Commission of Inquiry into the Diaphragm Wall and Platform Slab Construction Works at the Hung Hom Station Extension under the Shatin to Central Link Project

THIRD	WITNESS	STATEMENT	OF	BRETT	BUCKL	AND

I, BRETT BUCKLAND, of 39/F Sun Hung Kai Centre, 30 Harbour Road, Hong Kong, say as follows:

- I refer to my first and second witness statements dated 9 October 2018 ("First
 Witness Statement") and 18 October 2018 ("Second Witness Statement").
 Unless otherwise stated or the context otherwise requires, any abbreviations shall bear the same meaning as in my First Witness Statement and Second
 Witness Statements.
- I make this third witness statement in reply to paragraphs 13 to 31 of the second witness statement of Mr. Ho Hon Kit ("Mr. Ho") dated 16 October 2018 ("Mr. Ho's 2nd Statement") submitted to the Commission of Inquiry and to address any relevant matter raised in this statement.
- 3. Any allegations or matters raised in the statements mentioned in paragraph 2 above (or any other statements) which are inconsistent with my witness statements are denied. If I do not address any allegations or matters raised in other witness statements, it should not be construed as an admission on my part.
- 4. Unless otherwise stated, the facts stated herein are within my personal knowledge and are true. Where the facts and matters stated herein are not within my own knowledge, they are based on the stated sources and are true to the best of my knowledge, information and belief.

Allegations regarding the Change

- 5. At paragraph 15 of Mr. Ho's 2nd Statement, he refers to Leighton's positions that the Change was minor and therefore did not need to be submitted to BD for acceptance before being implemented and that the Change was actually accepted by BD.¹ He is wrong to refer to these two positions as contradictory. If a change is minor it does not need to be submitted to BD, but there is no preclusion from doing so. MTRCL made the decision to submit the Change to BD (which was accepted). However, my view is that MTRCL were not obligated to do so before the Change was incorporated into the construction, only prior to certification of the as-built record.
- 6. I disagree with Mr Ho's comments in paragraph 16 of his 2nd Statement. He states that under the consultation regime under an IoE any change of construction details must go through the consultation process and be accepted by BD or HyD, regardless of how minor they are. This is impracticable and does not reflect my understanding of how the IoE process is supposed to work. [This would mean, for example, that even a change in lap position would need to be submitted in advance to BD. This is not how the system works. Mr Ho is, in effect, arguing that the process under an IoE is more onerous than under the full BD process (which does allow minor changes to proceed on site with the RSE and AP's agreement). That does not seem to reflect the purpose or the spirit of MTRCL being granted exemptions from the usual approval procedures that apply to other projects and having greater autonomy to build its projects. If the process under an IoE is more onerous, there would be no point in MTRCL applying for an IoE in the first place.
- 7. Contrary to the implication in Mr. Ho's comments in paragraph 17 of his Second Statement, I disagree that exemption from the Buildings Ordinance under an IoE would result in a more onerous control regime. As there does not appear to be a documented process under the IoE specific to the management

¹ See paragraphs 34 to 38 of my First Witness Statement.

of minor design changes, I believe that it is appropriate to defer to PNAP ADM-19 and follow its intent as guidance. In relation to Mr Ho's comments on the PMP proposed by MTRCL, I would like to point out that there is not a single mention of "Management Plans" or "Project Management Plans" in the IoE dated 5 December 2012 and hence that such management plans would take precedence over the Buildings Ordinance. In any case, no such PMP was issued to Leighton in the contract documents or at any stage during the project, to the best of my knowledge. Nevertheless, having now been able to review the PMP as as referred to in Mr. Ho's Second Statement, I am now in a position to comment on it. Referring to the flowchart in Appendix 9 of the PMP titled "Administrative Procedure for Consultation Submissions under IoE/IoC", one can see that, after the box for "During Construction" and adjacent to the box for "Completion of Works", there is a statement saying, "Ensure acceptance of consultation submission and necessary amendments before certification of as-built record". This clearly shows that MTRCL expected that there would be some necessary amendments made to the works during the construction stage, for which MTRCL would need to obtain acceptance from BD before certification of the as-built record. Given that the PMP was proposed to (and presumably accepted by) BD, it follows that BD also accepted this approach. This is also consistent with my own understanding of the process.

- 8. I disagree with Mr Ho's comments in paragraphs 18 and 19 of his Second Statement regarding PNAP ADM-19 not being applicable to the Change because the diaphragm wall was part of the foundations. The top of the diaphragm wall where the Change was made is not considered to be part of the foundation system for these purposes. It is part of the slab structural system.
- 9. The definition of "foundation" in the HK Code of Practice for Foundations 2004 is "that part of a building, building works, structure or street in direct contact with and transmitting loads to the ground".

- 10. The Change concerns the connection between the EWL Slab and OTE Slab at the very top of the eastern diaphragm wall.² It is not in direct contact with the ground nor is it transmitting loads directly to the ground. It is also not the lowest load-bearing part of the structure, The loads from the EWL Slab and OTE Slab are transferred by the connection to the top of the diaphragm wall, which transfers these loads to the lower part of the diaphragm wall. In turn, the lower part of the diaphragm wall transfers those loads to the ground. The connection at the top of the diaphragm wall ensures adequate anchorage for the main bars of the EWL Slab and OTE Slab to resist the moments induced by vertical loading and deflection of the slabs. This clearly relates to the structure, not the foundation.
- 11. To be clear, I agree that the connection between the diaphragm wall and EWL Slab is critical and that any *major* design change here would require consultation. However, and as I have previously stated, the fact is that the Change does not represent a major design change, but simply a *minor* detail change (i.e. from straight coupled bars to straight continuous bars) that should not have required consultation with BD prior to construction.
- 12. I disagree with Mr Ho's comments in paragraph 20 of his Second Statement.

 The change from a straight coupled bar to a straight continuous bar has zero impact upon stability of the structure. As noted in paragraphs 8 and 9 above,

² There is no doubt that the EWL Slab and OTE Slab are part of the structure, rather than part of the foundations. This is clear from the two BD consultation letters dated 25 February 2013 respectively and the third BD consultation letter dated 25 June 2014. The first BD consultation letter dated 25 February 2013 covering Grids 0/15 and Grid I/N at paragraph 1, contains a table which states "Hung Hom Station (Grid 0/15 and Grid I/N - Foundation (Load Bearing Diaphragm Wall, Barrette Pile & Socketed Steel H-pile)" [Emphasis Added]. In Appendix III of the first BD consultation Letter dated 25 February 2013, foundation is described as "Foundation Works (Socketed Steel H-piles)". In Appendix IV of the first BD consultation letter dated 25 February 2013, foundation is described as "Foundation Works (Load Bearing Diaphragm Wall & Barrette)". The second BD consultation letter dated 25 February 2013 covering Hung Hom Station (Grid 22/49 and K/N) states "Foundation (Barrette Pile & Load Bearing Diaphragm Wall)". Appendix III of the Second BD Consultation Letter dated 25 February 2013 states "Foundation Works (Load Bearing Diaphragm Wall & Barrette)". The third BD consultation letter dated 25 June 2014 covering Grid 15/22 and K/N, contains a table which states "Foundation (Load-bearing Diaphragm Wall) - Grid 15/22 and Grid K/N of Hung Hom Station" [Emphasis Added]. That is, the EWL Slab and OTE Slab are not described in these BD consultation letters as foundations.

the connection at the top of the diaphragm wall is not considered to be part of the foundation system. Further, minor demolition works (e.g. to remove temporary concrete or to repair honeycombed or poor quality concrete) are a common part of the preparation of a diaphragm wall for connection to slabs.

- 13. Mr Ho's comments in Paragraphs 21 and 24 of his Second Statement emphasise that his complaint regarding consultation with BD is essentially of a formal and technical nature. It does not relate to safety at all. Mr Ho cannot dispute that BD were notified and informed of the Change and had no objection to it subject only to noting that MTRCL should confirm "compatibility" with the permanent works (which they did).
- 14. I do not understand how Mr Ho can claim that the BO Team "has no knowledge about the partial demolition of the east diaphragm wall". As Mr Ho acknowledges in paragraphs 25 to 29 of his Second Statement, BD was informed of the Change. Indeed, BD did not reject or object to the Change.

Dated the 2nd day of November 2018.

7 '

Signed: Z

Brett Buckland

⁴ See paragraphs 34 to 28 of my First Witness Statement.