
# Design & Access Statement

## Proposed low energy retrofit

## 93 South Hill Park

## London NW3 2SP

January 2022

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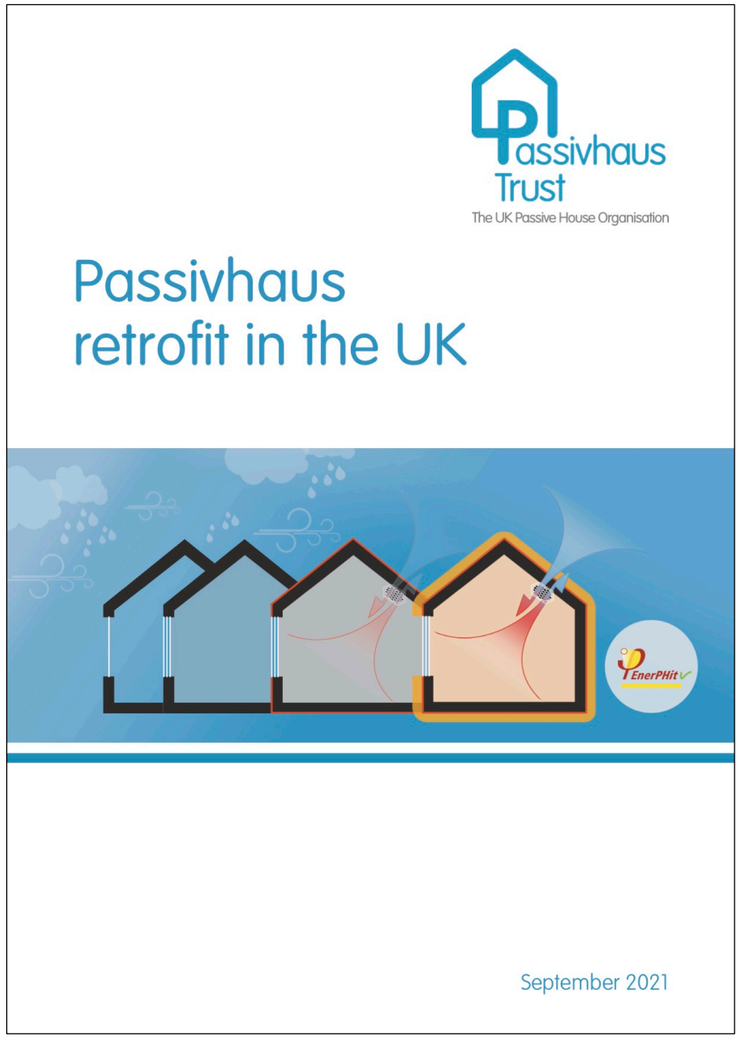
# 1. Introduction

This Design and Access statement covers proposed energy improvements and associated works to 93 South Hill Park, Hampstead NW3 2SP. The single-family house lies in the South Hill Park Conservation Area in the London Borough of Camden. The intention is to improve the energy performance of the house to, or close to, the EnerPhit Standard and should be considered in the context of the revised Climate Change Act (2008) and the UK's commitment to achieving net zero carbon emissions by 2050. This application is supplementary to a previous application (2021/3642/P) made on the 2nd September 2021 on which a decision is still awaited.


# 2. Project description

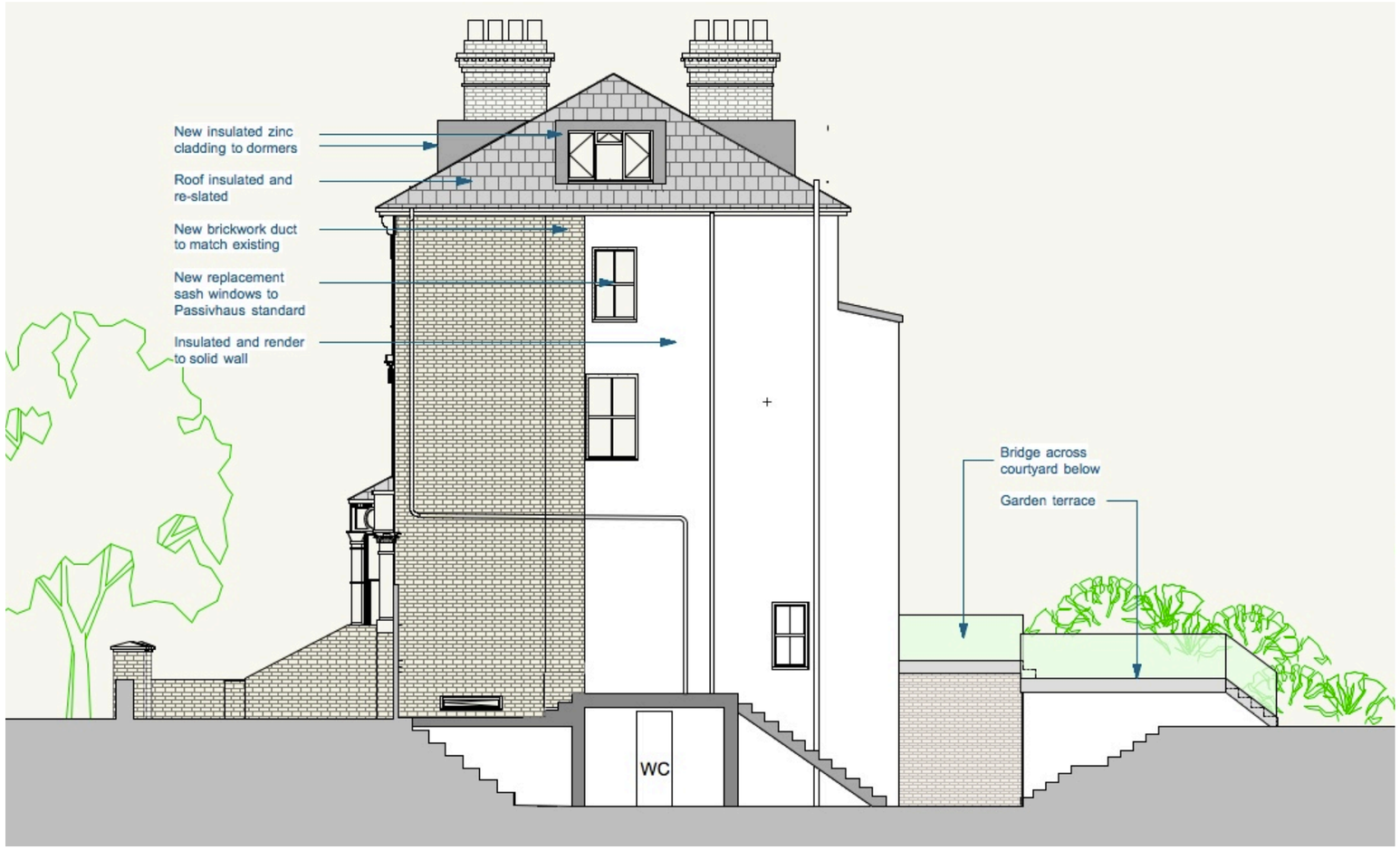
It is planned to fully renovate the interior of the property and it is considered important to use this opportunity to upgrade the energy and environmental performance of the building as far as is reasonably possible within a heritage context. It is proposed to take a fabric first approach, upgrading the insulation to the external envelope and airtightness of the house as first priorities. This will be supported by the installation of a mechanical ventilation and heat recovery (MVHR) system and air source heat pumps (ASHP) to provide low energy heating and hot water. Other measures will focus on achieving reduced water consumption and lowering pollutants.

Conservation area and heritage considerations have been taken into account to ensure that the proposed works will protect and enhance the appearance of the building to the greatest possible extent with the front and front side elevations being maintained, repaired and redecorated to enhance their existing qualities. The roof, currently covered in fibre cement slates will be reroofed in welsh slates and Crittall type windows will be replaced with high performance timber casements.

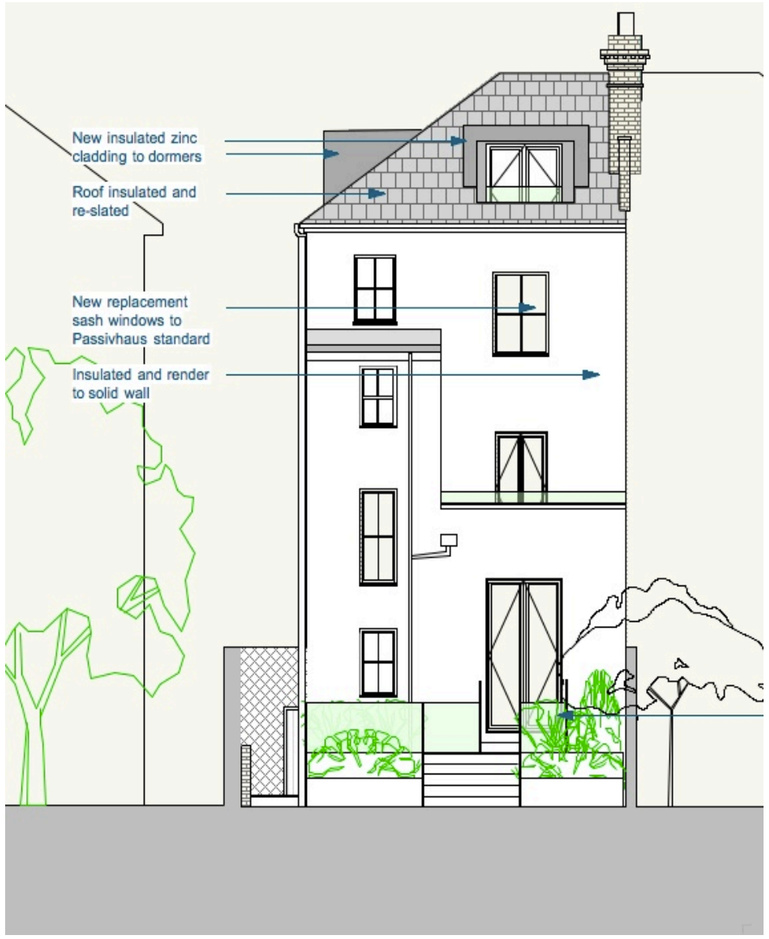
It is proposed to insulate the front part of the building with internal wall insulation (IWI) and the rear with external wall insulation (EWI) with a rendered finish up to the underside of the existing soffit. New high performance windows and external doors will be installed (as the previous application) with the existing front door being upgraded and retained. The existing roof structure will be repaired, strengthened and retained including the existing dormer windows. The roof will be comprehensively insulated before being re-slated.

# Project description

At the rear of the house the existing glass and steel balcony and staircase will be removed but it no longer proposed to replace this with a rear extension and ground level terrace as the September 2021 application. Instead a simple bridge will cross from ground level French doors to a raised decking area replacing the existing seating area. As with the previous application the small garden studio building at the rear of the property will be repaired, insulated and restored.




Proposed side elevation




Proposed rear elevation

# 3. Site location & context

The site is at the northern edge of the South Hill Park Conservation Area, backing onto Parliament Hill/Hampstead Heath, on a plot of approximately 424m$^2$. The five storey semi-detached house is surrounded by similar properties and together their frontages form an important consistent element in the streetscape.

Together South Hill Park and South Hill Park Gardens form a tight loop, sometimes described as a squash racquet, which No. 93 is near the head of, resulting in a splayed plot and a relatively narrow frontage (7.6m). At the rear of the property a small single room garden studio is wedged into the corner of the site and a gate in the rear fence leads out onto Parliament Hill. There is a rise of approximately 1.5m from street level to the rear of the site. The site is approximately 54m front to back with a maximum width of 10.3m.

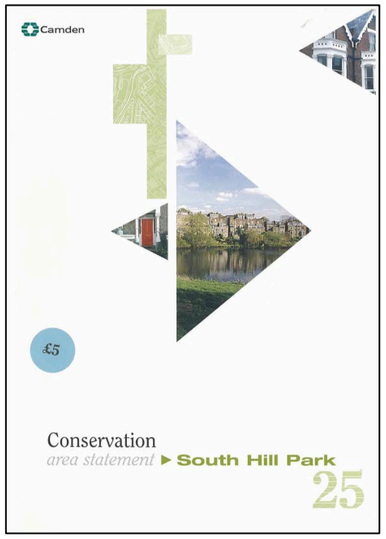
Aerial view – Image courtesy Google


1912 Ordnance Survey

# 4. Conservation area

The South Hill Park Conservation Area was designated in 1988 *“as they comprise a fairly homogeneous area in architectural terms*”. 93 South Hill Park is within Sub Area 1 of the Conservation Area and comprises the right hand half (as seen from the front) of one of the area’s typical pairs of semi-detached ‘Italianate’ villas, the major factor contributing to its ‘architectural unity’.

South Hill Park was laid out in an area of former farmland adjacent to Hampstead Heath in 1871 with houses rapidly being built and occupied in the early part of the 1870s. The houses in the upper part of the loop are all similar in broad appearance, albeit with numerous individual variations, with small front gardens, front stoops leading to the front doors and bracketed overhanging eaves.




# 5. Existing Building

The house comprises 5 storeys including a lower ground floor at rear garden level, a ground floor 7 steps up from street level and three further levels above. Typically each floor has two large rooms, one front, one back, with a much smaller room over the front entrance. There are a number of small service-sized rooms at the rear at the half landings of the staircase.

Externally

External walls are in London stock bricks laid in Flemish bond with a variation on Dutch bond in some of the panels between windows. Roofs are slated, largely fibre cement, but with some original welsh slates on the rear slope. Windows are timber sliding sash in the lower four storeys and Crittall type metal windows in the dormers on the third floor. All windows are single glazed.

The front elevation has a range of decorative elements including a double height bay window with relief panels and attached columns. The front door has a shallow columned porch, although the decorative arch visible on neighbouring properties has been replaced with a much simpler feature in recent times. A dentated stringcourse connects the window openings and rendered arches at first floor level with a simpler rendered band and splayed window arches at second floor. Decorative brackets notionally support cills to the bay windows and the eaves. The side and rear elevations possess none of the decorative features visible on the front.

The rear elevation at ground and lower ground floor levels was modified in the early 2000s with the addition of a steel and glass external balcony with open grillage decking and steps. This wouldn't have complied with Building Regulations at the time and represents a hazard for children today. Rear openings were also fitted with large-scale glazing/French windows leading onto the balcony or into the courtyard below. A double height glazed block fixed light was installed on the side elevation and the lower ground floor has a rendered finish.

The hipped roof has three dormer windows, one per flank, with the one on the front elevation recessed into the roof slope and an asphalt apron laid in front of it. The eaves soffit is in poor condition and requires replacement. At some point all the rainwater goods have been replaced with black UPVC fittings and pipes

The external condition of walls is reasonable, although a degree of repointing is required and plants are growing from the brickwork around the front steps. In the past inappropriate cement-based repointing has taken place in patches to the walls.

Internally

The lower ground level has been extensively 'modernised' with a new flight of open tread stairs, large scale flush doors etc. Period features have largely been expunged. The ground, first and second floors have retained their room configurations and features, while the third level has been modestly remodelled.

# 6. 2021 Application

In September 2012 a planning application (2021/3642/P), in the name of Terry Hallahan, was made by agents, Tate & Company Architects LLP, (registered 2nd September 2021) for a: *Rear single storey extension at ground floor. New terrace on rear extension. Replacement of garden room at rear of property. Replacement of windows on the 3 dormers on the roof with juliet type balcony. Various alterations and refurbishments*. It has yet to be determined.

It is proposed to maintain the following features contained in that application:

a. Replacement of all windows with high performance timber windows to match existing
b. Reconstruction and recladding of roof dormers
c. Insulation and re-slating of main roof
d. Creation of balcony at rear
e. New paving, bike & bin store at front
f. Refurbishment of front gate & fence
g. Works to garden building

The following works proposed in that application will not be implemented:

h. Lower ground floor rear extension and terrace above with stairs to garden level
i. Bronze cladding to dormers etc.

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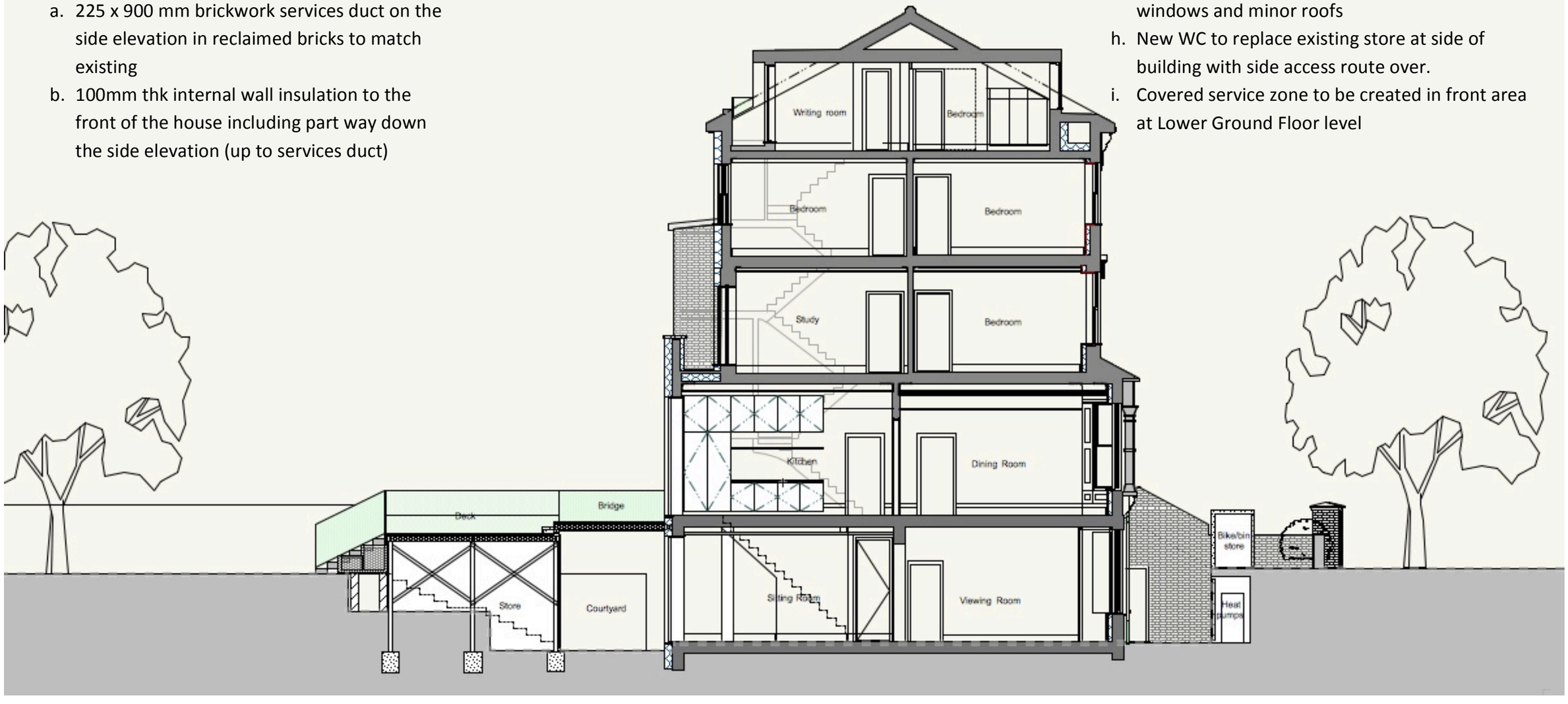
Illustration from 2021 application showing rear extension and bronze clad dormers – that WILL NOT be implemented

# 7. Proposals

It is proposed to augment the proposals in the September 2021 submission with the following works. These proposals take a fabric first approach intended to achieve external wall U-values of less than 0.18 W/m$^2$K and roof values of 0.12 W/m$^2$K as well as a maximum air infiltration rate of 2.0 ac/hr/m$^2$ @50 Pa in accordance with the LETI Climate Emergency Retrofit Guide:

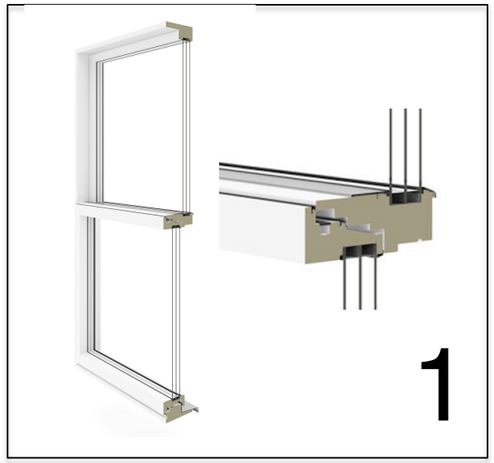
a. 225 x 900 mm brickwork services duct on the side elevation in reclaimed bricks to match existing
b. 100mm thk internal wall insulation to the front of the house including part way down the side elevation (up to services duct)
c. 200mm thk external wall insulation and render to the rear of the house and part way down the side elevation (from services duct on) complete with relocated windows.
d. Windows upgraded to Passivhaus standard
e. Replacement high performance French windows to be installed in existing Lower Ground Floor rear openings
f. New raised deck over existing external seating area including planters to separate from site boundary together with bridge connecting from Ground Floor kitchen. Both to be stone paved. This will have low impact on the neighbouring properties in comparison with the current proposals.
g. Dark zinc (graphite) cladding to dormer windows and minor roofs
h. New WC to replace existing store at side of building with side access route over.
i. Covered service zone to be created in front area at Lower Ground Floor level



# 8. Elements & materials

The following examples of construction elements and materials are proposed:

1. Windows – sash: Model Victoria from Bewiso
2. Windows – casement: Massiva*passiv* from Katzbeck
3. French windows: Luma from Katzbeck
4. Roof – main: Welsh slates
5. Dormer cladding (& minor roofs): Rheinzink pre-patinated graphite standing seam roof
6. Rainwater goods: Rheinzink to match cladding above
7. Rear wall EWI: Baumit SilikonTop, white, on mineral wool EWI slab
8. Paving – front: Marshalls Yorkstone paving
9. Paving – rear: Marshalls Symphony Porcelain Plank paving
10. Balustrades – rear: Clamped frameless glass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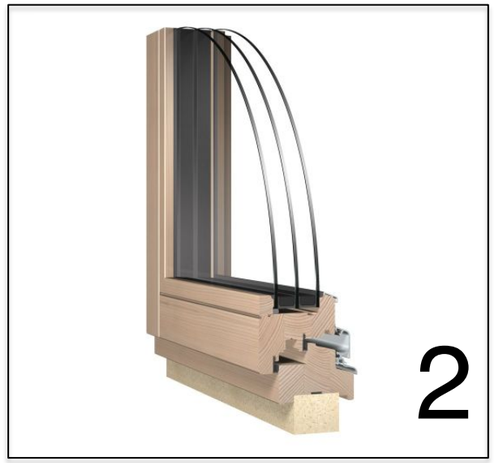
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# 9. Technology

The primary approach to dealing with sustainability will be the modifications to the fabric but ventilation and heat will be provided by:

1. Whole house MVHR system: e.g. Solarcrest with Zehnder ComfoAir Q
2. Air source heat pumps to provide low temperature heat.
3. Underfloor heating loops, and
4. Low temperature radiators

The house will be entirely electric and the existing gas supply will be removed.


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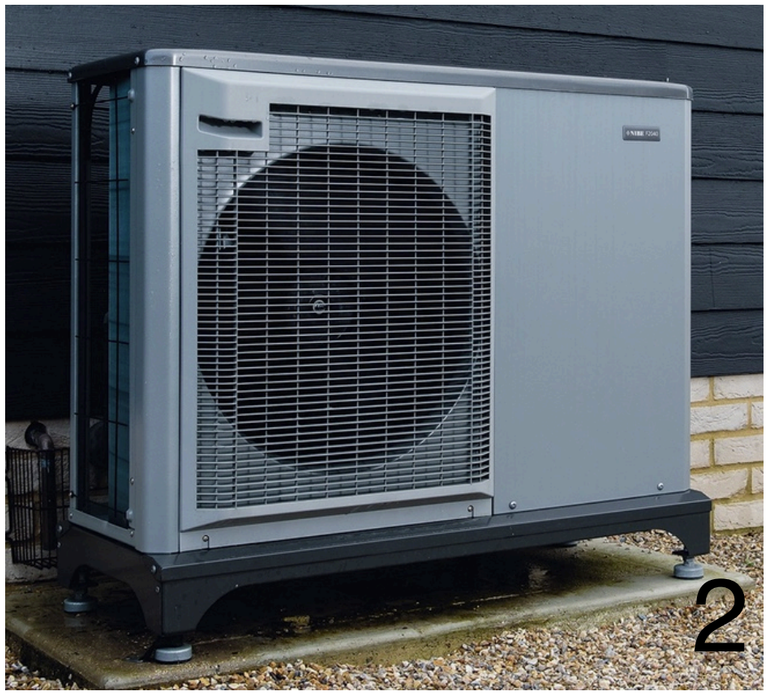
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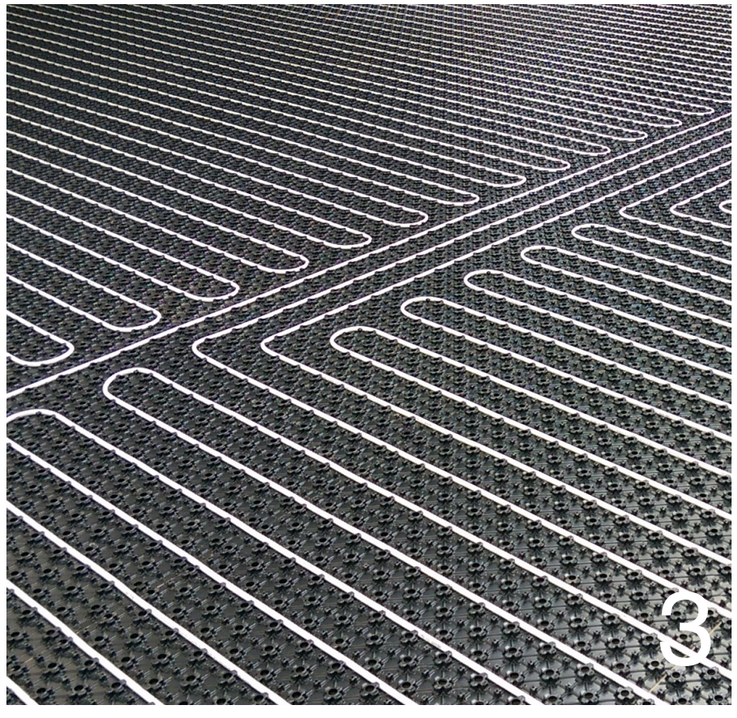
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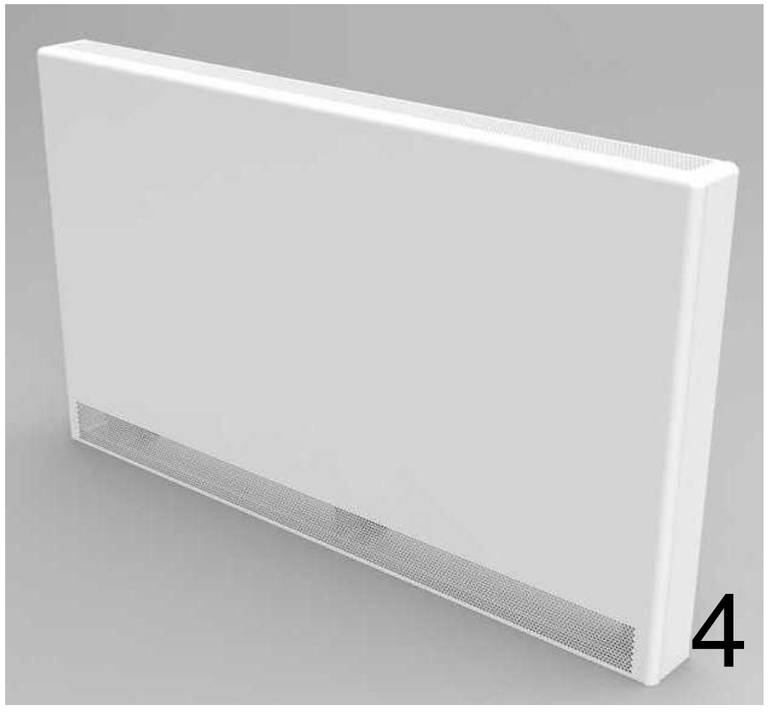
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## 10. Access

Access to the site is as at present from South Hill Park and from Parliament Hill/Hampstead Heath at the rear of the site. Both accesses are pedestrian only and no vehicles are possible on the site. The South Hill Park access is via steps up to the front door and via the side gate to the rear garden.

The rear access is an additional feature of the site and is only a minor access point.

Neither access is suitable for many disabled persons and the heritage aspects of the site will prevent any suitable changes being made.

## 11. Parking, bin & cycle storage

There is no on site parking. South Hill Park affords some controlled residents' parking.

A new bin and cycle storage enclosure will be built at the front of the site to ensure that these are kept in a secure location and out of immediate sight.

## 12. Flood risk

The site with its proximity to a number of streams and lakes on Hampstead Heath is designated by the Government's Flood Risk service as having a high risk of surface water flooding.

The lower ground floor will be constructed to be relatively resilient in the event of a flood, with rendered walls, tiled floor etc. Drains will be checked, cleared and improved if necessary.

# 13. Surveys

An arboricultural survey was carried out by Hayden's Arboricultural Consultants on 15th July 2021 and their Arboricultural Impact Assessment, Method Statement and Tree Protection Plan is included with this application. No works to any trees, beyond standard maintenance, is envisaged.

An environmental survey was carried out by Ecosa Ecological Survey & Assessment on the 3rd August 2021 and their Ecological Impact Assessment is included with this application

ECOSA
Ecological Survey & Assessment
*A Trinity Consultants Company*

KEY
H001 – Bay Laurel
T001 – Privet
T002 – Apple
T003 – Purple Leaved Cherry Plum
T004 – Cherry
T005 – False Acacia
T006 – Pear
T007 – Unknown
T008 - Lime