## THE HONG KONG HOUSING AUTHORITY

#### Memorandum for the Human Resources Committee

## Implementation of a three-year Training Programme for three Geotechnical Engineering Graduates in Development and Construction Branch

#### PURPOSE

To seek Members' approval for the introduction of a three-year training programme for Geotechnical Engineering Graduates (GEGs) in the Development and Construction Branch starting from 1999/2000.

# BACKGROUND

2. In response to many employers' concern about the availability of human resources for geotechnical work in Hong Kong, a working party, namely Working Party on Geotechnical Human Resources, was set up by the then Works Branch (now Works Bureau) in January 1997 to study the demand for and supply of human resources in geotechnical practice. The Working Party concluded in its report issued in December 1997 that there is a shortage of geotechnical personnel, and also estimated that there will be a steady future growth of 5% per year for geotechnical professionals.

3. The Report suggested that sustained long-term promotional efforts are required to attract graduates from universities and Vocational Training Council to join the geotechnical engineering field by providing more structured training schemes for both professional and technician grade graduates. The Government should provide more dedicated training places for graduates in geotechnical engineering. [Copy of the report can be obtained from the Committees' Secretary]. As such, the Civil Engineering Department (CED) will increase its GEGs from the present 12 to 18 in the coming year.

4. The Hong Kong Housing Authority has been a major employer of Geotechnical Engineers  $(GEs)^1$ . As a responsible organisation, we should share the responsibility of providing training to the GEGs to assist them in obtaining membership of recognised professional institutions. Apart from such social responsibility, we will also benefit from the GEG programme as a pool of young GEs will be formed in the long run which resources can be drawn to fill our vacancies in future<sup>2</sup>. This is especially crucial in the years to come with the ageing of our GEs<sup>3</sup>. There is a prominent need to have some younger GEs in order to achieve a more balanced staff composition as well as a progressive build-up of in-house expertise and experience on public housing projects.

## TRAINING SCHEME

5. The Housing Department has the capability to establish its own graduate training programme for GE discipline, similar to the training scheme currently implemented in other disciplines<sup>4</sup>. The proposed GEG training programme will be set up in accordance with the HKIE Engineering Graduate Training Scheme "A"<sup>5</sup>. It will be a three-year continuous formal specialist training registered under HKIE on various geotechnical engineering aspects. There is no need to increase the existing GE establishment for the implementation of the GEG training programme.

6. Experienced GEs will be delegated as supervisors/tutors to undertake the GEG training scheme. Since the programme is basically of one of on-the-job training nature, the supervisors/tutors so delegated will supervise the work of the GEGs, and at the same time monitor their progress and compliance of the training requirements. No guarantee will however be given to the GEGs that they will be offered a post of Geotechical Engineer/Assistant Geotechnical Engineer (GE/AGE) upon completion of their training. Recruitment of the trained GEGs as AGEs will depend on their performance and vacancy at the time.

<sup>&</sup>lt;sup>1</sup> As at 30 June 1999, the establishment of GE grade is 39.

<sup>&</sup>lt;sup>2</sup> Since 1997, we had employed nine GEs.

<sup>&</sup>lt;sup>3</sup> At present, about half of our GEs are over 40 years of age.

<sup>&</sup>lt;sup>4</sup> Other major building professional grades such as the Architect, Civil and Structural Engineers, Building Services Engineer and Quantity Surveyor, have got their own graduate training programme.

<sup>&</sup>lt;sup>5</sup> A graduate is trained to become a Corporate Member, that is a Professional Engineer. The entry requirement of GEG is as follows -

i) a degree in Civil Engineering from a Hong Kong University or equivalent (obtained in 1998 or after); or

ii) a qualification which satisfies in full the academic requirements for corporate membership of Geotechnical discipline of the HKIE (obtained in October 1997 or after).

# FINANCIAL IMPLICATIONS

7. The GEG training programme is proposed to be implemented in phases with one GEG employed in the first year and one additional GEG in each subsequent year, that is, a total of three GEGs every year starting from the third year.

8. Based on the training allowance<sup>6</sup> payable to Civil and Structural Engineering Graduates who are of similar entry qualifications and other miscellaneous expenses<sup>7</sup>, the additional annual cost, based on the 1999/2000 price level, is \$0.21 million for 1999/2000, \$0.44 million for 2000/01, \$0.67 million for 2001/02 and subsequent years. Funds have been reserved in the "Temporary Staff and Trainees/Graduates" vote of the Development and Construction Branch for the purpose.

# PROPOSAL

9. We propose to set up a three-year training programme for GEGs, starting from 1999/2000 onwards as stated in paragraphs one and seven.

#### PRESUMPTION

10. It is not thought that Members will object to the proposal. If no objection or request for discussion is received by the Committees' Secretary by **noon on 7 September 1999**, Members' approval will be presumed and appropriate action taken.

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<sup>&</sup>lt;sup>6</sup> The training allowance is as follows -

<sup>1</sup>st year : \$17,460 per month

<sup>2</sup>nd year : \$18,480 per month

<sup>3</sup>rd year : \$19,450 per month

<sup>&</sup>lt;sup>7</sup> Other miscellaneous expenses for setting up and maintaining the GEG training programme such as the registration fees for Hong Kong Institution of Engineers (HKIE) are around \$5,000 per GEG.