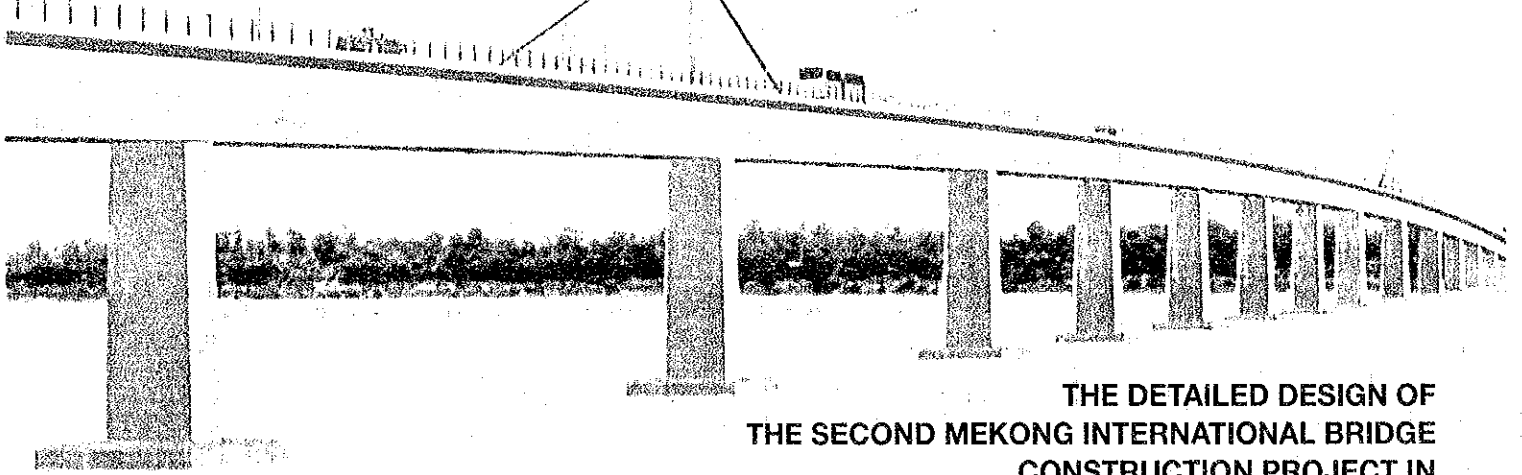


JAPAN INTERNATIONAL COOPERATION AGENCY

MINISTRY OF COMMUNICATION, TRANSPORT, POST AND CONSTRUCTION
THE LAO PEOPLE'S DEMOCRATIC REPUBLIC
DEPARTMENT OF HIGHWAYS
THE KINGDOM OF THAILAND



THE DETAILED DESIGN OF
THE SECOND MEKONG INTERNATIONAL BRIDGE
CONSTRUCTION PROJECT IN
THE LAO PEOPLE'S DEMOCRATIC REPUBLIC AND
THE KINGDOM OF THAILAND

FINAL REPORT

JUNE 2000



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THE KINGDOM OF THAILAND

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DRAFT PREQUALIFICATION DOCUMENTS (PACKAGE 1)

JUNE 2000



ORIENTAL CONSULTANTS COMPANY LIMITED



NIPPON KOEI CO., LTD.



1158420(8)

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MINISTRY OF COMMUNICATION, TRANSPORT,
POST AND CONSTRUCTION,
GOVERNMENT OF THE LAO PEOPLE'S DEMOCRATIC REPUBLIC
AND
DEPARTMENT OF HIGHWAYS,
MINISTRY OF TRANSPORT AND COMMUNICATIONS,
GOVERNMENT OF THE KINGDOM OF THAILAND

THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

INVITATION FOR PREQUALIFICATION

Date: _____

Contract Package 1: Bridge, Approach Viaducts and Roads Works

1. The Government of The Lao People's Democratic Republic, hereinafter referred to as "The Lao PDR" and the Government of Kingdom of Thailand, hereinafter referred to as "Thailand" have applied for an ODA loan from the *Japan Bank for International Cooperation, hereinafter referred to as "JBIC", towards the cost of the Second Mekong International Bridge Construction Project and intend to apply the proceeds of this loan to eligible payments under the contract for which this Invitation for Prequalification is issued.
2. The Ministry of Communication, Transport, Post and Construction, the Government of The Lao PDR and the Department of Highways, Ministry of Transport and Communications, the Government of Thailand, hereinafter referred to as "the Employers", intend to prequalify contractors and have formed a Project Office, represented by the Project Manager who shall be designated by the Employers. The Project Office shall undertake the Prequalification and bidding process for the following works under this project:

Contract Package 1: Bridge, Approach Viaducts and Roads Works

Construction of the Second Mekong International Bridge which will comprise a post-tensioned pre-stressed segmental concrete box girder bridge to be constructed by the cantilever method on multi-column type piled foundations, approach viaducts and sections of approach roads in both the Lao PDR and Thailand.

3. It is expected that Invitation to Bid will be made in (month and year).
4. There will be only one bid to cover the whole Contract Package 1. The construction works contract shall be split into two separate contracts at the center of main bridge of the Second Mekong International Bridge, Contract Package 1A to be signed with the government of Lao PDR and Contract Package 1B with the government of Thailand respectively.

* Japan Bank For International Cooperation(JBIC) was established on October 1,1999 through a merger of the Export-Import Bank of Japan(JEXIM) and the Overseas Economic Cooperation Fund, Japan,(OECF).

5. Prequalification is open to firms and voluntarily formed joint ventures from all eligible countries and areas and the contract shall be bid on an international competitive bidding (ICB) basis in accordance with the "Guidelines for Procurement under JBIC ODA Loans".
6. Eligible applicants may obtain the prequalification documents at the office of:
The Project Manager (Name, address, etc.)
7. The request must clearly state "Request for Prequalification Documents for The Second Mekong International Bridge Construction Project Contract Package 1". The documents are available during office hours up to (day, month, year) for a non-refundable fee of one hundred US Dollars (\$100).
8. Applications for Prequalification must be duly completed and submitted in sealed envelopes clearly marked "Application to Prequalify for the Second Mekong International Bridge Construction Project, Contract Package 1 Contract Nos. AB-C123 of the Lao PDR side and DE-F456 of Thailand side to the Project Manager office not later than 00:00 (local time) on date, month, year.
9. The Employers reserve the right to accept or reject late applications.
10. Every applicant will be advised, in due course, of the result of their applications. Only firms and joint ventures prequalified under this procedure will be invited to bid.

Name
Address

(Name of Employers and address)

MINISTRY OF COMMUNICATION, TRANSPORT,
POST AND CONSTRUCTION,
GOVERNMENT OF THE LAO PEOPLE'S DEMOCRATIC REPUBLIC
AND
DEPARTMENT OF HIGHWAYS,
MINISTRY OF TRANSPORT AND COMMUNICATIONS,
GOVERNMENT OF THE KINGDOM OF THAILAND

THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT

INSTRUCTIONS TO APPLICANTS

Date: _____

Contract Package 1: Bridge, Approach Viaducts and Roads Works

1. Scope of Bid
 - 1.1 The Ministry of Communication, Transport, Post and Construction, the Government of The Lao PDR and the Department of Highways, the Government of Thailand, hereinafter referred to as "the Employers", have applied for a loan from the Japan Bank for International Cooperation, hereinafter referred to as "the JBIC", toward the cost of the Second Mekong International Bridge Construction Project and intend to apply the proceeds of this loan to eligible payments under the contract for which this Invitation for Prequalification is issued. Payments by the JBIC will be made only at the request of the governments of the Lao PDR and Thailand and upon approval by the JBIC. Payments will be subject in all respects to the terms and conditions of the Loan Agreement. No party other than the governments of the Lao PDR and Thailand shall derive any rights from the Loan Agreement or have any right to the loan proceeds.
 - 1.2 The Employers intend to prequalify contractors for the Contract Package 1: Bridge, Approach Viaducts and Roads Works (hereinafter referred to as "the Contract") under the project, which will comprise a post-tensioned pre-stressed segmental concrete box girder bridge to be constructed by the cantilever method on multi-column type piled foundations, approach viaducts and sections of approach roads in both the Lao PDR and Thailand.
 - 1.3 Prequalification is open to firms and voluntarily formed joint ventures from all eligible countries and areas and the Contract shall be bid on an international competitive bidding (ICB) basis in accordance with the JBIC's Guidelines for Procurement. Domestic contractors may apply for prequalification independently or in joint venture with foreign contractors.
 - 1.4 General information on the climate, hydrology, topography, access to site, Project layout, expected construction period, facilities, and services provided by the Employers, are summarized in Annex 1.
 - 1.5 The Contract shall be on the basis of unit prices for work performed or items supplied. The General Conditions of Contract shall be FIDIC Fourth Edition 1987 as reprinted in 1992 with amendments. The Conditions of Particular Appreciations and all other Instructions are to be provided in the bidding documents, which shall be particularly used for this project.

- 1.6 The bid will cover the whole of the Contract Package 1, which shall be split into two separate contracts at the center of main bridge of the Second Mekong International Bridge. Contract Package 1A for the Lao PDR side and Contract Package 1B for the Thailand side. The successful bidder shall enter into separate contracts with the Lao PDR and Thailand respectively.

2. Submission of Applications

- 2.1 The prequalification application shall be prepared in one (1) original and five (5) copies. The original and copy of each set shall be clearly marked "Original" and "Copy", respectively on the front cover of each set. In the event of discrepancy between original and copies, the original shall prevail.

List of Documents

- Application Forms (1 to 11, whichever is necessary)
- Bank's Letter of Guarantee (if necessary)
- Letter of Guarantee
- Evidence (where required)

Applications for prequalification must be submitted to the Project Manager in sealed envelopes, which must be delivered by hand or by registered mail, at:

The Project Manager (name and address)

not later than:

00:00PM (local time) on date, month, year

and be clearly marked "Application to Prequalify for the Second Mekong International Bridge Construction Project Contract Package 1, Contract Nos.AB-C123 and DE-F456".

The Employers reserve the right to accept or reject late applications. Unaccepted late applications will be returned to the consignor unopened.

- 2.2 The name and mailing address of the Applicant shall be clearly marked on the envelope.
- 2.3 All the information and evidence requested for prequalification shall be answered in the English language.
- 2.4 Each application form shall be duly signed and stamped by the applicant or a person or persons duly authorized to sign on behalf of the applicant. Such authorization shall be indicated by a written power of attorney accompanying the application.
- 2.5 All documents submitted by the applicants shall be treated as confidential and will not be returned.
- 2.6 Failure to provide information that is essential to evaluate the Applicant's qualifications, or to provide timely clarification or substantiation of the information supplied, may result in disqualification of the Applicant.

2.7 Any questions that applicants may have about the scope of the works and/or information given in this document must be written in English and sent to the Project Manager at the address given above. Questions will be accepted provided they are received not later than twenty-one (21) days prior to the Closing Date. The questions will be answered by fourteen (14) days before the Closing Date in such a way that all purchasers of the Prequalification Documents will be informed of the questions and the answers given. Addenda such as clarifications, additions or deletions to the Prequalification Documents, which may be issued by the Project Manager by fourteen (14) days prior to the Closing Date will be distributed to each purchaser who shall acknowledge receipt of each addendum by signing and returning the receipt form issued with the addendum. All addenda issued shall become part of the Prequalification Documents.

2.8 The prequalification documents contain the following application forms:

- Form (1) General Information
- Form (2a) Annual Turnover Data
- Form (2b) Summary Sheet : Annual Turnover Data (Joint Ventures only)
- Form (3a) Operational Experience Record
- Form (3b) Summary Sheet : Operational Experience Record (Joint Venture only)
- Form (4a) Successful Experience Record
- Form (4b) Summary Sheet : Successful Experience Record (Joint Venture only)
- Form (5) Particular Experience Record
- Form (5a-e) Details of Project
- Form (6) Site Organization
- Form (7a) Personnel Capabilities
- Form (7b) Details of Personnel Capabilities
- Form (8a) Equipment Capabilities
- Form (8b) Details of Proposed Equipment
- Form (9) Financial Capabilities
- Form (10) Litigation History
- Form (11) List of Prequalification Forms Filled in by the Applicant

3. Qualification Criteria

3.1 Initial Evaluation

An initial evaluation of the application will be made based on meeting the following pass/fail criteria regarding the Applicant's general experience and capability for the minimum requirement of the prequalification.

The Applicant must fully meet the following minimum criteria which is proved by notarized documents:

(a) Average annual turnover over the last five (5) years of at least:

30,000 million Japanese yen equivalent

(b) Operational experience as a prime contractor and/or as a lead partner in a joint venture for a period of at least three (3) years in the last ten (10) years,

- (c) Successful experience as a prime contractor or as a partner of a joint venture in bridge projects in the last five-(5) years;

3.2 Further Evaluation

The applicants who pass the initial evaluation will be further assessed in detail by means of a scoring method.

At the qualification scoring, 100 points in full marks will be divided into the following three major qualification categories:

(1) Particular experience	40 points
(2) Financial capabilities	40 points
(3) Technical capabilities	<u>20 points</u>
Total	100 points

To be considered for prequalification, Applicant shall attain at least 60% of the maximum points for each respective category and also attain at least 70 points in total. The requirements on each category are stated below:

(1) Particular Experience

The Applicant must have successful construction experience as a prime contractor or a lead partner of a joint venture and have successfully completed the following threshold activities at least once in the last five years, or be currently engaged in such activities (for compliance, more than 50% of the relevant contract must have been successfully completed at the time of application). The Applicant shall attach original copy of work completion certificate, or notarized copy thereof, for each project.

- (a) Construction of prestressed concrete cablestayed bridges whose the span length shall be longer than 150 meters, and/or extradosed-type prestressed concrete cablestayed and/or prestressed concrete sail type bridges longer than 80 meter.
- (b) Construction of a major civil engineering infrastructure project in Asian countries with a contract value of YEN \ 4,000 million or more.
- (c) Complete construction including foundations of a major multi-span precast segmental prestressed concrete box girder bridge with more than 8 spans each of length greater than 70 meters.
- (d) Precast segmental cantilever erection method.
- (e) Construction of 1.5 meters or larger diameter cast-insitu concrete piling over water.

(2) Financial Capabilities

(a) Lines of Credit:

The Applicant shall demonstrate that he has access to, or has available lines of credit, and other financial means sufficient to meet the construction cash flow for a period of three months, estimated at YEN\ 1,500 millions equivalent, net of the Applicant's commitments for other contracts. If the Applicant feels that his financial capacity may be insufficient, he may include with his application a letter of guarantee issued by a first-class bank to supplement the application. This letter of guarantee shall be addressed to the Employers and shall guarantee that in case the Contract is awarded to the Applicant, the Applicant will be awarded with a revolving line of credit for an amount specified in the letter of guarantee. Such a revolving line of credit shall be maintained until the works are taken over by the Employers. Annex-2 to these Instructions to Applicants shows a form of such letter of commitment acceptable to the Employers.

(b) Financial Position:

The audited and notarized balance sheets for the last five years shall be submitted and must demonstrate the soundness of the Applicant's financial position, showing long-term profitability. Where necessary, the Employers will make inquiries with the Applicant's bankers. If your account shows extraordinary figures, please explain the reasons and the back grounds.

(3) Technical Capabilities

(a) Site Organization:

A site organization proposed by the Applicant shall adequately define the responsibility of each organization section. The quality assurance method proposed shall also be adequate for the project.

(b) Personnel Capabilities:

The Applicant must have suitably qualified key personnel, to fill the following positions. The Applicant shall supply information on a prime candidate for each position, who shall meet the minimum experience requirements specified below.

Position	Minimum Total Experience (Years)	Minimum Experience in Similar Works (Years)	Minimum Experience In Developing Countries (Years)
Project Manager	20	10	7
Planning Engineer	15	8	5
Foundation/Piling Engineer	15	8	5
Prestressing Concrete Engineer	15	8	5
Earthworks Engineer	15	8	5
Material Engineer	10	5	3

(c) Equipment Capabilities:

The Applicant shall provide a list of major equipment to be used to complete the following major works included in the Contract. The Applicant shall also demonstrate how he procures such equipment for use in the Contract, e.g. owned, through hire, lease, purchase or other means.

- I. The erection of 530 segments (maximum weight 140 tonne/segment) of 12 to 15 meter wide variable precast segmental prestressed concrete box girder bridge and cast insitu box girder deck with a total length of approximately 1,600 meters constructed over water within 18 months.
- II. Production of the 530 segments (maximum weight 140 tonne/segment), total concrete volume 13,000 m3 of 12 to 15 meters wide variable precast prestressed concrete segments within 18 months.
- III. The construction of 10 piers, each with 6 nos of 2 meters diameter cast-insitu concrete piles and 6 piers, each with 10 nos of 2 meters diameter cast-insitu concrete piles in the river within two dry seasons of low water level.
- IV. Installation of 16 nos pile caps including precast concrete skirting (maximum weight 5 tonne) over the river within two dry seasons of low water level.
- V. Production of approximately 35,000m3 concrete within 24 months, maximum production of 4,000 m3 per month.

3.3 Quality Control

The Applicant (as joint operation or as single applicant) must demonstrate that it has reliable quality control and assurance system at present. If the Applicant accredited the certificate of ISO 9000 series or equivalent, he must attach a copy of the authorized certificate. The Applicant must attach a set of justification documents of its total quality control system or equivalent adopted by the Applicant at present if the authorized certificate is not available.

3.4 Litigation History

The Applicant shall provide accurate information on any litigation or arbitration resulting from contracts completed or under execution by him over the last five years. A consistent history of awards against the Applicant or any partner of a joint venture may result in failure of the application. Subsequent discovery of undisclosed litigation or arbitration shall lead to the disqualification of the Applicant.

4. Joint Ventures

4.1 Joint ventures must comply with the following requirements:

- (a) Followings are the minimum qualification requirements:

- (I) The lead partner shall meet (a), (b) and (c) of the initial evaluation given in para. 3.1 and the joint venture must satisfy collectively all the qualifying criteria given in para. 3.2.

and

- (II) The lead partner shall meet not less than 65% of the qualifying criteria and the other partners, 35% of the qualifying criteria given in para. 3.2. Where the lead partner satisfies 100% of the qualifying criteria given in para. 3.2, there is no qualifying requirement for the other partners.

- (b) The formation of a joint venture shall be kept unchanged after prequalification.
- (c) Any bid shall be signed so as to legally bind all partners, jointly and severally, and any bid shall be submitted with a copy of the joint venture agreement providing the joint and several liability with respect to the contract.
- (d) One firm is allowed to form only one joint venture. Failure to comply with this will result in disqualification.

5. Conflict of Interest

- 5.1 The Applicant (including all members of a joint venture) must not be associated, nor have been associated over the past five years, with any consultant or other entity that has prepared the design, specifications, and other prequalification and bidding documents for the Project, or that was proposed as engineer for the contract. Any such association will result in the disqualification of Applicant.

6. Updating of Prequalification Information

- 6.1 Bidders shall be required to update the financial information used for prequalification at the time of submitting their bids, to confirm their continued compliance with the qualification criteria and verification of the information provided. A bid shall be rejected if the Applicant's qualification thresholds are no longer met at the time of bidding.

7. Others

- 7.1 Only firms and joint ventures that have been prequalified under this procedure will be invited to bid. A qualified firm or a member of a qualified joint venture may participate in only one bid for the Contract. If a firm submits more than one bid, singly or in joint venture, all bids including that party will be rejected. This rule will not apply to the specialist or subcontractors who shall be required for the contract.

7.2 Bidders will be required to provide bid security in the form of a bond, banker's guarantee or other security acceptable to the Employers for an amount specified in the bidding documents, and the successful bidder will be required to provide performance security. Examples of acceptable forms will be supplied with the bidding documents.

7.3 The Employers reserve the right to:

- (a) amend the scope and value of the contract to be bid, in which event the contract will only be bid among those prequalified bidders who meet the requirements of the contract as amended;
- (b) reject or accept any application; and
- (c) cancel the prequalification process and reject all applications.

The Employers shall neither be liable for any such actions nor be under any obligation to inform the Applicant of the grounds for them.

7.4 Applicants will be advised in writing and by fax in due course the result of their application, and the names of the prequalified applicants, without assigning any reason for the Employers' decision.

**PROJECT DESCRIPTION
OF
THE SECOND MEKONG INTERNATIONAL BRIDGE CONSTRUCTION PROJECT**

1 GENERAL INFORMATION

1.1 Site Conditions

The Bridge crosses the Mekong River at about 5km north of Savannakhet town and 7.5km north of Mukdahan town. The Main Bridge will be approximately 1,600m long and the connecting road will be 3km long for the Savannakhet side and 1.7km long for the Mukdahan side, respectively. The locations of the Bridge and connecting road are indicated and shown on the following pages.

The connecting road, both on the Savannakhet and Mukdahan sides, runs on a river terrace of the Mekong River. The ground elevations at the riverbanks are MSL +139m on the Savannakhet side and MSL +140m on the Mukdahan side. The water level of the Mekong River is about MSL +125.5m in the dry season. The riverbanks are about 15m higher than the river water level in the dry season.

The Savannakhet side of the connecting road runs on very low, gently undulating hills. The ground elevation along the connecting road varies from MSL +138 to +170m. Approximately 60% of the route runs through paddy fields and the remaining 40% through areas of greening, houses and factories. It crosses the provincial road A3 at about 1 km from the junction of the national road Route 9 and Kaysone Road.

The connecting road on the Thailand side mostly runs through the paddy fields on the ground elevations varying from MSL +138 to +142m. It access the Huai Po River, one of numerous minor tributaries of the Mekong River, at about 1 km from the National Highway Route 212.

Analyses of the High Water Level (HWL) have been carried out since an understanding of the seasonal variations in water levels will be important when considering options for construction and for programming construction activities. Based on the results the following values were adopted.

- An HWL of a 1 in 100 years average recurrence interval (ARI) flood water level is adopted at +139.60m for the Main Bridge.
- An HWL of a 1 in 25 years ARI flood water level is adopted at +138.50m for the approach and connecting roads.

1.2 Extent of the Works

1) Package 1 (The Lao PDR and Thailand)

The scope of the Works covered under Package 1 shall include:

(1) Main Bridge and Approach viaducts

- Substructure (Main Bridge)
 - Superstructure (Main Bridge)
 - Approach road from the Border Control Facilities to the Approach Viaducts (Lao PDR and Thailand sides)
 - Approach Viaducts (on both the Lao PDR and Thailand sides)
 - Traffic Changeover Facility on Thailand side
 - River Bank Protection Works on both banks
- The construction of viaduct structures and a Main Bridge approximately 2,000m in length, in spans of 50m to 110m.
 - The construction of the adjacent approach road at each end of the Bridge, approximately 475m of dual carriageway on the west bank including a traffic changeover, and 200m of dual carriageway on the east bank.
 - Provision of the Employer's and Engineer's requirements.
 - All protective and temporary works and other consequential work required for carrying out the work.

2) Package 2 (The Lao PDR side)

The scope of the Works covered under Package 2 shall include:

- (1) Connecting road from the National Road Route No.9 to the Lao PDR Border Control Facility. (L=1.864m)
Substructure (Main Bridge) / Drainage / Pavement /
Lighting facilities and other incidental works
Intersection : National and Route 9 (and Kaysone Road) and Provincial Road Route A3
- (2) Border Control Facility. (L=600m)
Civil Works (land reclamation surface water drainage, road works, etc.)
Building (offices and other buildings)
Water supply and sewage systems (septic tank)
Electric power supply system
Communication system
Lighting system

3) Package 3 (The Thailand side) (L=951m)

The scope of the Works covered under Package 3 shall include:

- (1) Connecting road from the National Highway Route No. 212 to the Thailand Border Control Facility. (L=520m)

Earth work / Drainage / Pavement / Lighting facilities and other incidental works

Intersection: National and Route 9 (and Kaysone Road) and Provincial Road Route A3

(2) Border Control Facility. (L=436m)

Civil Works (land reclamation surface water drainage, road works, etc.)

Building (offices and other buildings)

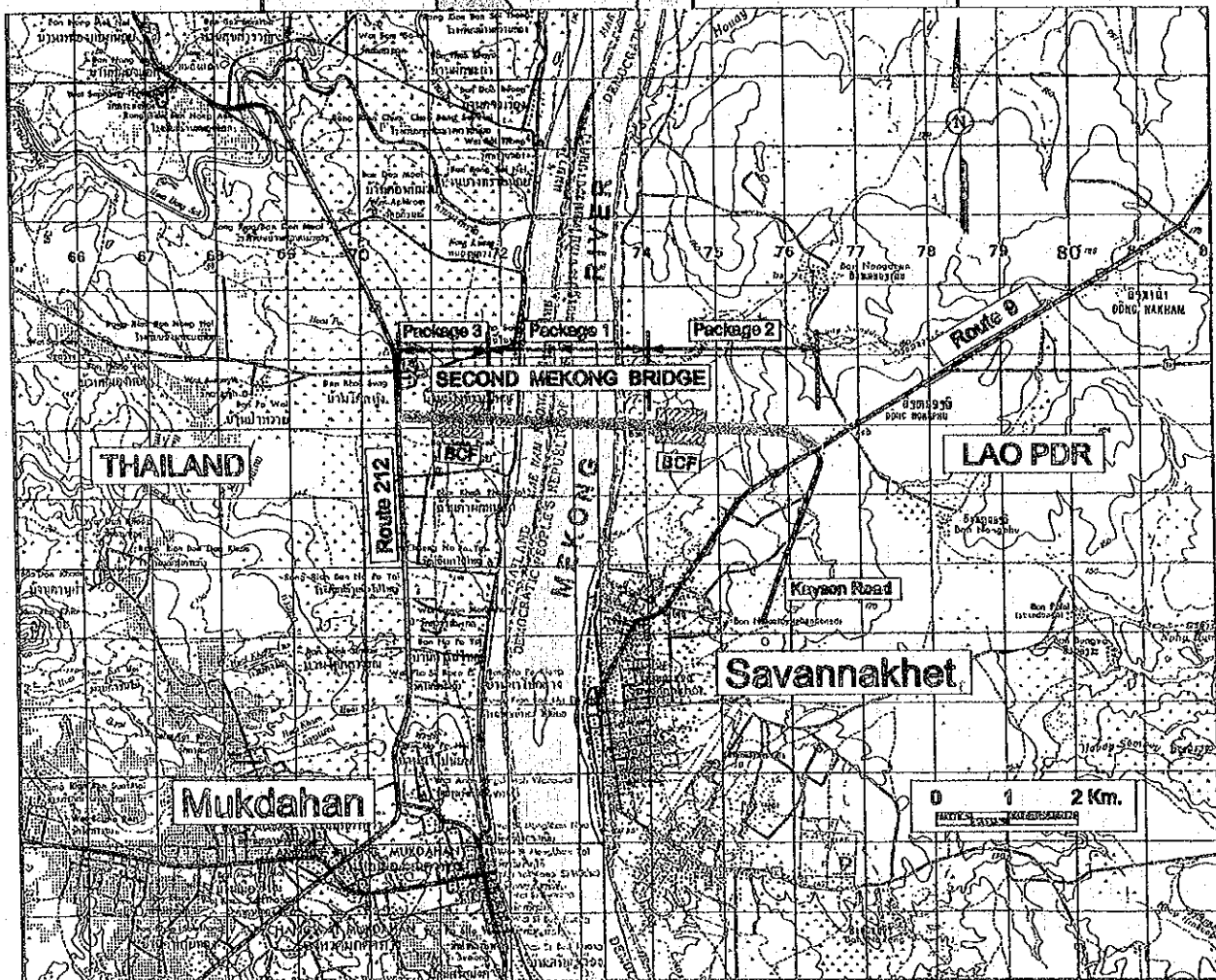
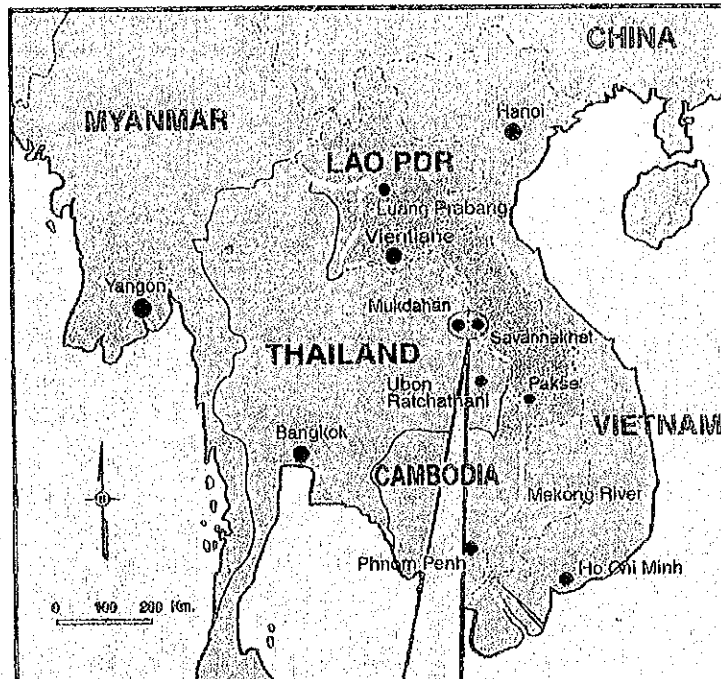
Water supply and sewage systems (septic tank)

Electric power supply system

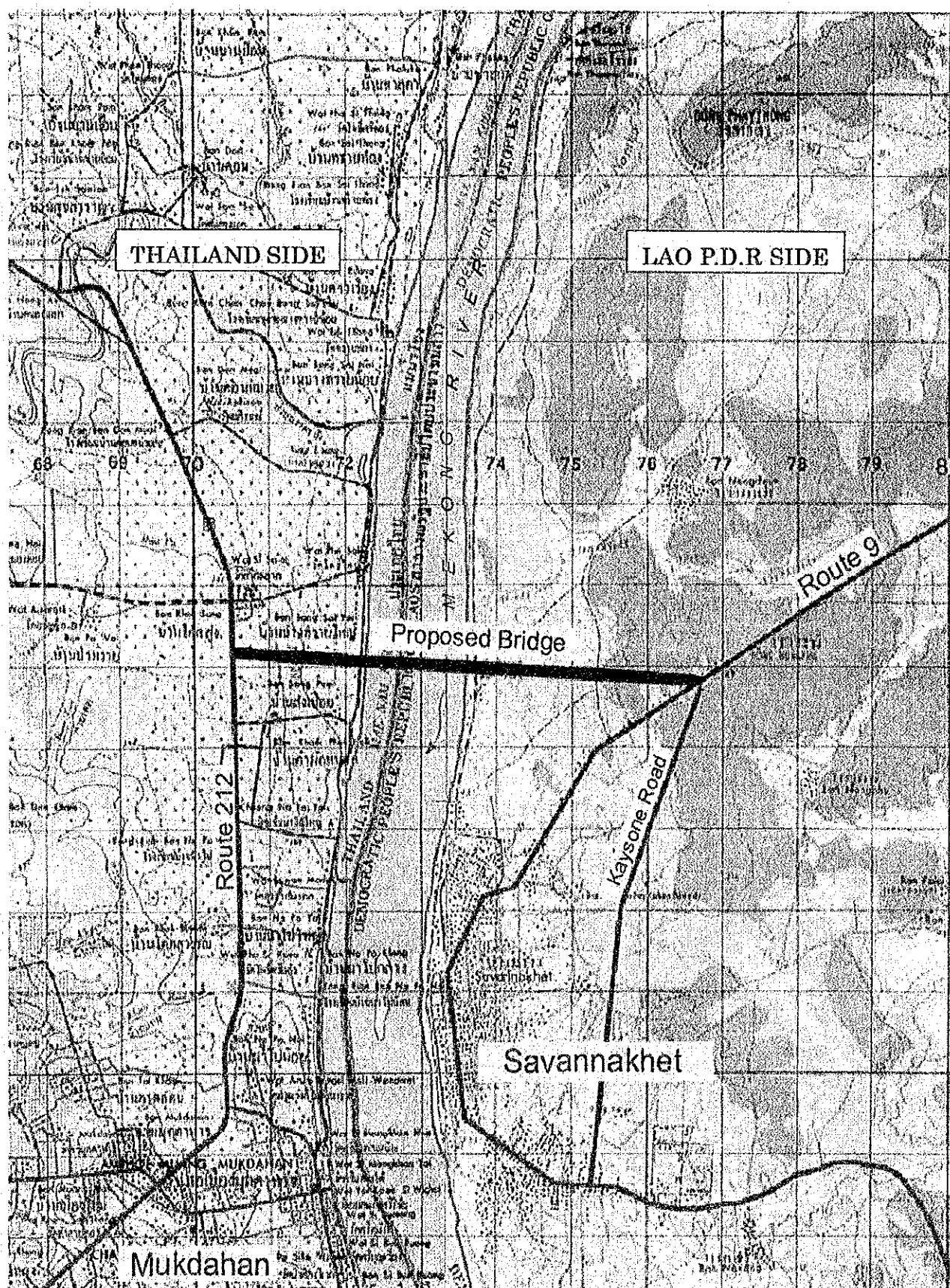
Communication system

Lighting system

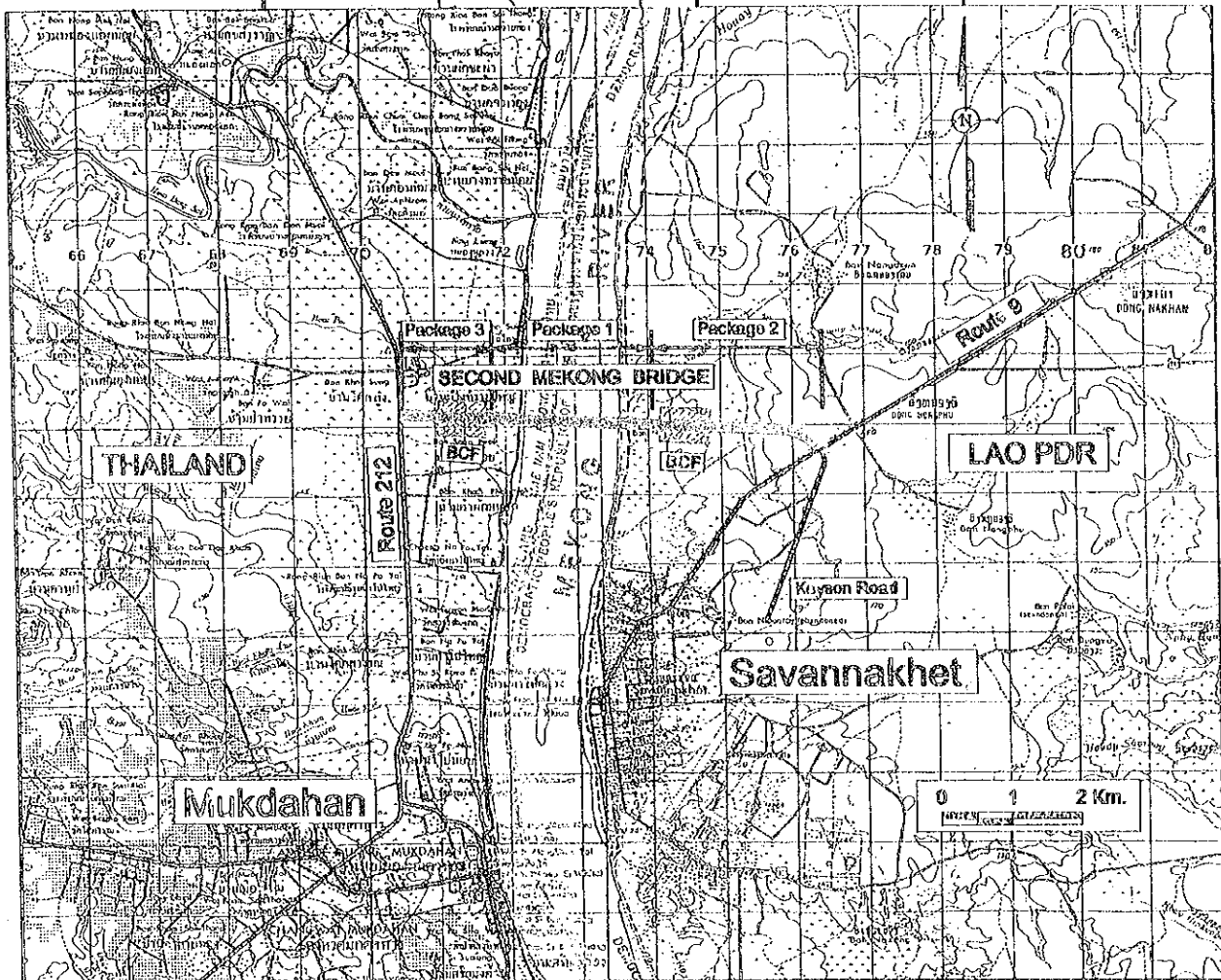
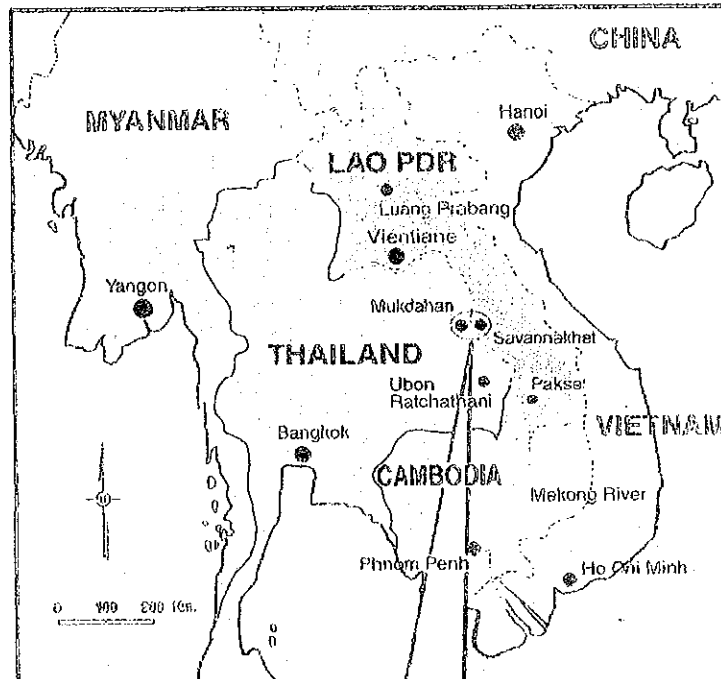
LOCATION MAP



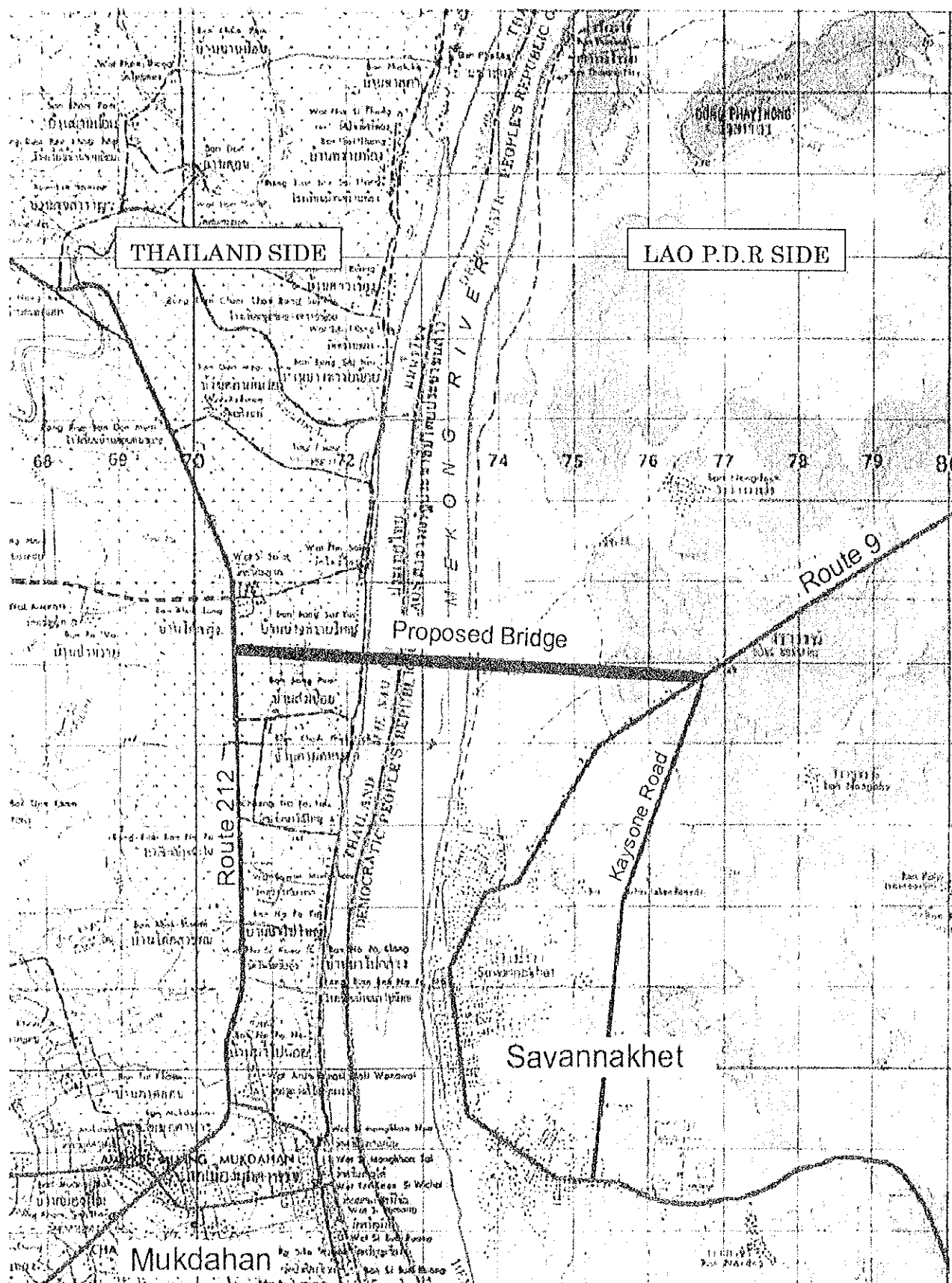
BRIDGE LOCATION MAP



LOCATION MAP



BRIDGE LOCATION MAP



2 ROAD

2.1 Design standard

The geometric design standard of the road is based on that of the Asian Highway and summarized in Table 2.1.

Table 2.1 The Geometric Design Standards of the Project

Geometric Item	Second Mekong Bridge
Class	Asian Highway Class II-L
Design Speed	80km/h
Min. Horizontal Curve Radius	400m
Min. Horizontal Curve Radius (without Transition Curve)	900m 3,500m
(without Superelevation)	
Min. Vertical Curve Radius (Crest)	5,000m 2,000m
(Sag)	
Max. Gradient	4.0%
Max. Superelevation	10.0%
Carriageway Width	3.5m 2 = 7.0m
Shoulder Width (Traffic Side)	2.5m
Crossfall	2.0%
Right of Way	50m (Lao PDR) 60m (Thailand)

2.2 Typical Cross-Section

The typical cross-sections of the connecting road on the Lao PDR the Thailand sides are shown in Figure 2.1 and 2.2, respectively. The 11m width median in the Thailand side has been decided on the basis of scheduled widening of the carriageway in the future.

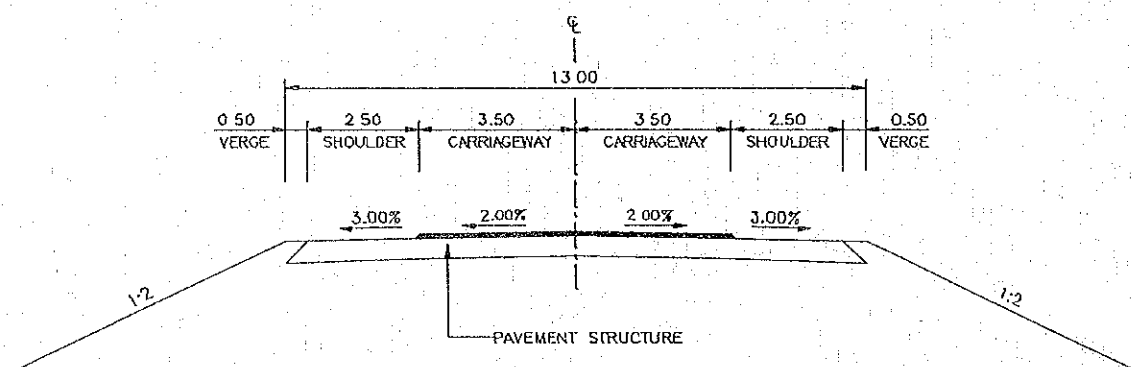


Figure 2.1 Typical Cross-section of the Connecting Road on the Lao PDR

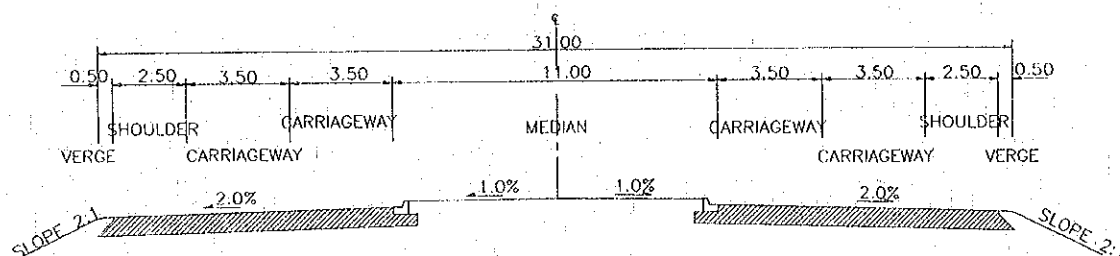


Figure 2.2 Typical Cross-section of the Connecting Road on the Thailand

2.3 Horizontal and Vertical Alignment

The horizontal alignment of the road was determined under the various controlling points such as the crossing point of the Bridge; the connecting points of Route No. 9, A-3 Road in Lao PDR, and Route No. 212 in Thailand; and the land use along the route.

The Vertical alignment of the road was determined on the basis of various vertical control points such as a navigation clearance and BCF elevation; connecting and crossover roads, and land use along the route (especially on the Lao PDR side). The horizontal and vertical alignments are shown in Figure 2.3 and 2.4.

2.4 Traffic Changeover

The traffic changeover is located between the Main Bridge and the Thailand BCF. The traffic changeover type was decided as an at-grade by reason of its simple and economical structure, as well as the expected increase in traffic volume in the future. The plan of the traffic changeover is shown in Figure 2.5.

The design standards for the traffic changeover are shown in Table 2.2.

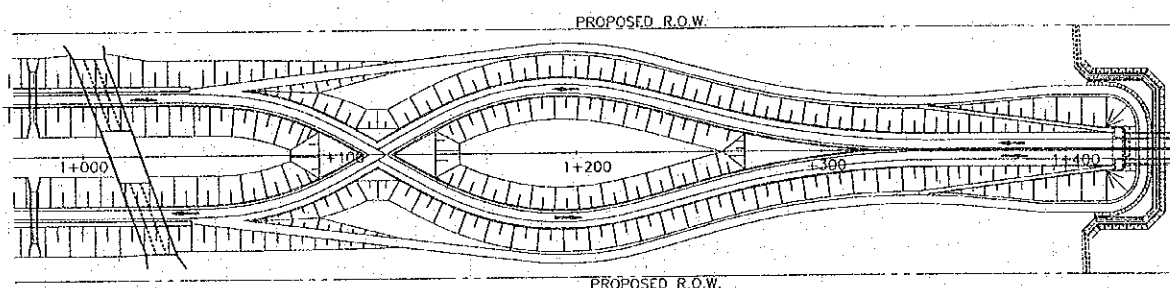
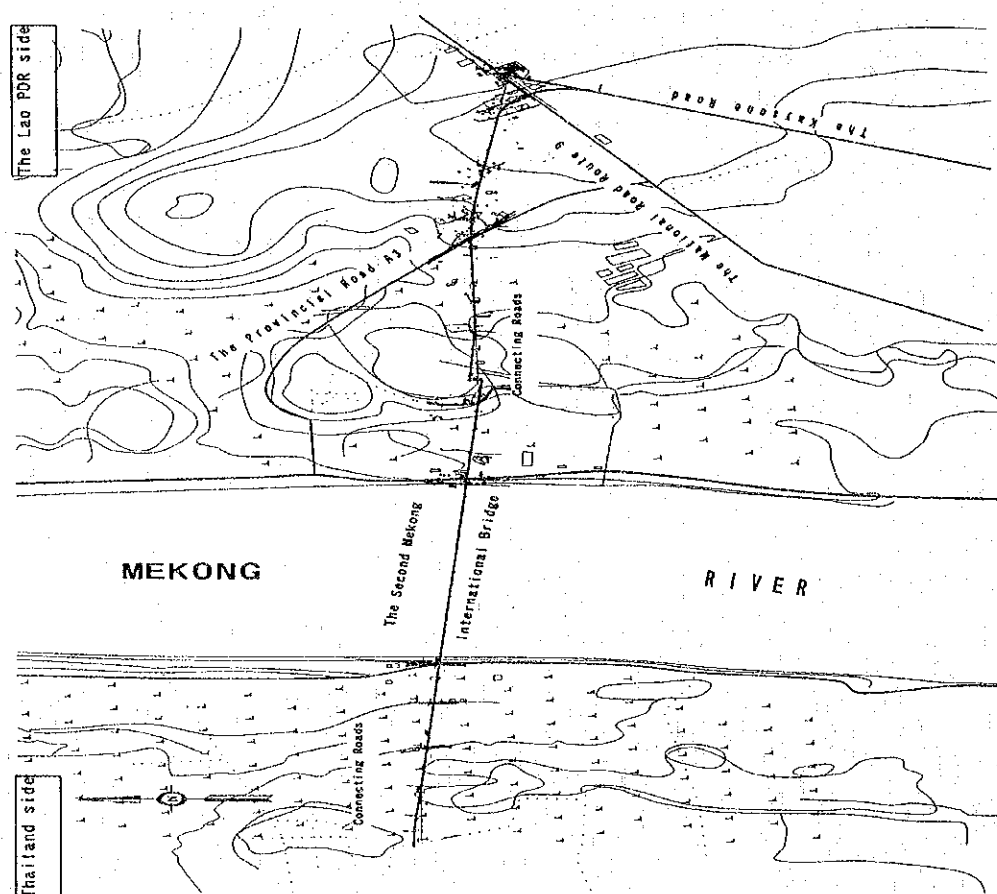


Figure 2.5 Traffic Changeover

Table 2.2 The Design Standards for the Traffic Changeover

Standard Item	Second Mekong Bridge
Class	Japanese Grade-B
Design Speed	50km/h
Number of Lanes	1 (on each side)
Min. Horizontal Curve Radius	90m
Min. Horizontal Curve Radius (without Transition Curve) (without Superelevation)	220m 1,300m
Min. Horizontal Curve Length	90m
Min. Vertical Curve Radius (Crest) (Sag)	5,000m 2,000m
Max. Gradient	4.0%
Max. Superelevation	10.0%
Lane Width	3.5m
Shoulder Width (Traffic Side)	2.5m
Shoulder Width (Center Side)	1.0m
Verge Width	0.5m
Formation Width	8.0m
Crossfall	2.0%


Figure 2.3 Horizontal Alignment of the Bridge and Connecting Road

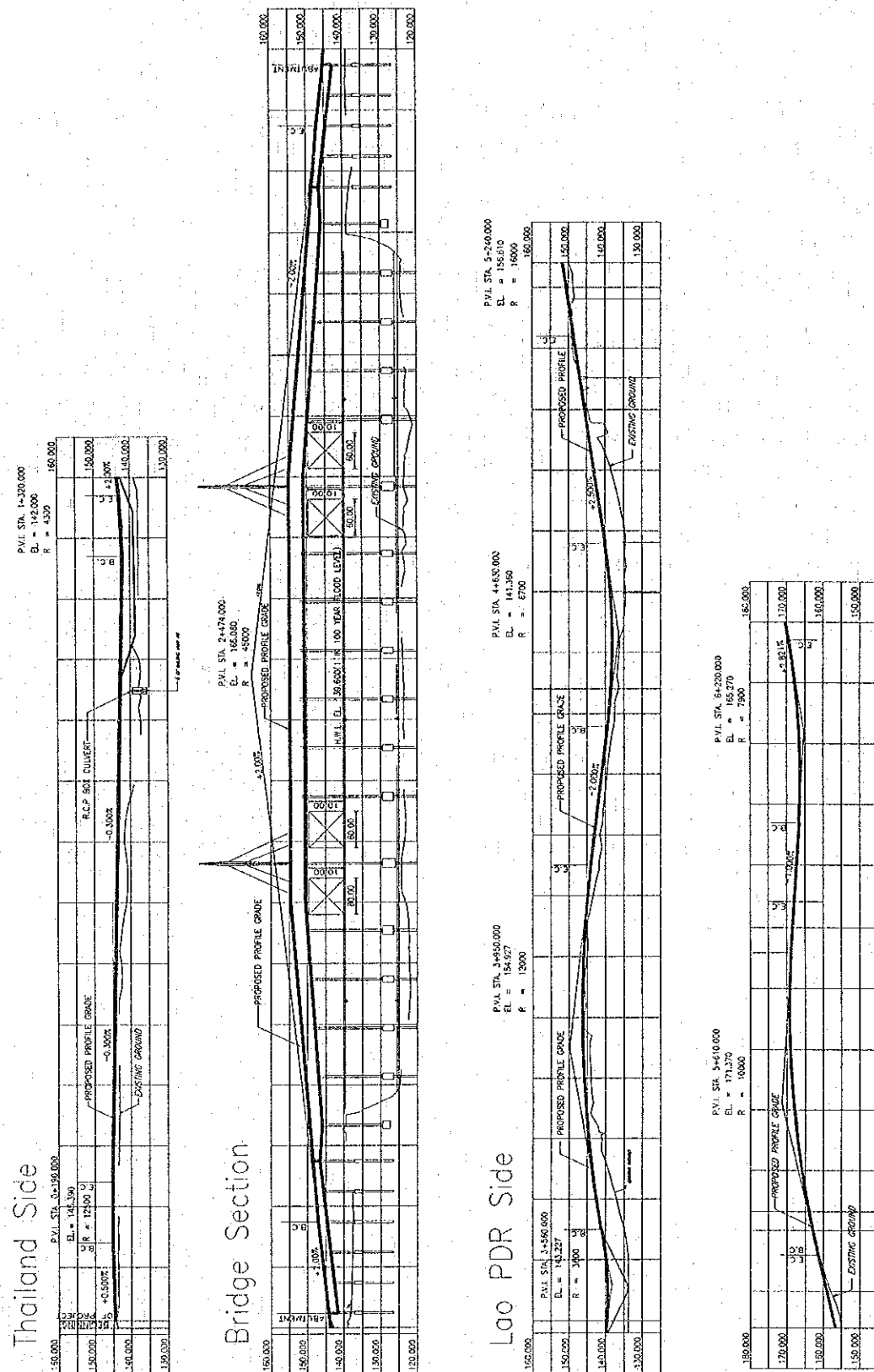


Figure 2.4 Vertical Alignment of the Bridge and Connecting Roads

2.5 Intersection

There are five roads that connect or cross the connecting roads. However, crossings of the riverbank roads at both sides of the River have been planned by using the main Bridge as an overpass. Therefore, the following three intersections have been designed.

- National Road Route No.9 (Lao PDR)
- Provincial Road A-3 (Lao PDR)
- National Highway Route No.212 (Thailand)

(a) The National Road Route No.9 Intersection

This intersection connects the connecting road of the Project, the National Road Route No.9 and Kaysone Road. But the crossing angle between the National Road Route No.9 and Kaysone Road is acute (approximately 37 degrees). Therefore, an improved roundabout type is proposed for traffic safety and also as a landmark. The intersection plan is shown in Figure 2.6.

(b) Provincial Road A-3 Intersection

The crossing angle of connecting road and the Provincial Road A-3 is approximately 42 degree. However, the required crossing angle is stipulated as more than 60 degrees in the AASHTO Standard. Therefore, the crossing angle has been modified at the intersection. The intersection plan is shown in Figure 2.7.

(c) National Highway Route No.212 Intersection

The crossing angle of the connecting road and the National Highway Route No.212 is approximately 89 degrees. Therefore, the intersection has been designed as a standard three-leg intersection type based on the DOH Standard Drawings. The intersection plan is shown in Figure 2.8.

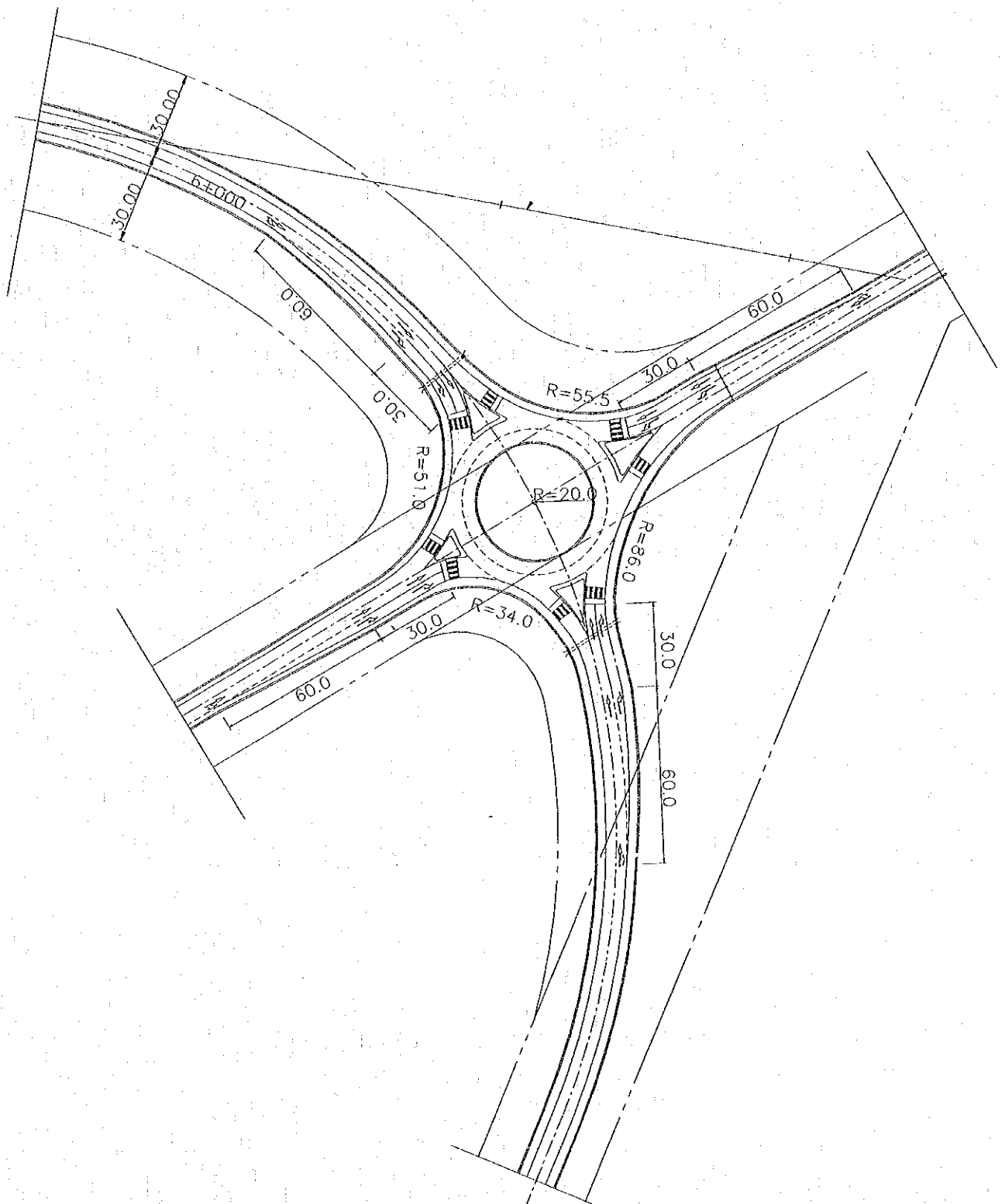


Figure 2.6 The National Road Route No.9 Intersection

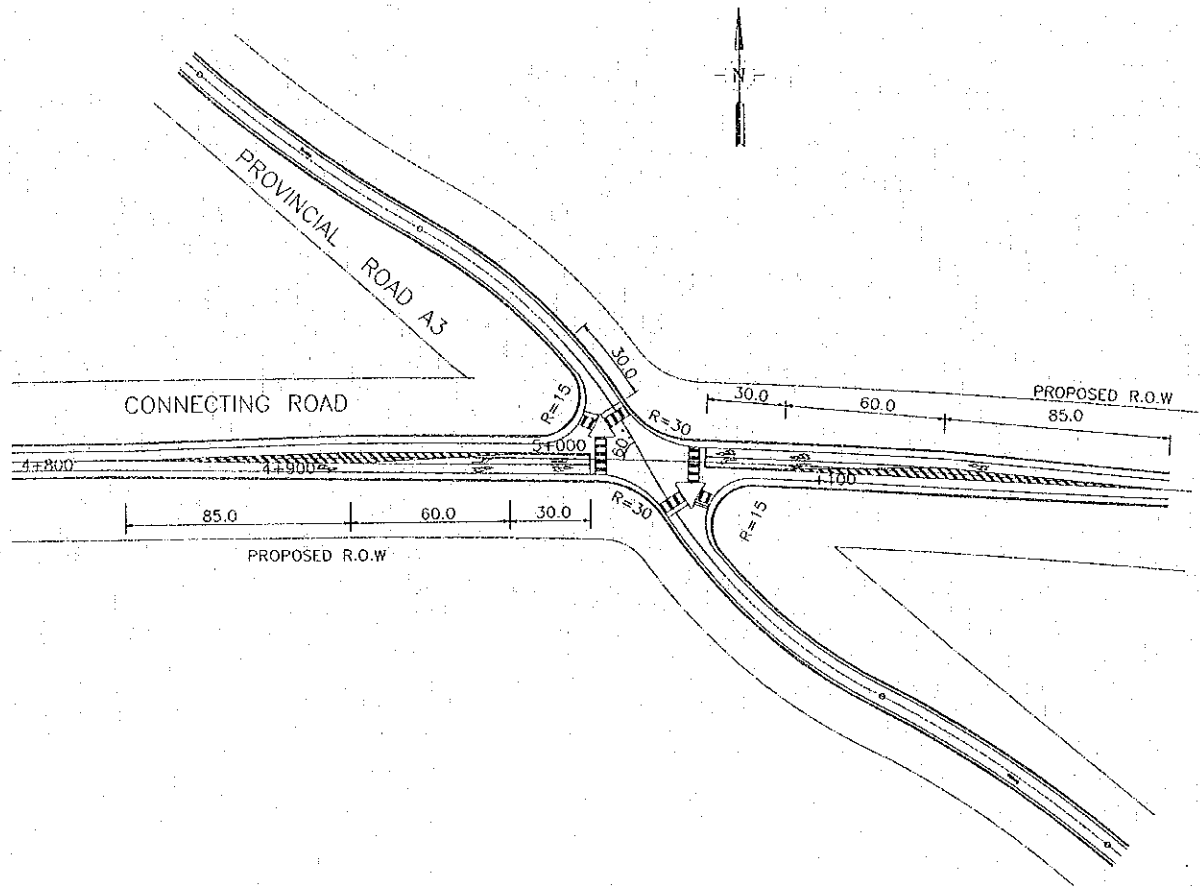


Figure 2.7 Provincial Road A-3 Intersection

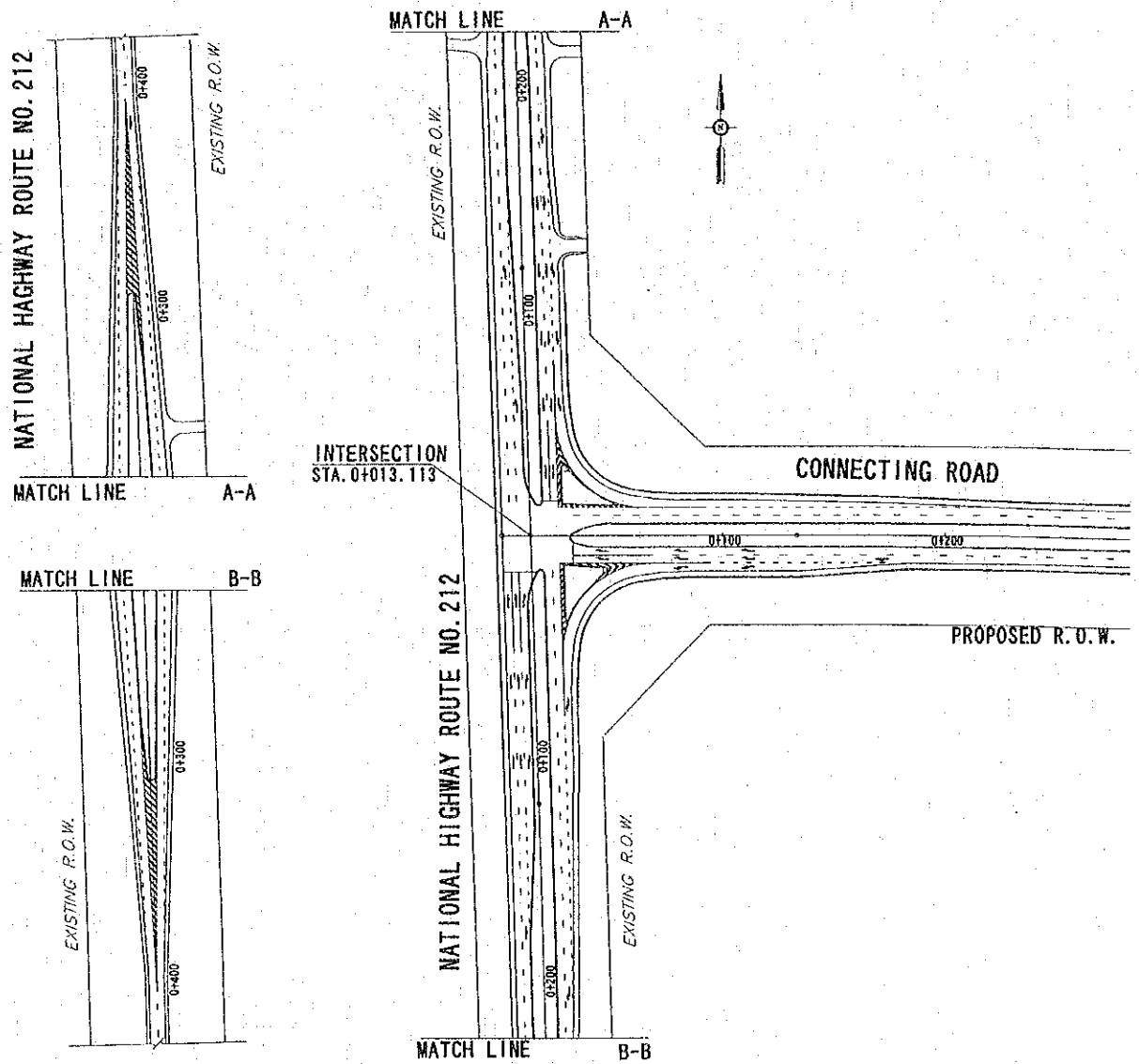


Figure 2.8 The National Highway Route No.212 Intersection

2.6 Pavement Structure

The pavement structure design has been determined based on the Manual for Asphalt Pavement and Manual for Cement Concrete Pavement (JRA : Japan Road Association). The pavement compositions for asphalt pavement and concrete pavement over shown in Figures 2.9 and 2.10, respectively.

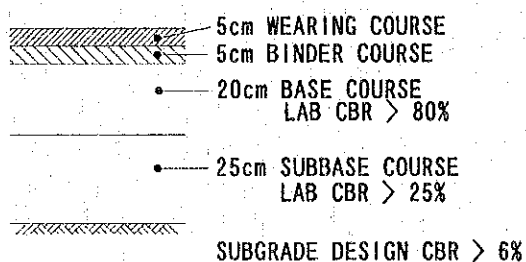


Figure 2.9
Composition of Asphalt Pavement

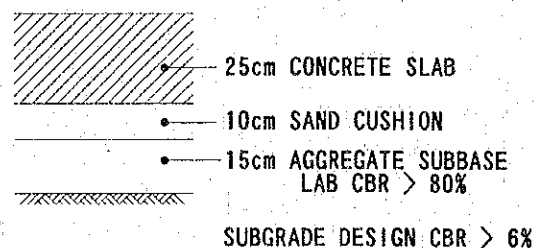


Figure 2.10
Composition of Concrete Pavement

2.7 Drainage System

The drainage systems for the Lao PDR side and the Thailand side are shown in Figure 2.11 and 2.12, respectively.

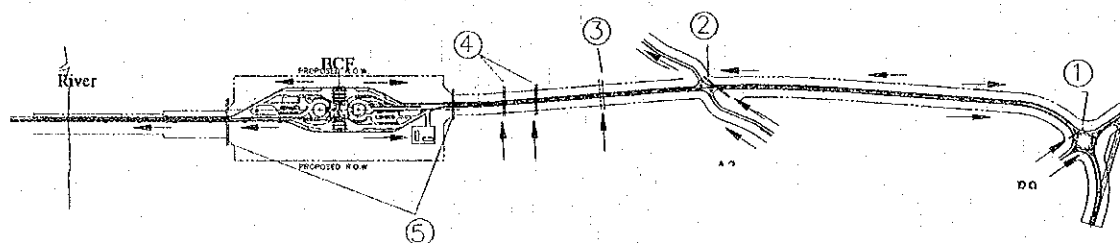


Figure 2.11 Drainage System, the Lao PDR side

- ① Pipe culverts for drainage at the intersection of the National Road Route No.9
- ② Pipe culvert for A-3 road drainage.
- ③ Box culvert for upstream drainage.
- ④ Pipe culverts for upstream drainage and irrigation
- ⑤ Pipe culverts for boundary BCF drainage

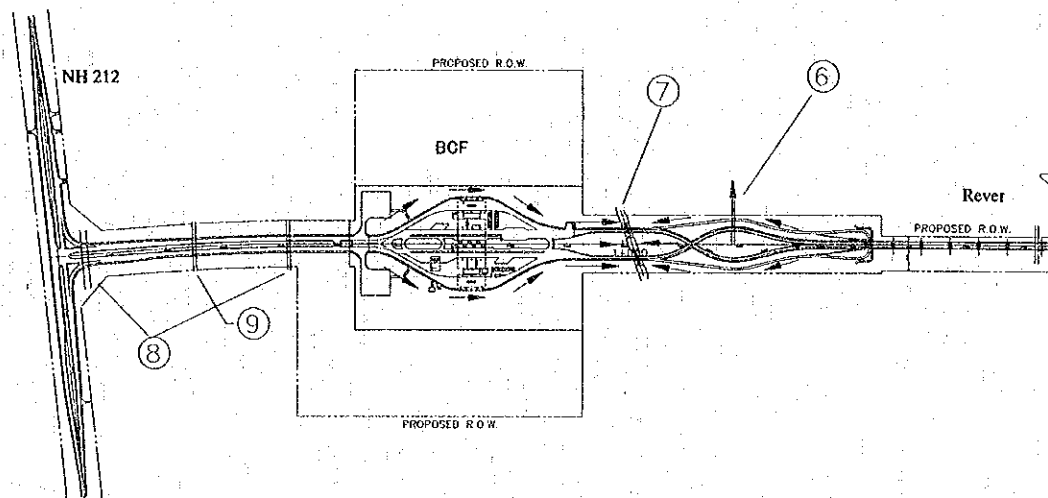


Figure 2.12 Drainage System, the Thailand side

- ⑥ Pipe culvert for drainage of traffic changeover
- ⑦ Box culvert for Po river – 3 cell box 3.6m x 3.6m
- ⑧ Pipe culverts for upstream drainage and irrigation
- ⑨ Pipe culverts for an irrigation canal

3. Bridge

3.1 Structural Source for Main Bridge

- Bridge type : PC (prestressed concrete) sail-type continuous box girder bridge (refer to Figure 3.1).
- Bridge length : 1600m
- Span : 60+4@80+2@110+5@80+2@110+4@80+60m
- Layout of bridge deck : 2x4.25m (carriageway)+ 2x1.5m (foot path) + 0.5m (media) =12.0m (standard section)
- Erection method : Pre-cast segment balanced cantilever erection method
- Alignment :

Horizontal Alignment	R= ∞
Vertical Alignment	2.0%
Crossfall of the road	2.0%
Crossfall of the sidewalk	1.5%
- Pier type : RC wall-type pier
- Foundation type : ϕ 2.0m cast-in-place RC multi pile foundations (except for P6, P23)
- Bearing strata : Mudstone or sandstone
- Bearing support : Elastomeric-laminated bearing
- Expansion joints : Steel finger joint type
- Guardrail : Steel type
- Lighting pole : Steel type

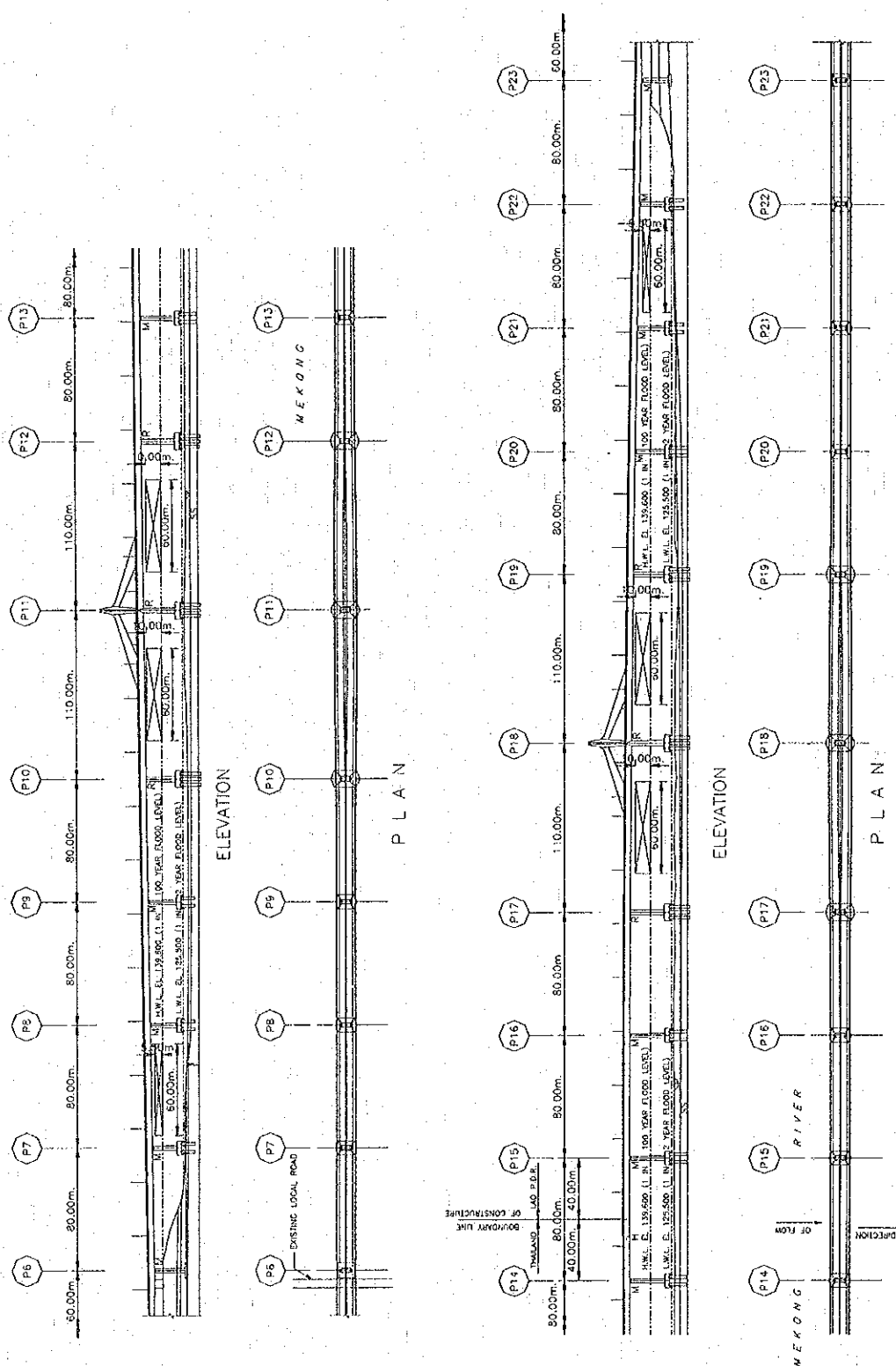


Figure 3.1(1/2) General View of the Main Bridge

3.2 Structural Source for Approach Viaduct

This chapter describes design results on the approach viaducts and ancillary works on the Main Bridge and approach viaducts.

- Bridge type : The Lao P.D.R. Side 4-span PC continuous box girder bridge
- Thailand Side 5-span PC continuous box girder bridge
(Refer to Figure 4.1)
- Bridge length Span : The Lao Side 50m@4=200m
Thailand Side 50m@5=250m
- Layout of bridge deck : 2x4.25m (carriageway) + 2x1.5m (foot path) + 0.5m (median) =12.0m
- Construction method : Temporary staging and cast-in-place concrete method
- Alignment : Horizontal Alignment $R = \infty$
Vertical Alignment 2.0%
Crossfall of the road 2.0%
Crossfall of the sidewalk 1.5%
- Abutment type : RC reverse T-type abutment
- Pier type : RC wall-type pier
- Foundation type : ϕ 1.0m cast-in-place RC multi pile foundations
- Bearing strata : Mudstone or sandstone
- Bearing support : Elastomeric-laminated bearing type
- Expansion joints : Steel finger joint type
- Guardrail : Steel type
- Lighting pole : Steel type

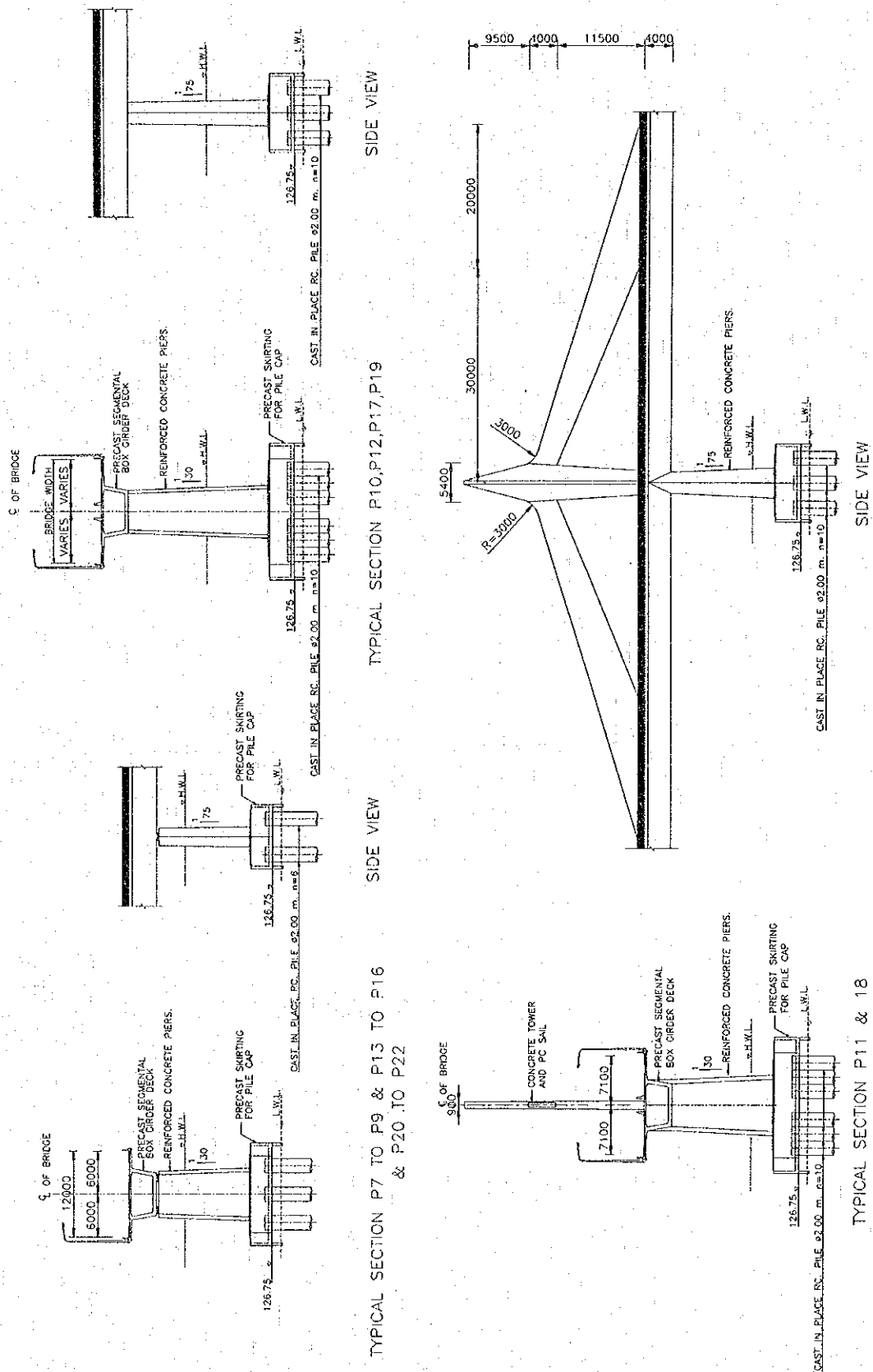


Figure 3.1(2/2) General View of the Main Bridge

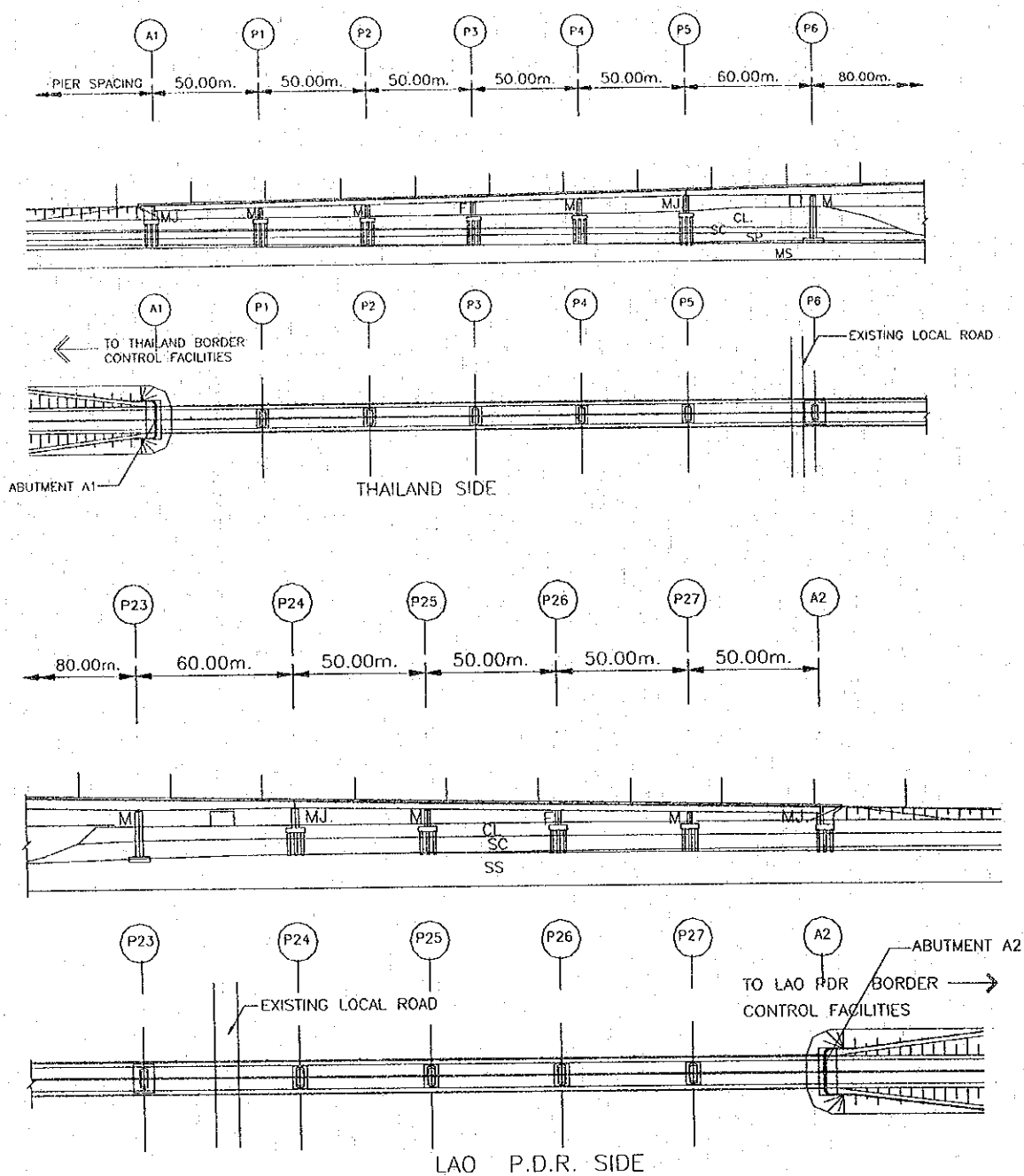


Figure 3.2 (1/2) General View of the Approach Viaduct

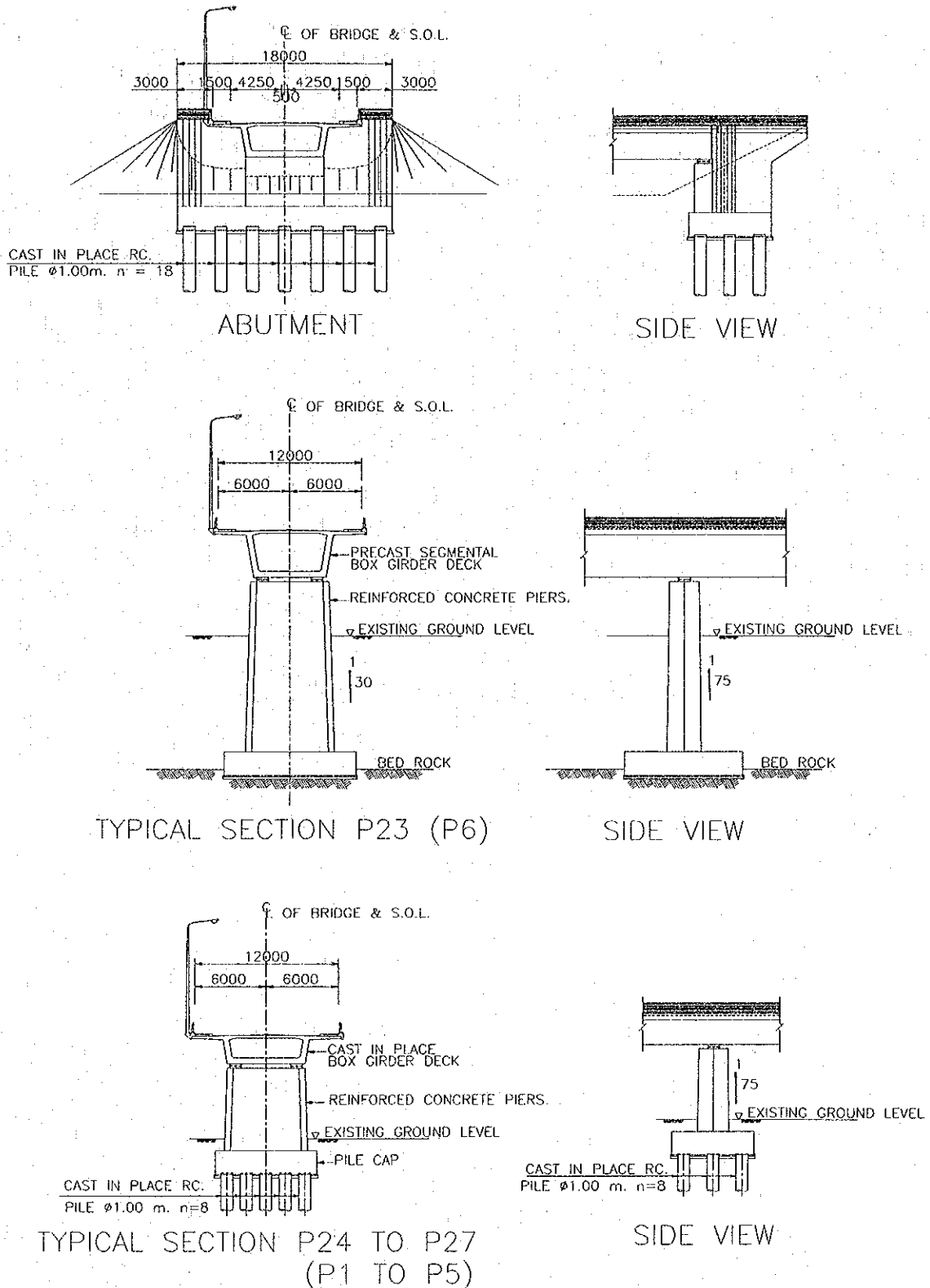


Figure 3.2 (2/2) General View of the Approach Viaduct

4 Border Control Facilities

4.1 BCF in Lao PDR

1) Location

The location of the Lao PDR Border Control Facility (BCF) is set up between 470 and 1,070m from the Mekong riverbank. The BCF is contained in an area of approximately $600 \times 250\text{m} = 150,000\text{m}^2$ or 15 hectares (Refer to Figure 4.1).

The existing land topography in the BCF area varies between 141 and 155m above MSL and the land slopes generally upwards in the north direction. On the other hand, from the geotechnical surveys indicate that dense sandy rock is located an average of only 3m below the existing ground surface. Considering these conditions as well as the adjacent levels of connecting and approach roads, the pavement at the cross center of the BCF was set up at 151.5m above MSL so that both rock excavation and filling could be minimized.

There is an abandoned irrigation canal running through the site in a north-south direction for which no modification will be made. An existing 22kV transmission line is also running through the site and this will have to be re-routed before starting the construction work on the BCF.

2) Scope of Works

The major buildings and other works to be involved in the design of the BCF are enumerated below.

- | | |
|--|--|
| - Main Offices (Immigration, Custom, Quarantine, etc.) | - Vehicle Parking Areas |
| - Public Toilets | - Powerhouse and Water-Receiving Tanks |
| - Inspection Booths (Immigration and Customs) | - Land Reclamation |
| - Spacious Roof Structures | - Roadwork within the BCF |
| - Check Point and Gates | - Surface Drainage System |
| - Check and Toll Offices | - Landscaping |
| - Officer's Parking Area with Roofs | - Incidental Utilities |
| - Inspection Pit and Truck Scale | - Marking and Signs |

3) Laws, Codes, Standards, and Units

The civil works for the BCF are basically designed by conforming to the design standard of the Department of Highways (DOH) in Thailand as well as TIS (Thai Industrial Standard) and other applicable local codes. All building works are designed basically in conformity with the following codes :

- a) Applicable local building laws and codes
- b) BAEL 91 and AISC for Structural Analysis
- c) ACI Building Code Requirements for Structural Concrete
- d) TIS or other international laws or codes

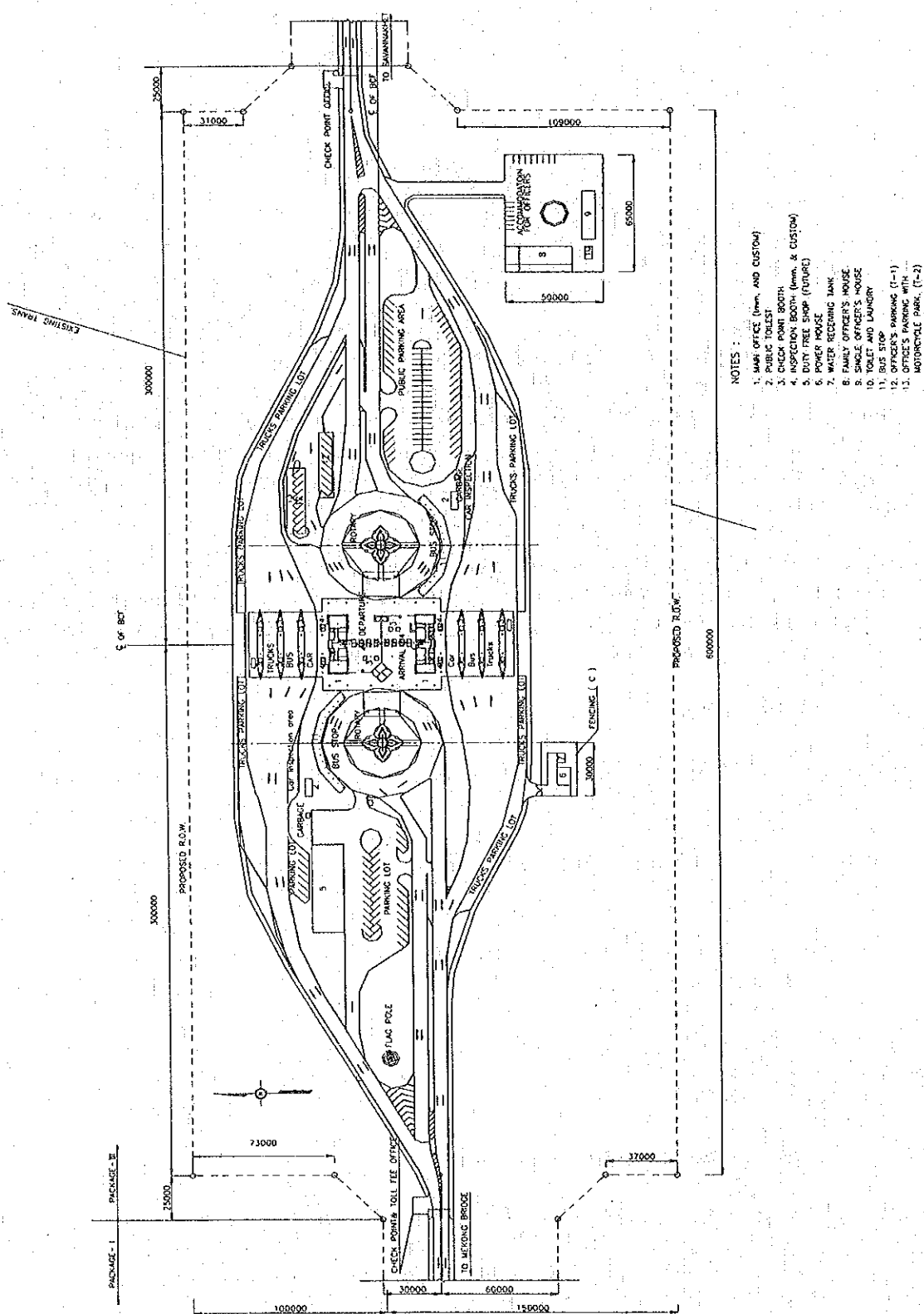


Figure 4.1 General Layout of Border Control Facilities

4.2 BCF in Thailand

1) Location

The location of the Thailand Border Control Facility (BCF) is set up between 800 and 1,200 m. from the Mekong Riverbank and from 500 to 900 m. from the National Highway Route No.212 in consideration of the adjacent road levels of the connecting road and traffic changeover, as well as the need to minimize disturbance to the private property in the area, which is contained in an area of approximately (400 ~ 500 m.) x 600 m. = 270,000 m², or 27 hectares.(Refer to Figure 4.2)

The existing land topography in the BCF area varies between 137.5 and 142.5 m. above MSL. The pavement of the BCF is set up at 144 m. above MSL so that only fill will be involved. The BCF land consists essentially of a hill (or ridge) at a level of 141 – 142.5m above MSL running through the Border Control Facility in a north-south direction.

The land consists of paddy fields in the east and the west and an uncultivated area on the hill (or ridge) area.

2) Scope of Works

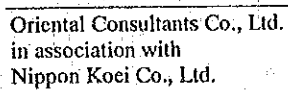
The major buildings and other works to be involved in the design of the BCF are enumerated below.

- | | |
|---|--|
| - Main Offices (Immigration, Customs, Quarantine, etc.) | - Vehicle Parking Areas |
| - Public Toilets | - Powerhouse and Water-Receiving Tanks |
| - Inspection Booths (Immigration and Customs) | - Land Reclamation |
| - Spacious Roof Structures | - Roadwork within the BCF |
| - Check Point and Gates | - Surface Drainage System |
| - Check and Toll Offices | - Landscaping |
| - Officer's Parking Area with Roofs | - Incidental Utilities |
| - Inspection Pit and Truck Scale | - Marking and Signs |

3) Laws, Codes, Standards and Units

The civil works for the BCF are basically designed by conforming to the design standard of the Department of Highways (DOH) in Thailand as well as TIS (Thai Industrial Standard) and other applicable local codes. While all building works are designed basically in conformity with the following codes :

- a) Thailand building laws
- b) ACI Building Codes for Structural Requirements
- c) AISC or EIT (The Engineering Institute of Thailand) for Structural Analysis.
- d) TIS (Thai Industrial Standard)



5 OTHER WORKS

For existing roads running along the river on both banks, a vertical clearance of 5.5 meters is required.

Additional works, which are required under the Project covering inter alia:

- The construction of flood protection facilities and drainage systems covering the provision of box and pipe culverts, river frontage structures, pumping facilities, precast pipes, etc.,;
- Lighting facilities and water pipes for bridge cleaning, as well as allowance for other utilities (cables, pipes, etc.);
- Provision of traffic signs and road markings;

It is vitally important that the Works are undertaken with the absolute minimum interference to existing traffic movements, vehicular or pedestrian; existing river transport operation; commercial interests, and general public convenience.

Annex-2

FORM OF BANK'S LETTER OF GUARANTEE
FOR OPENING A REVOLVING LINE OF CREDIT
IN FAVOR OF THE BIDDER

_____ [date]

To: [Name of Employers and address]

Sub: Letter of Guarantee Confirming Bank's Undertaking for Opening a Line of Credit in favor of [name of Bidder] in case of award to them of Works for Contract Package 1: Bridge, Approach Viaducts and Roads Works of the Second Mekong International Bridge Construction Project.

Dear Sir,

We, the authorized representatives of [name and address of Bank] in case of award of Contract Package 1: Bridge, Approach Viaducts and Roads Works of Second Mekong International Bridge Construction Project to _____ [name of Bidder], do hereby agree and undertake that _____ [name of bidder] will be provided by us with a revolving line of credit for an amount not less than YEN\ 1,500 million, as necessary, for the sole purpose of the execution of the above mentioned Contract. This revolving line of credit will be maintained until the issuance of the Taking-Over Certificate in respect of the whole of the Works.

In case you have reasons to believe that during the execution of the Contract, the construction activities at site suffer from lack of adequate cash flow and notifies in writing to that effect to us, we do hereby further undertake to place at your disposal on your first demand and without cavil or argument, any sum within the limit of above stated amount.

In witness whereof, authorized representative of the Bank has hereunto signed and sealed this Letter of Guarantee.

SIGNATURE AND SEAL OF THE BANK
ISSUING THIS GUARANTEE LETTER :

Name of Bank ::
Address :

LETTER OF GUARANTEE

[Letterhead paper of the Applicant, or partner responsible for a joint venture, including full postal address, telephone, fax, cable and telex addresses]

_____ [date]

To: _____

_____ [name and address of the Employer]

Sirs,

1. Being duly authorized to represent and act on behalf of (hereinafter referred to as "Applicant"), and having reviewed and fully understood all the prequalification information provided, the undersigned hereby apply to be prequalified by yourselves as a bidder for the following contract under the Second Mekong International Bridge Construction Project, using option (A)/(B)/(A)&(B) for the piling[delete option as appropriate].

Contract Package 1: Bridge, Approach Viaducts and Roads Works

2. Attached to this letter please find copies of original documents defining*

- (a) the Applicant's legal status;
- (b) his principal place of business; and
- (c) the place of incorporation[for applicants who are corporations]; or

the place of registration and the nationality of the owners[for applicants who are partnerships or individually owned firms].

[* For applications by joint ventures all the information requested in the prequalification documents is to be provided for the joint venture, if it already exists, and for each party to the joint venture separately. The Lead Partner shall be clearly identified. Each partner in the joint venture shall sign the letter.]

3. The Employers are hereby authorized to conduct any inquiries or investigations to verify the statements, documents and information submitted in connection with this application, and to seek clarification from our bankers and clients regarding any financial and technical aspects. This Letter of Guarantee will also serve as authorization to any individual or authorized representative of any institution referred to in the supporting information, to provide such information deemed necessary and requested by yourselves to verify statements and information provided in this application, or with regard to the resources, experience and competence of the Applicant.

4. The Employers may contact the following persons for further information**.

General and Managerial Inquiries:

Contact 1

Tel:

Contact 2

Tel:

Personnel Inquiries:

Contact 1

Tel:

Contact 2

Tel:

Technical Inquiries:

Contact 1

Tel:

Contact 2

Tel:

Financial Inquiries:

Contact 1

Tel:

Contact 2

Tel:

[** Applications by joint ventures shall provide, on a separate sheet equivalent information for each party to the application.]

5. This application is made in the full understanding that:

- (a) bids by prequalified applicants will be subject to verification of all information submitted for prequalification at the time of bidding;
- (b) The Employers reserve the right to:
 - amend the scope and value of any contracts bid under this project. In such event, bids will only be called from prequalified bidders who meet the revised requirements; and
 - reject or accept any application, cancel the prequalification process and reject all applications; and
- (c) The Employers shall not be liable for any such actions and shall be under no obligation to inform the Applicant of the grounds for them.

[Applicants, who are not joint ventures, shall delete paras. 6 and 7 initial the deletions.]

6. Appended to this guarantee, we give details of the participation of each party, including capital contribution and profit/loss agreements, to the joint venture or association. We also specify the financial commitment in terms of the percentage of the value of the contract, and the responsibilities for execution of the contract.

7. We confirm that in the event that we bid, as well as any resulting contract will be:
- (a) signed so as to legally bind all partners, jointly and severally; and
 - (b) submitted with a joint venture agreement providing the joint and several liability of all partners in the event the contract is awarded to us.
8. The undersigned declare that the statements made and information provided in the duly completed application are complete, true and correct in every detail.

Signed:
Name:
For and on behalf of,
Applicant:
(Or Responsible Partner
for a Joint Venture)

Signed:
Name:
For and on behalf of,
Partner:

Signed:
Name:
For and on behalf of,
Partner:

Signed:
Name:
For and on behalf of,
Partner:

Application Form (1)

Page ____ of Application Form (1)

GENERAL INFORMATION

All individual firms and each partner of a joint venture applying for prequalification are requested to complete the information in this form. Nationality information to be provided for all owners of applicants who are partnerships or individually owned firms.

Where the Applicant proposes to use named sub-contractors for critical components of the works, or work contents in excess of ten percent of the value of the whole works, the following information shall also be supplied for the specialist subcontractor(s).

1. Name of Applicant:
2. Head Office Address:
3. Local Office Address

4. Telephone Numbers:
5. Facsimile Numbers
6. Telex Number:

7. Place of Incorporation/
Registration:

8. Year of Incorporation/
Registration:

9. Nationality of Owners:

Name	Nationality
.....
.....
.....

Application Form (2a)

Page ___ of Application Form (2a)

ANNUAL TURNOVER DATA

Name of Applicant or Partner of a JV:.....

All individual firms and all partners of a joint venture must be requested to complete the information in this form. The information supplied shall be the annual turnover of the Applicant (or each member of a joint venture), in terms of the amounts billed to clients for each year for work in progress or completed, converted to Yen at the rate of exchange at the end of the period reported.

Applicants shall not be required to enclose testimonials, certificates and publicity material with their applications; these will not be taken into account in the evaluation of qualifications.

Annual Turnover Data

<u>Year</u>	<u>Construction (Only) Turnover</u>	<u>YEN\ Equivalent</u>
1995..
1996..
1997..
1998..
1999..

[Use a separate sheet for each partner of a joint venture.]

Application Form (2b)

Page ___ of Application Form (2b)

SUMMARY SHEET : ANNUAL TRUNOVER DATA (JOINT VENTURES ONLY)

Name of Applicant (or names of all partners of a joint venture):

.....

Total value of annual construction turnover, in terms of work billed to clients, in millions of YEN
 \ equivalent, converted at the rate of exchange at the end of the period reported.

Year:	1995	1996	1997	1998	1999
-------	------	------	------	------	------

Partner A:
 From Form(2a) page.....

Partner B:
 From Form(2a) page.....

Partner C:
 From Form(2a) page.....

Partner N:
 From Form(2a) page.....

TOTALS:	_____	_____	_____	_____	_____
---------	-------	-------	-------	-------	-------

Name of Applicant (or names of all partners of a joint venture):

.....

.....

.....

Applicants and all partners to an application shall provide information on their successful experience as a partner of a joint venture, of bridge projects on all contracts that full completion certificate has been issued in the last five years.

[illegible]

[Add further sheets as necessary.]

Application Form (5)

Page ___ of Application Form (5)

PARTICULAR EXPERIENCE RECORD

Name of Applicant or Partner of a JV:.....

The Applicants shall answer all the specified requirements described in para. 3.2 (1) of "Instructions to Applicants".

Using the formats of Form from 5a to 5e, each Applicant or partner of joint venture is requested to demonstrate his performance relevant to the stated threshold activities undertaken during the last five (5) years.

Application Form (5a)

Page ____ of Application Form (5a)

DETAILS OF PROJECT

Name of Applicant or Partner of a JV::.....

- (a) Construction of prestressed concrete cablestayed bridges whose the span length shall be longer than 150 meters, and/or extradosed-type prestressed concrete cablestayed and/or prestressed concrete sail type bridges longer than 80 meter.

1. Name of Project:
Country:

2. Employer:

3. Employer's address:

4. If the project was carried out in a joint venture,

Name of joint venture partners:

Details of own activities:.....

.....

5. YEN\ equivalent value of contract (based on the currencies of the contract converted into YEN\, at the exchange rate on the date of completion, or for current contract at the time of award):

6. Date of commencement:

7. Date of completion:

8. Construction period:

9. Value of contract completed to date (if contract still in progress)

10 Description of project, quantity of major works involved, etc:

.....
.....
.....
.....
.....

Application Form (5b)

Page ____ of Application Form (5b)

DETAILS OF PROJECT

Name of Applicant or Partner of a JV:.....

- (b) Construction of a major civil engineering infrastructure project in Asian countries with a contract value of YEN \ 4,000 million or more.

1. Name of Project:
Country:

2. Employer:

3. Employer's address:

4. If the project was carried out in a joint venture,

Name of joint venture partners:

Details of own activities:.....
.....

5. YEN\ equivalent value of contract (based on the currencies of the contract converted into YEN, at the exchange rate on the date of completion, or for current contract at the time of award):

6. Date of commencement:

7. Date of completion:

8. Construction period:

9. Value of contract completed to date (if contract still in progress)

10. Description of project, quantity of major works involved, etc:

.....
.....
.....
.....
.....

Application Form (5c)

Page ___ of Application Form (5c)

DETAILS OF PROJECT

Name of Applicant or Partner of a JV:.....

- (c) Construction of a major multi-span precast segmental prestressed concrete box girder bridge (greater than 8 spans and greater than 70m per span), in a package of foundations, substructures and superstructures.

1. Name of Project:
Country:

2. Employer:

3. Employer's address:

4. If the project was carried out in a joint venture,

Name of joint venture partners:

Details of own activities:.....

.....

5. YEN\ equivalent value of contract (based on the currencies of the contract converted into YEN\, at the exchange rate on the date of completion, or for current contract at the time of award):

6. Date of commencement:

7. Date of completion:

8. Construction period:

9. Value of contract completed to date (if contract still in progress)

10. Description of project, quantity of major works involved, etc:

.....
.....
.....
.....
.....

Application Form (5d)

Page ___ of Application Form (5d)

DETAILS OF PROJECT

Name of Applicant or Partner of a JV:.....

(d) Precast segmental cantilever erection method.

1. Name of Project:
Country:

2. Employer:

3. Employer's address:

4. If the project was carried out in a joint venture,

Name of joint venture partners:

Details of own activities:.....
.....

5. YEN\ equivalent value of contract (based on the currencies of the contract converted into YEN,
at the exchange rate on the date of completion, or for current contract at the time of award):

6. Date of commencement:

7. Date of completion:

8. Construction period:

9. Value of contract completed to date (if contract still in progress)

10. Description of project, quantity of major works involved, etc:

.....
.....
.....
.....
.....

Application Form (5e)

Page ___ of Application Form (5e)

DETAILS OF PROJECT

Name of Applicant or Partner of a JV:.....

(e) Construction of 1.5 meters or larger diameter cast-insitu concrete piling over water.

1. Name of Project:
Country:

2. Employer:

3. Employer's address:

4. If the project was carried out in a joint venture,

Name of joint venture partners:

Details of own activities:.....

.....

5. YEN\equivalent value of contract (based on the currencies of the contract converted into YEN,
at the exchange rate on the date of completion, or for current contract at the time of award):

6. Date of commencement:

7. Date of completion:

8. Construction period:

9. Value of contract completed to date (if contract still in progress)

10 Description of project, quantity of major works involved, etc:

.....
.....
.....
.....
.....

Application Form (6)

Page ____ of Application Form (6)

SITE ORGANIZATION

Name of Applicant:.....

Applicants shall provide a chart of site organization to be suitable for the project requirement.

Application Form (7a)

Page ____ of Application Form (7a)

PERSONNEL CAPABILITIES

Name of Applicant:

Applicants shall provide the names of a prime candidate qualified to meet the specified requirements stated for each position. The data on their experience shall be supplied in separate sheets. (On Form 7b for each candidate).

Position:[title of position]

Candidate's name:

Position:[title of position]

Candidate's name:

Position:[title of position]

Candidate's name:

Position:[title of position]

Candidate's name:

Position:[title of position]

Candidate's name:

Position:[title of position]

Candidate's name:

Application Form (7b)

Page ___ of Application Form (7b)

DETAILS OF PERSONNEL CAPABILITIES

Name of Applicant:.....

POSITION TO BE FILLED:

1. Candidate's name:
2. Date of Birth:
3. Professional qualifications:
4. Employer's name:
Employer's address:
Tel:
Fax:
Contact name (manager/personnel officer):
5. Candidate's present position:
6. Years with present employer:
7. Professional experience (Indicate particular technical and management experience relevant to the project, in reverse chronological order):

Years	Company, Project, Position Held, and
(From....To)	<u>Relevant Technical and Management Experience</u>

Application Form (8a)

Page ____ of Application Form (8a)

EQUIPMENT CAPABILITIES

Name of Applicant!.....

The Applicant shall prepare a list of equipment which he would propose to complete the major works within the specified period, as set out in para. 3.2(3)(c) of "Instructions to Applicants". The applicant shall also demonstrate how he has assured access to such equipment in separate sheets (on Form 8b for each equipment).

<u>Item of Equipment</u>	<u>Manufacturer/ Model/Capacity</u>	<u>Number of Units</u>
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Application Form (8b)

Page ____ of Application Form (8b)

DETAILS OF PROPOSED EQUIPMENT

Name of Applicant:

Item of equipment:

1. Name of manufacturer:
2. Model and power rating
3. Capacity:
4. Year of manufacture:
5. In case the Applicant is a joint venture, indicate the name of the partner who will provide this particular equipment:
.....
6. Current location:
7. Details of current commitments:
.....
.....
8. Indicate whether equipment is owned or to be hired, leased, manufactured especially, or through other means:
9. Owner:

[Omit the following information for equipment owned by the Applicant, including partners of a joint venture.]

10. Owner's address:
Tel:
Fax:
Telex:
11. Contact name and title:

Application Form (9)

Page ____ of Application Form (9)

FINANCIAL POSITION

Name of Applicant or Partner of a JV:.....

Applicants, including each partner of a joint venture, shall provide financial information to demonstrate that they meet the requirements stated in the Instructions to Applicants. Each applicant or partner of a JV must fill this form. A copy of the audited and notarized balance sheets for the last five years shall be attached.

1. Name of Banker:
2. Banker's Address:
Tel:
Fax:
3. Contact name and title:
[provide the same information for other bankers in a separate sheet.]

Summary of Assets and Liabilities converted into Japanese Yen (at the rates of exchange current at the end of each year) for the last five years:

	1995	1996	1997	1998	1999
1.Total Assets					
2.Current Assets					
3.Total Liabilities					
4.Current Liabilities					
5.Net Worth					
Working Capital					

Proposed sources of financing to meet the cash flow demands of the Project, net of current commitments (Instructions to Applicants, para. 3.2(2)(b))

(Note: The Applicant's current commitments shall be assessed as twice the maximum total of monthly cost for each on-going contract, or for which a letter of intent or acceptance has been received, assuming a straight line distribution of outstanding contract value over the outstanding contract period.)

SourcesAmounts

.....

.....

Application Form (10)

Page ___ of Application Form (10)

LITIGATION HISTORY

Name of Applicant or Partner of a JV:.....

Applicants, including each of the partners of a joint venture shall provide information on any history of litigation or arbitration resulting from contracts executed in the last five years or currently under execution, as required in the "Instruction to Applicants". A separate sheet shall be used for each partner of a joint venture.

<u>Year</u>	<u>Name of Client, Cause of Litigation and Matter under Dispute. Award FOR or Against the Applicant?</u>	<u>Disputed Amount (YEN) At Current Values</u>
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Application Form (11)

Page ___ of Application Form (11)

LIST OF PREQUALIFICATION FORMS FILLED IN BY THE APPLICANT

Name of Applicant or Partner of a JV:.....

Indicate the number of sheets duly filled in by the Applicant for each Form No.

FORM NO.	NUMBER OF SHEETS PREPARED BY APPLICANT	REMARKS
Form (1)
Form (2a)
Form (2b)
Form (3a)
Form (3b)
Form (4a)
Form (4b)
Form (5)
Form (5a-c)
Form (6)
Form (7a)
Form (7b)
Form (8a)
Form (8b)
Form (9)
Form (10)
Form (11)

