

**PROJECT
BRIEF**

ROUTE 3 COUNTRY PARK SECTION

Tai Lam Tunnel & Yuen Long Approach Road

ROUTE 3 - COUNTRY PARK SECTION: PROJECT BRIEF

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**ROUTE 3 - COUNTRY PARK SECTION
(Tai Lam Tunnel and Yuen Long Approach Road)**

PROJECT BRIEF

GLOSSARY OF TERMS

Terms and expressions used in the Brief shall, unless the context requires otherwise, have the meaning ascribed thereto in the glossary of terms set out in **Schedule 1**.

SECTION ONE: GENERAL

1.1 INTRODUCTION

- 1.1.1 The Government of Hong Kong invites the private sector to submit proposals in respect of the Franchise for Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road) on the basis of a build, operate and transfer arrangement. Route 3, extending from Hong Kong Island to Yuen Long will be an essential new road link serving the western part of the territory of Hong Kong and improving road connections to the border with the People's Republic of China.
- 1.1.2 The southern section of Route 3 (comprising the Western Harbour Crossing, the West Kowloon Expressway and the Kwai Chung and Tsing Yi sections) is already being constructed under the Airport Core Programme with completion expected to occur by mid-1997. It will connect with the Lantau Fixed Crossing and the North Lantau Expressway leading to the new airport at Chek Lap Kok. The Country Park Section, which is the northern section of Route 3, will be a dual 3-lane 13 km road running from Tsing Yi in the south to Au Tau near Yuen Long in the north, where it will connect with the new New Territories Circular Road.
- 1.1.3 Route 3 - Country Park Section will comprise three sections, as follows -
- (a) Ting Kau Bridge - a cable stayed bridge with approach viaducts spanning over Rambler Channel to link Tsing Yi and the mainland at Ting Kau;
 - (b) Tai Lam Tunnel - a 3.8 km tunnel extending under the Tai Lam Country Park from Ting Kau in the south to Ho Pui in the north; and
 - (c) Yuen Long Approach Road - approximately 6.3 km of at-grade road linking Tai Lam Tunnel and the New Territories Circular Road at Au Tau, together with an interchange at Au Tau to connect to Yuen Long Southern Bypass.

- 1.1.4 A plan showing the alignment of Route 3 - Country Park Section is at **Annex 1**.
- 1.1.5 The Hong Kong Government will construct the Ting Kau Bridge under its Public Works Programme. It is envisaged that tenders for the bridge will be invited in early 1994, with a view to commencing construction in September 1994 for completion in mid 1997.

1.2 PURPOSE OF THE BRIEF

1.2.1 In accordance with Government's policy to optimise private sector participation in the construction and operation of road infrastructure which is capable of providing a reasonable but not excessive return on investment, Government invites Tenders from the private sector for the Franchise, which will comprise the Execution of the Works and the operation and maintenance of Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road). Tenders should be submitted on the basis of the Brief.

1.2.2 The purpose of the Brief is threefold:-

- (i) to explain Government's general requirements in respect of the Project and the Franchise and to provide certain information which may be relevant to the Project and the Franchise;
- (ii) to provide guidance in the preparation of Tenders and explain the criteria and procedure based on which Tenders will be assessed; and
- (iii) to set out in detail Government's design and construction requirements in respect of the Project and Government's operation, maintenance and other requirements in connection with the Franchise.

1.3 THE FRANCHISE

Government envisages granting a franchise to design, construct, commission, maintain and operate Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road). The Franchise will include the right to collect tolls from vehicles using Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road) over the Operating Period.

1.4 PROJECT SCOPE

1.4.1 The scope of the Project includes Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road) which the Franchisee shall design, construct, operate and maintain. Also included in the scope of the Project will be:-

- (a) certain works which will be performed by the Franchisee and transferred to Government at no cost on or before the end of the Construction Period, including:-
 - (i) the relocation of St Joseph's primary school at Ko Po San Tsuen (see Section 6.11);
 - (ii) drainage works at Kam Tin and Au Tau (see Section 8.5);
 - (iii) connection to the Yuen Long Southern Bypass at Au Tau and the New Territories Circular Road (see Section 8.11(h));
 - (iv) an access road from Kam Sheung Road to the Toll Plaza, including provision of a car park and small storage building (see Section 8.5.6); and
 - (v) ancillary accommodation works and reprovisioning works for affected or damaged items or structures on a like for like basis;
- (b) certain works which, upon notification by the Director's Representative, will be performed by the Franchisee at the cost of Government and transferred to Government on or before the end of the Construction Period, including an extension of the Yuen Long Approach Road embankment to accommodate the Western Railway at Kam Tin; and
- (c) certain works which will be performed by or on behalf of Government and transferred at no cost to the Franchisee for operation and maintenance by it during the Operating Period, including the south section of Ramp C abutting Tuen Mun Road as described in Section 2.2.2 of the Design Manual.

1.4.2 Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road) includes a road tunnel and the approach roads, together with the associated interchanges, a toll plaza, electrical and mechanical installations, buildings and all related operational facilities. Other than the toll plaza administration building (which is the subject of a private treaty grant - see Section 6.3.3), this is all contained within the Franchise Area.

1.4.3 The Works include all works involved in the Project. Drawings showing the extent of the Works are included in the Final Report of Route 3 - Country Park Section Stage 2 Preliminary Design at **Annex 2** and the design details are described in the Design Manual at **Annex 3**. The Project Limits are shown in **Annex 4**. The Final Report of Route 3 - Country Park Section Stage 2 Preliminary Design includes an environmental impact assessment which, at the date of issue of the Brief, is in draft form. The final version of the environmental impact assessment will be issued to Tenderers during the tender period.

1.5 PROGRAMME

The target operating date for Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road) is late 1998 on the basis of construction on site beginning in early 1995. This date has been arrived at having regard to the general transport needs of Hong Kong, the current programme for the connecting infrastructure for Route 3 - Country Park Section and the time that may be taken for the necessary land resumption and for enacting the Enabling Ordinance. Government will, however, give favourable consideration to Proposals which achieve an earlier Operating Date.

1.6 IMPORTATION OF LABOUR

- 1.6.1 Tenderers should note that the Franchisee will have the responsibility for obtaining an adequate supply of labour for the Project and for the operation and maintenance of Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road). Except as mentioned in Section 1.6.2, all labour shall be engaged in Hong Kong. The Franchisee shall prevent illegal immigrants from being employed in respect of the Project.
- 1.6.2 The general policy of Government is that importation of labour from outside Hong Kong is not allowed except under certain special deserving circumstances and subject to the availability of quotas under the general labour importation scheme. The importation of key managerial and professional personnel on a temporary basis may be permitted under existing normal immigration policy.
- 1.6.3 The Project does not fall within the Airport Core Programme and does not benefit from the ACP labour importation scheme.

1.7 DISCLAIMER

All information, assumptions and projections contained in the Brief are indicative only and are provided solely to assist in a preliminary assessment of the Project. Nothing in the Brief shall create any contractual relationship between the Government and any Tenderer, nor shall it commit Government to any policy described in the Brief and neither Government nor any of its consultants or advisers will have any liability or responsibility if the information, assumptions and projections contained in the Brief or otherwise in respect of the Project prove to be incorrect. It is the responsibility of the Tenderer to verify the information, assumptions and projections contained in the Brief and otherwise.

1.8 ADDENDA

Government envisages that there may be aspects of the Brief which require clarification, amplification or correction and it may, from time to time during the tender period, issue addenda to the Brief.

1.9 CONFIDENTIALITY

- 1.9.1 Organisations interested in submitting a Tender are required to refrain from discussing the contents of the Brief or any information received with or pursuant to the Brief with any third party, except in connection with the preparation of its Tender or with the prior written consent of Government. Tenderers may be required to enter into agreements and/or indemnities in respect of the confidential nature of information relating to the Project. Government may reject any Tender submitted by a Tenderer which is in breach of any such requirement. Copyright in all plans and documents issued with or pursuant to the Brief or otherwise to a Tenderer is reserved to Government and its consultants.
- 1.9.2 Subject to Section 1.9.3, Government may from time to time release such information concerning the Project as it thinks fit.
- 1.9.3 Government shall maintain the confidentiality of information provided to it by a Tenderer in its Tender and the subsequent assessment thereof subject to disclosure required in the process of assessing Proposals received or responding to Tenderer's enquiries (see Section 2.7.1).

1.10 DISCUSSION WITH THE PRC

The Franchise conditions and the land implications of the Project will be discussed in the Sino-British Joint Liaison Group and the Land Commission, respectively. Preliminary information relating to the Project has been provided to the Chinese side of the Sino-British Joint Liaison Group.

- End of Section One -

SECTION TWO: GENERAL CONDITIONS FOR SUBMISSION OF TENDERS

2.1 INTRODUCTION

This Section outlines, for the information and guidance of Tenderers, the procedure for submitting Tenders in respect of the Franchise.

2.2 SUBMISSION OF TENDERS

2.2.1 Six (6) identical copies of the Tenders together with six (6) additional copies of the engineering parts thereof must be submitted, clearly marked accordingly on the outside of each envelope/parcel, addressed to the Secretary for Transport, c/o Government Secretariat Tender Box situated in the lift lobby on the lower ground floor of Central Government Offices (East Wing), Lower Albert Road, Hong Kong at or before noon on 8 April 1994. Late submissions will not be considered. All submissions will be opened after the deadline.

2.2.2 Each Tender and all documents submitted in connection therewith shall be in the English language. Each Proposal must be in a form which, so far as practicable, responds to the Sections, paragraphs and Annexes of the Brief, to facilitate the evaluation by Government of Tenders.

2.2.3 Each Proposal contained in a Tender shall remain valid and binding up to and including 31 May 1995. However, Government may agree an extension of this period with the Tenderer. Government may employ consulting engineers and financial and legal and other advisers as it considers appropriate to assist in the assessment of Proposals.

2.2.4 Guidance relating to the content of the financial aspects of a Proposal is given in Section Four. Guidance relating to the engineering aspects of a Proposal is given in Section Eight.

2.2.5 Each Tenderer shall be responsible for the fees, costs and expenses incurred in preparing and negotiating any Proposal submitted by it and Government shall under no circumstances become liable to reimburse any Tenderer for any such fees, costs or expenses or to indemnify it against any liabilities incurred or sustained by it in connection with the preparation, submission and negotiation of any Proposal.

2.3 TENDER DEPOSIT

2.3.1 Organisations interested in submitting a Tender are required, before the collection of the Brief and the associated documentation, to deposit with the Director of Accounting Services a tender deposit in the sum of one million Hong Kong dollars (HK\$1,000,000).

2.3.2 The tender deposit will be refunded without interest within thirty (30) days after the close of tenders, irrespective of whether or not a Tender is submitted.

2.4 BONA FIDE TENDER

2.4.1 Tenderers must submit a Bona Fide Tender, prepared in full accordance with all the requirements stipulated in the Brief.

2.4.2 Government reserves the right to determine whether a Tender is a Bona Fide Tender. Government's decision shall be final and not subject to appeal. Government will not be required to give reasons for its decision.

2.5 CONFORMING PROPOSALS

2.5.1 Government invites Proposals based on a build, operate and transfer arrangement for the Conforming Scheme. Details of the engineering, operational and related requirements of the Conforming Scheme are described in Section Eight.

2.5.2 Based on information and study findings available to Government at the date of issue of the Brief, the Conforming Scheme meets the transport, engineering and operational requirements of Government.

2.5.3 All Tenderers must submit at least one Conforming Proposal which conforms in full, in engineering and operational terms, with the Conforming Scheme, except for minor departures which do not materially affect the design, construction method or operational characteristics of the scheme. Further, all such minor departures must be clearly identified and fully described in the Conforming Proposal and in particular, the financial, programming and any other practical implications of a departure must be fully explained. A Conforming Proposal must also contain a toll adjustment mechanism based broadly on the principles specified in **Schedule 2** (see Section 4.4.2).

2.5.4 Tenderers may submit more than one Conforming Proposal (e.g. involving different financial and commercial terms) numbered according to the Tenderer's preference. The requirements of the Brief, and in particular the financial requirements of Section Four shall relate separately to each Conforming Proposal submitted.

2.6 ALTERNATIVE PROPOSALS

2.6.1 Alternative designs and alternative proposals in relation to the toll adjustment mechanism which differ in whole or in part from the Conforming Proposal will be considered. Alternative Proposals will only be considered if the proposal is on the basis of a build, operate and transfer arrangement and if the road is of dual-3 lane configuration, subject to the limitations on the availability of lands as described in

Section 6.12 and if the proposal does not involve any significant delay in the Execution of the Works.

2.6.2 On this basis, an Alternative Proposal may include, for example:-

- (a) modifications to the Conforming Scheme (e.g. adjustment to the Yuen Long Approach Road alignment or structure, layout of interchanges or construction methods) provided that the Tai Lam Tunnel must adopt the same corridor as the Conforming Scheme; or
- (b) other tunnel or approach road schemes along the same corridor as the Conforming Scheme but using different structural forms or designs from those envisaged in the Conforming Scheme; or
- (c) an alternative toll adjustment mechanism.

2.6.3 A Tenderer may submit one or more Alternative Proposals, numbered according to the Tenderer's preference provided that these are submitted together with a Conforming Proposal in a Bona Fide Tender. The requirements of the Brief and in particular the financial requirements of Section Four shall relate separately to each Alternative Proposal submitted.

2.6.4 Government will only consider those Alternative Proposals in which the Tenderer has demonstrated with full supporting evidence that the proposal is well researched and is technically feasible, that the Works Programme is reliable and that there are engineering, financial, programming and/or operational advantages over the Conforming Proposal. Tenderers should demonstrate fully in their submission the engineering, financial, programming and/or operational advantages of the Alternative Proposal (in regard to alternatives requiring additional land acquisition, see Section 6.12).

2.7 REQUESTS FOR INFORMATION

2.7.1 Enquiries and requests for information must be made in writing. Interested parties who wish to obtain further details or obtain clarification on any items in the Brief must limit their enquiries to the following matters and address them only to the relevant person as follows:-

- (a) Engineering, traffic and operational matters:-

Government Engineer/Western Harbour Link,
6/F, Ho Man Tin Government Offices,
88 Chung Hau Street, Homantin,
Kowloon.

(b) General, financial and planning matters:-

Principal Assistant Secretary (Transport) 6,
Transport Branch, Government Secretariat
2/F, East Wing, Central Government Offices,
Lower Albert Road,
Hong Kong.

Enquiries and requests for information and all replies thereto may be copied to all Tenderers. Tenderers may request that any information contained in an enquiry and/or the reply to such enquiry is not copied to other Tenderers. Government will determine whether it is appropriate to copy the reply and/or the enquiry to other Tenderers. While doing so, Government will not disclose the enquiry or any information contained therein to the other Tenderers and if Government determines that it is:-

- (i) not appropriate to copy the other Tenderers, it shall reply to the Tenderer without further circulation; or
- (ii) appropriate to copy the other Tenderers, it shall notify the Tenderer making the enquiry of its determination prior to replying to the enquiry and the Tenderer can then consider whether it wishes to withdraw the enquiry without further response from Government.

2.7.2 Enquiries must not be made to any other person including any Government officers or Government appointed advisers associated with the Project. Except for written clarification pursuant to Section 2.7.1 which is expressly stated to be by way of addendum to the Brief, no written or verbal communication representation or explanation by any person shall have any effect.

2.7.3 Should Tenderers consider there are any errors or inconsistencies in the Brief, then these should be brought to the attention, in writing, of the relevant person identified in Section 2.7.1.

2.7.4 Enquiries submitted later than two weeks prior to close of tenders will not be answered.

- End of Section Two -

SECTION THREE: ASSESSMENT OF PROPOSALS

3.1 INTRODUCTION

This Section outlines, for the information and guidance of Tenderers, the general basis and procedures upon which Government plans to assess the Proposals.

3.2 EVALUATION OF PROPOSALS

3.2.1 Government will conduct evaluation of all Proposals purporting to be Conforming Proposals which are included in a Bona Fide Tender. Government may also decide to evaluate any Alternative Proposals included in a Bona Fide Tender. In addition, subject to agreement with the Tenderer involved, Government may consider a hybrid scheme including features from any Conforming Proposal and any Alternative Proposal which may be submitted.

3.2.2 The evaluation will cover both the financial and technical aspects. During the course of evaluation, Government may require Tenderers to clarify any information or ambiguity contained in any Proposal submitted. Tenderers will be obliged to reply promptly and provide all the clarifications requested. No new information will be admitted or considered by Government unless such information is requested in writing by Government. All communications shall be made in writing.

3.2.3 Meetings will be arranged in Hong Kong during the second quarter of 1994. These meetings shall be attended by the Tenderer and its engineers/consultants and Government and its engineers/consultants. The main purposes of these meetings are:-

- (a) to provide the Tenderer with an opportunity to present the details and merits of its Tender; and
- (b) to allow Government to seek clarification on Proposals.

3.2.4 No commercial aspects will be discussed and no negotiation will take place at these meetings which are aimed at an exchange of views only. It is envisaged that a programme for these meetings will be announced within four (4) weeks after the close of tenders. Tenderers should make suitable arrangements to ensure that they and their advisers will be available to attend these meetings.

3.3 SHORTLISTING AND NEGOTIATION

3.3.1 Government may shortlist a number of Tenderers for the purpose of further clarification, detailed evaluation and negotiation and may, upon twenty-eight (28) days notice, require shortlisted Tenderers to submit a draft Construction Contract, Designer's appointment agreement, Checker's appointment agreement, relevant

warranty agreements and any other key contracts for review. Government's review of any such draft shall in no way commit Government.

- 3.3.2 Tenderers shall provide a prompt response on all technical, financial and commercial issues and shall ensure that all the necessary expertise is readily available to provide such response during the shortlisting stage.
- 3.3.3 The shortlisting stage shall be followed by negotiation between Government and the shortlisted Tenderers. The shortlisted Tenderers are required to have all the necessary expertise and personnel readily available for a prompt response to queries, requests for information, clarifications or revised proposals by Government and to participate in the negotiation. The negotiation will be conducted according to a tight time-table and failure to respond in a timely fashion to Government's invitation to negotiation may lead to disqualification of the Tender.
- 3.3.4 The shortlisted Tenderers may be required to submit one or more revised Proposals in accordance with revised requirements put forward by Government. Failure to submit such a revised Proposal will affect the evaluation of the Proposal. Shortlisted Tenderers may submit, of their own accord, additional and/or revised details on any Conforming Proposal and/or Alternative Proposal. However Government reserves the right not to consider any such additional revised Proposals or to invite other shortlisted Tenderers to further submit similar revised Proposals.
- 3.3.5 The final selection will be made by the Governor-in-Council.
- 3.3.6 It is the intention of Government to introduce the bill for the Enabling Ordinance to the Legislative Council as soon as possible following completion of negotiations and all necessary consultations.

3.4 ASSESSMENT CRITERIA

- 3.4.1 In its assessment of each Proposal, Government will take into account the following aspects:-
 - (a) the level and stability of the proposed toll regime;
 - (b) the proposed methodology for tolls adjustment;
 - (c) the robustness of the proposed Works Programme in meeting the Government's target date of completion;
 - (d) the financial strength of the Tenderer and its shareholders, together with their ability to arrange and support an appropriate financing package in support of the Project and the resources which they will be able to devote to the Project;

- (e) the structure of the proposed financing package including the levels of debt and equity, and hedging arrangements for any interest rate and/or currency risks and the level of shareholders' support;
- (f) the proposed corporate and financial structure of the Franchisee;
- (g) the quality of the engineering design, landscape design, environmental considerations, construction methods, including all traffic control, surveillance and tunnel electrical and mechanical, ventilation and lighting systems;
- (h) the ability to manage, maintain and operate Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road) effectively and efficiently; and
- (i) the benefits to Government and the community.

3.4.2 Although each aspect is considered important, and failure to propose acceptable standards in any one may lead to a Proposal becoming unsuccessful, particular attention will be paid to points (a) - (e) above.

3.5 ASSESSMENT PROCESS

3.5.1 The whole assessment process will be carried out in strict confidence. The evaluation will be undertaken within Government under the leadership of the Secretary for Transport. Government will not provide the assessment results or reasons in support of its assessments to any Tenderer or third party.

3.5.2 Each Tenderer should note that Government is not bound to accept any Proposal and may at any time by notice in writing to any Tenderer terminate the tendering and assessment process in relation to its Tender or any Proposal contained therein.

- End of Section Three -

SECTION FOUR: FINANCIAL AND RELATED ASPECTS

4.1 INTRODUCTION

This Section outlines, for the information and guidance of Tenderers, Government's requirements in respect of the financial and related aspects of the Franchise.

4.2 FRANCHISE PERIOD AND DATE OF COMPLETION

- 4.2.1 Franchise Period: Subject as provided in 4.2.3, the Franchise Period will be for a period of thirty (30) years from the day the Franchisee is entitled to start the Works in accordance with the Enabling Ordinance.
- 4.2.2 Date of Completion: Construction on site is expected to begin at the beginning of 1995 and Route 3 Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road) should be opened to traffic as soon as practicable thereafter. Government's target Operating Date is late 1998.
- 4.2.3 Extension of Franchise Period: Government may consider permitting an extension of the Franchise Period if the opening of Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road) is delayed as a direct result of a delay by Government in handing over any part of the Project Land by the time such part is required to enable the Franchisee to proceed with the Execution of the Works in accordance with the Works Programme. Any such extension granted would be in lieu of any other compensation and no other claim of any nature shall be made for any such delay in handover of any part of the Project Land.
- 4.2.4 Revocation and Termination of Franchise: The Enabling Ordinance will contain provisions relating to the revocation of the Franchise if the Franchisee is in default (which will include, without limitation, breach of obligation and insolvency) and for the termination of the Franchise upon the expiry of the Franchise Period. Upon the expiry of the Franchise Period Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road) and all buildings, machinery and plant which are ancillary to the construction, operation and maintenance thereof or which form part of it shall be transferred to Government without compensation being payable therefor.

4.3 TOLL REGIME

- 4.3.1 Tenderers must include in each Proposal submitted by them a proposed initial toll regime.

4.3.2 Any proposed initial toll regime should include initial tolls for each of the following categories of vehicles:-

- (1) Motorcycles, motor tricycles
- (2) Private cars; taxis
- (3) Public and private light buses
- (4) Light goods vehicles and special purpose vehicles of a permitted gross vehicle weight not exceeding 5.5 tonnes
- (5) Medium goods vehicles and special purpose vehicles of a permitted gross vehicle weight of or exceeding 5.5 tonnes but not exceeding 24 tonnes
- (6) Heavy goods vehicles and special purpose vehicles of a permitted gross vehicle weight of or exceeding 24 tonnes
- (7) Public and private single-decker buses
- (8) Public and private double-decker buses
- (9) Each additional axle in excess of two on any vehicle other than a vehicle specified in paragraphs (7) and (8) above

The tolls within any category should be the same. The ratio between the tolls applicable to each category need not necessarily follow the ratios applicable in other tolled tunnels in Hong Kong.

4.3.3 Government will reserve the right to impose a passage tax.

4.4 TOLL ADJUSTMENT METHOD

4.4.1 Government wishes to achieve a low and stable toll regime throughout the Franchise Period.

4.4.2 Tenderers are required to propose a framework for toll adjustments. Government will require a Conforming Proposal which is based broadly upon the framework for toll adjustments described in **Schedule 2**, but will consider any alternative proposals put forward by Tenderers which achieve the objectives set out in 4.4.1.

4.4.3 Tenderers are required to provide the information specified in Section 4.13.5.

4.5 TING KAU BRIDGE

It is not envisaged by Government that the Ting Kau Bridge will be tolled.

4.6 FINANCIAL STRENGTH

- 4.6.1 All Tenderers must be able to demonstrate that they have sound financial backing. Tenderers should provide, at the time of submission of their Tender, audited accounts for a minimum of 3 years together with the most recently published interim results (if available) for the proposed Franchisee (where available) and for each proposed shareholder and for the parent (and, if any, ultimate parent) company of each proposed shareholder of the proposed Franchisee and for the proposed consultants and contractors together with a statement giving details of any off-balance sheet liabilities including contingent liabilities. In the absence of audited accounts, a statement detailing the financial strength of the institutions and/or individuals involved should be provided.
- 4.6.2 It will be necessary for Government to be satisfied that the company to be granted the Franchise is capable of bearing the financial risks of significant variations in the costs of construction and operation, and in the revenues over the Franchise Period. Close attention will be paid to the financial structure proposed including the absolute level of the funds required to complete the Project and operate and maintain Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road) and the ratio of debt to equity.

4.7 FINANCIAL GUARANTEES AND UNDERTAKINGS

Government will require, inter alia, undertakings from Tenderers and/or other interested parties to address the issues stated below. Government expects such undertakings to take the form of non-assignable guarantees and undertakings to be given directly to Government, on a joint and several basis. Such guarantees and undertakings will include, inter alia:-

- (a) An undertaking whereby Tenderers and/or other interested parties guarantee that the Project will be completed (i) within a given number of months and (ii) within the budgeted costs.
- (b) An undertaking whereby Tenderers and/or other interested parties agree to indemnify Government for any costs incurred by Government in connection with any new tender or the transfer or other disposal of the Franchise to any third party upon a revocation of the Franchise due to the default of the Franchisee; and
- (c) An undertaking whereby the Tenderers and/or other interested parties agree that all amounts made available to the Franchisee by its shareholders or

sponsors shall be made available by way of subordinated debt or equity contributions for ordinary shares.

4.8 EQUITY

Government does not envisage taking any equity participation in the Franchisee.

4.9 CORPORATE STRUCTURE

4.9.1 Franchisee: The Franchisee shall be a limited liability company incorporated under the Companies Ordinance (Cap. 32) and subject to the general laws of Hong Kong.

4.9.2 Shareholders: Tenderers should provide in each Proposal submitted details of the shareholders, their respective shareholdings, their respective capital contributions (and the proportion of subordinated debt to equity) and the proposed capital structure.

4.9.3 Subsequent Changes to Shareholding: Prior to the award of the Franchise, Government's consent will be required for any changes in the proposed shareholding. Following the award of the Franchise, there will be restrictions placed upon changes to and transfers of the shareholding in the Franchisee.

4.10 NO TAX EXEMPTION

The Franchisee will be liable for taxation in accordance with the laws of Hong Kong at all times.

4.11 LAND RESUMPTION COSTS

Subject as more particularly provided in Section Six, land resumption and clearance costs will be borne by Government.

4.12 FINANCING

4.12.1 Government will not consider any Proposal which requires any guarantee or other financial support or undertaking from Government.

4.12.2 The proposed financing must be without recourse to Government.

4.12.3 Tenderers must include in each Proposal submitted the following information in respect of the proposed financing plan:-

- (a) detailed forecast annual balance sheet, profit and loss and cash flow projections for the Franchisee for the Franchise Period (but Tenderers should be aware that Government may require quarterly cash flow projections at a later date). As a minimum requirement, forecasts in the Proposal should be in sufficient detail to meet requirements set out in Section 4.13;
- (b) a detailed list of the assumptions used. As a minimum requirement, Proposals should include the assumptions used for each of the categories set out in Section 4.14. Furthermore, any other assumptions made should be provided;
- (c) the proposed structure, tenor and repayment schedule of the financing package; and
- (d) details of proposed techniques for the management of interest rate and (if applicable) currency risk.

4.12.4 Tenderers will be required to submit together with each Proposal submitted indicative terms and conditions from proposed lenders which comply with the terms and conditions assumed in the financing plan contained in such Proposal. Fully underwritten offers are not sought at this stage, but evidence from the proposed lenders of their strong support is required.

4.13 REQUIREMENTS FOR FORECAST FINANCIAL INFORMATION

4.13.1 Capital Costs: A breakdown of capital/construction costs on a quarterly basis, split into the following categories (to the extent applicable) is requested for each of Ting Kau Interchange, Tai Lam Tunnel (including the administration building and traffic control and surveillance system), Tai Lam Tunnel toll plaza and Yuen Long Approach (north of toll plaza, including the relocation of Saint Joseph's primary school at Ko Po San Tsuen):-

- (i) Earthworks/slopes
- (ii) Ground level roads
- (iii) Drainage
- (iv) Landscape
- (v) Structures
- (vi) Access roads (particularly to Kam Sheung Road from the Tai Lam Tunnel)
- (vii) Noise barriers
- (viii) Main Tunnels, Ventilation adits etc.
- (ix) Portals
- (x) E & M Works
- (xi) Buildings
- (xii) Toll facilities
- (xiii) Traffic control and surveillance system
- (xiv) Vehicles and mobile plant

The following items should also be stated for the categories listed above:-

- (i) design/consultancy/project management and other fees etc.;
- (ii) contingency costs; and
- (iii) insurance.

The construction/capital costs should NOT include finance costs (such as capitalised interest etc.) and should be expressed in both constant March 1994 prices and money of the day terms, and the inflation rates used and methods of calculation of inflation must be clearly indicated.

4.13.2 Costs during Operating Period: Operating costs in the first and each subsequent year of operation, split into the following categories:-

- (a) labour/staff costs;
- (b) other general running costs;
- (c) periodic overhaul and equipment replacement costs;
- (d) rates; and
- (e) insurance costs.

Operating costs should be expressed in both constant March 1994 prices and money of the day terms, and the inflation rates used and methods of calculation of inflation are to be clearly indicated.

4.13.3 Traffic Figures: Daily traffic volumes to be given for each year of operation, for each of the vehicle categories listed in Section 4.3.2. In any case, the appropriate annualisation factors (to convert daily figures to annual figures, or visa versa) should be provided for each category of vehicle.

4.13.4 Revenues: Different categories of all revenues generated in connection with the Franchise should be shown separately.

4.13.5 Toll Adjustment: Tenderers should provide, as a minimum, the following information in relation to any proposed toll adjustment mechanism:-

- (i) A schedule of anticipated toll increases in money of the day terms for each category of vehicle, stating the amount and timing of all proposed toll increases.
- (ii) A schedule of minimum and maximum estimated net revenue for each year of the Franchise in money of the day terms and/or in relation to any Alternative Proposal containing an alternative toll adjustment mechanism, the proposed trigger for toll increases under such mechanism.
- (iii) Equity and project internal rates of return anticipated by the Franchisee.

- (iv) The manner in which net revenue will be calculated.
- (v) The basis upon which royalties, if any, will be paid to Government.

4.14 DETAILED ASSUMPTIONS TO BE SUBMITTED WITH THE FINANCING PLAN

As a minimum, the assumptions for the following categories are required:-

- (a) Price/Cost Basis: Price/cost figures should be shown in both money of the day terms and in constant March 1994 prices (and the underlying inflation rates and methods of calculation must be given).
- (b) Inflation: Rates and escalation factors should be stated for the Construction Period and the Operating Period.
- (c) Interest Rate on Debt: Interest rates for the Construction Period and the Operating Period should be stated as well as the basis on which the figures are calculated, together with estimated financing fees. These rates should include an interest margin which should be stated.
- (d) Interest Income: Interest rates for the Construction Period and the Operating Period should be stated as well as the basis on which the figures are calculated.
- (e) Debt/Equity: The equity injection and debt drawdown profile should be clearly shown in conjunction with the cost disbursement schedule for the Construction Period.
- (f) Taxation: The tax calculations and the timing of the tax payments should be shown.
- (g) Initial Tolls: Tolls for each year of operation should be shown based on the initial toll and using the proposed increase mechanism (see Sections 4.4 and 4.13.5 above).
- (h) Toll Adjustment: The assumptions used in any toll adjustment mechanism should be stated.
- (i) Dividend Policy: This should be stated, including the ranking with respect to debt service.
- (j) Depreciation and Tax Allowances: The tax depreciation and balance sheet depreciation policy for each category of asset should be stated (Government will require the residual values at the end of the Franchise Period to be zero).

- (k) Subordinated Debt: The proposed rate of interest and repayment terms should be stated.

4.15 PUBLICATION OF FINANCIAL INFORMATION

Government will reserve the right to require publication by the Franchisee of financial information relating to the Franchisee from time to time during the Operating Period.

4.16 ADDITIONAL INFORMATION

Government reserves the right to request delivery of further or additional information upon receipt of the Proposals or at any time thereafter up to the award of the Franchise.

- End of Section Four -

SECTION FIVE - LEGAL MATTERS

5.1 INTRODUCTION

The purpose of this section is to set out the legal framework of the statutory and contractual arrangements which will govern the Project and the Franchisee.

5.2 LEGAL FRAMEWORK

5.2.1 The statutory and contractual provisions governing the Project and the Franchisee during the Franchise Period will be set out in:-

- (a) the Enabling Ordinance which will define the statutory rights and obligations of the Franchisee;
- (b) the Project Agreement between Government and the Franchisee which will set out the contractual terms and conditions of the Project and the Franchise; and
- (c) the Guarantee Agreement in respect of the obligations of the Franchisee.

5.2.2 The provisions of the Project Agreement, together with the Enabling Ordinance and any relevant Guarantee Agreement, shall form the entire contract between Government and the Franchisee in respect of the Franchise.

5.2.3 Neither the Brief nor any other document containing information or minuting discussions in relation to any aspect of a Proposal shall form any part of any contract subsequently concluded between Government and the Franchisee, nor shall they be used in interpreting or construing any such contract. If a Tenderer wishes any part of the Brief to become part of the contract with Government then it must include the same as part of a Proposal made by it and relevant provisions will need to be inserted in the Project Agreement.

5.2.4 All the contractual arrangements discussed above shall be expressed to be governed by and construed in accordance with the laws of Hong Kong.

5.3 ENABLING ORDINANCE

5.3.1 For guidance on the Enabling Ordinance, Tenderers should refer, by way of example, to the Western Harbour Crossing Ordinance (Ord. No.72 of 1993). The provisions of the Enabling Ordinance will reflect the specific requirements of the Franchise, including for example the toll adjustment mechanism.

5.3.2 The Enabling Ordinance will set out the respective statutory rights and obligations of the Franchisee and Government.

5.3.3 The Enabling Ordinance will contain, but shall not be limited to, provisions dealing with the following key issues:-

- (a) grant of Franchise, Franchise Period and the circumstances, if any, in which the Franchise Period may be extended (see Section 4.2.3);
- (b) basic obligations to design, construct, complete, test, commission, repair, maintain and operate Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road);
- (c) right to charge tolls and the initial toll levels and toll adjustment procedures;
- (d) royalties (if any);
- (e) land rights and wayleaves;
- (f) traffic regulation;
- (g) termination/revocation of Franchise (see Section 4.2.4);
- (h) Franchisee's defaults (including breach of obligation and insolvency) leading to revocation of the Franchise;
- (i) application of other Ordinances;
- (j) powers of the Director of Highways and the Commissioner for Transport;
- (k) dispute resolution procedures (see Section 5.5);
- (l) Government to take over operation during an emergency; and
- (m) subsidiary legislation/by-laws.

5.3.4 The enactment of the Enabling Ordinance is subject to the process of the Legislative Council, which can amend or reject the bill for the Franchise.

5.4 PROJECT AGREEMENT

5.4.1 The Project Agreement will contain provisions dealing generally with the Franchise (see Section 5.4.2) and provisions dealing specifically with the construction aspects of the Project (see Section 5.4.3) and the operation and maintenance of Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road) (see Sections 5.4.4 and 5.4.5). The terms and conditions of the Project Agreement will not be limited to those set out in the Brief.

5.4.2 Provisions of the Project Agreement dealing generally with the Franchise will include provisions relating to:-

- (a) the Franchisee, including without limitation, details of:-
 - (i) the corporate structure and share capital of the Franchisee;
 - (ii) the ownership and management of the Franchisee;
 - (iii) representations and covenants by the Franchisee;
 - (iv) dividend restrictions;
 - (v) ability of Government to require the Franchisee not to trade following the expiry of the Franchise using a name associated with the project; and
 - (vi) restrictions on its other business;
- (b) the Franchise, including without limitation, details of:-
 - (i) the Franchise Period;
 - (ii) the circumstances, if any, in which the Franchise can be extended (see Section 4.2.3);
 - (iii) the circumstances in which the Franchise can be revoked (see Section 4.2.4); and
 - (iv) transfer of Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road) to Government at the end of the Franchise Period;
- (c) the financial aspects of the Project, including without limitation, details of:-
 - (i) the terms and conditions of the financing for the Project;
 - (ii) the budgeted capital expenditure during the Construction Period;
 - (iii) the Franchisee's obligation to maintain costs within budgeted costs;
 - (iv) hedging strategy;
 - (v) contributions of equity and any subordinated debt and the Franchisee's debt/equity ratio; and
 - (vi) the taxation environment;

- (d) the terms and conditions on which the Franchisee shall exercise its rights and carry out its obligations, including without limitation, details of:-
 - (i) the duties of the Franchisee relating to the maintenance and operation of Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road), including proper operation in accordance with all laws and Government requirements, including environmental requirements;
 - (ii) details of the warranties and/or indemnities to be given by or on behalf of the Franchisee to Government in respect of the Project and the Franchise; and
 - (iii) the insurance obligations of the Franchisee referred to in Sections 5.4.3(q) and 5.4.4(e);
- (e) the circumstances in which Government can suspend the construction of the Project or operation of Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road); and
- (f) dispute resolution procedures (see Section 5.5).

5.4.3 Provisions of the Project Agreement dealing with the construction aspects of the Franchise will include provision for:-

- (a) the design, construction, completion, commissioning, testing and maintenance of the Works by the Franchisee in accordance with the Technical Requirements and the Design and Checking Procedure, within a specified construction period;
- (b) the employment by the Franchisee of the Contractor, Designer, Design Checker and Works Checker each of which shall be approved by Government and independent of the Franchisee and, unless otherwise agreed by Government, of each other, upon contracts entered into contemporaneously with the Project Agreement; such contracts will be in a form approved by Government and:-
 - (i) will reflect the obligations of the Franchisee and of the other party thereto to Government;
 - (ii) will not be materially amended, assigned or terminated without the consent of Government;
 - (iii) will contain dispute resolution procedures consistent with such procedures in the Project Agreement; and

- (iv) in relation to the Construction Contract only, will provide for a maintenance period of at least twelve months;
- (c) the Contractor to design the Temporary Works (with checking and certification by the Designer in accordance with the Design and Checking Procedure);
- (d) the Designer to design the permanent works in accordance with the Technical Requirements such design to be submitted to the Government in accordance with the Design and Checking Procedure;
- (e) the Design Checker and the Works Checker to check the design of the permanent works and check the Works respectively in accordance with the Design and Checking Procedure;
- (f) the environmental team (see Section 8.4.4) and the Works Checker to carry out and check, as appropriate, the environmental monitoring and audit during Execution of the Works in accordance with the environmental protection requirements (see Section 8.4 and Annex 19);
- (g) the Franchisee to carry out and complete the design of the Works and, in so far as the same are not described or stated in the Technical Requirements, to select any specifications for the kinds and standards of materials, goods and workmanship to be used therein;
- (h) a procedure regulating changes to the Technical Requirements by Government and by the Franchisee, substantially in the form set out in **Annex 5**;
- (i) a Government review procedure, including the Design and Checking Procedure. Under this procedure, Government can review all submissions of documents, drawings, design and other information prepared by the Franchisee in accordance with the Design and Checking Procedure but not so as to relieve the Franchisee of any obligations under the Franchise;
- (j) the Franchisee to accept entire responsibility for the Franchisee's Proposals and design, and for any mistake, inaccuracy, discrepancy or omission contained in the same;
- (k) following consultation with Government, the Franchisee to carry out ground and geophysical investigations and hydrological tests, and to comply with the environmental requirements and to ameliorate the environmental impact of the Project. The Franchisee shall be deemed to have inspected and satisfied itself regarding the condition of the Works Sites and Works Areas;
- (l) the Franchisee to make available all intellectual property rights for use by Government, to permit Government a transferable, non-exclusive royalty

free licence to use the same and to provide indemnities in respect of breach of such rights substantially in the terms set out in **Annex 6, Part A**;

- (m) quality assurance, inspection and testing procedures to be complied with by the Franchisee, the Designer, the Contractor, the Design Checker and the Works Checker (see Sections 9 and 10 of the Design Manual);
- (n) design, construction and manufacturing programmes and monthly progress reports to be submitted by the Franchisee in accordance with procedures set out in Section Eight (see also Section 8 of the Design Manual);
- (o) the Contractor, Designer, Design Checker and the Works Checker to give a direct warranty to Government of their respective obligations under their contract with the Franchisee;
- (p) the period for commencement and completion of the Works and the limited grounds for extension of time, substantially on the terms set out in **Annex 6, Parts B and C**;
- (q) insurance to be taken out by the Franchisee during the Construction Period, including, inter alia, Contractor's "all risks" insurance for the full replacement value of the Works, third party legal liability, employee compensation and professional indemnity insurance and insurance in respect of the use of aircraft and marine vessels, together with provision for insurance to be taken out by the Contractor and each Sub-Contractor and the Designer, Design Checker and Works Checker; such insurances should all be taken out in such amounts and upon such terms and covering such risks as may be required by Government;
- (r) the Franchisee or the Contractor not to assign the Construction Contract but permitting the Contractor to charge sums due to it thereunder to its bankers;
- (s) the Franchisee to warrant to Government that:-
 - (i) it has exercised and will continue to exercise in the design of the Works all the skill and care to be expected of a professionally qualified and competent designer experienced in work of similar nature and scope as the Project;
 - (ii) the Works will, when completed, comply in all respects with the Technical Requirements and the detailed design approved pursuant to the Design and Checking Procedure;
 - (iii) the Works have been or will be designed and constructed using proven up-to-date good practice and to the highest standards available at the date of submission of the Tender which are

consistent with the Technical Requirements, the detailed design approved pursuant to the Design and Checking Procedure and with the intended use of the Works;

- (iv) new goods and materials will be used throughout the Works and no goods or materials generally known to be deleterious or otherwise not in accordance with good engineering practice have been or will be specified or selected by the Franchisee or any one acting on its behalf and no goods materials which, after their specification or selection by or on behalf of the Franchisee but before being incorporated into the Works, become generally known to be deleterious or otherwise not in accordance with good engineering practice, will be incorporated into the Works; and
- (v) the design of the Constructed Facilities has taken or will take full account of the effects of the intended construction methods, Temporary Works and the Contractor's plant and equipment;
- (t) the grounds upon which Government may order the suspension of the Works, substantially on the terms set out in **Annex 6, Part D**;
- (u) certification of substantial completion pursuant to the Design and Checking Procedure involving the Works Checker and Government prior to permission to operate Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road), substantially on the terms set out in **Annex 6, Part E**;
- (v) maintaining records and photographs during design, construction, commissioning and testing, and provision of as built drawings and manuals;
- (w) providing facilities for third parties and cooperation and coordination with them, substantially on the terms set out in **Annex 6, Part G**;
- (x) security and safety on the Site and generally in the Execution of the Works (see Section 7.4 in the Design Manual); and
- (y) procedures for the submission of claims and the submission of documents, generally, substantially on the terms set out in **Annex 6, Parts F and H**, respectively.

5.4.4 Provisions of the Project Agreement dealing with the operation of Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road) will include provision for:-

- (a) the Franchisee's obligations to operate Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road) 24 hours a day in all

weather conditions in accordance with Government's operating requirements;

- (b) the establishment of operating procedures setting out the Franchisee's detailed proposals for operating Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road), including its standard operating procedures and systems (including manning levels) for, inter alia:-
 - (i) safe and efficient flow of traffic through the Franchise Area;
 - (ii) tunnel or lane closure for routine maintenance or cleaning;
 - (iii) dealing with incidents occurring within or having an adverse effect on the Franchise Area;
 - (iv) monitoring, detection and control of traffic movements, accidents, vehicle breakdowns and other emergency situations within the Franchise Area;
 - (v) monitoring of the proper functioning of all electrical and mechanical plant, systems and equipment within the Franchise Area and the toll plaza administration building;
 - (vi) operating the toll collection system and monitoring the collection of tolls; and
 - (vi) maintaining security within Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road);
- (c) variations to the operating procedures at the request of the Commissioner for Transport;
- (d) Government's right to require the temporary suspension or closure of Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road); and
- (e) insurance to be taken out by the Franchisee during the Operating Period, including, inter alia, property damage insurance for the full reinstatement value of Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road), consequential loss, third party legal liability, computer and machinery breakdown and consequential loss, employee compensation, fidelity guarantee and cash all risks (premises and transit) insurance, all to be in such amounts and upon such terms and covering such risks as may be required by Government.

5.4.5 Provisions of the Project Agreement dealing with the maintenance of Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road) will include provision for:-

- (a) the Franchisee's obligations to maintain and repair Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road) during the Operating Period to the standard required by the Enabling Ordinance and the Project Agreement (including the maintenance requirements to be specified therein);
- (b) variations to be made to such maintenance requirements at the request of the Director's Representative;
- (c) the making good by the Franchisee, for a period of 12 years, of inherent and latent defects in the Constructed Facilities;
- (d) the making good by Government, for a period of 12 years, of inherent or latent defects in those works constructed by or on behalf of Government and transferred to the Franchisee;
- (e) the Franchisee's obligations to maintain and repair the Works during the Post Construction Maintenance Period; and
- (f) restricting the Franchisee from recovering any costs incurred by it as specified in Sections 5.4.5 (c) and (e).

5.5 DISPUTE RESOLUTION PROCEDURES

- 5.5.1 Dispute resolution procedures shall be established both in the Enabling Ordinance (in respect of the exercise of Government powers) and in the agreements with Government (in respect of construction and other matters).
- 5.5.2 The Enabling Ordinance shall provide for the right of the Franchisee to apply to the Governor of Hong Kong for directions (pending the determination of arbitration proceedings under the Project Agreement) in similar circumstances to those described in section 66 of the Western Harbour Crossing Ordinance (Ord. No. 72 of 1993).
- 5.5.3 The Project Agreement will provide for arbitration of all disputes in accordance with arbitration rules set out in **Annex 26**, on the following basis:-
 - (a) the arbitration shall be a domestic arbitration for the purposes of Part II of the Arbitration Ordinance (Cap. 341);
 - (b) the decision of the arbitrator shall be final and binding on the Government and the Franchisee; and
 - (c) where such dispute concerns the Execution of the Works, unless:-
 - (i) otherwise agreed; or

- (ii) the dispute concerns a decision of the Director of Highways or the Commissioner for Transport or of any other person on behalf of Government under the Project Agreement or the Enabling Ordinance (save for the exercise of powers by the Secretary for Transport) which, if upheld in an arbitral award, would result in the Franchisee being in default under the Enabling Ordinance;

the arbitration shall be deferred until after substantial completion of the Works.

The Project Agreement may also contain a procedure for the rapid resolution of disputes relating to inherent and latent defects.

5.6 GUARANTEE AGREEMENT, WARRANTIES ETC.

Government will require the Franchisee to provide or procure in favour of Government various warranties, assurances, guarantees and indemnities. These arrangements will be in a form and substance satisfactory to Government and shall include, inter alia, the matters referred to in Section 4.7.

5.7 ASSIGNMENT AND DISPOSALS

5.7.1 The Franchisee shall not be entitled to assign, charge, subgrant, underlet or by any other means dispose of its rights under the Enabling Ordinance or the Project Agreement except as mentioned in the following Section 5.7.2 or with the prior consent of Government.

5.7.2 The Franchisee shall be permitted to charge or mortgage its rights under the Franchise (including the right to collect tolls) to secure financing for any of the following:-

- (a) the Execution of the Works;
- (b) undertakings arising out of its obligations set out in the Enabling Ordinance or the Project Agreement; and
- (c) other purposes subject to approval in writing by the Financial Secretary

but such security (other than security over the right to collect tolls) shall not be enforced without the prior written consent of the Governor-in-Council.

- End of Section Five -

SECTION SIX: LAND MATTERS

6.1 INTRODUCTION

The purpose of this Section is to explain the basis upon which Government will make land available for the Project and the Franchise.

6.2 GENERAL

- 6.2.1 Government will acquire and clear all lands within the Conforming Scheme for handing over, in phases as hereinafter explained, to the Franchisee. Unless specified elsewhere in the Brief, all land acquisition and clearance costs for the Conforming Scheme will be borne by Government. Building a new school to replace a primary school at Ko Po San Tsuen which will be affected by the Conforming Scheme will be the responsibility of the Franchisee as set out in Section 6.11.
- 6.2.2 Where elements of the Project are to be connected to existing construction, the Project Limits may be assumed to be at locations which permit the new construction to take place without additional works by others. In the case of planned adjacent construction, the limits shown may require minor adjustment, which can be defined in the detailed design stage, so as to achieve coordinated completion of works.

6.3 LAND TITLE

- 6.3.1 The Franchise Area will not carry land title.
- 6.3.2 The Franchise Area will be operated by the Franchisee under a wayleave to be granted by the Enabling Ordinance which will require the Commissioner for Transport to prepare and deposit in the Land Registry a plan defining the Franchise Area.
- 6.3.3 The site for the toll plaza administration building will be granted to the Franchisee by private treaty grant subject to a full market value premium (except in relation to the areas of the building which Government has agreed may be used as (i) the cash truck parking bay, (ii) the generator room, (iii) the uninterrupted power supply room, (iv) the switch room, (v) the battery room, (vi) the cable room and tunnel maintenance vehicle parking bay, (vii) the telephone exchange room, (viii) the tunnel operations store, (ix) the workshops, workshop storage and office workshop and (x) the dangerous goods and paint store) and upon such other terms and conditions as Government may require. The term of the private treaty grant shall be co-terminus with the Franchise Period, subject to the condition, inter alia, that Government shall have the right of re-entry if for any reason the Franchisee's rights and obligations under the Ordinance are determined or the Franchise is

revoked. The amount of the full market value premium shall be determined as at the date of the private treaty grant.

6.4 WORKS SITES AND WORKS AREAS

The Works Sites and Works Areas will be made available during the Construction Period to the Franchisee by licence subject to a nominal periodic fee (\$1 per annum, if demanded) and upon such other terms and conditions (which shall permit the Franchisee, its agent, the Contractor and each Sub-Contractor access to the Works Sites and Works Areas without charge for the purpose of carrying out the Works) as Government may require. No administrative fees will be charged for the preparation of the above licences.

6.5 PROPERTY DEVELOPMENT

There will be no property development associated with the Franchisee.

6.6 RATES

The Franchisee will be liable for rates assessed in accordance with the Rating Ordinance (Cap. 116). Liability for rates will arise in respect of the Franchise Area and the toll plaza administration building during the Operating Period and in respect of the Works Areas until handed back to Government. Work Sites shall not be assessed to rates.

6.7 ROADS (WORKS, USE AND COMPENSATION) ORDINANCE

6.7.1 It is intended that the Conforming Scheme will be gazetted under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) in two phases during the 1st quarter of 1994 and the 3rd quarter of 1994. The 1st phase gazette covers the southern section of the Conforming Scheme up to the northern end of the Toll Plaza, including the access road from Kam Sheung Road to the Toll Plaza. The 2nd phase covers the remaining section of Yuen Long Approach Road. It is anticipated that authorization by the Executive Council of the two phases of the Conforming Scheme will take place in September 1994 and April 1995 respectively. Starting from the authorization of each phase, a period of at least seven months for each phase will be required by Government for clearance and resumption prior to making the land available to the Franchisee.

6.7.2 In the event of objections under such Ordinance in relation to the Conforming Scheme, Government may prepare a revised Conforming Scheme. Any such revised Conforming Scheme may need to be further gazetted and could result in delay.

- 6.7.3 The provisions relating to a proposal which utilises an alignment different from that in the Conforming Scheme are set out in Section 6.12.

6.8 COUNTRY PARKS ORDINANCE

One section of the Yuen Long Approach Road under the Conforming Scheme encroaches into the Tai Lam Country Park and will have to be excised from the Tai Lam Country Park pursuant to provisions contained in the Country Parks Ordinance (Cap. 208). The agreement of the Country Parks Board and the Country Parks Authority, as well as the approval of the Governor-in-Council, will be required and it is anticipated that the whole procedure will take at least nine months from the date of issue of the Brief.

6.9 FORESHORE AND SEA-BEDS (RECLAMATION) ORDINANCE

The offshore temporary structures for the conveyor belt system for the disposal of surplus material from the southern section of the Project Land (see Section 8.10) may need to be gazetted under the Foreshore and Sea-beds (Reclamation) Ordinance (Cap. 127).

6.10 HANDOVER OF LAND

- 6.10.1 The limits of all Works Sites and Works Areas for the Conforming Scheme with the scheduled handover dates are delineated in Land Requirement Plans at **Annex 8**. As indicated in Section 6.7 above, it is anticipated that the Conforming Scheme will be gazetted under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) in two phases. Following authorization by the Executive Council and completion of clearance and resumption, it is anticipated that the majority of the Project Land will be made available in three phases. It is anticipated that the first phase land, which covers access and land for the construction of the southern section of Tai Lam Tunnel and requires no clearance and resumption, will be made available, as required for the Execution of the Works, not earlier than the beginning of the Franchise Period or, if later, 1st January 1995. The second phase land, which is for the construction of the northern section of Tai Lam Tunnel and the access road to the Toll Plaza will be handed over, as required for the Execution of the Works, not earlier than May 1995. The third phase land will be handed over, as required for the Execution of the Works, not earlier than December 1995.
- 6.10.2 The area occupied by the St. Joseph's primary school at Ko Po San Tsuen will not be available until the Franchisee has completed the works stated in Section 6.11, and the school has been completely relocated to the new premises.
- 6.10.3 The possession dates given above are approximate and circumstances may cause them to be varied. In case of substantial slippage in handing over of land which

causes a delay to the progress of the Works, Government may consider extending the Franchise Period to recover the loss of time during construction (see Section 4.2.3).

- 6.10.4 The Franchisee may request the allocation of additional areas, subject to the conditions in Section 6.12. The Director of Highways or his representative will decide if such allocation is suitable and no guarantee can be given that additional land will be provided.

6.11 ST. JOSEPH'S PRIMARY SCHOOL

- 6.11.1 The St. Joseph's primary school at Ko Po San Tsuen will be affected by the Conforming Scheme and will require relocation. The Schedule of Accommodation of the new school is delineated in the Design Manual. Preliminary design of the school is being prepared and will be made available to the Tenderers in December 1993/January 1994. Approval by the Town Planning Board will be required for the school to be built in the proposed location and the District Lands Office/Yuen Long will be making an application for this.

- 6.11.2 The Franchisee shall be responsible at its own cost to construct a new primary school (and to fit-out, furnish and equip the new school as provided in the Design Manual) and relocate St. Joseph's primary school to the new premises. The Franchisee may be required at its own cost to construct a playground adjoining the new school premises. The detailed design and the actual arrangements for the relocation must be agreed by the Director's Representative. Operation of St. Joseph's primary school must be kept uninterrupted prior to relocation. The relocation shall take place during school holidays by arrangement with the Director's Representative (who shall consult with the Department of Education).

6.12 ALTERNATIVE LAND REQUIREMENTS

- 6.12.1 Government will provide the Project Land required for a Conforming Scheme. It should be appreciated that the acquisition of additional land, required to facilitate the construction of any Alternative Proposal, will be time consuming and may result in unacceptable delay to the Project and to commencement of the Franchise.

- 6.12.2 As the arrangements for gazetting the Conforming Scheme under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) are in progress, any departures from the Conforming Scheme may have to be re-gazetted under such Ordinance, possibly resulting in unacceptable delay to the Project and to commencement of the Franchise. If a Tenderer considers that additional or alternative land to that shown on the plans at **Annex 8** is required for a Conforming Proposal or any Alternative Proposal or would be beneficial to the Project, these requirements must be fully identified and explained in the relevant Proposal. Such suggestions can only be considered in respect of unleased

Government land (which, if approved, can be made available to the Franchisee at a full market rental to be assessed by Government) or land owned by or available to the Franchisee. All costs of land resumption and clearance over and above that required for the Conforming Scheme shall be borne by the Franchisee.

6.12.3 In addition, if an Alternative Proposal affects additional Country Park land, excision of additional land may be required. This may require the various agreements and approvals indicated in Section 6.8, and may result in significant delay to the Project and to commencement of the Franchise.

6.12.4 Tenderers are to define their requirements in respect of Works Areas. As noted in Section 6.6, liability for rates will arise for such Works Areas.

6.13 LAND AVAILABILITY FOR SITE INVESTIGATION

6.13.1 Unleased Government land in the area of the Conforming Scheme may be made available for additional site investigations, during the preparation of Tenders, by arrangement through the Government Engineer/Western Harbour Link of Highways Department.

6.13.2 Tenderers may apply to the Director of Highways for consent to carry out additional site investigation works. Government does not bind itself to grant approval of such applications.

6.13.3 Tenderers may make their own arrangements to carry out additional site investigation works on private lands. The Government Engineer/Western Harbour Link should be kept informed about such arrangements.

6.14 ARRANGEMENTS FOR PROJECT LAND UPON COMPLETION OF WORKS

6.14.1 Upon completion of the Works, all parts of the Project Land outside the Franchise Area other than the site of the toll plaza administration building shall be reinstated, including any necessary landscaping, and returned free of cost in a condition satisfactory to the Director's Representative (in consultation with the Director of Lands). If the Franchisee fails to clear and reinstate the lands as required above, Government may carry out such works at the cost of the Franchisee after giving one month's notice.

6.14.2 Notwithstanding the above paragraph, the Director's Representative (in consultation with the Director of Lands) may determine that a reasonable area of land be retained by the Franchisee for the duration of any contractual maintenance period. Such occupation may be by licence subject to a nominal fee and other conditions as determined by Government.

6.14.3 The Franchisee shall be responsible for the Project Land during the Construction Period and for ensuring that access thereto is limited to authorised personnel for the purpose of the Execution of the Works. For this purpose the Franchisee shall, as a part of each Proposal, provide a scheme of control for security within the Project Land. There will be strict obligations to ensure that such scheme of control will be monitored and adhered to, and sanctions will be imposed for any breach thereof.

- End of Section Six -

SECTION SEVEN: TRANSPORT/PLANNING INFORMATION

7.1 INTRODUCTION

This Section contains information on Government's current plans regarding land use and transport development in the Territory and the latest airport and port growth forecasts. Tenderers should note that these plans and forecasts constitute no more than the planning information and assumptions available at this stage. This information is given to assist Tenderers in their preparation of Proposals but in no way amounts to Government's commitment to implement these plans. The plans and forecasts will be subject to approval, refinement and review as appropriate. Any statement of anticipation of a situation is for general guidance only and no warranty or representation is made by Government of any matter referred to in any such statement.

7.2 TERRITORIAL DEVELOPMENT STRATEGY

7.2.1 The Territorial Development Strategy ("**TDS**") is currently under review. The TDS provides a broad long term land use-transport-environment framework for the planning and development of Hong Kong. The main objective of the TDS is to facilitate Hong Kong's continued growth as a regional and international city. The TDS assesses the implications of the proposed port and airport development and the current policies on the land use, transport and environment on Hong Kong's development. The review will also consider the changing role of Hong Kong in the context of recent developments in South China especially in the Pearl River Delta region. The Pearl River Delta region has become the economic hinterland and major outward processing area for Hong Kong.

7.2.2 The review has proceeded to the stage of finalising the assessment of hybrid development options as the basis for the formulation of the preferred options. In terms of transport networks, the hybrid options have identified the possibility of new cross-border roads and railways. The review has established that the expanding development along the east bank of the Pearl River and the development of the North West New Territories as an important strategic growth corridor as result of the anticipated increasing close relationship between Hong Kong and its economic catchment area in China. More definite development proposals will be considered when the review is completed in mid-1994.

7.3 METROPLAN

- 7.3.1 The Metroplan Selected Strategy was endorsed by the Governor-in-Council in September 1991. Metroplan is designed to provide a framework within which both public and private sector agencies can formulate detailed plans and development programmes with the common aim of making Hong Kong a better place in which to live and work. To that end, the selected strategy sets out broad patterns of land use and proposes various guidelines with regard to the type, form and density of different kinds of development. The overall pattern of land use has been formulated within a network of principal highways and railways to provide for the safe and convenient movement of passengers and goods about Hong Kong. The restructuring of Hong Kong takes particular account of the new development opportunities that will be made available through the eventual relocation of the airport from Kai Tak.
- 7.3.2 Copies of the Overview of Metroplan which outline the main attributes of the selected strategy are given at **Annex 9**.

7.4 NORTH WEST NEW TERRITORIES DEVELOPMENT STRATEGY REVIEW

- 7.4.1 The principal goal of the North West New Territories (NWNT) Development Strategy Review is to produce a broad land use-transport-environmental plan for the NWNT sub-region up to 2011. The review will act as a link between the Territorial Development Strategy (TDS) Review and district/local planning and will be used as a framework for detailed planning and work programming. It will include plans showing future development areas, retained agricultural land, infrastructural requirements, landscape protection zone and other broad land use distribution in the sub-region.
- 7.4.2 The review commenced in mid-1990 and a number of sectoral studies have been carried out to examine the key issues of housing, open storage, transport, landscape, recreation, agriculture, constraints and opportunities etc. Based on the key issues nine different initial options have been generated and evaluated. These were narrowed down to three options for further detailed examination and evaluation.
- 7.4.3 A general objective in these options is to enhance the protection of the Mai Po Marshes and Inner Deep Bay. While awaiting the completion of TDS review, preliminary results provided from the TDS would assign a range of population quantum for NWNT for testing purposes in a number of suggested major growth areas. These possible growth areas for residential purposes include Tin Shui Wai Reserve Zone, Tuen Mun - Yuen Long Corridor, Kam Tin and Ngau Tam Mei. Cross border freight rail, passenger rail and road link have also been allowed for in the review. The next stage will be the production of a recommended development strategy for the sub-region in early 1994.

7.5 SOUTH WEST NEW TERRITORIES DEVELOPMENT STRATEGY REVIEW

- 7.5.1 The principal goal of the South West New Territories (SWNT) Development Strategy Review is to produce a broad land use-transport-environmental plan for the SWNT sub-region up to 2011. The Development Strategy Review will act as a link between the TDS Review and district/local planning and will be used as a framework for detailed planning and work programming.
- 7.5.2 An Interim Recommended Strategy (IRS) for the SWNT Development Strategy Review was submitted to and endorsed by Development Progress Committee on 10 June 1993. The IRS is basically a conservation-oriented strategy, apart from the committed land use proposals such as the port and airport and associated developments. Some moderate measures of additional growth may however be permitted in various other areas in the sub-region based on local conditions and the capacities of the existing and planned infrastructures.

7.6 RURAL OUTLINE ZONING PLAN FOR NORTH WEST NEW TERRITORIES

- 7.6.1 As a major step to improve the rural environment, in particular to control the proliferation of undesirable land use in the rural areas, it was considered necessary to extend the jurisdiction of the Town Planning Ordinance (Cap. 131) to cover rural areas so as to provide a statutory planning framework to guide and control private developments in these areas. The Town Planning (Amendment) Bill 1990 was passed in January 1991 to become the Town Planning (Amendment) Ordinance 1991 (No. 4 of 1991). It provides, inter alia, the extension of jurisdiction of the Town Planning Ordinance to cover the rural areas with enforcement power, the authority of the Director of Planning to designate Interim Development Permission Areas (DPAs) and the Town Planning Board to prepare DPA Plans.
- 7.6.2 Concurrent to the consideration of the Town Planning (Amendment) Bill 1990, a total of twelve (12) Interim DPA Plans were prepared for the North West New Territories. These interim DPA Plans were subsequently replaced by the draft DPA Plans which were gazetted on 12 July 1991. Pursuant to section 20(5) of the Town Planning Ordinance, all the twelve (12) draft DPA Plans for the North West New Territories are effective only until 12 July 1994 with a possible one year extension granted by the Governor-in-Council. As such, Outline Zoning Plans have to be prepared so as to continue planning control over the rural areas after the expiry of the twelve (12) draft DPA Plans.
- 7.6.3 The Territorial Development Strategy and the North West New Territories Development Strategy Review provide an overview of the key issues, development constraints and opportunities in the NWNT and formulate some broad planning guidelines for future development in the sub-region; it is therefore within the context of the broad goals of the Territorial Development Strategy and the North

West New Territories Development Strategy Review that the rural Outline Zoning Plans are drawn up.

7.6.4 The 12 rural Outline Zoning Plans (OZP) for the NWNT are:-

- (1) San Tin OZP
- (2) Mai Po and Fairview Park OZP
- (3) Nam Sang Wai OZP
- (4) Lau Fau Shan OZP
- (5) Ngau Tam Mei OZP
- (6) Kam Tin North OZP
- (7) Kam Tin South OZP
- (8) Shek Kong OZP
- (9) Pat Heung OZP
- (10) Tai Tong OZP
- (11) Ha Tsuen OZP
- (12) Sheung Pak Nai and Ha Pak Nai OZP

7.7 AIRPORT DEVELOPMENT

7.7.1 The ultimate development potential of Kai Tak was studied by consultants in 1988 who forecast that air passenger demand would increase by about $3\frac{1}{2}$ times from an actual terminal passenger demand throughput of 12.7 million in 1987 to approximately 46.4 million in 2010 (i.e. about 6% annual growth). The actual growth in air traffic, however, has been higher than forecast. Terminal passenger throughput reached 18.7 million in 1990 (about 15% growth over 1989), 19.2 million in 1991 (about 3% growth over 1990) and 22.1 million in 1992 (about 15% growth over 1991). If the current trend continues, Kai Tak airport is likely to be saturated by 1993/1994 in spite of the extensive expansion works currently in hand.

7.7.2 Updated provisional air traffic forecasts for the new airport at Chek Lap Kok reviewed by the Airport Master Plan Consultants, Greiner-Maunsell are given in **Annex 10**.

7.7.3 The new airport at Chek Lap Kok will be built on a site of about 1248 hectares and will ultimately comprise two runways separated by a distance of 1525m. It will operate 24 hours a day.

7.7.4 It is expected that the new airport at Chek Lap Kok in the first year with the first runway in operation, will be handling approximately 28.5 million total passengers and 1.1 million tonnes of cargo. Its ultimate capacity, with both runways operational, will be able to handle approximately 87 million total passengers and 8.9 million cargo tonnes per annum.

7.7.5 A statutory Provisional Airport Authority, chaired by the Financial Secretary, was established in April 1990 to oversee the financing and physical development of the

new airport at Chek Lap Kok. It is intended that a permanent body will be established in 1994 to own, develop and operate the new airport at Chek Lap Kok. This body will be funded by equity provided by Government and by loans from the capital markets.

- 7.7.6 The target opening date for the new airport at Chek Lap Kok is mid-1997 according to the present programme.

7.8 PORT DEVELOPMENT

- 7.8.1 According to the 1991 Port Cargo Forecasts, the overall port traffic of Hong Kong is expected to grow by about 6.5% p.a. from 1990 to 2011. Total tonnage is forecast to reach 284.2 million tonnes. Detailed projections are set out in the table shown in **Annex 11**. Projections of containerised cargo in TEUs for the years 1996, 2001 and 2006 are shown in the table shown in **Annex 12**.

- 7.8.2 There is likely to be relatively static demand for break-bulk facilities due to the increasing trend towards containerisation. The need for multi-purpose terminals may not materialise prior to 2006 but a considerable expansion in container berths will be required. According to the Review of Port Facilities Study 1991, by the year 2006, 20 container berths each having a capacity of 400,000 TEUs per year are required. The timing for container berths is given in the table shown in **Annex 13**. The updated Port Development Strategy 1991 Review is at **Annex 14**.

- 7.8.3 The 1993 Port Development Strategy Review is being carried out. Phase One of the study comprises a review of the port cargo forecasts and an update of productivity levels in cargo handling. Phase Two covers the translation of the cargo forecasts into facilities requirements and the consequent updating of the Port Development Plan and Programme.

- 7.8.4 Based on the current review of port facilities, a "modified Port Mix C" is advocated for 2006. This refers to a distribution of port cargo whereby:-

- (a) there is no requirement for Multi Purpose Terminals before 2006; and
- (b) all Fully Cellular Cargo ships are handled at container terminals, and the existing anchorages and buoys will cater for other cargoes.

7.9 NORTH LANTAU DEVELOPMENT

The current projection for the population of North Lantau and the current projection for airport related employment on North Lantau are shown in **Annex 15**.

7.10 LANTAU PORT PENINSULA DEVELOPMENT

7.10.1 The Lantau Port Peninsula is to be developed to provide Hong Kong with substantial additional port expansion. The most recent forecasts indicate a 2011 need for 5,440m of quay for container terminals.

7.10.2 Initially, the Lantau Fixed Crossing will provide the only route for traffic to move between the port and the mainland. The shared use of this link with, in particular, Chek Lap Kok airport-generated traffic, constitutes a potential constraint which is expected to be removed through the construction of additional fixed links serving road and/or rail traffic. The Sham Tseng Link, when completed, will provide an alternative route for the Lantau Port Peninsula Development traffic to the North West New Territories.

7.11 WHITE PAPER ON TRANSPORT POLICY

Government's transport policies are stated in the White Paper on Transport Policy in Hong Kong published in January 1990, a copy of which is shown at **Annex 16**. Details of Government's plans on the provision and improvement of the transport infrastructure to meet the long term travel demand in Hong Kong are given in the White Paper. In particular, Tenderers should note that it is Government's declared objective to provide high capacity strategic links to support the new airport and port facilities.

7.12 COMPREHENSIVE TRANSPORT STUDY II UPDATE

This study was carried out to review the recommendations of the Second Comprehensive Transport Study and all major post Second Comprehensive Transport Study studies on the new transport infrastructure proposals, taking into account the port and airport developments and other developments proposed by various strategic planning studies. This update study produced a new transport infrastructure development programme up to 2011. It also assessed the suitable level of restraint required on the private vehicle fleet and goods vehicle trips, apart from investigating the tolling strategy for road crossings and tunnels. A copy of the Study Update is shown at **Annex 17**.

7.13 TIMING OF STRATEGIC TRANSPORT LINKS

7.13.1 In accordance with the results of the Comprehensive Transport Study II Update and Railway Development Study, the programmes for commencement/completion of major improvements to strategic transport links are appended below for information only. For obvious reasons, the programmes are only indicative and the Government does not guarantee any of the timings in any manner.

7.13.2 Highway Network

- (a) The 1997 highway network is assumed to comprise the existing network plus the following strategic links:-
1. Tin Shui Wai West Link
 2. Tin Shui Wai East Link
 3. Yuen Long Southern Bypass
 4. Improvement to Tuen Mun Road
 5. North Lantau Expressway
 6. Lantau Fixed Crossing
 7. Route 3 (Kwai Chung and Tsing Yi Sections)
 8. West Kowloon Expressway
 9. Western Harbour Crossing
 10. Route 7 (Sai Ying Pun - Belcher Bay)
 11. Lung Cheung Road and Ching Cheung Road Improvements from Lai Chi Kok Park to Nam Cheong Street
 12. West Kowloon Corridor - Yau Ma Tei Section
 13. Route 5 Extension (Shek Wai Kok - Chai Wan Kok)
 14. Texaco Road Improvements - Phases 1 and 2
 15. Route 3 - Country Park Section (Ting Kau Bridge)
- (b) The 2001 highway network is assumed to consist of the 1996/97 network plus:-
1. Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road)
 2. Hung Hom Bypass and Princess Margaret Road Link
 3. Route 16 between West Kowloon and Sha Tin
 4. Lung Cheung Road Improvements from Nam Cheong Street to Lion Rock Tunnel
 5. North Tsing Yi Coastal Road
 6. Kam Tin Road Improvements
 7. Kam Tin Bypass
- (c) The 2006 highway network is assumed to consist of the 2001 network plus:-
1. Sham Tseng Link
 2. Central and Wanchai Bypass & Island Eastern Corridor Link (Causeway Bay - Wanchai)
 3. Central Kowloon Route and Kai Tak Connector between Kai Tak and Kwun Tong
 4. Hung Hom - Kai Tak Link
 5. Tai Po - Sha Tin Link (Additional)

- (d) The 2011 highway network is assumed to consist of the 2006 network plus:-
1. Green Island Link
 2. Route 3 (CRA4) (Stonecutters Island - Tsing Yi)
 3. Route 7 (Belcher Bay - Aberdeen)

7.13.3 Rail Network

- (a) The 1997 rail network is assumed to include the existing rail system plus:-
1. Airport Railway
 2. Tin Shui Wai LRT Link Stage 3
- (b) The 2001 rail network is assumed to consist of the 1996/97 network plus:-
1. The Western Corridor comprising
 - Port Rail Line connecting Kwai Chung and Lo Wu
 - Long Distance Passenger Service between Cheung Sha Wan and the border
 - North West New Territories Urban Rail Link between Cheung Sha Wan and Yuen Long/Tin Shui Wai
 2. Tseung Kwan O MTR Extension (Po Lam - Lam Tin)
- (c) The 2006 rail network is assumed to be the same as that in 2001.
- (d) The 2011 rail network will be that of the 2006 network plus the following:-
- MTR East Kowloon Route from Ma On Shan through Tai Wai and Diamond Hill to West Kowloon
 - South Hong Kong Island Line
 - extension of North Hong Kong Island Line

7.14 PROGRAMME FOR CONNECTING INFRASTRUCTURE

Government has been or will be carrying out major infrastructure, road works, road improvements and traffic management schemes in connection with Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road). The following works will facilitate the smooth flow of traffic to and from Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road) and will be carried out by Government or its agents. Although no guarantees or warranties will be given with regard to the programme for commencement or completion, the current programme is as follows:-

- (a) construction of Route 3 - Country Park Section (Ting Kau Bridge), including the North-West Tsing Yi Interchange and part of the Ting Kau Interchange, is to be completed by 1997;
- (b) improvements to Tuen Mun Road will commence in May 1994. Completion of individual climbing lanes will occur in phases between October 1996 and May 1997;
- (c) the two-lane New Territories Circular Road from Au Tau to Mai Po will be widened to dual three-lane by 1998;
- (d) construction of the Yuen Long Southern Bypass started in January 1992 and is anticipated to be completed in July 1994;
- (e) implementation of the Kam Tin Road Improvements will take place in June 1997 and will be completed in May 2000;
- (f) the advance contract for the Route 5 Route Extension will start in October 1994 and the project will be completed in January 1999;
- (g) the Sham Tseng Link will be completed by 2006;
- (h) the Tsing Yi North Coastal Road is scheduled to commence in April 1998 for completion in March 2001;
- (i) the Lantau Fixed Crossing and the southern section of Route 3 assigned as Airport Core Projects will be opened to traffic by June 1997.

7.15 AIRPORT RAILWAY

7.15.1 The Airport Railway was one of the recommended railway projects in the Government's White Paper on Transport Policy to serve the new international airport at Chek Lap Kok as well as to provide relief to the much congested Nathan Road Corridor now served by the Mass Transit Railway. The 34-kilometre Airport Railway will extend from the new airport, via Tsing Yi and West Kowloon to the Central Reclamation.

7.15.2 Two services will be provided. One will be a dedicated service from the new airport stopping only at Tsing Yi, West Kowloon and terminating at Central. With this service, it will take only about 23 minutes for air passengers to travel from the new airport to Central. The other will be a domestic MTR - type service between Tung Chung and Central with stations initially at Tung Chung, Tsing Yi, Lai King (interchanging with the existing MTR), Tai Kok Tsui, West Kowloon, and terminating at Central. Stations at Tai Ho Wan and Yam O on North Lantau will be developed as and when the scale of development demands.

- 7.15.3 The Airport Railway Feasibility Study was completed at the end of 1990. The prospective operator, i.e. the Mass Transit Railway Corporation, has been closely involved in the study and has been providing expert opinion to the consultants on the engineering and operational aspects of the feasibility study. Government is in discussion with the Airport Committee on the financing arrangements for the Airport Railway.
- 7.15.4 The estimated average daily patronage of the dedicated service of the Airport Railway is 39,000 in year 1997 when the new airport opens, the patronage is expected to increase to 52,000, 54,000 and 75,000 in years 2001, 2006 and 2011.
- 7.15.5 It is intended that the Airport Railway will be commissioned concurrently with the airport at Chek Lap Kok, but in the event the Airport Railway opens after the airport, there will be provision for interim bus services to cater especially for the shortfall in capacity prior to the commissioning of the Airport Railway. Such services will be terminated once the Airport Railway is in operation.
- 7.15.6 The estimated average daily patronage of the domestic service of the Airport Railway is 266,000, 357,000, 436,000 and 491,000 in years 1997, 2001, 2006 and 2011 respectively.

7.16 RAILWAY DEVELOPMENT STUDY

- 7.16.1 The Second Comprehensive Transport Study and the more recent Comprehensive Transport Study II Update identified a need for additional rail links in the Territory and put forward suggestions for further detailed study. In response to these recommendations the Railway Development Study was commissioned by Transport Branch and Railway Division of Highways Department in December 1991.
- 7.16.2 Two overall study stages were envisaged:-

Phase I - Programme Development Phase

Phase II - Programme Implementation Phase

The findings of Phase I would form a framework for Phase II. The present study constitutes Phase I with the following main objectives:-

- (a) to establish a railway development programme for passenger and freight transport for the Territory up to the year 2011;
- (b) to establish the recommended horizontal and vertical alignments of the selected railway routes for defining the extent of route protection;

- (c) to identify key issues, such as institutional and funding aspects associated with implementation, and recommend the scope of further studies for those railway projects proposed for implementation.

7.16.3 The Railway Development Study had been completed. Among the study recommendations, a new rail line running through the western part of the territory (called the Western Corridor) is accorded high priority for implementation by 2001. Government had consulted the public on the study findings and is now in the process of formulating a railway development strategy.

7.16.4 The proposed Western Corridor will run from the urban area, via Tsuen Wan and Kam Tin, to the Northwest New Territories (NWNT) and the border at Lo Wu and Lok Ma Chau. This rail corridor will provide three services: a long distance freight service to China, a long distance passenger service to China and a domestic passenger service to NWNT. A freight rail terminal is proposed at the Kwai Chung container port, while an international passenger terminal is proposed at Cheung Sha Wan (or South Kowloon). The study recommended that provision for four tracks should be allowed for this rail corridor to cater for long term growth.

7.16.5 A section of the proposed Western Corridor at Kam Tin will run close to Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road) alignment north of the north portal. Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road) will essentially carry vehicular traffic between the North West New Territories and the urban areas, as well as goods vehicles between Shenzhen and the container port. The proposed Western Corridor, on the other hand, will carry freight originating from South and Central China to Hong Kong, while providing passenger services both between China and Hong Kong, and between the North West New Territories and the urban areas.

7.17 FREIGHT TRANSPORT STUDY

This study will formulate a freight transport strategy for the period up to 2011 to best suit the future road, rail and waterborne transport systems and the economy of Hong Kong. It will also improve the goods vehicle modelling procedure adopted by the Second Comprehensive Transport Study. In the light of the projected demands, this study will develop a package of recommended policy/strategy measures for implementation in the short to long term.

7.18 SHAM TSENG LINK PRELIMINARY FEASIBILITY STUDY

7.18.1 The Sham Tseng Link will provide capacity relief for the Lantau Fixed Crossing, linking North Lantau and the Mainland, as traffic demand increases and also provide the necessary route security for access to Lantau and the Airport in the event that the Lantau Fixed Crossing is closed.

- 7.18.2 This preliminary feasibility Study provides a comprehensive review of possible alternative alignments for the Sham Tseng Link. The aim is to define the optimum feasible form for the sea crossing taking into account the constraints of the existing and planned infrastructures and utilities, land use, and restrictions due to the operation of the Port and Airport developments.
- 7.18.3 The Study commenced in March 1993 and the Final Report is expected to be issued by the end of 1993. At this stage preferred options in the forms of a long span bridge and a bored tunnel on separate alignments have been recommended. It is anticipated that, for either options, the Sham Tseng Link could be connected to Route 3 - Country Park Section and the Tuen Mun Road on the Mainland and the Lantau Port Expressway on Lantau. However, the feasibility of the connections on the Mainland will be reviewed and confirmed by a full engineering feasibility study to be commissioned later.
- 7.18.4 Traffic forecasts from previous studies and this Study indicate that a dual 2-lane Sham Tseng Link would have sufficient capacity to serve the traffic demand between 2006 and 2011.

7.19 CROSS BORDER TRAFFIC

- 7.19.1 There are three existing vehicular cross border points: Sha Tau Kok, Man Kam To and Lok Ma Chau. The location of these cross border points are shown in **Annex 18.1**. Vehicular traffic using the crossing points is increasing. Between 1990 and 1992, the average daily throughput increased by about 15% per year.
- 7.19.2 The northern end of Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road) at the New Territories Circular Road can connect to the three cross border points, via existing roads as shown in **Annex 18.2** and the location plan. Government will open two more processing kiosks in Lok Ma Chau on 1 February 1994. At present, only seven of fourteen processing kiosks on the Hong Kong side at Lok Ma Chau are manned. The number of kiosks manned can be further increased if necessary. There is also scope for building more kiosks at Lok Ma Chau.
- 7.19.3 In order to facilitate the increasing cross-border traffic and following consultation with the Chinese side, the opening hours of the crossing points have been extended gradually in recent years to the existing hours of 7 a.m. to 10 p.m. for Man Kam To and Lok Ma Chau, and 7 a.m. to 6 p.m. for Sha Tau Kok. Further extensions to opening hours will be considered in the future depending on the growth in traffic demand and subject to agreement with the Chinese authorities.

- End of Section Seven -

SECTION EIGHT: DESIGN AND CONSTRUCTION REQUIREMENTS

8.1 INTRODUCTION

The purpose of this Section is to outline Government's design and construction requirements in respect of the Project.

8.2 PRELIMINARY DESIGN OF ROUTE 3 - COUNTRY PARK SECTION

8.2.1 In February 1992, Highways Department commissioned a consultancy - Stage 1 Preliminary Design to provide a robust cost estimate and programme with the following output:-

- (a) Scope of Works: Summary Report;
- (b) Costing and Programme Report;
- (c) Costing and Programme Report: Supporting Information;

A tunnel ventilation preliminary assessment was also carried out in this consultancy. A working paper on the tunnel ventilation standards was produced.

8.2.2 In February 1993, Highways Department commissioned a consultancy - Stage 2 Preliminary Design to advance the preliminary design.

8.2.3 The Final Report - Route 3 - Country Park Section Stage 2 Preliminary Design will be completed in November 1993 consisting of the following documents:-

- (a) Executive Summary;
- (b) Volume 1 Engineering Information;
- (c) Volume 2 Drawings;
- (d) Volume 3A Environmental Impact Assessment - Tai Lam Tunnel and Yuen Long Approach Road (Part 1);
- (e) Volume 3B Environmental Impact Assessment - Tai Lam Tunnel and Yuen Long Approach Road (Part 2);
- (f) Volume 4 Environmental Impact Assessment - Ting Kau Bridge;

The Final Report covering Volumes 1 and 2 is contained in **Annex 2**. The Executive Summaries and Volumes 3A and 3B of the Final Report will be supplied to the Tenderers when available during the tender period. Site investigation reports as Appendix C of Volume 1 of the Final Report and the outputs from the Stage 1 Preliminary Design will be made available for inspection by Tenderers upon request.

8.3 THE DESIGN MANUAL

The Design Manual stipulates appropriate loadings, methods of analysis and codes and standards for use by the Franchisee in the design of the Project. It also specifies requirements for the toll plaza, control buildings, maintenance compounds, electrical and mechanical works, drainage and marine works, environmental and relocation requirements. The preferred alignment and the base design of Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road) are described in the Design Manual.

8.4 ENVIRONMENTAL PROTECTION REQUIREMENTS

- 8.4.1 The Environmental Impact Assessment contained in Volumes 3A and 3B of the Final Report - Route 3 - Country Park Section Stage 2 Preliminary Design makes recommendations for mitigation measures to reduce the environmental impacts arising from the construction and operation of Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road). These measures are to be adopted by the Franchisee, at its own cost, in order to ameliorate air, noise, water quality and visual impacts associated with the Project. As indicated in the Environmental Impact Assessment Report, there are several outstanding issues relating to reassurance and refinement of the recommended mitigation measures, that need to be addressed during the detailed design of the Works. At its cost, the Franchisee shall carry out a further, detailed, environmental impact assessment to address these outstanding issues and shall also carry out a separate environmental impact assessment on the conveyor scheme as described in Section 8.10.
- 8.4.2 Some of the existing dwellings adjacent to the Yuen Long Approach Road of the Conforming Scheme will be affected by traffic noise levels above those contained in the Hong Kong Planning Standards and Guidelines. Noise mitigation measures must be provided to reduce the effect to such standards. These measures will consist of either direct technical remedies such as noise barriers to be installed alongside the road or indirect remedies such as installation of air-conditioners and double glazing at the noise receivers (or any combination thereof). Indirect remedies will be carried out by the Franchisee at its own cost.
- 8.4.3 If considered necessary by Government, the Franchisee will be required to carry out further environmental assessment with regard to any Proposals which depart from the Conforming Scheme and implement any measures deemed necessary by Government. All Proposals are to take account of the Hong Kong Planning Standards and Guidelines issued by Government, Government Environmental Protection Ordinances and Environmental Impact Assessment findings/recommendations.
- 8.4.4 An environmental team shall be set up by the Franchisee to monitor and audit the environmental impact of the construction of Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road). The detailed requirements of the environmental team are shown in **Annex 19**.

- 8.4.5 The Franchisee shall carry out environmental monitoring and audit for the Franchise Area during the Operating Period as described in **Annex 20**.

8.5 DRAINAGE REQUIREMENTS

- 8.5.1 The Preliminary Drainage Impact Assessment contained in Volume 1 of the Final Report-Route 3 - Country Park Section Stage 2 Preliminary Design identifies the effects of the Conforming Scheme on the low lying areas and recommends measures to eliminate the problems. Outstanding issues that need to be addressed in the future detailed assessments are also described in the Preliminary Drainage Impact Assessment. The Franchisee shall conduct at its own cost a detailed drainage impact assessment for the Conforming Scheme, to supplement the Preliminary Drainage Impact Assessment, prior to the start of construction works. The detailed drainage impact assessment and the associated proposals for mitigation measures shall be agreed with and to the satisfaction of the Director of Highways in consultation with the Director of Drainage Services.
- 8.5.2 If considered necessary by Government, the Franchisee will be required to carry out at its own cost a full detailed drainage impact assessment with regard to any Proposals which depart from the Conforming Scheme and implement any measures deemed necessary by Government.
- 8.5.3 Drainage Services Department will carry out river channel works, (the Yuen Long and Kam Tin Main Channel works), along the Kam Tin Flood Plain to improve the drainage run-off in this area. The entire improvement works will be completed in several phases. The location plan for the Yuen Long and Kam Tin Main Channel Works is at **Annex 21**. There are two components of works which will have direct interfaces with the Conforming Scheme. The first is the improvement works for Yuen Long and Kam Tin - Stage I, Contract B, a section of which will interface with the Yuen Long Approach Road at Au Tau. It is intended that this project will commence in April 1994 for completion in April 1997. The second component is the works for the Main Drainage Channels for Yuen Long and Kam Tin - Stage II, Phase I and is in the vicinity of the Toll Plaza on the Yuen Long Approach Road under the Conforming Scheme. The work is scheduled for completion in 1998/99. There will be some drainage channels to be constructed by the Franchisee under the Conforming Scheme that will be connected to the main channels. Accordingly, the Franchisee will be required to liaise and coordinate closely with the Drainage Services Department on the interface design details and construction matters such that the construction of the main channels will not be adversely affected.
- 8.5.4 As the Yuen Long Approach Road embankment under the Conforming Scheme will encroach into the existing Kam Tin flood plain, the construction of the Conforming Scheme will reduce the existing flood storage of this area. The Franchisee shall carry out at its cost the measures agreed with the Director of Highways pursuant to Section 8.5.1 to ameliorate the potential flooding of low lying areas during the construction and operation of the Project. The Franchisee

shall be responsible for providing and maintaining any short term measures located outside the Project Limits to compensate flood storage capacity as a result of the Conforming Scheme or Alternative Proposal prior to completion of the Stage II, Phase I of Yuen Long and Kam Tin Main Channel Works in 1998/1999.

- 8.5.5 Some of the bridge structures within the Au Tau Interchange under the Conforming Scheme will span the Yuen Long and Kam Tin Main Drainage Channel Stage I (Contract B) works. Government's Drainage Channel contractor will form the river channel without permanent linings and handover the site to the Franchisee on a date specified in the Land Requirement Plans set out in **Annex 8**. The Franchisee shall maintain this section of river channel and keep its flow unobstructed during the period of its occupation. Upon completion of the bridge works, the Franchisee shall provide at its own cost the permanent lining to the satisfaction of the Director's Representative.
- 8.5.6 The access road from Kam Sheung Road to the Toll Plaza under the Conforming Scheme will span the existing Kam Tin River and the proposed Yuen Long Main Drainage Channel Phase II works. The Franchisee shall maintain flows in the existing Kam Tin River within the Project Limits, and construct a section of the new river channel within the Project Limits underneath the bridge crossing of the access road with a completion date to match the completion of the overall Main Drainage Channel Works in 1998/1999. The Franchisee will be required to allow the contractors for the Main Drainage Channel Works to pass through the Works Area for the access road in this area without restriction. The Franchisee shall liaise with the Director's Representative for the arrangement for the river relocation works.

8.6 ACABAS

- 8.6.1 The Advisory Committee on the Appearance of Bridges and Associated Structures (ACABAS) has been set up to ensure that designs undergo critical aesthetic examination prior to construction. ACABAS meets on a monthly basis and is chaired by a Regional Highway Engineer from the Highways Department with members representing the Architectural Services Department, Territory Development Department, Structures Division of Highways Department and Planning Department. The Franchisee is to consult ACABAS on all aspects of the permanent structural works which will be open to public view. Submissions to ACABAS by the Franchisee are to be made prior to detailed design and ACABAS recommendations are to be taken into account as detailed design proceeds. In the event of any disputes arising between ACABAS and the Franchisee, the Director of Highways or his representative will give a ruling on the issue.

8.7 GOVERNMENT ORGANISATION

The Director's Representative shall be the Director of Highways' representative for all aspects of the design, construction, commissioning and maintenance of the

Project, and all correspondence in connection with such aspects should be addressed to him. He will maintain an office with staff of appropriate experience to assist him in his duties.

8.8 RESTRICTION ON LAND AVAILABILITY AND USE

8.8.1 The areas of land to be made available to the Franchisee are shown in **Annex 8**, and will be subject to the following restrictions and other conditions in the licence agreement governing their occupation:-

- (a) those fish ponds which will be partly affected by the Project will be totally resumed for the construction work. The Franchisee shall be responsible for maintaining those parts of the fish ponds which will not be required for the permanent work. After completion of the construction work, the balance of the fish ponds shall be reinstated to their original status and handed back to Government;
- (b) the Franchisee shall be responsible for maintaining the access road at Ting Kau as described in detail in Section 8.12;
- (c) construction of the access road from Kam Sheung Road to the Toll Plaza under the Conforming Scheme will affect the Shek Wu Tong Road. The Franchisee shall maintain both vehicular and pedestrian access until proper connections can be provided at the access road;
- (d) all existing vehicular and pedestrian access shall be maintained at all times until the completion of the respective reprovisioning and construction works;
- (e) vehicular and pedestrian access shall be given to the Yuen Long and Kam Tin Drainage Channel Stage I contractor and maintenance contractor to gain access to carry out construction/maintenance works to the river channels after the Franchisee takes over the Works Sites in the vicinity of the Sha Po Roundabout. The Franchisee will be required to maintain public access on both east and west banks of the proposed channel near Sha Po Roundabout; and
- (f) all existing vehicular and pedestrian access must be maintained at all times for St. Joseph's School at Ko Po San Tsuen until its relocation to a new site.

8.8.2 It is anticipated that the land required for the Project will be made available to the Franchisee in three phases, commencing on the first day of the Franchise Period. Within each phase land will only be made available to the Franchisee as and when required to enable the Franchisee to commence and proceed with the Execution of the Works in accordance with the Works Programme. Details of phased possession are given in Section 6.

8.9 DESIGN STANDARDS (TEMPORARY WORKS)

The Temporary Works shall be designed to appropriate design standards, technical instructions, specifications and directives issued by Government. In the absence of appropriate Government design data, British or International Standards or Codes of Practice may be used. Particulars of Temporary Works and the method of construction to be employed shall be submitted for approval at the same time as approvals are sought under the Design and Checking Procedure specified in the Design Manual.

8.10 DISPOSAL OF EXCAVATED MATERIALS

- 8.10.1 The Environmental Impact Assessment Report of the Stage 2 Preliminary Design of Route 3 - Country Park Section has identified means of disposal of both suitable and unsuitable excavated materials. Tenderer's attention is drawn to the anticipated disposal of a large quantity (about 6 million m³ based on the Conforming Scheme) of excavated materials from the Ting Kau Interchange and the Tai Lam Tunnel. The haulage of this quantity of excavated materials along public roads would have a major traffic impact and will not be permitted.
- 8.10.2 The adoption is proposed of a conveyor system from the Ting Kau Interchange bridging over Tuen Mun Road and Castle Peak Road to a barge loading point at the headland between the Gemini Beaches. It is envisaged that the Beaches will be affected environmentally during the barge loading activities. Regional Council's agreement will be sought by Government in regard to this occupation. As the existing Regional Council's recreation facilities at the Beaches and the headland will be affected directly and indirectly by this occupation, the Franchisee shall at its cost reinstate all affected facilities and improve the barbecue area at the headland, the details of which have to be agreed by the Regional Council in due course. The Franchisee shall remove all installations relating to the conveyor system and temporary pier and carry out reinstatement with landscaping works to the areas affected by the scheme, after completion of the hauling activity.
- 8.10.3 The Franchisee shall carry out an environmental impact assessment for the conveyor system and the barge loading operation and carry out mitigation measures to ameliorate impacts to acceptable standards defined in Hong Kong Planning Standards and Guidelines. The Franchisee shall also carry out a marine impact assessment for the barge loading activity to the existing fairway outside the temporary pier (see Section 8.16).
- 8.10.4 The Franchisee shall make its own arrangements to dispose of the surplus excavated materials to location(s) to be agreed by the Director's Representative following consultation with the Fill Management Committee and Public Dumping Subcommittee. Rock may be required to be trimmed down to 250 mm before dumping. These materials may be disposed of to the following sites with prior agreement with the respective project offices and contractors:-

- (a) Lantau Port Development - CT 10 and CT 11 (Private Development);
- (b) a temporary breakwater off CT 10 and CT 11 (Government funded project);
and
- (c) Tseung Kwan O Areas 65, 66, 67 and 88 (parts) (public dumping sites managed by Government).

8.10.5 If crushing plant is to be used for crushing rock and for other uses, the Franchisee's attention is drawn to the Lands and Works Branch Technical Circular No. 24/85 set out in **Annex 22**.

8.11 PROGRAMME OF CONSTRUCTION - INTERFACE ISSUES

The Project has several interfaces with other projects which will be under construction at the same time. A plan showing the interfacing projects is shown at **Annex 23**. The Franchisee shall liaise and coordinate with other parties carrying out works which may have an effect on the Works, and arrange the Works to accommodate any interface including the following known interfaces:-

- (a) Route 3 - Country Park Section (Ting Kau Bridge) including part of Ting Kau Interchange. Detailed requirements are described in Section 8.12 below.
- (b) Tuen Mun Road Improvements. Detailed requirements are described in Section 8.12 below.
- (c) Yuen Long and Kam Tin Main Drainage Channels. The Franchisee shall reinstate any damaged drainage channels affected by the construction of the Project and provide access as mentioned in Section 8.8.1(d);
- (d) widening of the New Territories Circular Road from Au Tau to Mai Po;
- (e) improvements to Shek Wu Tong Access Road. The improvements will interface with the construction of the access road to the Toll Plaza under the Conforming Scheme. The improvement work will commence in January 1995 for completion in 1996. The detailed design of the access road by the Franchisee shall take account of the improvement works and the Franchisee shall liaise with the improvement contractor during construction;
- (f) improvements to Kam Tin Road. The improvements will upgrade the existing Kam Tin Road to a dual-two lane carriageway. The detailed design of the Yuen Long Approach Road shall allow for these improvement works to be implemented;

- (g) Kam Tin Bypass. This is a proposed dual-two lane carriageway bypassing Kam Tin town; and
- (h) Yuen Long Southern Bypass. A flyover will be constructed to link the Northern Connection of the Yuen Long Approach Road under the Conforming Scheme to the first phase of the Yuen Long Southern Bypass.

8.12 WORKS AT TING KAU AREA

- 8.12.1 In addition to Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road), there will be two other road projects to be constructed at the same time at Ting Kau. These projects are: Tuen Mun Road Improvements, and Route 3 - Country Park Section (Ting Kau Bridge). Both projects will have interface issues with the construction of the Conforming Scheme. A plan showing the interface details for the three road projects is shown as **Annex 24**.
- 8.12.2 The Tuen Mun Road Improvements will provide an additional climbing lane at certain sections of eastbound Tuen Mun Road. Work for the section at Ting Kau includes slope work and widening of bridge structures to accommodate a climbing lane. Construction work will commence in May 1994 for completion in July 1996.
- 8.12.3 The construction of Route 3 - Country Park Section (Ting Kau Bridge) consists of a long span bridge across the Rambler Channel, and approach viaducts to connect Route 3 - Tsing Yi Section with Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road). A pair of slip roads, Ramps G & H, will be provided to connect with Tuen Mun Road to and from Tuen Mun. Construction work will commence in September 1994 for completion in July 1997.
- 8.12.4 A common access road from Castle Peak Road at Ting Kau to the northern side of Tuen Mun Road will be formed by the Tuen Mun Road Improvements contractor for use by all three contractors. The Franchisee may use this access road for construction traffic, but not for haulage of excavated works, from Castle Peak Road to the Ting Kau Interchange. The Tuen Mun Road Improvement contractor will be responsible for maintaining this access road up to the date of substantial completion under his contract and the road will be handed over to the Ting Kau Bridge contractor. Upon completion of the Ting Kau Bridge contract, the Franchisee shall take over this road for management and maintenance until completion of the Works. The access road may be realigned by the former contractors to suit their sequence of works. The Franchisee shall also be responsible for removing any temporary structures, and reinstate the areas with hard and soft landscaping works upon completion of the construction of the Works.
- 8.12.5 Ramp C of the Conforming Scheme will be connected to the widened Tuen Mun Road. The portion of the Ramp abutting Tuen Mun Road will be constructed by

the Tuen Mun Road Improvements contractor, as shown in Final Report drawing No. 92393/01/101. The Franchisee shall treat this as a constraint for completion of detailed design of the Ramp.

8.12.6 As Ramp D of the Conforming Scheme will span across works sites for the Ting Kau Bridge approach viaduct and Tuen Mun Road widening, land for construction of Ramp D will be given to the Franchisee in phases, as shown in the drawing at **Annex 24**. In order to reduce the length of the span across the intersection of the Ting Kau Bridge viaduct and Tuen Mun Road, it is envisaged that a column will be located very close to the north-west corner of the intersection, and the foundation of the column may encroach into the proposed hard shoulder of the widened Tuen Mun Road. In order to allow flexibility in the design of the Ramp D foundation, land for the construction of about 50m of the Tuen Mun Road hard shoulder will be given to the Franchisee at the commencement of the Construction Period for the construction of the foundation and completion of the hard shoulder at the Franchisee's own cost. The hard shoulder shall be opened to traffic in June 1996 to tie in with completion of the Tuen Mun Road Improvements contract. In addition, the construction of Ramp D will affect an existing access road to the catchwater, and supporting slopes. The Franchisee shall maintain free access and the supporting slopes during the construction period. These slopes may have to be modified if they are affected by the construction of Ramp D.

8.12.7 The approach road to the Tai Lam Tunnel under the Conforming Scheme will connect to the approach viaduct of the Ting Kau Bridge to the north of Tuen Mun Road. The Ting Kau Bridge contractor will complete the bridge abutment and hand over the area to the Franchisee in March 1997 to complete the road works. The Franchisee shall treat this as a constraint for completion of detailed design of the approach road.

8.12.8 A traffic control and surveillance (TCS) system for the Ting Kau Bridge will be installed between 1996 and 1997 by a separate contractor. Some of the signs and control systems may be installed within the Project Limits. The Franchisee shall allow the TCS contractor to install the system and signs as appropriate.

8.13 AVOIDANCE OF NUISANCE

8.13.1 The Environmental Impact Assessment referred to in Section 8.4.1 has identified mitigation measures to be undertaken as part of the Project. This also makes recommendations for the monitoring and mitigation of construction nuisance in respect of air quality, noise, and water impacts. These recommendations are to be complied with by the Franchisee to the satisfaction of the Director's Representative.

8.13.2 In order to achieve an acceptable construction environment, conditions are to be imposed on the Contractor, subject to the approval of the Director's Representative, regarding (but not limited to):-

- (a) cleanliness of site;
- (b) requirement to abide by the Noise Control Ordinance (Cap. 400);
- (c) compliance with acceptable noise levels set out in Hong Kong Planning Standards and Guidelines;
- (d) maintenance of all roads, footways, access roads, streams, drains etc.;
- (e) discharge or disposal of all water and waste products;
- (f) construction, maintenance, removal and reinstatement of temporary drains;
- (g) dust suppression measures;
- (h) operation of concrete batching plant;
- (i) dredging equipment and procedures for the avoidance of pollution during dredging, transporting and dumping of dredged material and contaminated marine mud;
- (j) supply of water quality monitoring equipment and assistance for Government to monitor water quality;
- (k) protection of water quality at water intakes; and
- (l) site security and safety.

8.13.3 The Resident Engineer's site staff will be required to monitor the Contractor's plant and working methods and to ensure compliance with relevant standards and the conditions of land allocation.

8.14 TEMPORARY TRAFFIC ARRANGEMENTS

8.14.1 Construction shall be carried out to a programme agreed with the Director's Representative with whom temporary traffic arrangements required during construction, or for facilitating utility diversions, are also to be agreed. A traffic management group, chaired by the Director's Representative and attended by interested parties including Transport Department and the Royal Hong Kong Police Force, will meet whenever necessary in order to consider the Franchisee's proposals for temporary and permanent traffic diversions. Implementation of these arrangements, including diversionary measures and installation of traffic signals within the Project Limits, shall be included as part of the Project.

8.14.2 No temporary vehicular access to and from Tuen Mun Road will be permitted.

8.14.3 Haulage of excavated materials along public roads in Kam Tin and Yuen Long areas will not be permitted during peak hours.

8.15 EXISTING UTILITIES

8.15.1 Major existing utility installations, such as overhead power lines and pylons, and water works tunnels are shown in Volume 2 of the Final Report of the Route 3 - Country Park Section Stage 2 Preliminary Design. The Franchisee will be responsible for obtaining other existing utility information, and for checking and programming of all utility diversions required as a result of the Project. A set of water works installation drawings can be inspected in the Director's Representative's office upon request.

8.15.2 Existing utilities affected by the Project shall be diverted as necessary at the Franchisee's cost. The Franchisee shall liaise with the public utility companies and Government departments regarding the accommodation of plant and services related to the operation of Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road), and within the Project Area. The accommodation of such plant and services shall be subject to the approval of the Director's Representative. Any plant and services not related to the operation of Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road) will not be permitted to be laid along carriageways and hard shoulders.

8.15.3 The Franchisee shall liaise with the Water Supplies Department regarding the Tai Lam Chung water tunnel. Due to the close proximity of the water tunnel and construction of the road tunnel, a monitoring programme shall be required to the satisfaction of the Director's Representative to ensure construction work will not affect stability of the water tunnel.

8.16 MARINE AND NAVIGATIONAL REQUIREMENTS

8.16.1 A temporary barge loading point at headland between Gemini Beaches is proposed for the Franchisee to dispose of excavated materials from the Ting Kau Interchange and Tai Lam Tunnel excavations. Before the barge loading point is put into operation, the Franchisee shall conduct a marine impact assessment to demonstrate to the Marine Department that the impact on marine traffic is acceptable. If the impact on marine traffic is unacceptable to the Marine Department, the Franchisee shall not be entitled to operate the barge loading point until it has made such alterations as may be required by the Marine Department to reduce the impact on marine traffic to a level which is acceptable to the Marine Department.

8.16.2 The Franchisee shall liaise with the Marine Department on all aspects of the Project which are connected with marine traffic movements.

8.17 OPERATIONAL ASPECTS

8.17.1 A control centre shall be provided in the administration building. The control centre shall be responsible for the day-to-day operation of the tunnel and supervision of incident recovery when necessary. The control centre shall accommodate at least the following tunnel control systems:-

- (a) traffic control system;
- (b) traffic surveillance system;
- (c) toll collection system;
- (d) communication and radio re-broadcast systems;
- (e) ventilation control system;
- (f) lighting control system;
- (g) power supply system; and
- (h) fire services systems.

8.17.2 Detailed requirements for the above systems are contained in the Design Manual.

8.17.3 In addition to the control centre, an auxiliary control room shall be provided within the Ting Kau Interchange. This control room shall be equipped with adequate facilities to allow the basic traffic control functions to be carried out in case of emergency. Facilities shall be provided in the control room to allow overweight, overheight and other prohibited vehicles approaching the Tai Lam Tunnel to be detected, stopped and directed away from the Tai Lam Tunnel.

8.18 THE FRANCHISE AREA

8.18.1 The Franchisee shall be responsible for all activities within the Franchise Area and the toll plaza administration building, which are related to the operation and maintenance of Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road) and the approaches. These activities shall include the day-to-day traffic management and operation, equipment maintenance, and the maintenance (including cleansing) of all civil structures, carriageways, drains, box culverts, landscaping and land. There are some exceptions as described below:-

- (a) where bridges cross over public ground level roads and drainage channels: the Franchisee shall maintain the bridge structures and foundations. The area underneath the bridge will be excluded from the Franchise Area;

- (b) at public underpasses which form part of the road structure (e.g. box structures inside road embankment): the Franchisee shall maintain the structure of the underpass and all other daily maintenance will be carried out by Government; and
- (c) at public footbridges which are integrated with the Franchisee's structures; the Franchisee shall be responsible for the maintenance of such footbridges.

8.18.2 The Franchise Area shall commence at the bifurcation point of the last exit slip road on the approach to Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road), and terminate at the merging point of the first entry slip road at the opposite end thereof, save that the Franchise Area at Ting Kau approach viaduct will end at the relevant Project Limit. A plan showing the Franchise Area for the Conforming Scheme, incorporating the above principles, is shown at **Annex 7**. Tenderers are not expected to propose changes to this plan for the Conforming Proposal other than such minor departures referred to in Section 2.5.5. Adjacent or enclosed areas of land will also be included where deemed expedient by Government.

8.18.3 The limits of the Franchise Area covering slopes to be maintained by the Franchisee as shown on the Franchise Area Plan are indicative only. The exact extent will depend on the actual as-constructed extent of the slopes.

8.18.4 The limits of the Franchise Area with public roads are defined as the end of the merging noses.

8.19 MAINTENANCE REQUIREMENTS

8.19.1 All structures including slopes and earth retaining structures shall be capable of being maintained, and shall be so maintained, such that their reliability is unimpaired by any deterioration throughout their design life. Designs and construction techniques shall be carried out so as to minimise maintenance requirements, and shall also be such that access for, and ease of maintenance is facilitated. The carriageways, drainage, signing, electrical and mechanical works and ancillary equipment shall be maintained to standards as reasonably required by the Director's Representative. The Franchisee shall produce operation and maintenance manuals showing all the requirements for inspection and maintenance, compatible with the design life of the individual elements.

8.19.2 For elements of construction to be handed over to Government for future maintenance, the maintaining authority must endorse, with regard to maintenance aspects, the detailed design and the completed works to ensure acceptability of the finished product.

8.20 OUTLINE QUALITY PLAN

- 8.20.1 An outline quality plan shall be submitted as part of the Proposal. This shall contain, as a minimum, the Tenderer's proposed management quality plan detailing the management structure for the quality assurance of the Contractor's activities for the execution of all elements of the Works, whether carried out on-site or off-site and whether carried out direct by the Contractor or by sub-contractors.
- 8.20.2 The Franchisee shall submit a detailed quality plan, to include management, design, manufacturing, construction and installation quality plans. This shall be submitted to the Director's Representative for approval not less than twenty eight (28) days before commencement of the Works.

8.21 REQUIREMENT FOR CHECKING ENGINEERS

- 8.21.1 The Franchisee is to employ quality assurance engineers in the form of a Design Checker and a Works Checker.
- 8.21.2 The Design Checker, approved for this purpose and Project by the Director's Representative, shall be appointed by the Franchisee to certify that the designs for Temporary Works and permanent works throughout the project are in accordance with the stipulated criteria, Codes of Practice, design standards and all directives and in keeping with sound engineering design practices.
- 8.21.3 The Works Checker, approved for this purpose and Project by the Director's Representative, shall be appointed by the Franchisee to ensure that construction is carried out in accordance with the checked and certified in accordance with the Design and Checking Procedure and in accordance with construction standards, directives, specifications and instructions issued for this purpose by Government and pursuant to good construction practices.
- 8.21.4 All costs and fees arising from the appointment of the Design Checker and the Works Checker shall be borne by the Franchisee.
- 8.21.5 Subject to Section 5.4.3(b), the terms of engagement of the Design Checker and the Works Checker shall be agreed between the Franchisee and each party but such agreements shall not include any term(s) that will prejudice the independent roles of each party. The terms and conditions of engagement are subject to the approval of the Director's Representative, who is to be satisfied with the experience and number of staff to be engaged in checking duties.
- 8.21.6 The Design and Checking Procedure is contained in **Annex 25**.

8.22 TENDER PROGRAMME

8.22.1 The Tenderer shall submit a tender programme to show how he intends to carry out the works. The tender programme shall be developed as a critical path network and be presented in either bar chart or time scaled logic format, and shall clearly show the division of the Works into appropriate sections, the start and completion dates for each activity and their interrelationships, key dates and Works Areas and Works Sites handover dates. The tender programme shall be accompanied by a narrative statement describing programme activities, assumptions and logic, and highlighting the Tenderer's perception of the major constraints and critical areas of concern in the organisation, design, construction and completion of the Works.

8.23 WORKS PROGRAMME

8.23.1 Within sixty (60) days of execution of the Project Agreement, the Franchisee shall submit to the Director's Representative for his approval a programme of Works, in a form and manner to be approved by the Director's Representative, showing the Franchisee's plan for organising the Execution of Works, and for training and familiarisation of operational staff.

8.23.2 The Works Programme shall show all "Milestones", as agreed between the Franchisee and the Contractor, organised in a logical work-breakdown-structure including work stages and phases, and shall indicate critical paths(s). The Works Programme shall be accompanied by an Activity Report and a Narrative Statement.

8.23.3 Proposed Works Programmes submitted subsequent to approval of the initial Works Programme shall include the actual physical progress of work and forecast of work remaining. Actual progress shall be stated in percent complete, remaining duration, and actual start and finish dates for each activity in the Works Programme.

8.24 THREE MONTH ROLLING PROGRAMME

8.24.1 Within 14 days of execution of the Project Agreement, and thereafter at the end of each calendar month, the Franchisee shall submit to the Director's Representative its Three Month Rolling Programme in the form and detail to be agreed with the Director's Representative, setting out the work to be carried out during the following three months.

8.24.2 The Three Month Rolling Programme shall be an expansion of the current Works Programme, covering sequential periods of three months. The Three Month Rolling Programme shall provide more detail of the Franchisee's plan, organisation and execution of the work within these periods. In particular, the

Franchisee shall expand each activity planned to occur during the 3 month period, if necessary to a daily level of detail.

- 8.24.3 The Franchisee shall describe the discrete work elements and work element inter-relationships necessary to complete all work and any separable parts thereof including work assigned to sub-contractors.
- 8.24.4 Each submission of the Three Month Rolling Programme shall be accompanied by a Programme Analysis Report, describing actual progress to date, and the forecast for activities occurring over the three-month period.
- 8.24.5 If the Three Month Rolling Programme is at variance with the Works Programme, the Programme Analysis Report shall be accompanied by a supporting Narrative Statement describing the Franchisee's plan for the execution of the activities to be undertaken over the three month period, including programme assumptions and methods to be employed in achieving timely completion.
- 8.24.6 The Franchisee shall revise the Three Month Rolling Programme or propose revisions to the Works Programme, or both, from time to time as may be appropriate to ensure consistency between them.

8.25 MONTHLY PROGRESS REPORT

- 8.25.1 The Franchisee shall submit to the Director's Representative by the end of the first week of each calendar month its Monthly Progress Report in relation to the preceding month, which shall, amongst other things, highlight actual or potential departures from the Works Programme and state the measures which the Franchisee proposes to take in order to make good or reduce any delays, and include the updated Three Month Rolling Programme.
- 8.25.2 If requested by the Director's Representative, the Franchisee shall submit to the Director's Representative at weekly intervals a written report as to the progress of off-site manufacture of goods and materials.
- 8.25.3 The Franchisee shall also submit to the Director's Representative such other reports as may be required by any relevant authority or public body.

- End of Section Eight -

Schedule 1 - Glossary of Terms

SCHEDULE 1

GLOSSARY OF TERMS

In the Brief:-

"Airport Core Programme" and **"ACP"** means the projects listed as such in the memorandum of understanding between the Government of Great Britain and Northern Ireland and the Government of the People's Republic of China dated 3rd September 1991 concerning the construction of the new airport in Hong Kong and related questions;

"Alternative Proposal" means a Proposal other than a Conforming Proposal.

"Annex" means an annex to the Brief;

"Bona Fide Tender" means a Tender containing a Conforming Proposal and submitted in compliance with the requirements of the Brief;

"Brief" means this project brief, the Annexes, Schedules and any plans, drawings or other materials distributed with the Brief (and shall include any addenda issued in connection therewith);

"Conforming Proposal" means a Proposal which conforms in all material respects with the Conforming Scheme and which complies with the requirements of Section 2.5.3.

"Conforming Scheme" means a scheme for the Execution of the Works and the maintenance and operation of Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road) which conforms to the requirements set out in Section Eight (subject to amendment as provided in Section 6.7.2);

"Construction Contract" means the main contract entered into between the Franchisee and the Contractor in respect of the Execution of the Works;

"Constructed Facilities" means (a) that part of Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road) to be designed, constructed and commissioned by the Franchisee as more particularly described in the Design Manual, and (b) that part of the Works which will be performed by the Franchisee and transferred to Government at or before the end of the Construction Period and which are referred to in Section 1.4.1(a) and (b);

"Construction Period" means the period beginning on the day on which the Franchisee shall be entitled to start construction pursuant to the Enabling Ordinance and ending on the Operating Date;

"Construction Requirements" means Government's requirements for the Execution of the Works as set out in Section Eight and the Design Manual;

"Contractor" means any contractor employed by the Franchisee to design, construct, commission and/or maintain (during the Post Construction Maintenance Period) the Works;

"Design and Checking Procedure" means the procedure established by Government to approve and check the Execution of the Works, which procedure is contained in **Annex 25**;

"Design Checker" means the checking engineer employed by the Franchisee to carry out the design checking function in accordance with the Design and Checking Procedure;

"Design Manual" means the design manual prepared by Government contained in **Annex 3**;

"Designer" means the designer employed by the Franchisee to design the Works;

"Director's Representative" means the Government Engineer/Western Harbour Link or such other person nominated to fill that position by the Director of Highways from time to time;

"Enabling Ordinance" means an Ordinance passed by the Legislative Council, inter alia, granting the Franchise;

"Execution of the Works" means the design, construction, completion, testing, commissioning and, during the Post Construction Maintenance Period, the maintenance of the Constructed Facilities;

"Franchise" means the franchise granted to the Franchisee under the Enabling Ordinance to design, construct and complete the Works and to maintain and operate Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road) and to collect tolls for the use thereof by the public during the Operating Period;

"Franchise Area" means the area (other than the toll plaza administration building referred to in Section 6.3.3) to be operated and maintained by the Franchisee during the Operating Period which, in respect of the Conforming Scheme, is delineated on the plan shown in Annex 4 and described in Section 8.18 and which, upon the granting of the Franchise, will be delineated and marked as such on the plan deposited with the Land Registry pursuant to the Enabling Ordinance;

"Franchise Period" means, subject to Section 4.2.3, the period of thirty (30) years commencing on the date the Franchisee is entitled to start the Works pursuant to the Enabling Ordinance;

"Franchisee" means the company awarded the Franchise as specified in the Enabling Ordinance;

"Guarantee Agreement" means any guarantee, indemnity or assurance agreement referred to in Section 4.7 entered into in favour of Government in respect of the performance of the Franchisee's obligations in respect of the Project and the Franchise;

"Operating Date" means the date on which Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road) is opened to use by the public;

"Operating Period" means the period commencing on the Operating Date and ending at the expiry of the Franchise Period;

"Post Construction Maintenance Period" means the maintenance period under the Construction Contract referred to in Section 5.4.3(b)(iv);

"Project" means the project for the Execution of the Works and for the operation and maintenance during the Operating Period of Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road);

"Project Agreement" means the agreement in respect of the Project and the Franchise to be entered into between Government and the Franchisee including all relevant schedules and other attachments;

"Project Land" means the Works Areas and Works Sites to be made available to the Franchisee which, in respect of the Conforming Scheme, are delineated on the plan shown in **Annex 8**;

"Project Limits" means the project limits where the Works (other than the Works which comprise the construction of the new primary school - Section 6.11) interface with other infrastructure projects as the same is shown on the plan shown at **Annex 4**;

"Proposal" means a proposal for the Franchise and includes both a Conforming Proposal and an Alternative Proposal;

"Route 3 - Country Park Section (Tai Lam Tunnel and Yuen Long Approach Road)" means the completed dual 3-lane road comprising the Tai Lam Tunnel and the Yuen Long Approach Road, including the approach roads, interchanges and associated works and facilities all as more particularly described in the Brief;

"Schedule" means a schedule to the Brief;

"Section" means a section of the Brief;

"Sub-Contractor" means any sub-contractor employed by a Contractor in respect of the Execution of the Works;

"Tai Lam Tunnel" means the tunnel extending under the Tai Lam Country Park from the Ting Kau Bridge to the Yuen Long Approach Road;

"Technical Requirements" means the Construction Requirements and the Proposal of the Franchisee, as accepted by Government, in relation to the Execution of the Works;

"Temporary Works" means all temporary works of every kind required for the execution, completion and commissioning of the Works including without limitation all temporary buildings;

"Tender" means a tender submitted in respect of the Franchise in response to the Brief comprising one or more Proposals;

"Tenderer" means any person submitting a Tender;

"Ting Kau Bridge" means the bridge spanning Rambler Channel and linking Tsing Yi Island to Ting Kau, and associated approach viaducts;

"Toll Plaza" means the toll plaza to be constructed by the Franchisee as part of the Works which, in respect of the Conforming Scheme, is described in the Design Manual;

"Works" means all the construction works involved in the Project;

"Works Areas" means the land to be taken up by the Franchisee as works areas and which is shown on the plan in Annex 8;

"Works Checker" means the works checking engineer employed by the Franchisee who is to carry out the works checking functions in accordance with the Design and Checking Procedure;

"Works Programme" means the programme showing the sequence method and timing of the Execution of the Works;

"Works Sites" means the land to be taken up by the Franchisee as works sites and to be occupied by the Constructed Facilities at the end of the Construction Period, comprising all land within the Project Limits (other than Works Areas) and the site for the new school referred to in Section 6.11; and

"Yuen Long Approach Road" means the at-grade road linking the Tai Lam Tunnel and the New Territories Circular Road at Au Tau, and the associated interchange.

**Schedule 2 - Framework for
a Toll Adjustment Mechanism**

SCHEDULE 2

FRAMEWORK FOR A TOLL ADJUSTMENT MECHANISM

The purpose of this Schedule is to outline a framework for a toll adjustment mechanism.

The rationale for the toll adjustment mechanism is to maintain a low and stable toll regime while allowing a degree of certainty for the Franchisee over future toll increases.

The mechanism does not guarantee the Franchisee a level of revenue or a level of return. It is rather a mechanism by which the Franchisee has the option to implement toll increases which would, if other assumptions are met, achieve a level of revenue/return within specified parameters.

Basic Principles

- (1) Upon award of the Franchise, Government and the Franchisee agree upon a maximum and minimum level of Estimated Net Revenue figures for each year (respectively "**the Maximum Estimated Net Revenue**" and "**the Minimum Estimated Net Revenue**"), and a defined number of Anticipated Toll Increases ("**ATIs**") during the Operating Period which fall on a number of specified dates (the "Specified Dates").
- (2) Estimated Net Revenue figures are calculated as estimated revenue less estimated interest and estimated operating costs.
- (3) The Estimated Net Revenue figures are calculated on the basis that a number of ATIs are required at periodic intervals during the Operating Period.
- (4) Government and the Franchisee also agree on the amount of each ATI on the Specified Dates in money of the day terms.

Overview of how the Mechanism works

At the end of each operating year, the Franchisee submits to Government an audited statement of its Actual Net Revenue for that year. Actual Net Revenue is defined as actual revenue less actual interest and actual operating costs.

Under the mechanism, the Franchisee has the option to implement ATIs on the Specified Dates over the life of the Franchise, provided that Actual Net Revenue is below the Maximum Estimated Net Revenue for the year prior to the Specified Date.

As well as ATIs on Specified Dates, the mechanism also allows the Franchisee to bring forward an ATI from other years should Actual Net Revenue fall below the Minimum Estimated Net Revenue. However, should Actual Net Revenue in any year be in excess of the Maximum Estimated Net Revenue, all excess revenues are paid into a Toll Stability Fund (the "Fund"). Government has the sole right to utilise the Fund to stabilise tolls, either by deferring an ATI on a Specified Date or when Actual Net Revenue falls below the Minimum Estimated Net Revenue. Government may defer an ATI on a Specified Date by paying to the Franchisee the difference between the Actual Net Revenue and the Maximum Estimated Net Revenue for the year concerned. Alternatively, Government may defer the bringing forward of an ATI where Actual Net Revenue falls below the Minimum Estimated Net Revenue, by paying to the Franchisee the difference between these two amounts.