

APPENDIX

Appendix A-2 Engineering Data

ROAD LINK DATA

PROVINCE : Sulawesi Selatan

KABUPATEN: Wajo

LINK NO.	BEGINNING POINT (DESA NAME)	END POINT (DESA NAME)	LENGTH (KM)	THROUGH THE KEC. NAME & LENGTH		REMARKS
				KEC. NAME	LENGTH (KM)	
01	Tampangeng	Tosora	11	Pammana Tempe Majauleng	3 4 5	
02	Tosora	Paria	14	Majauleng	14	
03	Tosora	Aluppangnge	14	Sajoanging Majauleng	5 9	
04	Aluppange	Atapange	15	Sajoanging Majauleng	5 10	
05	Peneki	Solo	9	Takkalalo	9	
06	Solo	Ajuraja	11	Takkalalo	11	
07	Ajuraja	Soro	5	Takkalalo	5	
08	Waeleppang	Tosewo	3	Takkalalo	3	
09	Doping	Waeleppang	4	Takkalalo Sajoanging	3 1	
10	Atapange	Doping	16	Sajoanging Majauleng	11 5	
11	Doping	Jalang	7	Sajoanging	7	
12	Paojepe	Laukku	5	Pitumpanua	5	
13	Paojepe	Tanete	8	Pitumpanua	8	
14	Paria	Gilireng	11	Majauleng Monlang Pajo	8 3	
15	Tancung	Pasabaru	6	Tanasitolo	6	
16	Peneki	Waeleppang	4	Takkalalo	4	
17	Anabanua	Menge	15	Bolawa Monlang Pajo	8 7	
18	Salojampu	Canru	1	Sabbang Paru	1	
19	Calodo	Maroanging	17	Pammana	17	
20	Aluppangnge	Peneki	8	Takkalalo	8	
21	Peneki	Ajuraja	5	Takkalalo	5	
22	Wakko	Soro	17	Takkalalo	17	
23	Watabbola	Aluppangnge	12	Takkalalo	12	
24	Cellu E	Solo	21	Pammana Takkalalo Majauleng	3 16 2	

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 : Sulawesi Selatan

KABUPATEN: Wajo

LINK NO.	BEGINNING POINT (DESA NAME)	END POINT (DESA NAME)	LENGTH (KM)	THROUGH THE KEC. NAME & LENGTH		REMARKS
				KEC. NAME	LENGTH (KM)	
25	Bakke	Walanga	4	Sajoanging	4	
26	Tobulelle	Jalang	11	Sajoanging	11	
27	Pantobatu E	Allaporeng E	10	Sajoanging	3	
				Majauleng	7	
28	Jalang	Kulampu	16	Sajoanging	16	
29	Baramamase	Totakki	5	Sajoanging	5	
30	Bottotella	Baramamase	6	Sajoanging	6	
31	Gilireng	Sumpakecci	10	Monlang Pajo	6	
				Pitumpanua	4	
32	Gilireng	Paselloreng	10	Monlang Pajo	9	
				Pitumpanua	1	
33	Sumpakecci	Lokabatu E	14	Pitumpanua	14	
34	Kera	Lokabatu E	13	Pitumpanua	13	
35	Paselloreng	Lokabatu E	20	Pitumpanua	20	
36	Lokabatu E	Tanete	13	Pitumpanua	13	
37	Tanete	Belawa E	20	Pitumpanua	20	
38	Bulete	Belawa E	11	Pitumpanua	11	
39	Beriko	Belawa E	12	Pitumpanua	12	
40	Tingaraposi	Minangatellu E	11	Monlang Pajo	11	
41	Buluseppang	Watankalola	3	Monlang Pajo	3	
42	Callaccu	Tingaraposi	12	Monlang Pajo	12	
43	Lamata	Gilireng	3	Monlang Pajo	3	
44	Macanang	Dori E	8	Majauleng	6	
				Monlang Pajo	2	
45	Wele	Tanrutedong	6	Monlang Pajo	6	
46	Menge	Ongko E	8	Bolawa	8	
47	Menge	Tancungpurai	6	Bolawa	6	
48	Tancung	Menge	18	Bolawa	9	
				Tanasitolo	9	

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 : Sulawesi Selatan

KABUPATEN: Wajo

LINK NO.	BEGINNING POINT (DESA NAME)	END POINT (DESA NAME)	LENGTH (KM)	THROUGH THE KEC. NAME & LENGTH		REMARKS
				KEC. NAME	LENGTH (KM)	
49	Lowa	Menge	15	Bolawa	9	
				Tanasitolo	6	
50	Uraiang	Macanang	6	Majauleng	2	
				Tanasitolo	4	
51	Uraiang	Mellenge	4	Majauleng	2	
				Tanasitolo	2	
52	Macanang	Bulo E	8	Majauleng	2	
				Monlang Pajo	6	
53	Sakkoli	Sumpakecci	10	Sajoanging	3	
				Pitumpanua	7	
54	Tingaraposi	Paselloreng	8	Monlang Pajo	6	
				Pitumpanua	2	
55	Sengkang	Mario	9	Tempe	4.5	
				Tanasitolo	4.5	
56	Leppangeng	Bulucepto	3	Tanasitolo	3	
57	Bulucitta	Tosampa	7	Pammana	1	
				Tempe	6	
58	Surae	Tonring E	5	Sabbang Paru	2.5	
				Tempe	2.5	
59	Tampangeng	Galeko	5	Sabbang Paru	1	
				Tempe	4	
60	Sompe	Lapaukke	10	Sabbang Paru	5	
				Pammana	5	
61	Leppangeng	Tosora	8	Majauleng	4	
				Tanasitolo	4	
62	Tampangeng	Bulupatila	7	Tempe	7	
63	Tancung	Palippu	5	Tanasitolo	5	
64	Pammana	Lagosi	6	Pammana	6	
65	Sompe	Tondangsalo	6	Sabbang Paru	6	
66	Menge	Bolaasera E	3	Bolawa	3	
67	Menge	Bendoro	6	Bolawa	6	
68	Salodua	Bulupacelleng	2	Monlang Pajo	2	
69	Laerung	Bottodongga	4	Majauleng	4	
70	Bottodongga	Benceng ² E	7	Sajoanging	3.5	
				Majauleng	3.5	
71	Pekkae	Canru	1	Sabbang Paru	1	
72	Masia	Batue	2	Pitumpanua	2	

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 : Sulawesi Selatan

KABUPATEN: Wajo

LINK NO.	BEGINNING POINT (DESA NAME)	END POINT (DESA NAME)	LENGTH (KM)	THROUGH THE KEC. NAME & LENGTH		REMARKS
				KEC. NAME	LENGTH (KM)	
73	Bulu	Penrangriawa	8	Sajoanging	3	
				Majauleng	5	
74	Lawakessi	Lamasewanua	11	Majauleng	11	
75	Penrangriawa	Aluppang E	2	Sajoanging	2	
76	Penrangriase	Sp. Tosora	6	Majauleng	6	
77	Bungawae	Lacinde	5	Pitumpanua	5	
78	Canru	Liu	8	Sabbang Paru	8	
79	Kalukku	Lompoloang	8	Pitumpanua	8	
80	Soro	Labata	7	Takkalalo	7	
81	Paselloreng	Awo	15	Pitumpanua	15	
82	Awo	Tanete	5	Pitumpanua	5	
83	Kera	Babanakera	3	Pitumpanua	3	
84	Lalliseng	Babanalaliseng	7	Pitumpanua	7	
85	Jalang	Cenrana	2	Sajoanging	2	
86	Bulete	Doping ²	5	Pitumpanua	5	
87	Lompoloang	Bungawai E	7	Pitumpanua	7	
88	Ajuraja	Lagoari	4	Takkalalo	4	
89	Massaratu	Belawa E	9	Pitumpanua	9	
90	Doping	Pudee	2	Takkalalo	1	
				Sajoanging	1	
91	Cenranae	Ujungkessi	7.5	Tanasitolo	7.5	
92	Canru	U g i	4	Sabbang Paru	4	

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

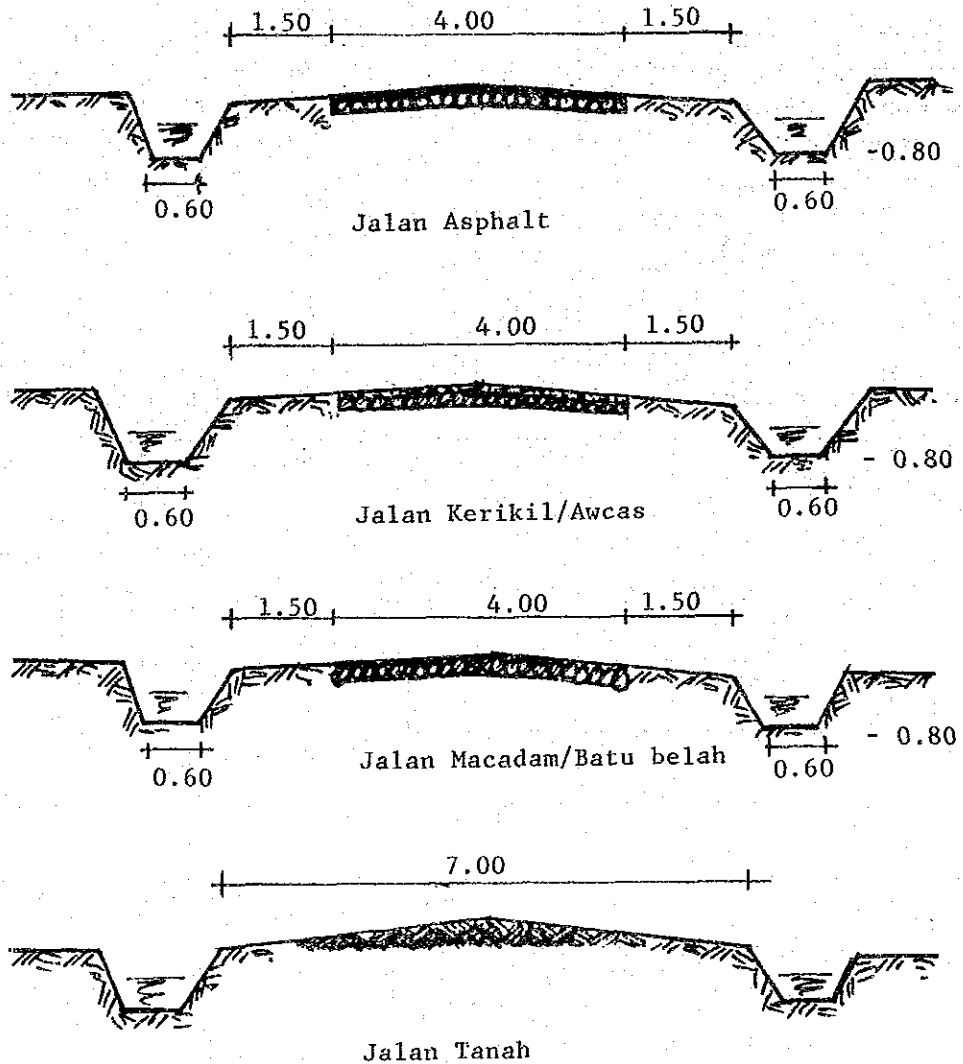
What Kind of Design Criteria has being applied for the new road construction and the improvement for the Kabupaten Road ?

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	LENGTII Panjang	COSTS Harga (Rp 10 ⁶)	REMARKS Keterang- an
		Lebar Jembatan	Type Jembatan	(KM)		
37	Kera - Pitumpanua	4	Gravel	3	30,545	
		-	-	-		
02	Kp. Baru - Paria - Tosora	4	Gravel	2.3	122,595	
		-	-	-		
-	Callacu - Tanapute	5	Gravel	0.8	37,054	
		-	-	-		
-	Callaccu - Bulupabulu	-	-	-	17,425	
		11	Beton	5 m		
-	Lapongkoda - Tempe	5	Gravel	1	30,953	
		6.5	Beton	5 m	12,505	
-	Bulupabulu - Tempe	5	Gravel	1.1	32,511	
		-	-	-		
-	Callaccu - Tokampu	5	Asphalt Surface	0.5	17,864	
		-	-	-		
-	Tampangeng - Surae	-	-	-	9,379	
		4.5	Beton	5 m		
59	Tampangeng - Caleko	5	Gravel	4.85	47,948	
		-	-	-		
58	Surae - Tonronge	5	Gravel	1.85	21,463	
		-	-	-		
13	Labetti - Ajucolo	5	Gravel	2	30,333	
		-	-	-		
-	Lompo - Bakke Alau	5	Gravel	0.35	9,688	
		-	-	-		
-	Paneki - Watabola	-	-	-	25,830	
		4.5	Beton	10 m		

* 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	L O C A T I O N From - To (dari - ke)	Lebar per-	Type per-	LENGTH Panjang (KM)	COSTS Harga (Rp 10 ⁶)	REMARKS Keterangan
		kerasan(m) Lebar Jembatan	Keraskan Type Jembatan			
04	Atapange - Allupange	4	Gravel	10	53,397	
17	Menge - Anabanua	4	Gravel	7.5	21,375	
-	Kp.Ara - Callaccu Tanah Pute	5	Gravel	1.4	36,183	
-	Kp.Ara - Tanah Pute	4.5	Beton	5 m	9,430	
-	Callaccu - Pattirosompe	5	Gravel	1.25	26,240	
-	Maroanging - Lapaukke	4.5	Beton	7 m	16,195	
-	Calado - Lapaukke	4.5	Beton	7 m	12,915	
56	Leppangeng - Bulucepo	5	Gravel	3	47,457	
71	Pekka E - Canru	4.5	Beton	12 m	27,009	
-	Alabanua - Wele	5	Gravel	1.1	16,093	
-	Kulampu - Akkotengeng	4.5	Beton	17 m	30,340	
-	SarammaE - TowaroE	4.5	Beton	15 m	27,470	
10	Atapange - Tale	5	Asphalt Surface	3	43,311	
-	DuppawaliE - Wakke	4.5	Beton	20 m	28,290	

* PAVENMENT TYPE : Pls note the appropriate No. below.

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3. : Gravel / kerikil
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LINK NO Nomor Ruas	LOCATION From - To (dari - ke)	Lebar per- kerasan(m)		Type per- kerasan	LENGTH Panjang (KM)	COSTS Harga (Rp 10 ⁶)	REMARKS Keterangan
		Lebar Jembatan	Type Jembatan	Type			
49	Lowa - Menge	4		Gravel	14	118,000	
		4		Timber	50 m		
28	Totakki - Jalang	4		Gravel	11	63,000	
		-		-			
05	Peneki - Solo	4		Gravel	29	195,225	
		-		-			
13	Masumpanduriange-Tanete	5		Gravel	1	28,480	
		4.5		-	5 m	13,120	
58	SuraE - Tonronge	5		Gravel	2	52,275	
		-		-			
-	Callaccu - Tempe	-		-	-	14,658	
		-		Beton	5 m		
90	Doping - PudeE	5		Gravel	2	61,910	
		-		-			
-	Maroanging - Lapaukke	-		-	-	13,120	
		4.5		Beton	5 m		
-	Liu Bila - Liu	-		-	-	15,734	
		4.5		Beton	7 m		
55	Data - Mario	5		Gravel	1	31,416	
		-		-			
10	Tale - Pantobatue	5		Asphalt Surface	3	58,528	
		-		-			
-	Ongkoe - Wele - Menge	-		-	-	18,758	
		4.5		Beton	7 m		
-	Tocule - Solo	-		-	-	44,383	
		4.5		Beton	21 m		
-	Bulete - Tangkoro	-		-	-	24,600	
		-		Beton	8 m		

* 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 ⁶)	REMARKS Keterangan
		Lebar Jembatan	Type Jembatan	Type			
-	Callaccu - Tempe	5	-	Gravel	1.5	39,307	
-	Lapaceccang	5	-	Gravel	1.65	40,233	
08	Waelepang - Tosewo	5	-	Gravel	1	21,319	
58	Surae	5	-	Gravel	1	22,857	
56	Data - Marrio	5	-	Gravel	1	18,347	
-	Lapongkoda - Bulupabulu	5	-	Gravel	1	20,089	
-	Amessangeng - Atakkae	5	-	Gravel	1	65,304	
-	Calodo - Maroanging	4.5	-	Beton	5 m	11,993	
32	Gilereng - Paselloreng	4	-	Gravel	11	71,972	
42	Callaccu - Paselloreng	4.5	-	Beton	7 m		
		4	-	Gravel	17	164,837	
52	BulaE - Macanang	4.5	-	Beton	50 m		
		4	-	Gravel	11	71,919	
15	Tancung-Palippu-Pasabaru	4.5	-	Beton	10 m		
		4	-	Gravel	11	62,810	
30	Bottotella - Barammase	4	-	Gravel	5	28,163	
37	Masumpangduriane-Tanete	4	-	Gravel	1	19,133	
		4.5	-	Beton	10 m		
-	Gilireng - Paselloreng	4	-	Gravel	1	65,969	
		4.5	-	Beton	34 m		
-	Atapange - Aluppange	4	-	Gravel	1	48,276	
		4.5	-	Beton	8 m		
-	Callaccu - Pattirosompe - Sengkang	5	-	Gravel	0.5	17,577	
		4	-	Gravel	0.5		

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

1. : Asphalt surface / penetrasi macadam
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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	COSTS Harga (Rp 10 ⁶)	REMARKS Keterang- an
		Lebar Jembatan	Type Jembatan	(KM)		
83	Kera - Babana Kera	4.5	Gravel	3	24,097	
19	Calodo - Maroanging	4.5	Gravel	1.7	19,551	
-	Tobulelle - Jalang	4.5	Gravel	7.5	62,246	
50	Uraiang - Macanang	4.5	Gravel	4.5	35,907	
22	Wakke - Maroanging - Dup pawale	4.5	Gravel	6	48,199	
-	Menge-Tokadde-Lowa	4.5	Beton	7 m	18,553	
-	Lowa - Menge	4.5	Beton	5 m	14,862	
10	Pantobatue - Tobulelle	5	Asphalt Surface	3.5	38,130	
10	Tobulelle - Sakkaleng	5	Asphalt Surface	3.5	38,130	
10	Sakkaleng - Doping	5	Asphalt Surface	3.5	38,130	
68	Salodua - Bulupacelleng	5	Gravel	1.5	25,625	
-	Bulupabulu - Leppangeng	5	Gravel	2.7	52,378	
-	Callaccu - Bulupabulu	5	Asphalt Surface	0.75	9,430	
-	Bulupabulu - Tempe	5	Asphalt Surface	1	6,458	
-	Lapongkoda - Bulupabulu	4.5	Beton	5 m	15,580	
-	Leppangeng - Tomodi	5	Gravel	1.5	23,883	
-	Lapongkoda - Tempe	5	Asphalt Surface	1.15	7,279	

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

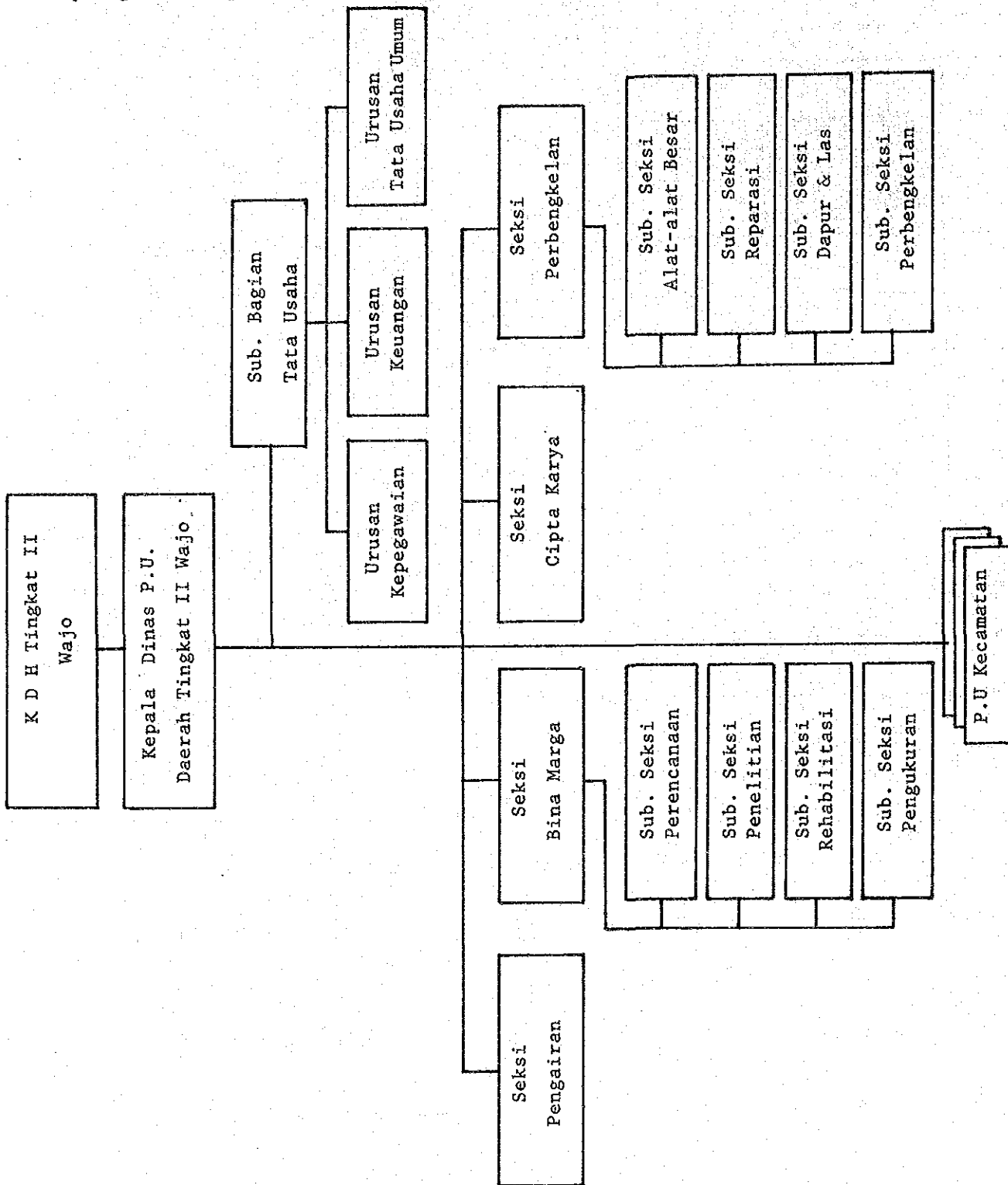
1. : Asphalt surface / penetrasi macadam
2. : Asphalt seal / pelaburan aspal
3. : Gravel / kerikil
4. : Gravel /ANCAS / kerikil / japat

EXISTING ORGANIZATION IN KABUPATEN

Structur 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 KABUPATEN

Tenaga Dinas PUK yang ada

PROPINSI: Sulawesi SelatanKABUPATEN: Wajo

DESCRIPTION /Uraian	NUMBER / Jumlah	REMARKS Keterangan
CONTROLLING STAFF Staff teknis PUK	(18)	(10)
DPUK ENGINEER Sarjana Teknik	-	-
ASSISTANT ENGINEER Sarjana Muda Teknik	2	-
TECHNICIAN STAFF Staff Teknik (STM)	16	10
ADMINISTRATION Tenaga Administrasi	10	-
SUPERVISOR Tenaga Pengawas	10	5
WORKING FORCE Tenaga Pelaksana Lapangan	(6)	
OPERATORS Operators	4	-
DRIVERS Supir	2	-
MECHANICS Mechanic	-	-
TRADESMAN Tukang	-	-
L A B O U R Buruh / Pekerja	-	-
OTHERS Lain-lain	-	-
TOTAL / JUMLAH	44	15

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

LOCATION AND AREA OF DPUK WORKSHOP

E-06

Lokasi Workshop DPUK

PROPINSI : Sulawesi Selatan

KABUPATEN: Wajo

LOCATION Lokasi	AREA (m2) Luas	NUMBER Jumlah	REMARKS Keterangan
Nepo	20.000	1	-

PROPINSI: Sulawesi Selatan

E-07

KABUPATEN: Wajo

LAND ACQUISITION COST

Daftar harga pembebasan tanah

DESCRIPTION Uraian	UNIT Satuan	RATE (RP) Harga	REMARKS Keterangan
CITY/kota	M2	2,500 - 7,500	Kelas I (Dalam Kota)
VILLAGE / desa	M2	1,650	
RICE FIELD/sawah	M2	200 - 500	
DRY FIELD/ladang	M2	100 - 450	
MIX CROPS/panen	M2	-	
FOREST/hutan	M2	-	
SWAMP / rawa	M2	-	
OTHERS / lain-lain	M2	50 - 125	

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							
Farm Tractor							
Dump Truck		1982	2	-	2		
Water Tank Truck							
Fuel Tank Truck							
Pick Up		1980	6	-	6		
Jeep		1983	1	-	1		
Motorcycle		1982	4	-	4		
Generator							
Water Pump		1981	24	-	24		
Others (Truck)		1980	74	-	74		

LIST OF EXISTING EQUIPMENT OF P.U KABUPATEN

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		1977 1983					
Steel Whell Roller			2	4	6		
Vibration Roller		1980	1	2	3		
Wheel Loader							
Front End Loader and Backhoe							
Mobile Crane							
Concrete Mixer							
Stone Crusher		1979	-	1	1		
Portable Compressor							
Hydraulic Excavator							
Asphalt Paving Machine							
Asphalt Sprayer		1984	1	-	1		
Asphalt Mixing Machine							
Mobile Workshop							
Mechanic Rammer							
Plate Tamper							
Pile Driver							
Leg Drill							
Hand Hammer							
Farm Tractor							
Dump Truck							
Water Tank Truck							
Fuel Tank Truck							
Pick Up		80/84	2	-	2		
Jeep							
Motorcycle							
Generator							
Water Pump							
Others (Truck)		1970	-	4	4		

PROV : SULAWESI SELATAN KAB : WAJO

LINK NO : 73 (IIB-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	m ²	0.0	162	91	0	0	0	
Subgrade Preparation	m ²	56000.0	20	11	1,120,000	616,000	1,736,000	
Normal Fill	m ³	0.0	1,668	865	0	0	0	
Fill in Swamp	m ³	0.0	2,474	1,055	0	0	0	
Normal Excavation to Spoil	m ³	640.0	975	524	624,000	335,360	959,360	
Sub Base Course	m ³	4480.0	3,158	1,351	14,147,840	6,052,480	20,200,320	
Base Course	m ³	2240.0	4,327	2,303	9,692,480	5,158,720	14,851,200	
Shoulder	m ²	24000.0	292	146	7,008,000	3,504,000	10,512,000	
Asphalt Patching	m ²	0.0	3,384	1,346	0	0	0	
Surface Dressing (Single)	m ²	32000.0	591	552	18,912,000	17,664,000	36,576,000	
Surface Dressing (Double)	m ²	0.0	737	868	0	0	0	
Earth Drain	m	0.0	773	119	0	0	0	
Earth Drain in Swamp (by machine)	m ³	0.0	1,151	475	0	0	0	
Pipe Culvert 80cm	m	32.0	40,653	40,932	1,300,896	1,309,824	2,610,720	
Masonry Culvert (80x80cm)	m	120.0	58,918	35,370	7,070,160	4,244,400	11,314,560	
Retaining Wall and Wing Wall (Timber)	m ²	0.0	17,117	246	0	0	0	
Retaining Wall and Wing Wall (Masonry)	m ³	34.7	42,283	11,516	1,467,220	399,605	1,866,825	
Gabion Protection	m ³	0.0	13,152	121	0	0	0	
New Bridge (Timber)	SET	1.0	--	--	0	0	0	
New Bridge (Concrete)	SET	1.0	--	--	0	0	0	
					Sub Total	61,342,596	39,284,389	100,626,985
Overhead (15%)						9,201,389	5,892,658	15,094,047
					TOTAL COST	70,543,985	45,177,047	115,721,032

Manual routine maintenance of road	Km	8.0	122,920	7,260	983,360	58,080	1,041,440
Routine maintenance of asphalt road	Km	8.0	338,400	134,600	2,707,200	1,076,800	3,784,000
			Sub Total		3,690,560	1,134,880	4,825,440
Maintenance of Timber Bridge (New)	m ²	0.0	10,411	1,344	0	0	0
Maintenance of Concrete Bridge (New)	m ²	0.0	2,049	2,523	0	0	0
Maintenance of Timber Bridge (Exist)	m ²	0.0	8,941	2,517	0	0	0
Maintenance of Concrete Bridge (Exist)	m ²	22.5	4,145	2,349	93,262	52,852	146,114

Earthwork & Pavement Unit Cost	(Rp/Km)	:	14,465,129
Timber Bridge Unit Cost	(Rp/m ²)	:	
Concrete Bridge Unit Cost	(Rp/m ²)	:	
Survived Value	(Rp)	:	17,110,464
Maintenance Rate without Bridge	(%)	:	4.17
New Bridge Cost Rate	(%)	:	

PROV : SULAWESI SELATAN KAB : WAJO

LINK NO : 69 (IIIB-1) LENGTH : 4 Km

UPGRADE : 9.5m 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	m2	0.0	162	91	0	0	0
Subgrade Preparation	m2	38000.0	20	11	760,000	418,000	1,178,000
Normal Fill	m3	0.0	1,668	865	0	0	0
Fill in Swamp	m3	0.0	2,474	1,055	0	0	0
Normal Excavation to Spoil	m3	256.0	975	524	249,600	134,144	383,744
Sub Base Course	m3	2240.0	3,158	1,351	7,073,920	3,026,240	10,100,160
Base Course	m3	1120.0	4,327	2,303	4,846,240	2,579,360	7,425,600
Shoulder	m2	22000.0	292	146	6,424,000	3,212,000	9,636,000
Asphalt Patching	m2	0.0	3,384	1,346	0	0	0
Surface Dressing (Single)	m2	16000.0	591	552	9,456,000	8,832,000	18,288,000
Surface Dressing (Double)	m2	0.0	737	868	0	0	0
Earth Drain	m	360.0	773	119	278,280	42,840	321,120
Earth Drain in Swamp (by machine)	m3	0.0	1,151	475	0	0	0
Pipe Culvert 800cm	m	24.0	40,653	40,932	975,672	982,368	1,958,040
Masonry Culvert 180x80cm	m	40.0	58,918	35,370	2,356,720	1,414,800	3,771,520
Retaining Wall and Wing Wall (Timber)	m2	0.0	17,117	246	0	0	0
Retaining Wall and Wing Wall (Masonry)	m3	16.9	42,283	11,516	714,582	194,620	909,202
Babion Protection	m3	0.0	13,152	121	0	0	0
New Bridge (Timber)	SET	1.0	--	--	0	0	0
New Bridge (Concrete)	SET	1.0	--	--	0	0	0
			Sub Total		33,135,014	20,836,372	53,971,386
Overhead (15%)					4,970,252	3,125,455	8,095,707
			TOTAL COST		38,105,266	23,961,827	62,067,093

Manual routine maintenance of road	Km	4.0	122,920	7,260	491,680	29,040	520,720
Routine maintenance of asphalt road	Km	4.0	338,400	134,600	1,353,600	538,400	1,892,000
			Sub Total		1,845,280	567,440	2,412,720
Maintenance of Timber Bridge (New)	m2	0.0	10,411	1,344	0	0	0
Maintenance of Concrete Bridge (New)	m2	0.0	2,049	2,523	0	0	0
Maintenance of Timber Bridge (Exist)	m2	0.0	8,941	2,517	0	0	0
Maintenance of Concrete Bridge (Exist)	m2	0.0	4,145	2,349	0	0	0

Earthwork & Pavement	Unit Cost	(Rp/Km)	:	15,516,773
Timber Bridge	Unit Cost	(Rp/m2)	:	
Concrete Bridge	Unit Cost	(Rp/m2)	:	
Survived Value		(Rp)	:	8,555,232
Maintenance Rate without Bridge		(%)	:	3.89
New Bridge Cost Rate		(%)	:	

PROV : SULAWESI SELATAN KAB : WAJO

LINK NO : 44 (IIIB-2) LENGTH : 8 Km

UPGRADE : 9.0m 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	162	91	0	0	0
Subgrade Preparation	m2	45000.0	20	11	900,000	495,000	1,395,000
Normal Fill	m3	0.0	1,668	865	0	0	0
Fill in Swamp	m3	0.0	2,474	1,055	0	0	0
Normal Excavation to Spoil	m3	441.0	975	524	429,975	231,084	661,059
Sub Base Course	m3	3184.0	3,158	1,351	10,055,072	4,301,584	14,356,656
Base Course	m3	1920.0	4,327	2,303	8,307,840	4,421,760	12,729,600
Shoulder	m2	40000.0	292	146	11,680,000	5,840,000	17,520,000
Asphalt Patching	m2	0.0	3,304	1,346	0	0	0
Surface Dressing (Single)	m2	0.0	591	552	0	0	0
Surface Dressing (Double)	m2	0.0	737	868	0	0	0
Earth Drain	m	9240.0	773	119	7,142,520	1,099,560	8,242,080
Earth Drain in Swamp (by machine)	m3	0.0	1,151	475	0	0	0
Pipe Culvert Ø80cm	m	32.0	40,653	40,932	1,300,896	1,309,824	2,610,720
Masonry Culvert (80x80cm)	m	32.0	58,918	35,370	1,885,376	1,131,840	3,017,216
Retaining Wall and Wing Wall (Timber)	m2	0.0	17,117	246	0	0	0
Retaining Wall and Wing Wall (Masonry)	m3	18.6	42,283	11,516	786,463	214,197	1,000,660
Gabion Protection	m3	0.0	13,152	121	0	0	0
New Bridge (Timber)	SET	1.0	--	--	0	0	0
New Bridge (Concrete)	SET	1.0	--	--	0	0	0
				Sub Total	42,488,142	19,044,849	61,532,991
Overhead (15%)					6,373,221	2,856,727	9,229,948
				TOTAL COST	48,861,363	21,901,576	70,762,939

Manual routine maintenance of road	Km	8.0	122,920	7,260	983,360	58,080	1,041,440
Routine maintenance of gravel road	Km	8.0	186,528	88,186	1,492,224	705,488	2,197,712
				Sub Total	2,475,584	763,568	3,239,152
Maintenance of Timber Bridge (New)	m2	0.0	10,411	1,344	0	0	0
Maintenance of Concrete Bridge (New)	m2	0.0	2,049	2,523	0	0	0
Maintenance of Timber Bridge (Exist)	m2	0.0	8,941	2,517	0	0	0
Maintenance of Concrete Bridge (Exist)	m2	31.5	4,145	2,349	130,567	73,993	204,560

Earthwork & Pavement Unit Cost	(Rp/Km)	:	8,845,367
Timber Bridge Unit Cost	(Rp/m2)	:	
Concrete Bridge Unit Cost	(Rp/m2)	:	
Survived Value	(Rp)	:	7,178,328
Maintenance Rate without Bridge	(%)	:	4.58
New Bridge Cost Rate	(%)	:	

PROV : SULAWESI SELATAN KAB : WAJO
 LINK NO : 39 (IIIA) LENGTH : 12 Km
 UPGRADE : 7.0m road bed, 4.0m road with surface Dressing (2)

(Rp)

ITEM	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		TOTAL	
			LOCAL	FOREIGN	LOCAL	FOREIGN		
Site Clearance in Light Bush	m2	6000.0	162	91	972,000	546,000	1,518,000	
Subgrade Preparation	m2	42000.0	20	11	840,000	462,000	1,302,000	
Normal Fill	m3	0.0	1,668	865	0	0	0	
Fill in Swamp	m3	0.0	2,474	1,055	0	0	0	
Normal Excavation to Spoil	m3	327.0	975	524	318,825	171,348	490,173	
Sub Base Course	m3	4138.0	3,158	1,351	13,067,804	5,590,438	18,658,242	
Base Course	m3	3840.0	4,327	2,303	16,615,680	8,843,520	25,459,200	
Shoulder	m2	36000.0	292	146	10,512,000	5,256,000	15,768,000	
Asphalt Patching	m2	0.0	3,384	1,346	0	0	0	
Surface Dressing (Single)	m2	0.0	591	552	0	0	0	
Surface Dressing (Double)	m2	46000.0	737	868	35,376,000	41,664,000	77,040,000	
Earth Drain	m	4900.0	773	119	3,787,700	583,100	4,370,800	
Earth Drain in Swamp (by machine)	m3	0.0	1,151	475	0	0	0	
Pipe Culvert Ø80cm	m	312.0	40,653	40,932	12,683,736	12,770,784	25,454,520	
Masonry Culvert (80x80cm)	m	0.0	58,918	35,370	0	0	0	
Retaining Wall and Wing Wall (Timber)	m2	0.0	17,117	246	0	0	0	
Retaining Wall and Wing Wall (Masonry)	m3	124.8	42,283	11,516	5,276,918	1,437,196	6,714,114	
Gabion Protection	m3	0.0	13,152	121	0	0	0	
New Bridge (Timber)	SET	1.0	--	--	0	0	0	
New Bridge (Concrete)	SET	1.0	--	--	8,415,642	3,604,882	12,020,524	
					Sub Total	107,866,305	80,929,268	188,795,573
Overhead (15%)						16,179,945	12,139,390	28,319,335
					TOTAL COST	124,046,250	93,068,658	217,114,908

Manual routine maintenance of road	Km	12.0	122,920	7,260	1,475,040	87,120	1,562,160
Routine maintenance of asphalt road	Km	12.0	338,400	134,600	4,060,800	1,615,200	5,676,000
			Sub Total		5,535,840	1,702,320	7,238,160
Maintenance of Timber Bridge (New)	m2	0.0	10,411	1,344	0	0	0
Maintenance of Concrete Bridge (New)	m2	18.0	2,049	2,523	36,882	45,414	82,296
Maintenance of Timber Bridge (Exist)	m2	54.0	8,941	2,517	482,814	135,918	618,732
Maintenance of Concrete Bridge (Exist)	m2	0.0	4,145	2,349	0	0	0

Earthwork & Pavement Unit Cost (Rp/Km)	:	16,940,942
Timber Bridge Unit Cost (Rp/m2)	:	
Concrete Bridge Unit Cost (Rp/m2)	:	767,978
Survived Value (Rp)	:	27,301,655
Maintenance Rate without Bridge (%)	:	3.56
New Bridge Cost Rate (%)	:	6.37

PROV : SULAWESI SELATAN KAB : WAJO

LINK NO : 11 (IIIB-1) LENGTH : 7 Km

UPGRADE : 9.5m 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 ²	0.0	162	91	0	0	0
Subgrade Preparation	m ²	0.0	20	11	0	0	0
Normal Fill	m ³	0.0	1,668	865	0	0	0
Fill in Swamp	m ³	0.0	2,474	1,055	0	0	0
Normal Excavation to Spoil	m ³	0.0	975	524	0	0	0
Sub Base Course	m ³	323.0	3,158	1,351	1,020,034	436,373	1,456,407
Base Course	m ³	560.0	4,327	2,303	2,423,120	1,289,680	3,712,800
Shoulder	m ²	38500.0	292	146	11,242,000	5,621,000	16,863,000
Asphalt Patching	m ²	57.0	3,384	1,346	192,688	76,722	269,410
Surface Dressing (Single)	m ²	28000.0	591	552	16,548,000	15,456,000	32,004,000
Surface Dressing (Double)	m ²	0.0	737	868	0	0	0
Earth Drain	m	0.0	773	119	0	0	0
Earth Drain in Swamp (by machine)	m ³	0.0	1,151	475	0	0	0
Pipe Culvert 80cm	m	0.0	40,653	40,932	0	0	0
Masonry Culvert 180x80cm	m	0.0	58,918	35,370	471,344	282,960	754,304
Retaining Wall and Wing Wall (Timber)	m ²	0.0	17,117	246	0	0	0
Retaining Wall and Wing Wall (Masonry)	m ³	1.5	42,283	11,516	63,424	17,274	80,698
Gabion Protection	m ³	0.0	13,152	121	0	0	0
New Bridge (Timber)	SET	1.0	--	--	0	0	0
New Bridge (Concrete)	SET	1.0	--	--	0	0	0
				Sub Total	31,960,810	23,180,009	55,140,819
Overhead (15%)					4,794,121	3,477,001	8,271,122
				TOTAL COST	36,754,931	26,657,010	63,411,941

Manual routine maintenance of road	Km	7.0	122,920	7,260	860,440	50,820	911,260
Routine maintenance of asphalt road	Km	7.0	338,400	134,600	2,368,800	942,200	3,311,000
			Sub Total		3,229,240	993,020	4,222,260
Maintenance of Timber Bridge (New)	m ²	0.0	10,411	1,344	0	0	0
Maintenance of Concrete Bridge (New)	m ²	0.0	2,049	2,523	0	0	0
Maintenance of Timber Bridge (Exist)	m ²	0.0	8,941	2,517	0	0	0
Maintenance of Concrete Bridge (Exist)	m ²	88.0	4,145	2,349	364,760	208,712	571,472

Earthwork & Pavement	Unit Cost	(Rp/Km)	:	9,058,849
Timber Bridge	Unit Cost	(Rp/m ²)	:	
Concrete Bridge	Unit Cost	(Rp/m ²)	:	
Survived Value		(Rp)	:	1,762,044
Maintenance Rate without Bridge		(%)	:	6.66
New Bridge Cost Rate		(%)	:	

PROV : SULAWESI SELATAN KAB : WAJU

LINK NO : 9 (IIIB-1) LENGTH : 4 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 ²	0.0	162	91	0	0	0	
Subgrade Preparation	m ²	0.0	20	11	0	0	0	
Normal Fill	m ³	0.0	1,668	865	0	0	0	
Fill in Swamp	m ³	0.0	2,474	1,055	0	0	0	
Normal Excavation to Spoil	m ³	75.0	975	524	73,125	39,300	112,425	
Sub Base Course	m ³	645.5	3,158	1,351	2,038,489	872,070	2,910,559	
Base Course	m ³	1120.0	4,327	2,303	4,845,240	2,579,360	7,425,600	
Shoulder	m ²	24000.0	292	146	7,008,000	3,504,000	10,512,000	
Asphalt Patching	m ²	0.0	3,384	1,346	0	0	0	
Surface Dressing (Single)	m ²	16000.0	591	552	9,456,000	8,832,000	18,288,000	
Surface Dressing (Double)	m ²	0.0	737	868	0	0	0	
Earth Drain	m	700.0	773	119	541,100	83,300	624,400	
Earth Drain in Swamp (by machine)	m ³	0.0	1,151	475	0	0	0	
Pipe Culvert 80x80cm	m	6.0	40,653	40,932	243,918	245,592	489,510	
Masonry Culvert (80x80cm)	m	0.0	58,918	35,370	0	0	0	
Retaining Wall and Wing Wall (Timber)	m ²	0.0	17,117	246	0	0	0	
Retaining Wall and Wing Wall (Masonry)	m ³	0.0	42,283	11,516	0	0	0	
Gabion Protection	m ³	0.0	13,152	121	0	0	0	
New Bridge (Timber)	SET	1.0	--	--	0	0	0	
New Bridge (Concrete)	SET	1.0	--	--	0	0	0	
					Sub Total	24,206,872	16,155,622	40,362,494
Overhead (15%)						3,631,030	2,423,343	6,054,373
					TOTAL COST	27,837,902	18,578,965	46,416,867

Manual routine maintenance of road	Km	4.0	122,920	7,260	491,680	29,040	520,720
Routine maintenance of asphalt road	Km	4.0	338,400	134,600	1,353,600	538,400	1,892,000
			Sub Total		1,845,280	567,440	2,412,720
Maintenance of Timber Bridge (New)	m ²	0.0	10,411	1,344	0	0	0
Maintenance of Concrete Bridge (New)	m ²	0.0	2,049	2,523	0	0	0
Maintenance of Timber Bridge (Exist)	m ²	0.0	8,941	2,517	0	0	0
Maintenance of Concrete Bridge (Exist)	m ²	69.8	4,145	2,349	289,113	163,842	452,955

Earthwork & Pavement Unit Cost (Rp/Km)	:	11,604,217
Timber Bridge Unit Cost (Rp/m ²)	:	
Concrete Bridge Unit Cost (Rp/m ²)	:	
Survived Value (Rp)	:	3,522,511
Maintenance Rate without Bridge (%)	:	5.20
New Bridge Cost Rate (%)	:	

PROV : SULAWESI SELATAN KAB : WAJU

LINK NO : 7 (IIIC) LENGTH : 5 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 ²	0.0	162	91	0	0	0
Subgrade Preparation	m ²	18000.0	20	11	360,000	198,000	558,000
Normal Fill	m ³	0.0	1,468	865	0	0	0
Fill in Swamp	m ³	0.0	2,474	1,055	0	0	0
Normal Excavation to Spoil	m ³	192.0	975	524	187,200	100,608	287,808
Sub Base Course	m ³	1300.8	3,158	1,351	4,107,926	1,757,380	5,865,306
Base Course	m ³	720.0	4,327	2,303	3,115,440	1,658,160	4,773,600
Shoulder	m ²	25000.0	292	146	7,300,000	3,650,000	10,950,000
Asphalt Patching	m ²	0.0	3,384	1,346	0	0	0
Surface Dressing (Single)	m ²	0.0	591	552	0	0	0
Surface Dressing (Double)	m ²	0.0	737	868	0	0	0
Earth Drain	m	740.0	773	119	572,020	88,060	660,080
Earth Drain in Swamp (by machine)	m ³	0.0	1,151	475	0	0	0
Pipe Culvert 80cm	m	80.0	40,653	40,932	3,252,240	3,274,560	6,526,800
Masonry Culvert (80x80cm)	m	0.0	58,918	35,370	0	0	0
Retaining Wall and Wing Wall (Timber)	m ²	0.0	17,117	246	0	0	0
Retaining Wall and Wing Wall (Masonry)	m ³	32.0	42,283	11,516	1,355,056	368,512	1,721,568
Gabion Protection	m ³	0.0	13,152	121	0	0	0
New Bridge (Timber)	SET	1.0	--	--	0	0	0
New Bridge (Concrete)	SET	1.0	--	--	0	0	0
				Sub Total	20,247,882	11,095,280	31,343,162
Overhead (15%)					3,037,182	1,664,292	4,701,474
				TOTAL COST	23,285,064	12,759,572	36,044,636

Manual routine maintenance of road	Km	5.0	122,920	7,260	614,600	36,300	650,900
Routine maintenance of gravel road	Km	5.0	186,528	88,188	932,640	440,930	1,373,570
			Sub Total		1,547,240	477,230	2,024,470
Maintenance of Timber Bridge (New)	m ²	0.0	10,411	1,344	0	0	0
Maintenance of Concrete Bridge (New)	m ²	0.0	2,049	2,523	0	0	0
Maintenance of Timber Bridge (Exist)	m ²	0.0	8,941	2,517	0	0	0
Maintenance of Concrete Bridge (Exist)	m ²	45.0	4,145	2,349	186,525	105,705	292,230

Earthwork & Pavement Unit Cost (Rp/Km)	:	7,208,927
Timber Bridge Unit Cost (Rp/m ²)	:	
Concrete Bridge Unit Cost (Rp/m ²)	:	
Survived Value (Rp)	:	2,346,122
Maintenance Rate without Bridge (%)	:	5.62
New Bridge Cost Rate (%)	:	

PROV : SULAWESI SELATAN KAB : WAJO

LINK NO : 22 (IIIA) LENGTH : 17 Km

UPGRADE : 12.5m road bed, 9.5m road with surface Dressing (2)

(Rp)

ITEM	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Site Clearance in Light Bush	m ²	47250.0	162	91	7,654,500	4,299,750	11,954,250
Subgrade Preparation	m ²	212500.0	20	11	4,250,000	2,337,500	6,587,500
Normal Fill	m ³	0.0	1,868	865	0	0	0
Fill in Swamp	m ³	2775.0	2,474	1,055	6,865,350	2,927,625	9,792,975
Normal Excavation to Spoil	m ³	863.0	975	524	841,425	452,212	1,293,637
Sub Base Course	m ³	22610.0	3,158	1,351	71,402,380	30,546,110	101,948,490
Base Course	m ³	12920.0	4,327	2,303	55,904,840	29,754,760	85,659,600
Shoulder	m ²	51000.0	292	146	14,892,000	7,446,000	22,338,000
Asphalt Patching	m ²	0.0	3,384	1,346	0	0	0
Surface Dressing (Single)	m ²	0.0	591	552	0	0	0
Surface Dressing (Double)	m ²	161500.0	737	868	119,025,500	140,182,000	259,207,500
Earth Drain	m	0.0	773	119	0	0	0
Earth Drain in Swamp (by machine)	m ³	3000.0	1,151	475	3,453,000	1,425,000	4,878,000
Pipe Culvert (80x80cm)	m	288.0	40,653	40,932	11,708,064	11,788,416	23,496,480
Masonry Culvert (80x80cm)	m	0.0	58,918	35,370	0	0	0
Retaining Wall and Wing Wall (Timber)	m ²	0.0	17,117	246	0	0	0
Retaining Wall and Wing Wall (Masonry)	m ³	115.2	42,283	11,516	4,871,001	1,326,843	6,197,844
Gabion Protection	m ³	0.0	13,152	121	0	0	0
New Bridge (Timber)	SET	1.0	--	--	0	0	0
New Bridge (Concrete)	SET	1.0	--	--	0	0	0
					Sub Total		
					300,868,060	232,486,016	533,354,076
Overhead (15%)					45,130,209	34,872,902	80,003,111
					TOTAL COST		
					345,998,269	267,358,918	613,357,187

Manual routine maintenance of road	Km	17.0	122,920	7,260	2,089,640	123,420	2,213,060
Routine maintenance of asphalt road	Km	17.0	338,400	134,600	5,752,800	2,288,200	8,041,000
			Sub Total)		7,842,440	2,411,620	10,254,060
Maintenance of Timber Bridge (New)	m ²	0.0	10,411	1,344	0	0	0
Maintenance of Concrete Bridge (New)	m ²	0.0	2,049	2,523	0	0	0
Maintenance of Timber Bridge (Exist)	m ²	0.0	8,941	2,517	0	0	0
Maintenance of Concrete Bridge (Exist)	m ²	90.0	4,145	2,349	373,050	211,410	584,460

Earthwork & Pavement Unit Cost	(Rp/Km)	:	36,079,835
Timber Bridge Unit Cost	(Rp/m ²)	:	
Concrete Bridge Unit Cost	(Rp/m ²)	:	
Survived Value	(Rp)	:	102,973,692
Maintenance Rate without Bridge	(%)	:	1.67
New Bridge Cost Rate	(%)	:	

PROV : SULAWESI SELATAN KAB : WAJU

LINK NO : 20 (IIIA) LENGTH : 8 Km

UPGRADE : 10.0m road bed, 4.0m road with surface Dressing (2)

(Rp)

ITEM	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Site Clearance in Light Bush	m2	0.0	162	91	0	0	0
Subgrade Preparation	m2	0.0	20	11	0	0	0
Normal fill	m3	0.0	1,668	865	0	0	0
Fill in Swamp	m3	0.0	2,474	1,055	0	0	0
Normal Excavation to Spoil	m3	0.0	975	524	0	0	0
Sub Base Course	m3	992.4	3,158	1,351	3,133,999	1,340,732	4,474,731
Base Course	m3	2560.0	4,327	2,303	11,077,120	5,895,680	16,972,800
Shoulder	m2	48000.0	292	146	14,016,000	7,008,000	21,024,000
Asphalt Patching	m2	0.0	3,384	1,346	0	0	0
Surface Dressing (Single)	m2	0.0	591	552	0	0	0
Surface Dressing (Double)	m2	32000.0	737	868	23,584,000	27,776,000	51,360,000
Earth Drain	m	140.0	773	119	108,220	16,660	124,880
Earth Drain in Swamp (by machine)	m3	0.0	1,151	475	0	0	0
Pipe Culvert Ø80cm	m	0.0	40,653	40,932	0	0	0
Masonry Culvert (80x80cm)	m	8.0	58,918	35,370	471,344	282,960	754,304
Retaining Wall and Wing Wall (Timber)	m2	0.0	17,117	246	0	0	0
Retaining Wall and Wing Wall (Masonry)	m3	1.5	42,283	11,516	63,424	17,274	80,698
Babion Protection	m3	0.0	13,152	121	0	0	0
New Bridge (Timber)	SET	1.0	--	--	0	0	0
New Bridge (Concrete)	SET	1.0	--	--	0	0	0
			Sub Total		52,454,107	42,337,306	94,791,413
Overhead (15%)					7,868,116	6,350,595	14,218,711
			TOTAL COST		60,322,223	48,687,901	109,010,124

Manual routine maintenance of road	Km	8.0	122,920	7,260	983,360	58,080	1,041,440
Routine maintenance of asphalt road	Km	8.0	338,400	134,600	2,707,200	1,076,800	3,784,000
			Sub Total		3,690,560	1,134,880	4,825,440
Maintenance of Timber Bridge (New)	m2	0.0	10,411	1,344	0	0	0
Maintenance of Concrete Bridge (New)	m2	0.0	2,049	2,523	0	0	0
Maintenance of Timber Bridge (Exist)	m2	0.0	8,941	2,517	0	0	0
Maintenance of Concrete Bridge (Exist)	m2	0.0	4,145	2,349	0	0	0

Earthwork & Pavement Unit Cost (Rp/Km)	:	13,626,266
Timber Bridge Unit Cost (Rp/m2)	:	
Concrete Bridge Unit Cost (Rp/m2)	:	
Survived Value (Rp)	:	7,822,984
Maintenance Rate without Bridge (%)	:	4.43
New Bridge Cost Rate (%)	:	

PROV : SULAWESI SELATAN KAB : WAJU

LINK NO : 19 (IIIB-2) LENGTH : 17 Km

UPGRADE : 10.0m 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	m2	0.0	162	91	0	0	0	
Subgrade Preparation	m2	130000.0	20	11	2,600,000	1,430,000	4,030,000	
Normal Fill	m3	0.0	1,668	865	0	0	0	
Fill in Swamp	m3	0.0	2,474	1,055	0	0	0	
Normal Excavation to Spoil	m3	520.0	975	524	507,000	272,480	779,480	
Sub Base Course	m3	7796.4	3,158	1,351	24,621,031	10,532,936	35,153,967	
Base Course	m3	4080.0	4,327	2,303	17,654,160	9,396,240	27,050,400	
Shoulder	m2	102000.0	292	146	29,784,000	14,892,000	44,676,000	
Asphalt Patching	m2	0.0	3,384	1,346	0	0	0	
Surface Dressing (Single)	m2	0.0	591	552	0	0	0	
Surface Dressing (Double)	m2	0.0	737	868	0	0	0	
Earth Drain	m	1040.0	773	119	803,920	123,760	927,680	
Earth Drain in Swamp (by machine)	m3	0.0	1,151	475	0	0	0	
Pipe Culvert 880cm	m	178.0	40,653	40,932	7,236,234	7,285,896	14,522,130	
Masonry Culvert 180x80cm	m	32.0	58,918	35,370	1,895,376	1,131,840	3,027,216	
Retaining Wall and Wing Wall (Timber)	m2	0.0	17,117	246	0	0	0	
Retaining Wall and Wing Wall (Masonry)	m3	76.2	42,283	11,516	3,221,964	877,519	4,099,483	
Gabion Protection	m3	0.0	13,152	121	0	0	0	
New Bridge (Timber)	SET	1.0	--	--	4,007,024	481,450	4,488,474	
New Bridge (Concrete)	SET	1.0	--	--	0	0	0	
					Sub Total	92,322,709	46,424,121	138,746,830
Overhead (15%)						13,848,406	6,963,618	20,812,024
					TOTAL COST	106,171,115	53,387,739	159,558,854

Manual routine maintenance of road	Km	17.0	122,920	7,260	2,089,840	123,420	2,213,060
Routine maintenance of gravel road	Km	17.0	186,528	88,186	3,170,976	1,499,162	4,670,138
			Sub Total		5,260,816	1,622,582	6,883,398
Maintenance of Timber Bridge (New)	m2	20.0	10,411	1,344	208,220	26,880	235,100
Maintenance of Concrete Bridge (New)	m2	0.0	2,049	2,523	0	0	0
Maintenance of Timber Bridge (Exist)	m2	0.0	8,941	2,517	0	0	0
Maintenance of Concrete Bridge (Exist)	m2	76.5	4,145	2,349	317,092	179,698	496,790

Earthwork & Pavement Unit Cost (Rp/Km)	:	9,082,048
Timber Bridge Unit Cost (Rp/m2)	:	258,202
Concrete Bridge Unit Cost (Rp/m2)	:	
Survived Value (Rp)	:	17,576,983
Maintenance Rate without Bridge (X)	:	4.46
New Bridge Cost Rate (X)	:	3.24

PROV : SULAWESI SELATAN KAB : WAJO

LINK NO : 16 (IIIB-1) LENGTH : 4 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 ²	0.0	162	91	0	0	0	
Subgrade Preparation	m ²	0.0	20	11	0	0	0	
Normal Fill	m ³	0.0	1,668	865	0	0	0	
Fill in Swamp	m ³	0.0	2,474	1,055	0	0	0	
Normal Excavation to Spoil	m ³	0.0	975	524	0	0	0	
Sub Base Course	m ³	633.0	3,158	1,351	1,999,014	855,183	2,854,197	
Base Course	m ³	1120.0	4,327	2,303	4,846,240	2,579,360	7,425,600	
Shoulder	m ²	24000.0	292	146	7,008,000	3,504,000	10,512,000	
Asphalt Patching	m ²	0.0	3,384	1,346	0	0	0	
Surface Dressing (Single)	m ²	16000.0	591	552	9,456,000	8,832,000	18,288,000	
Surface Dressing (Double)	m ²	0.0	737	868	0	0	0	
Earth Drain	m	0.0	773	119	0	0	0	
Earth Drain in Swamp (by machine)	m ³	0.0	1,151	475	0	0	0	
Pipe Culvert 800cm	m	0.0	40,653	40,932	0	0	0	
Masonry Culvert (80x80cm)	m	0.0	59,918	35,370	0	0	0	
Retaining Wall and Wing Wall (Timber)	m ²	0.0	17,117	246	0	0	0	
Retaining Wall and Wing Wall (Masonry)	m ³	0.0	42,283	11,516	0	0	0	
Gabion Protection	m ³	0.0	13,152	121	0	0	0	
New Bridge (Timber)	SET	1.0	--	--	0	0	0	
New Bridge (Concrete)	SET	1.0	--	--	0	0	0	
					23,309,254	15,770,543	39,079,797	
Overhead (15%)					3,496,388	2,365,581	5,861,969	
					TOTAL COST	26,805,642	18,136,124	44,941,766

Manual routine maintenance of road	Km	4.0	122,920	7,260	491,680	29,040	520,720
Routine maintenance of asphalt road	Km	4.0	338,400	134,600	1,353,600	538,400	1,892,000
					Sub Total	1,845,280	2,412,720
Maintenance of Timber Bridge (New)	m ²	0.0	10,411	1,344	0	0	0
Maintenance of Concrete Bridge (New)	m ²	0.0	2,049	2,523	0	0	0
Maintenance of Timber Bridge (Exist)	m ²	0.0	8,941	2,517	0	0	0
Maintenance of Concrete Bridge (Exist)	m ²	126.0	4,145	2,349	522,270	295,974	818,244

Earthwork & Pavement Unit Cost	(Rp/Km)	:	11,235,442
Timber Bridge Unit Cost	(Rp/m ²)	:	
Concrete Bridge Unit Cost	(Rp/m ²)	:	
Survived Value	(Rp)	:	3,483,057
Maintenance Rate without Bridge	(%)	:	5.37
New Bridge Cost Rate	(%)	:	

PROV : SULAWESI SELATAN KAB : WAJO

LINK NO : 27 (IIIB-2) LENGTH : 10 Km

UPGRADE : 9.0m 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	m2	0.0	162	91	0	0	0	
Subgrade Preparation	m2	90000.0	20	11	1,800,000	990,000	2,790,000	
Normal Fill	m3	0.0	1,668	865	0	0	0	
Fill in Swamp	m3	0.0	2,474	1,055	0	0	0	
Normal Excavation to Spoil	m3	160.0	975	524	156,000	83,840	239,840	
Sub Base Course	m3	5600.0	3,158	1,351	17,684,800	7,565,600	25,250,400	
Base Course	m3	2400.0	4,327	2,303	10,384,800	5,527,200	15,912,000	
Shoulder	m2	50000.0	292	146	14,600,000	7,300,000	21,900,000	
Asphalt Patching	m2	0.0	3,384	1,346	0	0	0	
Surface Dressing (Single)	m2	0.0	591	552	0	0	0	
Surface Dressing (Double)	m2	0.0	737	868	0	0	0	
Earth Drain	m	4780.0	773	119	3,694,940	568,820	4,263,760	
Earth Drain in Swamp (by machine)	m3	0.0	1,151	475	0	0	0	
Pipe Culvert DB0ca	m	64.0	40,653	40,932	2,601,792	2,619,648	5,221,440	
Masonry Culvert (80x80ca)	m	40.0	58,918	35,370	2,356,720	1,414,800	3,771,520	
Retaining Wall and Wing Wall (Timber)	m2	0.0	17,117	246	0	0	0	
Retaining Wall and Wing Wall (Masonry)	m3	32.9	42,283	11,516	1,391,110	378,876	1,769,986	
Gabion Protection	m3	0.0	13,152	121	0	0	0	
New Bridge (Timber)	SET	1.0	--	--	0	0	0	
New Bridge (Concrete)	SET	1.0	--	--	0	0	0	
					Sub Total	54,670,162	26,448,784	81,118,946
Overhead (15%)						8,200,524	3,967,317	12,167,841
					TOTAL COST	62,870,686	30,416,101	93,286,787

Manual routine maintenance of road	Km	10.0	122,920	7,260	1,229,200	72,600	1,301,800	
Routine maintenance of gravel road	Km	10.0	185,528	88,186	1,865,280	881,860	2,747,140	
					Sub Total	3,094,480	954,460	4,048,940
Maintenance of Timber Bridge (New)	m2	0.0	10,411	1,344	0	0	0	
Maintenance of Concrete Bridge (New)	m2	0.0	2,049	2,523	0	0	0	
Maintenance of Timber Bridge (Exist)	m2	0.0	8,941	2,517	0	0	0	
Maintenance of Concrete Bridge (Exist)	m2	72.0	4,145	2,349	298,440	169,128	467,568	

Earthwork & Pavement	Unit Cost	(Rp/Km)	:	9,328,679
Timber Bridge	Unit Cost	(Rp/m2)	:	
Concrete Bridge	Unit Cost	(Rp/m2)	:	
Survived Value		(Rp)	:	12,625,200
Maintenance Rate without Bridge		(%)	:	4.34
New Bridge Cost Rate		(%)	:	

PROV : SULAWESI SELATAN KAB : WAJO

LINK NO : 26 (IIIB-1) LENGTH : 11 Km

UPGRADE : 9.5m 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	m2	0.0	162	91	0	0	0	
Subgrade Preparation	m2	104500.0	20	11	2,090,000	1,149,500	3,239,500	
Normal Fill	m3	0.0	1,668	865	0	0	0	
Fill in Swap	m3	0.0	2,474	1,055	0	0	0	
Normal Excavation to Spoil	m3	227.0	975	524	221,325	118,948	340,273	
Sub Base Course	m3	6160.0	3,158	1,351	19,453,280	8,322,160	27,775,440	
Base Course	m3	3080.0	4,327	2,303	13,327,160	7,093,240	20,420,400	
Shoulder	m2	60500.0	292	146	17,666,000	8,833,000	26,499,000	
Asphalt Patching	m2	0.0	3,384	1,346	0	0	0	
Surface Dressing (Single)	m2	44000.0	591	552	26,004,000	24,288,000	50,292,000	
Surface Dressing (Double)	m2	0.0	737	868	0	0	0	
Earth Drain	m	500.0	773	119	386,500	59,500	446,000	
Earth Drain in Swap (by machine)	m3	0.0	1,151	475	0	0	0	
Pipe Culvert Ø80cm	m	0.0	40,653	40,932	0	0	0	
Masonry Culvert (80x80cm)	m	240.0	58,918	35,370	14,140,320	8,488,800	22,629,120	
Retaining Wall and Wing Wall (Timber)	m2	0.0	17,117	246	0	0	0	
Retaining Wall and Wing Wall (Masonry)	m3	43.8	42,283	11,516	1,851,995	504,400	2,356,395	
Bablon Protection	m3	0.0	13,152	121	0	0	0	
New Bridge (Timber)	SET	1.0	--	--	0	0	0	
New Bridge (Concrete)	SET	1.0	--	--	0	0	0	
					Sub Total	95,140,580	58,857,548	153,998,128
Overhead (15%)						14,271,087	8,828,632	23,099,719
					TOTAL COST	109,411,667	67,686,180	177,097,847

Manual routine maintenance of road	Km	11.0	122,920	7,260	1,352,120	79,860	1,431,980
Routine maintenance of asphalt road	Km	11.0	338,400	134,600	3,722,400	1,450,600	5,203,000
			Sub Total		5,074,520	1,560,460	6,634,980
Maintenance of Timber Bridge (New)	m2	0.0	10,411	1,344	0	0	0
Maintenance of Concrete Bridge (New)	m2	0.0	2,049	2,523	0	0	0
Maintenance of Timber Bridge (Exist)	m2	0.0	8,941	2,517	0	0	0
Maintenance of Concrete Bridge (Exist)	m2	20.0	4,145	2,349	82,900	46,980	129,880

Earthwork & Pavement Unit Cost (Rp/Km)	:	16,079,804
Timber Bridge Unit Cost (Rp/m2)	:	
Concrete Bridge Unit Cost (Rp/m2)	:	
Survived Value (Rp)	:	23,526,888
Maintenance Rate without Bridge (%)	:	3.75
New Bridge Cost Rate (%)	:	

PROV : SULAWESI SELATAN KAB : WAJO
 LINK NO : 25 (IIC) LENGTH : 4 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	m2	0.0	162	91	0	0	0
Subgrade Preparation	m2	36000.0	20	11	720,000	396,000	1,116,000
Normal Fill	m3	0.0	1,668	865	0	0	0
Fill in Swamp	m3	0.0	2,474	1,055	0	0	0
Normal Excavation to Spoil	m3	100.0	975	524	97,500	52,400	149,900
Sub Base Course	m3	2560.0	3,158	1,351	8,084,480	3,458,560	11,543,040
Base Course	m3	0.0	4,327	2,303	0	0	0
Shoulder	m2	20000.0	292	146	5,840,000	2,920,000	8,760,000
Asphalt Patching	m2	0.0	3,384	1,346	0	0	0
Surface Dressing (Single)	m2	0.0	591	552	0	0	0
Surface Dressing (Double)	m2	0.0	737	868	0	0	0
Earth Drain	m	3700.0	773	119	2,860,100	440,300	3,300,400
Earth Drain in Swamp (by machine)	m3	0.0	1,151	475	0	0	0
Pipe Culvert 80cm	m	40.0	40,653	40,932	1,626,120	1,637,280	3,263,400
Masonry Culvert (80x80cm)	m	0.0	58,918	35,370	0	0	0
Retaining Wall and Wing Wall (timber)	m2	0.0	17,117	246	0	0	0
Retaining Wall and Wing Wall (Masonry)	m3	16.0	42,283	11,516	676,528	184,256	860,784
Sablon Protection	m3	0.0	13,152	121	0	0	0
New Bridge (Timber)	SET	1.0	--	--	0	0	0
New Bridge (Concrete)	SET	1.0	--	--	0	0	0
Sub Total					19,904,728	9,088,796	28,993,524
Overhead (15%)					2,985,709	1,363,319	4,349,028
TOTAL COST					22,890,437	10,452,115	33,342,552

Manual routine maintenance of road	Km	4.0	122,920	7,260	491,680	29,040	520,720
Routine maintenance of gravel road	Km	4.0	186,528	88,186	746,112	352,744	1,098,856
Sub Total					1,237,792	381,784	1,619,576
Maintenance of Timber Bridge (New)	m2	0.0	10,411	1,344	0	0	0
Maintenance of Concrete Bridge (New)	m2	0.0	2,049	2,523	0	0	0
Maintenance of Timber Bridge (Exist)	m2	0.0	8,941	2,517	0	0	0
Maintenance of Concrete Bridge (Exist)	m2	0.0	4,145	2,349	0	0	0

Earthwork & Pavement	Unit Cost	(Rp/Km)	:	8,335,638
Timber Bridge	Unit Cost	(Rp/m2)	:	
Concrete Bridge	Unit Cost	(Rp/m2)	:	
Survived Value		(Rp)	:	4,617,216
Maintenance Rate without Bridge		(%)	:	4.86
New Bridge Cost Rate		(%)	:	

PROV : SULAWESI SELATAN KAB : WAJU

LINK NO : 76 (IIIC) LENGTH : 6 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	162	91	0	0	0	
Subgrade Preparation	m2	60000.0	20	11	1,200,000	660,000	1,860,000	
Normal Fill	m3	0.0	1,668	865	0	0	0	
Fill in Swamp	m3	0.0	2,474	1,055	0	0	0	
Normal Excavation to Spoil	m3	308.0	975	524	300,300	161,392	461,692	
Sub Base Course	m3	3840.0	3,158	1,351	12,126,720	5,187,840	17,314,560	
Base Course	m3	0.0	4,327	2,303	0	0	0	
Shoulder	m2	36000.0	292	146	10,512,000	5,256,000	15,768,000	
Asphalt Patching	m2	0.0	3,384	1,346	0	0	0	
Surface Dressing (Single)	m2	0.0	591	552	0	0	0	
Surface Dressing (Double)	m2	0.0	737	868	0	0	0	
Earth Drain	m	5480.0	773	119	4,236,040	652,120	4,888,160	
Earth Drain in Swamp (by machine)	m3	0.0	1,151	475	0	0	0	
Pipe Culvert 880cm	m	0.0	40,653	40,932	0	0	0	
Masonry Culvert (80x80cm)	m	98.0	58,918	35,370	5,656,128	3,395,520	9,051,648	
Retaining Wall and Wing Wall (Timber)	m2	0.0	17,117	246	0	0	0	
Retaining Wall and Wing Wall (Masonry)	m3	17.5	42,283	11,516	739,952	201,530	941,482	
Babion Protection	m3	0.0	13,152	121	0	0	0	
New Bridge (Timber)	SET	1.0	--	--	17,151,116	2,011,428	19,162,544	
New Bridge (Concrete)	SET	1.0	--	--	0	0	0	
					Sub Total	51,922,256	17,525,830	69,448,086
Overhead (15%)						7,788,338	2,628,874	10,417,212
					TOTAL COST	59,710,594	20,154,704	79,865,298

Manual routine maintenance of road	Km	6.0	122,920	7,260	737,520	43,560	781,080
Routine maintenance of gravel road	Km	6.0	186,528	88,186	1,119,168	529,116	1,648,284
			Sub Total		1,856,688	572,676	2,429,364
Maintenance of Timber Bridge (New)	m2	88.0	10,411	1,344	916,168	118,272	1,034,440
Maintenance of Concrete Bridge (New)	m2	0.0	2,049	2,523	0	0	0
Maintenance of Timber Bridge (Exist)	m2	0.0	8,941	2,517	0	0	0
Maintenance of Concrete Bridge (Exist)	m2	0.0	4,145	2,349	0	0	0

Earthwork & Pavement Unit Cost (Rp/Km)	:	9,638,062
Timber Bridge Unit Cost (Rp/m2)	:	250,420
Concrete Bridge Unit Cost (Rp/m2)	:	
Survived Value (Rp)	:	6,925,824
Maintenance Rate without Bridge (%)	:	4.20
New Bridge Cost Rate (%)	:	27.59

PROV : SULAWESI SELATAN KAB : WAJO
 LINK NO : B3 (IIIB-2) LENGTH : 3 Km
 UPGRADE : 9.0m 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	m2	0.0	162	91	0	0	0
Subgrade Preparation	m2	27000.0	20	11	540,000	297,000	837,000
Normal Fill	m3	0.0	1,668	865	0	0	0
Fill in Swamp	m3	0.0	2,474	1,055	0	0	0
Normal Excavation to Spoil	m3	208.0	975	524	202,800	108,992	311,792
Sub Base Course	m3	1680.0	3,158	1,351	5,305,440	2,269,680	7,575,120
Base Course	m3	720.0	4,327	2,303	3,115,440	1,658,160	4,773,600
Shoulder	m2	15000.0	292	146	4,380,000	2,190,000	6,570,000
Asphalt Patching	m2	0.0	3,384	1,346	0	0	0
Surface Dressing (Single)	m2	0.0	591	552	0	0	0
Surface Dressing (Double)	m2	0.0	737	868	0	0	0
Earth Drain	m	2500.0	773	119	1,932,500	297,500	2,230,000
Earth Drain in Swamp (by machine)	m3	0.0	1,151	475	0	0	0
Pipe Culvert D80cm	m	0.0	40,653	40,932	0	0	0
Masonry Culvert (80x80cm)	m	82.0	58,918	35,370	4,831,276	2,900,340	7,731,616
Retaining Wall and Wing Wall (Timber)	m2	0.0	17,117	246	0	0	0
Retaining Wall and Wing Wall (Masonry)	m3	14.6	42,283	11,516	617,331	168,133	785,464
Gabion Protection	m3	0.0	13,152	121	0	0	0
New Bridge (Timber)	SET	1.0	--	--	0	0	0
New Bridge (Concrete)	SET	1.0	--	--	0	0	0
			Sub Total		20,924,787	9,889,805	30,814,592
Overhead (15%)					3,138,718	1,483,470	4,622,188
			TOTAL COST		24,063,505	11,373,275	35,436,780

Manual routine maintenance of road	Km	3.0	122,920	7,260	368,760	21,780	390,540
Routine maintenance of gravel road	Km	3.0	186,528	98,186	559,584	264,558	824,142
			Sub Total		928,344	286,338	1,214,682
Maintenance of Timber Bridge (New)	m2	0.0	10,411	1,344	0	0	0
Maintenance of Concrete Bridge (New)	m2	0.0	2,049	2,523	0	0	0
Maintenance of Timber Bridge (Exist)	m2	0.0	8,941	2,517	0	0	0
Maintenance of Concrete Bridge (Exist)	m2	0.0	4,145	2,349	0	0	0

Earthwork & Pavement Unit Cost (Rp/Km)	:	11,812,260
Timber Bridge Unit Cost (Rp/m2)	:	
Concrete Bridge Unit Cost (Rp/m2)	:	
Survived Value (Rp)	:	3,787,560
Maintenance Rate without Bridge (%)	:	3.43
New Bridge Cost Rate (%)	:	

Appendix A-4

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

PROV : SULAWESI SELATAN KAB : WAJU

ITEM	UNIT	< 1988 >	< 1989 >	< 1990 >	< 1991 >	< 1992 >	< TOTAL >
EQUIPMENT :							
Bulldozer/Ripper	hr	487.6	548.9	716.5	755.9	1277.3	3786.2
Swamp Bulldozer	hr	69.3	69.0	18.5	37.0	0.0	193.8
Motor Grader	hr	960.6	1653.9	2071.4	2293.7	3173.0	10152.6
Hand-guide Vib. Roller	hr	162.4	251.6	1585.4	781.6	1150.4	3931.4
Tire Roller	hr	733.3	1628.8	1258.8	1473.2	622.2	5716.3
Vibratory Roller (D&T)	hr	701.0	1286.5	1599.7	1782.2	2349.7	7719.1
Hydraulic Excavator; Wheel	hr	320.7	270.9	93.8	111.1	23.9	820.4
Wheel Loader	hr	1198.8	2381.1	2544.3	2939.9	3274.9	12339.0
Water Tank Truck	hr	314.7	851.9	971.5	1140.4	1204.5	4483.0
Dump Truck	hr	9002.9	18147.4	20402.9	23367.8	26509.9	97430.9
Flat Bed Truck with Crane	hr	77.4	184.3	1015.2	470.3	677.5	2424.7
Flat Bed Truck	hr	926.3	2038.5	2009.6	2014.1	1110.6	8099.1
Portable Crusher/Screening	hr	249.2	640.6	559.6	680.4	546.6	2676.4
Concrete Mixer	hr	50.0	74.8	576.8	230.2	289.3	1221.1
Water Pump	hr	37.0	59.9	767.9	175.5	219.9	1260.2
Concrete Vibrator	hr	11.3	30.2	131.2	66.4	81.0	320.1
Asphalt Sprayer	hr	733.3	1628.8	1258.8	1473.2	622.2	5716.3
LABOUR :							
Handur	man day	727.9	1526.4	2228.2	2115.3	2402.3	9000.1
Skilled Labourer	man day	496.1	1100.0	1481.1	1587.9	2043.8	6708.9
Carpenter	man day	9.6	10.9	174.1	268.3	759.3	1222.2
Mason	man day	64.6	74.4	694.1	272.9	347.3	1453.3
Labourer	man day	6605.9	15101.6	19656.8	20627.3	21540.0	83531.6
Driver	man day	1876.9	3882.8	4322.6	4854.5	5128.1	20664.9
Operator	man day	1183.4	2071.1	2714.4	2662.8	3160.5	11792.2
MATERIAL :							
Bitumen	l	150410.2	391874.9	292645.7	343624.8	151666.6	1330222.2
Asphalt Oil	l	30066.6	54819.9	44476.6	51820.0	20533.3	201716.4
Kerosene	l	35941.8	78319.9	60793.2	71119.8	29866.6	276041.3
Sand	m ³	488.2	919.7	1273.0	1028.7	666.3	4375.9
Cement	bag	189.4	468.7	2189.9	1073.9	1314.4	5236.3
River Stone	m ³	64.6	74.4	723.3	272.9	347.3	1482.5
Steel Moulds	set	24.0	169.2	449.6	233.2	298.0	1174.0
Timber	m ³	0.5	0.0	11.5	22.3	66.6	100.9
Paint	l	0.0	0.0	0.0	144.3	491.2	635.5
Reinforcing Steel	kg	1469.8	5514.7	20734.3	10035.8	12440.4	50195.0
Tying Wire	kg	13.3	50.0	188.3	91.2	113.0	455.8
Equivalent Royalty	m ³	13860.4	36547.8	38479.4	45652.2	43330.1	177869.9

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

PROV : SULAWESI SELATAN KAB : WAJO

ITEM	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	723.8	1348.4	1285.9	1220.4	1091.2	5669.7
Hand-guide Vib. Roller	hr	78.7	450.0	720.0	1065.0	1620.0	3933.7
Tire Roller	hr	723.8	1348.4	1285.9	1220.4	1091.2	5669.7
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	193.5	385.1	395.7	426.6	467.3	1868.2
Water Tank Truck	hr	0.0	0.0	0.0	0.0	0.0	0.0
Dump Truck	hr	1318.5	3210.2	3814.1	4688.3	6042.1	19073.2
Flat Bed Truck with Crane	hr	1256.0	2394.6	2514.6	2563.5	2433.7	11162.4
Flat Bed Truck	hr	2782.9	5425.8	5401.8	5411.9	5341.6	24364.0
Portable Crusher/Screening	hr	97.0	193.6	199.4	215.4	236.9	942.3
Concrete Mixer	hr	3.5	6.7	7.1	7.1	7.3	31.7
Water Pump	hr	3.5	6.7	7.1	7.1	7.3	31.7
Concrete Vibrator	hr	3.5	6.7	7.1	7.1	7.3	31.7
Asphalt Sprayer	hr	0.0	0.0	0.0	0.0	0.0	0.0
LABOUR :							
Handur	man day	879.0	1825.0	1919.8	2055.7	2239.1	8918.6
Skilled Labourer	man day	147.1	486.8	669.4	909.8	1231.3	3444.4
Carpenter	man day	48.4	95.8	96.9	102.4	76.4	419.9
Mason	man day	0.0	0.0	0.0	0.0	0.0	0.0
Labourer	man day	10402.4	21634.8	22787.6	24419.1	26704.6	105948.5
Driver	man day	941.6	1931.3	2052.1	2209.3	2394.4	9528.7
Operator	man day	306.3	579.2	562.4	551.1	522.3	2521.3
MATERIAL :							
Bitumen	l	788.7	4050.0	6480.0	9585.0	14580.0	35403.7
Asphalt Oil	l	0.0	0.0	0.0	0.0	0.0	0.0
Kerosene	l	78.7	450.0	720.0	1065.0	1620.0	3933.7
Sand	m ³	16.6	81.7	127.1	184.6	277.3	687.3
Cement	bag	51.9	97.8	104.0	104.7	107.2	465.6
River Stone	m ³	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 ³	4.1	8.2	8.3	8.8	6.4	35.8
Paint	l	25.4	50.8	50.8	54.3	37.1	218.4
Reinforcing Steel	kg	267.0	502.5	534.8	538.2	551.2	2393.7
Tying Wire	kg	2.4	4.5	4.8	4.8	5.0	21.5
Equivalent Royalty	m ³	2741.8	5456.1	5607.5	6043.4	6620.4	26469.2

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

PROV : SULAWESI SELATAN KAB : WAJU

ITEM	UNIT	< 1988 >	< 1989 >	< 1990 >	< 1991 >	< 1992 >	< TOTAL >
EQUIPMENT :							
Bulldozer/Ripper	hr	487.6	548.9	716.5	755.9	1277.3	3786.2
Swamp Bulldozer	hr	69.3	69.0	18.5	37.0	0.0	193.8
Motor Grader	hr	1684.4	3002.3	3357.3	3514.1	4264.2	15822.3
Hand-guide Vib. Roller	hr	241.1	701.6	2305.4	1846.6	2770.4	7865.1
Tire Roller	hr	1457.1	2977.2	2544.7	2693.6	1713.4	11386.0
Vibratory Roller (D&T)	hr	701.0	1286.5	1599.7	1782.2	2349.7	7719.1
Hydraulic Excavator; Wheel	hr	320.7	270.9	93.8	111.1	23.9	820.4
Wheel Loader	hr	1392.3	2766.2	2940.0	3366.5	3742.2	14207.2
Water Tank Truck	hr	314.7	851.9	971.5	1140.4	1204.5	4483.0
Dump Truck	hr	10321.4	21357.6	24217.0	28056.1	32552.0	116504.1
Flat Bed Truck with Crane	hr	1333.4	2578.9	3529.8	3033.8	3111.2	13587.1
Flat Bed Truck	hr	3789.2	7464.3	7411.4	7426.0	6452.2	32463.1
Portable Crusher/Screening	hr	346.2	834.2	759.0	895.8	783.5	3618.7
Concrete Mixer	hr	53.5	81.5	583.9	237.3	296.6	1252.8
Water Pump	hr	40.5	66.6	775.0	182.6	227.2	1291.9
Concrete Vibrator	hr	14.8	36.9	138.3	73.5	88.3	351.8
Asphalt Sprayer	hr	733.3	1628.8	1258.8	1473.2	622.2	5716.3
LABOUR :							
Mandor	man day	1686.9	3351.4	4148.0	4171.0	4641.4	17918.7
Skilled Labourer	man day	643.2	1586.8	2150.5	2497.7	3275.1	10153.3
Carpenter	man day	58.0	106.7	271.0	370.7	935.7	1642.1
Mason	man day	64.6	74.4	694.1	272.9	347.3	1453.3
Labourer	man day	17008.3	36736.4	42444.4	45046.4	48244.6	189480.1
Driver	man day	2818.5	5814.1	6374.7	7063.8	7522.5	29593.6
Operator	man day	1489.7	2650.3	3276.8	3213.9	3682.8	14313.5
MATERIAL :							
Bitumen	l	151118.9	395924.9	299125.7	353209.8	166246.6	1365625.9
Asphalt Oil	l	30066.6	54819.9	44476.6	51820.0	20533.3	201716.4
Kerosene	l	36020.5	78769.9	61513.2	72184.8	31486.6	279975.0
Sand	m ³	504.8	1001.4	1400.1	1213.3	943.6	5063.2
Cement	bag	241.3	566.5	2293.9	1178.6	1421.6	5701.9
River Stone	m ³	64.6	74.4	723.3	272.9	347.3	1482.5
Steel Moulds	set	24.0	169.2	449.6	233.2	298.0	1174.0
Liaber	m ³	4.6	8.2	19.8	31.1	73.0	136.7
Paint	l	25.4	50.8	50.8	198.6	528.3	853.9
Reinforcing Steel	kg	1736.8	6017.2	21269.1	10574.0	12991.6	52588.7
tying Wire	kg	15.7	54.5	193.1	96.0	118.0	477.3
Equivalent Royalty	m ³	16602.2	42003.9	44086.9	51695.6	49950.5	204339.1

Appendix A-5

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

PROV : SULAWESI SELATAN		KAB : WAJU					(1000 Rp)
ITEM	UNIT	< 1988 >	< 1989 >	< 1990 >	< 1991 >	< 1992 >	< TOTAL >
EQUIPMENT :		124,482	242,451	268,178	297,382	325,106	1,257,599
Bulldozer/Ripper	15758	7,683	8,649	11,290	11,911	20,127	59,660
Shamp Bulldozer	11617	805	801	214	429	0	2,249
Motor Grader	13465	12,934	22,269	27,891	30,884	42,724	136,702
Hand-guide Vib. Roller	1587	257	399	2,516	1,240	1,825	6,237
Tire Roller	10676	7,828	17,389	13,438	15,727	6,642	61,024
Vibratory Roller (D&T)	6724	4,713	8,650	10,756	11,983	15,799	51,901
Hydraulic Excavator; Wheel	12601	4,041	3,413	1,181	1,399	301	10,335
Wheel Loader	16660	19,972	39,669	42,388	48,978	54,559	205,566
Water Tank Truck	3927	1,235	3,345	3,815	4,478	4,730	17,603
Dump Truck	5414	48,741	98,250	110,461	126,513	143,524	527,489
Flat Bed Truck with Crane	4981	385	917	5,056	2,342	3,374	12,074
Flat Bed Truck	3265	3,024	6,655	6,561	6,576	3,626	26,442
Portable Crusher/Screening	43673	10,883	27,976	24,439	29,715	23,871	116,884
Concrete Mixer	8956	447	669	5,165	2,061	2,590	10,932
Water Pump	480	17	28	368	84	105	602
Concrete Vibrator	310	3	9	40	20	25	97
Asphalt Sprayer	2065	1,514	3,363	2,599	3,042	1,284	11,802
LABOUR :		23,895	49,890	65,802	67,570	75,326	282,483
Mandur	2500	1,819	3,816	5,570	5,288	6,005	22,498
Skilled Labourer	2000	992	2,200	2,962	3,175	4,087	13,416
Carpenter	3000	28	32	522	804	2,277	3,663
Mason	3000	193	223	2,082	818	1,041	4,357
Labourer	1500	9,908	22,652	29,485	30,940	32,310	125,295
Driver	3000	5,630	11,648	12,967	14,563	15,384	60,192
Operator	4500	5,325	9,319	12,214	11,982	14,222	53,062
MATERIAL :		79,941	187,363	178,479	185,822	112,344	743,949
Bitumen	275	41,362	107,765	80,477	94,496	41,708	365,808
Asphalt Oil	700	21,046	38,373	31,133	36,274	14,373	141,199
Kerosene	250	8,985	19,579	15,198	17,779	7,466	69,007
Sand	5000	2,441	4,598	6,365	5,143	3,331	21,878
Cement	4000	757	1,874	8,759	4,295	5,257	20,942
River Stone	7500	484	558	5,424	2,046	2,604	11,116
Steel Moulds	7500	180	1,269	3,372	1,749	2,235	8,805
Timber	200000	100	0	2,300	4,460	13,320	20,180
Paint	3500	0	0	0	505	1,719	2,224
Reinforcing Steel	750	1,102	4,136	15,550	7,526	9,330	37,644
Tying Wire	1500	19	75	282	136	169	681
Equivalent Royalty	250	3,465	9,136	9,619	11,413	10,832	44,465

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

PROV : SULAWESI SELATAN KAB : WAJO

(1000 Rp)

I T E M	UNIT	< 1988 >	< 1989 >	< 1990 >	< 1991 >	< 1992 >	< TOTAL >
EQUIPMENT :		47,568	95,222	98,362	103,551	109,386	454,089
Bulldozer/Ripper	15758	0	0	0	0	0	0
Swamp Bulldozer	11617	0	0	0	0	0	0
Motor Grader	13465	9,745	18,156	17,314	16,432	14,693	76,340
Hand-guide Vib. Roller	1587	124	714	1,142	1,690	2,570	6,240
Tire Roller	10676	7,727	14,395	13,728	13,028	11,649	60,527
Vibratory Roller (D&T)	6724	0	0	0	0	0	0
Hydraulic Excavator; Wheel	12601	0	0	0	0	0	0
Wheel Loader	16660	3,223	6,415	6,592	7,107	7,785	31,122
Water Tank Truck	3927	0	0	0	0	0	0
Dump Truck	5414	7,138	17,380	20,649	25,382	32,711	103,260
Flat Bed Truck with Crane	4981	6,256	11,927	12,525	12,768	12,122	55,598
Flat Bed Truck	3265	9,088	17,715	17,636	17,669	17,440	79,546
Portable Crusher/Screening	43673	4,236	8,455	8,708	9,407	10,346	41,152
Concrete Mixer	8956	31	60	63	63	65	282
Water Pump	480	1	3	3	3	3	13
Concrete Vibrator	310	1	2	2	2	2	9
Asphalt Sprayer	2065	0	0	0	0	0	0
LABOUR :		22,441	46,673	49,294	52,999	57,877	229,204
Manur	2500	2,197	4,562	4,799	5,139	5,597	22,294
Skilled Labourer	2000	294	973	1,338	1,819	2,462	6,886
Carpenter	3000	145	287	290	307	229	1,258
Mason	3000	0	0	0	0	0	0
Labourer	1500	15,603	32,452	34,181	36,628	40,056	158,920
Driver	3000	2,824	5,793	6,156	6,627	7,183	28,583
Operator	4500	1,378	2,606	2,530	2,479	2,350	11,343
MATERIAL :		2,299	5,587	6,659	8,112	9,712	32,369
Bitumen	275	194	1,113	1,782	2,635	4,009	9,733
Asphalt Oil	700	0	0	0	0	0	0
Kerosene	250	19	112	180	266	405	982
Sand	5000	83	408	635	923	1,386	3,435
Cement	4000	207	391	416	418	428	1,860
River Stone	7500	0	0	0	0	0	0
Steel Moulds	7500	0	0	0	0	0	0
Timber	200000	820	1,640	1,660	1,760	1,280	7,160
Paint	3500	88	177	177	190	129	761
Reinforcing Steel	750	200	376	401	403	413	1,793
Tying Wire	1500	3	6	7	7	7	30
Equivalent Royalty	250	685	1,364	1,401	1,510	1,655	6,615

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

PROV : SULAWESI SELATAN

KAB : WAJO

(1000 Rp)

I T E M	UNIT	< 1988 >	< 1989 >	< 1990 >	< 1991 >	< 1992 >	< TOTAL >
EQUIPMENT :		172,050	337,673	366,540	400,933	434,492	1,711,688
Bulldozer/Ripper	15758	7,683	8,649	11,290	11,911	20,127	59,660
Swamp Bulldozer	11617	805	801	214	429	0	2,249
Motor Grader	13465	22,679	40,425	45,205	47,316	57,417	213,042
Hand-guide Vib. Roller	1587	381	1,113	3,658	2,930	4,395	12,477
Tire Roller	10676	15,555	31,784	27,166	28,755	18,291	121,551
Vibratory Roller (D&T)	6724	4,713	8,650	10,756	11,983	15,799	51,901
Hydraulic Excavator; Wheel	12601	4,041	3,413	1,181	1,399	301	10,335
Wheel Loader	16660	23,195	46,084	48,980	56,085	62,344	236,688
Water Tank Truck	3927	1,235	3,345	3,815	4,478	4,730	17,603
Dump Truck	5414	55,879	115,630	131,110	151,895	176,235	630,749
Flat Bed Truck with Crane	4981	6,641	12,844	17,581	15,110	15,496	67,672
Flat Bed Truck	3265	12,110	24,370	24,197	24,245	21,066	105,988
Portable Crusher/Screening	43673	15,119	36,431	33,147	39,122	34,217	158,036
Concrete Mixer	8956	478	729	5,228	2,124	2,655	11,214
Water Pump	480	18	31	371	87	109	615
Concrete Vibrator	310	4	11	42	22	27	106
Asphalt Sprayer	2065	1,514	3,363	2,599	3,042	1,284	11,802
LABOUR :		46,336	96,563	115,096	120,569	133,203	511,767
Mandur	2500	4,016	8,378	10,369	10,427	11,602	44,792
Skilled Labourer	2000	1,286	3,173	4,300	4,994	6,549	20,302
Carpenter	3000	173	319	812	1,111	2,506	4,921
Mason	3000	193	223	2,082	818	1,041	4,357
Labourer	1500	25,511	55,104	63,666	67,568	72,366	284,215
Driver	3000	8,454	17,441	19,123	21,190	22,567	88,775
Operator	4500	6,703	11,925	14,744	14,461	16,572	64,405
MATERIAL :		82,240	192,950	185,138	193,934	122,056	776,318
Bitumen	275	41,556	108,878	82,259	97,131	45,717	375,541
Asphalt Oil	700	21,046	38,373	31,133	36,274	14,373	141,199
Kerosene	250	9,004	19,691	15,378	18,045	7,871	69,989
Sand	5000	2,524	5,006	7,000	6,066	4,717	25,313
Cement	4000	964	2,265	9,175	4,713	5,685	22,802
River Stone	7500	484	558	5,424	2,046	2,604	11,116
Steel Moulds	7500	180	1,269	3,372	1,749	2,235	8,805
Timber	200000	920	1,640	3,960	6,220	14,600	27,340
Paint	3500	88	177	177	695	1,848	2,985
Reinforcing Steel	750	1,302	4,512	15,951	7,929	9,743	39,437
Tying Wire	1500	22	81	289	143	176	711
Equivalent Royalty	250	4,150	10,500	11,020	12,923	12,487	51,080

Appendix A-6

QUANTITIES OF BRIDGE ON PROPOSED ROAD LINKS

PROV : SULAWESI SELATAN KAB : WAJO

LINK NO	BRIDGE NAME	Km	From	« TYPE »		DESIGN LOAD CLASS	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)			
2	MELLENGE	10	TSRA	KB				15.50	1	15.50	4.50	69.75		0	2	IIIA
	LAPENNE	5	TSRA	KB				5.00	1	5.00	4.50	22.50		0	2	
	LECELECENG II	1	TSRA	KB				4.00	1	4.00	4.50	18.00		0	2	
	LECENG I	1	YSRA	KB				10.00	1	10.00	4.50	45.00		0	2	
3	CELLUE	6	TSRA	KK				52.00	1	52.00	4.00	208.00		0	2	IIIA
	LABALETAPA	2	TSRA	KK				14.00	1	14.00	4.00	56.00		0	2	
7	AJURAJA I	5	AJRA	KB				5.00	1	5.00	4.50	22.50		0	2	IIIC
	AJURAJA II	3	AJRA	KB				5.00	1	5.00	4.50	22.50		0	2	
9	DOPING	1	DPNG	KB				15.50	1	15.50	4.50	69.75		0	2	IIIB-1
11	MULLA	5	DOPG	KB				15.00	1	15.00	4.00	60.00		0	2	IIIB-1
	DOPING LAMA	1	DOPG	KB				7.00	1	7.00	4.00	28.00		0	2	
16	PANEKI II	1	PNKI	KB				5.00	1	5.00	4.00	20.00		0	2	IIIB-1
	MATANPENEKI I	1	PNKI	KB				22.00	1	22.00	4.00	88.00		0	2	
	MALEPPAANG	4	PNKI	KB				4.00	1	4.00	4.50	18.00		0	2	
19	SAREPAO I	3	CLDO	KB				7.00	1	7.00	4.50	31.50		0	2	IIIB-2
	N.1	7	CLDO	--	TH	10T	(B)	5.00	1	5.00	4.00	0.00	20.00	0	2	
	MARDANGING II	8	CLDO	KB				5.00	1	5.00	4.50	22.50		0	2	
	MALLIMONGAN 3	9	CLDO	KB				5.00	1	5.00	4.50	22.50		0	2	
22	BK.MACCILERENG	2	WKKE	KB				5.00	1	5.00	4.50	22.50		0	2	IIIA
	LAMPO BURNE	6	WKKE	KB				5.00	1	5.00	4.50	22.50		0	2	
	MARDANGIN	11	WKKE	KB				5.00	1	5.00	4.50	22.50		0	2	
	DUPPALAJI	14	WKKE	KB				5.00	1	5.00	4.50	22.50		0	2	
26	TIRONGGE	3	TBLI	PB				5.00	1	5.00	4.00	20.00		0	2	IIIB-1
27	TAWARO II	7	PANT	KB				5.00	1	5.00	4.50	22.50		0	2	IIIB-2
	TAWARO I	11	PANT	KB				11.00	1	11.00	4.50	49.50		0	2	
39	LAPAUKE	4	BRKO	KK				7.00	1	7.00	4.50	31.50		0	2	IIIA
	JAUPANDANG	8	BRKO	KK				5.00	1	5.00	4.50	22.50		0	2	
	KERAKERA	10	BRKO	--	RC	BH50	(B)	4.00	1	4.00	4.50	0.00	18.00	0	2	
44	LAPATOLIANG	4	HCNG	KB				7.00	1	7.00	4.50	31.50		0	2	IIIB-2
73	PENRANG	6	BULU	PB				5.00	1	5.00	4.50	22.50		0	2	IIIB-1
74	LAWASEWANUA	10	LWKS	LL	TH	10T	(B)	10.00	2	5.00	4.00	45.00	40.00	1	2	IIIB-2
76	BANCENGE	1	PGRS	--	TH	10T	(B)	5.00	1	5.00	4.00	0.00	20.00	0	2	IIIC
	BELANAE	4	PGRS	--	TH	10T	(B)	5.00	1	5.00	4.00	0.00	20.00	0	2	
	WAJO-WAJO I	5	PGRS	--	TH	10T	(C)	7.00	1	7.00	4.00	0.00	28.00	0	2	
	WAJO-WAJO II	5	PGRS	--	TH	10T	(B)	5.00	1	5.00	4.00	0.00	20.00	0	2	

Appendix A-7 CONSTRUCTION AND MAINTENANCE COST OF BRIDGES
ON PROPOSED ROAD LINKS

PROV : SULAWESI SELATAN KAB : WAJO

LINK NO : 2 (IIIA) LENGTH : 14 Km

(Rp)

ITEM	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Superstructure (Timber; Span 3m; 10T)	m2	0.00	58,908	4,626	0	0	0
Superstructure (Timber; Span 5m; 10T)	m2	0.00	65,251	5,107	0	0	0
Superstructure (Timber; Span 8m; 10T)	m2	0.00	86,430	6,706	0	0	0
Superstructure (Timber; Span 3m; BH50)	m2	0.00	73,045	5,719	0	0	0
Superstructure (Timber; Span 5m; BH50)	m2	0.00	79,747	6,195	0	0	0
Superstructure (Timber; Span 8m; BH50)	m2	0.00	101,141	7,841	0	0	0
Superstructure (Concrete; Span 3m; BH50)	m2	0.00	59,835	83,026	0	0	0
Superstructure (Concrete; Span 5m; BH50)	m2	0.00	61,034	92,741	0	0	0
Superstructure (Concrete; Span 8m; BH50)	m2	0.00	62,554	100,992	0	0	0
Superstructure (Concrete; Span 10m; BH50)	m2	0.00	68,143	114,666	0	0	0
Superstructure (Concrete; Span 15m; BH50)	m2	0.00	72,799	135,019	0	0	0
Substructure (Pier; for Timber; 10T)	NO	0.00	513,015	43,123	0	0	0
Substructure (Abut; for Timber; 10T)	NO	0.00	1,352,002	189,655	0	0	0
Substructure (Pier; for Timber; BH50)	NO	0.00	754,475	63,842	0	0	0
Substructure (Abut; for Timber; BH50)	NO	0.00	1,533,810	212,676	0	0	0
Substructure (Pier; for Concrete; BH50)	NO	0.00	1,760,817	457,927	0	0	0
Substructure (Abut; for Concrete; BH50)	NO	0.00	3,658,515	967,772	0	0	0
Demolition of Bridge (Timber->Timber)	m2	0.00	16,058	1,730	0	0	0
Demolition of Bridge (Timber->Concrete)	m2	0.00	16,058	1,730	0	0	0
Demolition of Bridge (Concrete)	m2	0.00	88,586	65,606	0	0	0
Maintenance of Timber Bridge (New)	m2	0.00	10,411	1,344	0	0	0
Maintenance of Concrete Bridge (New)	m2	0.00	2,049	2,523	0	0	0
Maintenance of Timber Bridge (Exist)	m2	0.00	8,941	2,517	0	0	0
Maintenance of Concrete Bridge (Exist)	m2	155.25	4,145	2,349	643,511	364,682	1,008,193
(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 : SULAWESI SELATAN KAR : WAJU

LINK NO : 3 (TIA) LENGTH : 14 Km

(Rp)

I T E M	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Superstructure (Timber;Span 3m;10T)	m2	0.00	58,908	4,626	0	0	0
Superstructure (Timber;Span 5m;10T)	m2	0.00	65,251	5,107	0	0	0
Superstructure (Timber;Span 8m;10T)	m2	0.00	86,430	6,706	0	0	0
Superstructure (Timber;Span 3m;BH50)	m2	0.00	73,045	5,719	0	0	0
Superstructure (Timber;Span 5m;BH50)	m2	0.00	79,747	6,195	0	0	0
Superstructure (Timber;Span 8m;BH50)	m2	0.00	101,141	7,841	0	0	0
Superstructure (Concrete;Span 3m;BH50)	m2	0.00	59,835	83,026	0	0	0
Superstructure (Concrete;Span 5m;BH50)	m2	0.00	61,034	92,741	0	0	0
Superstructure (Concrete;Span 8m;BH50)	m2	0.00	82,554	100,992	0	0	0
Superstructure (Concrete;Span 10m;BH50)	m2	0.00	68,143	114,666	0	0	0
Superstructure (Concrete;Span 15m;BH50)	m2	0.00	72,799	135,019	0	0	0
Substructure (Pier;for Timber;10T)	NO	0.00	513,015	43,123	0	0	0
Substructure (Abut;for Timber;10T)	NO	0.00	1,352,002	189,655	0	0	0
Substructure (Pier;for Timber;BH50)	NO	0.00	754,475	63,842	0	0	0
Substructure (Abut;for Timber;BH50)	NO	0.00	1,533,810	212,676	0	0	0
Substructure (Pier;for Concrete;BH50)	NO	0.00	1,760,817	457,927	0	0	0
Substructure (Abut;for Concrete;BH50)	NO	0.00	3,658,515	967,772	0	0	0
Demolition of Bridge (Timber->Timber)	m2	0.00	16,058	1,730	0	0	0
Demolition of Bridge (Timber->Concrete)	m2	0.00	16,058	1,730	0	0	0
Demolition of Bridge (Concrete)	m2	0.00	88,586	65,606	0	0	0
Maintenance of Timber Bridge (New)	m2	0.00	10,411	1,344	0	0	0
Maintenance of Concrete Bridge (New)	m2	0.00	2,049	2,523	0	0	0
Maintenance of Timber Bridge (Exist)	m2	264.00	8,941	2,517	2,360,424	664,488	3,024,912
Maintenance of Concrete Bridge (Exist)	m2	0.00	4,145	2,349	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 : SULAWESI SELATAN KAD : WAJU
 LINK NO : 16 (IIB-1) LENGTH : 4 Km

(Rp)

ITEM	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		>>>>> TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Superstructure (Timber;Span 3m;10T)	m2	0.00	58,908	4,626	0	0	0
Superstructure (Timber;Span 5m;10T)	m2	0.00	65,251	5,107	0	0	0
Superstructure (Timber;Span 8m;10T)	m2	0.00	86,430	6,706	0	0	0
Superstructure (Timber;Span 3m;BHSO)	m2	0.00	73,045	5,719	0	0	0
Superstructure (Timber;Span 5m;BHSO)	m2	0.00	79,747	6,195	0	0	0
Superstructure (Timber;Span 8m;BHSO)	m2	0.00	101,141	7,941	0	0	0
Superstructure (Concrete;Span 3m;BHSO)	m2	0.00	59,835	83,026	0	0	0
Superstructure (Concrete;Span 5m;BHSO)	m2	0.00	61,034	92,741	0	0	0
Superstructure (Concrete;Span 8m;BHSO)	m2	0.00	62,554	100,992	0	0	0
Superstructure (Concrete;Span 10m;BHSO)	m2	0.00	68,143	114,666	0	0	0
Superstructure (Concrete;Span 15m;BHSO)	m2	0.00	72,799	135,019	0	0	0
Substructure (Pier;for Timber;10T)	m0	0.00	513,015	43,123	0	0	0
Substructure (Abut;for Timber;10T)	m0	0.00	1,352,002	189,655	0	0	0
Substructure (Pier;for Timber;BHSO)	m0	0.00	754,475	63,842	0	0	0
Substructure (Abut;for Timber;BHSO)	m0	0.00	1,533,810	212,676	0	0	0
Substructure (Pier;for Concrete;BHSO)	m0	0.00	1,760,817	157,927	0	0	0
Substructure (Abut;for Concrete;BHSO)	m0	0.00	3,658,515	967,772	0	0	0
Demolition of Bridge (Timber->Timber)	m2	0.00	16,058	1,730	0	0	0
Demolition of Bridge (Timber->Concrete)	m2	0.00	16,058	1,730	0	0	0
Demolition of Bridge (Concrete)	m2	0.00	88,586	65,606	0	0	0
Maintenance of Timber Bridge (New)	m2	0.00	10,411	1,344	0	0	0
Maintenance of Concrete Bridge (New)	m2	0.00	2,049	2,523	0	0	0
Maintenance of Timber Bridge (Exist)	m2	0.00	8,941	2,517	0	0	0
Maintenance of Concrete Bridge (Exist)	m2	126.00	4,145	2,349	522,270	295,974	818,244
<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 : SULAWESI SELATAN KAB : WAJI
 LINK NO : 19 (IIIB-2) LENGTH : 17 Km

(Rp)

ITEM	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		>>>>> TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Superstructure (Timber;Span 3m;10T)	m2	0.00	58,908	4,626	0	0	0
Superstructure (Timber;Span 5m;10T)	m2	20.00	65,251	5,107	1,305,020	102,140	1,407,160
Superstructure (Timber;Span 8m;10T)	m2	0.00	86,430	6,706	0	0	0
Superstructure (Timber;Span 3m;BH50)	m2	0.00	73,045	5,719	0	0	0
Superstructure (Timber;Span 5m;BH50)	m2	0.00	79,747	6,195	0	0	0
Superstructure (Timber;Span 8m;BH50)	m2	0.00	101,141	7,841	0	0	0
Superstructure (Concrete;Span 3m;BH50)	m2	0.00	59,838	83,026	0	0	0
Superstructure (Concrete;Span 5m;BH50)	m2	0.00	61,034	92,741	0	0	0
Superstructure (Concrete;Span 8m;BH50)	m2	0.00	62,554	100,992	0	0	0
Superstructure (Concrete;Span 10m;BH50)	m2	0.00	68,143	114,666	0	0	0
Superstructure (Concrete;Span 15m;BH50)	m2	0.00	72,799	135,019	0	0	0
Substructure (Pier;for Timber;10T)	NO	0.00	513,015	43,123	0	0	0
Substructure (Abut;for Timber;10T)	NO	2.00	1,332,002	189,635	2,704,004	379,310	3,083,314
Substructure (Pier;for Timber;BH50)	NO	0.00	754,475	63,842	0	0	0
Substructure (Abut;for Timber;BH50)	NO	0.00	1,533,810	212,676	0	0	0
Substructure (Pier;for Concrete;BH50)	NO	0.00	1,760,817	457,927	0	0	0
Substructure (Abut;for Concrete;BH50)	NO	0.00	3,658,515	967,772	0	0	0
Demolition of Bridge (Timber->Timber)	m2	0.00	16,058	1,730	0	0	0
Demolition of Bridge (Timber->Concrete)	m2	0.00	16,058	1,730	0	0	0
Demolition of Bridge (Concrete)	m2	0.00	88,586	65,606	0	0	0
Maintenance of Timber Bridge (New)	m2	20.00	10,411	1,344	208,220	26,880	235,100
Maintenance of Concrete Bridge (New)	m2	0.00	2,049	2,523	0	0	0
Maintenance of Timber Bridge (Exist)	m2	0.00	8,941	2,517	0	0	0
Maintenance of Concrete Bridge (Exist)	m2	76.50	4,145	2,349	317,092	179,698	496,790
(Without Overhead)							
			TOTAL COST (Timber Bridge)		4,009,024	481,450	4,490,474
			(Concrete Bridge)		0	0	0
			TOTAL COST (without Maintenance)		4,009,024	481,450	4,490,474
(Overhead : 15%)							
			TOTAL COST (Timber Bridge)		4,610,378	553,668	5,164,045
			(Concrete Bridge)		0	0	0
			TOTAL COST (without Maintenance)		4,610,378	553,668	5,164,045

PROV : SULAWESI SELATAN KAB : WAJO

LINK NO : 22 (IIIA) LENGTH : 17 Km

(Rp)

I T E M	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Superstructure (Timber; Span 3m; IOT)	m2	0.00	58,908	4,626	0	0	0
Superstructure (Timber; Span 5m; IOT)	m2	0.00	65,251	5,107	0	0	0
Superstructure (Timber; Span 8m; IOT)	m2	0.00	86,430	6,706	0	0	0
Superstructure (Timber; Span 3m; BMSO)	m2	0.00	73,045	5,719	0	0	0
Superstructure (Timber; Span 5m; BMSO)	m2	0.00	79,747	6,195	0	0	0
Superstructure (Timber; Span 8m; BMSO)	m2	0.00	101,141	7,841	0	0	0
Superstructure (Concrete; Span 3m; BMSO)	m2	0.00	59,835	83,026	0	0	0
Superstructure (Concrete; Span 5m; BMSO)	m2	0.00	61,834	92,741	0	0	0
Superstructure (Concrete; Span 8m; BMSO)	m2	0.00	62,554	100,992	0	0	0
Superstructure (Concrete; Span 10m; BMSO)	m2	0.00	68,143	114,666	0	0	0
Superstructure (Concrete; Span 15m; BMSO)	m2	0.00	72,799	135,019	0	0	0
Substructure (Pier; for Timber; IOT)	NO	0.00	513,015	43,123	0	0	0
Substructure (Abut; for Timber; IOT)	NO	0.00	1,352,002	189,655	0	0	0
Substructure (Pier; for Timber; BMSO)	NO	0.00	754,475	63,842	0	0	0
Substructure (Abut; for Timber; BMSO)	NO	0.00	1,533,810	212,676	0	0	0
Substructure (Pier; for Concrete; BMSO)	NO	0.00	1,760,817	457,927	0	0	0
Substructure (Abut; for Concrete; BMSO)	NO	0.00	3,658,515	967,772	0	0	0
Demolition of Bridge (Timber->Timber)	m2	0.00	16,058	1,730	0	0	0
Demolition of Bridge (Timber->Concrete)	m2	0.00	16,058	1,730	0	0	0
Demolition of Bridge (Concrete)	m2	0.00	88,586	65,606	0	0	0
Maintenance of Timber Bridge (New)	m2	0.00	10,411	1,344	0	0	0
Maintenance of Concrete Bridge (New)	m2	0.00	2,049	2,523	0	0	0
Maintenance of Timber Bridge (Exist)	m2	0.00	8,941	2,517	0	0	0
Maintenance of Concrete Bridge (Exist)	m2	90.00	4,145	2,349	373,050	211,410	584,460
<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 : SULAWESI SELATAN KAB : WAJO
 LINK NO : 26 (IIIB-1) LENGTH : 11 Km

(Rp)

I T E M	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Superstructure (Timber;Span 3a;101)	m2	0.00	58,908	4,626	0	0	0
Superstructure (Timber;Span 5a;101)	m2	0.00	85,251	5,107	0	0	0
Superstructure (Timber;Span 8a;101)	m2	0.00	86,430	6,706	0	0	0
Superstructure (Timber;Span 3a;BHSO)	m2	0.00	73,045	5,719	0	0	0
Superstructure (Timber;Span 5a;BHSO)	m2	0.00	79,747	6,195	0	0	0
Superstructure (Timber;Span 8a;BHSO)	m2	0.00	101,141	7,841	0	0	0
Superstructure (Concrete;Span 3a;BHSO)	m2	0.00	59,835	83,026	0	0	0
Superstructure (Concrete;Span 5a;BHSO)	m2	0.00	66,034	92,741	0	0	0
Superstructure (Concrete;Span 8a;BHSO)	m2	0.00	62,554	100,992	0	0	0
Superstructure (Concrete;Span 10a;BHSO)	m2	0.00	68,143	114,666	0	0	0
Superstructure (Concrete;Span 15a;BHSO)	m2	0.00	72,799	135,019	0	0	0
Substructure (Pier;for Timber;101)	NO	0.00	513,015	43,123	0	0	0
Substructure (Abut;for Timber;101)	NO	0.00	1,352,002	189,655	0	0	0
Substructure (Pier;for Timber;BHSO)	NO	0.00	754,475	63,842	0	0	0
Substructure (Abut;for Timber;BHSO)	NO	0.00	1,533,810	212,676	0	0	0
Substructure (Pier;for Concrete;BHSO)	NO	0.00	1,760,817	457,927	0	0	0
Substructure (Abut;for Concrete;BHSO)	NO	0.00	3,658,515	967,772	0	0	0
Demolition of Bridge (Timber->Timber)	m2	0.00	16,058	1,730	0	0	0
Demolition of Bridge (Timber->Concrete)	m2	0.00	16,058	1,730	0	0	0
Demolition of Bridge (Concrete)	m2	0.00	88,586	65,606	0	0	0
Maintenance of Timber Bridge (New)	m2	0.00	10,411	1,344	0	0	0
Maintenance of Concrete Bridge (New)	m2	0.00	2,049	2,523	0	0	0
Maintenance of Timber Bridge (Exist)	m2	0.00	8,941	2,517	0	0	0
Maintenance of Concrete Bridge (Exist)	m2	20.00	4,145	2,349	82,900	46,980	129,880
<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 : SULAWESI SELATAN KAB : WAJO
 LINK NO : 73 (IIIB-1) LENGTH : 8 Km

(Rp)

ITEM	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		>>>>> TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Superstructure (Timber;Span 3m;10T)	m2	0.00	58,900	4,626	0	0	0
Superstructure (Timber;Span 5m;10T)	m2	0.00	65,251	5,107	0	0	0
Superstructure (Timber;Span 8m;10T)	m2	0.00	86,430	6,706	0	0	0
Superstructure (Timber;Span 3m;BH50)	m2	0.00	73,045	5,719	0	0	0
Superstructure (Timber;Span 5m;BH50)	m2	0.00	79,747	6,195	0	0	0
Superstructure (Timber;Span 8m;BH50)	m2	0.00	101,141	7,841	0	0	0
Superstructure (Concrete;Span 3m;BH50)	m2	0.00	59,835	83,026	0	0	0
Superstructure (Concrete;Span 5m;BH50)	m2	0.00	61,034	92,741	0	0	0
Superstructure (Concrete;Span 8m;BH50)	m2	0.00	62,554	100,992	0	0	0
Superstructure (Concrete;Span10m;BH50)	m2	0.00	68,143	114,668	0	0	0
Superstructure (Concrete;Span15m;BH50)	m2	0.00	72,799	135,019	0	0	0
Substructure (Pier;for Timber;10T)	NO	0.00	513,015	43,123	0	0	0
Substructure (Abut;for Timber;10T)	NO	0.00	1,332,002	189,655	0	0	0
Substructure (Pier;for Timber;BH50)	NO	0.00	754,475	63,842	0	0	0
Substructure (Abut;for Timber;BH50)	NO	0.00	1,533,810	212,676	0	0	0
Substructure (Pier;for Concrete;BH50)	NO	0.00	1,760,817	457,927	0	0	0
Substructure (Abut;for Concrete;BH50)	NO	0.00	3,658,515	967,772	0	0	0
Demolition of Bridge (Timber->Timber)	m2	0.00	16,058	1,730	0	0	0
Demolition of Bridge (Timber->Concrete)	m2	0.00	16,058	1,730	0	0	0
Demolition of Bridge (Concrete)	m2	0.00	88,586	65,606	0	0	0
Maintenance of Timber Bridge (New)	m2	0.00	10,411	1,344	0	0	0
Maintenance of Concrete Bridge (New)	m2	0.00	2,049	2,523	0	0	0
Maintenance of Timber Bridge (Exist)	m2	0.00	6,941	2,517	0	0	0
Maintenance of Concrete Bridge (Exist)	m2	22.50	4,145	2,349	93,262	52,852	146,114
(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 : SULAWESI SELATAN KAB : WAJO
 LINK NO : 74 (IIIB-2) LENGTH : 11 Km

(Rp)

I T E M	UNIT	QUANTITY	<<< UNIT COST >>>		<<<<< COST >>>>>		TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Superstructure (Timber; Span 3m; 10T)	m2	0.00	58,908	4,626	0	0	0
Superstructure (Timber; Span 5m; 10T)	m2	40.00	65,251	5,107	2,610,040	204,280	2,814,320
Superstructure (Timber; Span 8m; 10T)	m2	0.00	86,430	6,706	0	0	0
Superstructure (Timber; Span 3m; BMS0)	m2	0.00	73,045	5,719	0	0	0
Superstructure (Timber; Span 5m; BMS0)	m2	0.00	79,747	6,195	0	0	0
Superstructure (Timber; Span 8m; BMS0)	m2	0.00	101,141	7,841	0	0	0
Superstructure (Concrete; Span 3m; BMS0)	m2	0.00	59,835	83,026	0	0	0
Superstructure (Concrete; Span 5m; BMS0)	m2	0.00	61,034	92,741	0	0	0
Superstructure (Concrete; Span 8m; BMS0)	m2	0.00	62,554	100,992	0	0	0
Superstructure (Concrete; Span 10m; BMS0)	m2	0.00	68,143	114,666	0	0	0
Superstructure (Concrete; Span 15m; BMS0)	m2	0.00	72,799	135,019	0	0	0
Substructure (Pier; for Timber; 10T)	NO	1.00	513,015	43,123	513,015	43,123	556,138
Substructure (Abut; for Timber; 10T)	NO	2.00	1,352,002	189,655	2,704,004	379,310	3,083,314
Substructure (Pier; for Timber; BMS0)	NO	0.00	754,475	63,842	0	0	0
Substructure (Abut; for Timber; BMS0)	NO	0.00	1,533,810	212,676	0	0	0
Substructure (Pier; for Concrete; BMS0)	NO	0.00	1,760,817	457,927	0	0	0
Substructure (Abut; for Concrete; BMS0)	NO	0.00	3,658,515	967,772	0	0	0
Demolition of Bridge (Timber->Timber)	m2	45.00	16,058	1,730	722,610	77,850	800,460
Demolition of Bridge (Timber->Concrete)	m2	0.00	16,058	1,730	0	0	0
Demolition of Bridge (Concrete)	m2	0.00	88,586	65,606	0	0	0
Maintenance of Timber Bridge (New)	m2	40.00	10,411	1,344	416,440	53,760	470,200
Maintenance of Concrete Bridge (New)	m2	0.00	2,049	2,523	0	0	0
Maintenance of Timber Bridge (Exist)	m2	0.00	8,941	2,517	0	0	0
Maintenance of Concrete Bridge (Exist)	m2	0.00	4,145	2,349	0	0	0
(Without Overhead)							
		TOTAL COST (Timber Bridge)			6,549,669	704,563	7,254,232
		(Concrete Bridge)			0	0	0
		TOTAL COST (without Maintenance)			6,549,669	704,563	7,254,232
(Overhead : 15%)							
		TOTAL COST (Timber Bridge)			7,532,119	810,247	8,342,367
		(Concrete Bridge)			0	0	0
		TOTAL COST (without Maintenance)			7,532,119	810,247	8,342,367

PROV : SULAWESI SELATAN KAB : WAJI
 LINK NO : 76 (IIC) LENGTH : 6 Km

(Rp)

ITEM	UNIT	QUANTITY	UNIT COST		COST		TOTAL
			LOCAL	FOREIGN	LOCAL	FOREIGN	
Superstructure (Timber; Span 3m; IOT)	m2	0.00	59,908	4,626	0	0	0
Superstructure (Timber; Span 5m; IOT)	m2	60.00	65,251	5,107	3,915,060	306,420	4,221,480
Superstructure (Timber; Span 8m; IOT)	m2	28.00	86,430	6,706	2,420,040	187,760	2,607,808
Superstructure (Timber; Span 3m; BHSO)	m2	0.00	73,045	5,719	0	0	0
Superstructure (Timber; Span 5m; BHSO)	m2	0.00	79,747	6,195	0	0	0
Superstructure (Timber; Span 8m; BHSO)	m2	0.00	101,141	7,841	0	0	0
Superstructure (Concrete; Span 3m; BHSO)	m2	0.00	59,835	83,026	0	0	0
Superstructure (Concrete; Span 5m; BHSO)	m2	0.00	61,034	92,741	0	0	0
Superstructure (Concrete; Span 8m; BHSO)	m2	0.00	62,554	100,992	0	0	0
Superstructure (Concrete; Span 10m; BHSO)	m2	0.00	68,143	114,666	0	0	0
Superstructure (Concrete; Span 15m; BHSO)	m2	0.00	72,799	135,019	0	0	0
Substructure (Pier; for Timber; IOT)	NO	0.00	513,015	43,123	0	0	0
Substructure (Abut; for Timber; IOT)	NO	8.00	1,352,002	189,655	10,816,016	1,517,240	12,333,256
Substructure (Pier; for Timber; BHSO)	NO	0.00	754,475	63,842	0	0	0
Substructure (Abut; for Timber; BHSO)	NO	0.00	1,533,810	212,676	0	0	0
Substructure (Pier; for Concrete; BHSO)	NO	0.00	1,760,817	457,927	0	0	0
Substructure (Abut; for Concrete; BHSO)	NO	0.00	3,659,515	967,772	0	0	0
Demolition of Bridge (Timber->Timber)	m2	0.00	16,058	1,730	0	0	0
Demolition of Bridge (Timber->Concrete)	m2	0.00	16,058	1,730	0	0	0
Demolition of Bridge (Concrete)	m2	0.00	88,586	45,606	0	0	0
Maintenance of Timber Bridge (New)	m2	88.00	10,411	1,344	916,168	118,272	1,034,440
Maintenance of Concrete Bridge (New)	m2	0.00	2,049	2,523	0	0	0
Maintenance of Timber Bridge (Exist)	m2	0.00	8,941	2,517	0	0	0
Maintenance of Concrete Bridge (Exist)	m2	0.00	4,145	2,349	0	0	0
(Without Overhead)							
			TOTAL COST (Timber Bridge)		17,151,116	2,011,428	19,162,544
			(Concrete Bridge)		0	0	0
			TOTAL COST (without Maintenance)		17,151,116	2,011,428	19,162,544
(Overhead : 15%)							
			TOTAL COST (Timber Bridge)		19,723,783	2,313,142	22,036,926
			(Concrete Bridge)		0	0	0
			TOTAL COST (without Maintenance)		19,723,783	2,313,142	22,036,926

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