LCQ11: Engagement of land surveyors in public works projects

Following is a question by the Hon Tony Tse and a written reply by the Secretary for Development, Mr Michael Wong, in the Legislative Council today (June 27):

Question:

Some members of the surveying sector have pointed out that the work carried out by land surveyors (e.g. providing information on ground features for construction works, establishing site boundaries and setting piling positions for piling works) can reduce disputes caused by unclear land boundaries and ensure that works are carried out at accurate locations. Nevertheless, the Government has not made it mandatory for public works contractors to engage, according to the project scale and complexity, a specified number of registered land surveyors to participate in the projects. Such a situation may impact on the progress and quality of the works, and is not conducive to providing job opportunities to attract new blood. On the other hand, the Highways Department (HyD) issued the Highways Department Technical Circular No. 5/2003 (the Technical Circular) in 2003, providing guidelines on the qualification and experience requirements of surveyors engaged by contractors in highway projects. In this connection, will the Government inform this Council:

(1) as it is stipulated in the Technical Circular that in respect of road works the contract value of which is over $500 million, contractors must engage land surveyors who are members of The Hong Kong Institute of Surveyors in the Land Surveying Division (or persons with equivalent professional qualifications) with relevant experience, and such surveyors should be full time on site, whether the authorities know how the relevant requirements are implemented;

(2) given that the Technical Circular has been issued for over a decade since 2003, whether the authorities have reviewed if the Circular can still cater to present-day needs; if the authorities have, of the outcome; if not, the reasons for that and whether they will conduct a review expeditiously;

(3) whether government departments other than HyD have followed the guidelines set out in the Technical Circular when implementing works projects; if so, of the details; if not, the reasons for that; and

(4) whether it will consider formulating guidelines to stipulate that, in respect of public works projects the contract value of which is over $500 million or those with complicated site boundaries, contractors must engage a specified number of registered land surveyors (or persons with equivalent professional qualifications and work experience) to participate in works planning, and such surveyors should be full time on site; if so, of the details; if not, the reasons for that?

Reply:

President,

The Government always accords high priority to the quality and cost-effectiveness of public works. The Development Bureau and works departments review technical requirements of various aspects for public works contracts from time to time so as to align with the development of technology and project requirements. At present, the qualification and experience requirements of land surveying staff engaged by contractors are stated in the "General Specification for Civil Engineering Works" or the particular specifications prepared according to the situations of the individual projects.

My reply to Hon Tony Tse's question is as follows:

1. Since the site boundaries of roadworks projects are in general more extensive and complicated, land surveying staff with higher qualifications may be required to carry out some of the land surveying work. As such, the Highways Department (HyD) has promulgated its Technical Circular no. 5/2003 to set out the guidelines for preparation of particular specifications for individual projects for reference by its project offices. Although the technical circular has listed out the qualification and experience requirements for land surveying staff engaged by the contractors in different scale of projects, such as engaging member of the Hong Kong Institute of Surveyors in the Land Surveying Division or equivalent plus three years relevant working experience for works contracts with value over $500 million, it is not a hard and fast rule for including such requirements. The Technical Circular allows the project offices to determine the appropriate requirements in the particular specification to suit the actual situations and surveying demand of individual projects. The technical circular also requires the project offices to consult its departmental survey division on the relevant qualification and experience requirements of land surveying staff engaged by the contractor to be specified in the works contracts. The HyD advised that the operation of this technical circular has long been satisfactory all along.

2. The HyD has conducted reviews on the above-mentioned technical circular regularly. At present, it considers that the details of this technical circular are still applicable. The HyD will continue to review this technical circular at appropriate times and update its details if considered necessary.

3. Works departments set out the appropriate contract requirements with respect to the nature, complexity and surveying demand of their projects. If roadworks are involved in the public works projects by other works departments, they would make reference to the above-mentioned HyD's technical circular in preparing the contract requirements. In general, for projects involving substantial surveying work, works departments would consult their respective survey division on the requirements of land surveying staff to be engaged by contractors in order to suit the latest development of technology and the market.

4. In general, public works projects managed by different works departments vary in nature and complexity of works as well as the extent of the required surveying work. It may not be desirable to set out unified requirements on the qualification, experience and number of land surveying staff together with their number for all works departments. We consider that it is more appropriate for works departments to determine the relevant requirements of land surveying staff based on factors such as the the characteristics, complexity, and site constraints of the respective projects. On this issue, the Development Bureau and works departments will continue to keep in view of the development of the technology and the market, and conduct reviews and update relevant requirements when necessary.

LCQ10: Fresh water supply in Hong Kong in times of droughts in Guangdong Province

Following is a question by the Hon Kwok Wai-keung and a written reply by the Secretary for Development, Mr Michael Wong, in the Legislative Council today (June 27):

Question:

At present, 70 to 80 per cent of the fresh water in Hong Kong comes from Dongjiang water. Regarding fresh water supply in Hong Kong in times of droughts in Guangdong Province, will the Government inform this Council:

(1) whether it is stipulated in the Agreement for the supply of Dongjiang water to Hong Kong signed between the Hong Kong Government and the Guangdong Provincial Government that the two governments may discuss the adjustment of quantities of water to be supplied to Hong Kong in times of severe droughts in Guangdong Province; if so, of the details;

(2) whether it has formulated measures to cope with the situation that the supply of Dongjiang water to Hong Kong is inadequate due to severe droughts in Guangdong Province; if so, of the details, and under what circumstances water rationing will be imposed; and

(3) given that the daily water supply of the Tseung Kwan O Desalination Plant, upon completion of its first stage construction works, will only meet around 5 per cent of the daily water consumption of the whole territory, and that global water resources are getting increasingly tight, whether the authorities will study the setting of a target percentage of the fresh water output of the desalination plant in the water consumption at 30 per cent?

Reply:

President,

The Government is committed to maintaining the reliability of water supply in Hong Kong. Currently, the fresh water supply for Hong Kong comprises the imported Dongjiang (DJ) water from Guangdong and rainwater from local water gathering grounds, representing 70 to 80 per cent and 20 to 30 per cent of our total fresh water consumption respectively. The "package deal lump sum" approach has been adopted for the DJ water supply agreements since 2006. This approach enables us to import DJ water as needed according to the amount of local yield collected each year up to an annual supply ceiling. The annual supply ceiling in the current supply agreement is set at 820 million cubic metres (mcm) based on fresh water demand analysis conducted by the Water Supplies Department (WSD) to ensure water supply reliability of 99 per cent, such that water supply can be maintained round-the-clock even under extreme drought condition with a return period of one in 100 years.

My response to the three parts of Hon Kwok's question is as follows:

(1) and (2) Although the agreement signed between the Hong Kong Government and the Guangdong Provincial Government for the supply of DJ water to Hong Kong does not have provision for the adjustment of supply quantities by negotiation between the two governments in times of severe droughts in the Guangdong Province, the annual supply ceiling of 820 mcm under the current supply agreement represents only about 3 per cent of the annual mean flow of the main stream of DJ. Furthermore, there are three large reservoirs, namely Xinfengjiang Reservoir, Fengshuba Reservoir, and Baipenzhu Reservoir, in the middle-upper stream of the DJ River Basin with a total storage capacity of 17 060 mcm. The storage in these reservoirs can be utilised to balance the flow of DJ, enabling us to import DJ water up to the annual supply ceiling as stipulated in the current supply agreement.

As mentioned above, water supply can be maintained round-the-clock even under extreme drought condition in Hong Kong with a return period of one in 100 years under the current water supply arrangement. If Hong Kong suffers from persistent extremely dry weather leading to insufficient water supply, we will take into account a host of factors including fresh water demand, supply situation of various water resources and rainfall forecast, for implementing appropriate responsive actions, such as imposing restriction on non-essential supplies including landscape irrigation, filling of swimming pools and street cleansing.

(3) Tenders are being invited for the "Design, Build and Operate" contract of the first stage of Tseung Kwan O desalination plant, which is anticipated for commissioning by 2022. The first stage of the desalination plant will have a water production capacity of 135 000 cubic metres per day to meet about 5 per cent of fresh water demand in Hong Kong. There is also provision for future expansion to the ultimate water production capacity of up to 270 000 cubic metres per day if necessary. The Government will study the programme for

implementing the second stage of Tseung Kwan O desalination plant having regard to the supply situation of various water resources, water demand forecast and development of desalination technology.

Besides, we are also exploiting two other new water sources which are reclaimed water and recycled grey water/harvested rainwater to supplement the three existing water sources, namely local yield, DJ water and seawater for flushing, thus increasing the water sources from three to six, making water sources in Hong Kong more diversified. Currently, we have no plan on studying if the output of the desalination plant should be set at a target percentage of 30 per cent of the total water consumption. We will conduct regular review on the positioning of the desalination plant and the percentage of its output against the total water consumption based on the supply situation of various water sources, reliability, environmental impact, technological development, sustainability, cost effectiveness and demand for water resources.

LCQ10: Fresh water supply in Hong Kong in times of droughts in Guangdong Province

Following is a question by the Hon Kwok Wai-keung and a written reply by the Secretary for Development, Mr Michael Wong, in the Legislative Council today (June 27):

Question:

At present, 70 to 80 per cent of the fresh water in Hong Kong comes from Dongjiang water. Regarding fresh water supply in Hong Kong in times of droughts in Guangdong Province, will the Government inform this Council:

(1) whether it is stipulated in the Agreement for the supply of Dongjiang water to Hong Kong signed between the Hong Kong Government and the Guangdong Provincial Government that the two governments may discuss the adjustment of quantities of water to be supplied to Hong Kong in times of severe droughts in Guangdong Province; if so, of the details;

(2) whether it has formulated measures to cope with the situation that the supply of Dongjiang water to Hong Kong is inadequate due to severe droughts in Guangdong Province; if so, of the details, and under what circumstances water rationing will be imposed; and

(3) given that the daily water supply of the Tseung Kwan O Desalination Plant, upon completion of its first stage construction works, will only meet around 5 per cent of the daily water consumption of the whole territory, and

that global water resources are getting increasingly tight, whether the authorities will study the setting of a target percentage of the fresh water output of the desalination plant in the water consumption at 30 per cent?

Reply:

President,

The Government is committed to maintaining the reliability of water supply in Hong Kong. Currently, the fresh water supply for Hong Kong comprises the imported Dongjiang (DJ) water from Guangdong and rainwater from local water gathering grounds, representing 70 to 80 per cent and 20 to 30 per cent of our total fresh water consumption respectively. The "package deal lump sum" approach has been adopted for the DJ water supply agreements since 2006. This approach enables us to import DJ water as needed according to the amount of local yield collected each year up to an annual supply ceiling. The annual supply ceiling in the current supply agreement is set at 820 million cubic metres (mcm) based on fresh water demand analysis conducted by the Water Supplies Department (WSD) to ensure water supply reliability of 99 per cent, such that water supply can be maintained round-the-clock even under extreme drought condition with a return period of one in 100 years.

My response to the three parts of Hon Kwok's question is as follows:

(1) and (2) Although the agreement signed between the Hong Kong Government and the Guangdong Provincial Government for the supply of DJ water to Hong Kong does not have provision for the adjustment of supply quantities by negotiation between the two governments in times of severe droughts in the Guangdong Province, the annual supply ceiling of 820 mcm under the current supply agreement represents only about 3 per cent of the annual mean flow of the main stream of DJ. Furthermore, there are three large reservoirs, namely Xinfengjiang Reservoir, Fengshuba Reservoir, and Baipenzhu Reservoir, in the middle-upper stream of the DJ River Basin with a total storage capacity of 17 060 mcm. The storage in these reservoirs can be utilised to balance the flow of DJ, enabling us to import DJ water up to the annual supply ceiling as stipulated in the current supply agreement.

As mentioned above, water supply can be maintained round-the-clock even under extreme drought condition in Hong Kong with a return period of one in 100 years under the current water supply arrangement. If Hong Kong suffers from persistent extremely dry weather leading to insufficient water supply, we will take into account a host of factors including fresh water demand, supply situation of various water resources and rainfall forecast, for implementing appropriate responsive actions, such as imposing restriction on non-essential supplies including landscape irrigation, filling of swimming pools and street cleansing.

(3) Tenders are being invited for the "Design, Build and Operate" contract of the first stage of Tseung Kwan O desalination plant, which is anticipated for commissioning by 2022. The first stage of the desalination plant will have a water production capacity of 135 000 cubic metres per day to meet about 5 per

cent of fresh water demand in Hong Kong. There is also provision for future expansion to the ultimate water production capacity of up to 270 000 cubic metres per day if necessary. The Government will study the programme for implementing the second stage of Tseung Kwan O desalination plant having regard to the supply situation of various water resources, water demand forecast and development of desalination technology.

Besides, we are also exploiting two other new water sources which are reclaimed water and recycled grey water/harvested rainwater to supplement the three existing water sources, namely local yield, DJ water and seawater for flushing, thus increasing the water sources from three to six, making water sources in Hong Kong more diversified. Currently, we have no plan on studying if the output of the desalination plant should be set at a target percentage of 30 per cent of the total water consumption. We will conduct regular review on the positioning of the desalination plant and the percentage of its output against the total water consumption based on the supply situation of various water sources, reliability, environmental impact, technological development, sustainability, cost effectiveness and demand for water resources.

Regulators conclude consultation on further enhancements to the OTC derivatives regulatory regime

The following is issued on behalf of the Hong Kong Monetary Authority:

The Hong Kong Monetary Authority (HKMA) and the Securities and Futures Commission (SFC) today issued conclusions to a joint consultation on further enhancements to the over-the-counter (OTC) derivatives regulatory regime in Hong Kong (Note 1).

Based on market feedback, the mandatory use of Legal Entity Identifiers (LEIs) (Note 2) in trade reporting will only apply to the identification of entities that are on a reporting entity's side of a transaction (Note 3). This requirement will apply to the reporting of new transactions and daily valuation information beginning April 1, 2019.

Reporting entities should continue to identify their counterparties in transaction reports in accordance with a waterfall of identifiers specified in the Supplementary Reporting Instructions for OTC Derivative Transactions (Note 4). Meanwhile, reporting entities are expected to establish a process to request LEIs from their clients. Regulators will maintain close dialogue with reporting entities and keep in view international development to assess the need for further requirements in this area.

The HKMA and the SFC will proceed with their proposals for Phase 2 Clearing with some fine tuning. The clearing obligation will be expanded to include specified standardised interest rate swaps denominated in Australian Dollars and the list of Financial Services Providers will be revised (Note 5).

The regulators have also adopted the trading determination process proposed in the joint consultation paper and are currently using the process to determine for which products it may be appropriate for Hong Kong to introduce a platform trading obligation (Note 6).

The consultation conclusions paper can be downloaded from the websites of the HKMA or the SFC.

Notes:

1. See the March 2018 joint consultation paper on enhancements to the OTC derivatives regime for Hong Kong to – (1) mandate the use of Legal Entity Identifiers for the reporting obligation, (2) expand the clearing obligation and (3) adopt a trading determination process for introducing a platform trading obligation.
2. A unique 20-digit, alpha-numeric code which identifies an entity in a financial transaction.
3. Entities that are on a reporting entity's side of a transaction include the reporting entity, the transacting party that a reporting entity reports or acts for, a central counterparty or a provider of clearing services that is a reporting entity or one that clears a transaction for a reporting entity or the transacting party that a reporting entity acts for.
4. The Supplementary Reporting Instructions for OTC Derivative Transactions are available on the Hong Kong Trade Repository Website.
5. A list of entities designated as Financial Services Providers for the purpose of the OTC derivatives regulatory regime.
6. The obligation to trade specified OTC derivative products on a designated trading platform in accordance with trading rules to be proposed.

LCQ13: Management of water resources

Following is a question by the Hon Claudia Mo and a written reply by the Secretary for Development, Mr Michael Wong, in the Legislative Council today (June 27):

Question:

On the management of water resources, will the Government inform this

Council:

(1) of the latest progress of the works for the first stage of the desalination plant at Tseung Kwan O; whether it will adopt measures to facilitate the completion of the construction works for the plant ahead of the target date of 2022; of the progress of the works for the second stage and whether an implementation timetable is in place; if there is no timetable, of the reasons for that;

(2) of the latest progress of the following measures on new sources of water supply:
(i) supplying reclaimed water to the north-eastern part of the New Territories in phases for non-potable uses, and
(ii) wider use of grey water recycling and rainwater harvesting systems under suitable new government projects;

(3) whether it has studied exploring new water sources to diversify water resources, thereby reducing the reliance on Dongjiang water; if not, of the reasons for that; and

(4) regarding the consultancy review of the Total Water Management Strategy expected to be completed within this year, of (i) its preliminary findings and (ii) the outstanding work?

Reply:

President,

The Water Supplies Department (WSD) promulgated the Total Water Management Strategy in 2008 to ensure sustainable and reliable water supply in Hong Kong. The Strategy puts an emphasis on containing the growth of water demand through water conservation and exploiting new water resources. The WSD is currently exploiting three new water sources, namely desalinated seawater, reclaimed water and recycled grey water/harvested rainwater, to supplement the three existing water sources, being local yield, Dongjiang (DJ) water and seawater for flushing.

My response to the four parts of the Hon Claudia Mo's question is as follows:

Tenders are being invited for the "Design, Build and Operate" contract of the first stage of Tseung Kwan O desalination plant, which is anticipated for commissioning in 2022. The first stage of desalination plant will have a water production capacity of 135 000 cubic metres per day to meet about five per cent of fresh water demand in Hong Kong. We have made provision for its future expansion to the ultimate water production capacity of 270 000 cubic metres per day when necessary.

Under the contract of the first stage of desalination plant, the period for design and construction is 39 months, which has been compressed as far as possible. At this stage, we are endeavouring to complete the invitation and

assessment of tenders as soon as possible, and seek support of the Public Works Subcommittee for obtaining funding approval from the Finance Committee of the Legislative Council with a view to commencing the contract of the first stage of desalination plant as soon as possible. During the period of design and construction, we will closely supervise the contractor in order to commission the first stage of desalination plant in 2022 as scheduled. The Government will study the programme for implementing the second stage of Tseung Kwan O desalination plant having regard to the supply situation of various water resources, water demand forecast, and development of desalination technology.

(2) We plan to supply reclaimed water for toilet flushing in the northeast New Territories in phases starting with Sheung Shui and Fanling. We are currently taking forward the implementation of the associated infrastructure works. Whilst the construction of a service reservoir of flushing water and laying of truck water mains commenced in April 2017, we plan to start laying the first stage of the local distribution mains in Sheung Shui and Fanling in the third quarter of this year. Furthermore, we are continuing with the design of the remaining works, including a chlorination plant for production of reclaimed water, a pumping system and the second stage of the local distribution mains in Sheung Shui and Fanling.

Besides, we plan to launch a public consultation on the supply of reclaimed water this year and commence the related legislative amendment work to dovetail the provision of reclaimed water for toilet flushing in Sheung Shui and Fanling from 2022.

We have also been advocating the adoption of grey water reuse system and/or rainwater harvesting system in suitable government works projects. A joint technical circular on Green Government Buildings has been issued by Development Bureau (DEVB) and Environment Bureau (ENB) (DEVB technical circular no. 2/2015 / ENB circular memorandum no. 3/2015). This circular requires the utilisation of grey water recycling and/or rainwater harvesting to reduce fresh water demand for non-potable uses as far as practicable. As for private buildings, we make use of the assessment tools in the Building Environmental Assessment Method Plus for Existing Buildings Version 2.0 issued by the Hong Kong Green Building Council to encourage the adoption of grey water reuse and/or rainwater harvesting systems by awarding bonus credits to private buildings with these systems. Apart from these measures, we will construct a centralised grey water recycling system in the Anderson Road Quarry development site to treat grey water collected from end users within the development for flushing use.

(3) The WSD is currently exploiting three new water sources, namely desalinated seawater, reclaimed water and recycled grey water/harvested rainwater, to supplement the three existing water sources, i.e. local yield, DJ water and seawater for flushing. The water sources of Hong Kong will thus increase from three to six, becoming more diversified. In addition, we will continue to study the feasibility of exploiting other water resources, including their reliability, environmental impact, technological development, sustainability, cost effectiveness. We will also keep in view the development

of new water resources in different parts of the world and their feasibility of application in Hong Kong.

(4) The consultants employed by the WSD are conducting a review on the Strategy. The review includes evaluating the effectiveness of the Strategy being implemented, forecasting long-term water demand and supply up to 2040, exploring new water management initiatives and assessing the need of adjusting current measures in the formulation of new water management strategy.

The consultants have reviewed the various water management initiatives. They are currently reviewing the long-term water demand of Hong Kong based on the latest available data and the corresponding water management initiatives. The review of the Strategy is expected to complete by the end of 2018.