Coroner ME Hassell Senior Coroner Inner North London St Pancras Coroner's Court Camley Street London N1C 4PP

9 December 2015

Dear Madam,

## INQUEST CONCERNING THE DEATH OF RICHARD LACO ON 6 NOVEMBER 2013

I write this letter in response to the Prevention of Future Deaths ("PFD") report issued on 22 October 2015. In the PFD report, reference was made to the planning of two lifts of staircase landings at basement level in Core D at the Francis Crick Institute ("the Crick") by the specialist contractor, CMF Limited ("CMF"), and the review of those lifts by the principal contractor, Laing O'Rourke. This letter addresses the concerns raised and sets out the actions that have been taken by Laing O'Rourke since the accident.

First and foremost, Laing O'Rourke would like to make clear from the outset that nothing said in this letter should be taken as in any way diminishing our distress at the death of Richard Laco in the incident on 6 November 2013. It is our paramount objective to formulate and implement a safe work place for all. Laing O'Rourke deeply regrets the incident in which Mr Laco lost his life. Such incidents serve to strengthen our resolve to maintain a safe working environment for everyone on our projects. The Directors insist that safety is at the forefront of the business. To that end, Laing O'Rourke launched Mission Zero in October 2010, a campaign which built on previous initiatives with the ultimate aim of eliminating all work related accidents from our operations by 2020.

## The Core D basement lifts at the Crick

CMF was employed by Laing O'Rourke to be the architectural metalwork subcontractors at the Crick. CMF had the responsibility for designing, planning and executing its works, including the lifting of landings and staircases in the cores. CMF and their Appointed Person for Lifting were responsible for producing relevant risk assessments and method statements for its works and a Lift Plan for its lifting operations. In accordance with Laing O'Rourke's Construction Phase Health, Safety and Environmental Plan for the Crick, CMF's Risk Assessment and Method Statement ("RAMS") for the staircase works was reviewed by the Laing O'Rourke Package Manager, Andy Fright, whilst CMF's lift plan was initially issued to Andy Fright, who referred it to the Laing O'Rourke Appointed Person for Lifting at the Crick, Mike Mungroosingh. Paul Hughes took over from Mike Mungroosingh as Laing O'Rourke's Appointed Person for lifting on 25 July 2013 and reviewed revisions B and C of the CMF Lift Plan.

As the Package Manager Andy Fright's responsibilities included checking that CMF's documentation was complete and correct. This included ensuring that the scope of works was correct, that it was properly defined and that the sequence of works was correct. Andy Fright also checked to see how the work interfaced with other trades on site and checked that the CMF employees had the satisfactory competence, certificates and qualifications for the work. He also looked at the equipment CMF would use, the resources available on site and any emergency provisions necessary to complete work. He ensured that the client's quality specification for the landings and staircases had been met.



As part of his Package Manager function, Andy Fright referred specialist documentation involving CMF's lifting operations to the Appointed Person for Lifting at Laing O'Rourke to review.

As will be appreciated, giving evidence can be difficult, particularly in the context of an inquest. This is not a forum which employees of Laing O'Rourke are used to, but the witnesses called at the hearing endeavoured to assist and were transparently straightforward. Laing O'Rourke trains its employees rigorously and is confident that its people have suitable skills and expertise for their respective roles.

The CMF Lift Plan, as reviewed by Laing O'Rourke's Appointed Person for Lifting, utilised positive lifting attachments on landings and staircases when installing these sections into the stair cores. Photographs in the CMF Lift Plan, added at Laing O'Rourke's request, showed that landings would be stropped through eye bolts, which are positively fixed to the landing and choked. Staircase sections were fixed with a lifting jig. These sections, once positively attached, would be installed into the stair cores using a block and tackle to manipulate into place onto the fin plates in the case of landings, or onto the installed landings in the case of the stair flight sections. The use of positive lifting attachments provides for a safe system of work when a load is lifted up and manipulated into place above the ground regardless of any variation in the shape of the component.

Paul Hughes, Laing O'Rourke's specialist Appointed Person for Lifting, asked CMF to add some clarifications to its Lift Plan in August 2013. He asked that CMF uprate its winch to 2 tonnes to increase the factor of safety. In particular, at the request of Paul Hughes, photographs were added to the Lift Plan Rev C demonstrating the positive lifting attachments and the chain block/block and tackle for adjusting the position of the staircases and the landings for their installation in cores A to F. As he made clear at the inquest, Paul Hughes's view, supported by Mark Shearon (HM Inspector Health & Safety Executive), was that the lift plan is a working document and the use of photographs improves the understanding of the crew when briefing them on the work.

Laing O'Rourke approved the CMF Lift Plan on the basis that positive lifting attachments would be used for the lifting and installation of the landings (and staircases). As stated by Paul Hughes at the inquest, if CMF felt that it needed to deviate from the lift plan in force, for any reason, during the installation of landings or staircase sections, the lifting operation should have stopped immediately and further planning undertaken. Although the PFD report states that "there was no instruction to stop the procedure if positive fixings...could not be achieved", Laing O'Rourke had only approved CMF's lifts on the basis that positive lifting attachments were in use as had been the case in all the previous stair cores. No approval has ever been given by Laing O'Rourke to CMF to lift without positive lifting attachments.

Laing O'Rourke was not told about CMF's departure from the agreed safe system of work. No approval was given to CMF by Laing O'Rourke to deviate from the agreed lift plan. If the principles in the lift plan could not be complied with by CMF, then the plan needed to be re-addressed, re-written and resubmitted to Laing O'Rourke. This was anticipated by CMF's lift plan itself, which at page 16 of Revision C states, "This document must be regularly reviewed by the CMF site team/AP", that is the CMF Appointed Person for lifting, "and as required the LOR appointed person. Should any changes be required WORKS WILL NOT BE CONTINUED UNTIL APPROVAL OF ALL AUTHORISED PERSONS IS OBTAINED IN WRITING. THIS DOCUMENT WILL REQUIRE UPDATING TO REFLECT ANY CHANGES AGREED TO".



As stated by Paul Hughes, the absence of a positive lifting connection is a stop point; when lifting units and manipulating a load in the air rotating into place, there must be a positive lifting connection in order to ensure safe lifting. This principle remains the same with all lifts and shapes.

With hindsight, as the landings in the basement of core D were a different shape and were to be lifted upwards past the fin plates, before being lowered downwards onto the fin plates in the core, CMF should have considered an additional note in the plan for this lift. It is relevant, however, that the principle behind the method of lifting agreed by Laing O'Rourke in November 2013 required positive lifting attachments to be applied to a load lifted into the air and manipulated into place. This approved method provided a safe system of work, notwithstanding that, with hindsight, additional clarifications could have been, and eventually were, made to the plan by CMF, to account for the shape of the landing and the upward lift. The design of the lifting method and lift plan was the specialist contractor's responsibility. As the principal contractor Laing O'Rourke ensured that any such plan was safe by insisting on the use of the positive attachments.

## Action taken by Laing O'Rourke following the accident to prevent future deaths

On 8 November 2013 the Laing O'Rourke Project Leader at the Crick, Bob Williams, circulated an email reminder that, following the Project Director Jonathan Abbott's team talk, all packages were to undergo a full review of all method statements and lifting plans to ensure that they were current and reflected the actual install methods. This email also indicated that all Contractor Managing Directors were required to visit the site, in order to undertake a personal presentation to their respective teams on what was required of them at the Crick. All lift plans were suspended until they had been again reviewed and approved by Laing O'Rourke. A briefing of the accident and a health and safety briefing were conducted on 11 November 2013. Work recommenced at the Crick on 11 November 2013, save for the fact that core D remained closed for the official investigation.

In November 2013 Laing O'Rourke requested that CMF provide a detailed RAMS for the removal of the damaged landings in core D. Laing O'Rourke stressed to CMF that all landings and staircases must be rigged with positive lifting attachments. In December 2013 CMF started work on the revised RAMS and Lift Plan for the remaining stair installation, as well as testing its positive lifting attachments. Approval was granted by the HSE for the removal of the damaged landings from core D on 17 January 2014. On 23 January 2014 CMF were instructed to undertake a safe start workshop and to explain their method of installation for the next phase.

The revised CMF Lift Plan, dated 9 April 2014, is tailored for the installation in the basement in core D and has been reviewed by the HSE. This revised plan again requires positive lifting attachments to be rigged to the steel landings and the staircases. The basement landings and stairs under the ground floor slab in core D were successfully installed by CMF in May 2014.

Following this tragic accident Laing O'Rourke and the client have insisted on even greater use of health and safety measures. The CDM (Construction Design and Management) Co-ordinator has been required to be on site twice a month instead of once a month since 6 December 2013. On 21 January 2014 Dean Pettinger of Laing O'Rourke was appointed as an additional Appointed Person for Lifting and was specifically directed to focus on all lifts carried out by CMF, even though all those lifts were the primary responsibility of CMF.

As an additional safeguard, Laing O'Rourke now requires that lifting activity within a RAMS, is formally signed off on the RAMS and Lift Plan by the Laing O'Rourke Appointed Person for lifting. The same formal acknowledgement is now required by the Laing O'Rourke Temporary Works Co-ordinator, for any temporary works. Authorisation from the appropriate specialist person has always been required



during the review process, for example, where the contractor's work involves lifting. However, this step has now been committed to writing and the specialist person's acceptance, whether it is the Temporary Works Co-Ordinator or the Appointed Person for Lifting, is evidenced on the documentation. A Safety Alert was issued to all Laing O' Rourke workplaces, through both the Management and Health and Safety functions, for implementation on 28 November 2013 emphasising the requirement that lifting operations on a project must include the sign off by the Laing O'Rourke Appointed Person for Lifting as set out on the Revised Method Statement Approval Sheet T6-D. This Safety Alert emphasises that all contractors' Lifting Plans written by specialist contractors, such as CMF, must, as well as having been risk assessed, planned and approved by the sub-contractor's Appointed Person for Lifting, be approved in writing by the Laing O'Rourke Appointed Person for Lifting.

Furthermore, each project team is now required to review activities carrying increased risk on a monthly basis and schedule a 'Planned vs Actual' assessment for these activities. As part of the 'Planned vs Actual' assessment a manager will review the accepted method statement for an activity on a more formal basis and will then review with the team carrying out the work whether there has been any change in circumstance which may have an impact on the plan, or whether improvements could be made to the method in order to make the operation safer.

As stated above, Laing O'Rourke strives to learn lessons from continuous review of all its operations and, especially, from distressing incidents involving personal injury. Many steps have been taken at the Crick designed to ensure that tasks are subjected to heightened scrutiny and control to minimise the risk that safety considerations could be overlooked in planning and executing work on the site.

Laing O'Rourke reiterates its deep regret at the death of Richard Laco in this accident. The company takes this fatal accident very seriously and personally, and is driven to re-double its efforts to maintain a safe working environment throughout its operations.

Yours faithfully,

Managing Director UK & Europe