4.0
DESIGN RESPONSES

4.1 BRIEF

4.1.1 SUMMARY

The project will refurbish Building 13 and 20/21 at Elsecar Heritage Centre as well as revitalise the public realm. The proposed developments are targeted to maximise their future economic, social and cultural impact.

4.1.2 BUILDING 13

Brief overview
The Nursery will be retained within the Ground Floor while the First Floor will be refurbished as creative workspaces The building requires repairs and refurbishment throughout.

Internal refurbishment
Works to the Ground floor will include new glazed partitions to create a new entrance space. There will be improvements to circulation by the insertion of a new platform lift to provide access to the Upper Ground Floor. Additionally, a new lift located in the existing WC block will serve the Ground Floor and First Floor.

The layout of the First Floor will remain similar to the existing configuration. The central space will be subdivided to provide a shared area and meeting room. The fire strategy is being improved as part of the project which will allow wheelchair users and people with additional mobility requirements to safely use the building. This means that many of the existing doors that do not meet the required standard will need to be replaced with new fire rated doors.

External works
The building requires extensive conservation and repairs including roof, joinery and stonework repairs.

Access
New platform lift providing level access to Upper Ground Floor. New passenger lift to provide access to First Floor workspace.

4.1.3 BUILDING 20 & 21

Brief overview
The aspiration is for Buildings 20 and 21 to offer a range of events spaces and for multiple uses. Supporting and auxiliary spaces such as WCs require updating.

Internal refurbishment
Internal alterations to accommodate a new lobbied entrance from the west side of the building.

Refurbishment of auxiliary spaces so that they effectively support both events spaces

General redecoration and refurbishment of the internal spaces, including the WC and Kitchen areas.

Alterations to provide a robust fire strategy for the building

External works
Conservation and repairs are required to both buildings. The level of external works and repairs will be focussed on essential works only and concentrated on the Building 20 portion of the building.

Access
Level access is to be provided between grade level and Building 20 and also between Building 20 and Building 21, where there is currently a change in level.

4.1.3 PUBLIC REALM AND SITE WIDE IMPROVEMENTS

Brief overview
The Public Realm focuses on the resurfacing of two main square areas and small interconnecting thoroughfares. The design also includes consideration and flexibility for future use; particularly for pop-up community, cultural and commercial activities.

External works
The landscape strategy will make improvements across the site that will allow a range of activities and events to take place, while ensuring proposals are in keeping with the heritage environment.

This includes:
- Introducing a more visually consistent and appealing surface finish across the site to areas of existing tarmacadam and in-situ concrete.
- Space for performance, pop-up events and dining, complete with power supplies
- New lighting elements
- New planters
- Opportunities for the placement or integration of public artwork and sculpture
- Retention and protection of heritage items and features

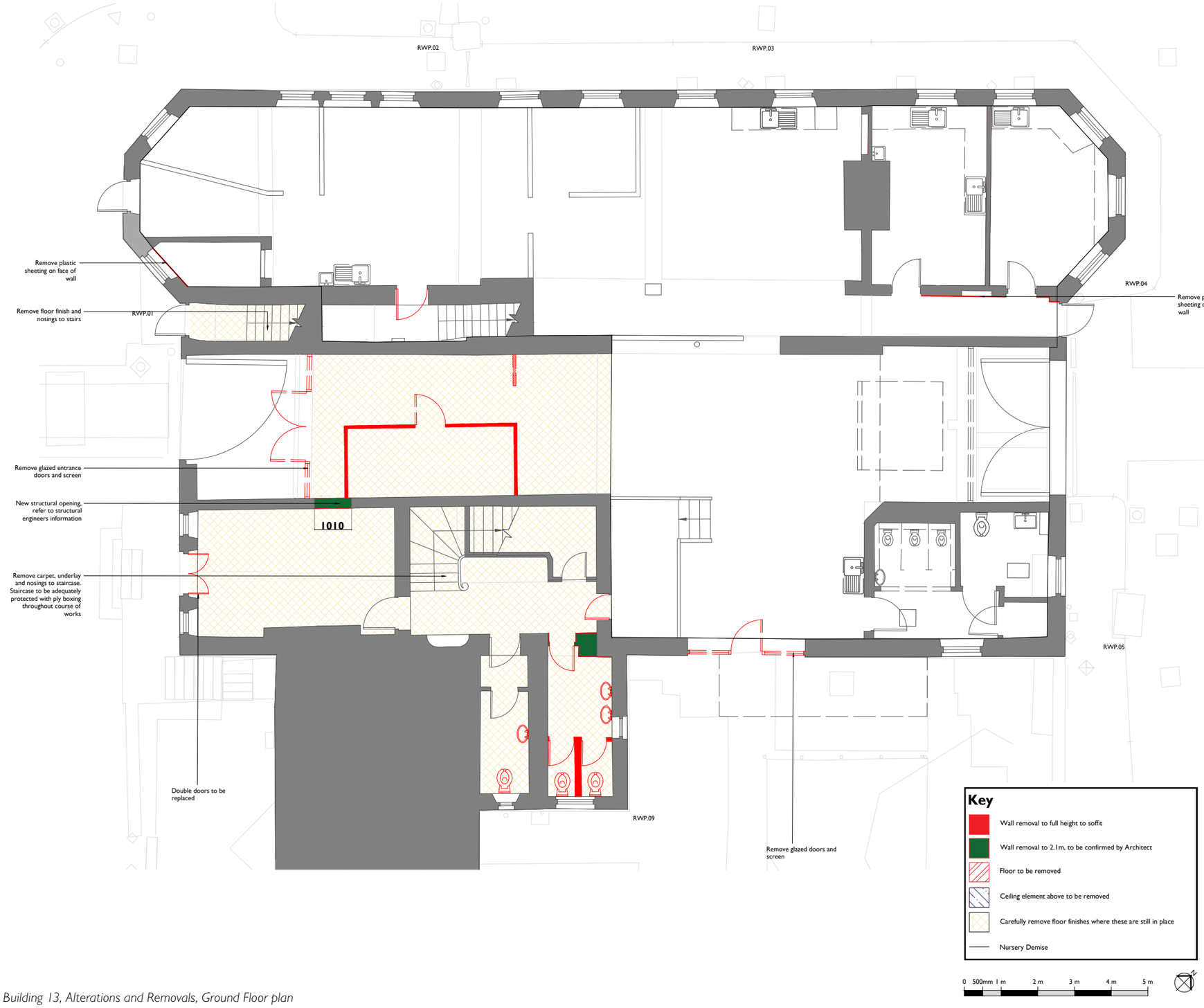
Access
The site is broadly flat and the public realm works will not substantially alter any of the existing levels on across the site.

4.2 ALTERATIONS AND REMOVALS

4.2.1 BUILDING 13 - GROUND FLOOR

Removals and alterations include:

- Removal of external doors and timber frames to the entrances at the northeast and southwest of the building
- Full refurbishment of the WC areas outside of the nursery.
- Removal of the ground floor slab to create a structural base for the new platform lift
- Replacement of modern doors where replacement is required as part of the fire strategy.
- A full renewal of building services including lighting outside of the nursery. Existing column radiators to be retained.
- Removal of existing floor finishes outside of the nursery.
- New structural opening from the entrance space and widening of the opening to the new lift area.

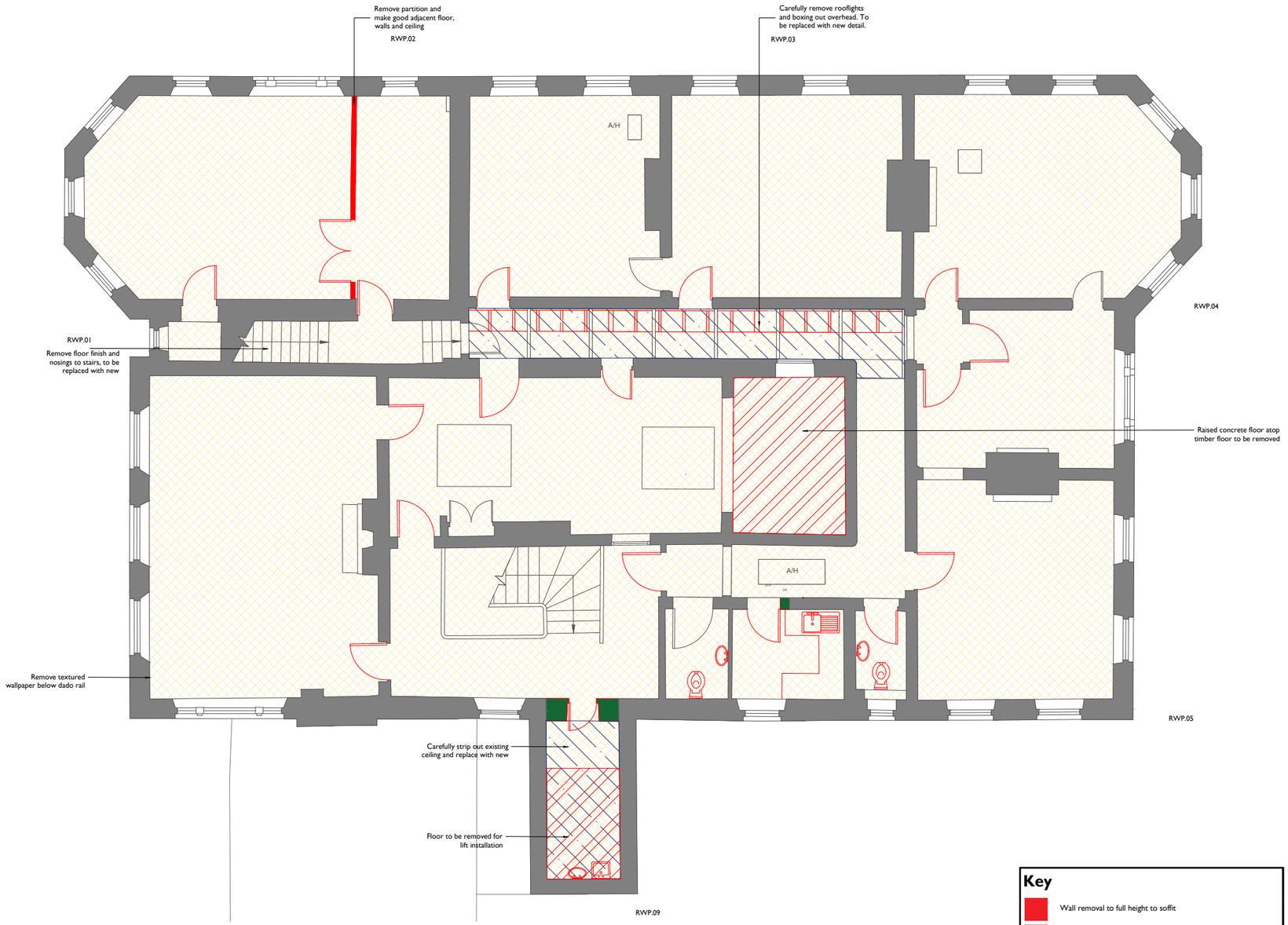


Building 13, Alterations and Removals, Ground Floor plan

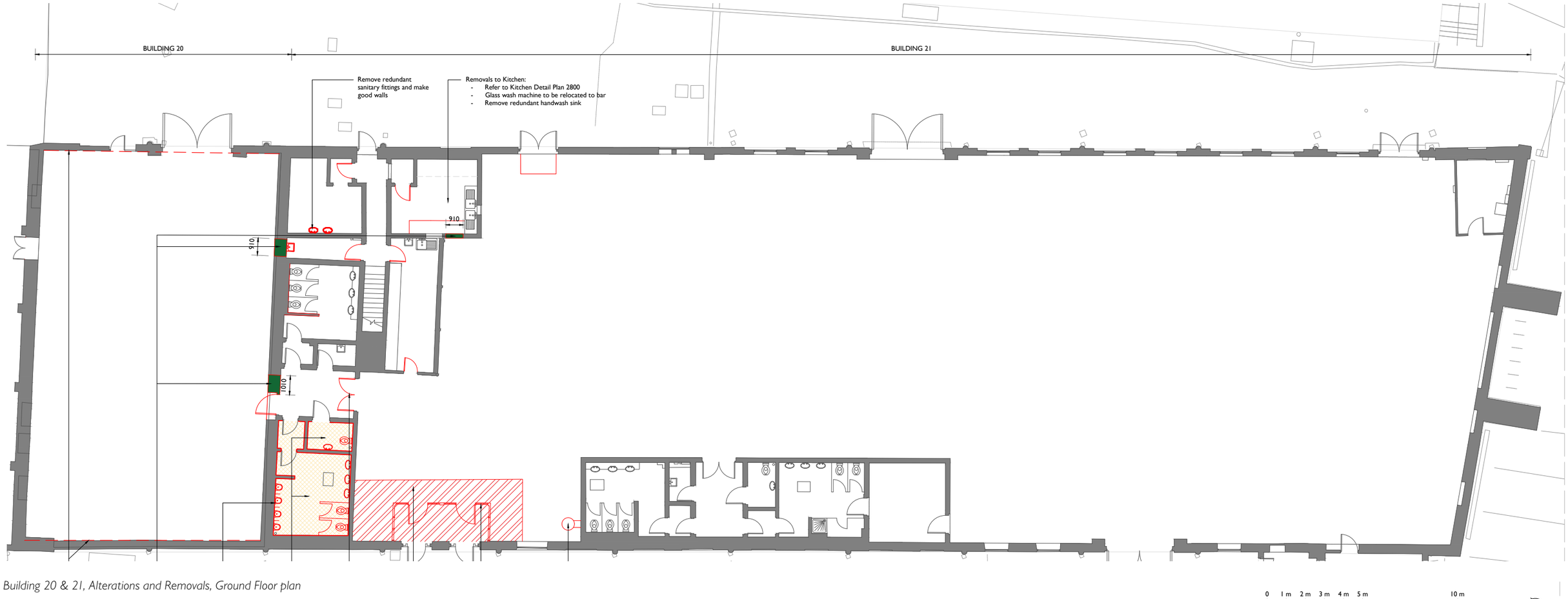
4.2.2 BUILDING 13 - FIRST FLOOR

Removals and alterations include:

- Removal of a modern, lightweight partitions to create an open office space
- Full refurbishment of the WC areas
- Removal of modern kitchen fittings and appliances
- Replacement of modern doors where replacement is required as part of the fire strategy
- Removal of the first floor slab to create a structural opening for the new platform lift
- Removal of the solid, raised floor area at the centre of the building
- A full renewal of building services including lighting. Existing column radiators to be retained.
- Removal of existing floor finishes
- Removal of the rooflights above the corridor space, which are currently allowing water ingress.
- At roof level, renewal of flat roof finishes
- Widening of the doorway to the new lift area.



Building 13, Alterations and Removals, First Floor plan



4.2.3 BUILDING 20 & 21

Removals and alterations include:

- Refurbishment of the male WCs adjacent to B20 with amendments to the female WCs.
- Removal of existing steep ramps to entrances where these are not compliant with buildings regulations
- Replacement of modern doors where replacement is required as part of the fire strategy.
- For Building 20, a full renewal of building services including lighting.
- Removal of inappropriate paint finishes to the internal walls of Building 20.
- For Building 20, removal of timber boarding at the eaves and replacement with new timber boarding and ventilation louvre detail to west elevation.
- Widening of the doorway between Building 20 and Building 21.
- New structural opening between Building 20 and Building 21 to the Catering area.
- There are no architectural alterations and removals proposed at the First Floor level.

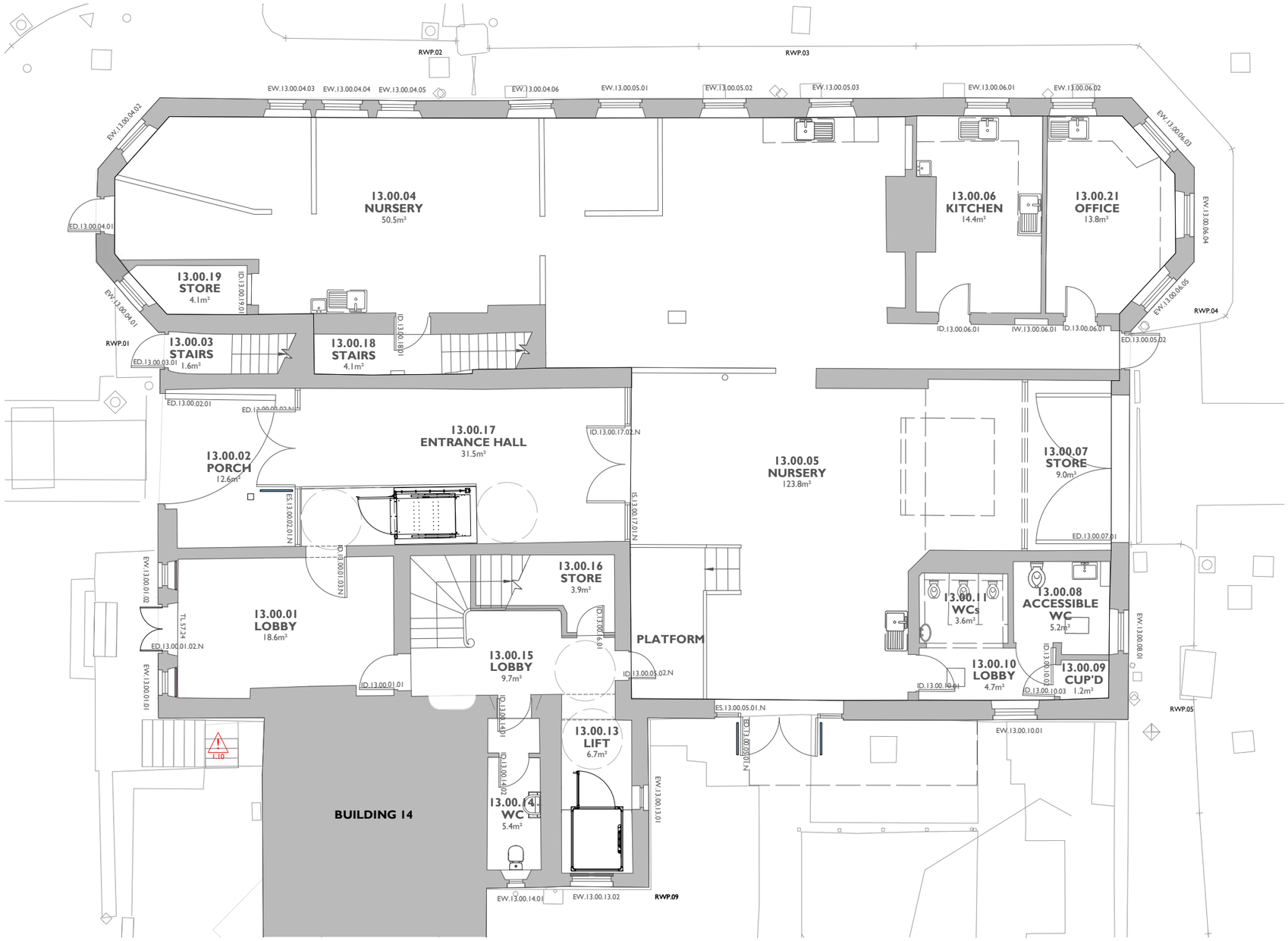
4.3 PROPOSED PLANS

4.3.1 BUILDING 13 - GROUND FLOOR

Key points

Works will focus on the entrance, circulation and WC areas and include:

- New glazed entrance doors with side panel glazing to the northeast and southwest entrances.
- Refurbished selected WCs
- New floor finishes and redecoration
- New platform lift and enclosed platform lift to provide accessibility to the First Floor.
- Renewed building services and lighting scheme

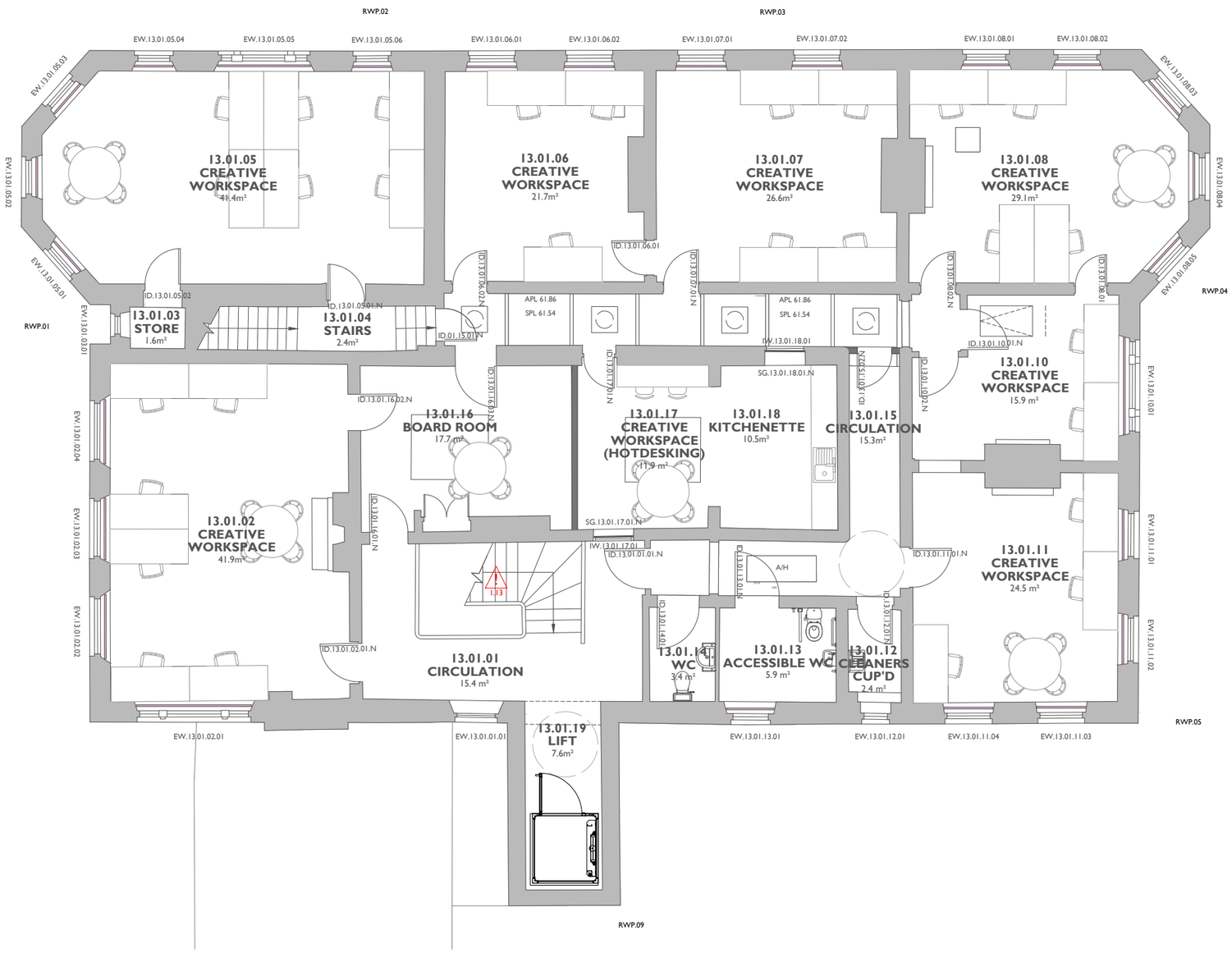


Building 13, Proposed Ground Floor plan

4.3.2 BUILDING 13 - FIRST FLOOR

Key points

- Full refurbishment of perimeter rooms to provide creative workspaces
- Creation of a small boardroom and kitchenette with hotdesking space
- Refurbished WCs including new accessible WC
- New enclosed platform lift to provide accessibility to the First Floor.
- Renewed building services and flexible lighting scheme
- Enhancements to provide a robust fire strategy such as replacement of modern internal doors.
- New floor finishes and full redecoration

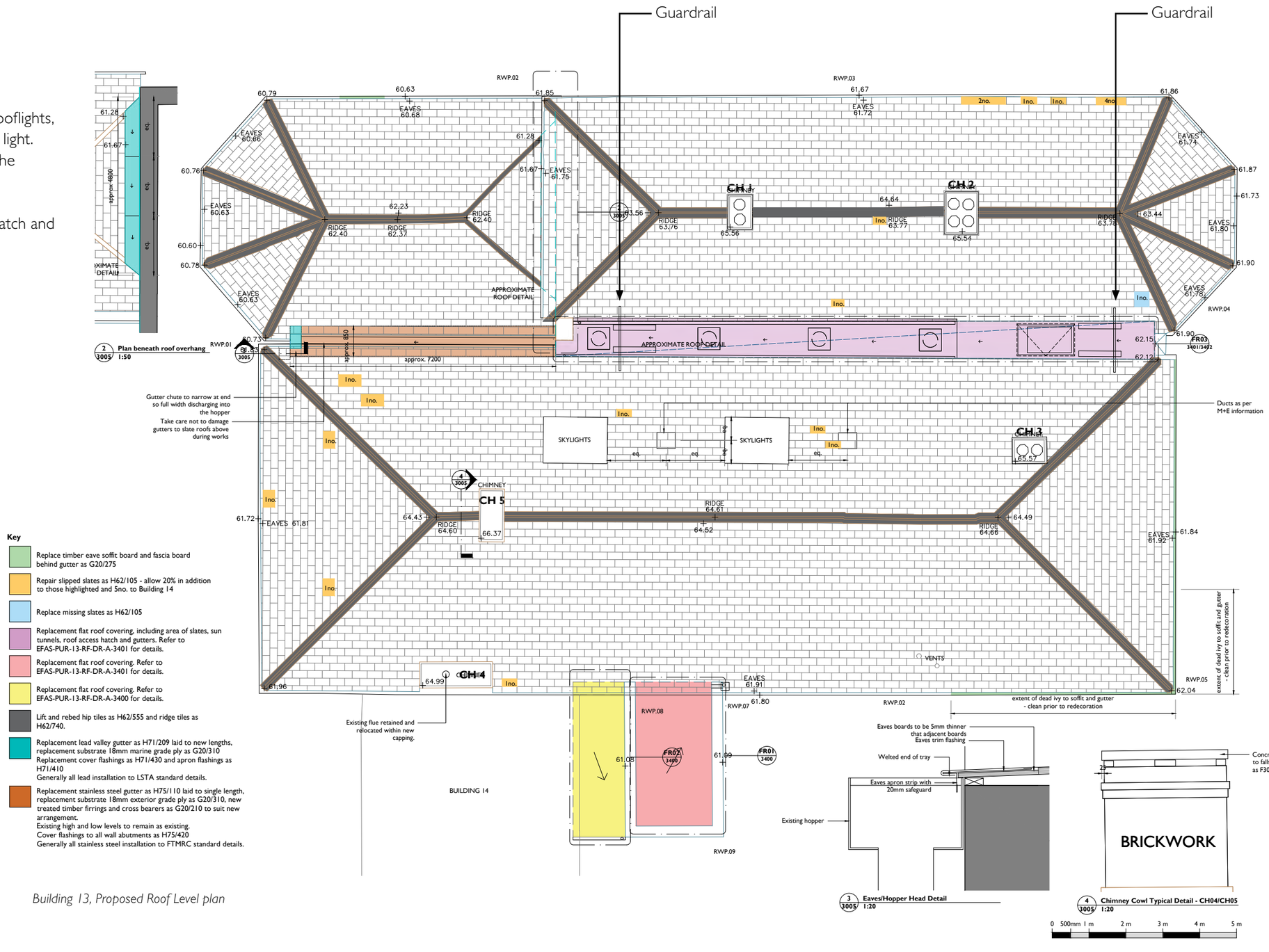


Building 13, Proposed First Floor plan

4.3.3 BUILDING 13 - ROOF LEVEL

Key points

- New flat roof build up to replace the existing rooflights, complete with new sunpipes to provide natural light.
- Renewal of the flat roofs to the south west of the building
- Renewal of lead valley gutters
- New roof access system including roof access hatch and guardrails



Key

- Replace timber eave soffit board and fascia board behind gutter as G20/275
- Repair slipped slates as H62/105 - allow 20% in addition to those highlighted and 5no. to Building 14
- Replace missing slates as H62/105
- Replacement flat roof covering, including area of slates, sun tunnels, roof access hatch and gutters. Refer to EFAS-PUR-13-RF-DR-A-3401 for details.
- Replacement flat roof covering. Refer to EFAS-PUR-13-RF-DR-A-3401 for details.
- Replacement flat roof covering. Refer to EFAS-PUR-13-RF-DR-A-3400 for details.
- Lift and rebed hip tiles as H62/555 and ridge tiles as H62/740.
- Replacement lead valley gutter as H71/209 laid to new lengths, replacement substrate 18mm marine grade ply as G20/310
  Replacement cover flashings as H71/430 and apron flashings as H71/410
  Generally all lead installation to LSTA standard details.
- Replacement stainless steel gutter as H75/110 laid to single length, replacement substrate 18mm exterior grade ply as G20/310, new treated timber firrings and cross bearers as G20/210 to suit new arrangement.
  Existing high and low levels to remain as existing.
  Cover flashings to all wall abutments as H75/420
  Generally all stainless steel installation to FTMRC standard details.

Building 13, Proposed Roof Level plan

4.3.4 BUILDING 13 FLAT ROOF REPLACEMENT

The existing central valley gutter and rooflights between the two main roof pitches of the building are a cause of water ingress and are a weakness in the ongoing integrity of the building. This can be seen internally in the staining and degradation of wall and ceiling linings directly below the rooflights.

It is proposed to replace this area of roof with a new, insulated and robust flat roof build up, designed to effectively dispose of rainwater from the roof. The rooflights which were liable to leakage will be replaced with 4no. dsun tunnels to provide light to the circulation space below.

A new access hatch with drop down inclined ladder will provide safe access for maintenance to the roof. There will be a guardrail at each end of the main valley gutter to prevent falls from height. Although the guardrails appear prominent in the elevation drawings, they will be substantially set back at the south end and will be set back by 1m from the elevation at the north end to minimse visibility.



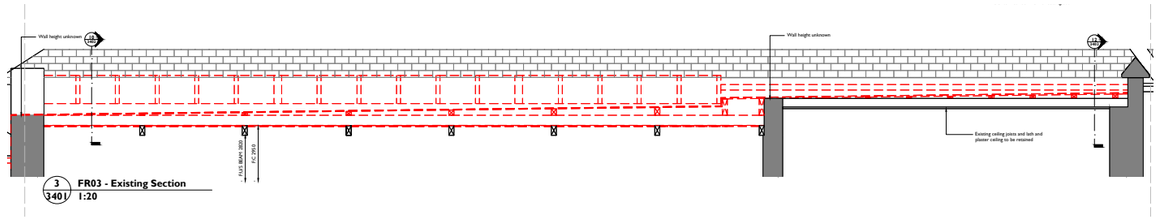
Building 13, Existing valley gutter



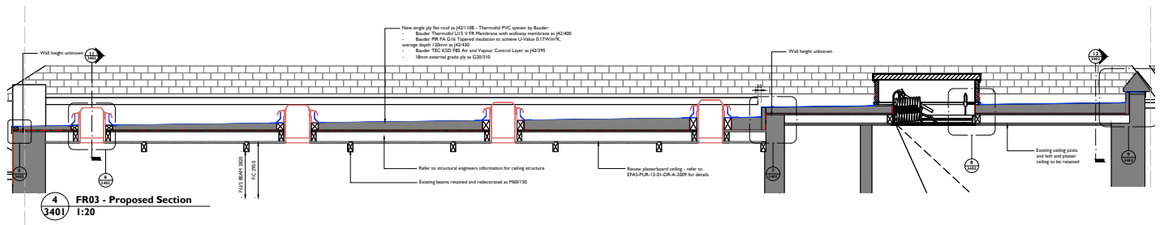
Building 13, Existing valley gutter and rooflights



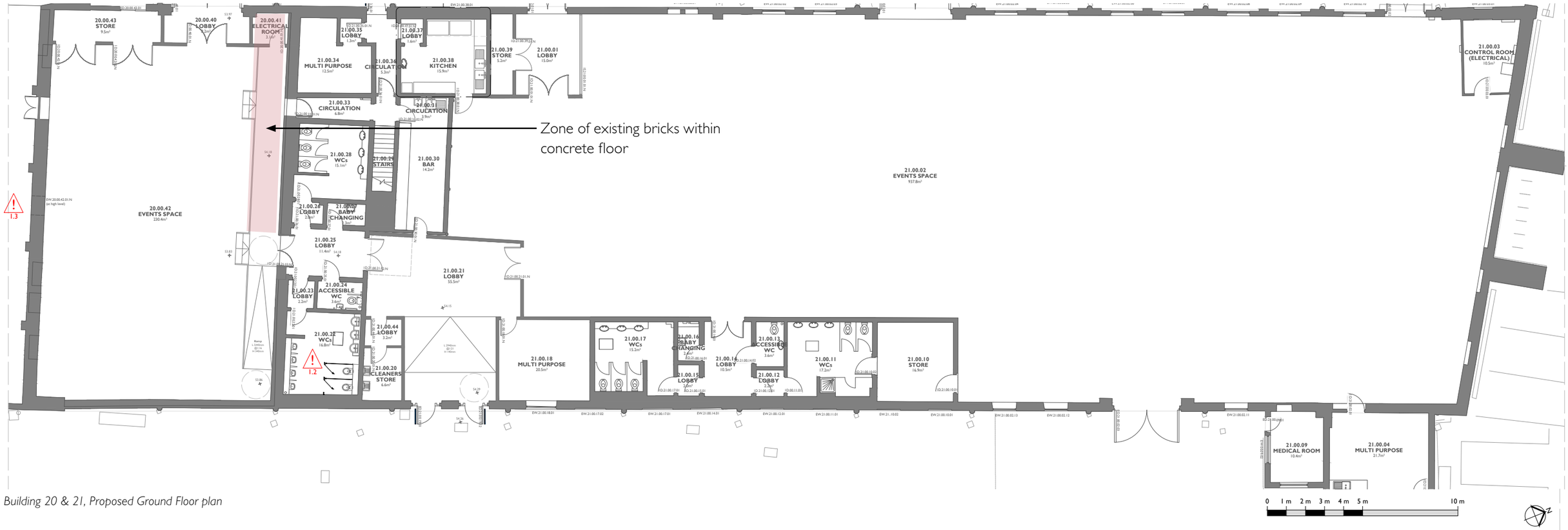
Building 13, Existing valley gutter (north end)



Building 13, Indicative existing valley gutter detail showing existing roof build up to be removed



Building 13, Proposed valley gutter detail



Building 20 & 21, Proposed Ground Floor plan

4.3.5 BUILDING 20 & 21 - GROUND FLOOR

The focus for the Ironworks is to provide a new Secondary Events space within Building 20.

Building 20 Event Space

- A new weather lobby to serve the west side of the building is proposed to provide comfort to occupants.
- To either side of the weather lobby will be storage spaces to support the flexible function of the Events Space
- A platform and ramp are proposed to mitigate the change in level between Buildings 20 and 21.
- The space will be provided with new building services including a new heating system, lighting and fire detection.
- The roof and timber clad wall directly below the eaves will be insulated and clad internally.

New Shared Lobby

- To allow simultaneous use of both events spaces, a new single storey lobby will be created at the east entrance to Building 21.
- The lobby also provides a critical egress route for occupants of Building 20.
- A inclined floor to the east entrance at a suitable and accessible gradient will be installed.
- Accessed off the new lobby, a new multi-purpose space will be created, adding to the building's events offer.

WCs

- The male and female WCs adjacent to B20 will be refurbished to provide modern and clean facilities to visitors.

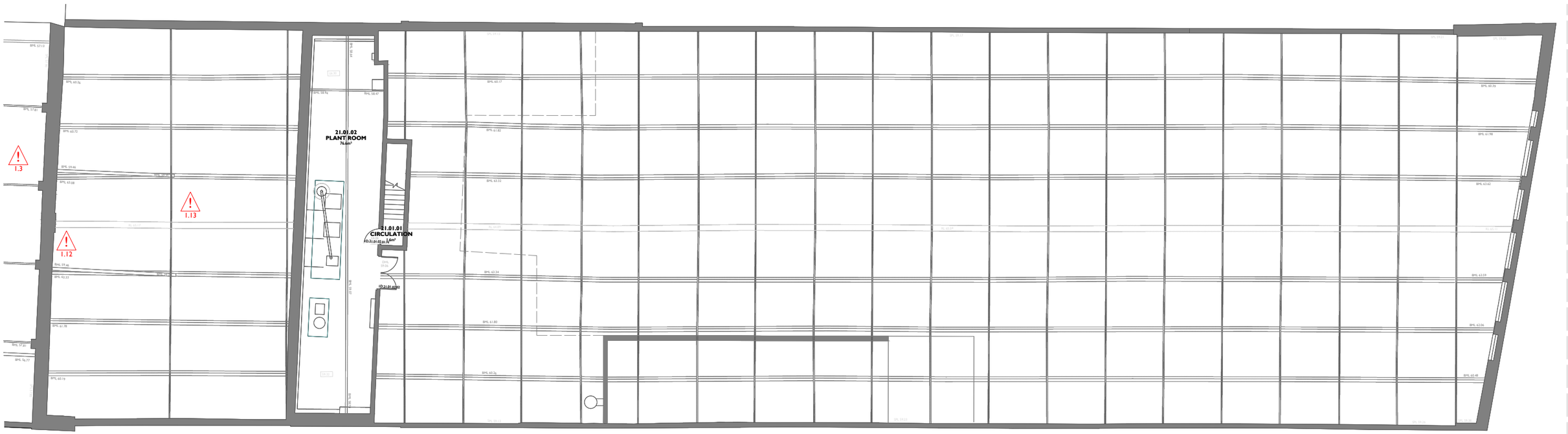
Fire Strategy

- Improvements to provide a robust fire strategy are proposed including the replacement of a number of doors and provision of new fire compartmentation.

Floor surface and change in Level

The existing concrete floor of Building 20 is ragged in places and therefore a levelling screed will be installed to provide a level surface. There is an area of existing bricks within the concrete floor along the north edge of Building 20.

A new ramp with platform and steps is proposed to mitigate the change in level between Building 20 and Building 21. This provides level access between the two spaces. The ramp will be of lightweight timber construction and is strategically located on the footprint of the existing bricks. This means that this area does not need to be screeded and is therefore protected by the ramp.



Building 20 & 21, Proposed First Floor plan

4.3.6 BUILDING 21 - FIRST FLOOR

Very limited works are proposed to the First Floor plant space. These are confined to the installation of new building services plant to serve Building 20.

4.4 CIRCULATION, ACCESS AND INCLUSION

4.4.1 BUILDING 13 - CIRCULATION AND ACCESS

The diagrams opposite illustrate the way in which it is envisioned that people will access and move through the building. Also shown are the WC facilities proposed to be provided.

Access will be considerably improved to the First Floor of Building 13 through the installation two new lifts. The lift between the Ground and First Floor is located in the flat roofed portion of the building that is thought to be a later addition. This minimises the level of intervention to significant building fabric.

As part of installing the new lift between Ground Floor and First Floor, the existing window to the rear of the new lift will be infilled. This is because it will be impossible to maintain and clean this window internally once the lift is in place. It is proposed to remove the window frame and infill this window with rendered masonry.



Existing window to be infilled

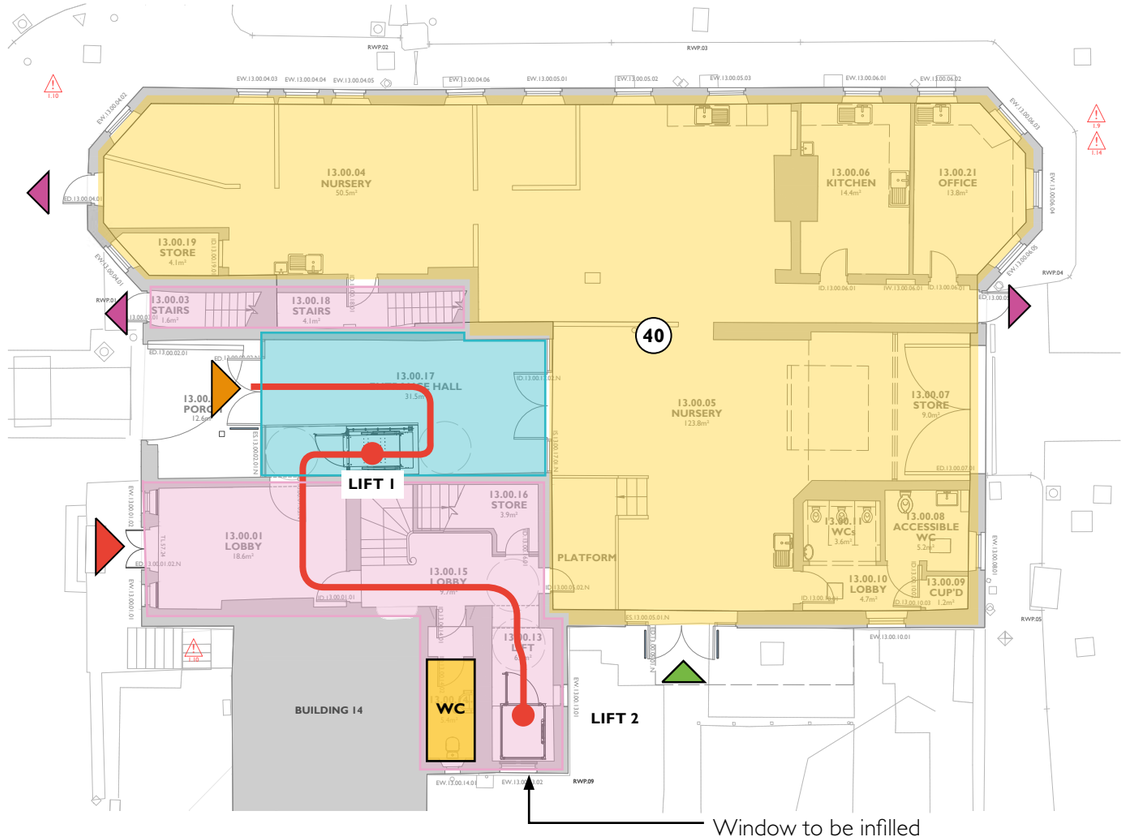
KEY

Entrances
- Shared entrance
- Workspaces entrance
- Nursery entrance
- Egress point
- Service / other entrance

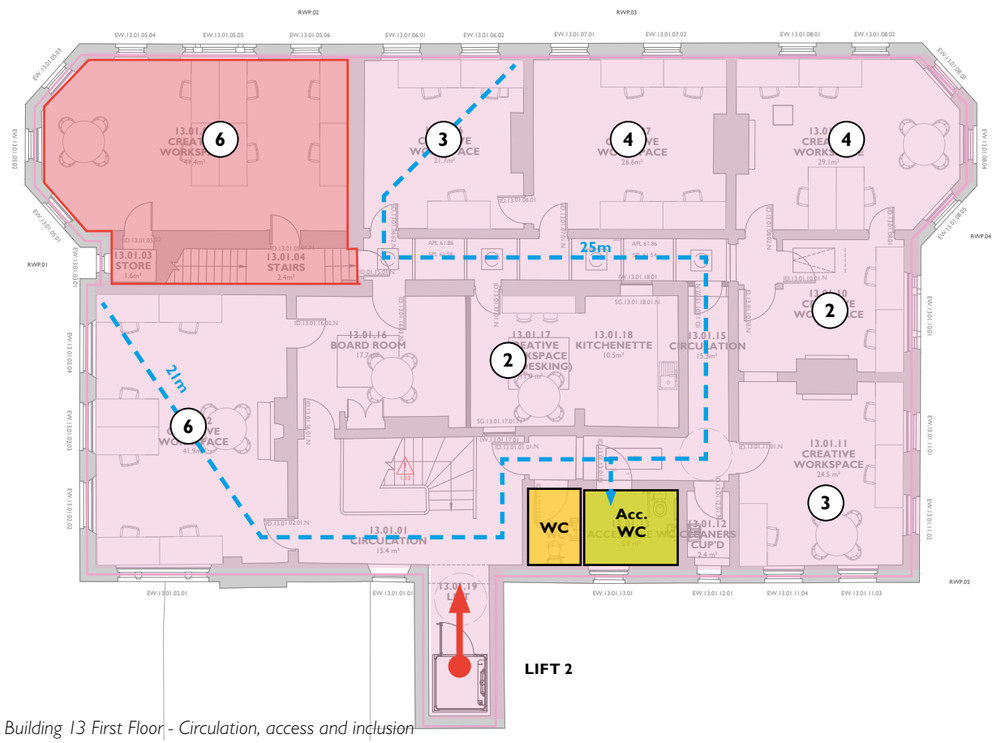
Accessibility
- Accessible route to vertical circulation
- Accessible vertical circulation

Spaces and demise
- Nursery
- Creative Workspaces
- Shared areas
- Area not accessible to those unable to use stairs. Equal and equivalent spaces are available
- (4) Anticipated room occupancy

WCs
- Travel distance to accessible WC
- WC
- Accessible WC



Building 13 Ground Floor - Circulation, access and inclusion

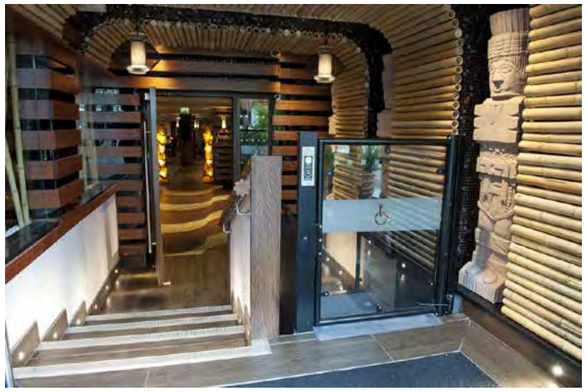


Building 13 First Floor - Circulation, access and inclusion

4.4.2 BUILDING 13 - LIFTS

Currently there is no accessible route to the First Floor of the building. In order to provide an accessible route to the First Floor of Building 13, two lifts are required. One lowrise platform will provide access from the Ground Floor entrance to the workspaces entrance lobby at the Upper Ground Floor level. Additionally an enclosed platform lift will allow access from the Upper Ground Floor level to the First Floor workspaces.





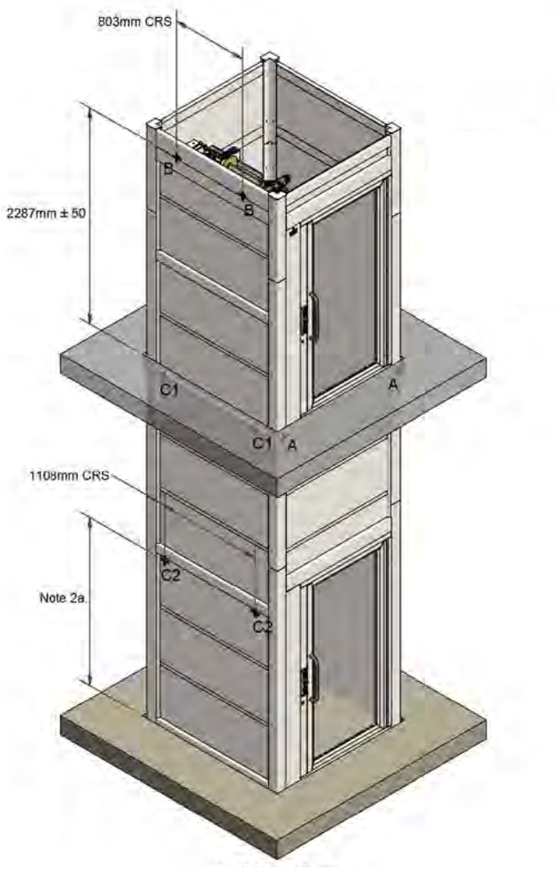


Lift 1 example images





Lift 2 example images



4.4.3 BUILDING 20 & 21 CIRCULATION AND ACCESS

The diagram opposite illustrates the way in which it is envisioned that people will access and move through the building. Also shown are the WC facilities proposed to be provided.



Building 20 & 21 Ground Floor - Circulation, access and inclusion

KEY

Entrances
- Workspaces entrance
- Visitor centre entrance
- Egress point
- Service / other entrance

Accessibility
- Accessible route to vertical circulation
- Accessible vertical circulation

Spaces and demise
- Primary events space
- Secondary events space
- Shared areas
- Area not accessible to those unable to use stairs. Equal and equivalent spaces are available

WCs
- Travel distance to accessible WC
- WC
- Accessible WC

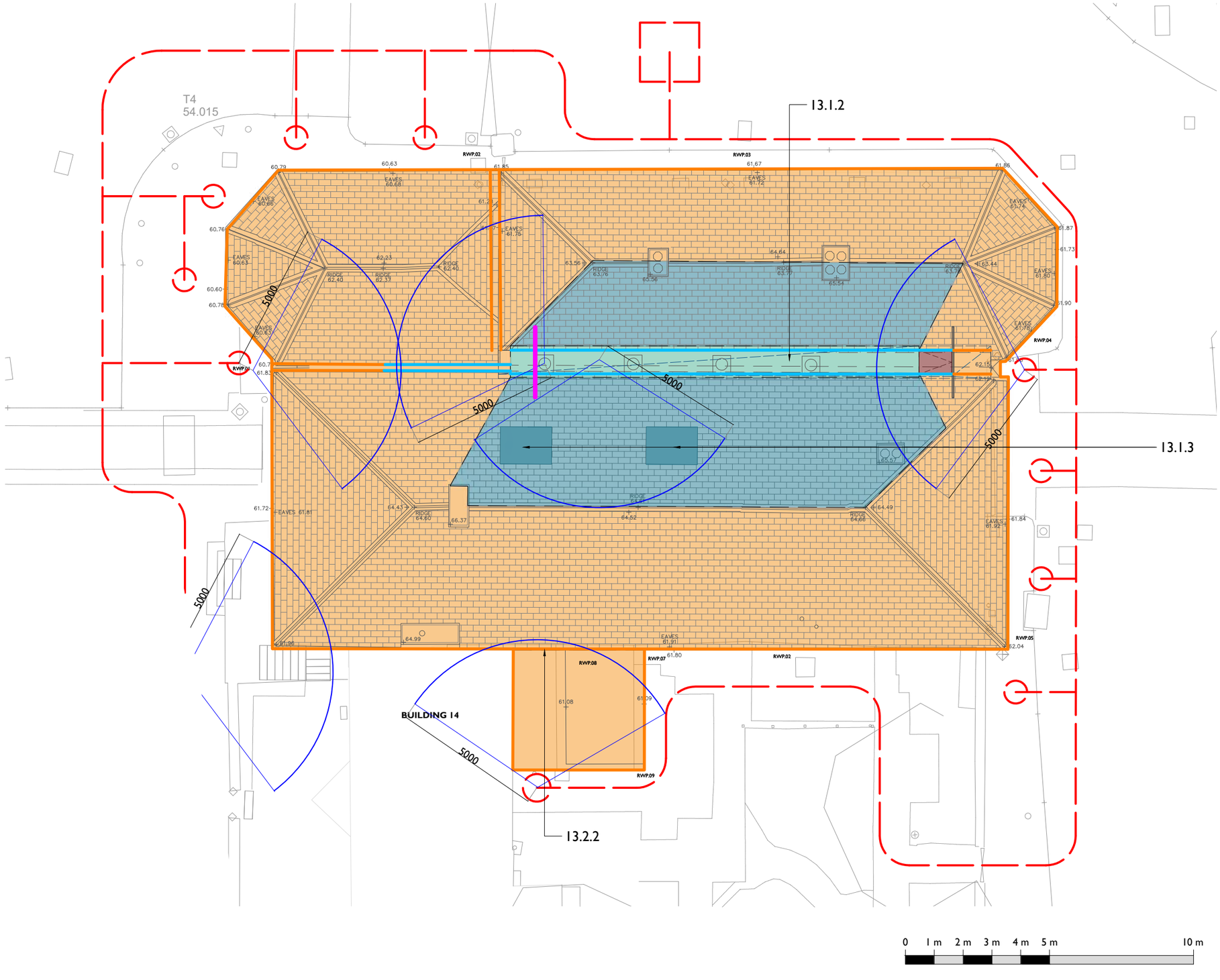
4.4.4 CLEANING AND MAINTENANCE STRATEGY

Key considerations for cleaning and maintenance are as follows:

- Ensuring that all areas of the building can be safely cleaned and maintained
- User and public safety compliance with the CDM regulations and Workplace regulations
- Simplicity and efficiency of operation including maintenance of plant and equipment
- Minimising the cost of building cleaning
- Preventing damage to the building finishes and facades
- The cost, time and disruption to the operation of the building caused by cleaning or maintaining should be considered.

Building 13

For the most part, the exterior of the building can be cleaned and maintained from the perimeter by use of a Mobile elevated work platform (MEWP) or scaffold. Only the central area of the roof within the existing valley gutter is inaccessible and therefore the focus of the design has been to develop proposals to allow this area of the building to be accessed safely and with relative ease.

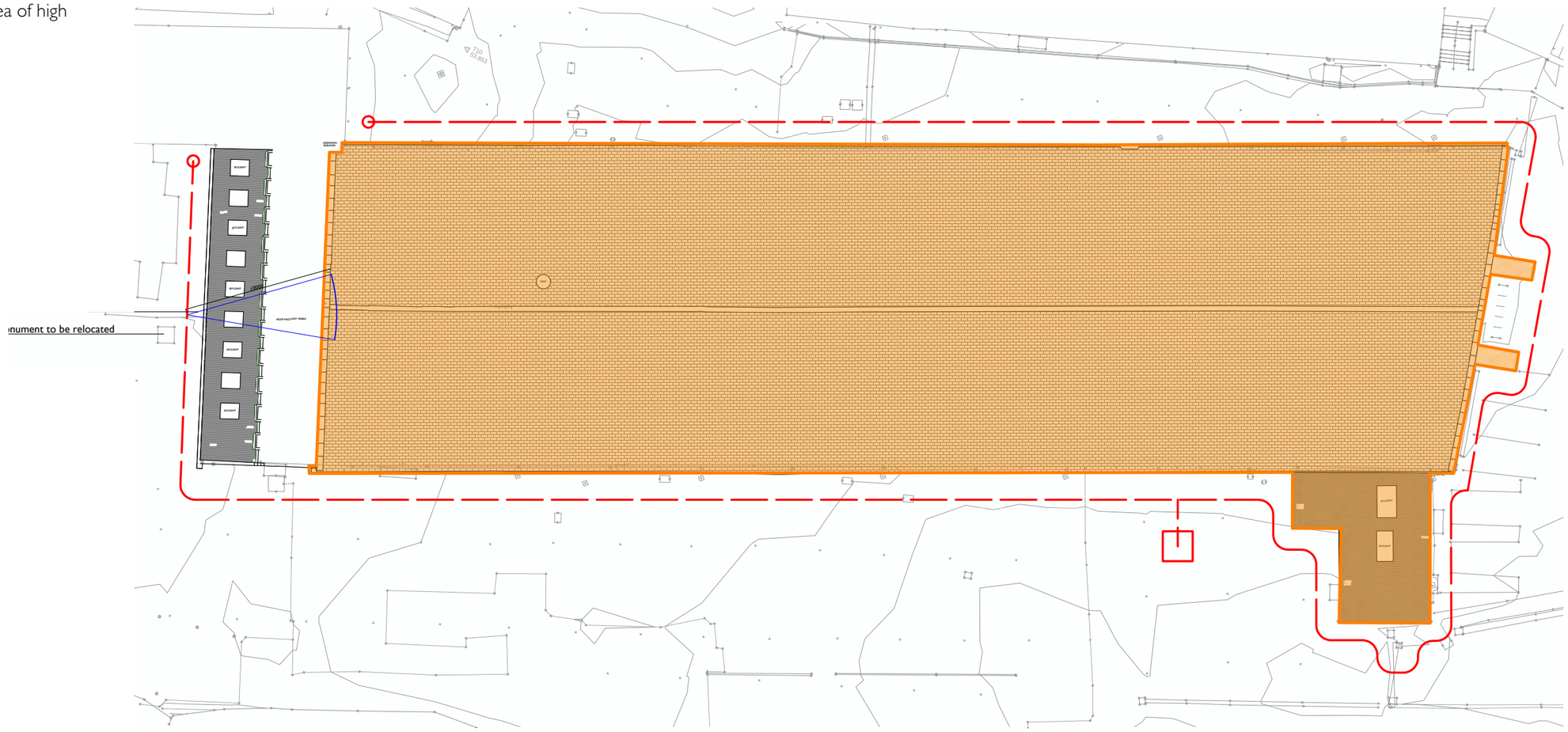


KEY

- MEWP track
- MEWP turning point
- MEWP set down point
- Flat roof access hatch and drop down access stair
- Flat roof accessible area (13.1.2)
- Roof area maintained by access from flat roof (13.1.1)
- Roof area maintained by access from scaffold tower / MEWP (13.1.4)
- 5m horizontal reach radius
- Roof edge / gutter maintained by MEWP access (13.1.5)
- Roof edge / gutter maintained by level access from accessible flat roof area (13.1.6)
- Guardrail

Building 20 & 21

Access to the exterior of Building 20 & 21 can generally be achieved by perimeter access. The more difficult areas to access are the south elevation, which is obstructed by Building 20B. A MEWP with extendible arm or complex scaffold will be required to safely access this area of high level elevation and roof edge.



4.5 FINISHES AND MATERIALITY

4.5.1 OVERVIEW

A materials and finishes strategy has been developed for the key spaces to be refurbished as part of the project.

The aim is to provide a palette of materials and finishes that in which visitors and staff feel comfortable in and are appropriate to the heritage character of the buildings.

Material selection and construction of interior fittings have been developed in response to the following principles:

- Quality of space - support the design concepts of light, space, air and multi-layering of the space
- Quality of material - selection of high quality, but not extravagant materials that are appropriate for use within the listed buildings.
- Quality of detail - construction details are well considered without being overly complicated.

4.5.2 BUILDING 13, GROUND FLOOR SPACES

The intention is for the new ground floor spaces to become entrance lobbies for the building. Therefore there is a need for the space to feel welcoming and inclusive as well as open and light. It is likely to receive a high footfall so materials such as floor finishes will need to be hard wearing.

The finishes and materials are proposed as a neutral palette, which can be tailored to the specific needs of the space.



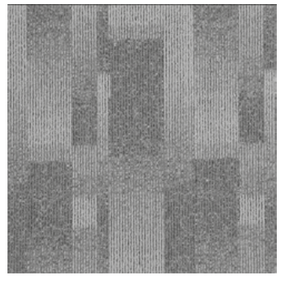
Materials palette for Building 13, including a precedent image of the platform lift

4.5.3 BUILDING 13, CREATIVE WORKSPACES

The materials and finishes for the Creative Workspaces will provide a high quality workspace environment which makes the most of the high ceilings, large sash windows and the other heritage features of the building. A simple and restrained palette is proposed which can be adapted by the tenants.









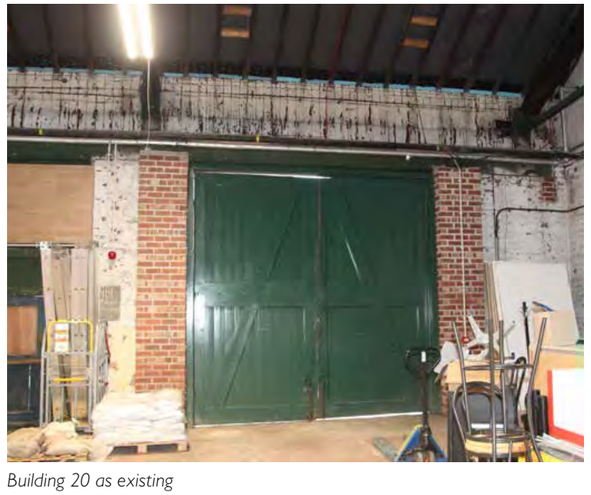
4.5.4 BUILDING 20, EVENTS SPACE

The strategy for the new events space is to create a warm and welcoming space that meets the functional and technical requirements for events, performance, exhibition and other potential uses.

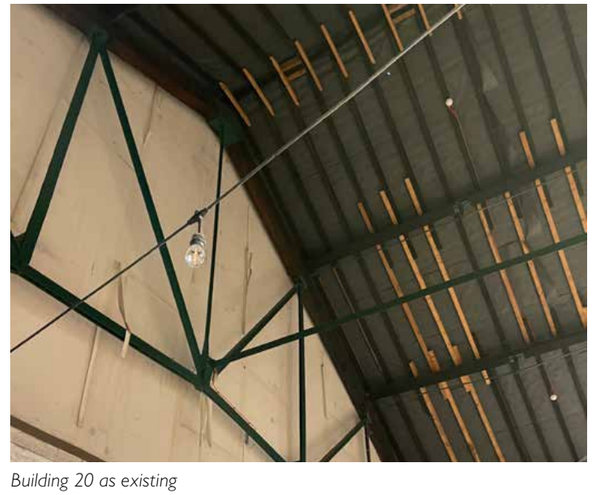
Materials palette for Building 20



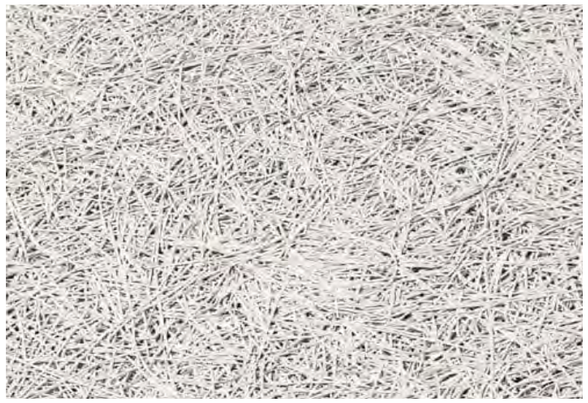
Vertical timber slats with black fabric substrate



Building 20 as existing



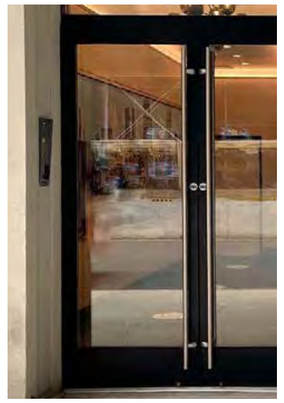
Building 20 as existing



Wood Wool Boards



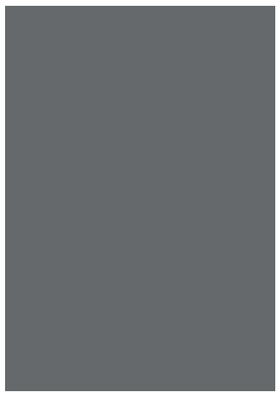
Existing stonework

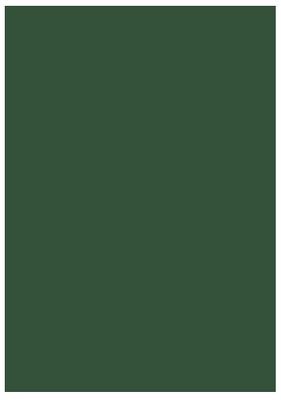


Black metal framed, glazed doors



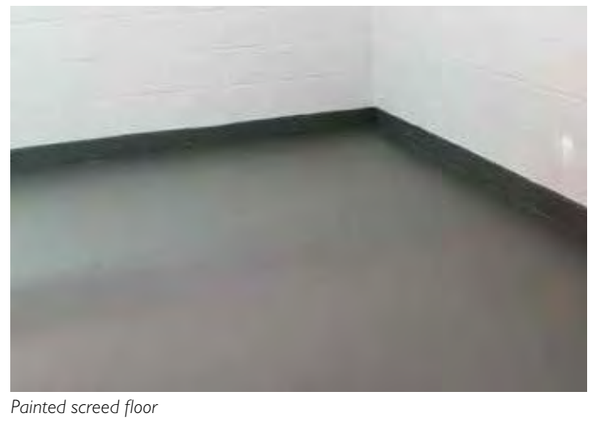
Black painted, vertical metal railings







Existing brickwork and green painted ironwork and joinery



Painted screed floor

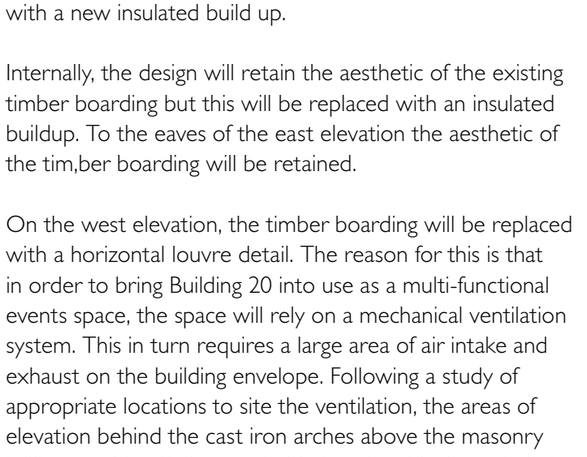
4.5.5 BUILDING 20 ROOF AND WALL DETAIL

It is proposed to insulate the existing roof at rafter level and replace the single skin timber shiplap boarding at the eaves with a new insulated build up.

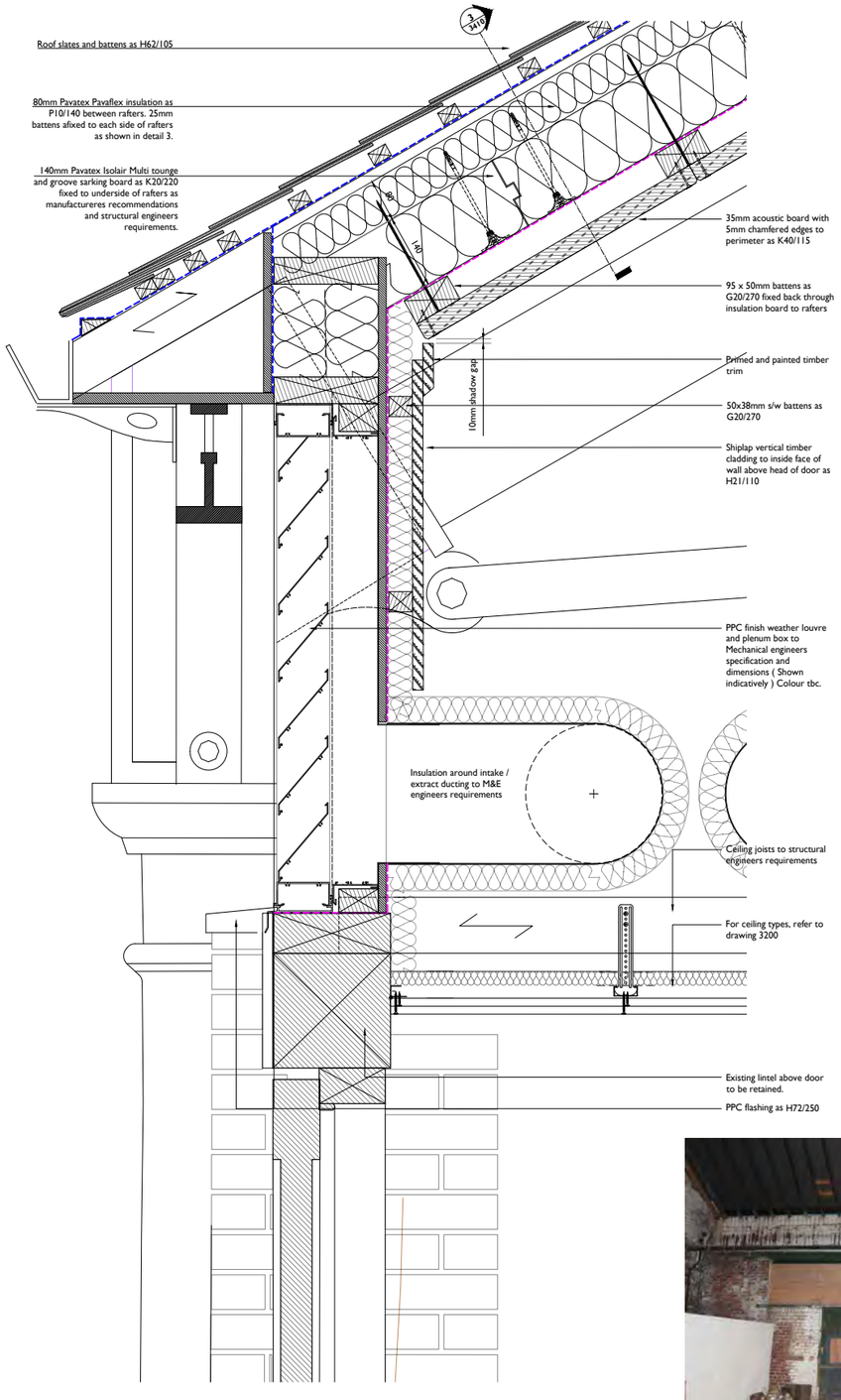
Internally, the design will retain the aesthetic of the existing timber boarding but this will be replaced with an insulated buildup. To the eaves of the east elevation the aesthetic of the tim,ber boarding will be retained.

On the west elevation, the timber boarding will be replaced with a horizontal louvre detail. The reason for this is that in order to bring Building 20 into use as a multi-functional events space, the space will rely on a mechanical ventilation system. This in turn requires a large area of air intake and exhaust on the building envelope. Following a study of appropriate locations to site the ventilation, the areas of elevation behind the cast iron arches above the masonry infills were identifed as a suitable location. Horizontal, dark-grey powder-coated ventilation louvres will be installed to these areas.

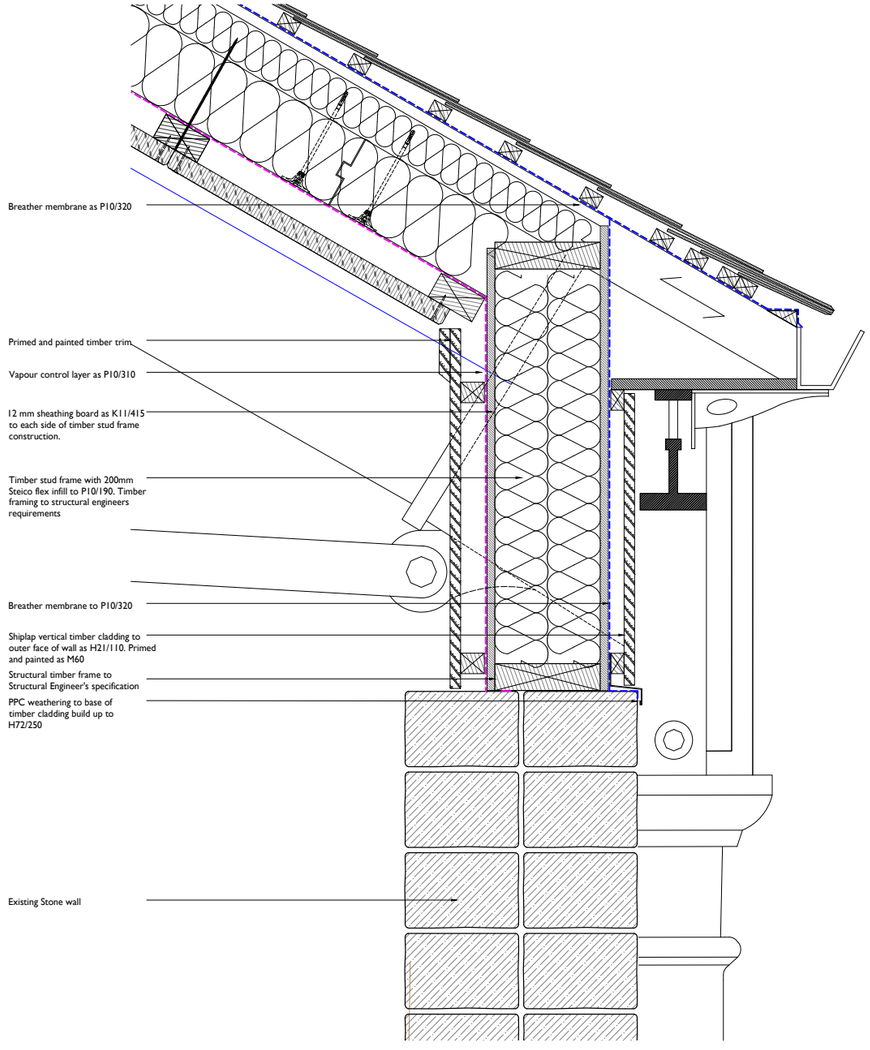
The impact on the elevations is minimal as there are no other areas of timber boarding on view across the elevation. Dark grey aluminium has been chosen to align with the industrial aesthetic of the site while clearly identifying as a new intervention. Historically, Buildings 20 & 21 were open-sided sheds and therefore the existing timber cladding is a relatively modern intervention in itself, along with the brick masonry, windows and green painted timber doors.



Areas of existing timber boarding to be replaced with a horizontal louvre detail



Building 20 eave section as proposed - West Elevation



Building 20 eave section as proposed - East Elevation

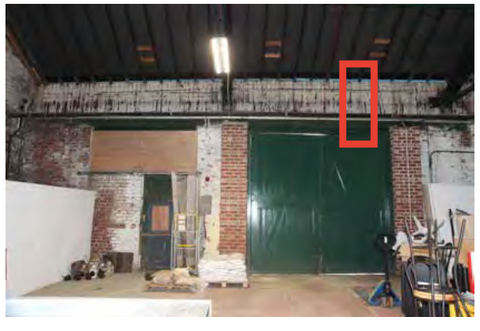


Photo of Building 20, location of west elevation detail marked in red

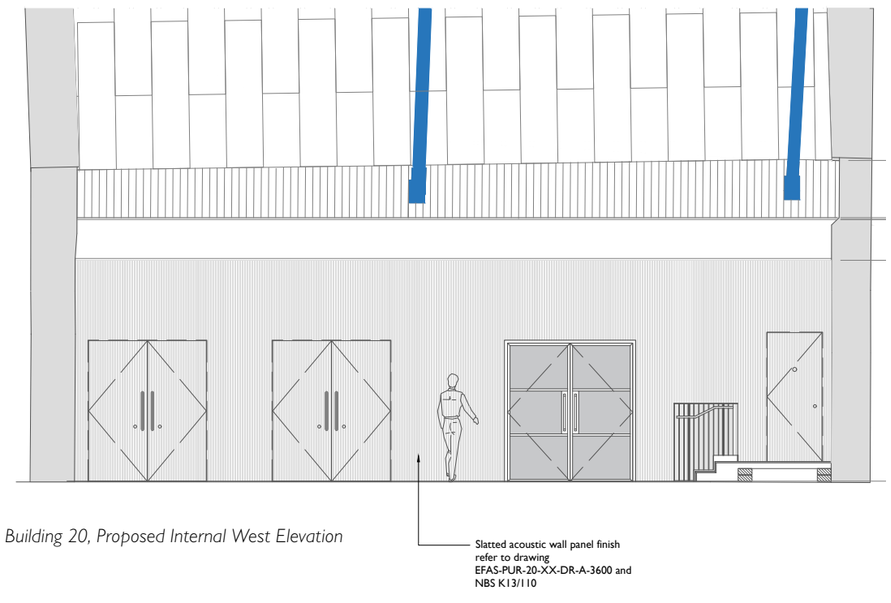


Photo of Building 20, location of east elevation detail marked in red

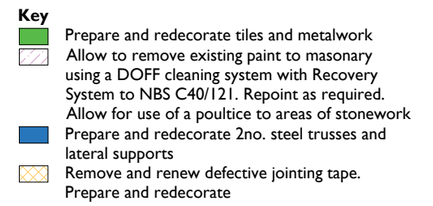
4.5.6 BUILDING 20, INTERNAL WALLS

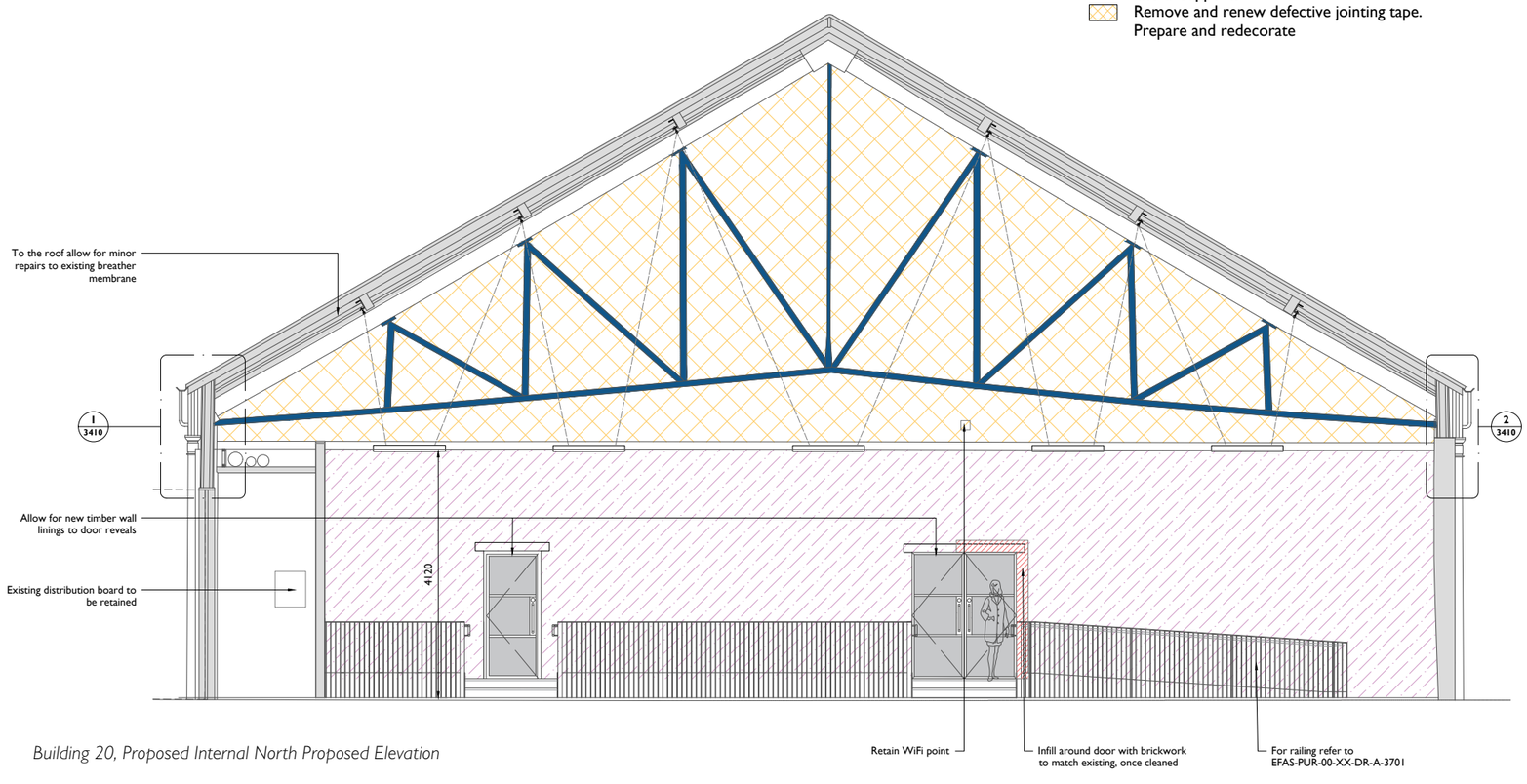
Vertical acoustic timber cladding is proposed to the west elevation of Building 20 to provide a striking yet subtle backdrop to the events space as well as providing acoustic absoption qualities. The use of timber will bring warmth and a feeling of quality to the space which at present feels very much like a cold and utilitarian industrial shed. It is a material that is easily maintainable compared to other potential material choices such as plasterboard, which requires periodic redecoration.

It is proposed to remove the existing inappropriate paint finishes to the masonry walls and display the quality of the masonry below. The roof of Building 20 will be insulated and a new ceiling installed to support and clad the insulation. The proposed ceiling finish is acoustic wood wool boards which will give the ceiling a high quality, textured finish. Wood wool is a low energy, recycled product that is self finished and therefore does not require periodic redecoration. The boards have excellent acoustic, thermal and fire properties.



Building 20, Proposed Internal West Elevation



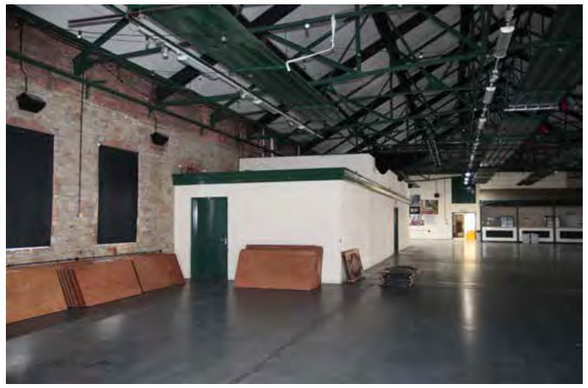


Building 20, Proposed Internal North Proposed Elevation

4.5.7 BUILDING 21 EVENTS SPACE

New lobbies are to be created within the Building 21 events space, which add to the existing single-storey blocks within the overall shed space. The aim is to tie together the existing and proposed single storey blocks that surround the bar area with a cohesive materials and finishes strategy.

It is proposed to apply a consistent thin layer of painted plaster to the existing painted blockwork and new stud walls facing into the events space to unify the blocks. The existing cornices will be painted white to match the tone of the walls.



Building 21 as existing



Building 21 as existing



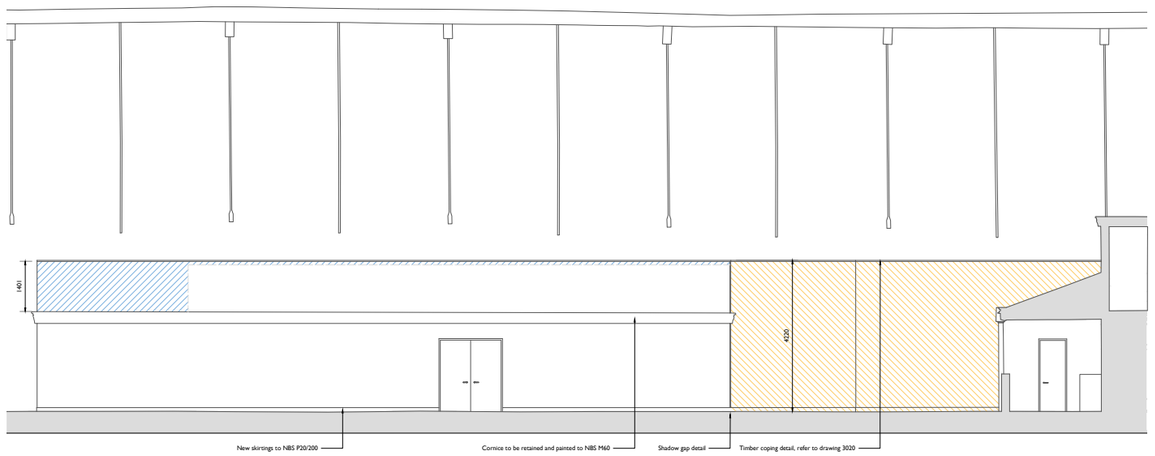








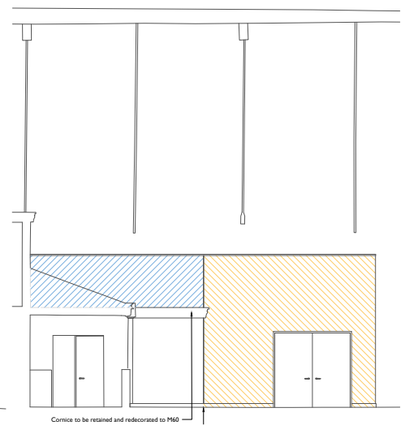
Materials palette for Building 21



Building 21, east lobbies elevation



Building 21, south lobbies elevation



Building 21, west lobbies elevation

Key

New partition

Height of existing blockwork wall extended

Elevations of new lobbies to Building 21

4.6 DESIGN STRATEGIES

4.6.1 FIRE STRATEGY

A Fire Strategy has been developed which is based on meeting Part B of the building regulations. Many of the internal doors within Building 13 and Buildings 20 and 21 that are relied upon as part of the Fire Strategy must be upgraded as the existing doors are not compliant. Therefore many of these doors are required to be replaced with modern, compliant doors. In all cases the doors to be replaced are relatively modern doors and have very limited heritage significance. Every effort has been made to reduce the number of doors that are to be replaced. Within Building 13 internal timber doors are to be replaced with new panelled timber doors with panelling to match the existing doors.

Refer to the following drawings for further information:

- EFAS-PUR-13-01-DR-A-2015
- EFAS-PUR-13-GF-DR-A-2016
- EFAS-PUR-20-01-DR-A-2014
- EFAS-PUR-20-GF-DR-A-2015

4.6.2 STRUCTURAL ENGINEERING

A number of structural interventions are required as part of the works. Within Building 13 these are part of the repairs to the building such as to repair the lintel above the large carriage doors on the south west elevation and also to facilitate the installation of access improvement such as the new lifts.

For Buildings 20 & 21, structural interventions include new openings in existing masonry walls and drainage improvements.

Details of the structural works can be found in documents:

- 20834-Y-DR-001-T1- B13 First floor proposed interventions and investigations
- 20834-Y-DR-001-T1- B13 Ground floor proposed interventions and investigations
- 20834-Y-DR-003-T1- B13 Proposed structural works for first-floor ceiling level and tie beam
- 20834-Y-DR-005-T2-B20 & B21 ground floor structural and civil interventions
- 20834-Y-DR-006-T2-B20 alterations to roof structure

4.6.3 BUILDING SERVICES ENGINEERING

The building services are to be upgraded within Building 13 which includes rewiring, new heating pipework and radiators, a new ventilation system to the central areas of the First Floor as well as new lighting systems.

Building 20 requires a comprehensive new fit out of building services including lighting, a new heating system with new boiler and suspended radiant panels, electrics and ventilation system. The works to Building 21 are more light touch and include minor amendments to lighting and electrics.

Refer to the following documents which collate the Building Services proposals:

- Building 13 - Electrical Proposals
- Building 13 - Mechanical Proposals
- Building 20&21 - Electrical Proposals
- Building 20&21 - Mechanical Proposals

4.7 PUBLIC REALM AND SITE WIDE IMPROVEMENTS

4.7.1 INTRODUCTION

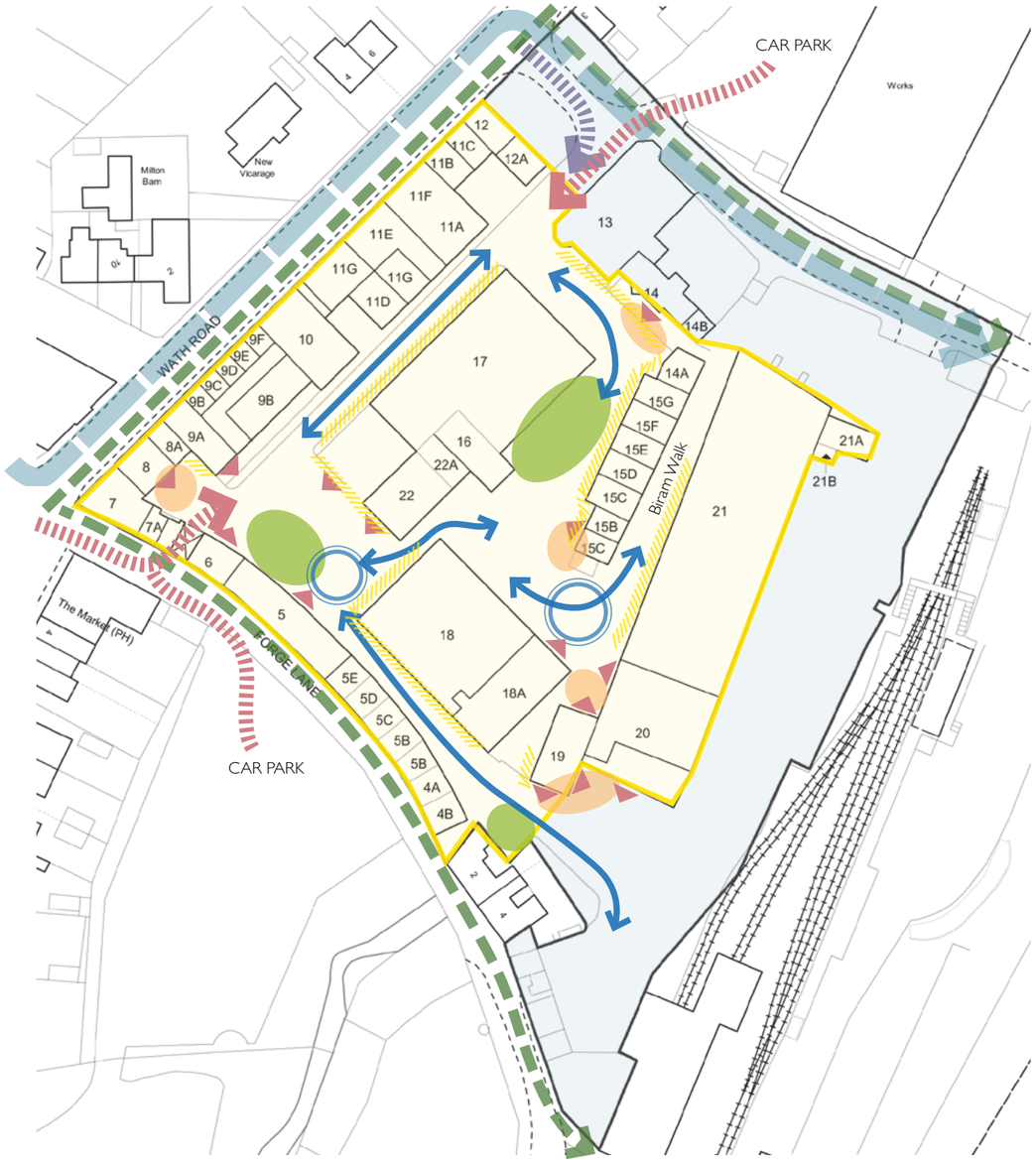
The landscape strategy will make improvements across the site that will allow a range of activities and events to take place, while ensuring proposals are in keeping with the heritage environment.

This includes:

- Introducing a more visually consistent and appealing surface finish across the site to areas of existing tarmacadam and in-situ concrete.
- Space for performance, pop-up events and dining, complete with power supplies
- New lighting elements
- New planters
- Opportunities for the placement or integration of public artwork and sculpture
- Retention and protection of heritage items and features

4.7.2 SUSTAINABILITY

The public realm proposals have been devised to enhance biodiversity incorporating native plants, plants with early/ late flowering periods as nectar sources for pollinators, large size planters better able to tolerate drought periods, and hard materials capable of being sourced locally (eg local gravel aggregates and timber).



Landscape Concept Plan

4.7.3 SURFACING

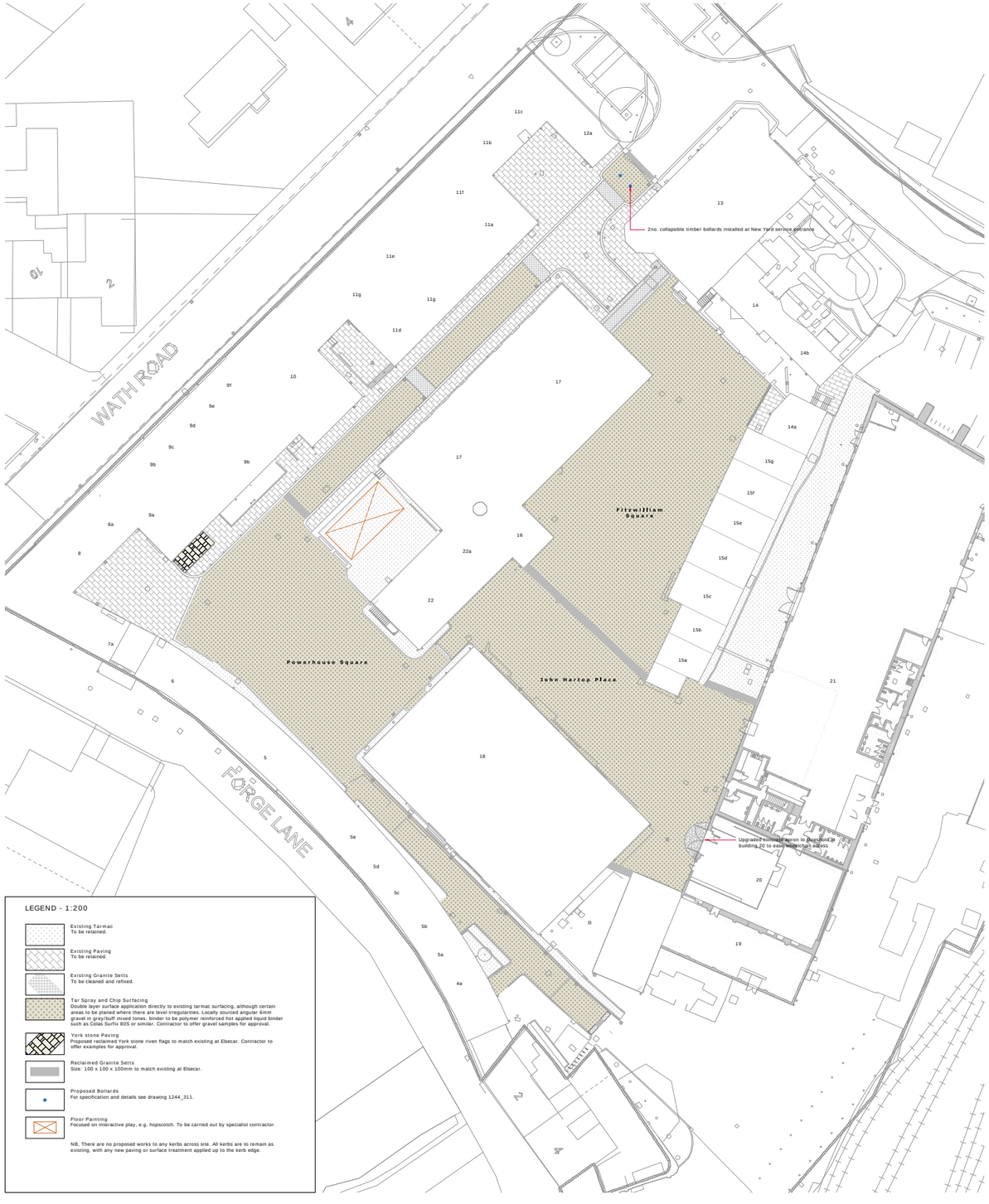
Following a site-wide review of opportunities and constraints, new surfacing was identified as a key consideration as the widespread existing tarmac and concrete surfacing is patched with repairs and mismatched textures and colours.

Following a the review of several surfacing options, including performance and costing, resin bonded gravel, dutch clay bricks and tar spray and chip, it was concluded that a double coating of tar spray and chip would be the most suitable option while being appropriate to the heritage setting, and the selection of a suitable local aggregate would allow careful colour choice.

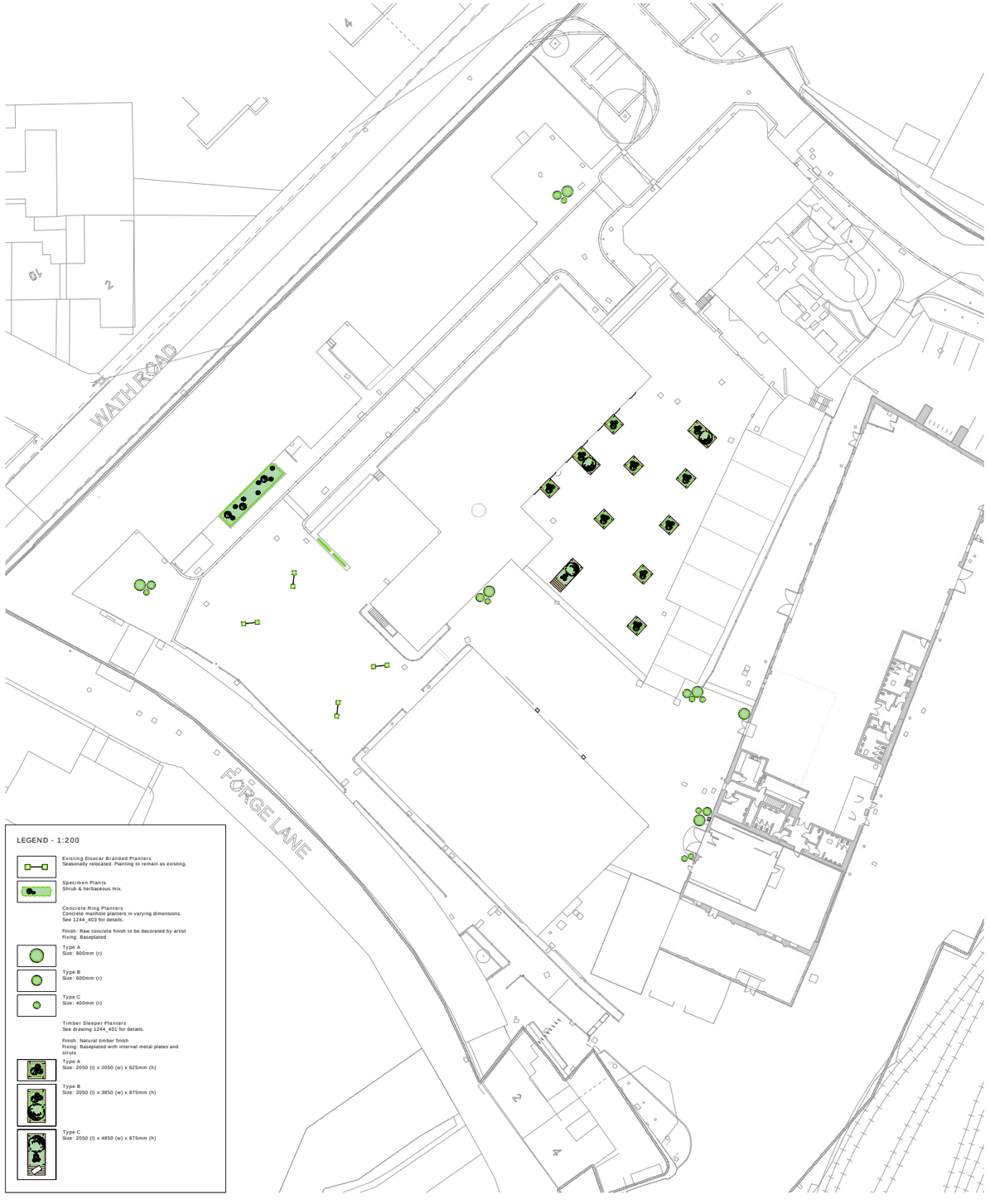
To delineate spaces across the wider site, bands of granite setts will be used at key junctions and interfaces between the different areas of the site.



Example of Tar spray and chip surfacing at RHS Bridgewater, Salford.



Proposed Hard Landscape Plan



Proposed Soft Landscape Plan

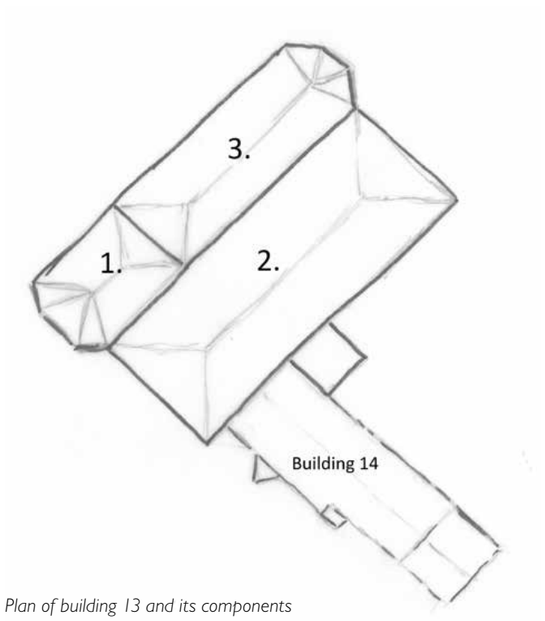
5.0
HERITAGE IMPACT ASSESSMENT

5.1 DESIGNATIONS

Building 13 and gate piers are Grade II*.

Building 20 (a) and 21 are Grade II* listed and are within the area occupied by the Elsecar Ironworks which is also designated as a Scheduled Monument[2].

The buildings which occupy the Earl's workshops were first listed in 1986, and their listing status and descriptions were upgraded in 2020 as part of research carried out as part of the Heritage Action Zone.



Plan of building 13 and its components

5.2 BUILDING 13

5.2.1 DESCRIPTION

Building 13 with attached gate piers is a distinctive building on the north-east boundary of the heritage centre. The row of cottages to the right (Buildings 14 and 14b) are the oldest buildings in the complex, constructed in the early 19th century before the workshops were formed. They abut Building 14 on the north-west side and are part of the same listing which was upgraded in 2012 to Grade II*.

It is a multi-phased building which has undergoing various phases of remodelling and comprises roughly three components:

01 South-west range – a roughly square-shaped two-storey range with a projecting three-sided bay facing into the workshop complex to the south-west.

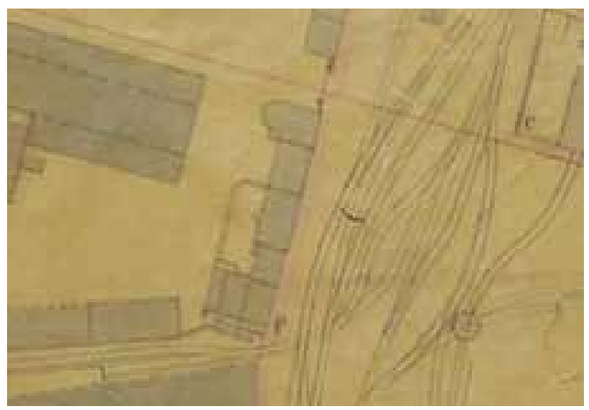
02 South-east range - a long, rectangular-shaped two-storey range built.

03 North-west range - a two-storey range with a projecting three-sided bay facing out of the workshop complex towards the former railway yards to the north-west[3]. The stone structure has a complex roof structure of hipped roofs and valley gutters with Welsh slate coverings and deep bracketed eaves. The oldest range to the north-west, although of two storeys is lower than its attached ranges. It has a canted bay facing south-west into the Heritage Centre. It is of interest as the lower areas of stone are different from the first floor, suggesting it was originally single-storied and has been interpreted as a gatehouse in its earliest form, later raised by a storey. Also of interest is the Venetian window on the north-west elevation.

The stone structure has a complex roof structure of hipped roofs and valley gutters with Welsh slate coverings and deep bracketed eaves. The oldest range to the north-west, although of two storeys is lower than its attached ranges. It has a canted bay facing south-west into the Heritage Centre. It is of interest as the lower areas of stone are different from the first floor, suggesting it was originally single-storied and has been interpreted as a gatehouse in its earliest form, later raised by a storey. Also of interest is the Venetian window on the north-west elevation.

The south-east range is a long rectangular structure which features the opposed carriage openings fitted with timber doors. A string course runs around the visible elevations between ground and first floor. On the first floor on the same elevation is another Venetian window, thought to have been relocated from the north-west range north-east elevation after 1912 when the north-west range was built. The principal entrance is on the south-west elevation. A two-storey porch features on the north-east elevation, with a flat roof, and infilled arch. The string course continues around this structure and it is likely that the ground floor dates to the construction of this range, but the change in stonework suggests it was later raised by a storey. Today, it features toilet facilities.

The north-west range is the last structure to be constructed and has a canted bay to Distillery Side mirroring that on the south-west range. It continues the same storey heights as the south-east range containing the Earl's station platform but lacks the string course.



1859 Detail of the Plan of New Yard (Barnsley Museums) showing the south-west range and attached building. Note: north is to the right.

5.2.2 TIMELINE

1795 Elsecar Ironworks established

1849 William and George Dawes who had taken over the works under lease from Earl Fitzwilliam. A set of cottages (Building 14) were retained within the New Yard

1859 A plan of New Yard from 1859 depicts the early form of Building 13, perhaps then a gate lodge. Attached to the south-east is Building 14 and 14b with an enclosure to the south-west.

1870 The south-east range is built as the Earl Fitzwilliam's private railway station

1885 The ironworks are closed

1912 The building is captured in a photo during a Royal Visit

By 1929 The north-west range has been constructed

1947 The National Coal Board take over the workshops

1970s The building contained the manager's office, inspection department and general offices

1983 Barnsley Main colliery closes

1988 Barnsley Council purchases the Elsecar workshops

1990s The building was renovated including roof repairs, internal partitioning and the replacement of windows and doors.

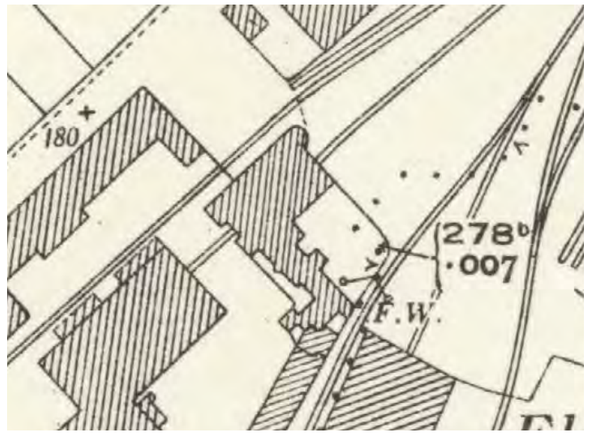
Building 13 was constructed as part of the workshop complex with the south-west range built in the 1850s. The earliest form of the building is captured on the 1859 plan of the New Yard, drafted ten years after William and George Dawes had taken over the works under lease from Earl Fitzwilliam. The plan shows a small building equating to the south-west range with a canted bay facing onto the workshop complex with attached gateposts. It may have been used as a gatehouse at this time. Attached to the south-east are a range of buildings, a number of which can be identified as Building 14 and 14a.



Ordnance Survey 25-inch 1890 (published 1892)



Royal Visit, 1912



Ordnance Survey 25-inch 1929 (published 1930)



Historical Development Plan

In 1870, part of the row was rebuilt as Earl Fitzwilliam's private railway station when the rectangular south-east range of Building 13 was constructed[4]. The building had opposing railway carriage entranceways and housed the station platform (now removed) and waiting rooms. The staircase hall in the south-east range is highly decorative featuring dark wood with a ramped handrail, turned banisters, moulded and fretted panels and a niche below. The staircase hall also has deep panelled doorcases and two wall niches, one concealing a radiator behind an intricate ironwork grill[5]. Another addition at this time was the cellar with wine storage.

By 1890 the OS 25 inch survey (published 1892) shows the south-east range with a railway track entering the north-east gable end where it terminates. Adjacent is Building 14 with rear projections, and a distinctive triangular porch.

The building is shown in an image capturing during a Royal Visit of 1912. The top of a wide arch entranceway is just visible above the Royal motor car in the north-west elevation of the south-east range which still survives on the interior today. A carriage entrance can also be seen on the north-east. A Venetian window is shown on the first floor of the north-east elevation of the south-west range below which is a flat roofed extension.

By 1929, the north-west range had been constructed enclosing the arched entranceway seen in the above photograph. The Venetian window in the new range may have been moved from the first floor of the north-east elevation at this time. A railway track ran through south-east range, terminating at Building 17. This arrangement can still be seen on the 1948 6-inch OS map (published 1949) (not featured here).

The building continued to be used by the NCB; by the 1970s the building contained the manager's office, inspection department and general offices. The site was purchased by Barnsley Council in 1988 and restored in the 1990s as part of the Heritage Centre. Today, the ground floor houses a day nursery, whilst the upper floors remain largely un-used.



The building in 1992 before its restoration. Historic England Archive, Ref: BB9305897

5.2.3 SIGNIFICANCE ASSESSMENT

Archaeological

Little is known about the site before Building 13's construction, although the south-east range appears to have replaced an earlier cottage. In terms of fabric evidence, it is unclear if this cottage was completely demolished or partially incorporated into the present building. The interior would benefit from further analysis to identify features relating to its former uses, including a single storied gatehouse, and the use of the south-east range as a railway station. Due to its current use, limited internal analysis has been carried out and more could be learnt from research and analysis of fabric to better understand the site's development. **High Archaeological Interest**

Artistic and Architectural

The range with attached cottages is of particular interest for its complex and interesting evolution through the 19th and early 20th century. The building is a distinctive two-storey building featuring two canted bay windows which look into the Earl's Workshops and also outwards across Distillery Side. It combines industrial features like the large, opposed timber doors of the former railway station with polite architecture like the Venetian windows. Internally, it retains cornicing and a fine staircase. **High Artistic and Architectural Interest**

Historic

Building 13 is attached to the oldest buildings within the complex, a terrace of cottages subsequently altered to form a supervisor's house. It has significant associative value as the gatehouse into the complex which formed Elsecar Central Workshops, an early and influential centralised facility which is a remarkable survival. It was adapted in 1870 as a private railway station, used by the Earl Fitzwilliam and his guests visiting Wentworth Woodhouse, indicating the pride that the Earl had in his industrial enterprises. It was also used as the departure point for seaside excursion trains laid on for the Earl's employees. **High Historic Interest**

Social Value

The building forms part of a Elsecar Heritage Centre which draws visitors from across the country. The site still holds value to former employees who passed through the gate ways and the offices when in operation by the NCB. The value of the building continues today as part of the Heritage Centre and could be improved in future should the building be put back into full use and made more publicly accessible. **Medium Social Interest**

5.2.4 SUMMARY ASSESSMENT IMPACT

This impact assessments follows the approach set out in Appendix B of this report.

The Proposals

The Ground Floor is to become the new Visitor Centre for the site and the First Floor will be refurbished as creative workspaces. The works include comprehensive refurbishment of the building, repairs to the building fabric internally and externally.

- New lifts to increase accessibility
- Renewal of the building services
- Replacement of flat roof areas

Impact Assessment

01 Effect on Fabric

New platform lifts to improve accessibility - A platform lift is proposed to be installed in the current toilet block. Part of this structure may date to 1870 when the building was adapted as the Earl's station. The fabric evidence of infilled arches and external string course would suggest it was originally a single-storied porch, perhaps raised and enclosed in the 20th century, and adapted as toilet facilities. The insertion of a lift will therefore have a **minor impact on fabric** much of which probably dates to the 20th century and is of limited value.

The platform lift in the Entrance Hall requires the removal of a lightweight partitions of no interest. It will open up this spaces and will not impact on historic fabric. **Neutral impact.**

Removal of partition walls - The ground floor plan form undergone many historic changes including the removal of original walls. The partitions proposed for removal date to the building's later uses in the 20th century when spaces were reconfigured; this is particularly apparent on the ground floor. Removing these partitions will return some of the spaces to their earlier dimensions and appearance whilst other spaces will become open and flexible, supporting the building's long-term sustainability. The removal of modern fittings in some spaces will have a positive impact on appearance. The overall impact is deemed to the be a **high positive beneficial impact.**

Renewal & upgrading of building services & lighting - Many of the proposed upgrades will be a like-for-like basis and will not impact on features of historic interest. Other upgrades may have some minor impacts such as the installation of new electrical points and lighting. These will be carried out with care using existing routes where possible and minimising new openings. The upgrades will increase potential uses of the buildings and secure its long-term sustainability. **Neutral to minor negative impact.**

Replacement of flat roof areas - The proposals remove modern roof lights of no value, replacing them with sun pipes, and propose the renewal of roof coverings which are currently failing. The proposals will have a high beneficial impact in the long term ensuring the building remains water-tight and will not alter the building's overall appearance. **High positive beneficial impact.**

02 Avoiding Harmful Impacts

The proposals are intended to be modest in scope and following a careful design process ensure that any harm to historic fabric is minimised.

03 Enhancing Significance

A number of elements of scheme will have a positive benefit on the listed building; these include the repairs to the roof, removal of modern partitions, removal of modern services and the upgrading of spaces to bring them back into use. The works will make it more accessible to the public (which is currently limited), which if combined with permanent interpretation, will widen appreciation and understanding of the building and it history.

04 Conclusion

The proposals for Building 13 will have some minor impacts on historic fabric such as the installation of new services and two platform lifts. However, most proposals will be beneficial to the listed building, such as the removal of modern partitions, roof repairs and redecoration. Any potential minor negative impact to the heritage significance is outweighed by the positive outcomes of improved condition, use and accessibility, with the additional long-term benefits which these will bring to the heritage.

5.3 BUILDING 20 AND 21

5.3.1 DESCRIPTION

The former rolling mill and workshop is roughly rectangular, constructed in a modular cast-iron framework walls of 12 bays infilled with stone and brick of various phases, substantial stone gables, the northern-most with massive buttresses, and an iron-work roof structure with slate finish. The key feature is the exposed iron framework in cast-iron sections of columns supporting depressed-arched sections. The infill panels to the side walls appear to be of different phases in brick and stone and many have later alterations. Windows within the panels are generally iron-framed, and again of various phases. There are entrances in both long elevations.

Internally, Building 20 and 21 are separated internally by a brick wall. Building 21 is an open space used for storage and has painted stone external walls and painted concrete floor. There is limited natural light sources with a pedestrian door and large double loading doors on the west elevation.

Building 21 is a large open space used for events interspersed with later structures built of block work providing toilet, bar and kitchen facilities. The principal feature of the space is the exposed roof structure of 14 Howe trusses formed of timber principal rafters and rolled, wrought iron sections and rods. Additional elements have been added to the roof structure possibly in steel post 1990. The underside of the roof is in modern materials and the floor a painted concrete screed. The walls are exposed brick and stone.

5.3.2 TIMELINE

1795 Elsecar Ironworks established

1849 William and George Dawes who had taken over the works under lease from Earl Fitzwilliam

1850 One of their first development was the construction of the rolling mill (Building 21)

1859 Plating for HMS Warrior, the Royal Navy's first ironclad warship, was rolled within Building 21

1860 The building was extended to the south by two bays (Building 20)

1885 The ironworks were closed. The rolling mill buildings were incorporated into the Central Workshops which serviced his estate and its collieries. The infilling of the openings utilising stone and then brick

By 1901 Building 20 is linked to a railway turntable indicating its use a workshop or store

By 1929 The turntable was removed and a railway siding now entered the northern gable

1947 The National Coal Board take over the workshops

1950s Building 21 was known to have been used as a locomotive workshop. After 1956 brick extensions are added to the southern end and at the north-eastern corner by the National Coal Board

1970s The northern half of Building 21 was used as a store, and the southern half a machine and fitting shop

1983 Barnsley Main colliery closes

1988 Barnsley Council purchases the Elsecar workshops

1990s The building was renovated and the interior converted into an events venue.

5.3.2 BRIEF HISTORY

Building 20 and 21 (the former more accurately known as 20a) were originally a rolling mill which was part of the Elsecar Ironworks established in 1795. The rolling mill, which was constructed in 1850, was one of the first new developments at Elsecar Ironworks carried out by William and George Dawes who had taken over the works under lease from Earl Fitzwilliam in 1849[6]. It is presumed that the iron frame was cast at the Elsecar works.

Building 21 is first shown on a plan from 1859. It shows a rectangular building constructed hard against an existing northern boundary, which accounts for the buildings skewed north gable end. Various buildings abut the southern end in the location of Building 20. The plan also shows that the long east and west elevations as dotted lines, indicating that the building was open-sided. In the year this plan was drafted, the Elsecar Ironworks produced the plating for HMS Warrior, the Royal Navy's first ironclad warship; the plates are likely, therefore, to have been rolled within Building 21.

The building was extended in the 1860s, with the addition of two further bays to the south which is now known as Building 20. The similar iron construction indicates they utilised the same casting pattern as the slightly earlier Building 21.



1859 Plan of New Yard and Ironworks (Barnsley Museums). Note: north is to the right.

The use of the building as a rolling shed continued until the closure of the ironworks in 1885 at which point the building was incorporated into Earl Fitzwilliam's Central Workshops which had been established in the 1850s to service his collieries and estate. The 1892 25-inch OS map (surveyed 1890) shows the ironworks have been cleared away to the south-east of the former rolling works. A railway line runs along the west elevation.

The open sides to the building were probably infilled at various times from this point onwards, proceeded in stages. It is likely that the panels on the eastern side, which are generally in stonework, date to the later 19th century, whilst those on the west are generally brickwork and likely to be early 20th century, with the those to the south being later 20th century.

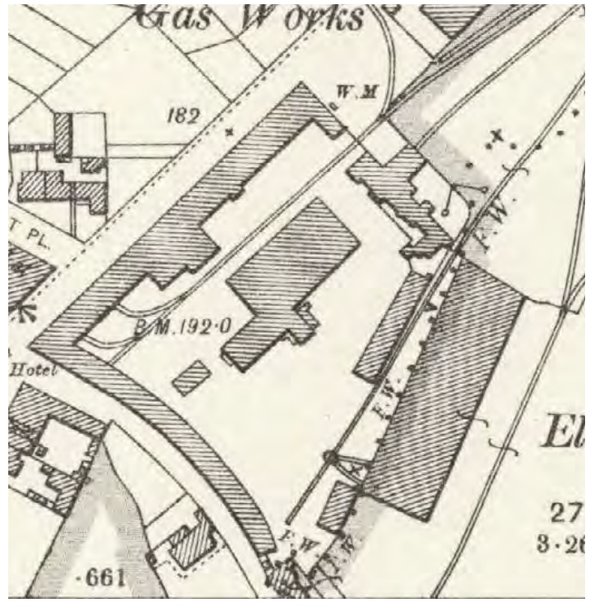
By the publication of the 1903 25-inch Ordnance Survey (surveyed 1901), the southern railway track has been extended further to the south and the southern end of the building (now Building 20) had been connected to the track by a waggon turntable, perhaps indicating its use as a workshop or stores. The 1930 25-inch Ordnance Survey (surveyed 1929) indicates that this turntable arrangement had been removed by 1929 but replaced by a new arrangement - another railway siding entered Building 21 through the centre of the northern gable which had been divided widthways. The division and different uses likely resulted in the infilling of the bays at different stages and the use of different window styles seen today. The large opening on the north elevation has been historically infilled, but the opening was reinforced with an I-beam, which is still visible on the interior. The building is noted as being used as a locomotive workshop in the 1950s.

Sometime after 1956, brick extensions were added to the southern end and north eastern corner by the National Coal Board and by the 1970s, the northern half of the building was used as a store, and the southern half a machine and fitting shop.

In the 1990s the building was converted as part of the Elsecar Heritage Centre into an exhibition and function venue. Building 21 is used for functions, whilst Building 20 is currently in use for storage, having recently been used as a temporary home for the beer tap room.



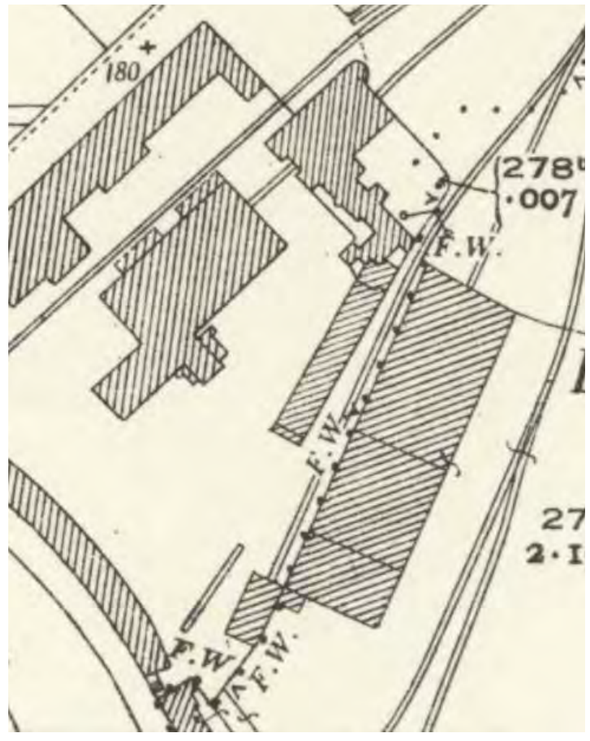
Interior of Building 52 in 1992 prior to its conversion. Historic England Archive, Ref: BB93/05891



OS 2-5inch, surveyed 1901, published 1903



OS 25-inch surveyed 1890, published 1892



OS 2-5inch, surveyed 1929, published 1930

5.3.3 SIGNIFICANCE ASSESSMENT

Significance of Building 20 and 21 has been succinctly summarised by Historic England in their listed entry and has been used to inform the statement presented here.

Archaeological

The surrounding site contains below ground remains of the Elsecar Ironworks dismantled soon after its closure in 1885 and is recognised for its high archaeological value by its scheduled status.

The fabric of the building has undergone various phases of use and change as evidenced by, for example, the infilling of openings on the long elevations in different materials and styles. There is more to understand about the development and the use of this building both in the built fabric and in below ground remains. **High Archaeological Interest**

Artistic and Architectural

The former Rolling mill is an impressive mid-19th century iron-framed modular building. The repetitive long elevations with exposed cast-iron sections with the nod to classical forms, along with the internal roof structure emphasise the industrial nature of the structure. The north gable end with substantial buttresses are imposing and awe-inspiring in scale. The roof structure is technologically interesting, making use of timber and iron (both cast and wrought iron) elements, an approach widely used for early railway station roofs which rarely survive, the later addition of mild steel trusses adds to this interest. **High Artistic and Architectural Interest**

Historic

The building is a rare example of a rolling mill and a key surviving building of William and George Dawes's mid-Victorian modernisation of Elsecar Ironworks. Along with other surviving roofed buildings and the extensive archaeological remains of the scheduled Elsecar Ironworks, it is one of the best surviving 19th century ironworks in England. As part of the complex of buildings which formed Elsecar Central Workshops, it is a remarkable survival of an early and influential centralised workshop facility which absorbed a number of ironworks buildings after the closure of the ironworks.

The site has associative value as an early structure built by William and George Dawes who had taken over the works under lease from Earl Fitzwilliam in 1849. IT is also associated with Britain's first ironclad warship, HMS Warrior, whose armour plating is thought to have been rolled in Building 21 in 1859. **High Historic Interest**

Social

The building forms part of a Elsecar Heritage Centre within which events and exhibitions draw a national audience. Although fewer as time passes, the site still holds value for former employees who remember the workshops when in operation by the NCB. The value of the building remains today as it continues to be used for special events such as wedding receptions and parties. **Medium Social Interest**

5.3.4 IMPACT ASSESSMENT

This impact assessments follows the approach set out in Appendix B of this report.

The Proposals

- Building 20 will be fully refurbished to provide a secondary events space. This will include repairs to the building fabric, new access doors and lobbies, insulation of the roof and new building services.
- Building 21 are relatively light touch and focus on minor improvements to facilitate the renovation of Building 20. The works include new weather lobbies and updating the ancillary spaces.

01 Effect on Fabric

The proposals focus on repair and refurbishment to Building 20 and 21 and are generally light touch. The removal of inappropriate paint finishes will benefit the fabric of Building 20 whilst the insulation of the roof and upper panels is necessary to make the space comfortable with only a **minor** disruption to historic fabric and change to appearance. The installation of new lobbies, replacement doors and ramps throughout are of **neutral impact**. The refurbishment of Building 21 will impact on modern fabric only, and the works aim to improve the overall appearance of the space for users and are therefore of **positive benefit to the heritage**. The widening of an existing door between building 20 and 21 will have only a **minor negative impact** on fabric as it will remove a small portion of historic brickwork.

02 Avoiding Harmful Impacts

The proposals are intended to be modest in scope and following a careful design process ensure that any harm to historic fabric is minimised.

03 Enhancing Significance

A number of elements of scheme will have a positive benefit on the listed buildings; these include the removal of modern paint finishes, insulation and the upgrading of Building 20 and the refurbishment of Building 21. The works will make Building 20 accessible to the public, increasing appreciation and understanding of both buildings.

04 Conclusion

The proposals to Building 21 (the older of the two structures) are of neutral impact affecting only modern fabric. Proposals are also intended to improve the appearance of the interior and are therefore of minor positive impact.

The refurbishment of Building 20 is intended to bring this building back into use through sensitive repair and upgrading, allowing this building to be opened to the public. The proposals are light touch and any potential minor negative impact to the heritage significance is outweighed by the social benefit of opening up the space for public use with the additional economic benefits which these will bring to the heritage overall.

5.4 EXTERNAL WORKS

5.4.1 HISTORY AND SIGNIFICANCE

1988 Barnsley Council purchases the Elsecar workshops

1990s The site is renovated with some surfacing upgrading as part of the works.

5.4.2 DESIGNATIONS AND SIGNIFICANCE

Part of the area is scheduled, but only a small proportion of the area intended to be upgraded lies within the SAM.

The significance of the public realm lies in it relationship to the Earl's Workshops providing part of its setting and appearance. The modern surfacing is mainly an unattractive patch-repaired tarmac finish with occasional areas of stones setts and stone paving. All finishes are believed to be modern, although some utilise traditional materials such as stone setts which will be retained. Generally, however, there is no heritage value in the current surfacing. There is high potential for improvement to enhance the appearance and setting of the all the listed buildings.

5.4.3 THE PROPOSALS

- Providing new surface finishes to a wide area of the site. Surface finishes will be a double-layer tar spray and chip above the existing tarmacadam finishes. This will provide a consistent finish across much of the Heritage Centre site.
- Seating, planters, performance pitches and other features are also proposed as part of the public realm works.

5.4.4 IMPACT ASSESSMENT

The resurfacing does not propose the removal of existing tarmac finishes and will therefore not impact on historic features or underground archaeology. The proposals will improve the setting of the listed buildings and provide and attractive and consistent finish to surfaces and improved public realm furniture.

Overall the impact is deemed as **high beneficial impact.**

6.0
APPENDICES

Appendix 1 National Heritage Listing - Buildings 20A and 21
Appendix 2 National Heritage Listing - Buildings 13-14
Appendix 3 Significance Assessment Criteria
Appendix 4 List of documents included as part of the LBC application

APPENDIX 1
NATIONAL HERITAGE LISTING - BUILDINGS 20A AND 21

Buildings 20a and 21, former rolling mill at Elsecar Ironworks, including two halved colliery pit wheels

Grade: II*

List Entry Number: 1151097

Date first listed: 04-Dec-1986

Statutory Address: Elsecar Heritage Centre, Wath Road, Elsecar, Barnsley, S74 8HJDetails

Former rolling mill building, 1850, extended 1860, built for Dawes' Elsecar Ironworks. Renovated 1990 as part of Elsecar Heritage Centre to form an exhibition and function venue.

Summary

A production building of Elsecar Ironworks, 1850, where heated wrought iron was rolled to form plates, rails and bars. In 2020 in use as a large event hall.

Reasons for Designation

The former rolling mill at Elsecar Ironworks, 1850, Buildings 20a & 21 at Elsecar Heritage Centre, are listed at Grade II* for the following principal reasons:

Architectural interest: * as an impressive mid-C19 iron-framed modular building; * for its technologically interesting composite roof structure which makes effective use of timber and iron (both cast and wrought iron) elements, an approach widely used for early railway station roofs which rarely survive, the later addition of mild steel trusses adding to the interest. * as a nationally rare surviving example of a rolling mill, a key surviving building of William and George Dawes's mid-Victorian modernisation of Elsecar Ironworks.

Historic interest: * the building where the armour plating for Britain's first ironclad warship, HMS Warrior, was rolled.

Group value: * with the other surviving roofed buildings and extensive archaeological remains of the scheduled Elsecar Ironworks, one of the best surviving C19 ironworks in England; * as part of the complex of buildings which formed Elsecar Central Workshops, this remarkable survival of an early and influential centralised workshop facility which absorbed a number of ironworks buildings after the closure of the ironworks.

History

Elsecar Ironworks was established in 1795. The rolling mill was built in 1850 as one of the first new developments at Elsecar Ironworks carried out by William and George Dawes who had taken over the works under lease from Earl Fitzwilliam in 1849. An iron-framed building with design similarities to the 1840 train shed at Euston, London, it is presumed that the ironwork was cast at the works. In 1859 Elsecar Ironworks produced the plating for HMS Warrior, the Royal Navy's first ironclad warship, the plates thought to have been rolled within this building. In 1860 the building was extended southwards by a further two bays (being the section now known as Building 20a) using the same patterns for the cast iron components used for the rest of the building. The ironworks closed in 1885, the rolling mill building being one of those retained and absorbed into Earl Fitzwilliam's Central Workshops complex that had been established in the 1850s to service his collieries and estate. The originally open sides to the building were infilled, probably at different stages given the varying designs of infilling and openings. The panels on the eastern side are generally in stonework, perhaps mainly late C19, those on the western side are generally brickwork, mostly probably early C20, but with those to the south being late C20. The 1901 Ordnance Survey map shows that the extension built 1860 was connected to the railway via a waggon turntable, perhaps indicating its use as a workshop or stores. By the 1929 map this arrangement had been removed, but a new siding then entered the building through the centre of the northern gable. The building is noted as being used as a waggon workshop up until 1950. Sometime after 1956 extensions were added to the southern end and north eastern corner by the National Coal Board, these are not of special interest and are not included in the listing. Around 1990 the building was converted as part of the Elsecar Heritage Centre into an exhibition and function venue.

Ironworks, alongside collieries, were key drivers of Britain's industrial development in the C19. Elsecar Ironworks, which is also designated as a Scheduled Monument, is one of the best surviving C19 ironworks nationally because a number of its buildings were absorbed into the Central Workshops complex and have thus survived. Most C19 ironworks in England have been either completely cleared or redeveloped. Elsecar Central Workshops was an early and pioneering industrial complex, prefiguring similar complexes built as the coal mining and other industries became more highly capitalised towards the end of the C19 and into the C20. Henry Hartop (1785-1865), the ironmaster who was employed by the fifth Earl Fitzwilliam, effectively adapted the concept of the model farm to service the industrial needs of the estate. Successive Earl Fitzwilliams, who were influential members within the first rank of society and the British Establishment, took pride in showing off their industrial concerns to visitors. Elsecar is thus thought to have been nationally, perhaps even internationally, influential.

MATERIALS: cast iron framework with coursed sandstone gable ends. Panels infilling the framework to the side walls is mainly in coursed sandstone on the eastern side and brickwork, on the western side. Welsh slate roof.

PLAN: the building is largely an undivided space, the southernmost two bays, the extension added 1860, being separated off by an internal brick wall.

EXTERIOR: the building is a tall single-storey of 12 bays, but with the northern gable being set at an angle so that there is an additional stone-built bay at the northern end on the west side. The building has a degree of architectural embellishment. The iron framework features cast iron round-section columns with simple capitals and bases, many of the bases now buried in the raised external ground surface. The columns, which also function as rainwater downpipes, support cast iron beams that form shallow basket-arches with the spandrels being perforated, the perforations divided by vertical struts. On the western side one column is omitted, the double bay thus formed being spanned by a substantial riveted wrought iron girder.

The stone-built gable ends are substantial. They are quoined and wrap around the corners for stability. They are raised and coped and had tall round arched windows which are now blocked. The northern gable has been at least partially rebuilt, removing external evidence of the former railway siding access, the buttresses flanking this blocked entrance also probably being C20 additions.

The infill panels to the side walls appear to be of different phases and many have later alterations. Windows within the panels are generally iron-framed, divided into small panes. Doors are generally timber-boarded.

The panels on the eastern side are mainly stone-built, some with top portions in brickwork. The southern three panels are blind, the next three each have a pair of large windows with stone lintels, the southern two being enlarged into doors. The next three panels have smaller paired windows with segmental heads formed with two courses of brick headers. The next panel is late C20 with large double doors set in brickwork. The last two panels, similar to those to the centre, are largely obscured by a mid-C20 addition.

The panels on the western side are mainly brick-built. However the additional bay at the northern end (allowing for the skew to the north gable) is stone-built and includes a single, tall, round-arched window. The next six bays are infilled in brickwork of pier-and-panel construction typical of late C19 and early C20 industrial buildings, each being divided into two panels, each panel having a segmentally headed window. Two of these bays have been altered with inserted doorways replacing windows. The remaining bays are of later, plainer brickwork with various openings.

INTERIOR: the original roof structure features 13 Howe trusses formed with timber principal rafters fitted into cast iron sockets at the top of the columns and at the ridge, the remaining elements of the trusses being rolled, wrought iron sections and rods. Most of the iron elements of the trusses are in tension, mostly arranged as paired strips bolted through to clasp the ends of the elements in compression which are T sections. In between the original trusses are more recent Fink trusses, possibly added circa 1990, formed out of lighter-weight sections, probably steel. The interior includes various other additions and structures added as part of the conversion as a function venue around 1990 and subsequently.

SUBSIDIARY ITEMS: set into the ground adjacent to the north gable are two halves of a spoked colliery pit wheel likely to have come from one of Earl Fitzwilliam's collieries and potentially manufactured at Elsecar Ironworks.

APPENDIX 2
NATIONAL HERITAGE LISTING - BUILDINGS 13-14

Buildings 13-14, former railway station, offices, housing and gate piers at Elsecar Central Workshops

Grade: II*

List Entry Number: 1191337

Date first listed: 04-Dec-1986

Date of most recent amendment: 19-Oct-2020

Statutory Address 1: Elsecar Heritage Centre, Wath Road, Elsecar, Barnsley, S74 8HJ

Summary

Range forming one side of Elsecar Central Workshops, the complex built in the 1850s to serve Earl Fitzwilliam's collieries, including the main entrance to the complex as well as a small private railway station. In 2020 part is in use as a children's nursery, part as a café.

Reasons for Designation

Former north-east range (gate piers, railway station, offices, and housing) at Elsecar Central Workshops, including an early C19 terrace of cottages converted into a house later in the C19, Buildings 13-14 at Elsecar Heritage Centre, are listed at Grade II* for the following principal reasons:

Architectural interest: * includes the oldest buildings of the complex, a terrace of cottages subsequently altered to form a supervisor's house; * the range is of particular interest for its complex development and evolution through the C19 and early C20.

Historic interest * association with Hartop, Nasmyth and the Earls Fitzwilliam; * that the range included a private railway station used by aristocratic visitors to Wentworth Woodhouse, demonstrating the pride that the Earls Fitzwilliam had in their industrial concerns.

Group value: * as an important part of the complex of buildings which formed Elsecar Central Workshops, an early and influential centralised workshop facility, the complex as a whole being a remarkable survival nationally which is of more than special interest.

History

The fifth Earl Fitzwilliam (1786-1857) continued the work of his father (1748-1833) in developing and supporting industrial concerns across his Wentworth-Woodhouse estate. In 1849, Henry Hartop (1785-1865), who had managed Elsecar Ironworks for the Earl from 1843 until it was leased to the Dawes brothers in 1849, suggested the establishment of a centralised workshop complex to service the needs of the estate, especially its collieries. Originally known as the New Yard, this complex was built immediately to the north-west of Elsecar Ironworks, close to Elsecar New Colliery. It was sited adjacent to the interchange between the local waggonway network (which served Milton Ironworks and the Tankersley iron ore pits to the west) and the Elsecar branch of the Dearne and Dove Canal and the recently opened branch line to the South Yorkshire Railway. The canal and railway linked the Central Workshops to Hemingfield Colliery to the north east, allowing Hemingfield's workshops to be converted into workers' housing. The Central Workshops were regarded as a showcase by the Fitzwilliams where public events and tours were often held, the fitting shop occasionally used for functions. In 1870 the sixth Earl Fitzwilliam (1815-1902) opened a private railway station for his estate as part of the complex and in 1912 the seventh Earl (1872-1943) hosted a visit by King George V and Queen Mary. Nationalisation in 1947 saw the complex taken over by the National Coal Board. It was acquired by Barnsley Council in the late 1980s and was subsequently restored as Elsecar Heritage Centre.

When the New Yard was established in 1850, the north-eastern side of the complex was defined by a row of early C19 cottages fronting to the north-east. The 1859 plan of proposed railway sidings shows this row as being divided into four units, also depicting the two porches on the southern side suggesting that they were now being used to face into the yard. It also shows an additional new unit, a cross wing at the western end, forming one side of the entrance to the complex and having a canted bay facing into the yard. Stonework of the current building suggests that this addition was originally single-storey: it is interpreted that this was built as a gatehouse. Stonework on the northern side of the cottages also suggests that these were also mainly single-storey, the better quality of the stonework to the upper storey of the double fronted cottage being similar to that used for other buildings in the complex built in the 1850s. In 1870 the northernmost unit of the original row was rebuilt as a private railway station for the Earl that extended north-eastwards to accept a railway siding shown on a plan dated 1879. This end of the row may have become the main offices for the complex, the former offices to the centre of the Wath Road range being given over to warehousing. A railway plan dated 1887 identifies the remaining cottages (excepting the southernmost unit) as 'HOUSE' indicating that the cottages had been combined into a single domestic unit. The 1881 census listed a single household under 'New Yard', that of George Birkenshaw (a clerk) and his family including a domestic servant. The railway station end of the row is shown in a 1912 photograph of the King leaving by motor car. Subsequently, by the time of the 1929 Ordnance Survey map, this north-western end of the range was extended to its current footprint to provide additional office accommodation. The railway station was used as the private railway station for Earl Fitzwilliam and his guests visiting Wentworth Woodhouse, indicating the pride that the Earl had in his industrial enterprises. It was also used as the departure point for seaside excursion trains laid on for the Earl's employees.

Elsecar Central Workshops was an early and pioneering industrial complex, prefiguring similar complexes built as the coal mining and other industries became more highly capitalised towards the end of the C19 and into the C20. Hartop employed by the fifth Earl Fitzwilliam, effectively adapted the concept of the model farm to service the industrial needs of the estate. The complex included a Nasmyth steam hammer, invented by Hartop's son-in-law, the notable Scottish engineer James Nasmyth (1808-1890) who invented and developed a number of workshop machine tools in the mid-C19. Successive Earl Fitzwilliams, who were influential members within the first rank of society and the British Establishment, took pride in showing off their industrial concerns to visitors. Elsecar is thus thought to have been nationally, perhaps even internationally, influential.

Details

Row of cottages, early C19, altered and expanded for Earl Fitzwilliam between the mid-C19 and early C20 to form a house, private railway station and offices as part of Elsecar Central Workshops. Renovated 1990 as part of Elsecar Heritage Centre.

MATERIALS: early walling in coursed rubble sandstone, later walling of better-dressed sandstone in larger blocks. Welsh slate roofs, brick chimney stacks.

PLAN: originally a row of single-depth cottages, possibly single room cottages (as now represented by the southernmost bay), with one larger cottage having an upper floor (the next two bays). What now appears as a two storey, double fronted cottage (forming the centre of the range) may have been formed out of two cottages when heightened to two storeys, probably in the mid-C19, and then combined with the original two storey cottage to form a house before 1887.

The later railway station and offices (the northern end of the range) has a railway carriage hall that passes through the centre of the building north-east to south-west. On the south-eastern side of this is the formal entrance and stair hall. On the north-west side are two secondary entrances to offices and a back stairs. On the first floor, accessed from the principal staircase, is a large reception room which is thought to have been a waiting room for the station.

EXTERIOR: Cottages: this is of seven, slightly irregular bays which can be seen as three separate sections, with later C19 outshots added to the north-east elevation: the southern section is single-storey with a gable end stack, with a door and window to the south-west elevation, the other elevations being blind.

The next section is of two storeys (with no evidence of heightening) and two bays, also with an end stack. It is built of poorer quality stone than used for most of the rest of the range. Its front door is on the left, set in a projecting porch built of better quality stone. The centrally set ground floor window to the rear (north-east) is probably the original front doorway. Windows have substantial stone lintels with thinner projecting sills, being smaller and squarer than those of the rest of the range.

The next section steps forward slightly and appears as a

double-fronted cottage with end stacks and a projecting triangular porch to the centre of the south-west elevation. This porch is of relatively poorer quality stone, and the ground floor is rendered, possibly concealing similar poor quality stone which is still exposed to the ground floor to the rear. The stonework to the first-floor is of better dressed, larger blocks. Window openings are taller than those of the two bay cottage, but otherwise detailed in a similar simple manner. The window in the triangular porch may have been converted from a second doorway (hinting at the building's possible origins as a pair of single room cottages). A ground floor window to the north-east elevation is slightly wider, this being a former front door served by a path marked on some C19 plans. At the northern end of the south-west elevation there is an external flight of steps to a first-floor door.

Railway station and offices: this can be divided into three sections: a roughly square, 3-bay building with a canted end facing into the workshop complex, this interpreted as the 1850s gatehouse; a larger, taller, rectangular range extending for three bays between the gatehouse and the surviving cottages, this being the railway station built 1870; and an early C20 office range extending for seven bays north-eastwards from the gatehouse, but matching the storey heights of the taller railway station which it abuts along its side, ending with a canted bay facing north-eastwards. The principal pedestrian entrance into the whole building is via the south-west elevation of the railway station, facing into the workshop complex. This is set on the southern side of the railway carriage entrance and is via a flight of steps to a small, raised forecourt enclosed with railings, and then in through a double door with a rectangular overlight flanked by narrow windows, this joinery all being C20 or later. Despite the different stages of construction of the building as a whole, the detailing to the stonework and other features is consistent. Roofs are hipped and project over the eaves to displaying the ends of the rafters. There are brick ridge stacks to each section, with two to the office range. Windows are simply treated with stone lintels and projecting sills with timber, multi-paned horned sashes. There are two Venetian windows, one being off-centre above the railway carriage entrance in the north-east elevation, the other more centrally set to the first-floor of the north-west elevation of the gatehouse, variation in the stonework suggesting that the first-floor to the gatehouse is a later heightening.

INTERIOR: the southernmost section retains a simple, small C18 or early C19 cottage-kitchen style fireplace with stone jambs and lintel. The ground floor northern room to the double fronted cottage retains dado panelling and two built-in cupboards flanking the fireplace with its later surround. Within the northern end of the range, forming the railway station and offices, there is good survival of typical Victorian style joinery and plasterwork, along with some fireplace surrounds. Of most note is the principal stair hall retaining its staircase which incorporates unusual fretwork panels to the balustrading. The doorways opening into this hallway have deep, panelled door cases. A large reception room on the first floor was a waiting room.

SUBSIDIARY ITEMS: to the north of the gatehouse are two stone gate piers with moulded capstones for a pair of iron railing entrance gates and flanking pedestrian gates.

APPENDIX 3
SIGNIFICANCE ASSESSMENT CRITERIA

Significance Assessment Criteria

Significance can be defined as the value of a heritage asset to this and future generations because of its heritage interest. The interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting (NPPF, 2021). The understanding of the significance of a place is vital to inform sensitively managed change.

In accordance with Historic England Advice Note 12 - Statements of Heritage Significance: Analysing Significance in Heritage Assets (2019) and the NPPF, the following criteria are employed within this report to assess significance:

Archaeological interest - There will be archaeological interest in a heritage asset if it holds, or potentially holds, evidence of past human activity worthy of expert investigation at some point.

Architectural and artistic interest - These are interests in the design and general aesthetics of a place. They can arise from conscious design or fortuitously from the way the heritage asset has evolved. More specifically, architectural interest is an interest in the art or science of the design, construction, craftsmanship and decoration of buildings and structures of all types. Artistic interest is an interest in other human creative skills, like sculpture.

Historic Interest - An interest in past lives and events (including pre-historic). Heritage assets can illustrate or be associated with them. Heritage assets with historic interest not only provide a material record of our nation's history, but can also provide meaning for communities derived from their collective experience of a place and can symbolise wider values such as faith and cultural identity.

The levels of relative significance used to inform the assessment of significance in this heritage statement range from High Significance, Medium, Low. Neutral and Intrusive Significance.

Impact Assessment Criteria

Heritage impact is defined as the potential level of harm or benefit to special architectural or historic interest causes by proposed development. The NPPF stresses that impacts on heritage assets should be avoided and if it cannot be avoided, it should be minimised or mitigated.

The NPPF does not prescribe a format or title for analyses of heritage significance and/or impact, so the methodology used is based on the guidance set out in Historic England Advice Note 12 - Statements of Heritage Significance: Analysing Significance in Heritage Assets (2019) and adapted as necessary:

- Assessment of impact
- Effect on fabric
- Effect on setting
- Cumulative impact
- Avoiding harmful impact(s)
- Enhancing significance
- Justification for harmful impacts

Assessment of impact – Any harm to, or loss of, the significance of a designated heritage asset (from its alteration or destruction, or from development within its setting), should require clear and convincing justification. This section assesses the affect of the proposals on fabric, setting and cumulative impact on significance.

A level of relative impact (major, moderate, minor or negligible) will be assigned to each proposal or group of proposals. Impact may also be beneficial and defined under the NPPFs sustainable development criteria of social, economic or environmental.

Avoiding harmful impact(s) – Harm to heritage assets should be avoided and if it cannot be avoided, it should be minimised or mitigated. This section will set out how decisions have been taken in the interest of the heritage asset to avoid harm, and if this is not possible, how risk as been mitigated or minimised through design changes.

Enhancing significance – Impact may also have public benefits that can be defined as social, economic or environmental. Heritage benefits such as repairs and reinstatement can be defined as environmental benefits. Any outcomes of the scheme that will enhance significance will be articulated here.

Justification for harmful impacts – Where a proposed development will lead to substantial or less than substantial harm, the proposals must achieve public benefits that outweigh that harm (NPPF paragraph 201 and 202). The proposals will be justified under the NPPFs sustainable development criteria of social, economic or environmental.

The levels of relative impact used to inform the assessment of significance in this heritage statement are outlined below:

- Major – high adverse impact. This does not exclusively equate to substantial harm or total loss, although this will of course represent a major impact
- Moderate – medium adverse impact
- Minor – low adverse impact
- Negligible – none or very limited impact
- Beneficial – social, economic or environmental public benefits

APPENDIX 4

LIST OF DOCUMENTS INCLUDED AS PART OF THIS LBC APPLICATION

Application Form

Location and Site Plans

EFAS-PUR-00-SL-DR-A-1001 Site Location Plan
EFAS-PUR-00-SL-DR-A-1002 Site Plan

Design and Access Statement Incorporating Heritage Impact Assessment

Existing Drawings

EFAS-PUR-13-GF-DR-A-1006 Building 13 - Ground Floor as Existing
EFAS-PUR-13-01-DR-A-1005 Building 13 - First Floor as Existing
EFAS-PUR-13-RF-DR-A-1004 Building 13 - Roof Plan as Existing
EFAS-PUR-13-XX-DR-A-1000 Building 13 - Elevations As Existing
EFAS-PUR-13-ZZ-DR-A-1001 Building 13 - Elevations 2 As Existing
EFAS-PUR-13-ZZ-DR-A-1002 Building 13 - Long Sections As Existing
EFAS-PUR-20-GF-DR-A-1005 Building 20 & 21 - Ground Floor As Existing
EFAS-PUR-20-01-DR-A-1004 Building 20 & 21 - First Floor As Existing
EFAS-PUR-20-RF-DR-A-1003 Building 20 & 21 - Roof Plan As Existing
EFAS-PUR-20-XX-DR-A-1000 Building 20 & 21 - Elevations As Existing
EFAS-PUR-20-ZZ-DR-A-1001 Building 20 - Internal Elevations As Existing
EFAS-PUR-20-ZZ-DR-A-1002 Building 20 & 21 - Sections As Existing
EFAS-PUR-21-ZZ-DR-A-1010 Building 21 - Internal Elevations As Existing

Removals and Alterations

EFAS-PUR-13-GF-DR-A-1016 Building 13 - Ground Floor Removals and Alterations
EFAS-PUR-13-01-DR-A-1015 Building 13 - First Floor Removals and Alterations
EFAS-PUR-20-GF-DR-A-1015 Building 20 & 21 - Ground Floor Removals and Alterations

Proposed Plans

EFAS-PUR-13-GF-DR-A-2006 Building 13 - Ground Floor Proposed
EFAS-PUR-13-01-DR-A-2005 Building 13 - First Floor Proposed
EFAS-PUR-20-GF-DR-A-2005 Building 20 & 21 - Ground Floor Proposed
EFAS-PUR-20-01-DR-A-2004 Building 20 & 21 - First Floor Proposed

Fire Strategy

EFAS-PUR-13-GF-DR-A-2016 Building 13 - Ground Floor Fire Strategy
EFAS-PUR-13-01-DR-A-2015 Building 13 - First Floor Fire Strategy
EFAS-PUR-20-GF-DR-A-2015 Building 20 & 21 - Ground Floor Fire Strategy
EFAS-PUR-20-01-DR-A-2014 Building 20 & 21 - First Floor Fire Strategy

Internal Walls

EFAS-PUR-20-XX-DR-A-2010 Building 20 Internal Elevations
EFAS-PUR-21-XX-DR-A-2011 Building 21 - Proposed Internal Elevations

Ceilings

EFAS-PUR-13-01-DR-A-2009 Building 13 - First Floor Reflected Ceiling Plan
EFAS-PUR-13-GF-DR-A-2008 Building 13 - Ground Floor Reflected Ceiling Plan
EFAS-PUR-20-01-DR-A-2007 Building 20 & 21 - First Floor Reflected Ceiling Plan
EFAS-PUR-20-GF-DR-A-2006 Building 20 & 21 - Ground Floor Reflected Ceiling Plan
EFAS-PUR-XX-XX-DR-A-3200 Ceiling Types and Details

Lifts, Ramps and Balustrades

EFAS-OUR-13-ZZ-DR-A-5000 Platform Lift 1
EFAS-OUR-13-ZZ-DR-A-5001 Platform Lift 2
EFAS-PUR-00-XX-DR-A-3701 Building 20 - Ramp and Steps Detail

Roof and External Walls

EFAS-PUR-13-XX-DR-A-3000 Building 13 - Repairs Northwest Elevation
EFAS-PUR-13-XX-DR-A-3001 Building 13 - Repairs Northeast Elevation
EFAS-PUR-13-XX-DR-A-3002 Building 13 - Repairs Southeast Elevation
EFAS-PUR-13-XX-DR-A-3003 Building 13 - Repairs Elevations Short
EFAS-PUR-13-ZZ-DR-A-3004 Building 13 - Repairs Southwest Elevation
EFAS-PUR-13-RF-DR-A-3005 Building 13 - Repairs Roof Plan
EFAS-PUR-13-RF-DR-A-3400 Building 13 - Flat Roof Details Extensions
EFAS-PUR-13-RF-DR-A-3401 Building 13 - Flat Roof Details Valley 1 of 2
EFAS-PUR-13-RF-DR-A-3402 Building 13 - Flat Roof Details Valley 2 of 2
EFAS-PUR-20-XX-DR-A-2000 Building 20 & 21 - Elevations As Proposed
EFAS-PUR-20-RF-DR-A-3006 Building 20 & 21 - Repairs Roof Plan
EFAS-PUR-20-ZZ-DR-A-3410 Building 20 Eaves Detail

Doors and Glazing

EFAS-PUR-13-XX-DR-A-3821 Building 13 - Door Type Elevations
EFAS-PUR-20-XX-DR-A-3811 Building 20/21 - Door Type Elevations
EFAS-PUR-13-XX-DR-A-3901 Building 13 - Glazing Details
EFAS-PUR-20-XX-DR-A-3801 Building 20 & 21 - Glazing Details

Floor and wall Finishes

EFAS-PUR-13-GF-DR-A-3010 Building 13 - Ground Floor, Floor Finishes
EFAS-PUR-13-01-DR-A-3011 Building 13 - First Floor, Floor Finishes
EFAS-PUR-20-GF-DR-A-3010 Building 20 & 21 - Ground Floor, Floor Finishes
EFAS-PUR-20-01-DR-A-3011 Building 20 & 21 - First Floor, Floor Finishes
EFAS-PUR-13-GF-DR-A-3012 Building 13 - Ground Floor Wall Finishes
EFAS-PUR-13-01-DR-A-3013 Building 13 - First Floor Wall Finishes
EFAS-PUR-20-GF-DR-A-3012 Building 20 & 21 - Ground Floor Wall Finishes
EFAS-PUR-20-01-DR-A-3013 Building 20 & 21 - First Floor Wall Finishes

Building Services Engineering

Building 13 - Electrical Proposals
Building 13 - Mechanical Proposals
Building 20&21 - Electrical Proposals
Building 20&21 - Mechanical Proposals

Civil and Structural Engineering

20834-Y-DR-001-T1- B13 First floor proposed interventions and investigations
20834-Y-DR-001-T1- B13 Ground floor proposed interventions and investigations
20834-Y-DR-003-T1- B13 Proposed structural works for first-floor ceiling level and tie beam
20834-Y-DR-005-T2-B20 & B21 ground floor structural and civil interventions
20834-Y-DR-006-T2-B20 alterations to roof structure

Landscape and Public Realm

1244_001F_Existing Site Plan
1244_111F_Hard Landscape
1244_112F_Soft Landscape
1244_121F_Hard Surface Interfaces
1244_122F_Hard Surface Interfaces