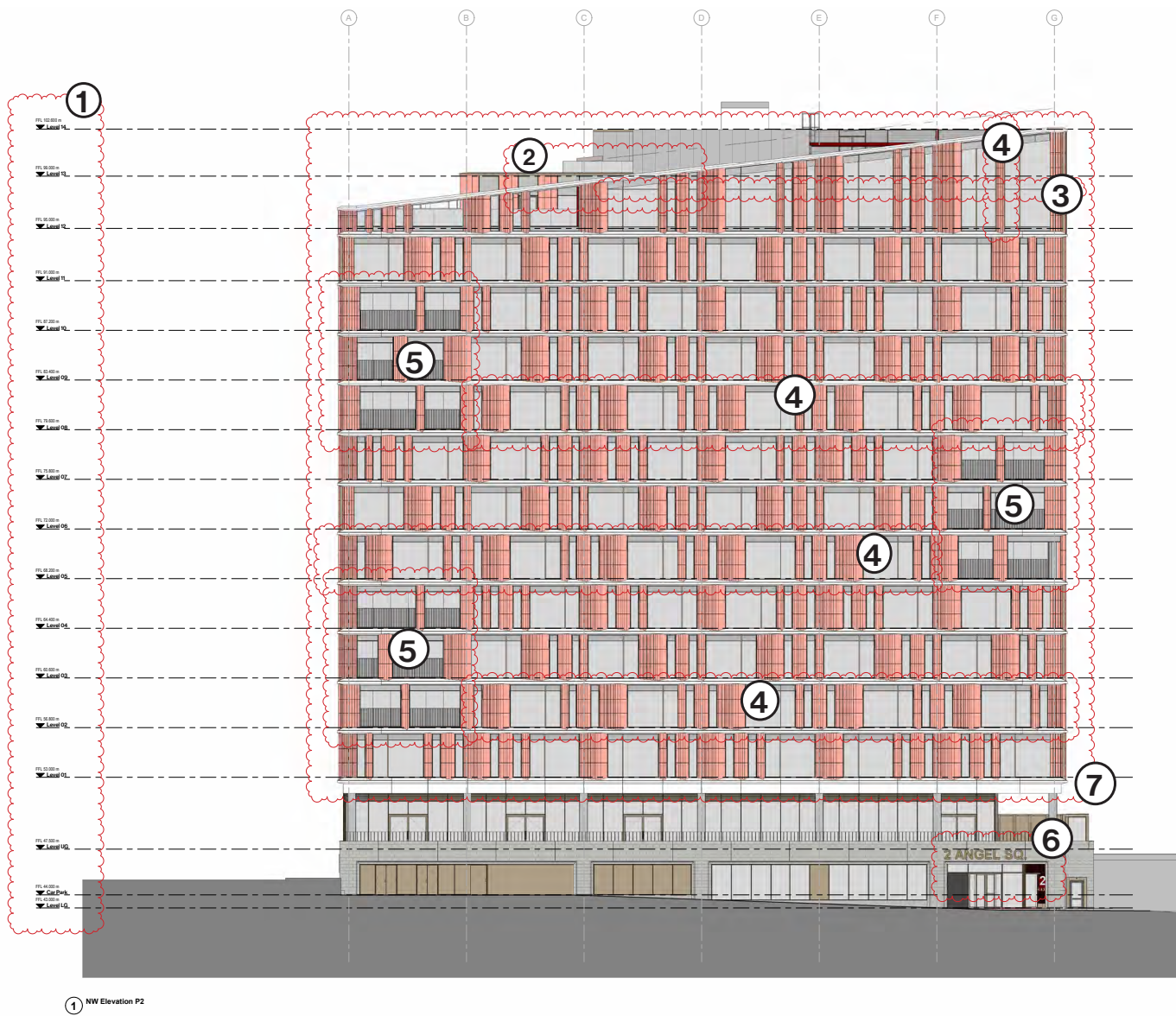
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|  |  | 14 |
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# 2&3 Angel Square Planning Plot 2 - Elevation Comparison



1. Floor to floor heights for typical office floors reduced to 3.8m (Planning: 4m)
  - Overall building height reduced 2.4m to top of parapet.
  - Planning: 105.0m
  - Sept: 102.6m
2. L13 Balustrade extents reduced.
3. Transom line added to L12 glazing through double height space. Reduced single pane glazing size.
4. Minor adjustments to Terracotta facade panel position. Sizes to remain as consented scheme with minor changes to positioning.
5. Balustrade to winter gardens raised to 1500mm above FFL
6. Indicative building signage added
7. Sill top surface finish updated



# 2&3 Angel Square Planning Plot 2 - Detail Bay Study

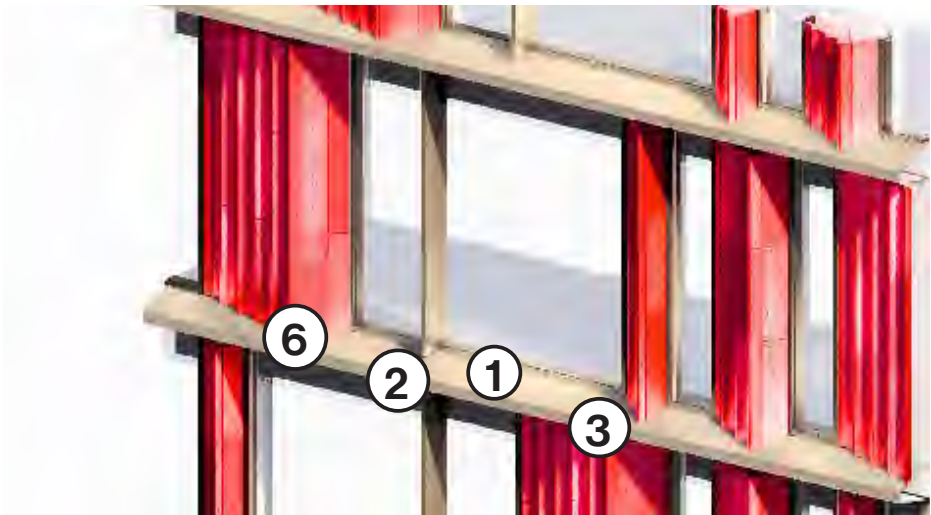


Detailed study bay of 2 Angel Square  
(consented proposal 4000mm flr - flr)

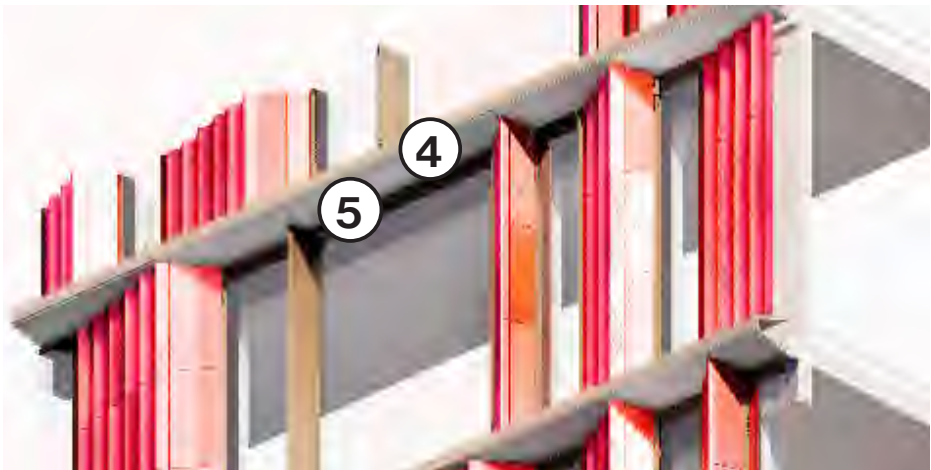
- Reduction in floor to floor to floor height. This has come from a reduction in the terracotta panel heights by 200mm
- Extent of aluminium. The profile, pitch and overall dimensions remain the same as the consented scheme, but the extents of the aluminium top surface now continues down the leading edge in place of a visible GRC edge shown on the consented scheme.
- The finish of the aluminium top surface has been adjusted to replicate the bronze tone of the glazing frames to reduce the amount of material variation in the facade.
- Reduction in visible GRC - now seen only on the underside of the sill (5) on isometric views (far right).



Detailed study bay of 2 Angel Square  
(Reduced building height, 3800mm flr - flr)



Sill detail from above

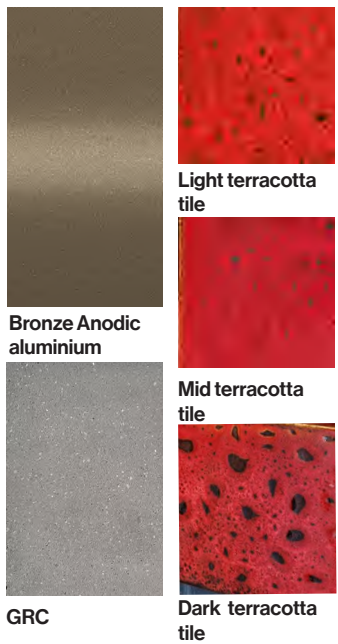


Sill detail from below

Material samples

## KEY

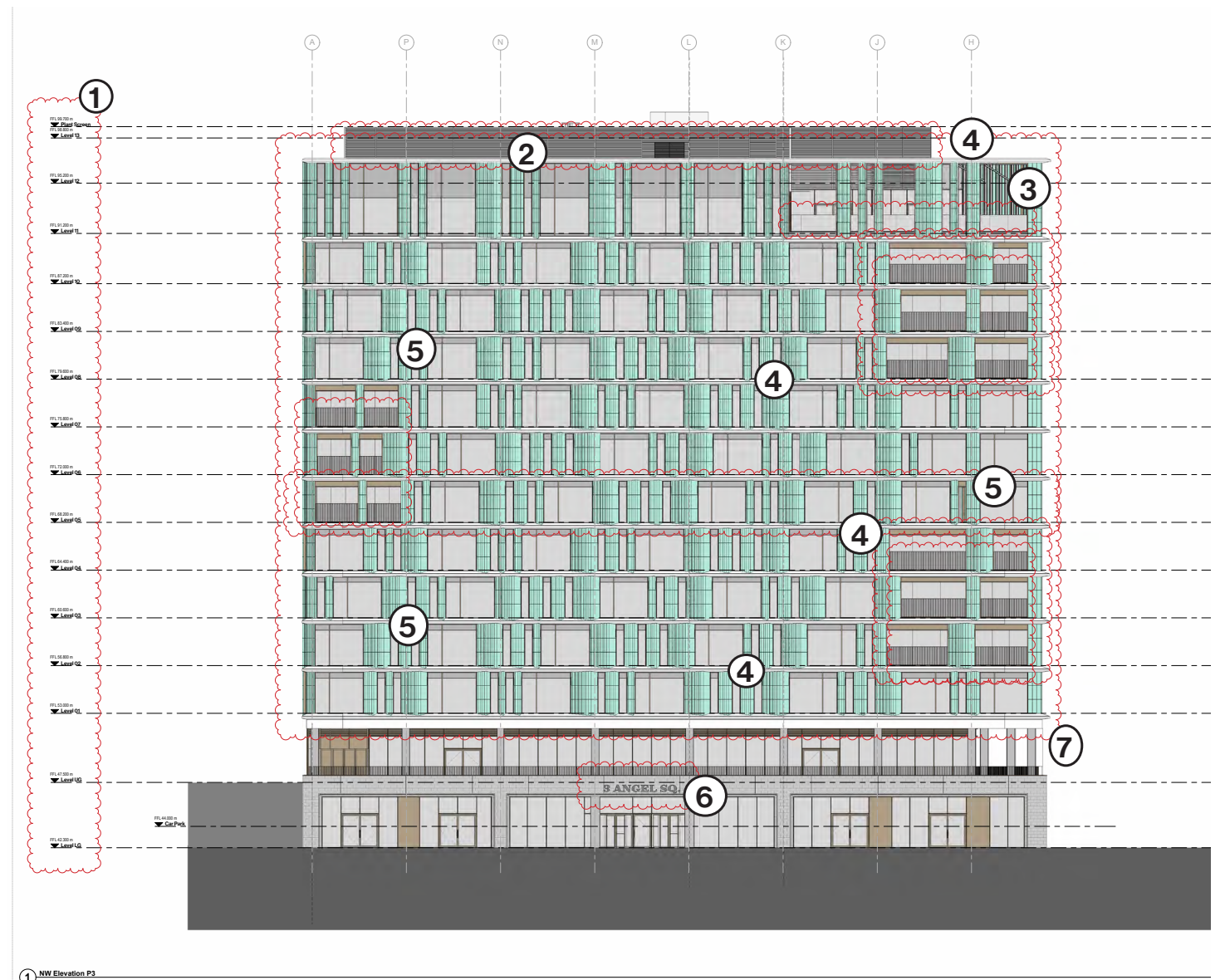
1. 25 degree pitch to top surface of sill to throw off rainwater.
2. Over sailing PPC anodic bronze aluminium sill to top surface of sill.
3. Reduced extent of GRC to vertical face of sill.
4. Continuous recessed drip detail to underside of soffit.
5. Angled, mid grey flecked GRC underside to sill.
6. Lapped joint to PPC anodic bronze aluminium sill



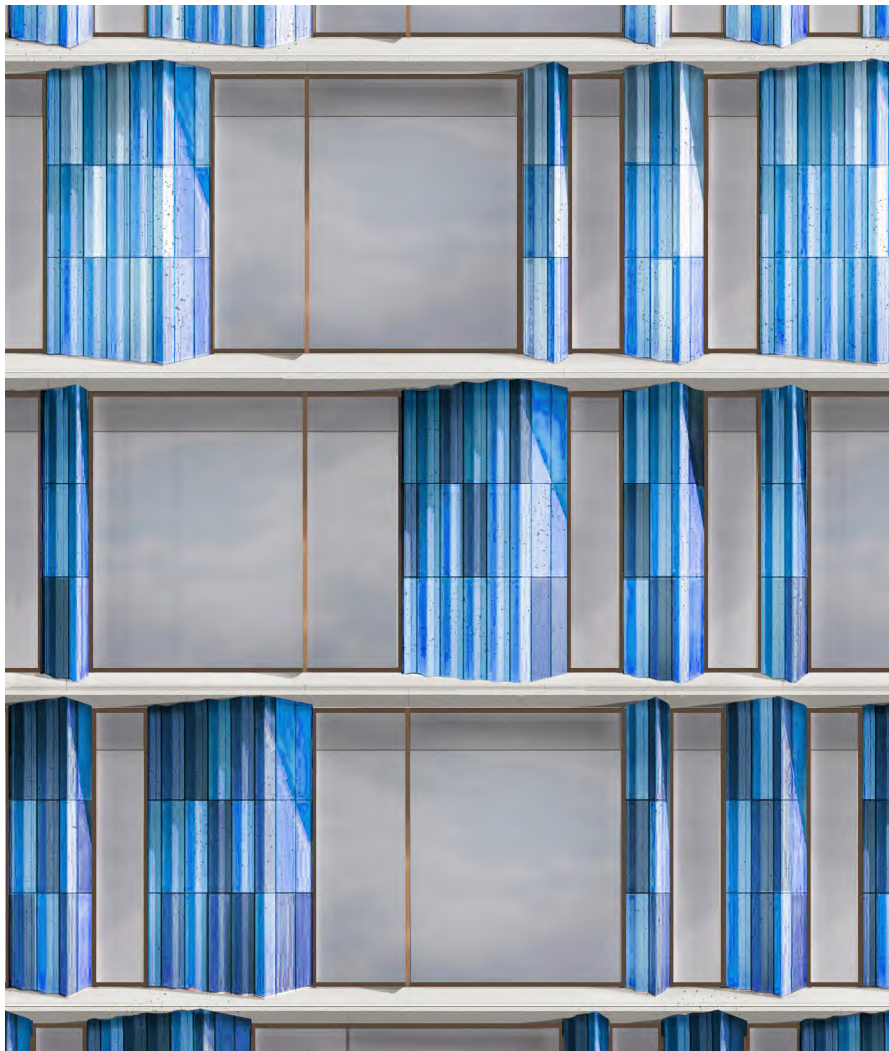
### Plot 3 - Elevation Comparison



1. Floor to floor heights for typical office floors reduced to 3.8m (Planning: 4m)
  - Overall building height reduced 1.3m to top of plant louvre screen
  - Planning: 101.0m (Plant Screen)
  - Sept: 99.7m (Plant Screen)
2. Louvred plant screen to L13 external plant area increased in height by 900mm
3. Minor adjustments to Terracotta facade panel position. Sizes to remain as consented scheme with minor changes to positioning
4. Balustrade at L11 changed to glazed panels (Planning: metal balusters)
5. Balustrade to winter gardens raised to 1500mm above FFL
6. Indicative building signage added
7. Sill top surface finish updated



# 2&3 Angel Square Planning Plot 3 - Detail Bay Study

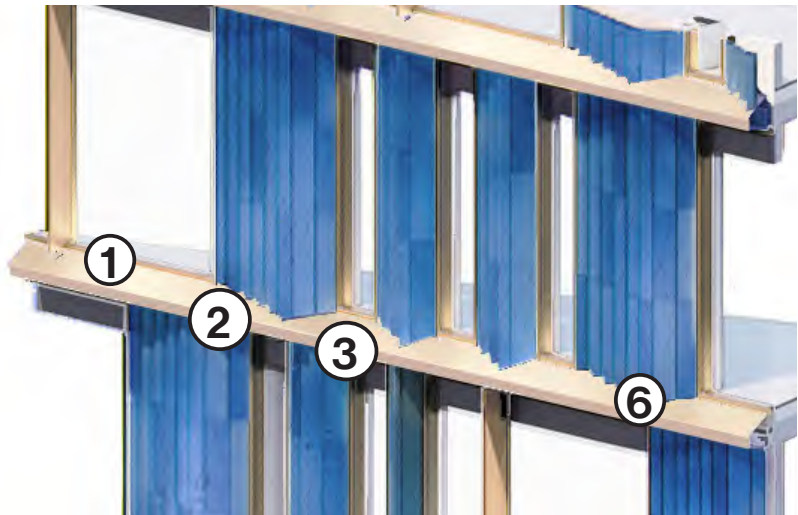


Detailed study bay of 3 Angel Square  
(consented proposal 4000mm flr - flr)

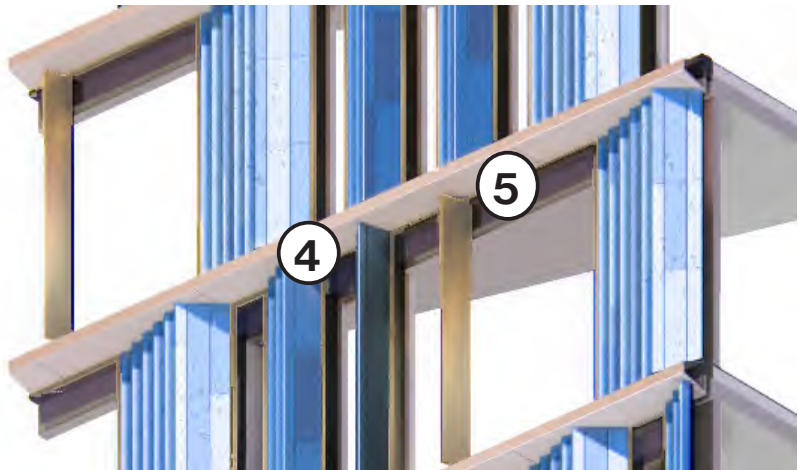
- Reduction in floor to floor to floor height. This has come from a reduction in the terracotta panel heights by 200mm
- Extent of aluminium. The profile, pitch and overall dimensions remain the same as the consented scheme, but the extents of the aluminium top surface now continues down the leading edge in place of a visible GRC edge shown on the consented scheme.
- The finish of the aluminium top surface has been adjusted to replicate the bronze tone of the glazing frames to reduce the amount of material variation in the facade.
- Reduction in visible GRC - now seen only on the underside of the sill (5) on isometric views (far right).



Detailed study bay of 3 Angel Square  
(Reduced building height, 3800mm flr - flr)



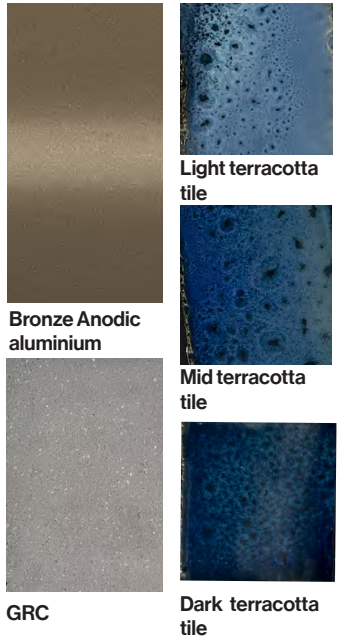
Sill detail from above



Sill detail from below

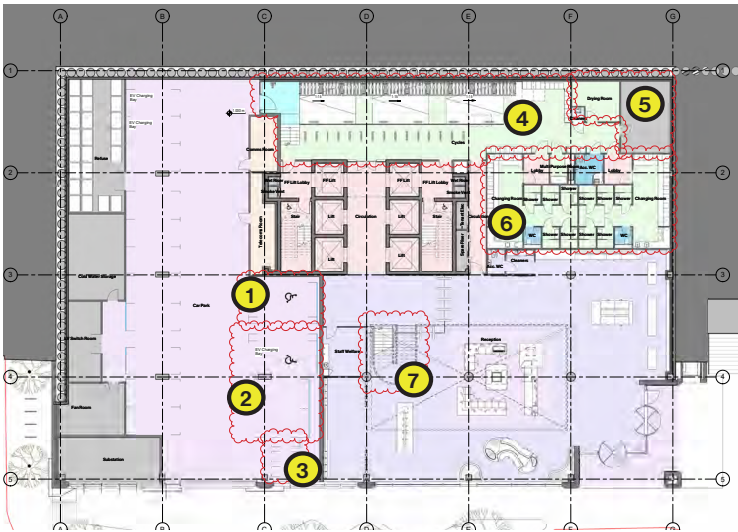
Material samples

- KEY**
1. 25 degree pitch to top surface of sill to throw off rainwater.
  2. Over sailing PPC anodic bronze aluminium sill to top surface of sill.
  3. Reduced extent of GRC to vertical face of sill.
  4. Continuous recessed drip detail to underside of soffit.
  5. Angled, mid grey flecked GRC underside to sill.
  6. Lapped joint to PPC anodic bronze aluminium sill

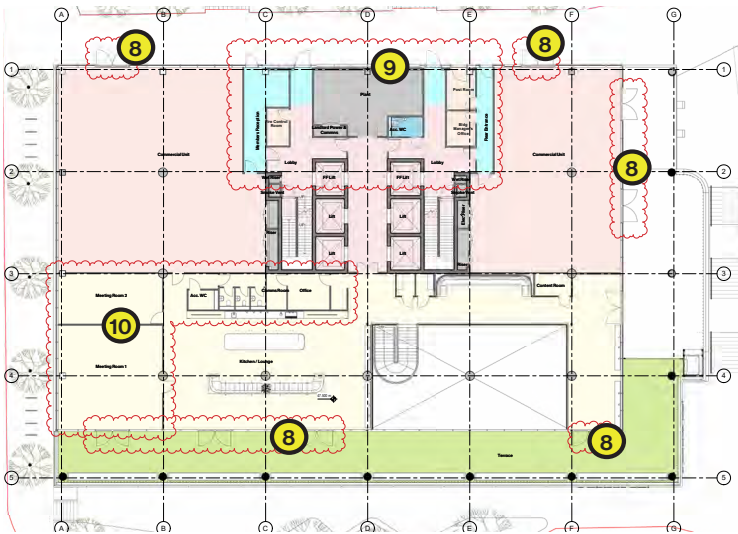


# Plot 2 - Internal Arrangement update

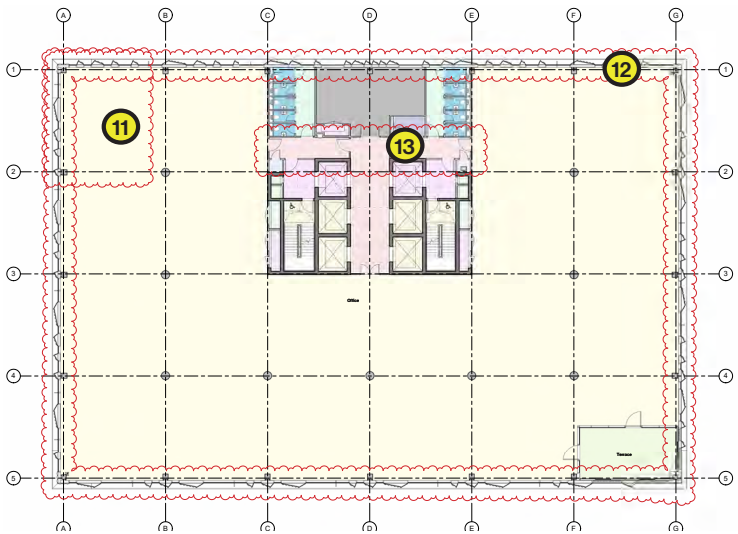
1. Car Park - Layout adjustment. Generator room omitted. Area marked for potential 'Future Tenant Generator Zone' if required.
2. Standard parking spaces allocated as E.V. Parking Spaces (1No Accessible, 2No Typical)
3. Motorcycle parking added: 3No Spaces
4. Cycle store - Layout adjustment. Number of cycle spaces reduced to 108No Total. (Planning: 122)
5. Pump Room increased in size. 1No Drying room omitted.
6. Changing room layout adjusted.
7. Internal Circulation stair relocated
8. External doors to Thread street & Terrace area, handed to open out.
9. Arrangement adjustments to back of house area.
10. Internal layout updated to include function rooms and support facilities
11. Winter gardens omitted from NE/SE corners at levels 5, 6 & 7.
12. Envelope construction updated
13. Typical floor core arrangement updated
14. External wall extended to create lobby for L12 terrace
15. Lobby arrangement updated
16. Extended roof area due to wall repositioning at L12
17. Roof slab locally dropped over WCs to align with sloping profile on SE elevation
18. Riser & AOV vent raised to top of internal plant area to avoid clashes
19. Louvred plant screen relocated - External plant area reduced
20. Location of PV panels relocated to sloping roof at NW corner
21. NIA areas updated LG - L12: 20,718.1m<sup>2</sup>/ 223,007 ft<sup>2</sup>



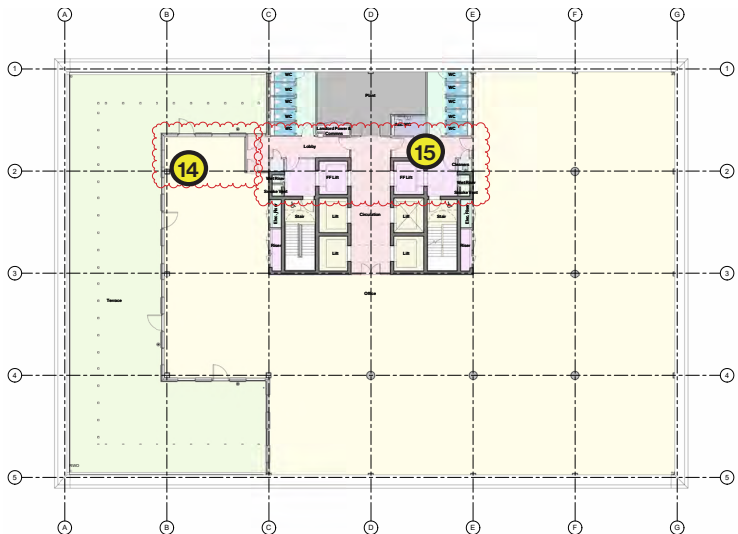
Detailed study bay of 2 Angel Square -Base



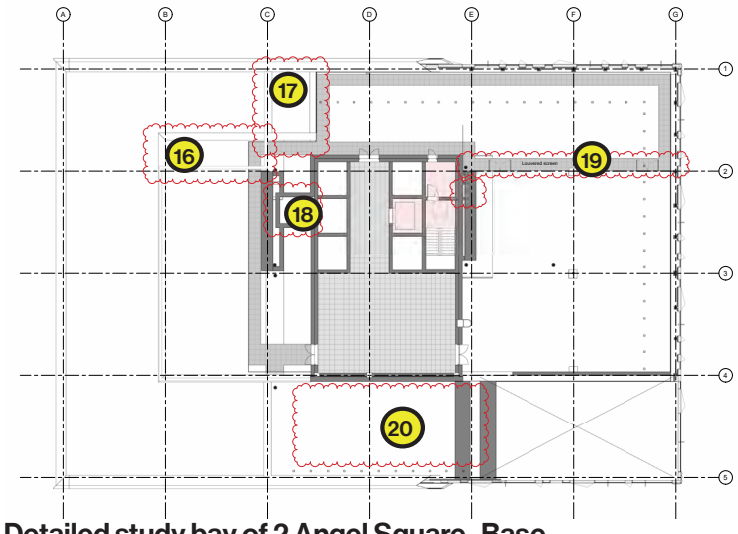
Detailed study bay of 2 Angel Square -Base



Detailed study bay of 2 Angel Square -Base



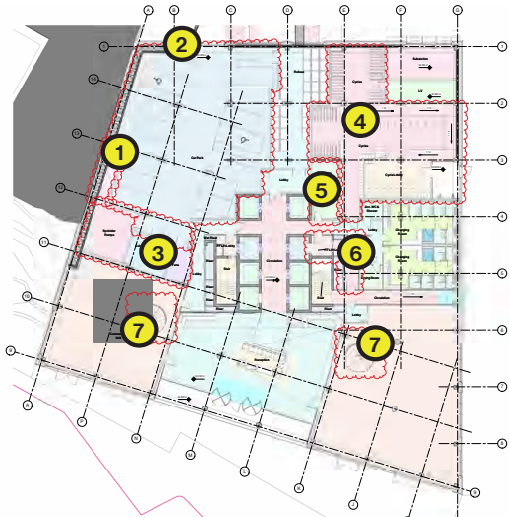
Detailed study bay of 2 Angel Square -Base



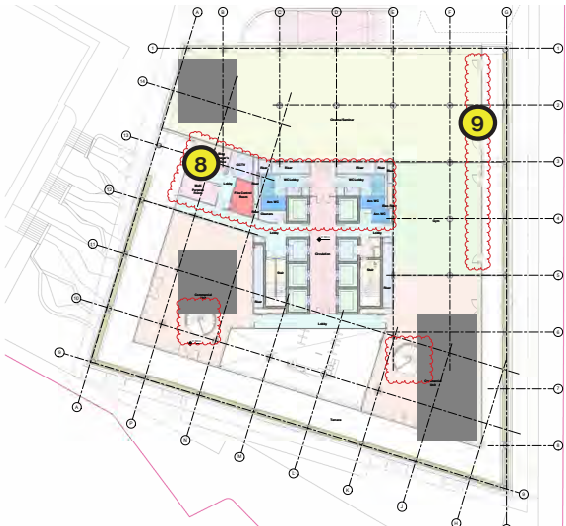
Detailed study bay of 2 Angel Square -Base

# Plot 3 - Internal Arrangement update

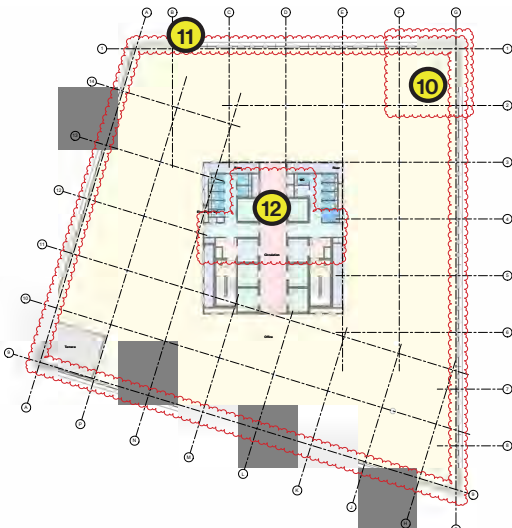
1. Pump enclosure & access zone added in car park.
2. Car park arrangement changed. 1No standard parking bay omitted. 14 Total (15No at Planning)
3. Cold water tank & allocated space for tenant generator re-positioned.
4. Cycle store - Layout adjustment. Number of cycle spaces reduced to 131 No Total. (Planning: 148)
5. Comms room & Telecoms room added
6. Fire fighting lift lobby arrangement adjusted to directly link with final escape route to Miller Street from stairs in the core.
7. Internal Circulation stair relocated
8. Changes to core layout & additional external door added to new post room on NE elevation.
9. External doors updated from double to single doors
10. Winter gardens omitted from NE & SE corners at levels 5,6 & 7.
11. Updated envelope construction
12. Typical core arrangement updated.
13. External wall to terrace updated to enclose column
14. Structural posts and frame added behind tall facade parapet on the perimeter of terrace
15. L12 internal plant area adjusted with increase in area to the NW up to edge of slab bordering L11 terrace. Area reduced on NE elevation with internal plant move moved back to lift shaft overrun.
16. Roof Slab adjusted bordering terrace to align with column position on L11.
17. Location of PV panels to span across Internal and external plant area
18. NIA areas updated LG - L11: 24,946.4 m<sup>2</sup>/ 268,528 ft<sup>2</sup>



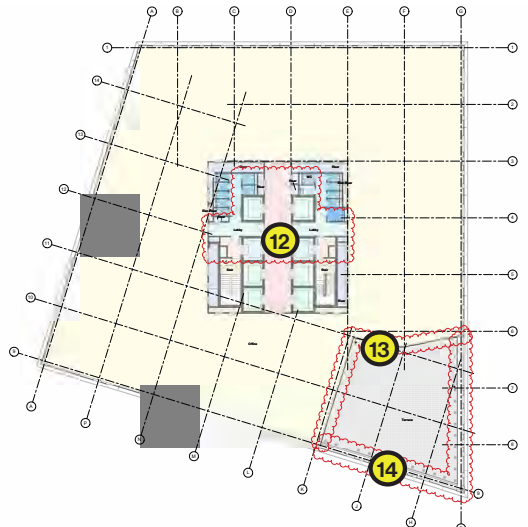
Detailed study bay of 2 Angel Square -Base



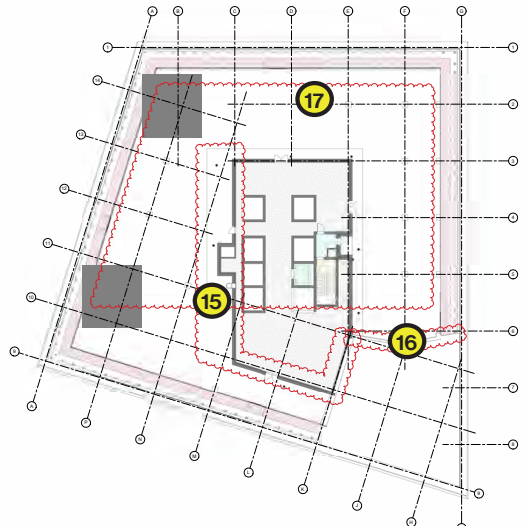
Detailed study bay of 2 Angel Square -Base



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Detailed study bay of 2 Angel Square -Base

## 2 Angel Square Planning Updated visualisation



Visualisation of scheme at time of planning application 07/22 ( showing 4000mm flr - flr)



Visualisation of scheme as of 08/23 showing reduction in building height and capturing proposed scheme changes including desired terracotta colours.

## Planning query Presentation

# Summary

In summary, when taken into consideration against the consented scheme for 2 and 3 Angel Square, we believe these proposed changes are of no detriment to the external façade and architectural language.

A 200mm reduction of each of the typical office floors would not be a legible change to that previously consented and would maintain significant floor to floor heights consistent with contemporary flexible office proposals and ensure the building's proportions remain considered and appropriate.

Minor updates implemented to the public realm, sill finishes and internal changes in layout has refined the building's appearance and functionality for the end user.

The amendments enable significant reductions to the building's embodied carbon content to support Manchester in its sustainability ambitions, help reduce the building's operational energy consumption, and maintain a high quality, flexible and desirable commercial office proposition.



Visualisation showing revised building heights

# CARTWRIGHT PICKARD

**cartwrightpickard.com**

 **@cartpickarch**

 **@cartwrightpickard**

**London Studio**

1 Canal Side Studios  
8-14 St Pancras Way  
London NW1 0QG  
T 020 7554 3830

**Manchester Studio**

Unit 308, Ducie House  
Ducie Street  
Manchester M1 2JW  
T 0161 914 7444

**Leeds Studio**

Studio 4, Cross York Street Studios  
Cross York Street  
Leeds LS2 7BL  
T 0113 360 9444