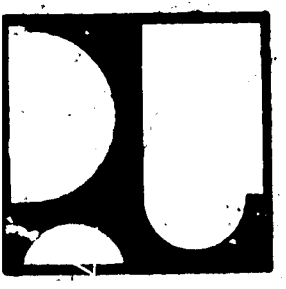
REPUBLIK INDONESIA

DEPARTEMEN PEKERJAAN UMUM

DIREKTORAT JENDERAL BINA MARGA



JAGORAWI HIGHWAY
STAGE II

MONTHLY REPORT

SEPTEMBER 1982

AMMANN & WHITNEY - TRANS ASIA ENGINEERING ASSOCIATES INC.

A JOINT VENTURE

CONSULTING ENGINEERING

REPUBLIK INDONESIA

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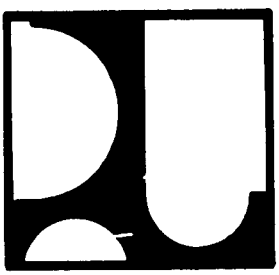
DIREKTORAT JENDERAL BINA MARGA



JAGORAWI HIGHWAY
STAGE II

MONTHLY REPORT
SUPERVISION

SEPTEMBER 1982

AMMANN & WHITNEY - TRANS ASIA ENGINEERING ASSOCIATES INC.
A JOINT VENTURE

CONSULTING ENGINEERING

REPORT NO. 101

September 1982

JAGORAWI HIGHWAY PROJECT
CONSULTING SUPERVISION SERVICES

Submitted by :

LARRY G. BUNTEN
Engineer in Charge

DEPARTEMEN PEKERJAAN UMUM
DIREKTORAT JENDERA... BINAMARGA
DIREKTORAT
PEMBANGUNAN JALAN ...
(JAGORAWI)

APPROVED
...BINAMARGA
NAME: Darwin
TITLE: Project Manager
DATE:

Prepared by :

AMMANN & WHITNEY/TRANS-ASIA
ENGINEERING ASSOCIATES, INC.,
A Joint Venture

P.O. Box 44 Bogor,
Indonesia

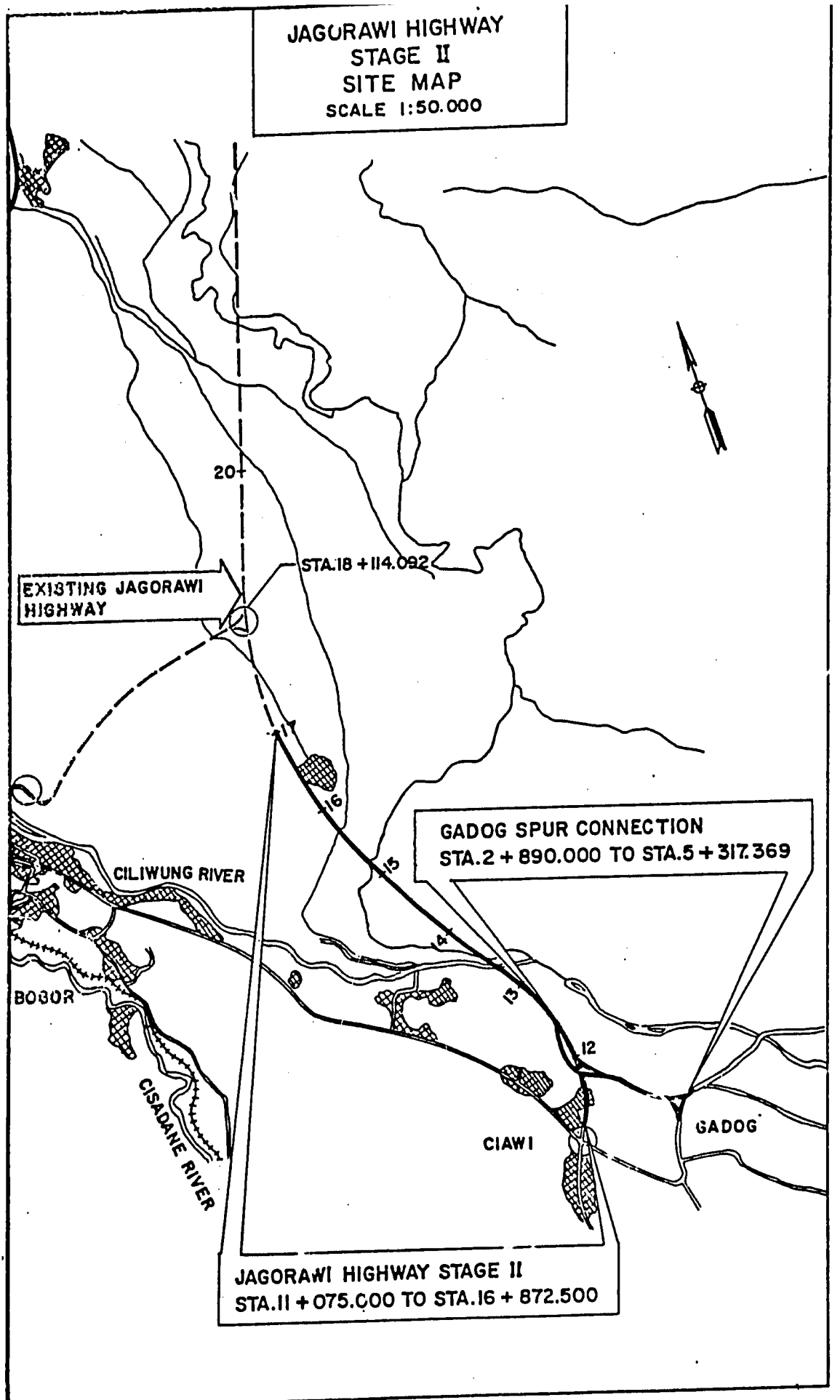

JAGORAWI HIGHWAY
STAGE II
SITE MAP
SCALE 1:50.000
20+
STA.18 + 114.092
EXISTING JAGORAWI HIGHWAY
17
16
15
4
13
12
GADOG SPUR CONNECTION
STA.2 + 890.000 TO STA.5 + 317.369
CILIWUNG RIVER
BOGOR
CISADANE RIVER
CIAWI
GADOG
JAGORAWI HIGHWAY STAGE II
STA.11 + 075.000 TO STA.16 + 872.500

TABLE OF CONTENTS

SECTION I .... NARRATIVE SUMMARY

I. 1. .... STAGE II CONSTRUCTION

The Contractor achieved 0.69 percent progress during the month by casting three structural concrete pier caps and placing protective concrete on exposed piles at Bridge Station 11+932. However, 7.31 percent progress had been scheduled for the month.

Progress stands at 12.96 percent complete vs 83.36 percent scheduled placing the the Contractor about 14 months behind schedule.

A partial work suspension of further work at Bridge Station 11+932 has been issued to the Contractor by the Engineer as it has been generally agreed that completion of this bridge will be deleted.

Funding for the Project has not, as yet, been provided. ICCI's project and bank guarantees have expired and have not been extended.

ICCI has reported the resignation of several top managers, and is presently being managed by members of the Board of Share Holders. The Engineer notes little improvement in the organization and management of ICCI during the two years since they began work on the Project. The Engineer has serious reservation that ICCI can complete this Project with their present organization.

I. 2. .... MAINTENANCE

Jasa Marga reported that they entered into an agreement with Scan-Roads of Singapore to supply premixed emulsion for the fog seal program.

SECTION II .... PROBLEM AREAS

II. ICCI began work on the Project during September 1980 -- two years ago. Since then, the Engineer has repeatedly reported ICCI deficiencies in management, organization, lack of equipment and insufficient working capital.

During the past two years, we have seen little, if any, improvement in these areas. ICCI advised us of the resignation of three top ICCI managers during the month, including the President of ICCI and Mr. Tuk Setyohadi, Vice President of Domestic Operations. The letter stated that ICCI is presently being managed by the Board of Share Holders.

ICCI so far has not been successful in assigning or subcontracting the work to Consortium member companies. The Engineer again advises that with ICCI's present organization, it is doubtful that they can complete this Project.

SECTION III .... ADMINISTRATION

III. 1. .... SUBMITTALS/APPROVALS

The Engineer's Rupiah Invoice No. 103 for August was submitted and a full advance was provided by Bina Marga. The Engineer's Dollar Invoice No. 90 for August and No. 91 Extra were submitted and have been approved by Bina Marga.

The Contractor submitted invoice No. 11 covering July and August. The invoice was certified by the Engineer and forwarded to Bina Marga.

The Engineer requested approval for an Engineering Sponsor visit for Mr. Gross during October.

III. 2. .... DECISIONS

It has generally been decided that Bridge Station 11+932 will be deleted from the work. Because the Contractor was working on this bridge, and after discussions with Jasa Marga/Bina Marga, the Engineer issued a "partial work suspension" order covering additional work at this bridge.

III. 3. .... MAJOR CONFERENCES

A meeting including Jasa Marga, Bina Marga and the Engineer was held on September 24th. The meeting was chaired by Mr. Budiharto.

Jasa Marga indicated that funding approvals for project finance would be available soon. It was generally agreed that the Contractor should renew project guarantees before receiving payment and that a letter would be sent to the Contractor ordering him to resume work within 30 days after receipt of payment for outstanding invoices.

The Engineer estimated that a time extension to October 1984 (17 months) would probably be required for completion of the Project.

III. 3. .... MAJOR CONFERENCES (Cont'd)

Jasa Marga stated that under law, payment for the Joint Venture's supervisory contract can not be extended beyond December 31, 1982 on a Rupiah payment basis. Jasa Marga intends to sign a new contract with Archicons Engineers, P.T. and requested the Joint Venture to enter into a separate technical assistance agreement with Archicons.

III. 4. .... OFFICIAL VISITORS

Mr. Robert Davis and Philip Tjakranata of US/AID Jakarta made an official inspection of the Project on September 8th.

Mr. E.A. Evanson, President of Trans-Asia Engineering Associates, Inc. visited the Project on September 9th and met with officials of Jasa Marga.

III. 5. .... FINANCIAL OVERRUNS/UNDERRUNS

Following is a summary of invoicing by the Contractor vs payments provided by Bina Marga.

Invoice No.	Period	Amount of Invoice	Amount Paid by Bina Marga	Reported by Contractor
1	Advance 1981	1,207,500,000	800,000,000	0
2	Thru June	89,119,176	89,119,176	216,283,000
3	J u l y	90,792,037	0	69,510,000
4	A u g u s t	3,400,241	3,400,241	16,511,000
5	September	71,894,479	0	49,430,000
6	October	291,967,260	0	243,154,065
7	November	168,368,956	0	213,205,701
8	December	7,361,561	0	56,688,719
9	January 1982	18,217,765	0	34,732,653
-	February	0	0	0
-	M a r c h	0	0	0
-	April	0	0	0
-	M a y	0	0	0
-	J u n e	0	0	0
10	February thru July 1982	33,686,288	0	51,750,962
11	August & September	43,977,985	0	42,614,502
		2,026,285,748	892,519,417	1,020,776,100

III. 5. .... FINANCIAL OVERRUNS/UNDERRUNS (Cont'd)

We again advise that ICCI's Project guarantees and the bank guarantee for the advanced payment have expired. A bank guarantee for Bina Marga-owned equipment has never been submitted. ICCI has had possession of Bina Marga equipment for up to two years.

Following is an estimate of the amount of money owed to the Government by ICCI which is unsecured :

Description	Millions of Rupiah
-- Estimated equipment rental owed to Bina Marga's Equipment Section (May 1981 - Sept. 1982)	Rp 300
-- Advance payment outstanding	Rp 702.7
Sub-total	Rp 1,002.7
-- Amount of progress payments Bina Marga owes ICCI	(-) Rp 726.4
ESTIMATED AMOUNT ICCI OWES TO THE GOVERNMENT	Rp 276.3

The estimated value of unsecured Government-owned equipment in the possession of ICCI is Rp 2 billion.

SECTION IV .... ENGINEERING PROGRESS

IV. 1. .... LABORATORY & QUALITY CONTROL

a) Compressive strength test specimens of concrete placed were cast and tests performed. The Contractor changed sources of sand from Ciapus to Purwakarta. The Purwakarta sand is finer than Ciapus resulting in an increased surface area. 7 and 14 day compressive strength tests were marginal. During the report period 3 sets of three each cylinders were tested at 28 days. Two sets showed strengths above minimum 210 kg/cm^2 and one set was below specifications. The Engineer required additional cement to be added to the mix. Increase was from 320 kg/m^3 to 335 kg/m^3. Subsequent 7 day compressive strength test results appear to be well within estimated strength for 7 days.

b) Sand and Aggregate Gradation

Three sand and two aggregate samples were obtained from the concrete batch plant and tested. All tests were satisfactory.

IV. 2. .... BRIDGES

Aggregate base fill under existing bridge pier No. 1 at Bridge Station 13+587 slipped out while the Contractor was subexcavating for new pier No. 1. The Engineer authorized the Contractor to fill the slip-out cavity with Class C concrete and about 25 M^3 were placed. The Engineer also authorized the Contractor to backfill new pier No. 1 using granular material by ponding. This will prevent excessive vibration that might cause additional slip-outs. A survey bench mark was set on the deck of the existing bridge near pier No. 1 and will be checked periodically for settlement.

An examination of the foundation at pier No. 3 and No. 6 of Bridge Station 13+587 indicates the presence of boulders that will interfere with pile driving. The Engineer authorized subexcavation below grade to remove these boulders.

IV. 2. .... BRIDGES (Cont'd)

When concrete was being placed, slump tests were made from each truck. Slump was maintained between 2 and 4 inches. Concrete cylinders were cast at the bridge site.

The Engineer, after discussions with Bina Marga/Jasa Marga, issued a partial work suspension for the remainder of work at Bridge Station 11+932 as it has been verbally agreed that this Bridge will be deleted from the planned work.

IV. 3. .... OFFICE ENGINEERING AND SURVEYS

Quantity surveys for bridge excavation were made during the month.

The Contractor's invoice No. 11 covering August and September was checked and certified for payment.

Draft contract amendments No. 1 and No. 2 covering contract change orders approved to date and an administrative change to appoint P.T. (Persero) Jasa Marga to administer the contract were prepared at the request of Bina Marga.

SECTION V .... PROGRESS

V. 1. .... PROGRESS

The Contractor was credited with achieving Rp 53.6 million of work. This amounts to 0.69 percent progress.

V. 2. .... RAINFALL

Except for one day at the end of the month when more than 100 mm of rain fell, the weather continued to be excellent.

RAINFALL DURING SEPTEMBER

	September	Ave. for Project Location
--- No. rain days	15	13.4
--- Maximum rain in 24 hours	100.5 mm	-
--- Total rainfall during the month	274.3 mm	302.2 mm
--- Lost working days due to rain	6	-
--- Accumulative lost working days	145	-

V. 3. .... PROGRESS VS SCHEDULE

Progress stands at 12.96 percent complete vs 83.36 percent scheduled. Scheduled progress for September was 7.31 percent, so the slippage was 7.31 - 0.69 = 6.62 percent. The Contractor is about 11 months behind schedule.

V. 4. .... COMMENTS ON PROGRESS

The Contractor stopped work in January 1982. The Contractor had scheduled 50.52 percent progress for the period January thru September or Rp 4.067 billion. On average, this amounts to Rp 104.3 million per week.

The actual work accomplished by the Contractor during this

V. 4. .... COMMENTS ON PROGRESS (Cont'd)

9 month period was Rp 116.1 million or about one week of scheduled progress.

The Contractor reported that 1130 manmonths were expended during this nine month period. This amounts to 4,894.5 man-weeks of effort to achieve one week of scheduled progress.

In addition, the Contractor incurred considerable overhead expense to maintain a field office; fuel for project vehicles and for commuting from Jakarta and Bandung; and fixed monthly rental expense for Bina Marga-owned equipment. In addition to incurring excessive overhead expense, the Contractor has wasted the entire construction year, one of the driest years in some time.

The Contractor is about 14 months behind schedule. Assuming 3 months to remobilize, we estimate an overrun of contract time of about 17 months. This would place project completion at about October 1984.

SECTION VI .... CONTRACTOR

VI. 1. .... CONSTRUCTION ACTIVITIES

a) Bridges

Class AA concrete was placed for pile caps at piers No. 2, No. 3 and No. 4 of Bridge Station 11+932. Pier wall at pier No. 2 of Bridge Station 11+932 was also placed, then "weak" concrete rebar protection was placed to cover exposed reinforcing dowels.

H-piles were capped with "weak" concrete at piers No. 8, No. 9, and No. 10 to prevent rust.

Subexcavation below planned footing grade for pier No. 1 at Bridge Station 13+587 was completed. About 25 M^3 of aggregate base under existing pier No. 1 sluffed into the excavation. The Engineer authorized, and the Contractor placed 25 M^3 of Class C concrete to fill this cavity.

Excavation for pier No. 6 at Bridge Station 13+587 was begun. Efforts to excavate pier No. 3 at Bridge Station 13+587 resumed; however, the backhoe rented by ICCI is too small for the size of boulders encountered. Defective water pumps and hose added to the Contractor's difficulties.

The pile driver mobilized last month proved to be in very poor condition. The Contractor attempted to drive piles for shoring the excavation at pier No. 3 at Bridge Station 13+587. Piles driven vertically to support shoring did not penetrate below the planned grade of the footing. As a consequence once the footing excavation reached planned grade the shoring collapsed

The Contractor began backfilling the subexcavation at pier No. 1, Bridge Station 13+587 using concrete sand from Purwakarta.

VI. 1. .... CONSTRUCTION ACTIVITIES (Cont'd)

b) Concrete Batch Plant

336 M^3 of Class AA concrete and approximately 33 M^3 of Class C concrete were produced at the plant. The plant operated well and produced very consistant mixes.

c) Culverts

The Contractor continued with the RCP installations at the Engineer's compound. One end wall was placed and backfill operations began.

VI. 2. .... EQUIPMENT

The rental pile driver is in poor condition and no pay item piles were completed this month. The rental excavator is in good condition, but is too small for the work. Water pumps are defective. The Bina Marga-owned loader has been broken down most of the month. One transit mixer truck is in poor condition.

Use of inadequate and poorly maintained equipment adds to the Contractor's work inefficiency.

Following is a listing of equipment on the site during September.

APPROVED EQUIPMENT LIST					EQUIPMENT MOBILIZED THRU SEPTEMBER 1982		
No.	Description	QT'Y	CAPACITY	Brand Name/Type	QT'Y	N A M E	R E M A R K S
1	Bull Dozer	1	320 HP	Komatsu D-155	1	Komatsu D-155	Bina Marga
2	Bull Dozer	2	220 HP	Komatsu D-85	2	Cat-D7G	Bina Marga
3	Bull Dozer	3	140 HP	Komatsu D-65	1	Komatsu D-53-A	Bina Marga (Sent to Taman Mini 4 September)
4	Track Loader	2	1.6 cu.m.	Komatsu D-75-S	-	- - - - - -	—
5	Motor Grader	3	—	Komatsu GD-600-R	3	Komatsu GD-600-R	Bina Marga
6	Wheel Loader	6	1.6 cu.m.	Fiat Allis	2	Fiat Allis 605-B	Bina Marga
7	Dump Truck	0	5 ton	Isuzu TX-40	22	Isuzu TX-40	Bina Marga
8	Dump Truck	-	—	—	2	Isuzu TL[illegible] ton)	Bina Marga
9	Sheep Foot Roller	2	17 ton	Caterpillar 815	-	- - - - - -	—
10	Vibratory Roller	2	9 ton	SP-42, SP-54 (Rex)	1	Ca 25-PD	PT ICCI
11	Tandem Roller	3	12 ton	S a k a i	-	- - - - - -	—
12	Rubber Tired Roller	2	8-12 ton	Sakai/Tanaka	-	- - - - - -	—
13	Water Tank Truck	3	4,000 liter	Hino, Toyota	-	- - - - - -	—
14	T r a i l e r	2	30 ton	I s u z u	-	- - - - - -	—
15	Back Hoe	2	0.6 cu.m.	Intern. Jumbo/Pool	-	- - - - - -	—
16	Back Hoe	1	1.6 cu.m.	Intern. Jumbo/Pool	1 1	Hitachi UH 07-05(0.8 cu. m) IHI-S-190 (0.7 cu.m.)	Hutama K.-Takenaka J.O. re'd 9/3/82 Peter & John (arrv'd 9/19/1982)
17	Farm Tractor	2	—	K o m a t s u	-	- - - - - -	—
18	Crusher & Screening Plant	1	100 ton/hr	K o b e	-	- - - - - -	Hutama Karya plant erected. Agreement to subcontract. Pending.

APPROVED EQUIPMENT LIST					EQUIPMENT MOBILIZED THRU SEPTEMBER 1982		
No.	Description	QT'Y	CAPACITY	Brand Name/Type	QT'Y	N A M E	R E M A R K S
19.	Crusher & screening Plant	2	30 ton/hr	Kang Won	2	Kang Won	Bina Marga (incl. Gen Sets)
20.	Sand Washer	2	—	S a k a i	-	—	—
21.	Water Pump	10	ø 4"	Yanmar	9	3 ea Tsurumi ø 4" KTV-37L	PT ICCI
						1 ea Alcon ø 2"	PT ICCI
						1 ea Kawamoto ø 3"	PT ICCI
						4 ea Yanmar TS-80 ø 4"	PT ICCI
22.	Generator, Set	2	90 KVA	Mercedesz	-	—	—
23.	Generator, Set	1	50 KVA	Mercedesz	1	Perkins	PT ICCI
24.	Generator, Set	3	10 KVA	K u b o t a	3	2 ea Yanmar, 7.5 KVA	PT ICCI
						1 ea Stamford 3152 (25 KVA)	PT ICCI
25.	Asphalt Mixing Plant	1	90 ton/hr	S i m e s s e	-	—	—
26.	Asphalt Finisher	2	60-100 ton/hr	Allat C-300	-	-	—
27.	Asphalt Hand Sprayer	2	600 liter	L o c a l	-	—	—
28.	Asphalt Distributor	1	4,000 liter	Marini	-	—	—
29.	Pavement Breaker	6	$2\frac{3}{64}$ liter	BR-20-Ingersoll Rand	3	TPB-60	— ICCI (1 ea borrowed by ICCI's High Rise Project on April 30th). — 2 ea borrowed by Bina Marga 22 September 1982.
30.	Pavement Saw	1	80 m/sec	W a c k e r	-	—	—

APPROVED EQUIPMENT LIST					EQUIPMENT MOBILIZED THRU SEPTEMBER 1982		
No.	Description	QT'Y	CAPACITY	Brand Name/Type	QT'Y	N A M E	R E M A R K S
31.	Road Marking Machine	1	—	M a r i n i	-	—	—
32.	Aggregate Drier	2	45 ton	Sakai/Tanaka	-	—	—
33.	Power Broom	1	20 HP	Mitsubishi	-	—	—
34.	Chips Spreader	1	—	E t n i r e	-	—	—
35.	Compressor	2	600 cfm	Broomwade	1	Broomwade-Stamford STV-25, 250 cfm	PT ICCI (Borrowed by Bina Marga Sept. 22nd)
36.	Mechanical Hand Stamper	10	—	TV-808	2	Mikasa MIR-120	PT ICCI
37.	Spreader Box	1	—	Etnire	-	—	—
38.	Aggregate Cold Bins	4	5 cu.m.	L o c a l	-	—	—
39.	Forklift	1	3.5 ton	Komatsu	1	TCM-VD-30	PT ICCI (borrowed by ICCI's High Rise Project on Feoruary 20, 1982)
40.	Truck Crane	2	40 ton	P & H Linkbelt	-	—	—
41.	Crawler Crane	2	75 ton	P & H 550	3	2 ea P & H 550 (50 ton)	Bina Marga
						1 ea LS-78 J (20 ton)	Bina Marga
42.	Tire Crane	2	10 ton	H a l l a	-	—	—
43.	Diesel Hammer	2	7 ton/80 HP	—	1	Mitsubishi M-14S	PT Bolung
44.	Pile Hammer	1	1200-1500 mkg	P & H Linkbelt	-	—	—
45.	Pile Hammer	1	3000-3500 mkg	P & H Linkbelt	1	Mitsubishi M-14S	PT Bolung

APPROVED EQUIPMENT LIST					EQUIPMENT MOBILIZED THRU SEPTEMBER 1982		
No.	Description	QT'Y	CAPACITY	Brand Name/Type	QT'Y	N A M E	R E M A R K S
46.	Batching Plant	1	35 cu.m./hr	Lambert	1	Lambert 20 cu.m./hour	Hutama Karya
47.	Concrete Transit Mixer	4	5 cu.m.	Isuzu	2	Hino 5 cu.m.	Hutama Karya
48	Concrete Mixer	1	750 liter	Winget	3	1 ea Golden Star, 3/4 cu.m.	PT ICCI
						1 ea Hercules, 0.3 cu.m.	PT ICCI
						1 ea Golden Star, 0.45 cu.m.	PT ICCI
49.	Concrete Bucket	2	500 liter	—	4	Concrete Bucket, 1.2 cu.m.	Hutama Karya
50.	Concrete Buggies	10	50 liter	—	-	—	—
51.	Concrete Internal Vibrator	14	ø 3"	M i k a s a	2	M i k a s a	PT ICCI
52.	Concrete Internal Vibrator	12	ø 1½"	M i k a s a	4	M i k a s a	2 ea PT ICCI 2 ea ICCI's High Rise Project (August 25, 1982)
53.	J e e p	7	—	Daihatsu Taft	4	Daihatsu Taft	PT ICCI (3 ea used by ICCI's Head Office, Jakarta).
54.	Pick Up	1	—	Chevrolet Luv	1	Chevrolet Luv	PT ICCI
55.	Mini Bus	1	—	Toyota Hi Ace	1	Toyota Hi Ace	PT ICCI
56.	S e d a n	1	—	Toyota Corolla	-	—	—
57.	Motor Cycle	11	—	Honda CB-100	3	Honda CB-100 KS	PT ICCI

APPROVED EQUIPMENT LIST					EQUIPMENT MOBILIZED THRU SEPTEMBER 1982		
No.	Description	QT'Y	CAPACITY	Brand Name/Type	QT'Y	N A M E	R E M A R K S
58.	W i n c h	1	2 Ton	Ingersoll-Radn K5UL	-	—	—
59.	SURVEY EQUIPMENT						
59.	Level plus Supplement Equipment	3	—	N i k k o n	2	N i k k o n	PT ICCI
60.	Transit plus Supplement Equipment	2	—	Nikkon & Wild	2	W i l d	PT ICCI
	PRECASTING EQUIPMENT						
61.	RCP Form Ø 60 cm	10	—	L o c a l	10	L o c a l	PT ICCI
62.	RCP Form Ø 80 cm	5	—	L o c a l	5	L o c a l	PT ICCI
63.	RCP Form Ø 120 cm	1	—	L o c a l	1	L o c a l	PT ICCI
64.	Extern. Concrete Vibrator	4	—	Wacker Arem 055	9	3 ea Mikasa 1.5 HP 6 ea Wacker 6.9 KVA	PT ICCI PT ICCI
65.	PCP Form Ø 20 cm	50	—	L o c a l	51	Made in Bogor	PT ICCI
66.	Truck Crane	1	3 ton	T a d a n o	-	—	—
67.	Prestress Unit Equipment	1	200 ton	—	-	—	—
68.	Generator, Set	1	300 KVA	M e r c e d e s z	-	—	—

APPROVED EQUIPMENT LIST					EQUIPMENT MOBILIZED THRU SEPTEMBER 1982		
No.	Description	QT'Y	CAPACITY	Brand Name/Type	QT'Y	N A M E	R E M A R K S
	WORKSHOP ACCESSORIES						
69.	Welding Machine	2	250 - 400 A	L i n c o l n	2	1 ea Miller 1 ea Denyo	PT ICCI PT ICCI
70.	G r i n d e r	2	—	Black & Decker	4	M i t s u b i s h i	PT ICCI
71.	D r i l l	1	—	Black & Decker	1	H i t a c h i	PT ICCI
72.	Bar Cutter	1	—	Black & Decker	2	1 ea K u b o t a 1 ea G e r m a n	PT ICCI PT ICCI
73.	J a c k	2	25 ton	Black & Decker	2	1 ea 2-ton Black & Decker 1 ea 5-ton Black & Decker	PT ICCI PT ICCI
74.	Fuel Tank	2	10,000 ton	L o c a l	3	1 ea Local (8,000 lt) 2 ea Local (10,000 lt)	PT ICCI PT ICCI
75.	C o m p r e s s o r	1	200 cfm	H o n d a	-	—	—
76.	Generator, Set	1	150 KVA	Mercedesz	-	—	—
77.	Service Car	2	—	Mitsubishi	-	—	—
78.	T o r c h	2	—	—	1	P e n g u i n	PT ICCI
79.	———	-	—	—	10	Philips Hallogen Lights	PT ICCI
80.	Batching Plant	-	—	—	2	Viking DBW 14 (700 kg)	PT ICCI
81	Welding Transformer	-	—	—	1	Bergin, 300 Amp.	PT ICCI (borrowed by ICCI's High Rise Project on April 30th).

VI. 3. .... CONTRACTOR'S PERSONNEL

Following is a summary of Project manpower reported by the Contractor.

Month	Y E A R		
	1980	1981	1982
January	--	52	150
February	--	29	150
M a r c h	--	27	150
A p r i l	--	67	132
M a y	--	No report	131
J u n e	--	No report	92
J u l y	--	No report	94
August	--	319	90
September	No report	387	141
October	No report	367	--
November	26	389	--
December	25	373	--

The Contractor's personnel report for September follows.

PT ICCI JAGORAWI HIGHWAY PROJECT STAGE II

MONTHLY PERSONNEL REPORT

SEPT 1982.-

NO	POSITION	MANAGER LEVEL	TECHNICAL STAFF						ADMINISTRATION & COST ACCOUNTING					TOTAL
			CIVIL	MECHANIC	ELECTRIC	OPERATOR	DRIVER	LABOR	BOOK KEEP	ASS ADM	TYPIST	OFF DRIVER	HELPER	
I.	PROJECT MANAGER :	1	1	-	-	-	-	-	-	-	-	1	-	3
II.	OFFICE MANAGER :													
	2.1.Office Engineer	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.2.Design &Plan - ning Engineer	1	3	-	-	-	-	-	-	-	-	1	5	10
	2.3.Cost Engineer	1	1	-	-	-	-	-	-	-	-	-	-	2
	2.4.Contract Adm	-	-	-	-	-	-	-	-	-	-	-	-	-
	2.5.Surveying & Pro- gress report	1	-	-	-	-	-	4	-	-	-	-	-	5
III.	FEILD ENGINEER :													
	3.1.General Supt	1	2	-	-	-	-	-	-	-	-	-	-	3
	3.2.Superintendent for Bridge Const	1	7	5	1	4	-	2	-	3	-	-	5	28
	3.3.Superintendent for Road Const	-	-	-	-	-	-	-	-	-	-	-	-	-
	3.4.Superintendent for Drain Const	-	-	-	-	-	-	-	-	-	-	-	-	-
	3.5.Superintendent for Equipment	2	1	2	-	-	-	-	-	-	-	-	2	7
	Sub t o t a l	8	15	7	1	4	-	6	-	4	-	2	12	59

REMARK :

SAY :

APPROVED BY :

IR.HUSODO SUHARTO
PROJECT MANAGER ROAD

CHECKED BY :

DRS.JULIUS
CHEIF ADM

PREPARED BY :

BAMBANG SINGGIH
GENERAL AFFAIRS

/ ejw.-

PT ICCI JAGORAWI HIGHWAY PROJECT STAGE II

MONTHLY PERSONEEL REPORT

SEPT 1982.-

NO	POSITION	MANAGER LEVEL	TECHNICAL STAFF						ADMINISTRATION & COST ACCOUNTING					TOTAL
			CIVIL	MECHANIC	ELECTRIC	OPERATOR	DRIVER	LASOR	BOOK KEEP	ASS ADM	TYPIST	OFF DRIVER	HELPER	
	Sub total	8	15	7	1	4	-	6	-	4	-	2	12	59
IV.	PROCUREMENT & LOGISTIC :													
	4.1.Procurement & Supply Manager	-	-	-	-	-	-	-	-	-	-	-	-	-
	4.2.Procurement & Purchasing	-	-	-	-	-	-	-	-	-	-	-	-	-
	4.3.Storage & Supply	-	3	-	-	-	-	-	-	1	-	-	-	4
	4.4.Transportation	-	-	-	-	-	-	-	-	-	-	-	-	-
V.	ADMINISTRATION :													
	5.1.Manager Of Adm	1	-	-	-	-	-	-	-	-	-	-	-	1
	5.2.General Affairs	-	1	-	-	-	-	-	-	2	1	1	9	14
	5.3.Cost Accounting	-	1	-	-	-	-	-	1	-	-	-	-	2
VI.	OTHERS :													
	6.1.Later Supplier	-	3	-	-	-	-	47	-	-	-	-	-	50
	6.2.On the job Training	-	-	1	-	7	2	-	-	-	-	-	-	10
	6.3.Operator From P.T.(PUSDIKAL)	-	-	-	-	1	-	-	-	-	-	-	-	1
	T o t a l :	9	23	8	1	12	2	53	1	7	1	3	21	141

REMARK :

S A T : _____

APPROVED BY :

IR.HUSODO SUHARTO
PROJECT MANAGER ROAD

CHECKED BY :

DRS.JULIUS
CHEIF ADM

PREPARED BY :

BAMBANG SINGGIH
GENERAL AFFAIRS

/ dja.-

SECTION VII .... MAINTENANCE

VII. Jasa Marga advised that they have contracted with Scan-Roads to supply pre-mixed emulsion for the fog seal program. Delivery is anticipated during October.

SECTION VIII .... PERSONNEL

VIII. 1. .... ENGINEER

EXPATRIATE MANMONTH STATUS
(Through Statement No. 92)

At the request of Bina Marga, Mr. Louis Van Melsem was temporarily attached to the Palembang RBO project beginning September 25th. Mr. E.A. Evanson, President of Trans-Asia visited the Project on September 9th.

	(1)	(2)	(3)	(4)	(5)	(6)
Position	M-M Thru Sept. '82	M-M Approved by Contract	M-M per Amnd. 10	Total Approved M-M (2+3)	M-M Remaining (4-1)	Date Complete
PRINCIPAL	6.47	7.00	0	7.00	0.53	—
SPECIALIST	10.43	13.00	(-) 2.60	10.40	(-)0.03	—
ENGINEER IN CHARGE	107.15	102.50	+ 8.30	110.80	3.65	Dec. 31, '82
SEN. BRIDGE ENGINEER	68.14	64.00	+ 6.10	70.10	1.96	Nov. 21, '82
SEN. CONST/ PAV'T ENGR.	12.67	15.00	+ 0.30	15.30	2.63	Dec. 9, '82
SEN. H-WAY ENGINEER	4.34	15.00	(-)10.70	4.30	(-)0.04	Dec. 26, '81
O T H E R S	370.81	373.00	(-) 2.20	370.80	(-)0.01	—
	580.01	589.50	(-) 0.80	588.70	8.69	—

Note : Man-months shown are contained in approved Amendment No. 10.

SECTION VIII ... PERSONNEL

VIII. 2. .... INDONESIAN PERSONNEL

There was no increase in the Engineer's staffing this month.

BINA MARGA COUNTERPARTS

1.	Mr.	Hadi Suwahyo	Counterpart Sen. Construction/ Paving Engineer.
2.	Mr.	Gono Sarpo	Counterpart Senior Materials Engineer.
		----	Counterpart Deputy Resident Engineer.
		----	Counterpart Sen. Bridge Engr.

FIELD PERSONNEL

3.	Mr.	Atang Suryana	Party Chief (Archicons), November 24, 1980.
4.	Mr.	Jenal Mamad	Chainman, September 8, 1980.
5.	Mr.	Sarji Sarjono	Instrumentman, Sept. 8, 1980.
6.	Mr.	Ato Toha	Rodman, September 8, 1980.
7.	Mr.	Susilo Budi	Technician, Sept. 18, 1980.
8.	Mr.	S a m a n	Technician, October 1, 1980.
9.	Mr.	Joko Purnomo	Senior Materials Inspector (Archicons), July 1, 1980.
10.	Mr.	Joko Sartono	Bridge Inspector (Archicons), July 16, 1981.
11.	Mr.	Dones	Bridge Technician (Archicons), September 1, 1981.
12.	Mr.	Luthfie Ali	Bridge Technician (Archicons), April 30, 1982.
13.	Mr.	Mochtar Dadan	Materials Aide, May 17, 1982.
14.	Mr.	Dalimin A.R.	Concrete Batching Plant Inspector, August 4, 1982.

OFFICE TECHNICAL PERSONNEL

15.	Mr.	Akhmad Khudori	Office Engineer (Archicons), September 2, 1980.
16.	Mr.	Parmono	Draftsman (Archicons), October 2, 1980.
17.	Mrs.	Widiyaningsih	Highway Technician, June 8, 1981.

VIII. 2. .... INDONESIAN PERSONNEL (Cont'd)

ADMINISTRATIVE PERSONNEL

18.	Mr.	Sukardi Wahyudi	Administrative Manager, July 1, 1980.
19.	Mr.	John Golluwola	Secretary, July 1, 1980.
20.	Mrs.	Onny Pratiwi	Clerk/Typist, July 1, 1980.
21.	Mrs.	Herny Widodo	Bookkeeper, July 1, 1980.
22.	Mr.	Suryoseputro	Accountant, July 1, 1980.
23.	Mr.	Irkin	Mechanic, July 1, 1980.
24.	Mr.	Ujang bin Tawi	Office Janitor, July 1, 1980.
25.	Mr.	Lily Sulaeman	Security Guard, July 1, 1980.
26.	Mr.	Ismail	Security Guard, July 1, 1980.
27.	Mr.	Enan Setiana	Chief Security Guard, October 1, 1980.
28.	Mr.	Sa'i Hidayat	Security Guard, October 1, 1980.
29.	Mr.	Sanan	Gardener, October 13, 1980.
30.	Mr.	Ayi Sukardi	Driver, July 24, 1981.
31.	Mr.	Didi	Driver, August 20, 1981.
32.	Mr.	Ido Suhada	Driver, September 1, 1981.

This month	32
Previous	846
T o t a l	878
Authorized Amendment No. 11 thru September 1982	945

VEHICLE MONTHS

Expended thru September 1982	218
Authorized by Amendment No. 11 thru September 1982	226

SECTION IX

CONSTRUCTION PHOTOS

Placing concrete H-pile protection

Placing structural concrete by chutes

SECTION X

APPENDIX

SECTION X .... APPENDIX

X. 1. .... INCOMING CORRESPONDENCE

NO.	FROM	SUBJECT	DATE
1.	Bina Marga	Visit to New Yersey Turnpike Authority.	Aug. 26, 1982
2.	Bina Marga	Jagorawi Highway Project Approval of Amendment No. 10 & 11.	Sept. 7, 1982
3.	PT ICCI	Rainfall Report for August 1982.	Sept. 10, 1982
4.	PT ICCI	Renegotiation.	Sept. 10, 1982
5.	PT ICCI	Deviations of facts at the Work.	Sept. 11, 1982
6.	PT ICCI	Shop Plan for Type A-3 Headwall (Revised).	Sept. 13, 1982
7.	PT ICCI	Acknowledgement of Letters.	Sept. 14, 1982
8.	Bina Marga	Approved Engineer's Dollar Invoice No. 90/1982.	Sept. 14, 1982
9.	PT ICCI	Cross Section Construction Plans Jagorawi Highway Stage II.	Sept. 15, 1982
10.	Bina Marga	Dollar Invoice No. 91/1982.	Sept. 17, 1982
11.	Archicons	Invoice of August 1982.	Sept. 15, 1982
12.	Bina Marga	Your Rupiah Invoice No. 103/1982	Sept. 17, 1982
13.	PT ICCI	ICCI's Top Management.	Sept. 16, 1982
14.	PT ICCI	Monthly Personnel Report.	Sept. 16, 1982
15.	PT ICCI	Price Escalation by Formula.	Sept. 21, 1982
16.	PT ICCI	Advance Payment.	Sept. 22, 1982
17.	PT ICCI	Engineer's Housing.	Sept. 22, 1982
18.	PT ICCI	Additional Plan on Concrete Iron Covering Cost and Joint Concrete Class AA by Use of Plastic Sheets.	Sept. 22, 1982
19.	PT ICCI	Price of Concrete Sand.	Sept. 22, 1982
20.	PT ICCI	Bridge Excavation.	Sept. 22, 1982
21.	Bina Marga	Technical Assistance for Regional Betterment Office (RBO II), Palembang.	Sept. 22, 1982

X. 1. .... INCOMING CORRESPONDENCE (Cont'd)

NO.	FROM	SUBJECT	DATE
22.	PT ICCI	Equipment Rental Rates.	Sept. 24, 1982
23.	PT ICCI	Concrete Sand.	Sept. 24, 1982
24.	PT ICCI	Information.	Sept. 24, 1982
25.	PT ICCI	Information.	Sept. 25, 1982
26.	Jasa Marga	Jagorawi Stage II.	Sept. 27, 1982
27.	Bina Marga	Approved Engineer's Dollar Invoice No. 91/1982.	Sept. 29, 1982

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SECTION X .... APPENDIX

X. 2. .... OUTGOING CORRESPONDENCE

NO.	TO	SUBJECT	DATE
1.	Bina Marga	Submittal of Engineer's Dollar Invoice No. 90 for August.	Sept. 1, 1982
2.	PT ICCI	Bridge Construction.	Sept. 2, 1982
3.	JV-NYC	Weekly Administration Report No. 392.	Sept. 4, 1982
4.	PT ICCI	Rainfall Records for August.	Sept. 7, 1982
5.	Bina Marga	Submittal of Engineer's Rupiah Invoice No. 103 for August.	Sept. 8, 1982
6.	PT ICCI	Partial Work Suspension Bridge Station 11+932.	Sept. 10, 1982
7.	Archicons	Authorized Increases in Basic Rates for Jagorawi Project.	Sept. 10, 1982
8.	Bina Marga	ASTM Reference Books.	Sept. 10, 1982
9.	Bina Marga	Submittal of Dollar Invoice No. 91 "Make Up for Amendment No. 10".	Sept. 10, 1982
10.	JV-NYC	Transmittal of Copies of Approved Amendments No. 10 and No. 11 for the Jagorawi Project.	Sept. 10, 1982
11.	JV-NYC	Weekly Administrative Report No. 393.	Sept. 11, 1982
12.	PT ICCI	Approval of Shop Plans.	Sept. 14, 1982
13.	PT ICCI	Requests for Fuel Price Increase and Renegotiation of Equipment Rental Rates --- Denied.	Sept. 15, 1982
14.	PT ICCI	Project Finance.	Sept. 16, 1982
15.	PT ICCI	Price Escalation by Formula.	Sept. 16, 1982
16.	PT ICCI	Concrete Sand.	Sept. 16, 1982
17.	PT ICCI	Price of Concrete Sand.	Sept. 16, 1982
18.	PT ICCI	Payment of Remaining 5 Percent Advance.	Sept. 16, 1982
19.	PT ICCI	ICCI's Unauthorized Use of Bina Marga-Owned House.	Sept. 17, 1982

X. 2. .... OUTGOING CORRESPONDENCE (Cont'd)

NO.	TO	SUBJECT	DATE
20.	PT ICCI	Rupiah Accounting Reports for August.	Sept. 17, 1982
21.	JV-NYC	Transmittal of Approved Dollar Invoice No. 90 for August.	Sept. 17, 1982
22.	PT ICCI	Interest on Unpaid Invoices.	Sept. 17, 1982
23.	Bina Marga	Submittal of Engineer's Monthly Supervision Report No. 100 for August.	Sept. 18, 1982
24.	Bina Marga	Resubmittal of Dollar Invoice No. 91.	Sept. 18, 1982
25.	JV-NYC	Weekly Administrative Report No. 394.	Sept. 18, 1982
26.	PT ICCI	Additional Cross Section.	Sept. 20, 1982
27.	Bina Marga	Engineer's Sponsor Visit Request for Approval	Sept. 20, 1982
28.	PT ICCI	Partial Work Suspension Bridge 11+932.	Sept. 20, 1982
29.	PT ICCI	Invoice for Cross Section Plan.	Sept. 20, 1982
30.	Bina Marga	Letter from Contractor on Management Changes.	Sept. 23, 1982
31.	PT ICCI	Bridge 13+587 Pier 1.	Sept. 23, 1982
32.	PT ICCI	Pile Driving.	Sept. 23, 1982
33.	Bina Marga	Acknowledgement of Advance.	Sept. 24, 1982
34.	PT ICCI	Request for Payment for Plastic Bond Breaker. Denied.	Sept. 25, 1982
35.	JV-NYC	Weekly Administrative Report No. 395.	Sept. 25, 1982'
36.	JV-NYC	Transmittal of Approved Dollar Invoice No. 91 --- Extra for September.	Sept. 30, 1982
37.	Bina Marga	Promotion.	Sept. 30, 1982

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JAGORAWI HIGHWAY PROJECT
STATUS OF CONTRACT CHANGE ORDERS AND FUNDS
Sheet 1 of 1

CCO No.	D E S C R I P T I O N	EIC SUBMIT	CONTRACTOR ACCEPT	BINA MARGA APPROVED RECOMM'D	BINA MARGA APPROVED	RUPIAH AMOUNT
	ORIGINAL AUTHORIZATION					+ 8,050,000,000
1	Revise Clearing and Grubbing	May 9, 1981	May 14, 1981	May 19, 1981	May 25, 1981	18,374,720
1	Revise Unclassified Excav., Class 1	May 9, 1981	May 14, 1981	May 19, 1981	May 25, 1981	(-) 47,040,000
2	Revise Spec. Engineer Vehicles	May 9, 1981	May 14, 1981	May 19, 1981	May 25, 1981	0
3	3-edge Bearing Test Machine	Sept. 10, 1981	Sept. 15, 1981	Sept. 17, 1981	Oct. 1, 1981	+ 1,774,381
4	Revise Density Spec. for A.B.C. &					
	Select Roadway Embankment	May 9, 1981	May 14, 1981	May 19, 1981	May 25, 1981	0
5	Engineer Housing Civil Works	May 9, 1981	May 14, 1981	May 19, 1981	May 25, 1981	+ 37,001,726
6	Recondition H-piles	May 6, 1982	June 3, 1982	May 9, 1982	June 16, 1982	(-) 105,008,457
7	Revisions to Engineer's Housing	Mar. 15, 1982	Mar. 17, 1982	April 8, 1982	Apr. 20, 1982	+ 36,015,188
8	Weigh House Modifications	---	---	---	---	---
9	Grade Change & Rev'd Typical Sect.	Mar. 15, 1982	Mar. 17, 1982	April 8, 1982	Apr. 20, 1982	(-) 269,529,428
10	Revisions to Conc. Perf'd Pipe	May 8, 1982	June 3, 1982	May 9, 1982	June 16, 1982	+ 33,905,565
11	Revised Concrete Headwalls	---	---	---	---	---
	T O T A L					7,757,493,695

X. 3. .... LISTING OF CONTRACT CHANGE ORDERS

P.T. ICCI
INDONESIAN CONSORTIUM OF CONSTRUCTION INDUSTRIES

Jagorawi Highway Project Stage II.
Complex Bina Marga No. 9
Baranang Siang, Bogor. Phone 26854

Address : Wisma Antara, 5th floor-17, Jln. Merdeka Selatan, Jakarta, Indonesia
Phone : 347412-3, 347581-2, Telex : 44845 ICCI IA.

Our ref : DJW/82 - E/185. Bogor, October 4, 1982.

Directorate General Bina Marga
Jalan Pattimura no 20
Kebayoran Baru, Jakarta.

Through : Mr. Larry G. Bunten
Engineer in Charge
Ammann & Whitney, Trans - Asia
A joint Venture.

Subject : Request for Monthly Rupiah.
Progress Payment no 10, Invoice no 11
Jagorawi Highway Project Stage II

Dear Sirs,

In accordance with the Special Provisions 109.11 of the contract, we submit the Monthly Rupiah Progress Payment no 10, Invoice no 11 together with the related documents, covering the period from July 26, 1982 up to September 25, 1982, the total amount requested in this Invoice as follows :

Total amount = Rp. 43,977,985.—

Your earliest approval and payment will be highly appreciated.

Very truly yours,
PT. INDONESIAN CONSORTIUM
OF CONSTRUCTION INDUSTRIES
Project Manager Road

Ir. HUSODO SUHARTO.

Encls : 7 sets of estimate no 10
and enclosures.

HS/srb.-

REPUBLIK INDONESIA
DEPARTEMEN PEKERJAAN UMUM
DIREKTORAT JENDERAL BINA MARGA

INVOICE
AND
MONTHLY CERTIFICATE OF PERFORMANCE

oject	: JAGORAWI HIGHWAY STAGE II	Date	: October 4, 1982.
ontract	: No. 06 / CTR / DN / BM / 81	Pay Estimate No.	: 10
ontractor	: INDONESIAN CONSORTIUM OF CONSTRUCTION INDUSTRIES.	RUPIAH	: Invoice no 11.
ngineer	: AMMANN & WHITNEY TRANS ASIA ENGINEERING ASSOC. INC.	Remarks	: Progress Payment July 26, 1982 thru September 25, 1982

OTAL RU IAH VALUE OF CONTRACT : Rp. 8,050,000,000.—

Description		RUPIAH TOTAL
otal Amount of Work Completed		Rp. 972,893,220.—
otal Amount Previously Credited		Rp. 919,261,531.—
ptal Amount Being Invoiced for Payment		Rp. 53,631,689.—
ess 10 % Retention	Rp. 5,363,169.—	
ess 2/3 of 15 % Advance Payment.	Rp. 5,363,169.—	
otal Amount to be deducted	Rp. 10,726,338.—	
ub total.		Rp. 42,905,351.—
dd 2,5 % PPn tax.		Rp. 1,072,634.—
otal Amount to be paid to the Contractor		Rp. 43,977,985.—

Separate Total Value of the Equipment and Materials delivered and Services performed under the Contract. Rp. 1,020,776,100.—

Separate Total Value since the date of the Previous Invoices of Goods delivered and Services Performed. Rp. 42,614,502.—

CONTRACTOR CERTIFICATION OF PERFORMANCE

The undersigned certifies that the cost reimbursable to the Contractor and the Amount payable to the Contractor in accordance with the terms of the Contract, up to the date of this Certificate, are not less than the total Payments received or claimed by the Contractor under the Contract (including the payment claimed under this invoice), and that the Contractor has fully complied with the terms and conditions of the Contract, including the Plans and Specifications.

P.T. INDONESIAN CONSORTIUM OF CONSTRUCTION INDUSTRIES — ICCI ROAD

HUSODO SUHARTO.
Project Manager
JAGORAWI HIGHWAY STAGE II PROJECT

INVOICE RECEIPT

The Engineer acknowledges receipt of Indonesian Consortium of Construction Industries.
Invoice No. ...11..... covering Pay Estimate No. ...10.....
on the ...5..... day of Oct. 1982 at ...15:15. hours.

Larry G. Bunten
Engineer - In - Charge
JAGORAWI HIGHWAY STAGE II PROJECT

ENGINEER CERTIFICATION OF PERFORMANCE

Date : ...OCT. 7...1982.....

1. The services (or equipment and materials) for which payment requested has been satisfactorily delivered;
2. The costs there of are properly payable in accordance with the terms of the Contract;
3. Any reports or recommendations required under the terms of the Contract have been received and are in accordance with the terms of the Contrac;

Larry G. Bunten

LARRY G. BUNTEN.
Engineer - In - Charge
JAGORAWI HIGHWAY STAGE II PROJECT

Approved for Payment	1. Date :.....	2. Date :.....
	PARMIN BRE.	Ir. MOELIA AIDA.
	Project Manager	Director of Construction
	JAGORAWI HIGHWAY STAGE II PROJECT.	JAGORAWI HIGHWAY STAGE II PROJECT

LAGUNA

HIGHWAY PROJECT

STAGE II

PROJECT RECORD-ESTIMATE

Period No. 10 Estimate No. 11 October 4, 1982.

Period Dates July 26, thru September 25, 1982.

Bid Item No.	DAY Item No.	ITEMS	Units	CONTRACT PRICES		ORIGINAL AUTHORIZED Amount	THIS ESTIMATE Quantity	THIS ESTIMATE Amount	TOTAL ESTIMATE Quantity	TOTAL ESTIMATE Amount	Bid Item No.
		BASIC TENDER									
1.	109(1)	Mobilization	L.S.		-	269,240,977	-	-	3333	89,913,659	
2.	111(1)	Engineer's Facilities	L.S.		-	120,435,459	-	-	9450	113,808,239	
4.	----	--------	L.S.	Deleted		----					
5.	201(1)	Clearing and Grubbing	L.S.	Deleted		----					
6.	202(1)	Remove Existing Grouted or Loose Rip Rap	Acre	16,406	-	11,156,080	-	-	1,09652	17,989,506	
7.	202(2)	Remove Existing Headwalls	Cu.M.	11,155	-	4,562,400	-	-	106	121,434	
8.	202(3)	Remove Existing Wing Walls	Each	93,726	-	897,552	-	-	-	-	
9.	202(4)	Remove Existing Bridge Gabion Spur Sta 34005+ And Miscellaneous Grouted Rip-Rap on Puncakan	Each	710,393	-	1,436,786	-	-	-	-	
			L.S.	-		3,285,241	-	-	-	-	
10.	203(1)	Unclassified Excavation Class 1	Cu.M.	2,352	-	517,440,000	-	-	38,93051	91,564,560	
11.	203(2)	Unclassified Excavation Class 2	Cu.M.	1,037	75	29,260,025	-	-	-	-	
12.	203(3)	Excavation Class 3	Cu.M.	2,245	54	37,049,760	-	-	9,62188	21,612,090	
13.	203(4)	Roadway Embankment	Cu.M.	1,117	15	108,140,120	-	-	27,78634	31,041,509	
14.	203(5)	Select Roadway Embankment	Cu.M.	8,654	-	139,329,400	-	-	1,710	14,798,340	
15.	206(1)	Structure Excavation	Cu.M.	4,922	-	25,740,800	-	-	5	20,110	
16.	206(2)	Bridge Excavation	Cu.M.	6,528	-	38,515,200	25380	1,656,806	2,04673	13,361,053	
17.	205(1)	Removal of Existing Pavement	Cu.M.	3,653	-	12,429,200	-	-	-	-	
18.	301(1)	Asphalt Treated Base Course	Ton	15,434	-	643,537,860	-	-	-	-	
19.	304(1)	Aggregate Base Course	Cu.M.	13,165	65	414,717,975	-	-	2	26,331	
20.	305(1)	Lime Treated Improved Subgrade, Processing	Cu.M.	-------		----DELETED	DURING	BID NEGOTIATIONS.	----	----------	
21.	305(2)	Hydrated Lime	Ton	-------		----DELETED	DURING	BID NEGOTIATIONS.	----	----------	
22.	305(3)	Curing Seal, Emulsified Asphalt Grade SS-1H	Ton	-------		----DELETED	DURING	BID NEGOTIATIONS.	----	----------	
23.	401(1)	Hot Bituminous Concrete Pavement	Ton	16,209	-	254,481,300	-	-	-	-	
24.	401(2)	Asphalt Cement 60-70 Penetration	Ton	300,126	74	984,415,707	-	-	-	-	
25.	407(1)	Tack Coat, Emulsified Asphalt Grade SS-1H	Ton	452,219	-	13,114,351	-	-	-	-	
26.	408(1)	Prime Coat, Liquid Asphalt Grade MC-70	Ton	524,848	-	57,733,280	-	-	-	-	
27.	409(1)	Seal Coat, Cover Aggregate, Grading D, Type 3	Ton	14,308	-	21,462,000	-	-	-	-	
28.	409(2)	Seal Coat, Liquid Asphalt Grade RC-250	Ton	535,466	-	34,805,420	-	-	-	-	
29.	409(3)	Seal Coat, Emulsified Asphalt Grade SS-1H	Ton	479,557	-	8,632,026	-	-	-	-	
30.	500A(1)	Structural Steel Piles Furnished	L.T.	46,625	-	404,238,750	-	-	6,360	296,535,000	
31.	500A(2)	Structural Steel Piles Driven	Each	132,460	-	109,411,560	-	-	428	56,692,880	
32.	500A(3)	Structural Steel Piles Test Driven	Each	132,460	-	397,380	-	-	-	-	
33.	500A(4)	Load Test (Each)		2,192,575	-	2,192,575	-	-	2	4,385,152	
34.	500B(1)	Soil Borings (Other than Rock)	L.M.	52,074	-	2,603,700	-	-	9685	5,043,366	
35.	500B(2)	Soil Borings (Rock)	L.M.	106,888	-	5,344,400	-	-	3825	4,088,465	
36.	500B(3)	Mobilization & Demobilization of Boring Equipment, Each Bridge Site	Each	633,106	-	1,899,318	-	-	1	633,106	
37.	601A(1)	Structural Concrete, Class "AA"	Cu.M.	120,282	-	637,494,600	335 99	40,413,549	367 48	44,202,432	
38.	601A(2)	Structural Concrete, Class "C"	Cu.M.	58,273	-	8,449,585	7 89	459,774	21 34	1,243,546	
		Sheet No. 1 Sub-Totals :						42,530,129		807,080,778	

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PROJECT RECORD-ESTIMATE

Project No. 10 11 October 4, 1982.

State: July 26, 1982 thru September 25, 1982.

Item No.	Pay Item No.	Items	Units	Unit Price	Amount	This Estimate Quantity	This Estimate Amount	Total Estimate Quantity	Total Estimate Amount
39.	601B(1)	East Bridge STA.11 + 932, Superstructure	L. S		701,009,672	-	-	-	-
40.	601B(2)	East Bridge STA.12 + 567, Superstructure	L. S		396,511,817	-	-	-	-
41.	601B(3)	East Bridge STA.15 + 540, Superstructure	L. S		392,834,263	-	-	-	-
42.	602(1)	Reinforcing Steel	Kg.	548	290,440,000	27,298 30	14,959,468	27,298 30	14,959,468
43.	603(1)	Reinforced Concrete Pipe, ϕ 60 cm	L. M	42,128	44,234,400	-	-	9 8	412,854
44.	603(2)	Reinforced Concrete Pipe, ϕ 90 cm	L. M	58,754	43,477,960	-	-	-	-
45.	603(3)	Reinforced Concrete Pipe, ϕ120 cm	L. M	90,385	4,519,250	-	-	-	-
46.	604(1)	Utility Manhole Type 1	Each	757,147	4,542,882	-	-	-	-
47.	604(2)	Utility Manhole Type 2	Each	401,969	1,607,876	-	-	-	-
48.	604(3)	Inlet, Type I (Each)		1,039,600	27,029,600	-	-	-	-
49.	604(4)	Inlet, Type II (Each)		1,025,051	1,025,051	-	-	-	-
50.	604(5)	Inlet, Type III (Each)		1,025,051	10,250,510	-	-	-	-
51.	604(6)	Inlet, Type IV (Each)		1,085,888	8,567,104	-	-	-	-
52.	604(7)	Grate Type I	Each	326,943	4,304,145	-	-	-	-
53.	605(1)	20 cm. Perfor. Conc. Pipe inplace, Incl. End Wall	L. M	9,913	46,591,100	-	-	-	-
54.	605(2)	Undertrain Junction Box Inplace	Each	17,061	426,525	-	-	-	-
55.	606(1)	Galvanized Beam Type Guardrail & Post	L. M	78,823	45,717,340	-	-	-	-
56.	606(2)	Remove Existing Guardrail and Relocate	L. M	6,391	2,428,580	-	-	-	-
57.	607(1)	Barbed Wire Fence	L. M	12,110	50,862,000	-	-	101 3	1,226,743
58.	609(1)	Concrete Curb Gutter, Type 1	L. M	11,929	1,550,770	-	-	-	-
59.	609(2)	Concrete Curb Gutter, Type 2	L. M	25,415	25,160,850	-	-	-	-
60.	609(3)	Concrete Delineation Strip	L. M	7,360	8,096,000	-	-	-	-
61.	609(4)	Concrete Median Barrier	L. M	39,395	169,511,400	-	-	-	-
62.	609(5)	Concrete Median Barrier End Taper	Each	149,123	596,492	-	-	-	-
63.	609(6)	Concrete Median Barrier Transition to Bridge	Each	695,439	4,172,634	-	-	-	-
64.	619(1)	Rock Slope Protection	Cu.M	15,811	79,055,000	-	-	-	-
65.	622(1)	Grouted Rip-Rap 20 cm. Toilet for Channel Lining	Sq.M	8,251	255,781,000	-	-	-	-
66.	622(2)	Grouted Rip-Rap	Cu.M	39,896	15,954,400	-	-	-	-
67.	623(1)	Survey Control Monument	Each	67,796	3,796,576	-	-	-	-
68.	624(1)	Placing Scalped Topsoil	Are	18,244	12,405,920	-	-	-	-
69.	629(1)	Sodding	Are	81,800	98,160,000	-	-	-	-
70.	630(1)	Concrete Block Slope Protection	Sq.M	19,456	15,687,600	-	-	-	-
71.	631(1)	Roadway Marking, 10 cm. Striping	L. M	767	34,745,100	-	-	-	-
72.	631(2)	Miscellaneous Pavement Marking Words, Arrow, Etc	Sq.M	6,829	136,580	-	-	-	-
73.	632(1)	Standard Road Sign, Type A	Each	122,287	244,574	-	-	-	-
74.	632(2)	Standard Road Sign, Type B	Each	141,296	1,412,960	-	-	-	-
75.	632(3)	Standard Road Sign, Type C	Each	141,296	2,119,440	-	-	-	-
76.	632(4)	Standard Road Sign, Type D	Each	408,421	816,842	-	-	-	-
77.	632(5)	Standard Road Sign, Type E	Each	148,754	446,262	-	-	-	-
78.	632(6)	Non Standard Road Sign No. 1	Each	247,550	742,650	-	-	-	-
79.	632(7)	Non Standard Road Sign No. 2	Each	247,550	247,550	-	-	-	-
80.	632(8)	Non Standard Road Sign No. 3	Each	309,927	309,927	-	-	-	-
		Sheet No. 2 Sub-Totals				-	14,959,468	-	16,599,065

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JAGORAWI HIGHWAY PROJECT

PROJECT RECORD-ESTIMATE

STAGE II

Estimate No. 10 — [illegible] No. 11 — October 1982

[illegible] Dates: July 26, 1982 thru September 25, 1982.

SHEET 3

Advisory [illegible] — Trans-Asia Engineering

Bid Sch. No.	Pay Item No.	Items	Units	Contract Prices	Original Authorized Amount	This Estimate Quantity	This Estimate Amount	Total Estimate Quantity	Total Estimate Amount	Bid Sch. No.
80	[illegible]	Sign [illegible] Post Sign No. 4	Each	[illegible]3,178	[illegible]	-	-	-	-	
81	[illegible]	Non Standard Road Sign No. 5	Each	246,130	[illegible]	-	-	-	-	
82	[illegible]	Non Standard Road Sign No. 6	Each	[illegible]	[illegible]	-	-	-	-	
83	[illegible]	[illegible]	Each	35,292	[illegible]	-	-	-	-	
84	[illegible]	Illumination [illegible], Compl.	L.S.	-	[illegible]	-	-	-	-	
85	[illegible]	Traffic Signal System Complete, Compl.	L.S.	-	45,231,600	-	-	-	-	
86	[illegible]	Utility Conduit [illegible] PVC	Lin.	2,377	[illegible]	-	-	-	-	
87	[illegible]	Traffic Safety Plastic Cone	Each	6,685	668,500	-	-	60	401,100	
88	[illegible]	Striped Traffic Safety Panel Barricade	Each	20,303	[illegible]	-	-	50	1,015,150	
89	[illegible]	Traffic [illegible] Sign, Type 1	Each	61,820	[illegible]	-	-	10	618,200	
90	[illegible]	Traffic [illegible] Sign, Type 2	Each	33,289	[illegible]	-	-	19	632,490	
91	[illegible]	Portable Traffic Safety Barricade, Type A	Each	35,321	[illegible]	-	-	18	635,778	
93	[illegible]	Portable Traffic Safety Barricade, Type B	Each	35,946	1,078,380	-	-	15	539,190	
94	[illegible]	Portable Traffic Safety Barricade, Type C	Each	41,488	[illegible]	-	-	5	207,440	
95	[illegible]	Headwall Type 2-1 for 40 cm Culvert	Each	250,971	10,038,920	-	-	-	-	
96	[illegible]	Headwall Type A-1 for [illegible] cm Culvert	Each	280,771	[illegible]	-	-	-	-	
97	[illegible]	Headwall Type A-1 for 125 cm Culvert	Each	531,629	[illegible]	-	-	-	-	
98	[illegible]	Headwall Type B-1 for 40 cm Culvert	Each	272,164	272,164	-	-	-	-	
99	[illegible]	Headwall Type B-1 for [illegible] cm Culvert	Each	425,870	[illegible]	-	-	-	-	
100	[illegible]	Headwall Type B-1 for 125 cm Culvert	Each	629,[illegible]	[illegible]	-	-	-	-	
101	[illegible]	Headwall Type A-2 for [illegible] cm Culvert	Each	[illegible]	[illegible]	-	-	-	-	
102	[illegible]	Headwall Type A-2 for [illegible] cm Culvert	Each	[illegible]	[illegible]	-	-	-	-	
103	[illegible]	Headwall Type A-2 for 125 cm Culvert	Each	[illegible]	2,[illegible]	-	-	-	-	
104	[illegible]	Headwall Type B-2 for 40 cm Culvert	Each	348,077	348,077	-	-	-	-	
105	[illegible]	Headwall Type B-2 for [illegible] cm Culvert	Each	491,160	982,320	-	-	-	-	
106	[illegible]	Headwall Type B-2 for 120 cm Culvert	Each	[illegible]	[illegible]	-	-	-	-	
107	[illegible]	[illegible]	(Each)	2,[illegible]	5,[illegible]	-	-	-	-	
		CCO lump sum payment :								
		CCO no 3 ; Three edge bearing test	LS	-	1,295,268	-	-	-	1,295,268	
		CCO no 7 ; Engineer Housing	LS	-	37,087,988	10	3,708,799	95	35,233,589	
		Sheet No. 3 [illegible] TOTALS:					3,708,799		40,578,205	

Best Available Document

PROJECT RECORD-ESTIMATE

Period No. 10 Period ending October 4, 1980.
Period dates July 26, 1980 thru September 25, 1980.

ITEMS	Date	UNIT PRICES	ORIGINAL AUTHORIZED Amount	(5) THIS ESTIMATE Quantity	(6) THIS ESTIMATE Amount	(7) TOTAL ESTIMATE Quantity	(8) TOTAL ESTIMATE Amount
Sheet No. 1 Sub totals					42,530,129		807,080,778
Sheet No. 2 Sub Totals					14,959,468		16,599,065
Sheet No. 3 Sub Totals					3,708,799		40,578,205
Sheet No. Sub Totals							
Sheet No. Sub Totals							
Sheet No. Sub Totals							
Sheet No. Sub Totals							
SUB - TOTALS; CONTRACT ITEMS							
(A) Time and Materials Extra Work					61,198,396		864,258,048
SUB - TOTALS WORK DONE							12,925,183
(B) Materials on Hand					61,198,396		877,183,231
					(-) 7,566,707		95,709,989
SUB - TOTALS; WORK DONE: MATERIALS					53,631,689		972,893,220
(C) Deduct 2/3 of 15% Advance Payment					5,363,169		77,418,054
(D) Deduct 10% Retention Payment					5,363,169		97,289,322
(E)							
(F)							
SUB - TOTALS; DEDUCTION							
Sub total					10,726,338		174,707,376
Add 2.5 % Fha tax.					42,905,351		798,185,844
TOTAL AMOUNT DUE CONTRACTOR					1,072,634		19,954,646
					43,977,985		818,140,490

DATE WORK STARTED Sep 22, 80 ESTIMATED DATE FOR COMPLETION May 11, 1983 WORKING DAYS 143 C.C.D DAYS • OTHER ALLOWABLE DAYS • PERCENT COMPLETED 11.3% PERCENT TIME ELAPSED 68.80 %

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REQUEST FOR PAYMENT FOR MATERIALS ON HAND

Ammann & Whitney
Trans – Asia Engineering

To : Mr. Larry G. Bunten.
Engineer - in - charge

From : PT. ICCI JAGORAWI HIGHWAY STAGE II.
Contractor

JAGORAWI
HIGHWAY PROJECT
STAGE II

In accordance with the provisions of Section 109.07 of the Special Provisions, request is made for payment as "Materials on Hand" for the following materials :

ITEM NO.	QUANTITY	MATERIAL DESCRIPTION	RP. ☐ VALUE	TYPE OF SUBSTANTIATING EVIDENCE OF PURCHASE ATTACHED	WHERE STORED *
1.	149,265.7	kg. Re-Bar a'100%	38,479,205	Invoice	Work shop Ciawi.
2.	2,787.30	m PCP ∅20 cm a'100%	5,713,965	Produced by Contractor.	Work Shop Sentul.
3.	635.20	m RCP ∅60cm a'100%	26,759,706	-"-	Work Shop Sentul.
4.	280	m RCP ∅ 80cm a'100%	16,451,120	-"-	Work Shop Sentul.
5.	37.50	m RCP ∅ 120cm a'100%	3,389,437	-"-	Work Shop Sentul.
6.	3,514.35	m3 Aggregate a'100%	15,550,999	-"-	Work Shop Sentul.
		Total Rp.	106,344,432.—		
		(0.9) Total Rp.	95,709,989.—		

AFFIDAVIT : Requested payment in pay estimate no 10 (-) Rp. 7,566,707.—
(95,709,989 - 103,276,696 = (-) Rp. 7,566,707.—)

The materials listed above have been purchased exclusively for use on the above referenced project. The material is separated from other like materials and is physically identified as our property for use only on The Jagorawi Highway Project. The Engineer may enter upon the premises for the purposes set forth in The Special Provision for inspection, checking or auditing, or for any other purpose as you consider necessary. It is expressly understood and agreed that this information and affidavit is furnished to the Engineer for the purpose of obtaining payment for the above materials before they are delivered to, or incorporated into, the project described above, and that the storage thereof at he location shown is subject to, and under the control of, the Engineer. A revised form showing the current status of the value of of materials for which payment is being requested will be submitted each estimate period.

Ir. HUSODO SUHARTO.
Contractor

P.T. INDONESIAN CONSORTIUM OF CONSTRUCTION INDUSTRIES
ICCI ROAD

* When stored at a location other than on the jobsite or at a fabricator's yard, a warehouse receipt for the material issued in the name of the Government shall accompany the request for payment. In case the storage location (other than the jobsite of fabricator's yard) is the Contractor's property, the area containing the material to be paid for shall be fenced off and posted to indicate that the material within the fenced area is under the control of the Government.

INSTTUCTION TO CONTRACTOR :

Submit original and two copies to Engineer-in-charge not later than one week prior to the end of the estimate period. Attach evidence of purchase (and warehouse receipt when required) to original.

SF - 13

MATERIAL ON HAND.

Estimate no 10.

1.	Re - Bar,			
	Quantity	=	176,564	Kg.
	Be used.	=	27,298.30	Kg.
		=	149,265.70	Kg.
2.	PCP ø 20 cm.	=	2,787.30	m.
3.	RCP ø 60 cm.	=	635.20	m.
4.	RCP ø 80 cm	=	280	m.
5.	RCP ø 120 cm.	=	37.50	m.
6.	Aggregate.	=	3,823.85	m3.
	Be used.	=	309.50	m3
		=	3,514.35	m3.

Rupiah Portions :

1.	Re - Bar :	149,265.70 x Rp 257.79 x 100 %	=	Rp.	38,479,205.—
2.	PCP ø 20 cm:	2,787.30 x Rp 2,050 X 100 %	=	Rp.	5,713,965.—
3.	RCP ø 60 cm:	635.20 x Rp42,128 x 100 %	=	Rp.	26,759,706.—
4.	RCP ø 80 cm:	280 x Rp 58,754 x 100 %	=	Rp.	16,451,120.—
5.	RCP ø 120 cm:	37.50 x Rp 90,385 x 100 %	=	Rp.	3,389,437.—
6.	Aggregate :	3,514.35 x Rp 4,425 x 100 %	=	Rp.	15,550,999.—
		Total	=	Rp.	106,344,432.—
		0,9 x total	=	Rp.	95,709,989.—

Requested in pay estimate no 10 = (-) Rp. 7,566,707.—

(95,709,989 - 103,276,696 = (-) Rp. 7,566,707.—)

PT. INDONESIAN CONSORTIUM
OF CONSTRUCTION INDUSTRIES
CAGORAWI HIGHWAY PROJECT STAGE II.

P.T. INDONESIAN CONSORTIUM OF CONSTRUCTION INDUSTRIES
ICCI ROAD

SECTION X .... APPENDIX

X. 5. .... STATUS OF FUNDS

I. DOLLAR FUNDS, ENGINEER'S CONTRACT

1- Approved Dollar Value of Engineer's Contract plus Amendments 1 thru 9 ...		US$	3,988,326
2- Actual Dollar Funds Available From US/AID Loan		US$	3,979,054*
3- Amount of Services and Fee thru Invoice No. 92, September 1982 ...	(-)	US$	3,895,811
Dollar Funds Remaining as of September 30, 1982		US$	83,243

II. RUPIAH FUNDS, ENGINEER'S CONTRACT

1- Approved Rupiah Value of Engineer's Contract plus Amendments 1 thru 9 ..		Rp	1,743,738,569
2- Amount of Services and Fee thru Invoice No. 104, September 1982	(-)	Rp	1,581,714,165
Rupiah Funds Remaining as of September 30, 1982		Rp	162,024,404

III. CONSTRUCTION CONTRACT

-- Approved Value of Contract		Rp	8,050,000,000
-- Value of Contract Change Orders Approved to Date	(-)	Rp	292,506,305
Approved Value of Contract		Rp	7,757,493,695

* Differences is due to banking charges.

CONTRACT NO. [illegible]
OWNER DIRECTORATE GENERAL BINA MARGA
ENGINEER ARTHUR & WHITNEY
TRAILS AS A JOINT VENTURE & ASSOCIATE INC
CONTRACTOR PT. JAGORESTAN CONSORTIUM OF CONSTRUCTION INDUSTRIES
(PT. JAGORESTAN CONSORTIUM)

CONSTRUCTION PROGRESS SCHEDULE

PT JCCI
JAGORESTAN CONSORTIUM
JAGORAWI HIGHWAY

NO	DESCRIPTION	QTY	DURATION (MONTH)	% JOB
1	MOBILIZATION	LS	9	5,516
2	QUARRY OPERATION (CRUSHING)	214,200 T	15	-
3	CLEARING AND GRUBBING REMOVAL OF OBSTRUCTION	L.S.	6	0.664
4	UNCLASSIFIED EXCAVATIONS	200,000 CuM	11	5.984
5	REMOVE AND REPLACE UNSUITABLE MATERIAL	32,600 CuM	5.8	2.244
6	SOIL BORINGS	100 LM	2	0.125
7	BRIDGE	L.S.	16.5	36.676
8	PREPASING	L.S.	7.5	-
9	PERFORATED CONCRETE PIPE	4,700 LM	7	0.598
10	ROADWAY EMBANKMENT	96,800 CuM	17	1.378
11	AGGREGATE BASE COURSE	31,500 CuM	14	6.010
12	PAVING	62,292 TON	14	24.940
13	CONCRETE MEDIAN BARRIER RAIL	4,300 LM	9	2.216
14	STRUCTURE EXCAVATION	6,600 CuM	15	0.327
15	REINFORCED CONCRETE PIPE (RCP)	1,840 LM	8	1.173
16	REINFORCED CONCRETE BOX (RCB)	10 EACH	17	0.590
17	MISC STRUCTURAL CONCRETE & REINFORCING STEEL	L.S.	12	0.698
18	MISC DRAINAGE FACILITIES	145 EACH	17	1.510
19	ROAD SIDE APPURTENANCES	L.S.	14	9.353
	PLANED PROGRESS/ SCHEDULE			100.00%
	ACTUAL PROGRESS			
	ESTD WORKABLE DAYS PER WEEK			
	ESTD HOURS WORKED PER DAY			

	1981								1982											
	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
ACTUAL PROGRESS									1.67	1.83	2.80	3.66	4.49	10.18	12.75	13.66	13.33	13.33	13.00	13.00
									12.05	12.12	12.26	12.27	12.96							

ESS SCHEDULE

PT [redacted]
MALAYSIAN CONSORTIUM OF CONSTRUCTION INDUSTRIES
JASCRAWI HIGHWAY PROJECT STAGE II

SEPTEMBER 1982

DRAWING NO.
DATE
DATE

APPROVED

REMARK

PROGRESS SCHEDULE No. 1

1982													1983				
DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	PROGRESS
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
																	100
																	95
																	90
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