

2. T o R

The Government of Lao People's Democratic Republic

The Application Form
for
The Technical Cooperation (Development Study)
by
The Government of Japan

for

The Feasibility Study

on

Improvement of road in the
Southern Region in Lao P.D.R.

The Ministry of Communication, Transport, Post and Construction.

Saracen from Pakse, and Route 16 that leads to Pakson in the Boloven Plateau were improved three years ago. Further, the Route NO.16 that runs to Thailand at the west side of Pakse Bridge, that Route NO.16 and 11 leading to Attapeu from Pakson and the Route 13S leading to Cambodia border are being improved at present.

Upon completion of current these bridges construction and road improvements in March 2001, the south-north trunk highway leading to Cambodia will be completed, the roads from Thailand can be connected to the south-north trunk highway and capitals of four provinces will be connected by paved roads.

When such roads and bridges projects will have been completed, the framework of the southern region will be formed and the development of the area along those Routes will be expedited and the road traffics will be further increased throughout the region and economy of the region will become more active and accelerated.

According to the current survey and general review of the population, GNP, economic activities, education level, extent of electricity supply, only Champasak and Savannakhet provinces are at the national level, and in the other provinces where road traffic is not convenient enough, the GNP is approx. \$100-\$150/person (the national average being \$350/person) and seems very poor.

Under such situation, to make road network to promote the regional development will be the most effective way to level up the economy of the southern region as a whole. From now on, it will be important to give priority to the improvement of the local national roads, because the road and bridge projects being in progress are partial to Champasak and Savannakhet.

-Outline of the Project (Outline of this Feasibility Study)
(Please refer to attached location map)

Under this current background the Government of Lao P.D.R. herein nominate the following Routes for this Application for The Feasibility Study hereby requested to the Government of Japan.

1) Priority 1.

(National Road Route NO.18A)

Location) Route NO.13S junction (B.Thangbeng) – Attapeu

Total length) 112 km

2) Priority 2.

(National Road Route NO.15)

Location) Saravane – NO.13S junction (B.Napong)

Total length) 75km

3) Priority 3.

(National Road Route NO.1G)

Location) Muang Phin/Route NO.9 junction (Savannakhet Province) –
B.Nadonkhoang/Route NO.15 junction

Total length) 120km

4) Priority 4.

(National Road Route NO.18B)

Location) From Attapeu (Xe Kong River crossing) – Vietnam border

Total length) 100km

(5) Desirable or scheduled time of the commencement of the Project

The Project requires to start by completion of Pakse Bridge and Bridges on the Route No.13.

(6) Expected funding source and/or assistance (including external origin)

No attempt to secure funding source except for the Government of Japan. The Government of the Lao P.D.R. expect to assist for not only study and design but also implementation of the construction.

(7) Other relevant Project. If any

a) Outline : Provide all weather access road in Attapu, Sekong, and Champasak province (Road No.20/1H and No.16)

Type : Loan

Donor : Asia Development Bank

Period : 1994 – 1999

b) Outline : Improvement of Road and Bridges between Pakse and Cambodia Boarder

Type : Loan

Donor : Asia Development Bank

Period : 1996 – 2000

c) Outline : Construction of Pakse Bridge over Mekong River

Type : Grant

Donor : JICA

Period : 1997 – 2001

d) Outline : Construction of Bridge on National Route No.13. (Savannakhet – Pakse Section)

Type : Grant

Donor : JICA

Period : 1998 – 2001

e) Outline : The Integrated Agricultural and Rural Development in Boloven Plateau.

Type : Development Study

Donor : JICA

Period : 1994 – 1996

2. Terms of Reference of the proposed Study

(1) Necessity / Justification of the Study

To establish a master plan of Improvement road in the Southern Region under the framework of national and regional development program.

(2) Necessity / Justification of the Japanese Technical Cooperation

To perform technology transfer to Lao. P.D.R. counterpart during the course of the study.

(3) Objectives of the Study

To determine the priority roads by the functional road classification.

To determine a suitable type of construction method including brief design of roads and bridges.

To estimate the approximate cost of construction.

(4) Area to be covered by the Study

The Study covers the southern area of the country.

(5) Scope of the Study

The scope of works for the study will be broadly divided into the following two items.

Work-I : Work for the whole southern area of Lao P.D.R. including data collection, field survey and establishment of basic project concept.

Work-II : Selection of the priority projects, data collection, field survey, analysis of the survey result and preparation of the feasibility study.

On-the-job training of the Government officials shall be carried out through Work-I and Work-II

Work-I

- a) To collect and review the existing data and information relevant to the study.
- b) To review the relevant master plan-study conducted by donor country.
- c) To carry out field survey and investigation.
- d) To establish basic concept for the project.
- e) To execute transfer of knowledge.

Work-II

- a) To select the priority project, detail field survey, investigation and analyze the results.
- b) To select type of bridge
- c) To prepare the feasibility study report

(6) Study Schedule

The period required for the study is estimated 15 months in total.
A tentative schedule is presented as follows.

DESCRIPTION	MONTHLY SCHEDULE														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Work - I (Whole Area)															
- Data collection	■	■	■												
- Field survey & investigation	■	■	■												
- Establishment of basis concept				■	■										
Work - II (Priority Projects)															
- Selection of the priority project						■									
- Detail Field survey & investigation							■	■	■						
- Analysis of survey results										■	■				
- Selection of type of bridge and road construction method												■			
- Preparation of the feasibility study													■		
Reporting															
- Information Report	■														
- Progress Report				■						■					
- Interim Report					■										
- Draft Final Report													■		
- Final Report															■

(7) Expected Major Outputs of the Study

To conduct a feasibility study on some priority projects to be selected through the study.

(8) Request of the Study to other donor agencies, if any

No request has been given to other donor agencies.

(9) Other relevant information, if any

Please see attached Annex

3. **Facilities and information for the Study Team**

(1) Assignment of counterpart personnel of the implementing agency for the Study

The Government may attach to the Consultant, junior professional staff and the Consultant shall provide for the appropriate training and instruction of the professional personnel.

(2) Available data, information, documents, maps etc. related to the Study

The Client will provide:

- a) all available reports of previous studies and design manuals
- b) all available and relevant traffic volume surveys
- c) all cost information in the possession of the Government for all modes of transport
- d) any other relevant information in the possession of Department of communication.

(3) Information on the security conditions in the Study Area

The security situation is very calm.

4. **Global Issues (Environment, Women in Development, Poverty, etc)**

(1) Environmental components (such as pollution control, water supply, sewage, environmental management, forestry, biodiversity) of the Project. If any

Environmental matters shall be looked into in the proposed study, however construction of the new bridges will not cause significant adverse effects.

(2) Anticipated environmental impacts (both natural and social) by the project. If any

Not applicable.

(3) Women as main beneficiaries or not

Not applicable.

(4) Project components which requires special considerations for women (such as gender difference, women specific role, women's participation), if any

Not applicable.

(5) Anticipated impacts on women caused by the Project, if any

Not applicable.

(6) Poverty reduction components of the Project, if any

The Project will contribute to reducing poverty of the populace of the nations going to benefit from it through increase domestic trade of products, and international trade of commodity.

(7) Any constraints against the low income people cause by the Project

Not applicable.

5. Undertakings of the Government of Lao P.D.R.

In order to facilitate a smooth and efficient conduct of the Study, the Government of Lao P.D.R. shall take necessary measures:

- (1) to secure the safety of the Study Team.
 - (2) to permit the members of the Study Team to enter, leave and sojourn in Lao P.D.R. in connection with their assignment therein, and exempt them from alien registration requirement and consular fee.
 - (3) To exempt the Study Team from taxes, duties and any other charges on equipment, machinery and other materials brought into and out of Lao P.D.R. for the conduct of the Study.
 - (4) To exempt the Study Team from income tax and charges of any kind imposed on or in connection with any emoluments or allowances paid to the members of the Study Team for their services in connection with the implementation of the Study.
 - (5) To provide necessary facilities to the Study Team for remittance as well as utilization of the funds introduced in Lao P.D.R. from Japan in connection with the implementation of the Study.
 - (6) To secure permission or entry into private properties or restricted areas for the conduct of the Study.
 - (7) To secure permission for the Study to take all data, documents and necessary materials related to the Study out of Lao P.D.R. to Japan.
 - (8) To provide medical services as needed. Its expenses will be chargeable to members of the Study Team.
6. The Government of Lao P.D.R. shall bear claims, if any arises against member(s) of the Japanese Study Team resulting from, occurring in the course of or otherwise connected with the discharge of their duties in the implementation of the Study, except when such claims arise from gross negligence or willfull misconduct on the part of the member of the Study Team.
7. The Department of Communication shall act as counterpart agency to the Japanese Study Team and also as coordinating body in relation with other governmental and non-governmental organizations concerned for the smooth implementation of the Study.

The Government of Lao P.D.R. assured that the matters referred in this form will be ensured for a smooth conduct of the Development Study by the Japanese Study Team.

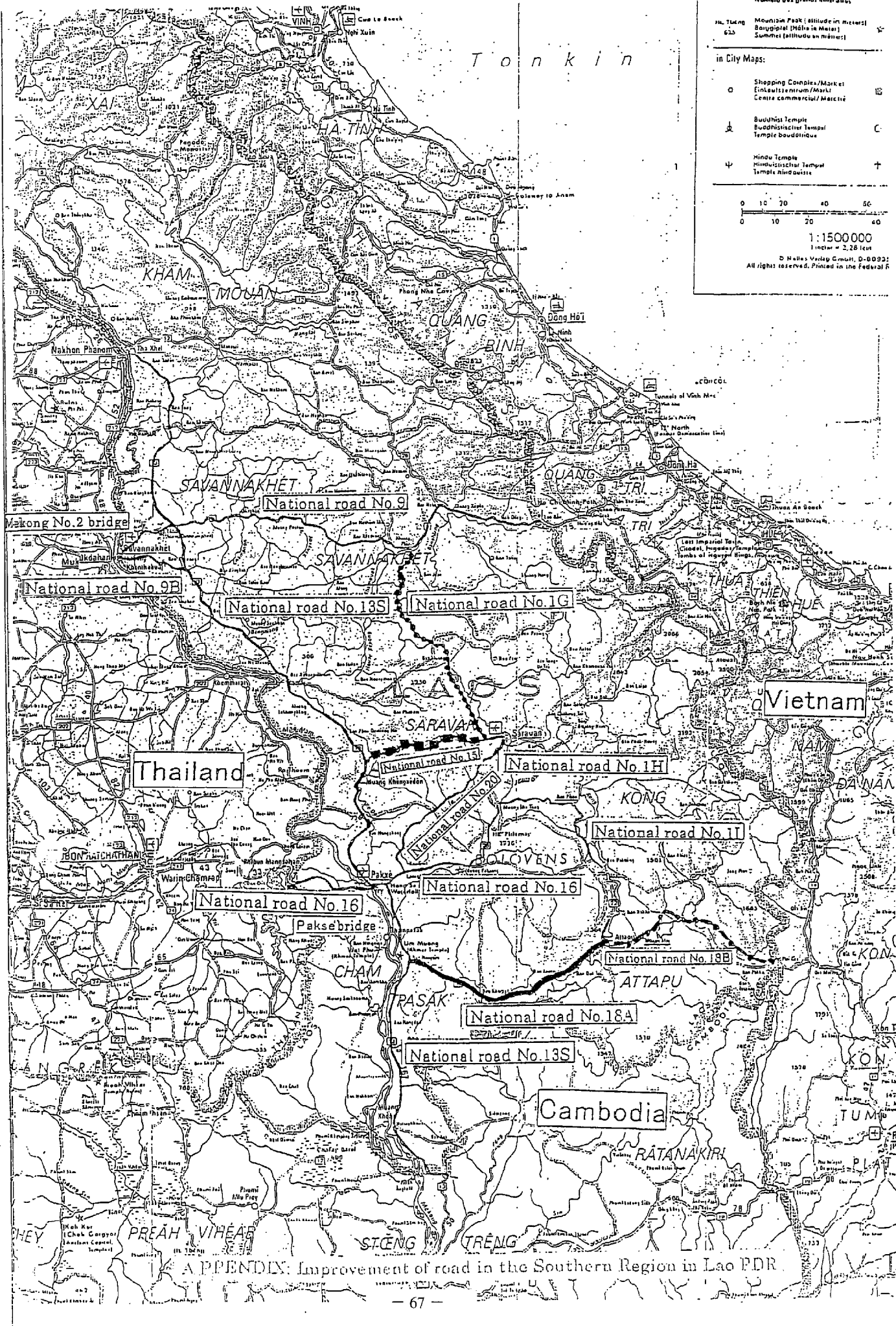
Signed :

Title :
On behalf of the Government of Lao P.D.R.

Date :

ANNEX

1. Location map
2. Organization Chart of the Ministry.
3. Organization Chart of Communication Dept.
4. Detail and Photograph on project route
(Higher priority route only)
 - 1)Route NO.18(A)
 - 2)Route NO.15



Mountain Peak (Altitude in Meters)
 635
 635
 635
 Summit (Altitude in Meters)

in City Maps:

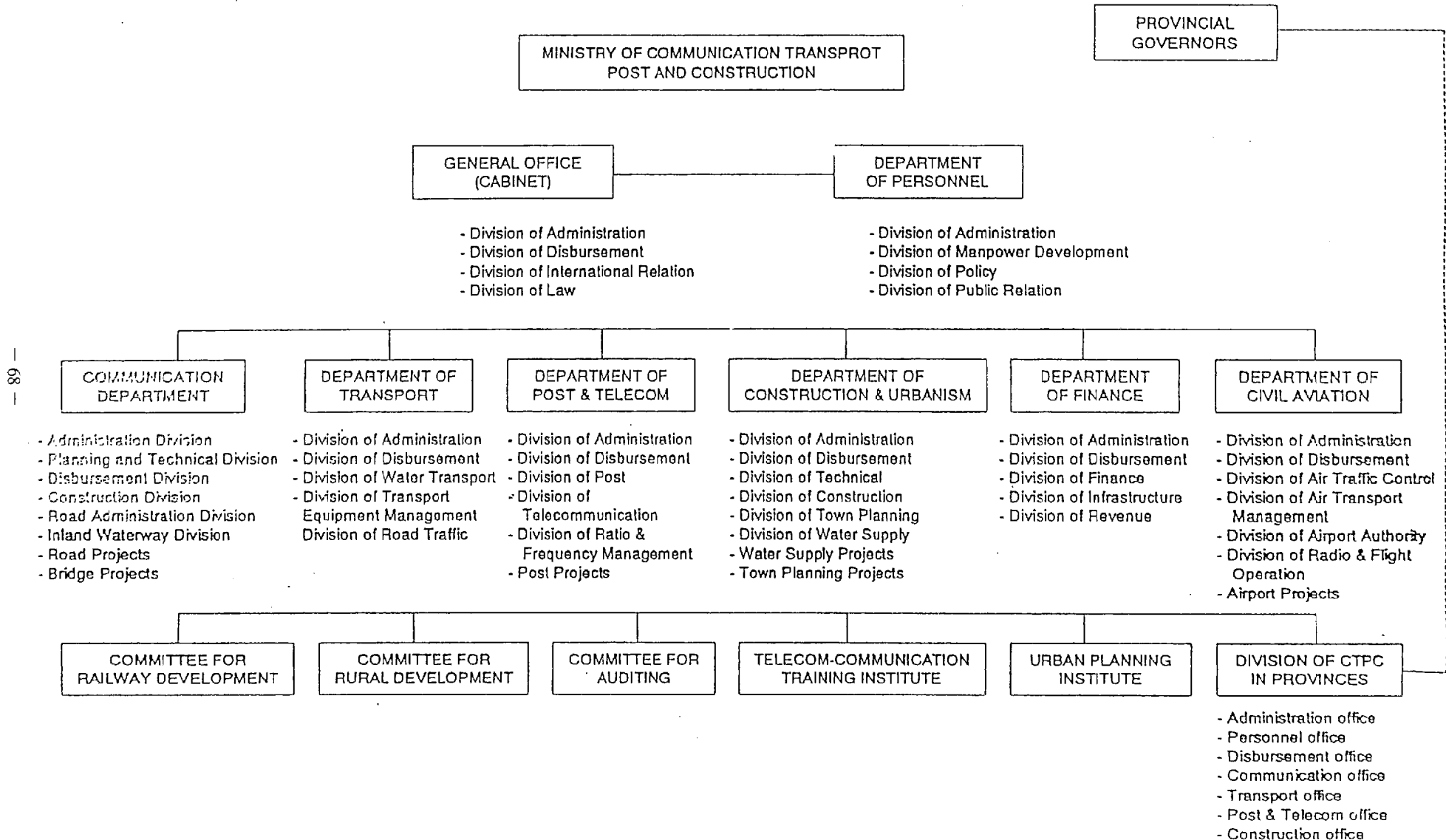
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 Einkaufszentrum/Markt
 Centre commercial/Mercerie
- Buddhist Temple
 Tempel Buddhistische
- Hindu Temple
 Tempel Hinduistische

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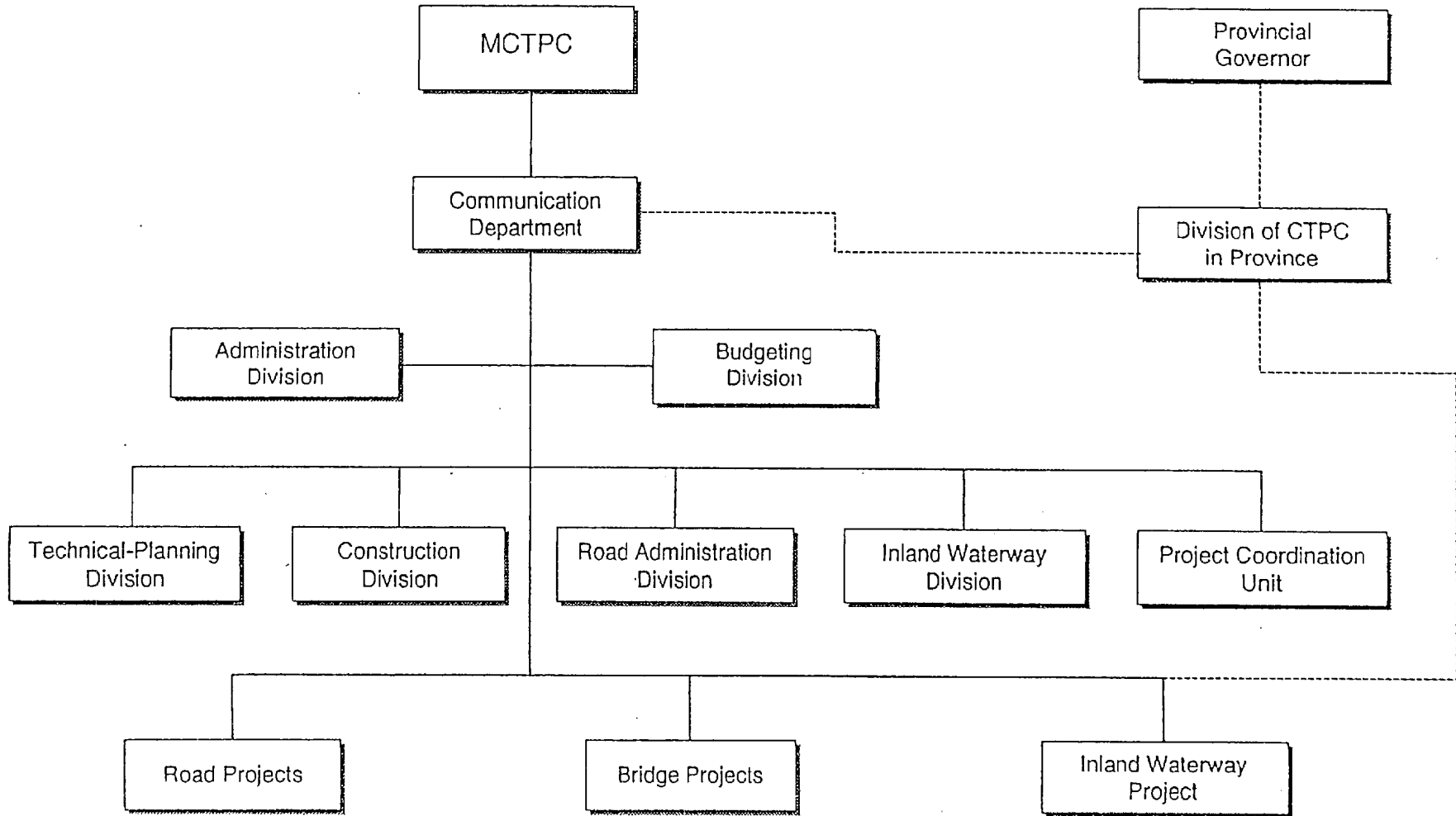
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APPENDIX: Improvement of road in the Southern Region in Lao PDR

ORGANIZATION CHART



ORGANIZATION CHART OF COMMUNICATION DEPARTMENT

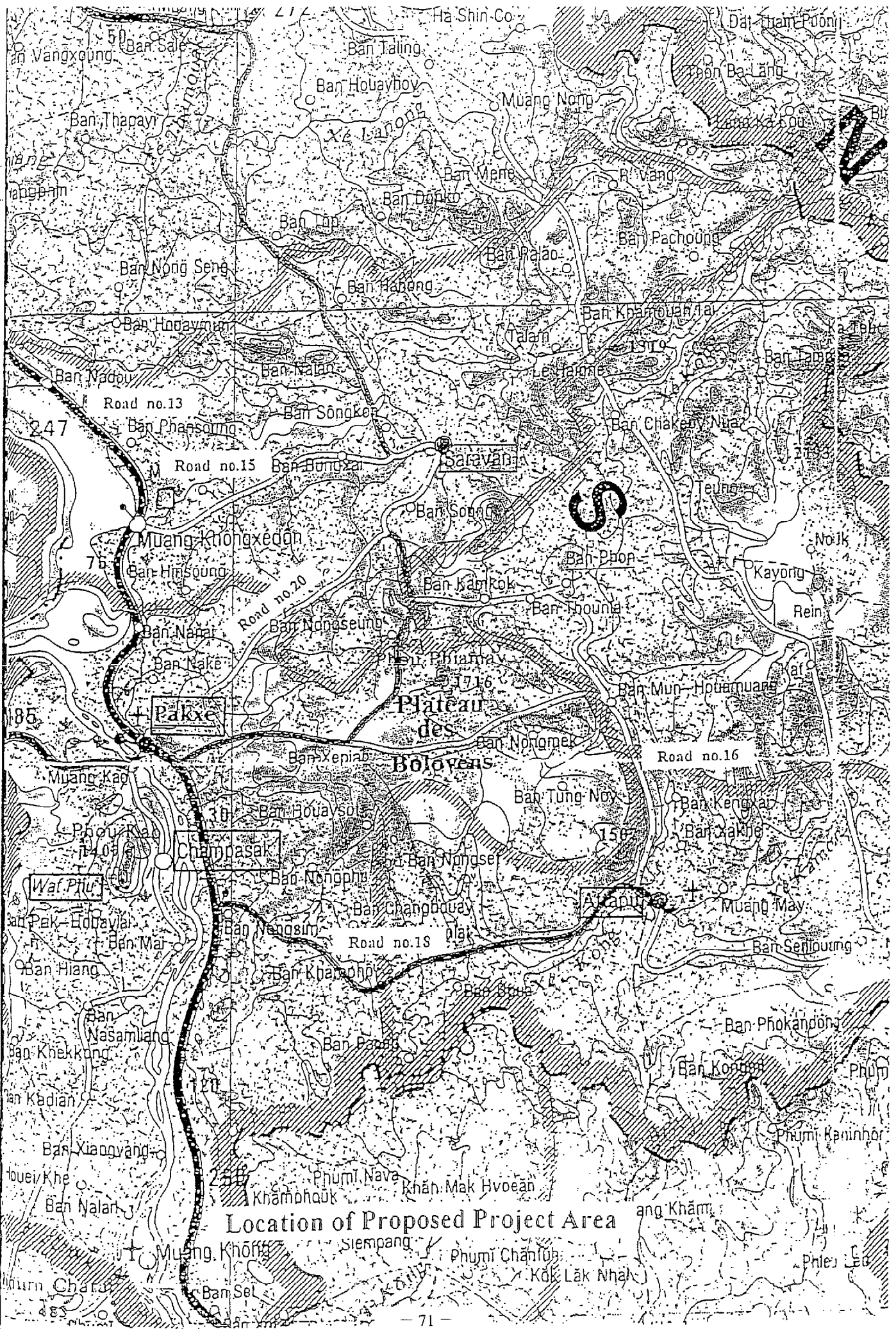


Detail and Photograph on project route

(Higher priority route only)

1)Route NO.18(A)

2)Route NO.15



Location of Proposed Project Area

*Investigation of Bridge on National Road no.18
(From Attapu to Xe Paieng River)*

Item	Description	Distance (km.)	Acc. Dist. (km.)	Dimension of Bridge			Capacity (tons.)	Photo No.	Time	Remark
				Width (m.)	Length (m.)	Heigh (m.)				
23	Small Bridge	0+500	19+100	-	L<5.00 m.	H<1.50 m.	-	-	14:09	
24	Small Bridge	0+500	19+600	-	L<5.00 m.	H<1.50 m.	-	-	14:11	
25	Small Bridge	0+300	19+900	-	L<5.00 m.	H<1.50 m.	-	-	14:13	
26	Bridge no.10	0+800	20+700	3.60	84.60	12.90	-	13	14:15	
27	Small Bridge	1+000	21+700	-	L<5.00 m.	H<1.50 m.	-	-	14:18	
28	Small Bridge	0+600	22+300	-	L<5.00 m.	H<1.50 m.	-	-	14:19	
29	Small Bridge	1+100	23+400	-	L<5.00 m.	H<1.50 m.	-	-	14:21	
30	Small Bridge	0+100	23+500	-	L<5.00 m.	H<1.50 m.	-	-	14:22	
31	Small Bridge	0+400	23+900	-	L<5.00 m.	H<1.50 m.	-	-	14:25	
32	Small Bridge	0+400	24+300	-	L<5.00 m.	H<1.50 m.	-	-	14:26	
33	Small Bridge	0+400	24+700	-	L<5.00 m.	H<1.50 m.	-	-	14:27	
34	Small Bridge	2+500	27+200	-	L<5.00 m.	H<1.50 m.	-	-	14:29	
35	Bridge no.11	1+000	28+200	3.50	65.00	13.00	-	14	14:30	
35	Bridge no.12	1+100	29+300	3.30	27.60	6.60	-	15	14:40	
36	Bridge no.13	5+200	34+500	3.70	10.70	2.50	-	16	14:50	
37	Bridge no.14	0+600	35+100	3.70	33.10	4.90	-	17	14:53	
38	Xe Paieng River.	4+300	39+400	-	-	-	-	18	15:03	

Note: The small bridge are apply in box culvert structure.

The small bridge dimension are as below

- Width ~3.50 m.
- Length < 5.00 m.
- High < 1.50 m.

Investigation of Bridge on National Road no.18
(From Attapu to Xe Paieng River)

Item	Description	Distance (km.)	Acc. Dist. (km.)	Dimension of Bridge			Capacity (tons.)	Photo No.	Time	Remark
				Width (m.)	Length (m.)	Height (m.)				
1	Junction road no.18 and road no.16(ATTAPU)	0+000	0+000	-	-	-	-	1	12:50	
2	Small Bridge	0+300	0+300	-	L<5.00 m.	H<1.50 m.	-	2	12:51	
3	Bridge no.1	0+400	0+700	3.60	7.60	2.60	-	3,4	12:58	
4	Bridge no.2	0+400	1+100	3.50	15.70	5.25	-	5	13:00	
5	Small Bridge	2+600	3+700	-	L<5.00 m.	H<1.50 m.	-	-	13:05	
6	Small Bridge	0+700	4+400	-	L<5.00 m.	H<1.50 m.	-	-	13:10	
7	Bridge no.3	0+900	5+300	3.50	59.45	9.40	-	6	13:14	
8	Bridge no.4	1+700	7+000	3.50	39.90	9.40	-	7	13:25	
9	Bridge no.5	0+200	7+200	3.50	26.40	4.80	-	8	13:30	
10	Small Bridge	0+600	7+800	-	L<5.00 m.	H<1.50 m.	-	-	13:35	
11	Small Bridge	0+800	8+600	-	L<5.00 m.	H<1.50 m.	-	-	13:37	
12	Small Bridge	0+800	9+400	-	L<5.00 m.	H<1.50 m.	-	-	13:40	
13	Small Bridge	1+400	10+800	-	L<5.00 m.	H<1.50 m.	-	-	13:43	
14	Bridge no.6	0+400	11+200	3.50	12.00	3.20	-	9	13:45	
15	Small Bridge	0+700	11+900	-	L<5.00 m.	H<1.50 m.	-	-	13:47	
16	Bridge no.7	0+700	12+600	3.20	50.00	11.60	-	10	13:48	
17	Bridge no.8	2+000	14+600	3.50	13.00	3.70	-	11	13:55	
18	Bridge no.9	0+900	15+500	4.30	24.00	9.20	-	12	14:00	
19	Small Bridge	0+900	16+400	-	L<5.00 m.	H<1.50 m.	-	-	14:01	
20	Small Bridge	0+500	16+900	-	L<5.00 m.	H<1.50 m.	-	-	14:02	
21	Small Bridge	1+100	18+000	-	L<5.00 m.	H<1.50 m.	-	-	14:05	
22	Small Bridge	0+600	18+600	-	L<5.00 m.	H<1.50 m.	-	-	14:07	