



Category II Check Certificate for The Hoxton, 199-206 High Holborn

Category II (Competent Independent Team in same Organisation) Check Certificate for the validation of the 3rd Party Developer's proposals for protection of Crossrail Infrastructure at risk within the Zone of influence of works
3rd Party Development: The Hoxton, 199-206 High Holborn, WC1V 7BD
Category II Checking Organisation: MLM Group
Designer for 3rd Party Development: Burras Ltd (piling contractor)
Category II Check Scope: <ul style="list-style-type: none"> • Check of piling calculations provided by piling contractor for permanent load bearing piles and piles for temporary contiguous pile wall required to construct pile caps and transfer beams.
Brief description of the subject of Category II Check including all disciplines covered and geographical extent: <p>Proposed construction of 6 storey extension at the Hoxton Hotel in Holborn. The site is situated at 199-206 High Holborn, London, WC1V 7BD with the site approximately centred on National Grid reference 530400, 181450.</p> <p>The proposed extension structure is to be constructed in the service yard area of the existing Hoxton hotel building. The footprint of the proposed structure directly crosses above a CRL tunnel (the crown of the tunnel is approximately 12m below existing ground level) so is within the safeguarding zone. To mitigate the effects on CRL, the proposed foundations consists of a number pile groups arranged so that all foundation piles are outside the Crossrail exclusion zone. For the structure directly above the CRL tunnel exclusion zone, transfer beams are used to transfer the structural loads to pile caps either side.</p> <p>The piles for the permanent load bearing piles in the pile groups consist of 300 mm and 450 mm diameter CFA piles of various lengths.</p> <p>The base of the transfer beams and pile caps are approximately 1.1 to 2.4 m below existing ground level. To enable construction of the pile caps and transfer beams, temporary contiguous pile walls have been proposed around the perimeter of the transfer beams and pile caps. The proposed contiguous pile walls consist of 300 mm diameter piles spaced at 600 mm centres installed up to 5m below existing ground level. For the transfer beam above the exclusion zone and adjacent pile caps, the toe of the contiguous pile walls will be above the top of Crossrail exclusion zone.</p> <p>Therefore, all piles (permanent load bearing and contiguous pile wall piles are located such that they are outside the CRL exclusion zone.</p> <p>Discipline = Geotechnical Engineering</p>
Documents Checked: <p>Design Calculations Checked:</p> <ul style="list-style-type: none"> • Hoxton Hotel Contiguous Wall Design - Burras Ltd Rev 5.pdf • Hoxton Hotel Loadbearing Pile Design - Burras Ltd Rev 5.pdf <p>Other relevant documents used:</p> <ul style="list-style-type: none"> • Campbell Reith Foundation Drawings <ul style="list-style-type: none"> ○ 10795-CRH-XX-00-DR-S-1000-P3 – Pile Layout ○ 10795-CRH-XX-00-DR-S-1001-P1 – Composite Piling GA Indicating Temporary Works and Permanent Piling ○ 10795-CRH-XX-00-DR-S-1002-P9 – Foundation Layout ○ 10795-CRH-XX-00-DR-S-2410-P4 – Part Wall Sections And Cross Section Through Crossrail Westbound Tunnel ○ 10795-220318-Foundation surcharge loads • Campbell Reith, The Hoxton Holborn, Interpretative Geotechnical Report, Rev D1 dated Oct 2017 (file ref: NSaed10795-041017-IGR D1.pdf)

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Requirements, Standards and Codes applied in this Check			
Permanent load bearing piles designed to BS EN 1997.			
Temporary shoring wall designed based on overall Factor of Safety approach. This is considered appropriate as the contiguous pile walls are considered temporary works.			
Any other relevant details:			
An impact assessment of the proposed development on the CRL tunnel has been submitted separately by Campbell Reith.			
Declaration by Checking Organisation:			
By Validation Team Leader of the Organisation undertaking Category II Check:			
I certify that, exercising reasonable professional skill and care, consistent with the agreed professional services, we have checked the Design of the 3 rd Party Development identified above, with the objective of ensuring that the predicted ground movement impact on Crossrail's infrastructure resulting from implementation,			
<ul style="list-style-type: none"> Complies with the Requirements, Standards, Codes and any other relevant details stated above; Does not exceed the minimum acceptance criteria specified in Crossrail guidance for the protection of its infrastructure against the effects of the Development works. Is accurate in its adoption of correctly calculated surcharge loading, interpreted soil parameters and intended construction sequences applicable to this development 			
In my reasonable opinion, the provisions made to protect Crossrail Infrastructure are considered to be satisfactory.			
I confirm that the Category II check was undertaken by a team wholly independent of the team responsible for the assessment and design of infrastructure protection to mitigate the 3 rd Party Development impact on Crossrail infrastructure.			
Name: Nabeel Bux	Position: Principal Geotechnical Engineer	Signature: 	Date: 27/04/2018
By Project Director of the Organisation undertaking Category II Check:			
I certify that the staff who have completed the above check are competent to carry out their duties and that they have used reasonable skill and care, and that inter-discipline interfaces have been managed and coordinated appropriately			
Name: Seera Chara	Position: Technical Director	Signature: 	Date: 27/04/2018
Acceptance by Crossrail: The certificate is accepted by CRL's Safeguarding team			
Name	Position	Signature	Date