

Appendix A-2 Engineering Data

## ROAD LINK DATA

PROVINCE : Kalimantan Selatan

KABUPATEN: Tapin

LINK NO.	BEGINNING POINT (DESA NAME)	END POINT (DESA NAME)	LENGTH (KM)	THROUGH THE KEC. NAME & LENGTH		REMARKS
				KEC. NAME	LENGTH (KM)	
01	Tambarangan	Serawi	12	Tapin Selatan	5	
				Tapin Tengah	5	
				Tapin Utara	2	
02	Serawi	Bakarangan	4	Tapin Utara	1	
03	Bakarangan	Paul	4	Bakarangan	3	
				Tapin Utara	2.5	
04	Perintis	Karatau	5	Bakarangan	1.5	
				Tapin Utara	3	
05	Walang	Gadung	4	Bakarangan	2	
				Tapin Utara	2	
06	Kapayang	Parigi	3	Tapin Tengah	1	
				Bakarangan	2	
07	Pauh	Anim Sahibar	2	Tapin Utara	2	
08	Bungur	Padang Buntu	6	Tapin Tengah	2	
				Tapin Utara	4	
09	Serawi	Mandurian	2	Tapin Utara	2	
10	Mandurian	Teluk Mesjid	1	Tapin Utara	1	
11	Tirik	Labung	5	Tapin Tengah	2	
				Tapin Utara	3	
12	Tambaruntung	Pandahan	4	Tapin Tengah	4	
13	Rantau	Banua Halat	3	Tapin Utara	3	
14	Sawang	Timbaan	4	Tapin Selatan	4	
15	Timbaan	Cintawari	2	Tapin Selatan	2	
16	Pandulangan	Ampera	4	Tapin Selatan	1	
				Tapin Tengah	3	
17	Kulur	Matang Rambai	1	Tapin Tengah	1	
18	Harapan Masa	Pantai Gabi	14	Tapin Utara	10	
				Piani	4	
19	Tamponang	Timbung	5	Tapin Utara	5	
20	Tambarangan	Hatungan	24	Binuang	8	
				Tapin Selatan	6	
				Tapin Utara	10	
21	Sumintin	Kumpai	3	Tapin Selatan	3	
22	Binuang	Pantai Belanti	5	Binuang	5	

Please note the priority No. in the Remarks of this list for each links No, according to the each Kabupaten's development plan.

## ROAD LINK DATA

PROVINCE : Kalimantan Selatan

KABUPATEN: Tapin

LINK NO.	BEGINNING POINT (DESA NAME)	END POINT (DESA NAME)	LENGTH (KM)	THROUGH THE KEC. NAME & LENGTH		REMARKS
				KEC. NAME	LENGTH (KM)	
23	Haruban	Gunung Batu	4	Binuang	4	
24	Binuang	Batu Hapu	13	Binuang	13	
25	Bumbun	Burakai	7	Binuang	7	
26	Kembang Kuning	Batu Hapu	6	Binuang	6	
27	Rantau Kesuma Giri	Translok	7	Tapin Utara	7	
28	Tatakan	Tandui	3	Tapin Selatan	3	
29	Dulang	Lumbu	3	Tapin Utara	3	
30	Rantau	Linuh	17	Tapin Utara	11	
				Piani	6	
31	Karatau	Garis Halat	8	Bakarangan	8	
32	Sabah	Ayunani Papan	5	Tapin Utara	5	
33	Bitahan	Miawa	17	Tapin Utara	9	
				Piani	8	
34	Rantau		3	Tapin Utara	3	Dalam Kota
35	Datu Sanggul	Sp.Kembang Habang	5	Tapin Selatan	5	
36	Binderang	Translok	4	Tapin Utara	4	
37	Parandakan	Beramban	11	Tapin Utara	5	
				Piani	6	
38	Lokpaikat	Mungkur Galah	5	Tapin Utara	5	
39	Tatakan	Kembang Habang	10	Tapin Selatan	7	
				Tapin Utara	3	
				Tapin Tengah	3	
40	Pandahan	Parigi Kecil	4	Bakarangan	1	
41	Miawa	Batu Ampar	5	Piani	5	
42	Suato	Kembang Habang	4	Tapin Utara	4	
43	Pantai Cabi	Gunung Pakan	6	Piani	6	
44	Gadung	Karatau	2	Bakarangan	2	
45	Parigi	Tangkawang	7	Tapin Tengah	3	
				Bakarangan	4	
46	Hatungun	Asam Randah	8	Binuang	8	

Please note the priority No. in the Remarks of this list for each links No. according to the each Kabupaten's development plan.

ROAD LINK DATAPROVINCE : Kalimantan SelatanKABUPATEN: Tapin

LINK NO.	BEGINNING POINT (DESA NAME)	END POINT (DESA NAME)	LENGTH (KM)	THROUGH THE KEC. NAME & LENGTH		REMARKS
				KEC. NAME	LENGTH (KM)	
47	Kampung Baru	Nes III	8	Binuang	2	
				Tapin Selatan	6	
48	Soato Tatakan	Sp.Kembang Habang	6	Tapin Selatan	6	
49	Padang Sari	Nes III	5	Binuang	5	
50	Pulau Pinang	Transad	6	Binuang	6	
51	A.Yani	Nes III	5	Binuang	5	
52	Gunung Batu	Sarang Samut	3	Binuang	3	
53	Batu Ampar	Batung	18	Piani	18	
54	Lokpaikat	Bataratat	7	Tapin Utara	7	

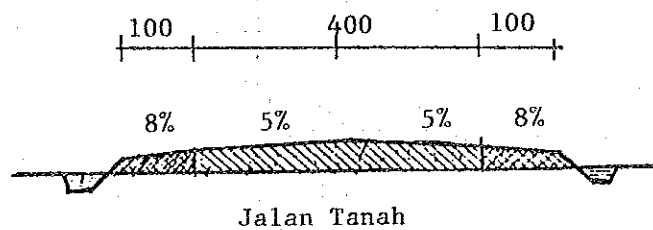
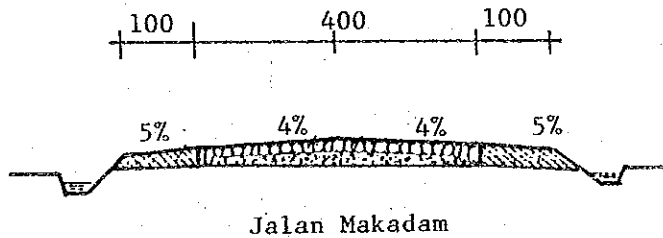
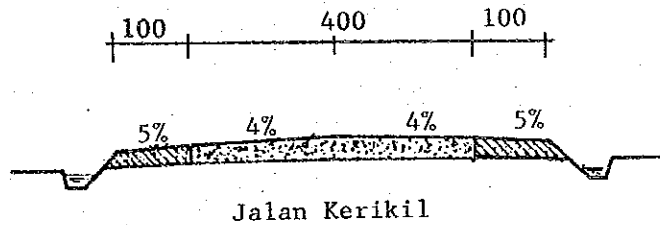
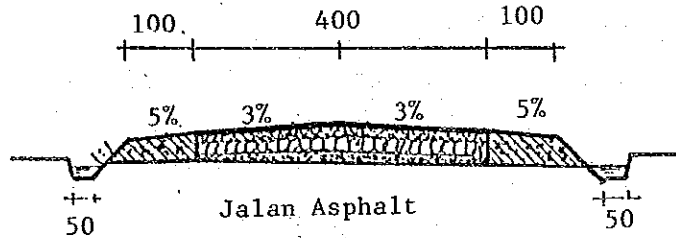
Please note the priority No. in the Remarks of this list for each links No, according to the each Kabupaten's development plan.

What Kind of Design Criteria has being applied for the new road construction and the improvement for the Kabupaten Road ?

Kriteria Perencanaan yang dipakai pada program penanganan jalan Kabupaten, baik untuk jalan lama maupun pembangunan baru.

Please draw the Typical Cross Section of the Kabupaten Road.  
Buat gambar dan penjelasan dari: Typical cross section yang dipakai pada program penanganan jalan selama ini (baik untuk jalan lama, maupun pembangunan baru)

TYPICAL CROSS SECTION.



LINK NO Nomor Ruas	L O C A T I O N From - To (dari - ke)	Lebar per- kerasan(m)	Type per- kerasan	LENGTH Panjang ( KM )	COSTS Harga (Rp 10 <sup>6</sup> )	REMARKS Keterang- an
		Lebar Jembatan	Type Jembatan			
	Dati II					
24	Binuang - Bumbun	4	Asphalt	4	37,500	
24	Bumbun - Hatungun/Tarungin	4	Asphalt/Gravel	5/3	77,981	
	<u>Penunjang</u>					
1.	Serawi - Labung	3.5	2	3.6	41,765	
	Harapan Masa - Lampinit	4	Asphalt/Gravel	2/3	63,056	
	Perintis - Keratau	3.5	Asphalt/Gravel	2/3	49,285	
	Miawa - Batu Ampar	4	Gravel	5	48,340	
	Rangda - Kuranji	4	Awcas	4	68,995	
	Pandulangan - Ampera	4	Gravel	3.3	13,559	

\* PAVEMENT TYPE : Pls note the appropriate No. below.

1. : Asphalt surface / penetrasi macadam
2. : Asphalt seal / pelaburan aspal
3. : Gravel / kerikil
4. : Gravel /AWCAS / kerikil / japat

LINK NO Nomor Ruas	LOCATION From - To (dari - ke)	Lebar per- kerasan(m)	Type per- kerasan	LENGTH Panjang ( KM )	COSTS Harga (Rp 10 <sup>6</sup> )	REMARKS Keterangan
		Lebar Jembatan	Type Jembatan			
	Dati II					
1.	Dulang - Lumbu	4	Gravel	2.7		
2.	Simpang Tiga Tirik	3	Asphalt	4.8		
3.	Simpang Bungur - P. Buntu	3	Asphalt	5		
4.	Patinting - M. Galah	4	Gravel	4		
5.	Pemeliharaan Kec.C.L.U.900m	3	Awcas	0.9		
			Jumlah		160,000	
	<u>Pendinjangan</u>					
1.	Souato -Kamb.Habang	4	Gravel	4		
2.	Rangda - Translok	3,5	Asphalt	5		
3.	Pandahan - Kapayang	4	Gravel	4		
	Parigi Kacil					
4.	Jembatan Ulin	4	Kayu Ulin	24 m		
5.	Lapis Ulin 40 m Desa Gadung					
6.	Parandakan - Beramban	4	3	5		
			Jumlah		201,000	

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4. : Gravel /AWCAS / kerikil / japat

LINK NO. : Nomor Ruas	LOCATION From - To (dari - ke)	Lebar per- kerasan(m)	Type per- kerasan	LENGTH Panjang ( KM )	COSTS Harga (Rp 10 <sup>6</sup> )	REMARKS Keterangan
		Lebar Jembatan	Type Jembatan			
	Dati II					
1.	Datu Sanggul-Kambang Habang					
2.	Translok - Miawa					
3.	Jln. Dulang - Telaga Padi					
4.	Rumintin - Kumpai					
5.	Pemeliharaan Jalan Kota					
			Jumlah		160,000	
	<u>Penunjangan</u>					
1.	Sawang - Timbaan					
2.	Tibung - Lampinit					
3.	Sidodadi - Translok					
4.	Sei. Bamban - Mt. Batas					
5.	Kembang Kuning - B. Hapu					
			Jumlah		195,700	

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4. : Gravel /AWCAS / kerikil / japat



KABUPATEN: Tapin

## LOCATION AND COSTS OF THE KABUPATEN

## ROADS CONSTRUCTED OR IMPROVED IN 1981/1982

Biaya konstruksi penanganan

jalan dan jembatan Kabupaten thn. 1981/1982

LINK NO : Nomor Ruas	LOCATION From - To (dari - ke)	Lebar per- kerasan(m)	Type per- kerasan	LENGTH Panjang ( KM )	COSTS Harga (Rp 10 <sup>6</sup> )	REMARKS Keterang- an
		Lebar Jembatan	Type Jembatan			
	Dati II					
1.	Walang - Gadung					
2.	Tambaruntung - Pinang babaris					
3.	Bitahan Translok - Miawa					
4.	Lumbu - Jln. Pembangunan					
5.	Baringin					
6.	Dulang				160,000	
			Jumlah		150,000	
	<u>Penunjang</u>					
1.	Keraton - Rantau					
2.	Pasar Binuang-Pt. Belanti					
3.	P. Buntu - Jln. Negara					
4.	Labung - Tlk. Mesjid Jln. Negara					
5.	Pandulangan - Labung					
6.	Rangda - Labuhan					
7.	Puting Waringin-Keladan					
			Jumlah Dana		146,240	

\* PAVEMENT TYPE : Pls note the appropriate No. below.

1. : Asphalt surface / penetrasi macadam
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3. : Gravel / kerikil
4. : Gravel /AWCAS / kerikil / japat

LINK NO. : Nomor Ruas	LOCATION From - To (dari - ke)	Lebar per- kerasan(m)	Type per- kerasan	LENGTH Panjang ( KM )	COSTS Harga (Rp 10 <sup>6</sup> )	REMARKS Keterangan
		Lebar Jembatan	Type Jembatan			
1.	Tambarangan - Lawahan- Tambaruntung					
2.	Simpang Mesjid Jami Rantau					
3.	Simpang Paul					
4.	Jalan S.M.A. Dulang					
5.	Desa Keladan C.L.U	-	-	-	-	
6.	Pemeliharaan Jalan dalam Kota					
			Dana Seluruhnya		100,000	
	<u>Penunjangan</u>					
1.	Binuang - Hatungun					
2.	Binuang - Sei Binuang					
			Jumlah Dana		86,000	

\* PAVEMENT TYPE : PIs note the appropriate No. below.

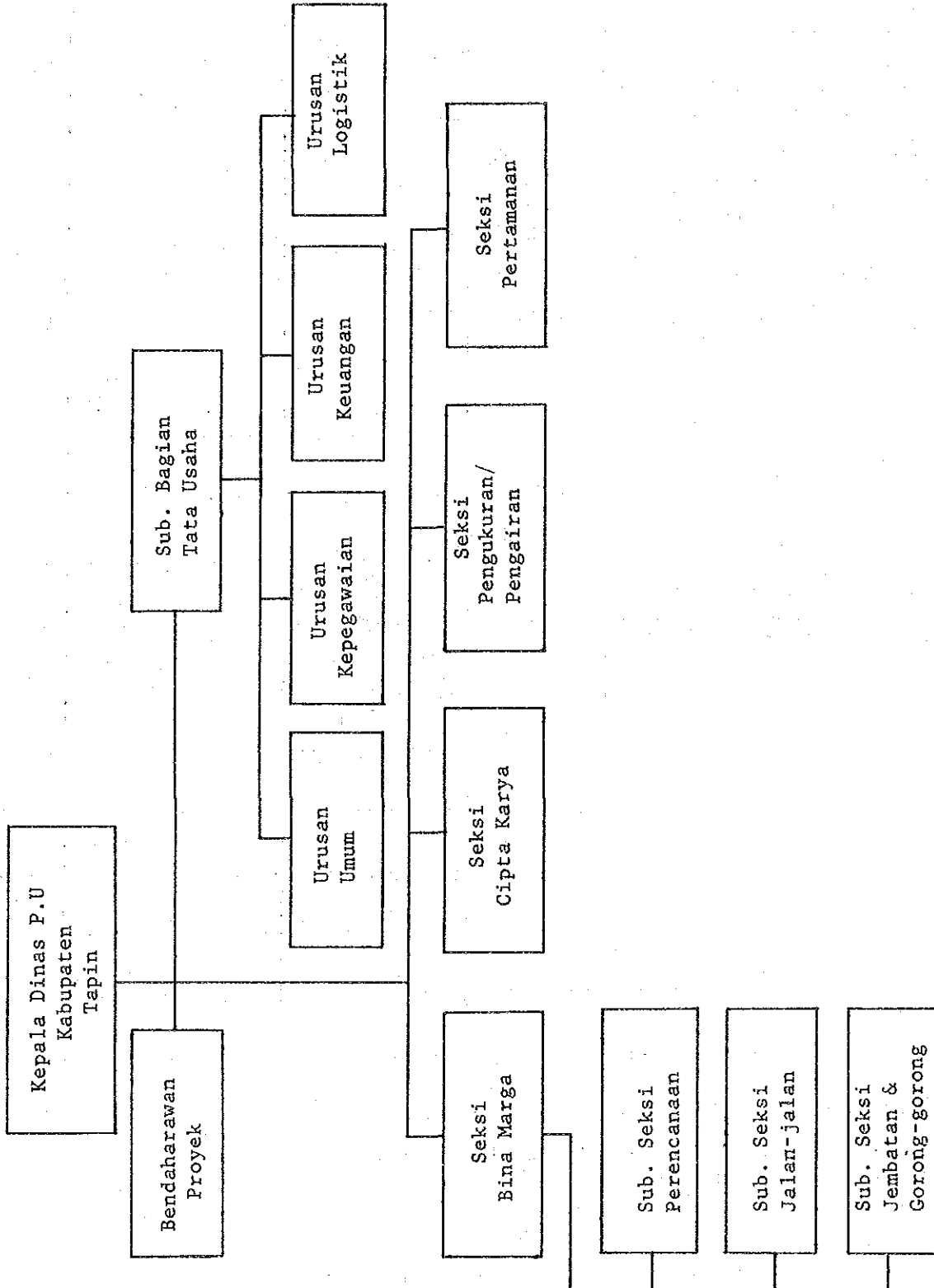
1. : Asphalt surface / penetrasi macadam
2. : Asphalt seal / pelaburan aspal
3. : Gravel / kerikil
4. : Gravel /AWCAS / kerikil / japat

EXISTING ORGANIZATION IN KABUPATEN

Struktur Organisasi yang ada dari P.U Kabupaten

Please draw the Cart of the Existing Organization in the Kabupaten.

Harap digambar bagan organisasi dari DPUK.



EXISTING STAFF RESOURCES OF BINA MARGA OF PU KABUPATENTenaga Dinas PUK yang adaPROPINSI: Kalimantan SelatanKABUPATEN: Tapin

DESCRIPTION /Uraian	NUMBER / Jumlah	REMARKS Keterangan
CONTROLLING STAFF Staff teknis. PUK	(28)	(10)
DPUK ENGINEER Sarjana Teknik	-	
ASSISTANT ENGINEER Sarjana Muda Teknik	-	
TECHNICIAN STAFF Staff Teknik (STM)	28	10
ADMINISTRATION Tenaga Administrasi	9	
SUPERVISOR Tenaga Pengawas	14	
WORKING FORCE Tenaga Pelaksana Lapangan	(31)	
OPERATORS Operators	2	
DRIVERS Supir	2	
MECHANICS Mechanic	2	
TRADESMAN Tukang	5	
LABOUR Buruh / Pekerja	20	
OTHERS Lain-lain		
TOTAL / JUMLAH	82	10

Catatan ; Untuk kolom keterangan harap diisi berapa orang yang telah mendapat Training.

LOCATION AND AREA OF DPUK WORKSHOP

E-06

Lokasi Workshop DPUK

PROPINSI : Kalimantan Selatan

KABUPATEN: Tapin

LOCATION Lokasi	AREA (m2) Luas	NUMBER Jumlah	REMARKS Keterangan
Tapin Selatan	20.000 m <sup>2</sup>	1 Lokasi	Lokasi Tersedia

PROPINSI: Kalimantan Selatan

E-07

KABUPATEN: Tapin

LAND ACQUISITION COST

Daftar harga pembebasan tanah

DESCRIPTION Uraian	UNIT Satuan	RATE (RP) Harga	REMARKS Keterangan
CITY/kota	M2	4,000	Harga Sample
VILLAGE / desa	M2	1,500	
RICE FIELD/sawah	M2	750	
DRY FIELD/ladang	M2	500	
MIX CROPS/panen	M2	300	
FOREST/hutan	M2	150	
SWAMP / rawa	M2	100	
OTHERS / lain-lain	M2		

PROPINSI: Kalimantan Selatan

E-08

KABUPATEN: Tapin

Classification of local contractors at Kabupaten level.

Klasifikasi kontraktor di Kabupaten

COMPANY NAME Nama Kontraktor	CLASS Kelas	CAPITAL Modal (Rp)	NUMBER OF EMPLOYEE Jumlah pegawai	REMARKS Keterangan
3	C3	34.797.000		

NOTE: DATI II

## LIST OF EXISTING EQUIPMENT OF LOCAL CONTRACTOR

Name of contractor

NAME OF EQUIPMENT Jenis peralatan	EXISTING CONDITION/ Kondisi Peralatan					REASON OF BAD CONDI TION/Sebab Kerusakan	REQUIRE - MENT / Ke- butuhan peralatan baru
	TYPE/ Tipe	P.Y	NUMBER / Jumlah				
			GOOD Baik	BAD Rusak	TOTAL Jumlah		
Bulldozer							
Motor Grader							
Tyre Roller							
Steel Wheel Roller							
Vibration Roller							
Wheel Loader							
Front End Loader and Backhoe							
Mobile Crane							
Concrete Mixer							
Stone Crusher							
Portable Compressor							
Hydraulic Excavator							
Asphalt Paving Machine							
Asphalt Sprayer							
Asphalt Mixing Machine							
Mobile Workshop							
Mechanic Rammer							
Plate Tamper							
Pile Driver							
Leg Drill							
Hand Hammer	-	-	41	-	41	-	
Farm Tractor	MF 290	1981	1	-	2	-	
Dump Truck	Toyota	1983	5	-	5	-	
Water Tank Truck							
Fuel Tank Truck							
Pick Up	-	-	5	2	7	-	
Jeep	Toyota	-	7	-	7		
Motorcycle	-	-	12	-	12		
Generator	-	-	4	-	4		
Water Pump	-	-	8	-	8		
Others	-	-	-	-	-		

## LIST OF EXISTING EQUIPMENT OF P.U KABUPATEN

NAME OF EQUIPMENT Jenis peralatan	EXISTING CONDITION/ Kondisi Peralatan					REASON OF BAD CONDIT TION/Sebab Kerusakan	REQUIRE - MENT / Ke- butuhan peralatan baru
	TYPE/ Tipe	P.Y	NUMBER / Jumlah				
			GOOD Baik	BAD Rusak	TOTAL Jumlah		
Bulldozer							2
Motor Grader							1
Tyre Roller							2
Steel Whell Roller			6		6		2
Vibration Roller			2	1	3		1
Wheel Loader							2
Front End Loader and Backhoe							
Mobile Crane							1
Concrete Mixer							1
Stone Crusher				1	1		2
Portable Compressor							1
Hydraulic Excavator							2
Asphalt Paving Machine							1
Asphalt Sprayer	DAS 200		1		1		1
Asphalt Mixing Machine							1
Mobile Workshop							1
Mechanic Rammer			4		4		
Plate Tamper							2
Pile Driver							1
Leg Drill							1
Hand Hammer							1
Farm Tractor							1
Dump Truck							5
Water Tank Truck							1
Fuel Tank Truck							1
Pick Up	L.300		1		1		1
Jeep							2
Motorcycle	Honda		3		3		3
Generator							
Water Pump							2
Others							



## Appendix A-3

## CONSTRUCTION AND MAINTENANCE COST FOR PROPOSED ROAD LINKS

PROV : KALIMANTAN SELATAN KAB : TAFIN

LINK NO : 26 (IIIC) LENGTH : 6 Km

UPGRADE : 8.0m road bed, 4.0m road with surface Subbase Course (Rp)

ITEM	UNIT	QUANTITY	UNIT COST		COST		TOTAL	
			LOCAL	FOREIGN	LOCAL	FOREIGN		
Site Clearance in Light Bush	m <sup>2</sup>	0.0	159	91	0	0	0	
Subgrade Preparation	m <sup>2</sup>	8000.0	20	11	160,000	88,000	248,000	
Normal Fill	m <sup>3</sup>	0.0	1,635	863	0	0	0	
Fill in Swamp	m <sup>3</sup>	0.0	2,445	1,052	0	0	0	
Normal Excavation to Spoil	m <sup>3</sup>	96.0	956	522	91,776	50,112	141,888	
Sub Base Course	m <sup>3</sup>	854.0	3,096	1,347	2,643,984	1,150,338	3,794,322	
Base Course	m <sup>3</sup>	1200.0	4,238	2,299	5,085,600	2,758,800	7,844,400	
Shoulder	m <sup>2</sup>	24000.0	288	146	6,912,000	3,504,000	10,416,000	
Asphalt Patching	m <sup>2</sup>	0.0	3,663	1,343	0	0	0	
Surface Dressing (Single)	m <sup>2</sup>	0.0	594	552	0	0	0	
Surface Dressing (Double)	m <sup>2</sup>	0.0	742	868	0	0	0	
Earth Drain	m	1800.0	909	119	1,636,200	214,200	1,850,400	
Earth Drain in Swamp (by machine)	m <sup>3</sup>	0.0	1,165	474	0	0	0	
Pipe Culvert 980cm	m	0.0	43,874	51,386	0	0	0	
Masonry Culvert (80x80cm)	m	0.0	63,563	41,554	0	0	0	
Retaining Wall and Wing Wall (Timber)	m <sup>2</sup>	0.0	10,244	246	0	0	0	
Retaining Wall and Wing Wall (Masonry)	m <sup>3</sup>	0.0	47,464	11,868	0	0	0	
Gabion Protection	m <sup>3</sup>	0.0	15,591	120	0	0	0	
New Bridge (Timber)	SET	1.0	--	--	0	0	0	
New Bridge (Concrete)	SET	1.0	--	--	0	0	0	
					Sub Total	16,529,560	7,765,450	24,295,010
Overhead (15%)						2,479,434	1,164,817	3,644,251
					TOTAL COST	19,008,994	8,930,267	27,939,261
Manual routine maintenance of road	Km	6.0	148,684	7,248	892,104	43,488	935,592	
Routine maintenance of gravel road	Km	6.0	184,800	88,047	1,108,800	528,282	1,637,082	
					Sub Total	2,000,904	571,770	2,572,674
Maintenance of Timber Bridge (New)	m <sup>2</sup>	0.0	7,203	1,121	0	0	0	
Maintenance of Concrete Bridge (New)	m <sup>2</sup>	0.0	1,752	3,135	0	0	0	
Maintenance of Timber Bridge (Exist)	m <sup>2</sup>	28.0	7,217	2,404	202,076	67,312	269,388	
Maintenance of Concrete Bridge (Exist)	m <sup>2</sup>	0.0	3,966	2,471	0	0	0	
					Earthwork & Pavement Unit Cost (Rp/Km)	:	4,656,544	
					Timber Bridge Unit Cost (Rp/m <sup>2</sup> )	:		
					Concrete Bridge Unit Cost (Rp/m <sup>2</sup> )	:		
					Survived Value (Rp)	:	1,517,728	
					Maintenance Rate without Bridge (%)	:	9.21	
					New Bridge Cost Rate (%)	:		

PROV : KALIMANTAN SELATAN KAB : TAPIN

LINK NO : 25 (IIB-2) LENGTH : 7 Km

UPGRADE : 8.0m road bed, 4.0m road with surface Base Course

(Rp)

I T E M	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		TOTAL	
			LOCAL	FOREIGN	LOCAL	FOREIGN		
Site Clearance in light Bush	m2	0.0	159	91	0	0	0	
Subgrade Preparation	m2	16000.0	20	11	320,000	176,000	496,000	
Normal Fill	m3	0.0	1,635	863	0	0	0	
Fill in Swamp	m3	0.0	2,445	1,052	0	0	0	
Normal Excavation to Spoil	m3	318.0	956	522	304,008	165,996	470,004	
Sub Base Course	m3	1981.2	3,096	1,347	6,133,795	2,668,676	8,802,471	
Base Course	m3	1680.0	4,238	2,299	7,119,840	3,862,320	10,982,160	
Shoulder	m2	28000.0	288	146	8,064,000	4,088,000	12,152,000	
Asphalt Patching	m2	0.0	3,663	1,343	0	0	0	
Surface Dressing (Single)	m2	0.0	594	552	0	0	0	
Surface Dressing (Double)	m2	0.0	742	868	0	0	0	
Earth Drain	m	4280.0	909	119	3,890,520	509,320	4,399,840	
Earth Drain in Swamp (by machine)	m3	0.0	1,165	474	0	0	0	
Pipe Culvert 80cm	m	0.0	43,874	51,386	0	0	0	
Masonry Culvert (80x80cm)	m	0.0	63,563	41,554	0	0	0	
Retaining Wall and Wing Wall (Timber)	m2	0.0	10,244	246	0	0	0	
Retaining Wall and Wing Wall (Masonry)	m3	0.0	47,464	11,868	0	0	0	
Gabion Protection	m3	0.0	15,591	120	0	0	0	
New Bridge (Timber)	SET	1.0	--	--	0	0	0	
New Bridge (Concrete)	SET	1.0	--	--	0	0	0	
					Sub Total	25,832,163	11,470,312	37,302,475
Overhead ( 15% )						3,874,824	1,720,546	5,595,370
					TOTAL COST	29,706,987	13,190,858	42,897,845

Manual routine maintenance of road	Km	7.0	148,684	7,248	1,040,788	50,736	1,091,524
Routine maintenance of gravel road	Km	7.0	184,800	88,047	1,293,600	616,329	1,909,929
			Sub Total		2,334,388	667,065	3,001,453
Maintenance of Timber Bridge (New)	m2	0.0	7,203	1,121	0	0	0
Maintenance of Concrete Bridge (New)	m2	0.0	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m2	52.0	7,217	2,404	375,284	125,008	500,292
Maintenance of Concrete Bridge (Exist)	m2	0.0	3,966	2,471	0	0	0

Earthwork & Pavement	Unit Cost	(Rp/Km)	1	6,128,264
Timber Bridge	Unit Cost	(Rp/m2)	1	
Concrete Bridge	Unit Cost	(Rp/m2)	1	
Survived Value		(Rp)	1	4,401,235
Maintenance Rate without Bridge		(%)	1	7.00
New Bridge Cost Rate		(%)	1	

PROV : KALIMANTAN SELATAN KAB : TAPIN  
 LINK NO : 24 (IIIB-1) LENGTH : 13 Km  
 UPGRADE : 7.0m road bed, 4.0m road with surface Dressing (1)

(Rp)

ITEM	UNIT	QUANTITY	UNIT COST		COST		TOTAL	
			LOCAL	FOREIGN	LOCAL	FOREIGN		
Site Clearance in Light Bush	m <sup>2</sup>	0.0	159	91	0	0	0	
Subgrade Preparation	m <sup>2</sup>	7000.0	20	11	140,000	77,000	217,000	
Normal Fill	m <sup>3</sup>	0.0	1,635	863	0	0	0	
Fill in Swamp	m <sup>3</sup>	0.0	2,445	1,052	0	0	0	
Normal Excavation to Spoil	m <sup>3</sup>	1332.0	956	522	1,273,392	695,304	1,968,696	
Sub Base Course	m <sup>3</sup>	930.0	3,096	1,347	2,879,280	1,252,710	4,131,990	
Base Course	m <sup>3</sup>	1120.0	4,238	2,299	4,746,560	2,574,880	7,321,440	
Shoulder	m <sup>2</sup>	39000.0	288	146	11,232,000	5,694,000	16,926,000	
Asphalt Patching	m <sup>2</sup>	225.0	3,663	1,343	824,175	302,175	1,126,350	
Surface Dressing (Single)	m <sup>2</sup>	52000.0	594	552	30,888,000	28,704,000	59,592,000	
Surface Dressing (Double)	m <sup>2</sup>	0.0	742	868	0	0	0	
Earth Drain	m	2000.0	909	119	1,818,000	238,000	2,056,000	
Earth Drain in Swamp (by machine)	m <sup>3</sup>	0.0	1,165	474	0	0	0	
Pipe Culvert Ø80cm	m	0.0	43,874	51,386	0	0	0	
Masonry Culvert (80x80cm)	m	0.0	63,563	41,554	0	0	0	
Retaining Wall and Wing Wall (Timber)	m <sup>2</sup>	750.0	10,244	246	7,683,000	184,500	7,867,500	
Retaining Wall and Wing Wall (Masonry)	m <sup>3</sup>	0.0	47,464	11,868	0	0	0	
Gabion Protection	m <sup>3</sup>	0.0	15,591	120	0	0	0	
New Bridge (Timber)	SET	1.0	--	--	0	0	0	
New Bridge (Concrete)	SET	1.0	--	--	0	0	0	
			Sub Total		61,484,407	39,722,569	101,206,976	
					9,222,661	5,958,385	15,181,046	
					<b>TOTAL COST</b>	<b>70,707,068</b>	<b>45,680,954</b>	<b>116,388,022</b>

Manual routine maintenance of road	Km	13.0	148,684	7,248	1,932,892	94,224	2,027,116
Routine maintenance of asphalt road	Km	13.0	366,300	134,300	4,761,900	1,745,900	6,507,800
			Sub Total		6,694,792	1,840,124	8,534,916
Maintenance of Timber Bridge (New)	m <sup>2</sup>	0.0	7,203	1,121	0	0	0
Maintenance of Concrete Bridge (New)	m <sup>2</sup>	0.0	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m <sup>2</sup>	208.0	7,217	2,404	1,501,136	500,032	2,001,168
Maintenance of Concrete Bridge (Exist)	m <sup>2</sup>	121.3	3,966	2,471	480,917	299,633	780,550

Earthwork & Pavement	Unit Cost	(Rp/Km)	:	8,952,925
Timber Bridge	Unit Cost	(Rp/m <sup>2</sup> )	:	
Concrete Bridge	Unit Cost	(Rp/m <sup>2</sup> )	:	
Survived Value		(Rp)	:	4,356,681
Maintenance Rate without Bridge		(%)	:	7.33
New Bridge Cost Rate		(%)	:	

PROV : KALIMANTAN SELATAN KAB : TARIN

LINK NO : 20 (IIIB-1) LENGTH : 24 Km

UPGRADE : 7.0m road bed, 4.0m road with surface Dressing (1)

(Rp)

ITEM	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Site Clearance in light Bush	m2	0.0	159	91	0	0	0
Subgrade Preparation	m2	49000.0	20	11	980,000	539,000	1,519,000
Normal Fill	m3	0.0	1,635	863	0	0	0
Fill in Swamp	m3	0.0	2,445	1,052	0	0	0
Normal Excavation to Spoil	m3	671.0	956	522	641,476	350,262	991,738
Sub Base Course	m3	4460.0	3,096	1,347	13,808,160	6,007,620	19,815,780
Base Course	m3	3080.0	4,238	2,299	13,053,040	7,080,920	20,133,960
Shoulder	m2	72000.0	288	146	20,736,000	10,512,000	31,248,000
Asphalt Patching	m2	963.0	3,663	1,343	3,527,469	1,293,309	4,820,778
Surface Dressing (Single)	m2	96000.0	594	552	57,024,000	52,992,000	110,016,000
Surface Dressing (Double)	m2	0.0	742	868	0	0	0
Earth Drain	m	1100.0	909	119	999,900	130,900	1,130,800
Earth Drain in Swamp (by machine)	m3	0.0	1,165	474	0	0	0
Pipe Culvert D80cm	m	0.0	43,874	51,386	0	0	0
Masonry Culvert (80x80cm)	m	0.0	63,563	41,534	0	0	0
Retaining Wall and Wing Wall (Timber)	m2	0.0	10,244	246	0	0	0
Retaining Wall and Wing Wall (Masonry)	m3	0.0	47,464	11,868	0	0	0
Gabion Protection	m3	0.0	15,591	120	0	0	0
New Bridge (Timber)	SET	1.0	--	--	0	0	0
New Bridge (Concrete)	SET	1.0	--	--	0	0	0
				Sub Total	110,770,045	78,906,011	189,676,056
Overhead ( 15% )					16,615,506	11,835,901	28,451,407
				TOTAL COST	127,385,551	90,741,912	218,127,463

Manual routine maintenance of road	Km	24.0	148,684	7,248	3,568,416	173,952	3,742,368
Routine maintenance of asphalt road	Km	24.0	366,300	134,300	8,791,200	3,223,200	12,014,400
			Sub Total		12,359,616	3,397,152	15,756,768
Maintenance of Timber Bridge (New)	m2	0.0	7,203	1,121	0	0	0
Maintenance of Concrete Bridge (New)	m2	0.0	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m2	423.5	7,217	2,404	3,056,399	1,018,094	4,074,493
Maintenance of Concrete Bridge (Exist)	m2	0.0	3,966	2,471	0	0	0

Earthwork & Pavement Unit Cost (Rp/Km)	:	9,088,644
Timber Bridge Unit Cost (Rp/m2)	:	
Concrete Bridge Unit Cost (Rp/m2)	:	
Survived Value (Rp)	:	17,897,838
Maintenance Rate without Bridge (%)	:	7.22
New Bridge Cost Rate (%)	:	

PROV : KALIMANTAN SELATAN KAB : TAPIN

LINK NO : 18 (IIB-1) LENGTH : 14 Km

UPGRADE : 8.0m road bed, 3.5m road with surface Dressing (1)

(Rp)

ITER	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		>>>>> TOTAL	
			LOCAL	FOREIGN	LOCAL	FOREIGN		
Site Clearance in Light Bush	m2	0.0	159	91	0	0	0	
Subgrade Preparation	m2	54480.0	20	11	1,089,600	599,280	1,688,880	
Normal Fill	m3	0.0	1,635	863	0	0	0	
Fill in Swamp	m3	696.0	2,445	1,052	1,701,720	732,192	2,433,912	
Normal Excavation to Spoil	m3	600.0	956	522	573,600	313,200	886,800	
Sub Base Course	m3	4050.6	3,096	1,347	12,540,657	5,456,158	17,996,815	
Base Course	m3	2695.0	4,238	2,299	11,421,410	6,195,805	17,617,215	
Shoulder	m2	63000.0	288	146	18,144,000	9,198,000	27,342,000	
Asphalt Patching	m2	40.0	3,663	1,343	146,520	53,720	200,240	
Surface Dressing (Single)	m2	49000.0	594	552	29,106,000	27,048,000	56,154,000	
Surface Dressing (Double)	m2	0.0	742	868	0	0	0	
Earth Drain	m	2380.0	909	119	2,163,420	283,220	2,446,640	
Earth Drain in Swamp (by machine)	m3	4800.0	1,165	474	5,592,000	2,275,200	7,867,200	
Pipe Culvert Ø80cm	m	18.0	43,874	51,386	789,732	924,948	1,714,680	
Masonry Culvert (80x80cm)	m	0.0	63,563	41,554	0	0	0	
Retaining Wall and Wing Wall (Timber)	m2	0.0	10,244	246	0	0	0	
Retaining Wall and Wing Wall (Masonry)	m3	3.2	47,464	11,868	151,884	37,977	189,861	
Gabion Protection	m3	0.0	15,591	120	0	0	0	
New Bridge (Timber)	SET	1.0	--	--	0	0	0	
New Bridge (Concrete)	SET	1.0	--	--	0	0	0	
					Sub Total	83,420,543	53,117,700	136,538,243
Overhead (15%)						12,513,081	7,967,655	20,480,736
					TOTAL COST	95,933,624	61,085,355	157,018,979

Manual routine maintenance of road	Km	14.0	148,684	7,248	2,081,576	101,472	2,183,048
Routine maintenance of asphalt road	Km	14.0	366,300	134,300	5,128,200	1,880,200	7,008,400
			Sub Total		7,209,776	1,981,672	9,191,448
Maintenance of Timber Bridge (New)	m2	0.0	7,203	1,121	0	0	0
Maintenance of Concrete Bridge (New)	m2	0.0	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m2	89.0	7,217	2,404	642,313	213,956	856,269
Maintenance of Concrete Bridge (Exist)	m2	0.0	3,966	2,471	0	0	0

Earthwork & Pavement Unit Cost (Rp/Km)	:	11,215,641
Timber Bridge Unit Cost (Rp/m2)	:	
Concrete Bridge Unit Cost (Rp/m2)	:	
Survived Value (Rp)	:	16,121,213
Maintenance Rate without Bridge (%)	:	5.85
New Bridge Cost Rate (%)	:	

PROV : KALIMANTAN SELATAN KAB : TAPIN

LINK NO : 12 (IIIB-2) LENGTH : 4 Km

UPGRADE : 6.0m road bed, 4.0m road with surface Base Course

(Rp)

ITEM	UNIT	QUANTITY	UNIT COST		COST		TOTAL	
			LOCAL	FOREIGN	LOCAL	FOREIGN		
Site Clearance in Light Bush	m <sup>2</sup>	0.0	159	91	0	0	0	
Subgrade Preparation	m <sup>2</sup>	5475.6	20	11	109,512	60,231	169,743	
Normal Fill	m <sup>3</sup>	0.0	1,635	863	0	0	0	
Fill in Swamp	m <sup>3</sup>	588.1	2,445	1,052	1,437,904	618,681	2,056,585	
Normal Excavation to Spoil	m <sup>3</sup>	1050.0	956	522	1,003,800	548,100	1,551,900	
Sub Base Course	m <sup>3</sup>	938.0	3,096	1,347	2,904,048	1,263,486	4,167,534	
Base Course	m <sup>3</sup>	0.0	4,238	2,299	0	0	0	
Shoulder	m <sup>2</sup>	8000.0	288	146	2,304,000	1,168,000	3,472,000	
Asphalt Patching	m <sup>2</sup>	753.0	3,663	1,343	2,758,239	1,011,279	3,769,518	
Surface Dressing (Single)	m <sup>2</sup>	0.0	594	552	0	0	0	
Surface Dressing (Double)	m <sup>2</sup>	0.0	742	868	0	0	0	
Earth Drain	m	1800.0	909	119	1,636,200	214,200	1,850,400	
Earth Drain in Swamp (by machine)	m <sup>3</sup>	4056.0	1,165	474	4,725,240	1,922,544	6,647,784	
Pipe Culvert 80cm	m	0.0	43,874	51,386	0	0	0	
Masonry Culvert (80x80cm)	m	0.0	63,563	41,554	0	0	0	
Retaining Wall and Wing Wall (Timber)	m <sup>2</sup>	110.0	10,244	246	1,126,840	27,060	1,153,900	
Retaining Wall and Wing Wall (Masonry)	m <sup>3</sup>	0.0	47,464	11,868	0	0	0	
Gabion Protection	m <sup>3</sup>	0.0	15,591	120	0	0	0	
New Bridge (Timber)	SET	1.0	--	--	0	0	0	
New Bridge (Concrete)	SET	1.0	--	--	0	0	0	
					Sub Total	18,005,783	6,833,581	24,839,364
Overhead (15%)						2,700,867	1,025,037	3,725,904
					TOTAL COST	20,706,650	7,858,618	28,565,268

Manual routine maintenance of road	Km	4.0	148,684	7,248	594,736	28,992	623,728
Routine maintenance of gravel road	Km	4.0	184,800	88,047	739,200	352,188	1,091,388
			Sub Total		1,333,936	381,180	1,715,116
Maintenance of Timber Bridge (New)	m <sup>2</sup>	0.0	7,203	1,121	0	0	0
Maintenance of Concrete Bridge (New)	m <sup>2</sup>	0.0	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m <sup>2</sup>	42.0	7,217	2,404	303,114	100,968	404,082
Maintenance of Concrete Bridge (Exist)	m <sup>2</sup>	0.0	3,966	2,471	0	0	0

Earthwork & Pavement	Unit Cost	(Rp/Km)	:	7,141,317
Timber Bridge	Unit Cost	(Rp/m <sup>2</sup> )	:	
Concrete Bridge	Unit Cost	(Rp/m <sup>2</sup> )	:	
Survived Value		(Rp)	:	2,083,767
Maintenance Rate without Bridge		(%)	:	6.00
New Bridge Cost Rate		(%)	:	

PROV : KALIMANTAN SELATAN KAB : TAPIN

LINK NO : 2 (YIC) LENGTH : 4 Km

UPGRADE : 6.0m road bed, 3.5m road with surface Subbase Course

(Rp)

ITEM	UNIT	QUANTITY	<<< UNIT COST >>>		<<<< COST >>>>		TOTAL	
			LOCAL	FOREIGN	LOCAL	FOREIGN		
Site Clearance in Light Bush	m <sup>2</sup>	4000.0	159	91	636,000	364,000	1,000,000	
Subgrade Preparation	m <sup>2</sup>	4050.0	20	11	81,000	44,550	125,550	
Normal Fill	m <sup>3</sup>	0.0	1,635	863	0	0	0	
Fill in Swamp	m <sup>3</sup>	930.0	2,445	1,052	2,273,850	978,360	3,252,210	
Normal Excavation to Spoil	m <sup>3</sup>	1000.0	956	522	956,000	522,000	1,478,000	
Sub Base Course	m <sup>3</sup>	299.8	3,076	1,347	928,180	403,830	1,332,010	
Base Course	m <sup>3</sup>	840.0	4,238	2,299	3,559,920	1,931,160	5,491,080	
Shoulder	m <sup>2</sup>	10000.0	288	146	2,880,000	1,460,000	4,340,000	
Asphalt Patching	m <sup>2</sup>	0.0	3,663	1,343	0	0	0	
Surface Dressing (Single)	m <sup>2</sup>	0.0	594	352	0	0	0	
Surface Dressing (Double)	m <sup>2</sup>	0.0	742	868	0	0	0	
Earth Drain	m	4000.0	909	119	3,636,000	476,000	4,112,000	
Earth Drain in Swamp (by machine)	m <sup>3</sup>	3000.0	1,165	474	3,495,000	1,422,000	4,917,000	
Pipe Culvert Ø80cm	m	0.0	43,874	51,386	0	0	0	
Masonry Culvert (80x80cm)	m	0.0	63,563	41,554	0	0	0	
Retaining Wall and Wing Wall (Timber)	m <sup>2</sup>	152.0	10,244	246	1,557,088	37,392	1,594,480	
Retaining Wall and Wing Wall (Masonry)	m <sup>3</sup>	0.0	47,464	11,868	0	0	0	
Gabion Protection	m <sup>3</sup>	0.0	15,591	120	0	0	0	
New Bridge (Timber)	SET	1.0	--	--	0	0	0	
New Bridge (Concrete)	SET	1.0	--	--	0	0	0	
					Sub Total	20,003,038	7,639,292	27,642,330
Overhead (15%)						3,000,455	1,145,893	4,146,348
					TOTAL COST	23,003,493	8,785,185	31,788,678

Manual routine maintenance of road	Km	4.0	148,684	7,240	594,736	28,992	623,728
Routine maintenance of gravel road	Km	4.0	184,800	88,047	739,200	352,188	1,091,388
			Sub Total		1,333,936	381,180	1,715,116
Maintenance of Timber Bridge (New)	m <sup>2</sup>	0.0	7,203	1,121	0	0	0
Maintenance of Concrete Bridge (New)	m <sup>2</sup>	0.0	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m <sup>2</sup>	52.0	7,217	2,404	375,284	125,008	500,292
Maintenance of Concrete Bridge (Exist)	m <sup>2</sup>	0.0	3,966	2,471	0	0	0

Earthwork & Pavement	Unit Cost	(Rp/Km)	:	7,947,170
Timber Bridge	Unit Cost	(Rp/m <sup>2</sup> )	:	
Concrete Bridge	Unit Cost	(Rp/m <sup>2</sup> )	:	
Survived Value		(Rp)	:	532,804
Maintenance Rate without Bridge		(%)	:	5.40
New Bridge Cost Rate		(%)	:	

PROV : KALIMANTAN SELATAN KAB : TAPIN  
LINK NO : 1 (IIIB-1) LENGTH : 12 Km  
UPGRADE : 6.5m road bed, 4.0m road with surface Dressing (1)

(Rp)

ITEM	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		>>>>> TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Site Clearance in Light Bush	m <sup>2</sup>	0.0	159	91	0	0	0
Subgrade Preparation	m <sup>2</sup>	0.0	20	11	0	0	0
Normal Fill	m <sup>3</sup>	0.0	1,635	863	0	0	0
Fill in Swamp	m <sup>3</sup>	0.0	2,445	1,052	0	0	0
Normal Excavation to Spoil	m <sup>3</sup>	2530.0	936	522	2,418,680	1,320,660	3,739,340
Sub Base Course	m <sup>3</sup>	1330.0	3,096	1,347	4,117,680	1,791,510	5,909,190
Base Course	m <sup>3</sup>	0.0	4,238	2,299	0	0	0
Shoulder	m <sup>2</sup>	30000.0	288	146	8,640,000	4,380,000	13,020,000
Asphalt Patching	m <sup>2</sup>	987.0	3,663	1,343	3,615,381	1,325,541	4,940,922
Surface Dressing (Single)	m <sup>2</sup>	48000.0	594	532	28,512,000	26,496,000	55,008,000
Surface Dressing (Double)	m <sup>2</sup>	0.0	742	868	0	0	0
Earth Drain	m	160.0	909	119	145,440	19,040	164,480
Earth Drain in Swamp (by machine)	m <sup>3</sup>	0.0	1,165	474	0	0	0
Pipe Culvert 800ca	m	0.0	43,874	51,386	0	0	0
Masonry Culvert (80x80ca)	m	0.0	63,563	41,554	0	0	0
Retaining Wall and Wing Wall (Timber)	m <sup>2</sup>	348.0	10,244	246	3,564,912	85,608	3,650,520
Retaining Wall and Wing Wall (Masonry)	m <sup>3</sup>	0.0	47,464	11,868	0	0	0
Gabion Protection	m <sup>3</sup>	0.0	15,591	120	0	0	0
New Bridge (Timber)	SET	1.0	--	--	0	0	0
New Bridge (Concrete)	SET	1.0	--	--	0	0	0
			Sub Total		51,014,093	35,418,359	86,432,452
Overhead (15%)					7,652,113	5,312,753	12,964,866
			TOTAL COST		58,666,206	40,731,112	99,397,318

Manual routine maintenance of road	Km	12.0	148,684	7,248	1,784,208	86,976	1,871,184
Routine maintenance of asphalt road	Km	12.0	366,300	134,300	4,395,600	1,611,600	6,007,200
			Sub Total		6,179,808	1,698,576	7,878,384
Maintenance of Timber Bridge (New)	m <sup>2</sup>	0.0	7,203	1,121	0	0	0
Maintenance of Concrete Bridge (New)	m <sup>2</sup>	0.0	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m <sup>2</sup>	98.0	7,217	2,404	707,266	235,592	942,858
Maintenance of Concrete Bridge (Exist)	m <sup>2</sup>	0.0	3,966	2,471	0	0	0

Earthwork & Pavement Unit Cost	(Rp/Km)	:	8,283,110
Timber Bridge Unit Cost	(Rp/m <sup>2</sup> )	:	
Concrete Bridge Unit Cost	(Rp/m <sup>2</sup> )	:	
Survived Value	(Rp)	:	4,136,433
Maintenance Rate without Bridge	(%)	:	1.93
New Bridge Cost Rate	(%)	:	



PROV : KALIMANTAN SELATAN KAB : TAPIN

LINK NO : 50 (IIIC) LENGTH : 6 Km

UPGRADE : 9.0m road bed, 4.0m road with surface Subbase Course (Rp)

ITEM	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Site Clearance in light Bush	m <sup>2</sup>	0.0	159	91	0	0	0
Subgrade Preparation	m <sup>2</sup>	54000.0	20	11	1,080,000	594,000	1,674,000
Normal Fill	m <sup>3</sup>	0.0	1,635	863	0	0	0
Fill in Swamp	m <sup>3</sup>	0.0	2,445	1,052	0	0	0
Normal Excavation to Spoil	m <sup>3</sup>	548.0	956	522	523,888	286,056	809,944
Sub Base Course	m <sup>3</sup>	3840.0	3,096	1,347	11,888,640	5,172,480	17,061,120
Base Course	m <sup>3</sup>	0.0	4,238	2,299	0	0	0
Shoulder	m <sup>2</sup>	30000.0	288	146	8,640,000	4,380,000	13,020,000
Asphalt Patching	m <sup>2</sup>	0.0	3,663	1,343	0	0	0
Surface Dressing (Single)	m <sup>2</sup>	0.0	594	552	0	0	0
Surface Dressing (Double)	m <sup>2</sup>	0.0	742	868	0	0	0
Earth Drain	m	0.0	909	119	0	0	0
Earth Drain in Swamp (by machine)	m <sup>3</sup>	0.0	1,165	474	0	0	0
Pipe Culvert Ø80cm	m	0.0	43,874	51,386	0	0	0
Masonry Culvert (80x80cm)	m	0.0	63,563	41,554	0	0	0
Retaining Wall and Wing Wall (Timber)	m <sup>2</sup>	0.0	10,244	246	0	0	0
Retaining Wall and Wing Wall (Masonry)	m <sup>3</sup>	0.0	47,464	11,868	0	0	0
Gabion Protection	m <sup>3</sup>	0.0	15,591	120	0	0	0
New Bridge (Timber)	SET	1.0	--	--	0	0	0
New Bridge (Concrete)	SET	1.0	--	--	0	0	0
			Sub Total		22,132,528	10,432,536	32,565,064
Overhead (15%)					3,319,879	1,564,880	4,884,759
			TOTAL COST		25,452,407	11,997,416	37,449,823

Manual routine maintenance of road	Km	6.0	148,684	7,248	892,104	43,488	935,592
Routine maintenance of gravel road	Km	6.0	184,800	88,047	1,108,800	528,282	1,637,082
			Sub Total		2,000,904	571,770	2,572,674
Maintenance of Timber Bridge (New)	m <sup>2</sup>	0.0	7,203	1,121	0	0	0
Maintenance of Concrete Bridge (New)	m <sup>2</sup>	0.0	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m <sup>2</sup>	20.0	7,217	2,404	144,340	48,080	192,420
Maintenance of Concrete Bridge (Exist)	m <sup>2</sup>	0.0	3,966	2,471	0	0	0

Earthwork & Pavement Unit Cost (Rp/Km)	:	6,241,637
Timber Bridge Unit Cost (Rp/m <sup>2</sup> )	:	
Concrete Bridge Unit Cost (Rp/m <sup>2</sup> )	:	
Survived Value (Rp)	:	6,824,448
Maintenance Rate without Bridge (%)	:	6.87
New Bridge Cost Rate (%)	:	

PROV : KALIMANTAN SELATAN KAB : TAPIN

LINK NO : 44 (IIIB-2) LENGTH : 2 Km

UPGRADE : 7.0m road bed, 4.0m road with surface Base Course

(Rp)

I T E M	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		TOTAL	
			LOCAL	FOREIGN	LOCAL	FOREIGN		
Site Clearance in Light Bush	m <sup>2</sup>	0.0	159	91	0	0	0	
Subgrade Preparation	m <sup>2</sup>	14000.0	20	11	280,000	154,000	434,000	
Normal Fill	m <sup>3</sup>	0.0	1,635	863	0	0	0	
Fill in Swamp	m <sup>3</sup>	0.0	2,445	1,052	0	0	0	
Normal Excavation to Spoil	m <sup>3</sup>	459.0	956	522	438,804	239,598	678,402	
Sub Base Course	m <sup>3</sup>	1120.0	3,096	1,347	3,467,520	1,508,640	4,976,160	
Base Course	m <sup>3</sup>	480.0	4,238	2,299	2,034,240	1,103,520	3,137,760	
Shoulder	m <sup>2</sup>	6000.0	288	146	1,728,000	876,000	2,604,000	
Asphalt Patching	m <sup>2</sup>	0.0	3,663	1,343	0	0	0	
Surface Dressing (Single)	m <sup>2</sup>	0.0	594	552	0	0	0	
Surface Dressing (Double)	m <sup>2</sup>	0.0	742	868	0	0	0	
Earth Drain	m	2000.0	909	119	1,818,000	238,000	2,056,000	
Earth Drain in Swamp (by machine)	m <sup>3</sup>	0.0	1,165	474	0	0	0	
Pipe Culvert D80cm	m	0.0	43,874	51,386	0	0	0	
Masonry Culvert (80x80cm)	m	0.0	63,563	41,554	0	0	0	
Retaining Wall and Wing Wall (Timber)	m <sup>2</sup>	450.0	10,244	246	4,609,800	110,700	4,720,500	
Retaining Wall and Wing Wall (Masonry)	m <sup>3</sup>	0.0	47,464	11,868	0	0	0	
Gabion Protection	m <sup>3</sup>	0.0	15,591	120	0	0	0	
New Bridge (Timber)	SET	1.0	--	--	8,254,571	898,467	9,153,038	
New Bridge (Concrete)	SET	1.0	--	--	0	0	0	
					Sub Total	22,630,935	5,128,925	27,759,860
Overhead ( 15% )						3,394,640	769,338	4,163,978
					TOTAL COST	26,025,575	5,898,263	31,923,838

Manual routine maintenance of road	Km	2.0	148,684	7,248	297,368	14,496	311,864
Routine maintenance of gravel road	Km	2.0	184,800	88,047	369,600	176,094	545,694
			Sub Total		666,968	190,590	857,558
Maintenance of Timber Bridge (New)	m <sup>2</sup>	90.0	7,203	1,121	648,270	100,890	749,160
Maintenance of Concrete Bridge (New)	m <sup>2</sup>	0.0	1,752	3,139	0	0	0
Maintenance of Timber Bridge (Exist)	m <sup>2</sup>	0.0	7,217	2,404	0	0	0
Maintenance of Concrete Bridge (Exist)	m <sup>2</sup>	0.0	3,966	2,471	0	0	0

Earthwork & Pavement	Unit Cost	(Rp/Km)	+	10,698,923
Timber Bridge	Unit Cost	(Rp/m <sup>2</sup> )	+	116,955
Concrete Bridge	Unit Cost	(Rp/m <sup>2</sup> )	+	
Survived Value		(Rp)	+	2,488,080
Maintenance Rate without Bridge		(%)	+	4.01
New Bridge Cost Rate		(%)	+	32.97

PROV : KALIMANTAN SELATAN KAB : TAPIN

LINK NO : 37 (ILIC) LENGTH : 11 Km

UPGRADE : 10.0m road bed, 4.0m road with surface Subbase Course

(Rp)

ITEM	UNIT	QUANTITY	UNIT COST		COST		TOTAL	
			LOCAL	FOREIGN	LOCAL	FOREIGN		
Site Clearance in light Bush	m2	0.0	159	91	0	0	0	
Subgrade Preparation	m2	20000.0	20,511	11	400,000	220,000	620,000	
Normal Fill	m3	0.0	1,635	863	0	0	0	
Fill in Swamp	m3	0.0	2,445	1,052	0	0	0	
Normal Excavation to Spoil	m3	100.0	956	522	95,600	52,200	147,800	
Sub Base Course	m3	1664.0	3,096	1,347	5,151,744	2,241,408	7,393,152	
Base Course	m3	2160.0	4,238	2,299	9,154,080	4,965,840	14,119,920	
Shoulder	m2	66000.0	288	146	19,008,000	9,636,000	28,644,000	
Asphalt Patching	m2	0.0	3,663	1,343	0	0	0	
Surface Dressing (Single)	m2	0.0	594	552	0	0	0	
Surface Dressing (Double)	m2	0.0	742	868	0	0	0	
Earth Drain	m	3000.0	909	119	2,727,000	357,000	3,084,000	
Earth Drain in Swamp (by machine)	m3	0.0	1,165	474	0	0	0	
Pipe Culvert D80cm	m	5.0	43,874	51,386	219,370	256,930	476,300	
Masonry Culvert (80x80cm)	m	0.0	63,563	41,554	0	0	0	
Retaining Wall and Wing Wall (Timber)	m2	0.0	10,244	246	0	0	0	
Retaining Wall and Wing Wall (Masonry)	m3	0.0	47,464	11,868	0	0	0	
Gabion Protection	m3	0.0	15,591	120	0	0	0	
New Bridge (Timber)	SET	1.0	--	--	0	0	0	
New Bridge (Concrete)	SET	1.0	--	--	0	0	0	
					Sub Total	36,755,794	17,729,378	54,485,172
Overhead ( 15% )						5,513,369	2,659,406	8,172,775
					TOTAL COST	42,269,163	20,388,784	62,657,947

Manual routine maintenance of road	Km	11.0	148,684	7,240	1,635,524	79,728	1,715,252
Routine maintenance of gravel road	Km	11.0	184,800	88,047	2,032,800	968,517	3,001,317
			Sub Total		3,668,324	1,048,245	4,716,569
Maintenance of Timber Bridge (New)	m2	0.0	7,203	1,121	0	0	0
Maintenance of Concrete Bridge (New)	m2	0.0	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m2	116.0	7,217	2,404	837,172	278,864	1,116,036
Maintenance of Concrete Bridge (Exist)	m2	0.0	3,966	2,471	0	0	0

Earthwork & Pavement Unit Cost (Rp/Km)	:	5,696,177
Timber Bridge Unit Cost (Rp/m2)	:	
Concrete Bridge Unit Cost (Rp/m2)	:	
Survived Value (Rp)	:	2,957,260
Maintenance Rate without Bridge (%)	:	7.53
New Bridge Cost Rate (%)	:	

PROV : KALIMANTAN SELATAN KAB : TAPIN

LINK NO : 31 (IIIB-1) LENGTH : 8 Km

UPGRADE : 7.0m road bed, 4.0m road with surface Dressing (1)

(Rp)

ITEM	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		TOTAL	
			LOCAL	FOREIGN	LOCAL	FOREIGN		
Site Clearance in Light Bush	m2	0,0	159	91	0	0	0	
Subgrade Preparation	m2	56000,0	20	11	1,120,000	616,000	1,736,000	
Normal Fill	m3	0,0	1,635	863	0	0	0	
Fill in Swamp	m3	0,0	2,445	1,052	0	0	0	
Normal Excavation to Spoil	m3	824,0	956	522	787,744	430,128	1,217,872	
Sub Base Course	m3	4480,0	3,096	1,347	13,870,080	6,034,560	19,904,640	
Base Course	m3	2240,0	4,238	2,299	9,493,120	5,149,760	14,642,880	
Shoulder	m2	24000,0	288	146	6,912,000	3,504,000	10,416,000	
Asphalt Patching	m2	0,0	3,663	1,343	0	0	0	
Surface Dressing (Single)	m2	32000,0	594	552	19,008,000	17,664,000	36,672,000	
Surface Dressing (Double)	m2	0,0	742	868	0	0	0	
Earth Drain	m	0,0	909	119	0	0	0	
Earth Drain in Swamp (by machine)	m3	0,0	1,165	474	0	0	0	
Pipe Culvert Ø80cm	m	0,0	43,874	51,386	0	0	0	
Masonry Culvert (80x80cm)	m	0,0	63,563	41,554	0	0	0	
Retaining Wall and Wing Wall (Timber)	m2	0,0	10,244	246	0	0	0	
Retaining Wall and Wing Wall (Masonry)	m3	0,0	47,464	11,868	0	0	0	
Gabion Protection	m3	0,0	15,591	120	0	0	0	
New Bridge (Timber)	SET	1,0	--	--	0	0	0	
New Bridge (Concrete)	SET	1,0	--	--	0	0	0	
					Sub Total	51,190,944	33,398,448	84,589,392
Overhead ( 15% )						7,678,641	5,009,767	12,688,408
					TOTAL COST	58,869,585	38,408,215	97,277,800

Manual routine maintenance of road	Km	8,0	148,684	7,248	1,189,472	57,984	1,247,456
Routine maintenance of asphalt road	Km	8,0	366,300	134,300	2,930,400	1,074,400	4,004,800
			Sub Total		4,119,872	1,132,384	5,252,256
Maintenance of Timber Bridge (New)	m2	0,0	7,203	1,121	0	0	0
Maintenance of Concrete Bridge (New)	m2	0,0	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m2	100,0	7,217	2,404	721,700	240,400	962,100
Maintenance of Concrete Bridge (Exist)	m2	0,0	3,966	2,471	0	0	0

Earthwork & Pavement	Unit Cost	(Rp/Km)	:	12,159,725
Timber Bridge	Unit Cost	(Rp/m2)	:	
Concrete Bridge	Unit Cost	(Rp/m2)	:	
Survived Value		(Rp)	:	16,861,824
Maintenance Rate without Bridge		(%)	:	5.40
New Bridge Cost Rate		(%)	:	

PROV : KALIMANTAN SELATAN KAB : TAPIN

LINK NO : 39 (IIIB-1) LENGTH : 10 Km

UPGRADE : 10.0m road bed, 4.0m road with surface Dressing (1)

(Rp)

ITEM	UNIT	QUANTITY	UNIT COST		COST		TOTAL	
			LOCAL	FOREIGN	LOCAL	FOREIGN		
Site Clearance in Light Bush	m <sup>2</sup>	0.0	159	91	0	0	0	
Subgrade, Preparation	m <sup>2</sup>	80000.0	20	11	1,600,000	880,000	2,480,000	
Normal Fill	m <sup>3</sup>	0.0	1,635	863	0	0	0	
Fill in Swamp	m <sup>3</sup>	0.0	2,445	1,052	0	0	0	
Normal Excavation to Spoil	m <sup>3</sup>	528.0	956	522	504,768	275,616	780,384	
Sub Base Course	m <sup>3</sup>	5173.0	3,096	1,347	16,015,608	6,968,031	22,983,639	
Base Course	m <sup>3</sup>	2800.0	4,238	2,299	11,866,400	6,437,200	18,303,600	
Shoulder	m <sup>2</sup>	60000.0	288	146	17,280,000	8,760,000	26,040,000	
Asphalt Patching	m <sup>2</sup>	0.0	3,663	1,343	0	0	0	
Surface Dressing (Single)	m <sup>2</sup>	40000.0	594	552	23,760,000	22,080,000	45,840,000	
Surface Dressing (Double)	m <sup>2</sup>	0.0	742	869	0	0	0	
Earth Drain	m	2900.0	909	119	2,636,100	345,100	2,981,200	
Earth Drain in Swamp (by machine)	m <sup>3</sup>	0.0	1,165	474	0	0	0	
Pipe Culvert Ø80cm	m	0.0	43,874	51,386	0	0	0	
Masonry Culvert 180x80cm	m	0.0	63,563	41,554	0	0	0	
Retaining Wall and Wing Wall (Timber)	m <sup>2</sup>	0.0	10,244	246	0	0	0	
Retaining Wall and Wing Wall (Masonry)	m <sup>3</sup>	0.0	47,464	11,868	0	0	0	
Gabion Protection	m <sup>3</sup>	0.0	15,591	120	0	0	0	
New Bridge (Timber)	SET	1.0	--	--	0	0	0	
New Bridge (Concrete)	SET	1.0	--	--	0	0	0	
			Sub Total		73,662,876	45,745,947	119,408,823	
Overhead ( 15% )					11,049,431	6,861,892	17,911,323	
					<b>TOTAL COST</b>	<b>84,712,307</b>	<b>52,607,839</b>	<b>137,320,146</b>

Manual routine maintenance of road	Km	10.0	148,684	7,248	1,486,840	72,480	1,559,320
Routine maintenance of asphalt road	Km	10.0	366,300	134,300	3,663,000	1,343,000	5,006,000
			Sub Total		5,149,840	1,415,480	6,565,320
Maintenance of Timber Bridge (New)	m <sup>2</sup>	0.0	7,203	1,121	0	0	0
Maintenance of Concrete Bridge (New)	m <sup>2</sup>	0.0	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m <sup>2</sup>	0.0	7,217	2,404	0	0	0
Maintenance of Concrete Bridge (Exist)	m <sup>2</sup>	0.0	3,966	2,471	0	0	0

Earthwork & Pavement	Unit Cost	(Rp/Km)	:	13,732,015
Timber Bridge	Unit Cost	(Rp/m <sup>2</sup> )	:	
Concrete Bridge	Unit Cost	(Rp/m <sup>2</sup> )	:	
Survived Value		(Rp)	:	19,749,267
Maintenance Rate without Bridge		(%)	:	4.78
New Bridge Cost Rate		(%)	:	

PROV : KALIMANTAN SELATAN KAB : TAPIN

LINK NO : 28 (IIC) LENGTH : 3 Km

UPGRADE : 6.0m road bed, 3.0m road with surface Subbase Course

(Rp)

ITEM	UNIT	QUANTITY	UNIT COST		COST		TOTAL	
			LOCAL	FOREIGN	LOCAL	FOREIGN		
Site Clearance in Light Bush	m2	4000.0	157	91	636,000	364,000	1,000,000	
Subgrade Preparation	m2	18000.0	20	11	360,000	198,000	558,000	
Normal Fill	m3	0.0	1,635	863	0	0	0	
Fill in Swamp	m3	742.5	2,445	1,052	1,815,412	781,110	2,596,522	
Normal Excavation to Spoil	m3	1780.0	956	522	1,701,680	929,160	2,630,840	
Sub Base Course	m3	1440.0	3,096	1,347	4,458,240	1,939,680	6,397,920	
Base Course	m3	0.0	4,238	2,299	0	0	0	
Shoulder	m2	9000.0	288	146	2,592,000	1,314,000	3,906,000	
Asphalt Patching	m2	0.0	3,663	1,343	0	0	0	
Surface Dressing (Single)	m2	0.0	594	552	0	0	0	
Surface Dressing (Double)	m2	0.0	742	868	0	0	0	
Earth Drain	m	2000.0	909	119	1,818,000	238,000	2,056,000	
Earth Drain in Swamp (by machine)	m3	3300.0	1,165	474	3,844,500	1,564,200	5,408,700	
Pipe Culvert Ø80cm	m	2.0	43,874	51,386	87,748	102,772	190,520	
Masonry Culvert (80x80cm)	m	0.0	63,563	41,554	0	0	0	
Retaining Wall and Wing Wall (Timber)	m2	0.0	10,244	246	0	0	0	
Retaining Wall and Wing Wall (Masonry)	m3	0.0	47,464	11,868	0	0	0	
Gabion Protection	m3	0.0	15,591	120	0	0	0	
New Bridge (Timber)	SET	1.0	--	--	0	0	0	
New Bridge (Concrete)	SET	1.0	--	--	0	0	0	
					Sub Total	17,313,580	7,430,922	24,744,502
Overhead (15%)						2,597,037	1,114,638	3,711,675
					TOTAL COST	19,910,617	8,545,560	28,456,177

Manual routine maintenance of road	Ka	3.0	148,684	7,248	446,052	21,744	467,796
Routine maintenance of gravel road	Ka	3.0	184,800	88,047	534,400	264,141	818,541
			Sub Total		1,000,452	285,885	1,286,337
Maintenance of Timber Bridge (New)	m2	0.0	7,203	1,121	0	0	0
Maintenance of Concrete Bridge (New)	m2	0.0	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m2	22.0	7,217	2,404	158,774	52,888	211,662
Maintenance of Concrete Bridge (Exist)	m2	0.0	3,966	2,471	0	0	0

Earthwork & Pavement Unit Cost (Rp/Km)	?	9,485,392
Timber Bridge Unit Cost (Rp/m2)	?	
Concrete Bridge Unit Cost (Rp/m2)	?	
Survived Value (Rp)	?	2,559,168
Maintenance Rate without Bridge (%)	?	4.52
New Bridge Cost Rate (%)	?	

PROV : KALIMANTAN SELATAN KAB : TAPIN

LINK NO : 27 (IIB-2) LENGTH : 7 Km

UPGRADE : 7.0m road bed, 3.5m road with surface Base Course

(Rp)

ITEM	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Site Clearance in Light Bush	m <sup>2</sup>	0.0	159	91	0	0	0
Subgrade Preparation	m <sup>2</sup>	202.5	20	11	4,050	2,227	6,277
Normal Fill	m <sup>3</sup>	0.0	1,635	863	0	0	0
Fill in Swamp	m <sup>3</sup>	5.2	2,445	1,052	12,714	5,470	18,184
Normal Excavation to Spoil	m <sup>3</sup>	215.0	956	522	205,540	112,230	317,770
Sub Base Course	m <sup>3</sup>	152.0	3,096	1,347	470,592	204,744	675,336
Base Course	m <sup>3</sup>	0.0	4,238	2,299	0	0	0
Shoulder	m <sup>2</sup>	24500.0	288	146	7,056,000	3,577,000	10,633,000
Asphalt Patching	m <sup>2</sup>	1047.0	3,663	1,343	3,835,161	1,406,121	5,241,282
Surface Dressing (Single)	m <sup>2</sup>	0.0	594	552	0	0	0
Surface Dressing (Double)	m <sup>2</sup>	0.0	742	868	0	0	0
Earth Drain	m	800.0	909	119	727,200	95,200	822,400
Earth Drain in Swamp (by machine)	m <sup>3</sup>	150.0	1,165	474	174,750	71,100	245,850
Pipe Culvert 80x80cm	m	0.0	43,874	51,386	0	0	0
Masonry Culvert 180x80cm	m	0.0	63,563	41,554	0	0	0
Retaining Wall and Wing Wall (Timber)	m <sup>2</sup>	75.0	10,244	246	768,300	18,450	786,750
Retaining Wall and Wing Wall (Masonry)	m <sup>3</sup>	0.0	47,464	11,868	0	0	0
Gabion Protection	m <sup>3</sup>	0.0	15,591	120	0	0	0
New Bridge (Timber)	SET	1.0	--	--	0	0	0
New Bridge (Concrete)	SET	1.0	--	--	0	0	0
			Sub Total		13,254,307	5,492,542	18,746,849
Overhead (15%)					1,988,146	823,881	2,812,027
			TOTAL COST		15,242,453	6,316,423	21,558,876

Manual routine maintenance of road	Km	7.0	148,684	7,248	1,040,788	50,736	1,091,524
Routine maintenance of gravel road	Km	7.0	184,800	88,047	1,293,600	616,329	1,909,929
			Sub Total		2,334,388	667,065	3,001,453
Maintenance of Timber Bridge (New)	m <sup>2</sup>	0.0	7,203	1,121	0	0	0
Maintenance of Concrete Bridge (New)	m <sup>2</sup>	0.0	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m <sup>2</sup>	184.0	7,217	2,404	1,327,928	442,336	1,770,264
Maintenance of Concrete Bridge (Exist)	m <sup>2</sup>	0.0	3,966	2,471	0	0	0

Earthwork & Pavement	Unit Cost (Rp/Km)	:	3,079,839
Timber Bridge	Unit Cost (Rp/m <sup>2</sup> )	:	
Concrete Bridge	Unit Cost (Rp/m <sup>2</sup> )	:	
Survived Value	(Rp)	:	337,668
Maintenance Rate without Bridge	(%)	:	13.92
New Bridge Cost Rate	(%)	:	

PROV : KALIMANTAN SELATAN KAB : TAPIN

LINK NO : 53 (IIC) LENGTH : 18 Km

UPGRADE : 6.0m road bed, 4.0m road with surface Subbase Course

(Rp)

ITEM	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		TOTAL	
			LOCAL	FOREIGN	LOCAL	FOREIGN		
Site Clearance in Light Bush	m <sup>2</sup>	72000.0	159	91	11,448,000	6,552,000	18,000,000	
Subgrade Preparation	m <sup>2</sup>	108000.0	20	11	2,160,000	1,188,000	3,348,000	
Normal Fill	m <sup>3</sup>	0.0	1,635	863	0	0	0	
Fill in Swamp	m <sup>3</sup>	0.0	2,445	1,052	0	0	0	
Normal Excavation to Spoil	m <sup>3</sup>	1440.0	956	522	1,376,640	751,680	2,128,320	
Sub Base Course	m <sup>3</sup>	11520.0	3,096	1,347	35,665,920	13,517,440	51,183,360	
Base Course	m <sup>3</sup>	0.0	4,238	2,299	0	0	0	
Shoulder	m <sup>2</sup>	36000.0	288	146	10,368,000	5,256,000	15,624,000	
Asphalt Patching	m <sup>2</sup>	0.0	3,663	1,343	0	0	0	
Surface Dressing (Single)	m <sup>2</sup>	0.0	594	552	0	0	0	
Surface Dressing (Double)	m <sup>2</sup>	0.0	742	868	0	0	0	
Earth Drain	m	35640.0	909	119	32,396,760	4,241,160	36,637,920	
Earth Drain in Swamp (by machine)	m <sup>3</sup>	0.0	1,165	474	0	0	0	
Pipe Culvert 80x80cm	m	204.0	43,874	51,386	8,950,296	10,482,744	19,433,040	
Masonry Culvert (80x80cm)	m	0.0	63,563	41,554	0	0	0	
Retaining Wall and Wing Wall (Timber)	m <sup>2</sup>	0.0	10,244	246	0	0	0	
Retaining Wall and Wing Wall (Masonry)	m <sup>3</sup>	57.6	47,464	11,868	2,733,926	683,596	3,417,522	
Gabion Protection	m <sup>3</sup>	0.0	15,591	120	0	0	0	
New Bridge (Timber)	SET	1.0	--	--	9,974,756	1,659,421	11,634,177	
New Bridge (Concrete)	SET	1.0	--	--	0	0	0	
					Sub Total	115,074,298	45,732,041	160,806,339
Overhead ( 15% )						17,261,144	6,859,806	24,120,950
					TOTAL COST	132,335,442	52,591,847	184,927,289

Manual routine maintenance of road	Km	18.0	148,684	7,248	2,676,312	130,464	2,806,776
Routine maintenance of gravel road	Km	18.0	184,800	88,047	3,326,400	1,584,846	4,911,246
			Sub Total		6,002,712	1,715,310	7,718,022
Maintenance of Timber Bridge (New)	m <sup>2</sup>	112.0	7,203	1,121	806,736	125,552	932,288
Maintenance of Concrete Bridge (New)	m <sup>2</sup>	0.0	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m <sup>2</sup>	0.0	7,217	2,404	0	0	0
Maintenance of Concrete Bridge (Exist)	m <sup>2</sup>	0.0	3,966	2,471	0	0	0

Earthwork & Pavement Unit Cost (Rp/Km)	:	9,568,777
Timber Bridge Unit Cost (Rp/m <sup>2</sup> )	:	113,297
Concrete Bridge Unit Cost (Rp/m <sup>2</sup> )	:	
Survived Value (Rp)	:	20,473,344
Maintenance Rate without Bridge (%)	:	4.48
New Bridge Cost Rate (%)	:	6.86



PROV : KALIMANTAN SELATAN KAB : TAPIN

LINK NO : 3 (IIIB-1) LENGTH : 4 Km

UPGRADE : 6.0m road bed, 3.5m road with surface Dressing (1)

(Rp)

ITEM	UNIT	QUANTITY	UNIT COST		COST		TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Site Clearance in Light Bush	m <sup>2</sup>	0.0	159	91	0	0	0
Subgrade Preparation	m <sup>2</sup>	0.0	20	11	0	0	0
Normal Fill	m <sup>3</sup>	0.0	1,635	863	0	0	0
Fill in Swamp	m <sup>3</sup>	0.0	2,445	1,052	0	0	0
Normal Excavation to Spoil	m <sup>3</sup>	0.0	956	522	0	0	0
Sub Base Course	m <sup>3</sup>	463.8	3,096	1,347	1,435,924	624,738	2,060,662
Base Course	m <sup>3</sup>	735.0	4,238	2,299	3,114,930	1,689,765	4,804,695
Shoulder	m <sup>2</sup>	10000.0	288	146	2,880,000	1,460,000	4,340,000
Asphalt Patching	m <sup>2</sup>	140.0	3,663	1,343	512,820	188,020	700,840
Surface Dressing (Single)	m <sup>2</sup>	14000.0	594	552	8,316,000	7,728,000	16,044,000
Surface Dressing (Double)	m <sup>2</sup>	0.0	732	868	0	0	0
Earth Drain	m	0.0	909	119	0	0	0
Earth Drain in Swamp (by machine)	m <sup>3</sup>	0.0	1,165	474	0	0	0
Pipe Culvert 80cm	m	0.0	43,874	51,386	0	0	0
Masonry Culvert (80x80cm)	m	0.0	63,563	41,554	0	0	0
Retaining Wall and Wing Wall (Timber)	m <sup>2</sup>	0.0	10,244	246	0	0	0
Retaining Wall and Wing Wall (Masonry)	m <sup>3</sup>	0.0	47,464	11,868	0	0	0
Gabion Protection	m <sup>3</sup>	0.0	15,591	120	0	0	0
New Bridge (Timber)	SET	1.0	---	---	0	0	0
New Bridge (Concrete)	SET	1.0	---	---	0	0	0
			Sub Total		16,259,674	11,690,523	27,950,197
Overhead ( 15% )					2,438,951	1,753,578	4,192,529
			TOTAL COST		18,698,625	13,444,101	32,142,726

Manual routine maintenance of road	Km	4.0	148,684	7,248	594,736	28,992	623,728
Routine maintenance of asphalt road	Km	4.0	366,300	134,300	1,465,200	537,200	2,002,400
			Sub Total		2,059,936	566,192	2,626,128
Maintenance of Timber Bridge (New)	m <sup>2</sup>	0.0	7,203	1,121	0	0	0
Maintenance of Concrete Bridge (New)	m <sup>2</sup>	0.0	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m <sup>2</sup>	54.0	7,217	2,404	389,718	129,816	519,534
Maintenance of Concrete Bridge (Exist)	m <sup>2</sup>	0.0	3,966	2,471	0	0	0

Earthwork & Pavement	Unit Cost	(Rp/Km)	:	8,035,682
Timber Bridge	Unit Cost	(Rp/m <sup>2</sup> )	:	
Concrete Bridge	Unit Cost	(Rp/m <sup>2</sup> )	:	
Survived Value		(Rp)	:	2,403,402
Maintenance Rate without Bridge		(%)	:	8.17
New Bridge Cost Rate		(%)	:	

## Appendix A-4

CONSTRUCTION AND MAINTENANCE QUANTITIES  
FOR ALL PROPOSED ROAD LINKS  
(CONSTRUCTION)

PROV : KALIMANTAN SELATAN      KAB : TAPIN

ITEM	UNIT	< 1988 >	< 1989 >	< 1990 >	< 1991 >	< 1992 >	< TOTAL >
<b>EQUIPMENT :</b>							
Bulldozer/Ripper	hr	239.3	462.9	684.2	816.2	762.2	2984.8
Swamp Bulldozer	hr	0.0	19.6	31.1	0.0	47.9	98.6
Motor Grader	hr	794.6	674.1	1025.7	1629.1	1518.0	5641.5
Hand-guide Vib. Roller	hr	0.0	445.0	414.7	220.2	28.9	1108.8
Tire Roller	hr	266.6	819.9	529.9	599.9	541.6	2757.9
Vibratory Roller (D&T)	hr	647.1	491.8	802.3	1237.5	1126.9	4305.6
Hydraulic Excavator; Wheel	hr	0.0	304.2	236.2	0.0	607.5	1147.9
Wheel Loader	hr	797.9	956.8	1375.7	1920.5	1700.5	6751.4
Water Tank Truck	hr	381.7	210.3	404.5	669.0	535.7	2201.2
Dump Truck	hr	6168.5	7818.7	11732.7	15620.1	13348.3	54688.3
Flat Bed Truck with Crane	hr	0.0	220.3	195.3	154.3	22.0	591.9
Flat Bed Truck	hr	320.0	1001.5	687.2	771.2	658.6	3438.5
Portable Crusher/Screening	hr	108.0	172.3	164.8	285.0	270.3	1000.4
Concrete Mixer	hr	0.0	0.0	34.6	34.6	6.1	75.3
Water Pump	hr	0.0	0.0	28.9	28.9	5.4	63.2
Concrete Vibrator	hr	0.0	0.0	17.4	17.4	4.2	39.0
Asphalt Sprayer	hr	266.6	819.9	529.9	599.9	541.6	2757.9
<b>LABOUR :</b>							
Mandur	man day	355.5	996.4	1258.8	1364.6	963.1	4938.4
Skilled Labourer	man day	160.0	2666.7	1403.7	964.4	346.3	5541.1
Carpenter	man day	0.0	1082.9	474.0	268.6	1.4	1826.9
Mason	man day	0.0	0.0	28.8	28.8	3.2	60.8
Labourer	man day	2731.3	8229.9	13808.4	15015.8	9218.5	49003.9
Driver	man day	1203.0	1740.9	2339.7	3059.8	2564.1	10907.5
Operator	man day	658.3	898.7	1172.0	1587.0	1549.1	5865.1
<b>MATERIAL :</b>							
Bitumen	l	54666.6	170850.5	110804.5	123649.9	111095.6	571067.1
Asphalt Oil	l	10933.3	33620.0	21730.0	24600.0	22208.3	113091.6
Kerosene	l	13066.6	40485.5	26209.3	29472.1	26547.6	135781.1
Sand	m <sup>3</sup>	160.0	542.9	452.8	466.9	348.0	1970.6
Cement	bag	0.0	0.0	265.9	265.9	63.7	595.5
River Stone	m <sup>3</sup>	0.0	0.0	28.8	28.8	3.2	60.8
Steel Moulds	set	0.0	0.0	102.0	102.0	25.0	229.0
Tiebar	m <sup>3</sup>	0.0	130.2	52.5	23.8	0.0	206.5
Paint	l	0.0	247.9	148.1	148.1	0.0	544.1
Reinforcing Steel	kg	0.0	0.0	3253.8	3253.8	797.5	7305.1
Tying Wire	kg	0.0	0.0	29.5	29.5	7.2	66.2
Equivalent Royalty	m <sup>3</sup>	13044.9	10192.4	15952.1	24786.8	19726.7	83702.9

CONSTRUCTION AND MAINTENANCE QUANTITIES  
FOR ALL PROPOSED ROAD LINKS  
(MAINTENANCE)

PROV : KALIMANTAN SELATAN      KAB : TAPIN

-----  
I T E M                      UNIT    < 1988 >    < 1989 >    < 1990 >    < 1991 >    < 1992 >    < TOTAL >  
-----

EQUIPMENT :

Bulldozer/Ripper	hr	0.0	0.0	0.0	0.0	0.0	0.0
Swamp Bulldozer	hr	0.0	0.0	0.0	0.0	0.0	0.0
Motor Grader	hr	236.5	471.1	470.3	470.4	543.0	2191.3
Hand-guide Vib. Roller	hr	540.0	1055.2	1176.0	1256.2	1447.5	5474.9
Tire Roller	hr	236.5	471.1	470.3	470.4	543.0	2191.3
Vibratory Roller (D&T)	hr	0.0	0.0	0.0	0.0	0.0	0.0
Hydraulic Excavator; Wheel	hr	0.0	0.0	0.0	0.0	0.0	0.0
Wheel Loader	hr	100.6	205.0	217.7	229.2	281.0	1033.5
Water Tank Truck	hr	0.0	0.0	0.0	0.0	0.0	0.0
Dump Truck	hr	1683.6	3339.3	3656.9	3886.7	4579.2	17145.7
Flat Bed Truck with Crane	hr	1319.2	2524.2	2555.1	2863.2	2982.6	12244.3
Flat Bed Truck	hr	1322.5	2612.5	2703.0	2762.5	3171.1	12571.6
Portable Crusher/Screening	hr	51.3	104.5	111.0	116.9	143.1	526.8
Concrete Mixer	hr	0.2	0.2	0.3	0.4	0.4	1.5
Water Pump	hr	0.2	0.2	0.3	0.4	0.4	1.5
Concrete Vibrator	hr	0.2	0.2	0.3	0.4	0.4	1.5
Asphalt Sprayer	hr	0.0	0.0	0.0	0.0	0.0	0.0

LABOUR :

Handur	man day	646.0	1271.4	1344.4	1410.8	1605.0	6277.6
Skilled Labourer	man day	710.2	1383.5	1466.3	1650.5	1761.2	6971.7
Carpenter	man day	187.8	364.9	366.0	436.1	427.1	1781.9
Mason	man day	0.0	0.0	0.0	0.0	0.0	0.0
Labourer	man day	7356.3	14479.3	15359.2	15996.5	18344.8	71536.1
Driver	man day	782.0	1530.0	1604.4	1720.8	1927.0	7564.2
Operator	man day	112.7	226.2	230.3	234.3	275.9	1079.4

MATERIAL :

Bitumen	l	4860.0	9497.2	10584.0	11306.2	13027.5	49274.9
Asphalt Oil	l	0.0	0.0	0.0	0.0	0.0	0.0
Kerosene	l	540.0	1055.2	1176.0	1256.2	1447.5	5474.9
Sand	m <sup>3</sup>	90.2	176.0	196.3	209.7	241.6	913.8
Cement	bag	3.2	4.2	5.5	6.5	6.5	25.9
River Stone	m <sup>3</sup>	0.0	0.0	0.0	0.0	0.0	0.0
Steel Moulds	set	0.0	0.0	0.0	0.0	0.0	0.0
Timber	m <sup>3</sup>	17.0	33.1	33.1	39.5	38.7	161.4
Paint	l	121.3	235.9	236.4	281.7	275.9	1151.2
Reinforcing Steel	kg	16.7	21.7	28.4	33.4	33.4	133.6
Tying Wire	kg	0.1	0.1	0.2	0.3	0.3	1.0
Equivalent Royalty	m <sup>3</sup>	1426.8	2903.7	3084.0	3247.7	3980.1	14642.3

CONSTRUCTION AND MAINTENANCE QUANTITIES  
FOR ALL PROPOSED ROAD LINKS  
(TOTAL)

PROV : KALIMANTAN SELATAN      KAB : TAPIN

ITEM	UNIT	< 1988 >	< 1989 >	< 1990 >	< 1991 >	< 1992 >	< TOTAL >
<b>EQUIPMENT :</b>							
Bulldozer/Ripper	hr	259.3	462.9	684.2	816.2	762.2	2984.8
Swamp Bulldozer	hr	0.0	19.6	31.1	0.0	47.9	98.6
Motor Grader	hr	1031.1	1145.2	1496.0	2099.5	2061.0	7832.8
Hand-guide Vib. Roller	hr	540.0	1500.2	1590.7	1476.4	1476.4	6583.7
Tire Roller	hr	503.1	1291.0	1000.2	1070.3	1084.6	4949.2
Vibratory Roller (D&T)	hr	647.1	491.8	802.3	1237.5	1126.9	4305.6
Hydraulic Excavator; Wheel	hr	0.0	304.2	236.2	0.0	607.5	1147.9
Wheel Loader	hr	998.5	1161.8	1593.4	2149.7	1981.5	7784.9
Water Tank Truck	hr	381.7	210.3	404.5	669.0	535.7	2201.2
Dump Truck	hr	7852.1	11158.0	15389.6	19506.8	17927.5	71834.0
Flat Bed Truck with Crane	hr	1319.2	2744.5	2750.4	3017.5	3004.6	12836.2
Flat Bed Truck	hr	1642.5	3614.0	3390.2	3533.7	3829.7	16010.1
Portable Crusher/Screening	hr	159.3	276.8	275.8	401.9	413.4	1527.2
Concrete Mixer	hr	0.2	0.2	34.9	35.0	6.5	76.8
Water Pump	hr	0.2	0.2	29.2	29.3	5.8	64.7
Concrete Vibrator	hr	0.2	0.2	17.7	17.8	4.6	40.5
Asphalt Sprayer	hr	266.6	819.9	529.9	599.9	541.6	2757.9
<b>LABOUR :</b>							
Handur	man day	1001.5	2267.8	2603.2	2775.4	2568.1	11216.0
Skilled Labourer	man day	870.2	4050.2	2870.0	2614.9	2107.5	12512.8
Carpenter	man day	187.8	1447.8	840.0	704.7	428.5	3608.8
Mason	man day	0.0	0.0	28.8	28.8	3.2	60.8
Labourer	man day	10087.6	22709.2	29167.6	31012.3	27563.3	120540.0
Driver	man day	1985.0	3270.9	3944.1	4780.6	4491.1	18471.7
Operator	man day	771.0	1124.9	1402.3	1821.3	1825.0	6944.5
<b>MATERIAL :</b>							
Bitumen	l	59526.6	180347.7	121388.5	134956.1	124123.1	620342.0
Asphalt Oil	l	10933.3	33620.0	21730.0	24600.0	22208.3	113091.6
Kerosene	l	13606.6	41540.7	27385.3	30728.3	27995.1	141256.0
Sand	m <sup>3</sup>	250.2	718.9	649.1	676.6	589.6	2884.4
Cement	bag	3.2	4.2	271.4	272.4	70.2	621.4
River Stone	m <sup>3</sup>	0.0	0.0	28.8	28.8	3.2	60.8
Steel Moulds	set	0.0	0.0	102.0	102.0	25.0	229.0
Timber	m <sup>3</sup>	17.0	163.3	85.6	63.3	38.7	367.9
Paint	l	121.3	483.8	384.5	429.8	275.9	1695.3
Reinforcing Steel	kg	16.7	21.7	3282.2	3287.2	830.9	7438.7
Tying Wire	kg	0.1	0.1	29.7	29.8	7.5	67.2
Equivalent Royalty	m <sup>3</sup>	14471.7	13096.1	19036.1	28034.5	23906.8	98545.2

## Appendix A-5

CONSTRUCTION AND MAINTENANCE COSTS  
FOR ALL PROPOSED ROAD LINKS  
(CONSTRUCTION)

PRDV : KALIMANTAN SELATAN      KAB : TAPIN

( 1000 Rp )

ITEM	UNIT	< 1988 >	< 1989 >	< 1990 >	< 1991 >	< 1992 >	< TOTAL >
<b>EQUIPMENT :</b>		74,313	102,851	135,480	181,021	167,173	660,838
Bulldozer/Ripper	15146	4,005	7,149	10,568	12,607	11,772	46,101
Swamp Bulldozer	11326	0	221	352	0	542	1,115
Motor Grader	13198	10,487	8,896	13,537	21,500	20,034	74,454
Hand-guide Vib. Roller	1529	0	680	634	336	44	1,694
Tire Roller	10392	2,770	8,520	5,506	6,234	5,628	28,658
Vibratory Roller (O&T)	6602	4,272	3,246	5,296	8,169	7,439	28,422
Hydraulic Excavator; Wheel	12316	0	3,746	2,909	0	7,481	14,136
Wheel Loader	16368	13,060	15,660	22,517	31,434	27,833	110,504
Water Tank Truck	3776	1,441	794	1,527	2,526	2,022	8,310
Dump Truck	5209	32,131	40,727	61,115	81,365	69,531	284,869
Flat Bed Truck with Crane	4860	0	1,070	949	749	106	2,874
Flat Bed Truck	3161	1,011	3,165	2,172	2,437	2,081	10,866
Portable Crusher/Screening	42658	4,607	7,349	7,030	12,157	11,530	42,673
Concrete Mixer	8630	0	0	298	298	52	648
Water Pump	459	0	0	13	13	2	28
Concrete Vibrator	294	0	0	5	5	1	11
Asphalt Sprayer	1986	529	1,628	1,052	1,191	1,075	5,475
<b>LABOUR :</b>		13,170	38,449	48,241	53,027	36,093	188,980
Handur	3000	1,066	2,989	3,776	4,093	2,889	14,813
Skilled Labourer	2500	400	6,666	3,509	2,411	865	13,851
Carpenter	3250	0	3,519	1,540	872	4	5,935
Mason	3250	0	0	93	93	10	196
Labourer	2000	5,462	16,459	27,616	30,031	18,437	98,005
Driver	3000	3,609	5,222	7,019	9,179	7,692	32,721
Operator	4000	2,633	3,594	4,688	6,348	6,196	23,459
<b>MATERIAL :</b>		29,933	96,664	68,550	74,883	60,634	330,664
Bitumen	275	15,033	46,983	30,471	34,003	30,551	157,041
Asphalt Oil	700	7,653	23,534	15,211	17,220	15,545	79,163
Kerosene	250	3,266	10,121	6,552	7,368	6,636	33,943
Sand	4500	720	2,443	2,037	2,101	1,566	8,867
Cement	5000	0	0	1,329	1,329	318	2,976
River Stone	10000	0	0	288	288	32	608
Steel Moulds	8000	0	0	816	816	200	1,832
Timber	80000	0	10,416	4,200	1,904	0	16,520
Paint	2500	0	619	370	370	0	1,359
Reinforcing Steel	1000	0	0	3,253	3,253	797	7,303
Tying Wire	1200	0	0	35	35	8	78
Equivalent Royalty	250	3,261	2,548	3,988	6,196	4,981	20,974

CONSTRUCTION AND MAINTENANCE COSTS  
FOR ALL PROPOSED ROAD LINKS  
(MAINTENANCE)

PROV : KALIMANTAN SELATAN

KAB : HULU SUNGAI SELATAN

( 1000 Rp )

ITEM	UNIT	< 1988 >	< 1989 >	< 1990 >	< 1991 >	< 1992 >	< TOTAL >
<b>EQUIPMENT :</b>		47,217	97,082	99,347	104,299	0	347,945
Bulldozer/Ripper	16224	0	0	0	0	0	0
Swamp Bulldozer	11917	0	0	0	0	0	0
Motor Grader	13810	7,226	14,424	13,492	13,706	0	48,848
Hand-guide Vib. Roller	1574	318	779	1,204	1,440	0	3,741
Tire Roller	11208	5,865	11,706	10,950	11,123	0	39,644
Vibratory Roller (D&T)	6879	0	0	0	0	0	0
Hydraulic Excavator; Wheel	13051	0	0	0	0	0	0
Wheel Loader	16964	3,087	6,281	6,341	6,836	0	22,545
Water Tank Truck	4106	0	0	0	0	0	0
Dump Truck	5569	8,339	17,887	21,010	23,652	0	70,888
Flat Bed Truck with Crane	5190	10,981	22,825	23,198	23,155	0	80,159
Flat Bed Truck	3491	7,325	14,873	14,742	15,320	0	52,260
Portable Crusher/Screening	44642	4,075	8,303	8,406	9,066	0	29,850
Concrete Mixer	8675	1	4	4	1	0	10
Water Pump	489	0	0	0	0	0	0
Concrete Vibrator	324	0	0	0	0	0	0
Asphalt Sprayer	2031	0	0	0	0	0	0
<b>LABOUR :</b>		22,504	46,795	49,585	52,668	0	171,552
Handur	2000	1,575	3,268	3,453	3,672	0	11,968
Skilled Labourer	2250	1,580	3,400	3,850	4,114	0	12,944
Carpenter	2500	761	1,584	1,611	1,635	0	5,591
Mason	2500	0	0	0	0	0	0
Labourer	1750	15,256	31,666	33,601	35,869	0	116,392
Driver	2500	2,627	5,461	5,717	5,981	0	19,786
Operator	3000	705	1,416	1,353	1,397	0	4,871
<b>MATERIAL :</b>		4,203	9,094	10,583	11,503	0	35,383
Bitumen	450	820	2,004	3,098	3,705	0	9,627
Asphalt Oil	800	0	0	0	0	0	0
Kerosene	250	50	123	191	228	0	592
Sand	5000	169	415	640	763	0	1,987
Cement	4350	17	35	35	17	0	104
River Stone	7750	0	0	0	0	0	0
Steel Moulds	8000	0	0	0	0	0	0
Timber	75000	2,070	4,305	4,380	4,455	0	15,210
Paint	2100	413	860	874	888	0	3,035
Reinforcing Steel	1000	20	41	41	20	0	122
Tying Wire	1200	0	0	0	0	0	0
Equivalent Royalty	250	644	1,311	1,324	1,427	0	4,706

CONSTRUCTION AND MAINTENANCE COSTS  
FOR ALL PROPOSED ROAD LINKS  
(TOTAL)

PROV : KALIMANTAN BELATAN      KAB : TAPIN

( 1000 Rp )

ITEM	UNIT	< 1988 >	< 1989 >	< 1990 >	< 1991 >	< 1992 >	< TOTAL >
<b>EQUIPMENT :</b>		103,911	161,308	196,681	245,669	241,271	948,840
Bulldozer/Ripper	15446	4,005	7,149	10,568	12,607	11,772	46,101
Swamp Bulldozer	11326	0	221	352	0	542	1,115
Motor Grader	13198	13,608	15,113	19,744	27,708	27,200	103,373
Hand-guide Vib. Roller	1529	825	2,293	2,432	2,256	2,257	10,063
Tire Roller	10392	5,227	13,415	10,393	11,122	11,270	51,427
Vibratory Roller (D&T)	6602	4,272	3,246	5,296	8,169	7,439	28,422
Hydraulic Excavator; Wheel	12316	0	3,746	2,909	0	7,481	14,136
Wheel Loader	16368	14,706	19,015	26,080	35,185	32,432	127,418
Water Tank Truck	3776	1,441	794	1,527	2,526	2,022	8,310
Dump Truck	5209	40,900	58,121	80,163	101,610	93,384	374,178
Flat Bed Truck with Crane	4860	6,411	13,337	13,366	14,664	14,601	62,379
Flat Bed Truck	3161	5,191	11,423	10,716	11,169	12,104	50,603
Portable Crusher/Screening	42658	6,795	11,806	11,765	17,143	17,634	65,143
Concrete Mixer	8630	1	1	300	301	55	658
Water Pump	459	0	0	13	13	2	28
Concrete Vibrator	294	0	0	5	5	1	11
Asphalt Sprayer	1986	529	1,628	1,052	1,191	1,075	5,475
<b>LABOUR :</b>		35,001	81,358	93,580	100,894	90,272	401,105
Mandur	3000	3,004	6,803	7,809	8,325	7,704	33,645
Skilled Labourer	2500	2,175	10,124	7,174	6,537	5,268	31,278
Carpenter	3250	610	4,704	2,729	2,289	1,392	11,724
Mason	3250	0	0	93	93	10	196
Labourer	2000	20,174	45,417	58,334	62,024	55,126	241,075
Driver	3000	5,955	9,812	11,832	14,341	13,473	55,413
Operator	4000	3,083	4,498	5,609	7,285	7,299	27,774
<b>MATERIAL :</b>		33,860	104,334	76,702	83,989	70,509	369,394
Bitumen	275	16,369	49,594	33,381	37,112	34,133	170,589
Asphalt Oil	700	7,653	23,534	15,211	17,220	15,545	79,163
Kerosene	250	3,401	10,384	6,846	7,682	6,997	35,310
Sand	4500	1,125	3,235	2,920	3,044	2,653	12,977
Cement	5000	16	21	1,356	1,361	350	3,104
River Stone	10000	0	0	288	288	32	608
Steel Moulds	8000	0	0	816	816	200	1,832
Timber	80000	1,360	13,064	6,848	5,064	3,096	29,432
Paint	2500	303	1,208	961	1,074	689	4,235
Reinforcing Steel	1000	16	21	3,281	3,286	830	7,434
Iying Wire	1200	0	0	35	35	8	78
Equivalent Royalty	250	3,617	3,273	4,759	7,007	5,976	24,632

## QUANTITIES OF BRIDGE ON PROPOSED ROAD LINKS

PROV : KALIMANTAN SELATAN KAB : TAPIN

LINK NO	BRIDGE NAME	Km	From	« TYPE »		DESIGN LOAD	SPAN CLASS	SPAN LENGTH (m)	SPAN NO (no)	SPAN LENGTH (m)	WIDTH (m)	AREA	AREA	PIER (no)	ABUT (no)	ROAD CLASS
				(EXIST)	(NEW)							(EXIST)	(NEW)			
26	KBB KUNING 1	1	KKNG	KK				4.00	1	4.00	4.00	16.00		0	2	IIC
	KBB KUNING 2	4	KKNG	KK				3.00	1	3.00	4.00	12.00		0	2	
27	SALAK	0	PLTA	KK				5.00	1	5.00	4.00	20.00		0	2	IIB-2
	SALAK	1	PLTA	KK				26.00	5	5.20	4.00	104.00		4	2	
	RANGDA	2	PLTA	KK				2.00	5	0.40	4.00	8.00		4	2	
	TARANTANG	3	PLTA	KK				13.00	3	4.33	4.00	52.00		2	2	
28	TATAKAN	1	TIKN	KK				5.50	1	5.50	4.00	22.00		0	2	IIC
31	N.I	2	KRTU	KK				6.00	2	3.00	4.00	24.00		1	2	IIB-1
	N.I	5	KRTU	KK				6.00	2	3.00	4.00	24.00		1	2	
	BAGAT	7	KRTU	KK				13.00	3	4.33	4.00	52.00		2	2	
37	KUJANG	2	PRDK	KK				8.00	2	4.00	4.00	32.00		1	2	IIC
	PARANDAKAN I	4	PRDK	KK				6.00	2	3.00	4.00	24.00		1	2	
	PARANDAKAN II	4	PRDK	KK				6.00	2	3.00	4.00	24.00		1	2	
	BERAMBAN	10	PRDK	KK				9.00	2	4.50	4.00	36.00		1	2	
44	TAPIN	240	GDB	KK	TH	IOT (C)		22.50	3	7.50	4.00	45.00	90.00	2	2	IIB-2
50	PADANG BARI	5	PPNB	KK				5.00	2	2.50	4.00	20.00		1	2	IIC
53	SUNGAI TAPIN	0	BAMP	KK	TH	IOT (C)		28.00	4	7.00	4.00	56.00	112.00	3	2	IIC



PROV : KALIMANTAN SELATAN KAB : TAFIN

LINK NO	BRIDGE NAME	Km	From	« TYPE »		DESIGN LOAD CLASS	SPAN LENGTH (m)	SPAN NO (no)	SPAN LENGTH (m)	WIDTH (m)	AREA (EXIST) (m2)	AREA (NEW) (m2)	PIER (no)	ABUT (no)	ROAD CLASS
				(EXIST)	(NEW)										
1	KALUTANG	0	TMBR	KK		4.00	1	4.00	4.00	16.00			0	2	111B-1
	LAMAHAN	4	TMBR	KK		8.50	2	4.25	4.00	34.00			1	2	
	N.I	8	TMBR	KK		4.00	1	4.00	4.00	16.00			0	2	
	N.I	10	TMBR	KK		4.00	2	2.00	4.00	16.00			1	2	
	N.I	11	TMBR	KK		4.00	1	4.00	4.00	16.00			0	2	
2	SINBAR	1	SMBR	KK		7.00	2	3.50	4.00	28.00			1	2	111C
	SINBAR	2	SMBR	KK		3.00	1	3.00	4.00	12.00			0	2	
	PARIGI	2	SMBR	KK		3.00	1	3.00	4.00	12.00			0	2	
3	PMT TUNGKAP	1	BKGN	KK		4.00	1	4.00	4.00	16.00			0	2	111B-1
	PEMATANG	1	BKGN	KK		3.50	1	3.50	4.00	14.00			0	2	
	PAUL	3	BKGN	KK		6.00	1	6.00	4.00	24.00			0	2	
12	TATASURA	2	TMBG	KK		4.00	1	4.00	4.00	16.00			0	2	111B-2
	PINANG BABARIS	3	TMBG	KK		6.50	2	3.25	4.00	26.00			1	2	
18	HARAPAN HASA	1	HASA	KK		9.00	3	3.00	4.00	36.00			2	2	111B-1
	DURAIT	2	HASA	KK		11.00	1	11.00	4.00	44.00			0	2	
	N.I	12	HASA	KK		3.00	1	3.00	3.00	9.00			0	2	
20	SALAM BBR5	6	TMBR	KK		5.00	2	2.50	5.00	25.00			1	2	111B-1
	SALAM BBR52	7	TMBR	KK		4.00	2	2.00	5.00	20.00			1	2	
	SALAM BBR53	7	TMBR	KK		5.00	2	2.50	5.00	25.00			1	2	
	PANTAI CABE	8	TMBR	KK		3.50	1	3.50	5.00	17.50			0	2	
	SUATO 1	10	TMBR	KK		5.00	2	2.50	5.00	25.00			1	2	
	SUATO 2	12	TMBR	KK		6.00	2	3.00	5.00	30.00			1	2	
	SUATO 3	12	TMBR	KK		6.00	2	3.00	5.00	30.00			1	2	
	SUATO 4	13	TMBR	KK		4.00	1	4.00	5.00	20.00			0	2	
	SUATO 5	14	TMBR	KK		8.00	2	4.00	5.00	40.00			1	2	
	KBG HABANG 1	16	TMBR	KK		6.00	1	6.00	4.50	27.00			0	2	
	KBG HABANG 2	16	TMBR	KK		8.00	1	8.00	4.50	36.00			0	2	
	KBG HABANG 3	16	TMBR	KK		4.00	1	4.00	4.00	16.00			0	2	
	BATU HAPU	19	TMBR	KK		10.00	3	3.33	4.00	40.00			2	2	
	ANAK BT HAPU	21	TMBR	KK		5.00	1	5.00	4.00	20.00			0	2	
	DURIAN J6H 1	23	TMBR	KK		5.00	1	5.00	4.00	20.00			0	2	
	DURIAN J6H 2	23	TMBR	KK		4.00	1	4.00	4.00	16.00			0	2	
	DURIAN J6H 3	24	TMBR	KK		4.00	1	4.00	4.00	16.00			0	2	
24	IRIGRASI	1	BNG	KB		3.90	1	3.90	3.40	13.26			0	2	111B-1
	TRANSAD	3	BNG	KK		3.00	1	3.00	4.00	12.00			0	2	
	PATUAKAN 1	3	BNG	KK		14.00	4	3.50	4.00	56.00			3	2	
	PATUAKAN 2	4	BNG	KK		5.00	1	5.00	4.00	20.00			0	2	
	PATUAKAN 3	5	BNG	RB		27.00	2	13.50	4.00	108.00			1	2	
	BUNGUR	6	BNG	KK		4.00	2	2.00	4.00	16.00			1	2	
	KMB KUNING 1	7	BNG	KK		6.00	2	3.00	4.00	24.00			1	2	
	KMB KUNING 2	8	BNG	KK		6.00	2	3.00	4.00	24.00			1	2	
	SAWAH	11	BNG	KK		6.00	2	3.00	4.00	24.00			1	2	
	HATUNGUN	11	BNG	KK		8.00	2	4.00	4.00	32.00			1	2	
	25	BUMBUN 1	1	BBUH	KK		7.00	3	2.33	4.00	28.00			2	
BUMBUN 2		2	BBUH	KK		6.00	3	2.00	4.00	24.00			2	2	

CONSTRUCTION AND MAINTENANCE COST OF BRIDGES  
ON PROPOSED ROAD LINKS

PROV : KALINANTAN BELATAN      KAB : TAPIN  
LINK NO : 1 (III B-1)      LENGTH : 12 Km

( Rp )

ITEM	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Superstructure (Timber; Span 3m; 10T)	m <sup>2</sup>	0.00	39,013	3,541	0	0	0
Superstructure (Timber; Span 5m; 10T)	m <sup>2</sup>	0.00	43,213	3,910	0	0	0
Superstructure (Timber; Span 8m; 10T)	m <sup>2</sup>	0.00	57,235	5,136	0	0	0
Superstructure (Timber; Span 3m; BH50)	m <sup>2</sup>	0.00	48,375	4,378	0	0	0
Superstructure (Timber; Span 5m; BH50)	m <sup>2</sup>	0.00	52,810	4,745	0	0	0
Superstructure (Timber; Span 8m; BH50)	m <sup>2</sup>	0.00	66,977	6,006	0	0	0
Superstructure (Concrete; Span 3m; BH50)	m <sup>2</sup>	0.00	46,053	107,965	0	0	0
Superstructure (Concrete; Span 5m; BH50)	m <sup>2</sup>	0.00	47,428	120,694	0	0	0
Superstructure (Concrete; Span 8m; BH50)	m <sup>2</sup>	0.00	48,954	131,491	0	0	0
Superstructure (Concrete; Span 10m; BH50)	m <sup>2</sup>	0.00	53,630	149,376	0	0	0
Superstructure (Concrete; Span 15m; BH50)	m <sup>2</sup>	0.00	58,035	176,007	0	0	0
Substructure (Pier; for Timber; 10T)	NO	0.00	339,916	32,859	0	0	0
Substructure (Abut; for Timber; 10T)	NO	0.00	964,092	154,362	0	0	0
Substructure (Pier; for Timber; BH50)	NO	0.00	499,927	48,627	0	0	0
Substructure (Abut; for Timber; BH50)	NO	0.00	1,084,991	171,532	0	0	0
Substructure (Pier; for Concrete; BH50)	NO	0.00	1,821,504	477,161	0	0	0
Substructure (Abut; for Concrete; BH50)	NO	0.00	3,755,081	999,497	0	0	0
Demolition of Bridge (Timber->Timber)	m <sup>2</sup>	0.00	11,009	1,373	0	0	0
Demolition of Bridge (Timber->Concrete)	m <sup>2</sup>	0.00	11,009	1,373	0	0	0
Demolition of Bridge (Concrete)	m <sup>2</sup>	0.00	83,389	81,377	0	0	0
Maintenance of Timber Bridge (New)	m <sup>2</sup>	0.00	7,203	1,121	0	0	0
Maintenance of Concrete Bridge (New)	m <sup>2</sup>	0.00	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m <sup>2</sup>	98.00	7,217	2,404	707,266	235,592	942,858
Maintenance of Concrete Bridge (Exist)	m <sup>2</sup>	0.00	3,966	2,471	0	0	0
( Without Overhead )			TOTAL COST (Timber Bridge)		0	0	0
			(Concrete Bridge)		0	0	0
			TOTAL COST (without Maintenance)		0	0	0
( Overhead : 15% )			TOTAL COST (Timber Bridge)		0	0	0
			(Concrete Bridge)		0	0	0
			TOTAL COST (without Maintenance)		0	0	0

PROV : KALIMANTAN SELATAN KAB : TAPIN

LINK NO : 2 (IIC) LENGTH : 4 Km

( Rp )

I T E M	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Superstructure (Timber; Span 3m; 10T)	m2	0.00	39,013	3,541	0	0	0
Superstructure (Timber; Span 5m; 10T)	m2	0.00	43,213	3,910	0	0	0
Superstructure (Timber; Span 8m; 10T)	m2	0.00	57,235	5,136	0	0	0
Superstructure (Timber; Span 3m; BH50)	m2	0.00	48,375	4,378	0	0	0
Superstructure (Timber; Span 5m; BH50)	m2	0.00	52,810	4,745	0	0	0
Superstructure (Timber; Span 8m; BH50)	m2	0.00	66,977	6,006	0	0	0
Superstructure (Concrete; Span 3m; BH50)	m2	0.00	46,053	107,965	0	0	0
Superstructure (Concrete; Span 5m; BH50)	m2	0.00	47,428	120,694	0	0	0
Superstructure (Concrete; Span 8m; BH50)	m2	0.00	48,954	131,491	0	0	0
Superstructure (Concrete; Span 10m; BH50)	m2	0.00	53,650	149,376	0	0	0
Superstructure (Concrete; Span 15m; BH50)	m2	0.00	58,035	176,007	0	0	0
Substructure (Pier; for Timber; 10T)	NO	0.00	339,916	32,859	0	0	0
Substructure (Abut; for Timber; 10T)	NO	0.00	964,092	154,362	0	0	0
Substructure (Pier; for Timber; BH50)	NO	0.00	499,827	48,627	0	0	0
Substructure (Abut; for Timber; BH50)	NO	0.00	1,084,991	171,532	0	0	0
Substructure (Pier; for Concrete; BH50)	NO	0.00	1,821,504	477,161	0	0	0
Substructure (Abut; for Concrete; BH50)	NO	0.00	3,755,081	999,497	0	0	0
Demolition of Bridge (Timber->Timber)	m2	0.00	11,009	1,373	0	0	0
Demolition of Bridge (Timber->Concrete)	m2	0.00	11,009	1,373	0	0	0
Demolition of Bridge (Concrete)	m2	0.00	83,389	81,377	0	0	0
Maintenance of Timber Bridge (New)	m2	0.00	7,203	1,121	0	0	0
Maintenance of Concrete Bridge (New)	m2	0.00	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m2	52.00	7,217	2,404	375,284	125,008	500,292
Maintenance of Concrete Bridge (Exist)	m2	0.00	3,966	2,471	0	0	0
<hr/>							
( Without Overhead )			TOTAL COST (Timber Bridge)		0	0	0
			(Concrete Bridge)		0	0	0
			TOTAL COST (without Maintenance)		0	0	0
<hr/>							
( Overhead : 15% )			TOTAL COST (Timber Bridge)		0	0	0
			(Concrete Bridge)		0	0	0
			TOTAL COST (without Maintenance)		0	0	0

PROV : KALIMANTAN SELATAN KAB : TAPIN

LINK NO : 3 (IIIB-1) LENGTH : 4 Km

( Rp )

I T E M	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		>>>>> TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Superstructure (Timber; Span 3m; 10T)	m2	0,00	39,013	3,541	0	0	0
Superstructure (Timber; Span 5m; 10T)	m2	0,00	43,213	3,910	0	0	0
Superstructure (Timber; Span 8m; 10T)	m2	0,00	57,235	5,136	0	0	0
Superstructure (Timber; Span 3m; BHSO)	m2	0,00	48,375	4,378	0	0	0
Superstructure (Timber; Span 5m; BHSO)	m2	0,00	52,810	4,745	0	0	0
Superstructure (Timber; Span 8m; BHSO)	m2	0,00	66,977	6,006	0	0	0
Superstructure (Concrete; Span 3m; BHSO)	m2	0,00	46,053	107,985	0	0	0
Superstructure (Concrete; Span 5m; BHSO)	m2	0,00	47,428	120,694	0	0	0
Superstructure (Concrete; Span 8m; BHSO)	m2	0,00	48,954	131,491	0	0	0
Superstructure (Concrete; Span 10m; BHSO)	m2	0,00	53,650	149,376	0	0	0
Superstructure (Concrete; Span 15m; BHSO)	m2	0,00	58,035	176,007	0	0	0
Substructure (Pier; for Timber; 10T)	NO	0,00	339,916	32,859	0	0	0
Substructure (Abut; for Timber; 10T)	NO	0,00	964,092	154,362	0	0	0
Substructure (Pier; for Timber; BHSO)	NO	0,00	499,927	48,627	0	0	0
Substructure (Abut; for Timber; BHSO)	NO	0,00	1,084,991	171,532	0	0	0
Substructure (Pier; for Concrete; BHSO)	NO	0,00	1,821,504	477,161	0	0	0
Substructure (Abut; for Concrete; BHSO)	NO	0,00	3,759,081	999,497	0	0	0
Demolition of Bridge (Timber->Timber)	m2	0,00	11,009	1,373	0	0	0
Demolition of Bridge (Timber->Concrete)	m2	0,00	11,009	1,373	0	0	0
Demolition of Bridge (Concrete)	m2	0,00	83,389	81,377	0	0	0
Maintenance of Timber Bridge (New)	m2	0,00	7,203	1,121	0	0	0
Maintenance of Concrete Bridge (New)	m2	0,00	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m2	54,00	7,217	2,404	389,718	129,816	519,534
Maintenance of Concrete Bridge (Exist)	m2	0,00	3,966	2,471	0	0	0
( Without Overhead )			TOTAL COST (Timber Bridge)		0	0	0
			(Concrete Bridge)		0	0	0
			TOTAL COST (without Maintenance)		0	0	0
( Overhead : 15% )			TOTAL COST (Timber Bridge)		0	0	0
			(Concrete Bridge)		0	0	0
			TOTAL COST (without Maintenance)		0	0	0

PROV : KALIMANTAN SELATAN KAR : TAPIN

LINK NO : 12 (IIIB-2) LENGTH : 4 Km

( Rp )

ITEM	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		>>>>> TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Superstructure (Timber; Span 3a; 10T)	m2	0.00	39,013	3,541	0	0	0
Superstructure (Timber; Span 5a; 10T)	m2	0.00	43,213	3,910	0	0	0
Superstructure (Timber; Span 8a; 10T)	m2	0.00	57,235	5,136	0	0	0
Superstructure (Timber; Span 3a; BN50)	m2	0.00	48,375	4,378	0	0	0
Superstructure (Timber; Span 5a; BN50)	m2	0.00	52,910	4,745	0	0	0
Superstructure (Timber; Span 8a; BN50)	m2	0.00	66,977	6,006	0	0	0
Superstructure (Concrete; Span 3a; BN50)	m2	0.00	46,053	107,965	0	0	0
Superstructure (Concrete; Span 5a; BN50)	m2	0.00	47,428	120,694	0	0	0
Superstructure (Concrete; Span 8a; BN50)	m2	0.00	48,954	131,491	0	0	0
Superstructure (Concrete; Span 10a; BN50)	m2	0.00	53,650	149,376	0	0	0
Superstructure (Concrete; Span 15a; BN50)	m2	0.00	58,035	176,007	0	0	0
Substructure (Pier; for Timber; 10T)	NO	0.00	339,916	32,859	0	0	0
Substructure (Abut; for Timber; 10T)	NO	0.00	964,092	154,362	0	0	0
Substructure (Pier; for Timber; BN50)	NO	0.00	499,927	48,627	0	0	0
Substructure (Abut; for Timber; BN50)	NO	0.00	1,084,991	171,532	0	0	0
Substructure (Pier; for Concrete; BN50)	NO	0.00	1,821,504	477,161	0	0	0
Substructure (Abut; for Concrete; BN50)	NO	0.00	3,755,081	999,497	0	0	0
Demolition of Bridge (Timber->Timber)	m2	0.00	11,009	1,373	0	0	0
Demolition of Bridge (Timber->Concrete)	m2	0.00	11,009	1,373	0	0	0
Demolition of Bridge (Concrete)	m2	0.00	83,389	81,377	0	0	0
Maintenance of Timber Bridge (New)	m2	0.00	7,203	1,121	0	0	0
Maintenance of Concrete Bridge (New)	m2	0.00	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m2	42.00	7,217	2,404	303,114	100,968	404,082
Maintenance of Concrete Bridge (Exist)	m2	0.00	3,966	2,471	0	0	0
( Without Overhead )			TOTAL COST (Timber Bridge)		0	0	0
			(Concrete Bridge)		0	0	0
			TOTAL COST (without Maintenance)		0	0	0
( Overhead : 15% )			TOTAL COST (Timber Bridge)		0	0	0
			(Concrete Bridge)		0	0	0
			TOTAL COST (without Maintenance)		0	0	0

PROV : KALIMANTAN SELATAN KAB : TAPIN

LINK NO : 18 (IIB-1) LENGTH : 14 Km

( Rp )

ITEM	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Superstructure (Timber;Span 3a;IOT)	m2	0,00	39,013	3,541	0	0	0
Superstructure (Timber;Span 5a;IOT)	m2	0,00	43,213	3,910	0	0	0
Superstructure (Timber;Span 8a;IOT)	m2	0,00	57,235	5,136	0	0	0
Superstructure (Timber;Span 3a;BMSO)	m2	0,00	48,375	4,378	0	0	0
Superstructure (Timber;Span 5a;BMSO)	m2	0,00	52,810	4,745	0	0	0
Superstructure (Timber;Span 8a;BMSO)	m2	0,00	66,977	6,006	0	0	0
Superstructure (Concrete;Span 3a;BMSO)	m2	0,00	46,053	107,965	0	0	0
Superstructure (Concrete;Span 5a;BMSO)	m2	0,00	47,428	120,694	0	0	0
Superstructure (Concrete;Span 8a;BMSO)	m2	0,00	48,954	131,491	0	0	0
Superstructure (Concrete;Span10a;BMSO)	m2	0,00	53,650	149,376	0	0	0
Superstructure (Concrete;Span15a;BMSO)	m2	0,00	58,035	176,007	0	0	0
Substructure (Pier;for Timber;IOT)	m0	0,00	339,916	32,859	0	0	0
Substructure (Abut;for Timber;IOT)	m0	0,00	964,092	154,362	0	0	0
Substructure (Pier;for Timber;BMSO)	m0	0,00	499,927	48,627	0	0	0
Substructure (Abut;for Timber;BMSO)	m0	0,00	1,084,991	171,532	0	0	0
Substructure (Pier;for Concrete;BMSO)	m0	0,00	1,821,504	477,161	0	0	0
Substructure (Abut;for Concrete;BMSO)	m0	0,00	3,755,081	999,497	0	0	0
Demolition of Bridge (Timber->Timber)	m2	0,00	11,009	1,373	0	0	0
Demolition of Bridge (Timber->Concrete)	m2	0,00	11,009	1,373	0	0	0
Demolition of Bridge (Concrete)	m2	0,00	83,389	81,377	0	0	0
Maintenance of Timber Bridge (New)	m2	0,00	7,203	1,121	0	0	0
Maintenance of Concrete Bridge (New)	m2	0,00	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m2	89,00	7,217	2,404	642,313	213,956	856,249
Maintenance of Concrete Bridge (Exist)	m2	0,00	3,966	2,471	0	0	0
<hr/>							
( Without Overhead )			TOTAL COST (Timber Bridge)		0	0	0
			(Concrete Bridge)		0	0	0
			TOTAL COST (without Maintenance)		0	0	0
<hr/>							
( Overhead : 15% )			TOTAL COST (Timber Bridge)		0	0	0
			(Concrete Bridge)		0	0	0
			TOTAL COST (without Maintenance)		0	0	0

PROV : KALIMANTAN SELATAN KAB : TAPIN

LINK NO : 20 (G111B-1) LENGTH : 24 Km

( Rp )

ITEM	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Superstructure (Timber; Span 3m; 101)	m2	0.00	39,013	3,541	0	0	0
Superstructure (Timber; Span 5m; 101)	m2	0.00	43,213	3,910	0	0	0
Superstructure (Timber; Span 8m; 101)	m2	0.00	57,235	5,136	0	0	0
Superstructure (Timber; Span 3m; BNS01)	m2	0.00	48,375	4,378	0	0	0
Superstructure (Timber; Span 5m; BNS01)	m2	0.00	52,810	4,745	0	0	0
Superstructure (Timber; Span 8m; BNS01)	m2	0.00	66,977	6,006	0	0	0
Superstructure (Concrete; Span 3m; BNS01)	m2	0.00	46,053	107,965	0	0	0
Superstructure (Concrete; Span 5m; BNS01)	m2	0.00	47,428	120,694	0	0	0
Superstructure (Concrete; Span 8m; BNS01)	m2	0.00	48,954	131,491	0	0	0
Superstructure (Concrete; Span 10m; BNS01)	m2	0.00	53,650	149,376	0	0	0
Superstructure (Concrete; Span 15m; BNS01)	m2	0.00	58,035	176,007	0	0	0
Substructure (Pier; for Timber; 101)	m0	0.00	339,916	32,859	0	0	0
Substructure (Abut; for Timber; 101)	m0	0.00	964,092	154,362	0	0	0
Substructure (Pier; for Timber; BNS01)	m0	0.00	499,927	48,627	0	0	0
Substructure (Abut; for Timber; BNS01)	m0	0.00	1,084,991	171,532	0	0	0
Substructure (Pier; for Concrete; BNS01)	m0	0.00	1,821,504	477,161	0	0	0
Substructure (Abut; for Concrete; BNS01)	m0	0.00	3,755,081	999,497	0	0	0
Demolition of Bridge (Timber->Timber)	m2	0.00	11,009	1,373	0	0	0
Demolition of Bridge (Timber->Concrete)	m2	0.00	11,009	1,373	0	0	0
Demolition of Bridge (Concrete)	m2	0.00	83,389	81,377	0	0	0
Maintenance of Timber Bridge (New)	m2	0.00	7,203	1,121	0	0	0
Maintenance of Concrete Bridge (New)	m2	0.00	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m2	423.50	7,217	2,404	3,056,399	1,018,094	4,074,493
Maintenance of Concrete Bridge (Exist)	m2	0.00	3,966	2,471	0	0	0
<hr/>							
( Without Overhead )	TOTAL COST (Timber Bridge)				0	0	0
	(Concrete Bridge)				0	0	0
	TOTAL COST (without Maintenance)				0	0	0
<hr/>							
( Overhead : 15% )	TOTAL COST (Timber Bridge)				0	0	0
	(Concrete Bridge)				0	0	0
	TOTAL COST (without Maintenance)				0	0	0

PROV : KALIMANTAN SELATAN KAB : TAPIN  
 LINK NO : 24 (IIR-1) LENGTH : 13 Km

( Rp )

I T E M	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		>>>>> TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Superstructure (Timber; Span 3a; IOT)	m2	0.00	39,013	3,541	0	0	0
Superstructure (Timber; Span 5a; IOT)	m2	0.00	43,213	3,910	0	0	0
Superstructure (Timber; Span 8a; IOT)	m2	0.00	57,235	5,136	0	0	0
Superstructure (Timber; Span 3a; BHSO)	m2	0.00	48,375	4,378	0	0	0
Superstructure (Timber; Span 5a; BHSO)	m2	0.00	52,810	4,745	0	0	0
Superstructure (Timber; Span 8a; BHSO)	m2	0.00	66,977	6,006	0	0	0
Superstructure (Concrete; Span 3a; BHSO)	m2	0.00	46,053	107,965	0	0	0
Superstructure (Concrete; Span 5a; BHSO)	m2	0.00	47,428	120,694	0	0	0
Superstructure (Concrete; Span 8a; BHSO)	m2	0.00	49,954	131,491	0	0	0
Superstructure (Concrete; Span 10a; BHSO)	m2	0.00	53,650	149,376	0	0	0
Superstructure (Concrete; Span 15a; BHSO)	m2	0.00	58,035	176,007	0	0	0
Substructure (Pier; for Timber; IOT)	NO	0.00	339,916	32,859	0	0	0
Substructure (Abut; for Timber; IOT)	NO	0.00	984,092	154,362	0	0	0
Substructure (Pier; for Timber; BHSO)	NO	0.00	499,927	48,627	0	0	0
Substructure (Abut; for Timber; BHSO)	NO	0.00	1,084,991	171,532	0	0	0
Substructure (Pier; for Concrete; BHSO)	NO	0.00	1,821,504	477,161	0	0	0
Substructure (Abut; for Concrete; BHSO)	NO	0.00	3,755,081	999,497	0	0	0
Demolition of Bridge (Timber->Timber)	m2	0.00	11,009	1,373	0	0	0
Demolition of Bridge (Timber->Concrete)	m2	0.00	11,009	1,373	0	0	0
Demolition of Bridge (Concrete)	m2	0.00	83,389	81,377	0	0	0
Maintenance of Timber Bridge (New)	m2	0.00	7,203	1,121	0	0	0
Maintenance of Concrete Bridge (New)	m2	0.00	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m2	208.00	7,217	2,404	1,501,136	500,032	2,001,168
Maintenance of Concrete Bridge (Exist)	m2	121.26	3,966	2,471	480,917	299,633	780,550
( Without Overhead )			TOTAL COST (Timber Bridge)		0	0	0
			(Concrete Bridge)		0	0	0
			TOTAL COST (without Maintenance)		0	0	0
( Overhead : 15% )			TOTAL COST (Timber Bridge)		0	0	0
			(Concrete Bridge)		0	0	0
			TOTAL COST (without Maintenance)		0	0	0



PROV : KALIMANTAN SELATAN KAB : TAPIN

LINK NO : 25 (1118-2) LENGTH : 7 Km

( Rp )

I T E M	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		>>>>> TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Superstructure (Timber; Span 3m; 10T)	m2	0.00	39,013	3,541	0	0	0
Superstructure (Timber; Span 5m; 10T)	m2	0.00	43,213	3,910	0	0	0
Superstructure (Timber; Span 8m; 10T)	m2	0.00	57,235	5,136	0	0	0
Superstructure (Timber; Span 3m; BH50)	m2	0.00	48,375	4,378	0	0	0
Superstructure (Timber; Span 5m; BH50)	m2	0.00	52,810	4,745	0	0	0
Superstructure (Timber; Span 8m; BH50)	m2	0.00	66,977	6,006	0	0	0
Superstructure (Concrete; Span 3m; BH50)	m2	0.00	46,053	107,965	0	0	0
Superstructure (Concrete; Span 5m; BH50)	m2	0.00	47,428	120,694	0	0	0
Superstructure (Concrete; Span 8m; BH50)	m2	0.00	48,954	131,491	0	0	0
Superstructure (Concrete; Span 10m; BH50)	m2	0.00	53,650	149,376	0	0	0
Superstructure (Concrete; Span 15m; BH50)	m2	0.00	58,035	176,007	0	0	0
Substructure (Pier; for Timber; 10T)	NO	0.00	339,916	32,859	0	0	0
Substructure (Abut; for Timber; 10T)	NO	0.00	964,092	154,362	0	0	0
Substructure (Pier; for Timber; BH50)	NO	0.00	499,927	48,627	0	0	0
Substructure (Abut; for Timber; BH50)	NO	0.00	1,084,991	171,532	0	0	0
Substructure (Pier; for Concrete; BH50)	NO	0.00	1,821,504	477,161	0	0	0
Substructure (Abut; for Concrete; BH50)	NO	0.00	3,755,081	999,497	0	0	0
Demolition of Bridge (Timber->Timber)	m2	0.00	11,009	1,373	0	0	0
Demolition of Bridge (Timber->Concrete)	m2	0.00	11,009	1,373	0	0	0
Demolition of Bridge (Concrete)	m2	0.00	83,389	81,377	0	0	0
Maintenance of Timber Bridge (New)	m2	0.00	7,203	1,121	0	0	0
Maintenance of Concrete Bridge (New)	m2	0.00	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m2	52.00	7,217	2,404	375,284	125,008	500,292
Maintenance of Concrete Bridge (Exist)	m2	0.00	3,966	2,471	0	0	0
( Without Overhead )			TOTAL COST (Timber Bridge)		0	0	0
			(Concrete Bridge)		0	0	0
			TOTAL COST (without Maintenance)		0	0	0
( Overhead : 15% )			TOTAL COST (Timber Bridge)		0	0	0
			(Concrete Bridge)		0	0	0
			TOTAL COST (without Maintenance)		0	0	0

PROV : KALIMANTAN SELATAN KAB : TAPIN

LINK NO : 26 (IIIC) LENGTH : 6 Km

( Rp )

I T E M	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		>>>>> TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Superstructure (Timber;Span 3a;10T)	m2	0.00	39,013	3,541	0	0	0
Superstructure (Timber;Span 5a;10T)	m2	0.00	43,213	3,910	0	0	0
Superstructure (Timber;Span 8a;10T)	m2	0.00	57,235	5,136	0	0	0
Superstructure (Timber;Span 3a;BN50)	m2	0.00	48,375	4,378	0	0	0
Superstructure (Timber;Span 5a;BN50)	m2	0.00	52,810	4,745	0	0	0
Superstructure (Timber;Span 8a;BN50)	m2	0.00	66,977	6,006	0	0	0
Superstructure (Concrete;Span 3a;BN50)	m2	0.00	46,053	107,965	0	0	0
Superstructure (Concrete;Span 5a;BN50)	m2	0.00	47,428	120,694	0	0	0
Superstructure (Concrete;Span 8a;BN50)	m2	0.00	48,954	131,491	0	0	0
Superstructure (Concrete;Span10a;BN50)	m2	0.00	53,650	149,376	0	0	0
Superstructure (Concrete;Span15a;BN50)	m2	0.00	58,035	176,007	0	0	0
Substructure (Pier;for Timber;10T)	NO	0.00	339,916	32,859	0	0	0
Substructure (Abut;for Timber;10T)	NO	0.00	964,092	154,362	0	0	0
Substructure (Pier;for Timber;BN50)	NO	0.00	499,927	48,627	0	0	0
Substructure (Abut;for Timber;BN50)	NO	0.00	1,084,991	171,532	0	0	0
Substructure (Pier;for Concrete;BN50)	NO	0.00	1,821,504	477,161	0	0	0
Substructure (Abut;for Concrete;BN50)	NO	0.00	3,755,081	999,497	0	0	0
Demolition of Bridge (Timber->Timber)	m2	0.00	11,009	1,373	0	0	0
Demolition of Bridge (Timber->Concrete)	m2	0.00	11,009	1,373	0	0	0
Demolition of Bridge (Concrete)	m2	0.00	83,389	81,377	0	0	0
Maintenance of Timber Bridge (New)	m2	0.00	7,203	1,121	0	0	0
Maintenance of Concrete Bridge (New)	m2	0.00	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m2	28.00	7,217	2,404	202,076	67,312	269,388
Maintenance of Concrete Bridge (Exist)	m2	0.00	3,966	2,471	0	0	0
<hr/>							
( Without Overhead )	TOTAL COST (Timber Bridge)				0	0	0
	(Concrete Bridge)				0	0	0
	TOTAL COST (without Maintenance)				0	0	0
<hr/>							
( Overhead : 15% )	TOTAL COST (Timber Bridge)				0	0	0
	(Concrete Bridge)				0	0	0
	TOTAL COST (without Maintenance)				0	0	0

PROV : KALIMANTAN SELATAN KAB : TAPIN

LINK NO : 27 (IIB-2) LENGTH : 7 Km

( Rp )

ITEM	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Superstructure (Timber; Span 3m; IOT)	m2	0.00	39,013	3,541	0	0	0
Superstructure (Timber; Span 5m; IOT)	m2	0.00	43,213	3,910	0	0	0
Superstructure (Timber; Span 8m; IOT)	m2	0.00	57,235	5,136	0	0	0
Superstructure (Timber; Span 3m; BMSO)	m2	0.00	48,375	4,378	0	0	0
Superstructure (Timber; Span 5m; BMSO)	m2	0.00	52,810	4,745	0	0	0
Superstructure (Timber; Span 8m; BMSO)	m2	0.00	66,977	6,006	0	0	0
Superstructure (Concrete; Span 3m; BMSO)	m2	0.00	46,053	107,965	0	0	0
Superstructure (Concrete; Span 5m; BMSO)	m2	0.00	47,428	120,694	0	0	0
Superstructure (Concrete; Span 8m; BMSO)	m2	0.00	48,954	131,491	0	0	0
Superstructure (Concrete; Span 10m; BMSO)	m2	0.00	53,650	149,376	0	0	0
Superstructure (Concrete; Span 15m; BMSO)	m2	0.00	58,035	176,007	0	0	0
Substructure (Pier; for Timber; IOT)	NO	0.00	339,916	32,859	0	0	0
Substructure (Abut; for Timber; IOT)	NO	0.00	964,092	154,362	0	0	0
Substructure (Pier; for Timber; BMSO)	NO	0.00	499,927	48,627	0	0	0
Substructure (Abut; for Timber; BMSO)	NO	0.00	1,084,991	171,532	0	0	0
Substructure (Pier; for Concrete; BMSO)	NO	0.00	1,821,504	477,161	0	0	0
Substructure (Abut; for Concrete; BMSO)	NO	0.00	3,755,081	999,497	0	0	0
Demolition of Bridge (Timber->Timber)	m2	0.00	11,009	1,373	0	0	0
Demolition of Bridge (Timber->Concrete)	m2	0.00	11,009	1,373	0	0	0
Demolition of Bridge (Concrete)	m2	0.00	83,389	81,377	0	0	0
Maintenance of Timber Bridge (New)	m2	0.00	7,203	1,121	0	0	0
Maintenance of Concrete Bridge (New)	m2	0.00	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m2	184.00	7,217	2,404	1,327,928	442,336	1,770,264
Maintenance of Concrete Bridge (Exist)	m2	0.00	3,966	2,471	0	0	0
<hr/>							
( Without Overhead )			TOTAL COST (Timber Bridge)		0	0	0
			(Concrete Bridge)		0	0	0
			TOTAL COST (without Maintenance)		0	0	0
<hr/>							
( Overhead : 15% )			TOTAL COST (Timber Bridge)		0	0	0
			(Concrete Bridge)		0	0	0
			TOTAL COST (without Maintenance)		0	0	0

PROV : KALIMANTAN SELATAN KAB : TAPIN

LINK NO : 28 (IIIC) LENGTH : 3 Km

( Rp )

ITEM	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		>>>>> TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Superstructure (Timber;Span 3m;10T)	m2	0.00	39,013	3,541	0	0	0
Superstructure (Timber;Span 5m;10T)	m2	0.00	43,213	3,910	0	0	0
Superstructure (Timber;Span 8m;10T)	m2	0.00	57,235	5,136	0	0	0
Superstructure (Timber;Span 3m;BN50)	m2	0.00	48,375	4,378	0	0	0
Superstructure (Timber;Span 5m;BN50)	m2	0.00	52,810	4,745	0	0	0
Superstructure (Timber;Span 8m;BN50)	m2	0.00	66,977	6,006	0	0	0
Superstructure (Concrete;Span 3m;BN50)	m2	0.00	46,053	107,965	0	0	0
Superstructure (Concrete;Span 5m;BN50)	m2	0.00	47,428	120,694	0	0	0
Superstructure (Concrete;Span 8m;BN50)	m2	0.00	48,954	131,491	0	0	0
Superstructure (Concrete;Span 10m;BN50)	m2	0.00	53,650	149,376	0	0	0
Superstructure (Concrete;Span 15m;BN50)	m2	0.00	58,033	176,007	0	0	0
Substructure (Pier;for Timber;10T)	NO	0.00	339,916	32,859	0	0	0
Substructure (Abut;for Timber;10T)	NO	0.00	964,092	151,362	0	0	0
Substructure (Pier;for Timber;BN50)	NO	0.00	499,927	48,627	0	0	0
Substructure (Abut;for Timber;BN50)	NO	0.00	1,084,991	171,532	0	0	0
Substructure (Pier;for Concrete;BN50)	NO	0.00	1,821,504	477,161	0	0	0
Substructure (Abut;for Concrete;BN50)	NO	0.00	3,755,081	999,497	0	0	0
Demolition of Bridge (Timber->Timber)	m2	0.00	11,009	1,373	0	0	0
Demolition of Bridge (Timber->Concrete)	m2	0.00	11,009	1,373	0	0	0
Demolition of Bridge (Concrete)	m2	0.00	83,389	81,377	0	0	0
Maintenance of Timber Bridge (New)	m2	0.00	7,203	1,121	0	0	0
Maintenance of Concrete Bridge (New)	m2	0.00	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m2	22.00	7,217	2,404	158,774	52,888	211,662
Maintenance of Concrete Bridge (Exist)	m2	0.00	3,966	2,471	0	0	0
<hr/>							
( Without Overhead )	TOTAL COST (Timber Bridge)				0	0	0
	(Concrete Bridge)				0	0	0
	TOTAL COST (without Maintenance)				0	0	0
<hr/>							
( Overhead : 15% )	TOTAL COST (Timber Bridge)				0	0	0
	(Concrete Bridge)				0	0	0
	TOTAL COST (without Maintenance)				0	0	0

PROV : KALIMANTAN SELATAN KAB : TAPIN

LINK NO : 31 (IIIB-1) LENGTH : 8 Km

( Rp )

ITEM	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		>>>>> TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Superstructure (Timber;Span 3a;10T)	m2	0.00	39,013	3,541	0	0	0
Superstructure (Timber;Span 5a;10T)	m2	0.00	43,213	3,910	0	0	0
Superstructure (Timber;Span 8a;10T)	m2	0.00	57,235	5,136	0	0	0
Superstructure (Timber;Span 3a;BMSO)	m2	0.00	48,375	4,378	0	0	0
Superstructure (Timber;Span 5a;BMSO)	m2	0.00	52,810	4,745	0	0	0
Superstructure (Timber;Span 8a;BMSO)	m2	0.00	66,977	6,006	0	0	0
Superstructure (Concrete;Span 3a;BMSO)	m2	0.00	46,053	107,965	0	0	0
Superstructure (Concrete;Span 5a;BMSO)	m2	0.00	47,428	120,694	0	0	0
Superstructure (Concrete;Span 8a;BMSO)	m2	0.00	48,954	131,491	0	0	0
Superstructure (Concrete;Span10a;BMSO)	m2	0.00	53,650	149,376	0	0	0
Superstructure (Concrete;Span15a;BMSO)	m2	0.00	58,035	176,007	0	0	0
Substructure (Pier;for Timber;10T)	ND	0.00	339,916	32,859	0	0	0
Substructure (Abut;for Timber;10T)	ND	0.00	964,092	154,362	0	0	0
Substructure (Pier;for Timber;BMSO)	ND	0.00	499,927	48,627	0	0	0
Substructure (Abut;for Timber;BMSO)	ND	0.00	1,084,991	171,532	0	0	0
Substructure (Pier;for Concrete;BMSO)	ND	0.00	1,821,504	477,161	0	0	0
Substructure (Abut;for Concrete;BMSO)	ND	0.00	3,755,081	999,497	0	0	0
Demolition of Bridge (Timber->Timber)	m2	0.00	11,009	1,373	0	0	0
Demolition of Bridge (Timber->Concrete)	m2	0.00	11,009	1,373	0	0	0
Demolition of Bridge (Concrete)	m2	0.00	83,389	81,377	0	0	0
Maintenance of Timber Bridge (New)	m2	0.00	7,203	1,121	0	0	0
Maintenance of Concrete Bridge (New)	m2	0.00	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m2	100.00	7,217	2,404	721,700	240,400	962,100
Maintenance of Concrete Bridge (Exist)	m2	0.00	3,966	2,471	0	0	0
<hr/>							
( Without Overhead )			TOTAL COST (Timber Bridge)		0	0	0
			(Concrete Bridge)		0	0	0
			TOTAL COST (without Maintenance)		0	0	0
<hr/>							
( Overhead : 15% )			TOTAL COST (Timber Bridge)		0	0	0
			(Concrete Bridge)		0	0	0
			TOTAL COST (without Maintenance)		0	0	0

PROV : KALIMANTAN BELATAN KAB : TAPIN

LINK NO : 37 (IIIC) LENGTH : 11 Km

( Rp )

ITEM	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		>>>>> TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Superstructure (Timber; Span 3a; IOT)	m2	0.00	39,013	3,541	0	0	0
Superstructure (Timber; Span 5a; IOT)	m2	0.00	43,213	3,910	0	0	0
Superstructure (Timber; Span 8a; IOT)	m2	0.00	57,235	5,136	0	0	0
Superstructure (Timber; Span 3a; BMSO)	m2	0.00	48,375	4,378	0	0	0
Superstructure (Timber; Span 5a; BMSO)	m2	0.00	52,810	4,745	0	0	0
Superstructure (Timber; Span 8a; BMSO)	m2	0.00	66,977	6,006	0	0	0
Superstructure (Concrete; Span 3a; BMSO)	m2	0.00	46,053	107,965	0	0	0
Superstructure (Concrete; Span 5a; BMSO)	m2	0.00	47,428	120,694	0	0	0
Superstructure (Concrete; Span 8a; BMSO)	m2	0.00	48,954	131,491	0	0	0
Superstructure (Concrete; Span 10a; BMSO)	m2	0.00	53,650	149,376	0	0	0
Superstructure (Concrete; Span 15a; BMSO)	m2	0.00	58,035	176,007	0	0	0
Substructure (Pier; for Timber; IOT)	NO	0.00	339,916	32,859	0	0	0
Substructure (Abut; for Timber; IOT)	NO	0.00	964,092	154,362	0	0	0
Substructure (Pier; for Timber; BMSO)	NO	0.00	499,927	48,627	0	0	0
Substructure (Abut; for Timber; BMSO)	NO	0.00	1,084,991	171,532	0	0	0
Substructure (Pier; for Concrete; BMSO)	NO	0.00	1,821,504	477,161	0	0	0
Substructure (Abut; for Concrete; BMSO)	NO	0.00	3,755,081	999,497	0	0	0
Demolition of Bridge (Timber->Timber)	m2	0.00	11,009	1,373	0	0	0
Demolition of Bridge (Timber->Concrete)	m2	0.00	11,009	1,373	0	0	0
Demolition of Bridge (Concrete)	m2	0.00	83,389	81,377	0	0	0
Maintenance of Timber Bridge (New)	m2	0.00	7,203	1,121	0	0	0
Maintenance of Concrete Bridge (New)	m2	0.00	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m2	116.00	7,217	2,404	837,172	278,864	1,116,036
Maintenance of Concrete Bridge (Exist)	m2	0.00	3,966	2,471	0	0	0
( Without Overhead )			TOTAL COST (Timber Bridge)		0	0	0
			(Concrete Bridge)		0	0	0
			TOTAL COST (without Maintenance)		0	0	0
( Overhead : 15% )			TOTAL COST (Timber Bridge)		0	0	0
			(Concrete Bridge)		0	0	0
			TOTAL COST (without Maintenance)		0	0	0

PROV : KALIMANTAN BELATAN KAB : TAPIN

LINK NO : 44 (IIIB-2) LENGTH : 2 Km

( Rp )

I.T.E.M.	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Superstructure (Timber;Span 3m;10T)	m2	0.00	39,013	3,541	0	0	0
Superstructure (Timber;Span 5m;10T)	m2	0.00	43,213	3,910	0	0	0
Superstructure (Timber;Span 8m;10T)	m2	90.00	57,235	5,136	5,151,150	462,240	5,613,390
Superstructure (Timber;Span 3m;BMSO)	m2	0.00	48,375	4,378	0	0	0
Superstructure (Timber;Span 5m;BMSO)	m2	0.00	52,810	4,745	0	0	0
Superstructure (Timber;Span 8m;BMSO)	m2	0.00	66,977	6,006	0	0	0
Superstructure (Concrete;Span 3m;BMSO)	m2	0.00	46,053	107,965	0	0	0
Superstructure (Concrete;Span 5m;BMSO)	m2	0.00	47,428	120,694	0	0	0
Superstructure (Concrete;Span 8m;BMSO)	m2	0.00	48,954	131,491	0	0	0
Superstructure (Concrete;Span 10m;BMSO)	m2	0.00	53,650	149,376	0	0	0
Superstructure (Concrete;Span 15m;BMSO)	m2	0.00	58,035	176,007	0	0	0
Substructure (Pier;for Timber;10T)	NO	2.00	339,916	32,859	679,832	65,718	745,550
Substructure (Abut;for Timber;10T)	NO	2.00	964,092	154,362	1,928,184	308,724	2,236,908
Substructure (Pier;for Timber;BMSO)	NO	0.00	499,927	48,627	0	0	0
Substructure (Abut;for Timber;BMSO)	NO	0.00	1,084,991	171,532	0	0	0
Substructure (Pier;for Concrete;BMSO)	NO	0.00	1,821,504	477,161	0	0	0
Substructure (Abut;for Concrete;BMSO)	NO	0.00	3,755,081	999,497	0	0	0
Demolition of Bridge (Timber->Timber)	m2	45.00	11,009	1,373	495,405	61,785	557,190
Demolition of Bridge (Timber->Concrete)	m2	0.00	11,009	1,373	0	0	0
Demolition of Bridge (Concrete)	m2	0.00	83,389	81,377	0	0	0
Maintenance of Timber Bridge (New)	m2	90.00	7,203	1,121	648,270	100,890	749,160
Maintenance of Concrete Bridge (New)	m2	0.00	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m2	0.00	7,217	2,404	0	0	0
Maintenance of Concrete Bridge (Exist)	m2	0.00	3,966	2,471	0	0	0
( Without Overhead )			TOTAL COST (Timber Bridge)		8,254,571	898,467	9,153,038
			(Concrete Bridge)		0	0	0
			TOTAL COST (without Maintenance)		8,254,571	898,467	9,153,038
( Overhead : 15% )			TOTAL COST (Timber Bridge)		9,492,757	1,033,237	10,525,994
			(Concrete Bridge)		0	0	0
			TOTAL COST (without Maintenance)		9,492,757	1,033,237	10,525,994

PROV : KALIMANTAN SELATAN KAB : TAPIN

LINK NO : 50 (IIC) LENGTH : 6 Km

( Rp )

I T E M	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Superstructure (Timber; Span 3m; 10T)	m2	0.00	39,013	3,541	0	0	0
Superstructure (Timber; Span 5m; 10T)	m2	0.00	43,213	3,910	0	0	0
Superstructure (Timber; Span 8m; 10T)	m2	0.00	57,235	5,136	0	0	0
Superstructure (Timber; Span 3m; BMS0)	m2	0.00	48,375	4,378	0	0	0
Superstructure (Timber; Span 5m; BMS0)	m2	0.00	52,810	4,745	0	0	0
Superstructure (Timber; Span 8m; BMS0)	m2	0.00	66,977	6,008	0	0	0
Superstructure (Concrete; Span 3m; BMS0)	m2	0.00	46,053	107,985	0	0	0
Superstructure (Concrete; Span 5m; BMS0)	m2	0.00	47,428	120,694	0	0	0
Superstructure (Concrete; Span 8m; BMS0)	m2	0.00	48,954	131,491	0	0	0
Superstructure (Concrete; Span 10m; BMS0)	m2	0.00	53,650	149,376	0	0	0
Superstructure (Concrete; Span 15m; BMS0)	m2	0.00	58,035	176,007	0	0	0
Substructure (Pier; for Timber; 10T)	NO	0.00	339,916	32,859	0	0	0
Substructure (Abut; for Timber; 10T)	NO	0.00	964,892	154,362	0	0	0
Substructure (Pier; for Timber; BMS0)	NO	0.00	499,927	48,627	0	0	0
Substructure (Abut; for Timber; BMS0)	NO	0.00	1,084,991	171,532	0	0	0
Substructure (Pier; for Concrete; BMS0)	NO	0.00	1,821,504	477,161	0	0	0
Substructure (Abut; for Concrete; BMS0)	NO	0.00	3,755,081	999,497	0	0	0
Demolition of Bridge (Timber->Timber)	m2	0.00	11,009	1,373	0	0	0
Demolition of Bridge (Timber->Concrete)	m2	0.00	11,009	1,373	0	0	0
Demolition of Bridge (Concrete)	m2	0.00	83,389	81,377	0	0	0
Maintenance of Timber Bridge (New)	m2	0.00	7,203	1,121	0	0	0
Maintenance of Concrete Bridge (New)	m2	0.00	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m2	20.00	7,217	2,404	144,340	48,080	192,426
Maintenance of Concrete Bridge (Exist)	m2	0.00	3,966	2,471	0	0	0
( Without Overhead )			TOTAL COST (Timber Bridge)		0	0	0
			(Concrete Bridge)		0	0	0
			TOTAL COST (without Maintenance)		0	0	0
( Overhead : 15% )			TOTAL COST (Timber Bridge)		0	0	0
			(Concrete Bridge)		0	0	0
			TOTAL COST (without Maintenance)		0	0	0



PRDV : KALIMANTAN SELATAN KAB : TAPIN

LINK NO : 53 (IIC) LENGTH : 18 Km

( Rp )

I T E M	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		>>>>> TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Superstructure (Timber; Span 3m; 10T)	m2	0.00	39,013	3,541	0	0	0
Superstructure (Timber; Span 5m; 10T)	m2	0.00	43,213	3,910	0	0	0
Superstructure (Timber; Span 8m; 10T)	m2	112.00	57,235	5,136	6,410,320	575,232	6,985,552
Superstructure (Timber; Span 3m; BM50)	m2	0.00	48,375	4,378	0	0	0
Superstructure (Timber; Span 5m; BM50)	m2	0.00	52,810	4,745	0	0	0
Superstructure (Timber; Span 8m; BM50)	m2	0.00	66,977	6,006	0	0	0
Superstructure (Concrete; Span 3m; BM50)	m2	0.00	46,053	107,965	0	0	0
Superstructure (Concrete; Span 5m; BM50)	m2	0.00	47,428	120,694	0	0	0
Superstructure (Concrete; Span 8m; BM50)	m2	0.00	48,954	131,491	0	0	0
Superstructure (Concrete; Span 10m; BM50)	m2	0.00	53,650	149,376	0	0	0
Superstructure (Concrete; Span 15m; BM50)	m2	0.00	58,035	176,007	0	0	0
Substructure (Pier; for Timber; 10T)	NO	3.00	339,916	32,859	1,019,748	98,577	1,118,325
Substructure (Abut; for Timber; 10T)	NO	2.00	964,092	154,362	1,928,184	308,724	2,236,908
Substructure (Pier; for Timber; BM50)	NO	0.00	499,927	48,627	0	0	0
Substructure (Abut; for Timber; BM50)	NO	0.00	1,084,991	171,532	0	0	0
Substructure (Pier; for Concrete; BM50)	NO	0.00	1,821,504	477,161	0	0	0
Substructure (Abut; for Concrete; BM50)	NO	0.00	3,755,081	999,497	0	0	0
Demolition of Bridge (Timber->Timber)	m2	58.00	11,009	1,373	616,504	76,888	693,392
Demolition of Bridge (Timber->Concrete)	m2	0.00	11,009	1,373	0	0	0
Demolition of Bridge (Concrete)	m2	0.00	83,389	81,377	0	0	0
Maintenance of Timber Bridge (New)	m2	112.00	7,203	1,121	806,736	125,552	932,288
Maintenance of Concrete Bridge (New)	m2	0.00	1,752	3,135	0	0	0
Maintenance of Timber Bridge (Exist)	m2	0.00	7,217	2,404	0	0	0
Maintenance of Concrete Bridge (Exist)	m2	0.00	3,966	2,471	0	0	0
( Without Overhead )			TOTAL COST (Timber Bridge)		9,974,756	1,059,421	11,034,177
			(Concrete Bridge)		0	0	0
			TOTAL COST (without Maintenance)		9,974,756	1,059,421	11,034,177
( Overhead : 15% )			TOTAL COST (Timber Bridge)		11,470,969	1,218,334	12,689,304
			(Concrete Bridge)		0	0	0
			TOTAL COST (without Maintenance)		11,470,969	1,218,334	12,689,304







JICA