

THE ZOCHONIS BUILDING

The University of Manchester

Design & Access Statement Project No: 6128 | BSA Project No: 18-047 | Issue No: 900-02 | September 2023



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Tracker

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1.0 Executive Summary

1.1 Introduction

This Design & Access Statement accompanies and supports a planning application to show how the Zochonis Long Term Maintenance (LTM) & Zero Carbon Management (ZCM) project will impact on this existing building.

The technical team was appointed in January 2023 to develop the design to RIBA stage 3 (spatial design). RECOM was tasked to develop the brief for this project which is based on consultee feedback received from the submission of the stage 2 (concept design) report.

During the RIBA stage 3 design, the UoM appointed Simon Connolly (Senior Project Manager) as client representative on behalf of the University of Manchester. Simon's appointment has helped develop the brief and respond to questions raised during the design development.

The brief required the design team to respond to consultee feedback provided at RIBA stage 2, several questions were raised on completion of the stage 2 report. The main difference in brief since the project inception is the King Associates, decarbonisation study. The Zochonis building is currently inefficient, dated and in need of a significant overhaul to achieve the University's ambition of a Zero Carbon Estate by 2038.

The King Associates report also identified that the building's energy consumption can be significantly reduced through a combination of; upgraded roof & insulation, external wall upgrade, LED lighting, ventilation upgrade, air source heat pumps (ASHP), BMS (Building Management System) and solar photovoltaic (PV) panels.



1.0 Executive Summary

1.1 Introduction (continued)

Located on Brunswick Street, the Zochonis Building was built in 1953 and designed by architect brothers J.S. and J.W. Beaumont.

The building itself is named after Sir John Zochonis, initially a scientist at the University and later a British businessman and philanthropist. He was the director of the company, P.Z. Cussons, which now owns numerous well-known healthcare brands.

It is a striking building sat amongst the Science Quadrangle of the Simon, Williamson, Chemistry and Schuster Buildings which were built over a decade later.

The building is predominantly used by the Age and Cognitive Performance Centre for multiple purposes. From sociology lectures to linguistics tutorials, the building sees many students entering its doors every week although since Covid there is the impression that the building is not currently occupied at the same levels pre-pandemic.

Since the recent conversion of Brunswick Street into a university park, the clumsy ramps and stairs which dominated its northern façade have been removed and the adjacent land graded to provide level access for all.



1.0 Executive Summary

1.1 Introduction (continued)

Project history

- Complaint received in 2014.
- Consultants WYG undertook a ventilation survey.
- The conclusion of the M&E condition report confirmed key areas of the building are not compliant with Part F of the building regulations (ventilation).
- Costs of works reported and would form a major project, other FMC (Building surveying, asbestos, fire and electrical) disciplines forming LTM.
- Stage 2 report prepared in 2018 by Bowker Sadler Architects (BSA).
- Decarbonisation Feasibility Study October 2022.
- Project re-establishment October 2022, technical team commence stage 2 report and design.
- The technical team submits the RIBA stage 2 (concept design) report & drawings January 23.
- Feedback is received from consultees mid-January 23.
- The technical team is instructed to progress with the RIBA stage 3 (spatial design) report & drawings.
- Appointment of Simon Connolly (Senior Project Manager – UoM).
- Hydrock (fire engineers) provides technical guidance during stage 3 design.
- The technical team presents slides at the UoM workshop presentation meetings held on 17/01, 02/03 and 17/04.
- The technical team attends a planning workshop with MCC & Paul Butler Associates 07/03.
- The technical team attends an on-site planning meeting with Tony Mitchell & Paul Butler Associates 17/05.
- The technical team attends an on-line planning meeting with Tony Mitchell & Paul Butler Associates 25/07 to discuss window proposals.
- The technical team presents to the Estates Team at a Stage 3 Report Review 26/07.
- The technical team attends an on-line planning meeting with Tony Mitchell & Paul Butler Associates 30/08 to discuss amended window proposals.



1.2 Architectural Overview

The impact of the LTM/ZCM works affect the Zochonis Building both internally and externally. For the purposes of this planning application this manifests itself in three main external proposals:

Roof Replacement – this includes a full strip off of existing roof coverings (i.e. not an overlay) and replacement with a system that has the ability to incorporate PV panels within its build-up to avoid any third party issues with a future PV installation compromising any new roof covering. Also to include permanent edge protection (and not a mansafe system).

New Roof Mounted Plant – Various locations for new Air Source Heat Pumps (ASHP) have been considered:

- A combined ASHP 'farm' externally located to serve both Zochonis & Simon Building
- An external ASHP 'farm' exclusively for Zochonis located in the current location of the cycle store
- Mount the ASHP's on the roof of the Zochonis Building

In pursuing the latter, we have had the roof structurally assessed and it is considered feasible to locate the ASHPs (and AHUs) on the areas of flat roof adjacent to the existing plant room. We have taken this further and suggested that the existing low height plant room wings are demolished to make space for the ASHP/AHUs and then hide them from view with an architectural screen to replace the walls of the former plant room wings.

New External Escape Stair – The notion of an additional external staircase has been discussed since the original Stage 2 Report was evolving in late 2018. A report from Jeffrey Smith (UofM Fire Officer at the time) noted the absence of a means of escape to the south-west wing of the building at 1st & 2nd floors and following a further meeting with Phil Unsworth the notion of an additional staircase dealing with the shortfall in means of escape was agreed. BSA explored options for locating this internally and externally. The latter solution was deemed to be more practical from a buildability perspective – subject to planning approval.

For Stage 3, an external Fire Consultant was been appointed (Hydrock) to carry out an independent review of the Zochonis Building and their findings confirm that an additional means of escape to the south-western corner of the building is required.

2.0 Brief

The premise of the Zochonis LTM/ZCM is two-fold. Firstly, it is to ensure that this important University asset can continue to serve the needs of both students and staff alike for the next few decades and beyond. It does this by review and renewal of selected Long Term Maintenance elements of the building, in particular the roof coverings.

Secondly it is to ensure that the building meets the Zero Carbon Management aspirations of the University as comprehensively as it can. To this end and in recognition of the fact the building is now 70 years old it is understood that the building could never meet these targets as comprehensively as say a new build. The elements that will be upgraded include:

- Roof replacement works including access and safety requirements
- Inspecting and cleaning brickwork & stone (including railings at podium level)
- Inspecting, cleaning/replacing rainwater pipes & outlets
- Asbestos Review
- Upgrade existing ventilation to WCs
- Fire strategy review, new fire detection and upgrade Fire Panel
- New wiring throughout including containment
- Upgrade existing WCs where identified
- Boxing in of LTHW pipes where newly insulated
- Redecorate areas affected by the above works

Plus ZCM elements of work summarised as:

- Photovoltaics to areas of flat roof
- Upgrade to the external walls to improve thermal performance
- Edge protection to areas of flat roof
- Strip out of all existing MEP services
- Provision of new LED lighting, fire & security systems (inc BMS) throughout
- New ventilation systems throughout
- Air source Heat Pumps, radiators and BMS controls
- Redecorate areas affected by the above works

3.0 Involvement & Consultation

Planning

Further to the appointment of Paul Butler Associates (Planning Consultants, Salford). RECOM and Bowker Sadler Architects attended a pre-application meeting to discuss proposals on Tuesday 7th March. Since this meeting, a planning application checklist has been provided highlighting additional surveys required to validate the application. Manchester City Council planning department advised the planning application can be determined within 13 weeks, subject to providing supporting documents to validate the application. The submission of the planning application and gaining approval form part of the critical path of this project.

A meeting with the planner (Tony Mitchell) was held on site on the 17th May and we were able to go through those elements of the proposed work that would require planning approval. Notably: The external staircase and the works to the roof. Our Planning Consultant Paul Butler Associates were also in attendance and their summary notes of the meeting are included in this document.

A further meeting with the planner (Tony Mitchell) was held on Teams on the 25th July and we were able to go reiterate those elements of the proposed work that would require planning approval.

Design

The design positively responds to and answers queries raised as part of the stage 2 consultee feedback. Architects (Bowker Sadler) has developed spatial drawings with consideration of structural, mechanical & electrical services and planning constraints. There are no major changes to the external character of the building apart from the Means of Escape (MoE) staircase, this is proposed on the southeast elevation adjacent to the Simon building.

3.0 Involvement & Consultation (continued)

The design team, with the assistance of the University of Manchester arranged a meeting with MCC Planning Officer Tony Mitchell via Teams on the 14th December 2022. The proposals that affected the external appearance of the building were discussed and the conclusion was for Bowker Sadler Architecture to issue a resume of the proposals via email such that Tony Mitchell could review and advise upon a Validation Checklist.

Whilst nothing was forthcoming from the above discussions the University appointed an external Planning Consultant (Paul Butler Associates) and another meeting was arranged with Tony Mitchell and his colleagues from Sustainability and Conservation (Paul Mason). Whilst Tony Mitchell was unable to attend the meeting, useful discussions were had with his colleagues and the design team emphasised the balance to be had between the University's desire to achieve NZC for the building and the external alterations required to be made to the building as a result.

It was agreed for the Planning Consultant to formulate a draft Validation Checklist for discussion and further confirmation.

The following items were considered to require planning approval:

- Any new external staircase
- Positioning of ASHP's on the roof further to alterations to the existing plant room
- Roof top edge protection assumed visible

The following items were considered to come under Permitted Development:

- Photovoltaic arrays proposed to the flat roof areas of the building

The following items were considered NOT to require planning approval:

- Replacement of Flat Roofing system
- Façade cleaning and like for like repairs to corroded boundary railings & stonework

In addition, the Planning Consultant identified the following reports would be needed to supplement any drawings submitted as part of a planning application:

- Design & Access Statement
- Planning Statement
- Heritage Statement
- Ecological Report
- Energy Statement
- Roof Top Plant Supporting Mechanical details and information (ASHPs)
- Ventilation and AHU Mechanical details and information
- Acoustic Report – existing and post-completion
- CEMP – Construction Management Plan and Construction Waste Management Plan
- Glint & Glare Assessment – Subject to further confirmation of PV installation

Of the items listed above that require planning approval, it could be argued that the most contentious is the addition of an external fire escape. We envisage this as being of an 'open' type (i.e. not cladded, roofed or enclosed) and designed and detailed in a manner that is complementary to the existing building (as the examples show) and not unlike the example of the stair added to the AVRO development in Manchester which has recently been shortlisted for RIBA NW Project of the Year 2023. The University will need to adopt a maintenance regime for the external stair including keeping it free from snow and ice in winter.

The CEMP will involve discussion by our Principal Designer with a potential Principal Contractor to deliver a robust CEMP.

3.0 Involvement & Consultation (continued)

A meeting was arranged by the University with the planners for the 17th May and this took the form of a site visit / walkround in order to discuss the proposals in more detail.

A summary of these discussions is presented below:

The Scope as proposed was presented by Bowker Sadler:

- An additional means of fire escape was proposed in the form of a new external stair core using existing windows which would be enlarged as fire doors
- Air Source Heat Pumps (ASHP) were proposed on the roof after removal of brick wings to the existing roof top plant room. The new ASHP units are proposed to be screened by terracotta panels
- Photovoltaics (PV) arrays are proposed on the roof
- Roof top edge protection fencing is proposed
- Additional ventilation grills were proposed where required

Observations by Tony Mitchell – Planning Officer:

- Noted that MCC regarded the building to have the status of a non designated heritage asset and made the following comments:
- Confirmed MCC planning authority are committed to Zero Carbon and the reduction of mechanical plant should be considered during design development.
- Requested that any roof guarding system should be the minimum required for operational purposes and designed so as not to be visually prominent.
- Acknowledged the difficulty in altering the internal layout of the building to accommodate a new fire escape and that should external provision be the only option available, requested the architect design an attractive fire escape which would be sympathetic to the building.

- Noted that grills may be acceptable to MCC in a limited number of circumstances, for example, where technical requirements demanded localised provision.
- Was supportive of PV's noting a glint and glare assessment would be required.

It is apparent therefore that when the time comes to submit a planning application for the work, justifications will be needed to supplement the drawings and reports as identified – particularly in the case of the external stair and the rooftop plantrooms.

A further meeting with the planner (Tony Mitchell) was held on Teams on the 25th July and we were able to go reiterate those elements of the proposed work that would require planning approval.

Ahead of a Planning Application submission, a further meeting with the planner (Tony Mitchell) was held on Teams on the 30th August and we were able to go reiterate those elements of the proposed work that would require planning approval. Discussions around modifying the existing windows were had (to increase natural ventilation/airflow into the building) and it was suggested that these do not form part of any planning application.

3.1 Stakeholder Engagement

The University of Manchester Stakeholder Team as formally identified (current):

- | | |
|---------------------------|--------------------------------------|
| • Stuart Lockwood (SL) | Head of Projects |
| • Brad Murphy (BM) | Project Mechanical & Energy Engineer |
| • Darren Leonard (DL) | Principal Electrical Engineer |
| • Mark Henry (MH) | Principal Compliance Manager |
| • Paul Britton (PB) | Principal Building Surveyor |
| • Russell James (RJ) | Principal Fire Officer |
| • Darren Stephens (DS) | ITSD (Telecoms) |
| • Gary Rowe (GR) | Security Services Manager |
| • Simon Atkinson (SA) | Waste Management |
| • Chris Winterbottom (CW) | Faculty Estates Team |
| • Lyn Fleming (LF) | Asbestos Team |

Additionally, we have engaged with the following key members of the U of M Estates team:

- | | |
|--------------------------|---|
| • Joanna Broadhurst (JB) | Senior Project Manager - Projects Group |
| • Brent Wills (BW) | Professional Services Unit Manager |
| • Simon Connolly (SC) | Senior Project Manager - Projects Group |
| • Alex Foley (AF) | Deputy Head of Building and Energy Management |
| • Peter Murray (PM) | Principal Energy Engineer |
| • Phil Unsworth (PU) | Fire Officer (prior to Stage 2 Update) |
| • Tony Small (TS) | Mechanical and Energy Team |
| • Chris McGreavy (CMC) | Faculty |

Key to Present: As per acronyms above plus:

- | | |
|------|--|
| RCM | Recom |
| BSA | Bowker Sadler Architecture |
| DSSR | DSSR MEP |
| KA | King Associates |
| AA | AA Projects |
| WML | WML Structural |
| HYD | Hydrock Fire Engineering |
| PBA | Paul Butler Associates (Planning Consultant) |
| MCP | Manchester City Council Planning Authority |

Stakeholder Engagement to date can be summarised overleaf:

Stage	Date	Format	Present	Discussion
1	Jan 2017	email	TS,DS,PB,PU, GR,LF,SA + AA	Initial Stage 1 Briefing for AA Projects Cost Report including various emails from UofM Depts: ME Team, ITSD, BuildingTeam, Fire Officer, Security, Asbestos, Waste
2	April 2018	email	LF	Observations on asbestos status of Zochonis Building and recommendation for further R&D Survey
2	Aug 2018	email	BSA, PB	BSA produce document outlining perceived Stage 2 Scope for confirmation by U of M
2	Dec 2018	email + site visit	BSA, PU	Observations on shortfalls in Fire Safety and on-site meeting to discuss potential locations for new escape stair
2	Jan 2019	email	BSA/RCM	BSA/RCM Issue Stage 2 Report to U of M Stakeholder Team
2 Update	Sept 2022	email	BSA, MH	Issue of asbestos re-inspection report from Principal Compliance Manager
2 Update	Oct 2022	email	BSA, MCP	First attempt to solicit feedback from MCC Planning
2 Update	Nov 2022	email	BSA, MCP	Second attempt to solicit feedback from MCC Planning
2 Update	Nov 2022	email	BSA, RC	BSA/RCM Issue DRAFT Stage 2 Update Report to U of M Stakeholder Team
2 Update	14 th Dec 2022	Teams meeting	BSA, RCM, SL, MCP	U of M schedule meeting with MCP to discuss Planning Issues for Zochonis Project
2 Update	14 th Dec 2022	email	BSA, MCP	Information issued to MCP as requested further to meeting held on 14 th December 2022
2 Update	22 nd Dec 2022	email	BSA, RCM	BSA/RCM Issue FINAL Stage 2 Update Report to U of M Stakeholder Team
2 Update	9 th Jan 2023	email	RCM, BSA	Team receive notice from U of M via RCM that we are to proceed to Stage 3
2 Update	13 th Jan 2023	presentation	RCM	RCM present slideshow summary of Stage 2 Update Report to U of M Stakeholder Team
2 Update	18 th Jan 2023	email	RCM	RCM provide feedback and comments from U of M Stakeholder Team
3	25 th Jan 2023	on-site meeting	RCM, BSA, AA, KA, DSSR, SC, CMC	Technical meeting arranged with the consultant team and Simon Connolly and Christopher McGreavy to discuss the project (inc. occupancy figures)
3	27 th Jan 2023	email	BSA, MCP	Third attempt to solicit feedback from MCC Planning
3	2 nd March 2023	workshop part 1	RCM, BSA, AA, KA, DSSR, SC, BW, PB, AF, JB and others	LTM Capital Works Programme – MEP & Building Fabric Design Strategies Workshop. RCM + BSA presented a succinct version of the project proposals
3	7 th March 2023	meeting	RCM, BSA, SC, JB, PBA, MCP	Meeting with newly appointed Planning Consultant and MCC Planning Dept to discuss impending Stage 3 Planning Applications and confirm Validation Checklists

[illegible]

4.0 Sustainability Statement

The existing systems and building fabric at the Zochonis Building are currently inefficient, dated and in need of significant overhaul/upgrade in order to achieve the Universities ambition of a Zero Carbon estate by 2038. A key element to this is heat decarbonization which in turn triggers both complementary & supplementary energy/system efficiency improvements.

Over the next two years the following works are crucial to this strategy (overall works to be completed by no later than the end of July 2025) and are crucial to transitioning away from imported gas towards renewable forms of imported electricity:

- Upgraded Roof & insulation – new Bauder roof system (achieves U value of 0.18)
- External Wall Upgrade - with insulated plasterboard (achieves U value of 0.25)
- LED lighting
- Ventilation upgrade(s)
- Air Source Heat Pumps (ASHP) & new secondary heating system
- BMS
- Solar PV panels – 11% contribution

The impact of such changes could be an **80% reduction in carbon emissions**, equating to a saving of 238 tons of Carbon each year with annual energy bills reducing by 31% each year.

The fabric upgrades reduce the primary energy associated with heating by 48%

The transition to an all-electric solution often adds significant loads to the existing electrical infrastructure. DSSR has received confirmation on the existing draw off the substation from the University and don't think we need to upgrade it to accommodate the new M&E provision. However, further calculations will be undertaken as part of stage 4 design development.

5.0 Site Assessment

The Zochonis Building is located within the University of Manchester South Campus to the eastern side of the Oxford Road Corridor. It sits sandwiched between The Simon Building to the west and the Chemistry Building to the east – the latter two buildings forming the Science Quadrangle together with The Williamson Building and the Schuster Building.

Its Northings & Eastings are 53.46605 & -2.2304



CIRCLED ABOVE: LOCATION OF THE ZOCHONIS BUILDING AS IT SITS WITHIN THE UNIVERSITY 'SCIENCE QUADRANGLE'

CIRCLED LEFT: LOCATION OF THE ZOCHONIS BUILDING AS IT SITS WITHIN THE OXFORD ROAD/UPPER BROOK STREET CORRIDOR



Site Assessment (continued)

5.1 Site Analysis

The Zochonis Building is located within the University of Manchester South Campus to the eastern side of the Oxford Road Corridor. It sits sandwiched between The Simon Building to the west and the Chemistry Building to the east – the latter two buildings forming the Science Quadrangle together with The Williamson Building and the Schuster Building.

Across from Brunswick Street (which is now Brunswick Park and closed to vehicular traffic) lies the Roscoe Building so in terms of all 6 buildings that front onto Brunswick Park, none have any Listed Building status.

However, to the south of The Zochonis Building across Dover Street, there are a number of listed buildings including:

- The University of Manchester Faculty of Economic Studies & Social Studies aka The Dover Street Building (Grade II)
- The Holy Name Presbytery (Grade II)
- 323-7 Oxford Road (Grade II)

The Zochonis Building has two main entrances; one from Dover Street (which is not level access) and one from Brunswick Park (which has level access). From our site visits we noted that the Brunswick Street entrance is the most actively used of the two entrances.

The area of hard landscaping to the west of the Zochonis Building is actually a 'deck' to underground accommodation linked to The Simon Building so any new structures founded in this area need to be verified by a Structural Engineer.

In terms of orientation, most of the flat roof areas receive south facing sunlight (which is ideal for Photovoltaic installations) with the exception of the flat roof areas that front on to Brunswick Park which are partly compromised due the shading effect of the east-west sunpath.

Design Concept

The majority of works to be carried out at the Zochonis Building are largely LTM/ZCM and as such form replacements of previously worn elements of fabric or plant e.g. roof replacement, façade cleaning, like-for-like stone repairs, internal MEP overhaul etc. The items that can be considered to be new designs backed by a design concept are as listed below:

New External Staircase – having explored the notion of a new internal staircase to the south-western corner of the floorplan and ruled this out on the grounds of impractical internal alterations and construction feasibility, a new lightweight external staircase is proposed and on balance we believe this is appropriate.

The new stair only needs to provide an escape route for ground, first and second floors and rather than design an enclosed cladded or glazed box, an open external staircase is far less intrusive, and designed in the same language as the existing metal railings at ground level - an open mesh and steel beam stairway fixed to tension rods and suspended from steel PFC channels bolted back to the existing structure.

The new external staircase will appear lightweight and at the appropriate time, larger scale details will confirm its appearance and specification.

Roof Top Plant Room Wings – The existing plant room at 4th Floor Level comprises of a brick-built single-storey central section of circa 196 sq.m that houses the lift room and ancillary plant such as switch rooms and tank rooms. It is connected to the lower floors by a single staircase that connects to the third floor (access restricted). On each of its eastern & western flanks is a brick-built single-storey narrow wing of accommodation each of circa 32 sq.m designated as 'storage'.

6.0 Design Concept

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The new external staircase will appear lightweight and at the appropriate time, larger scale details will confirm its appearance and specification.

Roof Top Plant Room Wings – The existing plant room at 4th Floor Level comprises of a brick-built single-storey central section of circa 196 sq.m that houses the lift room and ancillary plant such as switch rooms and tank rooms. It is connected to the lower floors by a single staircase that connects to the third floor (access restricted). On each of its eastern & western flanks is a brick-built single-storey narrow wing of accommodation each of circa 32 sq.m designated as 'storage'.

The central section will be stripped internally of existing redundant plant and repurposed to contain a number of water storage tanks (for the proposed ASHPs), primary and secondary heat pumps, expansion plant and air handling equipment.

It is further proposed to demolish the two brick wings and replace these with external areas to house the Air Source Heat Pumps (western flank) and Air Handling Units (eastern flank) as the internal heights of the existing wings are only 2.3m in height (1.86m to downstand beams). These new roof top plant areas will be screened by brickwork-coloured metal louvred acoustic architectural screens to give the appearance from street level of the brick wings that are to be replaced. They will have no roof/lid and will thus be exposed to the sky above.

Roof Replacement – Whilst not a new design requiring a concept, the new roof will take on a new look due to the incorporation of Photovoltaic Panels and new Edge Protection to supplement the existing low level parapets. We are proposing that the existing roof is completely stripped of existing coverings and a new Bauder Total Roof System is installed to create a new insulated warm roof. Solar panels can be fitted using an integral BauderSOLAR mounting system and in this way avoids any third party issues of damage to the new roof by installation of a different Photovoltaic Panel system.

The new roof and PV panels will not be visible from street level. However, it may be possible to see the new edge protection and our proposed elevations reflect this.

Facades Generally – A visual inspection has been carried out on the building facades' stonework, brickwork and fenestration, as well as the ground floor railings and the following recommendations are made:

- Brick & Stone Facades – to be cleaned using the proposed DOFF Integra superheated water system – or similar
- Windows – Existing windows to remain and be refurbished & repaired where necessary prior to final clean. The windows also require the restrictors to the upper sash to be modified to allow for a greater opening.
- Railings and Ground Level Parapets – These are to be repaired on a like-for-like basis in accordance with the detailed recommendations included in this report.

7.0 Design Evolution

The development of the design up to the current Stage 3 Planning Application can be summarised as follows:

RIBA Stage 1 (2017)

AA Projects are instructed by the University of Manchester to prepare a Stage 1 budget for the Long-Term Maintenance and upgrade of the Zochonis Building. This followed on from the presentation of a Roof Report dated 12th October 2013 by Bauder Total Roofing. In addition, Fire Safety and Electrical Works were added to the budget as advised by The University of Manchester's Mechanical & Energy Team (Tony Small).

AA Projects issued a Stage 1 Cost Report based upon the above in February 2017 with costs based upon the 4th Quarter of 2016.

RIBA Stage 2 (2018)

Further to the Issue of the Stage 1 Cost Report, Recom Solutions were appointed by the University in 2018 to manage the production of a Stage 2 Report. AA Projects were retained as Cost Consultant and Bowker Sadler and DSSR were appointed as Architects and MEP Consultants accordingly. The Stage 2 report built upon the Stage 1 Cost Report by adding in further improvements to the roof works (including safe access), enhanced means of escape and fire detection, electrical and ventilation improvements and subsequent decorations to make good. Externally, recommendations were made for the cleaning of the external facades and for refurbishing the ground floor railings.

This Stage 2 Report made further investigations into the perceived shortfall in means of escape from the south-west corner of the footplate and further to a meeting with the University Fire Officer, looked at how an additional escape stair could be incorporated to facilitate means of escape for the first and second floors. Bowker Sadler produced outline feasibility plans for an internal staircase and an external staircase with the latter option deemed to be more viable of the two options.

The Stage 2 Report also carried out an assessment of WC provision based upon occupancy numbers provided by the University. The occupancy figures were further split by BSA into office accommodation and teaching accommodation to provide more realistic figures. The assessment concluded there was a shortfall in WC accommodation – particularly for females. It also identified a shortfall in wheelchair accessible WC's in that there should be one at every floor level whereas the current situation only has one at Ground Floor level. It recommended the installation of a gender-neutral WC facility akin to that in the Simon Building.

This final version of the Stage 2 Report was issued to the University in February 2019.

RIBA Stage 2 Revised & Updated (2022)

After almost 4 years since the issue of the previous Stage 2 Report in 2018, the Zochonis Project recommenced again but with a remit to incorporate the findings of a Decarbonisation Study carried out by King Associates in the summer of 2022. The original consultant team + King Associates were thus briefed to update the original report from LTM to LTM & ZCM (Zero Carbon Management).

Further detail was added to the report including:

- The external stair to the south-west wing of the footplate
- Upgraded flat roof proposals including PV installation
- External Wall Thermal Upgrade Proposals
- Provision of LED lighting throughout
- Upgrade of the existing ventilation system
- ASHPs and new secondary heating systems throughout
- Investigations into Salex Funding availability
- Phasing/Decant Strategy to the above
- Programming implications
- Initial discussions with Planning Authority
- Cost plan updated in line with current pricing

7.0 Design Evolution (continued)

The updated report contained a costed 'shopping list' of refurbishment and upgrade works together with a proposed work package delivery strategy broken down by financial year and associated carbon savings.

A new roof survey was undertaken in November 2022 by Bauder and as a result further detail was added to the proposed roof replacement strategy.

The report further detailed a phasing strategy based upon the building remaining in occupation during the works and this was indicated on a quadrant basis by splitting the footplates into 4 parts in plan.

The Updated Stage 2 Report was issued to the University in December 2022.

RIBA Stage 3 Report (2023)

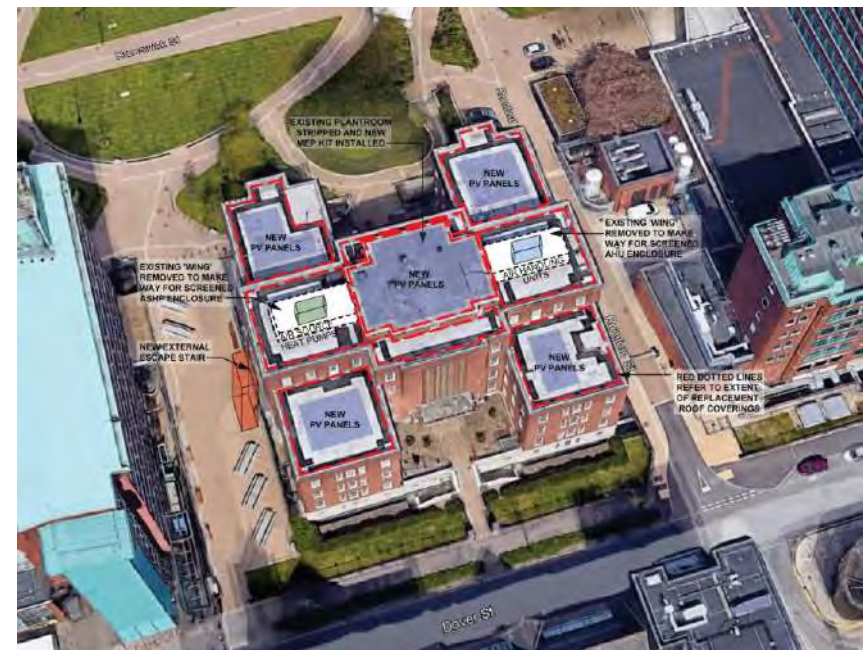
The Stage 3 Report built upon the information issued in the updated Stage 2 Report and adds further detail commensurate with RIBA Stage 3, including the preparation of drawings ready for a Planning Application.

In pursuing this enhanced detail, we have had the roof structurally assessed and it is considered feasible to locate the ASHPs (and AHUs) on the areas of flat roof adjacent to the existing plant room. We have taken this further and suggested that the existing low height plant room wings are demolished to make space for the ASHP/AHUs and then hide them from view with an architectural screen to replace the walls of the former plant room wings.

We have held further discussions with the Planning Authority to discuss those proposals that require planning approval – and an external Planning Consultant has been appointed to assist in this regard.

Additionally, an external Fire Consultant has been appointed (Hydrock) to carry out an independent review of the Zochonis Building and their findings confirm that an additional means of escape to the south-western corner of the building is required.

The Stage 3 Report should be the last written report issued by the consultant team for this project (apart from updates and revisions as required). The consultant team will need a steer from the University Stakeholders identifying those items they wish to take forward, planning applications lodged with the local authority and an instruction to proceed to RIBA Stage 4 (detailed design) which by and large will produce a package of drawings that can be tendered to suitable framework contractors.



ABOVE: SIMPLE OVERVIEW DIAGRAM SHOWING EXTENT OF WORKS TO BE CARRIED OUT TO THE EXTERNAL ELEMENTS OF THE ZOCHONIS BUILDING FOR STAGE 3

8.0 Design Intent: External

Proposed New Staircase to South-West Elevation

The independent fire report commissioned by the University and undertaken by Hydrock has identified a shortfall in the means of escape from the south-western corner of The Zochonis Building. Having discounted the option of installing a new internal escape stair on practicality and buildability grounds, we are proposing an 'open' external staircase which will be set as indicated on our plans – a minimum 1800mm away from any existing wall/window.

The new stair only needs to provide an escape route for ground, first and second floors and rather than design an enclosed cladded or glazed box, an open external staircase as proposed is far less intrusive, and designed in the same language as the existing metal railings at ground level - an open mesh and steel beam stairway fixed to tension rods and suspended from steel PFC channels bolted back to the existing structure.

Where the stair meets the adjacent podium level, we are also indicating extending the existing metal railings to 'enclose' an area to prevent unauthorized access to the staircase during out of hours and also discourage anti-social behaviour. There will be a gate in the railings with an externally rated escape push pad to facilitate escape.

The new external staircase will appear lightweight and at the appropriate time, larger scale details will confirm its appearance and specification.

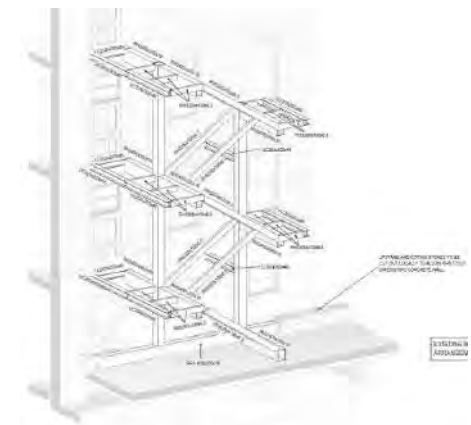
Having run through the main architectural aspects of the report on 26th July 2023, The estates team queried whether we had looked at options to enclose or semi-enclose the external stair proposal.

The public realm area between the Zochonis and Simon buildings is formed on the roof of the Simon building boiler house and as such there is no opportunity to provide a foundation to a new staircase. It will not be possible to support the new staircase on the roof slab, or roof beams of the boiler house.

A load assessment has been carried out to determine the impact of supporting the staircase on the concrete retaining wall. It has been concluded that the existing wall and foundation can provide support, however it will be necessary to spread the load from the staircase over sufficient length to ensure that the structure is not locally overloaded. This may include infilling windows to the plant space below. It will also be necessary to remove some of the load from above by removing the stone coping to the wall and preventing access to some of the paved area around using planting or similar.

WML were concerned about the loading of the new external stair on to the existing structure over the basement below the public realm space, and therefore the additional loading of an enclosure to the staircase is not considered feasible.

RIGHT: IN THE EXCERPT FROM THE STRUCTURAL ENGINEERS FIRE ESCAPE DRAWING, IT IS POSSIBLE TO SEE THAT THE NEW STRUCTURE HAS TO BE SUPPORTED OFF THE EXISTING RETAINING WALL GIVEN THAT THERE IS NO SOLID GROUND FOR FOUNDATIONS EITHER SIDE OF THE WALL. THE INCLUSION OF CLADDING TO ENCLOSE THE STAIRCASE IS THEREFORE CONSIDERED UNFEASIBLE



8.0 Design Intent: External

Roof Top Plant Room Wings

The existing plant room at 4th Floor Level comprises of a brick-built single-storey central section of circa 196 sq.m that houses the lift room and ancillary plant such as switch rooms and tank rooms. It is connected to the lower floors by a single staircase that connects to the third floor (access restricted). On each of its eastern & western flanks is a brick-built single-storey narrow wing of accommodation each of circa 32 sq.m designated as 'storage'.

Going forward, the central section will be stripped internally of existing redundant plant and repurposed to contain a number of water storage tanks (for the proposed ASHPs), primary and secondary heat pumps, expansion plant and air handling equipment.

It is further proposed to demolish the two brick wings and replace these with external areas to house the Air Source Heat Pumps (western flank) and Air Handling Units (eastern flank) as the internal heights of the existing wings are only 2.3m in height (1.86m to downstand beams). These new roof top plant areas will be screened by brickwork-coloured metal louvred architectural screens to give the appearance from street level of the brick wings that are to be replaced. They will have no roof/lid and will thus be exposed to the sky above.

Roof Replacement

Whilst not a new design requiring a concept, the new roof will take on a new look due to the incorporation of Photovoltaic Panels and new Edge Protection to supplement the existing low level parapets. We are proposing that the existing roof is completely stripped of existing coverings and a new Bauder Total Roof System is installed to create a new insulated warm roof. Solar panels can be fitted using an integral BauderSOLAR mounting system and in this way avoids any third party issues of damage to the new roof by installation of a different Photovoltaic Panel system.

The new roof and PV panels will not be visible from street level. However, it may be possible to see the new edge protection and our proposed elevations reflect this. The system we are proposing is of the free-standing 'Kee Guard' type which will be set back from the existing parapets. As such when viewed from street level they will hardly be visible. The highest roof – that to the central plant room, does not benefit from a parapet and the guardrail proposed to this roof will be more visible than those on the lower roofs.



ABOVE: 3D VIEW OF THE PROPOSED BSA EXTERNAL STAIRCASE TO THE SW ELEVATION

RIGHT: IMAGES OF EXTERNAL STAIRCASES USED AS PRECEDENT FOR THE DESIGN OF THE NEW INSTALLATION INCLUDING (TOP-RIGHT) THE AVRO PROJECT – THE CONVERSION OF A GRADE II LISTED MILL BUILDING INTO 31 NEW APARTMENTS – RIBA NW AWARDS 2023





ABOVE: THE EXISTING UN-INSULATED ROOF (WITH PARAPET) ABOVE THE THIRD FLOOR
BELOW: ILLUSTRATION OF THE BAUDER TOTAL ROOF SYSTEM BUILD-UP AS PROPOSED FOR ALL FLAT ROOF REPLACEMENTS AT THE ZOCHONIS BUILDING

Function	Product name	Thickness (mm)	Weight (kg/m ²)
1 Cap sheet	BauderKARAT (Charcoal grey)	5.2	6.0
2 Underlayer	BauderTEC KSA DUO 35	3.5	4.0
3 Insulation (0.15)	BauderPIR FA-TE	140	4.2
4 Insulation attachment method	Bauder PU Tin Adhesive	nominal	0.16
5 Air and vapour control layer (AVCL)	BauderTEC KSD FBS	2.5	2.5
Primer	Varies depending upon substrate type – please refer to specification	nominal	nominal
System Build-up		151.2	16.86

In-depth and up-to-date product specific technical data is available for each element within a system.
Download from our website bauder.co.uk/technical-centre

Warm roof indicative build-up

A 3D cutaway diagram of a roof build-up. It shows five distinct layers: 1. A dark grey cap sheet on top. 2. A lighter grey underlayer. 3. A thick, yellow insulation layer. 4. A thin, dark adhesive layer. 5. A thin, light-colored air and vapour control layer at the bottom. The layers are numbered 1 through 5 in red boxes.

ABOVE: THE EXISTING UN-INSULATED ROOF (NO PARAPET) TO THE PLANT ROOM
BELOW: A PREVIOUS INSTALLATION OF THE BAUDER TOTAL ROOF SYSTEM AND BAUDERSOLAR TOGETHER WITH EDGE PROTECTION



8.0 Design Intent: External (continued)

Facades Generally

A visual inspection has been carried out on the building facades' stonework, brickwork and fenestration, as well as the ground floor railings and the following recommendations are made:

- Brick & Stone Facades – to be cleaned using the proposed DOFF Integra superheated water system – or similar
- Windows – Existing windows to remain and be refurbished & repaired where necessary prior to final clean.
- Railings and Ground Level Parapets – These are to be repaired on a like-for-like basis where required.

Design Intent: Finishes

Although finite details to proposed finishes would be confirmed at Stage 4 design, we would suggest the following finishes for planning:

- New External Staircase – Hot dip galvanised steel with black painted finish
- New Plantroom Screens – 65mm deep acoustic screening louvres using Z-shaped blades finished in United Anodisers UA 120-1 finish (red/brown) to match existing brickwork
- Metal Railings/Stone Plinths – Like-for-Like repair and replacement
- New Escape Doors to New External Stair – White fully glazed door frames with the potential to incorporate astragal bars to match the existing windows
- Rooftop Guarding Rail – Tube for handrails, mid-rails, uprights and counterweight connection is to be galvanised mill finished to the requirements of EN ISO 1461



ABOVE: EXAMPLE OF PLANT ROOM SCREENING. FINISH TO BE ANODISED ALUMINIUM TO UA 120-1 TO MATCH EXISTING BRICKWORK

RIGHT: TYPICAL WHITE GLAZED DOOR FOR FIRE ESCAPE WITH ASTRAGAL BARS

BELOW: 'KEEGAURD' TYPE EDGE PROTECTION FORMED FROM GALVANISED TUBES AND COUNTER-WEIGHT CONNECTIONS



8.0 Design Intent: External (continued)

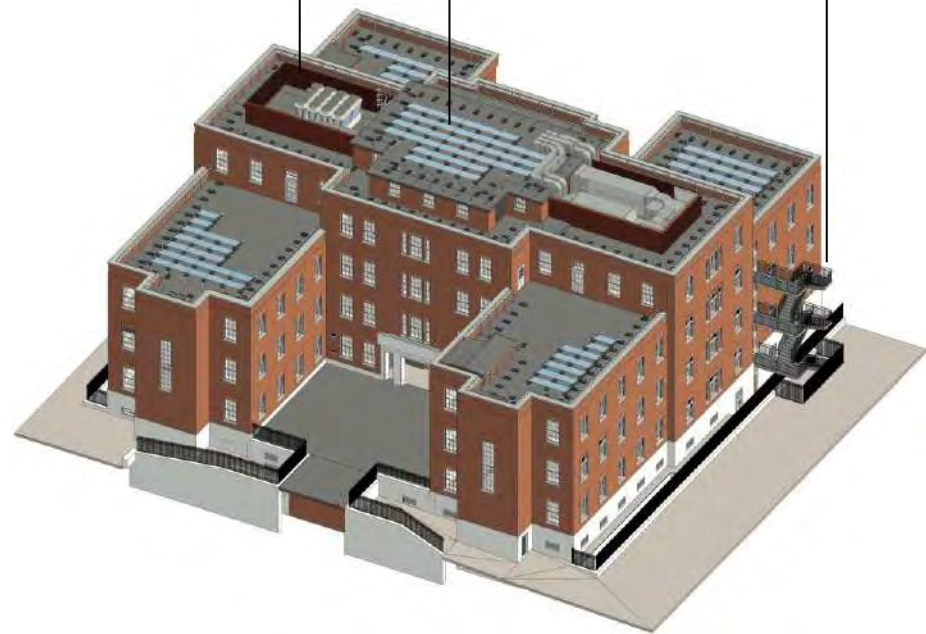
Summary Diagram of proposals for planning application

NEW ROOF COVERINGS WITH
INTEGRATED PV PANELS

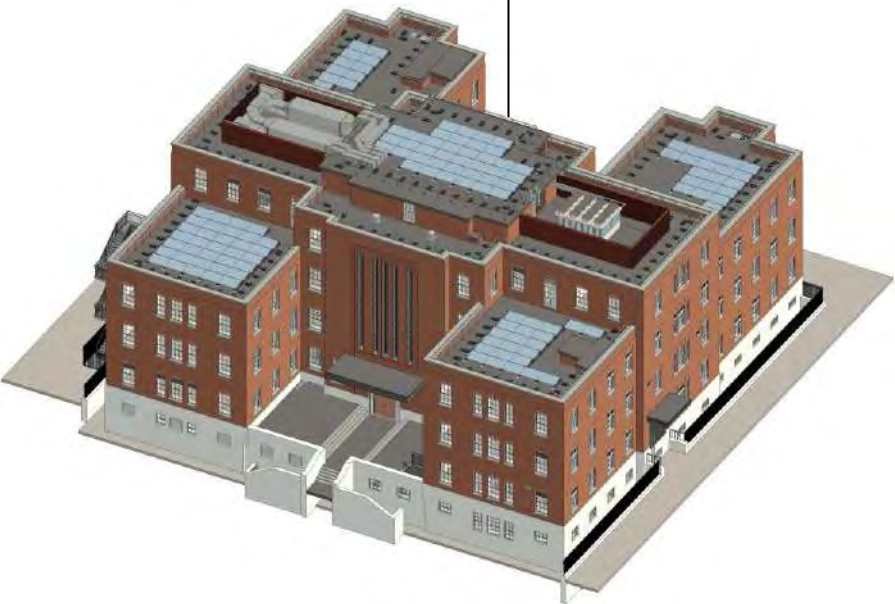
NEW PLANT ROOM SCREENS
TO HOUSE ASHPs /AHUs

NEW EXTERNAL ESCAPE STAIR
SERVING GROUND, 1ST & 2ND
FLOORS OF SOUTH-EAST WING

NEW EDGE PROTECTION TO
ALL REFURBISHED FLAT
ROOFS



VIEW OF THE ZOCHONIS BUILDING AS PROPOSED
AS VIEWED FROM BRUNSWICK STREET
(FROM NORTH-WEST)



VIEW OF THE ZOCHONIS BUILDING AS PROPOSED
AS VIEWED FROM DOVER STREET
(FROM SOUTH-WEST)

9.0 Access

Due to the nature of works proposed in this planning application, there are no proposals to alter any existing access arrangements to the building.

Since the recent conversion of Brunswick Street into a university park, the clumsy ramps and stairs which dominated its northern façade have been removed and the adjacent land graded to provide level access for all.

There are no landscaping proposals associated with this application.

Similarly, there is no impact upon existing car parking and no additional parking is proposed.



10.0 Justifications

Proposed New Staircase to South-West Elevation

The independent fire report commissioned by the University and undertaken by Hydrock has identified a shortfall in the means of escape from the south-western corner of The Zochonis Building. We investigated the possibility of incorporating a new internal stair within the footprint of the existing building but concluded that this would require significant internal works to the building structure including the strip out and demolition and removal of the existing concrete slab throughout three floors. After careful consideration based on cost, disruption to existing spaces, effect on principal elevations and fire strategy, forming an internal staircase has been discounted. The construction of an internal staircase would create a significant problem for demolition, breaking out the floor slab, mitigation of noise and vibration; safe access and installation of the new stairwell.

It would effectively obliterate the accommodation to this corner of the building footplate.



IMPACT OF NEW STAIRCASE IF LOCATED WITHIN THE BUILDING FOOTPRINT:

1. GROUND FLOOR – LOSS OF EXISTING OFFICE AND IMPACT UPON ADJACENT LECTURE ROOM
2. FIRST FLOOR – LOSS OF EXISTING OFFICE SPACES LEADING TO CORNER LOCATION OF STAIRCASE
3. SECOND FLOOR – LOSS OF EXISTING OFFICE SPACES LEADING TO CORNER LOCATION OF STAIRCASE



10.0 Justifications (continued)

Roof Top Plant Room Wings

The existing plant room at 4th Floor Level comprises of a brick-built single-storey central section of circa 196 sq.m that houses the lift room and ancillary plant such as switch rooms and tank rooms. It is connected to the lower floors by a single staircase that connects to the third floor (access restricted). On each of its eastern & western flanks is a brick-built single-storey narrow wing of accommodation each of circa 32 sq.m designated as 'storage'.

These existing brick wings are not big enough or high enough to accommodate the amount of kit required to be housed on the roof going forward. As can be seen on the 3D roof drawing the proposed louvred screens allow this new plant to be housed and screened from view. The alternative would be to have the plant exposed to the elements and to view. The screening louvres also provide for acoustic screening in addition to visual screening.

RIGHT: VIEW OF ONE OF THE EXISTING PLANT ROOM WINGS WHICH ARE PROPOSED TO BE REPLACED WITH A SCREENED LOUVRE ENCLOSURE



10.0 Justifications (continued)

Roof Replacement

Whilst the roof replacement itself is not subject to a planning application, its overhaul allows the university to bring the edge protection for the various flat roofs of the Zochonis Building up to modern safety standards.

The University does not allow the installation of less obtrusive man-safe systems and as such permission is sought for a permanent roof guarding system.

Similarly, the new roof and PV panels will not be visible from street level. However, it may be possible to see the new edge protection and our proposed elevations reflect this. The system we are proposing is of the free-standing 'Kee Guard' type which will be set back from the existing parapets. As such when viewed from street level they will hardly be visible. The highest roof – that to the central plant room, does not benefit from a parapet and the guardrail proposed to this roof will be more visible than those on the lower roofs.

RIGHT: VIEW OF THE EXISTING ROOF LEVEL PARAPET WALLS WHICH ARE PROPOSED TO BE INCREASED IN HEIGHT VIA NEW INBOARD BALLUSTRADING



11.0 Planning Application

The University appointed Planning Consultant (Paul Butler Associates) have advised that the following items would need to be provided in order for the City Council Planning Department to validate the application. Drawings to show the existing and proposed arrangements of:

- The new external staircase
- The positioning of ASHP's on the roof further to alterations to the existing plant room
- Any external ventilation louvres to the main facades.
- Roof top edge protection assumed visible

The following drawings would form part of any planning application:

- 1000 Site Location Plan (1250) & Block Plan (500)
- 1100 Existing Sub-Basement GA Plan
- 1101 Existing Basement GA Plan
- 1102 Existing Ground Floor GA Plan
- 1103 Existing First Floor GA Plan
- 1104 Existing Second Floor GA Plan
- 1105 Existing Third Floor GA Plan
- 1106 Existing Fourth Floor GA Plan
- 1107 Existing Roof GA Plan
- 1110 Existing North-West & South-East Elevations
- 1111 Existing North-East & South-West Elevations
- 1112 Existing Internal Elevations to Brunswick St & Dover St
- 1200 Proposed Sub-Basement GA Plan
- 1201 Proposed Basement GA Plan
- 1202 Proposed Ground Floor GA Plan
- 1203 Proposed First Floor GA Plan
- 1204 Proposed Second Floor GA Plan
- 1205 Proposed Third Floor GA Plan
- 1206 Proposed Fourth Floor GA Plan
- 1207 Proposed Roof GA Plan
- 1210 Proposed North-West & South-East Elevations
- 1211 Proposed North-East & South-West Elevations
- 1212 Proposed Internal Elevations to Brunswick St & Dover St
- 1225 3D View of Proposed Roof Works
- 1230 3D View of Proposed External Staircase

In addition, the Planning Consultant identified the following reports would be needed to supplement any drawings submitted as part of a planning application:

- Design & Access Statement
- Planning Statement
- Heritage Statement
- Ecological Report
- Energy Statement
- Roof Top Plant Supporting Mechanical details and information (ASHPs)
- Ventilation and AHU Mechanical details and information
- Acoustic Report – existing and post-completion
- CEMP – Construction Management & Construction Waste Management Plan
- Glint & Glare Assessment – Subject to further confirmation of PV installation

12.0 Planning History

A look at the online Planning Database for Manchester City Council details a small number of prior applications made over the last 20 years.

114318/FO/2016 – This application proposed an edge protection scheme to the existing roof comprised of tubular railing. It was lodged in October 2016 and subsequently withdrawn in March 2018. The proposals were not implemented.

093769/FO/2010/C1 – This application for Public Realm works preceeded the recent conversion of Brunswick Street into what is now known as Brunswick Park. This particular application, whilst significantly less encompassing than the implemented park, was lodged in March 2011 and approved in April 2011. These proposals were not implemented.

076667/FO/2005/C2 – This application formed part of a DDA improvement scheme to aid access to the Zochonis Building via the use of ramps and automatic doors. The ramps have since been removed as part of the Brunswick Park proposals. This particular application was lodged in August 2005 and approved in September 2005.

072758/FO/2004/C2 – There is little information provided for this application online although it appears to be a retrospective application for temporary accommodation. This particular application was lodged in November 2004 and a decision notice dated February 2006 deemed 'not proceeded with'.

Installation of 311m Sika/Trocol 5mm heavy duty walkway to existing roof, plus galvanised metal tubular railing system to existing roof to form edge protection on parapet wall.

Zochonis Building Oxford Road Manchester M13 9PL

Ref. No: 114318/FO/2016 | Validated: Wed 26 Oct 2016 | Status: Decided

Public realm works including hard and soft landscaping

Land Between Brunswick Street And Simon Building And
Zochonis Building Manchester

Ref. No: 093769/FO/2010/C1 | Validated: Thu 03 Mar 2011 | Status:
Decided

Removal of stairs to courtyard to main entrance of building with the provision of new ramp access and new automatic doors to fully comply with the DDA regulations

Manchester University Zochonis Building Brunswick Street City

Ref. No: 076667/FO/2005/C2 | Validated: Thu 11 Aug 2005 | Status:
Decided

Retrospective planning permission for the erection of two temporary buildings for teaching purposes

Adjacent To Zochonis Building Brunswick Street City

Ref. No: 072758/FO/2004/C2 | Validated: Tue 23 Nov 2004 | Status:
Unknown

13.0 Summary

This Design & Access Statement accompanies and supports a planning application to show how the Zochonis Long Term Maintenance (LTM) & Zero Carbon Management (ZCM) project will impact on this existing building.

Throughout the design process from RIBA Stage 2 to Stage 3, we have been in constant dialogue with the Planning Authority ahead of making the application itself.

We have addressed any concerns provided by the Planning Authority up to submission and as such these proposals are commensurate with all pre-planning discussions.

The proposed Long-Term Maintenance aspects will serve to:

- Arrest any further deterioration of the roof of the building which is under threat of further dilapidation.
- Make the roof a safer place for future access and maintenance.
- Make the occupants of the building safer by introducing a much needed additional means of escape.
- Incorporate modern technology to service the building in the form of Air Source Heat Pumps and upgraded MEP systems and thus make the building more thermally efficient and closer to achieving its Zero Carbon Management goals.

The scheme has been developed to sensitively respond to the built asset and introduce the proposals in a sympathetic manner, with only minor alteration to the roofscape, a number of small modifications to existing windows and additional low-level louvres and a considered addition to the south-west elevation to accommodate the new external staircase.



Appendices

- A Project Photographs
- B BSA Planning Drawings - Architectural

Appendix A

Project Photographs

Appendix C

Existing Photographs



South-West Façade – Location of proposed new external escape stair



Entrance to Zochonis Building from Dover Street



Example of staining to brick façade beneath cills

Existing Photographs



Approach to Zochonis Building from Brunswick Park



Entrance to Zochonis Building from Brunswick Park



Access to High Voltage Sub-Station at Basement Level



Live kit in Plant Room of Zochonis Building



Store room adjacent to Central Plant Room



Escape Stair to South East corner of Zochonis Building

Existing Photographs



Existing roof covering adjacent to plant room



Typical existing parapet detail including services/cables as appended



Existing AHU units as located on existing roof adjacent to plant room wing to be demolished



Existing roof covering to edge of upper plant room roof including lightning protection cable



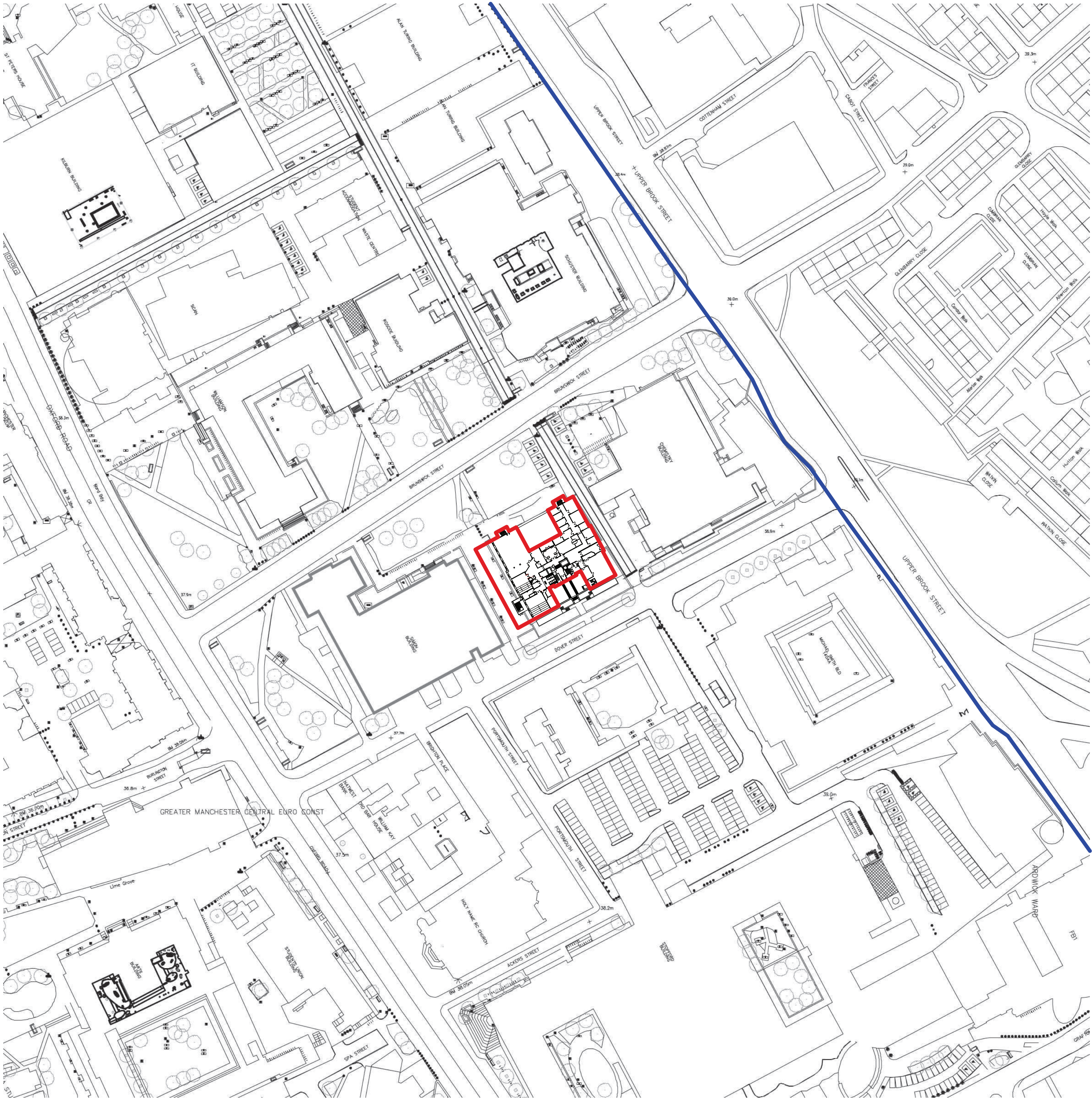
Existing 'eaves/soffit' detail to edge of upper plant room roof



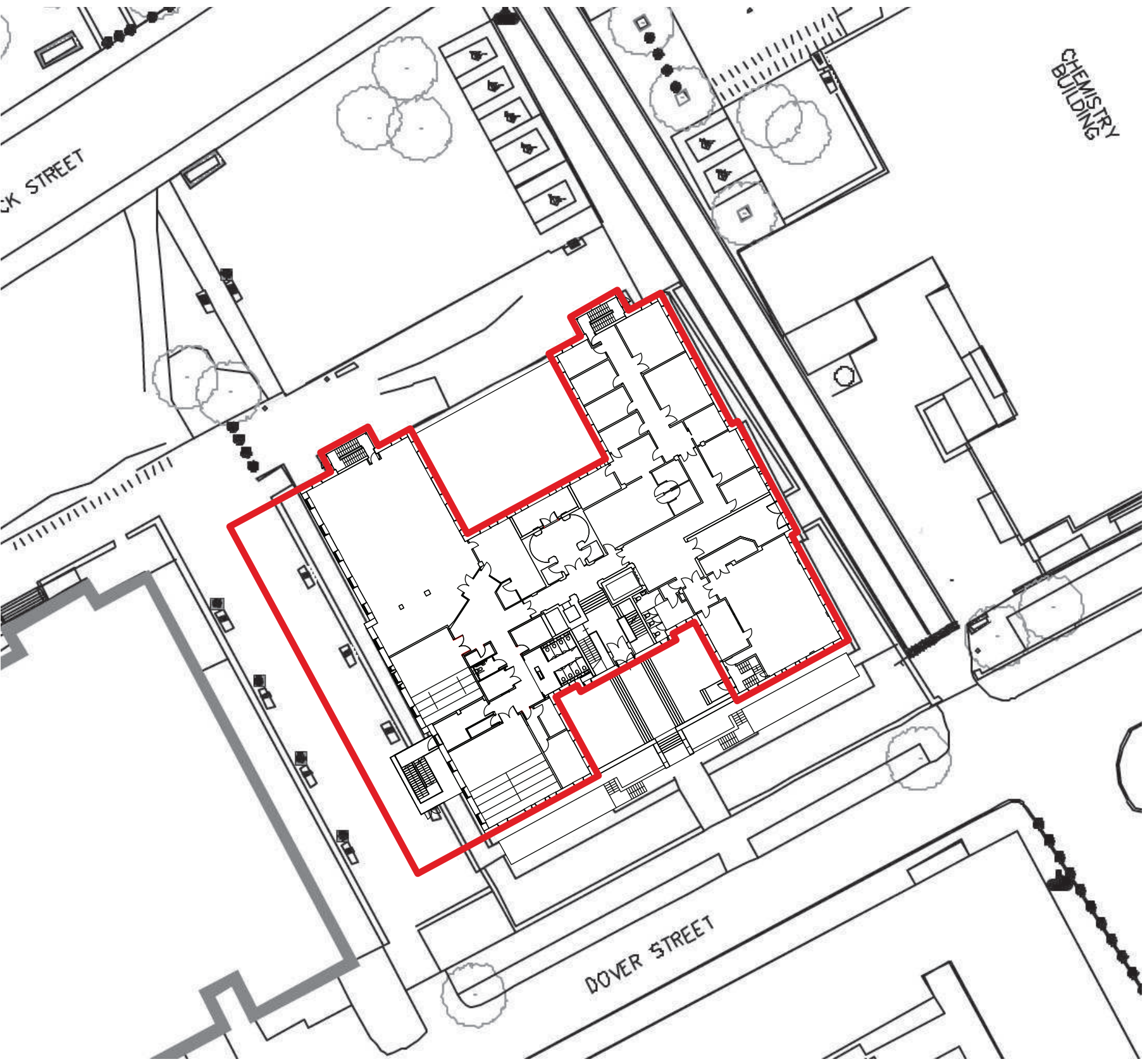
Area of flat roof to North-East corner of Zochonis Building showing ancillary rooftop accommodation

Appendix B

BSA – Planning Drawings - Architectural



Location Plan @ 1:1250 Scale



Block Plan @ 1:500 Scale

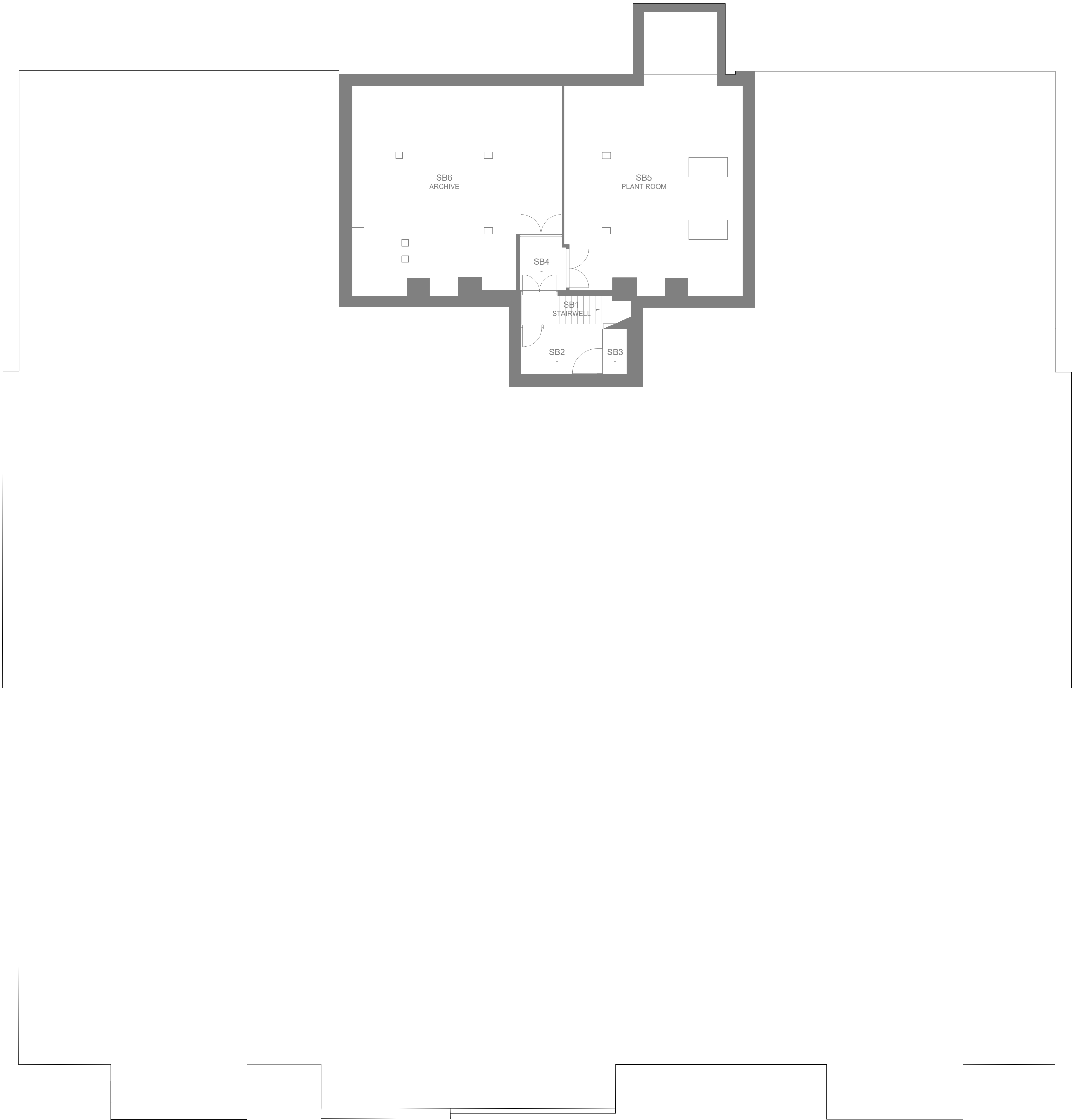
- University of Manchester Ownership Site Boundary
- Development Site Boundary

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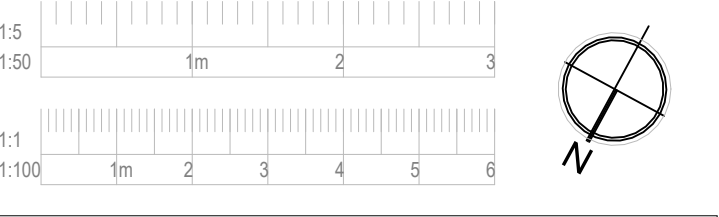
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BOWKER SADLER ARCHITECTURE				
Hatherlow House Hatherlow Romiley Stockport SK6 3DY 0161 406 7333 office@bowker-sadler.co.uk www.bowker-sadler.co.uk				
Project Zochonis Building				
Client University of Manchester				
Drawing Location Plan & Block Plan				
Scale	Sheet Size	Drawn	Checked	Date
As indicated	@A1	DAL	ADS	12.09.23
Project No.	Originator	Zone	Level	Form Discipline Number Revision
18-047				1000
Status	Planning			



Existing Sub-Basement GA Plan
1 : 100

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A	12.09.23	ADS	Minor Amendments	DL
Rev.	Date	Dm.		Chkd.

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0161 406 7333 | office@bowker-sadler.co.uk | www.bowker-sadler.co.uk

Project
Zochonis Building

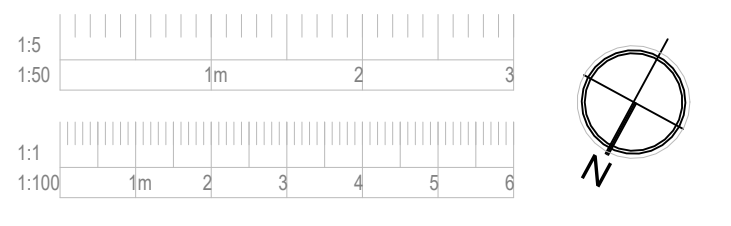
Client
University of Manchester

Drawing
Existing Sub-Basement GA Plan

Scale 1 : 100	Sheet Size @ A1	Drawn ADS	Checked DL	Date 08.03.23
Project No. 18-047	Originator -BSA-	Zone XX	Level -2-	Form Discipline D - A
Status	Number 1100	Revision A		

Planning

- Drawing not to be scaled
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- Check all dimensions on site
- Drawing to be read in conjunction with the Health and Safety Plan and all relevant Risk Assessments



1110

Existing South
East Elevation

1112

Existing South
West Internal
Wing Elevation
to Dover Street

1112

Existing North
East Internal
Wing Elevation
to Dover Street

1111

Existing South
West Elevation

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to Brunswick Street

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to Brunswick Street

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East Internal
Wing Elevation
to Brunswick Street

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Existing South
West Elevation

1110

Existing Ground Floor GA Plan

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A	12.09.23	ADS	Minor Amendments	DL
Rev.	Date	Dm.		Chkd.

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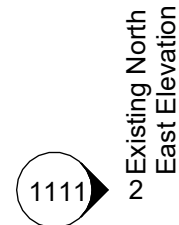
Drawing
Existing Ground Floor GA Plan

Scale	Sheet Size	Drawn	Checked	Date
1 : 100	@ A1	ADS	DL	08.03.23

Project No.	Originator	Zone	Level	Form	Discipline	Number	Revision
18-047	-BSA	-XX	-00	-D	-A	-1102	A
Status							

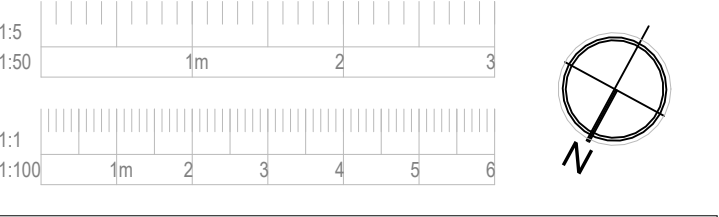
Planning



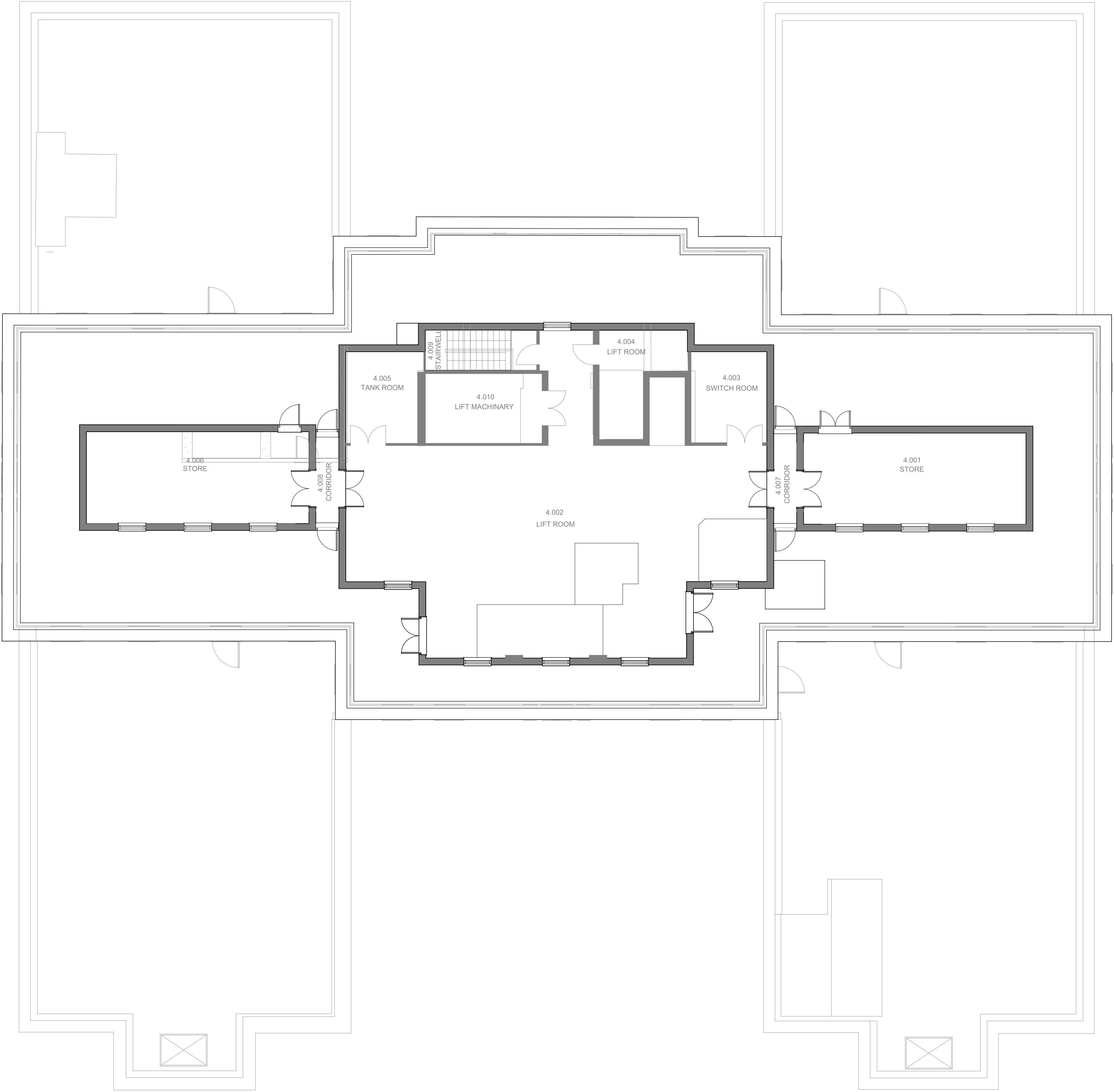


Existing North
2 West Elevation





1110
1 Existing South
East Elevation



1111
2 Existing North
East Elevation

Existing South
West Elevation
1111

A	12.09.23	ADS	Minor Amendments	DL
Rev.	Date	Dm.		Chkd.

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Project
Zochonis Building

Client
University of Manchester

Drawing
Existing Fourth Floor GA
Plan

Scale 1 : 100	Sheet Size @ A1	Drawn ADS	Checked DL	Date 08.03.23
Project No. 18-047	Originator -BSA-	Zone XX	Level 04	Form D
Status	Discipline A	Number 1106	Revision A	

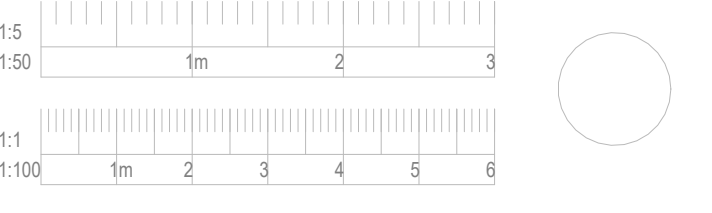
Planning

Existing Fourth Floor GA Plan

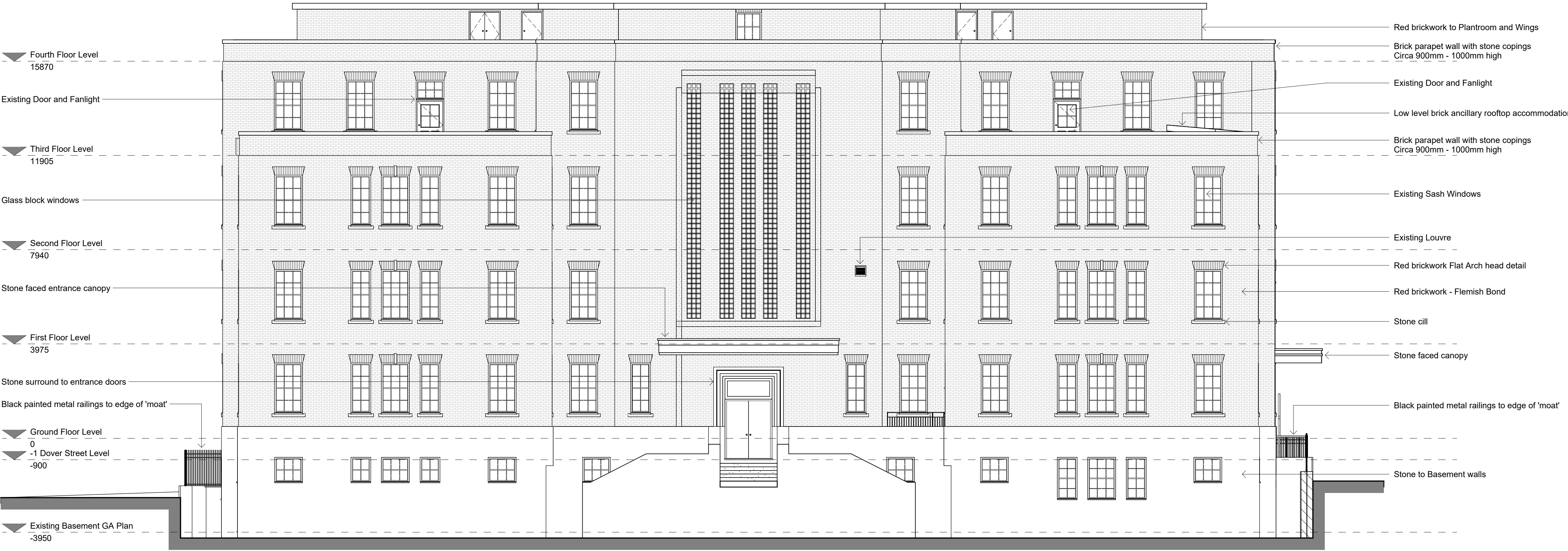
1 : 100

Existing North
2 West Elevation
1110





Existing North West Elevation
1 : 100



Existing South East Elevation
1 : 100

A	12.09.23	ADS	Minor Amendment to Notes	DL
Rev.	Date	Dm.		Chkd.

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Project
Zochonis Building

Client
University of Manchester

Drawing
Existing North West & South East Elevations

Scale 1 : 100	Sheet Size @ A1	Drawn ADS	Checked DL	Date 08.03.23
Project No. 18-047	Originator -BSA-	Zone XX	Level -XX-	Form -DR-
Status	A	1110	A	

Planning



Existing North East Elevation
1 : 100



Existing South West Elevation
1 : 100

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1:50
1:100
1m
2m
3m
4m
5m
6m

A	12.09.23	ADS	Minor Amendment to Notes	DL
Rev.	Date	Dm.		Chkd.

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Project
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Client
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Drawing
Existing North East & South West Elevations

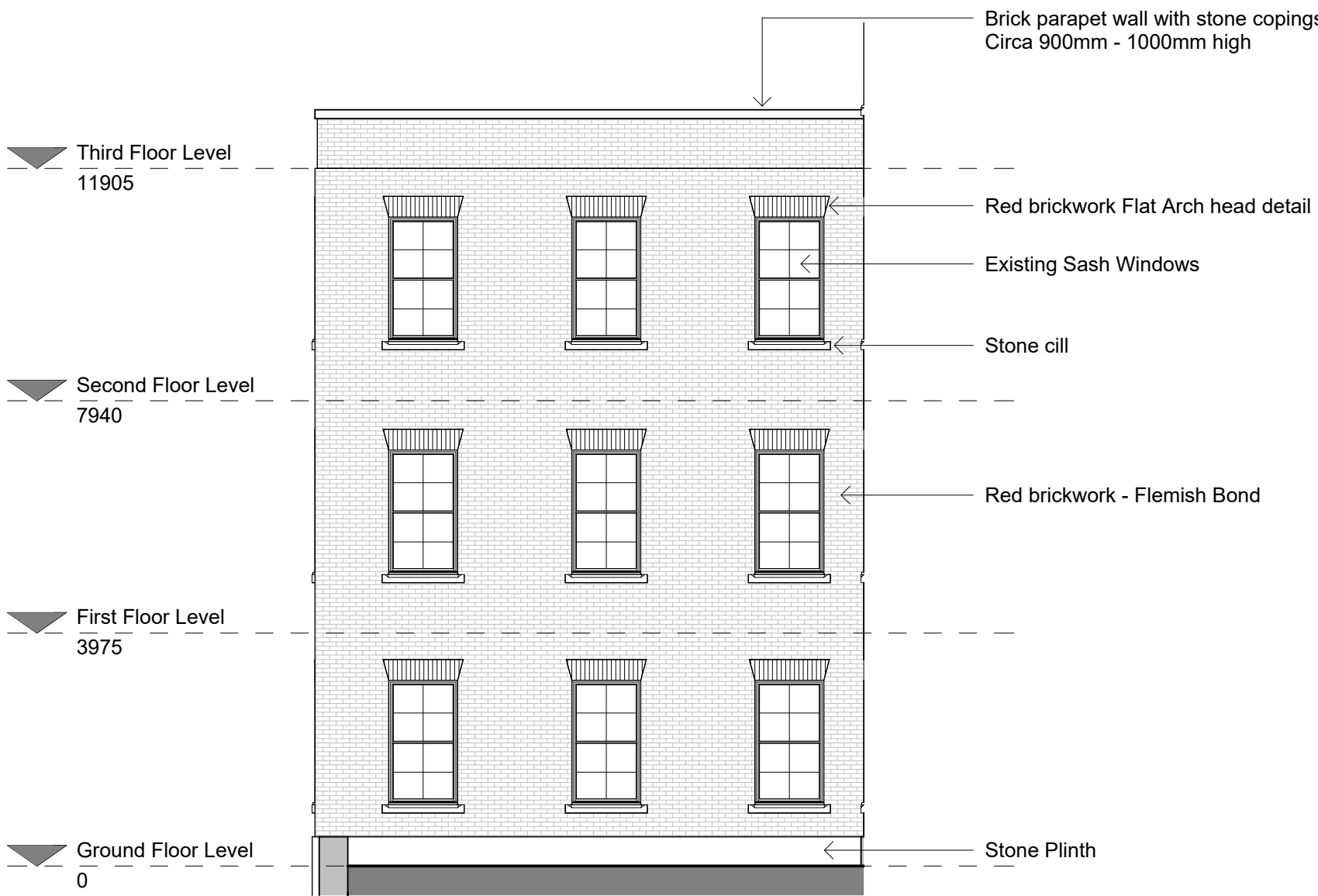
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Project No. 18-047	Originator -BSA	Zone -XX	Level -XX	Form -DR	Discipline -A	Number 1111	Revision A
Status							



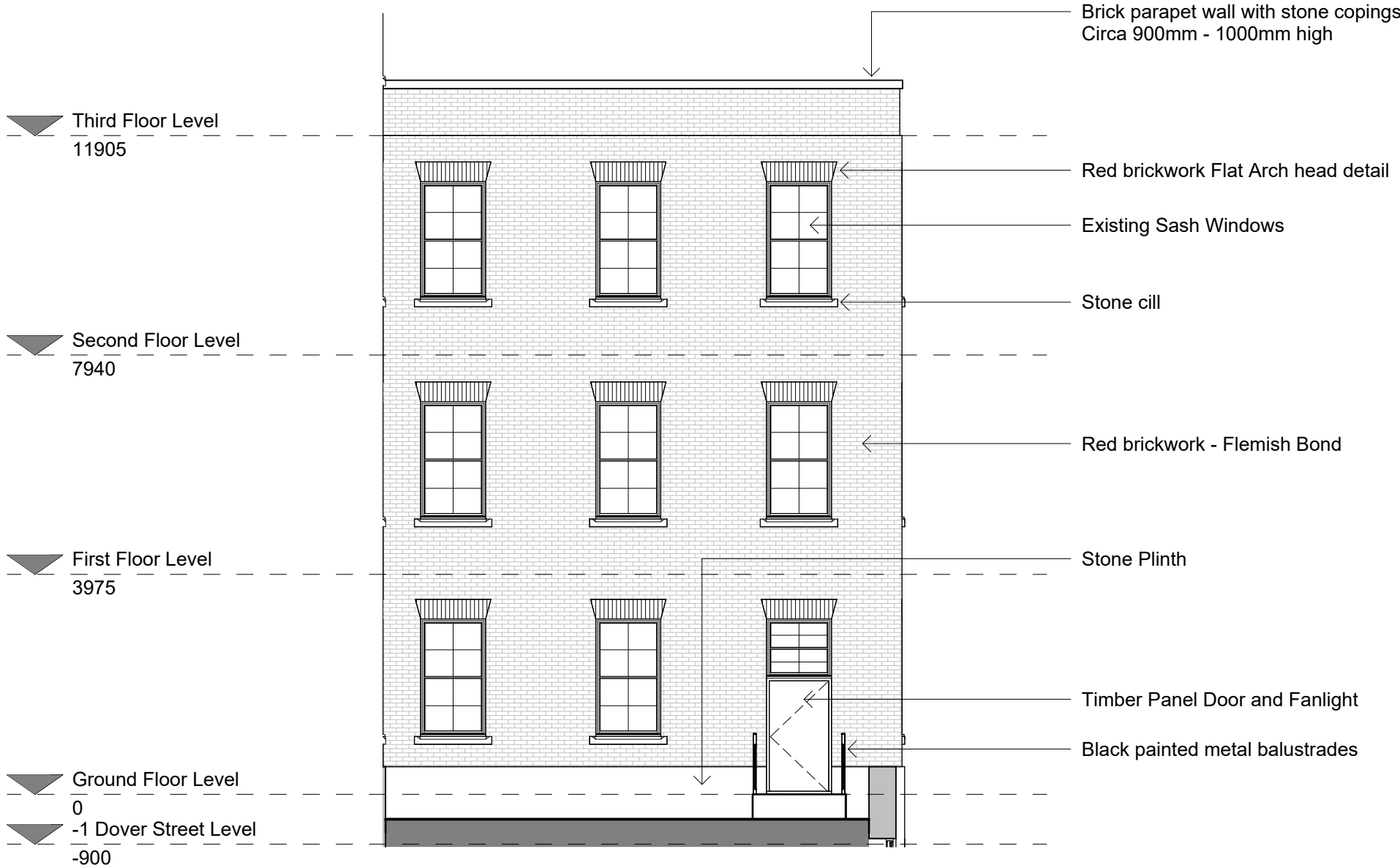
Existing North East Internal Wing Elevation to Brunswick Street
1 : 100



Existing South West Internal Wing Elevation to Brunswick Street
1 : 100



Existing North East Internal Wing Elevation to Dover Street
1 : 100



Existing South West Internal Wing Elevation to Dover Street
1 : 100

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1:50
1:100
1m
2m
3m
4m
5m
6m

A	12.09.23	ADS	Minor Amendment to Notes	DL
Rev.	Date	Dm.		Chkd.

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Project
Zochonis Building

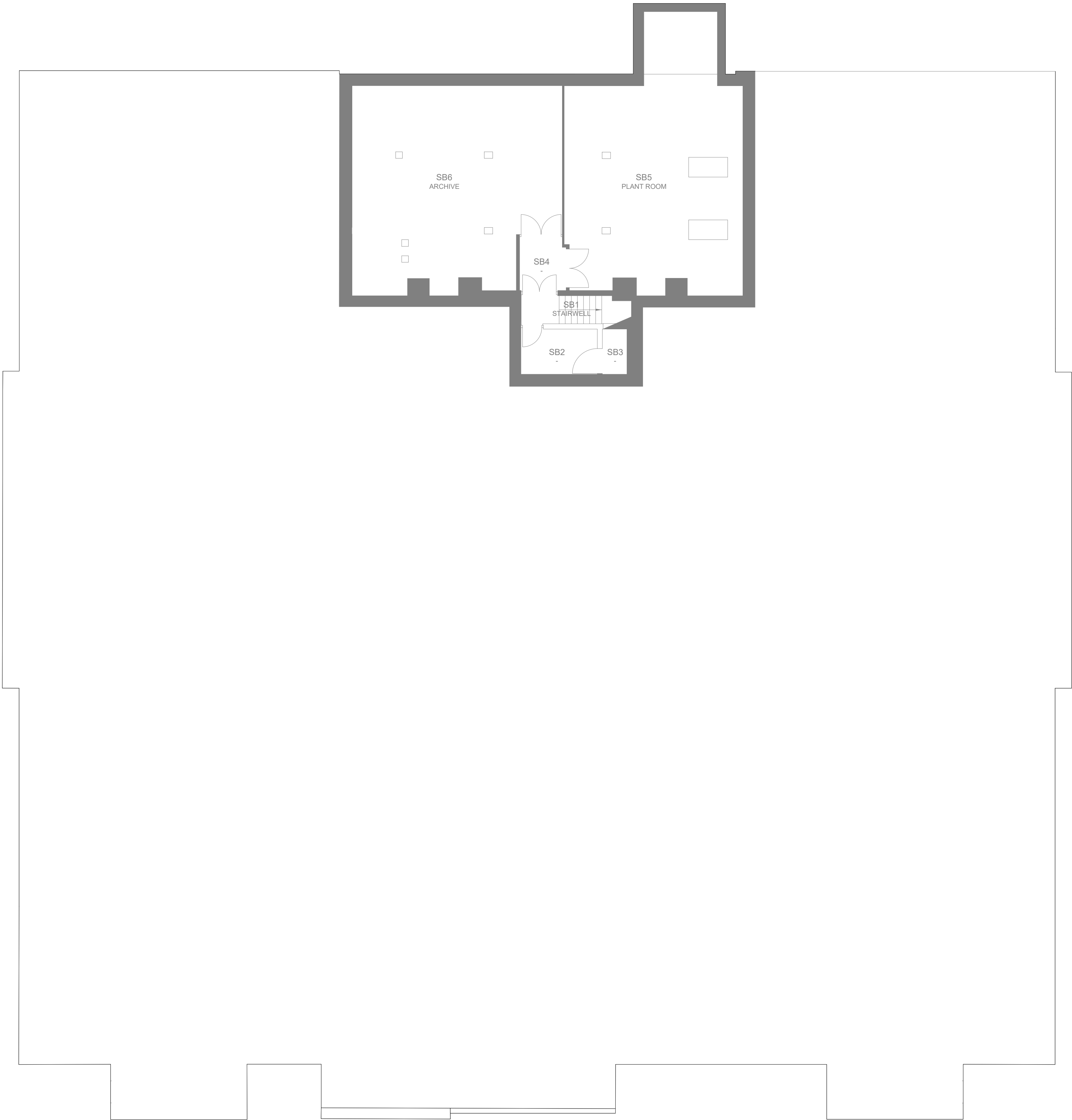
Client
University of Manchester

Drawing
Existing Internal Wing Elevations to Brunswick Street and Dover Street

Scale	Sheet Size	Drawn	Checked	Date
1 : 100	@ A1	ADS	DL	08.03.23

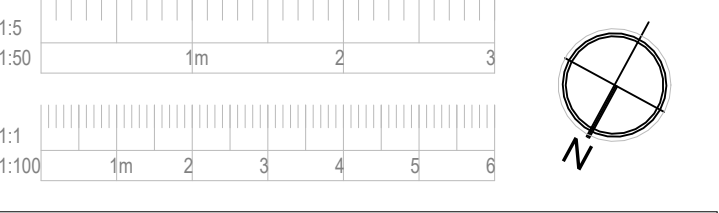
Project No.	Originator	Zone	Level	Form	Discipline	Number	Revision
18-047	-BSA	-XX	-XX	-DR	-A	1112	A

Status
Planning



Proposed Sub-Basement GA Plan
1 : 100

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Key

Note: Final Areas to be verified by the University of Manchester
All areas subject to condition survey and confirmation of internal requirements.

- Internal Refurbishment Works and new External Fire Escape Stair
- New Bauder Bituminous Felt roof system on tapered insulation laid to falls to existing roof gullies
- New Bauder Solar PV on new Bauder Bituminous Felt roof system on tapered insulation laid to falls to existing roof gullies
- New Bauder Solar PV on new Bauder Bituminous Felt roof system on tapered insulation laid to falls to new perimeter gutter and downpipes

D	12.09.23	ADS	Minor Amendments to Notes and Key	DL
C	06.07.23	ADS	Extent of full M&E Refurbishment works hatched and key updated in accordance with DSSSR email dated 06.07.23	DL
B	03.07.23	ADS	Scope of Works key added	DL
A	02.06.23	ADS	M&E and Structural information added	DL
Rev.	Date	Dm.		Chkd.

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Project
Zochonis Building

Client
University of Manchester

Drawing
Proposed Sub-Basement
GA Plan

Scale	Sheet Size	Drawn	Checked	Date
As indicated	@ A1	ADS	DL	08.03.23
Project No.	Originator	Zone	Level	Form
18-047	-BSA	- XX	- -2	- D
Status	Discipline	Number	Revision	
	A	1200	D	

Planning

Note: Final Areas to be verified by the University of Manchester

All areas subject to condition survey and confirmation of internal requirements.

- | | |
|---|---|
|  | Internal Refurbishment Works and new External Fire Escape Stair |
|  | New Bauder Bituminous Felt roof system on tapered insulation laid to falls to existing roof gullies |
|  | New Bauder Solar PV on new Bauder Bituminous Felt roof system on tapered insulation laid to falls to existing roof gullies |
|  | New Bauder Solar PV on new Bauder Bituminous Felt roof system on tapered insulation laid to falls to new perimeter gutter and downpipes |

D	12.09.23	ADS	GA Plan updated to include Lecture Rooms B23, B24, B25, B26, Corridors C5, C6 and Testing Booths B28-1, B28-2, B28-3, B28-4, B28-5 and B28-6	DL
C	06.07.23	ADS	Extent of full M&E Refurbishment works hatched and key updated in accordance with DSSR email dated 06.07.23	DL
B	03.07.23	ADS	Scope of works key added	DL
A	02.06.23	ADS	M&E and Structural information added	DL
Rev.	Date	Drn.		Chkd.

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Project Zochonis Building

Proposed Basement GA Plan

Scale	Sheet Size	Drawn	Checked	Date			
As indicated	@ A1	ADS	DL	08.03.23			
Project No.	Originator	Zone	Level	Form	Discipline	Number	Revision
18-047	-BSA -	XX -	-1 -	D -	A -	1201	D
Status							

1216 Proposed North East Elevation

Proposed
South West
Elevation

Proposed
North West
1 Elevation

Proposed Basement GA Plan

All areas subject to condition survey and confirmation of internal requirements.

- | | | | | |
|------|----------|------|---|------|
| D | 12.09.23 | ADS | Minor Amendments to Notes and Key | DL |
| C | 06.07.23 | ADS | Extent of full M&E Refurbishment works hatched and key updated in accordance with DSSR email dated 06.07.23 | DL |
| B | 03.07.23 | ADS | Scope of Works key added | DL |
| A | 02.06.23 | ADS | M&E and Structural information added | DL |
| Rev. | Date | Drn. | | Chil |

Scale	Sheet Size	Drawn	Checked	Date			
As indicated	@ A1	ADS	DL	08.03.23			
Project No.	Originator	Zone	Level	Form	Discipline	Number	Revision
18-047	-BSA-	XX	00	D	A	1202	D
Status							

Note: Final Areas to be verified by the University of Manchester

All areas subject to condition survey and confirmation of internal requirements.

- | | |
|---|---|
|  | Internal Refurbishment Works and new External Fire Escape Stair |
|  | New Bauder Bituminous Felt roof system on tapered insulation laid to falls to existing roof gullies |
|  | New Bauder Solar PV on new Bauder Bituminous Felt roof system on tapered insulation laid to falls to existing roof gullies |
|  | New Bauder Solar PV on new Bauder Bituminous Felt roof system on tapered insulation laid to falls to new perimeter gutter and downpipes |

D	12.09.23	ADS	Minor Amendments to Notes and Key	DL
C	06.07.23	ADS	Extent of full M&E Refurbishment works hatched and key updated in accordance with DSSR email dated 06.07.23	DL
B	03.07.23	ADS	Scope of Works key added	DL
A	02.06.23	ADS	M&E and Structural information added	DL
Rev.	Date	Drn.		Chkd.

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Project
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Client
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Drawing

Proposed First Floor GA
Plan

Scale	Sheet Size	Drawn	Checked	Date
As indicated	@ A1	ADS	DL	08.03.23

Project No.	Originator	Zone	Level	Form	Discipline	Number	Revision
18-047	-BSA -	XX -	01 -	D -	A -	1203	D

Status

Planning

1211 Proposed North East Elevation

1210
2 Proposed
South East
Elevation

1212

1 Proposed
North East
Internal Wing
Elevation to
Brunswick
Street

Proposed
North West
1 Elevation



Proposed
South West
2 Elevation

External Fire Escape Stair -
Hot dip galvanised steel with black painted finish
Refer to drawing 1230 for stair plans and visual

- Existing Sash window and stone cill removed, structural opening height increased for new door with fanlight to match existing style

- **New partition and door within Office 1.073 / 103H to form new Stair Lobby and adjacent Store Room**

- Repurpose Room 1.007 / 107 with new shaft walls and fire rated access doors to create new riser as part of MEP Works

Proposed First Floor GA Plan

1211
1
Proposed
North East
Elevation

Proposed Second Floor GA Plan

1 : 100

1210
2
Proposed
South East
Elevation

1210
1
Proposed
North West
Elevation

1212
2
Proposed
South West
Internal Wing
Elevation to
Dover Street

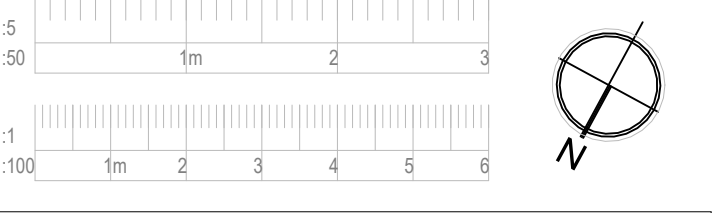
1212
2
Proposed
North East
Internal Wing
Elevation to
Dover Street

1212
2
Proposed
South West
Internal Wing
Elevation to
Brunswick
Street

1212
1
Proposed
North East
Internal Wing
Elevation to
Brunswick
Street

1211
2
Proposed
South West
Elevation

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Key
Note: Final Areas to be verified by the University of Manchester
All areas subject to condition survey and confirmation of internal requirements.

- Internal Refurbishment Works and new External Fire Escape Stair
- New Bauder Bituminous Felt roof system on tapered insulation laid to falls to existing roof gullies
- New Bauder Solar PV on new Bauder Bituminous Felt roof system on tapered insulation laid to falls to existing roof gullies
- New Bauder Solar PV on new Bauder Bituminous Felt roof system on tapered insulation laid to falls to new perimeter gutter and downpipes

External Fire Escape Stair - Hot dip galvanised steel with black painted finish Refer to drawing 1230 for stair plans and visual

Existing Sash window and stone cill removed, structural opening height increased for new door with fanlight to match existing style

Existing internal walls, glazed screen and doors (dashed) to be removed. New partition and door to form new Stair Lobby and adjacent Office 2.066 / 2.13 enlarged

Part of Office Room 2.012 / 2.12 Repurposed with new shaft walls and fire rated access doors to create new riser as part of MEP Works

D	12.09.23	ADS	Minor Amendments to Notes and Key	DL
C	06.07.23	ADS	Extent of full M&E Refurbishment works hatched and key updated in accordance with DSSR email dated 06.07.23	DL
B	03.07.23	ADS	Scope of Works key added	DL
A	02.06.23	ADS	M&E and Structural information added	DL
Rev.	Date	Dm.		Chkd.

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Project
Zochonis Building

Client
University of Manchester

Drawing
Proposed Second Floor GA Plan

Scale	Sheet Size	Drawn	Checked	Date			
As indicated	@ A1	ADS	DL	08.03.23			
Project No.	Originator	Zone	Level	Form	Discipline	Number	Revision
18-047	-BSA-	XX	02	-D-	A-	1204	D
Status							

Planning

Proposed Third Floor GA Plan
1 : 100

New 1100mm high galvanised mill finish Free Standing Roof Edge Protection Guardrail system to perimeter of Flat Roof behind parapet wall

New Bauder Solar PV on new Bauder Bituminous Felt roof system on tapered insulation laid to falls to existing gutleys, new rainwater outlets / counterflashing

Existing Low level brick ancillary rooftop accommodation

New 1100mm high galvanised mill finish Free Standing Roof Edge Protection Guardrail system to perimeter of Flat Roof behind parapet wall

New Bauder Solar PV on new Bauder Bituminous Felt roof system on tapered insulation laid to falls to existing gutleys, new rainwater outlets / counterflashing

Existing Skylight

Proposed South West Internal Wing Elevation to Dover Street

Proposed South West Internal Wing Elevation to Brunswick Street

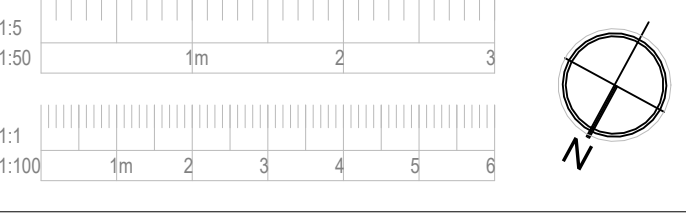
1210
2 Proposed South East Elevation

Proposed North East Internal Wing Elevation to Dover Street

Proposed North East Internal Wing Elevation to Brunswick Street

Proposed North West 1 Elevation
1210

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Key

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All areas subject to condition survey and confirmation of internal requirements.

- Internal Refurbishment Works and new External Fire Escape Stair
- New Bauder Bituminous Felt roof system on tapered insulation laid to falls to existing roof gutties
- New Bauder Solar PV on new Bauder Bituminous Felt roof system on tapered insulation laid to falls to existing roof gutties
- New Bauder Solar PV on new Bauder Bituminous Felt roof system on tapered insulation laid to falls to new perimeter gutter and downpipes

New 1100mm high galvanised mill finish Free Standing Roof Edge Protection Guardrail system to perimeter of Flat Roof behind parapet wall

New Bauder Solar PV on new Bauder Bituminous Felt roof system on tapered insulation laid to falls to existing gutleys, new rainwater outlets / counterflashing

Existing Sash window and stone cill removed, structural opening height increased for new door and fanlight to match existing style

Existing door to be removed, structural opening reduced for new sash window and stone cill to match existing style. Black-out film to be applied to internal side of glazing. Blockwork infill to window structural opening internally

Part of Workshop Room 3.009 / 3.04 Repurposed with new shaft walls and fire rated access doors to create new riser as part of MEP Works (Existing doors to Workshop to be reconfigured)

Part of Testing Room 3.011 / 3.06 Repurposed with new shaft walls and fire rated access doors to create new riser as part of MEP Works (Existing doors to Workshop to be reconfigured)

New 1100mm high galvanised mill finish Free Standing Roof Edge Protection Guardrail system to perimeter of Flat Roof behind parapet wall

New Bauder Solar PV on new Bauder Bituminous Felt roof system on tapered insulation laid to falls to existing gutleys, new rainwater outlets / counterflashing

Low level brick ancillary rooftop accommodation

Existing Skylight

D	12.09.23	ADS	Minor Amendments to Notes and Key	DL
C	06.07.23	ADS	Extent of full M&E Refurbishment works hatched and key updated in accordance with DSSR email dated 06.07.23	DL
B	03.07.23	ADS	Scope of Works key added	DL
A	02.06.23	ADS	M&E and Structural information added	DL
Rev.	Date	Dm.		Chkd.

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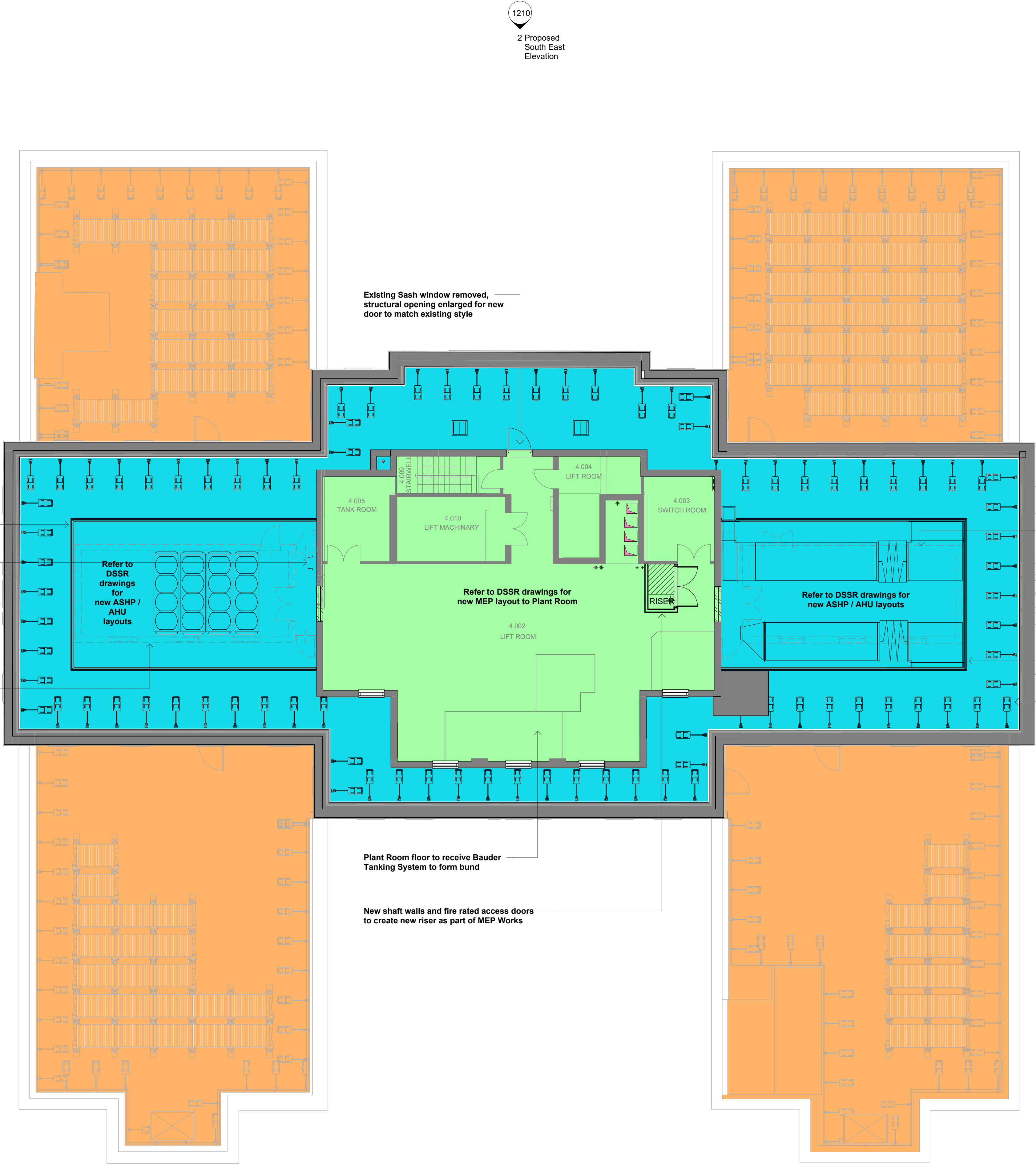
Client
University of Manchester

Drawing
Proposed Third Floor GA Plan

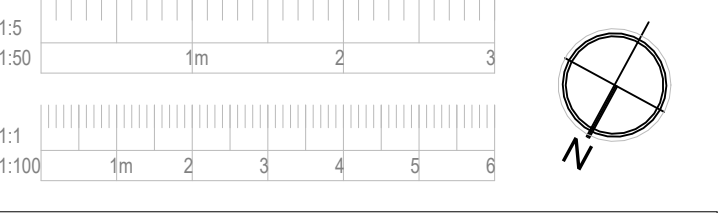
Scale	Sheet Size	Drawn	Checked	Date
As indicated	@ A1	ADS	DL	08.03.23
Project No.	Originator	Zone	Level	Form Discipline
18-047	-BSA	XX	03	D - A - 1205
Status				D

Planning

Proposed Fourth Floor GA Plan
1 : 100



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C	06.07.23	ADS	Extent of full M&E Refurbishment works hatched and key updated in accordance with DSSR email dated 06.07.23	DL
B	03.07.23	ADS	Scope of Works key added	DL
A	02.06.23	ADS	M&E and Structural information added	DL
Rev.	Date	Dm.		Chkd.

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Project
Zochonis Building

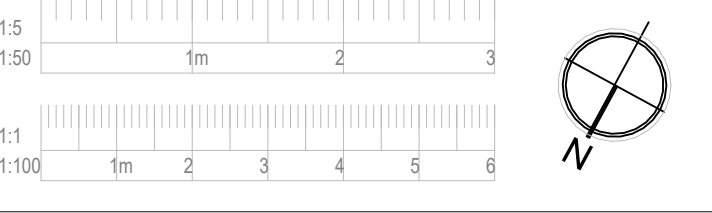
Client
University of Manchester

Drawing
Proposed Fourth Floor GA Plan

Scale	Sheet Size	Drawn	Checked	Date
As indicated	@ A1	ADS	DL	08.03.23
Project No.	Originator	Zone	Level	Form Discipline
18-047	-BSA	-XX	-04	-D - A - 1206
Status				D

Planning

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D	12.09.23	ADS	Minor Amendments to Notes and Key	DL
C	06.07.23	ADS	Extent of full M&E Refurbishment works hatched and key updated in accordance with DSSR email dated 06.07.23	DL
B	03.07.23	ADS	Scope of Works key added	DL
A	02.06.23	ADS	M&E and Structural information added	DL
Rev.	Date	Dm.		Chkd.

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Project
Zochonis Building

Client
University of Manchester

Drawing
Proposed Roof Plan GA

Scale	Sheet Size	Drawn	Checked	Date
As indicated	@ A1	ADS	DL	08.03.23
Project No.	Originator	Zone	Level	Form Discipline
18-047	-BSA	-XX	-05	-D - A - 1207
Status				D

Planning

1210
2 Proposed
South East
Elevation

New 1100mm high galvanised mill finish
Free Standing Roof Edge Protection Guardrail
system to perimeter of Flat Roof behind parapet wall
New Bauder Solar PV on new Bauder Bituminous
Felt roof system on tapered insulation laid to falls to
new perimeter gutter and downpipes

New galvanised mill finish hooped access ladder

1211
Proposed
North East
Elevation

Proposed
South West
Elevation
1211

Proposed
North West
1 Elevation
1210

Proposed Roof Plan GA
1 : 100

New 1100mm high galvanised mill finish Free Standing
Roof Edge Protection Guardrail system to perimeter of
Flat Roof behind parapet wall

New galvanised mill finish hooped access ladder

Existing brickwork Plantroom wings demolished and
replaced with 65mm deep acoustic screening
louvres using Z-shaped blades finished in United
Anodising UA 120-1 finish (red/brown)

Fourth Floor Level
15870

Third Floor Level
11905

Second Floor Level
7940

Stone faced entrance canopy

First Floor Level
3975

Black painted metal railings
to edge of 'moat'

Ground Floor Level
0
-1 Dover Street Level
-900

Proposed North West Elevation

1 : 100

Existing Sash window and stone cill removed, structural opening
enlarged for new door to match existing style

New 1100mm high galvanised mill finish Free Standing
Roof Edge Protection Guardrail system to perimeter of
Flat Roof behind parapet wall

Existing brickwork Plantroom wings demolished and replaced with
65mm deep acoustic screening louvres using Z-shaped blades
finished in United Anodising UA 120-1 finish (red/brown)

Existing Sash window and stone cill removed,
structural opening height increased for new door
with fanlight to match existing style

Existing door to be removed, structural opening
reduced for new sash window and stone cill to
match existing style

External Fire Escape Stair -
Hot dip galvanised steel with black painted finish
Refer to drawing 1230 for stair plans and visual

Second Floor Level
7940

First Floor Level
3975

Hot dip galvanised steel with black
painted finish railings/gate enclosure
to base of external fire escape stair

Ground Floor Level
0
-1 Dover Street Level
-900

Existing Basement GA Plan
-3950

Proposed South East Elevation

1 : 100

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Existing brickwork Plantroom wings demolished and
replaced with 65mm deep acoustic screening louvres using
Z-shaped blades finished in United Anodising UA 120-1 finish
(red/brown)

New 1100mm high galvanised mill finish Free Standing
Roof Edge Protection Guardrail system to perimeter of
Flat Roof behind parapet wall

Existing Brick parapet wall with stone copings
Circa 900mm - 1000mm high

New 1100mm high galvanised mill finish Free Standing
Roof Edge Protection Guardrail system to perimeter of
Flat Roof behind parapet wall

Existing Brick parapet wall with stone copings
Circa 900mm - 1000mm high

Red brickwork Flat Arch head detail

Stone cill

External Fire Escape Stair -
Hot dip galvanised steel with black painted finish
Refer to drawing 1230 for stair plans and visual

Red brickwork - Flemish Bond

Stone surround to entrance doors

Stone to Basement walls

Black painted metal railings to edge of 'moat'

Hot dip galvanised steel with black painted finish
railings/gate enclosure to base of external fire escape stair

New galvanised mill finish hooped access ladder

Existing brickwork Plantroom wings demolished and
replaced with 65mm deep acoustic screening louvres using
Z-shaped blades finished in United Anodising UA 120-1 finish
(red/brown)

New 1100mm high galvanised mill finish Free Standing
Roof Edge Protection Guardrail system to perimeter of
Flat Roof behind parapet wall

Existing Low level brick ancillary rooftop accommodation

Glass block windows

Stone faced entrance canopy

Red brickwork Flat Arch head detail

Red brickwork - Flemish Bond

Stone cill

Stone faced canopy

Stone surround to entrance doors

Black painted metal railings to edge of 'moat'

Stone to Basement walls

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1:50
1:50
1m
2
3

1:1
1:100
1m
2
3
4
5
6

C	12.09.23	ADS	Minor Amendment to Notes	DL
B	03.08.23	ADS	Window louvres removed and extent of works note for sash windows updated	DL
A	02.06.23	ADS	M&E, Structural information and external louvres added	DL

Rev.	Date	Drn.	Chkd.

BOWKER SADLER ARCHITECTURE

Hatherlow House | Hatherlow | Romiley | Stockport | SK6 3DY
0161 406 7333 | office@bowker-sadler.co.uk | www.bowker-sadler.co.uk

Project
Zochonis Building

Client
University of Manchester

Proposed North West & South East Elevations

Scale	Sheet Size	Drawn	Checked	Date
1 : 100	@ A1	ADS	DL	08.03.23

Project No.	Originator	Zone	Level	Form	Discipline	Number	Revision
18-047	-BSA	-XX	-XX	-D	-A	1210	C

Status
Planning

New 1100mm high galvanised mill finish Free Standing Roof Edge Protection Guardrail system to perimeter of Flat Roof behind parapet wall

Existing brickwork Plantroom wings demolished and replaced with 65mm deep acoustic screening louvres using Z-shaped blades finished in United Anodising UA 120-1 finish (red/brown)

Fourth Floor Level
15870

Existing Low level brick ancillary rooftop accommodation

New 1100mm high galvanised mill finish Free Standing Roof Edge Protection Guardrail system to perimeter of Flat Roof behind parapet wall

Third Floor Level
11905

Second Floor Level
7940

Existing Louvre

Stone faced entrance canopy

First Floor Level
3975

Loading Bay with Access Ladder

Black painted metal railings to edge of 'moat'

Ground Floor Level
0

-1 Dover Street Level
-900

New galvanised mill finish hooped access ladder

Red brickwork to Plantroom

Existing Brick parapet wall with stone copings
Circa 900mm - 1000mm high

New 1100mm high galvanised mill finish Free Standing Roof Edge Protection Guardrail system to perimeter of Flat Roof behind parapet wall

Existing Brick parapet wall with stone copings
Circa 900mm - 1000mm high

Red brickwork Flat Arch head detail

Stone cill

Red brickwork - Flemish Bond

Stone to Basement walls

Black painted metal railings to edge of 'moat'

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1:50
1:100

1m 2 3 4 5 6

Proposed North East Elevation

1 : 100

New galvanised mill finish hooped access ladder

Existing brickwork Plantroom wings demolished and replaced with 65mm deep acoustic screening louvres using Z-shaped blades finished in United Anodising UA 120-1 finish (red/brown)

Fourth Floor Level
15870

Existing Low level brick ancillary rooftop accommodation

New 1100mm high galvanised mill finish Free Standing Roof Edge Protection Guardrail system to perimeter of Flat Roof behind parapet wall

Third Floor Level
11905

Second Floor Level
7940

First Floor Level
3975

Ground Floor Level
0

-1 Dover Street Level
-900

New 1100mm high galvanised mill finish Free Standing Roof Edge Protection Guardrail system to perimeter of Flat Roof behind parapet wall

Red brickwork to Plantroom

Existing Brick parapet wall with stone copings
Circa 900mm - 1000mm high

Low level brick ancillary rooftop accommodation

New 1100mm high galvanised mill finish Free Standing Roof Edge Protection Guardrail system to perimeter of Flat Roof behind parapet wall

Existing Brick parapet wall with stone copings
Circa 900mm - 1000mm high

Red brickwork Flat Arch head detail

Stone cill

External Fire Escape Stair - Hot dip galvanised steel with black painted finish Refer to drawing 1230 for stair plans and visual

Red brickwork - Flemish Bond

Stone to Basement walls

Black painted metal railings to edge of 'moat'

Hot dip galvanised steel with black painted finish railings/gate enclosure to base of external fire escape stair

C	12.09.23	ADS	Minor Amendment to Notes	DL
B	03.08.23	ADS	Window louvres removed and extent of works note for sash windows updated	DL
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Rev.	Date	Dm.	Chkd.
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Project
Zochonis Building

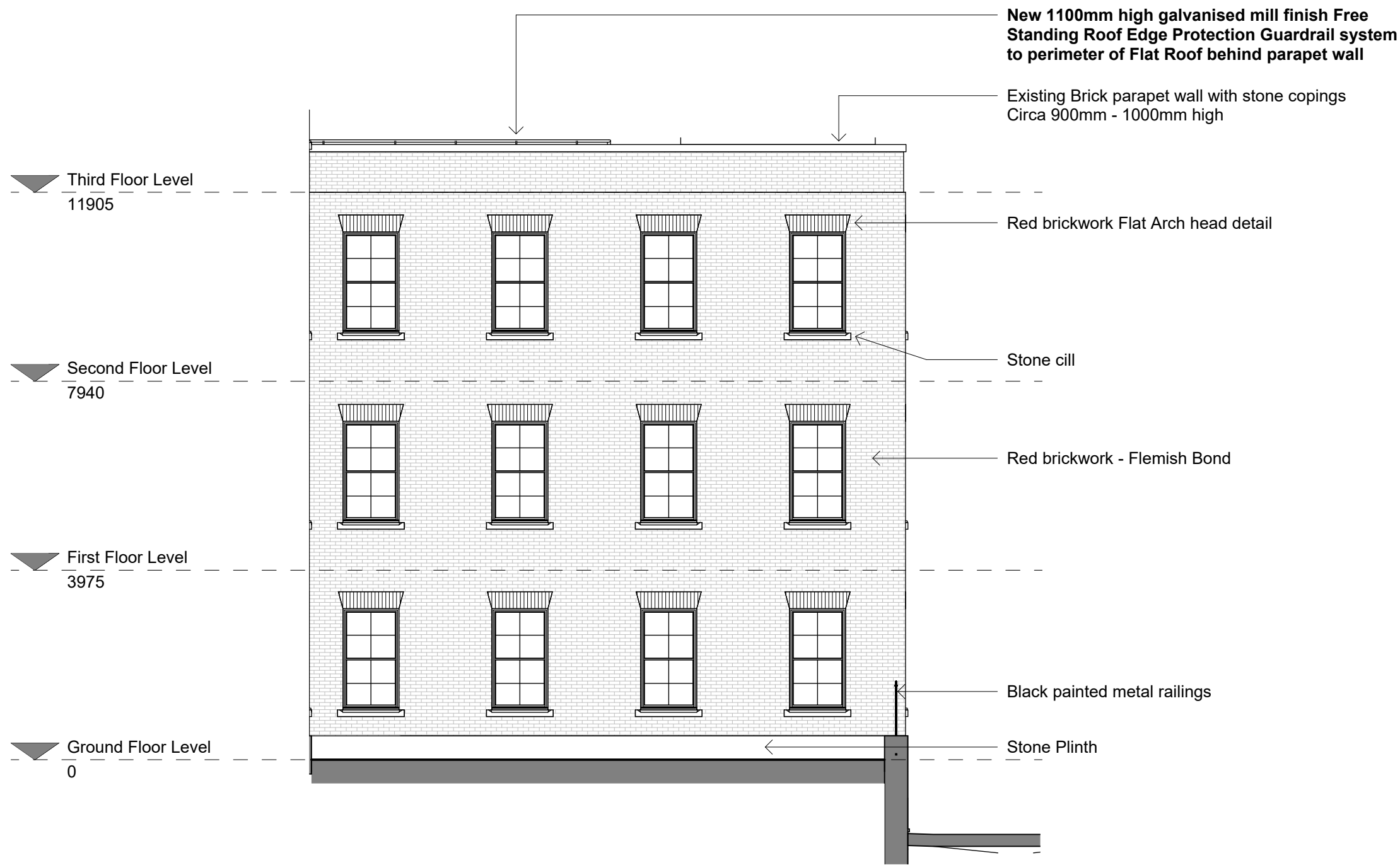
Client
University of Manchester

Drawing
Proposed North East & South West Elevations

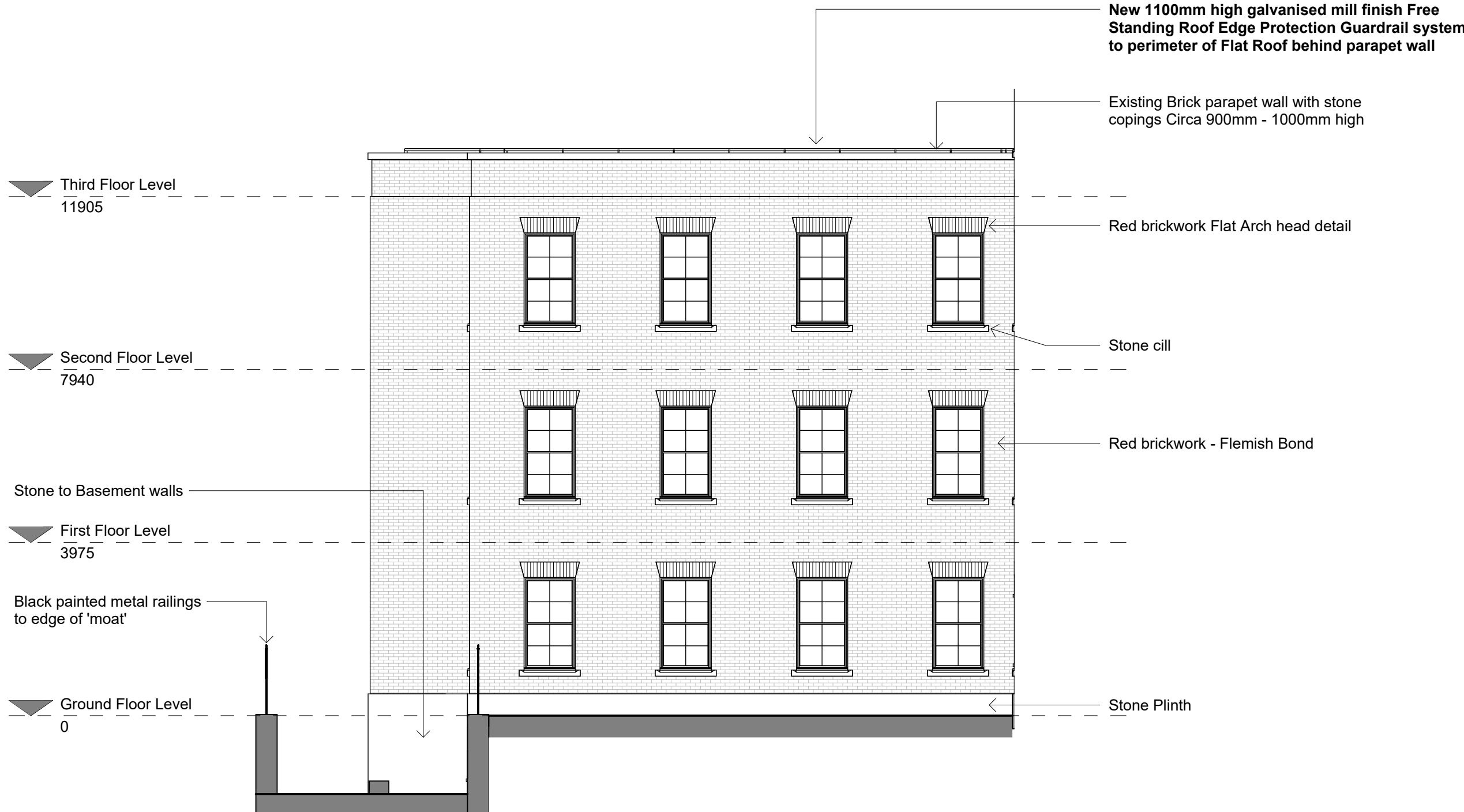
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Project No.	Originator	Zone	Level	Form	Discipline	Number	Revision
18-047	-BSA	-XX	-XX	-D	-A	1211	C
Status							

Proposed South West Elevation

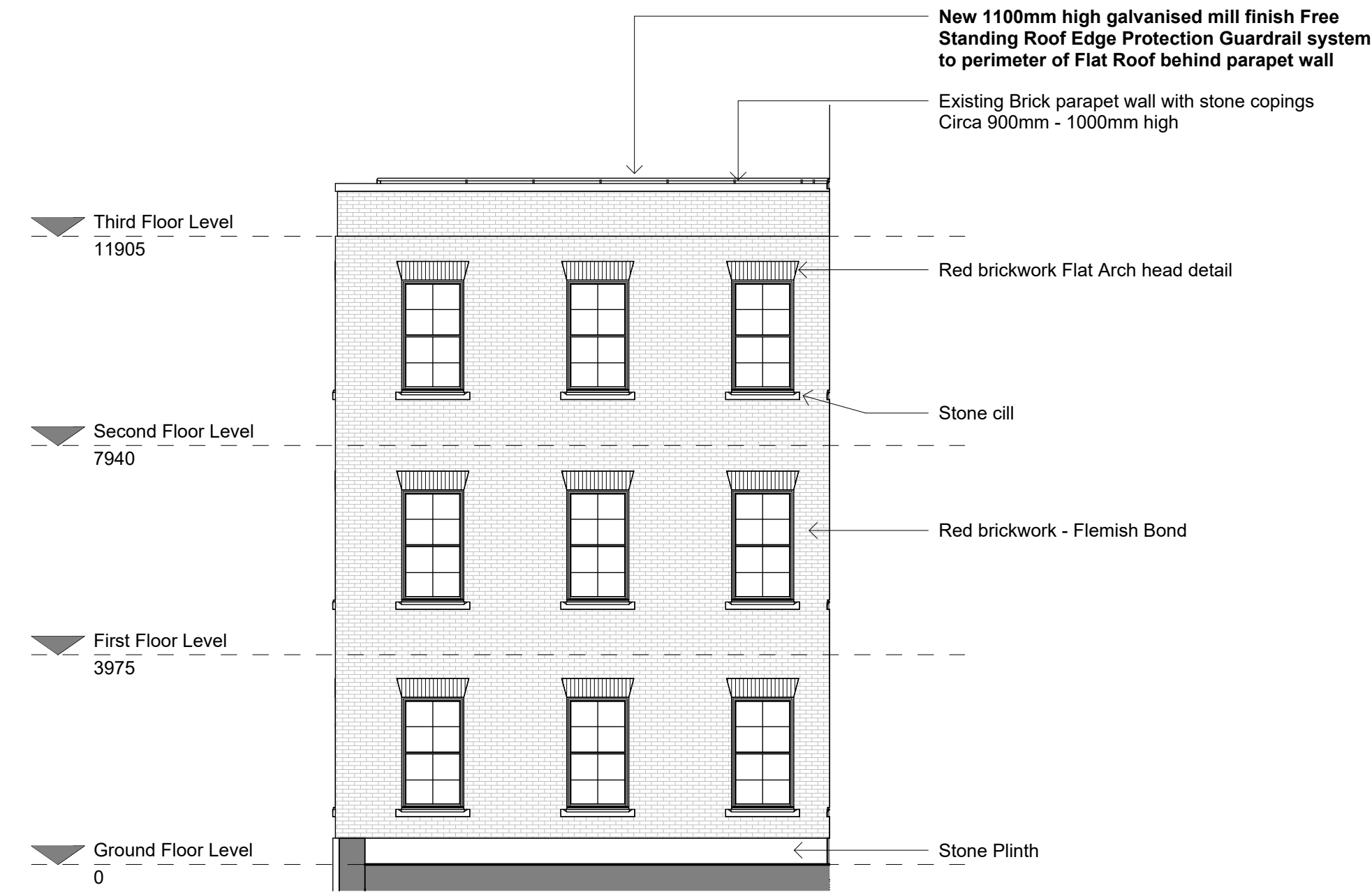
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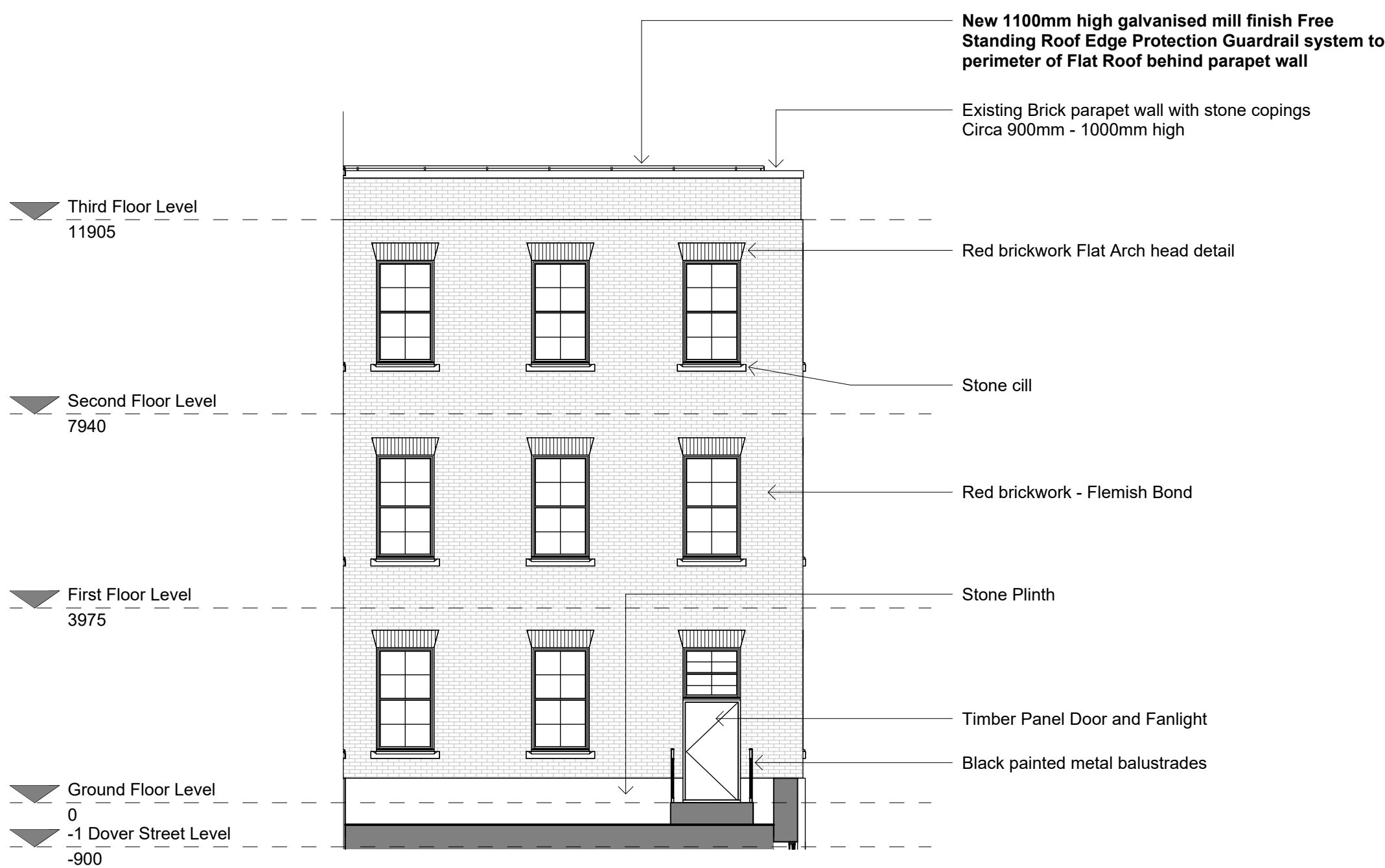
Proposed North East Internal Wing Elevation to Brunswick Street
1 : 100



Proposed South West Internal Wing Elevation to Brunswick Street
1 : 100



Proposed North East Internal Wing Elevation to Dover Street
1 : 100



Proposed South West Internal Wing Elevation to Dover Street
1 : 100

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1:50
1:50
1m
2
3
1:1
1:100
1m
2
3
4
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6

C	12.09.23	ADS	Minor Amendment to Notes	DL
B	03.08.23	ADS	Extent of works note for sash windows updated	DL
A	02.06.23	ADS	M&E and Structural information added	DL
Rev.	Date	Dm.		Chkd.

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Client
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Drawing
Proposed Internal Wing Elevations to Brunswick Street and Dover Street

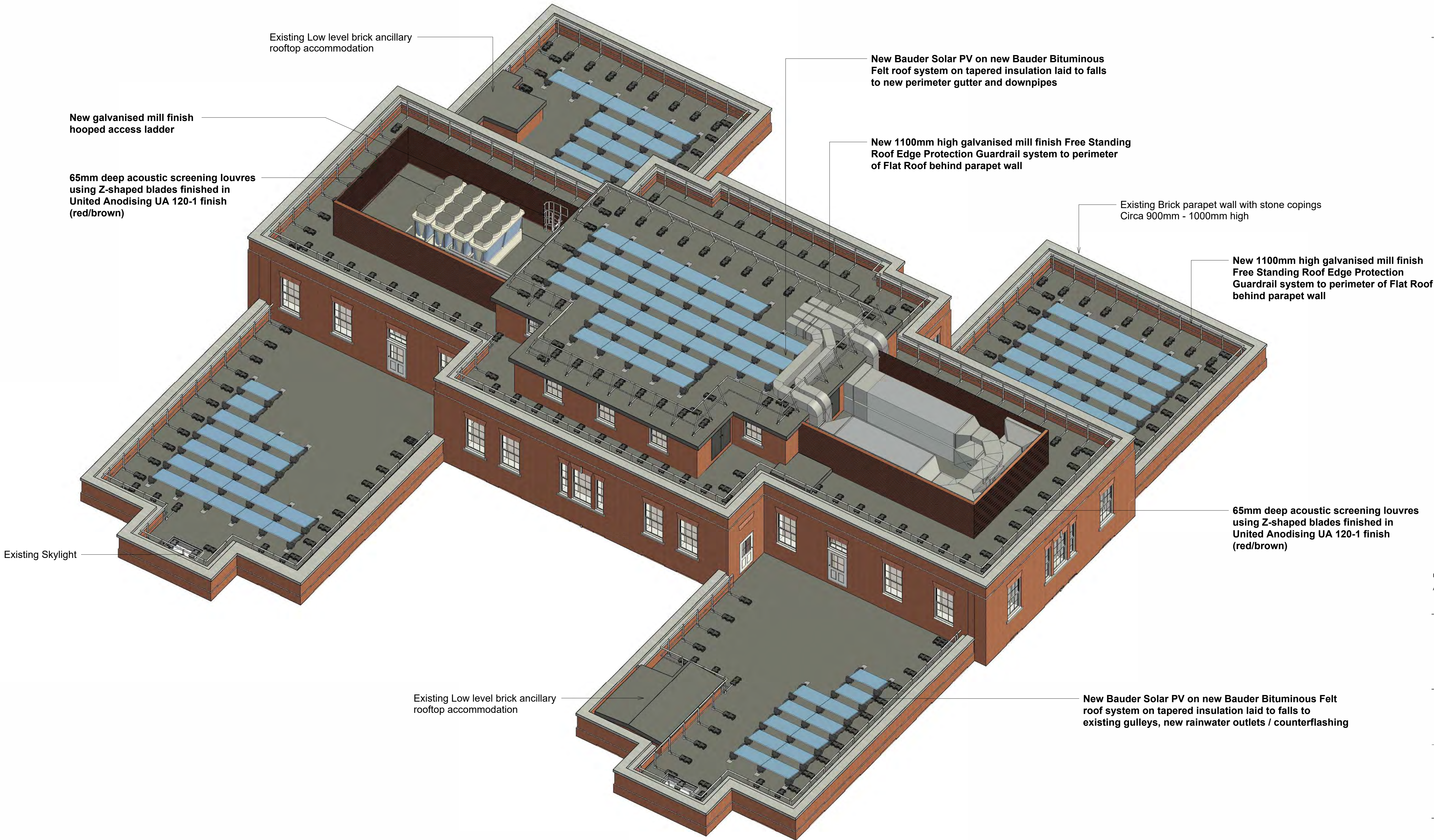
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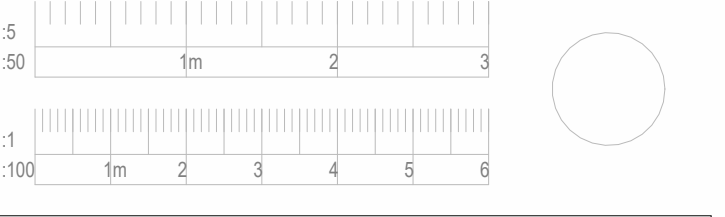
Status
Planning

3D View of Proposed Roof Works

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B	12.09.23	ADS	Notes and DSSR MEP Roof Plant Layout updated	DL
A	02.06.23	ADS	M&E and Structural information added	DL
Rev.	Date	Dm.		Chkd.

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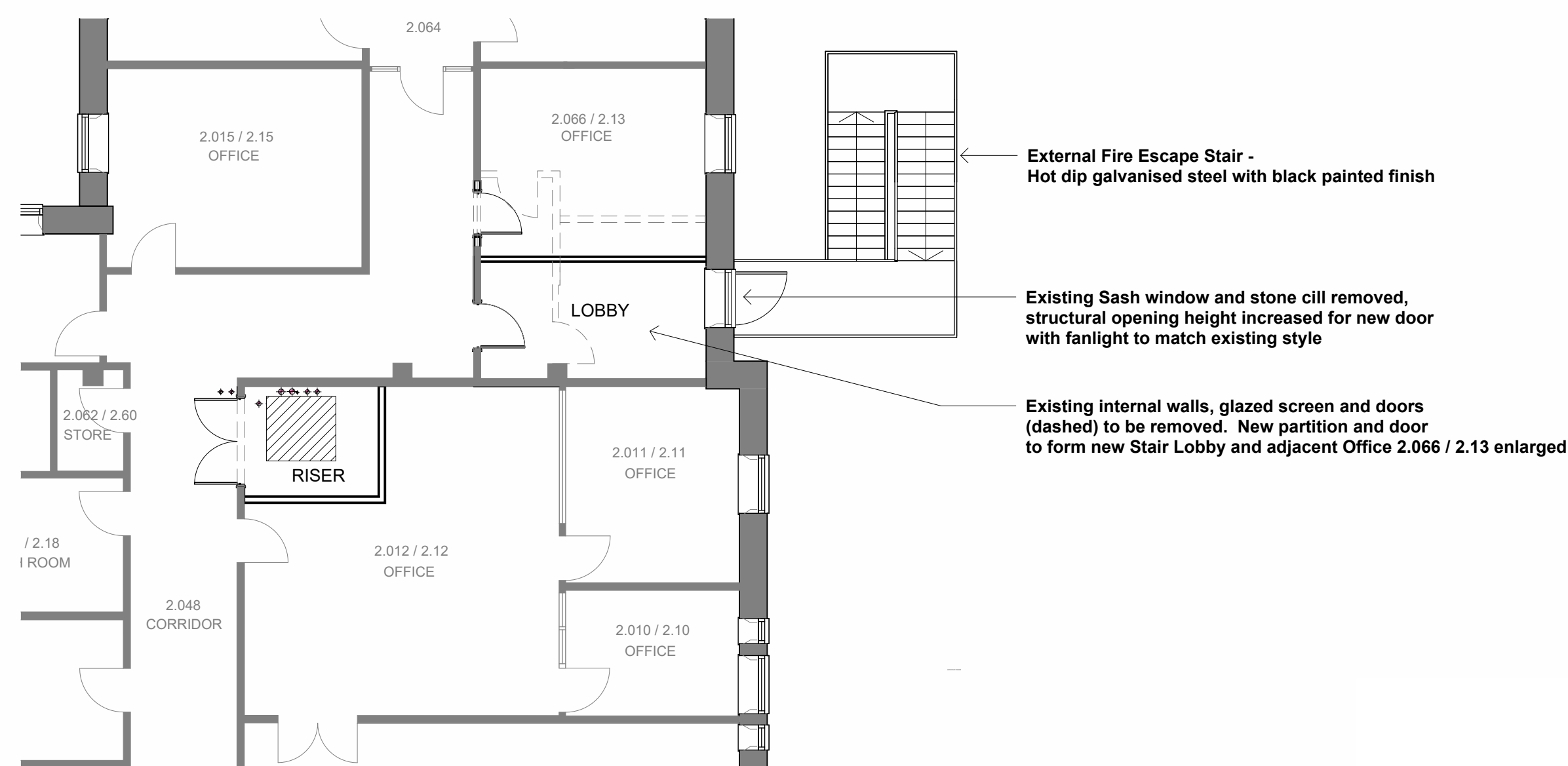
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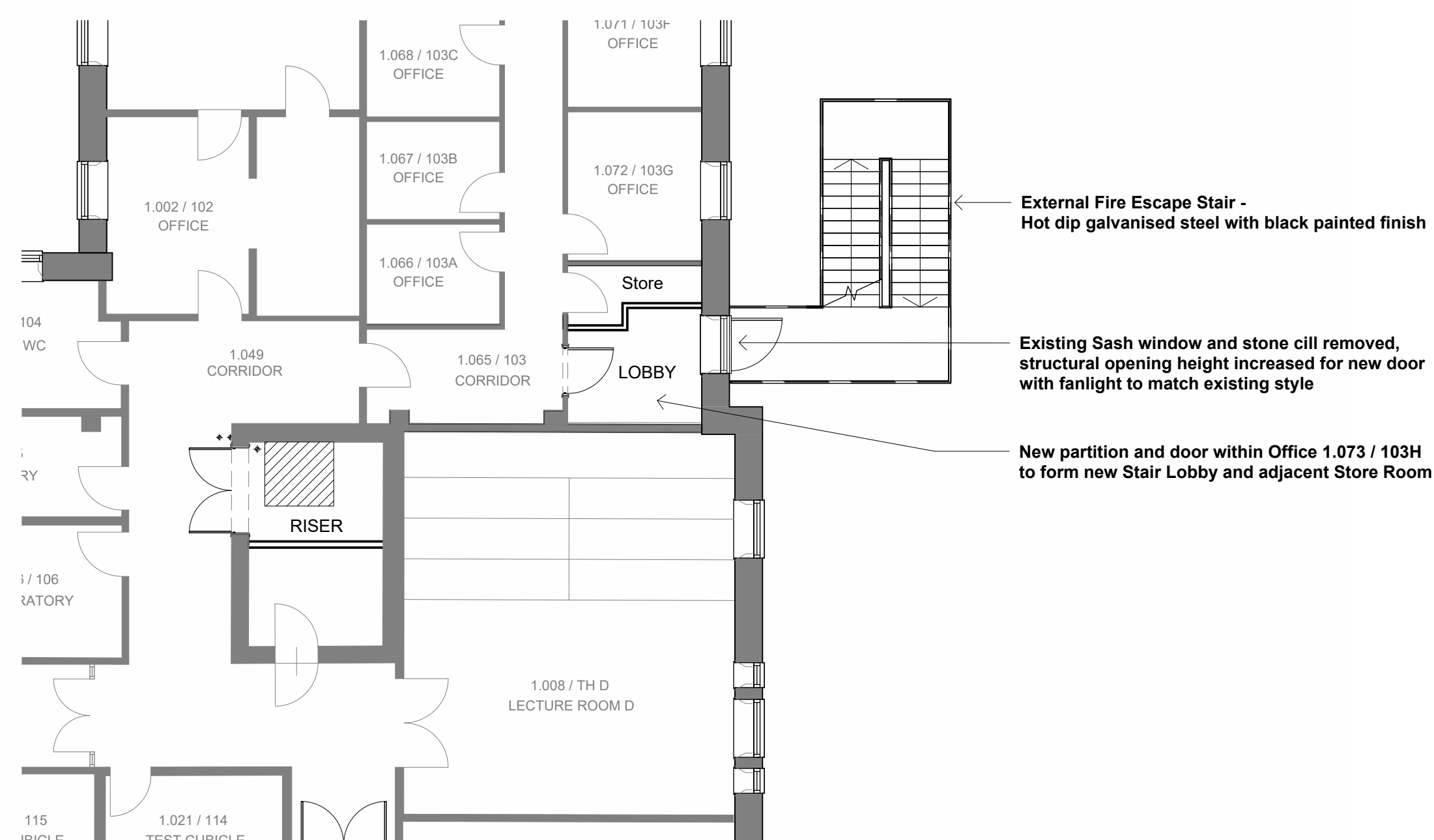
Drawing
3D View of Proposed Roof Works

Scale	Sheet Size	Drawn	Checked	Date			
	@ A1	ADS	DL	08.03.23			
Project No.	Originator	Zone	Level	Form	Discipline	Number	Revision
18-047	-BSA	-XX	-XX	-D	-A	1225	B
Status							

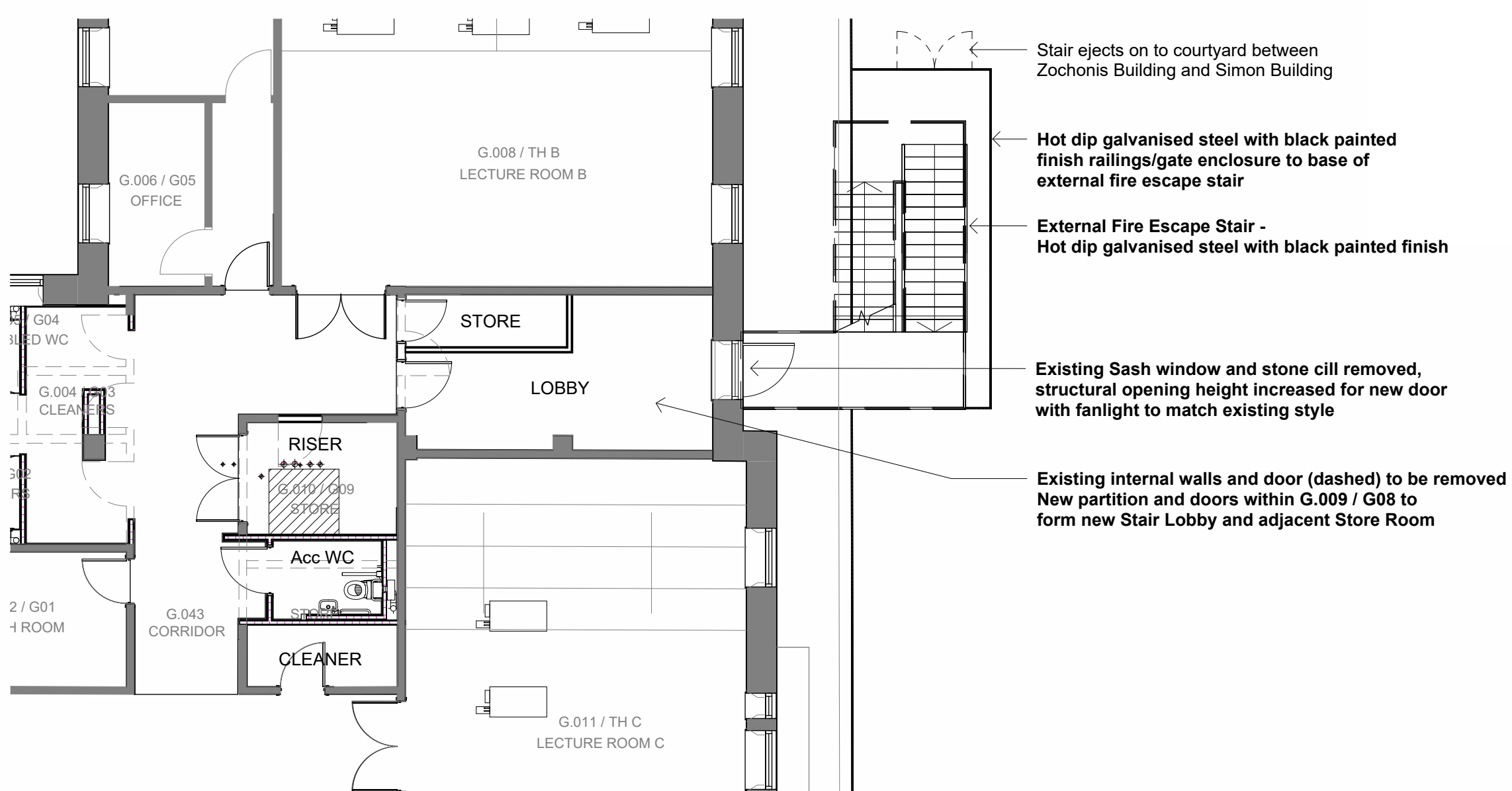
Planning



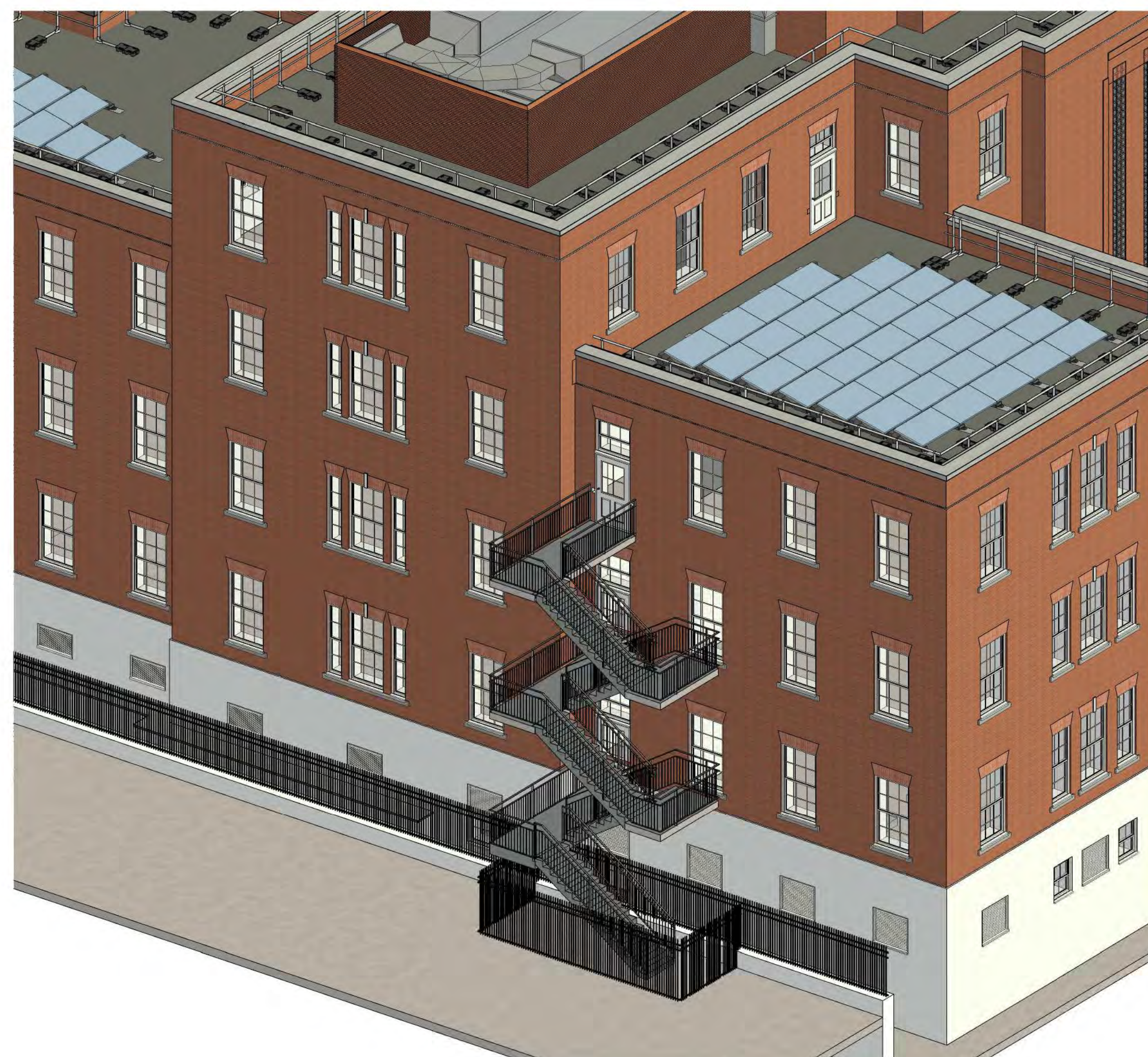
Second Floor Level - External Fire Escape Stair



First Floor Level - External Fire Escape Stair



Ground Floor Level - External Fire Escape Stair



3D View of Proposed External Fire Escape Stair

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B	03.08.23	ADS	Window louvres removed	DL
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Project
Zochonis Building

Client
University of Manchester

Drawing
Proposed External Fire
Escape Stair

Scale 1 : 100	Sheet Size @ A1	Drawn ADS	Checked DL	Date 17.03.23
Project No. 18-047	Originator - BSA -	Zone XX -	Level XX -	Form Discipline Number Revision D - A - 1230 C
Status				

Planning