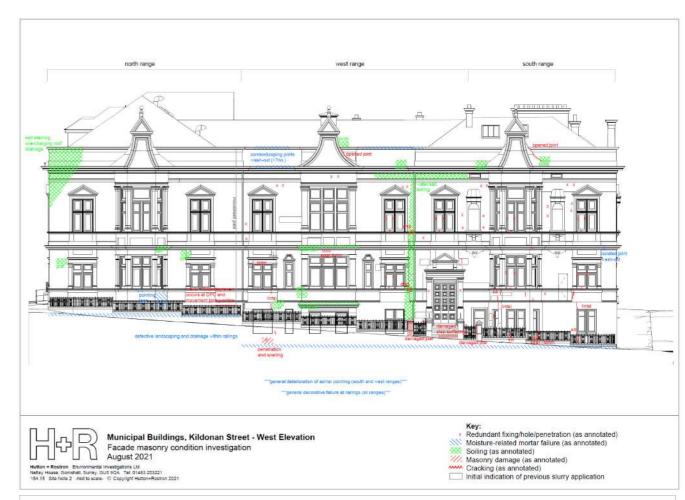
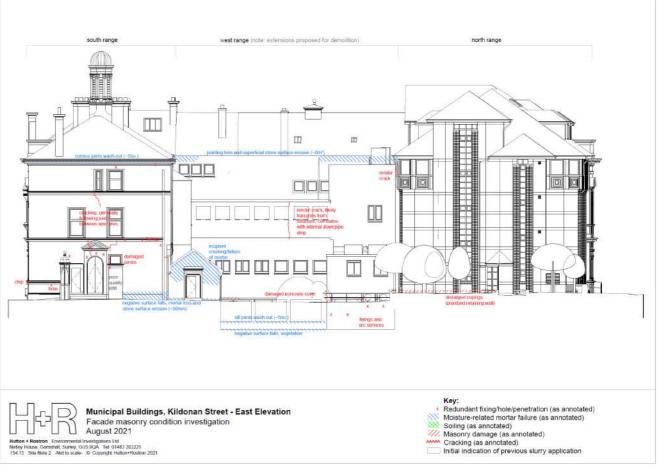
CONDITION SURVEYS

Collective Architecture commissioned detailed condition surveys by a specialists consultants to help inform the design. The surveys are appended to the Conservation Statement and consists of the following:

- Roof finishes condition
- Facade masonry condition
- Stone and mortar analysis
- Preliminary timber condition
- Preliminary investigation of residual moisture in masonry at ground basement level







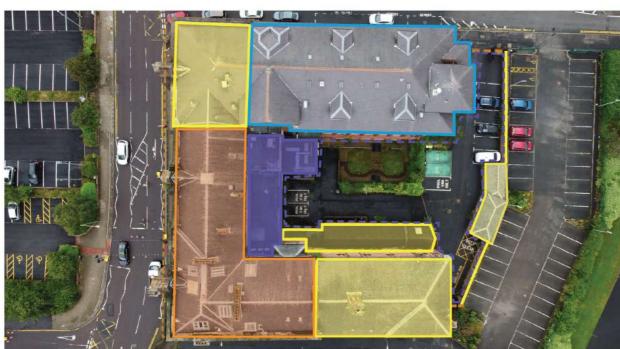
 ${\it Extracts from the H\&R report, please refer to full survey as part of the conservation statement}$

HERITAGE SIGNIFICANCE

Collective Architecture carried out two conservation surveys documenting all of the internal spaces and notable features as well as categorising all spaces into levels of significant ranging from Neutral to Outstanding. This has helped inform our strategies and spatial planning.

It's worth noting that the brief for this building was largely to convert to social housing and beyond this the council no longer has a viable use for the building. Therefore, the level of significance has had to be carefully considered and balanced so as to enhance the proposals but also not inhibit development.

On the whole most of the spaces with considerable or outstanding significant are retained within the commercial zones. The main exception to this is the police wing cells, which are unfortunately we are not able to retain in the proposals. (See explanation overleaf).





Extracts from the Conservation Study





DEMOLITION & RETAINED FACADE STRATEGY TO THE POLICE WING

The new design team and previous design team have both reviewed residential options for the Police Wing and arrived at the same conclusion that a partial demolition and retained facade approach is required for a viable residential conversion. Demolition is always a last resort but the decision was based on the fact that the the existing building is problematic for the following reasons:

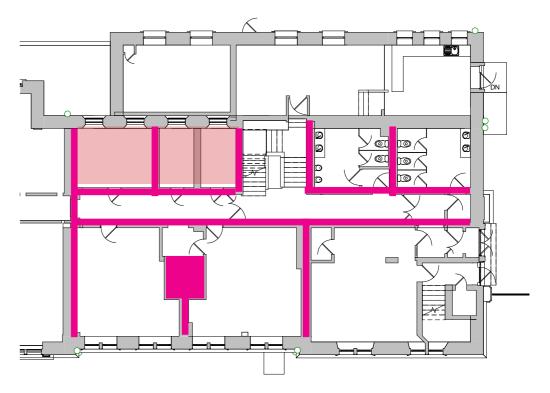
- Presence of narrow police cells at lower ground and ground level. The arched ceilings and load bearing walls are not adoptable and restrict spatial planning
- Irregular fenestration to rear elevation, making it difficult to adapt for residential use
- Locations of existing stairs/ relationship to rear elevation, again restricting future layouts with windows bridging two floor levels.

The former and current design teams have also liaised with HES on this issue and we understand there to be an acknowledgement that the building needs a new purpose and the retained facade approach would offer this in doing the following:

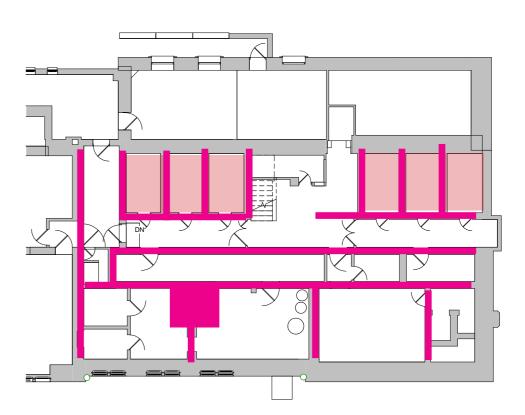
- Retaining the most significant elevations to Muiryhall St and the gable elevation
- Retaining the octagonal boiler vent shaft so that the street scape is largely un-altered.
- Demolishing the rear elevation, which is of less quality than the main elevations







Ground Floor Plan of Police Wing (showing assumed load bearing structure)



Lower Ground Floor Plan of Police Wing (showing assumed load bearing structure)



HERITAGE ITEMS

ENTRANCE TO DUNBETH ROAD:

The main entrance to Dunbeth Road will no longer be a primary entrance, due to it having stepped access. It does however need to be retained as a fire escape. Therefore the existing doors will need to be modified. The detail will need to be developed at Stage 4 but the intention is to permanently prop the door open within the reveals, as per the image below, with a fire rated glazed secondary door to bring more light into the stairwell, whilst preserving the historic doors in place.

STAINED GLASS WINDOW RELOCATION:

Our proposal is to remove the south facing stained glass windows to the former first floor former cafe area. The stained glass is of a more contemporary style compared to the north facing stained glass windows which dates from 1894. Our proposal is to remove the stained glass to the south, to bring more natural light into the proposed commercial space. Our intention is to make the panels into a back lit art installation which will be located within the new commercial space.

POLICE WING CELL DOORS:

The police wing cell doors remain a prominent historic feature of the Police Wing. Due to the requirement to fully redesign this internal space, the cell doors are required to be removed. The Council has been in discussion externally with the Lanarkshire Police Historical Society, and internally with the NLC Museums Service and Summerlee Museum, in order to assess the viability of citing the doors elsewhere as a potential museum exhibit. These local groups have intimated an interest in this proposal and are working with the Council to agree on how to take this forward. The Council are seeking this solution to ensure that the cell doors can be carefully removed and retained in another location locally. The Council will facilitate agreement on the best approach to retain the doors within a museum environment or elsewhere and ensure they are available to view as a point of historic interest in the future.

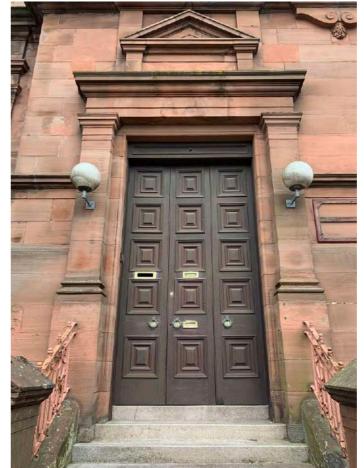














APPROACH TO RETROFIT

The client commissioned both an energy and retrofit consultant to advise on the proposals and how best to work with the existing fabric to appropriately protect, insulation, heat and ventilate the building to provide adequate and affordable housing and office space.

The historic nature of this building and its past refurbishments, conversions and additions lends complexity to retrofitting this building to meet the needs of today's housing. The values, metrics and targets set will ensure that the new homes are built to a high-quality standard, are energy efficient to the point that they will help to alleviate fuel poverty of tenants, are healthy to live in due to the use MVHR ventilation and will be durable through robust detailing and specification of components.

Key performance targets have been set to be achieved by the retrofit in order to optimise energy efficiency. This approach prioritises the need to reduce space heating demand and energy consumption, using the most reasonable and effective measures.

The reason to take this approach is to be as accurate as possible when calculating energy consumption and be able to close the performance gap, an issue that spreads wide across the industry. Our objective by reducing the demand and performance gap as much as possible, is to eliminate the risk of putting residents under fuel poverty levels. It is estimated that around 35% of the Scottish population is in fuel poverty. This is why it is key to follow a methodology that takes a whole building approach, aims to reduce the energy demand and above all, puts the user needs and well-being at the centre.

Key considerations have been as follows:

Thermal Bridges:

Poorly detailed junctions can result in localised condensation and mould growth, impacting the indoor environment and residents' health as well as potentially causing deterioration of the building fabric. We have made a conservative allowance in the energy model aligned with that used by SAP (application of the Y-value of 0.15 to 0.20 W/m2K) to give us a worst-case scenario. We have applied a correction factor on the junctions that will be improved as part of the retrofit.

Air tightness:

Heat loss from natural ventilation (infiltration) and draughts become significant if airtightness is not considered. By improving the airtightness of the buildings, we ensure that energy consumption is reduced, and high levels of comfort are achieved by reducing cold drafts.

Appropriate airtightness levels can be achieved through good design and the use of materials such as plaster or airtightness membranes.

Assumed existing air permeability: 15 m3/hr.m2@50Pa Targets:

- 90's Wing: ≤5 m3/hr.m2@50Pa (2.60 ACH)
- Historic Wing Resi: ≤5 m3/hr.m2@50Pa (6.25 ACH)
- Historic Wing Office: ≤10 m3/hr. m2@50Pa (4.9 ACH)

Ventilation

The proposed ventilation system is Mechanical Ventilation with Heat Recovery (MVHR). These systems have many advantages.

- Due to their heat recovery, there is a noticeable reduction in energy consumption.
- Provide clean and Fresh Air for Improved Health
- Filter out toxic city air and pollution

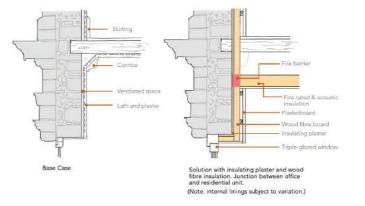
Natural Materials

The use of natural materials in the construction industry has many benefits both for the building, the planet and the users.

- Low embodied carbon: As the grid decarbonises and buildings get made more and more efficient, embodied carbon becomes a higher percentage of the carbon emissions emitted through the life cycle of the building. Natural materials not only are low on embodied carbon but some of them (wood, hemp, straw etc) sequester them, becoming carbon negative.
- Breathability: Natural materials are vapour-open, they buffer and manage moisture. This quality makes them perfect for insulating traditional buildings, as they are normally made with vapour-open materials (solid stone walls)
- Health: Natural materials are healthy and free of VOCs that have a negative impact on human health.
- •End of life: Due to their nature, they are easier to recycle and dispose.

90's Wing: The use of natural materials in this wing is recommended for their low embodied carbon and benefits on health and end of life.

Historic Wing: In the historic wing, natural materials have been recommended due to their breathability (plus all the other benefits). To internally insulate walls, breathable materials are needed and natural materials have this property. There are few industry-standard materials that are breathable and appropriate for historic properties. The use of natural materials for historic property improvements is considered best practice.











APPROACH TO HISTORIC WING

The historic wing presents the greatest challenge in terms of working with the existing historic fabric of the building and working with some of the grander spaces, particularly in terms of fabric improvement and service distribution.

Residential Areas:

Ceilings are proposed to all residential areas within the historic wing. This is to deal with fire and acoustic separation as well as reducing the impact on the space heating demand. Retaining existing decorative plasterwork will not be possible in these areas. However, these areas have been minimised with preservation of the buildings heritage a key priority. External walls will also be upgraded in these areas to provide the required thermal performance in line with the retrofit consultants recommendations.

Commercial Areas:

The commercial spaces occupy the areas of the building with the greatest heritage significance. We therefore propose to leave most of the existing ceilings as they are and use suspected rafts/baffles to integrate lights/ acoustic absorption and hide services where required. There will also be some areas of bespoke joinery and panelling required to integrate services at a lower level so that the ceilings are not disturbed.



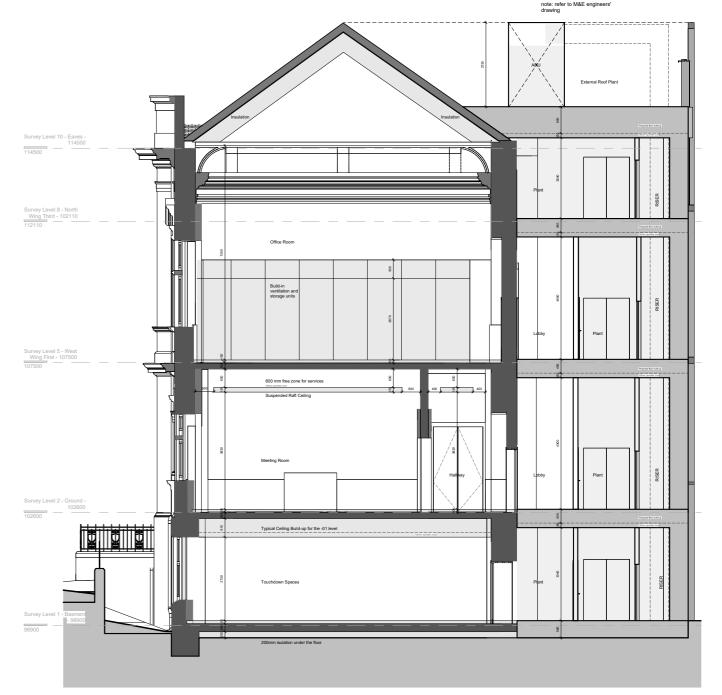


New insulation, cornice loss - to be replicated, no fire ceiling

Note: New built extension will have its own insulation, hence it's not represented in this diagram

New insulation, loss of comice, covered by new fire ceiling

New insulation, less disruptive (blown). Cornice intact



Proposed West Wing



Proposed panelling to key spaces to integrate acoustic absorption and services

DESIGN PROPOSALS: EXECUTIVE SUMMARY

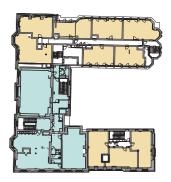
Our Stage 3 proposal is summarised in the points below and illustrated in detail on subsequent

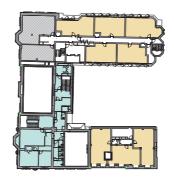
- Conversion of main building into 43 residential units (Including 5 amenity flats)
- Provision of circa 1400m2 of touch down spaces (including stairs and amenity space)
- Demolition of the police wing, with facade retention to Muiryhall Street and the East gable
- A rooftop extension to the North Wing
- Creation of a central resident's amenity space, a people priority zone, with restricted vehicle access (for emergency access only)
- 50% car parking provision is provided. 22 parking spaces are provided to the east of the site with EV charging provision. Includes 5 disabled spaces.
- Provision of secure external bin and bike stores making use of existing out-buildings as well as creating some new build structures.

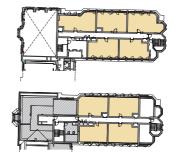








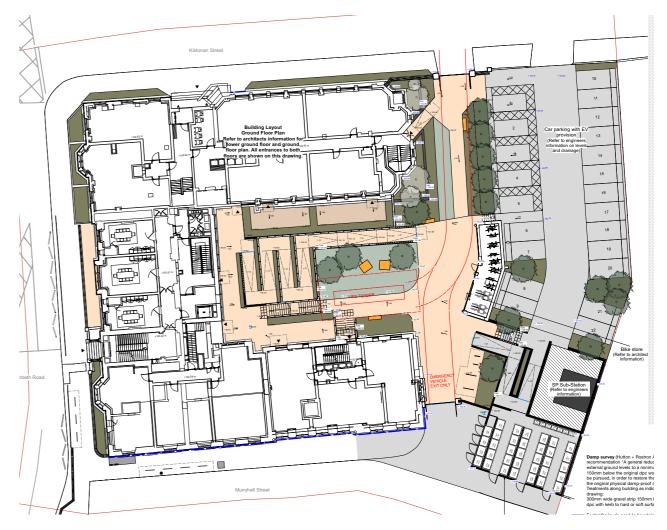








FOR OLDER PEOPLE AND AMBULANT



Proposed Site Plan