

Annex C

Letter dated 10.1.2024 from Hongkong Electric

香港電燈有限公司
The Hongkong Electric Co., Ltd.

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Our Ref.: T&D/841/S/1225

10 January 2024

P&T (M&E) Limited
33/F,
633 King's Road,
North Point, Hong Kong

Dear Sir,

Proposed Residential Development at 44 Stanley Village Road

We refer to the email of 20 December 2023 from your Ms. Sandy Leung and the submission of supplementary information from Mr. Angus Lai of Couture Homes Properties Limited (your client) in his email of 20 December 2023 regarding the above.

The revised location of the proposed substation at LG1/F (level +55.95) is noted. Before accepting your proposed location, it would be more appropriate for you to show the terrains and levels of the proposed substation and the above development in a BIM model or the like so that a more thorough assessment of the potential flooding hazard can be conducted.

We list our general requirements for ground floor substation with two sets of transformer and the associated equipment, and the additional requirements for the proposed substation at LG1/F (level +55.95) in the enclosed Appendix I for your reference.

Apart from the above, please note our comments on your submissions as follows:

1. The size of the proposed substation is spacious enough for the installation of two sets of 3 x 500-kVA, 1-phase transformer and the associated equipment.
2. No lawn shall be located right above the proposed substation.
3. A dedicated staircase for direct access from G/F of the above development to the proposed substation shall be provided.
4. The frontage of external wall of the proposed substation is not suitable for our standard arrangement of ventilation system. It will be required for you to provide the ventilation system and the details will be further assessed after the substation layout is finalised.
5. The cable lead-in arrangement between the public road, i.e. Carmel Road, and the lot boundary of the above development shall be included in the cable lead-in proposal. Please review and submit the revised cable lead-in proposal with cross-sectional details provided.

/To be continued

6. It comes to our attention that a section of the proposed cable lead-in facilities will be located on the slope outside the lot boundary of the above development. You are required to provide the design of the cable lead-in facilities including a proper access preferably from the above development for our consideration. In addition, please submit a copy of the permission regarding the construction and maintenance of the proposed cable lead-in facilities by the relevant Government Authorities for our record purpose.
7. Please provide a set of updated drawings showing the proposed crane lorry parking space, the equipment delivery route from the proposed crane lorry parking space to the proposed substation, and swept path analysis to demonstrate smooth turning of a 9-m long vehicle for our substation equipment delivery along the path between Stanley Village Road and the proposed crane lorry parking space. Our requirements for vertical transportation of equipment to and from the proposed substation are shown in item 2.4 of the enclosed Appendix I for your reference.

Please review and submit the revised substation proposal and the required information incorporating our above comments for our further consideration. To assist our planning work, please also provide a full set of the latest building plans including the existing building with elevations and floor levels clearly indicated.

Should you have any queries regarding the above matter, please contact our Mr. T.F. Lam at telephone No. 2843 3161.

Yours faithfully,



Samuel T.K. Chan
Head of Distribution Planning

Encl.
TFL/

c.c. Couture Homes Properties Limited
31/F, Bank of America Tower,
12 Harcourt Road,
Central, Hong Kong
Attn.: Mr. Angus Lai

Appendix I

Proposed Residential Development at 44 Stanley Village Road

(This document shall be read in conjunction with HK Electric's letter dated 10 January 2024)

1. General Requirements for Ground Floor Substation with Two Sets of Transformer and the Associated Equipment
 - 1.1. A substation with a clear headroom of 3.4 m should be provided to accommodate equipment. The substation floor shall be designed and constructed to withstand the weight of transformer, its associated high voltage switchgear and control equipment, each set of which is 10,000 kgf. The substation structure shall be designed to an average floor loading of not less than 20 kPa. Also all the floor area within the substation must be capable of withstanding a concentrated load of 100 kN over two Nos. of 40 mm x 600 mm rectangular strip which are the bottom channels of the above equipment.
 - 1.2. The entire substation ceiling shall be of double reinforced concrete slab construction. The clear separation between the upper slab and the lower slab shall not be less than 100 mm. Gravity fall of 1:100 shall be provided at the top surface of the lower slab together with proper drain points to discharge water to outside of the substation. Please refer to the enclosed drawing Nos. P584/03/R-3 and P585/03/R-7 for our detailed requirements. Please also note that no drain pipe is allowed to run inside the substation enclosure.
 - 1.3. The route for transportation of equipment to and from the substation should be not less than 2.0 m wide with a clear headroom of 2.6 m. Such access must be freely available and maintained at all times even after the commissioning of the substation. The developer should also undertake not to allow the erection of any permanent or temporary structure that will block the access to the substation.
 - 1.4. Your switchroom, of adequate size, should be provided adjacent to the substation. Space should be provided for mounting this Company's metering equipment. Enclosed is a set of our drawings as listed out in our drawing No. P606/04/R-4 showing our requirements and arrangements of the meter installation for your reference.

Please note that for each customer of summation metering with more than 2 circuits or with main switch rating 600 A, 3-phase or above, tariff meter alarm will be installed. You are required to submit details regarding the quantities and respective demand for these categories of customer and our Customer Installation Department will advise you on the metering arrangements.
 - 1.5. The low voltage connections shall be by busbar or single-core cables subjected to the substation layout configuration or orientation. For low voltage connection by busbar, you are required to provide and install transit block in mutually agreed position on the substation structure. You will also be responsible for providing and fitting the connection from the transit block to your low voltage switchgear. For the low voltage connections by single-core cables, you are required to provide and install single-core cables. A drawing detailing the transit block dimensions and arrangement for single-core cables connected to HK Electric substation will be sent to you when the substation details have been finalised.

/To be continued.....

- 1.6. Two ventilation systems capable of handling an air flow of 9,000 cu.m./hour are required for the substation to ensure that the substation temperature will not exceed 40°C. The axial flow fans, silencers and flexible couplers of the ventilation systems in the substation will be supplied by this Company but installed by you. You will also be required to design, supply and install ventilation ductworks and fan supports. The information on physical dimensions and weight of axial flow fan and silencers, details of the flexible couplers between the fan and the ductworks, space requirements for mounting and flow characteristics will be sent to you at a later stage.
- 1.7. The substation should be at ground level with at least one external wall for access and ventilation purposes. It must be completely sealed by you from all adjacent rooms and you must ensure that it complies fully with the Fire Services Department's requirements.
- 1.8. All materials supplied and installed by this Company will remain the property of this Company and will be maintained and replaced as necessary by us.
- 1.9. The substation should be provided with adequate lighting points, power points and control switches.
- 1.10. Any reinstatement necessary on your property should be carried out by you at no cost to this Company.
- 1.11. That you inform this Company of any intention to install any electricity generator for emergency purpose, so that adequate safeguards may be incorporated at the planning stage for the safeguarding of our equipment, personnel and members of the public.
- 1.12. This Company reserves the right to install such equipment within the substation as it deems to be necessary, and further reserves the right to install such additional items of equipment as may be required to meet the future demands of system.
- 1.13. That you inform this Company of the street name and house numbers of the building/premises before handing over the substation to us.
- 1.14. **That you provide a safe means of access to the substation, cable chamber and preformed trench and safe working environment for the employees and contractors of this Company at all times during the erection/commissioning period and subsequent operations. If it is necessary to excavate under your covered walkways and/or pedestrians have to be diverted outside the covered walkways, you are required to provide the safety measures for preventing falling objects from the construction site. Our staff will notify your site manager for such arrangement during the execution of work.**

- 1.15. You are required to obtain information from utility companies regarding the details of underground services in the vicinity. Please ensure early in the design stage that the cable entry points to the substation will not be obstructed by other underground services. Details of underground services shall be indicated on the Ground Floor Plan submitted.
- 1.16. Where cables to be laid outside the proposed substation are within the area of the above building/premises, you are required to place appropriate warning signs as per the enclosed drawing No. P279/95/R-2 in conspicuous positions and in the vicinity of the new cables so as to avoid these cables being damaged in any subsequent works in your building/premises. We will send you a copy of our part plan showing the approximate positions of this Company's cables for your necessary arrangement after the cables have been laid.
- 1.17. Should any live stock be kept in your building/premises, it is very likely that the survival of such live stock will rely on certain electrical appliances. In this connection, you are requested to install standby generator or other similar means in your building/premises to maintain your live stock. This Company will not be responsible for any loss of your live stock due to interruption of electricity for whatever reasons.

To ensure that essential services which are sensitive to transient voltage dips in the power supply will not be affected by voltage dips which may occur occasionally in our power system due to cable damage or fault, we recommend customers to incorporate un-interruptible power supply (UPS) in the design of their installation. Where voltage relays are designed, the locations and time settings should be carefully determined so as to avoid nuisance trippings. Please visit our website at <https://www.hkelectric.com/en/customer-services/energy-efficiency-safety/power-quality> on the above aspects.

- 1.18. Please note that this Company will install oil-less switchgear and transformer in this new substation. Fire Services Department has already granted exemption to this Company in the provision of portable fire extinguishers at this type of substations. Therefore, you are required not to include portable fire extinguishers in the substation and amend the transformer to oil-less type during the building plan submission stage. Please also note that when we take over the substation, no portable fire extinguisher should be placed inside the substation.
- 1.19. This Company shall have the right to carry out excavation within the private lot area of the building/premises in the future to access the cables for the purposes of operations, inspections, maintenance or extension of supply to other customers. The developer/owner/occupants of the building/premises shall not withhold permission for excavation by this Company within the private area for the above purposes.

2. Additional Requirements for the Proposed Substation at LG1/F (Level +55.95) for Two Sets of 3 x 500-kVA, 1-phase Transformer
- 2.1. The general requirements for ground floor substation as stated in Section 1 should be complied with.
- 2.2. A dedicated staircase of at least 1,050 mm wide for our personnel access from public area to the substation should be provided. The staircase should be covered and fully enclosed.
- 2.3. Two separate cable entries of a minimum of 3.5 m apart should be provided for the substation.
- 2.4. The vertical transportation of equipment to and from the substation should be by means of lift. At least one permanent lift complying with Lifts and Escalators Ordinance (Chapter 618) and the following arrangement for transportation of the 1-phase transformer and other equipment to and from the substation should be provided.
- (a) The capacity of lift at **normal operating mode** should not be less than 2,000 kgf.
- (b) The height and width of lift door shall not be less than 2,600 mm and 1,800 mm respectively. The depth of lift shall not be less than 2,000 mm.
- (c) For door of lift wider than 2,000 mm, the depth of lift can be reduced to not less than 1,800 mm.

Dual supply source (from normal a.c. supply and emergency generator) should be installed for the lift so that the lift can still be operated in case of shutdown of substation. The emergency generator of the building should have the capacity to operate the lift.

The following documents should be submitted to this Company for record:

- i. A safety certificate issued by a registered lift engineer according to Cap 618 Section 24 of Lifts and Escalators Ordinance (Chapter 618) of Electrical and Mechanical Services Department of Hong Kong SAR Government. A rated load shall be indicated clearly in the above certificate.
- ii. A Use Permit issued by the Director of Electrical and Mechanical Services Department of Hong Kong SAR Government according to Cap 618 Section 26 of Lifts and Escalators Ordinance (Chapter 618).

Should the above documents be not available at the time the substation is handed over to this Company, you are responsible for sending us the documents as soon as they have been obtained.