

# LCQ21: Incident of settlement in relation to Central Kowloon Route project

Following is a question by the Hon Starry Lee and a written reply by the Secretary for Transport and Housing, Mr Frank Chan Fan, in the Legislative Council today (October 27):

Question:

The Highways Department (HyD) announced on the 3rd of this month that in the course of carrying out the foundation works for the Kai Tak Ventilation Building and the Administration Building under the Central Kowloon Route project (the project), settlement readings exceeding the pre-set trigger level for works suspension (i.e. 25 millimetres) had been recorded at the nearby monitoring checkpoints on the 30th of last month. The HyD then, pursuant to the mechanism, ordered the contractor to immediately suspend all works for conducting a holistic and comprehensive assessment. In this connection, will the Government inform this Council:

- (1) whether it knows when the contractor learnt of the settlement exceedance; when the HyD received the relevant notification from the contractor;
- (2) whether there were communal facilities within the settlement monitoring area; if so, of the settlement readings recorded at the relevant monitoring checkpoints;
- (3) of the number of settlement monitoring checkpoints installed for the project and their locations; the settlement readings recorded at such monitoring checkpoints in the past three months;
- (4) whether mitigation measures need to be adopted for those buildings affected by the settlement; if so, of the details and the progress;
- (5) whether it will install more monitoring checkpoints for the project and increase the frequency of recording the readings; if so, of the details; if not, the reasons for that;
- (6) of the progress of the aforesaid assessment; whether it has identified the causes for the settlement exceedance;
- (7) whether it will request the contractor to review the works implementation methods, with a view to reducing the chance for recurrence of settlement exceedance; and
- (8) of the impacts of the works suspension incident on the works implementation progress of the project?

Reply:

President,

The Government has always attached great importance to the safety and quality of public works projects. In all circumstances, the Government will accord top priority to ensuring the safety of the public, site workers, surrounding structures and public facilities. Before commencement of construction works, about 1,700 settlement monitoring checkpoints were installed in the vicinity of the Central Kowloon Route (CKR) works sites to record structural and ground settlement information so as to monitor the impact of the works on nearby structures and public facilities with a view to ensuring that the works are being carried out in a safe manner. My reply to the various parts of the question is as follows:

(1) In the course of the foundation works for the Kai Tak Ventilation Building and Administration Building under the CKR project, two of the monitoring checkpoints installed on the service road adjacent to the Kai Tak Tunnel Administration Building recorded settlements of six millimetres and seven millimetres above the pre-set trigger level for works suspension on September 30. According to the established mechanism, when the settlement reaches or exceeds the pre-set trigger level for works suspension, the relevant works have to be suspended immediately, and the contractor is required to provide relevant information to the works department(s) concerned as well as to carry out inspections on affected public facilities and structures to confirm their structural and operational safety. Upon completion of such inspection, the concerned works department will issue a press release to announce the relevant situation as soon as possible. In accordance to the above mechanism, the Highways Department (HyD) had, upon receiving the report that day, immediately instructed the contractor to suspend all the relevant foundation works and conduct a holistic and comprehensive assessment, sent officers to carry out site inspection on the service road and surrounding structures and public facilities (including Kai Tak Tunnel, Kai Tak Tunnel Administration Building, etc.) with the contractor, as well as issued press release to inform the public on the overall situation upon completion of preliminary assessment.

(2) The service road concerned is for use by maintenance vehicles only and is not open for public use. As for the nearby structures and public facilities including Kai Tak Tunnel, Kai Tak Tunnel Administration Building, etc., there was no recorded settlement exceeding the pre-set trigger level for works suspension. The independent checking engineer of the contractor has confirmed that the above facilities remained structurally and operationally safe.

(3) As mentioned above, about 1,700 settlement monitoring checkpoints were installed in the vicinity of the CKR works site, in areas along the alignment of CKR, including Yau Ma Tei, Ho Man Tin, To Kwa Wan and Kai Tak, etc., to record structural and ground settlement information so as to monitor the impact of the works on nearby structures and public facilities. The number and location of the monitoring checkpoints would be adjusted according to

construction stages and nature of the works procedure, etc. In the past three months, except for the two monitoring checkpoints installed at the service road concerned, monitoring data of all the other settlement monitoring checkpoints had been stable and had not exceeded the pre-set trigger level for works suspension.

(4) and (5) Upon learning about the incident, the HyD has immediately arranged the contractor to carry out strengthening works, including improving the geological condition of the adjacent area by grouting, so as to better ensure structural and operational safety of the relevant facilities. The settlement at the service road concerned has now been trending towards stabilisation, the contractor will continue to carry out strengthening works until the situation is fully stabilised. Furthermore, with a view to monitoring the settlement situation more closely, additional monitoring checkpoints will be installed at appropriate locations in the vicinity of the site, and the monitoring frequency of relevant locations will also be increased.

(6) and (7) The HyD has already requested the contractor to conduct a holistic and comprehensive assessment to determine the cause of the settlement. The contractor has also been required to formulate proposals of appropriate mitigation measures and works methods to minimise the potential impact on the relevant structures and public facilities as soon as possible for the HyD's approval. The relevant follow-up works are anticipated to be completed by mid-November at the earliest. Upon receipt of the contractor's proposal and request for works resumption, the HyD will critically scrutinise the application with a view to ensuring the structural and operational safety of the abovementioned structures and public facilities, and allow resumption of works only when the settlement had completely stabilised. The Government will continue to closely monitor the condition of the surrounding structures and public facilities to ensure that works are being carried out in a safe manner.

(8) Since the suspension of works mainly concerned the foundation works for Kai Tak Ventilation Building and Administration Building under the CKR project, other major works under the project are proceeding as usual. The HyD will work with the contractor to formulate appropriate measures (e.g. reviewing the construction sequence of the superstructure of buildings) to recover the works progress of the foundation works for the Kai Tak Ventilation Building and Administration Building. The target of commissioning the CKR in 2025 remains unchanged.