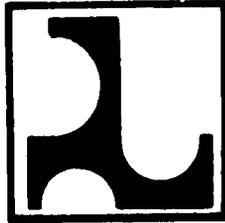


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**LUWU ROAD AND BRIDGES BETTERMENT PROJECT  
SOUTH SULAWESI**

CONSTRUCTION SUPERVISION  
ENGINEERING SERVICES

**MONTHLY PROGRESS REPORT**

SEPTEMBER 1982

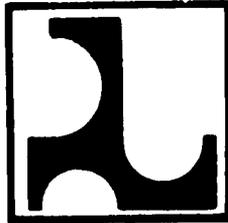
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P.T. INDAH KARYA  
CONSULTING ENGINEERS  
BANDUNG

LOUIS BERGER, INT. INC.  
ARCHITECT - ENGINEERS - ECONOMIST - PLANNERS  
EAST ORANGE, N.J. USA 07019



REPUBLIC OF INDONESIA  
MINISTRY OF PUBLIC WORKS  
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SOUTH SULAWESI**

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**MONTHLY PROGRESS REPORT**

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CONSTRUCTION SUPERVISORY SERVICES FOR LUWU ROAD BETTERMENT PROJECT  
P.T. INDAH KARYA - LOUIS BERGER INT. INC.

PROJECT OFFICES - JLN. IMAM BGMJOL 6 PALOPO, BONE BONE, WALENRAK, WOTU - SOUTH SULAWESI

Secretary of the Directorate General Bina Marga  
Jln. Pattimura 20  
Kebayoran Baru  
Jakarta.

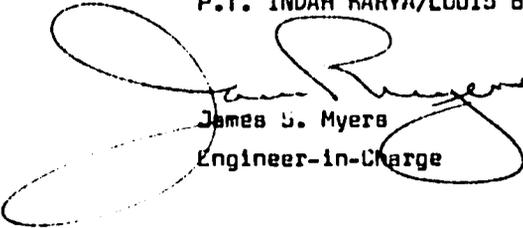
Attention: Kepala Bagian Intel  
Project Monitoring Officer

Re: Engineering Services Report  
Construction - Supervision  
Luwu Road & Bridges Betterment Project

Gentlemen:

Pursuant to the Consultant Contract we are pleased to transmit Report No. 14, covering the Engineers' activities for the month of September 1982.

Sincerely Yours,  
P.T. INDAH KARYA/LOUIS BERGER INTERNATIONAL, INC.



James S. Myers  
Engineer-in-Charge

JSM:alk

c.c.: File (3)

Enclosures: 20 reports.

MONTHLY PROGRESS REPORT NO. 14

Covering activities during the month September 1982

FOR THE DIRECTORATE GENERAL OF HIGHWAYS  
MINISTRY OF PUBLIC WORKS  
REPUBLIC OF INDONESIA

LUWU ROAD BETTERMENT PROJECT

BINA MARGA CONTRACT NO. 13/CTR/LN/BM/1978

PREPARED BY: P.T. INDAH KARYA/LOUIS BERGER INTERNATIONAL INC.

FINANCED BY: GOVERNMENT OF INDONESIA AND USAID

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REPORT NO. 14

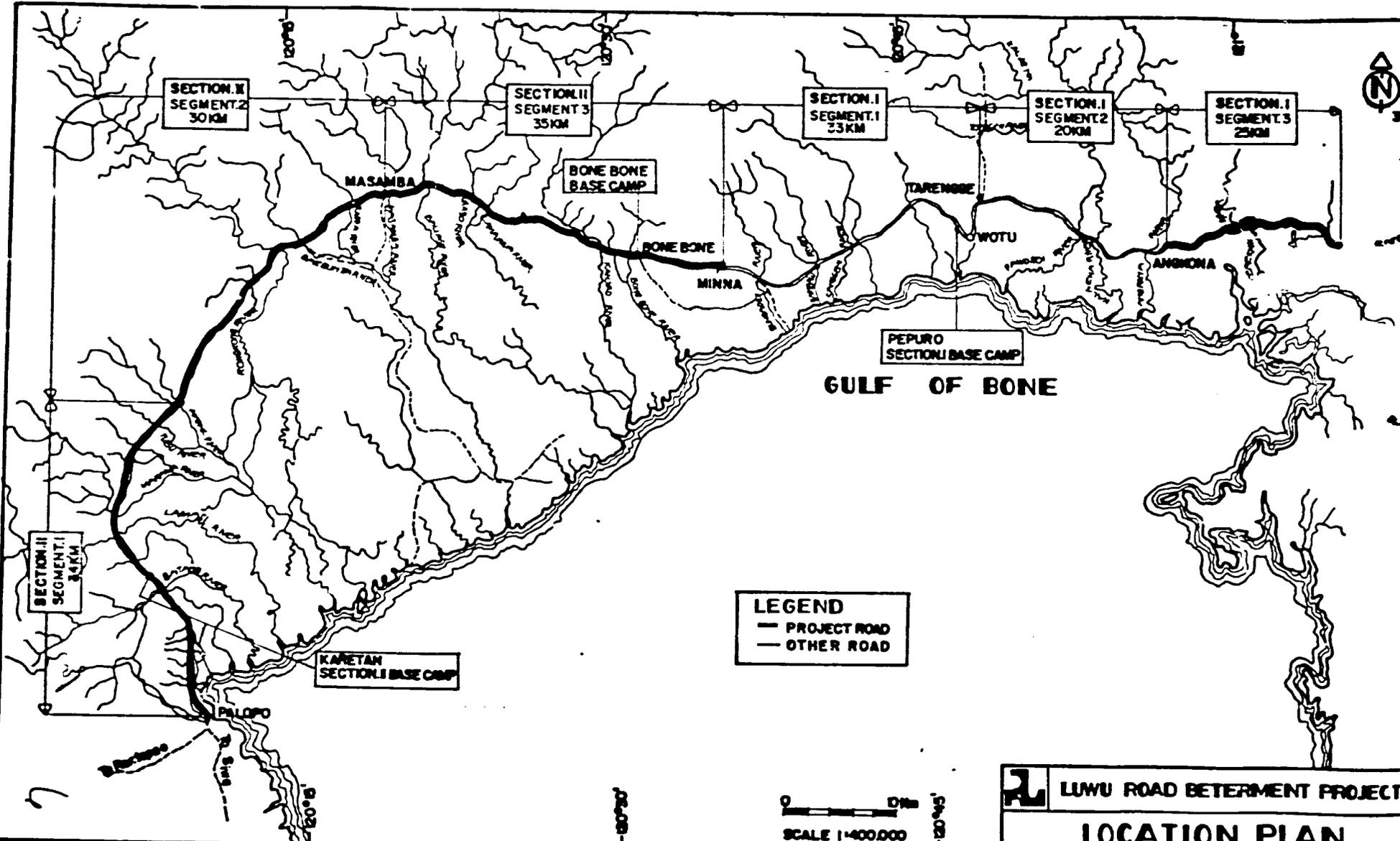
SEPTEMBER 1982

ENGINEERING SERVICES

SUPERVISION OF CONSTRUCTION

LOWE ROAD & BRIDGES IMPROVEMENT PROJECT

<u>DESCRIPTION</u>	<u>PAGE NUMBERS</u>
PROJECT LOCATION M.P	FRONT PIECE
WORK ACCOMPLISHED	01
SCHEDULES & PROGRESS	02 - 04
MAJOR PROBLEMS	05
DATA INPUT SHEET-ENGINEERING COSTS	06
PHYSICAL PROGRESS-ENGINEERING ACTIVITIES	07
ENGINEERING SERVICES ESTIMATED TOTAL COSTS	08



**LEGEND**  
 — PROJECT ROAD  
 — OTHER ROAD

0 1000 2000  
 SCALE 1:400,000

**LUWU ROAD BETTERMENT PROJECT**  
**LOCATION PLAN**

## WORK ACCOMPLISHED

activities performed by the Consultants for the month of September 1982 comprised the following professional works:-

- Supervision of Section I Contractor.
- Supervision of Section II Contractor.
- Materials testing in both Sections.
- Checked and evaluated revised progress schedule.
- Provided general guidance to Contractor to carry out construction activities in a workmanlike manner.
- Carried out inspection of all active work sites.
- Made field changes in the spirit of optimization to reduce the costs of the project and to expedite work. (Optimization Motivation.)
- Checked and approved Contractor "Line Layout Diagrams" and "Shop Drawings".
- Continued as-built surveys.
- Ascertained and concurred with the Contractor as regards quantities included in the Monthly Certificates with sufficient supporting evidence reviewed and approved.
- Maintained complete records and files to support engineering field decisions, change orders or back-up details for approved quantities incorporated into the works "As-Built" Information.
- Prepared Monthly Progress Report Detailing Construction activities using the official guidelines provided by the Client for the basic format.
- Maintained liaison between Contractor, Client and Lending Agency.
- Continued with Feasibility Report.

KABUPATEN ROAD PROGRAM & PREFEASIBILITY STUDY

I. GENERAL

The Government of Indonesia retained Louis Berger International, Inc. for the services of conducting a study on Kabupaten roads in Luwu by means of Addendum No.3 to the contract which was signed on 10 March 1982. The foreign exchange component was financed by US AID grant funds. The study commenced on 08 June 1982, and was substantially completed within the allocated time of four calendar months.

II. PERSONNEL

The following three expatriates were working out of the Jakarta office of the Consultant during this report period:

<u>Name</u>	<u>Position</u>	<u>Nationality</u>
Mr. Yuishiro Motomura	Team Leader	Japanese
Mr. Peter Smith	Traffic Engineer	British
Mr. Carter Brandon	Economist	American

III. REPORT PERIOD ACTIVITIES

The requirements for this study was substantially completed during this report period. The field work was 100 % completed and the office work was 95 % completed. The only remaining work was editing and proof reading, reproduction, collation, printing, & binding of the report.

IV. ACTIVITIES NEXT PERIOD

The Team Leader envisages total completion of the work as outlined in the terms-of-reference. Report distribution will be finalized and team members scheduled for departure from Jakarta.

## WORK SCHEDULE

### PROGRESS

#### Section I

##### Contractor: P.T. Sekayu International (Segments 1 & 2)

At the end of the last reporting period steps were undertaken by Uina Marga to allow P.T. Pembangunan Jaya to assume all contractual responsibilities from P.T. Sekayu. P.T. Sekayu's only activity during this period was therefore limited to performing inventories, conducting joint surveys with P.T. Jaya to establish P.T. Sekayu's in place quantities and repair of their equipment. Their subcontractor did however complete the piling at Lepa Lepa.

##### Contractor P.T. Pembangunan Jaya (Segments 1 & 2)

Upon being asked to assume the obligations of P.T. Sekayu, This Contractor commenced pulling equipment away from their own Segment 3 Section II and started stockpiling embankment material at Tomini River.

As soon as stationing and Cross sections were completed, trucks which increased in Number throughout the period commenced hauling of embankment between Pondir II Sta 9 + 972 and Kalena River Bridge Sta 12 + 298. Maintenance aspects were accomplished throughout the entire segment making the road once again passable for the public.

Work was also commenced on the 3 RC. Bridge foundations which had been given to P.T. Jaya last June.

Approximate percentage earned by P.T. Jaya after assuming the work in Segments 1 & 2 was 0.3 % for the period. This percentage is approximate only since a written contract denoting unit prices and mobilization costs which would increase the contractual sums for the work in these two segments are not available.

Percentage figures being used arise from the higher unit prices of both sections and do not consider aspects such as mobilization etc.

##### Contractor: P.T. Hutama Karya (Major Bridge Contractor)

This contractor was involved primarily in demobilization of their equipment. All work was completed during the last period.

Contractor P.T. Bumi Karya (Segment 3)

This contractor earned a dismal 1.4 % during the period. In spite of excellent weather conditions only 655 Cum.of embankment was placed during the period because of their only self propelled roller being down, between the 21st of August untill the 30th of September. Poor production prevails in all other facets of their work. Present rates of production would require up to September of 1983 for completion.

Section II

Contractor: P.T. Pembangunan Jaya

This contractor earned 3.53 % during the period with emphasis being placed towards completion of embankment paving, etc. in Segment 3. However, many outstanding Change Orders are pending negotiations between the Client and Contractor; therefore, until these prices are adjudicated the exact percentage of completion cannot be ascertained by the Consultant.

Total work, based on known factors, indicate that 76.10 % has been completed.

## MAJOR PROBLEMS

Major problem inhibiting successful and timely completion of this project area as follows:-

FINANCIAL: Short and long-term financing by the Contractor has impeded progress since the onset or commencement of the project and still present enormous problems. This is further exacerbated by the Contractors late submission of monthly estimates and apparent disregard of the fact that they cannot obtain payment unless these estimates are submitted and approved. These aspects have a snowball effect. Not only do they continually impede progress, they also cause unnecessary manmonths to be added for the Consultants' Supervision Services. Insufficient financing by the indigenous consulting firm and their failure to make prompt payments for work accomplished has led many suppliers and service organizations to demand money up-front before delivery of materials and goods or providing essential services.

PERSONNEL: Recruitment of personnel from Sulawesi has been a major problem for both Contractor and Consultant. It would appear that once we have expended time, money, and effort to train personnel, they simply leave and go elsewhere. Employees whose contracts have expired or are close to expiring are seeking employment elsewhere.

VEHICLES: The majority of vehicles presently in use by the Engineers require extensive work, with many needing complete overhauls. With the work coming to a close in Section II some of these vehicles can be repaired to replace those in Section I.

ENGINEERING CONSULTANCY COSTS AND MAN-MONTHS DATA INPUT SHEET

01 Project Identification \_\_\_\_\_ 02 Project Code \_\_\_\_\_ 03 Date 30 Sept 82  
 04 Reporting Unit Luwu Road and Bridge Betterment Project 05 Consultant P.T. Indah Karya / Louis Berger Int, Inc.  
 06 Contract Number 13/STR/LN/BM/1978 07 Activity Supervision of Construction  
 08 Project Limits, From Palopo 09 Project Limits, To Malili  
 10 Contract Signed 18 Nov 78 11. Start Date 15 Aug 78 12 Original Completion Date 14 Aug 81  
 13 Revised Completion Date 31 Mar 82 14 Estimated Completion Date 31 Dec 82

COSTS

MAN-MONTHS

<u>Original Contract</u>	Addenda 1 thru 4	<u>Original Contract</u>	<u>Addenda</u>
15 Dollars <u>965.8 X 10<sup>3</sup></u>	16 Dollars <u>1006.1 X 10<sup>3</sup></u>	17 Foreign <u>114</u>	18 Foreign <u>119.5</u>
19 Rupiah <u>698.2 X 10<sup>6</sup></u>	20 Rupiah <u>596.7 X 10<sup>6</sup></u>	21 Local <u>2543</u>	22 Local <u>1967.0</u>
<u>Estimated Addenda No.5 (Under Review)</u>		<u>Estimated Addenda No.5</u>	
23 Dollars <u>35.6 X 10<sup>3</sup></u>		24 Foreign <u>40.0</u>	
25 Rupiah <u>- 0 -</u>		26 Local <u>735.9</u>	
<u>Professional &amp; Technical Personnel</u>		<u>Professional &amp; Technical Personnel</u>	
27 Dollars <u>1.44 X 10<sup>6</sup></u>		28 Foreign <u>220.6</u>	
29 Rupiah <u>426.0 X 10<sup>6</sup></u>		30 Local <u>1330.0</u>	
<u>All Other Personnel &amp; Support</u>		<u>All Other Personnel &amp; Support</u>	
31 Dollars <u>1.83 X 10<sup>5</sup></u>		32 Foreign <u>-</u>	
33 Rupiah <u>673.5 X 10<sup>6</sup></u>		34 Local <u>17.2</u>	
35 Lenders share <u>40% FX Loan</u>	<u>Rupiah</u>		
<u>100% Grant FX</u>	<u>Contingency 56.9 X 10<sup>6</sup></u>		
	<u>P.P.n.(2.5%) 33.8 X 10<sup>6</sup></u>		

Note: All Foreign costs expressed in thousands of U.S. Dollars  
 All Local costs expressed in millions of Rupiah  
 All values entered to one decimal place

REPORT OF PHYSICAL PROGRESS SELECTED ENGINEERING ACTIVITIES

ACTIVITIES		PROGRESS				
CODE	DESCRIPTION	ORIGINAL TARGET	REVISED TARGET	THIS PERIOD	TU DATE	PERCENT COMPLETE
05	Preliminary Engineering Design	176	176	0	176	100
06	Final Engineering Design	176	176	0	176	100
07	Materials Investigation	13	13	0	13	100
14	Highway Redesign Work	0	176	0	176	100
19	Bridge Design	13	10	0	13	100
01	Feasibility Study Feeder Roads Program	Under Implementation : Field 40 % Office 95 %				97 %

PROFESSIONAL ENGINEERING SERVICES

ESTIMATED TOTAL COST

SUMMARY

<u>DESCRIPTION</u>	<u>U.S. DOLLAR</u>	<u>RUPIAH</u>
1. Original Contract	965,826	698,192,755.00
2. Addendum No. 1	122,064	179,185,386.00
3. Addendum No. 2	-0-	38,967,625.99
4. Addendum No. 3	884,083	378,590,480.00
5. Addendum No. 4	-0-	-0-
6. Addendum No. 5	35,556	-
7. Contingencies	-0-	56,939,929.60
<hr/>		
SUBTOTAL	2,007,529	1,351,876,176.59
PPn 2.5 %	-0-	33,796,904.41
<hr/>		
T O T A L S	2,007,529	1,385,673,081.00
<hr/>		

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