



The Heath & Hampstead Society

The Society examines all Notices of Intent for tree work relating to Hampstead and Hampstead Heath Fringes, and assesses them for their impact on the Conservation Areas, the local environment and building stability.

To London Borough of Camden, Tree Preservation Team

Planning Ref: 2020/1692/T
Case Officer: Tom Little

Address: 34 Frognal London NW3 6AG
Date: 9th May 2020

This is a curious case of a rebuilt 'brick conservatory' for an upper ground floor flat supported on stilts (that the new owner was told go 2.5m into the ground) so the lower ground floor flat has light for a window below. It is clear the problems dated from the recent extension re-build, which failed to replace the movement joints while using the same stilts. Thus this conservatory has a very different foundation level and type to that of the main building, yet is now firmly fixed to it. The building shows signs of poor drains and downpipe maintenance, and the drains report indicates a foul water drains leak in the area of movement: a potential cause of movement.



Rear conservatory ~2010
showing movement joint
- not in new add-on

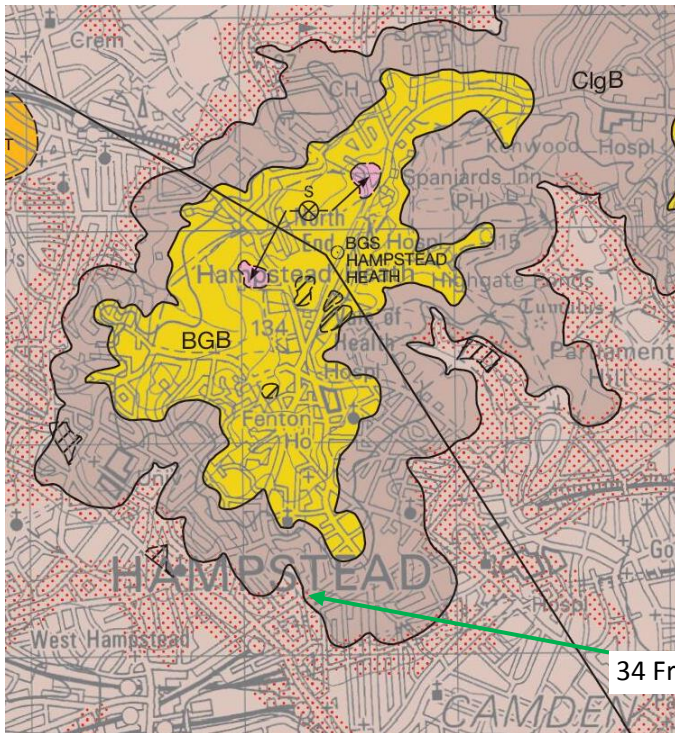


The ground is described in the report as level, yet Frognal steeply slopes down to Finchley Road here with deep passageways between each house and major stepping downhill of each of the houses. Have the roots of 34 Frognal limes' gone under the 2-storey 34A Frognal without affecting it, under a deeper passageway and then influenced four stilts? 12 months monitoring of the cracks was supposed to have been done but there is no sign of data regarding crack movement timed to vegetation leaf burst or fall, or to rainfall. The presence of lime tree roots is an indicator of water for the roots to go after e.g. from all the drains reported as damaged and requiring repair and replacement.

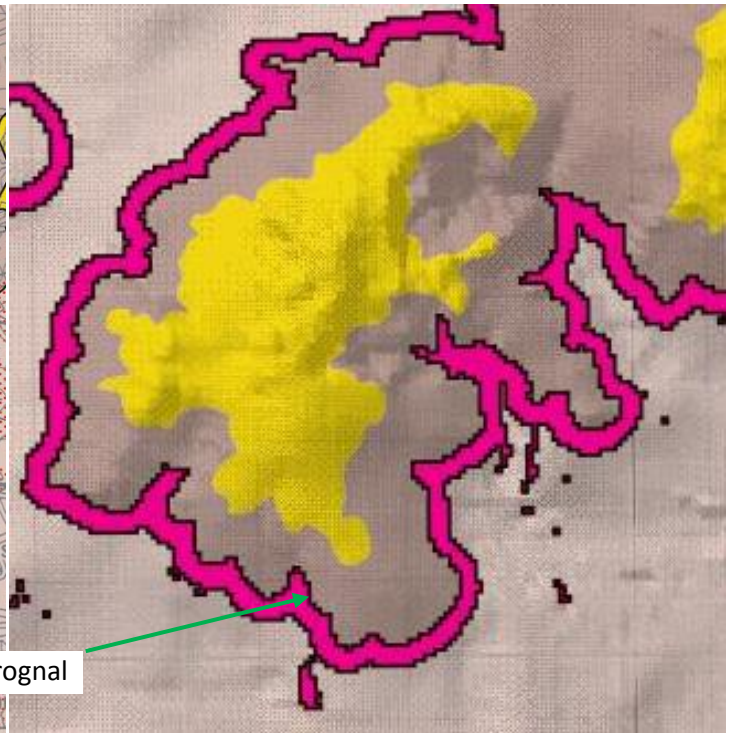
The 2-storey 34A Frognal



Local geological maps demonstrate 34 Frognal and its conservatory extension re-build are on an area of high to very high potential for slope instability (see below) mainly due to its position immediately below the springline of the geological boundary between Claygate Beds and Unit D of the London Clay Formation, the slope here and the overlying Head solifluction (crimson dots on the geological map) which is a silt-laden unstable water-carrying surface layer. A thick layer of Head has been confirmed here in the boreholes, though it has been labelled 'Made Ground'.

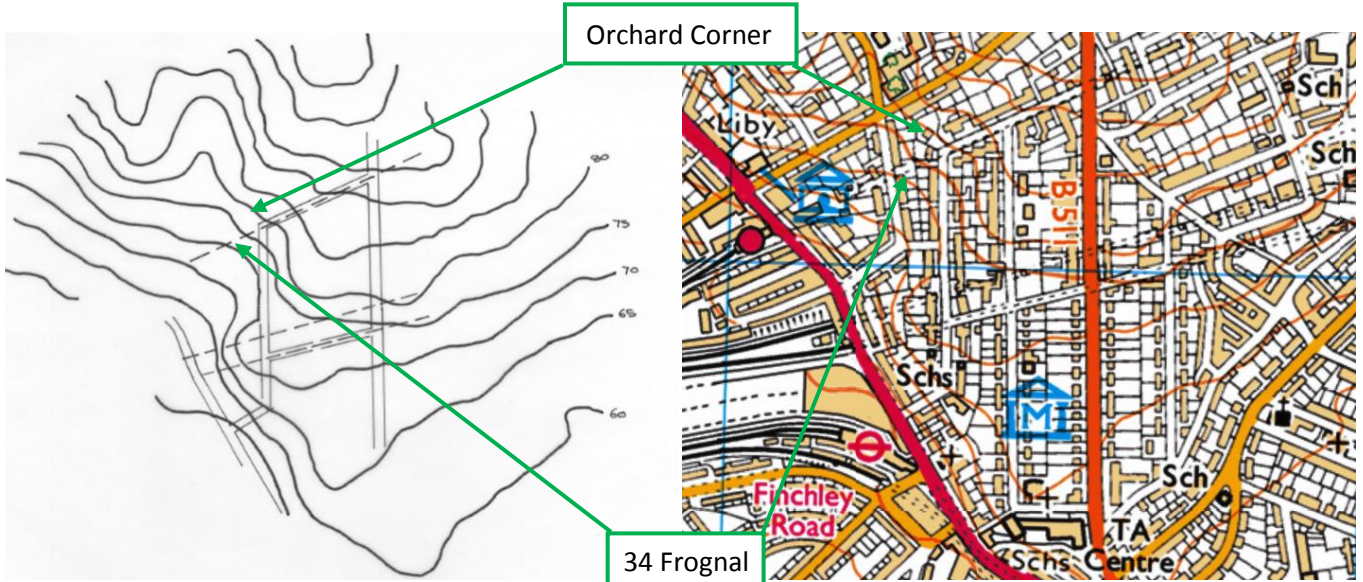


British Geological Survey 1:50 000 series North London Sheet 256 Bedrock and Superficial Deposits



BGS Areas for Greatest Potential for Slope Instability

<http://www.largeimages.bgs.ac.uk/iip/mapsportal.html?id=1001750>



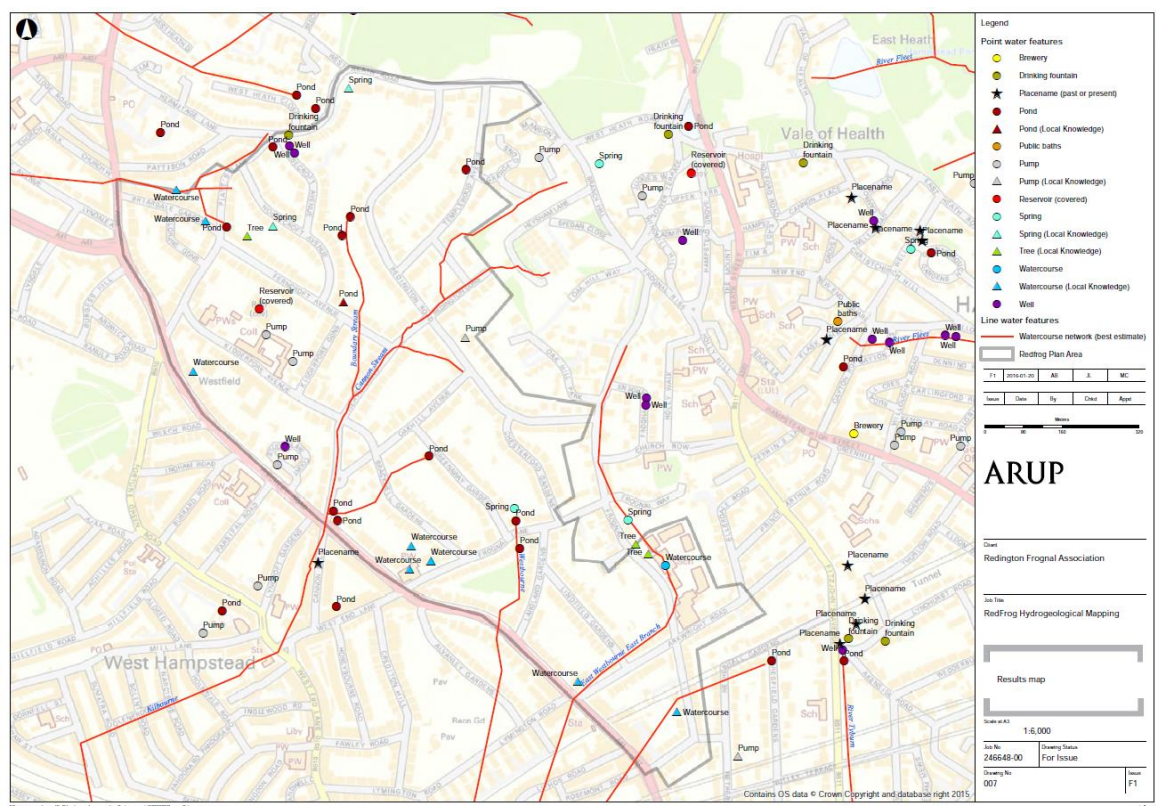
Contour lines show 34 Frognal is near the bottom of a fairly steep south-western running slope, which indicates the likely path of groundwater.

It is in direct line with Orchard Corner (high above on the top turn of Netherhall Gardens) which gained planning permission for an extension and basement garage in 2001 and large basement AND swimming pool (essentially doubling its depth) in 2005/6. This basement will have produced two potential problems:

- 1) Vibration and ground pressure changes at dig-out and insertion of sheet piling, causing some landslip at the time - 'kicking the sleeping dog' of this potentially unstable hill - and increasing the likelihood of further problems later.
- 2) Diversion of groundwater running directly towards the most eastern branch of the East Westbourne river that goes under 34 Frognal (see ARUP map below) producing changes to its ability to erode silt from the clay since. There

have recently been numerous burst water mains in Arkwright Road and towards the bottom of Froggnal indicating silt erosion beneath their foundations; an on-going problem.

34 Froggnal is also directly over the North London line rail tunnel near its entrance, so will be sustaining on-going vibration from the trains passing through, particularly the very heavy freight trains.



Thus, there are plenty of reasons for cracking, the evidence for desiccation is not strong considering the known high silt content of the soil in this region, and no evidence has been presented to confirm that the trees are the main influence here. How do the insurance company plan to underpin this building if removing all these trees at quite a distance away doesn't work? Jack up the stilts? It might be more appropriate for the builder of the conservatory to be approached and ensure the movement joint is replaced.

Please TPO and refuse the felling of these lime trees that provide such great public amenity viewed from Froggnal itself, as well as to all the flats and houses in this part of Froggnal and Netherhall Gardens behind.

Dr Vicki Harding, Society Tree Officer, Heath & Hampstead Society