

DESIGN & ACCESS STATEMENT

Application for minor internal alterations/refurbishment and installation of an energy efficient heat pump on the back of the terrace.

Address: Flat E, 42 Lancaster Gate, W2 3NA



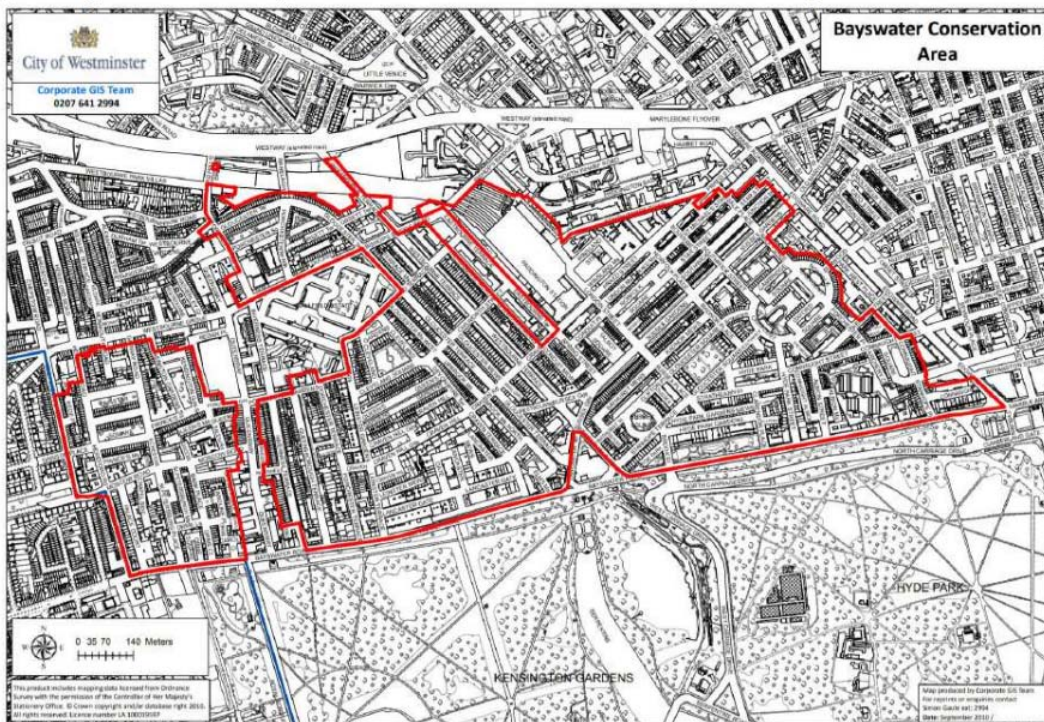
KTB ARCHITECTURE



1. Introduction

It is the intention of this statement to be concise and of proportionate length while covering all relevant issues relating to the proposed development at Flat E, 42 Lancaster Gate. The property is located at the south of Bayswater Conservation Area (first designated in 1967). The building is designated as a listed building, which forms a part of wider group designation Nos. 36 to 42 (consecutive) Lancaster Gate. In summary, the list description for Grade II listed 42 Lancaster Gate reads as follows:

'Grand terrace of houses.1865. John Johnson. Stucco. Slate mansard. 4 storeys and attic balcony to first floor where round headed. Sashes, plate glass. Dentil cornices above first floor, breaking forward over windows. Cornices to second floor windows. Architraves. Rich frieze and console cornice above third floor windows. Balustraded parapet to Nos 41 and 42 (missing to other houses). Central terrace in Lancaster Gate planned layout.'



Source (City of Westminster Council)

2. Brief and more recent property history

There are documents and paper trail on the City of Westminster website from the late 1990s when the whole property was divided into self-contained flats/apartments. Please refer to the Heritage Impact Assessment Section 2.0 – Historic background.

3. Use and Access

This apartment is to be retained as existing C3 class residential unit/apartment. It is spanning on two levels, second and third floor. The property has been unoccupied for the past two and half years. The clients as more recent owners want to bring the apartment back to its active use and use it as their primary home. The access to the building is through the main communal entrance situated on the ground floor with direct access from the street.

4. Design

The proposed works are of a minor scale, with a conservative approach towards any period features of specific historic and architectural interest. The proposals are well documented and illustrated in the application drawing package referred to in conjunction with this design and access statement as well as the heritage impact assessment attached to the application.

The works can be separated in two categories:

- Minor exterior work, and
- Interior alterations/refurbishment

4.1 EXTERIOR WORK

The sustainability approach towards this property is following the '**be lean** (minimise energy demand through passive and active measures), **be clean** (select the most energy-efficient heating and cooling infrastructure), **be green** (show intelligent use of renewable energy and technologies)' concept which will help reduce the total property carbon footprint. We are introducing an energy efficient heat pump unit which needs to be installed externally, as proposed on the drawings, on the Flat E's terrace north wall. The proposed heat pump will heat the property during the winter period (in conjunction with the existing heating system) and cool the property during the summer. The heat pump will be lean and minimise the energy use for heating and cooling, be clean in terms of using the up to date efficient technology and give the possibility to be green as it can be easily adjusted and connected to a renewable energy source in the future as long as the local infrastructure allows it.

Neighbouring Site Survey

As per the drawing *LST_003* 'Site analysis' in the drawing pack, throughout Lancaster Gate surrounding area there have been found three typical exterior locations where external condenser units have been installed. The façade and open terrace existing installations on the (i.e. the Spire House residential building), and roof installations (i.e. at No30&31, No15, No28, No50&51 Hotel Commodore etc).

Positioning, Scale and Materials

As there is currently still no guidance from the City of Westminster on installing air source heat pumps for listed properties and within conservation areas, two proposed locations had been submitted for pre-approval (Option 1 and Option 2) and only Option 1 has been retained in line with the feedback and recommendations received from the council as part of the pre-application process.

Picture 1 depicts the location for the installation of the external heat pump condenser unit. Please refer to the elevation drawings *LST_107* and *LST_108* in the drawing pack for further information and street view analysis.



Picture 1: Location for the installation of the external heat pump condenser.

The outdoor unit will be facing South while positioned on the North wall on the terrace of Flat E on the second floor (see Picture 2 below for terrace installation and positioning). It is positioned 0.75m away from the closest neighbouring residential window (Flat F Entry Hall) which has secondary glazing (see picture 2, terrace view to the west). As per drawing *LST_108* 'Existing Side East Elevation Street View Analysis' in the drawing pack, the proposed unit is not visible from the street as it is well hidden by the terrace parapet wall. This proposed location is sensitive to the heritage aspect as it is not affecting the overall appearance of the listed building. The Heritage Impact Assessment (page 8, section 3.16) concludes that the external works do not result in negative impact upon the host structure or any other heritage asset of relevance.



Picture 2: Terrace installation and positioning of outdoor unit.

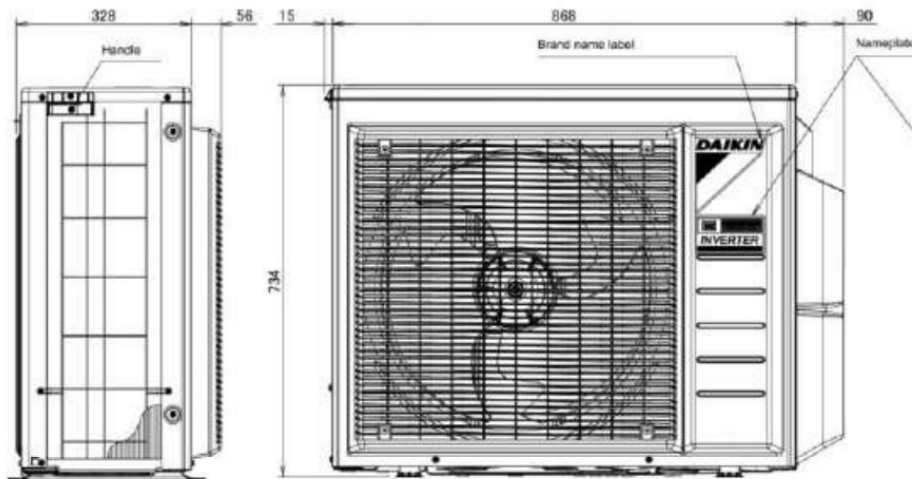
There is an existing water inlet pipe puncture through the existing facade wall. The existing opening can be slightly enlarged to run through the new condenser stacks (line sets) without creating new holes or further disturbing the existing façade.

Furthermore, the unit will be concealed from views with timber louvres covering and we will remove the decking to place the heat pump unit 7-10cm lower, as recommended in the pre-approval feedback below:

“Option 1, within the roof terrace is most appropriate, as this will minimises public views and uses existing wall openings. The pre-application drawing illustrates that the unit would not be visible from a sightline 50m away, though it should be noted that private views are also considered. It’s recommended that a section of the decking be removed to ensure the ASHP is located as close to the

terrace floor level as possible.” (‘Pre-application Feedback Letter’ as of June 8th 2022, p.1)

The new external heat pump unit is of Daikin make with model number ‘Outdoor Unit: DAIKIN R32 OUTDOOR RXM50N9 condenser unit, with an A++ heating energy efficiency rating. The external unit dimensions and scale including the acoustic bottom supports are 0.734m(H) x 0.384m(D) x 0.958m(W) and it does not exceed 0.6 cubic meters (see Picture 3).



Picture 3: External ASHP unit

There is an acoustic report adjoining to this planning application that confirms that the planned acoustic enclosure is sufficient to meet the latest local and national guidance. The proposed heat pump external unit at its peak performance achieves 49db total which is quite low in comparison to a standard or low traffic street with a usual 40db background noise. The acoustic report confirms that the enclosure described below will be sufficient to reduce the noise emission to a minimum of 10 dB below the background sound level (Noise Impact Assessment, p.9).

Materials that will be used for the acoustic box covering of the external air condenser unit are either waterproof/treated 12mm thick plywood or meditecroya extreme MDF 12mm (which is an waterproof MDF and it is ideal for external use, to create a Box Enclosure-23 dB Rw). This will serve as the main structural body (with acoustic competence) for the acoustic box. At the front there will be attached a metal ‘Caice SS150 Acoustic Louvered section (11 dB Rw)’. See Picture 4.



Picture 4: Material For the acoustic enclosure

The acoustic box will be covered with timber louvres painted in a colour matching the external façade and its surroundings to blend in the overall scenery. In line with the pre-application feedback, verdant planting will be positioned around the enclosure to further limit visibility in private views.

The heat pump will provide heating and cooling to the flat while utilising the existing secondary ceiling voids on the 3rd floor to install the internal concealed units. The vents will be simple louvred openings to minimize visual impact and they will be placed discreetly in the corners of the rooms, away from windows and doors in line with the guidance received as part of the pre-application process: *“These should be located discreetly in the corners of the rooms, away from windows and doors. (Pre-application Feedback Letter, p.2)”*

4.2 INTERIOR WORK

The proposed interior works are mainly minor works without any new partitioning or new layout configurations except from removing the kitchen partition and opening it up to the main room which will better reflect the room’s original proportions.

Throughout the planned improvements much consideration is given to the period features, albeit most of these have been replaced with modern materials likely as part of the works carried out in the 1990’s. The Heritage Impact Assessment (Section 3.0 Proposals, 4.0 Assessment and 5.0 Summary), consider the proposed changes in detail.

The main interior works are summarised below per floor.

Second Floor:

1. Refurbishing the existing windows and introducing a new single glazed thermal and acoustic 10.8mm laminated glaze to replace the existing 6mm units. Draft proofing the existing windows with the addition of inserted weather and acoustic seals. Revitalising the windows by sanding, repairing cracks, making good, redecorating and repainting. Existing sash weights are to be adjusted to suit the new weight of the windows. The additional timber rebate will be approached in accordance with the guiding received as part of the pre-application process:

“A few mm of the timber rebate will be routed out to accommodate the additional depth of pane, which would be acceptable.” (Pre-application Feedback Letter, p3)

2. Levelling the floor throughout the second floor as the existing floor joist have sagged in several locations and there is a floor difference up to 50mm. This will be done by introducing timber firrings to level off the difference in several areas. The existing floor finish is an engineered hardwood flooring of poor condition (it seems like it was installed in the late nineties). The floorboards include modern materials (see photographic evidence in the Appendix 5). If any historical floorboards were to have survived, they will be retained in situ and any levelling up would be undertaken above the floorboards, in line with the pre-application guidance received.
3. Repairing the existing wall crack on the West wall in the living dining area.
4. Repainting and redecorating all timber and plaster mouldings (skirting, architraves, cornices etc), walls, ceilings and full staircase, while repairing any cracks beforehand. This is introduced as the current state shows a lot of cracks, paint peeling out and other issues.
5. Introducing new floor finishes throughout the whole floor

6. Removing the two stud partition walls between the kitchen and the dining/living room which will better reflect the room's original proportions, in line with the guidance received as part of the pre-application process that stipulates this would be acceptable. The structural engineer report confirms these are non-load bearing walls. Installing new kitchen furniture including minor alterations in services to accommodate the new kitchen layout.
7. For any other minor works on the second floor please refer to the proposed works list on the proposed floor plan drawings.

Third Floor:

1. Refurbishing the existing windows and introducing a new single glazed thermal and acoustic 10.8mm glazing units to replace the existing 6mm glazing units. Draft proofing the existing windows with the addition of inserted weather and acoustic seals. Revitalising the windows by sanding, repairing cracks, making good, redecorating and repainting. Existing sash weights are to be adjusted to suit the new weight of the windows. Timber rebate as per the approach with the 2nd floor windows.
2. Levelling the floor throughout the third floor as the existing floor joist have sagged in several locations and there is a floor differences up to 40mm. This will be done by introducing timber firsings to level the difference in the floor in several areas. The existing floor finish is a hardwood flooring (it seems like it was installed in the late nineties). Where historical floorboards survive, they will be retained in situ and any levelling up will be undertaken above the floor boards, in line with the pre-application guidance received.
3. Repainting and redecorating all timber and plaster mouldings (skirting, architraves, cornices etc), walls, ceilings and full staircase, while repairing any cracks beforehand. This is introduced as the current state shows a lot of cracks, paint peeling out and other issues.
4. Introducing new floor finishes throughout the whole floor. Main difference is that instead of the existing carpet through the third floor hall and bedrooms, the same hardwood flooring from the second floor is introduced as a replacement floor finish.
5. Full bathroom refurbishments, which brings them to a more contemporary look, however the existing layout stays very similar. Even though the existing bathrooms were done in the 90s and are not original, the current layouts if needed in the future can be easily returned to their previous non original setting (please see images below for existing bathroom references). The current bathrooms are in a poor working and covering condition, from damaged sanitary ware to cracked and chipped tiling throughout (see Picture 5 and Picture 6). The master bathroom door will be replaced with a sliding pocket door.

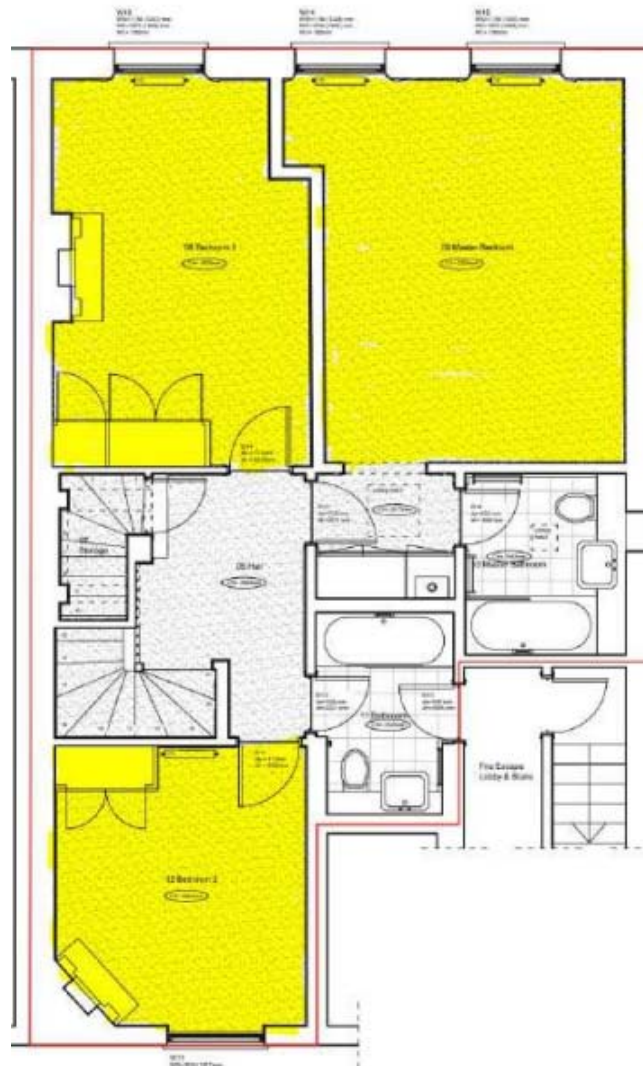


Picture 5: Current Master bedroom bathroom



Picture 6: Current guest bedroom bathroom

6. Turning the existing enclosed stair storage into a utility room/cupboard where the washer dryer will be located and fixed on a bespoke sturdy metal platform just sitting on top of the stairs (the structure will not be attached to the stairs) with acoustic padding to prevent vibrations and impact noise. The existing washer & dryer are situated in the 05 Cloak Room & Laundry below on the second floor. The drainage for the new 07 Utility Room is proposed to be done with minimum invasion as we are connecting to the existing drainage pipe on the second floor 05 Cloak Room & Laundry.
7. Introduction of secondary ceilings to all the bedrooms without removing the existing modern ceiling cover with void no bigger than 100mm (see Picture 7). The aim is to reduce the impact and airborne noise from the neighbours above by introducing 100mm acoustic mineral wool within the new ceiling void and x2 layers of 15mm acoustic plasterboards. The new MF ceiling will be installed as per the example images below. New ceiling roses and cornices to match existing style. The drop of the ceiling is minor as the existing ceiling height is 3m, it would not make a significant impact on the appearance and feel in the room as the new ceiling height will be close to 2.87m. The investigation has confirmed that the current ceilings in the 3rd floor are all of modern materials (two layers of plasterboard, please see photographic evidence in the Appendix 1 to 4 and Heritage Impact Assessment section 3.11).



Picture 7: Proposed secondary ceiling bedroom areas are highlighted in yellow

8. Replacing the existing non original secondary ceiling plasterboards with x2 layers of acoustic 15mm plasterboards and infilling the ceiling void with acoustic mineral wool. It is believed to have been installed in the late nineties when the property was turned into a self-contained apartment. Above the existing secondary plasterboard currently there are x2 layers of Gyproc fineline plasterboards which provide 60min fire separation with the neighbour above (see Picture 8). The existing secondary ceiling joists (2x2) to be replaced with (2x4) to take on the extra load of the extra layer of plasterboard.



Picture 8: Existing secondary ceiling halls and bathroom areas

9. It is believed that this secondary ceiling was created as a service void for the apartments service on the third floor. Within this service void there will be fitted x3 concealed ceiling duct units suppling the bedrooms with warm and cool air (see Picture 9).



- X Internal Unit
- Internal Vents
- Area of secondary ceiling void (~40cm)

Picture 9: Existing secondary ceiling in halls and bathroom areas as well as the location of internal units and vents

10. For any other minor works on the third floor please refer to the proposed works list on the proposed floor plan drawings

5. Concluding remarks

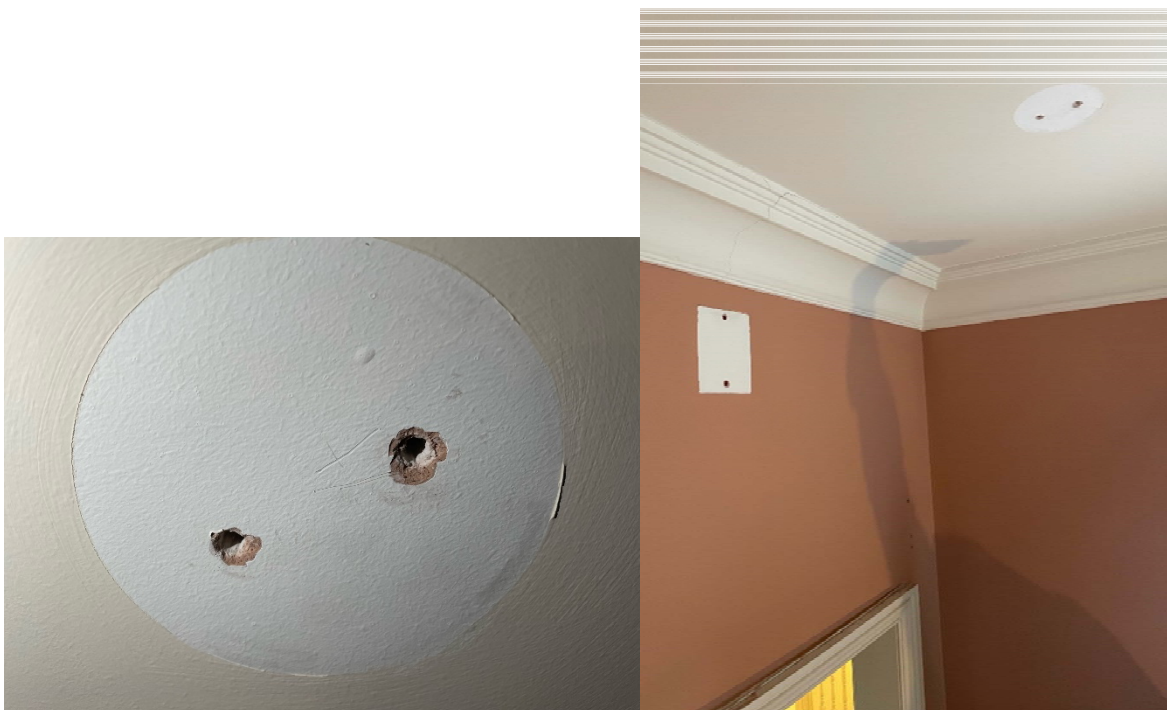
We believe the planned works are proportioned and well-justified to improve the energy efficiency and overall condition of Flat E, 42 Lancaster Gate. The proposed works are mindful and respectful of the period features of the property. The Heritage Impact Assessment considers the proposals as beneficial (Heritage Impact Assessment 5.4). The alterations and refurbishment will also result in the new owners moving to the apartment to use it as their primary home whereas it has been unoccupied for the past 2.5 years. We are at your disposal to provide further details of the planned works, where helpful.

APPENDIX: PHOTOGRAPHIC EVIDENCE OF BUILDING MATERIALS

Appendix 1: Ceiling Plaster in Guest bedroom



Appendix 2: Ceiling Plaster in Master Bedroom



Appendix 3: Ceiling Material



Appendix 4: Ceiling Plaster in the Office



Appendix 5: Downstairs Floorboards (under the stairs)



Appendix 6: Upstair Floorboards (office)

