

Second stage of holistic assessment strategy for Hung Hom Station Extension under Shatin to Central Link Project in progress

The holistic assessment strategy for the Hung Hom Station Extension under the Shatin to Central Link (SCL) Project has been progressing smoothly, the Transport and Housing Bureau (THB) said today (December 14). In response to the Government's request, the MTR Corporation Limited (MTRCL) commenced the second stage of the strategy to open up the concrete of the East West Line (EWL) and North South Line (NSL) platforms on Monday (December 10). The opening up of eight locations at the EWL is under way. Relevant tests will be conducted when the steel bars are exposed.

The second stage of the strategy mainly serves two purposes. The first purpose is to verify the as-constructed details through opening up the concrete for physical investigation at locations where the MTRCL has found gaps in the documentation about the steel reinforcement. In view of the allegations on the cutting-short of steel bars, the second purpose is to verify the as-constructed coupler connections through opening up certain connections between the slabs and diaphragm walls for detailed inspection and non-destructive tests on coupler connections.

A spokesman for THB said, "The first purpose involves at least 24 locations at the EWL slab. The MTRCL has opened up five locations where inspection will be conducted after the steel bars are exposed. For the second purpose, the MTRCL will open up 28 locations at the EWL and the NSL respectively, i.e. 56 locations in total, that were selected from random sampling carried out by the expert team from the University of Hong Kong (HKU). At least 168 steel bars or couplers will be exposed for inspection. Up till now, three randomly selected locations have been opened up. Non-destructive tests will be conducted when the coupler connection is reached.

"The Government attaches great importance to the opening up and examination of the concrete, and considers that it has to be conducted in a stringent, fair, scientific and safe manner to ensure the reliability of the results. To this end, the Government has consulted the expert team from the Department of Statistics and Actuarial Science of HKU on the selection method of opening-up locations and entrusted them to conduct random sampling. The sampling process, witnessed by representatives of the Expert Adviser Team for the SCL Project under the THB, the Highways Department, the Buildings Department and the MTRCL, was completed on December 10."

The process first involved the random selection of 56 locations at platform slabs. Next, based on the latest drawings provided by the MTRCL and given the number of layers of steel bars inside the slab, the slab is opened

up to the depth of a certain layer randomly selected. As the width of each opening-up location is about 400 millimetres, a set of three steel bars will be exposed for examination. This method is known as cluster sampling and is commonly used in statistics.

Prior to the opening up, the MTRCL had appointed a registered contractor in accordance with the Buildings Ordinance to carry out the opening-up works, submitted a detailed method statement to the Building Authority and obtained its consent.

As for the non-destructive test on coupler connections, the MTRCL proposed the use of phased array ultrasonic examination. The Expert Adviser Team for the SCL Project, experts from the Department of Civil Engineering of HKU and relevant government departments agreed that the examination method is viable.

Throughout the opening-up process, representatives from the Buildings Department, the Highways Department and its monitoring and verification consultant will monitor the situation, keep records, and, in particular, review the critical steps to ensure the process complies with the agreed method statement. The MTRCL has assigned technically competent persons as required by the Buildings Ordinance to supervise the opening-up and examination process. Police officers will also be present at the scene.

The MTRCL has stepped up security measures to secure the integrity and reliability of the works and evidence collection. Measures implemented include round-the-clock deployment of security guards at the site, installation of a closed-circuit television system at all entrances to the platform slabs for real-time monitoring of entry and exit, and compulsory registration of workers' entry into and exit from the site.

The Government has requested the MTRCL to shorten the process of opening up and examination from the originally planned 16 weeks to 12 weeks to dovetail with the work plan of the Commission of Inquiry. The MTRCL has agreed to try its utmost to speed up but the completion date cannot be ascertained at this stage given the unforeseeable risks and difficulties. The Government will continue to monitor the progress of the opening up and examination, and will urge the MTRCL to take measures to expedite if it fails to meet the programme. The Government will also announce relevant work progress on a regular basis.