9 King Edwards Road, Ruislip HA4 7AE – external wall insulation – summary information

1. 9 King Edwards Road, Ruislip HA4 7AE is a substantial detached property, originally built around 1921, situated in the Ruislip conservation area. A two-story extension was added on the right-flank many decades ago, creating a U-shaped layout, with a later single-story infill extension at the rear. The property was owned by the London Borough of Hillingdon for around 30 years from the mid 1970s, during which time it served as a mental-health hostel, and for which it underwent substantial alteration to divide it into a number of self-contained accommodation units. It was subsequently returned to private ownership and converted back into a single dwelling, which has been the applicant's home since 2011.

2. With the exception of the small amount of brickwork associated with the rear infill extension, the property has solid brick walls, approximately 215mm thick. Being a detached property with exterior walls on all four sides, the heat loss is significant. **The intention is to remedy this by means of external wall insulation.** This would also be a necessary first step towards adopting a more modern heating system should this prove feasible at some point in the future.

3. Much of the brickwork is presently rendered and painted. In some areas the render is only applied above a waist-high projecting tile course, with exposed brickwork below. In other places the render has been carried down to the ground and there are localised areas of significant damp ingress, believed to be due to the render bridging the damp proof course (DPC), as well as cracking of the render in areas exposed to driving rain. These deficiencies need to be remedied

5. Rather than simply undertaking local remedial action and repainting, it is proposed to provide a comprehensive overhaul of the external wall finishes, including the provision of external wall insulation (EWI) to all walls, to match (as far as possible) the existing visible finish, and to ensure that the underlying causes of damp ingress are addressed. The insulation work will be carried out using the KLEIB 'W' insulation system (described in a separate attachment), installed by a contractor specifically trained in its correct application in order to secure the manufacturer's 30-year warranty. Mineral wool insulation (120mm) will be used to ensure appropriate fire and thermal performance.

6. In addition to the insulation, to maintain the present visible finish the front and rear walls will be overlaid with brick slips below waist height in areas which presently have exposed brickwork. The east flank wall presently has exposed brickwork below waist height, but as this is invisible from either the road (because of the full height side gate*) or the garden it is not proposed to provide brick slips on this wall. The west flank wall is rendered throughout, with no exposed brickwork. Areas to be rendered will be finished with silicone-based paint (part of the KLEIB 'W' system) to match the appearance of the existing render as closely as possible. A slight difference in appearance will be that the new render and brick slip finish will only be carried down to the top of the DPC, with the existing render below this removed to eliminate any bridging. A separate recessed insulation layer will be provided below the DPC, finished in black to match the existing concrete plinth.

7. Associated with the EWI works, there will be renewal of guttering and downpipes, together with minor like-for-like repairs of damaged roof tiles and resurfacing of the rear infill extension flat roof, all of which have no significant visual impact. Internal work to improve the loft insulation will be carried out at the same time.

* The wooden side gate will be adjusted to accommodate the addition of the EWI