# Granton Heritage Projects Design Report

Rev 02 09.04.2024





















#### Introduction and Contents

City of Edinburgh Council commissioned a design team led by 7N Architects to provide architectural input to develop designs and support funding applications for four heritage projects in Granton:

- Former platforms at Granton Station
- Maldevic House
- Granton Castle Walled Garden
- Granton Lighthouse

This document outlines proposals for each site for the purpose of costing. From a total budget of approximately £5.5 million the design team have worked with CEC to prioritise and allocate funding to achieve optimum impact and value.



Street view illustrating the proposed transformation of Granton Lighthouse. *Image by Daako & 7N Architects.* 

## Prioritising Works for Best Impact

To inform allocation of funds, proposed works have been considered according to the following priorities:

- Longevity: Essential repairs to extend the life of historic buildings and structures (e.g. repointing, roofs, windows)
- Safety and security: (e.g. trip hazards, edge protection, locks)
- Inclusivity: upgrades to provide access for all (e.g. WCs, ramps, lifts, seating, signage).
- Environment: upgrades to reduce carbon footprint and improve ecological value.
- Value: prioritising works that add community and commercial value to support the long-term financial sustainability of the buildings (e.g. expanding lettable space, improved facilities).

All projects are considered within the framework outlined in the Materials Audit, commissioned by CEC in January 2024. This identifies material usage and sourcing within each project and suggests appropriate materials for future works.



Aerial photo showing the location of the Granton Heritage Projects:

- 1. Granton Station Platforms
- 2. Madelvic House
- 3. Granton Walled Garden
- 4. Granton Lighthouse

### Aims & Opportunities

The scope of each project is aligned with the aims and opportunities afforded by each site as summarised below.

## Granton Lighthouse:

Extensive retrofit, thermal upgrades and internal reconfiguration to establish a sustainable future for Granton Lighthouse as a key social amenity and cultural centre as part of the wider regeneration at central Granton.

#### Madelvic House:

Essential repairs and light refurbishment that will enhance an established workspace for local businesses, as well as improving flexibility for community use and events.

#### Granton Walled Garden:

Crucial and sensitive repairs across the perimeter walls and important features, such as the Dookit, to maintain the historic structures and secure its future as an important community asset.

## **Granton Station Platforms:**

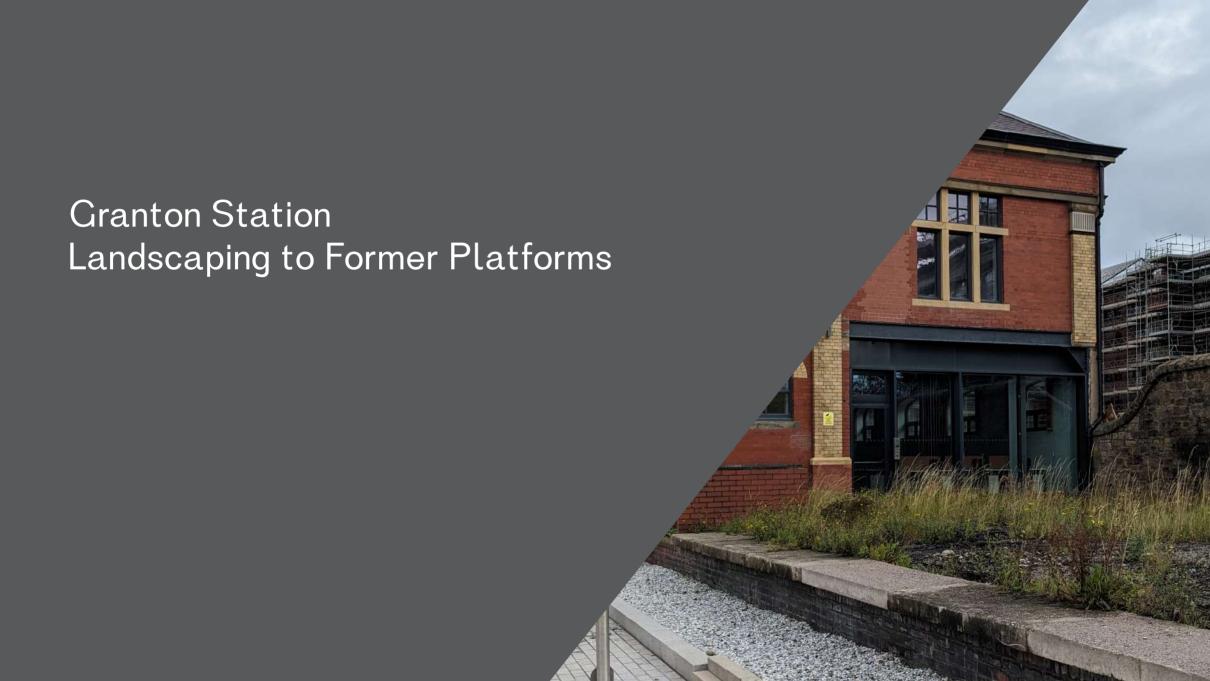
Landscaping to the former railway platforms, retaining their historic character while providing a flexible space for community use in an emerging neighbourhood.











## Granton Station Platforms - Design Statement

#### Overview

The following section of the report describes the proposals for the public realm improvements of the Granton Station Platforms.

#### Site

1 Granton Station Square Waterfront Broadway EH5 1FU

Granton Gasworks Station was a private railway station that operated between 1902-1942 to serve the nearby gasworks. Following refurbishment it later reopened as Granton Station Creative Works in 2023.

## Key Surveys & Consultation

Materials Audit Existing CAD drawings by ADP Design Team Site Visits

#### Team:



7N Architects

#### Brief

Complete recent public realm works and ensure longterm future use of the historic platforms by upgrading platform surfaces and in doing so, provide compliant means of escape and edge protection.

## Design Solution

Resurfacing of station platforms with a durable resinbound gravel. Concrete steps and benches run the perimeter of the platforms and planted 'edges' offer seating toward the new public realm while mitigating risk of falls and providing compliant emergency escape.

Opportunity has been identified for future use as community exhibition space or as a home for historic artefacts however this will not be implemented within the current funding.





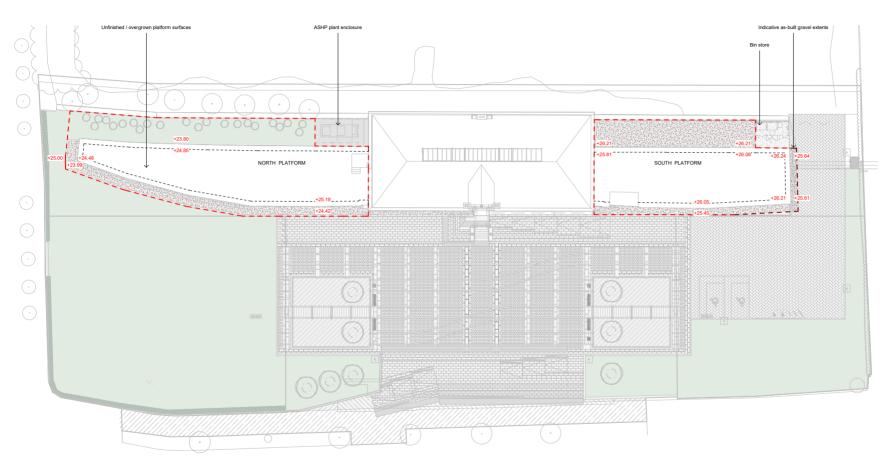


# Granton Station Platforms - Existing



The scope of the review by 7N Architects was to complete the recent landscape works to the former platforms either side of the Granton Station building now occupied by Wasps.

## Granton Station Platforms - Existing Landscape Scheme



The existing station platforms are currently a mixture of grass and hard landscaping. The proposals consider how the platforms can be provided with level access and useful spill-out space from the Station Building.

Do not scale from these drawings. Existing information is indicative only with survey required to develop proposals. To be read in conjunction with related project information:

- Architectural drawings (7N Architects) Cost plan (Armour) Net Zero Strategy (Max Fordham) Heritage Appraisal (Simpson and Brown)

#### Drawing Key - Existing Site

Existing Grass

Existing Hard Landscaping - Gravel

Existing Hard Landscaping - Other



Granton Station Site Boundary (ADP)





Existing Site Level (approx.)

## Granton Station Platforms - History



The station area has a rich history connecting the Gasworks and residents of the area to the City. The historic aerial photograph indicates the working Granton Gasworks and Station.



Historic photograph showing the Southern Platform to fore and Eastern wall to rear.

## South Platform - Existing



The south platform currently overlooks the public realm and parking composed of mostly hard surfaces. A tall wall forms the backdrop.



© Copyright of the National Railway Museum York (LGRP Collection, negative no. 11845)

# South Platform - Existing





A gravel perimeter to the kerb is already installed however, edge protection would be required to three sides. Note black metal bin store against wall to rear.

# North Platform - Existing





Flush gravel perimeter to front edge. Edge protection is required to the back edge.

## Future Vision - A Platform for the Community



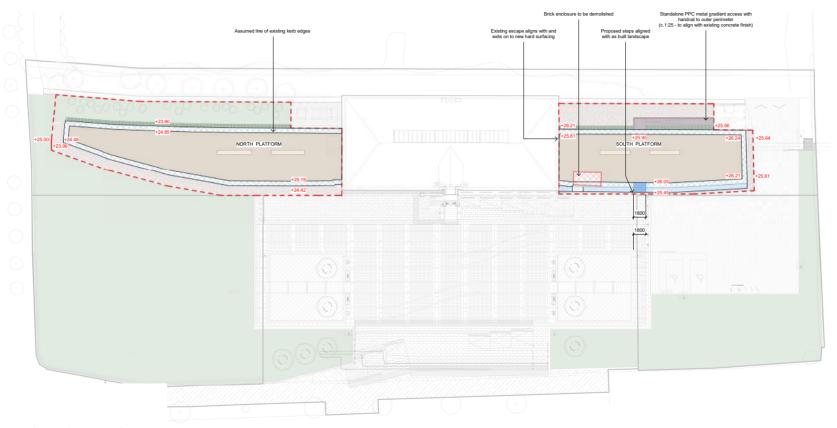
Illustrative sketch showing potential future use of the station platforms. The proposals consider the existing conditions and re-imagine the station platforms as a useful space for the users of the station building.

## Proposed Plan



The proposed plan for the current phase of works is focused on creating safe and easily accessible spaces that could be further animated in the future.

## Granton Station Platforms - Proposed Landscape Scheme



Proposed Landscape Plan

Drawing Ref: 189-7NA-SP-ZZ-DR-A-07100-Station Platforms - Existing Site Plan-P01

#### © 7N Architects (Randolph) Ltd. 2024

Do not scale from these drawings. Existing information is indicative only with survey required to develop proposals. To be read in conjunction with related project information: Architectural drawings (7N Architects) Cost plan (Armour)
Net Zero Strategy (Max Fordham)
Heritage Appraisal (Simpson and Brown) Existing Hard Landscaping - Gravel Existing Hard Landscaping - Other Granton Station Site Boundary (ADP) Station Platforms Site Boundary (7N) Existing Site Level (approx.) EXT-01 Demolition / existing structure and surface removal EXT-02 Clean and Make Good Existing Kerb Edges EXT-20 Concrete Bench EXT-20 Integrated Concrete Steps EXT-30 Concrete Kerb Edge EXT-40 Metal Access Ramp EXT-50 Planter with Tall Shrubs

EXT-80 Coastal Planting

## Outline Specification



A simple palatte of robust materials complements the existing building and recently completed public realm and retains the historic character of the platforms.

- 1. Resin bound gravel to station platforms
- 2. Timber benches large sleeper sections
- 3. Concrete bench with integrated steps
- 4. Planter with tall plants and supports to visually reinforce edge







#### Cost Overview

The construction cost estimate for the works described above is:

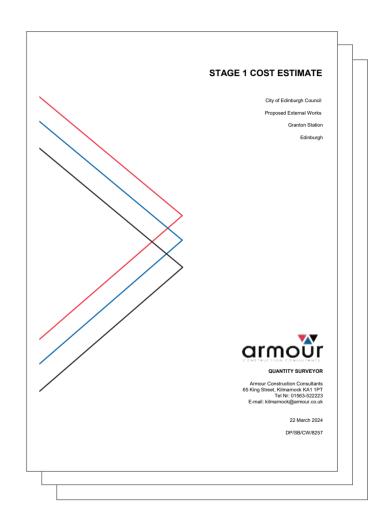
#### £153,785\*

This estimate includes an allowance of £12,000 for timber benches along with contingency and contractor OHP. Professional fees and VAT are excluded and no allowance has been made for inflation.

This estimate includes contingency and contractor OHP. Professional fees and VAT are excluded and no allowance has been made for inflation.

For further details including an itemised breakdown please refer to the full Cost Estimate by Armour.

\*Costs subject to final review by Armour.



Madelvic House Repairs and Refurbishment



#### Madelvic House

#### Overview

The following section of the report captures the proposed improvement and refurbishment works to Madelvic House. These focus on essential repairs and refurbishment as defined by a recent condition survey.

The 7N Architects team have reviewed the survey to suggest prioritisation of works and identified opportunities for enhancements that focus on maximising value, including:

- Option to expand function room including removal of tiled ceiling and new lighting.
- Redecoration inc. new floor finishes to all common areas (and option for tenant areas).
- Improved toilets including equal gender provision and separate accessible WC.



Existing photograph of Madelvic House.

### Design Statement

#### Site

Suite 1, Madelvic House,
Granton Park Avenue
EH5 1HS
19th-century, two-storey building previously used as
the offices of the Madelvic Motor Carriage Company,
and later United Wire.

## Key Surveys & Consultation

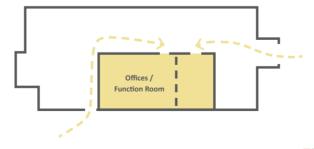
Materials Audit Condition Survey by Design Team Site Visit Existing drawings by 3D Reid

### Concept

Ensure long-term future use of the historic building via careful improvements to the structure and internal layout.

## **Design Solution**

Sensitive repairs to the exterior to maximise the historic value of the structure and interior upgrades. The configuration of the internal spaces is improved to provide flexible office space and a potential function room, with improvements to staff facilities that improve accessibility and inclusion Adaptable office spaces/ function room allow for new community use.



#### Team:













## Madelvic House - History



Left: Maldelvic House and gardens



Left: The site becomes United Wire Works



Fig. 45. Buses operating in Perth, Australia, in 1903, similar to those being used in London. They were built by Stirlings Motor Carriages Ltd at Granton



No. 1.

ELECTRIC SYSTEM.

Madelvie Double Brougham

Left: Electric vehicles built at the factory





Left: Images of the Wire Works

## Madelvic House - Conditions Survey

CEC commissioned an updated condition survey for Madelvic House late 2023, which has allowed repairs and upgrades to be prioritised by level of urgency.

Refer to Madelvic House Condition Survey CS001876.

This survey is referenced in the 7N scope of works which identifies where survey points are directly applicable, or where they are to be superseded by other proposed works. The cost estimate is based on the scope of works.



#### Edinburgh - City Of Edinburgh Council AMIS Live System

Organisation

Surveyor

Ian Campbell

#### CS001876

Survey Description

2 storey building constructed in Survey Date

1899, former Madelvic Motor 07/09/2023

Carriage Company, extensions to West and East. Category "B" listed building outer walls finished in red brick, main roof is pitched with slate covering, balcony on 1st floor to South elevation, majority of windows

are single glazed, timber sash and case.

Owner Mr Ian Campbell - Capital

Planning Asset Management

Condition Surveyor (internal)

Electrical Surveyor James Waugh

Mechanical Surveyor Gavin Alston SIT1702 MADELVIC HOUSE

Address

SUITE 1. MADELVIC HOUSE

GRANTON PARK AVENUE

FDINBURGH

EH5 1HS

Number of Active Buildings 1 Number of Active Rooms 0

External fabric of building is generally in poor condition. Urgent works required to make the building wind and weather tight. Landscaped areas in need of tidying up works. Mechanical Summary Most of the major items of mechanical plant installed in this building is in good operational condition and is expected to remain in A or B condition over the next 5 years.

Electrical Summary During the survey it was not possible to access all of the electrical equipment. The main incoming supply and some of the distribution boards are locked and situated in locked cupboards. Some of the switchgear is beyond its expected lifecycle and should be replaced. Some of the wiring associated with this equipment is most likely

Survey Status

COMPLETE

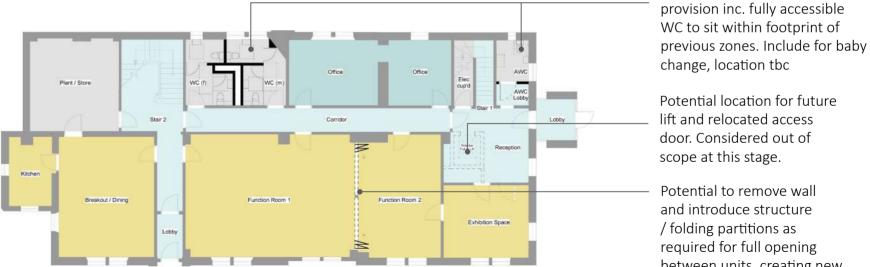
undersized and should be replaced.

27 September 2023 Page 1

#### Madelvic House - Ground Floor



**Existing Ground Floor** 



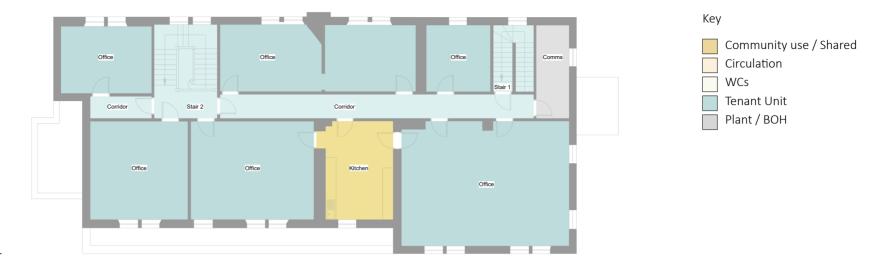
Potential location for future lift and relocated access door. Considered out of scope at this stage.

Refurbished WCs. Improved

Potential to remove wall and introduce structure / folding partitions as required for full opening between units, creating new flexible use function rooms

Proposed Ground Floor

## Madelvic House - First Floor



Existing First Floor



#### Cost Overview

The construction cost estimate for the works described above is:

#### £295,530\*

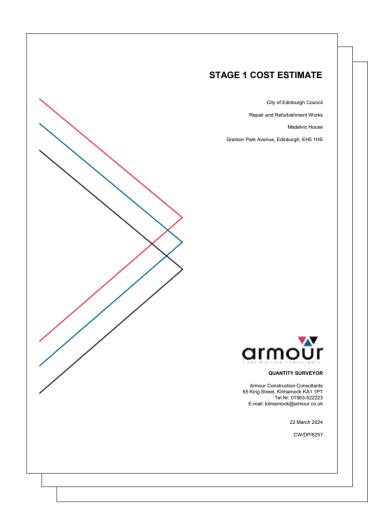
The above amount includes approximately £31,000 for the option to expand the ground floor function room by removing a wall and replacing with a folding partition.

This estimate includes contingency and contractor OHP. Professional fees and VAT are excluded and no allowance has been made for inflation.

For further details including an itemised breakdown please refer to the full Cost Estimate by Armour.

Costs across all projects are summarised at the end of this report.

\*Costs subject to final review by Armour.



Granton Walled Garden Completion of Repairs



#### Granton Walled Garden

#### Overview

Works outlined for Granton Walled Garden will repair the historic walls and structures to secure the future of the grounds for future community use.

The proposed works focus generally on repairs required either as a result of natural weathering, lack of maintenance or to rectify previous poor quality repairs (e.g. where historic walls have been repointed with cement mortar).

The following section of the report presents the key findings of the condition survey by Simpson & Brown and associated costs by Armour.

Top left- Existing condition with some previous interventions

Top right- Doocot on the west wall

Bottom left - The repaired section of the north wall Bottom right- Historic photo of Granton Castle





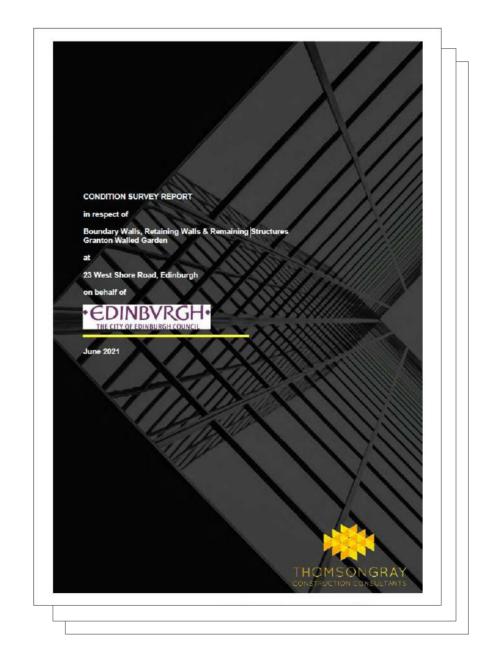




## Granton Walled Garden - Conditions Survey

CEC commissioned a condition survey for Granton Walled Garden in 2021. This has been updated with input from Simpson & Brown from a conservation standpoint and Cundall structural engineers.

Refer to Granton Walled Garden Condition Survey by Thomson Gray for original report.

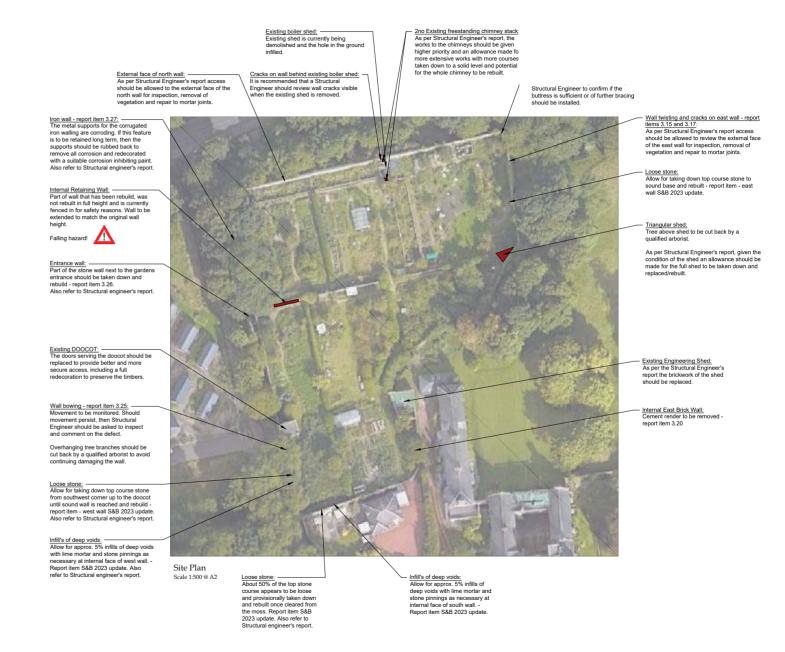


## Scope of Works & Repairs

The updated report by Simpson & Brown includes a survey of the current condition and maps out the extent of further repairs and works to the various walls and structures.

For full details refer to the following documents:

- Granton Castle Walled Garden- Scope of Works
- GWG-SAB-XX-XX-XX-SP-0001- Remedial works site plan



#### Cost Overview

The construction cost estimate for the repair works has been categorised according to urgency and can be summarised as follows:

Urgent £101,908

Necessary £329,945

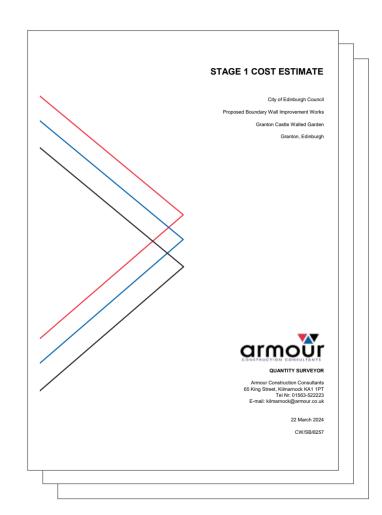
Desirable £243,000 **Total £674,853\*** 

This estimate includes contingency and contractor OHP. Professional fees and VAT are excluded and no allowance has been made for inflation.

The costs also include works to the external face of walls which require access from adjoining owners land and may be their responsibility to maintain.

For further details including an itemised breakdown please refer to the full Cost Estimate by Armour.

Costs across all projects are summarised at the end of this report.



<sup>\*</sup>Costs subject to final review by Armour.

Granton Lighthouse



#### Brief

# A vision to ensure a sustainable future for Granton Lighthouse.

The following section of the report by 7N Architects describes the proposed works to Granton Lighthouse. The key aims of the proposals are:

- Create a focal point for the expanding local communities to complement surrounding regeneration projects and residential focused development.
- Ensure commercial viability by supporting an emerging business case, optimising potential rental income through an appropriate mix of uses and efficient use of space.
- Secure an environmentally sustainable future for the site by minimising operational energy use through a combination of thermal upgrades and low carbon servicing strategy to align to CEC 2030 Net Zero targets.



Photograph from the existing lantern.

## Granton Development Framework

## Opportunities for Granton Lighthouse:

- Build on existing reputation as a hub for creative industry.
- Create a social hub around the lighthouse, a local landmark.
- Improve connectivity at key junction between Granton Harbour and Waterfront Avenue.



### Design Statement - Granton Lighthouse

#### Site

20-22 W Harbour Road 19th-century, two-storey warehouse with lighthouse, cottage and outbuildings formerly owned by the Northern Lighthouse Board and now owned by City of Edinburgh Council.

## Key Surveys & Consultation

Materials Audit
Condition Survey
Measured survey by Malcolm Hughes
Heritage Statement by Simpson & Brown
Design Team Site Visits
Community Presentation Q&A (13/10/22)

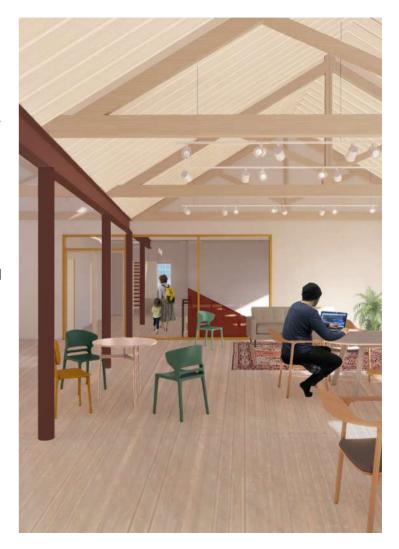
### Concept

Ensure long-term future use of the historic building and reconfigure for flexible workspace and community amenity function. Contemporary interventions that are sympathetic to historic fabric.

## **Design Solution**

Sensitive repairs to the exterior to maximise the historic value of the structure and upgrades to the thermal performance to ensure long-term use.

The configuration of the internal spaces is improved to provide flexible office space and a potential function room, with improvements to staff facilities considering accessibility and inclusion. Introduction of cafe and opportunity for exhibit on the building history.



Team:













# Existing Street Frontage





### **Current Condition**

CEC commissioned a condition survey in December 2021 which records present condition and identifies recommended remedial works. The proposals contained within this document supplement these remedial works with further enhancements. The scope of works cross-references to the survey to inform a coordinated cost estimate.

Further investigation works are required to some areas with specialist input regarding areas including roofs and the lighthouse lantern.









Top left- Street approach
Top right- Lighthouse tower
Bottom left- Sliding Door and brickwork
Bottom right- Cottage street elevation

### **Current Condition of Interior**

Throughout the building the historic character is clearly evident with cast iron columns supporting timber structure and various historic features including large sliding doors, hoists, exposed brickwork and built-in joinery. This presents a fantastic opportunity to create high quality space for a variety of uses.

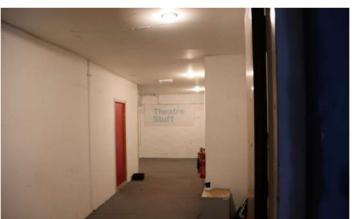
The internal condition of spaces, currently used as storage and band rehearsal rooms, is mixed and much of the existing fabric is in need of maintenance and repair.

The existing fire strategy should be reviewed and will require upgrades to allow a change from storage to uses with more occupants.

Top left- First floor, mid unit Top right- First floor, front unit

Bottom left- First floor, corridor to rehearsal rooms Bottom right- Ground floor, mid unit









## Scope Overview

Repairs to the historic building fabric including:

- Roof repairs to replace missing/broken slates.
- Remedial works to remove and replace rotten structural timbers.

Upgrades to optimise building performance and reduce energy use including:

- Internal wall insulation to all external walls
- Roof insulation
- Replacement double-glazed heritage windows

Reconfiguration to suit proposed uses including:

- New entrances inserted behind existing good entry doors
- New street front window
- New central stair and lift
- Internal partitions to sub-divide lettable spaces
- Refurbished and expanded WCs





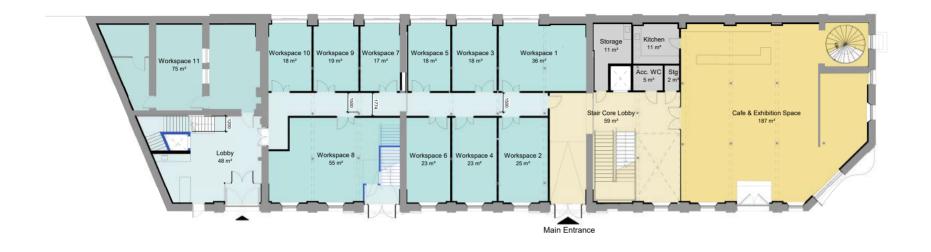








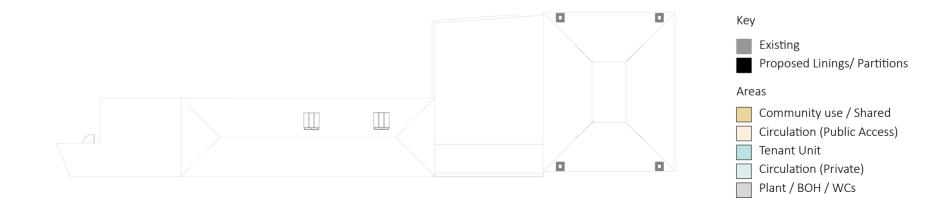
# Developed Proposals - Level 0 Plan



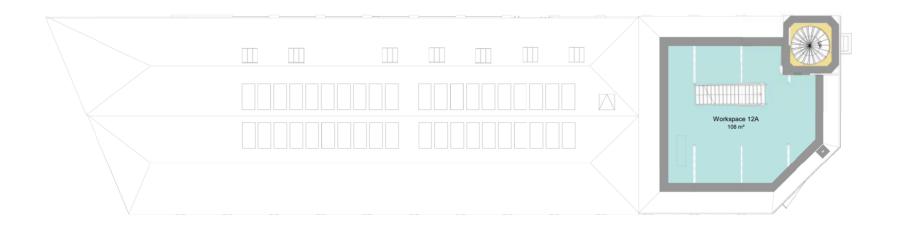


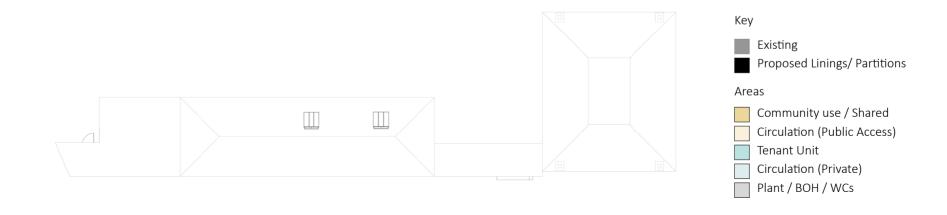
# Developed Proposals - Level 1 Plan



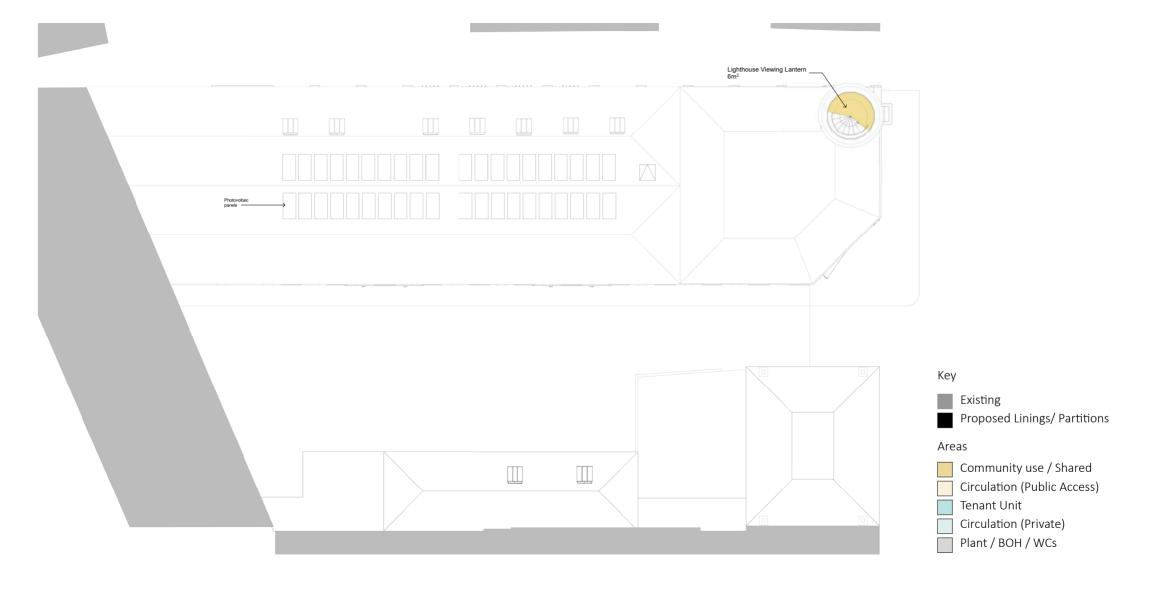


# Developed Proposals - Level 2 Plan





# Developed Proposals - Level 3 & Roof Plan



### Accommodation Schedule

Total		1,243	13,380
26	Workspace 23	29	312
25	Workspace 22	30	323
24	Workspace 21	26	280
23	Workspace 20	20	215
22	Workspace 19	17	183
21	Workspace 18	23	248
20	Workspace 17	18	194
19	Workspace 16	52	560
18	Workspace 15	30	323
17	Workspace 14	19	205
16	Workspace 13	197	2,120
15	Workspace 12A	109	1,173
14	Workspace 12	152	1,636
13	Workspace 11	75	807
12	Workspace 10	18	194
11	Workspace 9	19	205
10	Workspace 8	55	592
9	Workspace 7	17	183
8	Workspace 6	19	205
7	Workspace 5	18	194
6	Workspace 4	23	248
5	Workspace 3	18	194
4	Workspace 2	25	269
3	Workspace 1	36	388
1	Café + Kitchen	198	2,131
Unit	Name	NIA sqm	NIA sqft

### Other Rooms/ Areas

Plant Room A	36	
Plant Room B	32	344
Lighthouse Tower Viewing Floor	9	97
WCs (total)	37	398
Storage (total)	32	344
Lobbies & Circulation	225	

NIA sqm	NIA sqft		GIA sqft
1,243*	13,379	1,976	21,269
1,567	16,867	1,976	21,269
	1,243*	1,243* 13,379	1,243* 13,379 1,976

#### Notes:

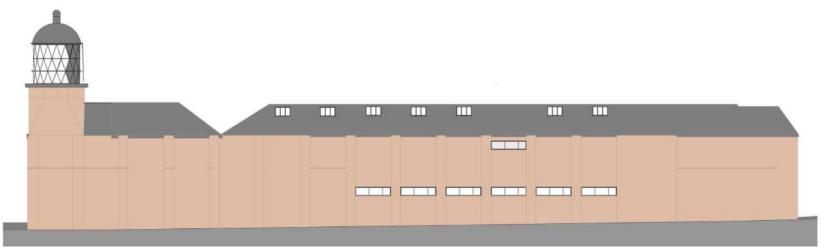
2nd floor attic space was recalculated to consider slope of roof and structural elements affecting head height (under 1.5m)

<sup>\*</sup>Circulation and Lobby space to Depot Music no longer included in NIA

### Elevations

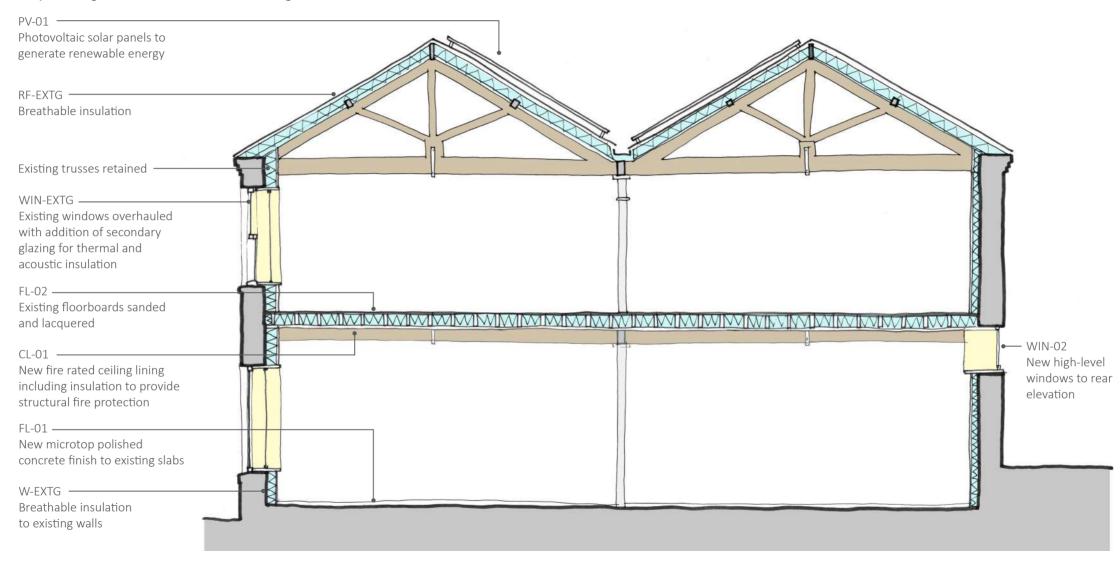


East Elevation (Courtyard)



West Elevation (Rear)

# Fabric Repairs and Upgrades - Improving Performance, Reducing Emissions



# Outline Specification



- 1. Existing roof structure repaired and painted
- 2. Breathable wood fiber insulation and lime system
- 3. New stairwells and associated opening up
- 4. New helical stairwell to lighthouse tower lantern
- 5. New cafe & kitchen and workplace kitchenettes
- 6. New WC 'superloos'











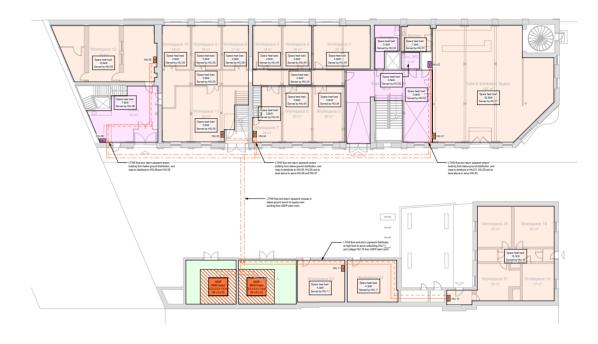
### **Building Services Strategy**

The MEP strategy for Granton Lighthouse has been developed to upgrade the energy efficiency, thermal comfort and provide mechanical ventilation in a way that allows for tenant flexibility and ease of use.

Air source heat pumps situated in the larger outhouse spaces will provide the entire premises with hot water for space heating.

Solar photovoltaic panels will be installed in the central valley of the double hip section of roof, hiding them from view from the street. These will be connected to the incoming electrical supply meter and be capable of exporting generation to the grid.

MVHR is proposed to each tenanted space, supplying fresh air to all working and exhibition/ cafe spaces and extract to all WCs, kitchens and BOH spaces. This will provide much needed ventilation without thermal loss.



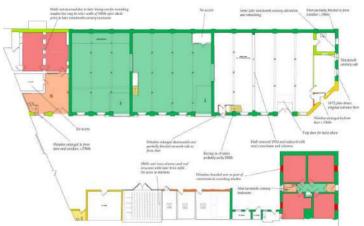
Ground floor space heating plan

### Heritage

The heritage statement provides key research and analysis of the building's phasing, alteration history and usage throughout the 19th- 21st centuries and has informed the architectural design and internal reconfiguration of the project.

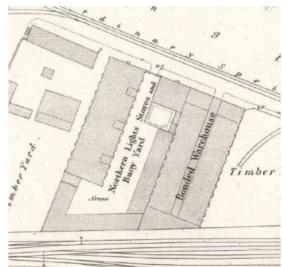
Included in the statement are drawings analysing the historic phasing of the building and architectural significance of the various parts. The statement also covers the history of the building and its alteration history.

Top left- Historic phasing drawing of ground floor Top right- Lighthouse tower in 1975 Bottom left- 1872 map Bottom right- 1876 OS Town Plan









### Cost Overview

The construction cost estimate for the works described above is:

### £4,150,545\*

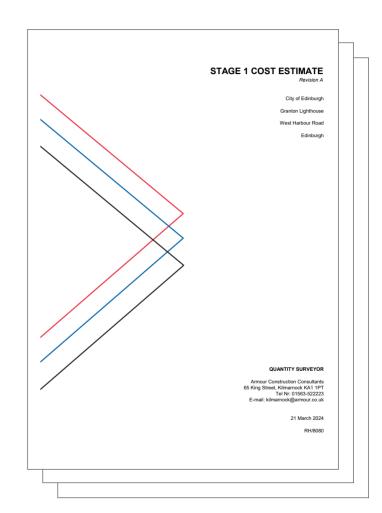
This includes £120,038 for optional works to add further stairs and lifts as shown blue on the drawings. The requirement for these elements is dependent on how the building is ultimately operated and occupied.

This estimate includes contingency and contractor OHP. Professional fees and VAT are excluded and no allowance has been made for inflation.

For further details including an itemised breakdown please refer to the full Cost Estimate by Armour.

Costs across all projects are summarised at the end of this report.

\*Costs subject to final review by Armour.



Cost Summary



# Cost Summary









	Granton Lighthouse	Madelvic House	Granton Station	Walled Garden	Total
Base Cost ('Urgent')	£4,030,507.16	£156,301.83	£141,785.16	£101,908.13	£4,430,502.28
Optional ('Necessary/Desirable')	£120,037.50	£139,218.75	£12,000.00	£572,945.40	£844,201.65
Total	£4,150,544.66	£295,520.58	£153,785.16	£674,853.53	£5,274,703.93*

Construction costs are inclusive of contingency and contractor OHPs but exclude professional fees and future inflation. Refer to Armour cost reports for further details and assumptions.

<sup>\*</sup>Costs subject to final review by Armour.

Next Steps



# Next Steps

### All projects:

- Engagement with tenants, local community and adjoining owners
- Grant funding applications by CEC
- Pre-application planning discussions

### Granton Lighthouse:

- Fire engineer input to develop bespoke fire strategy for the listed building
- Develop planning and listed building consent submission documentation



