

REV P2 - ADDITION OF APPENDIX C

H4026-BOW-A1-XX-RP-A-0004_ RESPONSE TO HISTORIC ENGLAND COMMENTS P1

NOTE: REFER TO ABOVE APPENDIX FOR UPDATED VISUALS

THE GEORGE HOTEL

**BOW
MAN
RILEY**



Kirklees
COUNCIL



REVISION: P2

DESIGN & ACCESS STATEMENT
APRIL 2023



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1.0 EXECUTIVE OVERVIEW

This document has been prepared by Bowman Riley on behalf of Kirklees Council to accompany a full planning application for the redevelopment of The George Hotel site in central Huddersfield.

It aims to demonstrate that the proposed scheme fulfils the key points of the project brief and provides sufficient detail to demonstrate its viability with due regard to user/ operator requirements whilst providing a development worthy of the Grade II* Listed George Hotel site. It aims to illustrate a development which reflects the historic importance of the building, as well as the importance of the George to Kirklee's current town centre regeneration plans.

The appended Heritage Statement attached within will look at the significance of the existing Grade II* building, its listing, condition and will include detailed proposals for the retention of elements whilst justifying the removal of others.

The detail of this statement will scrutinise how the options have been developed to date, the influencing factors for the decisions made in the process, the choice of materials, reasoning for this and the resultant quality and form of the new building by way of 3D visuals in the context of the site.

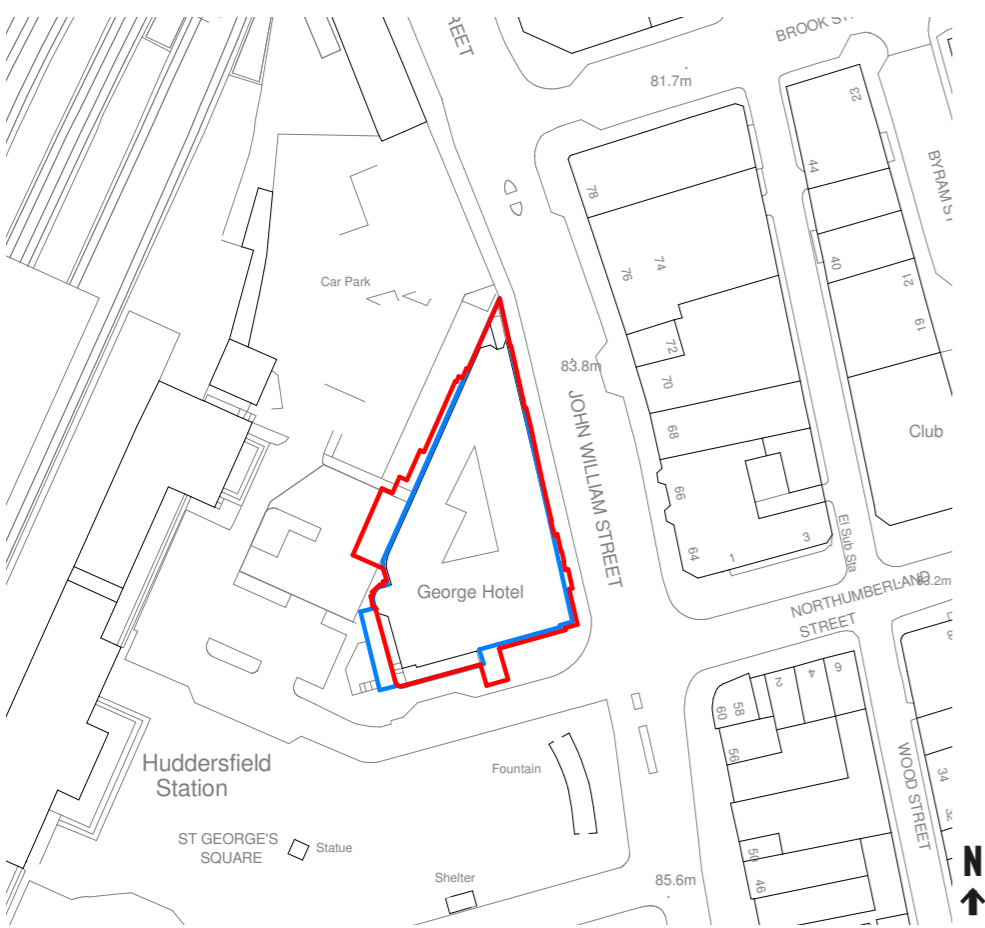
2.0 INTRODUCTION

2.1 SITE LOCATION

The George Hotel is located in the town centre of Huddersfield, West Yorkshire and positioned on the junction of John William Street and Railway Street. The building's main elevation faces St. George's square, a prominent public space shared with the railway station, water features and a sculpture of Harold Wilson, prime minister of the United Kingdom 1964 and 1970. Huddersfield is ideally located between Leeds and Manchester.

2.2 PROJECT DESIGN TEAM

Architect - Bowman Riley
Heritage Consultant - Bowman Riley
Lead Consultant - Bowman Riley
Principal Designer - Bowman Riley
Civil and Structural Engineer – Ramboll UK
Mechanical and Electrical Engineer – Ramboll UK
Vertical Transport Engineer – Ramboll UK
Quantity Surveyor – Turner and Townsend
BREEAM – Mott MacDonald
Project Management – Queensberry Real Estate
Fire Consultant – Mott MacDonald
Acoustics - Mott MacDonald



Location Plan (not to scale)

2.3 BACKGROUND

Since purchasing the building in 2010, Kirklees Council have undertaken a number of different Phases of works prior to instructing the re-development.

Phase 1: Asbestos Removal

Following the purchase of the building by Kirklees Council, an asbestos survey was undertaken and it was found to be present in the majority of the basement areas. A contractor was appointed to remove the asbestos from the building and encapsulate any remaining fibres to make the building safe.

Phase 2: Conservation Works (External envelope only)

Bowman Riley were appointed as Conservation Architects acting on behalf of Kirklees Council to assist the surveying team to identify and specify the external repair works. An assessment of significance was undertaken in addition to a high level survey of the building which allowed a conservation approach developed for the repairs.

The following works were identified and undertaken as part of the Phase 2 works which are currently ongoing:

Three main areas of repairs:

- External masonry walls
- Windows
- Roof

Masonry

Bowman Riley undertook a full inspection external walls and masonry details following the erection of the scaffold. It was important to not only understand the defects but more importantly the cause of the defects in order to identify the repairs required.

All areas of stone repair were subsequently identified on plans which can be seen in Photo A. It is fair to say that the stonework was in worse condition than initially thought.

In general the defects were:

- Large areas of cementitious mortar repairs
- delaminated stonework
- inappropriate alterations/ferrous fixings to the elevations.
- Areas of facebedded stone.



PHOTO A : Localised Masonry Repair



PHOTO B : Masonry repair of complete unit

Windows

Primary works to the windows are to be re-glaze with a slimline double glazed unit with a ripple effect which will allow the secondary glazing to be removed internally. Historic windows are to be repaired and rebalanced and any inappropriate window replacements are to be removed and replaced with a sliding sash design which is based on archival research.

Windows are currently with the joiners Smithson and Littlewoods who are undertaking a more detailed assessment of the frames now that they have been removed. Any that are unable to be repaired will be replaced on a like for like basis.



PHOTO C : Phase 2 existing window condition



PHOTO D : Phase 2 proposed window unit

Roof

The existing roof covering was welsh slate which appeared to have been reclaimed from elsewhere. In order to achieve the longevity required, it was agreed that the roof would be replaced with new welsh slates. Lead flashing was to be replaced and repairs undertaken to the decayed roof timbers which had evidence of fire damage.

Parapet gutters had failed in a number of areas and the falls and steps were not to current legislation and were re-designed and replaced. Flat roofs coverings were also replaced in addition to rationalising and replacing the rainwater goods.

Around February / March the works were tendered and William Birch were appointed as contractor.



PHOTO E : Phase 2 existing top storey level roof and window condition



PHOTO F : Phase 2 proposed image of roof repair

Phase 3: Development Phase

Kirklees Council appointed a development manager, Queensberry Real Estate, to undertake a preliminary assessment of the existing George Hotel. The findings were that the building would need substantial changes in order to attract a reputable hotel chain that would provide a secure long-term future for the building.

Bowman Riley worked with Queensberry to prepare a feasibility study which focused on the alterations that would be needed in order to convert the building from a 60 bed hotel to a 90-100 bed hotel.

2.4 STATUTORY CONSULTATION

As a result of numerous in-house workshops with the design team to include, Acoustic, Fire, Structural, MEP and Heritage, the design has been developed into a cohesive scheme which not only breathes new life into this important heritage asset but also achieves minimum target number and size of rooms.

External consultation has also taken place with the creation of a website allowing comments on the proposals prior to submission of the application in addition to presentations made to local history groups about the history of the building and initial findings. External consultation has also been held with Historic England facilitated by Kirklees Council. These discussions have included an initial meeting to review the stage 2 findings and proposals, subsequent meeting to review the developed designs and more targeted meetings with structural engineers and economists from Historic England. Site meetings have also been held to review the building and condition.

The design has undergone development as a result of these various consultations and comments incorporated.

2.5 LAND OWNERSHIP

There are two landowners/leaseholders relevant to the site. Kirklees council own the George Hotel and the streets to the east, south and the area of the car park highlighted to the west.

The railway station is owned by Kirklees council and leased to Network Rail.

Network Rail own the car park area highlighted to the north and have a common boundary with the George Hotel site.

- Kirklees council
- Kirklees council lease to network rail
- Network rail



DIAGRAM 1 : Land Ownership Diagram

3.0 PHYSICAL ASSESSMENT

3.1 SITE CONTEXT

The George Hotel is a Grade II* listed and there are several listing buildings around the site which contribute to the overall setting, the railway station (Grade I) and the railings to the station yard (Grade II) are immediately adjacent to the west of the building, other surrounding buildings include the Lion Buildings (Grade II*) along John William Street and those on the junction of Northumberland Street. The site is located facing St. George's Square, which is surrounded by further listed properties, opposite is the Britannia buildings which is also Grade II*.

John William Street is to the east, St. George's Square is to the south, two large car parking areas are to the west, and the railway line runs from the southwest to the northeast of the site. To the north, the character of the conservation area is somewhat lowered, with a large supermarket and new retail spaces beyond the railway line bridge. The main town centre is to the south of the site.

The building is iconic for Huddersfield, especially in terms of its close proximity to the train station, its relationship to the Rugby League, and the prevalence of the hotel and prominence of Huddersfield as a town with a strong economy from the 19th into the early 20th century.

3.2 SITE ANALYSIS

The site is sloping and elevated which opens to the east and west and converges to the north. The site at high level has the potential for views across Huddersfield. The site has few adjacent buildings with open space to the west from the south to the north which helps with environmental strategy such as passive solar and ventilation gains.

The frequency of the trains and transport along with the adjacent roads and car parking could be considered a source of pollution, along with any events on St. George's Square.

The building has good public transport links, the town centre, rail and bus station being in close proximity, Huddersfield also has a direct link to Manchester Airport and is in driving distance to the M62 and M1.

The site is located with its key existing block, Block A, facing south towards a public space. The site position and block arrangement provides good vehicular and pedestrian access. The building, Block A especially, frames several views and vistas from the southward approach, especially when placed in context with the train station's portico entrance.



DIAGRAM 2 : Axo view of existing building showing Block A B & C from the southeast

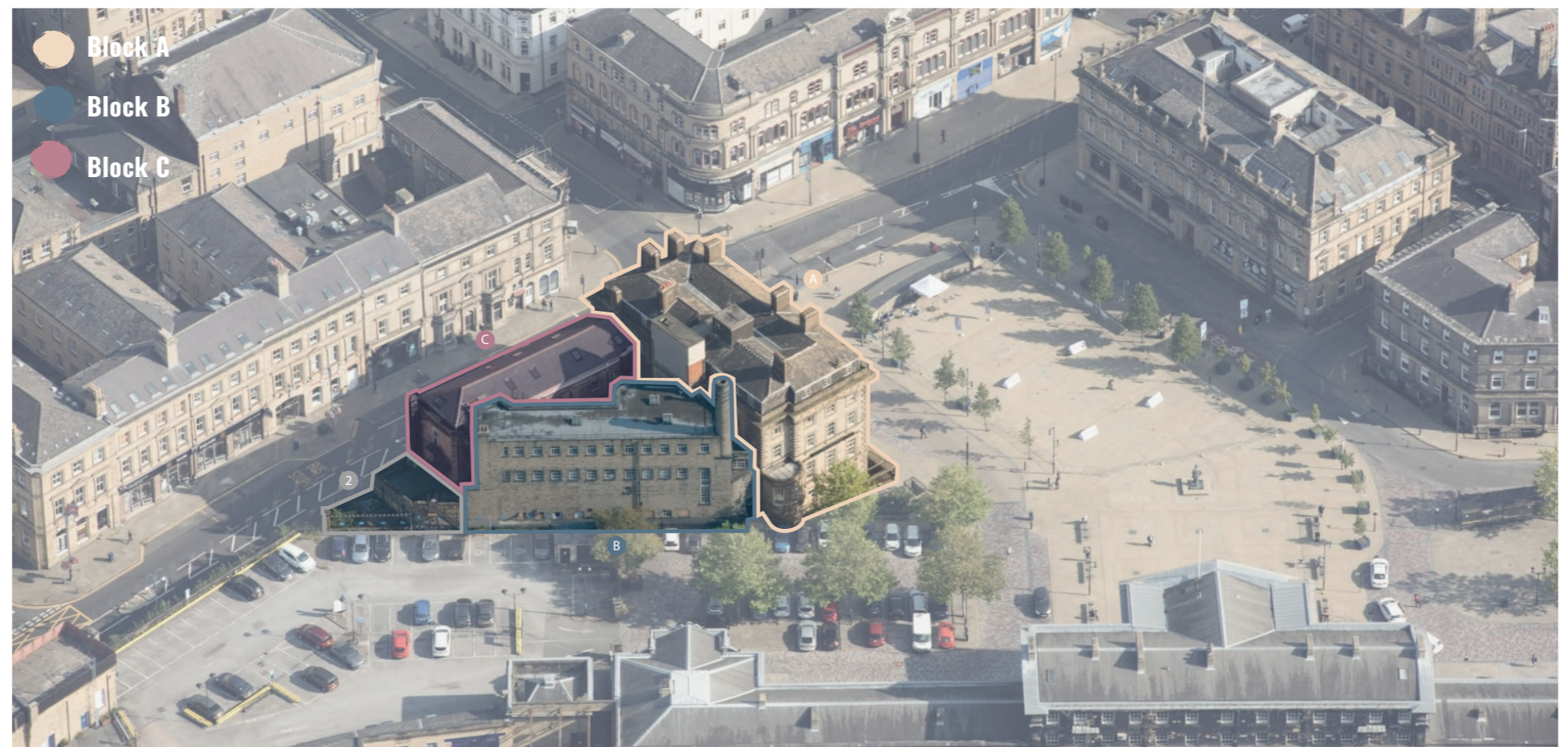


DIAGRAM 3 : Axo view of existing building showing Block A B & C from the northwest

3.3 SITE CONSTRAINTS AND OPPORTUNITIES

The hotel's main entrance is on Railway Street, leading upwards to the train station and car parking areas and is opposite St. George's square which is a pedestrianised area. The site triangulates to the north, to the west is car parking and the east is John William Street. To the west, the mezzanine level in Block B provides secondary access from the car park level. To the east, there are two further secondary points of ingress onto John William Street. There is one further point of access into Block A adjacent to the main entrance located into one of the function areas.

There is a significant level change from east to west especially to the north of the site from the car park, and further level changes from north to south along John William Street. There are railings around Block A to the west to address the level change creating a lightwell to the ground floor.

The George Hotel is Grade II* listed and its surrounding setting of heritage assets are to be taken into consideration as a site constraint. The car park serving the railway station has a one-way route returning to John William Street and provides access to another car park. There are six number trees dividing the parking spaces. The pedestrian movement around the train station and associated vehicular drop off, St. George's square as a public space, King's Head public house, and the areas for pedestrian access around the perimeter of the building, along with the vehicular traffic is a site constraint. There is a single storey substation immediately adjacent to the Block B on the west facade.



DIAGRAM 4 : Site Analysis, Constraints & Opportunities Diagram

3.4 TRANSPORT ASSESSMENT

General principles ;

- A review of the existing local transport network has been undertaken for all modes of transport and it has been determined that it is sufficient and that it operates safely at present.
- It has been demonstrated that the public transport provision in the vicinity of the site is excellent and provides many opportunities for travelling to the site by sustainable modes of transport.
- Given the central location of the site there are ample opportunities for staff, hotel guests or visitors to travel on foot or cycle.
- General servicing, refuse collection and deliveries at the hotel will be undertaken via Railway Street and the train station car park on the western boundary of the site. The timings of deliveries refuse collection and any other general servicing will be co-ordinated to be primarily undertaken outside of peak hours.
- Given the constraints of the site, no car or cycle parking is to be provided as part of the development proposals. Although no parking is proposed, there are opportunities for car parking in a number of car parks within a short walk from the site. In regard to cycle parking, those wishing to park cycles will be able to utilise the secure cycle hub within Huddersfield train station which has 54 spaces.
- The Transport Assessment and the accompanying Travel Plan have been prepared in accordance with 2018 BREEAM guidance as the applicant seeks to obtain an 'Excellent' rating. It is considered that the requirements of TRA 01 and TRA 02 of the guidance have been met within this report and in the Travel Plan.
- It has been demonstrated that the proposed development will generate very few car trips, in the order of 10 two-way trips in the morning peak period and 8 two-way trips in the evening peak periods. Due to the proposed development site not providing any on-site car parking the impact of these minimal trips will be distributed across a wide area and therefore would not be noticeable.
- For the very limited car trips, there are multiple car parking locations for these trips to park in the existing town centre car parks.
- It can be concluded that there are no highways reasons to refuse planning permission.

General approach ;

The Transport Statement and the accompanying Travel Plan have been prepared in line with the key principles set out in the Planning Practice Guidance and relevant guidance. A review has been carried out of the relevant national and local transport related policies. The Transport Statement identifies access to the site by all modes, particularly those by sustainable modes, such as foot, cycle and public transport (bus and train). The servicing arrangements for the site have been identified, which will be via Railway Street and the train station car park on the western boundary and states that they will primarily be undertaken outside of peak hours. The peak hour trip generation for the site, by all modes has been determined, which demonstrated that the number of car trips is likely to be minimal.

Due to the proposed development site not providing any on-site car parking the impact of these minimal trips will be distributed across a wide area using the existing car parks identified in the Transport Statement throughout Huddersfield, and therefore would not be noticeable. The Travel Plan includes a number of measures to minimise single occupancy vehicle traffic to and from the site. The objectives of the Travel Plan are to promote the benefits of active modes of travel; and to encourage staff to adopt sustainable modes of travel for most of their journeys to and from the site.

4.0 EXISTING BUILDING

4.1 HISTORIC DEVELOPMENT

The existing information helps demonstrate a building with various stages of historic development. The building has been categorised generally into block(s) A to C. Block A, the main range of the hotel, has four floors and a basement, Block B has three floors and a mezzanine level and a partial basement, Block C has three floors and basement. The ground floor layout connects the three blocks with two further areas, the courtyard, and the kitchen and public toilets.

Block A is the most prominent with key elevations facing St. George’s square towards the south, the train station and the junction of John William Street, Railway Street to Northumberland Street. This is referred to as the 1851 Block.

Block B is towards the rear facing the railway station. This is referred to as the 1930’s block but had an older block on this location and an additional storey from the 1960’s.

Block C is along John William Street. This is referred to as the 1874 block and built as ancillary to Block A.

Block B and C triangulate to the north from the main entrance of Block A. There are further infill sections between the blocks, for example the courtyard formed parts of the 1930’s extension.

The building is overall in disrepair or in poor condition which varies across the block(s) and areas, with spaces deemed unsafe and inaccessible. For example, the internal staircase is not fully functional due to excessive dry rot, and Block C has spaces that cannot be entered such as the central former Ballroom at the centre of overall plan. There is currently work being undertaken to address some of the conservation work required to Block A but mostly external repairs.

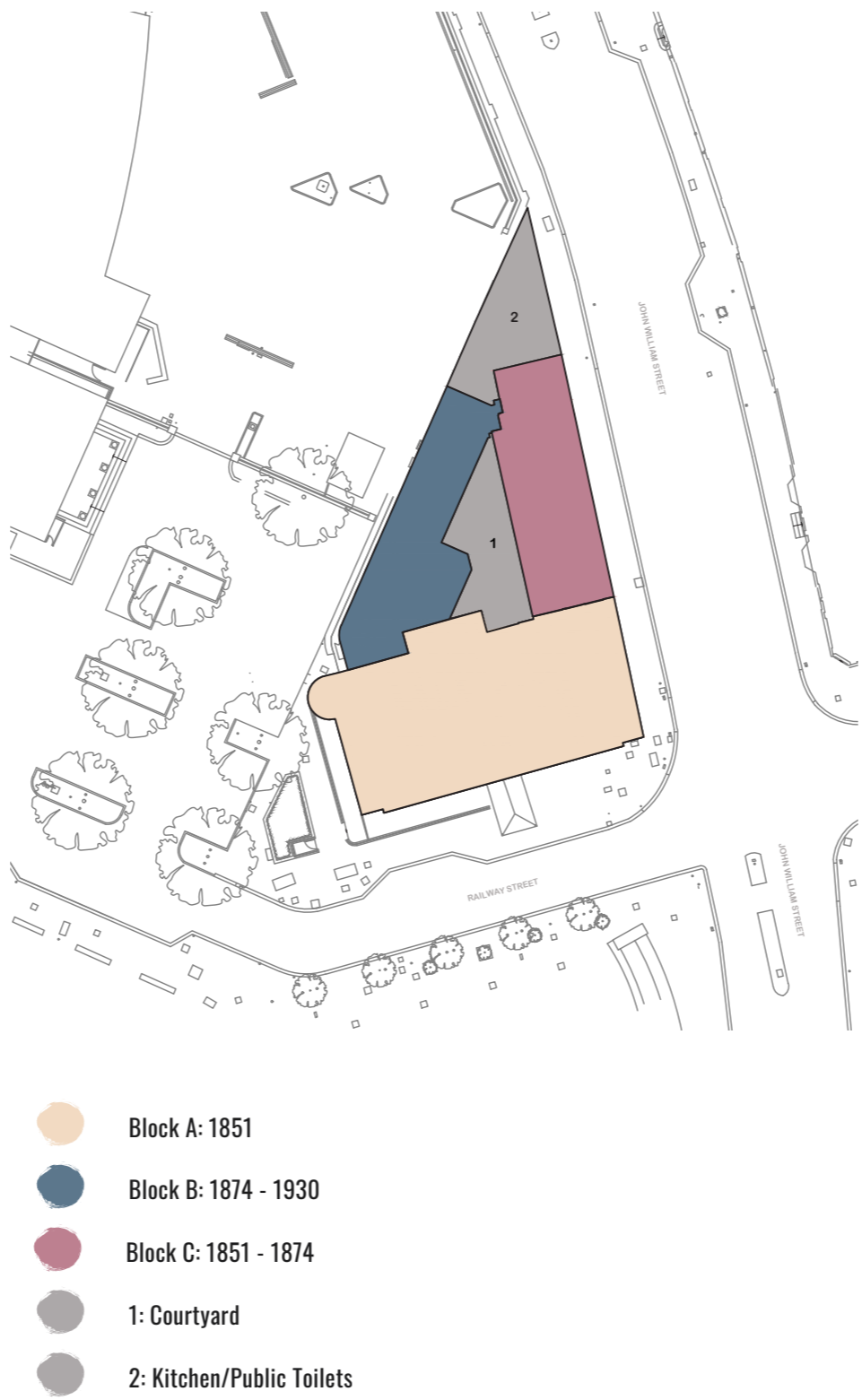


DIAGRAM 5 : Building diagram showing the massing arrangement and associated phasing



HISTORIC IMAGE 1 : Eye level view from the train station facing Block A from the southwest



HISTORIC IMAGE 2 : Street view from John William Street facing Block A from the southeast



HISTORIC IMAGE 3 : Aerial view, 1928

A selection of images that show the building in context either side of the 19th century.

4.2 BUILDING PHOTOGRAPHS

For the benefit of Phase 3 and to record the building up to Phase 2, drone photography was produced prior to the scaffolding of phase 2 and a Matterport digital scanning survey has been undertaken during the conservation works. Specific photographs of the building vary, for example some show the spaces prior to inspection.



PHOTO 1
Ground Floor view of the former Ballroom.



PHOTO 2
Ground Floor view of the entrance space and main staircase.



PHOTO 3
Ground Floor view of the former Bar & Event space



PHOTO 4
Masonry detail 1.



PHOTO 5
Basement view of circulation.



PHOTO 6
GF view of existing Bar.



PHOTO 7
GF view of main staircase.



PHOTO 8
FF view of Commercial Room.



PHOTO 9
Masonry detail 2.



PHOTO 10
External view from John William Street from the southeast.



PHOTO 11
Drone view facing Block A from the south.



PHOTO 12
External view from the train station from the southwest.

PHOTO SELECTION 1 : A selection of photos of the existing building, internal and external, to show the existing condition.

5.0 DESIGN PROPOSALS

5.1 KEY PRINCIPLES

- Efficient utilisation of the whole of the existing footprint of the site
- Sensitive refurbishment and upgrade of the retained elements to the best possible standards and quality
- Introduction of new elements of the building which make reference to the historical context of the site, whilst honestly expressing that they are a modern, quality addition
- Form and massing of the new extension appropriate to its location in the urban environment
- Provision of a level of accommodation which will be both viable and attractive to a prestigious hotel operator
- Accommodation of additional facilities to attract external use of the building for conferences and wedding functions
- Improvement of access throughout the building
- Retention of the main Heritage asset as feasible
- Statutory and regulatory compliance
- Sustainable consideration wherever possible in both the choice of materials, construction and servicing methodology

5.2 HERITAGE STATEMENT

As the building is included on the National Heritage List for England at Grade II*, Helen Walker RIBA CA has worked with the architects to advise on the likely impact of the proposed designs and to assist with the development of a sympathetic scheme which achieves a balance between the need to protect the significance of the heritage asset with the need to secure a long - term, viable future for this historically important Hotel.

The Heritage Statement has been prepared in accordance with the requirement under paragraph 194 of the NPPF which requires the applicant to provide an impartial assessment of significance of the heritage assets in order to understand the potential impact of the proposals and provide advice on mitigation to reduce the impact.

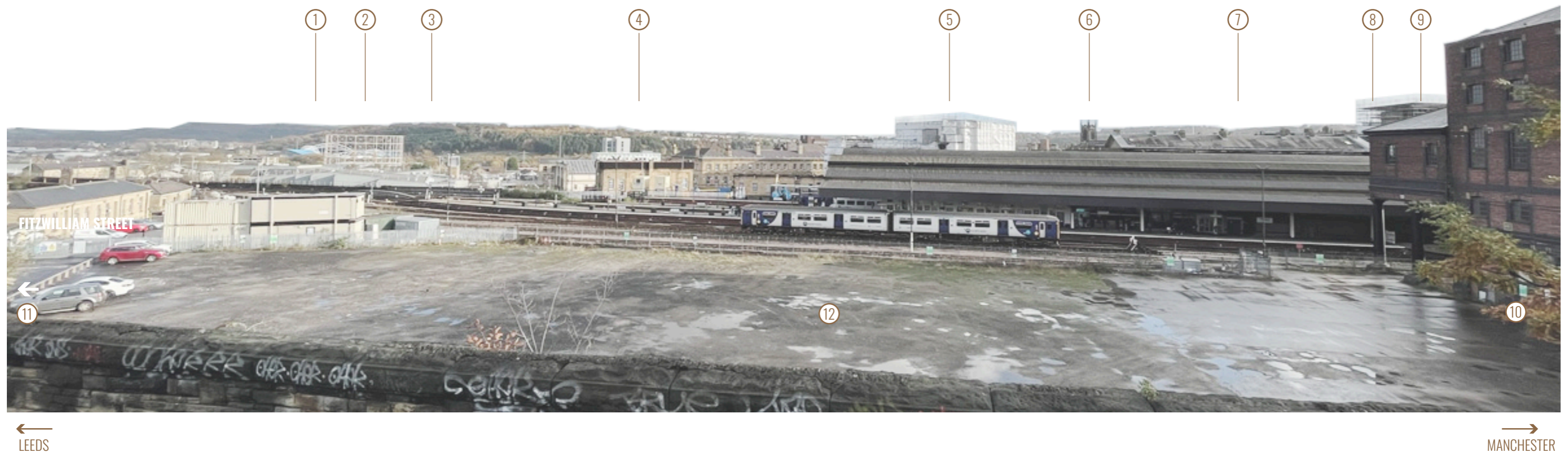
The document has also been prepared in accordance with the Historic England Advice Note 12 (HEAG279) "Statements of Heritage Significance: Analysing Significance in Heritage Assets" and Historic England's "Conservation Principles Policies and Guidance for the sustainable management for the historic environment".



SKETCH VIEW 1 : View in context across St. George's Square facing the new proposal from the southwest



PHOTO SELECTION 2 - PHOTOS 13 to 27 : A selection of photos from within the conservation area to show details of the site context.



- 1 John Smith's Stadium
- 2 Gasworks
- 3 Viaducts & Supermarket
- 4 Water Tower
- 5 The George Hotel
- 6 Train Station & St.George's Square
- 7 Huddersfield Parish Church of St.Peter's
- 8 Huddersfield Town Centre
- 9 The Estate's Building
- 10 Large Brick Warehouse in Goods Yard
- 11 Tower in northwest corner of railway yard
- 12 Fitzwilliam Car Park

DIAGRAM 6 : Site context view from near Fitzwilliam Street facing the site from outside of the conservation area facing west.

5.3 DESIGN DEVELOPMENT

Stage 2

The initial brief was to convert the existing 60 bed hotel into a 90+ bedroom hotel in order to create a Hotel which would be viable for the current market. Following the assessment of significance undertaken by the heritage team it was ascertained that Block B dated to the 1930's and the 1960's and did not contribute to the heritage significance of the building and as such had the most capacity for change. Block A was the most significant and had the least capacity for change and Block C had moderate capacity for change due to the amount of internal and external alterations that have historically been undertaken.

As Block A had the least capacity for change, this would be adapted to create further ancillary accommodation at ground and basement level by the historic planform, with hotel rooms at first and above.

It was initially proposed that the most efficient was to demolish Block B and rebuild.. This takes into consideration any potential harm of the heritage assets. This would allow the provision of hotel rooms from ground floor upwards (due to the existing levels rising around block B resulting in no natural light at ground floor) with ancillary accommodation at ground and basement levels.

In order to get closer to the 90+ bedrooms required for a viable hotel offering, Block C underwent a number of design options. The first option to be considered was raise the existing roof to create additional bedrooms at third floor level. This resulted in a scheme with 79 rooms which did not meet the brief. A further option was investigated which removed the roof of Block C completely with the addition of an extra floor creating an additional 6 rooms increasing the total to 85. Again, short of the target figure.

Following discussions with Queensberry, the scheme evolved to include a light well adjacent to the retaining wall on the west elevation allowing the creation of 5 additional rooms at ground floor level and the amalgamation of some rooms within the original hotel Block A which increased the total to 92. Following discussions with various interested operators, 92 rooms was deemed to be an acceptable number with an absolute minimum of 90. The ancillary accommodation for the ground and basement levels was then refined to meet the requirements of any prospective operator.



CONCEPT IMAGE 3 : Design visual from John William Street facing Block A.



CONCEPT IMAGE 4 : Design visual from John William Street from the north.



CONCEPT IMAGE 2A : Initial concept visual from John William Street for sketch option A



CONCEPT IMAGE 2B : Initial concept visual from John William Street for sketch option B



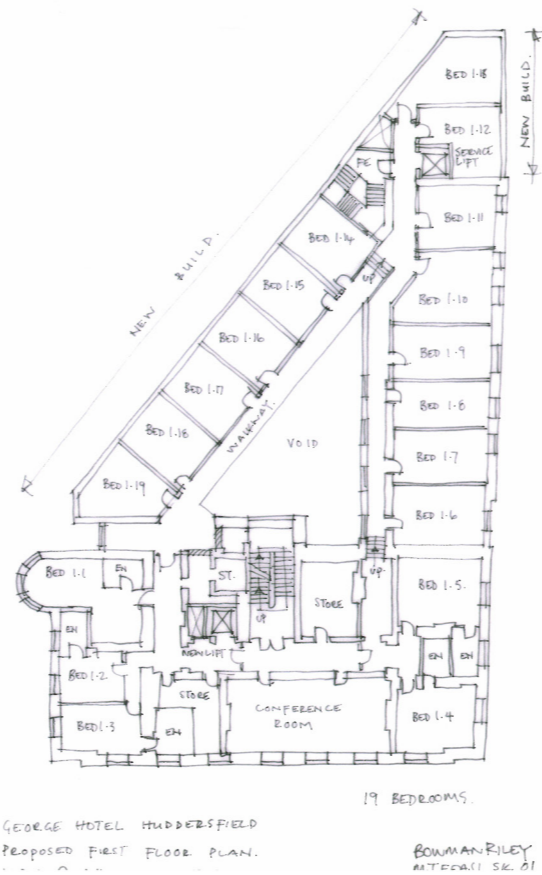
CONCEPT IMAGE 1A : Initial concept elevation for sketch option A



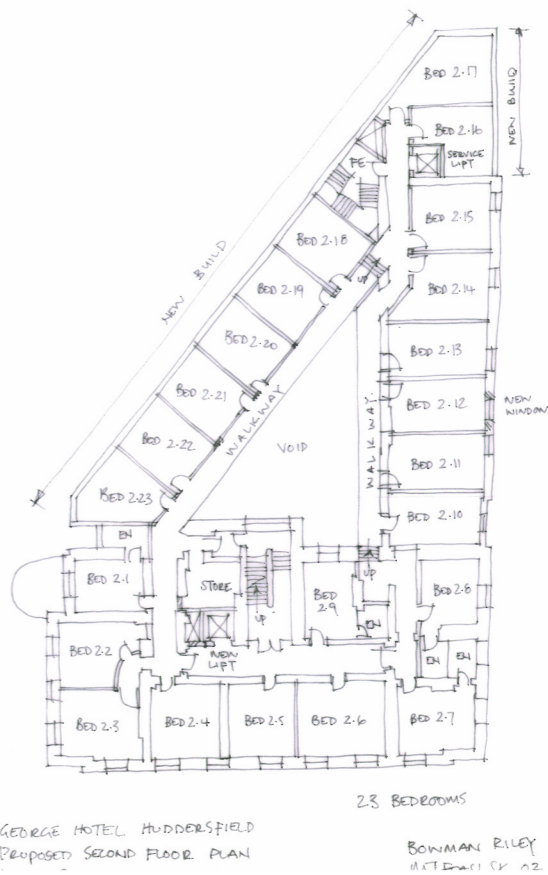
CONCEPT IMAGE 1B : Initial concept elevation for sketch option B

Stage 3:

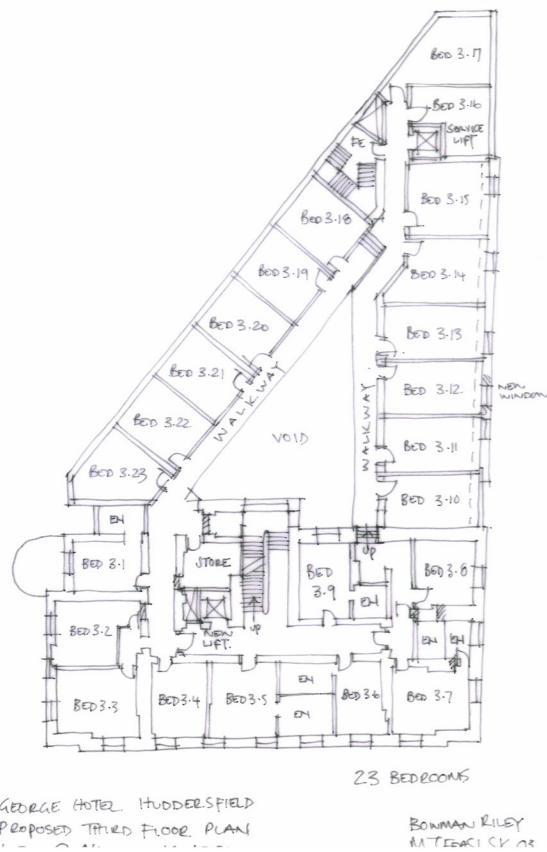
Bowman Riley were formally appointed by Kirklees Council to lead the design team in June 2022 as a result of a formal tender process. The Stage 2 designs for the new hotel had been based on historical information prepared by a third party, and it became obvious from our site visits that the building had not been accurately surveyed. In order to enable more accurate designs to be developed, a full topographical and measured building survey was undertaken. Upon receipt of the measured building survey, the designs were further developed.



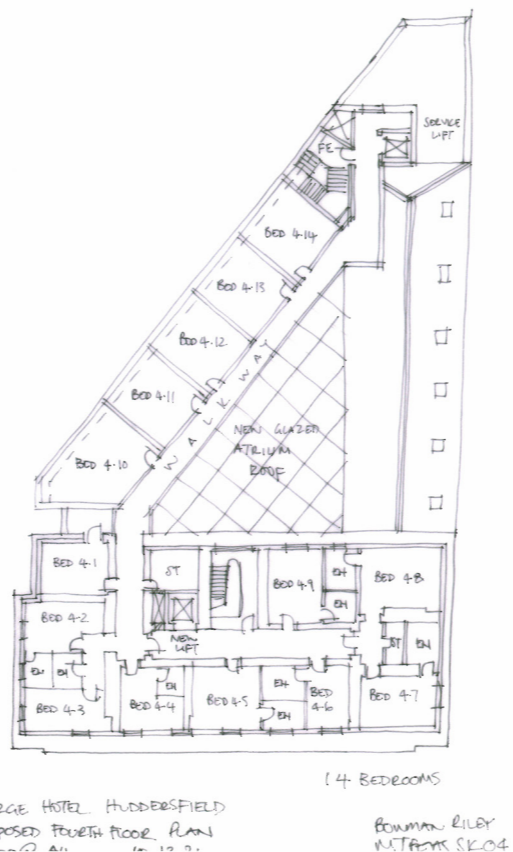
LAYOUT 1 : Initial concept layout for the proposed First Floor



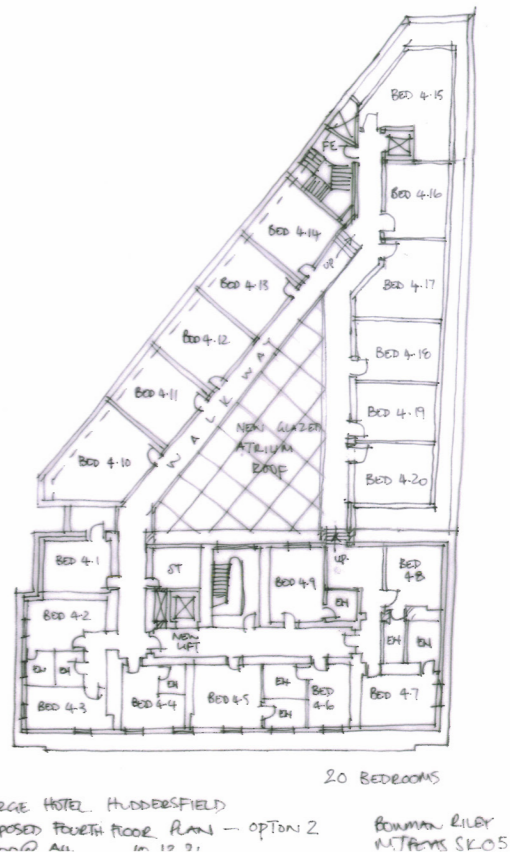
LAYOUT 2 : Initial concept layout for the proposed Second Floor



LAYOUT 3 : Initial concept layout for the proposed Third Floor



LAYOUT 4 : Initial concept layout for the proposed Fourth Floor Option 1



LAYOUT 5 : Initial concept layout for the proposed Fourth Floor Option 2

The main difference between the pre and post survey schemes is that the apex of the site is slightly more constrained than initially thought. The solution has been to revise the arrangement of the central atrium and the floor layouts have been updated. Following input from the MEP, fire and acoustic engineers, the design was developed to incorporate M and E risers, rationalisation of the bedrooms to accommodate continuous vertical bathroom risers, rationalisation of escape stairs and fire exits, re-introduction of a service lift.

It also became apparent from the revised survey information that the existing floor to ceiling heights in the basement would be insufficient for the function suite accommodation required in that location. Other locations were looked at as alternatives however these were ruled out due to lack of size and inadequate ventilation. This led us to the current proposal of lowering the basement floor level by approximately 1m in order to create the necessary ceiling height. In the process of reviewing the layouts in conjunction with the survey information it became apparent that the existing window locations, internal walls and the rear and northern external walls of Block C were constraining some of the rooms such that the sizes were falling below the required minimum of 20sqm.

In order to achieve the target room numbers, different options were investigated including the addition of an extra floor to blocks B and C. However, due to the basement height issues, retention of both the internal and external walls would have resulted in full scale underpinning of not only walls but, (due to extensive alterations undertaken in the 1930's) concrete pad foundations to existing steelwork which was deemed impractical. Following discussions with the Structural Engineer and numerous intrusive investigations into the building, it became apparent that there were some significant structural issues with the first and second floors of Block C (see structural engineers report for further details). As a result the external walls have been retained and the internal walls removed.

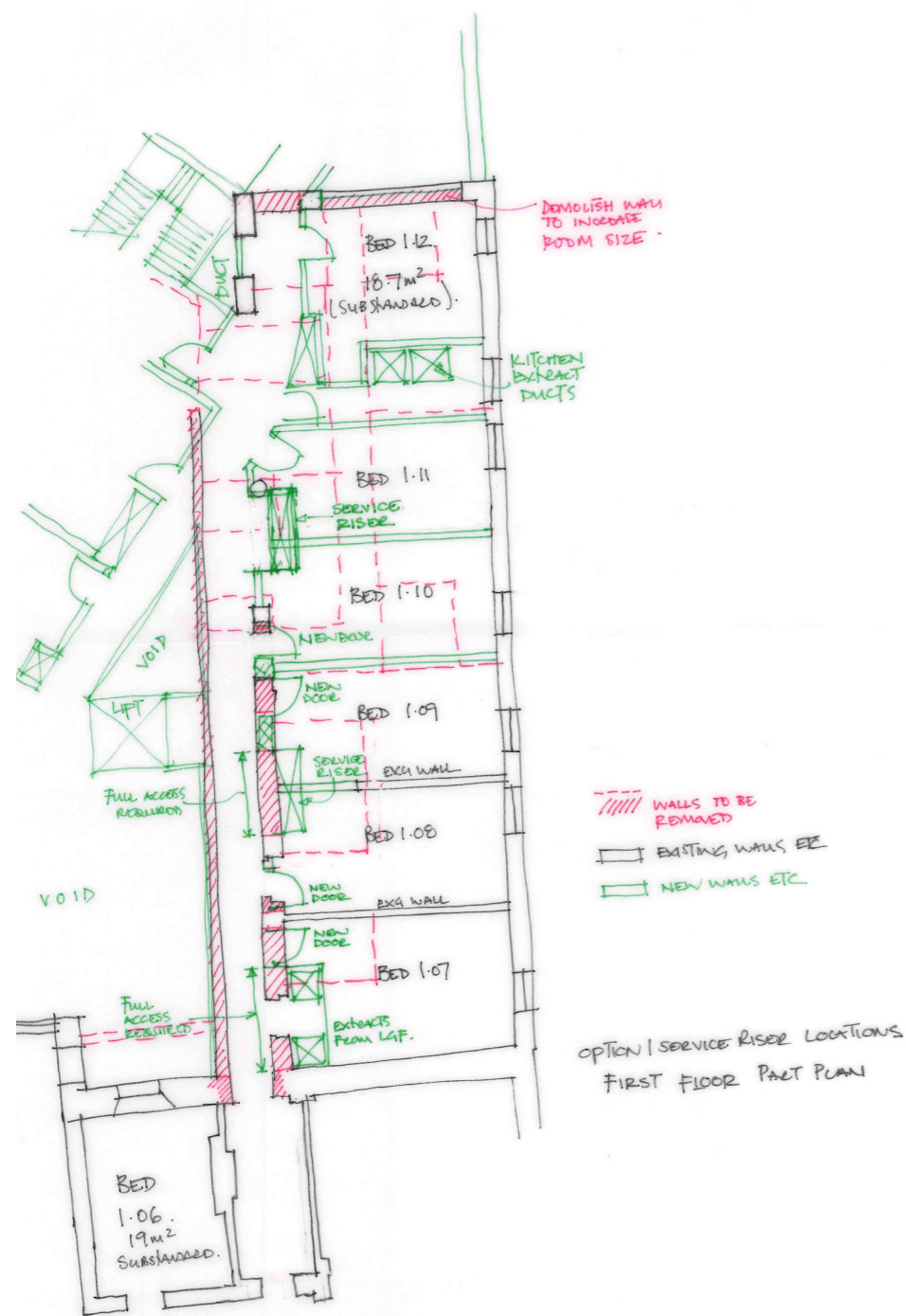
The above compromises have been reviewed against the retention of the historic fabric options and the conclusion we have arrived at is that they are required to be implemented in order to achieve a commercially viable hotel which in turn allows the continuation of the optimum viable use of the building which is a strong contributing factor to the significance of this Grade II* listed building.

5.4 DESIGN CONSTRAINTS FOR BLOCK C

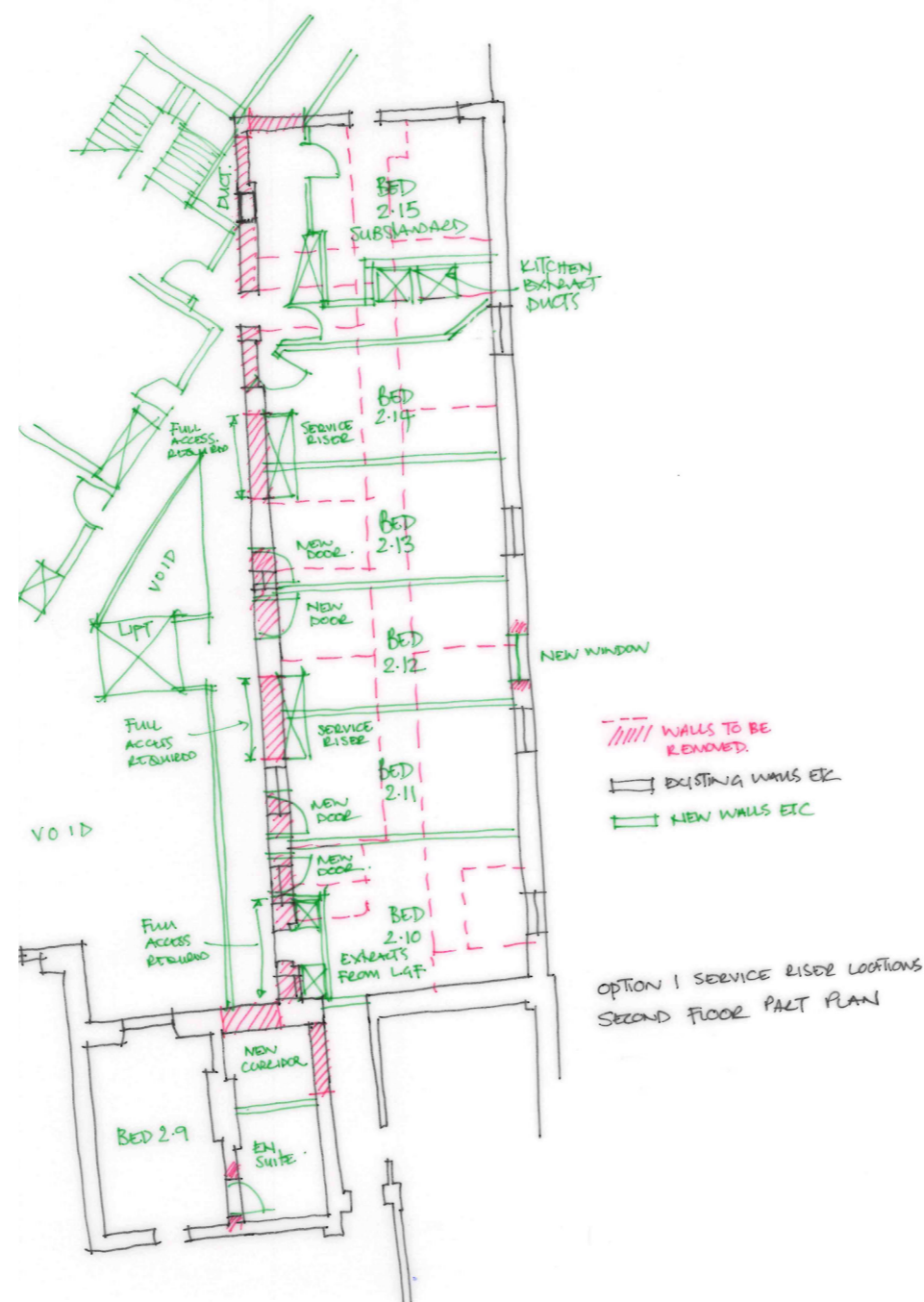
- Requirement for minimum 20 sqm room size
- Requirement for service risers to stack vertically floor to floor throughout the building. Investigated various options for locations for risers. Inside rooms require existing walls to be removed for full access. Within wall location ruled out as existing steel beams at GF ceiling level prevent continuous vertical drop.
- Ducts could be located outside the block C foot print however this would require the new corridor walkway pushing further out into the atrium space. This has a knock on effect requiring a new access point into Block A through bedrooms 106, 206, 306, located on the north elevation east of Block A. Doing so, would reduce the room sizes by approximately 3 sqm bringing it below the minimum space requirement therefore the total number of rooms would reduce below the viability target of 90.
- Retaining the existing 'internal' exterior wall to block C would require a minimum of 80% of the wall to be removed to allow for the insertion of new door openings, corridors, service risers etc therefore there would be little of the existing wall left after all the structural alterations hence the proposal to completely remove.
- In addition, given the structural instability of the existing first and second floors, new floors and steel structural would be required to be inserted into the building with the loss of even more existing structure throughout all levels of the building including new foundations in the basement.
- Extensive amounts of the 'internal' external wall of block C have already been removed at first floor historically to facilitate historical adaptations of the hotel leaving little of the historic fabric in tact.
- Internal wall positions for new walls between bedrooms restricted by existing window positions on John William Street Facade
- Restricted headroom in the basement requires floor lowering by 1m + to ensure

that it can be used as function room space with adequate floor to ceiling height and ceiling void space for ventilation services etc.

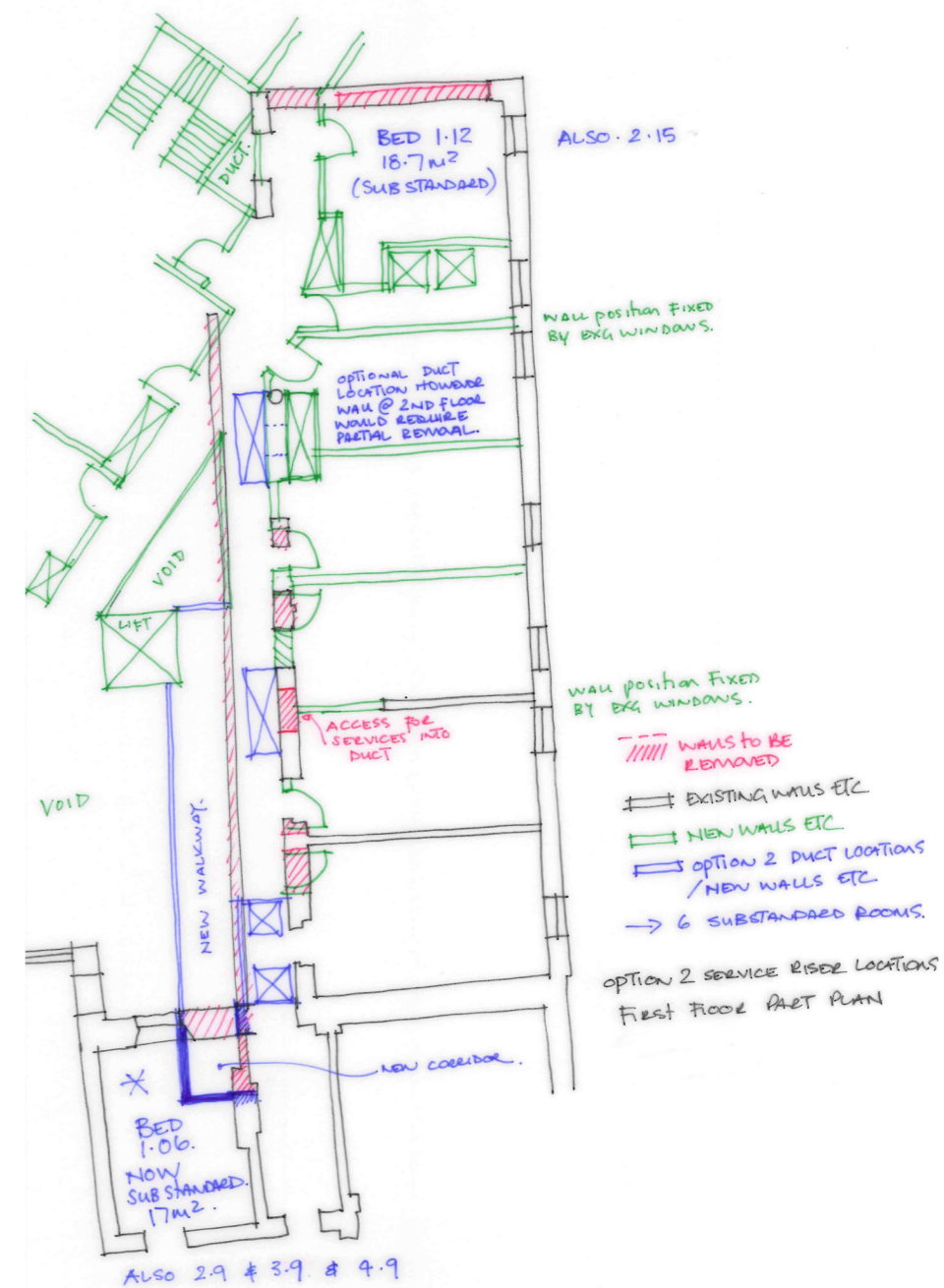
- Current basement is sub divided by internal load bearing cross and flanking walls and columns that would require removing in order to use the space as an open plan function room. The additional structural alterations including underpinning to all the existing external walls and columns would be financially not viable. In addition the physicality of getting machinery into the basement to undertake the underpinning works and also postbox method of under pinning the walls would make the work financially not viable.
- Retention of end wall of Block C restricts the sizes of the rooms in the apex of the new extension bringing them below minimum size requirement.



LAYOUT 6 : Option 1 First Floor Layout



LAYOUT 7 : Option 1 Second Floor Layout



LAYOUT 8 : Option 2 Second Floor Layout - alternative locations for risers

5.5 USE & AMOUNT

The existing building was previously in use as a hotel its total GIFA was 4309 m2. Historical use of the site is detailed in the Heritage Report.

The new proposal will also be used as a hotel , the combination of the retained heritage element Block A and the new extension will produce a building with a total GIFA of 5064 m2

The submitted proposal includes:

- 91 bedrooms minimum c.20m2
- 100 cover Banqueting Suite at Basement Level with serving kitchen
- Gym/ Fitness Suite at Basement Level
- 70 cover Restaurant and Bar at Ground Floor Level with serving kitchen
- 30 person Conference Room at Ground Floor Level
- 24 person Conference Room at First Floor Level
- Back of house and staff facilities at all levels

Refer to Bowman Riley drawings P204 – P210 for layout plans of each level.



DRAWING EXTRACT 1 : Basement level of Block A showing existing use.



DRAWING EXTRACT 2 : Proposed Basement level of Block A showing proposed use.

5.6 DEMOLITION & ALTERATIONS

Key Principles

- Remove inappropriate, low-quality, and modern interventions as a priority.
- Aim for alterations to high value areas of existing building fabric are done as a last resort.
- Design towards building nibs and down-stands are retained to allow appreciation of historic plan form.
- All areas due to be demolished/altered are photographed and recorded prior to commencement. (and deposited in the HER)
- All openings to be made good using plaster to match existing building (i.e., lime plaster).
- Where possible, all new openings to be modern but sympathetic in appearance –i.e., the openings will be designed to match the historic door openings in size and proportion but will have clean lines rather than replicating historic architrave details making them identifiable as a later alteration.
- Skirting details to return along the opening and to be matched to existing if applicable.

General Approach

All areas identified for demolition or alterations have been carefully thought through to limit the harm to the significance of the heritage asset. Any walls to be removed in their entirety are decided either detrimental or neutral. The historic building appraisal including the phasing plans and significance plans have been used to guide the proposals, in particular where the historic corridors in Block A have been brought back into use..

The approach to the design of the scheme has been an assumption for retention where possible of significant built fabric and removal of detrimental built fabric in the first instance. The brief from the client has been used as a guide, which has been adapted to suit the heritage constraints of the existing buildings. Any areas of major interventions have been reviewed as part of an on-going and iterative process and validation for these interventions has been sought from all parties and advice sought on the way forward. If the impact has been deemed to be too harmful to the significance of the heritage asset, the approach has been reviewed in order to explore other options or has been dismissed.

Partial Demolition to Form Structural Openings in Block A

Where possible our initial approach has been to limit areas of demolition to elements of the building which have been previously altered or new additions such as the partitions forming the previous en-suites. The historic corridor layout has been restored, as have the original bedroom layouts, particularly from Second to Fourth floor level.

Where this is not possible, the next level of alterations is to elements of the building fabric that may have been historically altered such as historic openings which have been previously infilled. Cracks at the head of these partition walls offer additional evidence that these walls were inserted, as well as the historic building plans which show these areas open.

Where openings are to be formed within existing built fabric that has been previously unaltered these openings will be finished in a modern and minimalist style with plain plastered reveals in material to match the existing wall. They have been designed to complement the proportions of the existing features in the rooms and will match the adjacent historic door openings in terms of height. In this way we ensure that, although the openings are legible as modern alterations, they are subservient to the existing historic details within the spaces and respect their scale and proportions.

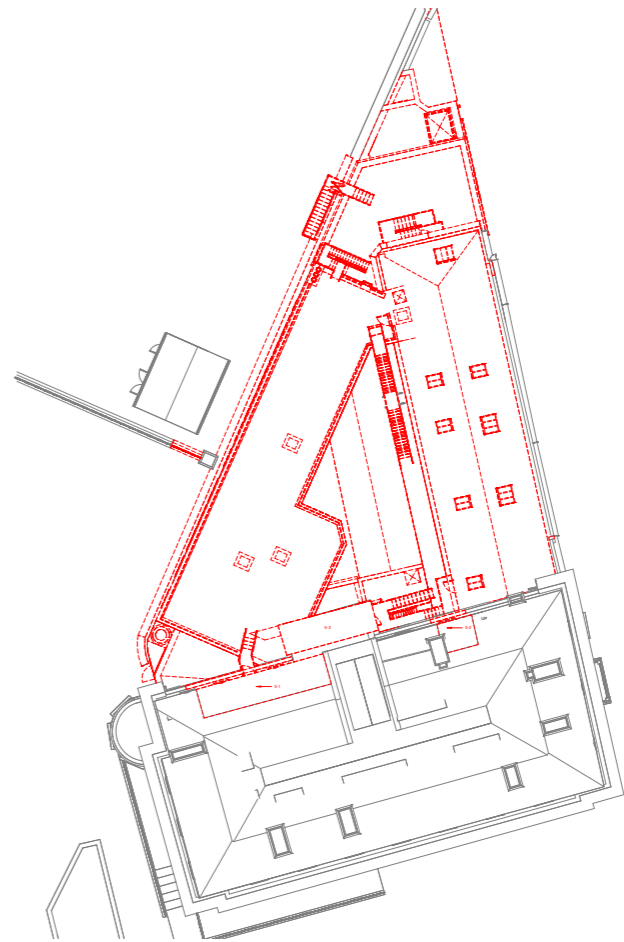
Demolition of Adjoining Built Fabric

Any significant demolition of historic fabric has been avoided wherever possible and is undertaken as a last resort once all other options have been discounted. For example, having carried out opening up works into Block B, it came apparent that there was none of the historic 1970's structure remaining and the building dated from the 1930's & 1960's and was a simple brick structure with no significant features.

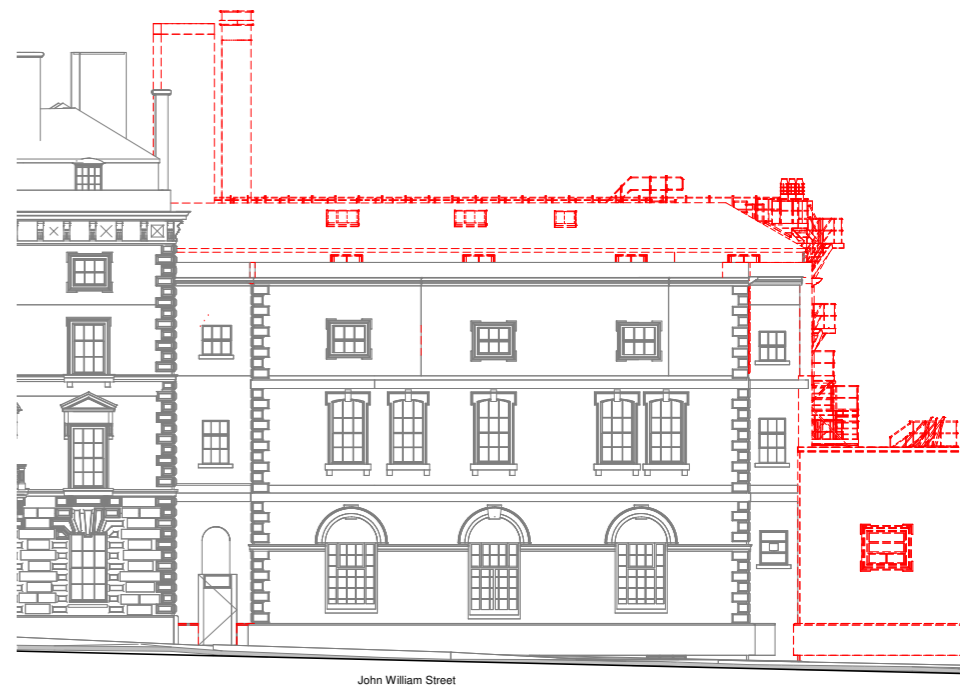
Structural assessment of Block C (which dates to the late 19th century) found that the both the internal layout of the building and the wall facing into the courtyard had been significantly altered. These alterations had left the building with a number of structural issues including the suspension of the First and Second Floors from modern steel trusses located in the existing roof void. An assessment of significance has indicated that blocks B and C had greatest capacity to accept change in a way that will cause the least harm to significance.

Both blocks contain a mixture of neutral & detrimental 20th century interventions and mid to late 19th century-built fabric deemed to be of medium significance which has historically been subject to significant alterations. The process of assessment for the purposes of design development has been fully documented in the appended Heritage Impact Assessment and Options Appraisal.

Demolition of unlisted structures that abut listed elements will be taken down with a view to the unlisted material being sacrificial and the historic fabric to be retained and repaired.



DRAWING EXTRACT 3 : Roof level layout showing high level overview of proposed demolition for each Block.



DRAWING EXTRACT 4 : John William Street elevation showing extent of proposed demolition for Block C.

5.7 SCALE & MASSING

Block A of the existing building has six storeys, five of which are visible above ground from the southeast and dissipates to four storeys towards the west as the ground slopes. Level 04, the top storey, is set back and utilises a mansard roof. This is retained in the proposal, Block A and the existing relationship of scale and massing for Block B & C has been considered in the proposal.

The existing façade on John William Street will remain as three storeys albeit an amendment of the previous levels to match with Block A. The existing roof is to be removed and an additional two storeys of accommodation is proposed. Each new level will set back from the façade, stepping back in consideration of the visibility from ground level and in acknowledgement of the historic elements.

The new proposal for block B and C will be consistent at this level to manage the scale and relationship to Block A. How each upper level is set back is relatively consistent along the east and west elevations, the massing at the conjunction of Block B & C where the external fabric converges has been considered in its material and appearance.

The atrium and covered canopy are a key node referencing the existing space between Block A to C. On the west elevation, the service core and lift does extend to accommodate the required functions. The new massing of Block B and C does link into the existing Block A roofscape across the rear elevation. The connection between the new Block B and Block A has been set back to differentiate and express the massing, a note back to the historic development of Block B.

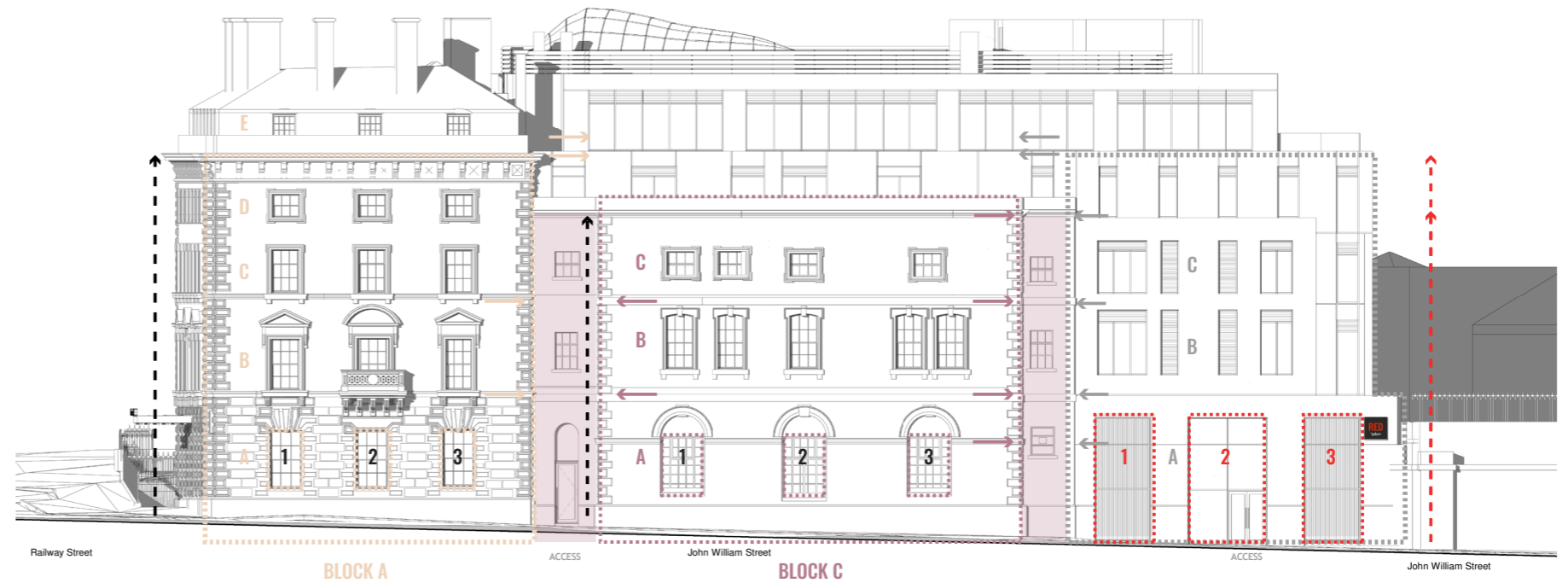


DIAGRAM 7 : John William Street elevation showing the relationship of the existing architecture and proposed design.

- Block A massing proportions
- Block A architectural horizontal feature lines
- Block A Ascending window aperture
- Block A Existing Window order
- Block A massing heights
- Block C massing proportions
- Block C architectural horizontal feature lines
- Block C Ascending window aperture
- Proposed massing proportions
- Proposed architectural horizontal feature lines
- Proposed Ascending window aperture
- Proposed Existing Window order
- Proposed massing heights



DIAGRAM 8 : West elevation facing from the railway station showing the relationship of the existing architecture and proposed design.

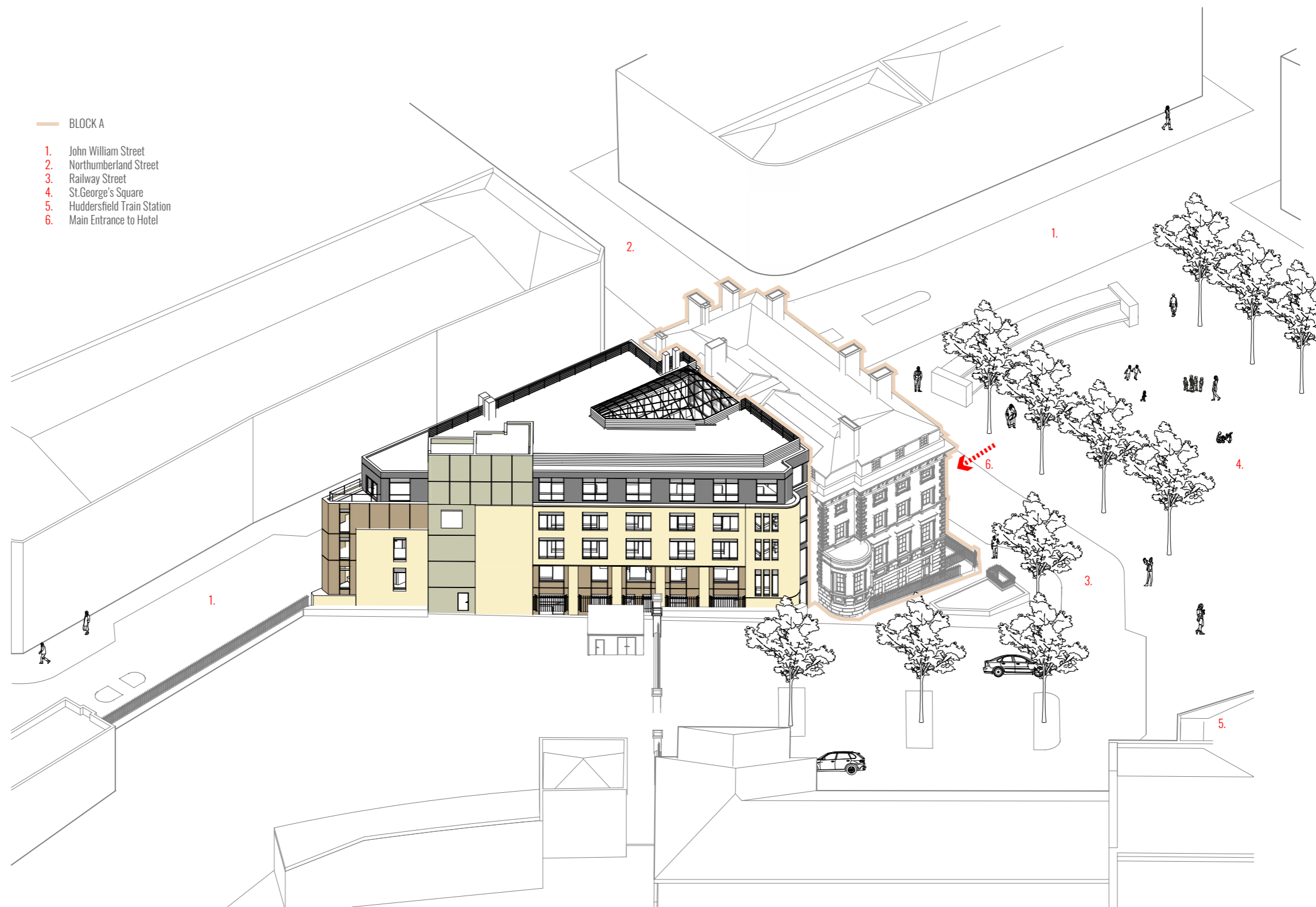


DIAGRAM 9 : Aerial view from the north west showing the proposed design.

5.8 APPEARANCE

The external appearance of the historic components is currently undergoing conservation works during Phase 2. The improvements include roof, masonry and window repair and replacement. The external façade of block A has distinctive stonework details and window reveals, with ascending proportions and hierarchy, a common trope for the period.

The proposal addresses the leading nature of Block A as an important heritage asset, the level change from east to west, and the relationship with other buildings on John William Street as Block B & C converge.

The proposal uses level lines and parapet heights from Block A and the existing façade of Block C as references to inform new design. This is referenced either with a change or line of material, window reveal or variation in the massing.

The proposal similarly alters the language on the west elevation acknowledging the level change and given the proportion of new massing in relationship to the existing gable of Block A. This is achieved by establishing an architectural order by way of a repeated bay and set back lightwell, a curved wall to react with the existing later bay window and pay homage to Block B's pre-1930's architecture no longer visible.

The pivot between Block B and C at the northern point of the site utilises a chamfered corner, a common language of the site context such as the Empire Building opposite. The appearance of this pivot and how it sits within its context is enabled more so in the materiality and order of fenestration, the upper corner of the building in this area differing and made more frequent.



VISUAL 1 : External view of John William Street from the north showing the proposal in context.



VISUAL 2 : External view of John William Street from the south showing the main entrance and proposal in context.

5.9 MATERIALITY

The proposal considers both the materials of the existing building's retained historic elements and the buildings site context. In addition to this, there is a general approach where the proposed design is still understood as new development whilst maintaining a sympathetic relationship with the existing architecture.

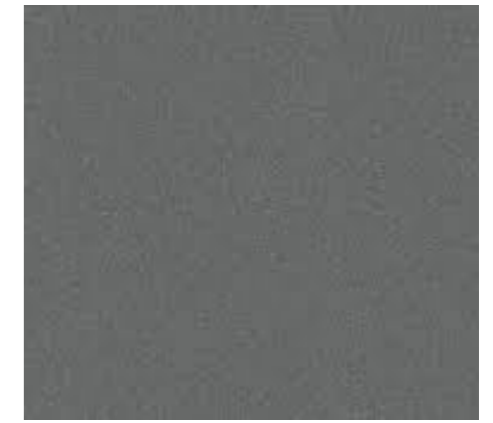
The new materials include stone face cladding to complement the existing stonework, the introduction of a new feature materials which is used to highlight any separation in massing and add tactility at low level, a metal cladding system in a warmer colour used to lift the corner between Block B & C as a subservient material to the stonework, and a metal cladding system in a darker colour at high level to blend with the existing slate roof of Block A. Windows, doors and curtain walling elements use dark colour frames, louvres and blanking panels to contrast with the existing sash windows.



DRAWNG EXTRACT 5 : John William Street elevation view showing the materials



PHOTO 28 - METAL CLADDING EXAMPLE



SAMPLE 1 - METAL CLADDING COLOUR 1



SAMPLE 2 - METAL CLADDING COLOUR 2

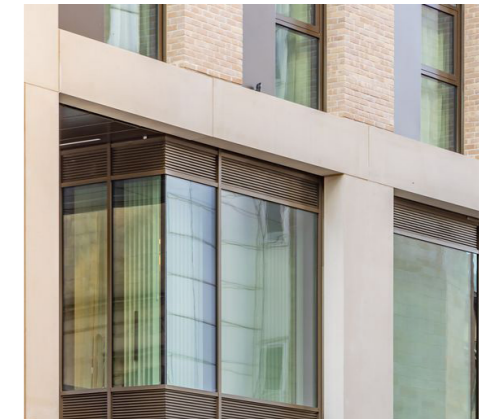


PHOTO 29 - CURTAIN WALLING EXAMPLE



SAMPLE 3 - STONE CLADDING 1



SAMPLE 4 - STONE CLADDING 2



SAMPLE 5 - FEATURE MATERIAL 1



SAMPLE 6 - FEATURE MATERIAL 2

SAMPLE COLLECTION 1 : A selection of samples for an overview of materiality



VISUAL 3 : External view of the proposal from the west showing the proposal in context.

5.10 ACCESS

Public Access

The hotel reception is accessed via the main entrance leading off Railway Street, this has level access from the pavement approach. Passing through the foyer via automatic opening doors the visitor will be greeted at reception. A dual level reception counter design will allow for use by all. Block A of the hotel (the retained heritage asset) will be served by a new 12 person accessible guest lift (PL1) utilising the existing shaft, this will also serve as an evacuation lift for the fire strategy. PL1 will give vertical access to all levels within block A.

A secondary access from street level to the bar area will be maintained as existing- this again will be level access. Level access is maintained throughout the remainder of the public areas at ground floor level, including into the new atrium extension. The new extension to the rear of Block A comprising Blocks B&C allows level access from Block A at Ground Floor , Level 3 and Level 4.

Where the existing façade to Block C is retained and window cill heights are fixed, it has been necessary to position the new floor within the extension accordingly, resulting in the introduction of stepped access between new and old at Levels 1 and 2. These two levels can, however be accessed by means of the new scenic glazed lift (PL2) which has been introduced within the atrium area and gives access from Ground floor to all levels.

Accessible Bedrooms

A number of bedrooms have been identified as fully accessible, these are located in both the new and existing sections of the building, to allow a variety of available experience for the user.

Accessible WC Facilities

Basement: Ground and First floor levels include an accessible WC facilities, to service the public function facilities at each of these levels.

Service Access

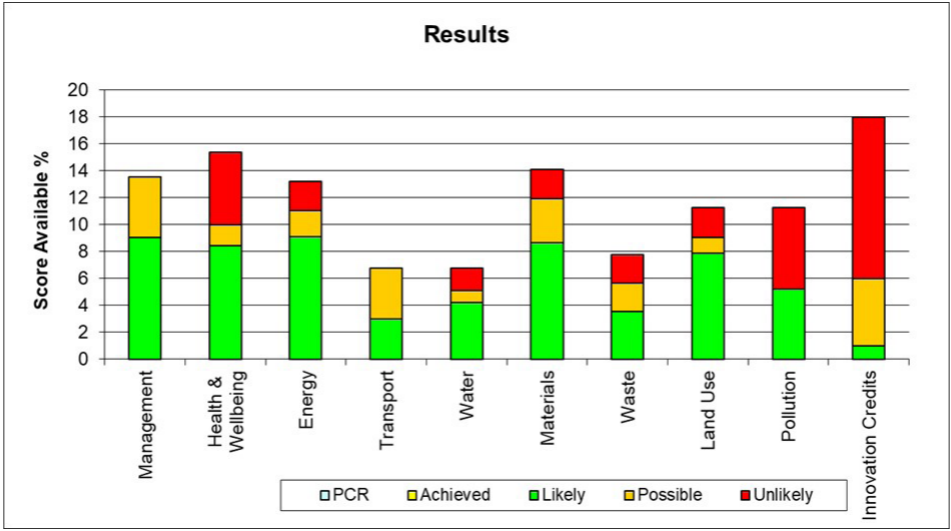
This will be primarily from the Network Rail Car Park entrance to the building here, a service lift (GL3) will allow vertical access to all levels. A loading area has been allocated in George Square with a service access route leading from this along the side of the building to the service access door.

Fire Tender Access

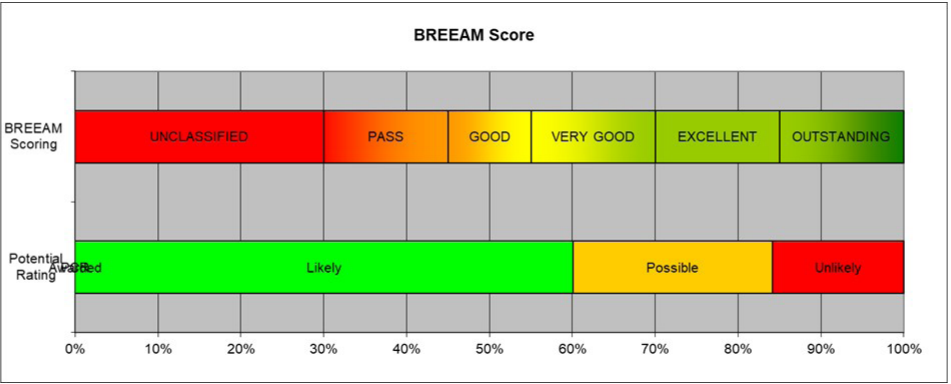
Fire service access to the dry riser at the northern end of the building will utilise the allocated loading bay in George Square and service access route alongside the building.

5.11 SUSTAINABILITY

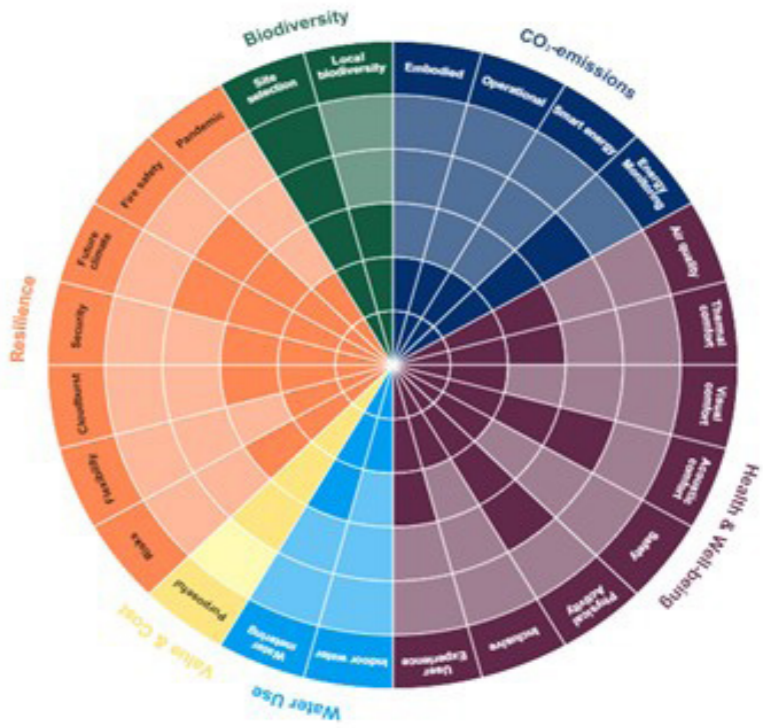
The project is aiming to achieve a minimum rating of ‘Very Good’ for BREEAM, the project has been registered with BRE and bespoke assessment criteria established. A preassessment workshop has been carried out by the Design team to review all of the issues and identify targets. The results have formed the strategy to achieve a very good rating. The chart below shows how the targeted credits are spread across the various criteria and where there may be opportunities to further the score.



The below shows how the project is currently on target to achieve a Very Good rating , with a margin of 5%, and the potential to score even higher.



During the design process the Design Team have utilised a Sustainability Dialogue Tool to identify key areas where attention can be focused with both the new building works and refurbishment of the existing heritage asset. This is an enabling tool which will be reviewed at both design and construction stages. A copy of the initial report can be found in the appendix.



5.12 SAFETY & SECURITY

The approach to security has been to define the areas considered to be accessible by the public at an early stage. This then enabled the design team to ensure that the perception of public and private is achieved through good design rather than solely relying on wayfinding solutions.

Security measures for the building have been prepared in conjunction with the ‘Designing Out Crime’ officer from the West Yorkshire Police and coordinated with the hotel operator’s requirements. Building characteristics, site constraints and heritage aspects have been carefully assessed whilst integrating the measures that are likely to be implemented.

The proposal will include an amalgamation of traditional measures, such as providing adequately lit and monitored areas around the building and compliance with Building Regulations, introduction of access control and monitoring systems such as BMS, intercom and electronic key access locks and provision of panic buttons in key areas around the building.

Public

Any area of the building where a member of the public can access without being a guest e.g.:

- The Ground Floor
- The Basement
- The First Floor conference room

These areas are accessed via the main entrance which will have a manned reception desk during opening hours with routes to the facilities associated with these spaces clearly identified and separated from the Back of House and Guest only areas via a secure line beyond which the public will not be able to gain access.

Staff Only

Areas of the building where access to guests is controlled by the staff and is fully restricted e.g.:

- Staff Offices
- Kitchens
- Stores
- Security etc.

These areas will be access via an electronic key fob/card which is clearly identifiable from the communal fob to be used by the guests.

The below list summarised agreed measures with the relevant parties:

- Lighting to be provided around all entrances/access points with automatic switches. Lighting location can not affect recording quality.
- All doors to have a locking hardware of the appropriate type and standard, including electronic RFID locks for all rooms as required by the Operator
- All doors and windows to be compliant with the approved Document, Part Q
- All fire exit doors to be compliant with the Approved Document, Part B, including panic bars and door closers
- Plant room to be locked shut to avoid unauthorised access.
- Windows located on the ground floor in new build blocks to include laminated glass; upper floor windows located below 900mm from FFL to have additional balustrades in new build blocks
- CCTV cameras to be located in key areas around all building entrances and internal public areas; all recordings to be stored over a 3-month period
- Key building areas (entrance, corridors, BOH areas) to have access control measures in place (electronic key access) with the exclusion of general access areas required by 3rd parties (utility rooms etc), which will have standard key locks.
- The reception desk to have a panic button and intruder alarm fitted
- Building to be equipped with a full Building Management System
- Telephone handset to be provided around lift lobby on each floor
- Bin store is to be located within a building and to be locked to avoid unauthorised access to prevent bins being used for climbing.
- New build blocks to have non-combustible cladding systems proposed.

5.13 SIGNAGE

ALL SIGNAGE SHOWN ARE INDICATIVE LOCATIONS ONLY AND SUBJECT TO CHANGE.
A SEPARATE APPLICATION WILL BE MADE FOR ADVERTISING CONSENT.

The proposal highlights various locations for signage to identify the hotel’s new operator’s brand and act as wayfinding for guests and visitors. The proposal aims to respect both the context and contribution of the building as a heritage asset in this setting.

For Block A, the new signage is located on the front elevation facing St. George’s Square with new flanking square light boxes at either side furthest from the main entrance. The new canopy, with its downward array of lighting, has the title &/or branding for the hotel to indicate the entrance above across the face. All signage on Block A is scaled to suit the overall elevation.

For new Block B & C, facing east towards the train station is a large sign at high level, which is positioned on a new wall element. There is a further deliveries signage on this façade. Facing west on John William Street, is a similar light box to those on the Block A front façade.

Wayfinding

Key Principles

- Wayfinding to be clear and appropriate for the end user with entrances clearly defined
- Clear definition between public and private areas
- Installation of wayfinding solution is fixed to new build elements of the construction where possible
- Where this is not possible wayfinding to be fixed to pattresses
- Use of free-standing wayfinding solutions to be incorporated where appropriate

General Approach

The main objective for the signage at The George Hotel is to be clear, concise, and easy to interpret for both regular users and visitors. The design of the signage needs to consider how familiar the user is with their surroundings, and from what distance it is designed to be seen. General approach to wayfinding will be via a hierarchical system of signs located at key touch points both externally and internally.

Naming standards to allow easy navigation to the right area of the building are essential to provide a sense of direction to visitors and building users. The design of the signage will be in accordance with Raddison Red brand guidelines and will be appropriate for the hierarchy and the location of the touchpoint. This system is designed to give the visitor an increased level of confidence in terms of their whereabouts within the development.



DRAWING EXTRACT 7 : South elevation from St. George’s Street to show the locations of the new signage.



DRAWING EXTRACT 8 : East elevation from the train station showing the high level sigange and the deliveries singage.



SIGNAGE IMAGE 1 : View of the main entrance to show new double doors and overhead canopy with lighting.



SIGNAGE IMAGE 2 : Radisson RED logo for reference only.



SIGNAGE IMAGE 3 : Example of Radisson RED hihg level signage.

5.14 LIGHTING

Lighting strategy for social spaces

Key Points:

- Social spaces lighting is based on accent lighting primarily with minimal downlights.
- Downlights used to ensure a minimum lux level is achieved and for key circulation points
- Circuiting and switching to offer maximum flexibility, with different scene settings.
- Accent lighting used to illuminate key features within the interior such as heritage
- accents, headboard details, feature raft lighting, window treatments etc.
- The lighting is used to enhance the interior but not detract with over lit spaces.

Overview:

The interior lighting similar to the interior design is based on the occupier’s brand standard, the lighting is designed to minimise penetrations into any existing ceilings with fixings to be fixed to suspended rafts rather than the fabric of the building where possible. The decorative accent lighting is carefully located through a mixture of concealed and exposed feature LED tape details, wall lights and feature pendants. Offering visitors maximum flexibility and scene setting through the circuiting and switching components to ensuring different moods can be achieved throughout the day.

Lighting strategy for bedrooms

Key Points:

- Bedroom lighting is based on accent lighting primarily with minimal downlights.
- Downlights used for entry points and bathroom lighting within newly formed ceilings wherever possible.
- Circuiting and switching to offer maximum flexibility, with different scene settings.
- Accent lighting used to illuminate key features within the interior such as heritage accents, headboard details, feature raft lighting, window treatments etc.
- The lighting is used to enhance the interior but not detract with over lit spaces.

Overview:

The interior lighting similar to the interior design is based on the occupier’s brand standard, the lighting is designed to minimise penetrations into any existing ceilings with the minimal downlights proposed to be housed within the new ceiling void. The decorative accent lighting is carefully located through a mixture of concealed LED tape details, wall lights, feature headboard pendants, bathroom vanity pendants, halo lit mirrors and lamps on 5amp circuits. Offering visitors maximum flexibility and scene setting through the circuiting and switching components to ensure only required lighting is on if needed.

Lighting strategy for bedrooms

Lighting strategy for the building externally

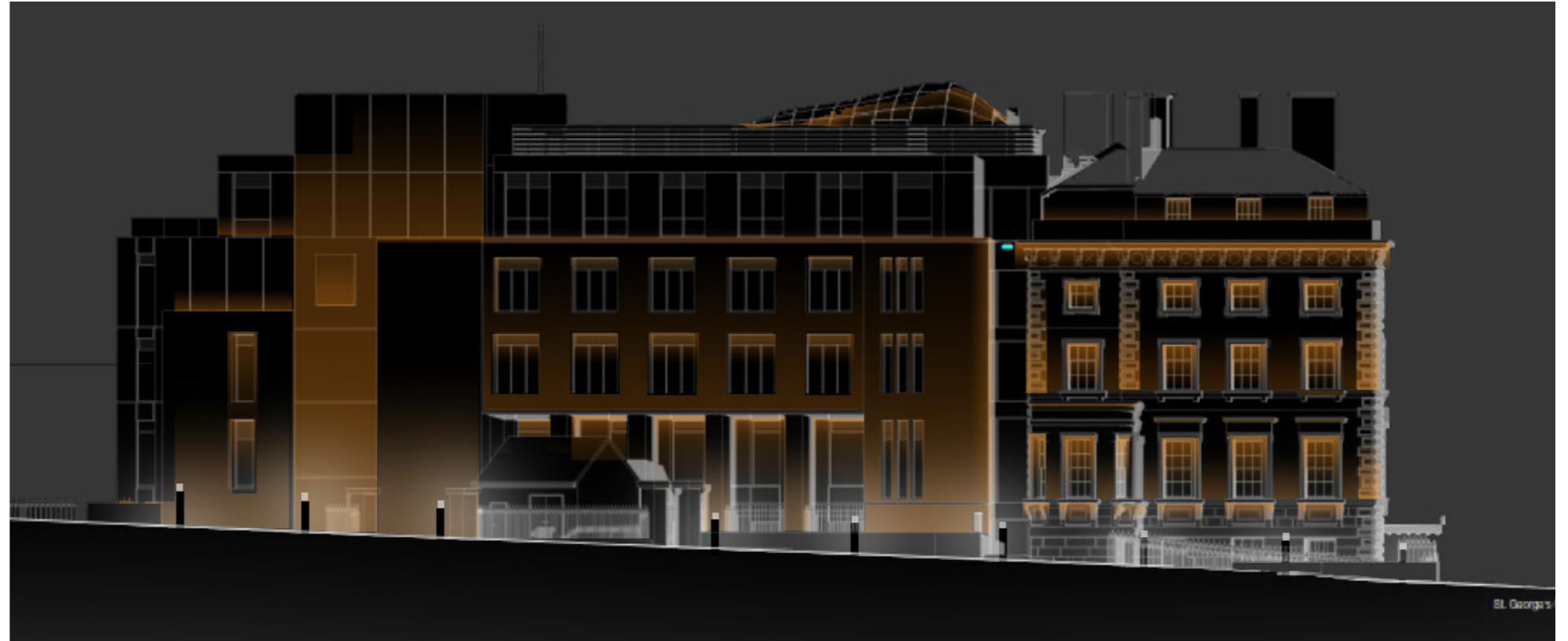
Key principles:

- Light fittings to be discrete and where possible hidden from ground level
- Light fittings to be linear uplights
- Lighting to highlight features on historic building
- New build lighting to be more of a gentle wash with signage and windows highlighted
- External pavement lamps to provides street level lighting
- All lighting to be long life LED lamps

Indicative lighting scheme shown below. Purpose is to highlight key features of the existing building using discrete external linear fittings located on ledges and within window reveals. The ashlar was designed to be the backdrop to the architectural features such as the quoins, window surrounds and cornice details, as such the lighting will highlight these key features.

All lighting to be colour change LED to allow the celebration of various event within the square such as Remembrance Sunday or St Patricks Day. These would be programmable with the lighting as shown for the majority of the year.

Light fittings will be long life LED lamps to avoid the need for maintenance, manufacturer and final lighting scheme to be agreed with contractor.



LIGHTING VISUAL 1 : West elevation showing indicative external lighting strategy

5.15 INTERIORS

New Build interventions within historic fabric

Key Principles

- Limit damage to historic building fabric where possible
- Interventions to be reversible
- Interventions to respect existing building mechanics and pathology
- Ensure any new build elements are clearly modern
- Existing historic building features to be retained and exposed within the current scheme where possible

Interior Alterations

The design strategy for new build interventions is to create a bold, striking, and sophisticated interior scheme that represents the Radisson Red brand. The interior design will enhance the interior spaces uncovering some of the original features that have been masked over the years.

The layers of history and heritage will be showcased as evidence of how the building has evolved over its life. Natural light will be improved by lifting modern ceilings to fully reveal the existing windows in their entirety.

A detailed and expansive internal lighting scheme will create an exciting environment for guests to explore and enjoy. The design will have an element of separation between the original hotel building and the modern extension. This will be reflected in a change in materials and interior design.

The bedrooms have been designed to retain decorative elements such as the cornicing, picture rails and skirtings where possible. These are fixed using battens and fillet pieces for new fitted furniture to ensure that no damage is caused to the decorative interior architectural elements, while including new lighting details and rafts to illuminate the decorative cornicing details and ensure they are highlighted within the scheme not hidden away.

Modern additions and servicing have been carefully considered to not detract from the buildings heritage, and overall ambiance.

In general, the approach to the design of The George Hotel has prioritised reinvigorating an existing hotel and bringing new life back into the local area and city whilst appreciating and understanding the heritage of the building and ensuring that these two principles are intertwined throughout the process. Utilising historical plans and as well as the occupiers brand standards to create an amalgamation of spaces that work cohesively to provide an exciting new offering to the existing area



INTERIORS IMAGE 1 : Ground Floor internal view of the library.



INTERIORS IMAGE 2 : Ground Floor internal view of the main entrance lobby.



INTERIORS IMAGE 3 : Ground Floor internal view of the Reception.

ALL VISUALS ARE INDICATIVE ONLY, FINAL FINISHES SCHEME, FURNITURE AND DECOR IS SUBJECT TO CHANGE.

Walls

Internal walls to hotel bedrooms will be lightweight stud partitions scribed around existing cornice and skirting details.

Walls to bathrooms and en-suites will be strengthened partitions able to take an imposed load of up to 1.5kN/m² to enable the installation of support grab rails, seats, and other adaptations.

Repairs to the building

Key Principles

All repairs to historic built fabric to be like for like where possible

Where the repair would be inappropriate on grounds of health and safety (i.e., lead paint) an alternative to be used with similar properties to ensure no long-term damage to building fabric

Any areas of repair to be undertaken will be recorded prior to work commencing

Significant investment as part of the proposals now will provide the long-term maintenance of these buildings for generations to come

General Approach

As part of the works we will be undertaking a full programme of repairs to the existing buildings and a maintenance strategy will be developed moving forward. As the majority of the building will be occupied it will be much easier to monitor and identify issues as they are raised by owners.

Due to the nature of the accommodation on site, the buildings will be occupied 24 hours a day by Hotel staff reducing the risk of security issues.

The Hotel Operator will be responsible for maintaining and repairing all elements of the building once they have taken occupation of the site. This will ensure that a robust planned preventative maintenance regime will be in place for the site as a whole with one single point of responsibility.



INTERIORS IMAGE 4 : First Floor internal view of the Conference Room.



INTERIORS IMAGE 5 : Ground Floor internal view of the Bar leading into the Reception.



INTERIORS IMAGE 6 : Generic internal view of a Bedroom in Block A.

ALL VISUALS ARE INDICATIVE ONLY, FINAL FINISHES SCHEME, FURNITURE AND DECOR IS SUBJECT TO CHANGE.

5.16 STRUCTURE

Structure

The information below provides a summary of the structural proposals for block A, B and C for the George Hotel. This includes information on the primary structural elements including the primary superstructure, substructure, and lateral stability system to be adopted.

Block A proposals

The architectural proposals look to largely retain block A with a limited number of structural interventions. The section below describes the key interventions from a structural perspective, which include:

- Removal of load bearing walls
- Penetrations through existing walls
- Replacement of timber floors to accommodate new hotel floor loads (new loads as a result of acoustic floor and wall requirements to meet modern hotel standards)

Removal of Load Bearing Walls

In certain locations within block A, the existing load bearing masonry structure which provides support to the floor, is to be removed. At these locations it is proposed that new structural support will be provided in the form of structural steelwork bearing onto the existing masonry either side of any required openings.

Penetrations through Existing Walls

Smaller, localised penetrations are to be addressed through structural lintels (precast concrete, number to suit the width of the walls). Such examples may be to facilitate opening for new windows, MEP penetrations and connections to the new structure in block B & C.

Timber floor replacement

A large percentage of the existing timber floors have been assessed as inadequate to withstand the revised floor loads. As a result, it is proposed to replace all existing suspended timber floors. The proposed construction will be traditional timber joists, with a resilient bars style acoustic build-up to meet the occupiers' specifications. Support details for the new timber joists will generally be comprised of a timber wall plate resin fixed to the face of the existing masonry which in turn supports the joists via proprietary metal hangers. In some localised areas, once full existing details are exposed on site, it may be possible to re-use some existing pockets in the existing masonry wall to support the proposed joists. If the later is to be adopted, joists may be notched at their ends to accommodate varying masonry pocket and timber joist sizes.

Lateral Stability

The stability to block A is provided by the load bearing masonry walls. There will be no change to the lateral load path in the proposed case following the works.

Block B & C proposals

Introduction

The existing blocks B and C are to be demolished in their entirety except for the listed façade along John William Street. A façade retention scheme will be designed to retain and conserve this façade in the temporary case whilst the new steel frame is constructed internally to offer it lateral restraint in the permanent case. The temporary façade retention system is likely to comprise of a series of external steel frames which will clamp to the façade through the existing window fenestrations.

Proposed Superstructure

The proposed primary superstructure for blocks B and C comprises of traditional down stand steel beams with a composite RC slab on permanent steel deck. The steel grid is typically 6m x 7m. Secondary beams span the long direction and are typically at approximately 3m centres. Typically, both the secondary beams and primary beams are 350mm deep although some localised sections are deeper to suit loadings and spans. The composite deck is 140mm thick with a normal weight concrete slab cast in-situ.

Proposed Substructure and basement reduction

To enable the basement level to be reduced across the footprint of the site (circa 1.2 metres for blocks B and C), whilst maintaining the integrity of the existing retaining walls around the perimeter, it is envisaged that a reinforced concrete liner wall will be constructed. As part of this work, mass concrete underpinning works will also be completed to the existing retaining walls to the perimeter.

A ground investigation is currently ongoing which will allow foundation details to be confirmed. At present we have assumed that this will show that, at basement level, the building will be supported on a raft foundation with local thickenings at column locations. To the perimeter walls, columns are to be directly sat on the new proposed RC liner retaining walls on dedicated in-situ concrete piers.

Interface details with existing building (Block A)

The new build structure for Blocks B, C and atrium will be designed as independent structures in relation to Block A. This will enable the existing and new build structures to move independently of each other and will ensure that no vertical loading is transferred from the proposed new structures onto the existing building. Secondary details such as roofing and cladding will be detailed to accommodate the differential movements.

Lateral Stability

Lateral stability is addressed through diaphragm action of the composite floor slabs and the provision of vertical braced bays providing stability against wind loads. These would primarily be located around stair cores and wall partitions to coordinate with the architectural proposals

Appendices

Land contamination assessment

A Phase 1 contaminated land desk study has been prepared and this accompanies the application. This report concluded that no significant sources of contaminative former uses of the site have been identified. The report noted that there was a low to moderate risk of ground gas on the site. The assessment recommended that a phase 2 investigation that currently being undertaken and will include contamination testing to further quantify the risks associated with contamination. The phase 2 works will also include ground gas monitoring.

Coal Mining Assessment

A Coal Mining (CON29M) assessment has been obtained and this is included in the Phase 1 contaminated land desk study which accompanies this application. This has indicated that there is a potential risk due to past underground coal mining on the site. A Phase II ground investigation is planed which includes deep boreholes to allow further assessment of the risk associated with past coal mining on the site.

5.17 FIRE

Key Principles

The details within this section 5.15 outline the preliminary fire strategy principles pertaining to the site and its setting for the George Hotel to satisfy the functional requirements of the Building Regulations. It will be necessary to agree with Building Control on all matters that deviate from the guidance documents. The fire engineering strategy will be evolving as the design is refined, although the key aspects are expected to be as the content of this section.

Fire Safety Objectives

The George Hotel's primary aim will be to specify and design out safety risk to prevent incidents occurring in the first place. If safety risk cannot be eradicated, it will be mitigated as far as reasonably practicable.

The following objectives have been identified for fire engineering on this project:

- The protection of life of staff, the public, and members of the fire and rescue service and other emergency services
- The protection of historically important building interior and exterior;
- The protection of the hotel business; and
- The protection of the environment.

To address these objectives the design, construction, and operation of the George Hotel is to consider the following fire safety principles:

- Fire Prevention - to identify the potential sources of a fire and reduce the risk of a fire occurring;
- Fire Mitigation - to provide adequate means of escape and to reduce the risk of damage caused by a fire by containing, controlling and suppressing a fire;
- Fire Management – to develop procedures for access, egress, maintenance activities, staff training and emergency planning; and
- Fire Fighting – to consider the risk posed to fire fighters and provide adequate facilities

Site Location

The George Hotel is 1 mile from Huddersfield Fire Station which has approximately 48 operational firefighters and is located on Outcote Bank Road, Huddersfield, HD1 2JT. An existing fire hydrant is located 40m from the proposed dry riser inlet which is adjacent to the proposed location of the building's premises information box (PIB) and RVP signage. The PIB will contain fire safety plans of George Hotel and clearly identify any relevant information that may be necessary in consultation with the fire and rescue service.

Fire Fighting Access

Vehicle access is provided around the majority of the perimeter of the site. Vehicle hardstands will be located within 18 m (and in sight of) the dry riser inlets. Hardstands are to be in accordance with the requirements within BS 9999 which are considered to be satisfactory due to the roadway construction being proposed. Access and proximity to street hydrants will achieve compliance with BS 9990.

The vehicle access routes around the building are designed to accommodate pump appliances in accordance with Approved Document B Table 20 and BS 9999 Table 20:

- Minimum width of road – 3.7m
- Minimum width of access gate – 3.1m
- Minimum carrying capacity – 12.5 tonnes
- Minimum clear height – 3.7m

Fire Fighting Facilities

Due to the building height and the depth of the basement levels, it is not required or proposed to have a fire fighting lift within the building. Dry risers serving every level of the hotel will be located within all escape stairs/lobbies. A 1.0 m² openable vent will be provided at the top of each escape stair to assist with fire fighter operations. Both escape stairs will be provide with protected access corridors at every level.

Facade

In accordance with BS 9999, external walls of the building shall adequately resist the spread of fire over the walls and from one building to another. Detailed external fire spread calculations will be undertaken as part for the design. The externals walls will be limited combustibility, and insulation and filler materials used in the construction of the external wall should be class A2-s1, d0 or better as per BS EN 13501-1.

Roof

The roof of the building shall adequately resist the spread of fire over the roof and from one building to another, and have BROOF(t4) classification in accordance with BS EN 13101-5.

5.18 MEP

The information below provides a summary of the MEP proposals for block A, B and C for the George Hotel. This includes information on the primary building services systems within the building.

Electrical

- The electrical services will be designed with items of plant and equipment arranged to allow adequate access for maintenance, removal, and replacement.
- Any equipment located in ceiling voids will be located to avoid access from the public or front of house (FOH) areas or located to minimise access requirements.

ELECTRICAL SUPPLY

- A high-level maximum demand assessment has been carried out, giving an estimated maximum demand of 850kVA, this includes 20% spare capacity,
- The building is currently served by a 400V three-phase LV power supply, owned and operated by Northern Powergrid. It is proposed that this supply will be removed since it has insufficient capacity for the electrical demands now required in the building.
- In order to accommodate the new equipment and electrically powered mechanical plant, a new upgraded supply will be provided to meet the max demand above. It is envisaged the new supply will terminate into a new service unit within the building, this has been initially located in the basement LV switch-room.
- A main LV Switchboard will be provided in the main Electrical Room located in the basement level of Block A, with cables and busbar systems installed to distribute low voltage electrical power, safely, and reliably, around the building starting with the cables connecting the main LV switchboard and finishing at the output terminals of all distribution boards or mechanical services panels.

From the main LV switchboard, sub mains distribution will be installed to the following:

- MCCB section boards.
- MCB distribution boards.
- Kitchen Panel boards (Basement and Ground Floor)
- Mechanical control panels and plant.
- Lifts.
- XLPE/SWA/LSFZH sub-mains cables emanating from the main LV Switchboard to electrical risers and to supply distribution boards, fixed equipment, etc
- Within MEP risers, busbars will be installed for vertical distribution of power.

- Fire rated sub mains distribution cables will be installed to life safety systems, plant and equipment including the following:
- Fire alarm control panel.
- Emergency voice communication system.
- Public address voice alarm system.

EMERGENCY POWER

- Emergency power for life-safety, emergency and critical systems will be required for the building, and to provide a secondary power supply for the evacuation lift and smoke extract fan for the atrium space. It is proposed the standby generator will be located on the roof with a fuel filler point located at ground floor level.
- Two separate uninterruptable power supply (UPS) will be installed, one in the basement Communications Room and one in the basement LV Electrical Room.

METERING

- Metering will be provided throughout the hotel as required by Building Regulations, BREEAM and CIBSE recommendations.
- All metering will be connected to centralised monitoring system within the building to maintain a record of all energy usage.

FINAL CIRCUIT WIRING

- Final circuit MCB Distribution Boards (DB's) to serve lighting and small power requirement will be provided at each riser and floor level and will incorporate sub-meters for both small power and lighting loads.
- Final circuit wiring shall generally comprise of copper conductor LSZH twin & earth cables installed in basket and conduit.
- Final circuit wiring in plant rooms shall comprise of copper conductor LSZH single core cables installed in galvanised steel trunking and conduits.
- Arc Fault Detection Devices (AFDDs) will be installed on all final circuits in the Bedrooms in accordance with BS7671.

CABLE CONTAINMENT

- A comprehensive cable containment installation including ladder, tray, basket and trunking/conduit will be provided for all systems. Segregation will be maintained between wiring systems in accordance with relevant standards.
- The primary horizontal routes will be installed above suspended metal ceiling rafts within the circulation spaces. Containment will be exposed in areas with no ceiling finishes, e.g. plant rooms.

- The primary vertical routes will be installed within services risers.
- Containment systems will be sized to cater for the initial design requirements and 20% spare capacity to allow for future cable installation.

LIGHTING

ARCHITECTURAL LIGHTING AND CONTROL

- The lighting design for all front of house (FOH) guest and public areas, lift lobbies, circulation corridors and guest rooms will be designed in conjunction with the project architect and interior designers.

LIGHTING DESIGN CRITERIA

- The Hotel will be provided with energy efficient lighting to ensure the internal lighting solution provides a good safe, comfortable, balanced and interesting visual environment, which provides the required lighting levels in all areas. The general lighting will utilise intelligent but simple automatic lighting controls for effective and cost-effective operation.
- The internal lighting will be designed in accordance with illumination guidelines within BSEN 12464-1, SLL Code for Internal Lighting and CIBSE guides
- In order to meet Part L2A of the Building Regulations, all luminaires will be LED.
- Illumination will generally be provided to energy efficient light sources where possible in accordance with part L of the Building Regulations.

BACK OF HOUSE LIGHTING

- The selection of luminaires will be suitable for the proposed mounting environment and be compatible with the ceiling finishes. The lighting design will take cognisance of areas with computer use and be designed to align with CIBSE guidance.
-
- Lighting control of BOH, non-public areas will generally be by local switches, however presence detection will be provided in transient spaces, with absence detection provided in Offices. Where appropriate PIR, timeclock and time scheduling via the central system will be provided in alignment with the client's requirements and Part L of the Building Regulations.

EMERGENCY LIGHTING

- An emergency lighting system will be provided throughout the new Hotel. Emergency Lighting will generally comprise of dedicated LED emergency fittings, provided separate from the general lighting, operating in non-maintained mode, with either self-contained battery packs, or linked to a central battery system wired in ‘enhanced’ grade fire rated cable.
- Emergency luminaires will be located to illuminate Escape routes; Plant rooms; External exits, etc. to enable occupants to safely evacuate the building in the event of an electrical supply failure.
- Batteries for the emergency lighting system will be rated for a full-rated output of 3 hours duration.
- Final exits will be provided with self-contained maintained exit luminaires complete with running man pictograms with appropriate direction arrow in accordance with the Fire officer requirements. Each final exit will be provided with an external building mounted maintained bulkhead luminaire.
- Emergency luminaires will also be located to clearly identify hazards, fire-fighting equipment (extinguishers, fire alarm break glass units etc), and to indicate changes of direction/level and draw attention to intersections.
- In addition, any hazardous environments or processes will be provided with emergency lighting at an enhanced lux level, to enable the operator to safely shut-down the process before evacuation. This will include areas e.g. Kitchen.
- A centralised intelligent self-test system will be provided to monitor the state and condition of the emergency lighting system

SMALL POWER INSTALLATION

- Socket outlets, fused connection units, switches, outlets etc will be provided and located for general purpose use or for specific equipment and to safely support the activities of the particular rooms.
- Floor boxes will be provided in Conference, Meeting and Banqueting Rooms.
- Small power accessories will be selected to suit the mounting environment, mounted at the correct height for their intended purpose and in compliance with Building Regulations Part M.

FIRE DETECTION, ALARM AND VOICE EVACUATION SYSTEM

A fully automatic analogue addressable fire alarm and voice evacuation system will be provided. The system will be designed in accordance with BS 5839-1.

- The main fire alarm control panel will be located at or adjacent to the reception desk.
- The fire alarm system will comprise of the following:

- Analogue addressable fire alarm panel located adjacent to the reception desk / fire service response entries with battery backup to provide 72 hours of autonomous operation.
- Interfaces to isolate items of mechanical plant and fire damper panels.
- Interfaces to disabled refuge systems, access-controlled doors, lifts and lighting controls.
- Manual call points / sounders and optical smoke & heat-detectors.
- Fire detection in the Atrium spaces will be provided by the installation of an air-aspiration system.
- Internal strobes for the auditory impaired.
- Alarm link to an off-site monitoring station.
- All cabling will be RED sheathed and BASEC approved fire rated with soft-skin ‘standard’ and ‘enhanced’ cable, contained, supported and clipped in full compliance with BS5839;
- Void detection and remote indication will be provided.

PUBLIC ADDRESS VOICE EVACUATION SYSTEM

- The voice evacuation system will be installed in all guestroom corridors and public /guest areas and be capable of broadcasting different messages and accept inputs priority order.

EMERGENCY VOICE COMMUNICATIONS

- An emergency voice communications system will be provided, in compliance with BS 5389-9, to allow fire fighters to communicate with one another and with others responsible for evacuating the building including communication and evacuation of disabled persons in emergency situations.
- The system design will support the fire engineered solution, the operator’s fire management plan and the requirements of the Fire Service. The master control station will be at the reception desk and the outstations provided adjacent to the disabled refuges located on all levels within the escape stairs.

SECURITY SYSTEMS

- The security systems proposals are to be reviewed to align with the building operator’s security management strategy.

INTRUDER ALARM SYSTEM

- An intruder alarm system will be provided to ensure the safety and security of the guests and their personal belongings during their stay in the hotel. The

intruder alarm system will be developed to align with the risk assessment and risk management strategy determined by discussion with the hotel operator.

- The intruder alarm system (IAS) will comply with the requirements of BS EN 50131 and PD6662. To minimise the likelihood of false alarms the IAS will be capable of providing alarm confirmation technology generating and transmitting unconfirmed and confirmed alarm signals to the alarm receiving centre (ARC).

CLOSED CIRCUIT TELEVISION SYSTEM

A CCTV system will be provided for 24-hour surveillance of external areas and front of house and back of house areas and generally cover:

- Building Elevations
- Guest Entrances
- Reception
- Service entrances
- Baggage stores
- Guest corridors
- Lift cars
- Main Communication and Electrical Rooms

ACCESS CONTROL

- A stand-alone door locking system will be provided to control and monitor the access and egress of staff and guests throughout the hotel.

STAFF ENTRY SYSTEM

- Access controls will be provided to the staff entry door from the service yard/ car park to regulate the access of staff personnel into the building.

GUEST SYSTEMS

GUEST MANAGEMENT SYSTEM

- The hotel operators guest management system will operate via the IT/Data & Wi-Fi network throughout the building.
- The main equipment will be located in the basement comms room with sub-cabinets located at each floor level in a dedicated communication riser. The head end equipment will be located at the reception desk. It is anticipated that 4 data outlets will be required per bedroom with a reasonable allowance for landlords areas.

TV SYSTEM

- A fully networked distribution system of digital television channels, video movies, video games, teletext, hotel messages and interactive system features to outlets located throughout the building will be provided.

AUDIO VISUAL SYSTEMS

- An audio-visual facility to the public spaces accommodating business meetings, exhibitions, conferences and private functions including the associated pre-function areas will be provided.

IT/DATA

- A flexible data cabling system will be provided to deliver a hard-wired solution with a wireless overlay to data and telecoms equipment throughout the building.
- The main equipment will be located in the Communications Room. System wiring will be carried out in Cat 6a (Cca) UTP cables. Remote patch panels will be provided to limit the cable lengths to 90 metres. Backbone cabling infrastructure will be carried out using fibre optic cables.
- Wi-Fi coverage will be provided throughout the building
- For Offices the data outlets will be provided by a combination of RJ45 outlets either within floor boxes or dado-mounted trunking systems.
- RJ45 outlets and dedicated UTP cables will also be provided for the following services:
 - Wireless Access Points (Power over ethernet)
 - Display Screens and wayfinding signage
 - Audio Visual Equipment
 - Security Cameras (Power over ethernet)
 - Access Control
 - Printers and Multi-function Devices
 - Metering Outstation
 - BMS Outstations
- Dedicated phone lines will be provided for the following services:
 - Lifts
 - Disabled Refuge Alarms
 - Reception Foyer

EARTHING AND BONDING

- The earthing and bonding installation will be carried out in compliance with BS 7430 and BS 7671.

LIGHTNING PROTECTION SYSTEM

- A lightning protection system complying with the requirements of BS EN 62305 will be provided. A risk analysis calculation to determine the probability of a lightning strike will be carried out to determine the level of risk and the grade of system.

5.12.2 INTERNAL ENVIRONMENTAL SYSTEMS

5.12.2.1 GUEST AREAS

- Guestrooms, offices, public areas will be heated and cooled using a VRF installation.
- Condensers located at roof level.
- Allows simultaneous heating & cooling.
- Areas controlled independently, on a room-by-room basis.
- Majority of units will be concealed fan coil type, located locally in voids, with supply and return air via ceiling mounted diffusers/grilles.
- Guest bedrooms will be heated and cooled using fan coils type indoor units located in a bulkhead above the entrance lobby of each bedroom.
- Larger and irregular shaped rooms may require multiple units to adequately condition spaces.
- Control will be on an area-by-area basis, with temperature sensors allowing modulation of the heating.
- Guest rooms will be linked to the hotel VIN card system to allow set back modes.

5.12.2.2 SERVER ROOM COOLING

- A dedicated cooling system will be provided to the server room.
- Condensers will be located at roof level, and in an N+1 arrangement, with an automatic change-over facility to ensure constant operation.

5.12.2.3 VENTILATION

- Dedicated air handling systems will be selected to serve the various areas of the hotel giving due regard to their function, occupancy, hours of operation and ventilation requirements to provide sufficient fresh air. Variable speed drives will be provided to all fans. The following ventilation systems are proposed:

5.12.2.3.1 GENERAL AREAS (WC'S, RECEPTION, CONFERENCE ROOMS)

- A fresh air system will serve the general areas. The air handling unit will be full fresh air and exhaust with no recirculation, incorporating heat recovery, refrigerant based heating/frost coils, attenuators, motorised dampers and filtration.
- Air will be supplied at a constant volume.
- Heating and cooling will be provided by local VRF fan coil units, where applicable.
- Motorised control dampers and fan speed control will be provided to WC areas, allowing WC's to be ventilated 24/7, without unnecessarily ventilating other areas.
- Air handling units will be located on the roof deck.

5.12.2.3.2 KITCHEN EXTRACT SYSTEM

- A dedicated extract system will serve the Kitchen and adjoining ancillary areas.
- Extract ventilation will be achieved via dedicated exhaust ducts from the kitchen canopies and general areas.
- The entire installation is to be in accordance with DW 172.
- Kitchen extract ductwork to be fire rated if fire compartment lines are crossed and will rise to the extract fan, located on the roof deck.
- Access is to be provided at each floor for maintenance and cleaning. The design of the kitchen extract systems will be determined by the usage, layout and equipment used in the kitchen, this information is required from the kitchen/catering specialist early in the next design stage.
- It is anticipated that the canopies will be provided with a fire suppression system.

5.12.2.3.3 RESTAURANT / KITCHEN SUPPLY

- Supply air to the restaurant and kitchen will be provided by a dedicated air handling unit located on the roof deck.
- This system will provide supply air at a slightly lower volume than the kitchen extract system with air being supplied to the restaurant based on occupancy and the balance of air being supplied to the kitchen.
- Air from the restaurant will be drawn into the kitchen via the serving counter or transfer grilles with the kitchen maintained at a negative pressure regime to its surrounding areas to avoid smells infiltrating other areas of the hotel.
- The Air Handling Unit will be full fresh air, including refrigerant based heating / frost coils, attenuators, motorised dampers and filtration.
- The AHU will be sized and selected to meet the zone fresh air requirements. Heating and Cooling will be provided via local fan coil units to minimise the ventilation load, with tempered fresh air supplied to the space for ventilation purposes only.

5.12.2.3.4 GUEST BEDROOMS & CORRIDOR

- There is a split strategy for the guest bedrooms, depending on their position within the building.
- All of the guest bedrooms within Block A, as well as the bedrooms on the first and second floor in Block C will be served via a dedicated air handling unit, located externally at roof level.
- The unit will supply tempered air to all guestrooms, tempered fresh will be delivered to the space via the rear of the fan coil units. Extract will be via the en-suite bathrooms to remove any odour or moisture.
- Extract to the ensuite bathrooms will be via the air handling unit not dedicated fans to allow energy to be recovered from the systems and reduce future maintenance requirements.
- If required fresh air will be delivered to the guest corridors via ducted ceiling mounted grilles, likewise with the extract. The AHU will be full fresh air and exhaust (no recirculation) incorporating heat recovery.
- Guest bedrooms within Block B, and those on the third and fourth floor of block C (above the listed façade) operate on the same principle, but rather than returning to central plant, have local mechanical ventilation heat recovery (MVHR) units within the space, ducted directly to atmosphere, avoiding space requirements internally for rising ductwork.
- Regardless of the method, control in these areas will be linked to occupancy through the key card system.

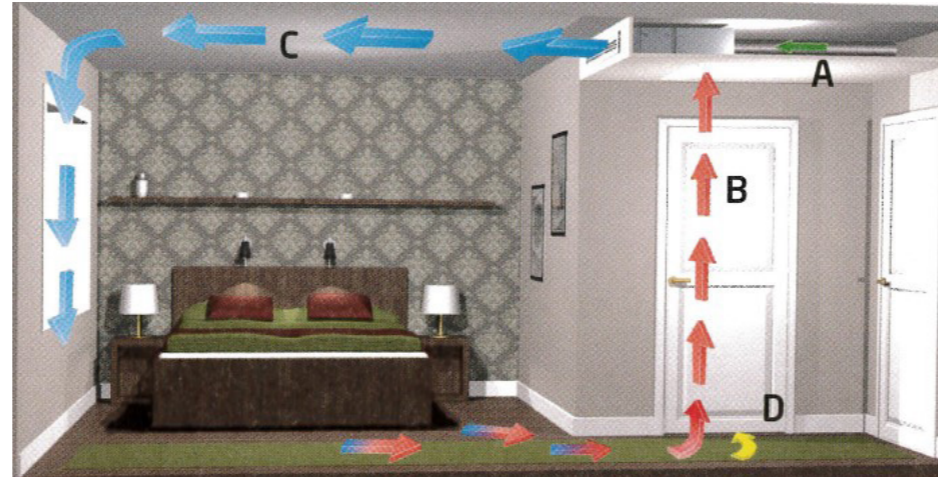


Figure. 1 – Illustration of ventilation strategy to hotel bedrooms: (A) Fresh air via central plant or local MVHR, (B) Return air from room back into fan coil unit; (C) Conditioned air delivered from fan coil unit; (D) Stale air exhausted via extract grille in bathroom vis door undercut.

5.12.2.3.5 GENERAL AND CLEANERS/ REFUSE STORES

- Ventilation will be achieved to the stores via the central AHUs as appropriate. These areas will be at negative pressures to surrounding areas, providing an air path.

5.12.2.3.6 SMOKE VENTILATION

- Smoke ventilation within the atrium will be provided via roof top smoke extract fans, with a dedicated fan supplying air to the atrium area via a dedicated shaft.

5.12.2.4 COLD WATER SYSTEMS

- A metered water supply will be taken from the Yorkshire Water Mains located within John William Street. This will supply a storage tank located in a plantroom at basement level. This is sized to store sufficient water to cover mains water interruption.
- The storage tank supplies a cold-water booster pump set, sized to meet the pressure and flow rate requirements for the building. UV water treatment shall be used to prevent proliferation of Legionella and other biofilms within the water services. The boosted cold water service system will also serve the domestic hot water generation plant at roof level, to prevent scale build up a water conditioner will be provided.

- Water will be distributed around the building via the bedroom risers to serve the bathrooms on the hotel floor. Packaged tanks and pump sets will be used to provide category 5 backflow protection where this is necessary.
- Since the water supply to Huddersfield is soft water, there are currently no plans to provide water softening plant and a dedicated softened water supply to the bedrooms.
- All components of the water services system will be WRAS approved.

5.12.2.5 HOT WATER SYSTEMS

- The hot water for the hotel will be generated using air source heat pumps. The ASHPs will be located at roof level and will feed buffer and storage cylinders in either the basement or in the rooftop plant area. This item is to be agreed at the next design stage.
- The incoming cold-water supply to the DHW generation will be taken from the BCWS supply. A water conditioner will be provided within the DHW plantroom to prevent scale build-up. The DHW will be stored at a minimum of 60deg C. DHW will be distributed in bedroom risers as a flow and return circuit, ensuring efficient temperatures are maintained and reducing water wastage.
- To prevent scalding, TMVs shall be provided at all outlets except kitchen sinks and cleaners sinks.
- All Fittings will be WRAS approved.

5.12.2.6 FIRE SUPPRESSION

- The building will be provided with dry risers in line with the fire engineer's requirements, and the basement Communications Room provided with a FM200 gaseous fire suppression system.

5.12.2.7 PLANT ACCESS

- As the majority of plant is roof mounted, the roof deck shall be fully accessible.
- The service lift shall be utilised for the installation and maintenance of low weight roof mounted equipment. Taking equipment to the fourth floor, with the final flight do be done via the staircase. High weight equipment will be craned into position.

5.19 ACOUSTIC

Mott Macdonald are appointed to provide acoustic engineering support for the planning application for the proposed redevelopment of the George Hotel, Huddersfield. A detailed noise impact assessment has been prepared and is presented in report referenced 100108576/AC01.

The principal conclusion of the noise impact assessment is that the proposed hotel development is considered to be consistent with the aim set out in Paragraph 185 of the NPPF, the first two aims of NPSE and local policy as stated in LP52 of The Kirklees Local Plan.

The following is a summary of that assessment:

- National and local planning policy and guidance relevant to the assessment of noise impacts upon, and generated by, the proposed George Hotel development has been identified.
- Consultation has been undertaken with the Environmental Protection Team at Kirklees Council to determine limits for building services plant and to determine approach to control of construction noise.
- The results of a noise survey at the site have been presented.
- The potential for noise and vibration impacts from construction of the Scheme has been considered along with proposals for mitigation by implementation of best practicable means.
- Appropriate criteria for internal ambient noise for the hotel have been identified. The measured noise levels indicate that appropriate internal ambient noise levels can be achieved with typical façade constructions, however acoustically enhanced glazing is recommended for the eastern façade facing John William Street, and part of the southern façade facing onto St George's Square.
- With reference to BS 4142:2014+A1:2019, limits for rating level have been proposed for new fixed plant associated with the development. Limits are based upon measured background sound levels representative of the nearest noise sensitive receptors.
- The potential for noise emissions from pedestrians accessing the building, events held within the hotel, collection/delivery vehicles and road traffic associated with the proposals have been considered. None of these are anticipated to result in significant adverse impacts and associated effects at the closest noise sensitive receptors.

5.20 VERTICAL TRANSPORT

The proposed lifts for the project are currently detailed as:

- PL1 – Guest/General Passenger Lift: 1 x 12 person (900kg) electric traction MRL lift – 1.0 m/s operating speed – capacity dictated by the confines of the existing lift shaft and well dimensions.
- PL2 – Guest/General Passenger Lift: 1 x 13 person (1000kg) electric traction MRL lift – 1.0 m/s operating speed (Scenic lift)
- GL3 – Passenger/Goods Lifts: 1 x 13 person (1000kg) electric traction MRL lift – 1.0 m/s operating speed

In accordance with the target performance figures recommended for hotel establishments in CIBSE Guide D a target Handling Capacity at 12% of the building population with an Average Waiting Time of less than 60 seconds in the “peak” 5-minute period.

The target performance figures as defined in the RHG Technical Standards document are more stringent, the Standards document states:

“The number, size and speed of the guest passenger elevators shall be based on a calculated average interval during peak periods, of 30 seconds or less (waiting time), and a handling capacity of 30% of the Hotel occupancy population in a five-minute period, 15% up and 15.5% down. For this purpose, “Hotel occupancy population” shall be assumed to be 1.5 times the number of rentable guest units in the Hotel at 100% occupancy.”

Traffic calculations have confirmed that:

- For lift PL1 the maximum Handling Capacity that can be achieved in the target 5 minute “peak” period is 20% of the building (guest) population.
- The Average Waiting Time in the same 5-minute period was 56.7 seconds
- For lift PL2, as the single lift needs to serve more levels (nine in total as currently designed) from entrances to the front and rear of the lift car, the performance of a single lift in this area would be considered as being unacceptable in terms of Handling Capacity but more importantly the Average Waiting Time.

Calculation results have been carried out which consider two lifts operating as an interconnected “duplex” pair. In this case the target performance figure for Handling Capacity is met while the Average Waiting Time for the group is marginally outside the 30 second target at 32.1 seconds.

In summary:

The two lifts currently detailed by the architect are single units which are located well apart from each other therefore they can only operate as “simplex” collective units. Two lifts arranged together will always provide an improved level of performance however in recognition that the intention is to use the lift shaft in the existing building for one of the new lifts then “duplex” operation in this area cannot be achieved as this would entail significant structural changes to the building to create a second adjacent lift shaft.

Single lifts in each area will not be able to meet the RHG performance requirements and in fact performance will be well short of those targets.

It is intended that the lifts provided will be selected from the manufacturers standard product range and will be of machine-room-less (MRL) type design which makes the machine room of the existing lift (PL1) redundant. PL2 is intended to be of a “scenic” design but again this lift can be selected from a standard model lift product.

Solutions to consider include:

Getting acceptance from the client team that the performance targets as defined in CIBSE Guide D are adopted rather than the RHG figures.

Consideration should be given to the introduction of an additional lift in the area adjacent to PL2 to allow them to operate as an interconnected “duplex” pair. This would enable a good level of service to be achieved.

Other points to consider:

There are areas where guest rooms are not accessible by both passenger lifts, and this will be an issue if lift PL2 was to be out of service for maintenance or repair. The RHG Technical Standards document has the following statement:

“In all cases, each installation must consist of at least a pair of elevators, to ensure continuity of service during periods of maintenance and repair”

The introduction of a second lift in the location of lift PL2 would address this single point of failure issue.

5.21 DRAINAGE (FOUL AND SURFACE)

Foul Drainage

It is anticipated that all levels above ground shall be drained via gravity to discharge into the Yorkshire Water sewer in John William Street using the existing sewer outfall.

Appliances at basement level, or in remote parts of the building where suspended drainage runs are unachievable shall drain to a buried sump chamber to be pumped into the suspended drainage.

The introduction of cavity walls dictates a pumped groundwater system is to be introduced, which will required multiple sumps within the basement slab to collect any groundwater ingress and pump to drain.

Surface Water Drainage

Discussions have been held with the LLFA and it has been deemed that attenuation is required on site to achieve an overall betterment.

At present it is proposed to attenuate the surface water from Blocks B & C to achieve a 50% betterment, leaving Block A and the new atrium unattenuated.

Due to the proposed basement levels and those of the sewer in John William Street, there are two methods of attenuation that are currently being investigated. The flat roof of Blocks B & C could be utilised for a blue roof system to provide the required attenuation. An alternative option is the use of attenuation tanks and hydrobrakes within the basement, but is reliant on achieving gravity outfall to the sewer.

Limitations/Assumptions

At the time of writing, no survey information has been received, as such the current condition and layout of the existing system is unknown. Historic drainage drawings do show the layout of the below ground system; however it is unknown if this has been modified. As such, no tangible progress can be made on the design of the below ground drainage system, as a key part of the strategy is to retain the existing where possible.

Informal discussions have been opened with the LLFA regarding attenuation requirements, where by the general strategy proposed - where the surfacewater from Blocks B & C are to be attenuated, and Block A is to remain as-is – is generally acceptable. There is a risk that the stakeholders may require the full site to be attenuated prior to connection to the sewer.

Information required

Below Ground Drainage Survey report.

Manhole Survey of the manhole adjacent to block C in John William Street.

Summary

Overall, the below ground drainage intent is to exit the building at the existing location, with the addition of a new system within the building for foul or surfacewater pending the outcome of the survey report and architectural layouts. A new demarcation manhole chamber will be required externally prior to the sewer connection. Blocks B & C will require attenuated surface water flowrates, therefore requiring storage in the basement or alternatively a Blue Roof introduced. Should a attenuation tank and hydrobrake approach be taken, there is potential for the storage for both blocks to be combined rather than dedicated storage for blocks B & C. The current proposal is for Block A can remain as-is, however this is to be confirmed formally with an agreement with the stakeholders. At present, the drainage survey information is required to progress the design of the below ground drainage.

5.22 ECOLOGICAL IMPACT ASSESSMENT & BIODIVERSITY NET GAIN (INCLUDING BAT SURVEY)

Ramboll UK Limited (‘Ramboll’) was commissioned by Bowman Riley Architects Ltd (the ‘client’) to undertake an Ecological Impact Assessment (EclA) and Biodiversity Net Gain (BNG) assessment of the George Hotel, St George’s Square, Huddersfield, HD1 1JA (the ‘site’) in advance of a façade retention scheme at the site (the ‘proposed development’). The site is located at Ordnance Survey grid reference SE 14411 16931, within the administrative boundary of Kirklees Council.

A desk study, UK Hab survey and a daytime assessment of buildings/structures for bats were completed to assess the likely effects of the proposed development on the ecological features ofthe site and in the study area, including designated sites. In addition, a BNG assessment was undertaken to calculate the biodiversity change for the site as a result of the proposed development in terms of net loss, no net loss or a net gain.

The site is predominantly an existing hotel building, surrounded by hardstanding and with a small area of vegetation (introduced shrub) present, growing from a roof in the northern-most corner of the site. No impacts on statutory or non-statutory designations within 2 km of the site are anticipated. The site contains habitats and species of ecological importance up to the Site level, due to the presence of a small area of introduced shrub, which provides a degree of habitat suitability for invertebrates and potentially for nesting/foraging birds, and opportunity for nesting birds within the hotel building. Roosting bats are unlikely to be present within the building, nor does the site provide potential for foraging/commuting bats.

Proposed mitigation and enhancement measures for these habitats and species are described which include, but are not limited to, provision of on extensive green roof on the building,provision of bird boxes and avoidance of nesting birds. No significant negative residual effects on identified ecological features are anticipated. It is anticipated that there would be a positive residual effect significant at the Site level in respect of habitats and invertebrates on account of the creation of new habitat on the site (an extensive green roof).The BNG assessment has demonstrated that it is possible to deliver a net gain of 15.80% for area-based habitats, via the compensatory actions outlined within this report, which exceeds the10% net gain mandated by Kirklees Council.

6.0 APPENDICES

6.1 APPENDIX A : SUSTAINABILITY STATEMENT



