

- (b) the Employer does not warrant, guarantee or make any representation about the accuracy, adequacy or completeness of such information or data made available to the Contractor;
- (c) the Contractor acknowledges that such information or data does not form part of the Contract and that Sub-Clause 11.2 applies to the information or data; and
- (d) to the extent permitted by law, the Employer will not be liable upon any Claim by the Contractor arising out of or in connection with that information or data or its completeness."

Sub-Clause 11.2 Non-Reliance

The Contractor:

- (a) warrants that he did not in any way rely upon:
 - (i) any information, data, representation, statement or document made by or provided to the Contractor by the Employer; or
 - (ii) the accuracy, adequacy or completeness of such information, data, representation, statement or document,for the purpose of entering into the Contract;
- (b) warrants that he enters into this Contract based on his own investigations, interpretations, deductions, information and determinations including everything referred to in Clause 12.1; and
- (c) acknowledges that he is aware that the Employer has entered into the Contract relying upon the warranties in paragraphs (a) and (b) of this Sub-Clause 11.2.

Sub-Clause 12.1 Sufficiency of Tender

Delete the Sub-Clause and substitute the following:

"The Contractor warrants that he has and shall be deemed to have:

- (a) satisfied himself as to the correctness and sufficiency of his Tender and of the Contract Price and any other prices and rates stated in the Contract, all of which shall, except insofar as it is otherwise provided in the Contract, cover all his obligations under the Contract (including those in respect of the supply of goods, materials, Plant or services) and all matters and things necessary for the proper execution and completion of the Works and the remedying of any defects therein;

- (b) carefully inspected and examined the Site and its surroundings and information available in connection therewith and to have satisfied himself, before submitting his Tender, as to:
 - (i) the physical conditions or obstructions upon and below the surface of the Site, including without limitation sub-riverbed conditions;
 - (ii) the local conditions, including but not limited to the hydrological, hydrographic and climatic conditions at, near or relevant to the Site or any other condition or characteristic of the Site affecting or which may affect his performance of the Contract;
- (c) informed himself as to the extent and nature of work and materials necessary for the execution and completion of the Works and the remedying of any defects therein;
- (d) informed himself as to the means of access to the Site and the accommodation he may require;
- (e) informed himself as to the availability and cost of labour;
- (f) obtained all information relevant to the risks, contingencies and all other circumstances which may influence or affect his Tender and the Contract Price, which the Contractor could have obtained by making detailed enquiries;
- (g) informed himself of the requirements of any Government Body or Authority and the requirements of any law in relation to the Works or the performance of his obligations under the Contract and, without limiting the generality of the foregoing, in relation to measures necessary to protect the environment from any adverse effect or damage arising from execution of the Works; and
- (h) obtained all appropriate professional and technical advice on all matters and circumstances in respect of the matters referred to in paragraphs (a)-(g) of this Sub-Clause 12.1 prior to submitting his offer for the Works."

Sub-Clause 12.2 Not Foreseeable Physical Obstructions or Conditions

Delete the Sub-Clause and substitute the following:.

"If during the execution of the Works the Contractor considers he has encountered physical obstructions, other than unexploded ordnance, or physical conditions, other than climatic or water level conditions or the results from climatic or water level conditions, on or near the Site, which obstructions or conditions were, in his opinion, not foreseeable by a competent and experienced contractor the Contractor shall, within 14 days of becoming aware of the obstruction or condition, give notice thereof to the Engineer, with a copy to the Employer, together with details of:

- (a) the physical conditions encountered and in what respects they differ materially from those which a competent and experienced contractor should reasonably have expected if he had done those things which the Contractor is deemed to have done under Clause 11 and Sub-Clause 12.1;
- (b) the additional work and additional resources which the Contractor estimates to be necessary to deal with the physical conditions;
- (c) the time the Contractor anticipates will be required to deal with the physical conditions and the expected delay in achieving completion of the Works; and
- (d) the Contractor's estimate of the cost of measures necessary to deal with the physical conditions.

Climatic or water level conditions or the results from climatic or water level conditions shall include wind, precipitation, temperature, humidity, light, lightning, drought, flood, tide, surge and current"

Sub-Clause 12.3 Engineer to Investigate

On receipt of a notice under Sub-Clause 12.2 from the Contractor the Engineer shall:

- (a) determine whether the obstructions or conditions, in his opinion, could not have been reasonably foreseen by an experienced contractor; and
- (b) within 21 days of making a determination, notify the Contractor and Employer of his determination together with any instructions which he may have relating to the obstructions or conditions.

Sub-Clause 12.4 Extension of Time and Costs for Not Foreseeable Physical Obstructions or Conditions

Where it is determined by the Engineer that the obstructions or conditions encountered could not have been reasonably foreseen by a competent and experienced contractor the Engineer shall determine:

- (a) any extension of time to which the Contractor is entitled under Clause 44;
- (b) the amount of any costs calculated in accordance with Sub-Clause 44.4, which may have been incurred by the Contractor, after the giving of a notice under Sub-Clause 12.2, by reason of such extension of time, which shall be added to the contract price; and,
- (c) the amount of any cost itself of any measures necessary to deal with the physical conditions, which shall be added to the contract price.

Such determination will take account of any instruction which the Engineer may issue to the Contractor in connection therewith.

The Contractor's entitlement under paragraph (b) shall be his only right to payment of money arising from an extension of time as a result of a not foreseeable physical obstruction or condition.

Sub-Clause 12.5 Mitigation

The Contractor shall take all reasonable measures necessary to mitigate the consequences and effects of the obstructions or conditions including compliance with all instructions issued by the Engineer relating to the obstructions or conditions.

Sub-Clause 13.2 Work and materials of a minor nature

Work and materials of a minor nature not expressly mentioned in the Contract but which a competent and experienced contractor should realise are necessary for the satisfactory completion and performance of the Works:

- (a) shall be supplied and executed by the Contractor without adjustment to the Contract Price;
- (b) shall not constitute a variation within the meaning of Sub-Clause 51.1; and
- (c) shall not entitle the Contractor to make a Claim.

Sub-Clause 14.1 Program To Be Submitted

"Add the following paragraphs to the end:

The time within which the program shall be submitted shall be 21 days.

The Contractor shall submit with his programme:

- (a) details of his proposals for the management and organisation of the Contract
- (b) curricula vitae of proposed key staff
- (c) details of his proposals for staff, labour and training
- (d) details of proposed Contractor's Equipment
- (e) proposed working hours
- (f) details of the organizations to provide engineering services
- (g) details of proposed major subcontractors and suppliers
- (h) details of the source of materials

- (i) details of his proposed construction method statement

The programme, and all such information to be provided with it shall elaborate on and update that submitted as schedules TS - 1 to TS - 6 and TS - 8 to TS - 11 with the Tender.”

Sub-Clause 14.2 Revised programme

Add the following paragraph to the end:

“Despite any changes to the programme, whether as the result of comment by the Engineer or otherwise, the Contractor shall nevertheless remain responsible for all planning, scheduling, sequences, methods, techniques and otherwise for the performance of his obligations under the Contract, including the obligation to complete the Works within the Time for Completion (notwithstanding that the programme may show delayed completion).”

Sub-Clause 14.3 Cash Flow Estimate To Be Submitted

Add the following two paragraphs to the end:

“The time within which the detailed cash flow estimate shall be submitted shall be 21 days.

The cash flow estimate shall elaborate on and update that submitted as Schedule TS - 15 with the Tender.”

Sub-Clause 14.4 Contractor not Relieved of Duties or Responsibilities

Delete the Sub-Clause and substitute the following:

“The submission to and review, comment or rejection by the Engineer of such programmes and other information to be provided with it and the provision of such cash flow estimates shall not:

- (a) relieve the Contractor of any of his duties or responsibilities under the Contract, especially the obligation to achieve completion of the Works or a Section by the Time for Completion;
- (b) evidence or constitute a direction by the Engineer to accelerate, disrupt, prolong or vary any of the Works;

Sub-Clause 15.1 Contractor’s Superintendence

Add the following two sentences to the end of the 1st paragraph.

"The Contractor's authorized representative shall have the authority to make decisions and negotiate on behalf of the Contractor. An appropriate notarised power of attorney shall be provided upon appointment of the Contractor's authorised representative."

Sub-Clause 15.2 Language Ability of Contractor's Representative

The Contractor's authorised representative shall be fluent in written and spoken English.

Sub-Clause 16.2 Engineer at liberty to object

Add the following words after "the Contractor" in line 2:

"or any subcontractor"

Sub-Clause 16.3 Language Ability Of Superintending Staff

All of the Contractor's superintending staff down to foreman level shall be fluent in written and spoken English. A reasonable proportion shall also be fluent in Vietnamese.

All superintending staff of subcontractors down to foreman level shall be fluent in written and spoken English. A reasonable proportion shall also be fluent in Vietnamese.

Sub-Clause 16.4 Staff and Labour from Viet Nam

The Contractor is encouraged, to the extent practicable and reasonable, to employ staff and labour from sources within Viet Nam. He shall encourage his subcontractors to do likewise

Sub-Clause 17.1 Setting Out

Add the following paragraph to the end:

"If at any time during the execution of the Works, the position or level of any point of reference as established and provided by the Employer is disturbed, the Contractor shall at his own cost restore the point to its original state. This work shall be carried out by a surveyor approved by the Engineer."

Sub-Clause 17.2 Prior Works

Where the proper execution of the Works is dependent upon or appreciably affected by the quality or completeness of any work on or around the Site to be carried out or that has been carried out by any other person (the "prior work") the Contractor shall:

- (a) inspect the prior work as soon as is practicable after the Employer gives the Contractor possession of the site pursuant to Sub-Clause 42.1;
- (b) if he discovers any defects or matters in or connected with the prior work which in his opinion render or are likely to render the prior work unsuitable, unsatisfactory or detrimental in any way to the proper execution of the Works, forthwith notify the Engineer in writing providing:
 - (i) full particulars of the defects or matters identified; and
 - (ii) the reasons for the opinion formed by him in respect of the defects or matters identified; and
- (c) not commence or continue with the execution of any part of the Works dependent upon or appreciably affected by the prior work the subject of the notification referred to in paragraph (b).

On receipt of the Contractor's notification the Engineer shall investigate the prior work the subject of the notification and:

- (d) if the Engineer agrees with the Contractor, issue an instruction to the Contractor and value any work carried out by the Contractor by reason of that direction as a Variation under Sub-Clause 52.1; or
- (e) if the Engineer disagrees with the Contractor, issue an instruction to the Contractor to commence or continue with the Works.

If the Contractor fails to:

- (f) inspect the prior work as required by this Sub-Clause 17.2; or
- (g) notify the Engineer of any defects or matters which should have been detected at the time of such inspection by a competent and experienced contractor and which may render the prior work unsuitable, unsatisfactory or detrimental in any way for the proper execution of the Works.

and the prior work subsequently proves to be unsatisfactory for the proper execution of the Works, then any work which is required to be executed in order to render the prior work suitable, satisfactory and non-detrimental for the proper execution of the Works shall be performed by the Contractor at his own expense.

Sub-Clause 20.4 Employer's risks

Delete Paragraph (h) and substitute the following

- (h) "any operation of the forces of nature other than climatic or water level conditions, or the results from climatic or water level conditions, against which an experienced contractor could not reasonably have been expected to take precautions"

Sub-Clause 25.5 Evidence of Currency of Insurance

The Contractor shall, whenever required, produce to the Engineer evidence that premiums have been paid up to date for all insurances required under the Contract and that the policies remain in force.

Sub-Clause 27.1 Fossils

Delete subparagraph (b) and substitute the following

- "(b) the amount of such extra costs, calculated in accordance with Sub-Clause 44.4, which shall be added to the Contract Price. The Contractor's entitlement under this paragraph (b) shall be his only right to payment of money arising from such articles."

Sub-Clause 28.2 Royalties

Add a second sentence as follows:

The Contractor shall also be liable for all payments or compensation, if any, levied in relation to the dumping of, or otherwise disposing of, any materials.

Sub-Clause 31.1 Opportunities for other contractors

Add the following paragraph to the end:

The Employer shall not be liable upon any Claim, and the Contractor shall have no Claim against the Employer, arising out of or in connection with the carrying out of work by any of the persons referred to in paragraphs (a) to (c) of this Sub-Clause 31.1 including arising out of or in connection with any delay, disruption or interference to the Works.

Sub-Clause 34.2 Rates of Wages and Conditions Of Labour

The Contractor shall pay rates of wages and observe conditions of labour not less favourable than those established for the trade or industry where the work is carried out. In the absence of any rates of wages or conditions of labour so established, the Contractor shall pay rates of wages and observe conditions of labour which are not less favourable than the general level of wages and conditions observed by other employers whose general circumstances in the trade or industry in which the Contractor is engaged are similar.

Sub-Clause 34.3 Hiring of Labour for the Works

The Contractor shall, to the maximum extent possible, employ workers from the immediate vicinity of the Site and shall select such employees on the basis of competence, efficiency and skill in the various occupations and trades.

Sub-Clause 34.4 Employment of Persons in Service of Others

The Contractor shall not recruit or attempt to recruit staff or labour from amongst persons in the service of the Employer or the Engineer.

Sub-Clause 34.5 Expatriate Visas And Work Permits

The Contractor shall be responsible at his own cost for obtaining any visas and work permits required by him for expatriate workers. Wherever possible and pursuant to any privileges granted by the Government of Viet Nam to the Employer for this project the Employer will assist the Contractor in obtaining such visas and work permits.

Sub-Clause 34.6 Repatriation of Labour

The Contractor shall be responsible for the return to the place where they were recruited of all such persons as he recruited and employed for the purpose of or in connection with the Contract and shall maintain such persons as are to be so returned in a suitable manner until they shall have left the Site or in the case of persons who are not nationals of and have been recruited outside of Viet Nam, shall have left Viet Nam.

Sub-Clause 34.7 Employment of Vietnamese Professional Staff/Training

Unless otherwise approved by the Engineer the Contractor shall arrange for the employment on the Works of at least six Vietnamese engineers and technical staff for the purposes of providing training in the course of their work duties. The Contractor shall provide training in estimating, contract negotiations, construction management, quality control, quality assurance, resource scheduling, and financial management.

Each of these engineers shall be engaged for a period of not less than twelve (12) months and shall be given adequate supervision and duties appropriate to their training needs and their qualifications. The Contractor shall pay an site allowance to be agreed with the Engineer to these nominated engineers.

Sub-Clause 34.8 Safety

The Contractor shall be solely responsible for the safety, protection and security of his personnel, third parties and the public at large on the site or at any location where the Works are being executed.

The Contractor shall have on his staff at the Site a suitably qualified officer dealing only with questions regarding the safety and protection against accidents of all staff and labour. This officer shall have the authority to issue instructions and take protective measures necessary to prevent accidents. He shall be fluent in written and spoken English and Vietnamese.

The officer so designated shall be made known to all employees by the posting of his name, designation and photograph in prominent positions on Site.

Sub-Clause 34.9 Health of Site Personnel

Prior to their employment, all labour and staff shall be given a health check and the Contractor shall keep health certificates of all employees. Workers shall be screened for drug abuse (especially heroin) and drug addicts shall not be employed.

The Contractor shall provide an AIDS education programme in accordance with the requirements of the Ministry of Health.

The Contractor shall provide, equip and maintain **on both sides of the river (Package 2 only)** throughout the duration of the Contract, a medical room together with first aid equipment and stores, and other suitable facilities and arrangements for the first aid treatment of all persons on the site and the transportation of any injured persons to hospital.

A sufficient number of the Contractor's employees who speak Vietnamese shall be fully qualified in first aid so that first aid will be immediately available in case of accident at any time and at any place throughout the Site and any off-site camps, housing or other facility. The persons so designated shall be made known to all employees by the posting of their name, designation and photograph in prominent positions on Site.

Sub-Clause 34.10 Measures against Insect and Pest Nuisance

The Contractor shall:

- (a) at all times take the necessary precautions to protect all staff and labour employed on the site from insect nuisance, rats and other pests and reduce the dangers to health and the general nuisance occasioned by the same;
- (b) provide his staff and labour with suitable prophylactics for the prevention of malaria and take steps to prevent the formation of stagnant pools of water;
- (c) comply with all the regulations of the local health authorities in these respects and shall in particular arrange to spray thoroughly with approved insecticide all buildings erected on the Site. Such treatment shall be carried out at least once a year or as instructed by the Engineer.

Sub-Clause 34.11 Epidemics

In the event of any outbreak of illness of an epidemic nature, the Contractor shall comply with and carry out such regulations, orders and requirements as may be made by the Government, or the local medical or sanitary authorities, for the purpose of dealing with and overcoming the same.

Sub-Clause 34.12 Occupational Health, Safety and Rehabilitation Plan to be Submitted

The Contractor shall, within 21 days after the date of the Letter of Acceptance, submit to the Engineer for his consent a detailed occupational health, safety and rehabilitation plan. This plan shall be in accordance with the current Vietnamese occupational health, safety and rehabilitation management system guidelines and shall elaborate on and update that submitted as Schedule TS - 18

The Occupational Health Safety and Rehabilitation Plan shall be included as part of the Project Quality Plan and be subject to and controlled by, the requirements of the Project Quality System.

The Contractor shall promptly update the Occupational Health, Safety and Rehabilitation Plan to take into account generally accepted occupational, health, safety and rehabilitation practices, the effectiveness of the existing Occupational Health, Safety and Rehabilitation Plan and any changes in any law or the enactment of any new law which affects or may affect the Contractor carrying out the Works.

Sub-Clause 34.13 Contractor not to Commence or Continue Work

The Contractor shall not commence any part of the Works until the Occupational Health, Safety and Rehabilitation Plan has been submitted to the Engineer. If at any time the Engineer believes the Plan to be inadequate he shall inform the Contractor, in writing, and the Contractor shall not continue with any part of the Works which the Engineer considers affected by the inadequacy of the Plan.

Sub-Clause 34.14 Revised Occupational Health, Safety and Rehabilitation Plan

If at any time it should appear to the Engineer that the occupational health and safety on the site is in any way compromised the Contractor shall produce, at the request of the Engineer, a revised Occupational Health, Safety and Rehabilitation Plan showing the modifications to such plan necessary to an appropriate level of health and safety.

Sub-Clause 34.15 Housing for Labour

The Contractor shall provide and maintain such accommodation and amenities necessary for compliance with his obligations under the Contract for all his staff and labour, employed for the purposes of or in connection with the Contract, including all fencing, water supply (both for drinking and other purposes), electricity supply, sanitation, cookhouses, fire prevention and fire-fighting equipment, air conditioning, coolers, refrigerators, furniture and other requirements in connection, with such accommodation or amenities.

On completion of the Contract, unless otherwise agreed with the Employer, the accommodation and amenities provided by the Contractor shall be removed and the site reinstated to its original conditions, all to the approval of the Engineer.

Sub-Clause 34.16 Supply of Foodstuffs

The Contractor shall arrange for the provision of a sufficient supply of suitable food at reasonable prices for all his staff and labour, and those of his Subcontractors, for the purposes of or in connection with the Contract.

Sub-Clause 34.17 Supply of Water

The Contractor shall, so far as is reasonably practicable, having regard to local conditions, provide on the Site an adequate supply of drinking and other water for the use of his staff and labour.

Sub-Clause 34.18 Alcoholic Liquor And Prohibited Drugs

The Contractor shall not allow any alcoholic liquor or drugs on the Site.

Sub-Clause 34.19 Arms And Ammunition

The Contractor shall not allow any arms or ammunition of any kind on the Site except those carried by personnel designated to carry such arms or ammunition by virtue of their position.

Sub-Clause 34.20 Festivals And Religious Customs

The Contractor shall, in all dealings with his staff and labour, have due regard to all recognized festivals, days of rest and religious or other customs.

Sub-Clause 34.21 Disorderly Conduct

The Contractor shall at all times take all reasonable precautions to prevent any unlawful riotous or disorderly conduct by or amongst his staff and labour and for the preservation of peace and protection of persons and property in the neighbourhood of the Works against the same.

Sub-Clause 34.22 Burial of the Dead

The Contractor shall make all necessary arrangements, in accordance with Vietnamese regulations, for the transport, to any place as required for burial, of any of his expatriate employees or members of their families who may die in Viet Nam. The Contractor shall also be responsible, to the extent required by the local regulations, for making any arrangements with regard to burial of any of his local employees who may die while engaged upon the Works.

Sub-Clause 34.23 Observance by Sub-contractors

The Contractor shall be responsible for observance by his Sub-contractors, and their subcontractors, of the foregoing provisions of Sub-Clauses 34.2 to 34.22.

Sub-Clause 35.2 Supply of Records and Daily Return

In addition to the requirements of Clause 35.1 the Contractor shall supply, in a form agreed with the Engineer, all records that may be required by the Engineer relating to dates and details of all engineering operations, rainfall, temperature and other weather conditions, river levels, and a daily return showing in detail by trades the staff, the number of men employed, the work on which they are engaged, the plant on site, the hours worked and any other particulars in relation thereto that the Engineer may additionally require.

Sub-Clause 35.3 Records Of Safety And Health

The Contractor shall maintain such records and prepare such reports concerning the safety, health and welfare of persons and any damage to property as the Engineer may from time to time prescribe.

Sub-Clause 35.4 Reporting Of Accidents

The Contractor shall report in writing to the Engineer and to the local police or the local labour inspector details of any accident involving injury to any persons occurring on the Site within six hours after its occurrence.

Sub-Clause 36.5 Engineer's Determination where Tests not Provided for

Delete subparagraph (b) and substitute the following

- “(b) the amount of any costs calculated in accordance with Sub-Clause 44.4, which may have been incurred by the Contractor by reason of such extension of time, which shall be added to the contract price; and,
- (c) the amount of the cost of the test itself, which shall be added to the Contract Price”

The Contractor's entitlement under paragraph (b) shall be his only right to payment of money arising from an extension of time as a result of tests not provided for.

Sub-Clause 36.6 Manufacturer's Direction

All manufactured articles, materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with this Contract and the manufacturer's printed recommendations. Where reference is made to manufacturer's recommendations, the Contractor shall submit four copies of such directions to the Engineer for his review and reference. Any conflict between the provisions of the Contract and any manufacturer's recommendations will be resolved by the Engineer and the

Contractor shall have no basis for any claim arising from his compliance with any ruling by the Engineer

Sub-Clause 37.1 General Requirements

Delete the words

“The Engineer, and any person authorised by him”

at the beginning of the Sub-Clause and substitute the following:

“The Employer or the Engineer, and any person authorised by either of them”

Sub-Clause 37.6 General Requirements

Testing shall be arranged by the Contractor in accordance with the requirements of the approved Quality System referred to in Clause 84.

The Contractor shall be responsible for arranging any testing directed by the Engineer.

Unless otherwise specified or approved, all testing under this Contract shall be carried out in a laboratory which is registered with an authority approved by the Engineer for the sampling and testing required.

The laboratory employed shall submit three copies of each test report direct to the Engineer.

Sub-Clause 37.7 Approval of Test

When the Contractor is satisfied that materials or the whole or a Section of the Works are in accordance with the Specification, he shall give written notification to the Engineer designating the materials or the Section of Work which is ready for inspection for acceptance.

The Engineer will provide written advice to the Contractor stipulating any testing required and the test locations.

Sub-Clause 37.8 Acceptance

The materials or work being tested will not be accepted by the Engineer as having passed the tests until the results of all tests relating to that material or work are satisfactory. The Engineer shall return to the Contractor one copy of the test certificates endorsed with the Engineer's acceptance or rejection of the material or work which the testing represents.

Sub-Clause 37.9 Contractor Not Relieved

The Contractor acknowledges that:

- (a) in conducting or arranging for inspection and testing in accordance with this Clause 37, the Engineer is under no obligation or duty to assist the Contractor to identify all or any errors, omissions or defects in the materials or Plant;
- (b) any acceptance, rejection, instruction or comment by the Engineer in relation to the inspection or testing carried out in accordance with this Clause 37 shall not relieve the Contractor of any of his obligations under the Contract.

Sub-Clause 40.2 Engineer's Determination following Suspension

Delete subparagraph (b) and substitute the following

- “(b) the amount of such extra costs, calculated in accordance with Sub-Clause 44.4, which shall be added to the Contract Price”

Add the following new paragraph to the end:

“The Contractor's entitlement under paragraph (b) shall be his only right to payment of money arising from any suspension.”

Sub-Clause 42.2 Failure to Give Possession

Delete subparagraph (b) and substitute the following

- “(b) the amount of such extra costs, calculated in accordance with Sub-Clause 44.4, which shall be added to the Contract Price”

Add the following new paragraph to the end:

“The Contractor's entitlement under paragraph (b) shall be his only right to payment of money arising from any failure to give possession.”

Sub-Clause 42.4 Site Conditions

The Contractor shall take the Site in the condition in which it is handed over. The Contractor shall be entirely responsible for the removal, and disposal, as necessary of all buildings, materials, debris etc. from the site.

Unless otherwise specified in the Contract and subject to the provisions of Clause 27.1 of the Conditions of Contract, all materials, plant, equipment, fixtures and other things salvaged from the site or from the Works shall become the property of the Contractor.

Sub-Clause 42.5 Access Routes

The Contractor:

- (a) shall be deemed to warrant that he has satisfied himself as to the suitability and availability of the routes of access to and egress from the Site, including without limitation all roads, highways, waterways and bridges which he chooses to use;
- (b) shall provide any signs or directions necessary for the guidance of his staff, labour and others;
- (c) shall make all necessary arrangements with the relevant authorities, including obtaining any permits that may be necessary for the use (including for heavy construction traffic) of access routes, signs and directions; and
- (d) acknowledges that:
 - (i) the Employer will not be responsible for any Claims which may arise from the use or otherwise of any access route, including without limitation any claim arising from damage to any bridge, road or waterway;
 - (ii) the Employer does not guarantee the suitability or availability of route of access to and/or egress from the Site, and will not be responsible for any difficulties encountered by the Contractor as a result of any non-suitability or non-availability for continuous use of any such access routes during construction.

Sub-Clause 42.6 Provision of Access to Others

The Contractor shall at all reasonable times give to the Employer and to the Engineer and to any other persons, authorised in writing by the Employer or by the Engineer, access to the Works and shall provide every reasonable facility necessary for the supervision, examination and testing of any work or materials for the Contract at any place where any such work is being or is to be carried out or materials are being prepared.

Sub-Clause 44.1 Extension of Time for Completion

Delete the Sub-Clause and substitute the following:

“The Contractor accepts the risk of and liability for completion of the Works strictly in accordance with the Contract, notwithstanding encountering delay or disruption in the execution of the Works, except to the extent provided by this Clause 44.

In the event of:

- (a) any Variation directed under Sub-Clause 51.1,
- (b) the circumstances set out in Sub-Clauses 6.4 (Delays and Cost of Delays of Drawings), 12.4 (Extension of Time and Costs for Not Foreseeable Physical Obstructions or Conditions), 27.1 (Fossils) or 42.2 (Failure to Give Possession),
- (c) any delay, impediment or prevention (including a breach of the Contract) by the Employer, or
- (d) Sub-Clauses 36.5 (Engineer's Determination where Tests not Provided for) or 40.2 (Engineer's Determination following Suspension) applying and,

having actually delayed, or be likely to delay, the Contractor in reaching substantial completion of the Works or any Section or any part thereof;

- (e) within the Time for Completion, in a manner which will prevent him from achieving substantial completion of the Works or a Section within the Time for Completion; or
- (f) after the Time for Completion, in a manner which will delay him in reaching substantial completion of the Works or a Section;

the Engineer shall, after due consultation with the Employer and the Contractor, determine the amount of such delay in reaching substantial completion and shall notify the Contractor accordingly, with a copy to the Employer, and the Time for Completion of the Works, or such Section or part thereof shall be extended by like amount

It is a condition precedent of the Contractor's entitlement to an extension that the Contractor must:

- (g) have given the notices required by Sub-Clause 44.2;
- (h) not have caused, or contributed to the delay;
- (j) have taken and continue to take all steps necessary both to preclude the cause of the delay and to avoid or minimise the consequences of the delay;
- (k) have been actually delayed, or be likely to be delayed in reaching substantial completion of the Works or any Section or any part thereof;

Sub-Clause 44.2 Contractor to Provide Notification and Detailed Particulars

Delete the Sub-Clause and substitute the following

“Provided that the Engineer is not bound to make any determination unless:

- (a) the Contractor has within 14 days after such event has first arisen notified the Engineer with a copy to the Employer:
- (b) the Contractor has within 28 days, or such other reasonable time as may be agreed by the Engineer, after such notification submitted to the Engineer detailed particulars of any extension of time to which he may consider himself entitled in order that such submission may be investigated at the time. Such detailed particulars shall include:
 - (i) all relevant details of the nature of the cause of the delay and the extent of the delay;
 - (ii) reference to the critical activities of the program submitted to the Engineer under Sub-Clause 14.1 (or as revised in accordance with Sub-Clause 14.1 or 14.2) and clearly showing how the delay involves an activity which is critical to the maintenance of progress in the execution of the Works or a Section so as to achieve completion of the Works within the Time for Completion of the Works or the Section; and
 - (iii) the steps which have been taken to alleviate and otherwise deal with the delay and its cause.”

Sub-Clause 44.4 Agreed Damages for Delay

The Contractor shall be entitled to be paid the amount specified in Tender Schedule TS – 14, Items 1 and 2, for each day by which the Time for Completion is extended in accordance with sub clause 44.1.

This amount:

- (a) is the agreed damages which shall be payable by the Employer in these circumstances; and
- (b) shall be a limitation upon the Employer's liability to the Contractor for any delay or disruption which:
 - (i) the Contractor encounters in performing the Works whether or not he is granted an extension of time; and
 - (ii) arises from a breach of contract by the Employer.

Sub-Clause 45.1 Restriction On Working Hours

Delete the last sentence:

"Provided that the provisions of this Clause shall not be applicable in the case of any work which it is customary to carry out by multiple shifts."

Sub-Clause 45.2 Relaxation Of Restrictions On Working Hours

The Contractor is at liberty to propose the carrying on of works during the night and on locally recognised days off rest and approval of any such proposal will not be unreasonably withheld subject to the Contractor agreeing to reimburse to the Employer the costs of any additional supervision resulting therefrom.

Sub-Clause 49.5 Extension of Defects Liability Period

If the Contractor carries out any work in accordance with this Clause 49, then the Defects Liability Period in respect of that work will be extended to a period of 365 days commencing upon the date of the completion of that work.

Sub-Clause 52.1 Valuation Of Variations

Add the following three new paragraphs to the end

"The rates in the Schedule of Prices for the Construction of Fixed Price Works and the Schedule of Rates for the Construction of Remeasured Works are inclusive of all labour, materials, overhead costs and profit, set down against the items and will be taken as the full inclusive rates for the finished work as shown on the Drawings and/or described in the Specification or which can reasonably be inferred from them, and cover the cost of every description of temporary works required, all the Contractor's obligations under the Contract, and all matters and things necessary for the proper completion and maintenance of the Works.

If the Contract fails to contain any applicable rates, or any rates which may be used as the basis for valuation, and rates need to be agreed upon or fixed for the purpose of valuing variations in accordance with the first paragraph of this Sub-Clause 52.1, the overhead and profit elements of such rates shall be those given in the Schedule of Overheads and Profit

The agreement, fixing or determination of any rates or prices as aforesaid shall include both Vietnamese Dong and Japanese Yen."

Sub-Clause 52.2 Power Of Engineer To Fix Rates

Add a final sentence to the first paragraph as follows:

“The agreement or fixing of any rates or prices as aforesaid shall include both Vietnamese Dong and Japanese Yen.”

Sub-Clause 52.3 Variations Exceeding 15 Per Cent

Add two additional paragraphs as follows:

“The adjustment or fixing of any sum as aforesaid shall have due regard to both the Vietnamese Dong and Japanese Yen portion included in the Effective Contract Price.

For the purpose only of establishing the percentage of addition to or deduction from the Contract Price, the combined value of the Vietnamese Dong and Japanese Yen portions of the varied works and the combined value of the Vietnamese Dong and Japanese Yen portion of the Effective Contract Price shall be converted to single totals in Vietnamese Dong using the Cash/TC Buying exchange rate of the Vietcombank (Ha Noi Branch) as most recently published by the Bank at the time of issue of the Taking Over Certificate for the whole of the Works.”

Sub-Clause 52.5 Daywork Rates

Reference in Sub-Clause 52.4 to daywork schedule shall mean the Schedule of Rates for Daywork.

The rates in the Schedule of Rates for Daywork include for transport of plant and labour to the site. Plant rates include the cost of fuel and all other consumables but exclude the cost of operators who shall be charged as labour.

Subject to the provisos of the preceding paragraph the rates in the Schedule of Rates for Daywork shall be basic cost rates and exclude overheads and profits which will be paid additionally at the percentages shown in the Schedule of Overheads and Profit.

Sub-Clause 53.6 Nature of Claims

A claim includes any claim:

- (a) under, arising out of, or in connection with, the Contract;
- (b) arising out of, or in connection with, the Works or either party's conduct before the Contract; or
- (c) otherwise, at law or in equity including without limitation:

- (i) by statute;
- (ii) in tort for negligence or otherwise, including without limitation negligent misrepresentation; or
- (iii) for restitution including restitution based on unjust enrichment.

Sub-Clause 54.9 Employer Not Responsible For The Delays

In respect of Clauses 34.5, 54.3 and 54.4 the Employer will not accept any responsibility for delay or costs arising from any lack or ineffectiveness of his assistance. In any event, all costs if any assistance involved shall be borne by the Contractor.

Sub-Clause 55.1 Quantities

Delete the Sub-Clause and substitute the following

“The Contractor has made his own assessment of the scope of work included in the fixed price part of the Contract Price and shall be deemed to have, and warrants that he has, determined and satisfied himself of the accuracy of the quantities in the Schedule of Prices for the Construction of Fixed Price Works and there shall be no change to the amount to be paid against each item notwithstanding that there may be discrepancies between the quantity in the Schedule of Prices for the Construction of Fixed Price Works and the quantity shown on the drawings or which can be inferred from them or the quantity actually incorporated in the Works.

The fixed price part of the Contract Price is fixed and the quantities making up this price will not be subject to remeasurement.

The quantities (if any) set out in the Schedule of Rates for the Construction of Remeasured Works are the estimated quantities for that part of the Works to which they relate, and they are not to be taken as the actual and correct quantities of the Works to be executed by the Contractor in fulfilment of his obligations under the Contract.

A direction shall not be required to be given by the Engineer by reason of the actual quantity of an item required to perform the Contract being greater or less than the quantity (if any) shown in the Schedule of Rates for the Construction of Remeasured Works or in the Schedule of Prices for the Construction of Fixed Price Works.”

Sub-Clause 56.1 Works to be Measured

Delete the first paragraph and substitute the following

“This Sub-Clause only applies to that part of the Works for which the Contractor is to be paid pursuant to the Schedule of Rates for the Construction of Remeasured Works.

The Engineer shall, except as otherwise stated, ascertain and determine by measurement the value of the Works for which the Contractor is to be paid pursuant to the Schedule of Rates for the Construction of Remeasured Works, and the Contractor shall be paid that value in accordance with Clause 60. The Engineer shall, when he requires such part of the Works to be measured, give reasonable notice to the Contractor's authorised agent, who shall:"

Sub-Clause 56.2 Schedule of Rates for the Construction of Remeasured Works

The rates in the Schedule of Rates for the Construction of Remeasured Works are inclusive of all labour, materials, overhead costs and profit, set down against the items and will be taken as the full inclusive rates for the finished work as shown on the Drawings and/or described in the Specification or which can reasonably be inferred from them, and cover the cost of every description of temporary works required, all the Contractor's obligations under the Contract, and all matters and things manifestly and contingently necessary for the proper completion and maintenance of the Works. Where any work in the Schedule of Rates for the Construction of Remeasured Works is unpriced by the Contractor all cost applicable to that work shall be deemed to be included elsewhere in the Schedule.

Sub-Clause 56.3 Schedule of Prices for the Construction of Fixed Price Works

The price in the Schedule of Prices for the Construction of Fixed Price Works is inclusive of all labour, materials, overhead costs and profit, set down against the construction of fixed price works and will be taken as the full inclusive price for the finished work as shown on the Drawings and/or described in the Specification or which can be inferred from them, and cover the cost of every description of temporary works required, all the Contractor's obligations under the Contract, and all matters and things manifestly and contingently necessary for the proper completion and maintenance of the Works.

Sub-Clause 57.1 Method of Measurement

Add the words "to be remeasured in accordance with Sub-Clause 56.1" after the words "The Works" in line 1

Sub-Clause 60.11 Place Of Payment

Payments to the Contractor by the Employer shall be made into bank accounts in Viet Nam.

Sub-Clause 60.12 Currencies Of Account And Rates Of Exchange

The currencies of account shall be the Vietnamese Dong and the Japanese Yen. All payments, deductions, adjustments or other sums shall be measured or calculated in each currency as set out in the Schedule of Prices for the Construction of Fixed Price Works, the Schedule of Rates for the Construction of Remeasured Works or as otherwise incurred.

There shall be no transfer of sums between one currency and the other and there shall be no adjustment to the amount measured or calculated in respect of any changes in the exchange rate between the two currencies.

Sub-Clause 60.13 Advance Payment

An advance payment of the amount stated in the Appendix to Tender shall, following the presentation by the Contractor to the Employer of an approved performance security in accordance with Sub-Clause 10.1 and a Guarantee in terms approved by the Employer for the full value of the advance payment, be certified by the Engineer for payment to the Contractor. Such Guarantee shall be progressively reduced by the amount repaid by the Contractor as indicated in Interim Payment Certificates of the Engineer issued in accordance with this Clause.

The advance payment shall not be subject to retention. The advance payment shall be repaid by way of reduction in Interim Payment Certificates commencing with the next certificate issued after the total certified value of the Permanent Works and any other items in the Schedules of Prices and Rates (excluding the deduction of retention) exceeds twenty percent of the sum stated in the Letter of Acceptance. The amount of the reduction in each interim certificate shall be one fifth of the difference between the total value of the Permanent Works and any other items in the Schedule of Prices for the Construction of Fixed Price Works and the Schedule of Rates for the Construction of Remeasured Works (excluding the deduction of retention) due for certification in such Interim Payment Certificate and the said value in the last preceding Interim Payment Certificate until the advance payment has been repaid in full.

Provided that upon the issue of a Taking-Over Certificate for the whole of the Works or upon the happening of any of the events specified in Sub-Clause 63.1 or termination under Clauses 65, 66 or 69, the whole of the balance then outstanding shall immediately become due and payable by the Contractor to the Employer.

Sub-Clause 60.14 Calculation of Minimum Amount of Interim Certificates

For the purpose only of calculating whether the net amount of payment under Sub-Clause 60.2, after all retentions and deductions, is not less than the Minimum Amount of Interim Certificates stated in the Appendix to the Tender the net amounts stated in Vietnamese Dong and in Japanese Yen shall be converted to a single total in Vietnamese Dong using the Cash/TC Buying exchange rate of the Vietcombank (Ha Noi Branch) as most recently published by the Bank on the date of the corresponding statement by the Contractor showing the amount to which he considered himself entitled.

Sub-Clause 65.4 Projectile, Missile

Delete the Sub-Clause and substitute the following”

“The Government of Vietnam has undertaken the task of clearing the land areas of the Site of any unexploded ordnance (UXO) and an audit of this clearance has been conducted by the My Thuan PMU. However there remains the possibility that recontamination may take place through the import of material by the Contractor or others, or, on or beneath the riverbed, by the actions of currents or tides.

Accordingly the destruction, damage, injury or loss of life caused by the explosion or impact, whenever and wherever occurring, of any mine, bomb, shell, grenade, or other projectile, missile, munition, or explosive of war, shall be deemed not to be a consequence of the said special risks and the discovery of or the consequences of any UXO on or beneath the Site will not entitle the Contractor to make any claim.”

Sub-Clause 68.2 Notice to Employer and Engineer

For the purposes of this Sub-Clause the respective addresses are:

(a) The Employer: My Thuan Project Management Unit (My Thuan PMU)
127B Dinh Tien Hoang St,
Binh Thanh District
Ho Chi Minh City
Viet Nam
Tel: (84 - 8) - 841 0088;
Fax: (84 - 8) - 841 1872

(b) The Engineer: **Nippon Koei Co. Ltd.**
127B Dinh Tien Hoang St,
Binh Thanh District
Ho Chi Minh City
Viet Nam
Tel: (84 - 8) - 510 2654, 510 2655 & 510 2656;
Fax: (84 - 8) - 841 3547

Sub-Clause 68.4 After Hours Calls

The Contractor shall, before commencing work submit to the Engineer the names and telephone numbers of responsible persons who may be contacted for after hours calls during the course of the Contract.

Sub-Clause 70.1 Increase Or Decrease Of Cost

There shall be no change to the Contract Price in respect of a rise or fall in the cost of labour and/or materials or any other matter affecting the cost of execution of the Works, except as provided for in Sub-Clause 70.2.

Sub-Clause 70.2 Subsequent Legislation

Delete the Sub-Clause and substitute the following:

If after the date 28 days prior to the latest date for submission of tenders for the Contract there occur in Viet Nam changes to any National or State Statute, Ordinance, Decree or other Law or any regulation or bye-law of any local or other duly constituted authority, including changes to the price of diesel fuel, asphalt or cement as controlled by the Energy Regulatory Board of the Government of Viet Nam and changes to the price of labour as controlled by the Department of Labour and Employment of the Government of Viet Nam but excluding any changes to any other prices controlled by the Government of Viet Nam, or there occurs the introduction of any such State Statute, Ordinance, Decree, Law, regulation or by-law, including changes to the price of diesel fuel, asphalt or cement as controlled by the Energy Regulatory Board of the Government of Viet Nam and changes to the price of labour as controlled by the Department of Labour and Employment of the Government of Viet Nam but excluding any changes to any other prices controlled by the Government of Viet Nam which cause additional or reduced cost to the Contractor in the execution of the Contract, such additional or reduced cost shall, after due consultation with the Employer and the Contractor, be determined by the Engineer and shall be added to or deducted from the Contract Price and the Engineer shall notify the Contractor accordingly, with a copy to the Employer.

The additional or reduced cost caused by any change to the Government controlled price of labour shall be applied only to the labour employed by the Contractor or his subcontractors on the Site in the execution of the Contract.

The additional or reduced price caused by any change to the Government controlled price of diesel fuel, asphalt or cement shall be applied only to the diesel fuel, asphalt or cement as delivered to the Site and consumed by the Contractor or his subcontractors on the Site in the execution of the Contract.

Sub-Clause 72.3 Currencies Of Payment For Provisional Sums

Delete the Sub-Clause and substitute the following:

“The proportions or amounts to be paid in foreign currencies in respect of Provisional Sums shall be determined in accordance with the principles set forth in Sub-Clauses 60.12 and 72.1 as and when these sums are utilised in whole or in part in accordance with the provisions of Clauses 58 and 59.”

Sub-Clause 73.1 Details To Be Confidential

The Contractor shall treat the details of the Contract as private and confidential, save in so far as may be necessary for the purposes thereof, and shall not publish or disclose the same or any particulars thereof in any trade or technical paper or elsewhere without the previous consent in writing of the Employer or the Engineer.

If any dispute arises as to the necessity of any publication or disclosure for the purpose of the Contract the same shall be referred to the decision of the Employer whose award shall be final.

Sub-Clause 74.1 Establishment Area for the Contractor and Engineer

The Contractor shall establish the area for siting his and the Engineer's site facilities and for storage of materials and equipment within the Site as shown on the Drawings.

No temporary building or structure shall be erected outside the Site. The Contractor shall, within seven days of acceptance of his Tender, submit to the Engineer for approval full details of the proposed layout of his offices, amenities, stores, workshops, etc., within the Site. Upon receipt of the Engineer's approval for his layout the Contractor shall mobilize all Contractor's Equipment and shall establish his offices and stores in this area.

The Contractor shall at all times maintain the Site in a clean and tidy condition.

The Engineer reserves the right to designate additional or alternative working, establishment or storage areas beyond the Site and the Contractor shall allow the use of such areas by others upon reasonable request from the Engineer.

Sub-Clause 74.2 Temporary Services during Construction

The Contractor shall provide and arrange for the provision of all necessary temporary services i.e. electricity, water, telephone, waste, etc., within the Site of the Works for the use of the Engineer and himself, from points to be approved by the Engineer. The Contractor shall arrange for and meet all costs, including fees and metered charges, involved in supplying, installing, maintaining, operating and removing these services.

All services shall be in accordance with the requirements of the appropriate Authority.

Sub-Clause 76.1 Contractor's Floating Plant

The Contractor shall at all times ensure that his floating Contractor's Equipment hold valid certificates of survey issued by an internationally recognised source to the approval of the Engineer.

All floating Contractor's Equipment shall comply with the regulations and navigational requirements for marine traffic using the Mekong River waterway, and shall display the required registration markings and details.

The Contractor shall provide such buoys, moorings and other fastenings as may be required for securing his floating plant.

Without anyway limiting or detracting from the effects of Clause 20 of the Conditions of Contract the Contractor shall insure his floating plant and craft against all marine risks appropriate to their respective uses including third party liability as required by Clause 23 and shall whenever required produce to the Employer or the Engineer the policy or policies of insurance and the receipt for payment of the current premium.

Sub-Clause 77.1 Navigation

Use of the river by ships and other craft adjacent to the Works will continue throughout the execution of the Contract. On the river the Contractor will only be permitted to move and moor marine plant or construction barges and equipment within the marked limits for river movement and mooring as shown on the Drawings.

The Contractor shall provide for the safe and unimpeded passage of river traffic via a clearly marked navigation channel through the Construction Zone. Details of all navigation control procedures shall be agreed with the appropriate Vietnamese marine authority for the section of the river in which the works are being carried out.

The Contractor, at all times, shall not allow barge traffic, or other plant or equipment to interfere in any way with navigation within the Site, or the approaches thereto and shall comply with all orders and directions given to him from time to time by the Viet Nam Maritime Safety Agency (VMS), the South Viet Nam Waterway Sub Department, the Employer or the Engineer in respect of navigation and shall conform in every way to their requirements in respect of mooring, marking, lighting and watching any structure, craft or equipment which may be used in the construction of the Works.

The Contractor shall indemnify the Viet Nam Maritime Safety Agency (VMS) and the South Viet Nam Waterway Sub Department from and against all actions, suits, claims, demands, damages, costs, charges and expenses arising out of or in consequence of any operations of the Contractor or of any Sub-contractor which obstruct or interfere with navigation or affect channels or waterways within site or the approaches thereto.

Sub-Clause 78.1 Removal of Sunken Plant

The Contractor shall immediately report to the Engineer any wreck or obstruction which he may encounter whilst carrying out the Works and shall comply with such instructions as the Engineer may issue to him regarding its removal.

The Contractor shall expeditiously raise and remove any plant (floating or otherwise) belonging to him or to any Sub-contractor or to any person employed by him which may be sunk in the course of the execution of the Contract or otherwise deal with the same as the Engineer may direct. Until the same shall be raised and removed the Contractor shall set such buoys and display at night such lights and do all such things for the safety of navigation as may be required by the Viet Nam Maritime Safety Agency (VMS), the South Viet Nam Waterway Sub Department, the Employer or the Engineer. In the event of the Contractor not carrying out the obligations imposed on him by this Clause, the Engineer, the Viet Nam Maritime Safety Agency (VMS), the South Viet Nam Waterway Sub Department or the Employer may set such buoys and lights to mark out such sunken plant and raise and remove the same (without prejudice to the right of the Employer to hold the Contractor liable) and the Contractor shall refund to the Employer all costs in connection therewith. The fact that the sunken vessel, craft or plant is insured or has been declared a total loss shall not absolve the Contractor from his obligation under this Sub-Clause to raise or remove the same.

Sub-Clause 79.1 Diving

The Contractor shall perform all diving activities in strict compliance with the requirements of the Viet Nam Maritime Safety Agency (VMS), the South Viet Nam Waterway Sub Department, the Employer and the Engineer.

The Contractor shall inform himself completely and thoroughly of every circumstance connected with diving operations and every contingency that may arise.

Sub-Clause 80.1 Bribery

Any commission, advantage, gift, gratuity, reward or bribe given, promised or offered by or on behalf of the Contractor or his agent or servant, or any other person on his or their behalf to the Employer or to the Engineer, or to any of their respective members, officers, servants, advisers, agents or employees or to any person on their behalf or on behalf of any of them in relation to the obtaining or to the execution of this or of any other Contract with the Employer, may, in addition to any criminal liability which may be thereby incurred, subject the Contractor to the cancellation of this and all others contracts which he may have entered into with the Employer and also to the payment of any loss or damage resulting from such cancellation.

Sub-Clause 81.1 As-Built Drawings

Not later than the date of issue of the Taking-Over Certificate for the whole of the Works, the Contractor shall submit to the Engineer for approval a set of prints taken from negatives prepared by the Contractor to show the "as-built" condition of the Permanent Works. Within 56 days of receiving comments on these, the Contractor shall amend the negatives to the satisfaction of the Engineer and then issue one negative and six prints off each drawing to the Engineer.

Sub-Clause 82.1 Testing

The Contractor shall arrange for all field and laboratory testing work, called for by the Specification, to be undertaken by an accredited laboratory approved by the Engineer.

Sub-Clause 83.1 Progress Meetings And Reports

The Contractor shall attend progress and other meetings on site as requested by the Engineer.

The Contractor shall submit on or before the third working day of each month to the Engineer a narrative report summarizing significant progress or problems encountered during the preceding month in respect to all parts of the work under the Contract and, without restricting the generality of the foregoing, shall include reasoned and detailed comments in respect to:

- (a) activities or items completed during the month, including dates of completion;
- (b) activities or items scheduled for completion during the month but not completed (showing details of intended remedial action and comments as to likely effects on the date for completion of whole of the Works);
- (c) changes to the critical path;
- (d) activities or items re-scheduled or re-estimated by the Contractor;
- (e) additional or deleted activities or items;
- (f) a description of any matters which currently have a positive or adverse effect on the execution of the Works or which, in the Contractor's opinion, have the potential to affect the execution of the Works together with particulars of the preventative and remedial action which has been, is being or may be taken in respect of such matters;
- (g) future up-to-date target dates for the finalization of the items highlighting any changes to the date for completion of the whole of the Works;
- (h) a report on the status of all Variations;
- (i) a report on the progress of the tendering procedure for the Provisional Sum Work (if any);
- (j) a summary of all Claims made by the Contractor; and
- (k) details of any other matters affecting or likely to affect the progress and cost of the Works, including (without limitation) a forecast final cost of the Works.

All reports from the Contractor shall be provided in electronic format as well as hard copy. Electronic versions shall use MS Word, Excel, MS Project and the like to the approval of the Engineer

Sub-Clause 84 Joint Venture Liability

If the Contractor is a joint venture of two or more persons, or firms, all such persons, or firms, shall be jointly and severally bound to the Employer for the fulfilment of the terms of the Contract and shall designate one of such firms to act as leader with authority to bind the joint venture. The composition or the constitution of the joint venture shall be as approved before the closing of tenders and shall not be altered without the prior consent of the Employer.

Sub-Clause 84.1 Quality System General

The Contractor shall perform the Works in accordance with a Quality System and shall undertake and demonstrate continuous improvement of that Quality System.

The Contractor's quality system for the management of all aspects of his obligations under this Contract shall comply with the requirements of ISO 9001:1994 and the Contractor's stated Quality Policy and objectives. The Quality System documentation shall include a Quality Manual and Procedures as required by ISO 9001, and as described in the Specification;

The Project Quality Plan shall encompass the planning requirements of ISO 9001, and shall be in accordance with the framework as set out in the Specification;

Sub-Clause 84.2 Quality System Documentation to be Submitted

The Contractor shall, within 21 days after the date of the Letter of Acceptance, submit to the Engineer for his consent three controlled copies of the current edition of his Quality Manual and a first edition of his Project Quality Plan.

This Manual and plan shall elaborate on and update those submitted as Schedule TS 17 with the Contractor's tender.

The Contractor shall not commence any part of the Works until the Quality Manual and first edition of the Project Quality Plan have been submitted to the Engineer

Sub-Clause 84.3 Revised Project Quality Plan

The Contractor shall review the Project Quality Plan monthly and revise it when necessary to address changes in the construction process and to maintain it current as new sub-contractors are engaged, and promptly submit the revised Project Quality Plan to the Engineer for his consent

The Contractor shall revise the Quality Manual if necessary and promptly submit any revision to the Engineer for his consent.

If at any time it should appear to the Engineer that the quality control on the site is in any way compromised the Contractor shall produce, at the request of the Engineer, a revised Project Quality Plan showing the modifications to such plan necessary to ensure an appropriate level of quality control.

Sub-Clause 84.4 No Duty of Care

The Engineer owes no duty to the Contractor to review a Quality Manual or Project Quality Plan submitted by the Contractor for errors, omissions or compliance with this Contract.

The Quality Manual or Project Quality Plan shall be used only as an aid to achieving compliance with the Contract and to monitor and document such compliance. Such acceptance, rejection, instruction, comments or reviews by the Engineer (or by any employee, consultant or agent of the Engineer or the Employer) in relation to the Quality Manual or Project Quality Plan prepared by the Contractor will not in any way lessen or otherwise affect:

- (a) the Contractor's obligations or responsibilities under this Contract or otherwise according to law; or
- (b) the Employer's rights against the Contractor whether under this Contract or otherwise according to law,

or in any way be construed as an instruction or notice by the Engineer to do or refrain from doing anything.

Sub-Clause 84.5 Quality Reports

- (a) The Contractor shall include a quality report in his monthly progress report containing the following:
 - (i) identification of all work in progress;
 - (ii) details of all action taken on the quality system since the last monthly report including the following:-;

- procurement reports
 - audit reports
 - training reports
 - new conformance reports
 - corrective action requests
 - minutes of management review meetings
- (iii) a statement that all Works claimed in Progress claims have satisfied the requirements of the Quality System and the Contract.
- (b) The Contractor shall include in such reports (at the appropriate time);
- (iv) certification at substantial completion of the Works that the Works have been substantially completed in accordance with the Quality System and the Contract; and
- (v) certification at the expiry of the last Defects Liability Period that the Works have been completed in accordance with the Quality System and the Contract.

Sub-Clause 84.6 Surveillance and Audits by the Engineer

The Contractor acknowledges that while the primary responsibility for all verification, validation, inspection and test lies with the Contractor (and his sub-contractors and suppliers), the Engineer is entitled to carry out verification, inspections and tests of the works, and conduct Quality System audits to evaluate the Contractors performance in complying with his obligations under this Contract (including the Quality Plan). The Engineer intends that the level of surveillance of the Works by the Engineer may involve close inspection at every stage. The Specification details where the Engineer's approval or review is required, and particular hold points in the specified technical processes are identified.

The Contractor shall:

- (c) make all necessary arrangements to ensure that the Engineer has access to all facilities (including laboratories), documentation, records and personnel (including those of subcontractors) that are required by the Engineer for the carrying out of the surveillance and audits referred to in this Sub-Clause 84.6;
- (d) ensure that any relevant employees of the Contractor are available to discuss details of quality matters with the Engineer during the monitoring and auditing referred to in this Sub- Clause 84.6;;

- (e) keep onsite and make available to the Engineer for his use when required copies of all relevant Codes of Practice, Test Methods and Standards referred to in the Specification.

Sub-Clause 85 Waiver of Conditions

Except as provided elsewhere in the Contract, none of the terms of the Contract shall be varied, waived, discharged or released either at law or in equity by the Employer except with the prior consent in writing of the Employer in each instance. Without limiting the generality of the foregoing no delay or failure by the Employer or the Engineer to exercise any rights under this Contract, nor any instruction, comment, discussion, resolution or agreement shall constitute a waiver of those or any other rights under the Contract.

Sub-Clause 86 Non-Reliance

The Contractor:

- (a) warrants that he did not in any way rely upon:
 - (i) any information, data, representation, statement or documentation whether forming part of this Contract or not which is made by, or provided to the Contractor by, the Employer or the Engineer, anyone on behalf of the Employer or the Engineer, or by any of the consultants engaged by the Employer or the Engineer; or
 - (ii) the accuracy or adequacy of such information, data, representation, statement or document,for the purposes of entering into the Contract;
- (b) warrants that he enters into this Contract based on his own investigations, interpretations, deductions, information and determinations; and
- (c) acknowledges that he is aware that the Employer has entered into the Contract relying upon the warranties in paragraphs (a) and (b) of this Clause 79.

Sub-Clause 87 Indemnity

Without limiting any other indemnity in this Contract, the Contractor shall indemnify the Employer and the Engineer against:

(a) any liability to or Claim by:

- (i) any other contractors employed by the Employer or any duly constituted authority and their workmen;
- (ii) the workmen of the Employer;
- (iii) any duly constituted authorities who may be employed on or near the Site, and their workmen; or
- (iv) any other person; or

(b) any loss suffered by the Employer,

arising as a result of the Contractor's breach of a term of this Contract.

SOCIALIST REPUBLIC OF VIET NAM
MINISTRY OF TRANSPORT
MY THUAN PROJECT MANAGEMENT UNIT
My Thuan Project Management Unit (My Thuan PMU)
127B Dinh Tien Hoang St, Binh Thanh District Ho Chi Minh City - Viet Nam
Tel: (84 - 8) - 841 0088; Fax: (84 - 8) - 841 1872

PREAMBLE TO THE SCHEDULES OF PRICES AND RATES

Can Tho Bridge Construction Project
Under JBIC Loan Agreement
Package I

SOCIALIST REPUBLIC OF VIET NAM
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PREAMBLE TO THE SCHEDULES OF PRICES AND RATES.

Can Tho Bridge Construction Project
Under JBIC Loan Agreement
Package I

1 Description

Schedules of Prices and Rates means Tender Schedules 12 to 15.

Tenderers' attention is drawn to the Description of Works, Conditions of Contract, Specification, Instructions to Tenderers and Drawings, and, specifically, the requirements of the prefaces to the Schedules of Prices and Rates, all of which shall be read in conjunction with the Schedules of Prices and Rates.

This preamble has been prepared in order to assist Tenderers in pricing the Schedules of Prices and Rates and to serve as a guide to the measurement of quantities.

2 Application of Preamble to Fixed Price Works

The prices in the Schedule of Prices for the Construction of Fixed Price Works, inclusive of all labour, materials, equipment, overhead costs and profit, set down against the items shall be taken as the full inclusive value of the finished fixed price work shown on the Drawings and/or described in the Specification or which can reasonably be inferred from them, and cover the cost of every description of temporary works required, all the Contractor's obligations under the Contract, and all matters and things necessary for the proper completion and maintenance of the Works.

The Tenderer shall make his own assessment of the scope of work included in the fixed price part of the Contract Price and shall verify that the estimated quantities in the Schedule of Prices for the Construction of Fixed Price Works are correct.

The Tenderer shall be deemed to have determined and verified the quantities and items of work with the Drawings and Specification prior to submitting his Tender and, if the Tenderer remains not satisfied with the quantities or items listed in the Schedule of Prices for the Construction of Fixed Price Works at the time of submitting his Tender, he shall insert in the Schedule any such items and quantities as computed by him for which he wishes to enter a price to cover the completion and proper performance of the Contract.

The fixed price part of the Contract Price shall be fixed prior to award of the Contract and the quantities making up this price will not be subject to remeasurement.

The Schedule will be used in assessing tenders and also progress claims during the construction of the Works. The quantities in the Schedule of Prices for Construction of Fixed Price Works, including any inserted and included in Bill 8 (Miscellaneous) are the Contractor's own assessment of the scope of work included in the fixed price part of the Contract Price and shall be fixed and not subject to remeasurement.

3 Application of Preamble to Remeasured Works

The rates in the Schedule of Prices for the Construction of Remeasured Works, inclusive of all labour, materials, overhead costs and profit, set down against the items shall be taken as the full inclusive rates for the finished work to be remeasured as shown on the Drawings and/or described in the Specification or which can reasonably be inferred from them, and cover the cost of every description of temporary works required, all the Contractor's obligations under the Contract, and all matters and things necessary for the proper completion and maintenance of the Works.

The Schedule will be used in assessing tenders and also progress claims during the construction of the Works. The quantities given in the Schedule are believed to be approximately correct, but they shall not be taken as a guarantee that the quantities will be carried out or are required or that they will not be exceeded. Quantities shall be measured in accordance with the provisions of Clauses 55 and 56 of the Conditions of Contract.

4 Application of Preamble to Additional Work

The clauses of this Preamble shall apply to any additional or varied work which the Contractor may be required to execute under this Contract except where specifically amended or supplemented by the instructions given to him to carry out such work.

5 Method of Measurement

The Works as executed shall be measured for payment in accordance with the method adopted in the Schedules of Prices and Rates and under the items as therein set forth notwithstanding any custom to the contrary. The net measurement or weight of the finished work in place shall always be taken and, except where otherwise stated or separate items are provided, no allowance shall be made for cutting, waste, laps or circular work.

5.1 Units and Currency

All sizes and quantities have been entered in the Schedules of Prices and Rates in metric units.

Units or terms used in these Schedules of Prices and Rates are:

m	=	linear meter
m ²	=	square meters
m ³	=	cubic meters
tonne	=	tonne
mnth	=	month

PS	=	Provisional Sum
PQ	=	Provisional Quantity
LS	=	Lump Sum
BI	=	Bill Item
No	=	Number off

The units of currency used in this Contract are the Japanese Yen and the Vietnamese Dong.

5.2 Rates and Sums to be for Work Complete

Notwithstanding any limits which may be implied by the wording of the individual items and/or the explanations in this Preamble, the rates and sums which a Tenderer enters in the Schedules of Prices and Rates shall be for the work finished complete in every respect; he will be deemed to have taken full account of all requirements and obligations, whether expressed or implied, covered by all parts of this Contract and to have priced the items herein accordingly. The rates and sums shall therefore include for all incidental and contingent expenses and risks of every kind necessary to construct, complete and maintain the whole of the Works in accordance with the Contract.

Full allowance is to be made in the rates and sums against the various items in the Schedules of Prices and Rates for all costs involved in the following, inter alia, which are referred to and/or specified herein:-

- all setting out and survey work;
- temporary access roads, fencing, watching, lighting, mooring and buoys;
- paying fees and giving notices to Authorities;
- payment for all patent rights and royalties;
- safety precautions and all measures to prevent and suppress fire and other hazards;
- interference to the Works by persons, vehicles, vessels and the like being legitimate users of the on-shore and off-shore facilities on or in the vicinity of the Site;
- the protection and safety of adjacent structures and shoreline in so far as they may be affected by the Works or Temporary Works;
- the supply, inspection and testing of materials and of the Works under construction, including the provision and use of equipment;
- setting to work, operating (including all fuel and consumable stores) and maintaining all constructional plant and equipment necessary for the execution of the Works and including the cost of all tests and other requirements in respect to such plant and equipment;
- working adjacent to or across existing services and installations;
- the recruitment, bringing to and from the Site, and all incidental costs and expenses

involved in the provision of all necessary skilled and unskilled labour and supervision.

No claim will be considered for further payment in respect of any work or method of execution which may be described in the Contract or is inherent in the construction of the Works and detailed in the Drawings, on account of:

- items having been omitted from the Schedules of Prices and Rates
- any omission from the wording of items or from clauses in the Preamble or
- no mention of such work or method of execution having been made in the Preamble.

Items against which no rates or sums are entered by a Tenderer, whether quantities are stated or not, shall be regarded as covered by other rates in the Schedules of Prices and Rates.

Subject to Sub-Clause 52.3 of the Conditions of Contract the quantities for work and materials stated in the Schedules of Prices and Rates are not to be considered as limiting or extending the amount of work to be done or materials to be supplied by the Contractor.

5.3 Rates and Sums to Bear Proper Relation to Work Described

The rates and sums entered by a Tenderer against all items in the Schedules of Prices and Rates shall bear a proper relationship to the cost of carrying out the work described in the Contract and shall include for the Contractor's head office, profit and risk and all other on-costs and similar charges which are applicable to the Contract as a whole are to be spread over all the rates in the Schedules of Prices and Rates, whilst those which apply to particular sections of the Contract are only to be spread over the items to which those sections refer.

5.4 Provisional Sums

Provisional Sums will be dealt with as provided for in the Conditions of Contract.

Provisional Sums are represented by the letters PS entered in the Unit column.

5.5 Interim Payment of Lump Sums for Permanent Work

Interim payment under items of permanent work priced as lump sums will be made on the basis of the estimated percentage completion of the work covered by such items at the time to which interim measurement relates. Lump Sums are represented by the letters LS entered in the unit column.

5.6 Attendance on the Engineer

Items that include the provisions of crew, drivers, chain persons, trades persons, laborers, cleaners, attendants and etc., shall cover in their corresponding rates all costs in connection therewith for the full time engagement and overtime as required under the instruction of the Engineer.

5.7 Control and Protection of Vehicle and Vessel Traffic

The price for control and protection of vehicle and vessel traffic shall include for all measures necessary to comply with the requirements of the contract and any regulatory authority.

5.8 Engineering Services

The price for engineering services shall allow for all costs associated with the design, checking, submission and re-design re-checking and re-submission as necessary of all works to ensure the proper construction of the Works. No additional payment will be made irrespective of the number of design iterations required.

5.9 Protection of Work and Cleaning up on Completion

The Contractor shall allow in his rates for protecting completed work at all times and for making good all damage to completed work due to any cause whatsoever, for clearing away rubbish as it accumulates and for maintaining the Site in a tidy condition to the satisfaction of the Engineer.

5.10 Testing of Materials and Permanent Works

The cost of all testing detailed in the Specification or reasonably to be inferred therefrom is deemed to be included in the rates entered in the Schedules of Prices and Rates. If the Engineer should require additional tests, the cost thereof shall be charged to the item for additional testing of materials and permanent works if the results of the tests shown the materials or permanent works tested to be in accordance with the Contract.

5.11 Dayworks

No work may be claimed as Dayworks by the Contractor unless prior written instruction has been given by the Engineer.

The cost of labour including plant operators shall be charged for the actual hours worked at the direction of the Engineer at the rates in Tender Schedule TS 14 submitted with the Contractor's tender. These rates shall allow for all overtime and other allowances.

The cost of materials shall be charged at the net price paid for the materials delivered to Site as substantiated by supplier's invoices. Payment will only be made for the quantity required for the Dayworks including any surplus material accepted by the Engineer.

Payment for plant shall be for actual hours worked at the rates in Tender Schedule TS 14 submitted with the Contractor's tender. These rates shall include for transport of plant and labour to the site. Plant rates shall include the cost of fuel and all other consumables but shall exclude the cost of operators who shall be charged as labour.

Subject to the provisos of the preceding paragraph the rates in the Schedule of Rates for Daywork shall be basic cost rates and exclude overheads and profits which will be paid additionally at the percentages shown in Schedule TS - 15, Schedule of Overheads and

Profit submitted with the Contractor's tender.

Standing time for plant on Site and used on Dayworks shall not be paid for

The cost for plant detailed in Tender Schedule TS 14 shall be for all plant required for Dayworks whether supplied by the Contractor, any sub-contractors or any plant hire contractors.

5.12 Payment of Items Measured on a Monthly Basis

Payment under items in Bidding Schedule which are measured on a monthly basis shall not be commenced until the full facilities described in the items and the Specification have been provided to the satisfaction of the Engineer. Payment will continue so long as such facilities continue to be provided to the satisfaction of the Engineer and until such time as the Engineer shall signify that facilities are no longer required.

5.13 Establishment, Maintenance and Demobilisation

The amount the costs of mobilising plant, equipment and site establishment will be separated interim certificate issued by the Engineer following completion of all necessary site facilities and mobilisation of all plant and equipment by the Contractor.

The amount of the costs of establishing the Engineer's office, the laboratory and the weighbridge will be separated interim certificate issued by the Engineer following completion of the relevant facility by the Contractor.

The amounts of the costs of demobilisation and removal of the Engineer's office, the laboratory and the weighbridge will be included generally in the certificate of payment following the contractor's statement at completion but part thereof may be included in a preceding interim valuation where appropriate and entirely at the Engineer's option due to some site facilities or plant having been dismantled or removed.

In the event of an extension of the time for Completion becoming apparent but either:

- no extension of time has been granted; or
- an extension has been granted but not to the full extent of such delay; or
- an extension of time has been granted but such extension is on one of the grounds not entitling the Contractor to reimbursement of cost then-

The amounts for monthly items will not be paid beyond the due date for completion.

In the event of an extension of the Time for Completion being granted by the Engineer on grounds which entitle the Contractor for reimbursement of extra costs, the amounts for monthly items will be paid throughout the extended time. In the event of the extension of the Time for Completion granted not being in units of complete calendar months, the extra amount due shall be calculated as pro rata to the monthly instalment.

6 General

6.1 Mobilization

Transport of Construction Plant, on the basis of the list of Construction Plant submitted with the Bid, from the port of unloading in Vietnam to the sites where they are to be used on the bridges and roads under Construction, and their installation:

Payment is also intended to cover the dismantling of the work sites by the Contractor, with the removal of all the installations, Constructional Plant and equipment, so that the site is restored to the state it was in before the installations, plant and equipment were placed there.

6.2 Construction of Temporary Yard

Lump sum price of construction of temporary yard shall include the cost of earth work, road, services of sewers, stormwater facilities, watermains, electricity supply lines, telephone lines of contractor's office, installation of construction plant with equipment of the Prestressed Concrete Box Girder (PC segment) and PC I Girder.

The rates are also include that the contractor shall be maintained in a neat and tidy condition in keeping with their location throughout the course of the Contract and completely removed from site at the completion of the Works.

6.3 Temporary Road and Bridge Works

The rates for this work shall include furnish, maintain during construction, and remove on completion of the work of all temporary roads and road works, access and service roads, temporary crossing or bridges over streams.

The Contractor shall provides for items such as signing, lighting and riding quality of the temporary road together with the proposed maintenance arrangements.

6.4 Maintenance and Protection of Traffic

The Contractor shall keep open to traffic existing roads during the performance of the Works and at all times keep roads and footpaths, affected by his operations from soil and material spillage.

The rate for payment to the contractor shall be deemed to include the cost to the Contractor of meeting his obligation under this Clause together with such other items as are expressly stated in the General Specification.

6.5 Payment under Clause 6.2 and 6.3 shall be made in three installments as follows:

- 40% (forty percent) on completion of the installation of plant, equipment, office and etc.
- 40% (forty percent) with the Monthly Certificates in installments proportional to the cost of work executed; and

- 20% (twenty percent) in the Final Certificate on completion of all necessary dismantling and restoration of the Site.

Payment under Clause 6.4 (Maintenance and Protection of Traffic) shall be made on a monthly basis.

6.6 Engineer's Office

The rate for construction of office maintaining and cleaning the Engineer's office shall include for the following:

- charges for power, lighting, water supply and refuse disposal;
- maintenance of buildings, services including air conditioning, vehicle access and hard-standing, office equipment, furnishings and fittings listed in Table ... are given as a guide.
- provision of consumables stores, such as fax paper, general stationery, cleaning materials, chemicals, etc.
- pest control and eradication;
- security and fire protection, prevention and control.

6.7 Vehicles and Launches for the Engineer

The rate for maintenance and operation of vehicles and launches for Engineer shall include maintenance, fuel, repairs and spare parts, licensing, taxing and insurance. Cleaning and provision of suitable replacements when the regular vehicles or launches are unserviceable.

6.8 Engineer's Accommodation

Construction of the buildings, provision of furnishing and equipment shall be in good condition, walls and woodwork fresh or newly painted. The size, furnishings and equipment listed in Table ----- are given as a guide to the minimum acceptable requirement.

The rate for accommodation shall include full compensation for providing the housing unit, furnishing servicing, repairing, maintaining and providing utilities, all for the period specified.

7 Site Clearance and Demolition

The rates and prices for site clearance and demolition works shall include for the removal and disposal of all demolished materials off site, unless otherwise stated, safety precautions and for all temporary props, bracing, plant and labour required. Rates shall also allow for backfilling of trenches and other excavations.

The rate for site clearance shall include for the removal and stockpile of all topsoil and

the removal and disposal of unsuitable material both to a depth of 300mm.

Rates for excavation below 300 mm from the original ground level shall include for excavation, loading and hauling to temporary stockpile locations or directly to fill or spoil, and maintenance of the stockpile by grading and compaction as necessary. Where unsuitable material is excavated the rate shall also include for disposal of the material off site.

The volume of excavation shall be measured in its original position and of filling in its final position as the neat line quantity shown on the drawings or as agreed by survey in the field. No allowances shall be made for over excavation or filling, working space, bulking, shrinkage or settlement as appropriate.

8 Earthworks

8.1 The rates for filling shall include the cost of trial demonstrations of proposed compaction equipment.

The volume of filling shall be measured in its final position from the actual interface, post settlement, of the fill material with the in-situ material to the neat line shown on the drawings or as agreed by survey in the field. The interface shall be determined using settlement plates substantiated by trial pits. No allowances shall be made for over filling, working space, bulking or shrinkage.

8.2 The rate for sand blanket shall include the cost of placing and compaction.

The quantity of sand blanket to be measured and paid for, will be the number of cubic meters of suitable material supplied and compacted to the engineer's satisfaction and in accordance with Specification. This material is required to be placed when filling within the influence zone of certain structures and any material placed outside the specified zone will not be measured for payment.

The price and payment will be full compensation for the work described including furnishing, hauling, placing and compacting the material.

8.3 Prefabricated Vertical Drain (PVD) and Sand Compaction Pile

The quantities of prefabricated vertical drain (PVD) and sand compaction pile to be paid for, shall be the number of linear meters measured of center-line between the top and bottom in under ground, as installation of PVD and pile as shown on drawings.

PVD shall be provided with an anchor plate or rod and plumpness of the equipment is required.

Sand Compaction pile shall be provided driving a pipe, vibratory hammer equipment to specified compacted.

The price and payment shall be full compensation for all costs including furnishing, hauling, placing and for all materials, labour, tools, equipment and incidentals necessary to complete the works.

8.4 Structural Excavation

The quantity of structure excavation to be paid for shall be the number of cubic meters of material measured in its original position and shall be computed as follows.

The volume of earth to be measured for structure excavation shall consist of a prismoid bounded by the following planes:

- upper plane; that plane reproduced by the projection of the perimeter of the base of the structural member and passing through the cleared ground along the perimeter above which plane excavation shall be considered as site clearing and below which excavation shall be considered as structure and shall be measured and paid for accordingly;
- lower plane; the horizontal plane at the base of the foundation; which will be taken as the lower surface of the structural concrete as shown on the Drawings or instructed by the Engineer;
- the vertical planes coinciding with the perimeter of the base of the structural member. Any additional width of excavation necessary for the installation of blinding stone or leveling concrete or structural concrete exceeding area of lower plane will not be measured for payment and the cost of this excavation will be deemed to be included in the unit price for the measures quantity as described above.

The volume of Blinding Stone measure for payment will be the number of cubic meters of stone completed using the dimensions shown in the drawings. Prices and payment shall be full compensation for all costs necessary or usual for the proper completion of the work.

9 Drainage

Lengths of pipes and U ditches shall be measured from the internal face of catchbasins or pits.

The rate for pipes shall include for excavation and maintenance of such excavation, manufacture, supply, and delivery to site of pipes, bedding, laying, jointing of pipes, testing, backfilling material compacted in layers and disposal of spoil.

Rates for pits and catchbasins and U ditches shall include for excavation and maintenance of the excavation, concrete, reinforcement, formwork, blinding, supply and installation of covers, ladders, cast in fittings, backfilling and compaction and disposal of spoil.

10. Pavement

Sub-base, base course and asphalt pavement shall be measured as the area of net dimensions of the pavement layers for the layer thickness specified.

The rates for sub-base and base course materials shall include for the removal from stockpile, or where stockpiled material is not available, provided from a Contractor developed or existing borrow area, hauling, placing in layers to the specified levels and

tolerances, watering, mixing and compaction, grading and trimming to level and control testing as specified.

The rates for asphalt pavements shall include for the profiling to tolerance of the base course and wearing course and their compaction to the required line and level.

The rates for concrete kerbing and inverts shall include for excavation, preparation of surface, supply and placement of concrete, construction joints, curing and testing of concrete and backfill as required.

The rates for scarifying the existing pavement, shall include for all trimming and preparing the subgrade and for compaction and testing as specified.

11. Piling

11.1 The cost of operating pile boring equipment shall be included in the rates for remeasured items for piling within the bridge section. Mobilisation and demobilisation rates are covered in Bill 1.

The various rates for piling shall include for the supply of all labour, testing, materials, plant, tools, survey equipment and miscellaneous equipment necessary to complete each particular item including:

- Taking observations, including video recording, and compiling the record of each pile and supplying one copy to the Engineer
- Providing access and facilities for the Engineer during driving

11.2 Testing

The test drilling pile load test and sonic test will be measured for payment purposes as lengths of hole drilled and per each in schedule of Bid.

The rate for testing shall include full compensation for all drilling, casing, if necessary, penetration test and split-barrel sampling, recording and presenting the results and storing the samples.

12. Concrete

12.1 General

All volumes of concrete shall be measured by net volume. No deductions in the measurement of concrete shall be made for small cavities, chamfers, nosings, bolt holes, and for totally encased rails, joists, reinforcement and the like. Deductions shall be made for openings exceeding one tenth of one square metre, pipes, etc.

The rates and prices for concrete shall include for all testing and test batching, the supply of all materials, plant, labour, formwork, reinforcement, chamfers and for all other work required to construct the concrete to the forms, dimensions, strengths and finishes as specified.

Bar and rod reinforcement shall be measured according to the weight as calculated from the Drawings or specified, the basis of the calculated weights being that steel weighs 7.85 kg per 1000 square mm of nominal cross sectional area per lineal metre, no allowance being made for waste or rolling margin.

The rates for concrete shall include for:

- formwork and chamfers and for all other work required to construct the concrete to the forms, dimensions, strengths and finishes as specified;
- all costs incurred in determining the mixes to satisfy the Specification;
- variations in cement content of the concrete mixes from the guide quantities given in the Specification;
- supplying all materials, mixing, transporting, placing and compaction (whether by hand or vibration);
- roughening the surface of previously executed work (including those parts of precast concrete work against which in-situ concrete will be placed) in order to provide the necessary bond with new concrete;
- blinding the surfaces to receive the concrete or providing a layer of approved polythene;
- achieving specified tolerances;
- forming slopes, falls and the like;
- forming all temporary joints, keys, stop ends, temporary stops and shuttering of other than permanently exposed faces;
- curing the concrete and all measures to protect freshly-poured concrete from direct sunlight and action of the elements;
- rubbing down and making good the concrete surfaces;
- the cost of control testing throughout the period of concreting and for the testing of concrete and remedial work ordered by the Employer consequent upon the results of control tests falling below the minimum specified;
- overtime working to maintain continuity of casting;
- a daily return to the Employer showing the quantities of cement and the number of mixings of each class of concrete used in each section of the Works.

12.2 Prestressed Concrete Members

The quantity of prestressed concrete I-girders and Box-girders segment to be measured for payment shall be the actual number of precast prestressed concrete structural members, installed in place, completed and accepted. Each member shall include the

contained within or attached to the beam or slab unit.

Prestressed cast-in-place concrete box girder will be paid for on the basis of the number of cubic meters of concrete, the weight (kg) of reinforcing steel and the weight (kg) of prestressing steel, respectively.

The prices and payment shall be full compensation for furnishing and placing all materials including all labour, tools, equipment and incidentals necessary to complete the work prescribed in this Clause. The payment of PC cable shall include the work of tensioning, grouting, anchorages and ducts. The unit price for I-girders and Box-girders segment will be deemed to include all concrete, reinforcement, PC cable, hauling and erection.

12.3 Concrete or pipe culvert shall be measured by linear meter. No deductions in the measurement of concrete shall be made for small cavities, chamfers, nosings, bolt holes, and for totally encased rails, joists, reinforcement and the like.

The rates and prices for concrete or pipe shall include for culvert concrete, labour, formwork, reinforcement, chamfers and for all other work required to construct the concrete to the forms, dimensions, strengths and finishes as specified.

The prices and payment shall be full compensation for furnishing and placing all materials including all labour, tools, equipment and incidentals necessary to complete the work.

13. Structural Steelwork

Rates for structural steelwork shall include for all tasks specified, including but not limited to, preparation, cutting, marking, welding, drilling, fabrication, supply, erection, preparation of shop drawings, testing, welder pre-qualification testing, etc.

Structural steelwork shall be measured net from the Drawings and no deduction shall be made for holes. The density of steel shall be taken as 7850 kilograms per cubic metre for determining the mass of pieces cut from plate or bar. The mass of steel sections shall be taken as those published by the manufacturers. Tolerance for rolling margin, wastage in fabrication, and the weight of welding material, bolts, nuts and washers shall not be included in the measured weight.

The rates for steelwork, protective plates and angles, hold down bolts and plinths, etc. shall include supply and fabrication, preparation and application of protective coatings, transport and fixing.

14. Cable Stay Work

14.1 Cable stay work including all anchorage, dampers and associated items shall be paid based on the theoretical weight (in tons) of installed and accepted stay cables measured from the theoretical final position of the outer surface of the steel anchor plate at the lower end the upper end.

The price shall cover all necessary works for stay cables cited including all fabricating furnishing, installing, and adjusting of stay cables, complete with anchorage components,

anchor pipes, split shims (if used), wedges, bearing plates, tension rings, polyethylene pipes including, painting, sealing and damping rings, boots, bolts, clamping bands, corrosion protection, erection devices and all incidental materials, tests, quality control and labor and equipment necessary to construct the stay cables, and all inspection, testing and safety provisions.

14.2 The cost for material supply shall include the stay cables, and anchorage materials. The stay cable material of PC strand, and lost materials of the PC strands. The anchorage material of anchorage devices with cap on pylons, anchorage devices on box girders. The protection pipe materials of high density polyethylene pipe (HDPE), recess tubes on pylon, recess tubes on box girders spiral bars, water proofing protection covers, bands for hanging, and their transportation and storage.

14.3 The costs for installation of anchorage devices, metal fittings for anchorage devices with assembling form and concrete work for cut off at the anchorage devices on pylons and protection cover works for fixing to anchorage.

The costs for installation shall include the works of stay cables for fabrication and installation of HDPE pipes, stress installation to the stay cable by strand-by strand and adjusting works, machinery /equipment costs for installation, and vibration control devices.

15. Bearing Pads

The quantities of bearing pads shall be measured by the number of each type completed in place in accordance with the Drawings irrespective of size. The rate and price for bearing pads shall consist of full compensation for furnishing, fabricating, transporting, painting and placing all materials including all labor, tools, equipment, and incidentals necessary to complete the work prescribed. Details of necessary accessories are shown on the Drawings, and include anchor bar and cap, and reinforcement, etc.

16. Bridge Utility

16.1 Bridge Railing

Price rates for road and bridge furniture of railing shall include the following:

- Material, fabrication work, marking, delivery and storing on site;
- All bolts and cast in fittings in structural connections other than those supplied;
- Making good any damage and repair to any protective treatments.

16.2 Expansion Joint

The quantities to be paid for shall be the actual number of linear meters of preformed expansion joints completed including sealant and back up form of foamed polystyrene or similar material used in adjacent curbs and parapet walls in place in accordance with the drawings.

The rate and price for expansion joint shall constitute full compensation for all cutting and excavation of pavement, formation of construction joint with existing concrete and for all labour and equipment, furnishing of materials including epoxy concrete, epoxy mortar, fiber reinforced plastic, reinforcement and concrete, fabricating, transporting, painting, setting expansion joints, and for other incidentals. Cost for preformed expansion joints will be deemed to include the cost of sealant used in adjacent works and parapets.

17 Electrical Services

17.1 General

Rates for electrical supply and installation shall include where applicable for all materials, plant and labour including all wiring, civil works as required, conduits, cable trays, fixings and fasteners, terminations, finishes, protection, cuttings, chasing, drilling and making good on completion.

17.2 Street Lighting Pole, Panel, Cable and PVC Conduit

The quantity of each item paid for under this clause will be the number of linear meters or individual items as indicated in Bid which are furnished and installed in accordance with this specification, the Drawings and the instructions of the Engineer.

The price and payment will be full compensation for all the work shown on the Drawings or described in the Specifications. The scope of work included in each pole item shall be as shown on the Drawings or as described in the Specifications.

The work of high mast lighting will include furnishing, assembly and erection of the mast, mast head, lanterns, wiring, electrical control gear, base plate and anchor bolts for the mast. One removable lowering and raising device drive motor unit shall be furnished and payment shall be full compensation for furnishing the drive motor and all its mounting and control equipment.

The payment for tunnel lighting panel will include furnishing and installing the remotely sited photo sensor.

The payment for cable will be full compensation for the furnishing, laying or pulling, and jointing cable, but excavation, protection and backfilling will be paid for under Clause Earth work.

18. Toll Collection Booths

18.1 General

The price for the toll collection booths shall include all building works and services works to provide the complete toll collection facilities including all internal and external finishes

18.2 Portland Cement Concrete (PCC) Pavement

The quantity to be paid for under this item will be the number of square meters of concrete pavement completed and accepted as measured complete in place in the permanent works. The width for measurement will be the width of the pavement shown on the typical cross section of the plans. The length will be measured along the center line of each roadway.

Joints and reinforcing steel required for the work of this clause will not be measured for separate payment.

The price for PCC pavement shall include the full compensation for furnishing and placing all materials, including, but not limited to, class P concrete, reinforcing steel, forms, dowels, tie bars and joint materials, and all other material, labour, equipment and incidentals necessary to complete the work as shown on the Drawings.

19. Vehicle Guardrail, Precast Concrete km Indicator Posts

The quantities to be paid for shall be the number of linear meters of each type of guardrail or fence, completed and accepted in accordance with the Drawings, Specifications, and as directed by the Engineer. Vehicle guardrail will be used at diverging noses, for protection of bridge piers and between earthwork and bridge sections.

The price and payment shall be full compensation for furnishing and installing all materials, including labour, equipment, tools and all incidentals necessary to complete the work as shown on the Drawings.

20. Traffic Signs

The quantities to be paid shall be the actual number of each type warning signs, maintenance marker posts, kilometer posts, guide-posts and concrete guard posts furnished, placed and accepted.

Payment shall be paid for in accordance with applicable Unit Prices as indicated on the Bid Price Schedule. Payment shall constitute full compensation for furnishing and placing all materials, including all labor, equipment, tools and incidentals necessary to complete the work.

21. Traffic Control Utility

21.1 Road Marking

The quantities of road marking to be paid for will be the number of square meters of the relevant material applied to the surface, completed and accepted in accordance with the Drawings, these Specifications, and as directed by the Engineer.

The price and payment shall constitute full compensation for furnishing all materials, labor and equipment and for fulfilling all the work as described in this clause.

21.2 Delineators

The quantities to be paid for shall be the actual number of delineators furnished, installed and accepted in accordance with the Drawings.

The prices and payment shall be full compensation for furnishing and installing delineators, including labour, equipment, tools and all incidentals, necessary to complete the work.

21.3 Concrete Curb and Barrier

Concrete Curb and Barrier shall be measured by number of linear meter. No deductions in the measurement of concrete shall be made for small cavities, chamfers, nosings, bolt holes, and for totally encased rails, joists, reinforcement and the like.

The rates and prices for concrete shall include for all materials, plant, labour, formwork, reinforcement, chamfers and for all other work required to construct the concrete to the forms, dimensions, strengths and finishes as specified.

22. Landscaping Work

22.1 Interlocking Concrete Block Paving

Concrete block pavement shall be measured as the area of net dimensions of the pavement.

The rates for sub-base and base course materials shall include for the removal from stockpile, or where stockpiled material is not available, provided from a Contractor developed or existing borrow area, hauling, placing in layers to the specified levels and tolerances, watering, mixing and compaction, grading and trimming to level and control testing as specified.

The rates for concrete kerbing and inverts shall include for excavation, preparation of surface, supply and placement of concrete, construction joints, curing and testing of concrete and backfill as required.

The rates for concrete block pavements shall include for the placing and compaction of sub-base and base course materials including their placing in layers to the specified levels and tolerances, watering, mixing and compaction, grading and trimming to level and the profiling to tolerance of the base course and bedding sand, the supply, placing, cutting as necessary of blocks and compaction to the required line and level.

23. Slope Protection

23.1 Clay Fill

The quantities of Clay Fill to be paid for shall be the number of square meters of treated surface measured on the slope in accordance with the Drawings.

The price and payment shall be full compensation for furnishing all materials, labour,

equipment, tools including preparation of surface, protection and maintenance, and other incidentals to complete the work in accordance with the Drawings and Specifications.

23.2 Masonry Slope Protection and Revetment Work

The quantities to be paid for shall be the number of square meters on slope rubble measured as indicated on the Drawings, completed and accepted. In computing the area for payment the dimensions used will be those determined by the payment lines or payment areas shown on the Drawings or ordered by the Engineer.

Any coping provided shall be included in the measurement as though it was mortared rubble. Where the Engineer instructs special joint or edge details of a thickness greater than the standard shown on the Drawings, this will be measured by volume and converted to an equivalent area of the standard thickness for the purpose of payment.

The price and payment shall be full compensation for furnishing all labour, equipment, and materials necessary for the proper completion of the work.

24. Drain for Bridge

The quantities of drain pipe to be paid for will be the number of linear meters measured along the central lines of pipe runs and no extra measurement will be made for bends or junction pieces.

The quantities of deck drain to be paid for shall be measured by the number of each type, completed in place and accepted.

Drain pipe shall be 20 cm and 15cm diameter. Payment for drain pipe and deck drain will be deemed to include for all fittings and supports necessary to install the drains in accordance with the details shown on the Drawings.

The prices and payment for this items shall be included full compensation for labour, tools and equipment, furnishing of materials, fabricating, transporting, and setting of each item and all other incidental works.

25. Lightning Protection

The quantity of lightning protection to be measured and paid for will be number of liner meters of cabling or individual items on the Schedules of Prices and Rates which are furnished and installed in accordance with the specification, the Drawings and the instruction of the Engineer.

Measurement of external cable to be taken to the junction box located within the elevation rod or conductor, grounding rod.

Payment for lightning rods shall include lightning receive parts, elevation rod, lightning conductor, down conductor, and earth electrode, grounding connections and wiring, fittings and all necessary equipment, materials, devices and incidentals necessary for complete operating units.

26. Navigation Aids

26.1 Aviation Obstruction Light and Navigation Bridge Light

The quantity of each item paid for will be the number of linear meters or individual items as detailed on the Schedules which are furnished and installed in accordance with this specification, the Drawings and the instructions of the Engineer.

Cable within each pole will not be measured for payment, but will be considered to be included in the unit price for the pay item being installed. Measurement of external cable will be taken to the junction board located within the hand-hole of the pole or to the first junction within the control panel.

The quantity measured as provided above, shall be paid for in accordance with applicable Unit Prices and Rates as indicated on the schedule of Prices and Rates. The price and payment will be full compensation for all the work shown on the Drawings or describe in these Specification.

The payment for cables will be full compensation for the furnishing, laying or pulling, and jointing cables, and all necessary protection.

26.2 Navigation Marker Bouys

The quantity of bouy to be paid for shall be the number of each unit measured on the schedule of Prices and Rates in accordance with the specification, the Drawings and directed by the Engineer.

The prices and rates for bouy shall include for supply and complete installation of all item comprising (except the spare parts) of bouy body, mooring chain and shinker, lighting equipment and painting.

The price the payment shall be full compensation for furnishing and installation all materials including all labour, tools, equipment and incidental necessary to complete the work.

SOCIALIST REPUBLIC OF VIET NAM
MINISTRY OF TRANSPORT
MY THUAN PROJECT MANAGEMENT UNIT
My Thuan Project Management Unit (My Thuan PMU)
127B Dinh Tien Hoang St, Binh Thanh District Ho Chi Minh City - Viet Nam
Tel: (84 - 8) - 841 0088; Fax: (84 - 8) - 841 1872

FORMS OF BANK GUARANTEE

Advance Payment Security
Performance Security

Can Tho Bridge Construction Project
Under JBIC Loan Agreement
Package I

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FORM OF GUARANTEE
ADVANCE PAYMENT SECURITY

Can Tho Bridge Construction Project
Under JBIC Loan Agreement
Package I

The Contractor shall provide an Advance Payment Security in the form below:

Form of Bank Guarantee for Repayment of the Advance Payment

No. _____

Date _____

WHEREAS, _____ (Name of Contractor) (hereinafter called the "Contractor"), whose registered office is at _____ (Address), has entered a written contract agreement (hereinafter called the Contract) dated _____ (Date) with My Thuan Project Management Unit (hereinafter called the "Employer") for the construction and completion of Can Tho Bridge, Package _____ (Name and No of Package) in conformity with the provisions of the Contract,

AND WHEREAS it has been agreed that the Contractor shall be entitled to draw an advance payment of _____ (Amount of Yen in Words) Japanese Yen, ¥ _____ (Amount of Yen in Figures) and _____ (Amount of Dong in Words) Vietnamese Dong, Đ _____ (Amount of Dong in Figures) in conformity with the provisions of the Contract

AND WHEREAS, it has been agreed that the said advance payment will be repaid by the Contractor in conformity with the provisions of the Contract.

AND WHEREAS it has been agreed that the Contractor shall obtain and provide a security for his proper performance in the repayment of the advance payment

We, _____ (Name of a State Bank or a Private Bank in Vietnam) (hereinafter called the Guarantor), having our Registered Office at _____ (Address), unconditionally guarantee to pay to the Employer as primary obligator, on demand, any sum or sums which may from time to time be demanded by the Employer from the Guarantor, in respect of the Contractor's proper performance in the repayment of the advance payment, up to the maximum aggregate sums of _____ (Amount of Yen in Words) Japanese Yen, ¥ (Amount of Yen in Figures) and _____ (Amount of Dong in Words) Vietnamese Dong, Đ (Amount of Dong in Figures) without the Employer needing to show grounds or reasons for the demand.

This payment will be made without any need for the Employer to demand payment from the Contractor, without reference by the Guarantor to the Contractor and notwithstanding any notice given by the Contractor not to make the payment.

If at any time in the course of the Contractor's obligations under the Contract there is any change, addition or other modification to the terms of the Contract, or of the Works to be performed thereunder, including any extension of the period of the Contractor's obligations, it shall be deemed that such change, addition or modification shall have been made with the Guarantor's consent and shall in no way release the Guarantor from any liability under this guarantee.

This guarantee shall remain in full force from the date of its signature either until such time as the Contractor has fulfilled all the Contractor's obligations in the repayment of the advance payment in conformity with the provisions of the Contract or the maximum aggregate sums above have been paid by the Guarantor to the Employer within the terms of this guarantee, whichever occurs sooner

SEALED with the Common Seal of the said Guarantor this _____ (date) day of _____ (month) 20____ (year).

SIGNATURE AND SEAL OF THE GUARANTOR _____

WITNESS _____

WITNESS _____

(Signature, Name and Address to be provided)

SOCIALIST REPUBLIC OF VIET NAM
MINISTRY OF TRANSPORT
MY THUAN PROJECT MANAGEMENT UNIT
My Thuan Project Management Unit (My Thuan PMU)
127B Dinh Tien Hoang St, Binh Thanh District Ho Chi Minh City - Viet Nam
Tel: (84 - 8) - 841 0088; Fax: (84 - 8) - 841 1872

FORM OF GUARANTEE
PERFORMANCE SECURITY

Can Tho Bridge Construction Project
Under JBIC Loan Agreement
Package I

The Contractor shall provide a Performance Security in the form below:

Form of Bank Guarantee for Performance

No. _____ Date _____

WHEREAS, _____ (Name of Contractor) (hereinafter called the "Contractor"), whose registered office is at _____ (Address), has entered a written contract agreement (hereinafter called the Contract) dated _____ (Date) with My Thuan Project Management Unit (hereinafter called the "Employer") for the construction and completion of Can Tho Bridge, Package _____ (Name and No of Package) in conformity with the provisions of the Contract.

AND WHEREAS it has been agreed in the Contract that the Contractor shall obtain and provide a security for his proper performance of the Contract

We, _____ (Name of a State Bank or a Private Bank in Vietnam) (hereinafter called the Guarantor), having our Registered Office at _____ (Address), unconditionally guarantee to pay to the Employer as primary obligator, on demand, any sum or sums which may from time to time be demanded by the Employer from the Guarantor, in respect of the Contractor's proper performance of the Contract, up to the maximum aggregate sums of _____ (Amount of Yen in Words) Japanese Yen, ¥ (Amount of Yen in Figures) and _____ Amount of Dong in Words) Vietnamese Dong, Đ (Amount of Dong in Figures), without the Employer needing to show grounds or reasons for the demand.

This payment will be made without any need for the Employer to demand payment from the Contractor, without reference by the Guarantor to the Contractor and notwithstanding any notice given by the Contractor not to make the payment.

If at any time in the course of the Contractor's obligations under the Contract there is any change, addition or other modification to the terms of the Contract, or of the Works to be performed thereunder, including any extension of the period of the Contractor's obligations, it shall be deemed that such change, addition or modification shall have been made with our consent and shall in no way release the Guarantor from any liability under this guarantee.

This guarantee shall remain in full force from the date of its signature either until such time as the Contractor has fulfilled all the Contractor's obligations under or in relation to the Contract or the maximum aggregate sums above have been paid by the Guarantor to the Employer within the terms of this guarantee, whichever occurs sooner

SEALED with the Common Seal of the said Guarantor this ^(date) day of ^(month) 20 ^(year).

SIGNATURE AND SEAL OF THE GUARANTOR _____

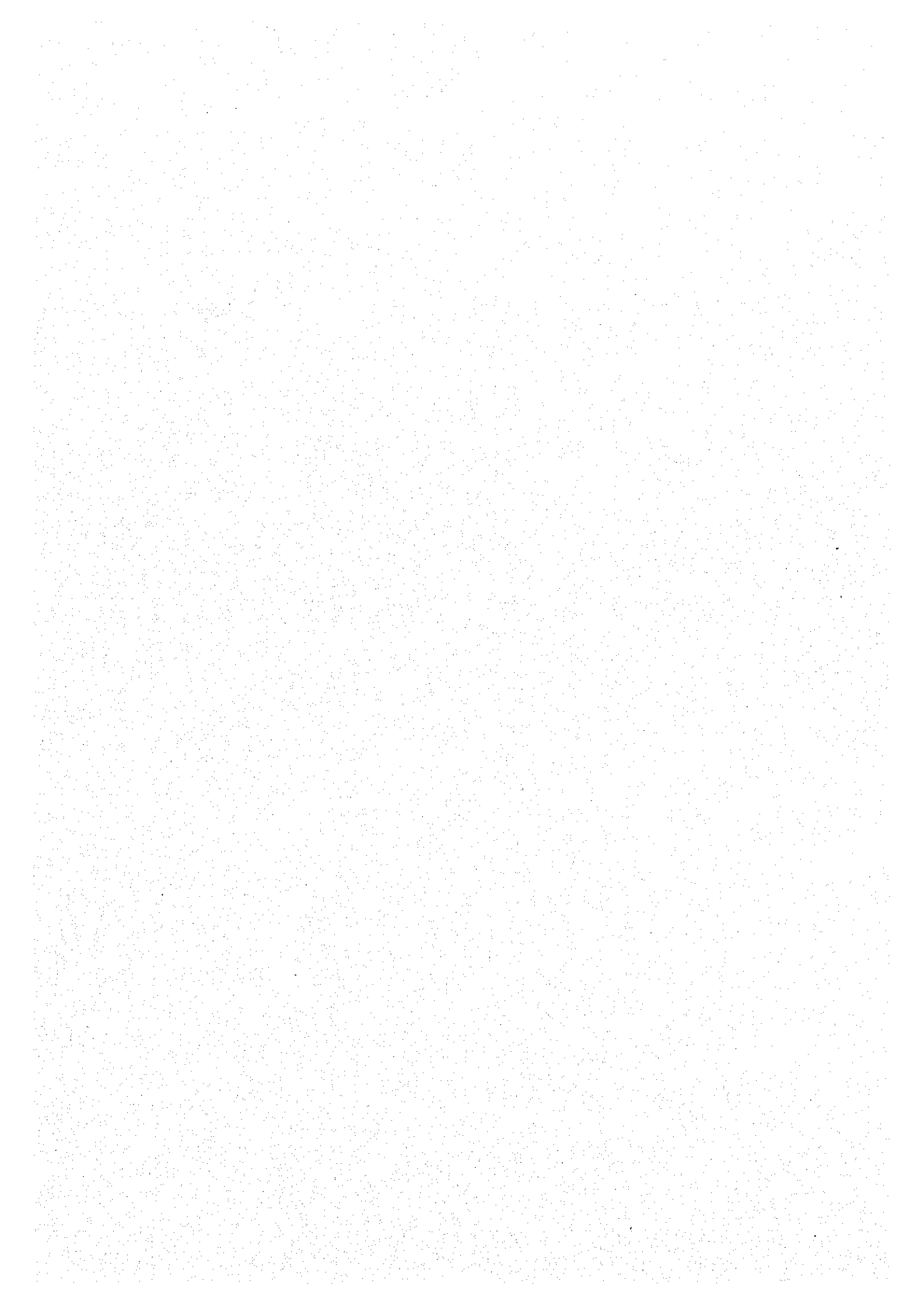
WITNESS _____

WITNESS _____

(Signature, Name and Address to be provided)







JICA

