

Lab Selkirk House Ltd.

**Selkirk House, 166 High Holborn  
and 1 Museum Street, 10-12  
Museum Street, 35-41 New Oxford  
Street and 16A-18 West Central  
Street, London, WC1A 1JR**

**Pre-Demolition Audit**

Issue 2 | 25 September 2023

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 271284-03

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**ARUP**

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# 1 Introduction

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This Pre-Demolition Audit report has been prepared by Ove Arup and Partners Ltd. ('Arup') on behalf of Lab Selkirk House Ltd. (the 'Applicant') in support of the detailed planning application being submitted by Lab Selkirk House Ltd (the Applicant) to the London Borough of Camden ('the Council') for the redevelopment of the land at Selkirk House, 166 High Holborn and 1 Museum Street, 10-12 Museum Street, 35-41 New Oxford Street and 16A-18 West Central Street, London, WC1A 1JR ('the site').

This Pre-Demolition Audit has been updated to reflect the updated planning application submitted (as part of the Circular Economy Statement) in June 2023 and to demonstrate compliance with London Plan Policy SI 7 outlined below alongside where this information can be found within this document and the planning submission documents.

It has also been updated to reflect the Greater London Authority's Circular Economy Statement Guidance (2022) and aligns with the pre-demolition audit requirements as set out in Section 2. It has also been updated to respond to comments from the Greater London Authority's Stage 1 review of the Circular Economy statement (8 August 2023). See GLA CES Memo response for further details.

The Applicant is looking to best promote resource efficiency via the effective management and reduction of refurbishment and fit-out waste and the reuse and direct recycling of materials. They have recently commissioned GXN and Material Index to support the enhancement of the initial pre demolition framework report.

A non invasive, visual survey of the building, combined with analysis of AutoCAD plans, 3D model survey and drawings provided, have been used to calculate the key materials arising from the proposed demolition on site. In addition the applicant has undertaken a range of invasive and non-invasive surveys of the site and buildings since 2020 in order to establish a detailed understanding of the existing buildings on site and as part of ongoing asset management activity. Further information on these can be found the *Clarifications and Responses on Demolition Justification including Pre-redevelopment Audit and Retention options appraisal* appended to Circular Economy Statement that should be read in conjunction with this document.

A thorough analysis of materials generated from elements for which demolition is proposed has been undertaken, relying on the data gathered and provided prior to a site visit. The results have been reported in mass, volume, and CO2e associated with these materials. The weight calculations have been based on well established density values for the designated materials.

Pre-redevelopment audit information on the existing buildings including a description of existing buildings, the building's age, state of repair, key materials, photos of typical internal spaces and facades, and site plans can be found in the following documents which accompany the planning application:

- Retention and Redevelopment Options and Whole Life Carbon comparison (June 2023)
- Clarifications and Responses on Demolition Justification including Pre-redevelopment Audit and Retention options appraisal (Appended to the Circular Economy Statement)

Further information on the management of site waste can be found in the accompanying Demolition Site Waste Management Plan and Construction Site Waste Management Plan report, which accompany the planning application.

## 1.1 Personnel

This report has been undertaken by Jonathan Evans. Jonathan is a Senior Planner in Arup with over 20 years' construction industry experience. Jonathan has significant management experience in the construction industry.

He has worked both onsite as client representative and as a principal contractor's site agent. He has extensive experience in the design and development of construction management plans and site waste management plans.

## 1.2 Objectives

The key objective of this exercise is to advise on the efficient use of material resources and to reduce the amount of waste produced due to the demolition activities of the site and to demonstrate alignment with London Plan Policy SI7, Reducing waste and supporting the circular economy strategy for the scheme.

The Applicant is guided by principles of sustainable resource and waste management: the waste hierarchy (see Figure 1) and circular economy principles (see Figure 2).

The waste hierarchy and the circular economy principles aim to reduce the quantity of waste generated while trying to maximise the efficient use of material resources.

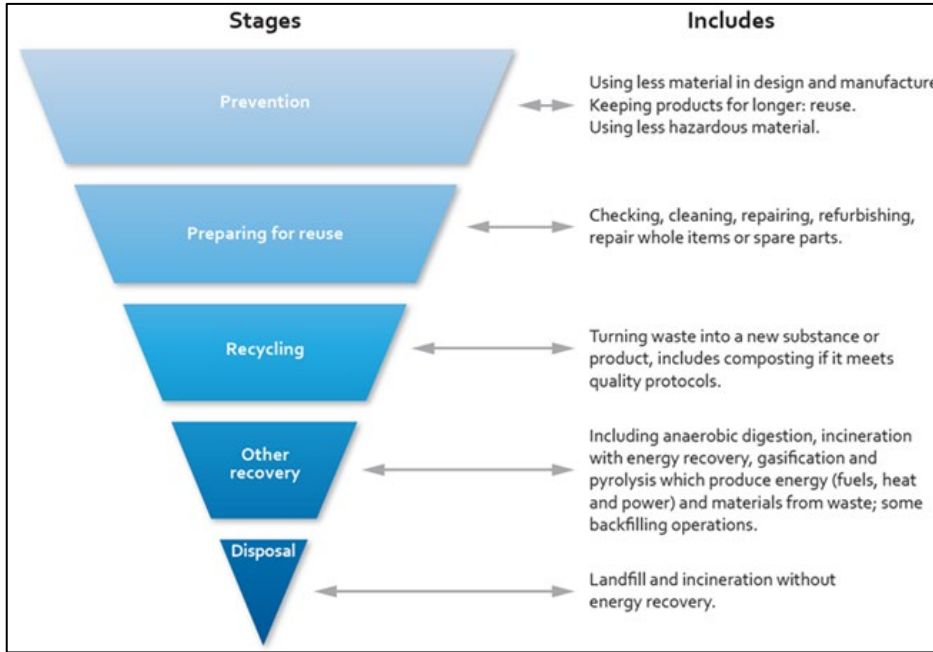


Figure 1: The waste hierarchy (adopted from the EU WFD<sup>1</sup>)

The circular economy puts materials and products back into the economy at the end of each service life at their highest value for as long as possible. This reduces the reliance on virgin materials and safeguards supply chains against material price volatility and scarcity. It aims to decouple resource consumption from economic growth, creating resilient economies.

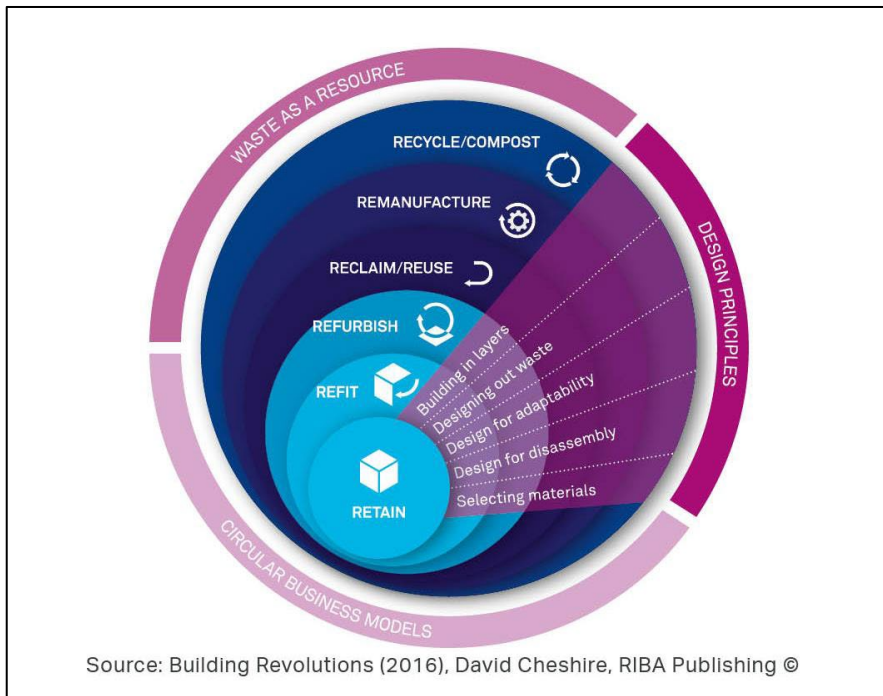


Figure 2: CE hierarchy for building approaches

<sup>1</sup> European Commission (2008), Directive 2008/98/EC on waste (Waste Framework Directive), Available at: <http://ec.europa.eu/environment/waste/framework/> (Accessed 29 October 2018).

### 1.3 Scope of the audit

This Pre-Demolition Audit has been updated to reflect the updated planning application submitted in June 2023 and to demonstrate compliance with London Plan Policy SI 7 and addresses the GLAs guidance on Whole Life Carbon Assessments 4.6.8 (March 2022), which states:

*'If substantial demolition is proposed, the pre-demolition audit should include the following core information:*

- *An explanation as to why it is proposed that the building(s) be demolished. Applicants should explain the different considerations for developing the site. This should go beyond simply saying that the buildings are of 'low quality'. Justification for demolition should be provided, in line with the approach set out in sections 2.4.3 to 2.4.5, above. An assessment of carbon impacts should be highlighted and, where relevant, the WLC assessment should be cross-referenced.'*

**This information is provided in the following documents:**

- **Retention and Redevelopment Options and Whole Life Carbon comparison (June 2023 submission)**
- **Clarifications and Responses on Demolition Justification including Pre-redevelopment Audit and Retention options appraisal) appended to the Circular Economy Statement).**
- *'It should be explained how any negative impacts resulting from demolition, such as the loss of embodied carbon in existing buildings, would be mitigated and offset.'*

**This information is presented in Table 4 and Section 5.5.**

- *'A summary of the key components and materials present in the existing buildings, with an estimate of the quantities and associated embodied carbon and whether they are suitable for reclamation.*

**This information is presented in Table 4.**

- *An explanation and drawings that show the extent of the proposed demolition and whether any parts of the building are being considered for retention'.*

**Clarifications and Responses on Demolition Justification including Pre-redevelopment Audit and Retention options appraisal) appended to the Circular Economy Statement).**

**A schedule of drawings outlining the retention and demolition works is presented in Appendix A. The schedule identifies the appropriate drawing numbers submitted with the application.**

- *Opportunities for reuse and recycling either within the proposed development or off-site nearby/locally or further afield.*

This information is presented in Table 4.

Paragraph, 4.6.9 states:

*Where possible, the following best practice information should also be included:*

- *how the value of existing building elements or materials can be recovered*

This information is presented in Section 6.

- *the amount of demolition waste (cross-reference the Recycling and Waste reporting table - refer to section 4.9 for further details)*

This information is presented in Table 3.

- *a schedule of practical and realistic providers who can act as brokers for each of the reclaimed items*

This information is presented in Section 7.

- *target reuse and reclamation rates.*

This information is presented in Table 4.

- *Explain how the value of existing building elements or materials can be recovered.*

This information is presented in Section 6.

- *Provide an estimate of the expected quantities of demolition waste arising.*

This information is provided in Table 5.

## 1.4 Report structure and limitations

The audit is based on the RIBA Stage 2 design; it will be updated in future iterations to reflect increased design detail and include any additional demolition works that may be identified at later stages of the design and planning of the site. At this stage the report will provide:

- An overview of the policy context;
- Overarching scheme overview;
- An overview of the buildings to be demolished or partially demolished and the proposed development;
- Presentation of the demolition strategy, material quantities and circular economy principles;
- Identification of materials embodied carbon and how materials will be reused;
- Identification of opportunities to maximise the recovery of materials and components from demolition for beneficial reuse and recycling and repurpose; and
- The report concludes by setting out next steps.



‘Materials’ in this report refers to surplus materials generated at any point during the demolition of the proposed site. This material will be suitable for reuse without any preparation or treatment.

## 2 Legislation, policy and guidance

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### 2.1 Overview

A series of legislation, policy and guidance documents set out a range of objectives and targets regarding demolition management and circular economy principles that are relevant to the site. Relevant policies are set out below.

### 2.2 The London Plan

The London Plan (2021) is the material consideration in planning decisions. The circular economy and waste-related policies of the New London Plan are outlined below.

The London Plan (Para 9.10.4) states:

*'Aggregates are bulky materials so Development Plans should maximise their use and re-use and minimise their movement, especially by road. The objective of proximity dictates that the best option is the use of local materials where feasible. The re-use/recycling of building materials and aggregates is a significant and well established component of the circular economy advocated in Policy SI 7 Reducing waste and supporting the circular economy and reduces the demand for natural materials.'*

*Policy SI7 (Reducing waste and supporting the circular economy) promotes waste reduction, material reuse, recycling and improved landfill diversion. The policy states:*

*'A: Resource conservation, waste reduction, increases in material re-use and recycling, and reductions in waste going for disposal will be achieved by the Mayor, waste planning authorities and industry working in collaboration to:*

- 1) promote a more circular economy that improves resource efficiency and innovation to keep products and materials at their highest use for as long as possible*
- 2) encourage waste minimisation and waste prevention through the reuse of materials and using fewer resources in the production and distribution of products*
- 3) ensure that there is zero biodegradable or recyclable waste to landfill by 2026*
- 4) meet or exceed the municipal waste recycling target of 65 per cent by 2030*
- 5) meet or exceed the targets for each of the following waste and material streams:*
  - a) construction and demolition – 95 per cent reuse/recycling/recovery*
  - b) excavation – 95 per cent beneficial use*

*6) design developments with adequate, flexible, and easily accessible storage space and collection systems that support, as a minimum, the separate collection of dry recyclables (at least card, paper, mixed plastics, metals, glass) and food.’*

Policy SI7 also sets out the requirement of producing a Circular Economy Statement to demonstrate the following:

- How all materials arising from demolition and remediation works will be reused and/or recycled.
- How the design and construction will reduce material demands and enable building materials, components and products to be disassembled and reused at the end of their useful life
- Opportunities for managing as much waste as possible on site
- Adequate and easily accessible storage space and collection systems to support recycling and reuse.
- How much waste the proposal is expected to generate, and how and where the waste will be managed in accordance with the waste hierarchy.
- How performance will be monitored and reported.

## 2.3 Duty of Care

Under the Environmental Protection (Duty of Care) (England) Regulations 1991 (as amended), any person who produces, imports, carries, keeps, treats or disposes of controlled waste (a ‘waste holder’), or as a broker who has control of such waste, has a statutory duty of care to ensure that waste is managed properly and recovered or disposed of safely.

A duty of care will be maintained on-site to ensure that waste generated during the construction period is handled in accordance with the relevant legislation and statutory guidance, including the Waste Duty of Care: Code of Practice<sup>2</sup>.

A summary of the main Duty of Care requirements that need to be followed by waste holders is provided in Figure 3.

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<sup>2</sup> Defra and Environment Agency (2018), *Waste duty of care: code of practice*, Available at: <https://www.gov.uk/government/publications/waste-duty-of-care-code-of-practice/waste-duty-of-care-code-of-practice> (Accessed 18 September 2023).

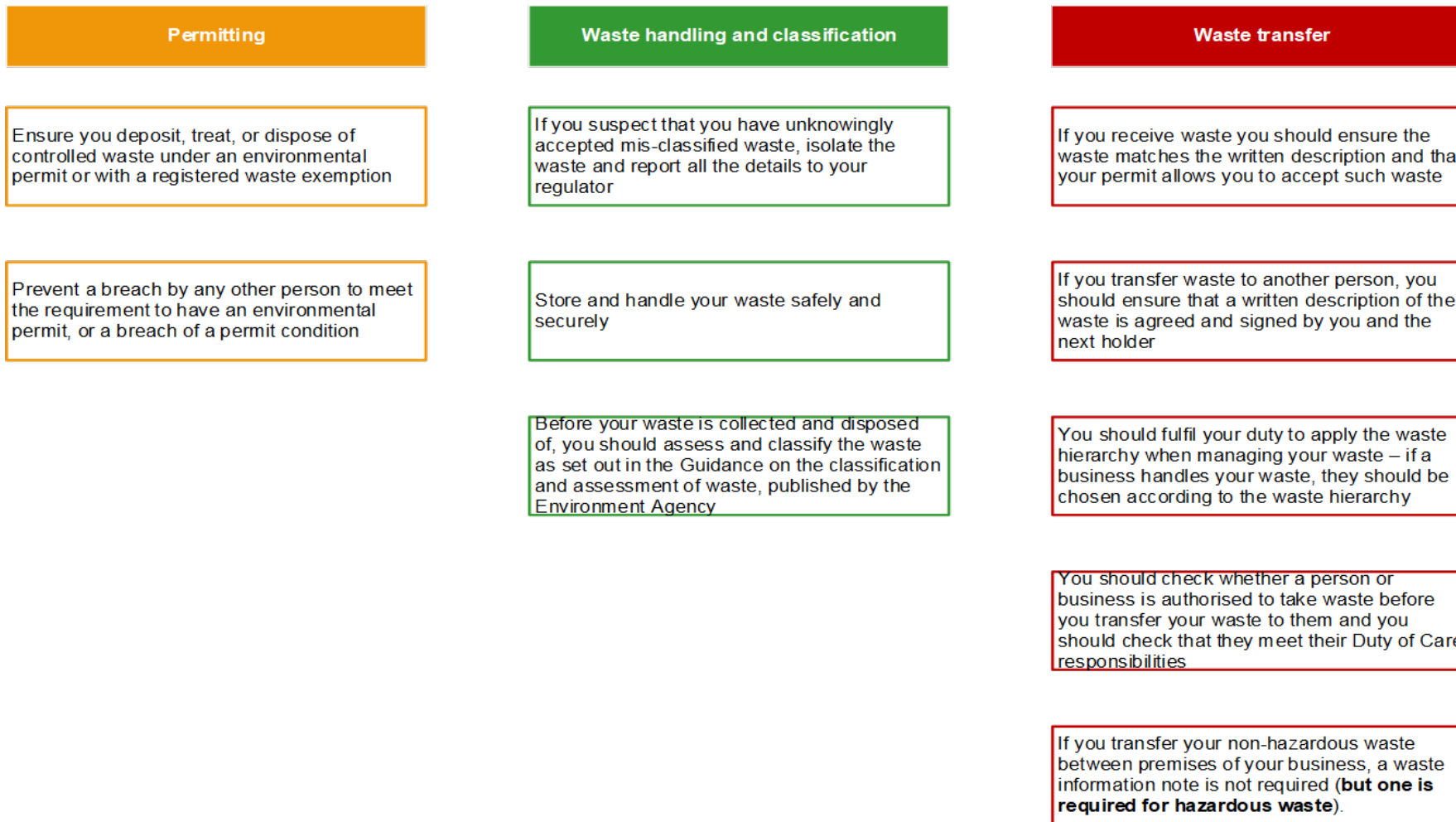


Figure 3: Duty of Care requirements for waste holders

## 2.4 Environmental permitting

In line with the waste Duty of Care, any waste generated during demolition that cannot be reused, will be sent to an appropriately permitted or exempt facility for reuse, recycling, recovery or disposal, operated by an entity registered with the appropriate environmental regulator (i.e. the Environment Agency in England and Wales).

Similarly, any waste recycling and/or recovery activity taking place onsite should receive an appropriate permit (e.g. storage of waste pending recovery by land treatment) or exemption (e.g. mobile plant for crushing demolition concrete) from the environmental regulator, prior to commencing the activity.

This approach is in line with the Environmental Permitting Regulations 2016 (as amended)<sup>3</sup>.

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<sup>3</sup> UK Government (2016), *The Environmental Permitting (England and Wales) Regulations 2016*, Available at: <http://www.legislation.gov.uk/uksi/2016/1154/contents/made> (Accessed 18 September 2023).

### 3 Scheme overview

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The following section sets out a description of the proposed buildings and demolition proposals. The following documents set out how the proposed approach to development has been informed:

- Design and Access Statement (DSDHA, June 2023)
- Listed Building Application (DSDHA, June 2023)
- Retention and redevelopment options and Whole Life Carbon comparison report (DSDHA, June 2023).
- Pre-redevelopment audit and retention options appraisal (DSDHA, September 2023)
- Clarifications and Responses on Demolition Justification including Pre-redevelopment Audit and Retention options appraisal (appended to the Circular Economy Statement) (DSDHA, September 2023).
- Circular Economy Statement (Scotch, June 2023)

The Applicant has identified the opportunity to create a high-quality new development through a public realm-led framework to deliver wide-reaching public benefits. The proposed masterplan incorporates new office space and new homes, including much needed affordable housing.

The Site comprises 0.5 hectares bounded by High Holborn to the south, Museum Street to the east and New Oxford Street to the north with the rear of the properties fronting Grape Street forming the western boundary.

West Central Street dissects the site and separates out the existing Selkirk House from the West Central Street block (known as ‘The West Central Street buildings’). The site layout is shown in Figure 4.

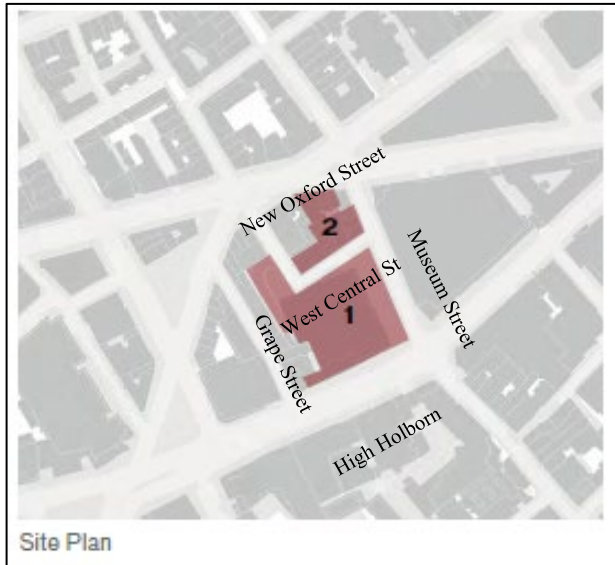


Figure 4: Site layout and surrounding streets

1. Selkirk House - comprises a ground plus 16 storeys building (plus two basement levels, and a further partial basement level). Selkirk House is predominantly occupied by the former Travelodge hotel. There is also a multi storey car park set across basement to second floor level. The Travelodge vacated in Summer 2020 and the tower remains vacant. 166 High Holborn is still in use as a fast-food takeaway; the car park was brought back into operation in February 2023.

2. West Central Street buildings - predominantly in retail use at ground floor level fronting New Oxford Street. The basement, first and second floors of No. 39 – 41 were in office use with the upper floors of 35 – 37 being in residential use. No's 16a, 16b and 18 West Central Street were previously in use as a nightclub at basement level with offices above. All buildings have been vacant since at least 2020; the nightclub was last in use in 2012.

Photographs of the current building on the site are shown in Figure 5.

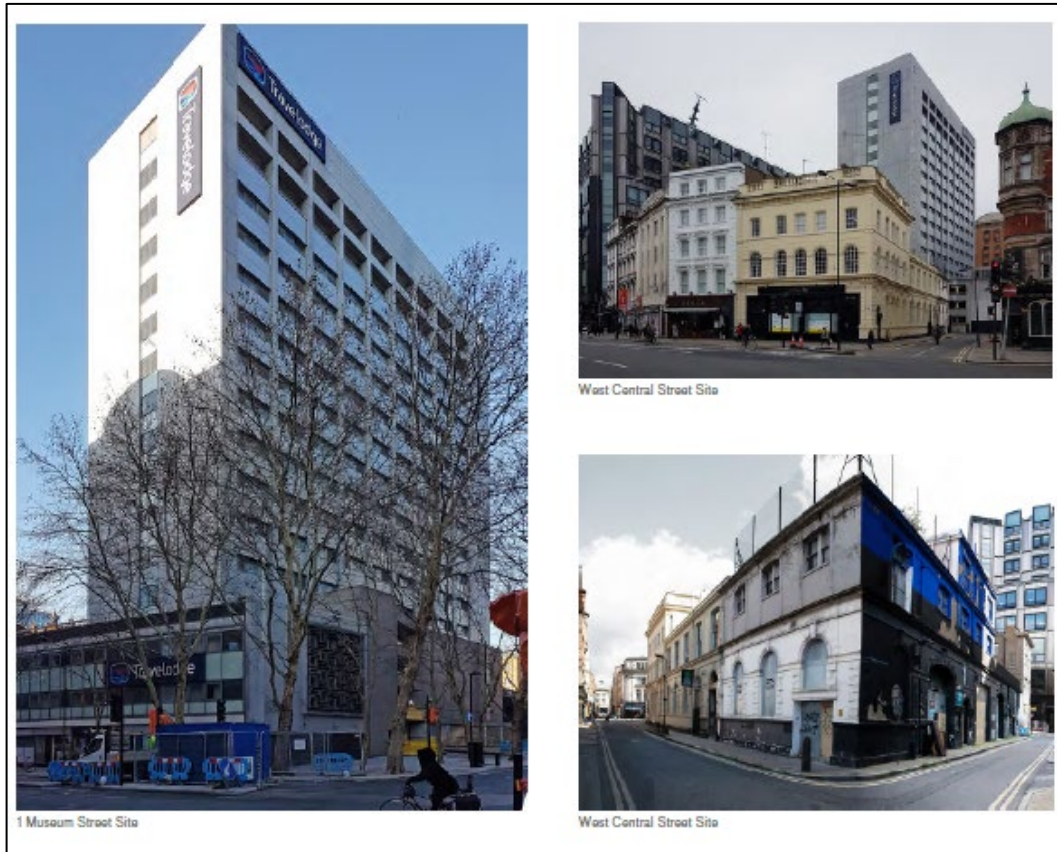


Figure 5: Images of the existing buildings on site

For further information on the existing buildings refer to the aforementioned pre-redevelopment audit.



## 4 Development proposals

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The masterplan proposed a combination of retention and refurbishment alongside demolition and redevelopment to deliver an uplift of 7,148 sqm of the site and enable the creation of a new pedestrian route, 22,650 sqm of new workspace, 44 homes and a range of ground floor commercial uses set in enhanced and enlarged public realm. Where demolition has been proposed the development has sought to retain and reuse existing substructure as outlined in the following descriptions.

The proposed development will retain the majority of the West Central Street buildings except 16a-18 West Central which is proposed for demolition with retention of the basement slab and replacement with 12 (of the 19) new affordable homes. The proposed masterplan will involve the demolition of the existing superstructure and re-use of the existing foundation raft of Selkirk House to construct a new commercial development, 1 Museum Street and Vine Lane and High Holborn residential and ground floor commercial buildings.

### 4.1 Selkirk House

The existing building was originally built in 1962. The building consists of a car park located on the north part of the block, occupying three levels of basement and four levels above ground. The car park utilises a spiralling floor plate arrangement to provide car parking. Access to the car park is via Museum Street and West Central Street.

On the southern part of the site the basement is occupied with amenity space and plant rooms. Above ground, up to level 3, the building presents some retail and plant space at grade and office space above.

On the eastern part of the development, above the offices and the car park, there is a tower with 16 floors, designed for office occupation and two residential floors above the office. Originally there was a plant enclosure on the roof at level 16. Level 4 is a podium transferring the building columns from tower above to accommodate the car park arrangement.

The building was converted in 2002 to a Travelodge hotel in the office part of the development. The 2002 refurbishment did not require major structural works, maintaining the footprint of the floor plates as they were, with localised structural adjustments. These included:

- Installation of a number of new risers through the slabs to service the hotel rooms. These have been strengthened using carbon fibre strips which will need to be taken into account for any further amendments required to the slabs.
- Over-cladding the original façade. The original concrete façade has been over-clad with a rainscreen system.

The building is reinforced concrete construction throughout utilising 180-200mm flat slabs with reinforced concrete columns in the tower area and column and

beam arrangements in the low-rise block. An edge beam runs around the perimeter of the tower floor plates which supports to the original concrete cladding and the 2002 over-cladding. A sketch of the existing structure is shown in Figure 6.

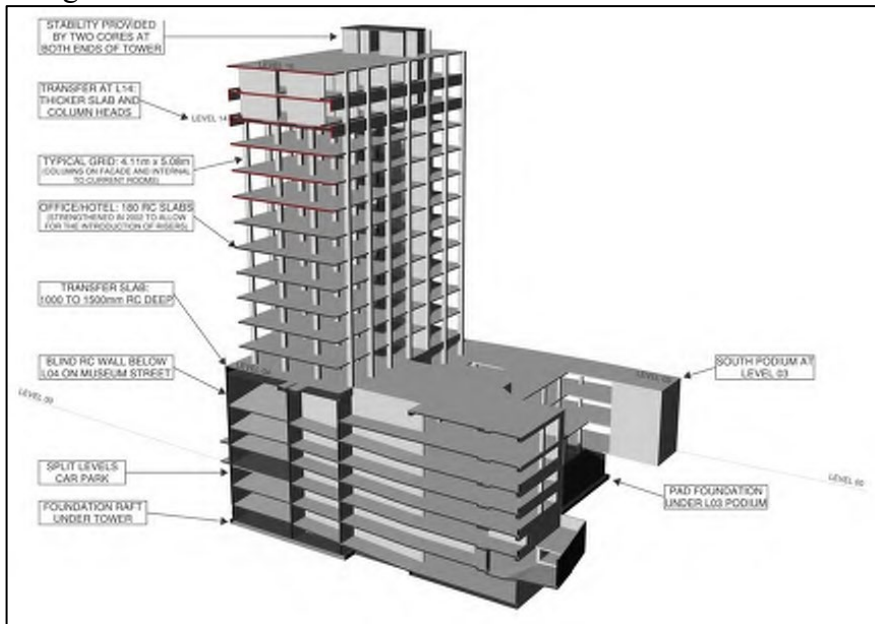


Figure 6: Sketch of Existing Building

## 4.2 West Central Street

The West Central Street buildings are located to the north of the existing Travelodge building and are bound by West Central Street to the south, Museum Street to the east. This block incorporates several listed buildings. The proposal is for a mix of sensitive retention and refurbishment for the majority of the buildings in this block, and demolition and redevelopment (with basement retention) of 16a-18 West Central Street. The proposals would deliver residential including 19 affordable homes with retail space at ground floor.

The addresses included within the site are the following:

- 16a, 16b and 18 West Central Street
- 10, 11 and 12 Museum Street (Grade II listed)
- 35-37 New Oxford Street (Grade II listed)
- 39 and 41 New Oxford Street

An overview of the West Central Street buildings shown in Figure 7.

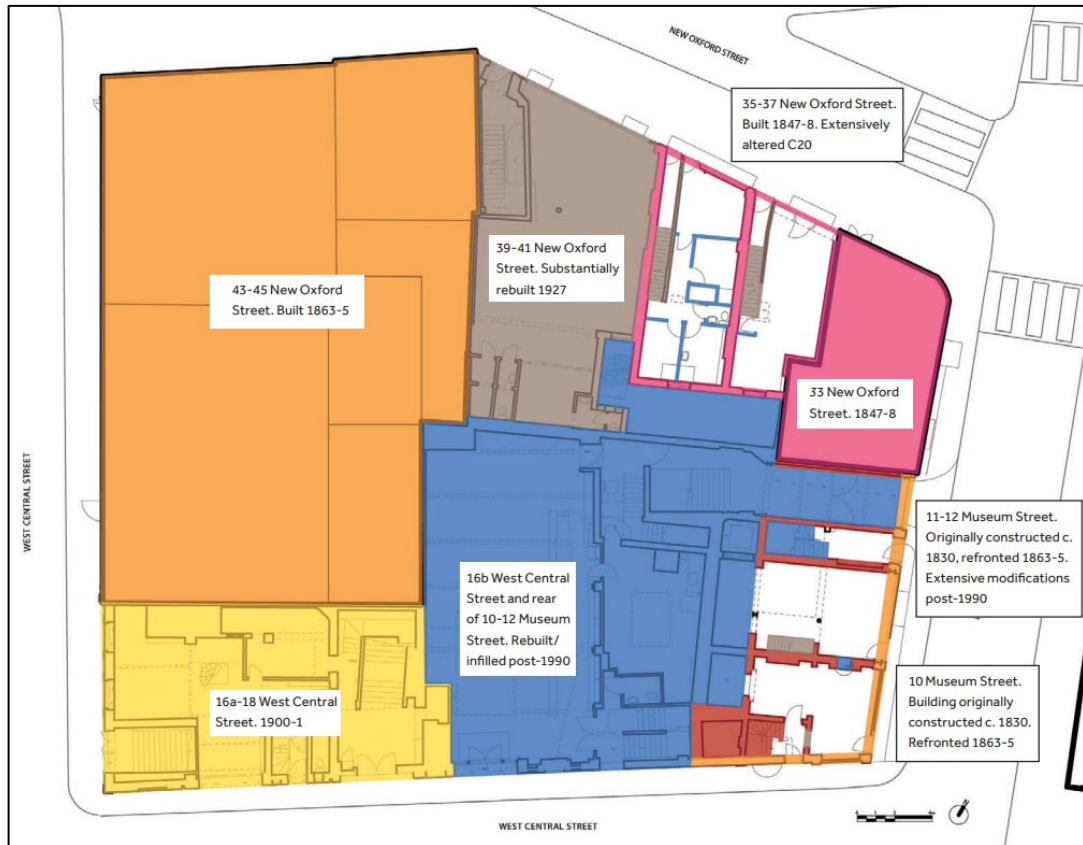


Figure 7: West Central Street overview (note: 43-45 New Oxford St and 33 New Oxford Street are outside of the planning application scope)

#### 4.2.1 16a, 16b and 18 West Central Street

16a-18 West Central Street is a two and three storey building, generally comprising loadbearing brickwork which support timber joist floors. 16b West Central Street is a single storey building with a traditional façade construction in the early 1990s. The building has been used as a nightclub, and the internal structure has been modified to a relatively large span steel structure with cellular beams which support precast planks. It was previously a night club which vacated in 2012.

The proposals for this block involve the following:

- Demolition of the existing building to leave just the basement walls and slab (existing retaining walls to be temporary propped prior to demolishing the ground floor); and
- Provide a new build concrete framed residential block with commercial at ground floor and plant space within the existing basement.

An image of the existing buildings is shown in Figure 8: 16a, 16b and 18 West Central Street.



Figure 8: 16a, 16b and 18 West Central Street

#### 4.2.2 10, 11 and 12 Museum Street

Number 10-12 Museum Street are Grade II listed buildings. Number 10 Museum Street is a three-storey residential building over retail space at ground floor. The construction appears to be of loadbearing brickwork supporting timber floors. Number 11 and 12 have previously undergone refurbishment. From the visual inspections undertaken by the project team the buildings are understood to be constructed of loadbearing masonry with steel beams spanning between party walls. Number 10 remains as a town house and retains a significant amount of original fabric. 11-12 block have been vacant since 2020; number 10 formed part of the nightclub.

A single storey basement extends across all three of the properties. There are also vaults that extend along the full extent of the Museum Street footpath.

An image of the existing buildings is shown in Figure 9: 10, 11 and 12 Museum Street.

The proposals for this building incorporate sensitive retention and refurbishment, retaining much of the existing historic fabric and repairing the historic facades while upgrading the building to provide high quality residential accommodation. Given this strategy, this block does not form part of the pre-demolition audit scope.

For further information on the existing building condition and the proposals please refer to the Pre-redevelopment audit, Heritage Statement and listed building application documents submitted alongside the planning application. A schedule of drawings indicating the extent of demolition of these buildings can be found in Appendix A.



Figure 9: 10, 11 and 12 Museum Street

### 4.2.3 35 and 37 New Oxford Street

Number 35 and 37 New Oxford Street are Grade II listed three-storey residential properties over retail at ground floor. From the visual inspections undertaken by the project team the buildings are understood to be constructed of London stock brick, with stucco facades to the New Oxford Street elevation. Flat parapets conceal butterfly roofs.

The proposals for this building incorporate sensitive retention and refurbishment, retaining the town house plan form and remaining historic fabric where present and repairing the historic facades while upgrading the building to provide high quality residential accommodation. Given this strategy, this block does not form part of the pre-demolition audit scope.

For further information on the existing building condition and the proposals please refer to the Pre-redevelopment audit, Heritage Statement and listed building application documents submitted alongside the planning application. A schedule of drawings indicating the extent of demolition of these buildings can be found in Appendix A.

### 4.2.4 39 and 41 New Oxford Street

The buildings appear to be of reinforced concrete frame construction, with traditional facades. From the visual inspections undertaken by the project team the buildings are understood to be transfer structures at ground and first floors of Number 41. There is a single storey basement along the entire footprint, with vaults under the New Oxford Street footpath.

The proposals for this building incorporate retention and refurbishment, retaining the existing structure while upgrading the building to provide high quality

residential accommodation. Given this strategy, this block does not form part of the pre-demolition audit scope

For further information on the existing building condition and the proposals please refer to the Pre-redevelopment audit, Heritage Statement and listed building application documents submitted alongside the planning application. A schedule of drawings indicating the extent of demolition of these buildings can be found in Appendix A.

An image of the existing buildings is shown in Figure 10: 35, 37, 39 and 41 New Oxford Street.



Figure 10: 35, 37, 39 and 41 New Oxford Street

## 4.2.5 Design development

Following the Grade II listing of 10-12 Museum Street and 35-37 New Oxford Street in March 2023, the strategy for the redevelopment for West Central Street has been updated from previous application.

The proposed roof extensions will not be progressed. The structures and historic fabric of 10-12 Museum Street, 35-41 New Oxford Street will now be retained and refurbished where previously façade retention was proposed.

The range of new residential and commercial uses and refurbished residential uses will be provided through the proposed strategy shown in Figure 11.

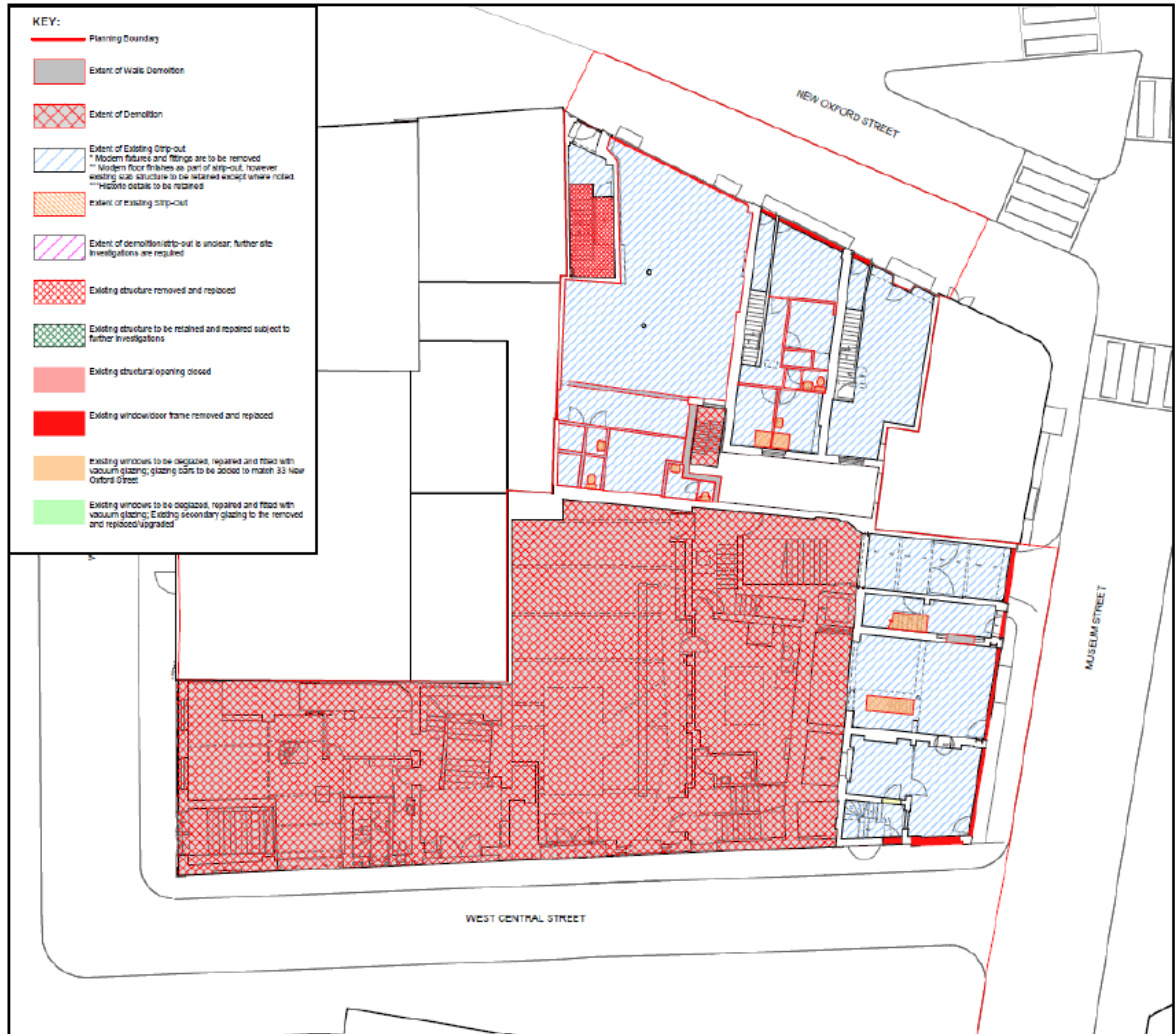


Figure 11: Summary overview of strip out and demolition works at West Central Street (Ground floor)

For a full schedule of drawings indicating demolition and retention please see appendix A.

#### 4.2.6 Extent of proposed demolition

In summary, the scheme proposes the retention and refurbishment of:

- 10-12 Museum Street
- 35-37 New Oxford Street
- 39-41 New Oxford Street

The applicant has submitted an application for Listed Building Consent Application in parallel to this planning application to ensure that all works to listed buildings are agreed in advance with the Council.

The scheme proposed the substantial demolition with basement retention and redevelopment of two elements:

- 16a, 16b-18 West Central Street

- Selkirk House

See Appendix A for a detailed description of retention and redevelopment strategy for each building and accompanying drawings.

### 4.3 Application summary

The proposed development has been carefully designed with a detailed understanding and analysis of the historic context being fundamental to the architectural response in order to respect and enhance its sensitive setting.

The proposed development falls within a one red line area and comprises of the following components:

**Museum Street** - a single new building rising to 19 storeys, providing office (Class E(g)(i)) accommodation on upper levels and a range of flexible town centre uses (Class E) at ground level.

**High Holborn** - a single new building rising to 6 storeys, providing residential (Class C3) accommodation on upper levels and a flexible town centre use (Class E) at ground level.

**Vine Lane** - a single new building rising to 5 storeys, providing market residential units with a flexible town centre use (Class E) at ground level.

**West Central Street** - a series of new and refurbished buildings rising to ground plus 5 storeys, providing residential accommodation (market, Low-cost rent and Intermediate rent) on upper levels (Class C3) and flexible town centre uses (Class E) at ground level.

In summary, the proposed development is seeking detailed planning permission for:

- **22,650 sqm (GIA) of office floorspace** falling within Class E(g)(i). This will be provided within the Museum Street building.
- **1,481 sqm (GIA) of flexible town centre floorspace** at ground floor level falling within Class E. This will be provided within the Museum Street, Vine Lane, High Holborn, and West Central Street buildings. The planning application specifies the range of uses within Class E that each of these units is seeking permission for.
- **3,992 sqm (GIA)** of residential floorspace will be provided. This represents an uplift of **2,078 sqm (GIA)** of residential floorspace falling within Class C3. This will be provided within the West Central Street, Vine Lane and High Holborn buildings.
- All of the affordable housing component (**1,693 sqm GIA**) is provided with the West Central Street buildings along with **294 sqm (GIA)** of market housing.



- **1,579 sqm (GIA)** of market housing is provided within the Vine Lane block with a **further 426 sqm (GIA)** of market housing being provided within the High Holborn block. Two new Extension of basement at 1 Museum Street which will be used for cycle parking, servicing areas, plant, storage, and other ancillary uses.
- A high proportion of open space across the site totalling **2,190 sqm** provided as public realm, pocket parks, communal areas, play space and private amenity for residents and office occupants.
- The creation of new public pedestrian route through the site known as ‘**Vine Lane**’, which will link High Holborn with West Central Street.
- 465 cycle parking spaces allocated as follows:
  - 345 long stay cycle parking spaces allocated to the office component.
  - 11 long stay cycle parking spaces allocated to the flexible town centre uses floorspace component.
  - 73 long stay cycle parking spaces allocated to the residential component.
  - 36 cycle parking spaces allocated to visitors to the site and located within the public realm areas.
- **0 vehicle parking spaces.**
- Extensive provision of open space across the site (**2,190sqm**) including:
  - **1,083 sqm** provided as public realm within the Applicant’s ownership across the site.
  - **509 sqm** provided as communal offices terraces within Museum Street building.
  - **186sqm** provided as play space within the West Central Street courtyard, which also provides communal open space for residents of those buildings.
  - **195 sqm** of communal open space within the Vine Lane block
    - **74 sqm** within the courtyard and **121 sqm** at level 4.
  - **87 sqm for WCS and 130 sqm for VL** of private amenity space.
- In addition to the open space provision within the Applicant’s ownership, 729 sqm of public realm and streetscape improvements outside of the Applicant’s ownership is proposed.

An impression of the proposed scheme is shown in Figure 12



Figure 12: Proposed scheme overview

## 4.4 Design Approach Table

The explanation of considerations for developing the site and justification for the proposed demolition in line with the strategy is set out in the Design Approach table set out in the Circular Economy Statement and GLA Circular Economy Statement Template submitted alongside this application.

## 5 Demolition Strategy and Circular Economy

### 5.1 Overview

As set out in Section 1 a number of intrusive and non-intrusive surveys have been undertaken on the existing buildings; information on these can be found in the Pre-Redevelopment Audit.

In finalising this report we have been able to access the client's further design stage team including GXN who are providing advice on circular economy to inform the next stage of design and have provided the calculations to inform the reuse, recycle and repurpose waste of waste for each building.

The applicant is yet to appoint a demolition contractor so detailed demolition plans are yet to be developed. As such the pre-demolition audit at this stage reflects a high level overview.

During RIBA Stage 3, detailed surveys and a demolition plan will be developed.

### 5.2 Demolition Materials

The overarching options for direct re-use and recycling are set out below in Table 1. This table identifies the various streams of waste and opportunities how each stream can be reused or repurposed.

Material	Options for reuse or direct recycling
Inert materials (excluding soil)	On-site reuse in original form e.g. bricks, roof tiles, paving slabs, kerbs, cills
	Off-site reuse in original form e.g. bricks, roof tiles, paving slabs, kerbs, cills
New and used metal materials	On-site reuse of metal material in original form
	Off-site reuse of metal material in original form
Composite materials (materials which include more than one material type often bonded together)	On-site reuse in original form
	Off-site reuse in original form
New and used plasterboard (offcuts/unused/undamaged boards)	On-site reuse in original form
	Off-site reuse of unused/undamaged plasterboard on other construction or refurbishment projects
	Off-site reuse options for unused or undamaged plasterboard – e.g. local community scheme, surplus construction material trading, charities
	Plasterboard manufacturer take-back schemes e.g. collection of bagged offcuts or unused boards
Furniture	On-site reuse in original form
	Off-site reuse options – e.g. local community schemes, local charities, schools, etc
	On-site reuse of timber on the project

Material	Options for reuse or direct recycling
Timber products (All sawn soft/hard wood only – no board products e.g. MDF/chipboard etc.)	Off-site reuse via another project, National/local community wood reuse scheme
New and used mineral fibre ceiling panels and tiles	Off-site reuse in other construction/refurbishment projects, local community schemes, charities
	Off-site recycling via manufacturer for closed loop recycling
Vinyl floor coverings (uplifted vinyl flooring and post-installation offcuts)	Off-site direct recycling via manufacturer for closed loop recycling
Used carpet tiles (good reusable condition)	On-site reuse of carpet tiles in their original form
	Off-site direct reuse on other construction/refurbishment projects, local community schemes, charities
	Direct recycling via a manufacturer for closed loop recycling
Packaging materials (all timber, cardboard & plastic)	Repatriation of wooden pallets from product suppliers for direct reuse
New and unused insulation board (foam board only e.g. EPS, XPS, ISO, COMP. not mineral fibre)	Off-site reuse of new and unused insulation board on other construction/refurbishment projects, local community schemes, charities
	Resale of insulation board via surplus construction material trading companies
	Collection by manufacturer for closed loop recycling
Fixtures and fittings	On-site reuse in original form e.g. sinks, doors, gates
	Off-site reuse in original form, e.g. sinks, doors, gates

Table 1: BREEAM Materials and options for reuse and recycling

### 5.3 Museum Street and West Central Street

Having considered Table 1 and having taken into consideration the demolition strategy and the proposed development the opportunities for reuse, recycle and repurposing of materials for the Museum Street and West Central Street scheme is set out in Table 2.

Table 2: Proposed demolition waste strategy for Museum Street and West Central Street

Material	Opportunity for reuse	Opportunity for recycling	Repurposing
<b>Inert materials (excluding soil)</b>	<p>Face brick work to be cleaned for reuse to assist in refurbishment of existing façade (retained) and or where exposed brick work is noted to provide continuity</p> <p>Face Brick Work may also be cleaned for resale</p> <p>Coping stones; ridge and other roofing materials may be considered for reuse where refurbishment is considered;</p> <p>Roofing materials may be recovered for resale</p> <p>Paving slabs, kerbs, cills will be protected in deconstruction of the buildings and considered for reuse in maintaining the materials within the new design especially in refurbishment of existing facades and roadways etc</p>	<p>Glass / glazing solutions will be recycled</p>	<p>Concrete products and masonry (various) will be crushed (potentially on site) where not reusable and used on site where applicable as fill for basement areas no longer required or;</p> <p>Suitably crushed to enable use as piling mat or 6F2 for sale for subbase roadways etc</p> <p>Roofing materials where unusable will be crushed as with the concrete and masonry above</p>
<b>New and used metal materials</b>	<p>Metal architectural details (e.g. handles, banisters rail, etc) will be demounted and sold as are for reuse</p>	<p>Copper cables; metallic components and rebar etc. will be recycled off site for reforming and reuse by others</p>	<p>Copper cables; metallic components and rebar etc. will be recycled off site for reforming and reuse by others</p>
<b>Composite materials (materials which include more than one material type often bonded together)</b>	<p>Bonded materials will be reviewed in nature and where reusable safely without modification will be sold for reuse</p>	<p>Bonded materials that cannot be reused will be taken from site to specialist recycling plants for separation and those materials suitable for reuse will be put back in to manufacturing; materials that cannot be recycled easily will be repurposed</p>	<p>All materials for repurposing will be considered on environmental grounds to best “use”, and where no other use can be found, the materials will be considered for waste to heat, or waste to power schemes such as with North</p>

Material	Opportunity for reuse	Opportunity for recycling	Repurposing
			London Heat & Power based in Enfield North London
<b>New and used plasterboard (offcuts/unused/undamaged boards)</b>	Reuse as suitable on site or resale for external usage		
<b>Furniture</b>	Furniture products will carefully be removed from site and either offered to local charities, or community groups or sold on directly to third parties	Where furniture is unable to be sold on it will be broken down into its material parts and recycled through manufacturer closed loop recycling schemes where appropriate or via registered recycling contractors	
<b>Timber products (All sawn soft/hard wood only – no board products e.g. MDF/chipboard etc.)</b>	Where timber can be reclaimed reasonably it will be considered for reuse on site, but it is generally considered that this will be cleaned and sold for offsite reuse Off-site reuse via another project, National/local community wood reuse scheme	Where timber can be reclaimed but not reused the timber will be recycled into timber products such as board at offsite facility	Where timber is beyond recycling efficiently the timber will be repurposed, by sending it to register waste to heat / power plants
<b>New and used mineral fibre ceiling panels and tiles</b>	Where fibre ceilings can be reclaimed reasonably it will be considered for reuse on site, but it is generally considered that this will be cleaned and sold for offsite reuse	Where fibre ceilings can be reclaimed but not reused, they will be recycled through manufacturer closed loop recycling schemes	Where fibre ceiling panels are not able to be recycled, they will be where possible repurposed, by sending it to register waste to heat / power plants
<b>Vinyl floor coverings (uplifted vinyl flooring and post-installation offcuts)</b>	It is not envisaged that vinyl flooring will be reused on site	Off-site direct recycling via manufacturer for closed loop recycling	Where floor coverings are not able to be recycled, they will be where possible repurposed, by sending it to register waste to heat / power plants
<b>Used carpet tiles (good reusable condition)</b>	On-site reuse of carpet tiles in their original form	Direct recycling via a manufacturer for closed loop recycling	Where floor coverings are not able to be recycled, they will be where possible

Material	Opportunity for reuse	Opportunity for recycling	Repurposing
	Off-site direct reuse on other construction/refurbishment projects, local community schemes, charities		repurposed, by sending it to register waste to heat / power plants
<b>Packaging materials (all timber, cardboard &amp; plastic)</b>	Repatriation of wooden pallets from product suppliers for direct reuse	Cardboard will be recycled through registered recycling plants	
<b>New and unused insulation board (foam board only e.g. EPS, XPS, ISO, COMP. not mineral fibre)</b>	Off-site reuse of new and unused insulation board on other construction/refurbishment projects, local community schemes, charities Resale of insulation board via surplus construction material trading companies	Collection by manufacturer for closed loop recycling	
<b>Fixtures and fittings</b>	Fixtures and fittings, especially bracketry will be considered for reuse within the existing site; Where the fixtures and fittings can be reused, those not used on site will be sold for use elsewhere such as in the community (door closers; doors; trunking; kitchen units etc for community projects or refurbishment of community facilities)	Where fixtures and fittings are unsuitable for reuse, they will be considered for repurposing or recycling; Where recycling is considered the best option, the materials will be separated off site into their constituent materials and recycled accordingly	

## 5.4 Demolition Quantities

A summary of the forecast quantities of materials and waste to be generated by the scheme, including the embodied carbon, is provided in Table 3.

All the quantities presented in this report are based on assumptions and standard figures and therefore they represent the “best estimate” at current level of knowledge of the existing buildings on site.

Concrete is by far the most prominent material, estimated to be 24.517 tonnes (correspondent to 57.3% of material on site). The embodied carbon of all the materials present within the building is estimated to be 7.350 tonnes of CO<sub>2</sub>e. The carbon emissions data has been sourced from the publicly accessible ICE Inventory of Carbon and Energy V3, as of November 10, 2019.<sup>1</sup> However, it's important to acknowledge that since the original material's composition and source details are not fully known, the CO<sub>2</sub> equivalent figures used should be approached with some degree of caution.



Table 3: Forecast demolition quantities (Information provided by GXN Architects)

Product	Total Weight (kg)	Total Volume (m <sup>3</sup> )	CO <sub>2</sub> e (kg)	Total Weight (%)	Total Volume (%)
Concrete	24.517.470	10.216	2.525.299	57,3 %	53.5 %
Metal	384.211	192	945.160	0,9 %	1.0 %
Glass	9.329	4	15.206	0,02 %	0,02 %
Bricks	17.584.928	8.374	3.692.835	41,1 %	43.8 %
Gypsum	95.898	83	37.400	0,2 %	0.4 %
Carpet tiles	28.265	20	82.244	0,1 %	0.1 %
Timber	67.773	169	17.824	0,2 %	0,9 %
Ceramic	38.461	15	9.231	0,1 %	0.1 %
Plastics	6.532	5	20.249	<0,1%	<0,1%
Marble	160	0.06	112	<0,1%	<0,1%
Stone	41.250	14	3.713	0,1 %	0.1 %
Bitumen	5.957	6	1.322	<0,1%	<0,1%
<b>TOTALS</b>	<b>42.780.234</b>	<b>19.0978</b>	<b>7.350.594</b>		

## 5.5 Assessment of retention, re-use and recycling and of negative impacts

It should be noted that the scheme includes the retention of:

- The Selkirk House basement and foundations, which will form part of 1 Museum Street;
- The basement within 16a-18 West Central Street;
- 10-12 Museum Street, 35-41 New Oxford Street

An assessment has been conducted to estimate the circular economy approach and embodied carbon impact of demolition of the rest of the site.

The estimation has been made using OneClick LCA and ICE database to determine Module C2,3 and 4 for the materials part of the demolition. Module C1 has been calculated based on RICS Professional Statement (Section 3.5.4.1) which suggest using 3.4 kgCO<sub>2</sub>e/m GIA as a rate to determine deconstruction and demolition emissions.

For C2 assumption of 50km has been taken into account for transportation. The calculation on have been conducted based on the best practice re-use and recycling route identified as target reuse and reclamation rates indicated in Table 4. Note this table incorporates all buildings on site including those to be retained.

Table 4: Site wide assessment of Retention, Reuse, Recovery and Landfill strategy and associated embodied Carbon Impact of Demolition (provided by GXN Architects)

Product	Estimated Retention %	Estimated Reuse %	Estimated Recovery & Recycling %	Estimated Landfill %	End of Life Scenario	C2 (kgCO <sub>2</sub> e)	C3 (kgCO <sub>2</sub> e)	C4 (kgCO <sub>2</sub> e)
Concrete	24 % 5.884.193 kg	20 % 4.903.494 kg	56 % 13.729.783 kg	0% 0 kg	Crushed to aggregate	116.123	4.668	-
Metal	3 % 11.526 kg	55 % 211.316 kg	42 % 161.369 kg	0% 0 kg	Recycled	2.323	355	-
Glass	0 % 0 kg	87 % 8.116 kg	13 % 1.213 kg	0% 0 kg	Recycled	58	0,3	-
Bricks	50 % 8.792.464 kg	50 % 8.792.464 kg	0 % 0 kg	0% 0 kg	Crushed to aggregate	54.795	-	-
Gypsum	0 % 0 kg	0 % 0 kg	98 % 93.980 kg	2% 1.918 kg	Recycling of gypsum board, gypsum pulverizing and handling	598	67	25
Carpet tiles	0 % 0 kg	0 % 0 kg	100 % 28.265 kg	0% 0 kg	PVC products incineration	176	58.509	-
Timber	1 % 678 kg	91 % 61.674 kg	6 % 4.066 kg	2% 1.355 kg	Incinerated	418	6.303	18
Ceramic	0 % 0 kg	19 % 7.308 kg	81 % 31.154 kg	0% 0 kg	Crushed to aggregate	240	11	-
Plastics	0 % 0 kg	24 % 1.568 kg	66 % 4.311 kg	10 % 653 kg	PVC products incineration	41	8.924	8
Marble	0 % 0 kg	0 % 0 kg	100 % 160 kg	0% 0 kg	Crushed to aggregate	1	0,1	-
Stone	100 % 41.250 kg	0 % 0 kg	0 % 0 kg	0% 0 kg	Crushed to aggregate	-	-	-
Bitumen	0 % 0 kg	0 % 0 kg	0 % 0 kg	100% 5.957 kg	-	37	-	77
<b>% of total</b>	<b>34.43 % 14.730.111 kg</b>	<b>32.69 % 13.985.939 kg</b>	<b>32.85 % 14.054.301 kg</b>	<b>0,02 % 9.984 kg</b>		<b>174.808 (kgCO<sub>2</sub>e)</b>	<b>78.836 (kgCO<sub>2</sub>e)</b>	<b>128 (kgCO<sub>2</sub>e)</b>

Table 4 established potential circular economy routes for much of the demolition material. At the next stage the applicant will work with the appointed circular economy advisor and the demolition contractor once appointed to confirm scheme specific targets and achieve these targets by providing the demolition contractor with a return schedule indicating optimal end of life destination for the various materials. Stone is assumed 100% retained onsite on retained facades.

## 6 Materials and waste management

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This section sets out how materials will be treated onsite to ensure that the Applicant's objectives are met.

### 6.1 Options to optimise material value retention.

#### 6.1.1 Testing:

The demolition contractor will perform concrete testing by extracting small samples from floor slabs, columns, and walls. The goal is to analyse the concrete composition and detect any potential contaminants, such as elevated levels of chlorides and sulphates.

#### 6.1.2 Innovation consideration:

Engage in discussions with the SmartCrusher to assess the feasibility of implementing this system within the UK. SmartCrusher asserts a remarkable 60% reduction in carbon emissions throughout the concrete's life cycle.

#### 6.1.3 Engage with demolition contractor:

Make informed decisions regarding the management options for the concrete related components, coordinate with demolition contractors and other relevant suppliers as required.

### 6.2 Demolition material and waste segregation

Demolition material and arising waste will be sorted into separate key waste groups during the deconstruction process. A minimum seven-stream segregation strategy will be carried out where possible, in line with WRAP guidance<sup>4</sup>:

- Inert materials (excluding soil)
- New and used metal materials
- Composite materials (materials which include more than one material type often bonded together)
- New and used plasterboard (offcuts/unused/undamaged boards)
- Furniture
- Timber products (All sawn soft/hard wood only – no board products e.g. MDF/chipboard etc.)
- New and used mineral fibre ceiling panels and tiles

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<sup>4</sup> <http://www.wrap.org.uk/sites/files/wrap/Waste%20man%20technical1.pdf>  
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- Vinyl floor coverings (uplifted vinyl flooring and post-installation offcuts)
- Used carpet tiles (good reusable condition)
- Packaging materials (all timber, cardboard & plastic)
- New and unused insulation board (foam board only e.g. EPS, XPS, ISO, COMP. not mineral fibre)
- Fixtures and fittings

The above segregation strategy will support the demolition to maximise the amount of material to be recycled, reused or repurposed.

However, under certain circumstances the types of materials and waste generated will not warrant the segregation of the above streams, and in some specific cases, it may be acceptable to rely on offsite segregation at an appropriate construction materials recovery facility.

### 6.3 Storage

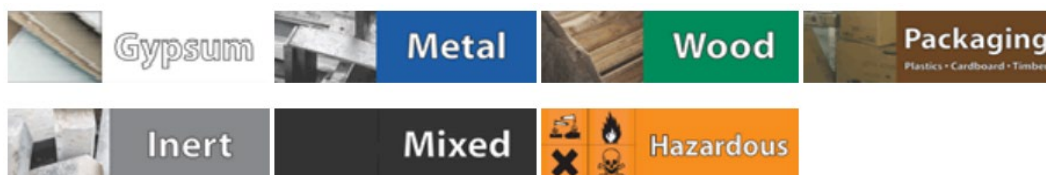
The movement of demolition and any excavated material will be kept to a minimum to avoid double handling.

All types of hazardous materials and waste will be kept separate from each other and will always be kept separate from non-hazardous materials and waste. They will be appropriately stockpiled or stored in appropriate containers (e.g. with the appropriate seals, drainage provisions and signage).

Any surplus excavated material will be stockpiled onsite without intermixing with other materials to avoid contamination. This will be achieved by using dividers and/ or setting the stockpiles sufficiently apart.

All skips and storage receptacles will be sheeted, or otherwise remain lidded or closed, during times when waste is not being deposited into them. They will also be covered to prevent the escape of material and waste whilst in transit and loaded for maximum payload efficiency.

A range of dedicated materials and waste containers and equipment will be provided, including wheeled containers and bulk containers. Materials and waste containers will be colour-coded in line with the colour-coding scheme developed by ICE (see Figure 13). This will facilitate the separation of waste for reuse and recycling and to ensure that inert, non-hazardous and hazardous waste materials are kept separated.



### Figure 13: ICE waste stream colour-coding

All skips and storage receptacles will be inspected periodically to ensure they are fit for purpose. Skips and storage receptacles that are not fit for purpose will be taken out of use immediately with appropriate signage used to signify that they should not be used.

Further details on the proposed management of waste is presented in the Demolition Site Waste Management Plan (Arup, June 2023), submitted with the planning application.

## 7 Reuse strategies

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### 7.1 Waste hierarchy

The waste hierarchy and principles of the circular economy are aimed at reducing waste generation and maximising the efficient use of materials. This section provides descriptions and recommendations for each demolition material, focusing on options that align with the highest points in the waste hierarchy. Table 5 presents a best case scenario option. In general, it is advisable to allow for the longest possible lead-in time and maximise exposure to facilitate the reuse of products and components.

To optimise the potential for reclamation with the materials and elements currently in the building, consider the following steps:

1. Engage in a discussion with the client to review the report's findings and explore the possibility of closedloop reuse in similar projects or future development/ refurbishment endeavours.
2. When feasible, allocate on-site storage dedicated to segregating salvaged items. The highest likelihood for reuse, which comes with corresponding environmental and economic advantages, is achieved when materials are kept as close to the site as possible. This can be achieved by:
  - Utilising salvaged items within the same local area for the same client.
  - Selling or providing salvaged materials locally to benefit the surrounding community.

Table 5: Best case reuse potential

Product	Estimated Reuse %	Estimated Recovery & Recycling %	Estimated Landfill %	Reuse potential	Direct Reuse Issue to consider	Alternative Recovery & Recycling % opportunity
Concrete	20 % 4,903,494 kg	56 % 13,729,783 kg	0% 0 kg	Limited (Precast element)	Careful removal of existing precast elements. Need engagement with Demo Contractor in early phase.	(Downcycle) Higher value recycled aggregates for road sub-base or concrete. Separation from potential contaminants.
Metal	55 % 211,316 kg	42 % 161,369 kg	0% 0 kg	Limited (Structure)	Reuse requires careful removal and end user located. All older steel cannot be justified for reuse under current guidance.	(Recycle) Where reuse not possible, remaining steel for closed loop recycling.
Glass	87 % 8,116 kg	13 % 1,213 kg	0% 0 kg	Limited (Windows)	Deconstruction/handling of window and internal glass; deconstruction program impact; segregation on site.	(Recycle) Where reuse not possible, remaining glass for closed loop recycling, demo program impact could be issue.
Bricks	50 % 8,792,464 kg	0 % 0 kg	0% 0 kg	Limited (due to unknown mortar strength)	Separation from contaminants to maximize recycling grade.	(Recycle / Upcycle) Where reuse not possible, remaining bricks for closed loop recycling or engage with product manufacturer
Gypsum	0 % 0 kg	98 % 93,980 kg	2% 1,918 kg	Difficult	Manufacturers generally do not accept post consumer waste for new products.	(Downcycle) Limited closed loop recycling, soil conditioner application more likely.
Carpet tiles	0 % 0 kg	100 % 28,265 kg	0% 0 kg	Difficult (due to quality)	Reuse requires careful removal and end user located as well as quality evaluation.	(Downcycle) Low recycling potential, could use as energy feedstock or equestrian surfacing
Timber	91 % 61,674 kg	6 % 4,066 kg	2% 1,355 kg	Limited (structure) High (doors)	Reuse requires careful removal and end user located. Doors could be easily removed and resell on secondary market.	(Recycle) High recycling potential, should avoid energy feedstock route.
Ceramic	19 % 7,308 kg	81 % 31,154 kg	0% 0 kg	Limited (Sanitary-ware)	Reuse requires careful removal and end user located.	(Downcycle) Limited closed loop recycling, mixed inert fill more likely.
Plastics	24 % 1,568 kg	66 % 4,311 kg	10 % 653 kg	Difficult	Contact relevant scheme provider for recycling.	(Upcycle) Could be recycled through PVC take-back schemes - recovynyl.
Marble	0 % 0 kg	100 % 160 kg	0% 0 kg	Limited (Reuse potential linked to ability to remove )	Reuse requires careful removal and end user located. Mechanical fixing could create issues and cracking during removal.	(Recycle) Higher value recycled aggregates for specific manufacturer, pending composition verification.
Stone	0 % 0 kg	0 % 0 kg	0% 0 kg	Limited (Reuse potential linked to ability to remove )intact	Reuse requires careful removal and end user located. Mechanical fixing could create issues and cracking during removal.	(Recycle) Higher value recycled aggregates for specific manufacturer, pending composition verification.
Bitumen	0 % 0 kg	0 % 0 kg	100% 5,957 kg	Not possible	-	-
Tot. potential by Weight	32.69 % 13,985,939 kg	32.85 % 14,054,301 kg	<0.1 % 9,984 kg			



Table 5 establishes best-case reuse potential for much of the demolition material. At the next stage the applicant will work with the appointed circular economy advisor and the demolition contractor once appointed to established scheme specific targets and the mechanism for monitoring and achieving these.

## 7.2 Reuse and recycling community

Table 5 identifies a selection of materials which have the capacity to be directly re-used or recycled within other local projects.

Coordination with surrounding projects could be established as a sustainable solution to help reduce building site waste. Although some materials from the site may not be of use for the new proposal, many could be of use to other projects and vice versa. Sharing materials like concrete aggregate, glass, steel, aluminium or specific feature elements would provide a strategy which lowers CO<sub>2</sub> emissions through less down cycling and less transportation distances required to waste sites.

There are also few other organisations that may be able to assist with the reuse of items, which are listed below in London:

- Reyooz: <http://www.reyooz.com/>;
- Globechain: <https://globechain.com/>;
- Reuse Network: <https://reuse-network.org.uk/donateitems/#/>
- Collecteco: <https://www.collecteco.co.uk/>;
- London Reuse Network: <http://lcn.org.uk/projectsservices/london-re-use-network/>
- Scrapstores: <https://www.workandplayscrapstore.org.uk/> and Reuseful UK <https://www.reusefuluk.org/>

There is also an interactive map available from the Supply Chain Sustainability School, which shows geographically the different platforms available for material exchange: <https://www.supplychainschool.co.uk/school-launches-new-mepmapping-tool/>.

For items that may have some architectural salvage value, specific salvage items can be advertised for free on [www.salvo.co.uk](http://www.salvo.co.uk) or low value materials on [www.salvomie.co.uk](http://www.salvomie.co.uk).

Salvo also operates a demolition/refurbishment alert service on their website which serves to bring forthcoming demolition products to the attention of potential buyers or users. Local architectural salvage merchants about specific items can also be contacted. Salvo publishes a directory on their website. Ensure that salvaged items are removed and stored in such a way that all components remain together, e.g. doors in their frames.

The team have in the past have been worked with EME – Excess Material Exchange, a digital matching platform that identifies high-value re-use options for

excess materials or waste products, and is currently partnering with Material Index LTD.


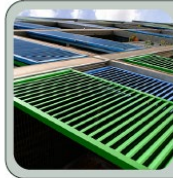






## 8 Next steps

As a next step, the applicant would like to work further on the materials arising from the demolition of the existing building and make sure that are utilised at the highest value possible.

As such, the Upcycle Catalogue work undertaken to inform this report will provide ideas for utilising the ‘waste’ of today, to build the architecture of tomorrow. The exact quantities and typology of upcycle will eventually be further investigated in future phases when team will get a better knowledge of the building composition.

The project’s circular economy advisor for detailed design GXN has an established relationship with a number of ambitious suppliers and manufacturers who are equally passionate about circular economy and upcycling.

A number of these companies are listed below. As the project processes, the team will continue to pull in this expertise to advise on the handling and transformation of many of the upcycling ideas.

 <p><b>SAINT-GOBAIN</b></p> <p>We are seeking a collaboration with the research departments of companies like Saint-Gobain regarding recycling or up-cycling of glass products.</p>	 <p><b>ALLOY FABWELD</b></p> <p>Alloy Fabweld Ltd are UK leaders in Architectural Metalwork. They specialise in design, manufacturing of high quality bespoke metalwork for commercial projects.</p>
 <p><b>ASG</b> ASSOCIATED STONE GROUP LTD</p> <p>Stone contracting and consultancy services for clients and architects. ASG incorporates every aspect of natural stone design, procurement and installation</p>	 <p><b>K&amp;D</b></p> <p>K&amp;D Joinery is regarded as one of London and the South East's leading purpose made joinery manufacturers. K&amp;D could provide services for timber related workstreams.</p>
 <p><b>SAS</b></p> <p>SAS International is a leading British manufacturer of quality metal ceilings and bespoke architectural metalwork. SAS leads through innovation, cutting-edge design and technical acoustic expertise.</p>	 <p><b>Metalworks London</b></p> <p>Metal fabrication business dedicated to customized jobs. Located in London Brixton, 'Metalworks' undertakes any job to do with metal, while also providing installment services</p>
 <p><b>SPEIRS + MAJOR</b></p> <p>Speirs Major is a UK lighting design practice. As they will be lighting consultants for the project, we have organised to meet to discuss potential ideas for upcycling lighting design concepts</p>	 <p><b>CHELSEA ARTISANS</b> FUSION GLASS DESIGNS</p> <p>Chelsea Artisans &amp; Fusion Glass Designs are experts in the design, manufacture and supply of architectural decorative glass.</p>

Appropriate timescales for the required demolition activities will be provided to ensure full recoverability of the demolition waste arising including high value reuse.

Unused, surplus construction and demolition materials will be returned, sold or donated to nearby construction projects or via online construction materials trading platforms.

Once the Stage 3 pre-demolition audit is undertaken project specific targets will be established with the different demolition material types quantified, the quantities and the management routes of these materials can be tracked. This can be achieved by using BRE's SmartWaste monitoring tool, or similar.

# Appendix A

## Summary of proposed demolition and retention works

Proposed Work				
Building	Demolish	Replace	Retain	Drawing Reference(s)
16a, 18 and 16b West Central Street	<ul style="list-style-type: none"> <li>Existing building from ground floor up, incl. roof.</li> </ul>		<ul style="list-style-type: none"> <li>Existing basement footprint with some alteration to floor levels to improve accessibility.</li> </ul>	295B-P10.300, 295B-P10.301, 295B-P10.302, 295B-P10.303, 295B-P10.304, 295B-P10.305, 295B-P10.306, 295B_P10.401
10 Museum Street	<ul style="list-style-type: none"> <li>Modern fittings at all levels</li> </ul>	<ul style="list-style-type: none"> <li>Existing window/door frame removed and replaced (ground floor)</li> </ul>	<ul style="list-style-type: none"> <li>Existing building façade and roof (to be repaired where necessary).</li> <li>Existing windows to be deglazed, repaired and fitted with vacuum glazing; Existing secondary glazing to the removed and replaced/upgraded (basement, first to third floor)</li> </ul>	295B-P10.300, 295B-P10.301, 295B-P10.302, 295B-P10.303, 295B-P10.304, 295B-P10.305, 295B-P10.306, 295B_P10.400, 295B_P10.401, 295B_P10.402
11 - 12 Museum Street	<ul style="list-style-type: none"> <li>Recently added partition walls and modern fittings across all levels.</li> <li>Internal staircase in 12 Museum St. between first, second and third floor.</li> </ul>	<ul style="list-style-type: none"> <li>Existing window/door frame removed and replaced (basement and ground floor)</li> </ul>	<ul style="list-style-type: none"> <li>Existing building façade and roof (to be repaired where necessary).</li> <li>Existing windows to be deglazed, repaired and fitted with vacuum glazing; Existing secondary glazing to the removed and replaced/upgraded (first to third floor)</li> </ul>	295B-P10.300, 295B-P10.301, 295B-P10.302, 295B-P10.303, 295B-P10.304, 295B-P10.305, 295B-P10.306, 295B_P10.400, 295B_P10.401, 295B_P10.402
35 New Oxford Street	<ul style="list-style-type: none"> <li>Recently added partition walls and modern fittings across all levels.</li> </ul>	<ul style="list-style-type: none"> <li>Existing window/door frame removed and replaced (ground floor)</li> </ul>	<ul style="list-style-type: none"> <li>Existing windows to be deglazed, repaired and fitted with vacuum glazing; glazing bars to be added to match 33 New Oxford Street</li> <li>Existing building façade and roof (to be repaired where necessary).</li> </ul>	295B-P10.300, 295B-P10.301, 295B-P10.302, 295B-P10.303, 295B-P10.304, 295B-P10.305, 295B-P10.306, 295B_P10.400, 295B_P10.401, 295B_P10.402

37 New Oxford Street	<ul style="list-style-type: none"> <li>Recently added partition walls and modern fittings across all levels.</li> </ul>	<ul style="list-style-type: none"> <li>Existing window/door frame removed and replaced (ground floor)</li> </ul>	<ul style="list-style-type: none"> <li>Existing building façade and roof (to be repaired where necessary).</li> </ul>	295B-P10.300, 295B-P10.301, 295B-P10.302, 295B-P10.303, 295B-P10.304, 295B-P10.305, 295B-P10.306, 295B_P10.400, 295B_P10.401, 295B_P10.402
39 - 41 New Oxford Street	<ul style="list-style-type: none"> <li>Recently added partition walls and modern fittings across all levels.</li> </ul>	<ul style="list-style-type: none"> <li>Existing window/door frame removed and replaced (ground to third floor).</li> <li>Remove existing staircase and replace with new, compliant staircase.</li> </ul>	<ul style="list-style-type: none"> <li>Existing building façade and roof (to be repaired where necessary).</li> </ul>	295B-P10.300, 295B-P10.301, 295B-P10.302, 295B-P10.303, 295B-P10.304, 295B-P10.305, 295B-P10.306, 295B_P10.400, 295B_P10.401, 295B_P10.402
Selkirk House	<ul style="list-style-type: none"> <li>Existing building from basement level 2 up, incl. roof.</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li>Existing basement Level 2 footprint with some alteration to floor levels to improve accessibility.</li> </ul>	295-P10.300_Demolition Site Plan_B, 295AB_1MS-Selkirk House Retention Options Review & WLC Comparison, 1MS and WCS Circular Economy Statement R10 P.75