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Our Ref: **2520/AAF/WE/JG**

Your ref:

Date: **16th December 2011**

London Borough of Camden
Planning Services
Town Hall
Argyle Street
London
WC11 8ND

For the attention of Obote hope

Dear Sir

Re: - Basement Application-49a Hillfield Road, London NW6 1QD

. Please find attached revised Planning Application Forms full set of plans, location plan and statement on geology , water movement ,subsidence and drainage of thre site.

Should you require any additional information please do not hesitate to contact us.

Yours sincerely

W. Eshmade

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Proposed Basement to Ground Floor Flat, 49 Hillfield Road, London NW6

i) Desktop Study
(Based on Camden geological, hydrogeological and hydrological study)

The house is located in an area of London Clay (refer to Slope angle map (Sheet 16 - Camden Geological, Hydrogeological and Hydrological Study) and there are no area of significant site slopes local to the site.

This high plasticity clay soil is classed as an unproductive aquifer which will not permit the lateral passage of ground water through this soil.

From watercourses sheet 11 - Camden Geological, Hydrogeological and Hydrological Study the nearest identifies watercourses is located in West End Lane area approximately 0.5 Kilometres from the site of the proposed basement. From Camden Surface water features sheet 12 - Camden Geological, Hydro geological and Hydrological Study there is not a pond, lake or river within 2 kilometres of the site.

There is however to the north of the garden enclosed by Hillfield Road, Gondar Gardens and Agamemnon Road a covered reservoir which was constructed at the time of the residential development of the area.

ii) Engineering Study

From Appendix 4 of the Camden geological, hydrogeological and hydrological study) Flooding in 1975 and in 2002 occurred in Hillfield Road. It is not clear the extent of the flooding up and down the road. There is only mention of two properties in the road in the detailed submissions of the flood Scrutiny Panel Report, one not identified and the second No 64.

No 49 Hillfield Road is located on a sloping site with Gondar Gardens to the rear. The road level in Gondar Gardens above the property is 76.9 metres and 66.8 metres in Hillfield Road falling away to 63.1 Metres in Mill Lane. In Hillfield Road there is a cross slope with the level being 69.3 metres at the junction with Mill Lane falling away to 65.9 metres with the junction with Agamemnon Road.

No 64 is down slope of No 49 and down slope of the junction of Hillfield Road and Agamemnon Road so is much more susceptible to the effects of surface water running down the road and also across the road from Agamemnon Road.

iii) Construction Methods

From a visual inspection of the houses adjacent to the property there appear to be basements in 57, 55, 51 47a, 45 & 43 Hillfield Road. There are basement developments to the properties either side of the proposed development in 49 Hillfield Road.

Due to the developed properties either side there will be no adverse effect on the stability of the terrace provided that the basement to No 49 is no lower than the extended basements to the properties either side.

It is proposed to underpin the front and rear walls of the basement using a conventional "hit and miss" underpinning method. Because the party walls are protected by the existing underpinning work then there will not be any stability problems with the proposed works to the front and rear wall.

The extended basement area is to be waterproofed using a 'bituthene' membrane system. Any ground water build up will be dealt with using 2 no land drains installed under the slab and connected into the existing surface water system serving the property. One of the lines existed prior to the development and will be refurbished as part of the basement enlargement.

The foul drainage line running from the rear manhole under the house into the public sewer in Hillfield Road will be lowered and the slope of the line reduced down to a 1:40 slope. A new manhole will be built within the new bay to the front of the basement and a non-return valve installed to ensure that there is no back flow of sewerage or rainwater into the basement.

In addition the front light wall will have a raised cill level to minimise the risk of any surface water build up to the front bay re-entering into the basement area. The rear light wall is inside a trapped area and beside the high rear wall of the light well no surface water can enter into the basement from this route.



A.A.Freeman C.Eng., F.I.Struct. E., F.I.Mech. E., F.B.I.M., M.Inst.Pet.