

Audit Query Tracker – 17 Railey Mews NW5 2PA

Query No	Subject	Query	Response	Date closed out
1	Land Stability	Comment on possible desiccation and tree roots to 5.40m.	The moisture content profile (Fig 3 of the SI report) shows no sign of desiccation. Further, the foundations of the new basement will be well below the depth given by NHBC guidance in respect of the adjacent tree.	
2	Land Stability	Movement monitoring strategy to be revised – trigger values not considered conservative.	We will revise the trigger values to Amber: 5mm Red: 10mm These values are typical and will ensure that the damage to the adjacent building is limited to Category 1 at worst.	
3	Land Stability	Further consideration of nature of foundations and structural arrangement of No 16 Railey Mews.	The pit dug beside the side wall of No 16 indicated that it is founded on a normal strip foundation. The ground movement assessment assumed shallow spread foundations for No 16. Any special foundations would be deeper and less susceptible to damage. The assumptions made about the foundations of No 16 are considered conservative.	
4	Land Stability	Outline calculations required to demonstrate feasibility of structural proposals.	Full retaining wall design will be carried out within Tekla Tedds in accordance with EN1997-1:2004 incorporating Corrigendum No. 1. The retaining wall will be considered propped by the basement slab and the ground floor slab. Ground surcharge and building loads will be considered as per Atelier One detailed load take-down. The following parameters will be considered within analysis: <ul style="list-style-type: none"> • Unit weight 20kN/m³ • Short term undrained shear strength – 50+7z for the London Clay in the GMA. Datum Z=0 at 0.9m below GFL. • 40kPa uniform surcharge considered to allow for the made ground from GFL to -0.9m • Lateral earth pressure = 1.5 time vertical earth pressure for short and long term • Long term drained shear strength – Cohesion 2kPa and friction angle 23°. • Groundwater considered at ground floor level to account for a burst water main. 	
5	Land Stability	Confirmation of Ground Movement Assessment conclusions with explicit	No 17 Railey Mews is currently supported on piles and ground beams. The piles are not below the perimeter walls. To avoid an over-complex analysis the ground movements were assessed taking no account of the presence of the piles. This is	

		reference to proposed hybrid foundation solution.	conservative because the piles will restrain the movement of the ground during basement excavation. Without considering the effects of the piles or the stiffness of the overlying ground, the	
6	Land Stability	Confirmation that proposed mitigation measure of underpinning the rear wall at the adjacent property, 16 Railey Mews, is achievable.	The rear wall of No 16 will not be underpinned, only the front portion of the side wall where it is adjacent to No 17.	