Appendix C – screening flowcharts

Hydrology (surface water flow and flooding) screening

	Screening flowchart question	Response	Scoping stage?
1	Is the site within the catchment of the pond chains on Hampstead Heath	No, the site is well removed from these ponds and outside the catchment area as shown on Figure 14 of Arup's hydrogeological study – Hampstead Heath Surface Water Catchments and Drainage.	N
2	As part of the site drainage, will surface water flows (e.g. rainfall and run-off) be materially changed from the existing route	No, these will be unaffected as the site is already effectively cut off from the wider landscape by walls on 3 sides and the run off from the driveway will be similar to the existing as shown on drawings 1636/01/08 and 1636/01//09	N
3	Will the proposed basement development result in a change in the proportion of hard surfaced / paved areas?	No, The area of hardstanding is reduced slightly as part of the proposed development as shown on drawings 1636/01/08 and 1636/01//09 in Appendix J. This is beneficial so is not considered further	N
4	Will the proposed basement result in changes to the profile of the inflows (instantaneous and long-term) of surface water being received by adjacent properties or downstream watercourses?	No, there will be negligible changes in surface water flows off site because surface water flow in the made ground is currently cut off by the boundary walls and will continue to do so	N
5	Will the proposed basement result in changes to the quality of surface water being received by adjacent properties or downstream watercourses?	No, there will be negligible changes in surface water flows off site as noted in 4.	N
6	Is the site in an area known to be at risk from surface water flooding, such as South Hampstead, Gospel Oak and King's Cross, or is it at risk from flooding, for example because the proposed basement is below the static water level of a nearby surface water feature?	Yes, based on Figure 15 of Arup's hydrogeological study – Hydrogeological and Hydrological Study Flood Map, Avenue Road was flooded in 2002	Y

Hydrogeology (groundwater) flow screening

	Screening flowchart question	Response	Scoping stage?
1	Is the site located directly above an aquifer?	No, based on Figure 8 in Arup's report – Camden Aquifer Designation Map	N
1b	Will the proposed basement extend beneath the water table surface	Yes, the proposed basement will be founded in the clay and therefore below any ground water/ perched water table	Y
2	Is the site within 100m of a watercourse, well (used/disused) or potential spring line?	The site is within 100m of a lost river of London (Tyburn) which has since been diverted underground (Figure 11 – Arup report). However it is not within 100m a current watercourse, well or potential spring line. Refer to Figure 12 of Arup report and Appendix E.	Y
3	Is the site within in catchment of the pond chains on Hampstead Heath?	No, as shown on Figure 14 of Arup Report – Hampstead Heath Surface Water Catchment and Drainage.	N
4	Will the proposed basement development result in a change in the area of hard surfaced / paved areas?	No, The area of hardstanding is reduced as part of the proposed development as shown on drawings 1636/01/08 and 1636/01//09 in Appendix J	N
5	As part of the site drainage, will more surface water (e.g. rainfall and run-off) than present be discharged to the ground (e.g. via soakaways and/or SUDS)?	No, rainfall will generally flow off the site and discharge into the ground as before as shown on drawings 1636/01/08 and 1636/01//09 in Appendix J	N
6	Is the lowest point of the proposed excavation (allowing for any drainage and foundation space under the basement floor) close to, or lower than, the mean water level in any local pond (not just the pond chains on Hampstead Heath) or spring line.	No, there are no ponds or spring lines hydraulically connected to the site.	N

Slope and ground stability screening

	Screening flowchart question	Response	Scoping stage?
1	Does the existing site include slopes, natural or manmade, greater than 7°? (approximately 1 in 8)	No, Figure 16 of Arup Report – Slope Angle Map – and site observations confirm the site's gradient is less than 7°.	N

2	Will the proposed re-profiling of landscaping at site change slopes at the property boundary to more than 7°?	No, the proposal does not include landscaping that affects the boundaries	N
3	Does the development neighbour land, including railway cuttings and the like, with a slope greater than 7°?	No, site observations and Figure 16 of Arup Report have confirmed the neighbouring sites have similar gradients.	N
4	Is the site within a wider hillside setting in which the general slope is greater than 7°?	No, Figure 16 of Arup Report – Slope angle map and site observations confirm the wider gradient is less than 7°.	N
5	Is the London Clay the shallowest strata on site?	Yes, Figure 3 of Arup Report – Camden Geological Map and the findings on site show the shallowest strata on site is London Clay.	Y
6	Will any tree/s be felled as part of the proposed development and/or any works proposed within any tree protection zones where trees are to be retained? (Note that consent is required from LB Camden to undertake any work to any tree/s protected by a Tree Protection Order or to tree/s in a Conservation Area if the tree is over certain dimensions).	No trees will be felled on site	N
7	Is there a history of seasonal shrink-swell subsidence in the local area, and/or evidence of such effects at the site?	There is no evidence of this in the local area and/or at the site, though London Clay is liable to seasonal change	N
8	Is the site within 100m of a watercourse or potential spring line?	The site is within 100m of a lost river of London (Tyburn) which has since been diverted underground (Figure 11 – Arup report). However it is not within 100m a current watercourse, well or potential spring line. Refer to Figure 12 of Arup report and Appendix E.	Y
9	Is the site within an area of previously worked ground?	Historical records and Figure 3 from Arup's report – Camden geological map indicate the site is not on worked ground,	N
10	Is the site within an aquifer?	No, Figure 8 in Appendix E of Arup report show the site is not located above an aquifer although it is located in an outer source protection zone	N
11	Is the site within 50m of the Hampstead Heath Ponds?	No, the site is not within 50m of the Hampstead Heath ponds.	N
12	Is the site within 5m of a highway or pedestrian right of way?	No, the proposed basement is further than 5m from the nearest highway/pedestrian right of way, refer to the Site plan in Appendix A	N

13	Will the proposed basement significantly increase the differential depth of foundations relative to neighbouring properties?	Yes, the basement is being formed adjacent to neighbouring properties which do not have a basement.	Y
14	Is the site over (or within the exclusion zone of) any tunnels, e.g. railway lines?	No, Figure 18 of Arup report in Appendix E show the site is the site is outside any exclusion zones.	N