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## NO.56A KING HENRY'S ROAD, LONDON BASEMENT IMPACT ASSESSMENT REVIEW

For the Attention of Mr. Jon Smithson

As instructed, we have reviewed the Basement Impact Assessment (BIA) provided for the development at 56a King Henry's Road, London and considered its suitability and accuracy to support the proposed development. The BIA considers the surface water and groundwater hydrological conditions and the geotechnical information relating to the site to form a comprehensive review. The existing BIA was completed by Ecos Maclean Ltd and is dated 21st January 2019. The purpose of this summary is to identify any discrepancies identified as part of this review between the available flood risk and mapping datasets and the conclusions made within the BIA.

The focus of this review is on the surface water flood risk, although the entire report has been reviewed and any inconsistences have been noted. Sections 1 and 2 provide context for the site and the development, in terms of its existing ground conditions, hydrogeology, flood risk and drainage potential. The statements and conclusions made within these chapters are relevant and accurate based on the information reviewed. With reference to those sub-sections of interest; Section 2.9 (Hydrology) states "There are no culverted rivers or other water bodies within 100m of the site", this is correct based on the information available. The Strategic Flood Risk Assessment confirms the nearest culverted waterbody is approximately 550m to the south-west of the site with the nearest open channel waterbody being the Regents Canal, 750m to the south.

With reference to Section 2.10 (Flood Risk), the current flood mapping confirms the site to lie within Flood Zone 1 and it is therefore at no flood risk from fluvial or tidal sources. Surface water flood risk is not illustrated on the Flood Zone mapping, although the long-term flood mapping data does confirm that the site itself is at very low risk of flooding from surface water. The railway to the north of the property and garden is shown to be at varied risk from surface water flooding based on the available flood risk mapping. To add the flood risks, review of the available mapping and publications have identified that the site is located 200m north-west of an Environment Agency recorded groundwater flooding incident. The London Borough of Camden's Strategic Flood Risk Assessment also shows

Page 1 of 3











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the site to be located within an area which has 8no. recorded incidents of internal flooding as a result of sewer flooding (based on the DG5 Register).

Finally, with reference to Section 2.11 (Drainage Assessment and SuDS), the statement suggests that there will be no increase in impermeable areas as a result of the proposed lightwell to the front of the property because this area is already paved. We would agree with this statement although would point out that there is no mention to the rear of the property, where based on the current planning proposals there appears to be both a ground floor and basement level extension beneath the permeable rear garden. It maybe that the proposals are different to those considered as part of the original BIA or that the rear garden of the property is also paved and therefore any new building extension in this area, would not result in an increase in impermeable areas. It would be worth clarifying the proposals to confirm whether an increase in impermeable areas will result and therefore require drainage to be considered in more detail.

Section 3 of the BIA considers the screening phase and looks at subterranean flow, slope stability and surface water flow and flooding. The section relating to flood risk and drainage is Section 3.3 (surface water flow and flooding), therefore this section has been considered in more detail as part of this review. The other two screening exercises have not been commented on. In terms of this screening exercise, the findings are still considered to be relevant for Questions 1, 4, 5 and 6. Questions 2 and 3 both relate to the potential for increase in surface water flow and potential changes in existing surface water flow routes as a result of the proposed development. As noted previously, it is not clear as to whether the rear ground floor and basement level extensions will result in an increase in impermeable areas. The existing and proposed section plans would suggest that there may be a small increase in impermeable areas as a result of the development to the rear of the existing property which would result in a requirement to consider surface water flow routes and rates in more detail. This should be clarified with the architect before the BIA is submitted.

Section 4 of the BIA considers the scoping phase and is split into the relevant disciplines; the focus for the flood risk is Section 4.4 (surface water flow and flooding). This section confirms that the earlier screening phase identifies the potential surface water flood risks and that the proposals will not impact on the surface water flows currently present. Confirmation that no increase in impermeable areas at the rear of the property, should be obtained as if there is an increase in impermeable then there will be an inherent increase in surface water flows generated on the site.

This section also states that a proposed low-level wall should be constructed off the front of the property to protect the proposed lightwell from the potential for surface water flows

Page 2 of 3











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to enter the basement level. The front of the property is accessed from King Henry's Road, this is shown to be at very low risk from surface water flooding based on the flood risk mapping available. The railway line to the rear of the property is however shown to be at greater flood risks from surface water, we understand that the railway line is several meters lower than the site ground level therefore the risk of surface water flows directing towards the site from the railway line would be very low.

I trust the above summary confirms the findings of this review exercise and clarifies the situation, if you require anything further please do not hesitate to contact us.

Yours sincerely,

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Signed Off By

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Page 3 of 3







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