Hampton Waterworks

Historic England - July 2023

LOM architecture and design

00
Introduction

This presentation is for the benefit of Historic England. It aims to set out the public benefits of the proposals and the means of reducing and avoiding harm to the significance of relevant heritage assets.

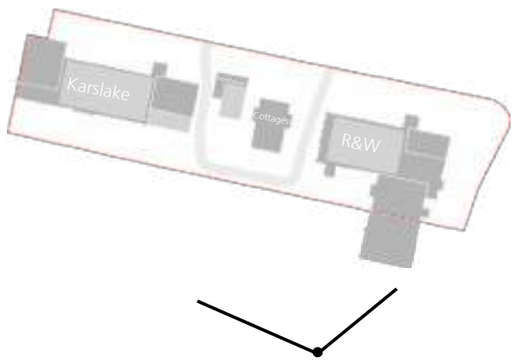
This presentation outlines the design evolution that has responded to and integrated the Site's architectural and historic interest to the proposed development.

The project aims to create a unique gateway for Hampton, bringing new life to the existing Waterworks site whilst creating a high quality place full of historic character where people can live and work.

Introduction **Key view**

Looking north from Lower Sunbury Rd

Proposed view, Artist rendering



The view from Lower Sunbury Road takes in the full Waterworks site from a distance across the reservoirs. The new additions blend with the light-coloured stone and brickwork. Roof extensions sit modestly above the engine houses on both Karslake (left) and Ruston & Ward (right) buildings referencing the original pitched slate roofs.

Existing view, Photograph

Interventions
01 - Roof extensions

Interventions - 1. Roof Extensions
Retention and replacement

Most roofs across the site are to be structurally retained, thermally upgraded and refinished to match existing. New roof extensions are proposed for the central engine houses only, as that location allows for the greatest addition of floor area, to allow the creation of a viable development.

Retain & re-roof existing Engine house roofs

New roof extension over single-story blocks

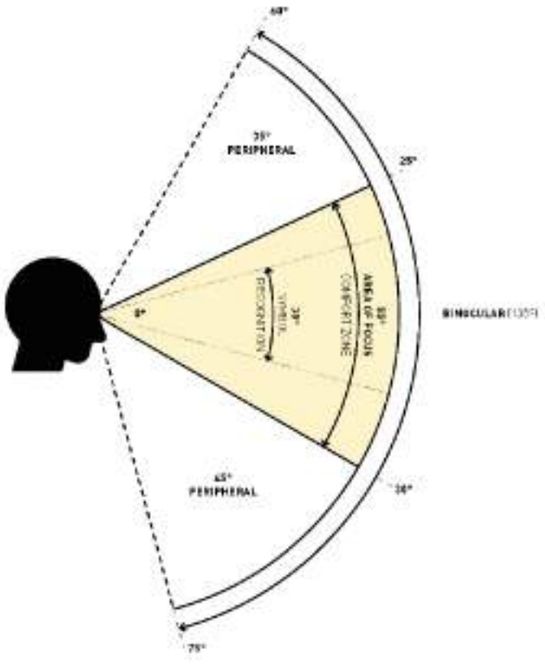
New-build extension

Interventions - 1. Roof Extensions
Perception and impact

The principal views of the building roofs are from Upper Sunbury Road as percieved by pedestrians as they pass by on both sides of the road.

Pedestrians approaching down the hill from the station experience the main view of the roofs but are more limited in number.

Car users will have limited views because they are concentrating on the road, moving at speed and in one direction on each side.

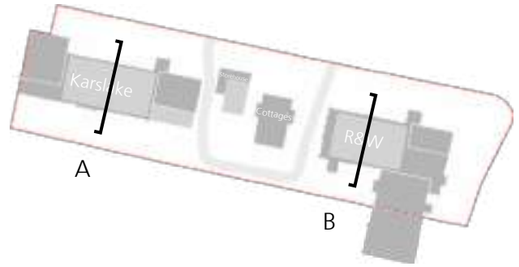


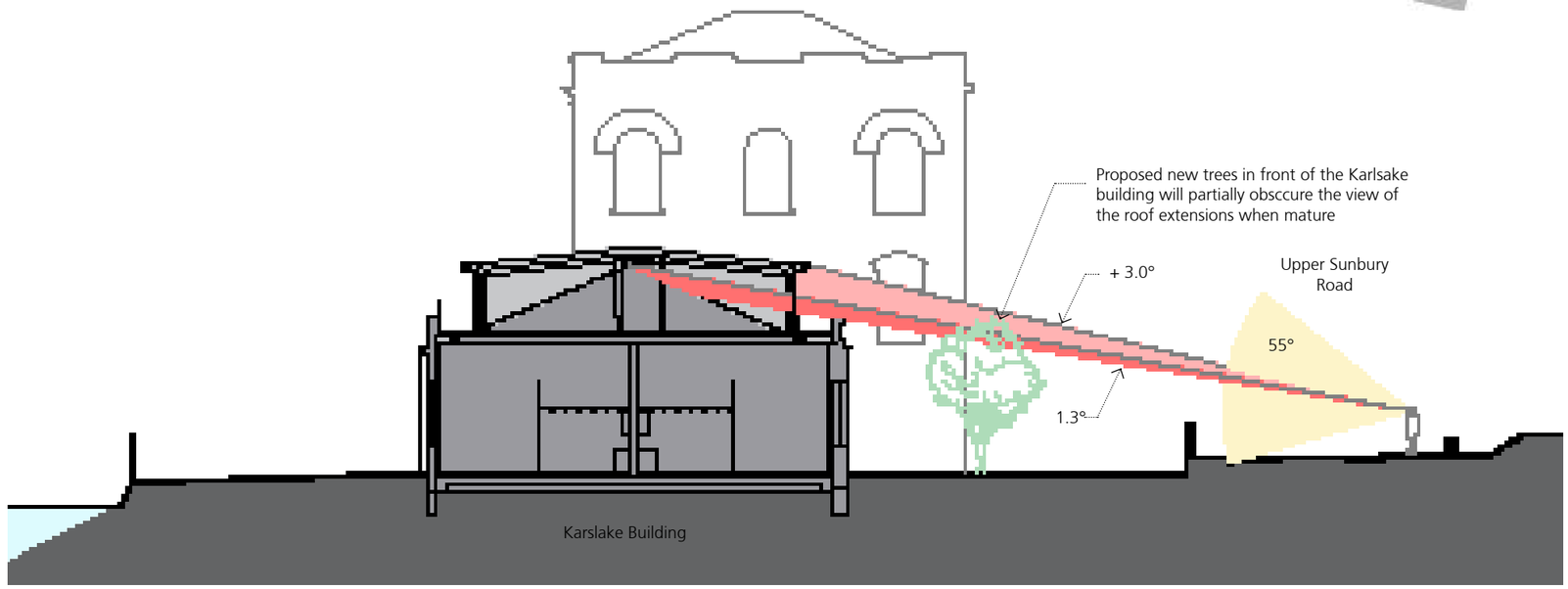
Key

55 degree human vertical field of view

View of existing roof

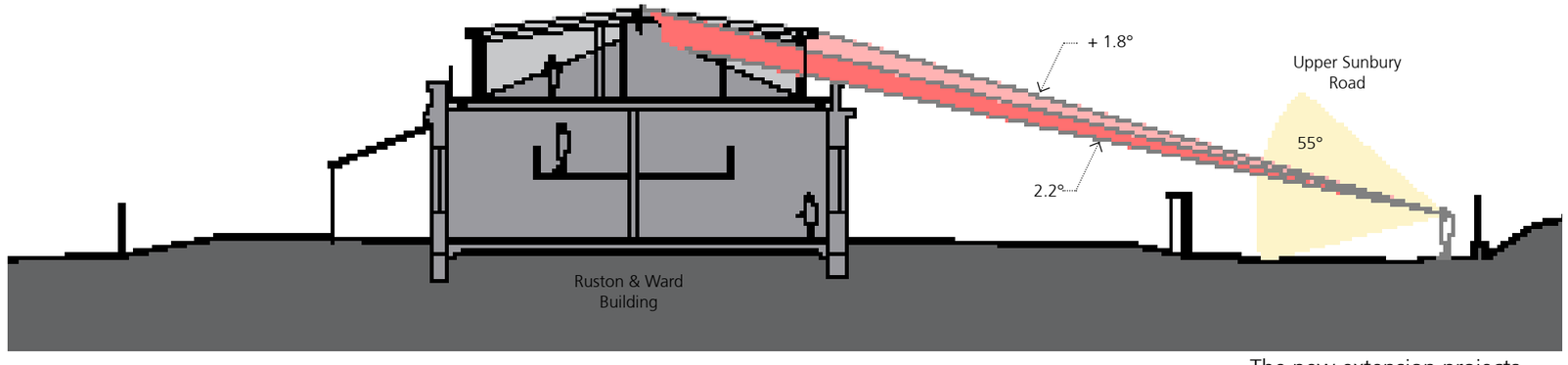
Increased view of proposed roof extension





Section A
Karslake Building, looking east

The new extension projects an additional **3.0°** into the normal **55°** field of vision



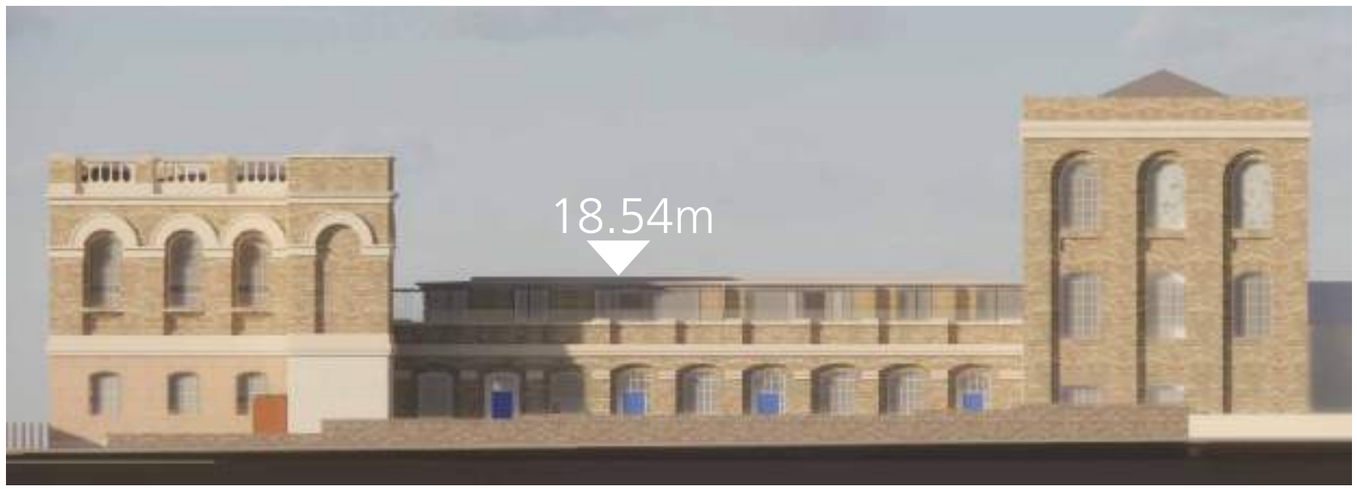
Section B
Ruston & Ward Building, looking east

The new extension projects an additional **1.8°** into the normal **55°** field of vision

Interventions - 1. Roof Extensions

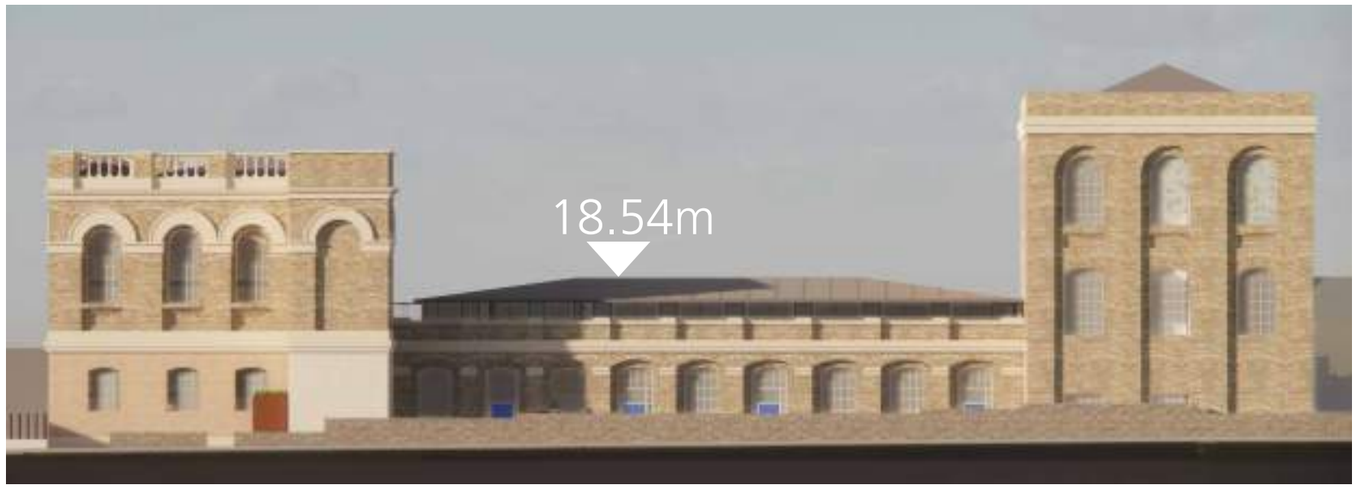
Design development through consultation

Refused Application - Karslake 20/1744/FUL



Design updated - Karslake in May 2022

Previous HE consultation



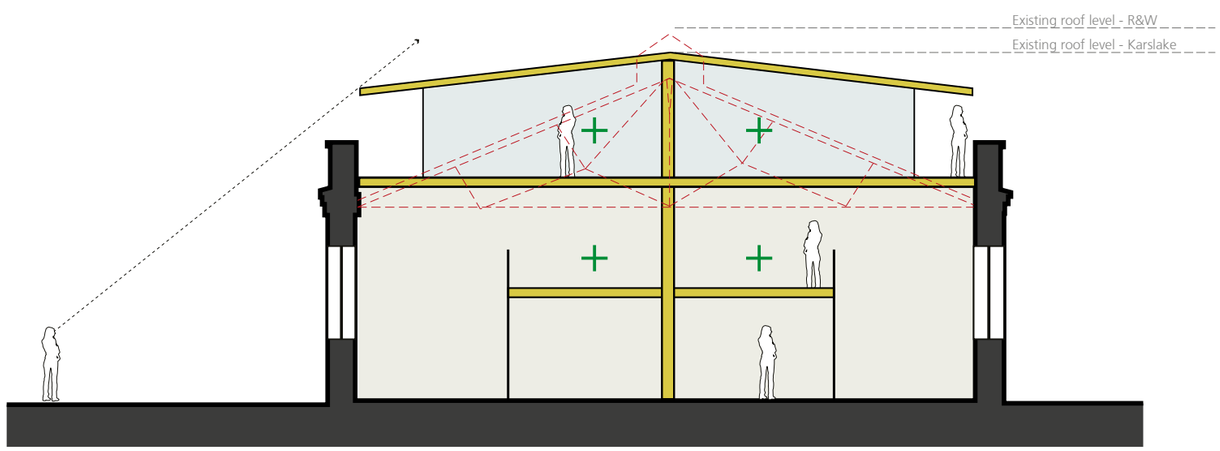
Current design proposal - Karslake

Following input from Heritage Officer

Interventions - 1. Roof Extensions

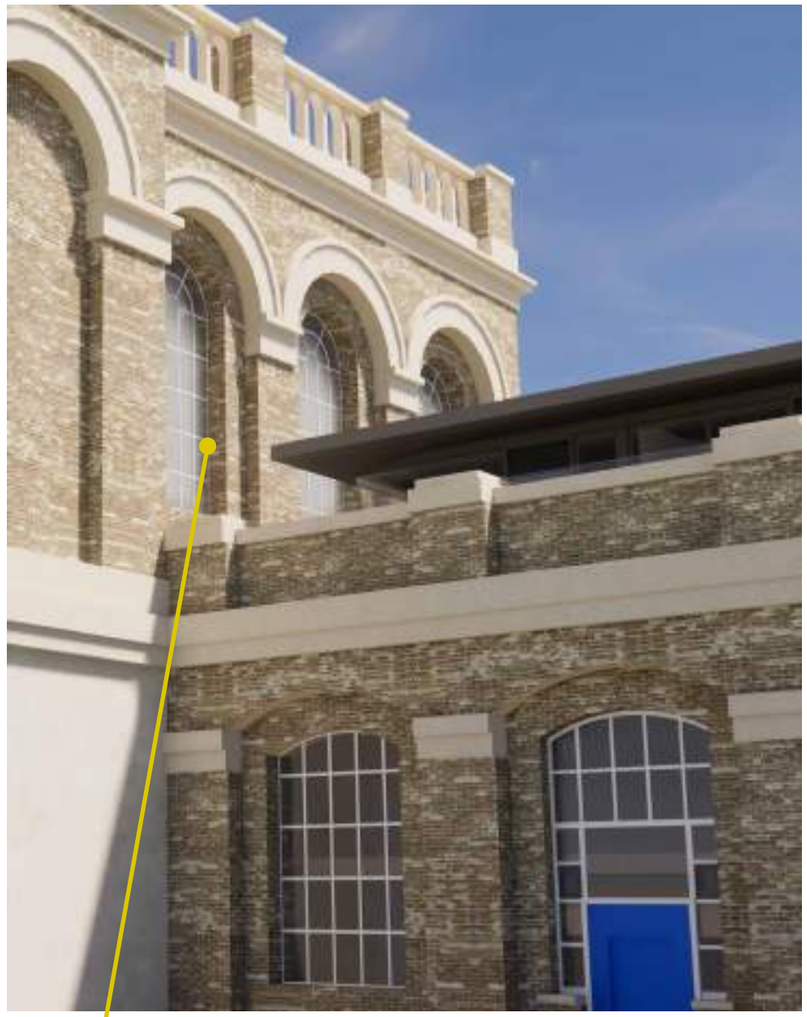
Current proposal

Lower eaves line and deep shadow created by the overhang helps to set the roof extension behind the parapet

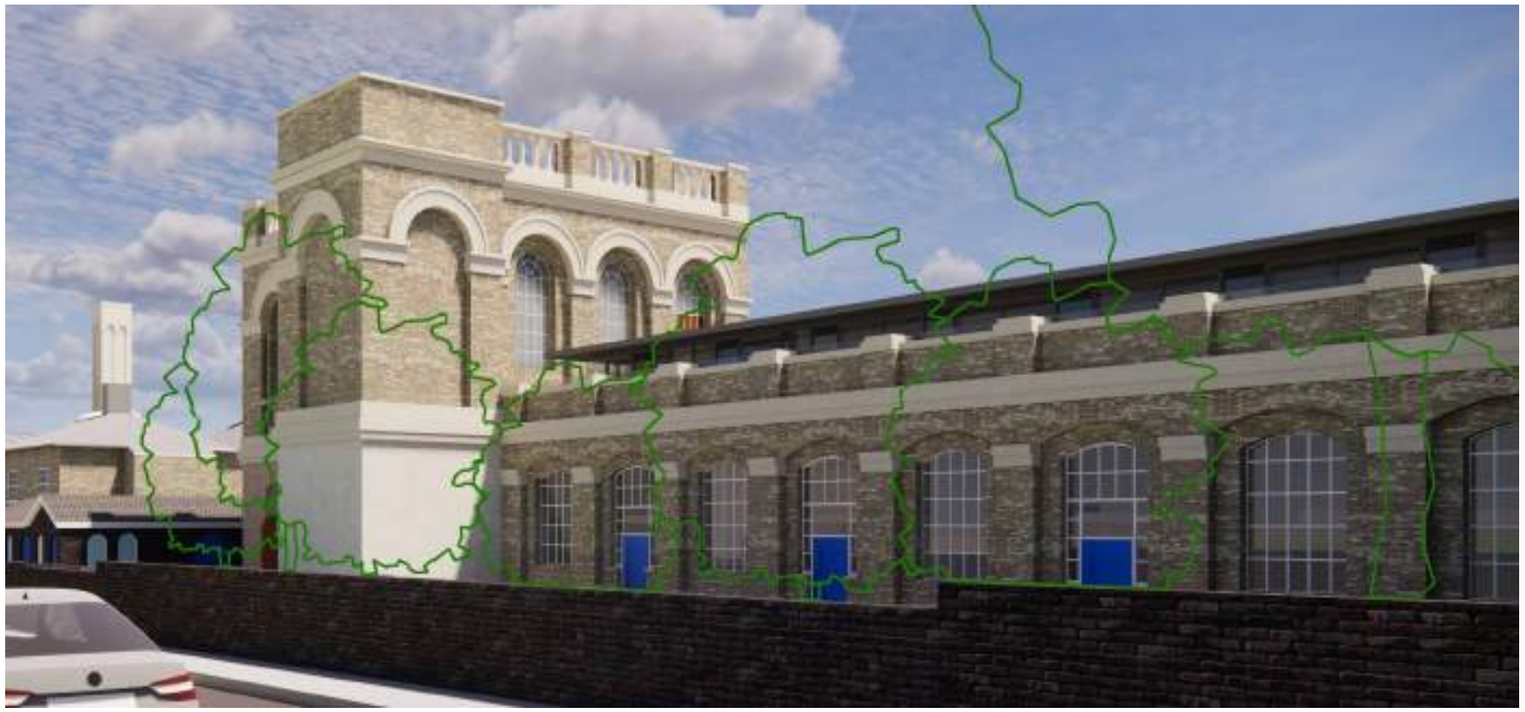


Existing Roof

Careful refinement



The roof has been cut back to create some relief and reveal more of the arched windows and expose them to a similar level as the existing roof.



Proposed

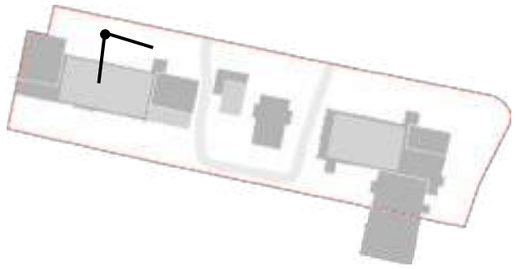
Existing

Sensitive materiality

Enhance setting

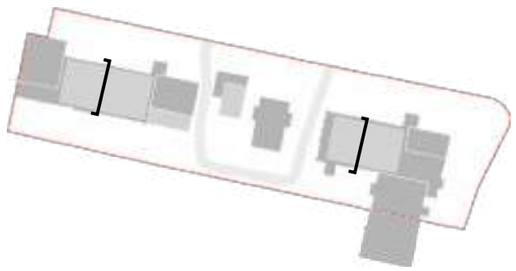
Our approach is to build new elements in a contemporary idiom designed to read as a distinct phase in the building's development, with historic fabric being refurbished in-situ or retained and integrated elsewhere on Site.

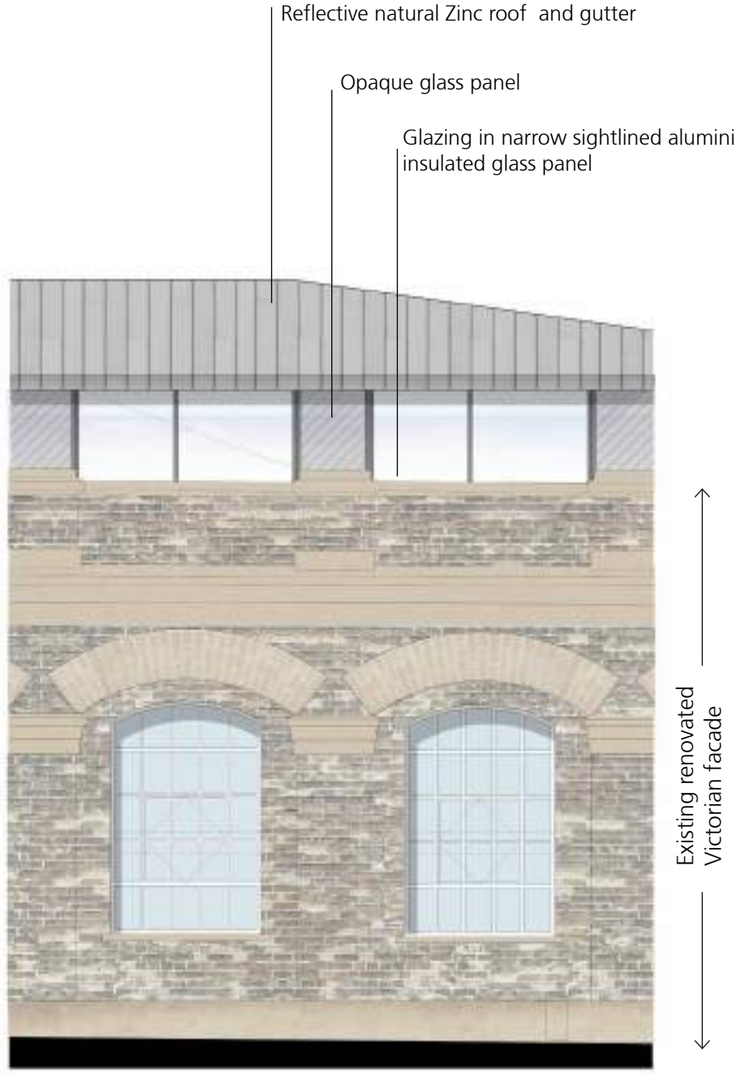
The proposals set conservation grade repair and retention measures as the basis of a sympathetic conversion, with proportionate introduction of new fabric to secure viable uses.



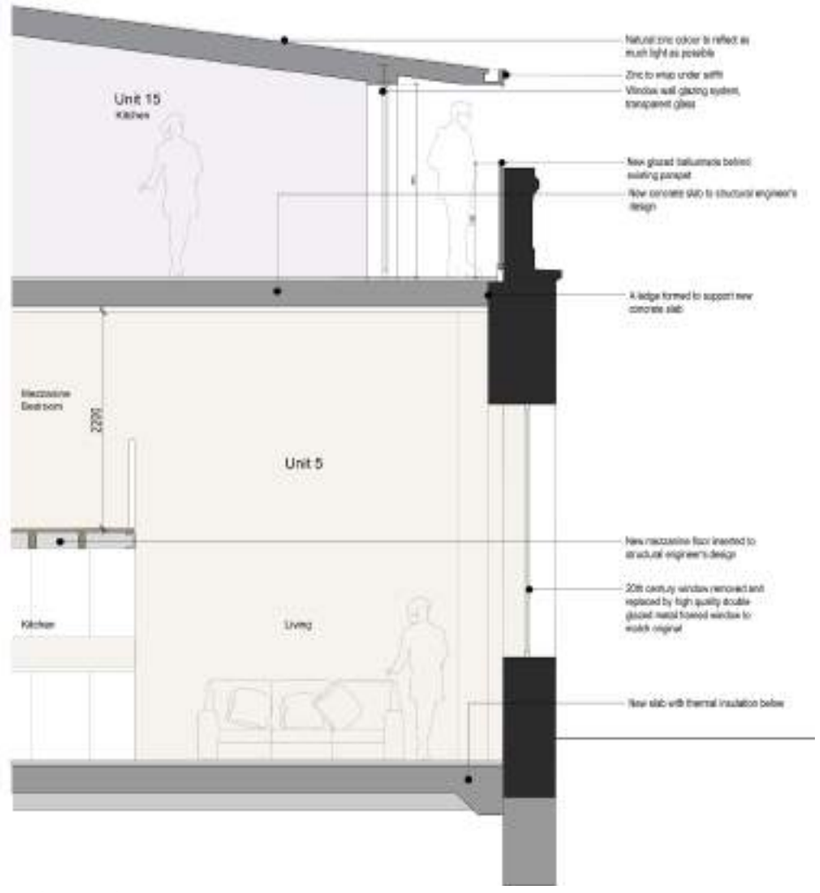
Interventions - 1. Roof Extensions
Detail development

Enlarged section and elevation of the typical single story block with roof extension illustrating the insertion of new roof extension over the existing volume.



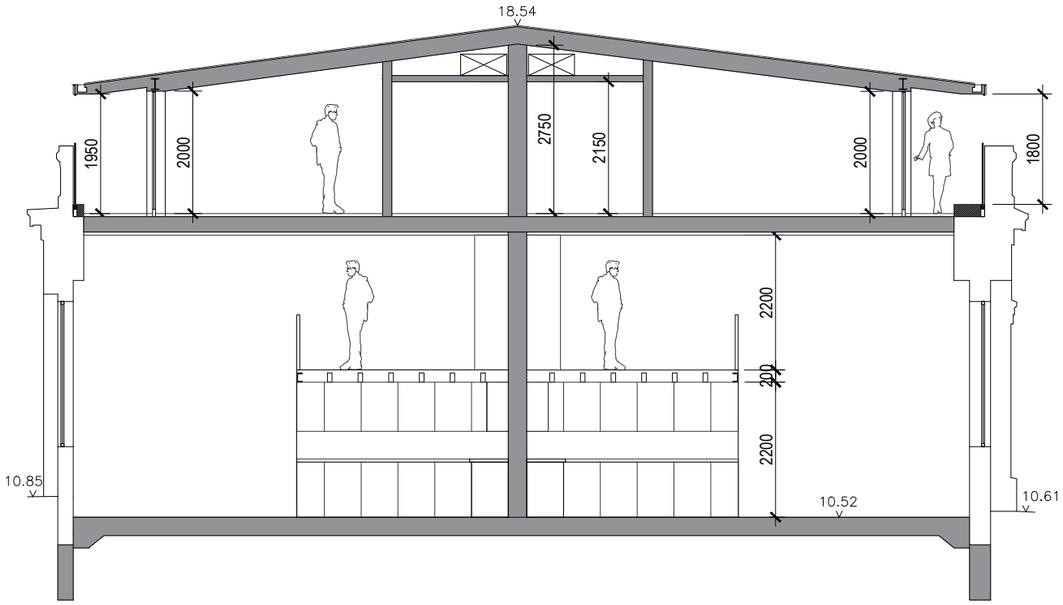


Enlarged elevation
Single story block with roof extension



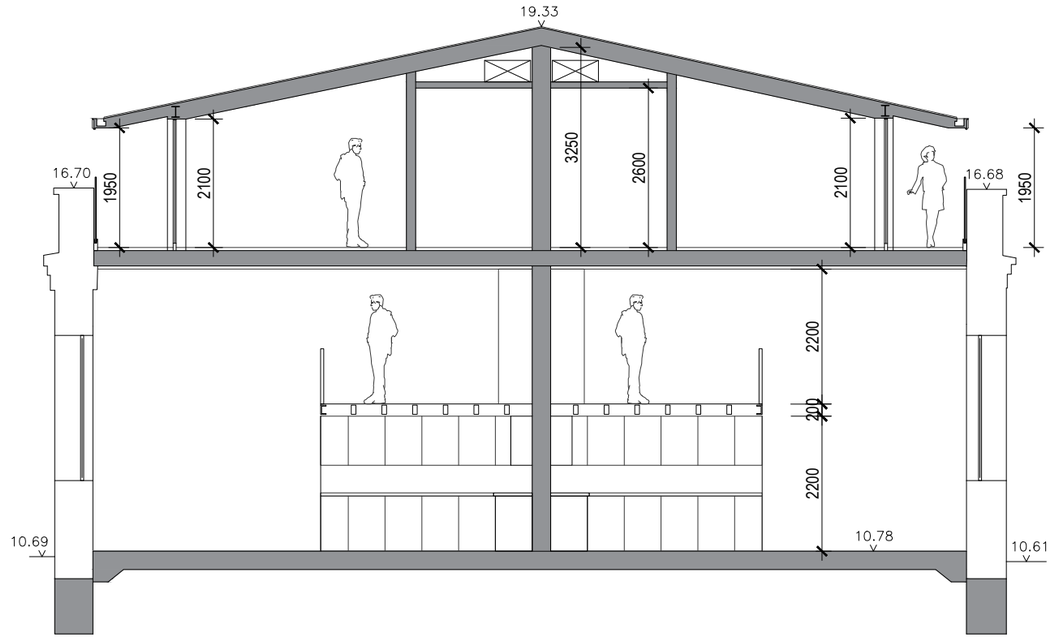
Enlarged section
Single story block with roof extension

Detail sections



KARSLAKE SECTION

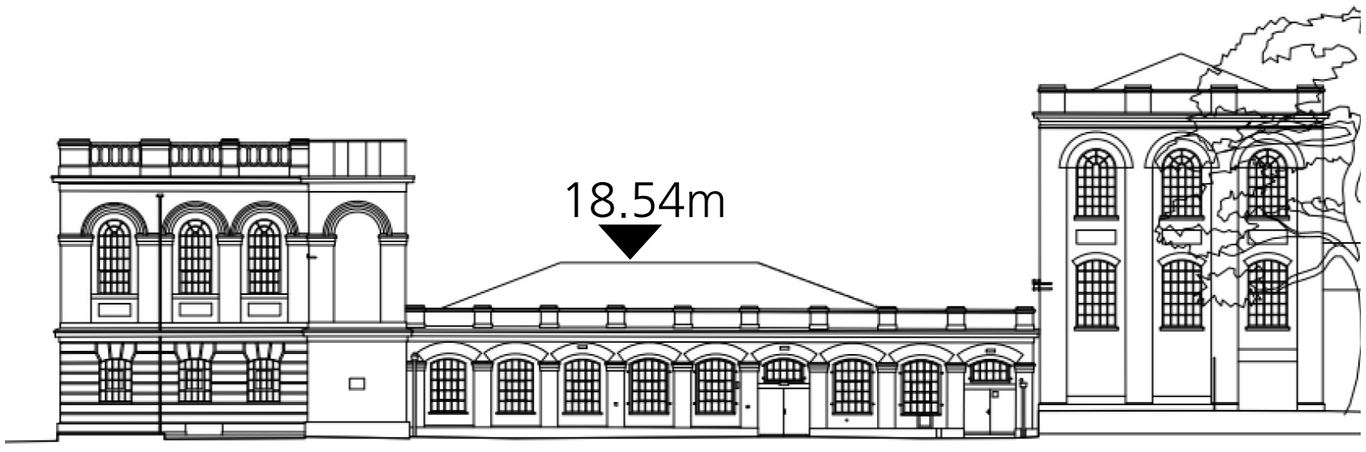
Demolish



R&W SECTION

Existing and Proposed

Proposed Roof Extension

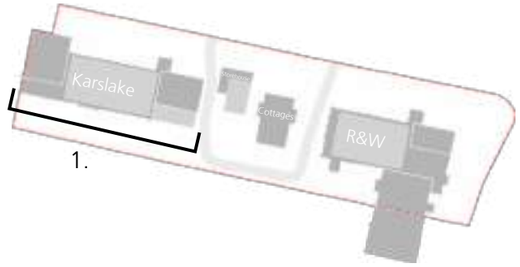


Existing Roof

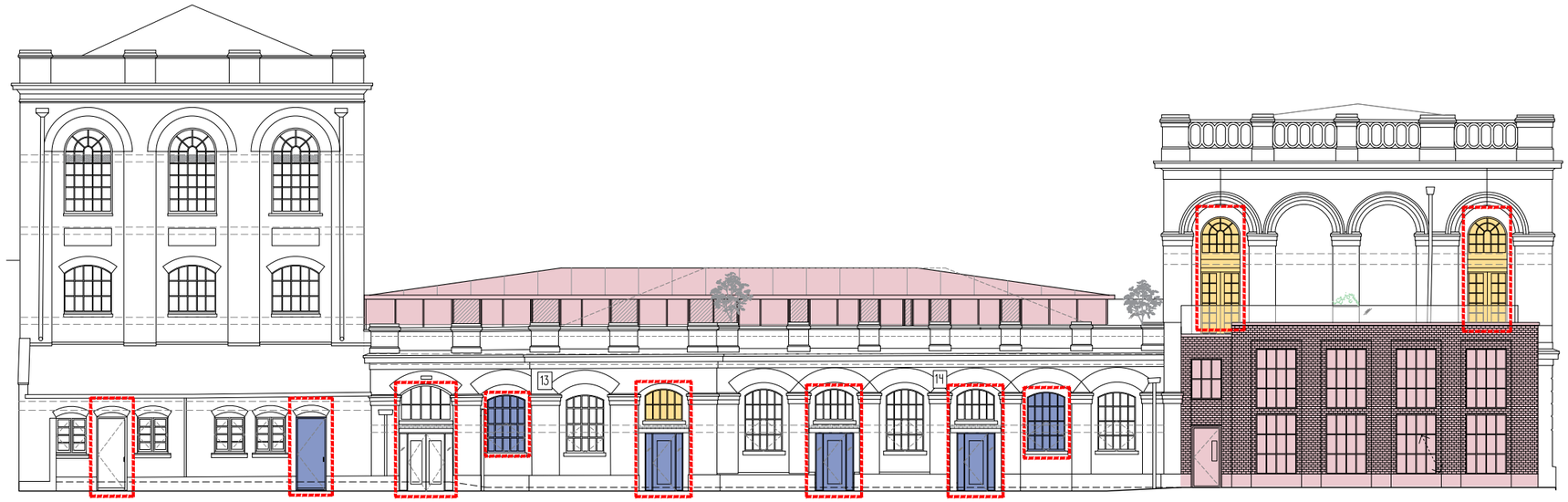
Karslake Existing & Proposed Elevations

Proposed changes

- New opening
- Change existing opening
- New extension (under development)



Proposed



Proposed
Karslake Elevation 1

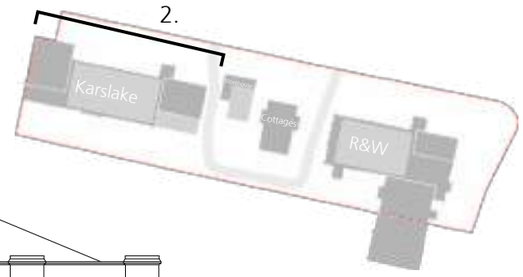
Existing

Existing
Karslake Elevation 1

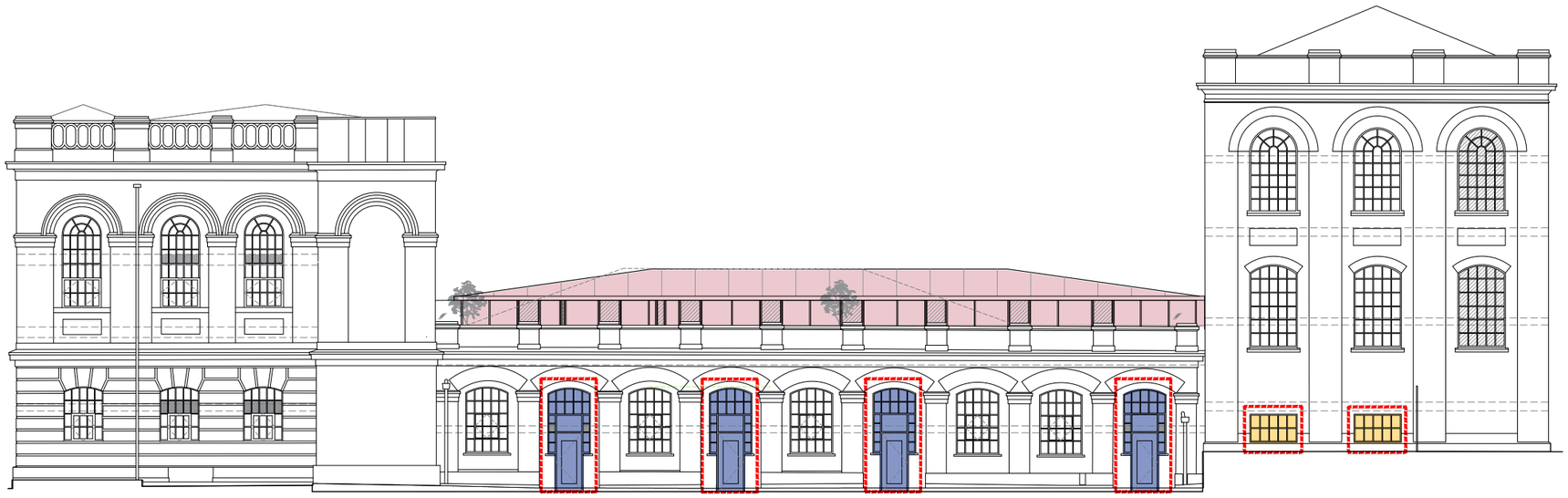
Karslake Existing & Proposed Elevations

Proposed changes

- New opening
- Change existing opening
- New extension (under development)

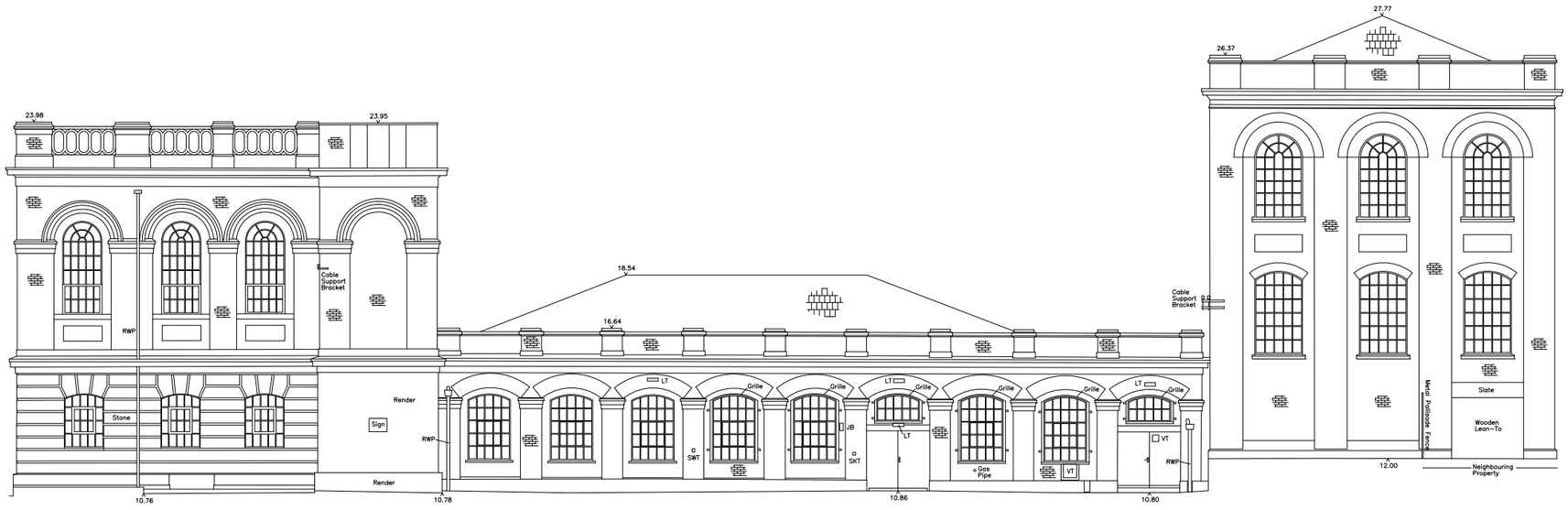


Proposed



Proposed
Karslake Elevation 2

Existing



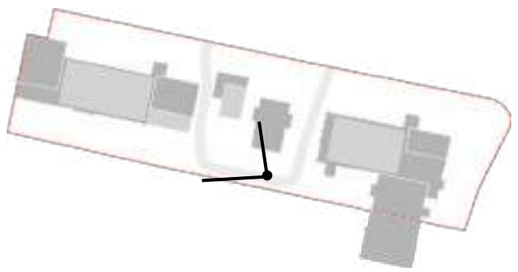
Existing
Karslake Elevation 2

Interventions
02 - Rear Building Extensions

Karslake - original design development

A number of different cladding materials have been considered but matching brick was selected as the preference of the conservation officer.

Recessed aisles matched the existing building.

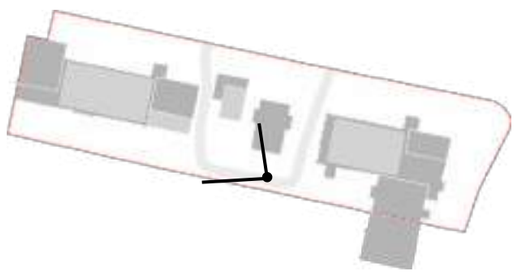


Interventions - 2. Rear Extension

Karslake - current proposal

Amended following input from Heritage Officer and DRP

Feedback from the DRP indicated a preference for simple clean fenestration and matching brick detailing which has been developed as a neutral extension that following the rhythm, materials and colours of the existing building.



Karslake - current proposal

Following input from Design Review Panel the design of the rear extension has been simplified and refined in form to match the rhythm of the arched niches of the existing buildings.

Cornice and coping heights have also been used as datum lines for cill and head heights.

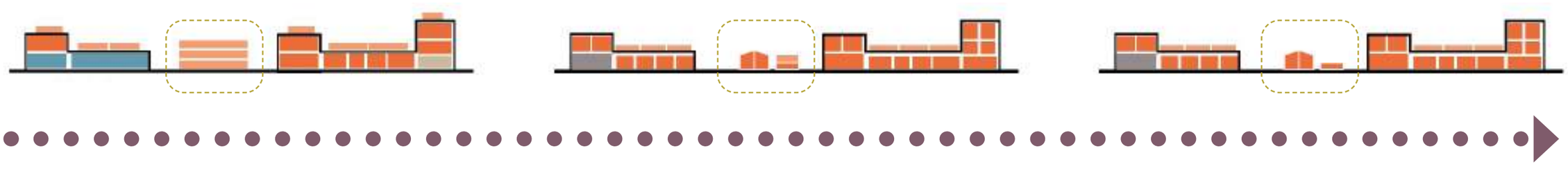
Cottages and Storehouse - design development

We have responded to the comments made by the local planning authority during the design and application process moving from a demolition and new build response to a single storey extension.

Original - New build 3 storey block

Iteration 1 - 2 storey block

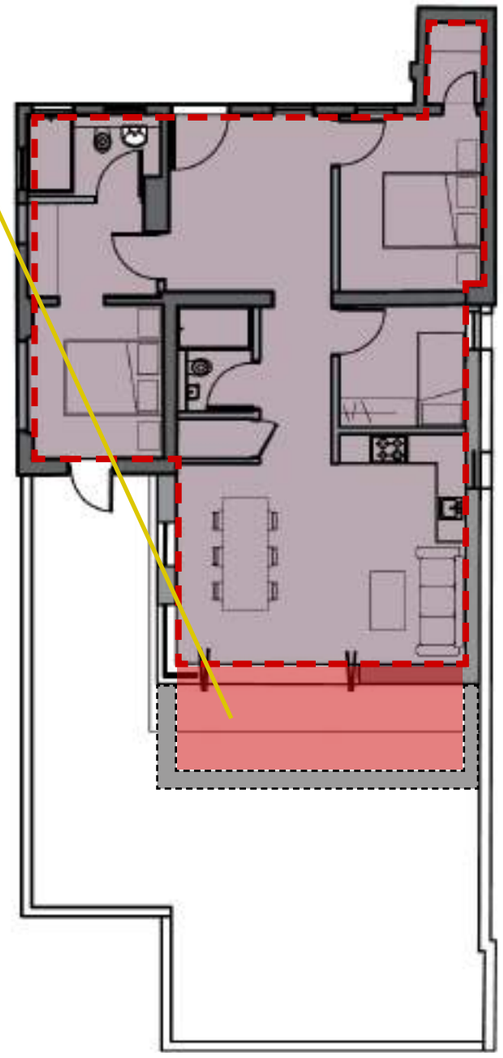
Current proposal - Single storey extension and green roof



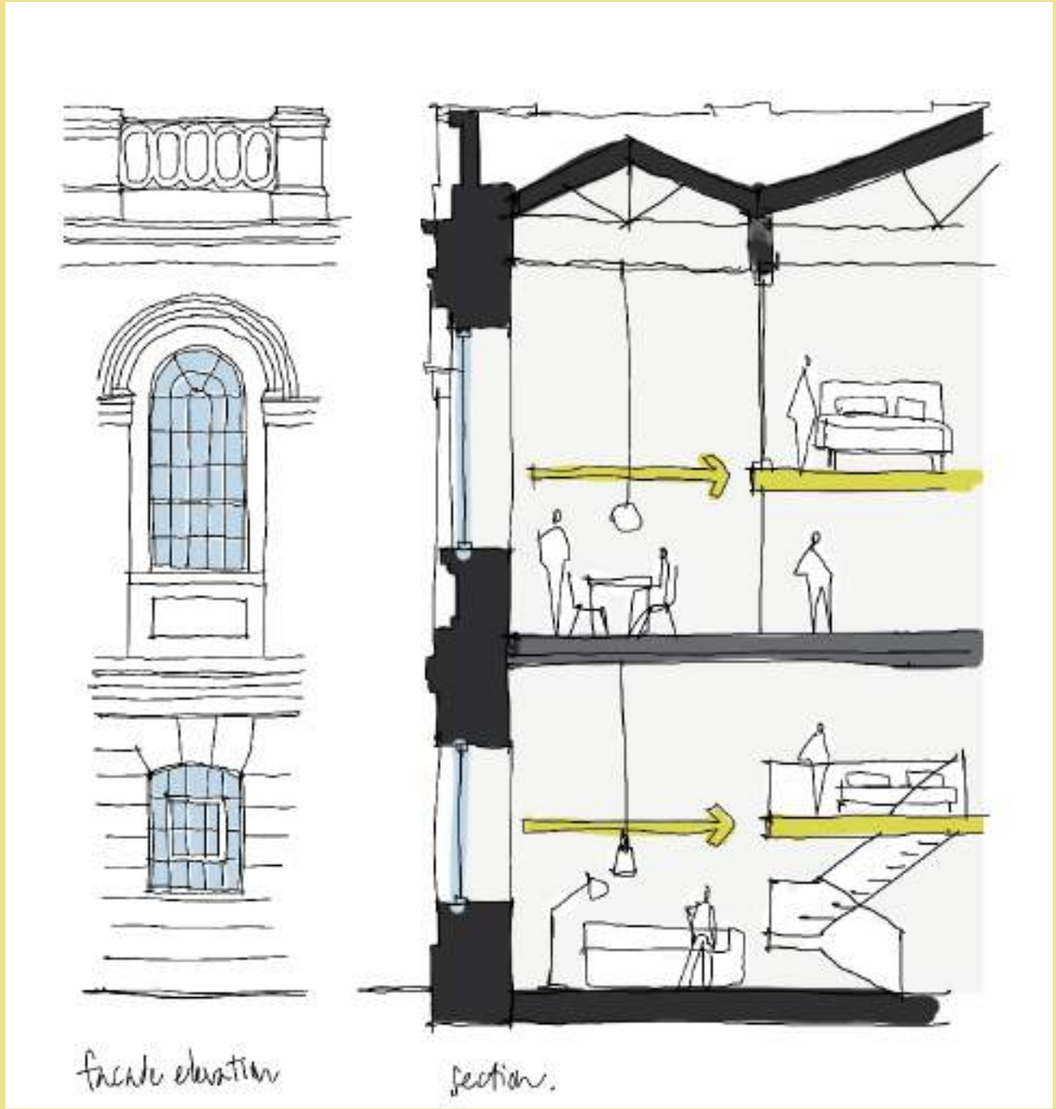
The impact has been considerably reduced over design iterations

Storehouse proposed extension

Following feedback from LPA, Heritage Officer and DRP the Storehouse extension area reduced 18% to 90.53 sq m (GIA).

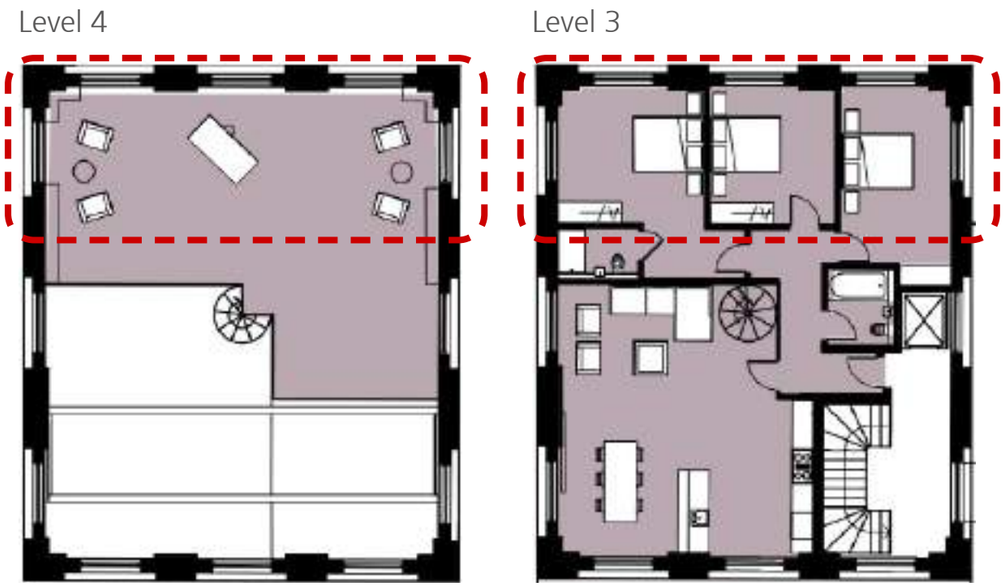


Interventions
3 - Spatial Sub-division



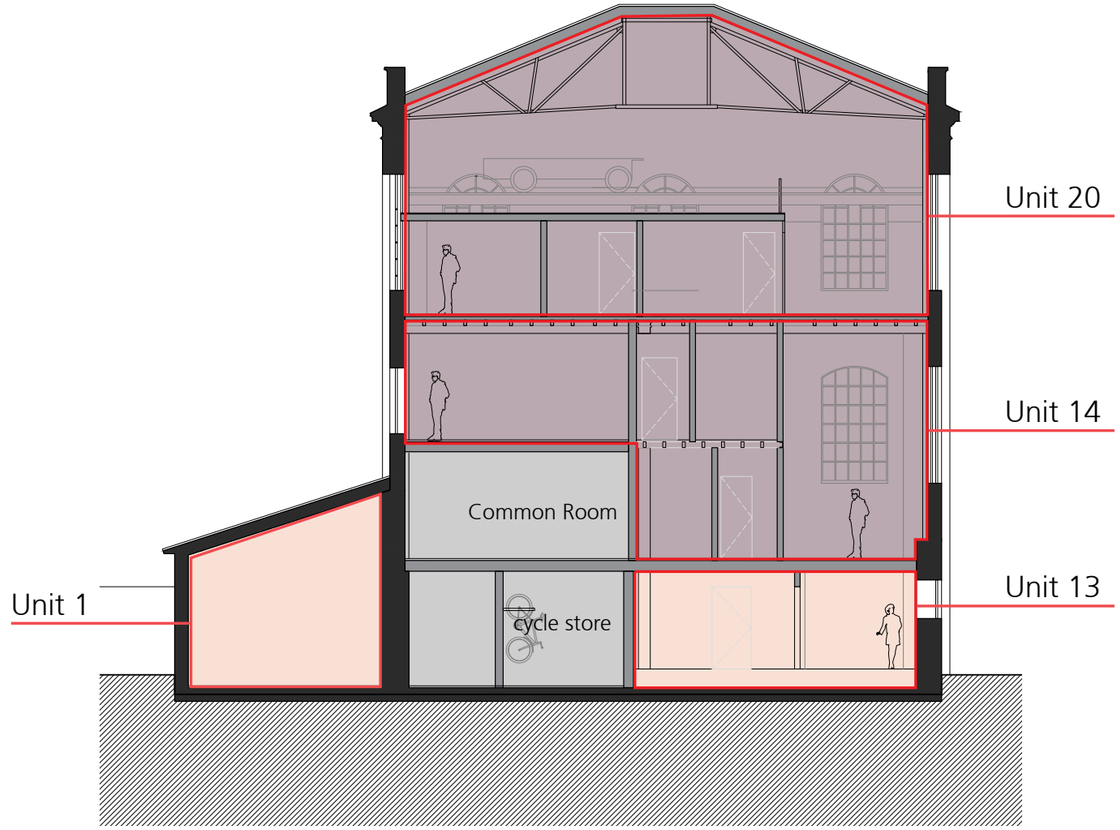
Apartment refinement

Unit 20 - Altered to respect principal windows



Unit 20 - Previous layout

A number of apartments have been reconfigured to further improve the relationship to large windows. As a result all principal windows to Upper Sunbury Road give onto double height volumes.



Section 4

Karslake western pump house

Interventions
04 - Retention of Heritage Fabric

Summary of retained features

The summary tables identify instances of historic fabric, its relative significance and extent of change. The overwhelming majority of fabric will be retained.

Karslake Exterior Features

Item	Description	Heritage Significance	Proposal	Commentary
Figure 1	Brickwork – discolouring and staining	MS	Retain in situ and renovate	
Figure 2	Brickwork - organic growth	MS	Retain in situ and renovate	
Figure 3	Brickwork – minor material failure	MS	Retain in situ and renovate	Undertaking re-pointing areas
Figure 4	Brickwork – exstensive material failure	MS	Retain in situ and renovate	Undertaking substantial restoration works
Figure 5	Brickwork – incorrect material from historic works	LS/MS	Retain in situ and renovate	
Figure 6	Stonework, render, plaster – discolouring and staining	MS	Retain in situ and renovate	
Figure 7	Stonework, render, plaster - organic growth	MS	Retain in situ and renovate	
Figure 8	Stonework – minor material failure	MS	Retain in situ and renovate	Re-finish any dilapidated areas
Figure 9	Render, plaster defected finish	MS	Retain in situ and renovate	Re-finish any cracked render or plaster
Figure 10	Stonework – window cills	MS	Retain in situ and renovate	Repair or replace window cill
Figure 11	Metalwork – defective rainwater goods	MS	Retain in situ and renovate	Replace if unsalvageable with conservation grade replacement
Figure 12	Metalwork – flashing failure	MS	Retain in situ and renovate	Replace if unsalvageable with conservation grade replacement
Figure 13	Metalwork – discolored signs or features	HS	Retain in situ and renovate	Restoration works of any existing features
Figure 14	Metalwork – defunct features	LS	Retain in situ and renovate	Retain elements with heritage significance
Figure 15	Fixtures – external fixtures	LS	Retain in situ and renovate	Retain elements with heritage significance

Key		
High heritage significance	HS	Retain in situ and renovate
Medium heritage significance	MS	Retain and relocate
Low heritage significance	LS	Remove
No significance	No	

Summary of retained features

Karslake Interior Features

Item	Description	Heritage Significance	Proposal	Commentary
Figure 1	Intermediate floor	HS	Retain in situ and renovate	
Figure 2	Intermediate floor	HS	Retain in situ and renovate	Strengthen, acoustic and fire treatment
Figure 3	Metal staircases	MS	Retain and relocate	Relocate within apartment
Figure 4	Door recesses	HS	Retain in situ and renovate	
Figure 5	Intermediate floor - timber and cast iron	HS	Retain in situ and renovate	Acoustic and fire treatment
Figure 6	Intermediate floor - cast iron columns	MS	Retain in situ and renovate	Fire treatment
Figure 7	Beam loft floor	HS	Retain in situ and renovate	Acoustic and fire treatment
Figure 8	Level indicators	HS	Retain and relocate	relocate within apartment
Figure 9	Header tank	No	Remove	
Figure 10	Stencilled 'large condensor tubes'	HS	Retain in situ and renovate	Apartment feature
Figure 11	Stencilled 'small condensor tubes'	HS	Retain in situ and renovate	Apartment feature
Figure 12	Brickwork linear motif detail	HS	Retain in situ and renovate	Apartment feature
Figure 13	Spring beams	HS	Retain in situ and renovate	Apartment feature
Figure 14	Gantry traveller	HS	Retain in situ and renovate	Apartment feature
Figure 15	Cast iron windows	HS	Retain in situ and renovate	
Figure 16	Electrical conduits	LS	Remove	
Figure 17	Interior	LS	Remove	
Figure 18	Wrought iron roof structure	MS	Remove	Refer to design proposal
Figure 19	Intermediate floor	LS	Remove	Alter and remove
Figure 20	Interior	LS	Remove	Refinish overclad
Figure 21	Interior soffit	LS	Remove	
Figure 22	Interior corbels detail	HS	Retain in situ and renovate	Apartment feature
Figure 23	Interior upper windows original	MS	Retain in situ and renovate	

Key

High heritage significance	HS	Retain in situ and renovate
Medium heritage significance	MS	Retain and relocate
Low heritage significance	LS	Remove
No significance	No	

Summary of retained features

Rushton & Ward Interior Features

Item	Description	Heritage Significance	Proposal	Commentary
Figure 1	Glazed floor & wall tiles	LS/MS	Retain in situ and relocate	Retain part in situ and part relocated
Figure 2	Centrifugal pumps	LS/MS	Retain and relocate	Relocate on site
Figure 3	Centrifugal pumps	LS/MS	Retain and relocate	Relocate on site
Figure 4	Control cabinet	LS/MS	Retain and relocate	Relocate on site in work space
Figure 5	Control cabinet	LS/MS	Retain and relocate	Relocate on site
Figure 6	Control cabinet	LS/MS	Retain and relocate	Relocate on site in work space
Figure 7	Cast iron radiator	LS	Remove	
Figure 8	Centrifugal pumps	LS/MS	Retain and relocate	Relocate on site as external feature
Figure 9	Centrifugal pumps	LS/MS	Retain and relocate	Relocate on site as external feature
Figure 10	Centrifugal pumps	LS/MS	Retain and relocate	Relocate on site
Figure 11	Control cabinet	LS/MS	Retain and relocate	Relocate on site in work space
Figure 12	Lifting beam	LS	Remove	
Figure 13	Steps and handrails	LS	Remove	Remove for safety
Figure 14	Ground floor cast iron beam	LS	Retain and relocate	
Figure 15	Pumping equipment	LS/MS	Retain and relocate	Relocate on site as external feature
Figure 16	DC motor	LS/MS	Retain and relocate	Relocate on site as external feature
Figure 17	DC Motor	LS/MS	Retain and relocate	Relocate on site
Figure 18	Pumping equipment	LS/MS	Retain and relocate	Relocate on site as external feature
Figure 19	Pumping equipment	LS/MS	Retain and relocate	Relocate on site as external feature
Figure 20	Pumping equipment bed plate	LS/MS	Retain and relocate	Relocate on site as external feature
Figure 21	Pumping equipment brass plate	LS/MS	Retain and relocate	Relocate on site as external feature
Figure 22	Valve control standard	LS/MS	Retain and relocate	Relocate on site as external feature
Figure 23	Marland cover plate	LS/MS	Retain and relocate	Relocate on site
Figure 24	Primary lifting beams	HS	Retain in situ and renovate	
Figure 25	Primary wrought iron roof structure	MS	Retain in situ and renovate	
Figure 26	Primary roof radial ties	MS	Retain in situ and renovate	
Figure 27	Wall tiles	MS	Retain in situ and renovate	
Figure 28	Steps and handrails	LS	Remove	Replace or upgrade to comply with building regulations
Figure 29	Electrical control panel	LS/MS	Retain and relocate	Relocate on site in work space
Figure 30	Cast iron radiator	LS	Remove	
Figure 31	Door and wall tiles	MS	Retain in situ and renovate	Retain tiles and refurbish door
Figure 32	Stair and brick enclosure	No	Remove	
Figure 33	Gantry	MS/HS	Retain in situ and renovate	
Figure 34	Primary wrought iron roof structure	MS	Retain in situ and renovate	Retain in situ and refurbish
Figure 35	Door and wall tiles	MS	Retain in situ and renovate	Retained and refurbished
Figure 36	Doors	MS	Retain in situ and renovate	Refurbished in line with fire requirements
Figure 37	Interior	No/LS	Retain in situ and renovate	Refurbished and subdivided into units
Figure 38	Interior	No/LS	Retain in situ and renovate	Refurbished and subdivided into units
Figure 39	Primary wrought iron roof structure	MS	Remove	Refer to design proposal
Figure 40	Interior	No/LS	Retain in situ and renovate	Refurbished and subdivided into units

Summary of retained features

Rushton & Ward Exterior Heritage Features

Item	Description	Heritage Significance	Proposal	Commentary
Figure 1	Brickwork – discolouring and staining	MS	Retain in situ and renovate	
Figure 2	Brickwork - organic growth	MS	Retain in situ and renovate	
Figure 3	Brickwork – minor material failure	MS	Retain in situ and renovate	Undertaking re-pointing areas
Figure 4	Brickwork – exstensive material failure	MS	Retain in situ and renovate	Substantial restoration works required
Figure 5	Brickwork – incorrect material from historic works	LS/MS	Retain in situ and renovate	
Figure 6	Stonework, render, plaster – discolouring and staining	MS	Retain in situ and renovate	
Figure 7	Stonework, render, plaster - organic growth	MS	Retain in situ and renovate	
Figure 8	Stonework – minor material failure	MS	Retain in situ and renovate	Re-finish any dilapidated areas
Figure 9	Render, plaster defected finish	MS	Retain in situ and renovate	Re-finish any cracked render or plaster
Figure 10	Stonework – window cills	LS/MS	Retain in situ and renovate	
Figure 11	Metalwork – defective rainwater goods	MS	Retain in situ and renovate	Replace if unsalvageable with conservation grade replacement
Figure 12	Metalwork – flashing failure	MS	Retain in situ and renovate	Replace if unsalvageable with conservation grade replacement
Figure 13	Metalwork – discolored signs or features	MS	Retain in situ and renovate	Restoration works of any existing features
Figure 14	Metalwork – defunct features	MS	Retain in situ and renovate	Retain elements with heritage significance
Figure 15	Fixtures – external fixtures	LS/MS	Retain in situ and renovate	Retain elements with heritage significance

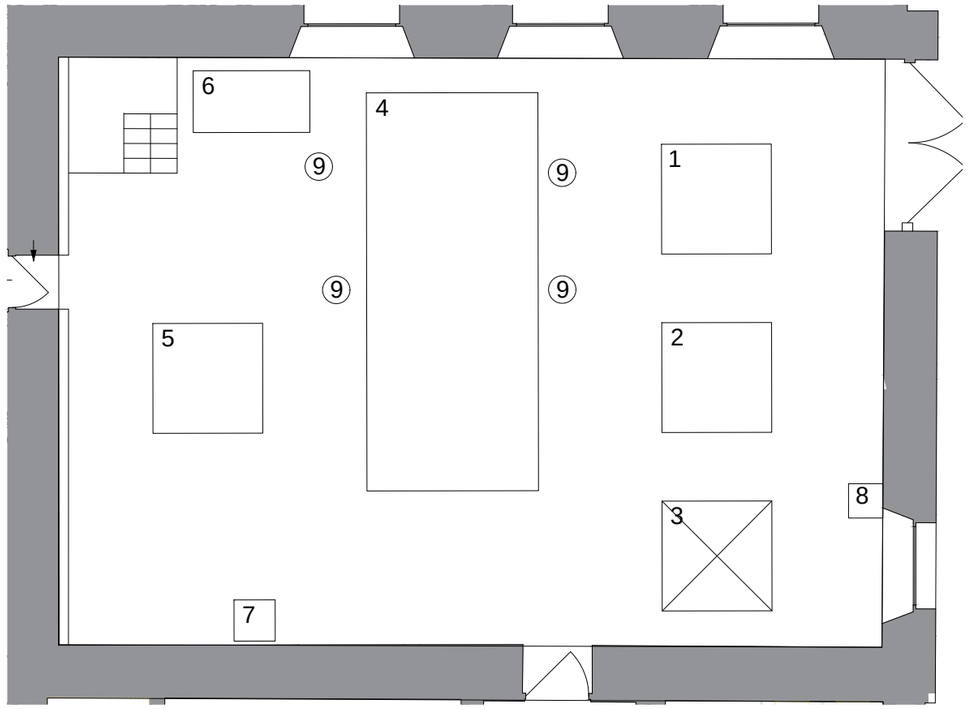
Site Heritage Features

Item	Description	Heritage Significance	Proposal	Commentary
Figure 1	Fragment of railway for coal supply	HS	Retain in situ and renovate	
Figure 2	Historic stone setts	HS	Retain in situ and renovate	
Figure 3	Brick piers	HS	Retain and relocate	Existing pillars to be relocated
Figure 4	Painted cast iron piers	MS/HS	Retain and relocate	Existing pillars to be relocated
Figure 5	Railings	HS	Retain in situ and renovate	

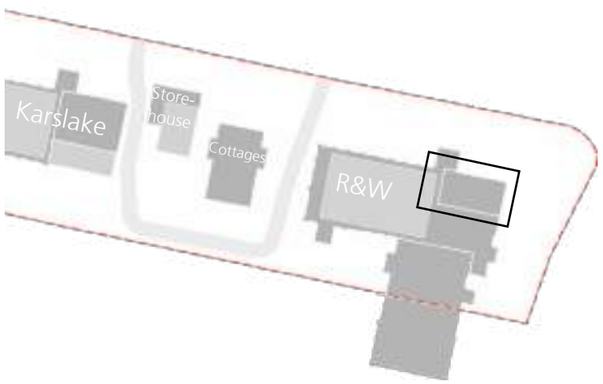
Key		
High heritage significance	HS	Retain in situ and renovate
Medium heritage significance	MS	Retain and relocate
Low heritage significance	LS	Remove
No significance	No	

Interventions
05 - Enhancing Appreciation of Heritage Engineering Features

Existing Pumphouse Machinery



Ruston & Ward Pumphouse existing electrical pumping equipment. Approximate locations shown.



Item 1

Replacment W H Allen DC motor
Date: Undated
Size: 1.6m x 1.6m
Report comment: Low to medium significance

Item 2

Harland DC motor
Date: 1932
Size: 1.6m x 1.6m
Report comment: Low to medium significance

Item 3

Harland DC Motor
Date: 1932
Size: 1.6m x 1.6m x 3 (Recessed)
Report comment: Low to medium significance

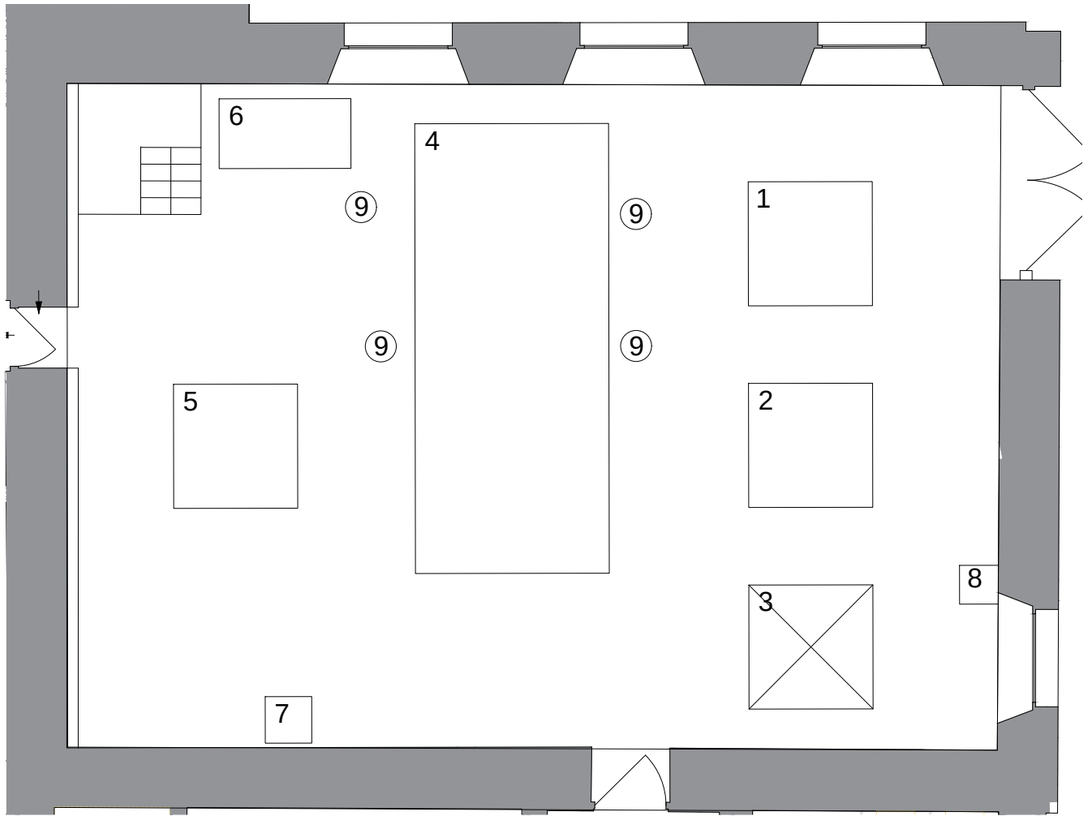
Item 4

Harland twin impellar electric centifugal pump set
Date: 1932
Size: 5.8m x 2.5m
Report comment: Low to medium significance

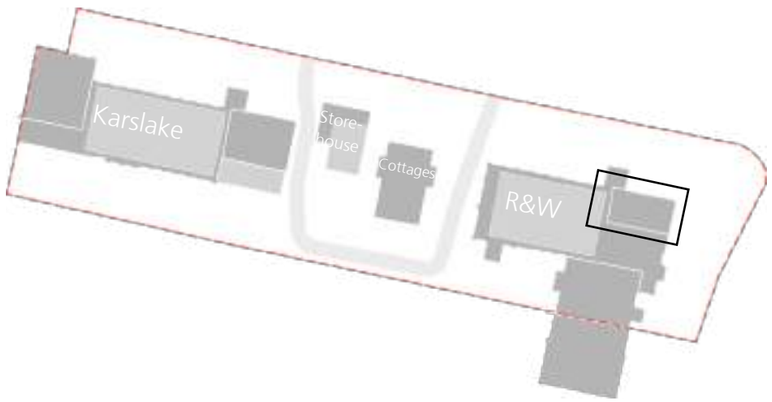
Item 5

Harland DC Motor
Date: 1932
Size: 1.6m x 1.6m
Report comment: Low to medium significance

Existing Pumphouse Machinery



Ruston & Ward Level 0 Pumphouse existing electrical pumping equipment. Approximate locations shown.



Item 6

Harland control cabinet for electric centrifugal pump
Date: 1932
Size: 0.9m x 1.7m Doubel leaf.
Report comment: Low to medium significance

Item 7

Harland control cabinet for electric centrifugal pump
Date: 1932
Size: 0.6m x 0.6m Single Leaf
Report comment: Low to medium significance

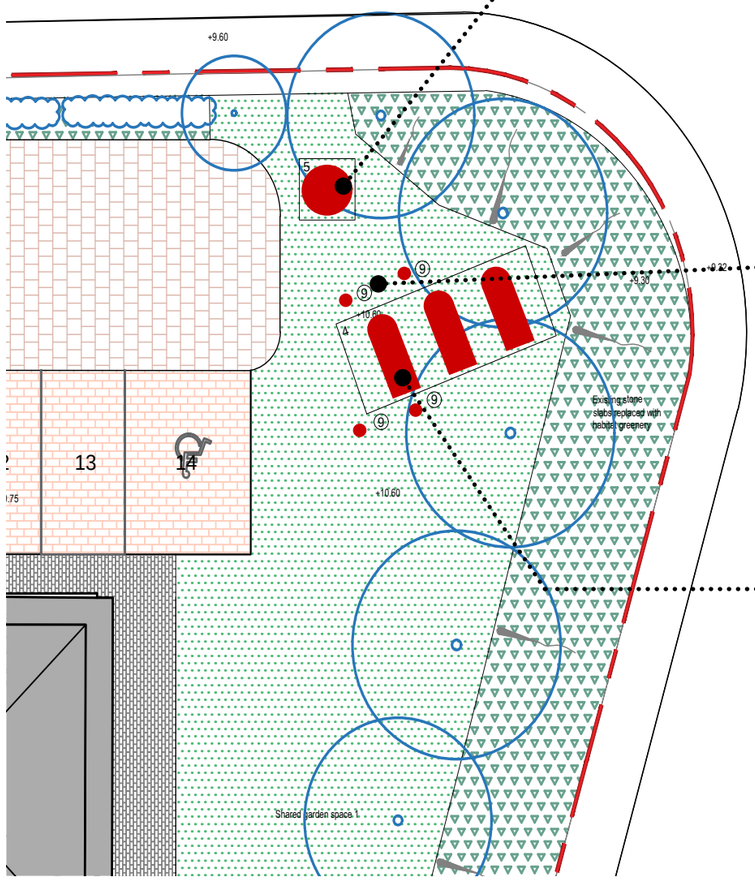
Item 8

Harland control cabinet for electric centrifugal pump
Date: 1932
Size: 0.5m x 0.5m Single Leaf
Report comment: Low to medium significance

Item 9

Valve Control standard for centrifugal pump
Date: 1932
Size: 0.4 d
Report comment: Low to medium significance

Relocation of Pumphouse Machinery

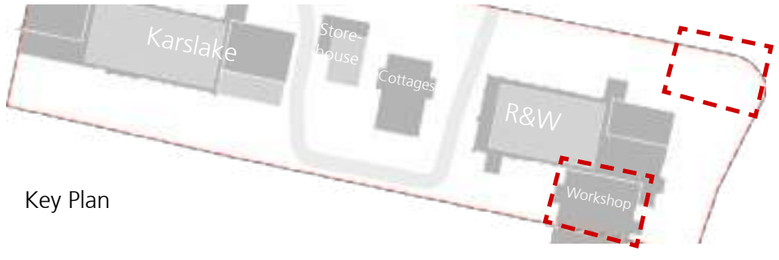


Item 5
Harland DC motor
Low to medium significance

Item 9
Valve control standard for twin impellar electric centrifugal pump set
Low to medium significance

Item 4
Harland twin impellar electric centifugal pump set
Low to medium significance

Centrifugal Pump, DC Motor and Valve Control used to create a unique landscape feature in the most prominent location on the corner of the site Upper and Lower Sunbury Road



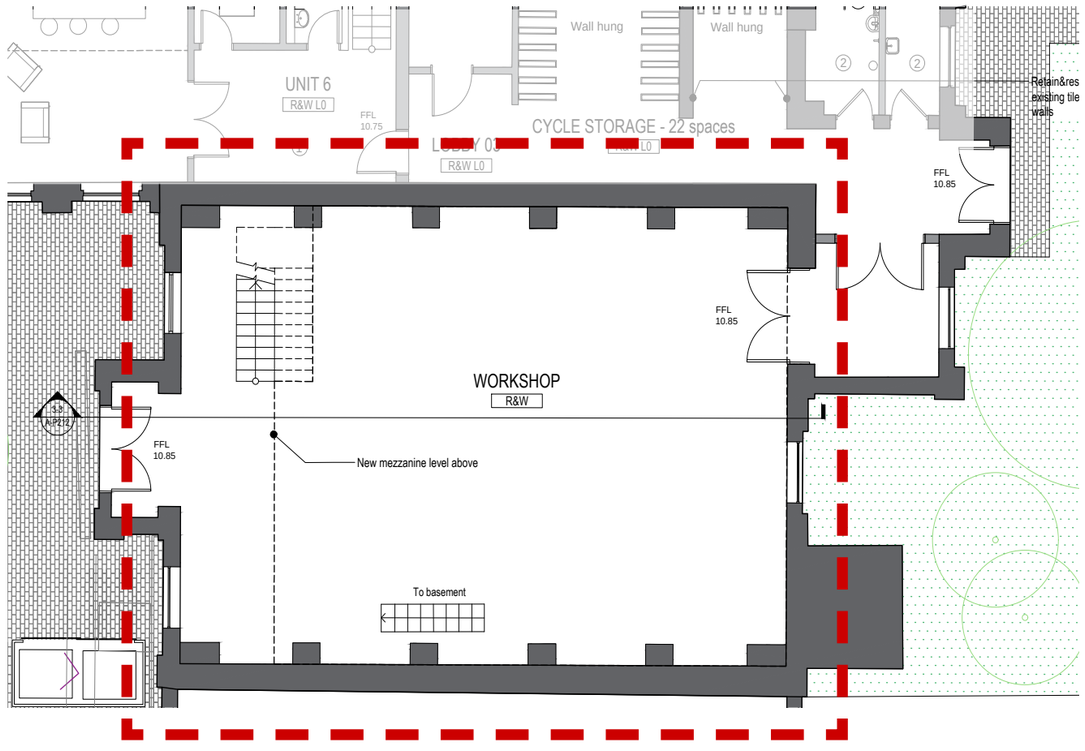
Key Plan

3No. Harland control cabinets to be relocated to the proposed coworking business space to help create a unique and authentic character to reimagined workshop space

Item 6
Harland control cabinet for electric centrifugal pump
Low to medium significance

Item 7
Harland double leaf control cabinet for electric centrifugal pump
Low to medium significance

Item 8
Harland control cabinet for electric centrifugal pump
Low to medium significance



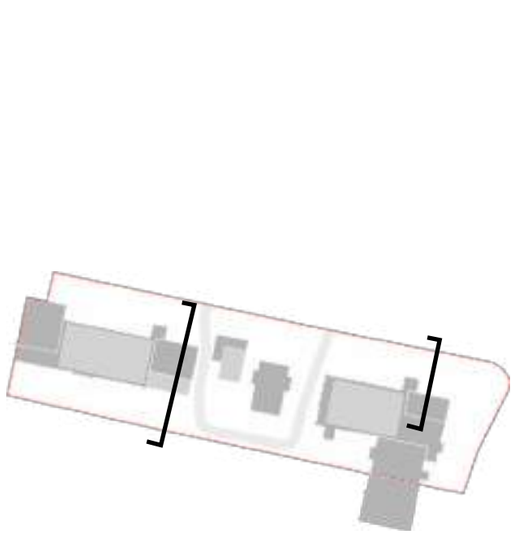
Pumphouse Machinery integration within landscape

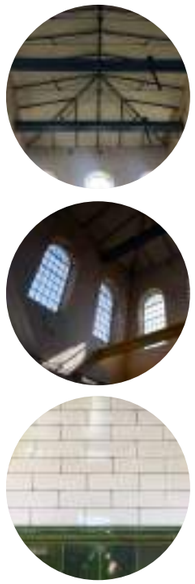
Proposed view, Artist rendering

Benefits

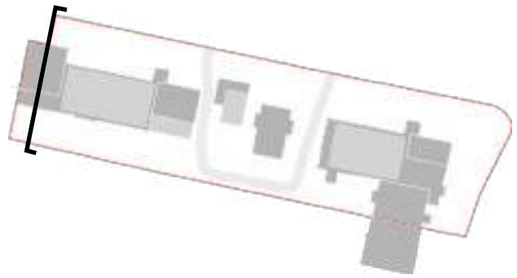
Karslake apartments optimise building volumes

The proposed development will secure viable, long term mixed uses of the buildings. The proposed residential and commercial conversion ensures their ongoing maintenance and management.





Apartments enjoy space and industrial character



Hertiage features retained:
roof trusses & lifting crane

Unit 21, Upper penthouse
flat, 3+ bedrooms

Hertiage features retained:
cast iron beams & columns

Unit 20 (1-bed flat)

Upper Sunbury Rd

Garden of residential
neighbour

Unit 14 (2-bed gallery flat)

Unit 13 (1-bed flat)

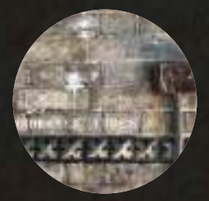
Karslake cycle storage

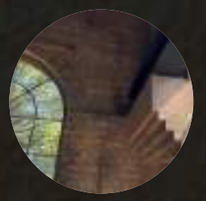
plnat / storage

Unit 1 (1-bed flat)

Shared surface paving

Thames Water reservoirs





Benefits - 1. Life & Vitality

Apartments enjoy space and industrial character

The top level of the western Karslake Pump House retains many historic architectural features still existing in good condition to be exposed in the new flat.

A huge steel gantry crane is left in place crossing over the lofty, open kitchen and living space. Original cast-iron windows run around all four facades, letting great amounts of natural light inside and providing views out across Hampton all the way to the Thames.

Above the bedrooms, a mezzanine library level tucks in just below the exposed roof structure of steel trusses.

Retention and Restoration of Industrial Heritage Details

While appropriately managed as vacant structures, the buildings require urgent repair and renovation to safeguard their architectural and historic interest.


Decorative stair treads


Large steel beams & composite wrought iron trusses


Intricate wrought iron truss work holds up the timber and slate roofs


Ornamental cast iron railing surrounds part of the site


Interior of the western pump house of Karslake building


Original window opening mechanism


The Beam's second storey with cast-iron round-headed windows


The royal blue timber doors add highlight the entrances and provide a contrast with the stonework


Tuscan order steel columns hold up the second floor's large steel beams in The Beam, Karslake


Large steel gantry crane at the top of the western pump house


Western pump house in Karslake retains the most original features


Western pump house in Karslake retains the most original features


Rail tracks are still visible within some on the cobblestone paving


White and green Victorian glazed ceramic tiles can be found in good condition - to be retained and cleaned


Existing cobblestones within the landscape - to be retained as part of the landscape proposal

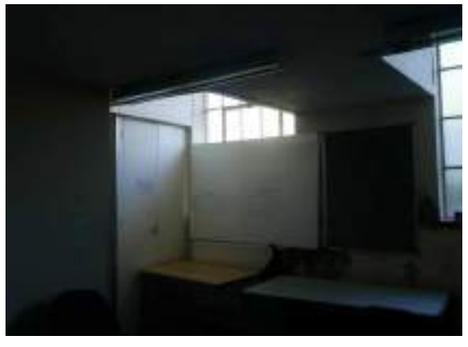
Dog-tooth detailing set within the walls

Benefits - 2. Safeguarding Heritage

Removing poor quality accretions

Significant investment will be required to restore & bring the Hampton Waterworks buildings fully back into use.

Poor modern additions
A number of poor quality twentieth century additions have been made throughout the buildings. The proposal looks to strip these intrusions away and restore the buildings.

Basic industrial vestiges
The building interiors are basic with some attractice historic details to be uncovered and expressed.

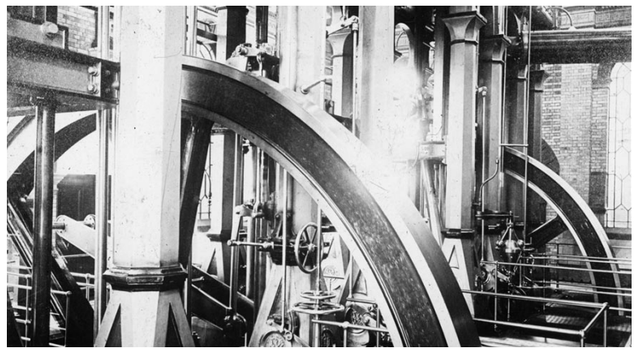


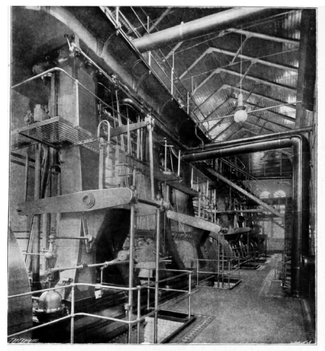

Deterioration of historical fabric
The buildings are no longer occupied, and some areas have significant internal deterioration - this will continue to worsen the longer they remain empty.




Interpretation Boards and Digital Access

Public engagement measures could range from on-Site interpretation boards, explorable, shareable virtual information delivered through QR codes and options for partnership with local interest groups. These measures will deliver a range of ‘access’ options to future occupants and the public, vastly enhancing present opportunities to appreciate and understand the Site’s significance as an important heritage asset.

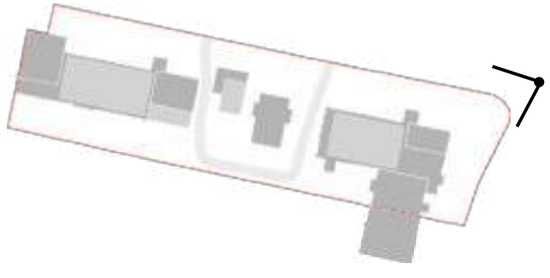




Benefits - 4. Gateway to Hampton

An appropriate arrival to Hampton

Proposed view, Artist rendering



Restoring facade, glazing and upgrading landscaping with integrated historical artefacts creates a handsome prospect to the intersection of Upper and Lower Sunbury roads,

The pedestrian entrance welcomes people into the Workshop office space. The new extensions are barely visible in the background.

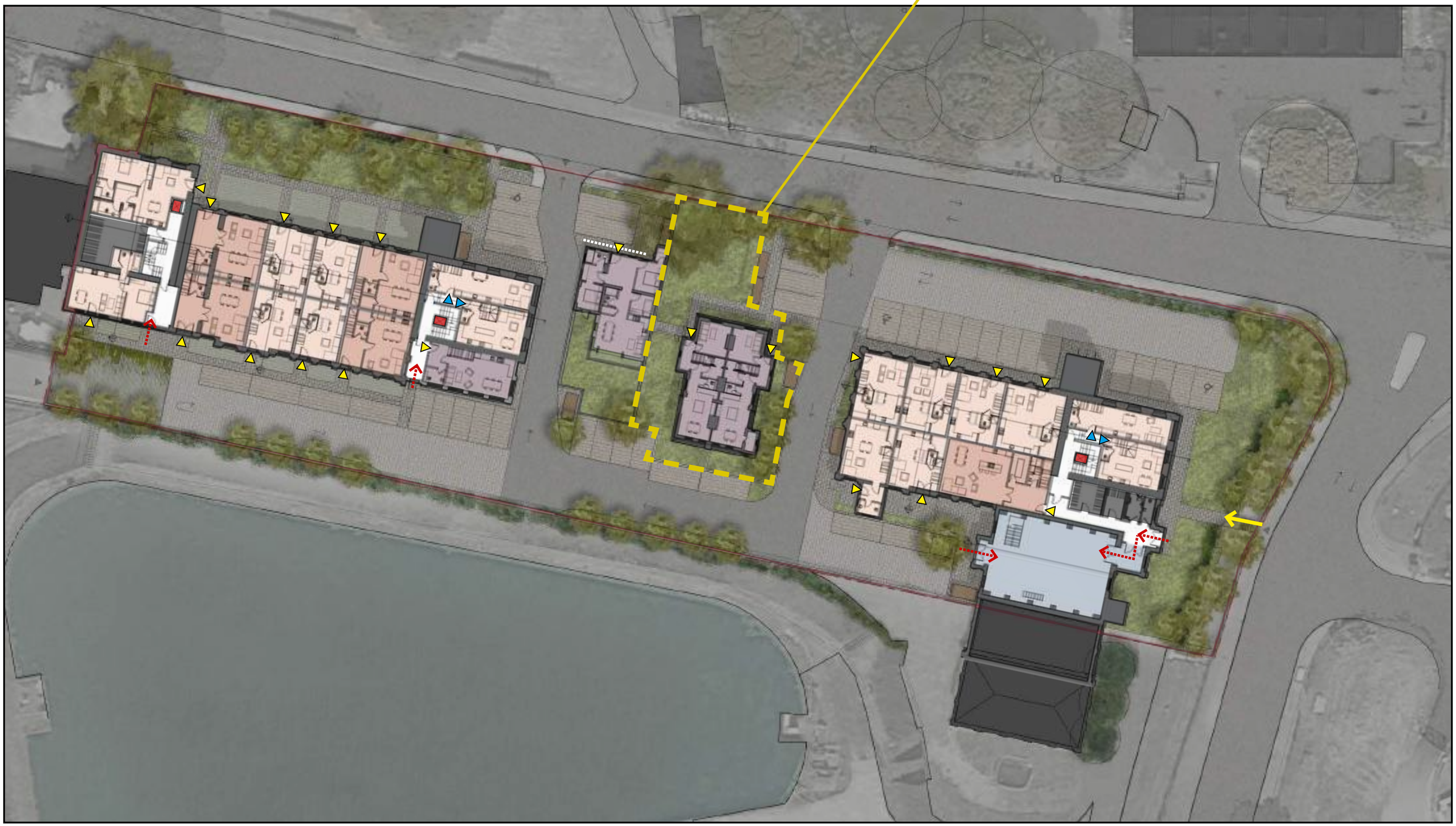
Existing view, Photograph

Spacious attractive apartments

The gallery ground level units are designed to efficiently use a double height space within the existing buildings creating a spatious ambience. Generous amounts of natural light filter in through the large heritage windows. The bedroom set upstairs on the mezzanine is separate, but visually connected in loft living. Built in storage is integrated under the stairs.

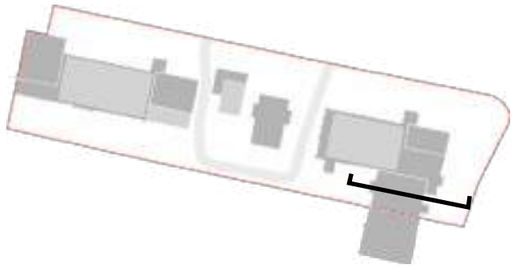
Benefits - 6. New Affordable Homes

Affordable Family Units



Benefits - 7. Employment Space for Job Creation
Ruston & Ward workshop - commercial space

The separate workshop space in Ruston & Ward building provides 290 sqm of office area - accommodating potentially 25 to 40 people working in the space. A local co-working use is currently being reviewed for the space, providing desk space for small business owners in Hampton who live locally and would be most likely to walk to the site.



Roof trusses & glazed roof light retained

Heritage details retained and highlighted - ceramic tiles & steel crane

Prominent entry at junction utilised for the Workshop

Shared surface paving for pedestrians and vehicles

Entry to workshop from the west

Ground level workshop space

New mezzanine level inserted

Existing basement; can be utilised for kitchen and/ or storage

Ruston & Ward Workshop

Native, soft planting

Lower Sunbury Road

Benefits - 8. Sustainable Development

Carbon reduction

LOM is accredited as net zero practice and we are committed to reducing carbon emissions in our projects.

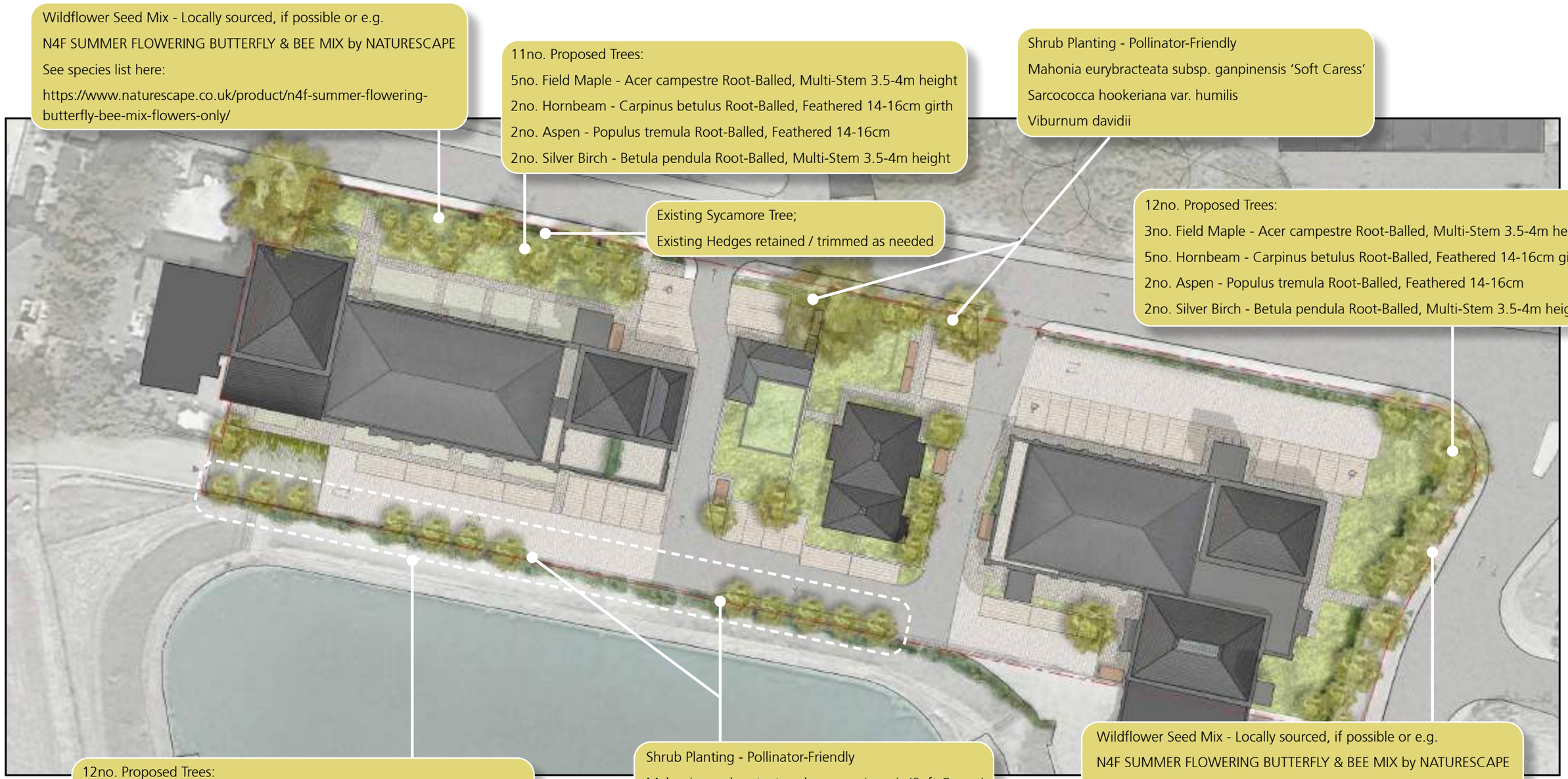
Hampton Waterworks, and other heritage projects, present a challenge to achieving our sustainable goals and objectives due to the constraints imposed in relation to retention of important historic elements of the building such as glazing.

Our design approach is embodied within a series of sustainable strategies as set out below....

1. **Reuse of existing buildings** - this presents a huge benefit when considering the embodied carbon within the existing structure and fabric of the building.
2. **Heating and ventilation** - Mechanical Ventilation and Heat Recovery MVHR systems are being proposed for all units. This approach to ventilation is efficient and allows us to retain the existing glazing where heritage considerations take precedence, whilst also providing a sealed draught free, efficient environment. This has the added benefit of resolving acoustic issues related to traffic noise from Upper Sunbury Road.
3. **Renewable energy** - It is also proposed to utilise Air Source Heat Pumps ASHP in conjunction with the MVHR system to conserve energy through the utilisation of renewable energy sourced from ambient air temperature.
4. **Efficient plant & equipment** - All plant and equipment will have the latest efficiency ratings.
5. **Insulation** - New higher performance glazing and insulation is proposed where it can be applied without adversely harming heritage assets.
6. **Biodiversity** - additional trees and soft landscaping provide enhanced biodiversity.
7. **Water conservation** - Efficient taps, showers and appliances will reduce the demand for water and green/sedum roof for retention of run off a well as improving biodiversity.

Benefits - 9. Sustainable Development

Additional trees and biodiversity



Substantial infrastructure investment

CIL contributions circa £660,800 and S106 contributions including employment and skills training, including an improved pedestrian crossing along Upper Sunbury Road.

Summary **Planning Assessment**

The Table Below Summarises Key Benefits and Interventions.

Benefits

We have amplified scheme benefits by exploring ways that we can make the heritage assets more accessible and appreciable through through site based interpretation boards and digital links.

1. **Life and Vitality -** The proposed development will secure viable, long term mixed uses of the buildings. The proposed residential and commercial conversion ensures their ongoing maintenance and management.
2. **Safeguarding Heritage -** While appropriately managed as vacant structures, the buildings require urgent repair and renovation to safeguard their architectural and historic interest. A schedule of repair and alteration has been submitted, demonstrating how the scheme identifies and integrates historic fabric as the basis of the proposals. Significant alteration, where introduced, is proportionate to the need to undertake change to support viable new uses.
3. **Greater Access to Heritage Assets -** The proposed development incorporates varied measures to raise public appreciation of the Site's architectural and historic interest. Public engagement measures range from on-Site interpretation boards, explorable, shareable virtual information delivered through QR codes and options for partnership with local interest groups. These measures deliver a range of 'access' options to future occupants and the public, vastly enhancing present opportunities to appreciate and understand the Site's significance as an important heritage asset.
4. **Gateway to Hampton -** Creating a gateway into the area through uplift and vitality.
5. **New Homes -** Creation of 36 new homes in the area, which is an important contribution to housing need in the borough. The units will be unique and will be an important addition to the variety of housing stock that is available.
6. **Affordable Homes -** Creation of 2 social rented family units with gardens on site through local Housing Association. This is a good contribution to affordable housing need.
7. **Employment Space for Job Creation -** Economic benefits from the development with the creation of construction jobs and 21 to 40 new office / co-working jobs through the new commercial space to be provided.
8. **Sustainable Development -** Highly sustainable new homes that deliver an industrial heritage placemaking led scheme.
9. **Additional Trees and Biodiversity** - 8. Additional urban greening and trees supporting greater biodiversity on the site. The pre-development site scores a total of 1.26 habitat units and 0.00 hedgerow units with the post development creation and retention providing 3.27 habitat units and 0.08 hedgerow units which is an overall net gain of +159.44% habitat units and 100% hedgerow units. We are losing one Category B tree and several Category U trees. However there will be an increase in the total number of trees as seven new trees will be planted.
10. **Financial Contributions to Local Infrastructure** - CIL contributions circa £660,800 and S106 contributions including employment and skills training, including an improved pedestrian crossing along Upper Sunbury Road.

Key interventions

The following set out the key interventions to the building that have evolved substantially over the course of extensive consultation with the Local Planning Authority and Historic England. These are summarised below and further detail is provided through appendices to this document.

1. **Roof extensions** – The roof extensions have been refined over some 5 iterations and again since our last consultation to reduce their visual impact and these are presented in the attached summary. These refinements mean that the current proposal is within the existing roof ridge heights and presents a very minimal profile with deep overhanging eaves and shadow lines as requested by the LPA heritage officer. The extensions have also be drawn away from the pump houses to reveal more of the arched windows to the adjacent walls. – refer to the iterations and detailed illustration of the latest proposal
2. **Rear building extensions** – These have also been refined since the last HE consultation in line with comments from the LPA Heritage Officer and DRP and we understand are now considered acceptable.
3. **Subdivision of space** – It is acknowledged that the internal layout of the building will change through the introduction of new uses/spaces. In the evolution of the proposals, alterations have been made to the apartment configurations to further improve the open roof spaces to the penthouses and, embeds retention of historic features, including windows and supports the legibility of original use. The roof structures and lifting beams in the towers are exposed and open to the dwellings below and almost all significant windows are open to double height volumes. The impact of cellular space has therefore been minimised. Partition, cellular spaces and introduction of modern fabric has been minimised as a key design principle.
4. **Retention of Heritage Fabric** – As requested, a Gazetteer of Heritage Fabric has been compiled that identifies the relative significance of fabric across the building. The Gazetteer has informed the provision of a schedule of change and retention. Great effort has been employed to retain the majority of key fabric and features in situ, with limited instances of the relocation of features within in site. The success of the detailed assessment and design process means that only the wrought iron roof structures to the engine houses on R&W and Karslake will be removed. The majority of historic fabric and features have been integrated to the proposals and this is detailed in the attached detailed summary. This applies to both internal and external elements, with change being proportionate to the introduction of viable future uses.
5. **Enhancing Appreciation of Heritage Engineering Features** – A number of key items are being retained on site and are fundamental to establishing the proposed development's character and sense of place. Please refer to the schedule and drawings conveying retention and location of these features.

08
Appendices

Appendices

1. Design and Access Document (Draft)
2. Condition Survey Photo Record - Schedule of Repairs
    2.1 Karslake
    2.2 Rushton & Ward
    2.3 Site
3. Historic Building Gazetteer (Hampton Waterworks)
4. Drawings (plans, elevations, sections, details)
5. Fire strategy
6. MEP strategy