London Borough of Hackney Skills, Economy and Growth Scrutiny Commission Meeting - Planning Policy and Net Zero Carbon, 17 January 2024

Case Study 195 Mare Street, E8
Lynch Architects

1 Introduction
195 Mare Street is a prominent, historic Grade II* listed building that had been abandoned and was on the Heritage at Risk register for many years. Dating back to 1697, the house was built in the rural outskirts of the City for Abraham Dolins, a merchant from Ghent and member of the East India Company. The house passed to his son whose family lived in the house until 1801when the house was remodelled by the new owner, John Francis Blacke, a wine merchant originally from Berne. In 1809, the house was inherited by Thomas Wilson, a merchant who had worked in Grenada and was a Tory MP for the City of London between1818-1826. After Wilson's death in 1852, the house was sold to the Elizabeth Fry Society to be a refuge for the reformation of women prisoners. This use continued for over 50 years, when in 1913 it was sold to the Lansdowne Liberal and Radical Club, later the New Lansdowne working men's club. In the 1920s, the house was extended to incorporate a large concert hall at the back of the building and major internal alterations and opening up took place. The Home Guard occupied the house during WWII and it was bombed in 1940. In 2004, the New Lansdowne Club shut and the house was bought by a series of developers, including a Vietnamese developer who proposed a community centre, which was never created. The house was squatted at various points and squatters held community events, performances and parties.

Recently, the land to the rear backing onto Gransden Avenue was developed for housing with 21 flats being built and the house itself was earmarked for office use. Our clients Elizabeth Prochaska and Duncan Clark purchased the building in 2022 with the intention to convert the building back to its original use as a residential dwelling where they will live with their family. In March 2023, Hackney Council granted approval for the building to be converted into a dwelling with community arts use at lower ground floor. The consented scheme was prepared by Rees Bolter Architects and includes the change of use from 'abandoned' to 'sui generis' to cover the combined residential use and community use with public access. Consent was granted for internal alterations, an unpopular and arguably harmful external escape stair, a small outbuilding, landscaping and the replacement of the front boundary gates and railings.

Whilst this consent established the principle of change of use back to residential, the scheme lacked detail and a clear strategy for rehabilitation of the house. Lynch Architects were approached by Elizabeth and Duncan in February 2023 to develop revised proposals. Based in Hackney, our studio is a 10-minute walk from the house. We have extensive experience of heritage and conservation design work and on this project are working with a strong design team including Price & Myers structural engineers, Max Fordham environmental engineers and Semper Fire consultants. We are seeking to balance balance best conservation and sustainability practice in all aspects of the design.

Our scheme, submitted for planning in November 2023, seeks to amplify the special atmosphere of the house, responding to the remnants of original historic fabric and bringing legibility to the interior and exterior spaces with a series of sensitive interventions. Energy efficiency measures and low carbon technologies proposed in the retrofit will assist in bringing down heating costs to a more manageable level in the longer term, making it more likely that a single family could realistically afford the running costs. The project will embody an ethical conservation approach to energy and heritage.

2 Overview of the proposed scope of work and current proposals
Broadly, the proposed amendments to the consented scheme are as follows:

• New design for front and rear gardens and north courtyard
The garden proposals address use, orientation, noise, overlooking and privacy. These include a new entrance gateway from Mare Street and a new gate to separate the public and private territory. We propose a more site specific bike/gardening shed and bin store arrangement, which could accommodate a WC and servery if required.

• No external fire escape stair tower
Instead, we propose the insertion of a new, free-standing timber stair on the north-south axis opposite the existing stair, i.e. in the position shown on the conjectural plans prepared by Jon Bolter showing the likely location of the former servant stair. The second stair would be diminutive in its character to the main existing staircase, connecting the more domestic family rooms from ground to second floor. It would be pulled away from the south facade, creating a triple height void into which the stair sits. South light would enter from the existing windows on this facade illuminating the stair and hall.

• New rooflight
A new circular rooflight is proposed to be inserted at second floor corridor level, located within the central valley gutter and referencing the circular motif elsewhere. It brings top light into the narrower corridor on the top floor and marks the culmination at the top landing of the new secondary timber stair.

• No requirement for an external escape stair from basement

• Clear strategy for rehabilitation of the house
The plan form and cellular division reverts back towards the likely original layout. The consented scheme proposes the insertion of new partitions for secondary spaces such as utility room, laundry and dressing room and bathroom on the north-south axis on all floors. Through the introduction of the new secondary stair in this location, our proposals seek to reinforce the north-south axis with a legible and more authentic 'enfilade' plan arrangement and to bring south light into the plan. Commenting on the previously consented scheme, Tim Walder, Hackney's former Principal Conservation and Design Officer supported ''the insertion of walls into locations where they likely existed in the past'' noting, ''in general the division of oversized spaces into more cellular domestic spaces is a heritage benefit, since the building will revert towards its historic floorplan.''

• Celebration of historic remnants
Our proposals attempt to amplify the special atmosphere these remnants lend to the interior spaces. For example, the proposed new timber panelling takes cues from historic panelling, yet will be clearly identifiable as an intervention of our time. Our strategy to deal with the historic paintwork seeks to conserve and retain the patina and character whilst proposing a practical solution to protect (and allow to be cleaned and maintained) the paintwork at low level and where mouldings have been renewed.

• Removal of new gypsum plaster internal partitions
This may include some removal of gypsum plaster wall linings on external walls, depending on the capacity for thermal upgrades. Where new openings in internal walls are proposed, these are generally in 'new' gypsum plaster walls.

• Concealment of wide span steel downstand beams and encased steel columns.

We propose to improve the proportional relation of solid and void – making openings appear to have been constructed from brick and timber, rather than the wide spans generated by steel downstand beams installed during the working men's club era and recently by the previous developer.

• Development of strategy for insertion of WCs into closets either side of chimneys
This is established in consented scheme. We proposed to keep plumbing to the north and south side of the building, removing the need for pipes in the centre of the plan. Similarly, we propose a vertical service riser running through all floors of the building in a concealed zone next to the new stair.

The architectural quality of the proposed interventions demonstrates a meaningful, imaginative and informed response to the historic value and significance of the building. We consider the proposals for the listed building and its setting to be appropriate and justifiable, and that they would cause less harm than the previously consented scheme.

3 Outline of the planning process
Our proposals have been developed following a preapplication meeting in May 2023 with Adam Dyer and Catherine Nichol of Hackney Council, and Claire Brady, of Historic England. This pre-application process represented the beginning of a conversation between Lynch Architects, Hackney Council and Historic England regarding the rehabilitation of the house.

We received a response letter in July with 'in principle' support for the proposed configuration of the building. A second pre-application meeting was held with Adam and Claire on 2nd October 2023, with email feedback from Adam and Catherine.

Lynch Architects have incorporated recommendations into the revised proposals, addressing the rear garden design (and protecting the amenity of the neighbouring residential units), and progressing the proposed mechanical and electrical design and retrofit strategies to demonstrate how these changes will impact the building and surviving historic fabric.

It was agreed that amendments to the consented scheme would be dealt with via a S73 Variation of Condition and a Deed of Variation to ensure that the S106 legal agreement reflects the amended planning application. A new listed building application has been submitted to accompany the S73 and, once implemented, will supersede the previous listed building consent. The application is due to be determined at the end of January 2024.

The new application takes account of the conditions attached to the current planning and listed building consents so that as much of the information required can be included in the submission.

Historical research undertaken by Jon Bolter, Elizabeth Prochaska and Lynch Architects has been incorporated into a statement of significance that explores reasons for 195 Mare Street's special architectural and historic interest. The statement is structured on the four 'heritage values' cited in the publication 'Conservation Principles, Policies and Guidance for the sustainable management of the historic environment' (English Heritage, April 2008) and describes the reasons for its special architectural and historic interest: evidential, historic, aesthetic and communal.
The images in this presentation are taken from the Design and Access Statement submitted with the application. It records our understanding and interpretation of the historic values and significance of 195 Mare Street, informing its development and re-adaptation for residential use and the long-term, sustainable conservation of the historic property. It also attempts to convey the atmosphere and character of the house incorporating sketches, visualisations and model photographs which we have used to test the proposals.

Relevant national and local planning policies and guidance have been followed, as advised by the case officer. Even as we develop the detailed technical design proposals, guidance in this field is evolving. For example, Historic England's recent advice note "Climate Change and Historic Building Adaptation" published for public consultation in November 23 helpfully identifies broad strategies for improving energy efficiency which are likely to be acceptable, being mindful of any impact on significance. Happily, these strategies echo our thinking.

4 Energy strategy and measures taken to maintain the character of the building
As part of a "fabric first" approach we are seeking to establish the thermal improvements that are possible in each space while being sensitive to the conservation needs of historic fabric. The interventions in rooms will vary according to the opportunities available.

Our low energy servicing strategy in response to the opportunities and constraints presented by the building and the site prioritises the avoidance of any fossil fuel use to promote long term decarbonisation and improvement in air quality.

We intend to replace the recently installed single glazing with high performance double glazing, and to insulate external walls and roof with breathable materials where possible, with detailing to improve airtightness. On the ground floor, we propose to insert breathable insulation inside the existing void behind the timber panelling in the historic rooms. MVHR would be incorporated discreetly using the chimneys as ventilation ducts and low temperature heating would be provided by an air source heat pump with underfloor heating and radiators. The valley between the roofs provides a location for PVs.

Max Fordham's energy strategy is structured according to the London Plan energy hierarchy: Be Lean; Be Clean; Be Green.

Be Lean
The first step is to reduce energy demands compared to the baseline. It is cheaper and easier to implement fundamental measures earlier in the design and it is at this stage that most passive measures can have their greatest effect. The aim has been to prioritise robust measures which are less likely to be changed, are easier to build successfully and have the greatest effect on the energy use,

Passive measures include improving the thermal performance of the fabric, improving air tightness by limiting air leakage to 0.15 air changeovers per hour (through careful detailing and specifying materials that can be lapped and sealed) and reducing instances of thermal bridging, though this is challenging in such a building.

Active measures include high efficiency lighting and mechanical ventilation. Mechanical ventilation will reduce external noise and allow heat recovery. In winter the proposed MVHR unit will temper the incoming cold fresh air reducing heat losses and increasing user comfort. During the summer the heat exchanger may be bypassed to reduce the risk of overheating if it is hot inside the building. Alternatively, during warmer summer months, the building can be naturally ventilated using the existing windows. These measures are expected to result in a reduction to the yearly heating demand of 77%.

Be Clean
Following the reduction of energy demand in the Be Lean stage, the London Plan requires the development to demonstrate how the systems will supply energy efficiently and cleanly to reduce CO2 emissions in the Be Clean stage of the energy hierarchy.

As our development is quite small and is expected to have low heat losses and demands, connecting to a district heat network is considered to be unnecessary as this would require additional infrastructure. Instead, the intention is to meet the demands for space heating and hot water by way of an electric air source heat pump. Space heating will be delivered, where possible, via underfloor heating to compliment the heat output from the heat pump.

Where underfloor heating is not possible, resulting for unsuitable aspects of the existing historic structure, the space will be heated through either natural of fan assisted radiators.
As a result of adopting this methodology, no savings are made during the Be Clean measures when compared to the 2021 notional building.

Be Green
Two forms of renewable technology on-site have been considered as suitable:

Firstly, an Air Source Heat Pump (ASHP).
ASHPs are a highly efficient method of heating and cooling a building, they are far more efficient than gas boilers. Electrification of heating also ensures that as the national grid decarbonises, so too does the building.

Secondly, a PV Array.
The roof of the building is pitched with an approximate west to east orientation. It is proposed that the both the inner pitches will be used to generate electricity. Using todays current PV technology it is expected that a 30m2 array located here would produce a peak of 7.2 kW of electrical power equating to a total of 5080 kWh/annum when considering the average solar irradiance in this location. Using the current average grid carbon factor for the UK for electricity (0.2485 kgCo2/kWh) the PV array should offset 1.263 Tones of CO2 per annum.

The final building, after considering all 3 aspects, Be Lean, Be Clean and Be Green and current 2023 grid carbon factors has a resultant carbon saving of 90.8% when compared to the existing building if we assume the existing building were to be heated with a gas boiler.

5 Conclusion
The strategy for 195 Mare Street could be described as ‘Long-term Sustainable Conservation’ and should provide a robust basis for future stewardship. The proposals put forward here represent a significant financial commitment to keeping the building off the ‘heritage at risk’ register and rehabilitating it as a family home whilst also providing valuable community use and access for the general public. Our Clients are enthusiastic to share with others the stories and atmosphere of the house and to help write the next chapter in its history.