EDWARDS RENSEN **ARCHITECTS**

DESIGN & ACCESS & SUSTAINABILITY STATEMENT

For Full Planning and Demolition in a Conservation Area at

Flat 1, 162 Haverstock Hill, London, NW3 2AT

November 2021

CONTENTS:

1. SITE AND SURROUNDINGS

1.1 The application site is Flat 1, 162 Haverstock Hill, London, NW3 2AT.

1.2 Flat 1 is a small infill development built in the early 1990's behind and beside the large main Victorian semi-detached house which fronts Haverstock Hill.

1.3 The site is within the Parkhill and Upper Park Conservation Area in the London borough of Camden.

Figure 1: Photo of the front
The red arrow points to the application site.

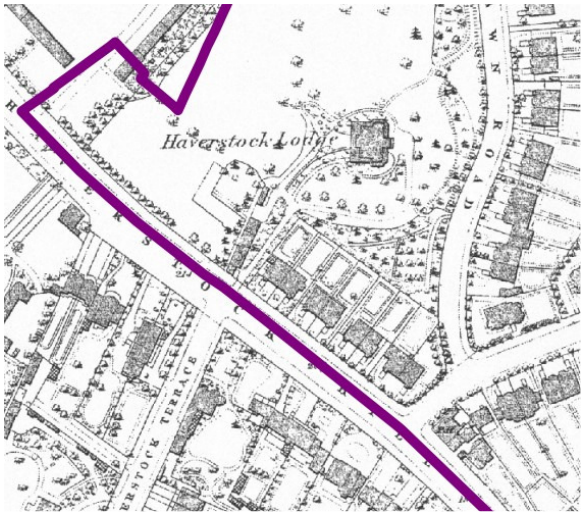
Figure 2: Measured survey drawing of the front elevation

2. HISTORY

2.1 The main house at 162 Haverstock Hill was built in the early 1860s as part of a development by William Lund called the Haverstock Lodge Estate, which included numbers 156 to 170 Haverstock Hill. 162 Haverstock Hill was called Rickham House.

2.2 The extracts from historic Ordnance Survey maps below show that 162 Haverstock Hill was originally a semi-detached house and where flat 1 now stands was garden. These OS extracts show how the urban fabric gradually changed as Haverstock Lodge was replaced by Downside Crescent and Belsize Park tube station was built.

Figure 3: extract from O.S. dated 1870-75



The purple line is the edge of the conservation area.

Figure 4: extract from O.S. dated 1894

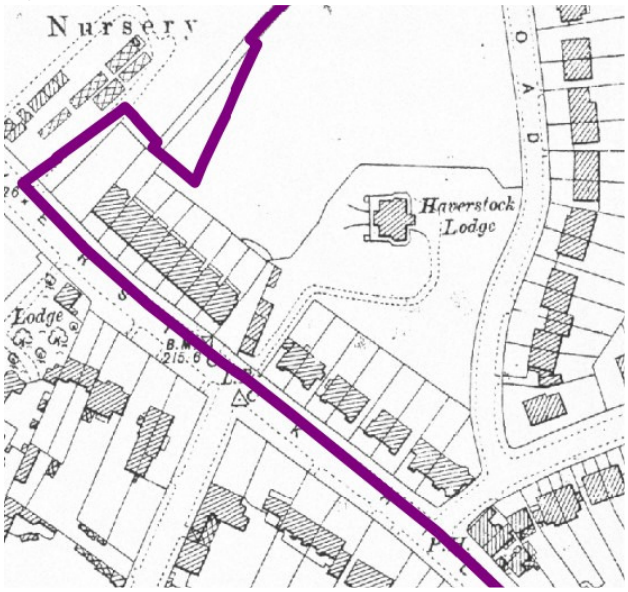
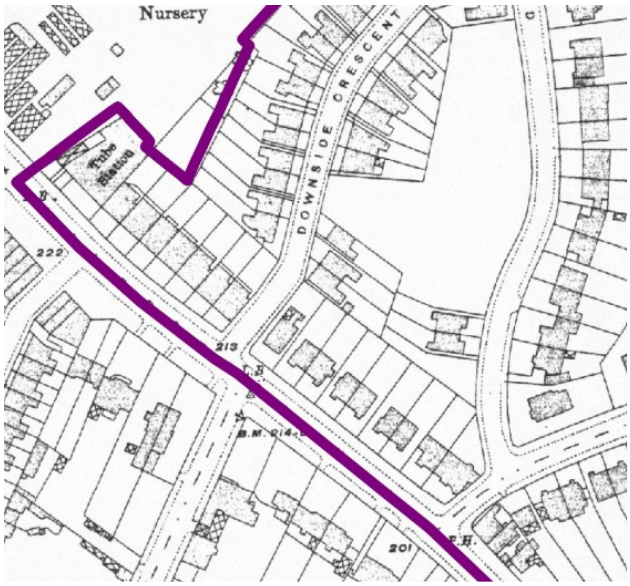


Figure 5: extract from O.S. dated 1914



2.3 At some point in the twentieth century a garage was built to the rear of the main house. In 1985 planning approval was given to convert 162 Haverstock Hill into five flats including replacing the garage with a small two storey house, to be named Flat 1. The planning application reference was PL/8401537/R1. Permission was granted on the 13th of February 1985. Construction was delayed and the works were completed in the early 1990s.

2.4 Parkhill and Upper Park Conservation Area was established in 1973 and has been expanded several times since. The application site became part of the conservation area when it was expanded in 1991.

2.5 The adjacent infill development (164C Haverstock Hill) was granted planning permission at appeal in 2003.

3. PROPOSAL

Brief

3.1 The proposal is to demolish the existing twentieth century two storey infill house called Flat 1 and to replace it with a better house within nearly the same footprint.

3.2 The applicant proposes to replace the existing house because the existing layout is awkward and the house is not energy efficient. In terms of layout; the ground floor is divided into dark cellular spaces, and half of the first floor is only accessible through the bedroom. In terms of energy efficiency; it is poorly insulated, it overheats in summer and is very cold in winter. It requires a lot of energy to heat and to cool. Natural light and ventilation are also inadequate and security is an issue. By replacing the existing Flat 1 house, better quality accommodation can be provided and current environmental standards can be achieved or improved upon, reducing energy use going forwards.

3.3 Problems with the existing dwelling include that the flat roof leaks in several places and needs replacing. Better materials with longer lifespans are available now than when flat 1 was built. Also the existing boiler is external and extremely inefficient.

3.4 Refurbishment was initially explored instead of replacement, but the amount of changes needed to update the house (and the existing different ceiling heights) make refurbishment structurally impractical.

3.5 The proposed new house will be compliant with current accessibility standards and therefore much better able to accommodate the applicants in their retirement.

Scale and roof line

3.5 The scale of the proposal is very similar to the existing building in terms of footprint, height and roofline.

3.6 <u>Footprint</u>
The proposal is almost entirely within the footprint and envelope of the existing Flat 1. The one area in which the proposal extends beyond the existing footprint is at the back where a single storey part would extend into the side passage. The extended area of footprint is 6.4 sqm. The back garden is quite large for the size of property (130sqm), and the small extension will not impact garden amenity and will greatly enhance the inside space.

3.7 <u>Height and roofline</u>
The height of the proposal is the same as existing at the front and back, and lower in the middle. The proposed front and back parapets line through with the parapets of the existing neighbour at 164C Haverstock Hill.

3.8 The existing Flat 1 has a plant room on the flat roof containing water tanks. Despite being 106cm higher than the parapet, it is hardly visible from the front and back, because of it's position in the middle of the flat roof. The proposal has an upstand in the middle of the roof for a skylight. The proposed skylight is 53cm lower than the current plant room, and would be even less visible from the street or gardens.

Character, materials and architectural treatment

3.9 There is a limited palette of materials and they are durable, robust and high quality.

3.10 Front elevation

The main material proposed for the front façade is an elegantly elongated silver-grey brick; Randers Tegl Bricks, or similar. This brick was approved by Camden Planners for 101 Camley Street (application reference 2014/2674/P).

3.11 The proposed fenestration is wider and more in proportion with the fenestration of the original Victorian house, while being clearly contemporary.

3.12 The joints in the middle of the façade would be recessed, while those around the boarder would have flush joints, to create a subtle differentiation between the middle where the window, door and canopy are set and the border around the edges. This reflects, in a contemporary way, the pronounced blocky corners of the adjacent Victorian house.

3.13 The front door, canopy and window above will be high quality (triple glazed), with streamlined and seamless designs. Smaller elements such as post box, entry phone and rainwater pipe are integrated into the composition, to create a calm uncluttered elevation.

3.14 The front elevation would present a calm, serious urban front towards the street. When seen closer up, where the details become apparent, it would 'soften' to reveal texture and material, becoming more tactile and domestic.

3.15 Back elevation

The proposed rear elevation is simple and informal. At both ground and first floor there would be a large sliding door within a simple rectangular plane. Like the front window, the sliding doors are high quality, high spec, with triple glazing to achieve high insulative values.

3.16 The proposed bricks at ground floor level are the same as at the front. At first floor the proposed material is self-colouring acrylic render. The render continues around the corner to the side façade, creating interlocking volumes of brick and render.

3.17 Like on the front façade, the roof edge lines up with, and roof trim detail matches, the adjacent 164C Haverstock Hill. The balustrade is frameless glass. A well-placed single rainwater pipe creates an equal brick pier on either side of the sliding door. The proposed façade is uncluttered, calm and informal.

3.18 Side elevation

The proposed side elevation is softer and more informal. The applicant asked the neighbour whose garden this elevation faces, what material they would like for the wall on the boundary. The neighbour chose brick to match her existing garden wall.

3.19 The other walls are acrylic render, to enhance the interlocking-volumes concept and to help make the building seem even smaller. The proposed windows are triple glazed to match front and back. The ground floor window has obscured glass, for privacy of the applicant and the neighbour. A wooden screen at the edge of the back terrace prevents overlooking of neighbouring gardens and creates privacy for the applicant.

4. IMPACT ON CHARACTER & APPEARANCE OF THE AREA

4.1 The proposed development is small in scale compared to adjacent buildings.

4.2 The site is set back from the road and down a slope, which reduces any impact.

4.3 Compared to existing, the proposed footprint is only slightly larger and only at the back.

4.4 Compared to existing, the proposed height is the same at the front and back and lower in the middle.

4.5 The Parkhill and Upper Park Conservation Area Management Strategy (Adopted 11 July 2011) includes the main Victorian house in front of the application site in the list of buildings making a positive contribution to the area (156-170 Haverstock Hill) (p33).

4.6 On p19 the Management Strategy describes the dramatic variation in styles in 'coach house' type infill developments between the large semi-detached Victorian houses on Haverstock Hill.
*"There are many examples of infill between houses in this area, but possibly none as contrasting and eye catching as between numbers 162 and 164 Haverstock Hill where **pastiche** meets individualism in contrasting versions of contemporary coach-house infill."*
This implies that an alternative to pastiche would be viewed positively.

4.7 On p35 the Management Strategy mentions the existing Flat 1 under the heading
'Buildings that make a negative contribution'
*"Twentieth century extensions which vary from the pastiche to the individualistic for example between 162 and 164 Haverstock Hill **neutral effect**"*
This implies that a proposal to replace Flat 1 would not be resisted in principle.

4.8 On p37 under the title
"Problems and pressures, and capacity for change"
"The characteristic gaps between Victorian semi-detached villas have been eroded over time, with infill structures of varied design quality."
This implies that a proposal to replace Flat 1 might be seen as a positive opportunity.

4.9 On p55 the Management Strategy states:
"Where infill extensions are acceptable in principle they should:
• be subordinate to the design of the main building and clearly read as an extension.
This implies that an infill development which responds to rather than imitates the original Victorian building in style and materials would be viewed positively.

4.10 For further details see Heritage Statement by planning consultant Anthony Keen.

5. AMENITY

5.1 The proposal will have minimal impact on the amenity of neighbouring properties, because it stays almost entirely within the envelope of the existing building.

5.2 The two areas where the proposal extends beyond the existing envelope are:

a. In the rear side passage at ground floor level. This is just one storey high and the proposal has been agreed with the owner-occupier-neighbour, in Flat 2, 162 Haverstock Hill. There is a window in Flat 2 in a spare bedroom which currently looks into Flat 1's rear side passageway. The fence between Flat 1's land and Flat 2's garden will be removed, as requested by the owner-occupier of Flat 2, so the view from Flat 2's spare bedroom will be at an angle into their own garden. Given the northly orientation and the distance between Flat 2's spare bedroom window and the proposed new wall, there would be no adverse impact in terms of outlook, sunlight or daylight.

b. In the rear side tank room access passage at first floor level. This fills in the area between the existing timber screen and the conservatory, so although it creates more indoors area, it does not impact on the neighbours. The design has been agreed with all the neighbouring owners in the flats in 162 Haverstock Hill.

5.3 The proposal has been agreed with all the neighbouring owners in 162 Haverstock Hill as well as the neighbours in 164C Haverstock Hill (the adjacent infill development).

5.5 The existing garden space is not being reduced.

6. SPACE STANDARDS

6.1 The space standards for new homes in Camden are set out in Camden Planning Guidance document Housing, January 2021.

Size

6.2 For space standards requirements, Camden's Planning Guidance on Housing refers to Nationally Described Space Standards point 10 Technical requirements.

6.3 The proposed new dwelling is a 2bed 3person dwelling over two stories.

6.4 The proposed dwelling exceeds the minimum requirements as follows:

Table 1: Space Standards

Space/provision	**Nationally Described Standard**	**Proposed**
Gross internal area	70sqm	95sqm.
Built in storage	2.5sqm	4.69sqm including 0.78 for services.
Bedspaces	At least 1double bedroom	1 double bedroom and 1 single bedroom
Area & width of a single bedroom	Area at least 7.5sqm. Width in one direction at least 2.15m	Area: 11sqm Smallest width: 3.25m
Area & width of a double bedroom	Area at least 11.5sqm. Width in one direction at least 2.75m	Area: 15.6sqm Smallest width: 3.12m
Minimum floor to ceiling height.	2.3m for at least 75% of the Gross Internal area.	Ground floor: 2.9m (100%) First floor: 2.5m (100%)

Layout

6.5 Camden also stipulates standards to do with outlook, accessibility, circulation, etc:

a. Dual aspect and outlook:
The dwelling has good dual aspect, better than existing, and each room has a good outlook. The living room-kitchen-dining and the main bedroom look out over the back garden. The single bedroom/study looks out over the front drive.

b. Natural daylight:
Apart from the first-floor bathroom and ground floor cloakroom, all spaces have large areas of glazing, which let in natural daylight.

c. Privacy:
All habitable rooms enjoy excellent privacy.

d. Circulation space:
Circulation space is efficient, minimal and accessible.

e. Ceiling height:
Camden encourages a ceiling height of at least 2.5m for at least 75% of the gross internal area. The proposed ceiling heights for the entire dwelling is 2.6m or more.

f. Accessibility:
See separate section, below.

g. Storage:
The storage space in the proposed dwelling exceeds the requirements set out in the Nationally Described Standards (see table 1 Space Standards above). The kitchen will be equipped with pull out bins for separate recyclable waste.

h. Stacking:
n/a.

i. Climate change mitigation:
Refer to the Energy Statement by Green Build Consult, dated October 2021.

7. ACCESSIBILTY

7.1 Both the London Plan and Camden Local Plan stipulate that new homes should comply with Approved Document Part M(4)2. The proposal complies as follows:

Approaching the dwelling

7.2 Part M(4)2 does not apply to land outside the curtilage of the development.

7.3 Part M(4)2 stipulates that an approach route should comply with the following:

a. The approach route is level, gently sloping or, where necessary, ramped.

b. Private parts of the approach route have a minimum clear width of 900mm or 750mm where there are localised obstructions.

c. Communal parts of the approach route (except communal stairs) have a minimum clear width of 1200mm or 1050mm where there are localised obstructions.

d. Any localised obstruction does not occur opposite or clos to the doorway, or at a change of direction, and is no longer than 2m in length.

e. All external parts of the approach route have a suitable surface.

f. Every gate (or gateway) along the approach route has both:
- A minimum clear opening width of 850m
- A 300mm nib to the leading edge of the gate.

7.4 Compliance:
The proposed entrance level of the new dwelling is slightly higher than the level of the existing dwelling. The area on front of the entrance doors will be adjusted to become level. Therefore the approach route in side the curtilage of the development is level. The minimum width of the approach route is 2.6m, without any obstruction. The surface is made of concrete pavers. There are no gates (or gateways) along the approach route.

Parking space and drop of point

7.5 There is no parking space within the curtilage of the development, and there is no dedicated drop off point for the dwelling. There is an existing parking space in the front drive, in the area of shared freehold.

Communal entrance

7.6 Stipulations on communal entrances and communal stairs and lifts do not apply. The dwelling has its own dedicated front door at street level.

Private entrances

7.7 Part M(4)2 stipulates that the principle private entrance should comply with the following:

a. There is level external area with a minimum width of and depth of 1200mm.

b. The landing is covered for a minimum width of 900mm and a minimum depth of 600mm.

c. Lighting is provided which uses fully diffused luminaires activated automatically by dusk to dawn timer or detection motion.

d. The door has a minimum width of clear opening width of 850mm.

e. Where there are double doors, the main (or leading) leaf provides the required minimum clear opening width.

f. A minimum 300mm nib is provided to the leading edge of the door and the extra width created by this nib is maintained for a minimum distance of 1200mm beyond it.

g. The depth of the reveal on the leading side of the door is a maximum of 200mm.

h. The threshold is an accessible threshold.

i. Where there is a lobby or porch, the doors are a minimum of 1500 apart and there is at least 1500mm between door swings.

7.8 <u>Compliance</u>

The proposal complies. The area in front of the front door of the existing dwelling is slightly sloping. The proposal is to raise the level of the entrance level the paving in front of the entrance door to create a 1200mm wide and deep level area in front of the front door. The area in front of the door is covered by a 600mm deep canopy, which is over 2m wide. The entrance area will be provided with a motion censored diffuse light. The clear door opening width is more then 1m, With a 480mm nib on the leading side. There is effectively no reveal on the leading side. The threshold is an accessible threshold. And there is no lobby or porch.

Door and hall width

7.9 Part M(4)2 stipulates that Internal doors and corridors comply with the following:

a. The minimum width of every landing is 900mm.

b. Any localised obstruction, such as a radiator, does not occur opposite or close to a doorway or at a change of direction and is no longer then 2m; and the corridor is not reduced below a minimum of 750mm width at any point.

c. Every door has a minimum clear as set out in below table.

Figure 6: extract from Part M

Table 2.1 Minimum widths of corridors and passageways for a range of doorway widths

Doorway clear opening width (mm)	Corridor clear passageway width
750 or wider	900 (when approached head on)
750	1200 (when approach is not head-on)
775	1050 (when approach is not head-on)
800	900 (when approach is not head-on)

d. A minimum 300mm nib is provided to the leading edge of every door within the entrance storey.

7.10 Compliance

The proposal complies. The only corridor is at first floor level, which is 900m wide. This corridor has no obstructions. The clear width of the bedroom door is 900mm. The clear width of the first-floor bathroom is just over 1m. The clear width of the ground floor cloak room, which is approached head-on, is 750mm and it has an unobstructed space on the leading side of the door.

Stairs

7.11 Part M(4)2 stipulates that internal stairs and steps should comply with the following:

a. Access to all rooms and facilities within the entrance storey should be step-free.

b. Level changes within every level should be avoided.

c. The stairs from the entrance storey to the storey above (or below) has a minimum clear width of 850 when measured 450mm above the pitch line of the treads (ignore any newel post).

d. All stairs meet the provision of Part K for private stairs.

7.12 Compliance

The proposal complies. There are no steps at entrance level and internally there are no level changes at first floor level. The stairs is 850mm wide and complies with Part K.

Access in habitable rooms
Living, kitchen and eating areas

7.13 Part M(4)2 stipulates the following:

a. Within the entrance storey there is a living area.

b. A minimum of 1200mm clear space is provided in front of and between all kitchen units and appliances.

c. Glazing to the principle window to the principle living area starts at a maximum of 850mm.

7.14 Compliance

The proposal complies. There is a living area within the entrance storey, which has sliding doors to the garden. the space between and in front of kitchen units and appliances is at least 1.6m.

Bedrooms

7.15 Part M(4)2 stipulates the following for bedrooms:

a. Every bedroom provides a clear access route a minimum 750mm from the doorway to the window.

b. At least one double bedroom (the main bedroom) can provide a clear access zone a minimum 750mm wide to both sides of the bed.

c. Every other double bedroom can provide a clear access zone a minimum 750mm wide to one side of the bed.

d. All single and twin bedrooms can provide a clear access zone a minimum 750mm wide to one side of the bed.

e. It can be demonstrated that the provisions can be achieved.

7.16 Compliance

The proposed scheme meets all above stipulations to do with access in bedrooms. Refer to the submitted plan drawings for demonstration of this.

Sanitary facilities

General provisions

7.17 Part M(4)2 stipulates that all walls, ducts and boxing to part M compliant WC/cloakroom, bathroom, and shower rooms should be strong enough to support grab rails, seats, etc.

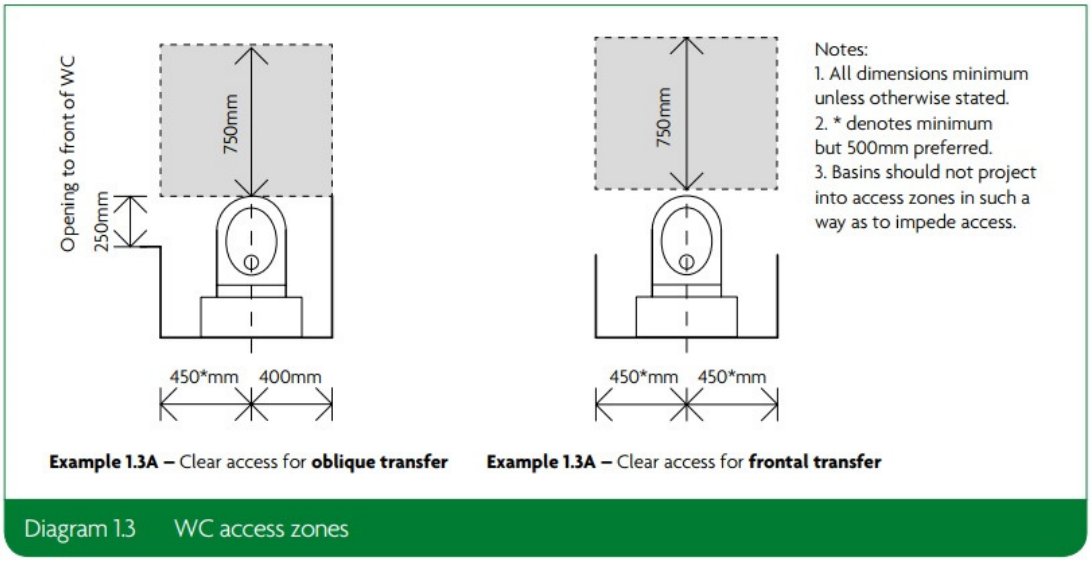
7.18 Compliance

The proposal complies. The inner leaf of external walls and partitions are made of timber frame. On the sides facing the ground floor WC space and the first-floor bathroom space, the timber frame studs will be lined with 12mm plywood to provide walls that can withstand 15kN/m2 imposed loads, suitable for grabrails etc. Ducting and boxing will also be lined with 12mm ply to achieve 15kN/m2 imposed load.

WC facility on the entrance storey

7.19 Part M(4)2 stipulates that the entrance storey WC in a two or three storey dwelling with one or two bedrooms should meet the provisions of the below diagram and the door opens outwards.

Figure 7: extract from Part M



7.20 Compliance

The proposal complies The proposed entrance storey WC complies with the diagram on the right (frontal transfer). Refer to the plan drawings submitted with the application.

Bathrooms

7.21 Part M(4)2 stipulates that the storey with the principle double bedroom should:

a. Also have a bathroom with a WC, hand wash basin and bath.

b. Which meets the provisions of the diagram on the next page.

c. And has provisions for a potential level access shower within this bathroom if a level access shower is not provided elsewhere in the dwelling.

7.22 Compliance

The proposal complies. The bathroom which is on the same level as the principle double bedroom complies with the provisions set out in the diagram on the next page. The bathroom has a fully fitted level access shower which could become fully wheelchair accessible by removing the bath. Refer to the plan drawings submitted with the application.

Figure 8: extract from Part M

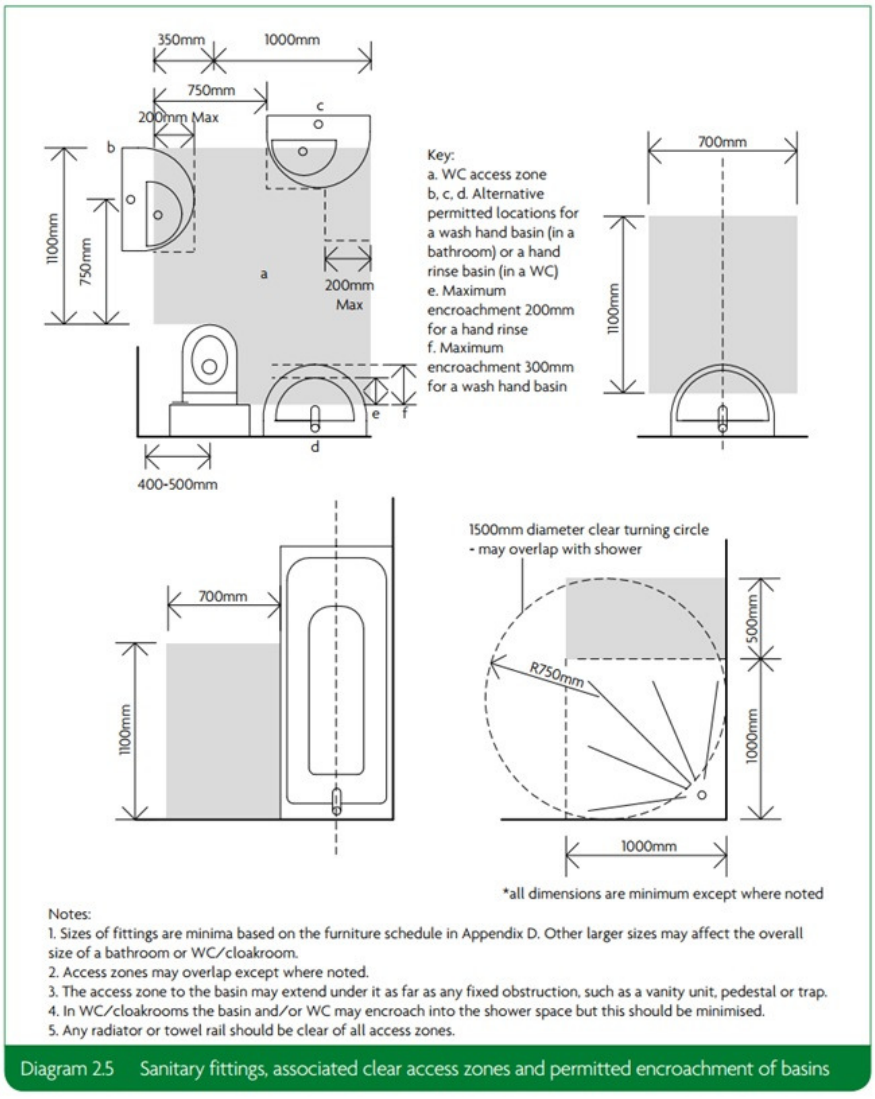


Diagram 2.5 Sanitary fittings, associated clear access zones and permitted encroachment of basins

Services and controls

7.23 Part M(4)2 stipulates that services and controls should comply with the following.

a. Consumer units are mounted so that switches are between 1350mm and 1450mm above floor level.

b. Switch, sockets, stopcock and controls (apart from radiator and cooker hood controls) have the centreline between 1350mm and 1200mm above floor level and a minimum of 300mm (measured horizontally) from an inside corner.

c. The handle to at least one window in the principle living area is located between 450mm and 1200mm above floor level.

d. Handles to all other windows are located between 450mm and 1400mm above floor level.

e. Either:
   I. Boiler timer controls and thermostats are mounted between 900mm and 1200mm above finished floor level, or
   II. Separate controllers (wired or wireless) are mounted elsewhere in an accessible location within the same height range.

7.24 Compliance

The proposal complies. The requirements above for the location and heights of service and controls will be met. More detailed information will be developed during the detail design phase of the project.

8. SUSTAINABILTY

8.1 The proposal is to demolish an existing single dwelling and replace it with a new single dwelling. In planning terms this is classed as a 'minor development'.

8.2 The proposed development is designed to comply with the sustainability policies of the London Plan 2021, Chapter 9 and the Camden Local Plan 2017.

London Plan 2021:

8.3 The proposal responds to The London Plan Sustainability policies SI-1 to SI-5 as follows:

a. Policy SI 1 improving Air Quality:
The proposed development replaces an existing dwelling house with the same occupancy level. The development will not impact on air quality.

b. Policy SI 2 Minimising greenhouse gas emissions:
This policy of the London Plan applies to major developments only. The proposal is designed to achieve low level of heat loss, through airtightness, high insulation values, energy efficient appliances and ventilation with heat recovery. It complies with the energy efficiency policies of the Camden Local Plan 2017.

c. Policy SI 3 Energy Infrastructure:
This policy refers to large scale developments only. There are no CHP, communal or district network available to connect to.

d. Policy SI 4 Managing heat Risk:
The scheme uses the cooling hierarchy set out in the policy, as far as possible.

I. Reduction of heat entering the building. The orientation of the dwelling is ideal to avoid heat gain. The living space and main bedroom are at the back, facing north. Large sliding doors let in much needed natural light without the risk of heat gain. South facing secondary rooms have regularly sized windows.

II. The fabric will be highly insulated and airtight. High spec triple glazed windows have been specified. The high spec front door is also highly insulated. the ventilation of the house will be mechanical with heat recovery.

III. The ground floor construction will be tiles on screed, providing thermal mass where it is most efficient. The ceilings are 2.65m or more.

IV. The house is dual aspect, and all windows have lockable opening positions providing good natural cross ventilation while maintaining security.

e. Policy SI 5 Water Infrastructure:

V. Water use:
Water consumption will be limited through the implementation of the optional requirements of Approved Document G.

VI. Surface water:
The current dwelling is served by a combined foul and surface water sewer only.

8.4 Other London Plan Sustainability Policies are not applicable to 'minor developments', they refer to major developments, high level infrastructure, and borough wide sustainability.

Camden Local Plan 2017

8.5 Camden's Sustainability planning requirements are set out in Camden's Local Plan in the following policies:
- CC1 Environmental standards and climate change.
- CC2 Adapting to climate change.
- CC3 Water and flooding.
- CC4 Air quality.
- CC5 Waste management.

Policy CC1 Environmental standards and climate change.

8.6 The Council's environmental standards and climate mitigation measures are set out in points A. to H. of this policy. Some of these are relevant to this proposal.

Demolition versus retention and refurbishment.

Energy efficiency:

8.7 High insulative values of floors, walls, roofs and glazing together with low permeability and minimal cold-bridging using accredited details, combined with the use of an MHVR system will ensure the new dwelling is very energy efficient, achieving at least an CO2 reduction below Approved Document L2 2013. Refer to the separate energy statement by Green Build Consult.

Resource efficiency:

8.8 Adaptation of the existing dwelling was explored. The current dwelling has many deficiencies:
a. The floors, walls and roof are poorly insulated and extensively glazed, with poorly insulated glazing.
b. The ventilation and heating system are outdated and of poor efficiency.
c. Because of the conservatory at the back of the first floor, the main bedroom is too hot in summer and too cold in winter, and cannot be made dark.
d. The living-dining and kitchen spaces on the ground floor are dark.
e. Accessibility inside the existing dwelling is poor. Some spaces are very small, there are many level changes, the stair cannot be adapted for a stair lift if needed and there is not a bathroom on the same floor as the bedroom.

8.9 To solve the existing dwelling's deficiencies extensive rebuilding would be necessary. After exploring options for adapting the existing dwelling, it became clear that it would be much more efficient to demolish the existing dwelling and build a new one. This will enable it to be replaced with highly insulated and airtight construction, using materials with low embodied carbon footprints, creating a fully part M(4)2 compliant dwelling, and to benefit from saving on materials through efficient design.

Re-use and recycling:

8.10 The aim is to recycle and/or re-use 85% of the demolition and construction 'waste'.

8.11 The client will appoint a waste management company, which is registered with the Environment Agency, to collect, sort and redistribute materials obtained during the demolition and construction phase.
The company appointed will be required to:
- Hold a weighbridge certificate,
- Be authorised to collect and receive waste,
- Complete and retain a transfer note.

8.12 To aid future separation of materials and recycling, glue fixing will be minimised by specifying that fitting and fixing to be done using dry fix methods wherever possible.

Low embodied energy:

8.13 The construction of the main elements (floors, walls, roofs, windows) has low embodied energy as defined by the BRE Green Guide 2008 ratings.

8.14 Construction types and BRE Green Guide rating:

- Ground floor construction:
  Structural topping on beam and extruded polystyrene blown block flooring. BRE Green Guide rating A+.

- First floor construction:
  Plywood on timber joists (and or I-beams): BRE Green Guide rating A+.

- Roof construction:
  Timber joists, OSB/3 decking, vapour control layer, insulation, PVC single ply waterproofing membrane: BRE Green Guide rating A+.

- External wall type 1 (brick):
  Brickwork, cement mortar, breather membrane, breather membrane, OSB/3 or ply, timber frame with insulation, vapour control layer, plasterboard on battens, paint: Green Guide rating A+.

- External wall type 2 (insulated render):
  Polymeric render system, breather membrane, OSB/3 sheathing, timber frame with insulation, vapour control layer, plasterboard, paint: BRE Green Guide rating A+.

- Windows:
  Powder coated aluminium clad softwood window, triple glazed, water based translucent coating internally: BRE Green Guide rating A+.

8.15 All timber used in the construction will be from certified sustainable sources, i.e. FSC or PEFC.

Water use in the finished building:

8.16 Water consumption will be limited through the implementation of the optional requirements of Approved Document G in line with London Plan requirements.

Policy CC2 Adapting to climate change:

8.17 The Council's adapting to climate change standards focus on surface water management, green infrastructure, and overheating.

Surface water management & green infrastructure:

8.18 The proposal does not include a green roof because the client is afraid it will be difficult to maintain for them. However, the structure and waterproofing of the roof is designed so that a green roof could be installed in the future.

8.19 The existing garden is very large for the size of the dwelling and the location. The house to garden ratio, and water retention on the site is therefore very good, as is the green amenity.

8.20 The new dwelling replaces an existing dwelling, and the footprint has been enlarged only slightly. The impact of the proposal on water is therefore minimal.

8.21 The current dwelling is served by a combined foul and surface water sewer only.

8.22 Orientation, fenestration, and dual aspect ventilation prevent the dwelling from overheating.

Policy CC3 Water and flooding:

8.23 The development has no impact on flood risk. The development replaces an existing dwelling. The level of the new ground floor is the same as that of the existing dwelling, and the footprint only slightly increased.

Policy CC4 Air quality:

8.24 Due to extent of the demolition a pre-construction Air Quality Assessment will be undertaken, and mitigation measures secured through a Construction Management Plan.

Policy CC5 Waste:

8.25 The development will include waste storage facilities which enable the client to separate waste and store it in a convenient way until the time that it will be collected.

9. ARCHITECTS' PRACTICE PROFILE & EXPERIENCE

9.1 Edwards Rensen Architects (ERA) were formed in 2012 by Jo Edwards and Adrie Rensen who were previously, respectively, a project architect and an Associate Director at multi award winning Pollard Thomas Edwards architects. Before that they worked at award winning firms including Lifschutz Davidson, Environmentally Conscious Design architects and several Dutch architectural practices including the internationally renowned Mecanoo Architecten.

9.2 ERA have a sensitive approach to working with historical environments. ERA aim to build projects that are clearly modern and yet sympathetic to their historic context.

9.3 ERA have been published in several design magazines including Wallpaper and Grand Designs.

9.4 One of ERA's projects was selected by New London Architecture for their Don't Move Improve exhibition in 2021.

See ERA's work at:
www.edwards-rensen-architects.co.uk