		Name of Bridge : PANUKID							
	30:	Classification : Repair	÷.,						
tem 0		Description	Unit	Price	Quantity	Amount	Forlegn Component	Local Component	Taxes
	EART	HWORK AND ROAD WORKS Clearing and Grubbling	6a -						
	· · .	Common excavation	Sq.m Cu.m	2.16 43.8	-	-	- 1	· · · · · ·	-
(2)		Bridge excavation above low water level	Ըս.տ	58.5	r -		· _		-
(2)5		Bridge excavation below low water level	Cu.m	111		~	·		
(5)		Shoring, cribbing, cofferdam and related work	LS	1			-		
(1)	- :	Embankment	Cu.m	69.0	479	33051.00	24127.23	5618.67	3305.1
(5)		Selected borrow for backfill Aggregate subbase course	Ըս. տ	120 195	· -	-	· · · ·	стана 1911 — Прилания 1911 — Прилания	<u>به</u> ۱۰۰
(2)		PCC Pavement (Reinforced)	Sq.m	465					<u>-</u>
	•	Sub-total				33051.00 (100.0 %)	24127.23 (73.0 %)	5618.67 (17.0 %)	3305.1 (10.0 %
••	- · ·	RSTRUCTURE WORKS Removal concrete structure	Cu.m	912	26	23712,00	10196.16	11144,64	2371.2
(S) (1)		Removal steel structure (bridge) Ralling	LS m	1 789	-		10130.10		-
	÷.,	Timber structure (Detour bridge)	span	45200	7	316400.00	98084.00	186676.00	31640.0
(\$)	2	Structural steel (Detour bridge) Reinforcing steel	Sor.me Ka	5180 17.9	4180	74822.00	53871.84		7482.2
0	-	Structural concrete. Class A Prestressed concrete bridge	Cu.m Cu.m	2760 15800	32	88320.00	18576.00	30912.00	8832.0
	•	Steel bridge(I-beam) Paint	ten Sq.m	61400 68.4	550	37620.00	1890.60	28967.40	3762.0
		Sub-total				540874.00	215618.60		54087.4
	autoći	二、素美 花 にん 金 たいしたい しっかん				(100.0 %)	(39.8 %)		(10.0 >
1) (S)	2002	TRUCTURE WORKS Removal of concrete structure	Cu.m	912	-	÷.	· _	-	-
(1) (3)		Removal of steel structure Steel H-plies	ևՏ ՠ	1 3260	-	-	-	-	-
(4). (6)		Precast concrete pile (400X400mm) Steel sheet pile	ភា កា	801 3290	-		· ·		-
(7)		Precast concrete sheet pile Cast-in-Place concrete pile(1200mm)	18 50	580 7270	-	-		-	<u>-</u> .
(16)	:	Reinforcement steel	kg	15.5	-	· -	-		-
(1) (5)		Structural concrete, Class A Seal concrete	Ըս.ա. Ըս.ա.	1930 1740	=	-	- ·		-
		Grouted riprap Stone masonry	Ըս.m. Ըս.m.	945 853	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	· _	-		. 1
		Gabion	Cu.m	663	·	-	-		-
		Sub-total				· - · ·	· -)	· _ ·	< - · · >
5	RIVE	R TRAINING WORKS	_	100	_			· · · ·	
(1) (4)		Untreated timber pile Precest concrete pile (400X400mm)	5) 5)	109 801			r		
(6)		Steel sheet pile Reinforcement steel	na Kgr	3290 15.5	-	-	-		-
(1) (5)		Structural concrete, Class A Seal concrete	Ըս. տ Ըս. թ	1930 1740	-	~	· · · ·	· <u>-</u> ·	-
		Grouted riprap	С⊎. ก	945	-	-	-	· -	
		Stone masonry Stone pitching (Hand-laid	Cu.m.	853	-	-	-		-
		rock embankment) Gabion	Ըս.թ. Ըս.թ.	300 663	· -	-	-	-	-
		Sub-total							-
	SPEC	TAL WORKS FOR REHABILITATION				(-)	(-) 3 - 1 -	(-)	(-)
•		Additional stringer Additional sidewalk	ton. Sg.me	41300 6690	5	206500.00	156940.00	28910.00	20650.0
		Reinforcing beam of RCDG	Cu.m	5960 8680	-			•	-
		Widening of pier coping				206500.00	156940.00	28910.00	20650.0
>	TOUP					(100.0 %)	(76.0 %)		(10.0)
· -	(BAP	ORARY WORKS Scaffolding	5q.m. Cu.m.	156	124	19344.00	13540.80	3868.80	1934.
		Staging Temporary bridge	5q.m.	5180	-		-	-	· +
		Preparation works,	LS						103/
		Sub-total				19344.00 (100.0 %)	13540.80 (70.0 %)	(20.0 %)	1934. (10.0
	2.4.4	Grand Total				799769.00 (100.0 %)	410226.63		79976. (10.0

AP11-34

31 Name of Bridge : SAN ISIDRO Classification : Repair na Moora na tanàna amin' Panjar Santan

	Classification : Repair							
	· ·					Foriegn	Local	
tem lo.	Description	Unit	Price	Quantity	Amount	Component	Component	Taxes
) EA	RTHWORK AND ROAD WORKS					6.5.75	e en el téles de g	4. t. t.
1 CA 0	Clearing and Grubbling	So, m	2.16	-	· -		•	-
2 .	Common excavation	Cu.m	43.8		-			-
3(2)	Bridge excavation above low			_	-			
	water level	Ըս.ա	58.5			a de seconda de la	1. 1. 1. 1. N. N.	
3(2)5	Bridge excavation below low water level	Cu.m	111		<u> </u>	· · · ·	laka a n asas	-
3(5)	Shoring, cribbing, cofferdam						an Market and	
	and related work	LS	1		33051.00	24127.23	5618.67	3305
4(D)	Embankment	Cu.ต	69.0	479				3305.
4(5)	Selected borrow for backfill	- Cu.ສ	120		-	a a ser e s a a		_
0	Aggregate subbase course	Sq.m	165	-	.'	a da tamén	e i e 19 . • 19	· .
1(2)	PCC Pavement (Reinforced)						5618.67	
1 .	Sub-total				33051.00	; 73.0 X	(17.0X)	3305. (10.0
I) SU	PERSTRUCTURE WORKS						s est el Marcín SA P	na tra se
1) 30 (1(S):	Removal concrete structure	Cu.a	912	- 62		24313.9	26575.68	5654.
10)	Removal steel structure (bridge)	LS	1	-	20150 00	22092.0		39 15
1	Railing	周	789	50 . 7			186676.00	31640.
2.1	Timber structure (Detour bridge)	span Solum	5180	-				
3(5) 4	Structural steel (Detour bridge) Reinforcing steel	kz	17.9	8393	150234.70	108168.9	3 27042.25	15023.
5(1)	Structural concrete. Class A	Cu.m	2760	65	179400.00	98670.0	62790.00	17940.
7	Prestressed concrete bridge	Ըս.ա	15800	<u></u> .	7		an a	-
8	Steel bridge(1-beam)	ton So.m	61400 68.4	552	37756.80	4908.3	8 29072.74	3775.
1 .	Paint	39.W						
a terdi	Sub-total		·		779785.50 (100.0 %)		345569.66 (44.3 x)	77978. { 10.0
	DETDUCTUDE HADVE				(100.0 4)	1 1010 4		
(L) SU 1(S)	BSTRUCTURE WORKS Removal of concrete structure	Cu.m	912				an an an an the second	
1(1)	Removal of steel structure	LS	1	. · · -	· –	-	e sa ta serie se	· •
0(3)	Steel H-piles	m	3260	-	-	-	e i die 1 ™ die 1 ₩ 10	
D(4)	Precast concrete pile (400X400mm)	10	801	•		· · · ·	· · · · · · · · · · · · · · · · · · ·	<u>.</u> .
0(6)	Steel sheet pile	50	3290 580	-	_	2 .	al and a second	-
0(7)	Precast concrete sheet bile	р е	7270		1 - 1 - 1 -	an an an a an	-	-
0(16) 4	Cast-in-Place concrete pile(1200mm) Reinforcement steel	kg	15.5	· -		÷.	a tha ann a n an am	-
5(1)	Structural concrete, Class A	Cu.m	1930	-	· - ·			~ ·
5(5)	Seal concrete	Cu.m.	1740	-	. -	. •	이 가지 않는 것 같아.	
1	Grouted riprap	Cu.m	945	· -	-	-		- I
5	Stone masonry	- Cບ.ສ Cu.ສ	853 663		-	-		· · ·
9	Gabion							
	Sub-total					(-)	(-)	 -)
V) RI	VER TRAINING WORKS				• • •		and the second second second	
0(1) H1	Untreated timber pile		109	· –	-	1. 		
0(4)	Precast concrete pile (400X400mm)	Ð	801	-	. N. − 1		e da en la e da fi	-
0(6)	Steel sheet pile	· DA	3290	· -	-	-		
4	Reinforcement steel	Kg .	15.5		-	-	· · · · · · · · · · · · · · · · · · ·	
5(1)	Structural concrete, Class A	Ըս.m. Ըս.m.	1930	· · · · · ·	-	-		· -
5(6)	Seal concrete	Cu.m.	945	-	•	- - .	in the second a the se	•
4 5	Grouted riprap Stone masonry	Cu.m	853		-	-	in ang t ra sa	-
5	Stone pitching (Hand-laid					1997 - 19		· _
	rock embankment)	Cu.a	300	· -	_			-
I	Gabion	Cu.m	663					
	Sub-total				-		an a contra	
	TALL VARES FOR DEPART ITATION				(-)	(-)		
SP	ECIAL WORKS FOR REHABILITATION Additional stringer	ton	41300	. 9	371700.00	282492.0	0 52038.00	37170
	Additional sidewalk	5q.s	6690		-	- ·	gen ant alt∎ an De	•
	Reinforcing beam of RCDG	Cu.m	5960	-	-	11 T 7	a terti tu 🕇 👘	· · · • •
	Widening of pier coping	C11.m	8680					
					371700.00	282492.0	0 52038.00	37170
	Sub-totai				(100.0 %)	(76.0 %) (14.0%)	(10.0
	NPORARY WORKS	50 m	150	248	38688.00	27081.6	0 7737.60	3868
	Scaffolding	Sq.m. Cu.m.	156 220	248	38088.00	27081.8		
	Staging Tomponey bridge	ເບ.ຫ Sq.ສ	5180		-	~	a a star	-
2 3	Temporary bridge Preparation vorks	LS		-	- 11 -		t de la constante de la constan	- · ·
e					38688.00		0 7777 60	3868.
·	Sub-total				(100 0 *)	(70.0 %	0 7737.60) (20.0 K)	(10.0
·								
•	Grand Total				1223224.80	689938.1	2 410963.93) (33.6 %)	122322.

32 Name of Bridge : SAN GABRIEL Classification : Replacement of Superstructure

liem No.	Description	Unit	Price	Quantily	Amount	Foriegn Component	Local Component	Taxes
	EARTHWORK AND ROAD WORKS	*******						
[} D0	Clearing and Grubbling	Se.m	2.16	-	-			-
2	Common excavation	CU.m	43.8	-	-		-	-
3(2)	Bridge excavation above low							
	water level Bridge excavation below low	Cu.m	58.5	· -	~	-		-
)(2)S	water level	Cu.m	111					
(5)	Shoring, cribbing, cofferdam	C0.1.M		-	-	-		
1.1	, and related work	LS	1	. .	-	· •		•
(1) .	Embankment	ຕາເມ	69.0	479	33051.00	24127.23	5618.67	3305.10
(S)	Selected borrow for backfill Aggregate subbase course	Ըս.ա Ըս.ա	120	. "	-	· -	-	- ·
(2)	PCC Pavement (Reinforced)	50.m	465	·				
	Sub-total				33051.00	24127.23		3305.10
)	SUPERSTRUCTURE WORKS				(100.0 X)	(73.0 %)	(17.0 %)	(10.0 X
(S)	Removal concrete structure	Cu.m	912	73	66576.00	28627.68	31290.72	6657.6
(1)	Removal steel structure (bridge)	LS	1		-	-		-
1. F	Railing	m,	789	43	33927.00	18999.12		3392.7
	Timber structure (Detour bridge) Structural steel (Detour bridge)	span	45200	6	271200.00	84072.00	160008.00	27120.0
(5)	Reinforcing steel	Sot n Kg	5180	7854	140586.60	101222.35	25305.59	14058.6
(1)	Structural concrete, Class A	Cu.m	2760	79	218040.00	119922.00		21804.0
	Prestressed concrete bridge	Cu.m.	15800	-	-	-	-	-
3	Steel bridge(l-beam)	ton	61400	· -	-	-	· · ·	-
	Paint	Sq.m	68.4		~			
•	Sub-total				730329.60	352843.15	304453.49	73032.9
10	- 人名特纳 第二人 人名英格兰人		.*		(100.0 %)	(18.3 %)		(10.0 X
	SUBSTRUCTURE WORKS	_						
1(S) 1(1)	Removal of concrete structure Removal of steel structure	Cu.m LS	912 1	-	~	- :		-
)(3)	Steel H-piles	L3 M	3260	_	_	_		-
x(4)	Precast concrete pile (400X400mm)	л л	801	-	-		-	
(6)	Steel sheet pile	Ø	3290	-	-	-	÷ . ·	-
0(7)	Precast concrete sheet pile	助	580	-	-		-	-
0(16) 4	Cast-in-Place concrete pile(1200mm) Reinforcement steel	m kg	7270 15.5	-	-	-	- ·	-
5(1)	Structural concrete, Class A	Cu.m	1930		-	<u>.</u>	· •	-
5(5)	Seal concrete	Cu.m	1740	-	-	-	-	-
l	Grouted riprap	Cuin	945	- 84	79380.00	34133.40	37308.60	7938.0
i 9	Stone masonry Gabion	Ըս.թ. Ըս.թ.	853 663	-	-	-	-	_ ··
,								
	Sub-total				79380.00	34133.40		7938.0
· ·	 Description of the second s Second second secon				(100.0 %)	(43.0 %)	(47.0 X)	(10.0 X
n hin	RIVER TRAINING WORKS Untreated timber pile	. R	109	-	-	-	_	_ · ·
3(4)	Precasi concrete pile (400X400mm)	19,	801	-	-		·	· _
0(6)	Steel sheet pile	h	3290	-	-	-	-	-
4	Reinforcement steel	kg	15.5	· -	-	-	-	÷.
5(1)	Structural concrete, Class A	Ըս.ք	1930	-	-	-		-
5(5) 4	Seal concrete Grouted riprap	Ըսւա։ Ըսւա∋	1740			-	-	_
5	Stone masonry	Cu.m	853	-	-	-	~	- '
5	Stone pitching (Hand-laid							
	rock embankment)	Cu.m.	300	-	-	-	-	×
	Gabion	Cu.m	663					
	Sub-lotal				-	-	-	-
					(-)	(-)	(-)	(-)
	SPECIAL WORKS FOR REHABILITATION							
,	Additional stringer	ton	41300	_	-	-		-
	Additional sidewalk Reinforcing beam of RCDG	Sq.m Çu,≋	6690 5960	_	-	-	-	-
	Videning of pier coping	Cuin	8680	23	199640.00	105809.20		19954.0
								1000/ 0
	Sub-total				199640.00 (100.0 %)	105809.20	73866.80 (37.0 %)	19964.0 (10.0 X
D	TENDADADY HADRE				(100.0 %)	(5.3.0 %)	(31.0 4)	1 10.0 %
()).* ·	TEMPORARY WORKS Scaffolding	Sq., m	156	-	-	-	- 1	-
1	Staging	Cuim	220	751	165220.00	102436.40	46261.60	16522.0
2	Temporary bridge	Sq.M	5180	-	-	-		-
3	Preparation works	LS		-				
	· · · · · · · · · · · · · · · · · · ·				165220.00	102436.40	46261.60	16522.0
	Sub-total				(100.0 X)	(62.0 %)	(28.0 %)	(10.0 %
					1207620.60	619349.38	467509.16	120762.0
	Grand Total						(38.7 %)	(10.0 ×

.

33	Name of Bridge	;	раноно
	Classification		

a sector de la companya de la compa Sector de la companya de la companya

Item No.		Description	Unit	Price	Quantity	Amount	Forlegn Component	Local Component	Taxes
		HWORK AND ROAD WORKS				***********	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	iniiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	
(1) 100		Clearing and Grubbling	5 ។ . ត	2.16	·	·. +		New State (Arthurson) (1997)	
02		Common excavation	Ըս. ա	43.8				이 영산하는 특별 사람.	- .
03(2)	1	Bridge excavation above low					e for an de l'Alex	방법과 한동안 수	
		water level	С ս, ո	58.5	· -	· · · ·			-
03(2)	5	Bridge excavation below low	_	· · · ·	· ·	· _		•	
		water level	Cu.m	111	그는 것 같은 것 같아.		an Anna an A		
03(5)		Shoring, cribbing, cofferdam	LS	÷1 .	÷ .	- '	-	1941 - T 1941	-
04(1)		and related work Embankment	Cu.m	69.0	· -	-	•	a di sentencia di second	
04(S)		Selected borrow for backfill	Cu.m	120		· · · · ·	್ ಎಂದು ಸ್ಮಾರ್ ಕ	a se su terra de	•
00		Aggregate subbase course	Cu.m	195		· -			• .
11(2)		PCC Pavement (Reinforced)	Sq.m.	165					
		Sub-total							(-)
11)	SUPE	RSTRUCTURE WORKS					1705 00	51 13 68	1000
01(5)		Removal concrete structure	Cu.m	912	12	10944.00		· · · · · · · · · · · · · · · · · · ·	1094.4
01(1)		Removal steel structure (bridge)	LS	1	26	20514.00	11187.84	6974.76	2051.4
01 -	•••	Railing	10 10	789		-	-		
02		Timber structure (Detour bridge) Structural steel (Detour bridge)	span So.m	45200 5180		-		en la contra de la c	-
03(S) 04		Reinforcing steel	kg	17.9	1450	25955.00	10001.00		2595.5
ວິຣີຕ່າງ		Structural concrete, Class A	Cu.m	2760	12	33120.00	18216.00	11592.00	3312.0
07		Prestressed concrete bridge	Cu.m	15800	· · ·	2 · · · · · ·	그는 가는 투구.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-
08		Steel bridge(1-beam)	ton	61400					
11		Paint	So, m	68.4					*******
ara Aginta	÷	Sub-total				90533.00	53097.36 (58.6 X)	28382.34 (31.3 ×)	9053.3 (10.0 X
	CIIDS	TRUCTURE WORKS			· ·			and an early distribution of the	
01(S)	2003	Removal of concrete structure	Cu.m	912	-		19 1. 19 1.	alah di di 🖛 Marak	-
01(1)		Removal of steel structure	LS	1	· · · ·	-	an an an the second		
00(3)		Sieel H-piles	ត	3260	-	. •	•	an an the state	14 .
00(4)			· D1	801		• •	나타나 관련 문제		
00(6)		Steel sheet pile	R)	3290	-		-		-
00(7)		Steel sheet pile Precast concrete sheet pile Cast-in-Place concrete pile(1200mm)	្តា	580 7270				y	, -
00(16	3	cast in race concrete prictions	na k <i>a</i> r	15.5	-	2 in 1 <u>-</u>		÷	-
04		Reinforcement steel Structural concrete, Class A	Cu.m	1930	-	-			· •
05(1) 05(5)		Seal concrete	Cu.m	1740	- 1	. •	-	and the state of the second	
01		Grouted riprap	Cu.m	945	54	51030.00		23984.10	
05		Stone masonry	Cu.m	853	. –	^	· · · -	ijig≦usege≛ i erd	
09		Gabion	Cu.M	663				بز ہے۔۔ جمعہ میردشدہ وسرد پ	
	:	Sub-totał				51030.00 (100.0 X)	21912.90	23984.10 (47.0 %)	5103.0 (10.0 %
IŸ)	RIVE	IR TRAINING WORKS						eats a fifteer.	- 1
00(1)		Untreated timber pile	a	109	: -	-		-	
00(4)		Precast concrete pile (400X400mm)	E\$	801	· · ·		n n n t <u>i</u>		
00(6)		Steel sheet pile	10 14 -	3290	-		_ `	n an an an freinn an a n an an a	-
04		Reinforcement steel	kg Сц. л	1930	-	-			-
05(1) 05(5)		Structural concrete, Class A Seal concrete	Cu.m	1740	-	-	-	laga, se - a s	-
05(5)		Grouted riprap	Cu.m	945			•	e de la s e ta de	-
05		Stone masonry	Cu.m	853		-	-	or the const e nt of a	-
06		Stone pitching (Hand-laid					and the first state of the second	and the second sec	
		rock embankment)	Cu.m.	300	· -	•	·	an an tha tha th	-
09		Gabion	Cu.mo	663	-				
		Sub-lotal				-			(-)
Y)	SPRC	TAL WORKS FOR REHABILITATION				· · ·			
•) 00	91.66	Additional stringer	ton	41300	–	· _		and states and	-
)i		Additional sidewalk	Sq.me	6690		. –	1. T. C.	es su 🔽 e 🖞 📜	-
Ď2		Reinforcing beam of RCDG	ີ່ເປັ້	5960	· · · -	-			3472.0
12		Widening of pler coping	С ս. љ	8680	4	34720.00	18401.60	12846.40	3412.9
13		Sub-total				34720.00 (100.0 X)	18401.60 (53.0 %)	12845.40	3472.0
,,		ORARY WORKS				110010 41		1.1.2 1. 1.	a she a sa sa
	TENP		59.8	155	132	20592.00	14414.40	4118.40	2003.4
(ÎV	TEMP	Scaffolding			-	<u> </u>			
/1) 00	TEMP	Scaffolding Staging	Cu.ms	220					
/1) 00 21	TEMP		Cu.m. Sq.m.	220 5180	-	-		그는 말에 가장한 물건이 있다.	
VI) 00 01 02	TEMP	Staging	Cu.ms		ī	5906.25	3235.69	2079.94	590.6
VI) 00 01 02	TEMP	Slaging Temporary bridge	CU.RA Sq.RA LS		1	5906.25 26498.25	3235.69 17650.09	2079.94	590.6 2649.8
03 V1) 00 01 02 03	TEMP	Staging Temporary bridge Preparation works	Cu.m. Sq.m.		ī	5905.25	3235.69 17550.09 (65.6 %	2079,94 6198.34 (23.3 %)	· .

	مز ب ب اب	Classification : Replacement of Supers	uructure						
tem D	2 2 	Description	Unit	Price	Quanitity	Amount	Foriegn Component	Local Component	Taxes
	EART	HWORK AND ROAD WORKS					***********		
· .		Clearing and Grubbling Common excavation	Sq.m	2.16	399	861.84	60.33		86.1
(2)		Bridge excavation above low	Cu.m	43.8	139	6088.20	4079.09	1400.29	608.8
		water level	Cu.m	58.5	.	-	<u>.</u>	-	-
)(2)5		Bridge excavation below low water level	Cu.m	111			· ·		
3(5)		Shoring, cribbing, cofferdam	¢α	111	-			· · ·	•
		and related work	LS	1	-	, -	, ·		-
4(1) 4(S)		Embankment Selected borrow for backfill	Ըս.տ Ըս.տ	69.0 120	479	33051.00	24127.23	5618.67	3305.1
)		Aggregate subbase course	Cu.m	195	127	24765.00	17830.80	and the second	2476.5
(2)	11	PCC Pavement (Reinforced)	\$0.m	465	321	102765.00	63714.30		10275.5
		Sub-total			********	167331.04	109811.75	40966.18	16753.1
						(100.0 %)	(65,5 %)		(10.0 %
) (S)	SUPE	RSTRUCTURE WORKS Removal concrete structure	Cu.m	912	79	710.18 00			
(α)		Removal steel structure (bridge)	LS	1	-	72048,00	30980.64	33862.56	7204.8
l i		Railing	, n	789	44	34716.00	19440.96		3471.6
2 3(5)		Timbér structure (Detour bridge) Strüctural steel (Detour bridge)	span Sq.m	45200 5180	6	271200.00	84072.00	160008.00	27120.0
1		Reinforcing steel	kg	17.9	9603	171893.70	123763.46	30940.87	17189.3
5(1)		Structural concrete. Class A Prestressed concrete bridge	Cບ. m Cບ. ໜ	2760	96	264960.00	145728.00	92736.00	26496.0
7. B		Steel bridge(1-beam)	ton	61400	·····	-	_		-
1		Paint	Sq.m	68.4	-	-	, 		•.
i		Sub-total				814817.70	403985.06	329350.87	81481.7
						(100.0 %)	(49.5 %)		(10.0 %
	SUBS	TRUCTURE WORKS Removal of concrete structure	Cn =					1997 - 19	
(S) (1)		Removal of steel structure	Cu.mi LS	912 1	·	-	· <u>-</u>		
(3)		Steel H-piles	æ	3260	-	-	-	-	
(4)		Precast concrete pile (400X400mm) Steel sheet pile	m M	801 3290	-	-	-		-
)(6))(7)		Precast concrete sheet pile	E)	580	-	-	<u> </u>	-	-
)(16)		Cast-in-Place concrete pile(1200mm)	, PD	7270	-		-	· · ·	-
5(1)		Reinforcement steel Structural concrete, Class A	kg Cu.a	15.5 1930	-	-	-		-
5(5)		Seal concrete	Cuim	1740	-	-	-	<u> </u>	-
L .	÷	Grouted riprap	Cu.m	945		-	-		-
i 1		Stone masonry Gabion	Cu.m Cu.m	853 663	·	-	-	2	:
		Sub-total						· -)	· - · ·
n	RIÝE	R TRAINING WORKS				. ,	· ·		
n)		Untreated timber pile	m	109	-	-		- ,	-
0(4) 0(6)		Precast concrete pile (400X400mm) Steel sheet pile	10 10	801 3290	-	-	-	e e Ind	-
4		Reinforcement steel	kg	15.5		-	-	-	-
5(1)		Structural concrete, Class A	Cu.m Cu.m	1930 1740	· · 1	-	-		-
5(5) I		Seal concrete Grouted riprap	Cu.m	945	-	-	-	·	-
5		Stone masonry	Cu.ma	853	-	-	-	-	-
i		Slone pitching (Hand-laid rock embankment)	Cu.m.	300	· -	-	-	-	-
3		Gabion	Cu.m.	663	-	-	-	. . .	-
	•								
		Sub-total				(-)	(-)	(-)	(-)
	SPEC	IAL WORKS FOR REHABILITATION							
) 		Additional stringer	ton Sotam	41300 6690	-	-	_ ·	-	-
		Additional sidewalk Reinforcing beam of RCDG	50.m	5960	-	-	. · -	-	-
		Widening of pier coping	Cu.m	8680	8	69440.00	36803.20	25692.80	6944.0
		Sub-total				69440.00	35803.20	25692.80	6944.0
						(100.0 %)	(53.0 %)	(37.0 %)	(10.0 ×
)	TEMP	DRARY WORKS	Sq.m	156	-	-	-	-	-
)		Scaffolding Staging	Cu.m	220	756	166320.00	103118.40		16632.0
		Temporary bridge	Sq.m.	5180	- 1	- 36543.26	- 19611.55	13277.38	- 3654.3
		Preparation works	LS			30343.20			
		Sub-total				202863.26	122729.95		20286.3
:						(100.0 %) 1254652.00	(60.5 X) 673329.97		<pre>{ 10.0 % 125465.2</pre>
		Grand Total				10.3604036.00	010063.31	100000.00	160400.6

AP11-38

	35 Name of Bridge : SGT. MATIAS					ta salat i	$(x,y) \in \{x,y\}$	17
	Classification : Repair	· .		· · · · ·	i de la te	ielielies Freiss		
em				· · · · · · · · ·	••	Forless		
·	Description	Unit		Quantily	ABOUD .	Component	Component	Taxes
	EARTHWORK AND ROAD WORKS					a di kasa	and the second	1+.
20 81	Clearing and Grubbling	Sq.m Cu.m	2.16	· · · · ·	· ·		가 가 다 다 다 다 다 다. 아니는 아이는 다 다 다 다 다 다 다 다 다 다 다 다 다 다 다 다 다 다 다	
(2)		Cn+w	10.0	· ·		an a		
	water level	Cų.m	58.5	. ~	-			
(2)8	S Bridge excavation below low water level	Cu.m	111	-	-	에 가 가 흔 곳 하네.	14월 14일 <u>-</u> 18일 -	· .
(5)		04114				and the state		
	and related work	LS	1 69.0		-	-	e kana bi 👖 sesa	
(1) (S)		. Cu.ສ ເປັນສ	120	-		. .		-
	Aggregate subbase course	Cu.m.	195	-	÷ '	-	an an T urka	-
(2)) PCC Pavement (Reinforced)	Sq.m.	465					
1.	Sub-total						· · · · · ·	
<u>,</u>	SUPERSTRUCTURE WORKS			1 N 1	(~)			
ίs)		Cu.m	912	16	14592.00	6274.56	6858.24	1459
$\mathbf{\Omega}$) Removal steel structure (bridge)	LS	1 789	· 1	- <u>-</u>	이 가지 하고 말했다.	나라 가지 물 문헌이	1
	Railing Timber structure (Detour bridge)	· m Span	45200	-		s - 1 - 2 - 7		-
(S)		\$0 B	5180	·		24487.20	6121.80	
	Reinforcing sleel	kg Cu.m	17.9	1900 16	34010.00		15456.00	3401 4410
$\dot{0}$) Structural concrete, Class A Prestressed concrete bridge	Cu.m	15800	-	-			-
	Steel bridge(1-beam)	ton	61400		-		e se production	-
	Paint	Sq.m.	68.4					<u>-</u> .
× .	Sub-total				92762.00 (100.0 %)	55049.70 (59.3 %)	28436.04 (30.6 %)	9276
Ď	SUBSTRUCTURE WORKS							
(S)		Cu.m	912	-		uter j ete	이 아이 그 아파	
(1) (3)		LS m	3260	· <u> </u>	-	· _ ·		=
		DD .	801	~		· · · · ·		· -
(6)) Steel sheet pile	12	3290	· · · ·	· · · · ·	· · · · · · · · · · · · · · · · · · ·	승규는 가 즐거 있는	-
(7)		28 (3)	580 7270	-		김 씨는 영국 문화 문화	아이는 아이들 것이다.	_
(16)	Reinforcement steel	kg	15.5	-	· · ·	-	•	-
0		Cu.ສ	1930		-	· . · · · ·	나는 지수를 가운다.	-
(5)		Cu.ສ Cu.ສ	1740 945			Ξ.		-
	Grouted riprap Stone masonry	Cu.m	853	-	-	···	이 아이 말 한 것	·· -
	Gabion	Cu.m	663		-			
÷.,	Sub-total				-		-	
,	RIVER TRAINING WORKS				ξ - , .}	(-)	(-)	i – 1
ά÷.		A	109	-	-	÷ .		· -
(4)) Precast concrete pile (400X400mm)	Ð	801		.		고고 아이는 가지?	
(6)		n kg	3290 15.5		-	-	-	-
(1)	Reinforcement steel Structural concrete, Class A	Cu.m	1930	• •	-	. .		-
(5)	Seal concrete	Cu.m	1740	-	· -	-	1999 - H istory H istory - H	• 7
	Grouted ripsap	ัCน.ต Cน.ต	945 853		-		이 아이들 것이 같아.	-
•	Stone masonry Stone pitching (Hand-laid	CU.14	000					
	rock embankment)	Cu.m	300		-			-
	Gabion	Cu.m	663					
	Sub-total				(-)	()	· · · · · · · ·	• •
	SPECIAL WORKS FOR REHABILITATION	•			:	e di terre		
	Additional stringer	ton Sq.m.	41300 6690	-	-		이 이 아이들 않는다.	-
	Additional sidewalk Reinforcing beam of RCDG	Cu.m	5960	-				-
	Widening of pier coping	Cu.m.	8680	3	26040.00	13801.20	9634,80	260
. •	Sub-total				26040.00	13801.20		260 { 10.4
	TEMPORARY WORKS				(100.0 %)	(53.0 %)	A Contract And	
	Scaffolding	Sq.m	156	165	25740.00	18018.00	5148.00	257
	Staging Temperaty bridge	Ըս.m։ Տգ.m.	220 5180	-	-		그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그	-
	Temporary bridge Preparation works	οų.m LS	0100	1	1336.26	2606,01		430
			***********		30076.26	20624.07	<u>-</u>	300
	Sub-total				(100.0 X) 148878.26	(68.5 X) 89476.03	(21,4 %)	° (10.(
							44515.41	14887

36 Name of Bridge : NAUBOD 1 Classification : Repair

•

• .

	Classification : Repair					19		
item No	Description	Unit	Price	Quantity	Amount	Foriegn Component	Local Component	Taxes
	RTHWORK AND ROAD WORKS							
00	Clearing and Grubbling	Sq.m	.2.16		-		•	-
2	Common excavation	Ըս.թ	43.8	-	-	-		-
3(2)	Bridge excavation above low water level	~				$(k_1,\ldots,k_{n-1},\ldots,k_{n-1})$	1 A	
21015	Bridge excevation below low	Cu.m	58.5	-		-	· -	-
3(2)5	water level	Ըս.ա	111		_			
3(5)	Shoring, cribbing, cofferdam					-	-	-
.'	and related work	LS	l	· -	-			-
4(1)	Enbankment Selected berrow for boshellt	ິ Cu.m	69.0	479	33051.00	24127.23	5618.67	3305.10
4(S)	Selected borrow for backfill Aggregate subbase course	Cu.m.		64	7680.00	2764.80	4147.20	768.00
Q 1(2)	PCC Pavement (Reinforced)	Cu.m Sq.m	195	· -	-	- 11 - 1	•	-
	Sub-total				40731.00	26892.03	9765.87	4073.10
	PERSTRUCTURE WORKS				(100.0 %)	(66.0 X)	(23.9 %)	(10.0 %)
[) SU [(S)]	Removal concrete structure	Cu.m	912	20				
(1)	Removal steel structure (bridge)	LS	1	39	35568.00	15294.24		3556.80
i	Railing	10	789	33	26037,00	14580.72		
2	Timber structure (Detour bridge)	span	45200	5	271200.00			27120.00
(5)	Structural steel (Detour bridge)	Sci. N	3180	-		1997 - 1997 - 1997 -	1 a g 🛨	
	Reinforcing steel Structural concrete. Class A	ke Cu -	17.9	5566	99631.40	71734.61		9963.14
(1)	Prestressed concrete bridge	Cบ.ณ Cu.ณ	2760 15800	+3		65274.00	41538.00	11868.00
î B	Steel bridge(1-beam)	ton	61400	·	-			
1.5.1	Paint	Sq.m	68.4	367	25102.80	3263.36	19329.16	2510.28
er e star	Sub-total				576219.20	254218.93		57621.92
	BSTRUCTURE WORKS				(100.0 %)	(44.1 %)	(45.8 X)	(10.0 X)
(S) SU (S)	Removal of concrete structure	Cu.m.	912	_	_		_	· _ ·
a)	Removal of steel structure	LS	1	_	-	· · · _		_ · · ·
(3)	Steel H-piles	20	3260	· _	-	-	·	-
(4) 👘	Precasi concrete pile (400X400mm)	10	801	· -	•	-	· •	
)(6)	Steel sheet pile	X9	3290	-	-	-		-
)(7)	Precast concrete sheet pile	Ð	580	· -	-	•	-	
(16)	Cast-in-Place concrete pile(1200mm) . Reinforcement steel	53 14 m	7270	-	-	-		
4 5(1)	Structural concrete, Class A	kg Cu.m	1930			-		-
5(5)	Seal concrete	Cu.m.	1740	_	-	_	_	_ ·
1	Grouted riprap	Cu.ma	945	-	-			- '
5 .	Stone masonry	Cu.m	853	44	37532.00	18015.36	15753.44	3753.20
	Gabien	Cu.m	663	-	-	-	** *	· -
	Sub-total				37532.00	18015.36	15763.14	3753.20
					(100.0 %)	(48.0 X)	(42.0 %)	(10.0 %)
n RI	VER TRAINING WORKS							
2012	Unireated timber pile	19	109	-	-	-	-	-
0(4)	Precast concrete pile (400X400mm)	PA -	801	· -	-	· –	-	. .
0(6) 4	Steel sheet pile		3290 15.5		-	_	<u> </u>	-
5(1)	Reinforcement steel Structural concrete, Class A	kд Сц. m	1930	-	-	_		-
(5)	Seal concrete	Çu.m	1740	-	-			-
4	Grouted rinrap	Cu.m	945	-	-	-	-	-
i	Stone masonry	Cu. 10	853	-	~	-	-	-
	Stone pitching (Hand-laid	-					100 A. 100 A. 100 A.	
	rock embankment)	Ըս.m Ըս.m	300 863		-	-	-	-
,	Gabion							
	Sub-total				-	-	-	-
					(-)	(-)	(-)	(-)
						+		
	ECIAL WORKS FOR REHABILITATION		41300 -	-	-	-	-	-
	Additional stringer	ton						-
	Additional stringer Additional sidewalk	So.m	6690	-	-		-	-
	Additional stringer Additional sidevalk Reinforcing beam of RCDG	So.m Cu.m	6690 5960	-	-			-
	Additional stringer Additional sidevalk Reinforcing beam of RCDG Widening of pier coping	So.m	6690	-	-	-	- 	-
	Additional stringer Additional sidewalk Reinforcing beam of RCDG Widening of pier coping Sub-total	So.m Cu.m	6690 5960	-			- - -	- -
	Additional stringer Additional sidewalk Reinforcing beam of RCDG Widening of pier coping Sub-total	So.m Cu.m	6690 5960	-	- - 	(-)	(-)	-
) ; ;) TE	Additional stringer Additional sidevalk Reinforcing beam of RCDG Widening of pier coping Sub-total	Sa.m Cu.m Cu.m	6690 5960 8680	- - - 165			- (-) 5148-00	· · ·
) 2 3 1) TE	Additional stringer Additional sidewalk Reinforcing beam of RCDG Widening of pier coping Sub-total Sub-total Sup-RARY WORKS Scaffolding	Տգ.m Ըս.m Ըս.m Տգ.m	6690 5960 8680 		25740.00	18018.00	- (-) \$148.00 3388.00	2574.00
) i) TE	Additional stringer Additional sidewalk Reinforcing beam of RCDG Widening of pier coping Sub-total SNPORARY WORKS Scaffolding Staging	Տզ.m Ըս.m Ըս.m Տզ.m Ըս.m	6690 5960 8680 156 220		25740.00	18018.00 7502.00		2574.00
) 2 3 1 2 3 1 1 2	Additional stringer Additional sidewalk Reinforcing beam of RCDG Widening of pier coping Sub-total SMPORARY WORKS Scaffolding Staging Temporary bridge	Sa.m Cu.m Cu.m Sa.m Cu.m Sa.m	6690 5960 8680 	55	25740.00	18018.00 7502.00 9739.39	3388.00	2574.00
0 1 2 3 3 1 1 2	Additional stringer Additional sidewalk Reinforcing beam of RCDG Widening of pier coping Sub-total SNPORARY WORKS Scaffolding Staging	Տզ.m Ըս.m Ըս.m Տզ.m Ըս.m	6690 5960 8680 156 220	55	25740.00 12100.00 20769.67	18018.00 7502.00 9739.39	3388.00 8953.31	2574.00 1210.00 2076.97
) 2 3 1 2 3 1 1 2	Additional stringer Additional sidewalk Reinforcing beam of RCDG Widening of pier coping Sub-total SMPORARY WORKS Scaffolding Staging Temporary bridge Preparation works Sub-total	Sa.m Cu.m Cu.m Sa.m Cu.m Sa.m	6690 5960 8680 156 220	55	25740.00 12100.00 20769.67 58609.67	18018.00 7502.00 9739.39 35259.39	3388.00 8953.31 17489.31	2574.00 1210.00 2076.97 5860.97
0 1 2 3	Additional stringer Additional sidewalk Reinforcing beam of RCDG Widening of pier coping Sub-total SNPORARY WORKS Scaffolding Staging Temporary bridge Preparation works Sub-total	Sa.m Cu.m Cu.m Sa.m Cu.m Sa.m	6690 5960 8680 156 220	55	25740.00 12100.00 20769.67 58609.67 (100.0 %)	18018.00 7502.00 9739.39 35259.39 (60.1 %)	3388.00 8953.31 17489.31 (29.8 %)	2574.00 1210.00 2076.97 5860.97 (10.0 x)
0 1 2 3 1 3 1 1 2	Additional stringer Additional sidewalk Reinforcing beam of RCDG Widening of pier coping Sub-total SMPORARY WORKS Scaffolding Staging Temporary bridge Preparation works Sub-total	Sa.m Cu.m Cu.m Sa.m Cu.m Sa.m	6690 5960 8680 156 220	55	25740.00 12100.00 20769.67 58609.67	18018.00 7502.00 9739.39 35259.39	3388.00 8953.31 17489.31	2574.00 1210.00 2076.97

37 Name of Bridge : SOOK Classification : Repair

		Classification : Repair	· .				1. A.	asetter ter ange Reference ange	
ltem No.		Descriplion	Unit	Price	Quantity	Amoùnt	Foriegn Component	Local Component	Taxes
		HWORK AND ROAD WORKS	•				n engelse	n a tanggang beraka Kalang berakan	
· 00		Clearing and Grubbling	Տգ. տ Շպ. տ		_	_		reasonal Alexandra	-
12 13(2)		Common excavation Bridge excavation above low	Cu.a.	40.0	•		्र सम्बद्धां स	الأني أنشعه الرجام بالألام الأراغ بلك الرجام	•
÷.		water level	Cu.m	38.5		÷			·
3(2)	S	Bridge excavation below low water level	€ນ.π∋	111	-	-	-		-
3(5)		Shoring, cribbing, cofferdam			-		an ta an	e (25 - 15 e 16 m) State de la Carl	
i		and related work	LS Cu.m	1 69.0		-	· –		-
4(1) 4(S)		Embankment Selected borrow for backfill	Cu.m	120	-	-	1914 - 1914 ⁻ 1917 -	tintin pretinanse. Nationalist	• •
0		Aggregate subbase course	ິດ ເພັ່	195 465		·	가 가 몸 감구 지 수 몸 감구 (2) 가	يوم يام⊷مور مريقان ارتدارد	-
1(2)		PCC Pavement (Reinforced)	39.0P	403					
1		Sub-lotal				7 - 7	(-)	(-) (· -)
D	SHEE	RSTRUCTURE WORKS		1.1		• • •			
its		Removal concrete structure	Çu.m	912	39	35568.00	15294.24	16716.96	3556.
1(1) 1		Removal steel structure (bridge)	LS m	789		-	-	in the second	-
2.		Railing Timber structure (Detour bridge)	span	45200	· .· •		a di sha ƙwa	 Najstvi €540.5. Statstvi €540.5. 	-
3(S)		Structural steel (Detour bridge)	Sa.m	5180 17.9	6116			19705.75	10947.
4 5(1)		Reinforcing steel Structural concrete, Class A	kg Cu.m	2760	47	129720.00	71346.00	45402.00	12972.
7		Prestressed concrete bridge	Cu.m	15800	1 1 1		119 4-1 8710 0000 1516 - 2	ligi erasi €sta di Sharayaye erasi	
8		Steel bridge(l-beam) Paint	ton Sq.m	61400 68.4	. 807	55198.80	7175.84	42503.08	5519.
•						329963.20		124327.79	32996.
	de la com	Sub-total				(100.0 %)		(37.6 %)	(10.0
ш	SUBS	TRUCTURE WORKS						· 가장관 국민간가 다. 1987년 - 이상 구	
L(S)		Removal of concrete structure Removal of steel structure	Cu.m LS	912 1	·	<u>-</u>		_ → 1.5.15	· · ·]
L(1) D(3)		Steel H-piles	n	3260	-	-	· -		-
0(4)		Precast concrete pile (400X400mm)	104 	801 3290	-				-
0(6) 0(7)		Steel sheet pile Precast concrete sheet pile	កាំ ឆ	580		-	at in ar a N	ala a 🔸 👘	
0(16		Cast-In-Place concrete pile(1200mm)	a di	7270	· -	1 - 1 - 1 - 1			7
4 5(1)		Reinforcement steel Structural concrete. Class A	kg Cu.m	15.5 1930	-	- .			
5(5) 5(5)		Seal concrete	Cu.m	1740		. –	-	a de la composición d	- .
1 -		Grouted riprap	Cu.ສ Cu.ຫ	945 853		-		an 18 an ≓ 1, 19 an 19 an 18 an - 10 an - 10 an	-
5 9		Stone masonry Gabion	Cu.m	663		- .	· -		· -
-				• • • • • • • • • • • • • • • • • • • •					·
1		Sub-total				(-)		(-)	្រុក រ
¥)		R TRAINING WORKS	-	109	_			andara an an an an an Taona an anna an an	211
0(1) 0(4)		Untreated timber pile Precast concrete pile (400X400mm)	ጠ ም	801	· -	· · -	an in a sea an sea	early the training	
0(6)		Steel sheet pile	ภ	3290	· -			 1	-:
4		Reinforcement steel Structural concrete. Class A	kg Сц. л	15.5 1930	·	-		, sur se∎urfiel. Sur sur se	
5(1) 5(5)		Seal concrete	Cu.m	1740		-	<u> -</u>	. -	÷.
1		Grouted riprap	Ըս.ա Ըս.ա	945 853	· •	-	-	n Collega (n. 1 10) n. a. National an anna an an t-	-
5		Stone masonry Stone pitching (Hand-laid	cu.m	600			1. 1. No. 7	a standing salata	
		rock embankment)	Cu.m	300		-	- ., .	ا د انس ایند. ان انگریاسا	-
9		Gabion	Çu.m.	663					
		Sub-total				(-)	<i>.</i> .	ана селания (—) —	- ب - ۲
,	SPEC	TAL WORKS FOR REHABILITATION				- To - To -	entra la pres	$0 = (\delta_{1}, \delta_{2}) = (\delta_{1}, \delta_{2}, \delta_{2}) = (\delta_{1}, \delta_$	· · · ·
)	0.00	Additional stringer	ton	41300	. 7	289100.00	219716.00	40474:00	28910
l		Additional sidewalk Reinforcing beam of RCDG	Sq.m Cu.m	6690 5960	· · · ·	·	antesa Areat	신간 동안 방송 문을 가 있는 것	-
2		Widening of pier coping	Cu.m	8680	· · -	_			- 1
		Sub-total				289100.00	219716 00	40474.00	28910
						(100.0 %)	(76.0 %)	(14.0 %)	(10.0
D	TEMP	ORARY WORKS	Sq.m	156	183	28548.00	19983.60	5709.60	2854
)		Scaffolding Staging	Cu.m.	220	103	20040.00	÷ .		-
2		Temporary bridge	So, M	5180			-	1	- 1942-
3		Preparation works	LS			19428.34	12370,16		
		Sub-total				47976.34		10824.94	4797. { 10.0
						(100.0 %)	(67.4 %)	(22.5 %)	66703.
		Grand Total							(10.0

38 Name of Bridge : KANAPAWAN Classification : Repair

teo D		Description	Unit.	Price	Quantity	Amount	Foriegn Component	Local Component	Taxes
)		WORK AND ROAD WORKS							
<u>5</u> .		Clearing and Grubbling	Sq.m	2.16		-			
2 .		Common excavation	Cu.m	43.8		-	·' -	· •	-
3(2)		Bridge excavation above low	6 ¹ -						
		Bridge excavation below low	Cu.n	58.5	-	- 1	-	~	-
3(2)5		water level	Cu.m	111				1. A.	
3(5)		Shoring, cribbing, cofferdam			-	-	-		-
		and related work	LS	1	-		-	1999 <u>-</u> 1997	_
(Ú) -		Embankment	Ըս. ՠ	69.0		-	· _ ·		-
4(S)		Selected borrow for backfill	Cu. ត	120	-	-	, u		- '
)		Aggrégate subbase course PCC Pavement (Reinforced)	Cuim	195	· •	-	-	•	-
1(2)		rec ravement (Reinforceu)	Sq.m	165	-		.	·	-
		Sub-total				-	~	-	-
l)	SUPE	STRUCTURE WORKS				(-)	((-)	(-)
(5)		Removal concrete structure	Cu.m	912	119	108528.00	46667.04	51008.16	10852.4
(D)		Removal steel structure (bridge)	LS	1	•	7			
		Railing	200	789	100	78900.00	44184.00	26826.00	7890.0
		Timber structure (Detour bridge) Structural steel (Detour bridge)	SPAN	45200	. .	· · -		a sa tra terreta de	-
(S)		Reinforcing steel	Sa.m Kr	5180 17.9	16775	200329 50	216106 00		-
α		Structural concrete. Class A	เป็น ต	2760	129	300272.50 356040.00	216196.20	54049.05 124614.00	30027.2 35604.0
	5 J.	Prestressed concrete bridge	Cu.m	15800	125	336040.00	130022.00		35004.1
		Stéel bridge(1-beam)	ton	61400		- '	-	.	
		Pálňt	Sq.m	68.4	1107	75718.80	9843.44	58303.48	7571.4
	1.1	Sub-lotal				919459.30	512712.68	314800.69	91945.9
•	euner	RUCTURE WORKS				(100.0 X)	(55.7 %)	(34.2 %)	(10.0
1) (S)	3003	Removal of concrete structure	Cu.m	912	_	_	_	· · ·	
άĴ.	1.1	Removal of steel structure	LS	1		_	· · · · <u>-</u> ·	-	
(3)		Steel H-piles	<i>m</i>	3260	-		· · ·	_ ·	-
(4)		Precast concrete pile (400X400mm)	. D	801	-	-		-	- 1
(6)		Steel sheet pile	m	3290	-	-	-		~
(7)		Precast concrete sheet pile	10	580	-	-	*		~ .
(16)		Cast-in-Place concrete pile(1200mm)	20	7270	-	· -		. *	-
		Reinforcement steel	kg	15.5		-	· •	-	-
(1)	-	Structural concrete, Class A Seal concrete	Ըս.m Ըս.m	1930	-			·	-
(5)		Grouted riprap	Ըս.ա. Ըս.ա.	945	139	131355.00	56482.65	61736.85	13135.1
		Stone masonry	Ըս.ա	853	103	-	50402.03	01100.85	10130.1
		Gabion	Cu.m	663	· · ·		-	-	-
		Sub-total				131355.00	56482.65	61736.85	13135.9
	<u>.</u> .					(100.0 %)	(43.0 X)	(47.0 %)	(10.0
	RIVEF	TRAINING WORKS		100				1.5.2	· · · ·
<u>90</u>		Unireated timber pile	6	109	-	-			_
(4) (6)		Precast concrete pile (400%400mm) Steel sheet pile	20 . 10	801 3290		-	-		_
		Reinforcement steel	ĸĸ	15.5	_	-	-		-
a)		Structural concrete, Class A	Cน. ส	1930	-	-	- · ·	-	
(5)		Seal concrete	Cu. ត	1740	-	-	-	-	-
-		Grouted riprap	Cប.ព	945	-	-	-	-	-
		Stone masonry	Cu.m	853	-	-	-	-	-
		Stone pitching (Hand-laid	c ¹	200		_			_
		rock embankment) Gablon	Cu.m Cu.m	300 663		-	~		-
		Sub-total				(-)	(-)	(-)	(-)
	SPECI	AL WORKS FOR REHABILITATION							-
		Additional stringer	ton	41300		-	. –		-
		Additional sidewalk	Sci. m	6690	-	-	-	-	-
		Reinforcing beam of RCDG	Cu.m	5960	-	-	- · · Ī	-	-
		Widening of pier coping	Си.в	8680					
		Sub-total			÷	(-)	· - ·	(~ · ·	< - · ·
,	TENPO	DRARY WORKS						1	•
		Scaffolding	So .m	156	502	78312.00	54818.40	15662.40	7831.
		Staging Temporary bridge	Cu.m Sci.m	220 5180	·		-		· -
1.0		Preparation works	LS		1	33873.79	18720.41	11766.00	3387.
		Sub-total				112185.79	73538.81	27428.40	11218.
		JUD-IVIGI				(100.0 %)	(65.5 %) 642734.15	(24.4 %) 403965.93	(10.0 116300.
						1163000.09			

39 Name of Bridge : BASIAD Classification : Repair

	assification :	: Répair				· · · ·			
							تىلىدىيەتىرى بولەر بەتر بەتر مەرچى	a ana dia mana ama dia Mana dia	
Item			Unit	Price	Quantity	Amount	Forlegn Component	Local Component	Taxes
	escription								
	RK AND ROAD WO		1				e		
	earing and Gru		Sq.m	2.16		-		men e ghib)	-
	mmon excavatio		Cu.m	49.0			ing the second states	and the state of the	
	idge excavatio ater ievel	Sh adove IDw	Cu.m	58.5		. •			-
	idge excavatio	on below low					1997 - 1997 - <u>1</u> .		
Ψ.	ater level	1. A.	Cu.m	111	. –		and the Press	ere de la composition de la compositio	*
	oring, cribbit		LS	1	· ••	·	••* ()	and the second	•
	nd related wor bankment	r k	Cu.m	69 0	. · · · · ·	-	-		· •
	lected borrow	for backfill	Cu.m	120	· -		in p In		· - ·
	gregate subbas		Cu.m	195 465		-		and the second second	
1(2) PC	C Pavement (Re	einforced)							
	Sub-total					· · · · ·	(-)	< -)	< ·-)
	RUCTURE VORKS							ente un permit	
I) SUPERST	RUCIURE VURNS	e structure	Cù m	912	117	106704.00	15882.72	50150.88	10670.4(
1(1) Re	moval steel st	tructure (bridge)	LS	1					10175
)1 Ra	iling		m	789	129	101781.00			10178.1
2 Ti	mber structur	e (Detour bridge)	span Sq.m.	45200 5180	<u>.</u>	2010 - 12 <u>4</u> 78 2		이 가지 않는 목도가 있다. 이 제 : 이 같은 목도가 있다.	
	nictural steel	i (Detour bridge)	ke	17.9	15477	277038.30		49866.89	27703.8
5(1) St	ructural conci	rete. Class A	Cu.m	2760	119	328440.00	180642.00	114954.00	32844.0
)7 Pr	estressed con	crete bridge	Cu.n	15800	· · · ·	.÷ •			· · · ·
	eel bridge(I-	beam)	ton Sg.m	61400 68.4	1214	83037.60			8303.7
1 Pa	int		34.8				<u>an di kata kata kata kata kata kata kata kat</u>	والمستعدة والترجيد بالمراجع المراجع المراجع	*********
	Sub-total					897000.90 (100.0 %)	493784.54	313516.27 (34.9 %)	89700.0 (10.0 x
II) SUBSTRU	CTURE WORKS		• .					an an an tao Aminina. An an an an tao an	
		rete structure	Cu.m	912	- -	- '			-
	moval of steel		LS	1		-			
0(3) St	eel H-piles		រា ភ	3260		_ ·	(1) Solution (12) (12)	an er et ≞ bruž	-
	ecast concrete eel sheet pilo	e pile (400X400mm)	54 10	3290	· · · · ·	2	-		
	ecast concrete		tà -	580	-	-			-
0(15) Ca	st-in-Place co	oncrete pile(1200am)	79.	7270			· · · -		-
	inforcement s		kg Cu.m	15.5 1930	-	-		i se Çini	
	rúctural conci al concrete	rete, Class A	Cu.m.	1930	· · -	-	-	-	· · –
	outed riprap		Çu.m	945	. –	-	÷ .		•
	one masonry	1 () () () () () () () () () (Cu.m	853	-	-			· <u> </u>
	bion		Cu.m.	663		,		<u></u>	
· •	Sub-total					-	-	pritjan de l a Ar an anti-	
n an	N. LANDAG WORKS	e a le altre de la companya de la co				(-)	(=)		
	RAINING WORKS treated timber		n	109	-	-	e di <mark>a</mark> de la c		-
)0(4) Pr	ecast concrete	e pile (400X400mm)	12	801	-	-			
	eel sheet pild		79	3290	· · •	-	· · · · · · · · · · · · · · · · · ·		
	inforcement s		kg Cu.m	15.5		-			-
		rete, Class A	Cu.m	1740	_	-	-	가는 것은 4 00만	· -
	al concrete outed riprap		Cu.m	945	· · · · -	-	-	-	
	one masonry		Сц. m	853	-	-			-
	one pitching		Cu.ms	300		-			-
	ock embankmen' bion	t)	Cu.m.	663		· _	-	14 - 14 - 14 - 14 - 14 - 14 - 14 - 14 -	-
	Sub-total		_			(-)	(-)	(-)	(-)
) SPECIAL	WORKS FOR REI	HARILITATION						an an an Artan	· · · · · · · · ·
	ditional strip		ton	41300	24	991200.00	753312.00	138758.00	99120.0
Ad Ad	ditional side	walk	So.m	6690	-	-		en en la seconda en la seco La seconda en la seconda en	· •
2 Re	inforcing beam	a of RCDG	Cu.m.	5960				an an an an ar a n an an Ar an 12 an 12 a Breach	-
	dening of pier	r coping		8680				د داد د د د د د د د د د د د د د	
	Sub-total					991200.00	753312.00	138768.00	99120.0 (10.0 X
	ANDAG NA					(100.0 %)	(/6.0 %)	(14.0 X)	10.0
1) TEMPORA 0 Se	RY WORKS affoiding	1	Sq.m	156	544	100464.00	70324.80	20092.80	10046.4
	aring		Cu.m.	220		~	-		· -
2 Tei	mporary bridge		Sq.m.	5180	-		-		6965 S
)3 Pr	eparation vori	ks	LS		1	59659.95		14171.31	
	Sub-total						109847.44	34264.11	16012.3
	et egener i service et el s					(100.0 \$)	(68.6 ×)	(21.4 X) 486548.38	(10.0 ×
						2040324 95	1366933 98	186618 38	204032.4
	Grand Tota	1				(100.0 %)		(23.7 %)	(10.0 %

AP11-43

	IN Name of Buildes & Climbols							
-	40 Name of Bridge : GUNACA Classification : Replacement of Supers	tructure						
ltem No	Description	· .	Price	Quantity	Amount	Forlegn Component	Local Component	Taxes
	BARTHWORR AND ROAD WORKS							
100	Clearing and Grubbling Common excavation	So.m Cu.m	2.12 42.9	-	-	-	-	-
102	Bridge excavation above low			-	-		-	-
103(2)5	water level 5 Bridge excavation below low	Cu.m	57.3	-	-	-		-
	water level. Shoring, cribbing, cofferdam	Çu.m	109	· –	-		. .	-
103(6)	and related work	LS	1 67.7	· -	-	· -	-	-
104(1) 104(S)	Embankment Selected borrow for backfill	Ըս.m. Ըս.m.		-	-		. <u>*</u>	
200	Aggregate subbase course	Сս. տ	189	-	-			-
311(2)	PCC Pavement (Reinforced)	5q.m	-123		- 			
• 2. 2	SUB-total SUPERSTRUCTURE WORKS				(-)		· · · ·	· - ·
		-				(-)		(-)
101(S) 101(1)	Removal steel structure (bridge)	Cu.m LS	894	180	160920.00	69195.60	75632.40	16092.
401	Railing Timber strücture (Detour bridge)	n en en	717 61900 4980	68 		27303.36	16577.04	4875.
402 403(S)	Structural steel (Detour bridge)	Span Sq.m	4980	i i da El				-
404	Reinforcing steel Structural concrete, Class A	kg Cu.m	16.3 2600 14400 60200	14949 149	243668.70 387400.00	175441.46		24366. 38740.
407	Prestressed concrete bridge	Cu.m.	14400	-	-	-	-	-
408	Steel bridge(l~beam) Paint	ton Sq.m.	60200 65.8	-	~	-	_	-
	Sub-total			· • - • • • • • • • • • • • • • • • • •	840744.70	485010 49	271659.81	84074.
•					(100.0 X)	(57.6 %)	(32.3 %)	(10.0
(111) 101(S)	SUBSTRUCTURE WORKS Repoval of concrete structure	Cu.m	894		_	-	· _	· _
101(1)	Removal of concrete structure Removal of steel structure	LS	1	-	*	_	·	, '
400(3) 400(4)	Steel K-piles Precast concrete pile (400X400mm)	នា នា	3130 742	-	-	-	-	-
400(6)	Steel sheet pile Precast concrete sheet pile (1200mm) Cast-in-Place concrete pile(1200mm)	\$	3160	-	-	. .	-	· - ·
400(7) 400(16)	Cast-in-Place concrete pile (1200mm)	新 . 格	537 6730	-	-		-	-
40 <u>4</u> 405(1)	Reinforcement steel Structural concrete. Class A	К.इ. С11. л.	14.1 1820	-	-	-	-	-
405(5)	Seal concrete	ເພື່ອ	1840	-	•	-	-	-
501 505	Grouted riprap Stone masonry	Ըս.տ Ըս.տ	883 797	-	-	-	· -	-
509	GADION	Cu.#	625	· -		-	<u>-</u>	-
•	Sub-total	********				-		-
(19)	TUTE TRAINING MOREC				(-)	()	(-)	(₁ –)
400(1)	Untreated timber pile	D	149	-	- ,	. -	-	-
400(4) 400(6)	Precast concrete pile (400X400mm) Steel sheet pile	6. 13	3160	-	-	-	-	-
494	Reinforcement steel	kg Cu D	14.1	-	-	-	-	<u> </u>
405(1) 405(5)	Structural concrete, Class A Seal concrete	ເນ. ຫ ເນ. ຫ	1820 1640	-	-		-	-
304 505	Grouted riprap Stone masonry	Ըս.m Ըս.m	883 797	-	-	- +	· · · · · · · · · · · · · · · · · · ·	-
505 506	Stone pitching (Hand-laid							_
509	rock embankment) Gabion	Ըս.ա Ըս.ա	283	-	-	-	-	-
							· · · · · · · · · · · · · · · · · · ·	
*	Sub-total				(-)	(-)	(-)	(-)
(¥) 800	SPECIAL WORKS FOR REHABILITATION	ton	39700	× _	-	-	-	-
801	Additional stringer Additional sidewalk	Sq.m.	6880		-	-	-	-
802 803	Reinforcing beam of RCDG Widening of pier coping	Ըս.m Ըս.m	5520 8040	- 26	209040.00	110791.20	77344.80	20904.
					209040.00	110791.20	77344.80	20904.
•	Sub-total				(100.0 X)	(53.0 %)		(10.0
(¥])	TENPORARY WORKS	8	162	· _		-	1 <u>1</u> .7	-
900 901	Scaffolding Staging	ວິຊຸກ Cu. ກ	153 216	1220	263520.00	163382.40	73785.60	26352.
902	Temporary bridge	Sor.ត LS	4980	110	547800.00 55833.14	410850.00 35101.02		54780. 5583.
903	Preparation works							
•	Sub-total		-		867153.14 (100.0 %)	609333.42 (70.2 %)		86715. (10.0

AP11-44

ltem No.	Description	Unit	Price	Quantity	Amount	Foriegn Component	Local Component	Taxea
1)	FARTHWORK AND ROAD WORKS					n an		
00	Clearing and Grubbling	Sq.m	2.12	··		이 아이들 것이		: <u>``</u>
D2 D3(2)	Common excavation Bridge excavation above low	Cu.n	42.9	1.11				
03123	vater level	Ըս. ա	57.3	25	1432.50	902,48	386.78	1 13 .2
03(2))S Bridge excavation below low	C 11 m	100	. 17	1853.00	1130.33	537.37	185.3
03(5)	water level) Shoring, cribbing, cofferdam	Cu.m	109		1000.00		a se entre energies.	100.0
00107	and related work	ĻS	t		-	-	7883.67	1000
04(1)		Cu.m.	67.7 118	685 103	46374.50 12154.00	33853.39		4637 4
04(S) 00) Selected borrow for backfill Aggregate subbase course	Cu.m	189				n en en la <u>19</u> 19-19- Anne anti-Talance	
11(2)		Sq.m	423					
	Sub-total				61814.00	40261.63		6181.4
ni.	 International description of the second se Second second se Second second s Second second se				(10010.%)	(65.1 %)	(24.8 %)	(10.0 x
)1(S)		Cu.m	894	99	88506.00	38057.58	41597.82	8850.6
01(1)) Removal steel structure (bridge)	LS	1 717	51	36567.00	20477.52	12432.78	3656.7
01 02	Railing Timber structure (Detour bridge)	n span	61900	· -		134323.00		43330.0
03(\$)) Structural steel (Detour bridge)	So m	4980	11075	100700 50	132323.40	33080.85	18378.2
D4 .		kg Cu.m	16.3 2600	11275	183782.50 293800.00	161590.00		29380.0
05(1) 07		Cu n	14400		· · · · · ·		가지 나는 동안 부가를 모두. 이 것은 가 있었는 것 것 가지 하지?	
80	Steel bridge(1-beam)	ton Sa m	60200 65-8	· · ·	·	l i leŽeve		
11	Paint							
	Sub-total	·.			1035955.50 (100.0 %)		445588.45 (43.0 %)	103595.5 (10.0 x
шŚ		_				39595.28		9208.2
01(5)		Cu.m LS	394	103	92082.00	39393.10	49510194	
1(1) 0(3)		ц.5 /л	3130	· · · ·		÷. *. *.	•	-
0(4)		m ·	742	· •		ਨ ਕਿ ਮੀਟੇ ਮੁ	e di Espera	-
)0(6))0(7)		an . Ja	3160 537	-		- I-		- , - Igr
00(16		n .	6730	- i -	-			,
04	Reinforcement steel	Kg	14.1	9680	136488.00	98271.36		13648.8 17654.0
)5(1))5(5)		Cบ. ต Cบ. ต	1820	97	176540.00	101085.40		-
01	Grouted riprap	Cu.m	883	56	49448.00	21262.64	23240.56	4944.8
05	Stone masonry	Cu.m	797 625	25 211	19925.00 131875.00	9564.00 81762.50	8368.50 36925.00	1992.5
9	Gabion	Cu.m						
	Sub-total				606358.00 (100.0 %)	358145.1f		60635.8
(¥)	RIVER TRAINING WORKS						the state of the	and the second
)0(1))0(4)		. DA 121	149	· -	-	्र त्यी व	이야기 이 고통이 하는	· · _
0(6)		ta	3160		- '	1 - T	김 영화 같은 것이다.	-
4	Reinforcement steel	kg	14.1	· ; =	-	- <u>-</u>	i de la tel Escare	· -
5(1) 5(5)		Ըս.m Ըս.m	1820 1640	·	-	- 4	아이 정말 같아.	
4	Grouted riprap	Cu.m	883	· · ·	-	-	a da esta	
5	Stone masonry	Cu.ma	797	•	-	-	-	· –
6	Stone pitching (Hand-laid rock embankment)	Cu.m	283	-	-	and the second	ent entry else	
9	Gabion	Cu.m	625	÷. +	-	· · ·		-
	Sub-total							
	SPECIAL WORKS FOR REHABILITATION				(- ·)	(-)	C - D	(-)
0	Additional stringer	ton	39700	-	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -			
1	Additional sidewalk	Sq.a	6880			i je stali se		-
2	Reinforcing beam of BCDG Widening of pler coping	Cu.ss Cu.ts	5520 8040	6	48240.00	25567.20		4824.0
3.								4824.0
	Sub-total				.48240.00 (100.0 %)	25567.20 (53.0 %)		(10.0)
D	TEMPORARY WORKS	_			1			stadiji <u>–</u>
0	Scaffolding	Sor.m Cuma	153 216	805	173880.00	107805.60	48686.40	17388.
1 2	Staging Temporary bridge	Sci.ma	4980		113880.00	10/805.00		· · •
3	Preparation works	LS		1	57787.42	30556.53	21452.15	5778.1
	Sub-total				231667.42	138362.13		23166.7
					(100.0 %) 1984034.93	(59.7 %)		198403.4
	Grand Total							

	- 1	the set of		÷	
42		Bridge :			

<u>. / L</u>								
llem No-	Description	Ünit	Price	Quantity	Amount	Foriegn Component	Local Component	Taxes
	EARTHWORK AND ROAD WORKS Clearing and Grubbling	F						
00 02	Common excavation	Sq.m. Cu.m.	2.12 12.9	· •	-	<u> </u>		-
03(2)	Bridge excavation above low water level	· 						
03(2)S	- Nutsian additional bulant lass	Cu.m	57.3	-	-	. ~		
	water level	Cu.m	109	· -	-	. -	-	-
03(5)	Shoring, cribbing, cofferdam and related work	LS	1	÷ _				·
04(D)	LEUGHKMENI	Cu.m	67.7	1646	111434.20	81346.97	18943.81	
04(S)	Selected borrow for backfill Aggregate subbase course	Ըս.m. Ըս.m.	118 189	· -	• ·	-	i i Angelia	- · .
00 11(2)		So: m	423		· · · •	· -		
	Sub-total				111434.20 (100.0 %)	81346.97		11143.42
<u>п)</u> :	SUPERSTRUCTURE WORKS				(100.0 %)	(73.0%)	(17.0 %)	(10.0 X)
01(5)		Cu.m LS	894 1	107	95658.00	41132.94	44959.26	9565.80
01(1) 01	Railing	R	717	62	44454.00	24894.24	15114.36	4445.40
02	Timber structure (Detour bridge) Structural steel (Detour bridge)	Span	61900	11	680900.00	211079.00		68090.00
03(S) 04	Reinforcing steel	Sq.a kg	4980 16.3	12386	201891.80	145362.10	36340.52	20189.18
05(1)	Structural concrete. Class A	Cu. ຄ	5000	124	322400.00	177320.00		32240.00
07 08	Prestressed concrete bridge Steel bridge(1-beam)	Cu.m ton	14400 60200	· _	-	<u> </u>	· · · <u>-</u> ·	-
n.	Paint	5 q .m	65.8	· …		· ••	- 1	
	Sub-lotal				1345303.80 (100.0 %)	599788.28 (44.5 %)		134530.38 (10.0 %)
ШDÉ .	SUBSTRUCTURE WORKS				100.0 47	1 4410 47	1 10.4 47	(10.0 47
01(5)		Ըս. ա. 1.Տ	894	-	-	-		
)1(1))0(3)			3130	·	-	-		-
0(4)	Precast concrete pile (400X400mm)	m	742	· -	. .	-	- 1	-
0(6) 0(7)		រា ភា	3160 537	-	-	-	· · .	
0(16)) Cast-in-Place concrete pile(1200mm)	Ŵ.	6730	-	-	-		·_
4		kter Cu.as	14.1	· _	- '	• ·		<u> </u>
5(1) 5(5)		Cu.m	1640	-	-	-	-	2.
π, .	Grouted riprap	Cu.m	883	*	-	-	· · · ·	
)5)9	Stone masonry Gabion	Cu.m Cu.m	797 625	, <u> </u>		-	-	-
	Sub-total						 ,	
W)	RIVER TRAINING WORKS				(-)	(")	(,)	(-)
00(1)	Untreated timber pile	n	149	-	-	- '	·	-
00(4) 00(6)		63 61	742 3160	-	-	-	-	-
4	Reinforcement steel	kg	14.1	-	-	-	· -	-
5(1)		Cu.m	1820	-	-	-	~	-
15(5). 14	Seal concrete Grouted ripray	C ນ.ສ Ç ນ.ສ	1640 883	-	-	-		_
5	Stone masonry	Cu.m	797	· –	-	. •	· -	-
6	Stone pitching (Hand-laid rock embankment)	Cu.m	283	-	-	-	-	
9	Gablon	Cu.m.	525	• -	-	-	-	-
÷.	Sub-total							
р. — . Г	SPECIAL WORKS FOR REHABILITATION			÷ .	(-)	(-)	v = 1	· -)
0	Additional stringer	ton	39700 6880	-	-	<u> </u>		-
)1 2	Additional sidewalk Reinforcing beam of RCDG	ຽບ.ຫ Cນ.ຫ	5520	·	-	-	-	
3 .	Widening of pier coping	Çu.m	8040	13	104520.00	55395.60	38672.40	10452.00
· ·	Sub-total				104520.00 (100.0 %)	55395.60 (53.0 %)		10452.00 (10.0 X)
1)	TENPORARY WORKS	A	177	_	_	·	· · · · -	-
)0)1	Scaffolding	Տգ.ա. Ըս.ա։	153 216	1383	298728.00	185211.36	83643.84	29872.80
2	Staging Temporary bridge	Sq.m	4980	220	1095600.00	821709.00	164340.00	109560.00
3	Preparation works	LS			88667.58	52303.27		8866.76
нн 11.	Sub-total				1482995.58 (100.0 %)	1059214.63 (71.4 %)		148299.56 (10.0 %)
1	Grand Total				3044253.58	1795745.47	944082.75	304425.36
					(100.0 X)	(58.9 %)	(31.0 %)	(10.0 >

-

43 Name of Bridge : PALSABANGON Classification : Replacement of Superstructure

	Classification : Replacement of Supera							
ltem		Unit	Price	Quantity	Amount	Foriegn Component	Local Component	Taxes
No.	Description							
L) ËA	RTHWORK AND ROAD WORKS						jeret i ri <u>i</u> More	t str
00 -	Clearing and Grubbling	Sq.m	3.12 42.9	· · · · ·	-	4.4 y	n se a construction de la construction Se a construction de la construction	
02	Common excavation	Cu.m	42.9		1			
03(2)	Bridge excavation above low water level	Cu.m	57.3	168	9626.40	6064.63	2399.13	952.6
03(2)5	Bridge excavation below low	Çu. <i>m</i>	109	•	- · · ·			~
3(5)	water level Shoring, cribbing, cofferdam	LS	1	· · · · ·	•			_
	and related work	.Cu.#	67.7	1201	81307.70	59354.62		8130.77
4(1)	Embankment Selected borrow for backfill	Cu.m	118	105	12390.00	4460.40	6690.60	1239.00
0	Aggregate subbase course	Cu.m	189		·: •			- , .
1(2)	PCC Pavement (Reinforced)	Sq.m	-153					
1 . L	Sub-total				103324.10	69879.65	23112.04	10332.4
					(100.0 %)	(67.6 %)	and the second	(10.0 x)
	PERSTRUCTURE WORKS	Cu.m	894	123	109962.00	47283.66	51682.14	10996.2
1 (<u>5)</u> 1 (1)	Removal concrete structure Removal steel structure (bridge)	LS	1					-
1	Railing	n	894 1 717	66	47322.00	26500.32		4732.2
2	Timber structure (Detour bridge)	span	61900	19	1176100.00	364591.00		117610.0
3(5)	Structural steel (Detour bridge)	59.11	4980		237393.20	170923.10	42730.78	23739.3
4 .	Reinforcing steel	K.K.	16.3	14564 146	379600.00		132860.00	37960.0
5(1)	Structural concrete, Class A	Cu.m	2600 14400	140	-			
7	Prestressed concrete bridge	Cu.m ton	60200	· _	-	-		· •
8 1	Steel bridge(l-beam) Paint	Sq.m	65.8	· –	· · ·	-	-	
•	***************************************				1950327.20	818078.08	937261.40	195037.7
	Sub-total				(100.0 %)	(41.9 %)	(48.0 %)	(10.0 X
บว่า รข	BSTRUCTURE WORKS	_				-	_	
1(5)	Removal of concrete structure	ແກ້ ເ	894		<u> </u>	a na s <u>i</u> stre		. <u>2</u> .1
(1)	Removal of steel structure	LS B	1 3130	· _	-		이 이 모두 한 것	
(3)	Steel H∸piles Precast concrete pile (400X400mm)	En En	742	-	-	· • .	2 i - 1 - 1	
)(<u>4)</u>)(5)	Steel sheet pile	130	3150	- 1		-		÷.
0(7)	Precast concrete sheet pile	ra -	537	-	· -	*	ing sa 🖉 👘 👘 sa ka	÷.
0(16)	Cast-in-Place concrete pile(1200mm)	m	6730	-	i kan Tun		a de la composición d	
4	Reinforcement steel	ke	14.1	-	<u> </u>		· 가위 · 위의 가톨레이지 · ·	- 1 I I I
5(1)	Structural concrete, Class A	Ըս,թ Ըս,թ	1820	·	-		-	-
5(5)	Seal concrete Granted Fibrar	Cu.m	883	102	90066.00	38728.38	42331.02	9006.6
1 5	Grouted riprap Stone masonry	նս.ա	797		•	÷ 1		'
9	Gabion	Cu.m	625					
	Sub-Lotal				90066.00	38728.38		9006.5
V) RI	VER TRAINING WORKS				(100.0 X)	· · · · ·	(47.0 ×)	(10.0 %
0(1)	Untreated timber pile		149	77	11473.00	5621.77		1147.3
0(4)	Precast concrete pile (400X400mm)	周	742	· ·	2012	en a segunda de la composición de la co	승규는 영화 관계 전 관계	
0(6)	Steel sheet pile	Ca	3160		9306.00	6700.32		930.6
4	Reinforcement steel	kg Cu -	14.1	660	60060.00		17417.40	6005.0
5(1)	Structural concrete, Class A	Ըս.ա։ Ըս.ա։	1820	33	-	-		
5(5) 4	Seal concrete Grouted riprap	Cu.m	883	174	153642.00	66066.06	72211.74	15364.2
5	Stone masonry	Cu.m	797	-	-	-	and the second second	
5	Stone pitching (Hand-Jaid							0000 9
	rock embankment)	Cù.m	283	116	32828.00	9191.84 163525.00		3282.8 26375.0
)	Gabion	Cuim	625	422	263750.00			
	Sub-total				531059.00 (100.0 %)	287741.59 (54.1 %)		53105.9 (10.0 ×
	ECIAL WORKS FOR REHABILITATION					a de la dela de	e server i	. ·· · _
0	Additional stringer	ton	39700	-	· ·	. <u>-</u>	in the state of the	
1	Additional sidéwalk	Sq.m Cu.m	6880 5520	-	-	5 <u>5</u> 5		-
2	Reinforcing beam of RCDG	Cu.m Cu.m	8040	11	88440.00	46873.20	32722.80	6844.0
3	Widening of pier coping							8844.0
	Sub-total				88440.00 (100.0 %)	46873.20 (\$3.0 %)	(37.0 %)	(10.0 *
	MPORARY WORKS	~						Sec 1
)	Scaffolding	Sq.m.	153	1850	356400.00	220968.00		35640.0
1	Staging	Cu.m	216	1650	356400.00	220968.00	33132.00	300101
2 3	Temporary bridge Preparation works	5q.m LS	4980	ĩ	93589.99	44468.07		9359.0
-					449989.99	265436.07	139554.92	44999.0
	Sub-total				(100.0 %)	(58.9 %)	139554.92 (31.0 %)	(10.0 %
	Grand Total				3213256.29	1526736.97	1365193.69	321325.5
					(100.0 X)		(42.4 %)	(10.0 *

DETAILED CONSTRUCTION COST ESTIMATE (44/52)

14 Name of Bridge : LAGNAS II Classification : Repair

())))))))))) ())))))))	EART	HWORK AND ROAD WORKS Clearing and Grubbling Common excavation Bridge excavation above low water level Bridge excavation below low water level	Sq.m. Cu.m.	2,12					
00 92 93(2) 93(2) 93(5) 94(1) 94(5) 90 11(2) 11(2)	 i .	Common excavation Bridge excavation above jow water level	Cu.m.	2,12					
)2)3(2))3(2))3(5))4(1))4(5))0)1(2) (1))1(5)	 i .	Common excavation Bridge excavation above jow water level	Cu.m.		_	_			
n3(2) n3(2) n3(5) n4(1) n4(5) n0 n1(2) f(1) n1(5)		Bridge excavation above low water level		42.9	_	-	-		· · · •
03(2)S 03(5) 04(1) 04(5) 00 (1(2) (1) 01(5)		water level	-	427		•	-	•	-
03(5) 04(1) 04(5) 00 11(2) 11(2)		Bridge excavation below low	Ըս. տ	57.3		_			
03(5) 04(1) 04(5) 00 11(2) 11(2)		the second se		41.0	-	-	-		-
04(1) 04(5) 00 11(2) 11(2)		Water Level	Cu.m	109		_			
04(1) 04(5) 00 11(2) 11(2)		Shoring, cribbing, cofferdam			-	-	•		-
04(5) 00 11(2) (1) 01(5)		and related work	LS	1	_		2 P. 1997		
04(5) 00 11(2) (1) 01(5)		Embankment	Cu,m	67.7	· _	-	-	-	-
00 [](2) []) []) [])	•	Selected borrow for backfill	Cu.m	118	_		· _		-
(1)(2) (1) 01(5)	· .	Aggregate subbase course	Cu.m.	189					-
(İ) 01(5)		PCC Pavement (Reinforced)	Sq.m.	423		-		· · ·	-
01(5)	•								
01(5)	16	Sub-total				-	-	-	-
01(5)						(c)	(- ·)	(-)	(-)
	SUPE	RSTRUCTURE WORKS							
		Removal concrete structure	Ըս. տ	894	22	19668.00	8457.24	9243.96	1966.
01(1)	1.1	Removal steel structure (bridge)	LS	. 1		-	_	-	· · · -
1		Railing	19	717	-	- · .	1 i <u>-</u> .	_ · · · ·	-
72		Timber structure (Detour bridge)	SÞan	61900	. .	•	-	·-	-
3(5)		Structural steel (Detour bridge)	span Sq.m	4980	· · · -	1	· -	-	-
)4		Reinforcing steel	8 K	16.3	2620	42706.00	30748.32	7687.08	4270.
5(1)		Structural concrete, Class A	Cu.m	2600	22	57200.00	31460.00		5720.
07		Prestressed concrete bridge	Cu.m.	14400	· · ·	- '			-
8		Steel bridge(I-beam)	ton	60200	· -	-	- · · - ·		· –
1		Paint	5q.m.	65.8	-	· •	🖕 î.e.	·· · -	-
. :	tai y 1	Sub-total				119574.00	70666.86		11957.
in i	SURS	TRUCTURE WORKS				(100.0 %)	(59.1 %)	(30.9%)	(10.0
11/01	2003	Removal of concrete structure	Cu.a	0.0 4					
		Removal of steel structure		894	-		-	-	· •
1(1)		Steel H-piles	LS	1	-		-	-	· •
0(3)	÷.,		m;	3130	-	-	•	-	-
0(4)		Precast concrete pile (400X400mm)	Ph.	742	-	-	-	-	-
0(6)		Steel sheet pile	12	3160	-	-	-	~	-
0(7)		Precast concrete sheet pile	B ,	537	-	-	-	-	-
0(16)		Cast-in-Place concrete pile(1200mm)	R0	6730	-	-		-	-
H		Reinforcement steel	kg	14.1	-	· -			-
05(1)		Structural concrete. Class A	Cu.m	1820	-	-	+	-	-
05(5)		Seal concrete	Cu.m.	1640	-	-	-	-	-
01		Grouted riprap	ິ Cu. ຄ	883	-	-	-	· -	-
05		Stone masonry	Cu.m	797	-	-	-	<u> </u>	-
9		Gabion	Cu.m	625				-	-
		Sub-total					_		-
19.00	۰. ·					()	(-)	(-)	(-)
(V)	RIVE	R TRAINING WORKS				-			
0(1)		Untreated timber pile	Ð	149	-	-	-		-
0(4)		Precast concrete pile (400X400mm)	n	742	· _	-	· · · -	· -	-
0(6)		Steel sheet pile	6	3160	-	-	-	1997 - 1 <u>4</u> - 1997 - 19	-
04		Reinforcement steel	kg	14.1	· -	-	-		-
05(1)		Structural concrete, Class A	Cu. ສ	1820	· _	· _	-	· _	
)5(5)		Seal concrete	Cu.ກ	1640	_	-		_	
)4		Grouted riprap	Cu.m	883	-	-	-		~
74 05				797		-	-	<u> </u>	-
		Stone masonry Stone pitching (Hendelaid	Cui.m.	131	-				
)6		Stone pitching (Hand-laid	Cu.m.	283	-	-	. .	· _	_
9		rock embankment) Gabion	Cu.m.	625	_	-	_	-	-
		Sub-total				-	~ .	-	-
						(-)	(-)	(-)	(-)
) :	SPEC	IAL WORKS FOR REHABILITATION							
0		Additional stringer	ton	39700	-	-	- .	-	-
ñ		Additional sidewalk	Sq.m	5380	-	-	- :	-	-
22		Reinforcing beam of RCDG	Cu.m	5520	-	-	-	-	-
33		Widening of pier Coping	Cu.m	8040	-	-	-	- 1	-
- · ·									
	2	Sub-total				· · -	· -	<i>.</i>	· •
						(-)	(-)	(-)	(-)
(D) 1	TEMP	ORARY WORKS							
0	1.1	Scaffolding	Sq.m	153	154	23562.00	16493.40	4712.40	2356.
)1		Staging	Cu. គ	216	-	-	-	-	-
2		Temporary bridge	Sq.m	4980	· -	-	-	÷	-
3		Preparation works	LS		1	4294.08	2614.77	1249.90	429.
					••				
	1.1	Sub-total				27856.08	19108.17		2785.
						(100.0 %)		(21.4 %)	(10.0
•	2	Grand Total			•	147430.08	89773.73	42913.34	14743.
		Grand (ota)				(100.0 %)	(60.8 %)		(10.0

	45 Name of Bridge : STO CRISTO Classification : Replacement of Supers	tructure			•	n ferrera a Stor	landa da seri 1941 - Alfred Barrison, Alfred 1941 - Alfred Barrison, Alfred Barrison, Alfred Barrison, Alfred Barrison, Alfred Barrison, Alfred Barrison, Al	•
ltem No.	Description	Unit	Price	Quantity	Amount	Forlegn Component	Local	Taxes
(1)	EARTHWORK AND ROAD WORKS					82.96		
100	Clearing and Grubbling	Տգ.m Ըս.m	2.12	359 103	1185.08		983.62 1016.30	118.51
102 103(2)	Common excavation Bridge excavation above low	:						
103(2)	water level S Bridge excavation below low	Cu.m	37.3	-	- -	en la la Cara		
	water level	Cu.m	109	. i t	* .			
103(5)	Shoring, cribbing, cofferdam and related work	LS	1		- <u>-</u>		n an statistiker – 19. Statistiker – 19.	
104(1)	Embankment	Ըս.m Ըս.m	67.7 118	685	46374.50	33853.39	7883.67	4637.45
104(S) 200	Selected borrow for backfill Aggregate subbase course	Cu.m	189	170	32130.00	23133.60	5783.40	3213.00
311(2)	PCC Pavement (Reinforced)	So.m	423	295	124785.00		34939.80	12478.50
* .	Sub-total		-		208893,28 (100.0 %)	137397.17	50605.78 { 24.2 %}	20889.33 (10.0 X)
		Cu.m	894	143	127842.00	54972.06	60085.74	12784.20
101(S) 101(1)	Removal steel structure (bridge)	LS	1.1	-	•.	1 - 1 - 1 - 1		-
401 402	Railing Timber structure (Detour bridge)	ា ទទុងរា	717	79	56643.00 557100.00		19258.62 328689.00	5664.3(55710.00
403(S)		F	4980	17391	-	-	51025.19	28347.3
404 405(1)	Reinforcing steel Structural concrete, Class A	KK Cu.m	16.3 2600	174		248820.00	158340.00	45240.00
407	Prestressed concrete bridge	Cu.m ton	14400 60200	-	_	1.5		-
408 411	Sieel bridge(i-beam) Paint (international contents)	59.m	65.8				_****; 	
•	Sub-total				1477458.30 (100.0 %)		617398.55 (41.7 %)	
CHÚ)		Cu.m	894	52	46 488 . 00	19989.84	21849.36	4648.8
101(S) 101(1)		LS	1		-	-		•
400(3) 400(4)		គ្	3130 742	· -	-	-		
400(6)	Steel sheet plle	ភ	3160	*	-		u nashi <u>a</u> ƙwa	•
400(7) 400(16		. 10 10	537 6730		··· • 📮 ·	ara a 📳		· -
404	Reinforcement steel	KK	14.1		- -	er av statistick	i a d <u>i</u> s	:
405(1) 405(5)	Structural concrete, Class A Seal concrete	Ըս.» Ըս.»	1820 1640	· -	-	· _ `	-	-
501	Grouted riprap	Cu.m Cu.m	883 797	· -	-	-	-	-
505 509	Stone masonry Gablon	Cu.m	625			-	-	· _ ·
₽	Sub-total				46488.00 (100.0 %)	19989.84 (43.0 %)	21849.36 (47.0 %)	4648.80 (10.0 %)
(1V) 400(1)	RIVER TRAINING WORKS Untreated timber pile	. D	149	· _				-
400(4)	Precast concrete pile (400X400mm)	. (P	742	-				
400(6) 404	Steel sheet pile Reinforcement steel	ጠ እድ	3160 14.1	-	_ ·		un tra 1 de las	
105(1)	Structural concrete. Class A	Cu.m	1820		· -	-	-	-
405(5) 504	Seal concrete Grouted riprap	Հս.m Հս.m	1640 883	-	-		-	-
505	Stone masonry	Cu.m	797	-	-		1997 - 1 99	
506	Stone pitching (Hand-laid rock embankment)	Çu.⊪	283		-	-	lan ang san ang sa San ang san ∎aga sa	
5 09	Gabion	Cu.m.	625					
.	Sub-total				e - 55		(e 	(- · ·
(V) 300	SPECIAL WORKS FOR REHABILITATION Additional stringer	ton	39700		-	÷	n an an Anna An Leanna Anna T arainn	. · ·
	Additional sidevalk Reinforcing beam of RCDG	So.m. Cu.m.	6880 5520	•	-	1		-
301	RELATORCIAN ORAM OF RUUU	Cu.m	8040	12	96480.00	51134.40		9648.00
101 102	Widening of pier coping				96480.00	51134.40		9648.00 (10.0 %
101 102 103					7100 0 **	/ E2 A ~ \	1.37 0 41	
301 302 303 • (V1)	Widening of pier coping Sub-total TEMPORARY WORKS				(100.0 %)	(53.0 %)	(37.0 %)	
801 802 803 (V1) 800	Widening of pier coping Sub-total TEMPORARY WORKS Scaffolding	รจ.ต 6น.ต	153	1426	· _ ·	(53.0 %) - 190969.92		30801.5
101 102 103 103 100 101 102	Widening of pier coping Sub-total TENYORARY WORKS Scaffolding Staging Temporary bridge	Cu.m Sq.m		·	308016.00	190969.92	86244.48	30801.5
301 302 303	Widening of pier coping Sub-total TENFORARY WORKS Scaffolding Staging Temporary bridge Preparation works	Cu.m	216	1426	308016.00 64120.07	190969.92 33354,16	86244.48 24353.90	30801.5 6412.0
101 102 103 103 100 101 102	Widening of pier coping Sub-total TENYORARY WORKS Scaffolding Staging Temporary bridge	Cu.m Sq.m	216	·	308016.00 64120.07	190969.92 33354.16	86244.48 24353.90 110598.38 (29.7 %)	30801.5

.

46 Name of Bridge : NAGAPONG Classification : Replacement of Superstructure

tem).	Description	Unit	Price	Quantily	Amount	Foriegn Component	Local Component	Taxes
	HWORK AND ROAD WORKS	••••••					************	
) EARI D	Clearing and Grubbling	50.m	2,12	931	1973.72	100.10	1000 10	
Ž	Common excavation	Cu.m	42.9	255	10939.50	138.16 7329.47		197.3
3(2)	Bridge excavation above low			200	10555.00	1323.41	2516.09	1093.9
	water level	Cu.m	57,3	-	-	-	- .	<u></u>
3(2)5	Bridge excavation below low	_						
1441	water level Shoring, cribbing, cofferdam	Cu.m.	109		-	: 4	. − .	-
3(5)	and related work	1.5	•				and the second second	
1(1)	Enbankmen	Cu.m	67.7	252	17050 10			
((5)	Selected borrow for back[11]	C11.m	118	94	17050.40	12454.09 3993.12	2900.27 5989.68	1706.0- 1109.24
0	Aggregate subbase course	Cu.m	189	255	48195.00	34700.40		4819.5
(2)	PCC Pavement (Reinforced)	5a.m	423	442	186966 00	115918.92	52350.48	18696.6
	·						*	
-	Sub-total				276226.62	174534.16	74069.80	27622.6
SUPE	RSTRUCTURE WORKS				(100.0 X)	(63.1 %)	(26.8 %)	(10.0 %
1) SUPE 1(S)	Removal concrete structure	Cu.m	894	34	30396.00	13070.28	1 12 0 6 1 2	3039.6
(d)	Removal steel structure (bridge)	LS	1	158384	168384.00	112817.28		16838.4
, 	Railing	n.	717	57	40869.00	22886.64		4086.9
ł	Timber structure (Detour bridge)	span	61900				-	
3(5)	Structural steel (Detour bridge)	Sci.m	4980	· -	<u> </u>		-	· -
	Reinforcing steel	kg.	16.3	7040	114752.00	82621.44		11475.2
(D)	Structural concrete, Class A	. Cu.m	2600	70	182000.00	100100.00	63700.00	18200.0
	Prestressed concrete bridge Steel bridge(1-beam)	Cu.m	14400 60200	77	1108800.00	753984.00	243936.00	110880.0
	Paint	ton Տգ.թ.	65.8	· · · -	-	· <u>*</u>	1 - 1 <u>1</u>	· -
• • •								
	Sub-lotal				1645201.00	1085479.64	395201.26	164520.1
	a de la compañía de l				(100.0 %)	(65.9 %)	(24.0 X)	(10.0 %
	TRUCTURE WORKS							
(\$)	Removal of concrete structure	Cu.m	894	-	-	-		
(1)	Removal of steel structure	LS	1	~	-	-	• • •	-
(3)	Steel H-piles Broost opporate pile (1007/00pp)	B.	3130	-		-	-	-
(4)	Precast concrete pile (400X400mm) Steel sheet pile	23 10	742	62	45004.00	32202.80	9200.80	4600.4
(6) .	Precast concrete sheet pile	10 70	3160 537	-	-	·	· · · -	<u> </u>
)(7))(16)	Cast-in-Place concrete pile(1200mm)	144 178	6730	· -		<u>-</u>		-
	Reinforcement steel	kg	14.1	3520	49632.00	35735.04	8933.76	4963.2
ian -	Structural concrete, Class A	Cu.m	1820	30	54600.00	33306.00		5460.0
5(5)	Seal concrete	Cu.m	1640	_	-		· · · · · · · · · · · · · · · · · · ·	
1	Grouted riprap	Cu.m	883	83	73289.00	31514.27	34145.83	7328.9
5	Stone masonry	Cu.m	797	. .	-	*	- 1	-
1	Gabion	Си. м	625		-	-	<u>₹</u>	-
	Sub-total				223525.00	132758.11	68414.39	22352.5
,					(100.0 %)	(59.3 %)	(30.6 %)	(10.0 %
() RIVE	R TRAINING WORKS							
(1)	Untreated timber pile	<i>t</i> n	149	-		-		-
(4)	Precast concrete pile (400X400mm)	5	7.42			÷ -		-
(6)	Steel sheet pile	. เก 	3160	-	-	-	. –	
	Reinforcement steel	kg Cu m	14.1	-	-	-		-
(1) (5)	Structural concrete, Class A	Cu.m. Cu.m.	1820 1640	-	-	·	-	·
1.07	Seal concrete Grouted riprap	Cu.n	883	-	-	-	÷.	
	Stone masonry	Cu.m	797		-	-	-	-
	Stone pitching (Hand-laid	2414						
	rock embankment)	Cu.m	283	-	-	-		-
	Gabion	С ս. թ.	625	~	~	-	- '	-
	Sub-total				(~)	(-)	(-)	(~)
SPEC	IAL WORKS FOR REHABILITATION				. ,			
SFEG	Additional stringer	ton	39700	-	· -	-	-	-
	Additional sidewalk	Sq.m	6880	-	-	-	-	-
	Reinforcing beam of RCDG	Cu.m	5520	-	-	-	-	-
	Widening of pier coping	Cu.m	8040	-	-	-	-	
· ·	Sub-total				(-)	(~)	(-)	(-)
	ORARY WORKS							· ,
)	Scaffolding	Sq.m.	153	283	43299.00	30309.30	8659.80	4329.9
	Staging	Cu.m.	216	-	-	-		_
	Temporary bridge	Sq. m	4980	· .		42692.44	16390.36	6564.7
1. E	Preparation works	LS		1	65647.55	44094.44	16390.36	0004. <i>1</i>
	Cub. 1.4.4.1				108946.55	73001.74		10894.6
	Subviotal				(100.0 %)		(22.9 %)	(10.0 %
	Grand Total				2253899.17	1465773.64	562735.61	225389.9
	UIBBU IUVOI				(100.0 %)	(65.0 X)	(24.9 %)	(10.0 %
1								

u menanta badi h

47 Name of Bridge : BIGA Classification : Repair

ltem No.		Unil	Price	Quantily	Amount	Forlegn Component	Local Component	Taxes
())0. ·	EARTHWORK AND ROAD WORKS Clearing and Grubbling	Sq.m	2.12	· •				-
)2	Common excavation	Cu.m	42,9	-		_ · · · · · · · · · · · · · · · · · · ·		-
3(2)	Bridge excavation above low			· · · ·		· .	and an	-
. F	water level	Cu.m	57.3	••• •	· · · · ·		and the second second	-
)3(2)5		6	109	-	-		· · · · · · · · · · · · · · · · · · ·	
	water level	Cu.ຫ	109		1 A.	e des des conse	elan en logi i tañs	
)3(5)		LS	- 1		-		이 가 가득 말했다.	-
94(1)	and related work Embankment	Ču.m	67.7	, i i -	. –			-
4(S)		Cu.#	118	-	-			
10	Aggregate subbase course	Cu.m	189	· · ·	-	이 아이 가운 아이		
1(2)	PCC Pavement (Reinforced)	So.m.	423				للأب مركوه والماليات بوالمركز لواليا أورابو	
	Sub-total				(–)	()	. (° -)).	(
D.	SUPERSTRUCTURE WORKS		· .					
DI (S)		Cu.m	894	53	47382.00	20374.26	22269.54	4738.2
01(1)	Removal steel structure (bridge)	LS	1	· •	· • •	-	i de la companya de l	-
) 1 –	Railing	5 9)	717				a service a service ser	· · · _ ·
)2	Timber structure (Detour bridge)	span	61900 4980	· · · ·	. · · -			
3(S)		So: PA Krz	16.3	8426	137343.80	98887.54		13734.3
)4	Reinforcing steel Structural concrete, Class A	Cu.m	2600	65	169000.00	92950.00		16900.0
)5(1))7	Prestressed concrete bridge	Cu.m.	14400	- 1	.	<u> </u>	n de la serie br>La serie de la s	· -
8	Steel bridge(1-beam)	ton	60200	· · · · · · · · · · · · · · · · · · ·	-			7310.3
i i	Paint	59.18	65.8	- 111	73103.80	9503.49		*********
	Sub-total				425829.60	221715.29 (51.9 %)	162431.35	42682.9 (10.0)
ID.	SUBSTRUCTURE WORKS				100.0 47			
11) 11(S)	Removal of concrete structure	Сบ.ก	894		-	-		-
1(1)	Removal of steel structure	LS	1	•	· -	-		
0(3)	Steel H-piles	ħ	3130	· •		<u>-</u>		
0(4)	Precast concrete pile (400X400mm)	R	742	-	· -	· •		
0(6)	Steel sheet pile	10	3160			<u>-</u>	a na 🖕 🔒	_
0(7)	Precast concrete sheet pile	D	537 6730			1 - 1 - 1 - 2	e su terre e su	· -
00(16)		m kg	14.1	-	-	· · -		-
14	Reinforcement steel Structural concrete, Class A	Cu.m	1820	-	- 1		· · · · · · · · · · · · · · · · · · ·	-
)5(1))5(5)		Cu.m	1640	· · ·	-	- 1	· · · · · · · · · · · · · · · · · · ·	· • ·
	Grouted riprap	Cu.m	883	· -	-			-
05	Stone masonry	Cu.m	797	•	-	5		-
9	Gabion	Cu.a	\$25					
ν.	Sub-total				(-)	· -)		(-)
¥)	RIVER TRAINING WORKS		2		· ·			
0(1)	Untreated timber pile	m	149	-	-	-	-	-
0(4)	Precast concrete pile (400X400mm)	18	742	· -	-	-		- '
0(6)	Steel sheet pile	n	3160	-	-	•	· · · · · · · · · · · · · · · · · · ·	-
4	Reinforcement steel	kg	14.1	-	-	-	그는 것을 즐기고?	_ '
5(1)	Structural concrete. Class A	Cu.ສ	1820	-	-	-	in an ion <u>n</u> a a'	-
5(5)	Seal concrete	Cu.m	1540 883	_			- 18 T. 🖕 👘 18	-
4	Grouted riprap	Cu m Cu m	797	-	-	÷	- 1999 - 1997	· -
6	Stone masonry Stone pitching (Hand-laid	VV. M				1 1	an an an Ardana An Ardana	
v	rock embankment)	Cu.m	283	-	-	-	- 19 - El 19 -	-
9	Gabion	Cu.m	625		· · · ·			
	Sub-total				-		·····	(- [~])
	SPECIAL WORKS FOR REHABILITATION				、 - 、			•
)	Additional stringer	ton	39700	5	198500.00	150860.00	27790.00	19850.
0	Additional sidewalk	So.a	6880		-	- · · - ·		• -
2	Reinforcing beam of RCDG	Cບ.ສ	5520	-	. -			
3	Widening of pier coping	Cu.m	8040	· -				
	Sub-total				198500.00	150860.00	27790.00	19850.
					(100.0 %)	(76.0 ×) (14.0 x)	(10.0
	TENPORARY WORKS	Sq.ma	153	506	77418.00	54192.60	15483.60	7741.
0	Scaffolding	ວບ.ສ Cບ.ສ	216	-	-			-
1	Staging Temporary bridge	So. ຄ	4980	· · · · ·	–	1		
3	Preparation works	LS		. 1	21082.43	12803.04	6171.15	2108
.					98500.43	65995 6	21654.75	9850
	Sub-total				(100 0 %)	1 68 0 8	\ (21 Q X)	(10.0
	Grand Total				723830.03 (100.0 %)	439570.9	211876.10	72383-

48 Name of Bridge : SAN CRISTOBAL Classification : Repair

te≊ .		Description	Unit		0		Foriegn	Local	
¥0.				Price	Quantity	Amount	Component	Component	Taxes
1)	EART	HWORK AND ROAD WORKS							
60		Clearing and Grubbling	Sq.m	2.12	-	~	· _	-	-
02		Common excavation	Cu.m	42.9		· •	•	-	-
03(2)		Bridge excavation above low							
		water level	ุ Cu. ธ	57.3	-	-	-	-	-
03(2)5	,	Bridge excavation below low	~						
		vater level Shoring, cribbing, cofferdam	Çu.n	109	-	-	-	-	-
03(5)	•	and related work	16						
		Embankment	LS Cu.m	1		•	-	- `	-
04(1)		Selected borrow for backfill	Cu.m.	67.7	776	52535.20	38350.70	8930.98	5253.5
04(S)		Aggregate subbase course	Cu.m.	118	-	-		-	-
00		PCC Pavement (Reinforced)	Sq.m	189 423	-	-		-	-
11(2)				440		-	·	. · ·	
		Sub-total				52535.20	38350.70	8930.98	
						(100.0 X)	(73.0 %)		5253.5 (10.0 X
ID :	SUPE	RSTRUCTURE WORKS					()310 4)	111.0 47	10.0 4
01(5)		Removal concrete structure	Cu,m	894	106	94764.00	10748.52	44539.08	9476.4
01(1)		Removal steel structure (bridge)	LS	1		-	-		241014
Ó1		Railing	n	717	109	78153.00	43765.68		7815.3
02	1.1	Timber structure (Detour bridge)	span	61900	-	-	-		
03(S)		Structural steel (Detour bridge)	Sq.m	4980	506	2519880.00	1889910.00	377982.00	251988.0
04	1.1.1	Reinforcing steel	kg	16.3	14190	231297.00	166533.84		23129.7
(05(1)		Structural concrete, Class A	Cu.m.	2600	109	283400.00	155870.00	99190.00	28340.0
07		Prestressed concrete bridge	~~~	14400			· -		· د
08	1.1	Steel Bildkett-Deam	ton	60200	-	-	-	· · ·	-
11 .		Paint	So.m	65.8	1855	122059.00	15867.67	93985.43	12205.9
		Sub-total				3329553.00	2312695.71		332955.3
2.2.5	aune	TRUCTURE PORME				(100.0 %)	(69.4 X)	(20.5 X)	(10.0 %
	2092	TRÚCTURE WORKS							
01(S)	1.	Removal of concrete structure	Cu.a	894	-	-		· -	- '
01(1)		Removal of steel structure	LS	1	-	-	-		-
00(3)		Steel H-piles	M	3130	-	-		-	-
00(4)	4.1	Precast concrete pile (400X400mm)	th .	742	-	-	•	-	-
00(6)		Steel sheet pile	5	3160	· -		-	•	-
00(7)		Precast concrete sheet pile	m	537	-	-		-	-
00(16)		Cast-in-Place concrete pile(1200mm)	<u>n</u> 1. –	6730	-	-	-	-	-
04	·	Reinforcement steel	kg Cu.m	14.1	-	-	~		-
05(1)		Structural concrete, Class A		1820	-	-	•	•	-
05(5)		Seal concrete	Cu.m.	1640	-	-	-		-
01		Grouted riprap Stone masonry	՝ Ըս. ա։ Ըս. ա	883 797	-	•		-	-
05 109		Gabion	Cu.m	625		-	-	- A	
~ *	· ·								
		Sub-total					-	•	· -
	2 + 2					(-)	(-)	(-)	(-)
183	RIVE	R TRAINING WORKS					•		
00(1)		Untreated timber pile	¢	149	-	-	-	-	-
00(4)		Precast concrete pile (400X400mm)	20	742	· -	-	-	-	-
00(6)		Steel sheet pile	8	3160	-	-	-	· •	· _
04		Reinforcement steel	kg	14.1		-	-	-	~
05(1)		Structural concrete, Class A	Сц. ш	1820	-	-	-	-	-
05(5)		Seal concrete	Cu.m	1640	-	-	+	-	-
84		Grouted riprap	Cu.m	883	-	· -	-	-	-
05	-	Stone masonry	Cu.m	797	-	-	-	-	-
06		Stone pitching (Hand-laid							
		rock embankment)	Cu.m.	283	-	-	-	-	-
09		Gabion	Ըս.թ	625	-	-	-	-	-
		Sub-total				-			-
						(-)	(-)	·(-)	(-)
		IAL WORKS FOR REHABILITATION			-				·
00		Additional stringer	ton	39700	22	873400.00	663784.00	122276.00	87340.0
01		Additional sidewalk	Sq.m.	6880	-	-			-
02		Reinforcing beam of RCDG	Cu.m	5520	-	-		-	-
03		Widening of pier coping	Cu.m	8040	-	-	· –	•	-
								123276 00	
		Sub-total				873400.00	663784.00		87340.0
						(100.0 %)	(76,0%)	C 14.0 X)	(10.0)
VI)	TENP	ORARY WORKS	-		*	A1444 44	C 10CD 00	10000 00	
00		Scaffolding	59.5	153	•	91800.00	64260.00		9180.0
01		Staging	Сบ. ต	216	· -	-	-	-	-
02		Temporary bridge	Sq.m.	4980	-	-			
03		Preparation works	LS		1	130418.65	92372.71	25004.07	13041.4
	1								
		Sub-total				222218.65	156632.71		22221.8
						(100.0 %)			(10.0 \$
•		Grand Total				4477706.85 (100.0 %)	3171463.12		447770.0
						((0),0,7)	1 10.8 21	1 (N. 1 X)	

.

							Foriegn	Local	
tem lo.		Description	Unit	Price	Quantity	Amount	Component		Taxes
)		WORK AND ROAD WORKS	.	2.18	5214	11366.52	795.66	9434.21	1136.6
00)2		Clearing and Grubbling Common excavation	ູ Sot.m Cu.m	44.2	170				751.4
53(2)		Bridge excavation above low		59,0	979	57761.00	36389.43	15395.47	and the second second
3(2)	s	water level Bridge excavation below low	Cu.m	39.0		· · · · · · · · · · · · · · · · · · ·			5776.1
÷	•	water level	- Cu.m	112	1311	150528.00	91822.08		13052.8
3(5)		Shoring, cribbing, cofferdam and related work	LS	ນີ.	1232	1232.00	887.01	221.76	123.;
4(1)		Embankment	Ըս.ա. Ըս.ա.	69.7 122	5019 1782	349824.30 217404.00	255371.74		34982. 21740.
4(S) 0		Selected borrow for backfill Aggregate subbase course	Cu.m	195 .	8 1 9	165555.00	119199.60	29799.90	16555.
1(2)		PCC Pavement (Reinforced)	Sq.m	474	1474	698676.00	433179.12	100050160	69867.
1. 		Sub-total				1659860.82 (100.0 %)	1020944.49		155986.
		STRUCTURE WORKS	1 <u>.</u>			1000 10 00	112076 10	122502.21	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -
1(S) 1(1)		Removal concrete structure Removal steel structure (bridge)	Cu.m LS	921 1	283	260843.00	112076.49		26064.
1		Railing	ก	803	165		74197.20		13249,
2 3(5)		Timber structure (Detour bridge) Structural steel (Detour bridge)	span Sg.m	43300 5430	-		가 가지 않는 것이 같다. 사람이 있는 것이 있는 것이 같다. 사람이 있는 것이 있는 것이 있는 것이 같이 있는 것이 없는 것이 있		
4	1	Reinforcing steel	kr Cu.m	18.5	20537	379934.50 565800.00	273552 84	68388.21 198030.00	37993. 56580.
5(1) 7		Structural concrete, Class A Prestressed concrete bridge	Cu.m Cu.m	2760 16100	205	3590300.00	2441404.00		359030.
8		Steel bridge(1-beam)	ែលោ	62000 71.7	-	<u>-</u> -			· •
1		Paint	Sq.m						
• •		Sub-total				4929172.50 (100.0 %)		1223834.72 (24.8 X)	492917.
	SUBS	RUCTURE WORKS	-		140	112282 00	10711 60	53243.01	11328.
1(S) 1(1)		Removal of concrete structure Removal of steel structure	Cu.m LS	921	123	113283.00	48/11.09	55245.01	
)(3)		Steel H-piles	at a	3410	-	995520.00	CO 6 4 3 6 3 6 3	199104.00	99552.
)(4))(6)		Precast concrete pile (400X400mm) Steel sheet pile	ख् क	816 3440	1220	-	030804.00	133104.00	33332.
(7)		Precast concrete sheet pile	'n	587 7400	-	a surregad	an an Star	leg ting⊒egya	-
0(16 4)	Cast-in-Place concrete pile(1200mm) Reinforcement steel	· m Kg	16.2	36740	595188.00	428535.36	107133.84	59518.
5(1)		Structural concrete. Class A	Ըս, թ	1930	460	887800.00	541558.00 124966.80	107133.84 257462.00 53557.20	88780. 19836.
5(5)		Scal concrete Grouted riprav	Ը Ա. տ Ը Ա. տ	1740	114		124900.00	7	-
5		Stone masonry	Cu.m	797 600		-	-	i e et er	-
3		Gabion	Cu.ล	500					
		Sub-total				2790151.00 (100.0 %)		670500.05 (24.0 %)	279015. (10.0
¥)	RIVE	t TRAINING WORKS Untreated timber pile	B	104	· · · _		· · · · · ·	· · · ·	
9(1) 9(4)		Precast concrete bile (400X400mm)	10 ·	816	-				+
0(6)		Sleel sheet pile	ካ አደ	3440		-	1 · 2 :	••••••••••••••••••••••••••••••••••••••	-
4 5(1)		Reinforcement steel Structural concrete. Class A	Cu.m	1930	-	- '	-	-	-
5(5)		Seal concrete Grouted riprap	Ը Կ. ա Ը Կ. ա	1740 883	81	71523.00	30754.89	33615.81	7152.
4. 5		Stone masonry	Cu.m	797	-	-	-		•
;		Slone pitching (Hand-laid rock embankment)	C ນ.ຫ	272	-	-	_ ``	9 <u>1</u> 1	-
•		Gabion	ເບ. ຫ	500	-		. .		·
		Sub-total				71523.00	30754.89		7152.
,	SPECE	AL WORKS FOR REHABILITATION				1100.0 33	(43.0 %)	τ 47.0 4)	. 10.0
) <u> </u>		Additional stringer	ton Som	43300	•	· · -			-
		Additional sidewalk Reinforcing beam of RCDG	Sa.m Cu.m	7220 6070	·	-	an an 1955 an	_	-
i		Widening of pier coping	Cu.a	8840	-				
		Sub-total				- ,	ند الم الم	(- ()
D	TEMPO	RARY WORKS	a	120			01015 00	46050 00	13035.
)		Scaffolding Staging	50.m Cu.m	158. 222	825	130350.00	91245.00 15140.40	26070.00 6837.60	2442.
!		Temporary bridge	Sq.m	5430	821	4458030.00	3343522.50	668704.50	445803. 42190.
5		Preparation works	LS		. 1	421905.22	286639.91	੶੶੶੶੶੶੶੶	
		Sub-total				\$034705.22	3736547.81	794686.89	503170.
						(100.0 %)	(74.2 %)	(15.7 %)	(10.0

•

50 Name of Bridge : HINOGBONGAN Classification : Repair

0		Description			Quantity	Amount	Foriegn Component	Local Component	Taxes
	FART	HWORK AND ROAD WORKS	~						
0	Pide 4	Clearing and Grubbling	5q.m.	2.18			1		
		Common excavation	Cu.m	44.2		-	-	· · · • ·	-
2 3{2)∵	, .	Bridge excavation above low		44.5		-		-	-
		water level	Cu. ต	59.0	387	33833 00	1 1001 70	e1e1 61	0000
3(2)5		Bridge excavation below low		05.0	301	22833.00	14384.79	6164.91	2283.
		water level	Сս. ա	112	1042	116704.00	71189.44	33844.16	11670.
3(5)	'	Shoring, cribbing, cofferdam					11103.44	00044110	11070.
1.1		and related work	1.5	1	-	-	-	-	-
4(1) -	•	CHUGHKIGCHI	Cu.m	69.7	-	-	· _		-
375) -	-	Selected borrow for backfill	Ըստա	122	568	69296.00	24946.56	37419.84	6929
0	21 - C	Aggregate subbase course	Ըս. տ	195				-	
(2)		PCC Pavement (Reinforced)	Sq.m	474	-		_ ·	-	
. e. 14	·	· ************************************						***********	
· ·		Sub-total				208833.00	110520.79		20883
		OOTDUCTUDE HODEC				(100.0 %)	(52.9 %)	(37.0 %)	(10.0
$\mathbf{D} \sim 0$	SUPE	RSTRUCTURE WORKS					11 - C		
1(5)		Removal concrete structure	Cu.m	921	-		-	-	· -
1(1)		Removal steel structure (bridge)	LS	1		-	-	-	-
1 1 2 2		Railing	na -	803	•	· •	-	-	-
2		Timber structure (Détour bridge)	span	43300	-	-	-	-	-
3(5)	1	Structural steel (Detour bridge)	Sq.m	5430	-	-	-	-	-
4		Reinforcing steel	κ.	18.5	-	-	-		-
5(1)		Structural concrete, Class A	С ս. տ	2760	~	-	-		-
7		Prestressed concrete bridge	Cu.m	16100	· –	-	-	-	-
8		Steel bridge(1-beam)	tan	62000	. .	-	-	-	-
1		Paint	Sq.m	71.7	~	· -	-	-	÷
	÷.,								
1.1	- 1	Sub-lotal				-	-	~	
- • •	-	TRUCTURE NORME				(-)	(-)	(~)	c - ·
	SUB5	TRUCTURE WORKS							
1(5)		Removal of concrete structure	Cu.m.	921	-	-	·	-	-
1(1)		Removal of steel structure	LS	1	-	-	-	-	-
0(3) .		Steel H-piles	· 0	3410	·	· · · ·		-	-
0(4)		Precast concrete pile (400X400mm)	m	816	264	215424.00	150796.80		21542
0(6)		Steel sheet pile	78	3440	-			•	
0(7)		Precast concrete sheet pile	ត	587	435	255345.00	176188.05	53622.45	25534
0(16)		Cast-in-Place concrete pile(1200mm)		7400	-			· · · · · · · · · · · · · · · · · · ·	
4 S. S.		Reinforcement steel	kg	16.2	11000	178200.00	128304.00		17820
5(1)		Structural concrete, Class A	Cu.m	1930	91	175630.00	107134.30	50932.70	17563
5(5)		Seal concrete	Cu.m.	1740	-	-	-	-	+
1		Grouted riprap	Cu.m	883	-	-	-	+	-
5		Stone masonry	Cu.m	797		-	-	-	-
9	· · · ·	Gabion	Cu.m	600	-	-	· -	· -	-
- C	1.1	Sub-total				824599.00	562423.15	179715.95	82 459
	-	500-10(a)				(100.0 %)	(58.2 %)		
21	0175	O TRAINING MORYS					(00.2 47		10.0
	RITE	R TRAINING WORKS		104	_	- ·		-	
0(1)	-	Unireated limber pile	73 	816	435	354960.00	248472.00		35496
0(4)		Precast concrete pile (400X400mm)	Da	3440	435	334900.00	248472.00	10392.00	33490
0(6)		Steel sheet pile	10 22 -		-		_		
4		Reinforcement steel	kg Cu -	16.2	-		_		-
5(1)		Structural concrete, Class A	Cu.m	1930	-	-	-	-	-
5(5)		Seal concrete	Cu. ต	1740		108600 00	15701 87	51046 22	10860
4		Grouted riprap	Cu.m	883	123	108609.00	46701.87	51046.23	10900
5		Stone masonry	Ըս.ա.	797	-	-	-		-
6		Stone pitching (Hand-laid	c	272		_	_		-
•	1	rock embankment)	Cu.m	272	-	-	-	-	-
9		Gabion	ແມ່ນ ເປັນ ເປັນ ເປັນ ເປັນ ເປັນ ເປັນ ເປັນ ເປັ	000					
	÷.,	Sub-total				463569.00	295173.87	122038.23	46356
	1.10	Sub-total				(100.0 %)	(63.6 %)		(10.0
)	conc	IN NODRE TOD BEUADILITITION							
). 0	SFEC	IAL WORKS FOR REHABILITATION	ton	43300	-	-	-	-	-
1		Additional stringer	Sg.m.	7220	-	-	-	-	-
2		Additional sidewalk Reinforming beam of PCDC	50.16 Cu.an	6070	_	-	-	-	-
-		Reinforcing beam of RCDG		8840	· •	-	-	-	-
3		Widening of pier coping	Cu.m				******		
		Sub-total				-	-	-	-
	-	900.00141				(-)	(-)	(-)	(~
D ·	TENP.	ORARY WORKS							
õ	1 CAP	Scaffolding	Sq.m.	158	-	-	-	-	-
1 :			Cu.m	222	-	-	-	-	-
		Staging .	59.20	5430	-		-	-	-
		Temporary bridge	54.# LS		1	44910.03	29043.53	11375.49	4491
2		Preparation works	F'g						
2									4 4 6 1
2	1					44910.03	29043.53	11375.49	4491
2 3		Sub-total				44910.03 (100.0 %)	29043.53 (54.6 %)		4491 (10,0
2						44910.03 (100.0 %) 1541911.03		(25.3 X)	

AP11-54

.

•

51 Name of Bridge : JUBASAN 11 Classification : Replacement of Superstructure

						Foriegn	Local	
ltem No.	Description	Unit	Price	Quantity	Amount	Component	Component	Taxes
1) EA	RTHWORK AND ROAD WORKS			917	1999.06		1659.22	1996 - 1997 - 19
00 02	Clearing and Grubbling Common excavation	Sq.m Cu.m	2.18 44.2		1999100		i esti paren reci recenzi i contra alla	
3(2)	Bridge excavation above low							
	vater level	Cu.m	59.0	210	12390.00	7805.70	3345.30	1239.00
3(2)5	Bridge excavation below lov water level	Cu.m	112	262	29344.00	17899.84	8509.76	2934.40
3(5)	Shoring, cribbing, cofferdam			317302	317303 00	228157:34	57114.36	31730.20
	and related work Embankment	LS Cu.m	1 69.7	1421	99043.70	72301.90	16837.43	9904.3
)4(1))4(S)	Selected borrow for backfill	Cu.m		180	51860.00	1905.80	11828-10	2196.00
00	Aggregate subbase course	Cu.m	195	255	19725.00	35802.00	8950.50 58662.24	
1(2)	PCC Pavement (Reinforced)	Sòr.mi	474					
	Sub-total	÷		· · · ·	741271.76		166937.21	74127.1: (10.0 x
II) SU	PERSTRUCTURE WORKS				15. 1	1.00		
i1 (S)	Removal concrete structure	·· Cu.m		87	80127.00		37659.69 84975.67	8012.7 36945.9
01(1) 01	Removal steel structure (bridge) Ralling	ξ.S Ω	1 803	369459 98	79694 00			
02 · ·	Timber structure (Detour bridge)	span	43300	11	476300.00	147653.00	281017.00	47630.0
)3(S)	Structural steel (Detour bridge)	span Sq.m	5430	12210	225885.00		40659.30	
)4)5(1)	Reinforcing steel Structural concrete, Class A	หศ Cบ.ส	18.5 2760	122	336720.00	185195.00		
);;);;	Prestressed concrete bridge	kg Cu.m Cu.m ton	16100	133	2141300.00	1456084.00	471086.00	214130.0
08	Steel bridge(1-beam)	ton	62000 71.7		-			-
11	Paint	Sq.m						
1 A.	Sub-total						1060005.52 (28.5 %)	370848.50 (10.0 x)
III) SU	BSTRUCTURE WORKS							
01(5)	Removal of concrete structure	Cu.m	921	· -		· · · ·	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	
0(3)	Removal of steel structure Steel H-piles	LS a	1 3410			n di sina ang	nt of po t age of c ∎ of	· · <u>-</u> · ,
0(4)	Precast concrete pile (400X400mm)	n	, 816	469			76540.80	
0(6)	Steel sheet plie	. M	3440	-	<u> </u>		an tha tha tha she	-
0(7) 0(16)	Precast concrete sheet pile Cast-in-Place concrete pile(1200mm)	. n	587 7400	-	-	· 글 · · · · · · · · · · · · · · ·	经公司投资 法法费的资产	_ · ·
04	Reinforcement steel	kg	16.2			340005.60	85001.40	47223.0
)5(1)		Cu.m	1930	292) 163432.40 20671.20	
5(5) 1	Séal concrete Grouted riprap	Ըս. տ Ըս. տ	1740 883	•	-			
5	Stone masonry	Cu.m	797	-	-	· - ·	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	-
9	Gabion	. Cu.m	600					
	Sub-tota)				1495054.00 (100.0 %)) 345645.80 (23.1 %)	
	VER TRAINING WORKS							· · · ·
0(1)	Untreated timber pile Precast concrete pile (400X400mm)	20 10	104 816	-	-	-		· · 📮 ·
0(6)	Steel sheet pile	· Pa	3440	-		.	i stani 🗕	
4	Reinforcement steel	kg	16.2	-	-	-	· · · · · · · · · · · · · · · · · · ·	
)5(1))5(5)	Structural concrete, Class A Seal concrete	Ըս. տ Ըս. տ	1930	-				-
4	Grouted riprap	Cu.m	883	-	+	· -	.	-
5	Stone masonry	Cu.m	797	-	-	-		
6	Stone pitching (Hand-laid rock embankment)	Cu.m	272	-	-	.	· · · · ·	· -
9	Gabion	Cu.m	600		-			-
	Sub-total					· · · · · ·	- . (-).	·
) SPI	ECIAL WORKS FOR REHABILITATION				(-)	(-)		(-)
0	Additional stringer	ton	13300	-	-			1995 <u>-</u>
1	Additional sidewalk Reinforcing beam of RCDG	Sq.m Cu.m	7220 6070	· ·	-	-		-
2	Widening of pier coping	Cu.m	8840	-	-	1		.
•	Sub-total					·		
					(, +)	(-)	((-	(-)
	APORARY WORKS	Sq.ma	158	491	77578.00	54304.60	15515.60	7757.8
0	Scaffolding Staging	ՏԿ.ա Ըս.ա	222	. 99	21978.00	13626.36		2197.8
2	Temporary bridge	50.m	5430	183	993690.00	745267.50	149053.50	99369.0 21114.1
3	Preparation works	LS		!	211141.70	137728.19	العاص ويهيم أسراك بأركب ساعه	
	Sub-total				1304387.70	950926.65		130438.7 (10.0 %
	Grand Total				(100.0 %) 7249198.46		1795610.81	724919.8
					(100.0 %)		(24.7 %)	(10.0 X

52 Name of Bridge : JUBASAN | Classification : Reconstruction

R	Description	Unit	Price	Quantity	Amoun t	Forlegn Component	Local Component	Taxes
EA	RTHWORK AND BOAD WORKS							
	Clearing and Grubbling	Sq.m		7073	15419.14	1079.34	12797.89	1541.
•	Common excavation Bridge excavation above low	Сս. ա	44.2	182	8044,40	5389.75	1850.21	804.
2)	Water level	Cu.m	59.0	2500				
2)5	Bridge excavation below low	. Curu	09.0	2590	152810.00	96270.30	41258.70	15281.
	water level	Ըս. ա	112	361	10432.00	24663.52	11725.28	4043.
5)	Shoring, cribbing, cofferdam							
n -	and related work Embankment	LS Cu.m	1	419958	419958.00	302369.76	75592.44	41995.
\$)	Selected borrow for backfill	Cu.m	69.7 122	7784 2562	542544.80	396057.70	92232.62	54254.
	Aggregate subbase course	Cu.n	195	1062	312564.00 207090.00	112523.04 149104.80	168784.56 37276.20	31256. 20709.
2)	PCC Pavement (Reinforced)	Se.m.	474	1843	873582.00	541620.84	244602.96	87358.
	Sub-tota]			********	2572444.34	1629079.05		
eu	PERSTRUCTURE WORKS				(100.0 %)		(26.6 ×)	₹ 10.0
50. \$}	Removal concrete structure	Ըս, ա	921	5 4 0	125200 00			
ŭ :	Removal steel structure (bridge)	LS	1	148 760883	136308.00 760883.00	58612.44 509791.61	64064.76 175003.09	13630. 76088.
•••	Rating	m	803	163	130889.00	73297.84	44502.26	13088.
	Timber structure (Detour bridge)	sban	43300	· -	-		-	-
\$)	Structural steel (Detour bridge)	Sci.n	5430			-		
1)	Reinforcing steel Structural concrete, Class A	ke Cu.a	18.5	20262 203	374847.00 560280.00	269889.84	67472.46	37484
• •	Prestressed concrete bridge		16100	203		308154.00 2419508.00	196098.00 782782.00	56028 365810
	Steel bridge(1-beam)	ton	62000					
	Paint	Sq.m.	71.7	-	-		-	-
•	Sub-total				5521307.00	3639253.73	1329922.57	552130
) 50	BSTRUCTURE WORKS				(100.0 %)	(65.9 %)	(24.0 %)	(10.0
s) -	Removal of concrete structure	C ບູ _້ ສ່	921	~	-	-	-	-
1)	Removal of steel structure	LS	1	-	-	-	-	-
3)	Steel H-piles	1	3410	-	-	-	-	-
4) 6)	Precast concrete pile (400X400mm) Steel sheet pile	EL AN	816 3440	~	~	-	-	-
6) 7)	Precast concrete sheet pile	n Th	587				-	-
16)	Cast-in-Place concrete pile(1200mm)		7400	374	2767600.00	1937320.00	\$53520.00	276760.
	Reinforcement steel	kg	16.2	39600	641520.00	461894.40	115473.60	64152.
1) ·	Structural concreté, Class A	Cu.m	1930	400	772000.00	470920.00	223880.00	77200.
5)	Seal concrete	Cu.m	1740	9	15660.00	9865.80	4228.20	1566
	Grouted riprap Stone masonry	ຕີບ.ສ ດິນ.ສ	883 797	-	-		-	-
	Gabion	Cu.m	600	-	-	-		
	Sub-total				4196780.00 (100.0 %)	2880000.20 (68.6 %)	897101.80 (21.3 %)	419678
81	VER TRAINING WORKS				(100.0 %)	(00.0 47	(LI.5 4/	10.0
1)	Untreated timber pile	n	104	-	-	-		-
4)	Precast concrete pile (400X400mm)	'n	816	-	-	•	-	-
6)	Steel sheet pile	R	3440	-	-	-	· -	-
1)	Reinforcement steel Structural concrete. Class A	kg Cu.m	16.2 1930	-		-	·	-
5)	Seal concrete	Cu.m	1740	-		-	-	-
-	Grouted riprap	Cu.m	883	209	184547.00	79355.21	86737.09	18454
	Stone masonry	Cu.m.	797	-	-	•	-	-
	Stone pitching (Hand-laid	Cu.m	272	-	-	-	_	-
	rock embankment) Gabion	Cu.տ	272 600	-			-	-
	Sub-total				184547.00 (100.0 %)	79355.21 (43.0 %)	86737.09 (47.0 %)	18454
SP	ECIAL WORKS FOR REHABILITATION				(100.0 4)	1 99.0 71	1 11-U AI	. 10.0
	Additional stringer	lon	43300	-	·	-	-	2
	Additional sidewalk Reinforcing been of HCDG	Sot.ma Cu.ma	7220 6070	-	-	-	~	-
	Reinforcing beam of RCDG Widening of pier coping	ເບ.ສ ເບ.ສ	8840	-	-	-	-	-
	Sub-total							
	and the Alexandra and the second s				(-)	(-)	(-)	(-
TE	NPORARY WORKS	Sq.m	158	814	128612.00	90028.40	25722.40	12861
•	Scaffolding Staging	3գ.թ. Հս.թ	222	119	26418.00	16379.16	7397.04	2641
	Temporary bridge	50.m	5430		1504110.00	1128082.50	225616.50	150411
	Preparation works	LS		1	424026.55	283865.35	97758.55	42402
	Sub-total				2083166.55 (100.0 %)	1518355.41 (72.8 ×)	356494.49	208316
· · ·	Crest Talal				14558244.89	9746043.60		1455824
	Grand Total				(100.0 X)	(66.9 %)	(23.0 %)	(10.0

AP11-56

APPENDIX 12.1

PROJECT AVERAGE DAILY TRAFFIC VOLUME

									· · · · · · · · · · · · · · · · · · ·						
						(CAR)			1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1					and a second	
Bridge					-			Sar Sar					2 34 1 1		
2	Eridge Name	1986	1990	1992	1994	1996	1998	2000	2002	2004	2006	2008	2010	2012	2014
	1 MARILÃO	5968	8171	9869	11913	14396	17132	17132	17132	17132	17132	17132	17132	17132	17132
	2 LABANGAN 1	3940	2394	6515	7869	9504	11479	13771	13771	13771	13771	13771	13771	13771	13771
	3 SULIPAN	3940	5095	6163	7455	2005	10871	13120	13875	13875	13875	13875	13875	13875	13875
	4 PLARIDEL	2465	3404	4105	4951	5963	7195	8673	9266	11475	13217	15246	17586	18745	1874
	5 TAGAMUSING	3536	4882	5888	7102	8562	10321	12441	14310	16460	18960	21704	21704	21704	21704
•	S BUED	1657	2288	2759	3328	4012	4837	5830	6706	7713	8885	10248	11821	13636	15728
	7 LOMBOY	1084	1481	1779	2137	2568	3086	3710	4254	4878	5600	6436	7398	8503	9774
	8 BAUANG 1	2421	3307	26/66	4772	5734	6833	8286	9501	10894	12506	14375	16522	17458	17458
	9 BÁUANG 2	2421	3307	3973	4772	5734	6833	8286	9501	10849	12506	14375	16522	17458	17458
	10 STA CRUZI	590	768	923	1110	1334	1602	1924	2206	2529	2904	3338	3836	4409	5068
	11 LANGLANGKA 1	450	586	2 <u>6</u>	847	1017	1222	1467	1683	1929	2215	2546	2926	3363	3866
	12 STA MARIA	450	585	704	847	1017	1222	1467	1683	1929	2215	2546	2826	3363	3866
	13 TIPCAL	264	363	437	527	634	202	918	1054	1211	1393	1605	1850	2132	2457
	14 PLARIDEL-PULILA	2956	4047	4888	2001	7130	8612	10402	12844	15859	18483	18483	18483	18483	18483
	15 SAN ROQUE	3591	4916	5938	22 22	8662	10462	12636	15603	18391	18391	18391	18391	18391	18391
	16 SICSICAN	2662	3736	4523	5477	6637	8046	9755	12080	14960	18551	20200	20200	20200	20200
	17 INDIANA	441	592	716	867	1049	1266	1527	1810	2145	2545	3025	3594	4271	5078
	18 BATU	577	774	937	1135	1372	1656	1998	2368	2807	3330	3958	4703	5589	6641
	19 NAMANPARAN 1	443	594	720	871	1053	1271	1534	1818	2155	2557	3039	3611	4291	5033
	20 SAN LUIS	423	627	760	921	1113	1343	1619	1920	2277	2705	3218	3829	4556	5421
	21 NAGUILAN	2 08	1340	1524	1968	2379	2969	3460	4103	4866	5780	6877	8183	9737	11585
	22 MALALAN	236	350	424	514	621	749	903	1071	1270	1509	1795	2136	2542	3024
	23 BALASIG	237	351	426	516	624	752	205	1076	1276	1515	1803	2145	2553	3037
	24 SAN PABLO	272	403	489	592	716	803	1041	1235	1464	1739	2069	2462	2930	3486
	25 PINACANAUAN	126	170	207	252	306	371	450	535	636	758	305	1079	1288	1537
	26 PARED	8	125	153	186	226	274	332	395	470	560	66 8	767	951	1134
	27 SUJE(RIZAL)	257	341	41?	497	601	728	883	1000	1133	1285	1459	1656	1880	2134

	ΥΓ	Appendix 12.1	12.1	PROJEC	PROJECTED AVERAGE	RAGE DA	DAILY TRAFFIC VOLUME	APPIC V	'OLUME	(Cont'd)	d)	:		
	1	ı		(CAR)	- · ·					•	•		;	
						-								
Bridge						σ	ĕ			-	-			
No. Bridge Name	1986	1990	1992	1994	1996	1996	2000	2002	2004	2006	2008	2010	2012	2014
29 SAN FERNANDO	999	679	1062	1283	1552	1878	2273	2574	2915	3305	3753	4261	4839	5613
30 PAMUKID	666	879	1062	1283	1552	1878	2273	2574	2915	3305	3753	4261	4839	5495
31 SAN ISIDRO	666	679	1062	1283	1552	1878	2273	2574	2915	3305	3753	4261	4839	5435
32 SAN GABRIEL	999	678	1062	1283	1552	1878	2273	2574	2915	3305	3753	1261	4839	5495
33 PAHOHO	999	879	1062	1283	1552	1878	2273	2574	2915	3305	3753	4261	4839	2675
34 TINIGUIBAN	9 9 9	679	1062	1283	1552	1878	2273	2574	2915	3305	3753	4261	4639	5535
35 SGT.MATIAS	999	878	1062	1283	1552	1878	2273	2574	2915	3305	3753	4261	4839	5495
36 NAUBOD 1	866	879	1062	1283	1552	1878	2273	2574	2915	3305	3753	4261	4839	2010
37 SOOK	313	413	66	603	729	683	1068	1210	1370	1550	1764	2003	2274	2582
38 KANAPAWAN	425	560	676	816	386	19	1445	1636	1852	2099	2382	2703	3067	3480
GASIAD	425	560	678	816	396	1194	1445	1636	1852	2099	2382	2703	3067	3480
40 GUMACA	706	916	1106	1336	1612	1945	2345	2824	3401	4102	4955	5964	7228	8728
41 TALABA	706	916	1106	1336	1612	1945	2345	2824	3401	4102	4955	5984	7228	8729
42 BINAHAAN	843	1093	1321	1585	1925	2322	2600	3372	4061	4898	5916	7145	8630	10423
43 PALSABANGON		1093	1321	1595	1925	2322	2800	3372	4081	4698	5916	7145	8630	10423
44 LAGNAS 2	1106	1435	1733	2093	2526	3046	3674	4424	5328	6426	7762	9374	11323	13675
45 STO CRISTO	1106	1435	1733	2093	2526	3046	3674	4424	5328	6426	7762	9374	11323	13675
46 MAGAPONG	1017	1400	1691	2042	2467	2981	3602	4345	5241	6330	7656	9258	11196	13540
47 BIGA	3595	4674		6815	8233	8948	12023	14503	17495	21130	25425	25425	25425	25425
48 SAN CRISTBAL	3595	4609	5536	6648	2986	9603	11543	13861	16644	19931	23802	25196	25196	25195
49 JABONG	78	109	135	168	208	258	320	378	4	\$29	627	78	880	195
50 HINOGBONGAN	15	161	199	247	307	380	471	557	629	780	\$24	1095	1297	1537
S1 JUBASAN2	206	288	357	443	543	681	1 8	886	1180	1397	1655	1961	2324	2754
52 JUBASAN 1	206	288	357	6 43	240 240	661	844	366	1180	1397	1655	1961	2324	2764

	•			Ide	Appendix	12.1	PROJECTED (JEEPNEY)	-	AVERAGE DAILY		TRAFFIC VOLUME	VOLUME	· · · · ·			-
	Bridge				7.1				Jeepney							1
Z	No. Bridge Name	1986		1990 1992	1992	1994	1996	1998	2000	2002	2004	2006	2008	2010	2012	ст., т.
	A MARILAO	60	6055	7847	9135	10636	12373	14172	14172	14172	14172	14172	14172	14172	14172	Ľ -
	2 LABANGAN 1	1 4731	3	6130	7137	8309	3996	11237	12976	12976	12976	12976	12976	12976	12976	
	3 SULIPAN	4	4731	5968	6836	7965	9266	10764	12504	12923	12923	12923	12923	12923	12923	5
	4 PLARIDEL	4 4	1179	1523	1764	2043	2365	2736	3165	3532	3941	4399	4312	5484	5697	Aleria. NGC -
	5 TAGAMUSING		1108	1431	1658	1920	2223	2571	2975	3319	3703	4134	4581	4581	4581	· ·
	6 BUED	(73	301	389	450	522	604	669	808	905	1006	1123	1254	1400	1563	i, i
-	7 LOMBOY	***	165	213	246	285	330	382	442	493	550	613	684	763	852	
-	8 BAUANG 1	23	2365	3049	3530	4087	4731	242	6332	7062	7877	8787	9804	10939	11389	
	9 BAUANG 2	23	2365	3049	3530	4087	4731	5423	6332	7062	7877	8787	9804	10939	11389	
<u>.</u>	10 STA CRUZI	ы)	583	723	838	970	1122	1297	1499	1672	1864	2079	2320	2589	2869	
	11 LANGLANGKA	-	206	256	296	343	397	458	530	591	629	735	820	915	181	
	12 STA MARIA	14	206	256	296	343	397	458	530	591	659	735	820	915	1021	
	13 TIPCAL		ß	110	127	147	170	136	227	253	282	314	351	332	438	-
	14 PLARIDEL-PULILA		2216	2871	3343	3892	4528	5263	6119	7221	8521	9479	9479	6479	9479	•
	15 SAN ROQUE		1711	2217	2581	3005	3496	4064	4724	5575	6280	6280	6280	6280	6280	÷ -
	16 SICSICAN	~	806	1058	1231	1433	1668	1941	2258	2666	3148	3718	3948	3948	3948	
	17 INDIANA		396	507	591	690	804	335	1087	1244	1425	1632	1870	2142	2455	
	18 BATU	, -3	327	418	488	570	664	277	897	1027	1177	1348	1544	1769	2027	
	19 NAMANPARAN 1		399	510	236	695	810	942	1095	1254	1436	1644	1864	2159	2473	
	20 SAN LUIS	•	170	240	280	327	381	442	514	588	674	222	885	1014	1162	
	21 NAGULAN		212	299	349	408	475	- 551	640	733	840	803	1103	1264	1449	
	22 MALALAN		60	85	8	115	134	156	181	208	238	272	312	358	410	
	23 BALASIG		8	130	152	177	206	239	278	318	365	418	479	549	629	:
:	24 SAN PABLO		<u>95</u>	134	1 5 7	183	213	247	287	329	376	431	494	567	649	
	25 PINACANAUAN	N	42	\$	ន	R	85	8	115	312	151	174	199	228	262	
	26 PARED	F -	103	131	153	179	209	243	283	324	371	426	488	560	642	
	27 SUJE(RIZAL)		235	297	345	401	467	544	634	701	776	859	950	1051	1163	

		Appe	Appendix 12	2.1 2.2	PROJECTE (BUS)	PROJECTED AVERAGE DAILY (BUS)	GE DAII		TRAFFIC VOLUME	E C				
Bridge (1) - 11 - 12 - 12 - 12 - 12 - 12 - 12 -				• . • • • • •	. • •	SNG	<u>8</u>	/ ^ 12			17		-	
No. Bridge Name	1986	1990	1992	1994	1996	1998	2000	2002	2004	2006	2008	2010	2012	2014
1 MARILAO	25	32	38	\$	51	83	ŝ	83	83	58	88	58	82	58
2 LABANGAN 1	2178	2822	3285	3825	4450	5173	5974	5974	5974	5974	5974	5974	2874	5974
3 SULIPAN	2178	2701	3147	3667	4266	4956	5757	5951	5951	5951	5951	5951	5951	5951
4 PLARIDEL	1280	1653	1915	2218	2568	2970	3437	3834	4278	4775	5332	5954	6245	6245
5 TAGAMUSING	1293	1670	1935	2241	2594	3001	3471	3873	4322	4824	5345	5345	5345	5345
6 BUED	929	1200	1390	1610	1863	2156	2494	2783	3105	3456	3870	4321	4825	5388
7 LOMBOY	664	856	<u>9</u> 91	1148	1328	1537	1778	1983	2211	2467	2753	3071	3427	3824
8 BAUANG 1	697	839	1040	1205	1394	1613	1866	2081	2321	2590	2889	3224	3357	3357
9 BAUANG 2	697	868	1040	1205	1394	1613	1866	2081	2321	2590	2889	3224	3357	3357
10 STA CRUZI	376	467	540	626	724	837	967	1078	1202	1341	1496	1670	1863	2079
11 LANGLANGKA 1	499 -	619	717	930	360	1110	1283	1431	1596	1780	1986	2216	2472	2759
12 STA MARIA	499	619	717	830	960 9	1110	1283	1431	1596	1780	1986	2216	2472	2759
13 TIPCAL	342	\$41	510	591	683	789	912	1017	1134	1265	1412	1577	1760	1965
14 PLARIDEL-PULILA	065	1283	1493	1739	2023	2351	2734	3226	3807	4235	4235	4235	4235	4235
15 SAN ROQUE	1137	1473	1715	1997	2323	2701	3139	3705	4173	4173	4173	4173	4173	4173
16 SICSICAN	1187	1558	1813	2111	2456	2858	3325	3926	4636	5475	5815	5815	5815	5815
17 INDIANA	289	370	432	504	587	682	793	306	1040	1191	1365	1564	1791	2053
18 BATU	187	239.	279	326	360	441	513	588	673	121	883	1012	1159	1328
19 NAMANPARAN 1	291	372	435	507	591	687	798	914	1047	1199	1374	1574	1804	2067
20 SAN LUIS	301	425	496	579	674	783	6 06	1041	1193	1367	1566	1795	2058	2359
21 NAGUILAN	225	318	371	433	504	585	680	778	892	1022	1171	1342	1538	1763
22 MALALAN	4	ġ	~	Q	თ	10	12	4	16	8	21	24	27	31
23 BALASIG	149	210	246	287	334	388	450	515	230	676	775	889	1019	1138
24 SAN PABLO	162	229	267	312	363	421	489	560	642	736	843	365	1108	1269
25 PINACANAUAN	137	175	204	238	278	323	376	431	194	266	650	745	854	086
26 PARED	81	103	121	141	164	191	222	255	292	335	364	440	505	579
27 SUJE(RIZAL)	186	235	273	317	369	430	502	555	614	680	752	832	921	1019
28 GUINOBATAN	489	618	720	839	978	1140	1329	1471	1627	1801	1994	2208	2445	2707

ł

				(BUS)	(S)	·	1.		- 14 	ма. 19		· .		
							Bus.							- 1 - 1 - 1
Bridge Name	1986	1590	1992	1994	1996	1998	2000	2002	2004	2006	2006	2010	2012	2014
29 SAN FERNANDO	667	522	1073	1249	1454	1692	1970	2179	2410	2666	2951	3266	3614	4000
30 PAMUKID	733	922	1073	1249	1454	1692	1970	2179	2410	2666	2951	3266	3614	4000
31 SAN ISIDRO	733	922	1073	1249	1454	1692	1970	2179	2410	2665	2951	3266	3614	4000
32 SAN GABRIEL	733	922	1073	1249	1454	1692	1970	2179	2410	2666	2951	3266	3614	4000
33 PAHOHO	733	922	1073	1249	1454	1692	1970	2179	2410	2666	2951	3266	3614	4000
34 TINIGUIBAN	733	922	1073	1249	1454	1692	1970	2179	2410	2666	2951	3266	3614	4000
35 SGT.MATIAS	733	922	1073	1249	1454	1692	1970	2179	2410	2666	2951	3266	3614	4000
36 NAUBOD1	733	922	1073	1249	1454	1692	1970	2179	2410	2666	2951	3266	3514	4000
37 SOOK	167	210	245	285	331	386	449	496	543	608	672	744	823	5
38 KANAPAWAN	207	260	303	353	410	478	556	615	681	753	833	921	1019	1128
39 BASIAD	207	260	303	353	410	478	556	615	661	753	833	321	1019	1128
40 GUMACA	323	401	466	541	629	729	846	646	1133	1311	1518	1758	2036	2357
41 TALABA	323	401	466	541	629	729	846	646	1133	1311	1518	1758	2036	2357
42 BINAHAAN	325	403	469	545	633	734	851	385	1140	1319	1527	1769	2048	2372
43 PALSABANGON	325	403 0	469	545	633	734	851	365	1140	1319	1527	1769	2048	2372
44. LAGNAS 2	683	823	332	1153	1339	1553	1802	2085	2412	2792	3234	3744	4336	5021
45 STO CRISTO	688	853	392	1153	1339	1553	1802	2085	2412	2792	3234	3744	4335	5021
46 MAGAPONG	813	1009	1172	1361	1580	1834	2129	2464	2852	3303	3825	4430	5131	5 943
47 BIGA	391	485	202	655	760	882	1024	1185	1372	1588	1831	1831	1831	1831
48 SAN CRISTBAL	391	484	562	653	757	878	1018	1177	1362	1568	1799	1867	1867	1867
49 JIABONG	80	103	121	143	168	138	233	264	239	340	385	4 38	197	25
50 HINOGBONGAN	28	36	6	20	65	69	8	8	105	119	135	153	174	197
51 JUBASAN 2	1 8	139	2	193	227	267	314	356	4	458	520	291	670	761
52. HIRASAN 1	108	139	164	193	700	267	314	355	404	458	520	501	670	761

.

.

Bridge	н 1						Truck	14 14		4				
No. Bridge Name	1986	1990	1992	1994	1996	1398	2000	2002	2004	2006	2008	2010	2012	2014
1 MARILAO	1816	2257	2555	2892	3269	3638	3638	3638	3638	3638	3638	3638	3638	3638
2 LABANGAN 1	1000	1243	1407	1593	1800	2033	2280	2280	2280	2280	2280	2280	2280	2280
3 SULIPAN	1000	1202	1360	1540	1740	1963	2215	2250	2250	2250	2250	2250	2250	2250
4 PLARIDEL	1239	1522	1709	1919	2154	2415	2707	2952	3218	3508	3822	4164	4313	4313
5 TAGAMUSING	1101	1352	1519	1706	1914	2146	2405	2623	2960	3117	3370	3370	3370	3370
6 BUED	560	688	772	868	974	1001	1223	1334	1455	1585	1727	1882	2050	2234
7 LOMBOY	547	675	760	855	962	1081	1215	1327	1449	1582	1726	1883	2054	2241
8 BAUANG 1	789	526	1096	1233	1387	1559	1752	1914	2090	2282	2489	2716	2796	2796
9 BAUANG 2	789	626	1096	1233	1387	1559	1752	1914	2090	2282	2489	2716	2796	2796
10 STA CRUZI	164	196	221	249	279	314	352	384	420	458	500	545	595	649
11 LANGLANGKA 1	174	208	234	264	296	333	373	408	445	486	530	579	831	689
12 STA MARIA	174	208	234	264	296	333	373	408	445	485	530	579	631	689
13 TIPCAL	163	200	225	252	283	317	355	367	422	460	501	546	595	649
14 PLARIDEL-PULILA	875	1088	1231	1393	1575	1779	2008	2290	2610	2803	2803	2803	2803	2803
15 SAN ROQUE	2152	2687	3042	3443	3892	4395	4962	5657	6156	6156	6156	6156	6156	6156
16 SICSICAN	1436	1792	2023	2284	2578	2907	3279	3733	4249	4834	5037	5037	5037	5037
17 INDIANA	566	698	262	899	1018	1150	1300	1450	1617	1803	2009	2239	2495	2780
18 BATU	657	811	920	1044	1182	1335	1509	1683	1877	2093	2332	2599	2896	3227
19 NAMANPARAN 1	456	563	638	725	820	927	1047	1168	1303	1453	1619	1704	2010	2240
20 SAN LUIS	318	432	491	557	630	711	802	895	966	1112	1239	1380	1537	1712
21 NAGUILAN	272	370	420	476	539	608	686	765	853	951	1059	1180	1314	464
22 MALALAN	125	17	2	221	250	282	318	355	395	441	491	547	609	678
23 BALASIG	147	200	227	257	291	329	371	414	461	514	573	538	710	Ę
24 SAN PABLO	162	220	250	284	321	362	409	456	508	566	631	703	783	872
25 PINACANAUAN	217	265	300	340	384	433	488	543	605	674	749	834	928	1032
26 PARED	80	හී	* 1 1	125	141	160	180	200	223	248	276	307	342	381
27 SUJE(RIZAL)	97	118	133	151	170	192	217	236	257	279	303	328	356	387
OP CUNICBATAN	200	C 10		1										

·		App	Appendix 1	1.2	PROJECTED AVERAGE DAILY TRAFFIC VOLUME	SD AVER	AGE DAI	LY TRA	FFIC VO		(Cont'd)): De	.'
	·				(TRUCK)			•	•.					
-							. 4	a at					•	. •
Bridge						1	Truck							
No. Bridge Name	1986	1990	1992	1994	1996	1998	2000	2002	2004	2006	2008	2010	2012	2014
29 SAN FERNANDO	424	515	582	658	744	841	950	1033	1122	1219	1323	1436	1558	1691
30 PAMUKID	424	515	582	658	744	841	950	1033	1122	1219	1323	1436	1558	1691
31 SAN ISIDRO	424	515	582	658	744	841	950	1033	1122	1219	1323	1436	1558	1691
32 SAN GABRIEL	424	515	582	658	744	841	950	1033	1122	1219	1323	1436	1558	1691
33 PAHOHO	424	515	582	658	744	841	950	1033	1122	1219	1323	1436	1558	1691
34 TINIGUIBAN	424	515	582	658	744	841	950	1033	1122	1219	1323	1436	1558	1691
35 SGT.MATIAS	424	515	582	658	744	841	950	1033	1122	1219	1323	1436	1558	1631
36 NAUBOD 1	424	515	582	658	744	841	950	1033	1122	1219	1323	1436	1558	1691
37 SOOK	171	208	235	265	300	339	383	416	453	492	534	579	623	682
38 KANAPAWAN	286	348	393	445	503	568	642	698	759	824	894 208	179	1053	1143
39 BASIAD	286	348	393	445	503	568	642	698	759	824	894	671	1053	1143
40 GUMACA	537	<u>64</u>	727	821	925	1042	1173	1317	1478	1658	1858	2083	2336	2618
41 TALABA	537	644	727	821	925	1042	1173	1317	1478	1656	1858	2083	2336	2618
42 BINAHAAN	461	553	624	705	795	895	1007	1130	1269	1423	1595	1789	2005	2248
43 PALSABANGON	461	553	624	705	262	895	1007	1130	1269	1423	1595	1789	2005	2248
44 LAGNAS 2	608	729	823	929	1048	1180	1328	1491	1673	1877	2104	2359	2644	296
45 STO CRISTO	608	729	823	929	1048	1180	1328	1491	1673	1877	2104	2359	2644	2964
46 MAGAPONG	803	962	1085	1223	1378	1550	1745	1957	2195	2461	2757	3089	3461	3878
47 BIGA	517	620	669	788	887	966	1123	1260	1413	1584	1766	1766	1766	1765
48 SAN CRISTBAL	512	624	306	664	902	1018	1148	1290	1449	1620	1803	1842	1842	1842
49 JIABONG	8	8	2	118	133	150	170	186	205	225	247	272	298	328
50 HINOGBONGAN	4	ß	60	68	4	87	8	108	119	130	143	157	13	130
51 JUBASAN2	128	155	175	198	224	253	286	314	345	379	416	457	502	552
CO RIDACANI	478	1	- -	100	100	023	400	24.6	246		418	257	£	Su u

AP12-9

Bridge No					•	(IOTAL)	(T	'.				 	• •		•
CN N								Total							
ž	Bridge Name	1986	1990	1992	1994	1996	1998	2000	2002	2004	2006	2008	2010	2012	2014
•••	1 MARILAO	13865	18307	21597	25491	30089	35000	35000	35000	35000	35000	35000	35000	35000	35000
2	ELABANGAN 1	11849	15589	18344	21596	25420	29922	35000	35000	35000	35000	35000	35000	35000	35000
(T)	I SULIPAN	11849	14866	17506	20627	24279	28554	33596	35000	35000	35000	35000	35000	35000	35000
4	4 PLARIDEL	6163	8102	9493	11131	13056	15316	17982	20294	22912	25899	29312	33188	35000	35000
ΥΩ.	5 TAGAMUSING	7038	9335	11000	12969	15293	18039	21292	24125	27345	31035	35000	35000	35000	35000
ų.	6 BUED	3447	4565	5371	6328	7453	8783	10355	11725	13279	15059	17099	19424	22074	25096
19•1	7 LOMBOY	2460	3225	3776	4425	5188	6086	7145	8057	9088	10262	11599	13115	14836	16789
Ψ.	8 BAUANG 1	62.72	8228	9639	11297	13246	15538	18236	20558	23182	26165	29557	33401	35000	35000
U,	9 BAUANG 2	6272	8228	9639	11297	13246	15538	18236	20558	23137	26165	29557	33401	35000	35000
Ť	10 STA CRUZI	1713	2154	2522	2955	3459	4050	4742	5340	6015	6782	7654	8640	9756	11019
÷.	11 LANGLANGKA 1	1329	1669	1951	2284	2670	3123	3653	4113	4629	5216	5882	6636	7487	8453
2	12 STA MARIA	1329	1669	1951	2284	2670	3123	3653	4113	4629	5216	5882	6536	7487	8453
1-1 9	13 TIPCAL	854	1114	1299	1517	1770	2065	2412	2711	3049	3432	3869	4365	4925	5559
4- 2	14 PLARIDEL-PULILA	7037	9289	10955	12928	15256	18005	21263	25581	30797	35000	35000	35000	35000	35000
ина mit i	15 SAN ROQUE	8601	11293	13276	15617	18373	21622	25461	30540	35000	35000	35000	35000	35000	35000
£ен 	16 SICSICAN	6091	8144	9590	11305	13339	15752	18617	22405	26993	32578	35000	35000	35000	35000
***	17 INDIANA	1692	2167	2531	2960	3458	4033	4707	5412	6227	7171	8269	9539	11012	12722
	18 BATU	1748	2242	2624	3075	3598	4204	4917	5666	6534	7542	8717	10083	11671	13518
* **	19 NAMANPARAN 1	1589	2039	2389	2798	3274	3827	4474	5154	5941	6853	7916	9048	10578	12240
ň	20 SAN LUIS	1212	1724	2027	2364	2798	3279	3844	4444	5142	5956	6908	8018	9313	10824
'n	21 NAGUILAN	1613	2327	2764	3285	3897	4613	5466	6379	7451	8716	10210	11969	14038	16473
5	22 MALALAN	426	612	724	858	1014	1197	1414	1648	1919	2240	2619	3065	3568	42.03
23	3 BALASIG	625	691	1051	1237	1455	1708	2006	2324	2692	3123	3630	4221	4911	5687
24	4 SAN PABLO	691	986	1163	1371	1613	1893	2226	2580	2990	3472	4037	4698	5470	6371
ส	25 PINACANAUAN	522	664	774	506	1053	1226	1429	1821	1886	2172	2503	2886	3332	3849
х	26 PARED	357	457	538	631	740	868	1017	1174	1356	1569	1816	2104	2440	2831
2	27 SUJE(RIZAL)	775	991	1162	1366	1607	1894	2236	2492	2780	3103	3464	3867	4320	4827
28	B GUINOBATAN	2172	2778	3270	3851	4540	5357	6327	7062	78.84	8809	9653	11000	10395	00001

Г

		÷		-	(TOTAL)	(TOTAL)				-	•		-		
						:	• •		•			1			111
Bridge							T	Total							
No. Bridge Name	Name	1986	1990	1992	1994	1996	1998	2000	2002	2004	2006	2008	2010	2012	2014
29	SAN FERNANDO	2397	3038	3556	4168	4889	5736	6736	7492	8334	9278	10338	11520	12841	14318
30 PAMUKID	Ĵ	2397	3038	3558	4168	4889	5736	6736	7492	8334	9278	10338	11520	12841	14318
31 SAN ISIDRO	SIDRO	2397	3038	3558	4168	4889	5736	9573	7492	8334	9278	10338	11520	12841	14318
32 SAN G	SAN GABRIEL	2397	3038	3556	4163	4869	5736	6736	7492	8334	9278	10336	11520	12841	14318
33 PAHOHO	ç	2397	3038	3558	4168	4889	5736	6736	7492	8334	9278	10338	11520	12841	14316
34 TINIGUIBAN	IIBAN	2397	3038	3558	4168	4889	5736	6735	7492	8334	9278	10338	11520	12841	14318
35 SGT.MATIAS	ATIAS	2397	3038	3558	4168	4889	5736	6736	7492	8334	9278	10338	11520	12841	14318
36 NAUBOD1	50	2397	3038	3558	4168	4889	5736	6736	7492	8334	9278	10338	11520	12841	14318
37 SOOK		771	382	1155	1357	1598	1885	2223	2479	2767	3090	3453	3861	4318	4830
38 KANAPAWAN	NAWAN	1378	1747	2045	2397	2811	3302	3879	4316	4804	5349	5960	6643	7404	8257
39 BASIAD	. 0	1378	1747	2045	2397	2811	3302	3879	4316	4804	5349	5960	6643	7404	8257
40 GUMACA	5	1894	2368	2772	3248	3804	4456	5223	6114	7162	8402	5673	11610	13667	16098
41 TALABA	4	1894	2368	2772	3248	3804	4456	5223	5114	7162	8402	9873	11610	13567	16098
42 BINAHAAN	AAN	1772	2226	2620	3085	3631	4274	5032	5920	6971	8220	9710	11481	13584	16087
43 PALSABANGON	BANGON	1772	2226	2620	3085	3631	4274	S032	5920	6971	8220	9710	11481	13584	16087
44 LAGNAS 2	NS 2	3015	3777	4432	5202	6106	7163	8409	9857	11562	13583	15981	18613	22166	26134
45 STO CRISTO	RISTO	3015	3777	4432	5202	5106	7183	8409	9857	11562	13583	15981	18813	22166	26134
46 MAGAPONG	PONG	3105	3882	4542	5316	6226	7294	8555	10015	11733	13768	16176	19022	22388	26373
47 BIGA		5780	7364	8748	10396	12362	14710	17513	20818	24760	29489	35000	35000	35000	35000
48 SAN CRISTBAL	RISTBAL	5780	7299	8640	10232	12120	14366	17034	20173	23902	28241	33279	35000	35000	35000
49 JIABONG	Ű	383	496	586	695	822	974	1156	1319	1508	1726	1977	2268	2600	2985
50 HINOGBONGAN	BONGAN	266	352	423	200	609	Ŕ	880	1017	1179	1364	1583	1837	2134	2481
51 JUBASAN 2	SAN 2	639	836	365	1186	1414	1688	2017	2318	2666	3070	3540	4086	4719	5455
ED BIRASAN 1	AN 1	639	926	205	1186	1414	16.98	2017	2318	JAKK	3070	0756	4086	4719	5455

APPENDIX 12.2

 $[1,1] \in [n]$

VEHICLE OPERATION COST

Appendix 12.2 VEHICLE OPERATING COSTS

(1) VEHICLE OPERATING COSTS BY COST COMPONENT

a) BASIC RUNNDING COST (Pesos/Vehicle-Km)

				Main	enance		· · · · · · · · · · · · · · · · · · ·
Vehicle Type	Fuel	Lubricant	Tires	Parts	Labour	Depreciation	Total
Car	0.32	0.02	0.06	0.48	0.10	0.69	1.70
Jeepney	0,28	0.02	0.08	0.28	0.08	0.34	1.09
Bus	0.62	0.08	0.13	0.77	0.09	1.05	2.74
Truck	0.88	0.09	0.31	1.06	0.03	0.92	3.40

b) BASIC FIXED COST (Pesos/Vehicle-Hour)

Vehicle Type Depre	ciation	Oppotunity Cost of Capital	Crew Cost	Overhead Taxes and Licences	Total	Basic Fixed Costs
Car	5.32	9.30	1.54	1.40	17.60	6.92
Jeepney	1.20	4.30	9.22	14.32	29.04	26.14
Bus	4.69	17.28	15.30	15.59	52.85	39.20
Truck	8.09	20.24	20.16	14.39	62.88	42.76

c) BASIC COSTS

	Running	Fixed	Time
Vehicle Type	(P/km)	(P/min.)	(P/min.)
Car	1.740	0.105	0.270
Jeepney	1.120	0.396	0.371
Bus	2.820	0.594	1.336
Truck	3.500	0.648	0.000

AP-12-13

Road	Surface	Vehicle	Speed	Delta-L
Туре	Condition	Туре	(km/h)	Values /km
Paved	Very Bad		30.00	0.60
		Jeepney	30.00	0.60
		Bus	30.00	0.90
41. T	1.11	Truck	30.00	0.90
1 - 1 - 1 1	Bad	Car	40.00	0.40
• •		Jeepney	40.00	0.40
	21. C.	Bus	40.00	0.60
·		Truck	40.00	0.60
	Fair	Car	60.00	0.20
	2	Jeepney	60.00	0.20
		Bus	50.00	0.30
		Truck	50.00	0.30
	Good	Car	70.00	0.00
		Jeepney	70.00	0.00
		Bus	60.00	0.00
ų saratinių s		Truck	60.00	0.00
Gravel	Very Bad	1	30.00	0.90
		Jeepney	30.00	0.90
		Bus	30.00	1.30
	· .	Truck	30.00	1.30
	Bad	Car	40.00	0.60
		Jeepney	40.00	0.60
		Bus	30.00	0.90
· .		Truck	30.00	0.90
	Fair	Car	50.00	0.30
		Jeepney	50.00	0.30
		Bus	40.00	0.50
		Truck	40.00	0.50
	Good	Car	60.00	0,15
		Jeepney	60.00	0.15
		Bus	50.00	0.25
		Truck	50.00	0.25

(2) VEHICLE OPERATING SPEED AND DELTA-L VALUES

APPENDIX 12.3

LIST OF ROAD LINK

		1
LINK		14
	je.	,
ROAD		and the second
ЧO		
LIST		
1	·	
12.3		
Appendix	÷	
Den	4	
AT		

- Lacag) 1. Manila North Road (Manila

13,865 11,849 11,849 ADT in 1986 Detouring Length(<u>Km</u>) Main Detoure Detouring Road Route Length 6.25 3.75 <u>, 6</u> 20.00 8.75 17.75 13.75 5.00 5.00 Method Rep1 Rec. Rec. Bridges 8 PLARIDEL TAGANVSING BUED Rehabilitation MARILAO LABANGANI SULIPAN Name No é 12 22 4 Link Length (km) 14.0 41.0 41.0 51.0 51.0 51.0 51.0 152.0 173.0 201.0 173.0 201.0 201.0 238.0 238.0 260.0 Kilometer Post Region нннн нинннни цинн MNN-1 MNN-1 MNN-2 MNN-5 MNN-6 MNN-6 MNN-6 MNN-6 MNN-6 MNN-6 No. Link

Traffic of Heavey Vehicle (%)

(13.1)(8.4)(8.4)

1,000

(20.0) (15.6) (16.2) (22.2) (12.6) (12.6)

1,239 1,101 560 789 789

6,163 3,447 6,272 6,272 6,272

3.75 5.00

000

- 48.75 11.25 25.00 25.00 25.00 None

Rec.

LOMBOY BAVANG I BAVANG II

48 58 77 77 77 77 77 77

ı

1

(9.6) (13.1)

164 174

1,713

- 1

None None

I.

1

174 (13.1)

1,329

None None

27.00

Repl.

TIPCAL

17.0 18.0

Rec.

STA. MARIA

ī

ī í

24.50

Rec.

STA. CRUZI LANGLANGKAI

104 120 148

61.0 74.0 7.5

MN+10 MN-11 MN-12 MN-12 MN-13

16.0 ဝဝ

260.0-321.0 321.0-345.5 321.0-345.5 353.0-359.0 369.0-369.0 396.0-453.0 470.0-453.0

MN-15 MN-15 MN-16 MN-16

55

ı

(19.1)

163

854

١

8

Traffic of Heavey Vehicle (12.4)(25.1)(33.5) (37.6) (28.7) (26.2) (16.9)(29.6)(23.5)(23.4)(41.5)(22.4)(23.6) 875 2 162 566 657 318 318 1,436 272 147 217 217 217 207 80 6,091 1,692 1,748 1,222 1,613 426 625 691 522 357 7,037 8,601 ADT 1n 1986 Detouring Length (Km) Main Detoure Detouring Road Route Length G 7.50 7.50 1 1 **p**. 57.50 12.50 None 32.50 17.50 None None None None None None ı ī 12.50 5.00 10.00 20.00 48.50 20.00 38.75 17.50 26.25 26.25 54.00 1 1 Method Rec. Rep. Repl. Rep. Rep. Rep. Rehabilitation Bridges ł 1 PLARIDEL PULIA SAN ROQUE NAGUILAN MALALAM BALASIG SAN PABLO PINAGANAUAN PARED Я INDIANA BATU NAMANPARAN I SAN LUIS 2. Pan-Philippine Highway (Manila - Allacapan Name SICSICAN No. 0 4 1 0 43 73 86 89 89 Link Length (km) 4 2028 8000 8000 39.0 34.0 54.0 37.0 00 ເດເດ ю 51. 30 0 ဗ္တိ ŝ 35.0-55.0 55.0-85.0 85.0-125.5 125.5-162.0 125.5-162.0 162.0-236.0 268.0-238.0 268.0-268.0 268.0-316.5 316.5-368.0 368.0-388.5 388.5-427.5 427.5-445.0 445.0-479.0 00 Kilometer Post 479.0-533.(533.0-570.(Region ннннн нннннннн ннннннн HHHHH 出日 PN-9 PN-10 PN-11 PN-12 PN-13 PN-14 PN-15 No. Link

Appendix 12.3 LIST OF ROAD LINK (Cont'd)

1	L i N	Link	Reh	Rehabilitation Bri	Bridges	Deto	Detouring Length(Km)	Rth(Km)	ADT	Traffic	ic of
No. Kegion		Lengtn - (km)	No.	Name	Method	Road	Letoure Route	uerouring Length	10 1986	neavey	(%) (%)
PS-1 V	644.0-588.0	56.0	19	SUJE	Rep1.	10.50	30.00	.1	775	26	(12.5)
ŝ	588 0-510 5	77.5	i	1	1	1	1		1		
2	510.5-501.5	ດູຍ ດູຍ	5	GUINOBATAN	Rep.	8	15.00	6 6.50 _	2,172	777	(7-61)
	0.244-0.100	200	1 U			1 10	20 EC	00 1 1 1 1	702. 6	24	(177)
	444.0-400.0	0 1	0.6	PAMUKID	Rep.		00.40		00		
			77	SAN ISIDRO	Rep.	•					
			78	SAN GABRIEL	Repl.			0			
	•		6	PAHORO	Rep.	•) 0 0 1			•
		•	င္ဆန္	ATTAL TOTAL	Kept				•		
			20	AALIAN 195	Kep.						
ų	U 100 V 201		0	TINGOWN		ı) 	- 1 - 1		.1
	00101007007000700070007000700000000000	2 4 2 4 2 4	g	SOOK	Rep.	30.00	50.00	1. 1. 1.	171	171	(22.2)
- 0			2 1			- - - - -	1	1	1	1	•
00	900 0-366 0		143	KANDAWAN	Reb.	25,00	50.00	1	I.378	286	(20.8)
	266.0-214.0	200	- 725 725	BASTAD	Rep.	52.00	None	ı	1.378		(20.8)
	214 0-199.5	14			1			 1	•		
12	199 5-179.0	121	173	GUMACA	Repl.	17.50	50.00	,	1,894		~
VI 81-2	6	•	181	TALABA	Repl.	21.25	47.50	1	1,894	• .	
44	150.5-121.0		188	BINAHAAN	Rep1.	29.50	None	•	1,772		- 7
÷	•		190	PAISABANGON	Repl.	29.50	None	1	T, 77 Z		- 22
S-15 IV	121.0- 81.5	39.5	206	LAGNAS II	Rep.	40.00	50.00	-1	3,015		1.1
		-	208	STD CRISTO	Repl	40°00	50.00	00.01 4	0 10 0 0	809 60	
S-16 IV	81.5- 51.0	30.5	220	MAGAPONG	Керт	20.00	00.45	÷			
- 13			223	PIGA ADIA	Kep.		00.15		0 0 0 0 0 0		
PS-17 IV	51.0- 29.0	22.0	122	SANCKLSTOBAL	xep.	T3. (3	00.61	÷ 1	201.0		۹.1
			1 • •								
• •			•								
							÷		•		
4. Pan-Philipp	ilippine Highway		(Liloan -	- Allen)				· · ·			
	K1	Link		Rehabilitation 1	Bridges	De	touring I	Detouring Length(Km)	ADT	Tra	Traffic of
No. Regi	on Post	Length	-			Main	Detoure	Detourin	2 1 2	Heave	v Vehic
		(Konu)	No	Name	Method		÷.,	Length			(%)
-	Ö		1		ì	1			61 44 1 1	1	1
~	õ	. 11.	dire.		1		1			1	1
FL-S VIII	I 831.0-759.0	0 72.0	109		Rec.				č	383 7	76 (19.8)
-	F i	2.5		5.0	Rep.	1			2		
'n.	i		÷	JUBAGAN II	Repl	. 62.00	0 None			307	10.0c/ a

۰,

APPENDIX 12.4

COST/BENEFIT STREAM

COST/BENEFIT STREAM (1/26)

	O (MNR	Contraction of the local division of the loc			ebiocement	of Superstri					1.199		Unit:1000 P	esos
	Coşt			EVL		TCH			M.Cos	t	Flood	Residual	Total E	enerits
Year F	and the second data was not as a second data was a second data was a second data was a second data was a second	Distd			with		with	w/	0	with	w/o	Value		Dis'd
1990	58	58	Ċ.	2,012	2,012		92,263		30	30	() 0	0	
1991	1,123	.977	:	2,651	2,651		98,190		30	- 30	(0	·0	
1992	0	. Q		3,489	326	104,445	99,222		30	2	. (0 -	8,413	6,36
1993	0	.0	-	4,588	432		105,552		30	2	c	. 0	9,739	6,40
1994	0.	0	• •	6,024	571	118,221	112,310		30	2	() · · · 0	11,391	6,51
1995	· 0:		• •	7,897	756	125,783	119,494	5	30	.2	Ċ	0	13,458	6,69
1996	0			10,327	1,000	133,632	126,950		30	2	C		16,036	6,93
1997	¢) i je 🗘		13,472	1,322	142,012	134,911		30	2	Ċ		19,277	7,24
1999	0	0		17,266	1,723	148,716	141,280		30	2	Ċ	0	23,006	7,52
1999	0	0 (1 S		20,633	2,099	148,716	141,280		30	. 2		0	25,997	7,39
2000	0	i taQ.	-	24,553	2,557	148,716	141,280		30	2	Č	•	29,459	7,28
2001	Q .	. Q		29,076	3,113	148,716	141,280		30	2):):)	33,426	7,18
2002	0	0	÷	34,240	3,787	148,716	141,280		30	2	Ċ		37,916	7,08
2003	0	0		40,066	4,604	148,716	141,280		30	2	ò		42,926	6,97
2004	0	0		46,551	5,590	148,716	141,280		30	:2	- È		48,424	6,84
2005	0	0		53,663	, 6,779	148,716	141,280		30	2	Č		54,347	
2006	Û	1.1		61,334	8,209	148,716	141,280		30	2		· · ·		6,67
2007	0	. 0		69,484	9,922	148,716	141,280		30	2		•	60,588	6,47
2008	0	0	÷	77,920	11,967	148,716	141,280			_	0		67,004	6,22
2009	.0.			85,546	14,396	148,716	141,280		30	2	(73,416	5,93
2010	0			95,172	17,266	148,716	•		30 70	2	(79,612	5,59
2011	0			103,628	20,633	-	141,280		30	2	. (85,369	5;21
2012	.0	-		111.758			141,280		30	2	(-	90,458	4,80
2012	.0			119,429	24,553	148,716	141,280		30	2	Ç		94,667	4,37
		,		•	29,076		141,280		30	2	(97,316	3,93
2014		0	÷	126,540	34,240	148,716	141,280	·	30	2			100,156	3,49
Totol	1,181	1,035		,100,299	209,584	3,453,826	3,290,652		750	106			1,122,901	143,16

B/C Ratio

internel Rote of Return 572.1%

138 32

2.LABANGAN 1 (MNR 14) Reconstruction Unit: 1000 Pesos Cost TCHV EVL Flood Residual M.Cost **Total Benefits** w/o Dis'd. with Year Rehab. with w/o w/o with w/o Velue D1s'd 7,878 1990 3,717 3,717 7,878 18,819 18,819 1,857 1,857 Ô G Ô 0 1991 11,140 9,687 10,099 10,099 20,015 20,015 1,857 1,857 ¢ n Û ¢ 1992 25,997 19,657 12,876 12,876 21,302 21,302 1,857 1,857 0 0 0 .0 25,997 16,315 22,665 1,857 Q 1993 17,093 16,315 22,665 1,857 0 0 Û 7,434 4,250 20,529 20,529 24,118 24,118 1,857 1,857 0 - -0 0.5 0 1994 25,628 24,365 1.657 149 1.585 0 30,199 15,014 1995 0 0 5 25,647 1,716 36,490 27,252 25,890 1,857 15.776 Ó. 31,709 6 149 Ô. 1995 Ô $\sim 10^{-1}$ 43.888 16,499 1997 0 0 38,881 8 28,963 27,515 1,657 149 1,858 ۵ 52,473 ¢ 47,224 11 30,780 29,241 1,857 149 2,012 D 17,154 1998 Ô 32,703 31,068 1,857 149 2,179 0 62,310 17,712 1999 0 0 56,801 14 2,344 72,957 18,034 34,520 32,794 1,857 149 Û, Û. 2.5 0 67.197 18 2000 34,520 32,794 1.857 149 2,344 Û 78,923 16,964 2001 0 0 73,167 22 15.823 149 2,344 Û. 84,659 2002 0 0 78,908 27 34,520 32,794 1,857 2,344 90,069 84,324 34 34,520 32,794 1,857 149 Ô. 14.639 0 0 2003 32,794 1,857 149 2,344 0 95,082 13,438 89,345 41 34,520 2004 Ð. Ð 149 2,344 Ð 99,652 12,247 34,520 32,794 1,857 93,924 502005 0 Û. 103,755 11,088 32,794 1,857 149 2,344 ¢ 34,520 2005 0 0 98.037 61 107,387 9,979 2,344 0 32,794 1.857 149 0 0 101,684 75 34,520 2007 1,857 2,344 32,794 149 Q, 110.564 8,934 0 ¢ 104,877 91 34,520 2008 113,312 7.962 34,520 32,794 1,957 149 2.344 Ô 107,645 111 2009 0 0 115,665 7,067 32,794 1,857 149 2,344 n 34,520 110,022 136 2010 0 Û 32,794 1,857 149 2,344 Ô 117,661 6,251 112,048 34,520 0 166 2011 Q 32,794 1,857 149 2;344 0 119,339 5,514 34.520 **0** 203 2012 ¢ 113,763 1,857 149 2,344 0 120,738 4,851 32,794 34,520 2013 Q., 0 115,207 248 149 2,344 44.571 166,454 5,815 1,857 116,417 302 34,520 32,794 Q Û 2014 44,571 1,821,587 46,425 12,265 44,510 240,760 770,064 736,908 69,326 Total 74,285 54,405 1,734,505

Net Present Value 186,355 8/C Ratio 4.43 Internel Rate of Return 37.1%

. . . .

, vermu

COST/BENEFIT STREAM (2/26)

SULIP	AN (HINR	معمد من التري		econstructio			مستشم	خشيف	MCan		Flood	Resid	*****	Unit : 1000	al Benefits
1 . J. A. A.	Cost	S	EVL.			TCH			M.Cos	and the second second second		Valu		101	Disid
Year	Rehab.	Ols d	w/o	with	: w/o		with		W/0	with	w/o				
1990	6,137	6,137	23,867	23,887		0	1914 -	р0	3,071	3,071	1)	0		
1991	18,424	16,021	30,627	30,627	1.11	0	. · · ·	0	3,071	3,071	•		. 0		0.1
1992	42,997	32,512	39,048	39,048		0		0	3,071	3,071	(0		0
1993	42,997	28,271	49,482	49,482	-	¢		0	3,071	3,071	1 N. 1) 	. 0		0
1994	12,298	7,031	62,271	62,271		0	2 P.	0	3,071	3,071)	, Ó	(1) (1) (2) (2)	0
1995	0	· · o	77,754	-14		. 0		0	3,071	246			0	80,56	
1996	0	·· 0	96,130	18	, ist	0	1.1	0	3,071	246)	0	98,93	ある しん かたいか
1997	0	14 O	117,796	24	1 A. 1	0.	1.1	0	3,071	246	•		. 0	120,59	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
1998	. 0	· · · •	142,971	32		0	1.1.1.4	0	3,071	246	: j ()	- Q	145,76	
1999	0	. 0	171,841	- 42	19 N. N	0		0	3,071	245	-		., 0		
2000	0	o	204,521	56		0	5 - A	0	3,071	246	. () NY S	0	207,29	
2001	. 0 .	0	231,355	- 71	÷.+	0	1.5	· 0	3,071	246	. ()) Ø	_	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
2002	0	0	249,506	. 87	· ·	0	1997 - 19 19	0	3,071	246	· · · · · () tilse	-0	252,24	
2003	0	. 0	266,632	106		0	1.11	0	3,071	246). 1	¢	269,35	
2004	0	0	282,508	130		¢	- 15 C	0	3,071	246	() ()	0	285,20	
2005	0 0	. 0	296,987	158		0		0	3,071	245) - 1	¢	299,65	4 36,82
2006	Ó	. 0	309,994	193		0		0	3,071	246)	0	312,62	6 33,40
2007	0.	0	321,523	236		ò	1. 11.	. 0	3,071	246	`` () , z (* .)	ं०	324,11	3 30,11
2008	0	. ·	331,621	288	2	0		0	3,071	245	· · · · ·)	֯	334,15	6 27,00
2009	· õ	0	340,373	352	. :	Ó Í	- 1. s	.0	3,071	246	· · · () - ¹ - 1	0	342,84	7 24,09
2010	ŏ	s õ	347,890	430		ö	· · ·	Ð.	3,071	246	1 i i i	x to pair	0	350,28	6 21,40
2011	ŏ	Ŏ	354,296	525	1.1	0	2.1	0	3,071	245	1. (s e de la	`` 0	356,59	18,94
2012	ŏ	ŏ	359,720	641		Ö.	- 1 × -	Ó	3,071	246) i i i i	0	361,90	16,72
2012	ŏ	· ŏ	364,285	783		0		• 0	3,071	246) the f	ं०	366,32	8 14,71
2013	Ö.		368,110	956		.0		0	3,071	246	- i (73,	712	443,69	2 15,50
_	122.853	89,972	5,441,128	210,457		- Č		0	76,775	20,275	(73,	712	5,360,89	696,97

224

Net Present Value B/C Retto

Internal Rate of Return

7.75 48.4%

607,005

4.PLAR	idel (MNR	48)	. 1	Repair			· .			Unit: 1000 Pe	
	Cosi		IV3	L	TCH		M.Cos	t 1	Flood Residual	Totol Be	
Year	Rehab.	Disid	W/0	with	w/o	with	w/o	with 👘	w/o Veiue		Disid
1990	1,630	1,830	6,098	6,008	0.	0		915	0 0	0	0
1991	0	0	7,811	7,811	0	0		915	4	0	0
1992	9,146	6,917	10,131	10,131		0	915	915	0 0	0	0
1993	18,296	12,030	13,101	13,101	0	0	915	915	0 0	0	Ó
1994	7,307	4,178	16,884	16,884	Û	0	915	915	0 0	0	0
1995	0	· 0	21,674	1,247	0	0	915	73	0 0	21,268	10,574
1996	. 0	0	27,678	1,640	0	0	-915	73	0 0	26,879	11,621
1997	0	• 0	35,152	2,155	ò	. Q	915	⁵ 73	0 0	33,838	12,721
1998	0	Ó	44,365	2,832	0	0 14 T	915	73	Q × Q.	42,375	13,852
1999	0	· 0	55,614	3,719	0	0	915	73	0 0	52,736	14,991
2000	0	. 0	69,181	4,683	0	O	915	73	0 0	65,140	16,101
2001	· 0	. 0	83,734	6,285	0	0	915	73	0 0	78,290	16,628
2002	0	. Ó	100,437	8,083	0	0	915	73	0 0	93,195	17,419
2003	0	. 0	119,332	10,382	0	0	915	73	0 0	109,791	17,844
2004	. 0	. 0	140,404	13,318	0	0	915	73	Q :. Q	127,927	18,080
2005	Ū.	n D	163,574	17,054	Ð	0	915	73	0 0	147,361	18,110
2005	ŏ	· 0	188.826	21,805	0	0		73	0 0	167,851	17,938
2007	Ő	· Ď	215,911	27,813	. 0	. 0		73	0 0	186,939	17,557
2008	ŏ	ŏ	244,582	35,374		0		73	0 0	210,150	16,981
2009	ŏ	÷ŏ	274,947	44,831	0 ·	0		73	0 0	230,957	16,228
2010	ŏ	ŏ	306,566	56,585	. 0	0		73	0 0	250,823	15,325
2010	ŏ	ő	336,370	70,438	õ	0		73	0 0	266,774	14,174
	ő	- o	348,880	82,948	, n	ò		73	0 0	266,774	12,325
2012		0	340,000	97,062		ŏ		73	ō ō	263,617	10,591
	0	-	369,637	112,772	0	0		73	0 7,316	264,720	9,248
2014		0			0			6,035	0 7,316	2,909,427	298,509
Tota)	20,201	24,955	3,560,433	675,162		V	22,07J	0,000	,,,,,,	2,507,421	

Net Present Value 273,554 8/C Ratio Internal Rate of Return

11.96 54.2%

COST/BENEFIT STREAM (3/26)

	COSt		in viel fand €	VL.	TCI	IV.	M.Cos	•••••• <u>•</u> •	Flood	Residual	Unit: 1000 F	Benefits
Year	Rehob,	- commence	W/0	with	w/o	with 2	w/o		w/o	Value	Total	Disid
1990	764	764	6,07	· · · · · · · · · · · · · · · · · · ·	71,201	71,201	380	380	0		0	(
1991	3,798	3,303	7,76		75,467	75,467	380	380	ů.	Ċ		
1992	7,608	5,753	9,89		79,996	79,996	380	360	. 0			
1993	3,034	: 1,995	12,51	0 12,510	84,736	84,736	380	380	0			
1994	· 0		15,71	9 3	89,844	85,352	380	30	1,121	-		12,39
1995	Q	0	19,59	4 4	95,216	90,455	380	30	1.212			12,88
1996	0		24,21	4 6	100,798	95,758	360	-30	1,311	-	· · · · ·	13,36
1997	0	C 0	29,65	7 7	106,749	101,412	380	30	1,417	·· č		13,81
1998	0	0	35,98	0 10	113,016	107,365	380	- 30	1,533	··	-	14,22
1999	0	· • •	43,22	9 13	119,652	113,669	380	30	1,658	0		14,55
2000	0	0 D	51,43	2 17	126,656	120,323	380	:30	1,794	-	-	14,60
2001	0	. 0	59,42	9 22	132,291	125,677	380	30	1,904			14,60
2002	0	0	68,01	2 29	138,137	131,230	380	30	2,020			14,44
2003	0	. 0	77,14	0 37	144,240	137,033	380	30	2,144	Ċ		14,10
2004	0	e 2 a 🗛	86,75	6 49	150,618	143,087	380	30	-			13,69
2005	0	0	96,81	4 63	157,254	149,391	380	30	2,416			13,19
2006	0	0	107,36	5 82	164,153	155,945	380	30	2,567			12,65
2007	¢.	0 10.0	i 18,31	6 106	171,315	162,749	380	30				12,06
2008	0	<. Q	128,69	8 137	177,477	168,603	380	- 30	2,876			11,36
2009	0	0	132,09	5 167	177,477	168,603	380	30	-	c		10,12
2010	0	0	135,01	2 204	177,477	168,603	380	30	2,876		-	8,97
2011	0	0	137,49	8 249	177,477	168,603	380	30	2,876			7,93
2012	0	0	139,60	3 304	177.477	168,603	380	30	2,876			6,99
2013	•	· 0	- 141,37	5. 371	177,477	168,603	380	- 30	2,876		153,104	6,15
2014	0		142,85	9 453	177,477	168,603	380	30	2,876	9,122		5,71
etal	15,204	11,814	1,827,03		3,363,684	3,211,067	9,500	2,150	46,232			248,13

B/C Retio 21.00 82.1%

Internal Rate of Return

6.BUED (MNR 58) Reconstruction Unit: 1000 Pesos Cost EVL TCHV M.Cost Total Benefits Flood Residual w/o Disd with Year Rehab. with w/o Dis'd w/o with w/o Value 5,998 0 1990 5,998 4.347 4,347 ۵ Û 2,999 2,999 Û 0 0 1991 17,995 15,648 5,559 5,559 0 Û 2,999 2,999 ¢ ¢ 0 Ó 1992 41,989 31,750 7,068 7,068 ¢ ¢ 2,999 2,999 0 Ô 0 0 1993 41,989 27,608 8,937 8,937 Q ¢ 2,999 2,999 0 0 0 0 1994 11,997 6,859 11,219 2,999 0 0 11,219 0 2,999 Q. 0 0 2,999 1995 0 864 17,590 0 13,969 2 Ø Û 240 0 8.745 2,999 934 20,939 9,053 1995 ¢ Û 17,250 3 Ô 0 240 0 1997 0 Q 21,106 4 0 ¢ 2,999 240 1,009 0 24,870 9,349 6 1998 Q Ó 25,587 Q ¢ 2,999 240 1,090 Q 29,430 9,621 2,999 34,646 9,849 Q 30,717 8 0 0 240 1,178 Û 1999 0 0 2,999 240 1,273 0 40,530 10,018 0 2000 ñ 36,508 10 0 9,943 0 13 0 2,999 240 1.351 0 46,259 2001 O, 42,162 Q. 1,432 52,388 9,792 240 ¢ 2002 0 Ô 46,213 - 17 0 0 2,999 0 0 54,643 22 ¢ ¢ 2,999 240 1,519 0 58,900 9.573 2003 Ô 2,999 240 1,611 0 65,75 i 9,292 ò 61,409 28 0 2004 Ó 0 2,999 240 1,709 0 72,914 8,961 36 ¢ 68.483 2005 0 Ô 2,999 1,814 0 80,406 8,593 0 240 75,880 .47 Ô 2005 ¢ 0 8,194 Û 2,999 240 1,926 ¢ 88,182 Û. 2007 ø 0 -83,558 61 96,233 7,776 2.045 2,999 240 0 2008 00 ¢ 91,509 80 0 0 2.172 ¢ 104,571 7,348 Ó 0 99,743 103 ¢ Û 2,999 240 2009 6.917 108,272 134 Q 0 2,999 240 2,307 Ô 113,204 0 2010 0 2,999 240 2,450 0 122,156 6,490 ¢ 2011 0 Û 117,121 174 Q 2,999 240 2,603 0 131,457 6,073 0 ¢ 225 Ô. 2012 0 126,320 2,999 240 2,765 Q 141,146 5,670 Ō. 0 135,914 292 ñ 2013 2,999 2,938 71,981 223,226 7,798 240 Ò. 145,927 379 Ō Ô. 2014 Ó 0 Q 74,975 19,795 34,990 71,981 1,564,798 169,056 Total 119,968 87,663 1,441,421 38,774

81,193 Net Present Value 1.92 B/C Ratio

Internel Rate of Return 22.2%

COST/BENEFIT STREAM (4/26)

	Y (MNR 6 Cost	and the second s	EVL		TCH	V	M.Cos	t Floo	od Residual	Total Ben	erits
reer.	Renab.	Disid.	w/o	with	w/o	with	w/o ::)ts'd
1990	46	45	497	497	0	0	24	24	0 0	1. Sec.	
1991	926	805	650	650	0	0	24	24	0 0	O	्रि
1992	· 0	¢	851	80	14 0	0	24	2	0 0	794	60
1993	: 0	0	1,112	105	ls a 🗘	- 0	24	2	0	1,030 S.	67
1994	0	• •	1,452	138	0		24	2	0.810		76
1995	Ö	0	1,892	181	. 0	0	24	2	0 0 0	1,733	66
1996	0	0.	2,460	238	0	o i esti o	24	2	0 0		97
1997	0	0	3,191	313	0	0	24	2	0 0		1,09
1998	0	0 -	4,126	412	0	\$	24	2	0		1,22
1999	0	0	5,318	541	0	0	24	2	e Qigire O		1,36
2000	0	0	6,826	711	= (; o	0	24	2	Q (2, 5) O	s 6,138	1,51
2001	0	·. 0	8,555	916	o e e	Ŭ.,	24	2	Ó 0		1,64
2002	0	e g 🛛 🗿 e	10,665	1,180	0	0	24	2	0 th 10	- • .	- 1,77
2003	0	° 0'	13,210	1,518	0	. 0	24	2	<u>0</u> 00	11,714	1,90
2004	0	· 0	16,247	1,951	. 0	0 - 1 - 1 - 0	24	2	0 0	14,318	2,02
2005	0	• •	19,833	2,506	0	 - 	24	24 2 11 1	012,327 0	17,350	2,13
2005	0 ¹	0	24,009	3,213	. O	0	24	2	0.1.139-0		2,22
2007	0	0	28,804	4,114	0	• • • • • 0	24	2	Q 2 Q	24,712	2,29
2008	0	· 0·	34,236	5,258	0	0	24	2	0.55.0	29,000	2,34
2009	0.	. 0	40,293	6,703	• • •	- 1,13 0	24	2	0.11.1.1	33,613	2,36
2010	0	٥	46,948	8,517	Q .	1 - 1 - 1 0	24	2	0.000000	38,453	2,54
2011	0	0	54,176	10,787	ng i 0	0	24	2	01, 5, 11, 2, 0	43,412	2,30
2012	0	0	61,927	13,605	e " e 0	0	24	2 2	0.175	48,344	2,23
2013	0	0	70,150	17,079	0	0	24	2	0.00000	53,094	2,13
2014	0	0	78,796	21,321	0	0	24	2	0 324	57,821	2,02
otel		851	536,224	102,534	Û	0	600	94	0 324	434,531	38,81

Net Present Volue 8/C Rotio

Internal Rate of Return

45.62

100.0%

	Cost		EVL		TCHV			M.Cos	t	Flood	Residu	la)	Tote	-	erits
Year	Rehob.	Dis'd	w/o	with	w/o	with		W/0 ·		w/o	Valu	ie .			ls'd
1990	3,625	3,625	12,627	12,627	0		0	1,812	1,812		0 1	0 :::	0		(
1991	10,874	9,456	16,142	16,142	Q		0	1,812	1,812		012 C	0		1.2	- 12 S.C
1992	25,360	19,176	20,517	20,517	0		Û	1,812	1,812	· . !	0. 1	0		215	12.54
1993	25,360	16,675	25,927	25,927	11 A S		٥	1,812	1,812		Q de El	0 ::	0		- 26j (
1994	7,249	4,145	32,521	32,521	Ó		0	1,812	1,812		0	0	0	5.1 A	C I
1995	Ó.	· 0	40,488	7	tjar 5 0	·* .	0	1,812	145		0	0	42,147		20,95
1996	0	0	49,970	10	1 - 1 1 0		0	1,812	145		0	0	51,627		22,32
1997	0	• 0	61,133	13	0		0	1,812	145		0 - 11	0 🖯	62,788		23,60
1998	0	0	74,071	17	0		0	1,812	145		G F 1, 1	0	75,721		24,75
1999	0	0	88,891	22	Ó		0	1,812	145	· . ·	0 5	Ö.	90,536	•	25,73
2000	0	0	105,617	29	0		0	1,612	.145		0.0	0	107,255		26,51
2001	Ο.	• 0	121,873	37	0		Û	1,812	145		0	0	123,502		26,54
2002	0	· 0	139,289	49	0		0	1,812	145		0	0	140,907	1.1	26,33
2003	0	0	157,763	63	Q		0	1,812	145		0	0 :	159,367		25,90
2004	0	0	177,174	81	a 14 🛛 🗘		Ó.	1,812	145		0 a 1 1	0 %	178,760	1	25,26
2005	0	0	197,461	105	0		0	1,812	145		Qui litere	0	199,023		24,45
2006	0	0	218,599	136	: - 0		Ŷ	1,812	145		0 North	0	220,129		23,52
2007	0	0	240,479	177	i O		0	1,812	145		0 - 1	0	241,970		22,48
2008	0	· 0	263,117	229	- · · O	5 T	0	1,812	145		0	Ð	264,555	- '	21,37
2009	0	0	286,521	296	° 0		0	1,812	145		Q '	Q	287,892		20,22
2010	· 0	0	310,725	384	: 0		9	1,812	145	· · · ·	G	0.	312,008		19,06
2011	0	0	330,951	490	0	· .	0	1,812	145		0 .	0	332,128		17,64
2012	-0	0	336,017	599	1912 - Q	÷	0	1,812	145		Q , 2014	0	337,085		15,57
2013	0	· 01	340,282	731	÷ : • 0	1. ÷	0	1,812	145		O thiến	0	341,218		13,70
2014	• 0	. 0	343,855	893	 0		0	1,812	145		0 43,4	181	388,110		13,55
otal	72,468	53,076	3,992,010	112,102	0	·	0	45,300	11,960		0 43,4	181 3	,956,728		139,55

Net Present Volue 386,476 B/C Retio 8.28 Internal Rate of Return 46.48

COST/BENEFIT STREAM (5/26)

	Cost	·	EVI,	· · · · · · · · · · · · · · · · · · ·		TCHY		_	M.Cos	l	Flood	Residual	Total	Benefits
ear.	Rehab.	Disid	W/O	with	<u>\\/o</u>		with		w/o	with -	w/o	Value		D1s'd
1990	2,235	2,235		12,627		0		Û.	1,117	1,117	0	Ċ	0	
1991	11,175	9,717	16,142	16,142		0		0	1,117	1,147	0	¢	i ó	
1992	22,349	16,899	20,517	20,517		. 0		0	1,117	1,117	0	. c	÷ 0	
1993	8,928	5,870	25,927	25,927		0		0	1,117	1,117	0	ć	.0	
1994	Q	· 0	32,521	7		0		0	1,117	89	0	Ċ		19,17
1995	, 0	· 0,		9		0		0	1,117	89	0			20,63
1996	0	0	49,970	12		0		0	1,117	89	0	c		22,04
(997	0	÷ 0.	61,133	15		0		٥	1 117	89	-0	· .		23,36
199B	0	. 0	74,071	20		0		0	1 117	89	0	Ċ	-	24,54
1999	0	0.	88,691	27		Q		0	1 117	69	0	· 0		25,55
2000	0.	0	105,617	35	. •-	0		0	1 1 1 7	69	0	Ċ	-	26.35
2001	0	-e 0 .,	121,873	46		0		0	1,117	89	Ó	Ċ		26,40
2002	0	. Q.	139,289	59		0.		0	1,117	69	0	Ċ	-	26,21
2003	0	0	157,763	77		0		Ô	1,117	89	0	Ċ		25,79
2004	0	. Q	177,174	99		0		0	1,117	89	. 0			25,17
2005	0	. O	197,461	129		0		0	1,117	89	0	0		24,37
2006	0	0	218,599	166		0		0	1 117	89	Ū.	Ċ		23,45
2007	0	0	240,479	216		0		¢	1,117	89	0	Ċ		22,42
2008	ò	0	263,117	279		0		0	1 117	69	0		263,865	21,32
2009	0		286,521	362		0		0	1,117	89	0	c		20,17
2010	0	0	310,725	469		0		0	1,117	89	0			19,02
2011	0	, i O	330,951	599		0		0	1,117	89	0	Ċ		17,60
2012	0	0	336,017	731		0		0	1.117	89	0	. c	-	15,53
2013	0	0	340,282	893		0	• •	0	1,117	89	0		-	13,67
2014	0	0	343,855	1,090		. Q		0	1,117	89	0	25,812		12,94
otel	44,687	34,722	3,992,010	80,553		0		0	27,925	6,337	0	26,812		455,79

Net Present Value B/C Rotio

13.13

U.51 A	CRUZ 1 (I			econstructio								Jnit: 1000 P	
110	Cost	2 · · · · · · · · · · · · · · · · · · ·	EVL	1. F. 1. 1. 1.		TCHV		M.Cos			Residual	Total E	Benefits
Year	Rehab.	Disid	.w/o	with	w/o		with	W/0	with .	w/o	Volue		Disd
1990	938	938	3,649	3,649		0	0	467	467	0	0	Ò.	Ċ
1991	4,667	4,058	4,682	4,662		0	Ó	467	467	0	0	. 0.	. 0
1992	9,345	7,066	5,926	5,926		0	0	467	467	0	· · 0	0	. 4
1993	3,729	2,452	7,482	7,482		0	Q	467	467	, Ó	O	0	🤇
1994	0	. 0	9,395	2		0	0	467	37	670	¢	10,492	5,999
1995	0	0	11,688	- 3		0	0	467	37	723	0	12,838	6,383
1996	. O	0	14,410	3		Ŷ	Ô	467	37	780	0	15,617	6,75
1997	0	0	17,609	4	· •	0	0	467	37	842	0	18,876	7,096
1998	.0	0	21,325	. 6		0	0	467	37	909	0	22,658	7,40
1999	0	. 0	25,548	8		¢	¢	467	37	980	0	26,950	7,66
2000	0	٥.	30,332	10		0	Q	467	37	1,058	0	31,810	7,86
2001	ő	0	34,980	13	-	Û	0	467	37	1,121	· · 0	36,517	7,84
2002	Q	Ó	39,952	17		0	0	467	37	1,187	0	41,551	7,76
2003	0	0	45,240	22		0	.0	467	37	1,257	0	46,905	7,62
2004	Ó.	0	50,764	28		0	0	467	37	1,332	. 0	52,497	7,41
2005	, Ó	0	56,560	37		0	0	467	37	1,411	0	58,364	7,17
2006	, O	0	62,556	48		0	0	467	37	1,496	. Q	64,434	6,88
2007	. 0	Ó	66,789	62		0	0	467	37	1,586	0	70,742	6,57
2008	0	0	75.216	80		0	0	457	37	1,681	. 0	77,246	6,24
2009	0	0	81,860	103		0	Ó.	467	37	1,782	0	83,969	5,90
2010	o o	0	88,712	134		0	0	467	37	1,890	0	90,897	5,55
2011	0	0	95,820	173		0	0	467	37	2,004	• 0	98,081	5,21
2012	o o	0	103,154	224		0	0	467	- 37	2,125	• - 0	105,485	4,87
2013	. 0	0	110,780	291		0	. 0	467	37	2,254	. 0	113,173	4,54
2014	. õ	0	118,745	376		0	0	467	37	2,391	11,207	132,396	4,62
otal	18,679			23,363	···,	0	0	11,675	2,645	29,479	11,207	1,211,498	137,40

Net Present Value 122,888 B/C Retio 9.47 Internal Rate of Return 50.0%

.

internal Rote of Return 61.0%

COST/BENEFIT STREAM (6/26)

	Cost		EVI			TCH	<u>۲</u>	11	M.Cos	i i	Flood Re	sidual	Total Be	
Year		Disid	. w/o	with	w/o		with		w/o			Value		Dis'd
1990	127	127	197	197		0		Q	65	65	0	0	0	¢
1991	· 0	0	259	259		0		Ŷ	65	65	0	0	0	Ó
1992	0	Q -	340	340	1.1	Q	1.1	Q	65	65	0	0.	0	C
1993	· 0	0	1,183	1,183		0		0	65	65	υ	0	0	C
1994	2,478	1,417	1,545	1,545		0		0	65	65	Û	0	0	¢
1995	0	· 0	2,013	106		0	· ·	0	65	- 5	Q		1,967	978
1996	Ö	0	2,616	139		0		0	65	5	0	0	2,536	1,096
1997	0	• • • • •	3,393	183		0		0	65	5	0	. O	3,269	1,229
1998	0	0	4,385	241		Û		0	65	5	0	· Q.	4,204	1,374
1999	Q	0	5,649	317		0	· .	0	65	5	0	0	5,391	1,537
2000	0	0	7,244	417		¢		0	65	5	0	0	6,887	1,70
2001	0	0	9,078	538		0		٥	65	5	0	0	8,600	1,849
2002	. 0	0	11,317	694	1 · ·	0	÷.	0	65	5	0	0	10,683	1.997
2003	Q.	0	14,012	894		0		0	65	5	0	0	13,178	2,14
2004	. 0	0	17,231	1,152		0		0	65	5	0	0	16,138	2,28
2005	· 0	0	21,022	1,487	1.1	¢		0	65	5	0	0	19,598	2,40
2006	0	0	25,446	1,910	1	0		Ò.	65	5	0	0	23,596	2,52:
2007	Q	· ò ·	30,518	2,456		Û.		0	65	5	0	0	28,122	2,61
2008	· 0	0	36,256	3,154		0		ø	65	5	0	0	33,162	2,68
2009	0	0	42,656	4,046		0		Û	65	5	¢	0	38,670	2.71
2010	Û	• 0	49,690	5,181		0		0	65	5	Ó	0	44,570	2,72
2011	ò	.Q.	57,307	6,618		0		0	65	5	0	0	50,749	2,696
2012	0	0	65,466	8,433	÷ .	0	2	¢	65	5	0	0	57,092	2,636
2013	Ó	0	74,131	10,717		0	19	¢	65	5	0	0	63,474	2,550
2014	0	0	83,232	13,571		0		0	65	5	0	868	70,588	2,461
otel	2,605	1,544	566,186	65,778		¢		0	1,625	425	0	868	502,474	42,19
· .								• .			, · ·			1.1.1 1.1.1
et Pre	sent Val	ue .	40,650											

5

B/C Ratio Internal Rate of Return

79.5%

Unit 1000 Pesos 12.STA MARIA (MNR 120) Reconstruction Total Benefits Flood Residual TCHV M.Cost £ΥL Cost Dis'd w/o w/o Value w/0 with with Dis'd w7o with Yeer Rehab. 839 839 Ó Ó 3.420 0 0 Ũ 3,420 0 1990 1,679 1,679 839 839 Q Ò 0 0 0 4,365 4,365 Ô 1991 8,396 7,301 10 0 0 0 Û 839 839 1992 16,791 12,696 5,541 5 541 Q 0 160 0 ò. 6,991 6,991 Ð 0 939 839 Ð Ô 1993 4,409 6,705 5 807 10.157 8,762 2 Û 0 839 67 625 0 Q 1994 0 6 13 | 0 674 0 12,332 10,888 2 Û 839 67 1995 0 0 13,405 3 Ó 839 67 726 0 14,900 6 442 Ò 0 1996 Û 17,922 6,737 782 0 67 Ô 839 1997 0 0 16,371 4 Ô. 21,400 6.996 0 1998 0 0 19,790 5 Ô. Q 839 67 843 0 25,367 7,211 0 7 Q 0 839 67 909 1939 0 23,693 Ô 639 67 979 0 29,820 7.371 Q 28,078 9 ð 2000 0 Q 0 839 67 1,036 0 34,150 7 340 Q 32,353 12 2001 Û 38,792 7 25 1 1,097 Q 839 67 0 2002 Q Q 36,939 16 Ô 43,680 7,099 ¢ 2003 0 Q 41,767 20 0 0 839 57 1,161 ¢ 48,812 6 899 ¢ 46,837 26 0 Q 839 67 1,229 ¢. 2004 6 655 52,112 34 ¢ 67 1,300 0 54,150 0 Ó 839 2005 0 ¢ 1,377 ¢ 59,712 6 38 1 0 44 ¢ 839 67 57,607 2005 0 65 444 6.081 1.458 ¢ 57 Ø 639 67 2007 Û Q 63,270 0 71,359 5,766 0 2008 0 Q 69,115 73 0 0 839 67 1,545 5,442 0 95 0 0 839 67 1,636 0 77,455 2009 0 75,142 1,733 0 83,741 5,117 81,358 123 0 0 839 67 2010 ¢ 0 4 793 Q 839 67 1,836 ¢ 90,208 0 87,759 159 Ô 2011 Q 4,477 96.895 839 67 1945 ŏ 2012 0 Q 94,384 205 ¢ Ø 4 172 2,059 ø 103,848 2013 ø ¢ 101,281 266 0 ٥ 839 67 344 ¢ ¢ 839 67 2,183 20,143 131,205 4 584 Q 108,451 2014 ő 20,975 20,143 1,131,350 128,751 26,085 21,823 0 ¢ 4,763 27,134 Total 33,571 1,089,679

Net Present Volue 102,666 B/C Rotio 4.94 Internal Rate of Return 37.2%

COST/BENEFIT STRBAM (7/26)

- 1 (Pr	Cost		EVI.	eplocement	TCI		M Da					nli:1000 P	and the second se
Year	Renob.	Disd		with	W/o	with [.]	M.Co: w/o		Flood			Total E	enefits
1990	174	174	140	140	6,395	6,395		with	W/0		/alue		Disid
1991	0	0	183	183	6,779		88	88	c		0	٥.	1
1992	0	0	241	241	7 194	6,779 7,194	88	88	C		0	¢	
1993	.0	0 0	316	316	7,610	7,194	- 88	88	¢		0	0	
1994	3,335	1,907	414	414	8,058	8,058	88	88	C		0	0	
1995	0	0	542	75	8,537	-	88	88	¢		0	0	
1996	-0		709	98	9,049	8,110	88	7	. 0		۰.	975	48
1997	0	O .	926	129	9,049	8,596	68	7	¢		<u>o</u>	1,144	49
1998	0			169		9,082	88	7	Ċ		0	t,356	51
1999	0	0	3,963	222	10,136 10,711	9,629	88	7.	¢		0	3,497	1,14
2000	Ō	• •	5,076	292		10,176	88	7	C		· `0	4,356	1,23
2001	0.0		6,356	377	11,351	10,783	86	. 7	C		Û.	5,432	1,34
2002	:0.		7,913	485	11,862	11,269	88	7	C		0	6,653	1,43
2003	, o		9,791		12,374	11,755	88	7	c		0 ·	8,127	1,51
2004		Š.	12,030	625	12,918	12,272	- 88	7	Ċ		0	9,893	1,60
2005	: U : 0;	-		805	13,493	12,819	88	7	· C). '	0	11,981	1,69
2005	. · · · · · · · · · · · · · · · · · · ·		5	1,035	14,101	13,396	88	7	· C) - (• 0	14,414	1,77
2007			1.1.1.1.1.1	1,331	14,708	13,973	- 88	7)	0	17,222	1,84
· · · · ·	0			1,711	15,348	14,580	88	7	•)	0	20,402	1,89
2008	• • • •		25,245	2,196	16,019	15,218	68	7	· · · ·)	0	23,930	1,93
2009	0.		29,686	2,816	16,723	15,886	88	7	0)	0	27,787	1,95
2010	0		34,571	3,604	17,458	16,585	88	• 7	C)	0	31,920	1,95
2011	0	0 ·	39,853	4,602	18,225	17,314	88	7	· · C) -	0	36,243	1,92
2012		0	45,511	5,863	19.025	18,074	88	7	C) 🗇	0	40,681	1,87
2013	0		51,514	7,447	19,888	18,894	88	7	Ċ)	0	45,142	1,81
2014	0	0		9,425	20,751	19,714	88	7	C	<u> </u>	1,170	50,666	1,77
otal	3,509	2,081	389,528	44,601	318,273	304,161	2,200	580	C)	1,170	361,821	30,19
let Pr	esent Va	lue	28,115							2			
B/C Re		51 F - 5	14.51										

Internal Rate of Return 50.0%

14.PLARIDEL-PULILAN (PPH North 3) Repair Unit: 1000 Pesos Cost TCHV Flood Residual S. S. EVL M.Cost Total Benefits w/o Year Rehab. Diso with w/o with ₩/0 with w/o Value Dis'd 1990 1,413 1,413 3,775 3,775 32,945 32,945 706 706 Û Ò õ 0 1991 7,064 6,143 4,930 4,930 35,034 35,034 706 706 0 Û Q Q 14,116 10,674 6,425 1992 6,425 37,275 37,275 706 706 ¢ Ó 0 0 1993 3,708 8,348 8,348 39,667 0 5,639 39.667 706 ò. 706 0 0 1994 10,810 740 40.072 12.829 Û · · · • 42.181 706 56 0 7.335 Ō 7,684 1995 0 Û 13,942 978 44,906 42,661 706 56 Û 0 15,858 1996 Û Û 17,864 1,291 47,692 45<u>,</u>307 706 56 ò 0 19,627 8,485 1997 0 Q 22,818 1,704 50,689 48,155 706 56 0١ 0 24,298 9,134 1998 Ó. Ø 28,931 2,248 53,869 51,175 706 56 0 0 30,026 9,815 0 36,977 0 36,430 2,964 57,230 54,368 706 56 0 10,511 1999 Ο. 60,803 57,763 Û 45,306 3.905 706 56 Û 11,199 2000 0 Û 45.522 61,675 706 0 55,597 11,950 2001 0. Û 56,887 5,185 64,921 56 Û Ó 2002 Ô, 70,462 6,877 69,342 65,875 706 56 0 67,702 12,654 0 9,108 74,036 70,334 706 56 0 0 81,695 13,278 2003 0 ¢ 86,452 Ô 97,612 75,080 706 56 Û 13,795 Ó 105,055 12.044 79.032 2004 0 0 80,172 ¢ 115,389 14,181 706 56 2005 Ø Q 126,417 15,896 84,391 13,598 80.632 706 Sb ΰ 127.245 2005 0 ¢ 142,092 19,740 84,876 Û 0 134 458 12,495 153,240 23,675 84,876 80,632 706 56 A 2007 ¢ Q 28,292 64,876 80,632 706 56 Ô 0 140,360 11,342 Û 163,758 2008 0 173,509 33,667 84,876 80,632 706 56 0 0 144,735 10,170 2009 0 0 64,876 60,632 706 56 ¢ 0 147,426 9,008 182.401 39,869 0 2010 Ô, 84,876 80,632 0 148,333 7,881 706 56 Ô 2011 0 Ô 190,390 46,950 Ô 147,426 6,811 54,938 84,876 80,632 706 56 Ô 2012 0 0 197,471 56 0 144,735 5,815 80,632 706 0 ¢ 203,672 63,830 84,876 2013 0 56 146,006 80,632 706 5,645 5,101 Q. 209,048 73,581 84,876 0 2014 0 470,960 1,637,897 1,563,246 17,650 4,000 0 5,646 1,883,640 212,442 Total 28,232 21,937 2,260,669

Net Present Value 190,505 9.68 8/C Ratio Internal Rate of Return 48.9%

COST/BENEFIT STREAM (8/26)

1.0	Cost		EVL		- 65 - 54	TCH	V ·		M.Cos			Restaual	÷.		Benefits
iear -	Rehab.	Dis'd	W/0	with	w/o		with		w/o	with 🔅	w/o	Value	<i></i>	and the second second second	Dis'd
1990	35	35	3,090	2,080	••••	Q	1 N -	0	d - 1 8 -	18	0		a de la	Ó	1
1991	695	604	4,055	4,055	٠.	0	· · ·	0	18	18	0	-	Ч÷,	0	144 (
1992	0	¢	5,317	1,344		0	5 K.	0	18	6 M 1	0			3,990	3,01
1993	0	Ô	6,964	1,770	1.2	0	1997 - C	0	18	11	0		14 -	5,211	3,42
1994	Q	0	9,109	2,330	·.	Ò.	(22,2,2)	Q	18	5 1 1	0			6,796	3,88
1995	Q .	0	11,895	3,066		0	(1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,	0	18	- I	.Q.) () (j	8,846	4,39
1996	¢	0	15,492	4,030	i.	0.	1. S. C.	0	18	- E I -	· 0			11,479	4,96
1997	:0	.0	20,130	5,296	, · · ·	0	1.11.91	0	s Act 18	- 19 1	0) (j.	14,851	5,58
1998	0	• 0	26,081	6,954	· · ·	0		0	. 18	1	-0	90 ° 0) []	19,144	6,25
1999	0	. 0.	33,675	9,124	÷ .	Ó	÷ 1	0	18	10 (BAN)	-0	0	9 A 1	24,568	6,98
2000	0	. 0	43,303	11,956	1.1	• 0	1.1	0	18	1.1	0	1. O	ţ.	31,363	7 75
2001	0	0	55,872	15,774	1. T	0	- - 252	Ø	18		- O	0	¥€_(40,115	8,62
2002	Ŭ.	0.	• .	20,781	2	0	- <u>-</u> -	0	18	· • 1	0	े ।) (C	50,948	9,52
2003	õ	Ď	91,474	27,322		0	. •	¢	18	11 . I	0	0	121	64,169	10,42
2004	ŏ	ŏ	110,629	34,213		0		¢	1.18	11 A.L	0	÷ (ц÷É –	76,433	10,80
2005	.o	. 0	127,529	41,032		0	(x_{A},y_{a},y_{a})	Ô	- 18	1	¢.	200 (• <u></u>	86,514	10,63
2006	, õ	0.		49.034		0		0	18	- 1	o o	0	не.,	95,742	10,33
2007	0.	- o	165.080	58,351		ò	5. S. S.	Ò	18	1.1	÷0	C C	¥⊕.'	105,746	9,91
2008	: 0:	ů.		69,099		0		0	18	. 1	0	0) .	116,093	9,38
2000	ŏ	ů.	205,675	81,372		0	11	Ó.	18		0	a. 161 - Q) [–] "	124,320	
2010	ŏ	. õ	226,175	95,217	e de la	-0	أيو المراجب	Ó	18	. 415	Ó	0)	130,974	6,00
2010	0	. 0		110,629		ō.	n an	ò	18	1	0	5 - C)	135,658	7,20
2012	- 0	0	265,591	127,529		ō		ō	18	1	0	a da 🛛 🖞)	138,079	6,37
	0	0.2		145,759		Ď		õ	18		0		цă.	138,079	5,54
2013		0	300,721	165,080	· · · ·	ŏ		õ	18	191		9.146		135,604	4,74
2014 otaì	730	639		1.094,207		ŏ		. o	450	59				566,922	166,53

25 m - 10

Net Present Volue B/C Retto

Internal Rate of Return

260.52

475.6%

Unit: 1000 Pesos 16.SICSICAN (PPH North 43) Repair Flood Residual Total Benefits M.Cost Cost EAL TCHY Dis'd with with w/0 Value Disid w/o with w/o w/o. Үеаг Rehab. 0 6,148 6,148 123,022 123,022 100 100 ٥ 0 0 197 197 1990 0 oʻ`o 130,711 130,711 :100 100 0 💮 Ô. 3,798 3.303 8,010 8,010 1991 138,881 131,937 100 : - 8 0 0 16,424 12,419 10,410 1.022 1992 0 0 <u>9</u>8. 19,619 12,900 Ó Û 147,599 140,219 100 1993 0 0 13.493 1,346 0 ¢ 23,587 13,486 0 Û 17,429 1,773 156,799 148,959 100 1994 **o** e 😳 14.174 22,421 2,335 166,616 158,285 100 8 ø 28,508 1995 0 0)**o** ad a . 34,578 14,949 3,074 176,982 168,133 100 8 0 1996 0 0 28,711 4,044 187,966 178,568 100 8 0 Q 42,009 15,793 36.564 0 Ø 1997 ્રા 51,035 16,683 189,590 8 Ø. 0 199,568 100 5,318 1998 Ô Ô 46.282 ¢ 61,889 17,593 211,994 в 1999 ¢ 0 58,184 6,987 201.394 100 Ó 0 Ó 74,755 18.478 0 0 72,576 9,169 225,106 213,851 100 8 2000 90,487 19,450 90,497 240,209 228,199 100 - 8 Q Ø 0 Q 12,112 2001 Ô 111,835 15,975 256,274 243,450 100 8 Q. 0 108,766 20,329 2002 Ô 129,653 21,072 273,368 259,699 8 0 0 100 2003 Û 0 136,921 21,029 Q 21,639 291,697 8 153,108 2004 0 0 166,053 27,622 277,113 -100 0.... ۵ 178.882 21,984 Ģ 199,407 36,176 311,194 295,635 100 8 0 2005 Ô 22,095 47,254 331,858 315,265 100 8 6 € 1-0 206,760 0 0 237,329 2005 328,505 100 8 ø Q 230,747 21,442 0 0 273,440 60,975 345,794 2007 328,505 8 Ó Q 238,449 19,268 345,794 100 292,209 71,141 2008 Q Ô 328,505 100 8 Û, Ó 243,214 17,089 345,794 2009 0 ¢ 309,609 83,777 ð 244,826 14,959 2010 ¢ 0 325,476 98,031 345,794 328,505 100 8 0 12,922 339,731 113,899 345,794 328,505 100 8 0 Ġ 243,214 ¢ 0 2011 345,794 328,505 100 8 $\pmb{\varphi} \in$ 0 238,449 11,017 0 0 352,366 131,298 2012 345,794 328,505 100 8 0 ¢ 230,747 9,270 363.432 150.067 2013 Û n 7,729 328,505 100 8 221,246 169,959 345,794 799 2014 0 ¢ 373,024 0 3,995 3,500 3,891,557 1,087,641 6,336,196 6,032,080 2,500 384 0 799 3,110,952 376,740 Total

 Net Present Value
 373,240

 B/C Ratio
 107.64

 Internet Rate of Return
 367.7\$

COST/BENEFIT STREAM (9/26)

	Cost		EVL		TCH	/	M.Cos	ι.	Flood	Residual	Total (enefits
leer	Reheb.	Disid	W/0	with	W/0	with	w/o	with		Value		Disid
1990	0	0	3,187	3,187	15,754	15,754	657	657	Q	0	0	مند <u>ند تم</u>
1991	1,320	1,148	4,063	4,063	16,792	16,792	657	657	¢.	0	0	
1992	6,577	4,973	5,155	5,155	17,876	17,876	657	657	0	0	0	· · · ·
1993	13,143	8,542	6,499	6,499	19,049	19,049	657	657	0	¢.	o	
1994	5,246	2,999	8,139	8,139	20,291	20,291	657	657	jo.	· • •	Ó	· · · · ·
1995	0	0	10,111	2	21,622	20,541	657	53	625	Ó	12,421	6,175
1996	0	0	12,435	2	22,976	21,828	657	53	673	Ó	14,859	5,42
1997	0	0	15,151	3	24,421	23,200	657	53	724	Ó	17.698	6,65
1998	Ó	0 ·	18,286	4	25,956	24,658	657	53	779	ò	20,964	6,85.
1999	0	· 0 ·	21,858	5	27,603	26,223	657	. 53	838	0	24,676	7,01
2000	0	0	25,878	7	29,341	27,874	657	53	903	0	28,845	7,13
2001	0	0 - 0 -	30,115	. 9	30,989	29,439	657	53	965	0	33,225	7,14
2002	Ō	0	34,700	. 12	32,727	31,090	657	53	1,031	0	37,960	7,09
2003	0	0	39,632	16	34,555	32,827	657	53	1,102	0	43,050	6,99
2004	0	· 0	44,892	21	36,496	34,671	657	53	1,178	. 0	48,479	6,85
2005	0	0	50,459	27	38,550	36,622	657	53	1,259	· 0	54,223	6,66
2005	0	Ó ín	56,323	35	40,694	38,659	657	53	1,347	0	60,274	6,44
2007	0	0	62,503	46	42,974	40,825	657	53	1,441	0	66,652	6,19
2008	0	0	68,962	60	45,343	43,076	657	53	1,541	Ó	•	5 92
2009	ŏ	0	75,738	78	47,871	45,478	657	53	1,649	0	80,307	5,64
2010	0	- O 1	82,840	102	50,535	48,008	657	53	1,765	0	87,633	5,35
2011	Ó	Ċ.	90,305	134	53,356	50,688	657	53	1,889	· 0	95,333	5,06
2012	0	° O	98,135	175	56,312	53,497	657	.53	2,022	. 0	103,402	4,77
2013	0	0	106,421	229	59,450	56,477	657	53	2,165		111,934	4 49
2014	Ò	0	115,150	299	62,745	59,606	657	53	2,318	15,772	136,682	4,77
otal	25,286	17,762	1,086,937	28,309	874,278	835,051	16,425	4,345	26,214	15,772	1,151,932	123,66

Net: Present Value B/C Ratio

internal Rate of Return

18.BATU (PPH North 73) Repair Unit: 1000 Pesos TCHV Cost EVL M.Cost Flood Residual Totol Benefits Year Rehab. Dis'd w/o with w/o with w/o with w/o Value Ois'd 1990 0 0 1,731 1,731 30,507 30,507 786 786 0 0 0 0 1,575 1,370 0 1991. 2,248 2,248 32,463 32,463 786 786 0 0 0 1992 7,863 5,946 2.914 2.914 34,608 34,608 786 786 Ô Ô 0 0 36,865 0 1993 15.714 10,332 3,768 36,865 786 786 0 0 0 3,768 39,272 39,272 786 ò Ð · 0 1994 6,276 3,588 4,852 4,852 786 Ô 4734 1995 0 0 6,223 358 41,830 39,738 786 63 841 Ô 9,521 1996 Ò 7,931 470 44,463 42,240 786 63 905 ¢ 11,312 4,891 0 47,247 44,884 786 63 974 0 13,489 5,071 1997 0 ò 10,046 616 47,708 1,048 5,272 50,219 786 63 0 16,128 199B Ô Ô 12.653 808 53,378 50,709 786 1,129 0 19,290 5,483 15,828 1,059 63 1999 0 Ò 23,037 5,695 56.764 53.926 786 63 1,215 Ò 2000 0 Û. 19,648 1,387 27,219 5.851 2001 Û 0 24,003 1,802 59,924 56,928 786 63 1,299 û 5.982 2,339 63,309 60,144 786 63 1,389 Ô 32,005 2002 ĵ٥ 0 29,067 66,883 63,539 786 63 1,485 Ô 37,385 6,076 0 34,866 3,033 2003 0 67,077 786 63 1,588 0 43,325 6,123 41,412 3.928 70,607 Ö ò 2004 74,594 70,865 786 63 1,699 Q 49,780 6,118 2005 0 0 48,707 5.078 1,818 0 56,675 6,057 78,732 74,796 786 2006 ø 0 56,752 6,554 63 5,938 63 1.946 0 63,900 8,439 83,133 78,977 786 2007 Q 0 65,514 2,083 71,286 5.760 Û 10,832 87,723 83,336 786 63 74,926 2008 0 ٥ 5,531 13,859 92,613 87,982 786 63 2,230 0 78,721 Ô 84,996 2009 0 97,766 92,878 786 63 2,388 0 86,029 5,256 17,662 2010 ٥ 0 95,692 2,558 0 93,025 4,942 98,060 786 63 103,221 2011 Ò Q 106,987 22,404 4,597 786 63 2,740 ¢ 99,507 0 118,856 28,259 108,939 103,492 Q 2012 2,935 786 63 Ó 105,329 4,232 131,352 35,431 114,995 109,245 0 2013 0 116,579 4.073 44,111 121,390 115,320 786 63 3,146 6.286 144,466 2014 0 0 107,681 1,691,445 1,615,559 19,650 5,190 35,416 6,286 1,053,542 223,942 31,428 21,236 1,145,438 Total

86,445 Net Present Volue 5.07 B/C Ratio Internal Rate of Return 37.2%

AP 12-27

,

^{6.96} 45.9%

COST/BENEFIT STREAM (10/26)

	Cost		EVL	d a l'Alle	TCI	IV	M.Cos	t		Resid		Total Ba	
Year	Rehab.	Disd	w/o	with	w/o	with	W/0	with	w/o	Val			DIS'd
1990	0	0	602	602	51,357	51,357	122	122	0	, Y	0	୍ତ	
1991	243	211	768	768	54,641	54,641	122	122	Ó	·	Q	Q	
1992	4,644	3,512	1,033	1,033	58,199	58,199	122	122	, Q	4	0	0	
1993	0	0	1,351	104	62,030	58,929	122	10	0	. ÷ .	• • ₂₂₂	4,461	2,93
1994	0	ο.	1,765	137	66,135	52,828	122	- 10,	0	12	Q.,	5,047	2,881
1995	Ó	. 0	2,302	181	70,423	66,901	122	10	0		0	5,755	2,86
1996	0	. 0	2,989	237	74,801	71,061	122	i 10	0	i st	0	6,604	2,85
1997	Ö	O.	3,873	312	79,545	75,567	122	10	0	N.	0	7,651	2,87
1998	Û,	. 0	5,005	410	84,562	80,334	122	10	0		Q 22	8,935	2,92
1999	Ó	0.	6,443	538	89,853	85,360	122	: 10	0		0	10,510	2,98
2000	0	. 0.	8,259	706	95,508	90,733	122	10	0	1.81	0 ·	12,441	3,07
2001	0	0 0	10.452	920	100,890	95,846	122	10	÷Q:	- c.	Q 🕤	14,699	3,15
2002		0	13,180	1,198	106,546	101,219	122	10	0	-	0	17,421	3,25
2003	- o	0	16,502	1 560	112,567	106,938	122	10	0	· .	0	20,682	3,36
2004	Ó	. 0	20,517	2,029	119,861	112,918	122	10	<u>o</u>	5.83	0 :	24,544	3,46
2005	0	. 0	25,306	2,636	125,520	119,244	122	10	,0		0	29,058	3,57
2006	0	0	30,969	3,423	132,544	125,917	122	10	.0		0	34,285	3,66
2007	0.	Ó	37,562	4,439	139,933	132,936	122	10	.0	4.1	0.,	40,232	3,73
2008	0	ò	45,121	5,746	147.687	140,302	122	. 10	0	· .	Ó	46,872	3,78
2009	Ō.	ò	53,678	7,422	155,897	148,102	122	10	0	9.95	0	54,163	3,80
2010	0	i o	63,230	9,565	164,563	156,335	122	10	0	4.4.4	0	52,006	3,78
2011	0	ŏ	73,761	12,290	173,685	165,001	122	-10	0	er er	0	70,268	3,73
2012	0	. 0	65.245	15,738	183,354	174,186	122	10	0		0	78,787	3,64
2013	ŏ	. <u>0</u>	97,628	20,071	193,571	163,692	122	10	0		0	87,348	3,50
2014	ŏ	- ŏ	110,884	25,479	204,335	194,118	122	10	0	1.	629	97,364	3,40
	4,887	3,723	718,455	117 564	2,847,007	2,712,864	3,050	586	0	1,	629	739,133	73,28

Net Present Value B/C Ratio

Internal Rate of Return

69.557

19.68

100.0%

20.SAN LUIS (PPH North 89) Unit: 1000 Pesos Repair M.Cost Flood Residual Total Benefits TCHV EVL Cost Value Dis'd w/0 w/o with w/0 w/o with Yeer Rehob. Dis'd with Ò 8 0 Q Ó 1990 0 Û 199 199 0 Ô 8 . **O**. 0 ¢ Û. 8 -8 12 263 263 0 0 1991 10 0 0 0 0 301 228 920 920 0 Û .) e 9 8 1992 Q 8 1 Û Ô 952 633 251 ¢ 1993 0 `Q 1,206 0 8 1 Ô 0 1,254 717 331 Q 1994 ø Q 1,577 0: 1,631 811 8 0 1995 ¢ Q 2,059 436 Û Ò 1 0 0 2,113 913 0 8 -,41 1996 Q Q 2,678 572 0 1,026 Ô 0. 2.728 1997 0 0 3,472 751 0 Û 8 1 1,149 985 ¢ 8 0 Ô 3.514 ¢ 4,492 0 0 1998 1,280 8 0 0. 4,504 1,291 û Û Ô 5,788 1 1999 ń 0 5,744 1,420 Û 0 1.691 0 8 2000 Ò Ô 7,427 1 8 0 0 7,232 1,555 Ô 2001 0 0 9,422 2,197 Û. .1 1,690 9,044 0 0. 2002 0 ¢ 11,887 2,850 0 0 8 1 1,823 3,690 0 0 8 0 0 11,218 Ø Û 14,901 1 2003 1,950 Û 8 0 **Q**. 13,795 4,771 Û 18,559 2004 Û 0 1 0 16,780 2,062 Q 6,149 Û 8 2005 Ø Q 22,922 Û 1 2,159 0 0 20,199 0 8 2006 Û ¢ 28,102 7,911 Ô 1 2,230 24,001 0 ¢ Ô 34,132 10,138 0 0 8 0 2007 ۱ 2.274 Û 0 41,071 12,942 0 0 8 0 0 28,137 2008 0 8 Ô ¢ 32,505 2,284 16,442 Q Û Û 48,940 2009 1 0 36,982 2,260 8 0 57,753 20,778 0 0 2010 0 0 1 2,200 0 ¢ 41,404 Ò 8 2011 Q 0 67,491 26,095 0 ł 45,594 2,105 Ô Û Q Q 78,132 32,545 ¢ 0 8 2012 1 1,983 ¢ 89,633 40,275 Q 0 8 Ô Ô 49,365 2013 Ô 8 0 63 52,620 1,838 101,9B1 49,430 ¢ 0 0 0 2014 1 36,361 0 200 63 411,326 Total 313 238 655,007 243,903 Û Ö 46

Net Present Value36,123B/C Ratio152.78Internal Rate of Return305.38

·

AP 12-28

1.4

COST/BENEFIT STREAM (11/26)

	Cost		EVL		TCR	V	M.Cos	t.	Flood	Residual	Unit:1000 F	Benefits
Year	Renob.	Dis'd	w/o	with a second	W/6	with:	₩/0	with 🗟	· w/o	Volue	iotur	Disid
1990	0	0	.] = = = =	1,562	14,266	14,266	744	744	0	0	0	
1991	1,494	1,299	2,070	2,070	15,192	15,192	744	744	Ó	ò	1. O	· · ·
1992	7,446	5,630	2,704	2,704	16,194	16,194	744	744	0.	0	· · · 0	
1993	14,860	9,784	3,520	3,520	17,235	17,235	744	744	0	Ō	Ō	· · · .
1994	5,941	3,397	4,567	4,567	18,353	18,353	744	744	-0	Q.	÷0.	· (
1995	Q	0	5,903	340	19,549	18,571	744	60	798		8,023	3,989
1996	0		7,572	449	20,782	19 743	744	60	864	Ő.	9,712	4,19
1997	¢.	. 0	9,661	592	22,055	20,952	744	60	937		11,792	4,43
1998	0	× 01	12,250	782	23,443	22.271	744	60	1,015	. 0	14,340	4,68
1999	0	-	15,433	1,032	24,908	23,663	744	60	1,101	Ŏ	17,432	4,95
2000	0	́О,	19,286	1,361	26,450	25,128	744	60	1,193	ŏ	21,125	5,22
2001	0	· 0	23,724	1,781	27,954	26,556	744	60	1.284	-	25,309	5,44
2002	0	· 0	28,917	2,327	29,496	28,022	744	60	1,382	ŏ	30,131	5,63
2003	0	े	34,930	3,039	31,154	29,597	744	60	1,488	, õ	35,621	5,78
2004	0	ି 🔶 🗘	41,781	3,963	32,889	31,245	744	60	1,603		41,749	5,90
2005	0	. 0	49,476	5,158	34,740	33,003	744	60	1,726	ů.	48,465	5,95
2005	. • 0	0	58,088	6,708	36,668	34,835	744	60	1,861	ŏ	55,758	5,95
2007	0	. o	67,544	8,701	38,712	36,776	744	60	2,006	ŏ.	63,469	5,69
2008	0	···' 0	77,827	11,252	40,832	38,791	744	- 60	2,163	o o	71,465	5,77
2009	0	0	88,956	14,505	43,107	40,952	744	60	2,334	• Ŏ.	79,625	5,59
2010	0	· 0	100,871	18,618	45,498	43,223	744	50	2,517	. 0	87,729	5,36
2011	. 0	• 0	113,604	23,789	48,004	45,604	744	60	2,716	ŏ	95,616	5,08
2012	.0	0	127,145	30,229	50,664	48,131	744	50	2,931	· ŏ	103,064	4,76
2013	· . Q .		141,553	38,182	53,479	50,805	744	60	3,163	· · č	109,893	4,10
2014	0	0		47,885	56,448	53,626	744	60	3,415	5,952	121,815	4,25
otal	29,761		1,195,790	235,136	788,072	752,734	18,500	4,920	36,497	5,952	1,052,133	103,30

Net Present Value B/C Ratio

internal Role of Return

83,191

5.14

36.5%

22.MALALAN (PPH North 113) Repair Unit: 1000 Pesos EVL TCHV Residual Cosi M.Cost Flood Total Benefits with Year Reheb. Dis'd w/o w/o with W/0 with w/o Value Disid 1990 0 Ō 154 154 12,543 12,543 226 226 0 ¢ 0 0 1991 452 393 202 202 13,424 13,424 226 226 Ø 0 ¢ Ō 6,479 14,230 14,230 Ò Ó 1992 6,569 265 265 226 226 Û 0 1993 0 Q 340 .73 15,184 14,425 226 18 171 0 1,413 929 458 16,211 15,400 1,565 895 1994 Ò 0 95 226 18 185 0 17,238 16,376 1.741 866 1995 0 Q 598 127 226 18 200 0 17,421 845 1996 0 0 780 167 18,338 226 18 216 Û 1,954 1997 ¢ 0 1,015 219 19,439 18,467 226 18 234 0 2,209 830 0 Û 1,315 288 20,686 19,651 226 18 253 ¢ 2,521 824 1998 273 824 379 21,933 20,836 226 18 0 2,898 Û 1.699 1999 Ò 23,326 3,360 226 18 295 ¢ 830 498 22,160 2000 Ò Û 2,188 837 23,414 226 18 318 0 3.894 2001 0 0 2,786 650 24,647 4,532 342 Û 847 0 Û 3,526 845 26,040 24,738 226 18 2002 0 4,428 1,097 27,434 26,062 226 18 367 Q 5,278 858 2003 0 28,974 27,526 226 18 394 Q 6,161 871 5,532 1,422 2004 - 0-0 29,059 226 18 424 0 12,476 1,533 1,839 30,588 2005 0 Ò 12,154 14,159 1,513 32,349 30,731 226 18 457 0 2.375 2005 : 0 Û 14,252 34,109 226 18 49 I [°] 0 15,890 1,477 32,404 ò 0 16,539 3,054 2007 17,660 1,427 18 529 Û Q 19,036 3,914 36,016 34,215 226 2008 Ó 19,399 1,363 570 ΪØ. 21,711 4,989 37,997 36,097 226 18 0 2009 0 6,332 40,124 38,118 226 18 614 Q 21,096 1,289 Û 24,600 Û 2010 40,208 226 18 661 0 22,667 1,204 42,325 2011 0 Q 27,664 7.963 44,672 42,438 226 18 712 ¢ 24,072 1,112 9,991 2012 0 0 30,910 44,808 226 18 768 0 25,288 1,016 47,166 Û 34,372 12,418 2013 • Q 18 828 28,050 980 226 1,804 47,247 0 38,018 15,295 49,733 :0 2014 23,170 694,726 661,998 5,650 1,074 9,303 1,804 238,283 74,672 264,550 Total 9,021 6,872

Net Present Value	16,298
B/C Ratio	3.37
Internal Rate of Return	29.6%

COST/BENEFIT STREAM (12/26)

•	Cost		EVL	· . ·	TCI	IV · ·	M.Cos	t i		testdual	Totel B	
Year	Rehab.	Distd	. w/o	with	W/0	with	W/0	with	and a subscript of the local division of the	Value		
1990	0	0	268	268	0	0		100	0	· · · ·		C
1991	197	171	352	352	0	. C		100	0	· · · · · · · · · · · · · · · · · · ·		1 S - 1
1992	3,810	2,661	463	463	î 0	Ć		100	0	141 j 🗘	0	
1993	. 0	0	607	127	0	oli i do di 🗘		6	297		670	
1994	- Q	0	795	167	· · · 0	(† 1916) 1917 - C	100	6	321	0 .		59
1995	0	0	1,039	220	- 0	0		8	348	, en 🗠 🗘.		62
1996	0	0	1,352	289	. · . • •	0	100	8	375	0	•	66
1997	0	0	1,754	379	0	0	100	8	405	0 ()		70
1998	0	0	2,272	498	n akun ≬	- 19 ()	100	8	437	- 0 -		75
1999	Q	: 0	2,929	654	. Q		0.01	8	471 5	0		. 80
2000	0	٥	8,223	857	0	.	100	8	509	0		1,96
2001	0	0	10,079	1,114	0	ji C	100	8	546	୍ ତ୍		2,06
2002	0	Ô	12,242	- 1,447	. 0	0	001	· · · · • 8.	585	-i 0		2,14
2003	0 -	Ò.	14,721	1,875	0	0	100	8	627	2 . O	13,566	2,20
2004	¢	0	17,527	2,424	1. a 1. a 0	0	0 <u>a</u> s 100 .	· · · 8	672	- · · · • •		2,24
2005	0	0	20,677	3,128	0	. 0	100	8	- 72 te	1. j. 0	18,362	2,25
2006	0	• 0	24,159	4,025	0	0	100	8	774	S . S 🗘	21,000	2,24
2007	0	• •	27,968	5,164	0	.	100	: B	831	0	23,728	2,20
2008	0	0	32,104	6,600	. 0	· · · C	100	NG 8	892	<u>)</u> (26,488	2,14
2009	. 0	0	36,525	B,393	Ö	0	100	. 8	958	6.9 0 .	29,183	2,05
2010	0	0	41,249	10,617	· · · · · 0		100	8	1,029	0.	31,753	-1,94
2011	· 0	0	46,229	13,340	0	0	Ea 100	8	1,105	0	34,087	1,81
2012	0.	Ó	51,533	16,658	0	0	100	8	1,188	. : 0 ,	36,155	1,67
2013	÷0.	0.	57,117	20,635	0	0	100	8	1,276	. ang 1 0 3	37,851	1,52
2014	· 0	. 0	62,999	25,344	0	0	100	8	1,372	.801	39,920	1,39
otal	4 007	3,052	475,183	125,038	the second second	C	2,500	476	15,739	801	368,715	34,57

Net Present Value 31.524 11.33 B/C Rotio Internal Rate of Return 47.7%

Unit: 1000 Pesos 24 SAN PABLO (PPH North 129) Repair TCHV M.Cost Flood Residual EVL Cost w/o Value w/o with with w/o with w/o Yeer Rehab. Dis'd 14,069 365 365 Ö 14,069 Q. 1990 Ó Ô 296 296 1991 730 635 389 511 3,659 2,767 1992 4 804 7,307 669 1993 1,668 877 1994 2,918 1**9**95 ¢ Ô 1,146 1996 0 0 1,492 1,937 1997 0 0 ¢ 2,506 1998 0 1999 0 7.298 Û 9.083 2000 0 0 2001 Ô Û 11,138 2002 0 13,522 Û 16,267 1,415 30,259 29,221 365 29 0 0 2003 0 Û 19,379 32,486 30,862 365 29 0 Ù. 2004 1,838 0 Ó 34,340 32,623 29 0 2,384 365 0 22,869 2005 Ô Ó : 29 0 34,385 365 Û 2005 ¢ ø 26,732 3,087 36,195

38,241

40,352

42,590

44,956

47,450

50,072

52,822

55,763

778,640

36,329

38,334

40,460

42,708

45,077

47,568

50,181

52,975

743,718

389	15,028	15,028	365	. 365	-Q-	0	0
511	15,987	15,987	365	365	0	0.	÷.0.
669	17,010	17,010	365	365	0	0:	0
877	18,161	18,161	365	365	.:0	ç ·	i i i 0
: 163	19,313	18,347	365	29	0	Ó	2,285
215	20,528	19,501	365	29	0	0	2,640
282	21,807	20,716	365	29	0	0,	3,081
371	23,149	21,992	365	29	0	. 0	3,628
488	24,620	23,389	365	- 29	an a 1 0 5 a line	0	8,377
641	26,155	24,847	365	29	0.	Ο.	10,086
836	27,626	26,245	365	29	0	0.1	12,020
1,088	29,161	27,703	365	29	0	0	14,228
1 415	30,759	29,221	365	29	0	0	16,725

365

365

365

365

365

365

365

365

9,125

29

29

29

29

29

29

29

29

2,405

0

0

Ô

¢

0.

0.

¢.

0

֯.

Total Benefits

0

: 0

19,502

22,538

25,791

29,215

32,744

36,313

39,822

43,201

46,363

49,195

54,548

472,302

Û

Û

Û

0

Ó

Ó

0

2,923

2,923

Disid

0

¢

Ó

0 5

1,136

1,141

1,158

1,186

2,361

2,493

2,584

2,659

2.718

2,756

2,770

2,756

2,715

2.646

2,552

2,433

2,295

2.142

1,976

1,906

44,404

Net Present Value 34,530 4.50 6/C Ratio Internal Rate of Return 32.48

Ó

Û

0

Q

Ô

Û

Û

Ô

14,614

Ô

0

0

û

Ô

Q

Ô

Û

9,874

30,955

35,526

40,442

45,667

51,217

57,099

53,289

69,819

530,125

3,988

5,136

6,594

8,429

10,725

13,576

17,072

21,318

102,368

2007

2008

2009

2010

2011

2012

2013

2014

Total

COST/BENEFIT STREAM (13/26)

	Cost		EVL		TCH	· · · · · · · · · · · · · · · · · · ·	M.Cos	t	Flood	Residual	nit: 1000 P	
Year	Reheb.	Dis'd	w/o	with	w/o	with	- W/0	with	- w/o	Value	i o car d	enefits Dis'd
1990	<u>)</u> ()	0	232	232	0	0	367	367	0	Value 0	0	
1991	730	635	303	303	0	0	367	367	-	0 0		1
1992	3,671	2,776	396	396	Ó	ŏ	367	367	.0 0	ů v	0	
1993	7,342	4,827	517	517	ò	. 0	367	367	. o	ŏ	0	
1994	2,941	1,682	674	674	Ō	0	367	367	0	o o	0	
1995	Ó	0	877	125	ò	ŏ	367	29	293	0	1,383	58
1996	0	0	1,137	164	0	ò	367	29	315	0	1,505	70
1997	0	0	1,469	214	, o	o O	367	. 29	339	o o	1,020	
1998	0	0	1,894	281	0	, o	367	29	364	.0	2,316	720
1999	Ō	0	2,433	367	0	ò	367	29	392	. Ç	2,796	79
2000	0	· 0	3,115	48	0	o i	367	29	421	ò	3,393	83
2001	. Ó.	0	3,939	624	0	ò	367	29	450	ŏ	4,103	68:
2002	0	0	4,952	808	0	ò	367	29	480	ů,	4,961	92
2003	0	0	6,190	1,047	0	ò	367	29	513	ŏ	5,993	97
2004	0	0	7,681	1,354	0	0	367	29	548	ο δ	7,212	1,01
2005	0	. 0	16,787	1,750	ò	0	367	29	586	· õ	15,960	1,96
2006	0	.0	19,531	2,255	0	0	367	29	626	Ŏ	18,239	1,94
2007	•	0	22,515	2,900	0	ò	367	29	669	ŏ	20,621	1,91
2008	0	0	25,727	3,719	ů.	ō	367	29	715	. 0	23,060	1,86
2009	0	0	29,142	4,752	Ó	ò	367	29	764	ŏ	25,493	1,79
2010	0	0	32,768	6,048	O	0	367	29	816	. 0	27,875	1,70
2011	0	Ó	36,586	7,651	Ó	0	367	29	875	ů.	30,137	1,60
2012	Q	· •	40,600	9,653	0	ŏ	367	29	936	. Õ	32,220	1,489
2013	0		44,815	12,088	0	. 0	367	29	1,002	0	34,066	1,369
2014	0	0	49,222	15.029	0	ŏ	367	29	1,072	2,937	38,539	1,34
otal	14,684	9,920	353,502	73,442	0	0	9,175	2,415	12,178	2,937	301,924	25,29

Net Present Value B/C Ratio

2.55

24.18

Internal Rate of Return

26.PARED (PPH North 154) Reconstruction Unit: 1000 Pesos Cost EYL TCHV M.Cost Flood Residual Total Benefits Year Rehab. Dis d W/0 with w/o with w/o with w/o Value Dis'd 1990 Ö 866 866 553 553 ø 0 9,953 9,953 0 Û Û 1,110 1991 1.112 967 1,110 10.563 10,563 553 553 Ð Ô 0 0 Ō 1992 5,535 4,185 1,413 1,413 11,274 11,274 553 553 0 0 Ū, 1993 11,070 7,279 1,781 1,781 11,985 11,985 553 553 0 0 Û 0 1994 4,412 2,523 2,236 2,236 12,696 12,696 553 553 0 ¢ Ó Q 13,508 553 ¢ 4,139 2,058 1995 0 0 2,783 0 12,833 44 172 553 Ô 4,839 2,092 ò 0 14,321 13,605 44 186 1996 3,429 ł. 14,473 1997 0 4,190 15,235 553 44 200 0 5,661 2,128 Ó 1 6,615 0 2.162 1998 Ô ø 5,078 ł 16,251 15,438 553 44 216 û 7.672 1999 0 0 6,073 t 17,165 16,306 553 44 233 2,181 0 7,214 2 18,282 17,368 553 44 252 Ó 8,887 2,197 2000 0 19,297 18,333 553 44 270 0 10,158 2,183 2001 Ò. Ó 8,417 3 19,297 553 44 289 Û 11,530 2,155 3 20,313 2002 0 Ò 9,720 553 44 309 0 13,014 2,115 4 21,430 20,359 11,129 2003 0 Ò 0 14,599 2,063 21,517 553 44 331 2004 ¢ 0 12,632 б 22,649 16,282 0 2.001 2005 0 0 14,232 8 23,868 22,675 553 44 355 Ô. 18,069 1.93E 10 25,188 23,929 553 44 381 2005 0 0 15,930 ŝ 19,958 1,855 26,610 25,280 553 44 409 û Q Û 17,723 13 2007 553 44 438 ¢ 21,924 1,772 19,593 17 28,032 26,631 2008 0 0 553 44 469 0 23,996 1,686 29,556 28,078 2009 0 ¢ 21,563 22 44 504 θ 26,190 1,600 553 29,622 2010 0 0 23,647 29 31,181 28,513 1,515 38 32,907 31,262 553 44 541 Ô ò Û 25,857 2011 1.430 580 0 30,945 34,735 32,999 553 44 28,170 **S**0 2012 0 Ô 34,832 553 44 623 Û 33,523 1,347 66 36,665 2013 0 0 30,624 36,762 553 44 669 13,277 49,523 1,730 38,697 86 0 0 33,219 2014 356,037 38,200 13,825 3,645 7,427 13,277 518,072 542,361 Total 22,129 14,953 308,629 7,767

23,247 Net Present Value B/C Ratio 26.6%

2.56

Internal Rate of Return

COST/BENEFIT STREAM (14/26)

. : ::	Cost	· 、	EVL.	1444 - 14 MA	1111	TCHY	가 가 나는 것	MCOS	at in the second se		Residual	Totol	Benefits
lear	Rehab.	D1s'd	w/o	with	w/o		with 🕤	w/o	with	W/0	Value	ور بر المراجع br>مراجع من مراجع المراجع ا	Dis'd
1990	0	. Ú	101	101	ولي الم	0	0	78	78	0	0	•	0
1991	162	141	133	133	2 A A	0	¢	78	78	Q	0	0	-
1992	0, 1	Ó	176	176		٥Č	Ŷ	78	78	Ô	0	0	· · · · ·
1993	Q	0	231	231		0	0	78	78	0	0	-¢	(
1994	, 2,976	1,702	304	304		0	0	78	78	0	0	0	
1995	0	0	400	55		Ô	0	78	6	0	0	417	207
1996	0	0	526	73		٥.	0	. 78	6	0	0	525	227
1997	0	0	692	96	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	0	0	78	6	0	0	668	25
1998	Ó	0	908	127		0	0	78	6	0	0	653	279
1999	• •	. 0	2,995	168		0	0	78	6	0	0	2,899	824
2000	0	Ó	3,858	222		0	0	78	ō	0	0	3,708	917
2001	0	0	4,818	285		0	0	78	6	, Q	0	4,605	990
2002	ò	0	5,974	365		0	• • • •	78	6	Q.,	0	5,680	1,062
2003	0	0	7,372	471		0	0	78	6	0	0	6,974	1,133
2004	0	0	9,028	604	•	0	0	78	6	0.	0	8,497	1,20
2005	0	0	10,973	774		0	Û .	78	6	· 0	0	10,270	1,263
2006	0	0	13,228	993	1.1	0	0	78	6	. 0	0	12,308	1,315
2007	0	0	15,797	1,271		0	Ö	78	6	. 0	0	14,598	1,356
2008	0	0	18,686	1,626		Û	0	78	δ	0	0	17,133	1,384
2009	0	0	21,879	2 075		0	0	78	6	0	0	19,876	1,397
2010	0	0	25,376	2 645		Ο.	0	78	6	0	0	22,802	1,39.
2011	0	Ó	29,150	3,366		0	0	78	6	0	0	25,856	1,374
2012	.0	0	33,160	4,272		0	0	78	6	0	0	28,961	1,338
2013	0	0	37,369	5,402		0	0	78	6	0	0	32,038	1,287
2014	. 0	0	41,790	6,614		0	0	76	6	0	1,046	36,094	1,25
1616	3,138	1,842	284,924	32 651	1.1	0	0	1,950	510	0	1,045	254,762	20,459

Net Present Volue B/C Rotio

18,617

) 1. I 1 46. I %

Internal Rate of Return

Unit: 1000 Pesos 28.GUINOBATAN (PPH South 43) Repair **Total Benefits** TCHY M.Cost Flood Residuel EVL-Cost w/o with W/0 Volue Disid with w/a with w/o Rehab. Disid Year 1,356 22 22 0 0 Ó ð 1,356 0 1990 Û Û Ó 22 ¢ 0 Q Û 22 1,767 0 1991 46 40 1,767 Û 0 Ô Ô Ó 2,298 2,298 0 Û 22 22 0 0 1992 Ó 0 0 2,978 2,978 Ò 0 22 22 Û 1993 0 Ó ò Ó 0 22 22 0 0 1994 834 477 3,849 3,849 Q 2,331 4,953 285 ¢ Q 22 2 0 0 4,688 0 ĥ 1995 ò 5,990 2,590 22 2 0 376 0 Ð 1996 Û Û 6,345 7,608 2,860 2 ø 0 1997 ¢ Û 8,084 496 Ô 0 22 22 2 0 0 9,602 3,139 0 Ò 10,235 653 0 Q 1998 12,031 3,420 12,872 86 I Ò 0 22 2 Û 0 1999 ø ¢ Û 16,063 1,134 ø 0 22 2 0 Ø 14,949 3,695 2000 0 0 ¢ 17,914 3,850 1,452 22 2 19,345 0 0 2001 Ū Ċ 21,255 3,973 2 0 ¢ 2002 0 Û 23,093 1,858 ٥ Û 22 24,947 4,055 2 Ô 0 2003 0 0 27,302 2,375 0 Û 22 28,946 4,091 31,957 3,031 ¢ ¢ 22 2 Q 0 Û ¢ 2004 Ù 22 2 Ø Û 33,203 4,080 Ò ò 37,045 3,862 0 2005 2 0 0 37,645 4,023 4,912 22 42,537 0 Ô 2005 ¢ Û 42,174 3,919 2007 Û Û 48,387 6,233 0 0 22 -2 0 Ó 3,771 46.674 0 54,538 7,885 0 0 22 2 0 0 2008 Ō 3,586 60,956 9,939 0 22 2 0 0 51,037 0 2009 ¢ Û 12,476 2 Ò, 0 55,137 3,369 67,593 Q o 22 Û 2010 0 2 0 0 58,865 3,126 74,431 22 15,586 Û 2011 Ō 0 ΰ 2,870 8 62,111 2 0 2012 ¢ Ð 81,457 19,367 0 Ô 22 2,601 0 0 88,641 23,910 0 Û 22 2 ¢ .0 64,751 2013 2,337 0 96,021 29,319 0 0 22 2 ¢ 176 66,898 2014 0 ¢ 666,425 67,668 860 824,103 158,258 0 550 150 176 Total 517 0

Net Present Value 6 B/C Ratio Internal Rate of Return 2

COST/BENEFIT STREAM (15/26)

	Cost	(PPH Sout	EVL	pair	·	TCHV	·····		M.Cos				Init: 1000 P	and the second s
Year	Rehab.	Dis'd	w/o	with	w/o	10111	with		W/0	vith i	Flood w/o	Residual	Total B	ienerits
1990	0	0	1,215	1,215		0		0	42	42	0	Value		Ols'd
1991	81	70	1,581	1,581		ò		õ	42	42	0	0	0	1
1992	5. G 🗘	0	2,052	2,052	111	0		õ	42	42	ŏ	0	0	
1993	1,610	1,059	2,657	2,657	1	ò		ŏ	42	42	``0	-	0	1
1994	0	0	3,425	235	11	0 0		ò	42	. 42	, o	. 0	0 ·	
1995	0	0	4,401	309	500	ò		ŏ	42	3	ö		3,229	1,840
1996	0	• •	5,627	406	÷.,	ò		ŏ	42	3	0	0	4,131	2,05
1997	0	0	7,156	534	••	ō		ŏ	42	3		. 0	5,260	2,27
1998	Ō	.0	9,041	703		ò		à	42	3	0	0	6,661	2,50
1999	0	0	11,349	923		õ		õ	42	3	0	.0	8,377	2,739
2000	0	0	14,130	1,212		ō		ů.	42	3	0	0	10,464	2,97
2001	0	0	17,001	1,550		õ		ů.	42	3	0	0	12,957	3,20
2002	0	0	20,267	1,978		ŏ		ŏ	42		0	0	15,490	3,33
2003	0	Ó.	23,935	2,522		ŏ		ů.	42	3	, v	. 0	18,328	3,420
2004	0		27.979	3,208		ŏ.		0	42	3	0	. 0	21,452	3,48
2005	÷ õ	· 0	32,397	4,074		0		0	42	3	-	0	24,810	3,50
2006	0	Ó	37,145	5,160		ŏ				3	0	0	28,362	3,460
2007	Ō	÷ 0	42,197	6,519	~ ·	õ		0	42	3	Ó Ó	0	32,024	3,42:
2008	à	÷ ŏ	47,498	8,206		õ		0	42 42	3	-	0	35,717	3,319
2009	õ	· õ	53,005	10,285		õ		0	42 42	3	0	0	39,331	3,178
2010		· 0·	58,704	12,831		ŏ		o o		3	0	0	42,759	3,004
2011	ŏ	ō	64,556	15,919		ŏ.		o o	42	3	0	0	45,912	2,805
2012	ŏ	ò	70,533	19,623		ŏ		•	42	3	0	0	48,675	2,560
2013	ŏ	· ŏ	76,656	24,024		õ		0 0	.42	3	0	0	50,949	2,354
2014	ŏ	ŏ	82,897	29,178		0		•	42	3	0	0	52,671	2,110
Total .	1.691	1,129	717,404	156,904		0		0	1,050	231	0	338	54,096 561,655	1,890 59,503

Net Present Value B/C Ratio

1

Internal Rate of Return 173.18

30.PAM	UKID (PPI	South 76	5) R	epair			1911 - 1913 1914 - 1914 - 1914	÷.	Alexandria.		Unit: 1000 P	esos
	Cost		EVL		TCHV	/	M.Cos	st	Flood	Residual	Total E	lenerits
Year	Rehob.	Dis'd	w/o	with	w/o	with	W/0	with	. w/o	Volue	• •	Dis'd
1990	0	0	1,215	1,215	0	0	28	28	0	Q	0	0
1991	58	50	1,581	1,581	0	0	28	28	0	0	0	0
1992	~ 0	0	2,052	2,052	0	0	28	- 28	0	0	, O	0
1993	1,042	685	2,657	2,657	0	0	. 28	28	0	0	0	0
1994	0	0	3,425	235	0	0	28	2	0	0	3,216	1,839
1995	0	Û	4,401	309	0	Ŷ	28	2	0	0	4,118	2,047
1996	0	0	5,627	406	0	0	28	2	0	Ó	5,246	2,268
1997	Ó	· 0	7,156	534	0	0	28	2	0	· 0	6,647	2,499
1998	Ó	0	9,041	703	0	· 0	28	2	0	0	8,364	2,734
1999	÷Ó	· •	11,349	923	0	0	28	2	0	0	10,451	2,971
2000	• •	· •	14,130	1,212	0	0	28	2	0	0	12,943	3,199
2001	0	0	17,001	1,550	0	0	28	2	Ó	0	15,477	3,327
2002	0	· 0	20,267	1,978	0	0	28	2	0	0	18,314	3,423
2003	0	•	23,935	2,522	0	0	28	2	0	0	21,439	3,484
2004	0	0	27,979	3,208	0	0	28	2	Ó	Û	24,797	3,505
2005	Ó	. 0	32,397	4,074	0	· 0	28	2	Ó	0	28,348	3,484
2006	0	0	37,145	5,160	0	0	28	2	0	· 0	32,010	3,421
2007	0	. 0	42,197	6,519	0	0	28	2	0	0	35,703	3,318
2008	0 0	0	47,498	B,206	0	0	28	2	0	0	39,318	3,177
2009	0	0	\$3,005	10,285	0	0	28	2	0	0	42,746	3,004
2010	0	0	58,704	12,831	0	0	28	2	0	0	45,898	2,804
2011	, i	. 0	64,556	15,919	0	Ø	28	2	¢	0	48,662	2,585
2012	- 0	0	70,533	19,623	0	0	28	2	¢	0	50,935	2,353
2013	-0	. 0	76,656	24,024	0	0	28	2	0	0	52,658	2,115
2014	÷ŏ	· 0	82,897	29,178	• 0	0	28	2	<u> </u>	220	<u>_</u>	1,665
Total	1,100	736	717,404	156,904	0	0	700	154	0	. 220	561,254	59,442

58,706 Net Present Value B/C Rotio 80,76 222.98 Internal Rate of Return

^{52.70}

COST/BENEFIT STREAM (16/26)

	ISIDRO (I Cost		EVL			TCHV			M.Cos	C in the	F1000	Resi	dual	Total Be	
léer	Rehob.	Disid	w/o	with	W/0		with		· ₩/0	with	W/0	-	lue		Dis'd
1990	0	0	1,215	1,215		0		0	42	42	0	۱ <u>۳</u> - ۲	0	•	м О
1991	81	70	1,581	1,581		• • •		0	42	42	0	Ь., ,	0	0	• • • •
1992	0	0	2,052	2,052	1	0		Q .	42	42	- 0	<u>ار ا</u>	0	+> 0	0
1993	1,598	1,051	2,657	2,657	÷ .	0		0	42	42	0	leggi -	0	0	0
1994	, Ó	.0	3,425	235		0		0	42	3	0	1 :	0	3,229	1,846
1995	0	Ó	4,401	309	· .	0 -		Ó	42	3	, ç		0	4,131	2,054
1996	0	0	5,627	406		Ó		Q	42	2 - 3	C	18	0	5,259	2,274
1997	0	Ò	7,156	534	5	0		0	42	: 3	Ç		0	6,660	2,504
1998	0	0.	9,041	703		0		0	42	- 3	¢		Q	8,377	2,736
1999	Ó	Ó	11,349	923		¢		¢	42	×.,3	, Q	<u>1</u>	¢	10,464	2,975
2000	0	0	14,130	1,212		0		0	42	3	<u>ر</u>		0	12,956	3,203
2001	0	0	17,001	1,550		0		0	42	3	ۍ . ۲. پ	Ľ.	0	15,490	3,330
2002	0	0	20,267	1,978		Q		Q.	. 42	- 3	ç	9, F.	0	18,328	3,420
2003	0	0	23,935	2,522		0		0	42	- 3	¢	k pr	0	21,452	3,487
2004	0	0	27,979	3,208		.0		0	42	k e. 3	Ċ	н h,	Q.	24,810	3,506
2005	0	0	32,397	4,074		0		0	42	. , 3	· 0	Page.	0	28,362	3,465
2006	0	. 0	37,145	5,160		0		0	42	3	· • •	L ight	, Q	32,024	3,422
2007	0	ð	42,197	6,519		0		0	42	3	Ç	۱., I	0	35,717	3,319
200B	.0	0	47,498	8,206	1.1	0		Ó.	42	3	C	•	0	39,330	3,170
2009	0	0	53,005	10,285		0		0	42	3 .	_ C	1 -22	· 0	42,759	3,004
2010	0	0	58,704	12,831		0		0	42	. 3	Ç	• 12 f	0	45,912	2,605
2011	0	0	64,556	15,919		Ð		٥	42	3	, c	. 193	0	48,675	2,586
2012	0	. 0	70,533	19,623		0		0	42	- 3	- 0	• 12.	0	50,948	2,354
2013	0	Ď	76,656	24,024		0.		0	42	3 .	Ç	• ja	Ο.	52,671	2,110
2014	0	0	82,897	29,178		Ο.		0	42	3	0	<u>ha di a</u>		54,093	1,890
otal	1,679	1,121	717,404	156,904		0		0	1,050	231	C	I.	336	561,647	59,502

Section 200

 Net Present Value
 58,381

 B/C Ratio
 53.08

 Internal Rate of Return
 173.7%

	Cost		EYL			TCHV	, ,	•	M.Cos	ti i	Flood	Res		Total 8	enefits
Year	Renab.	Dis'd	W/O	with	w/o		with _		w/o	with	W/0		lue	<u> </u>	Dis'd
1990	0	0	464	464	<u>.</u>	0	1 T.I	0:	41	41	0	i, e	0	0	
1991	81	70	608	608		Q.	(0	41	- 41	- Q	٤	. O	0	₹
1992	0	Q	797	797		0	. (0	41	41	Ç	÷ ·	0	• •	Q
1993	1,575	1,036	1,043	1,043		0	. (0	41	41	0	њ., I	0	_ Q ,	() () () () () () () () () ()
1994	0	0	1,363	87	5	0		0	-41	- 3	0	۱.	•	1,314	75
1995	. 0	0	1,779	114		ø	I	0	41	3	- Ģ	ļ i	0	1,702	840
1996	0	0	2,316	151		0	, i	0 .	41		Ų	· ·	¢	2,203	95.
1997	0	0	3,009	198		0		0	41	× 3	. 0	ų 1	0.	2,848	1,07
1998	0	0	3,896	261		0		0	41.	3	c	ı.	0	3,673	1,20
1999	0	0	5,030	344		0	· (¢	41		. C	•	0.	4,724	1,34
2000	0	0	6,465	454		0	1	0	41	<u>, 3</u>	O	t, j	0,	6,050	1,49
2001	0	0.	8,060	562		0		Û	41	3	0	н — м	0.	7,516	1,6,8
2002	0	. 0	9,990	746		0		0	41	3	Ó	н.,	0	9,282	1,73
2003	0	0	12,307	956	·.	Ó		0	41	· 3	. 0		0	11,389	1,85
2004	0	0	15,050	1,224		0	· · ·	0	4!	3		1	Û	13,863	1,95
2005	0	0	18,267	1,567		ò	· .	0	41	3	C	n si	0	16,738	2,05
2006	0	0	21,985	2,004		0	1	0	41	3	Ċ	n é a	0	20,019	2,13
2007	0	0	26,228	2,560		0		ο.	41	3	¢	цэ.,	. ¢	23,706	2,20
2008	0 0	ů Ú	30,989	3,265		0		0	41	3	Ċ		0	27,763	2,24
2009	ŏ	ŏ	36,252	4,156		0		0	41	3	, c		0	32,134	2,25
2010	ŏ	ŏ	41,999	5,281	-	0		0	41	3	·	1	0	36,756	2,24
2011	Ô	ů	48,179	6,693		0	•	0	41	3). ¹	0	41,524	2,20
2012	ů.	ů 0	54,734	8,456		ō		0	41	3	Ċ	i pa	0.	46,316	2,14
2013	ŏ	Ŏ	61,633	10,648		ò		0	41	. 3	c	· ·	0	51,024	2,05
2014	ŏ	· 0	68,804	13,350	÷.,	ŏ		0	41	3	. c		552	56,044	1,95
otai	1,656	1,105	481,247	66,009		0		0	1.025	227			552	416,588	36,32

Net Present Value 35,215 B/C Ratio 32.84 Internal Rate of Return 98.28

COST/BENEFIT STRBAM (17/26)

	Cost		EVL		TCH	V	M.Cos		Flood	Residual	Unit: 1000 P	
Yeor	Rehab.	Disid	W/0	with	W/0	with	- w/o	with	w/o	Value		Benefits Dis d
1990	0	0	464	464	0	0	7	7	0			
1991	12	10	608	608	0	ŏ	· ,		0		0	
1992	0	0	797	797		Ó	י	י ז	0	Ť	0	
1993	255	168	1,043	1,043	. o	ŏ	7	. (.	0		· · · · · ·	
1994	0	0	1,363	235	0	ŏ	· • •	r 1	Ó	-	•	ا . باد ح
1995	0	0	1,779	309	, n	ŏ	7		ŏ	•	1,134	64
1996	0	0	2,316	406	0	õ	7				1,476 1,916	73
1997	0	0	3,009	534	· .	. č	· •		0			82
1998	0	0	3,896	703	Ŏ	Ő	, 7		, v	-	2,481	933
1999	0	1 · 0	5,030	923	Ň	Ó	7		Ó		3,200	1,04
2000	0	· 0	6,465	1,212	. 0	ů 0	, 7		0		4,113	1,16
2001	0	0	8,060	1,550	ŏ	ŏ	, 7	1	0	•	5,259	1,30
2002	0	0	9,990	1,978	ŏ	0	(7	· ·			6,516	1,40
2003	0	0	12,307	2,522	ŏ	ů	, '		0	•	8,018	1,49
2004	0	. 0	15,050	3,208	ŏ	ŏ	7		-		9,792	1,59
2005	0	0	18,267	4 074	ŏ	0	7		0		11,848	1,67
2006	0	0	21,985	5,160	ŏ	ŏ	,		0		14,199	1,74
2007	Ò	· 0	26,228	6,519	ŏ	ů ů	·				16,831	1,79
2008	Ó	· 0	30,989	8,206	ò	· 0	, ,		0	-	19,715	1,B3
2009		. 0	36,252	10,285	ŏ	0	, í		0		22,790	1,84
2010	Ő	ō	41,999	12,831	0	. 0	7		0		25,974	1,82
2011	Ó	· č	48,179	15,919	Ň	0	· -		0 0		29,174	1,78
2012	Ó	. 0	54,734	19,623	ŏ	· 0	· ·	1			32,266	1,71
2013	0	ŏ	61,633	24,024	. 0	. v		1	,0 O		35,117	1,62:
2014		ŏ	68,804	29,178	. 0	0		1	.0	- N - N - N - N - N - N - N - N - N - N	37,616	1,51
otal		178	481,247	152,311	0	0	175	49	0		<u>39,685</u> 329,120	29,88

Net Present Value 8/C Ratio

29,705

	Cost		ËVL		TCH	1	M.Cos	4	Flood	Residual	Total	Benefits
Yéór	Renab.	Disd	W/0	with	w/o	with	w/o	with	- w/o	Value	Total	Disd
1990	0	0	464	464	0	0	42	42	0		0	
1991	81	70	608	608	ŏ	°.	42	42	õ	· ŏ	ŏ	
1992	0	0	797	797	ō	ò	42	42	0	ò	ŏ	
1993	1,586	1,043	1,043	1,043	0	ò	42	42	ò	o i	0	
1994		0	1,363	87	0	0	42	3	o	. 0	1,314	75
1995	0	: o	1,779	114	Ó	Ó	42	3	o	. 0	1,703	84
1996	Ó	Ó	2,316	151	0	0	42	3	0	0	2,204	95
1997	0	Ó	3,009	198	0	. 0	42	3	ò	0	2,849	1,07
1998	Q	0	3,896	261	0	0	42	3	0	ວ່	3,673	1,20
1999	0	· 0	5,030	344	0	0	42	3	0	0	4,724	1,34
2000	Ö	0	6,465	454	0	0	42	3	0	0	6,050	1,49
2001	ō	0	8,060	582	0	0	42	3	0	0	7,516	1,61
2002	0	0	9,990	746	0	0	42	3	0	0	9,282	1,73
2003	0	0	12,307	956	0	0	42	3	0	0	11,389	1,85
2004	0	0	15,050	1,224	0	0	42	3	0	0	13,864	1,95
2005	0	0	18,267	1,567	0	0	42	3	¢	× 0 .	16,738	2,05
2006	0	0	21,985	2,004	0	0	42	. 3	0	0	20,020	2,13
2007	0	Ó	26,228	2,560	0	0	42	3	Ò	0	23,707	2,20
2008	0	0	30,989	3,265	0	0	42	3	0	0	27,763	2,24
2009	0	Ó	36,252	4,156	́ 0	0	42	3	Ó	0	32,134	2,25
2010	0	o ^{n.}	41,999	5,281	0	0	42	3	Ŷ	0	36,757	2,24
2011	0	0	48,179	6,693	0	Q	42	3	0	0	41,524	2,20
2012	0	0	54,734	8,456	0	0	42	3) O	. O	46,316	2,14
2013	0	· 0	61,633	10,648	0	. O	42	3	0	0	51,024	2,05
2014	0	0	68,804	13,350	0	0	42	3	0	556	56,048	1,95
otal	1,667	1,113	481,247	66,009	0	0	1,050	231	0	556	416,599	36,32

Net Present Value B/C Ratio

35,209 32.63 97.9%

•

^{167.88} Internel Rate of Return 289.5%

COST/BENEFIT STRBAM (18/26)

	Cost		EVL	e de la servició en	1999 - 1999 -	TCHY		N.Cos	t i	Flood	Residual	TOCOLE	enerits
Year	Rehab.	Dis'd	W/0	with	w/o		with .	w/o	with	W/0	Value		Dis'd
1990	0	0	464	464	5	0	0	5	5	0	Nia de las	0	
1991	12	10	608	608		0	0	5	5	0	e la secto de la compañía	. 0.	- 10 - E - E
1992	0	0	797	. 797		¢	0	5	5	0		0	
1993	185	122	1,043	1,043		0	0	5	5	0		0	
1994	. 0	0	1,363	235	·	0 '	0	5	0	0		1,133	64
1995	0	Û	1,779	309		0	. O	5	0	· 0	1. 1. The	1,474	73
1996	0	0	2,316	406	. · .	0	٥.	5	0	0		1,914	82
1997	0	0	3,009	534		0	0	5	0	-0	Q.,	2,479	93:
1998	Ó	0	3,896	703		Ó,	O,	5	0	0		3,198	1,04
1999	0	0	5,030	923		Ò	. 0	5	0	Ç	1. S.	4,111	1,16
2000	0.	0	6,465	1,212		0	0	5	0	. O	- 14	5,257	1,30
2001	0	0	8,060	1,550		0	0	5	0	0			1,40
2002	0	0	9,990	1,978	÷ .	0	0	-5	0	0	0	8,017	1,49
2003	0	0	12,307	2,522		Û	0	. 5	0	. 0	0	9,790	1,59
2004	0	0	15,050	3,208		0	· 0	. 5	Q.,	0	0	11,846	1,67
2005	0	0	18,267	4,074	$A = \frac{1}{2} \sum_{i=1}^{n} $	0	. 0	5	0	0	ц. О .	14,198	1,74
2006	0	0	21,985	5,160		0	<u> </u>	5	0	, O	Q .	16,829	1,79
2007	0	0	26,228	6,519		0	0	5	0	Q	i <u>, 0</u> ,	19,713	1,83
2008	0	0	30,989	8,206		0	• • • •	5	0.	. 0	0	22,788	1,84
2009	o	0	36,252	10,285		0	0	5	.0	0		25,972	1,62
2010	o	0	41,999	12,831		0	0	5	0	C	0.	29,173	1,78
2011	0	0	48,179	15,919		0	٥.	. 5	0	. 0		32,265	1,71
2012	0	0	54,734	19,623		0.	0	5	0	0	0	35,116	1,62
2013	0	0	61,633	24,024	1. 	0	0		0	0		37,614	1,51
2014	0	0	68,804	29,178		0.	. 0	. 5	0	0	39	39,670	1,38
otal	197	132	481,247	152,311	1.10	0	0	125	. 20	. 0	39	329,072	29,67
				and the second				· · · · ·	· · · .	-			··· ·
	sent Vali	ue	29,743				1.1		1.1	2		a en la	والأربقة والمراجع
/C Re	tio		226.33								e processione		e det le

36.NAU	80D 1 (PI			pair	ia-		مستنسب			<u> </u>	Flood Oak	and the second se	nit: 1000 F	Benefite
. ÷.,	Cost		EVL			тсну		ੁੱ ਵ	M.Cost	with		ldual Slue	10131	Disid
Year	Reneb.	Disid	W/0	with	w/o		with		w/o 24	24	0	0	0	0150
1990	0	0	464		-	0	1.1	0				. 0		Ċ
1991	46	40	608	608	5	.0		0	24	24	<u>.</u>		0	
1992	0	0	797	797	<u>.</u>	0		0	24	24	0	0	0	2.23
1993	903	594	1,043	1,043		0		0	24	24	0	0	and the set of the set	
1994	0,	0	3,425	235		0		0	24	2	Ο,	0.	3,212	1,83
1995	0	0	4,401	309		0		Ù	24	2	0	0	4,114	2,04
1995	Ó	. 0	5,627	406		0	1.1	0	24	2	0	0	5,243	2,26
1997	. 0	0	7,156	534		0		0	24	2	0	0	6,644	2,49
1998	0	0	9,041	703		0		0	24	2	0	0	8,360	2,73
1999	0	0	11,349	923		0		0	24	2	O	Q.	10,447	2,97
2000	0	0	14,130	1,212		0		0	24	. 2	0,	0	12,940	3,19
2001	0	0	17,001	1,550	i de la composición d	Q		Q	24	2	0	0	15,473	3,32
2002	ð	0	20,267	1,978		0		0	24	2	0	0	18,311	3,42
2003	0	0	23,935	2,522		Ó.		0	24	2	0	• 0	21,435	3,48
2004	0	0	27,979	3,208		0		0	24	2	. O	0	24,793	3,50
2005	0	0	32,397	4,074		0		0	24	- 2	0	0	28,345	3,48
2006	0	0	37,145	5,160		0		0	24	2	0	0	32,007	3,42
2007	0	0	42,197	6,519		0	-	¢	24	. 2	0	0	35,700	3,31
2008	Ó	0	47,498	8,206		0		0	24	2	.0	0	39,314	3,17
2009	Ó	0	53,005	10,285		0	•	0	24	2	0	0	42,742	3,00
2010	.0	Ó	58,704	12,831		0		Q	24	2	0	0.	45,895	2,80
2011	0	0	64,556	15,919	. 1	0	•	0	24	2	.0	0.	48,658	2,58
2012	0	0	70,533	19,623		0		0	24	. 2	0	0	50,932	2,35
2013	0	0	76,656	24,024		ò	-	¢.	24	2	0	0	52,654	2,11
2014	ō	0	82.897	29,178	•	ò	• •	ò	24	2	0	190	53,930	1,88
0101	949	634	712,811	152,311	-	0	· . ·	à	600	138	0	190	561,149	59,42
at Pri	esent Val	lite	58,793		•		· · · ·			· •.	14.54			
/C R6			93.73		-						1. The S.			4

8/C R4 Internal Rate of Return 247.8%

COST/BENEFIT STRBAM (19/26)

	EVL w/o 287 494 647 645 1,104 1,439 1,871 2,428 7,079 8,824 10,527 12,670 14,975	with 287 377 494 135 177 234 307 405 533 700 919 1,175 1,497 1,907	w/ 0		v <u>w</u> 1		w/c	1.Cos 0 22 22 22 22 22 22 22 22 22	t with 22 22 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2	-Flood w/o 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			Total 8 0 0 5333 688 891 1,152 1,467 1,916 6,400 7,925	enefits Dis'd 35 39 44 49 55 62 1;81 1,95
0 40 639 0 0 0 0 0 0 0 0 0 0 0 0 0	287 377 494 647 845 1,104 1,439 1,871 2,428 7,079 8,824 10,627 12,670 14,975	287 377 494 135 177 234 307 405 533 700 919 1,175 1,497	<u></u>					22 22 22 22 22 22 22 22 22 22 22 22 22	22 22 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0 0 0 0 0 0 0 0 0 0 0 0 0 0		0 0 0 0 0 0 0 0 0	0 533 668 891 1,152 1,487 1,916 6,400	35 39 44 49 55 62 1,81
40 .639 0 0 0 0 0 0 0 0 0 0 0 0 0	377 494 647 845 1,104 1,439 1,871 2,428 7,079 8,824 10,627 12,670 14,975	377 494 135 177 234 307 405 533 700 919 1,175 1,497						22 22 22 22 22 22 22 22 22 22 22 22 22	22 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0 0 0 0 0 0 0 0 0 0		0 0 0 0 0 0 0	0 533 668 891 1,152 1,487 1,916 6,400	35 39 44 49 55 62 1,81
.639 0 0 0 0 0 0 0 0 0 0 0 0 0	494 647 845 1,104 1,439 1,871 2,428 7,079 8,824 10,627 12,670 14,975	494 135 177 234 307 405 533 700 919 1,175 1,497				0 0 0 0 0 0 0		22 22 22 22 22 22 22 22 22 22 22 22	22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0 0 0 0 0 0 0 0 0		0 0 0 0 0 0	0 533 688 891 1,152 1,487 1,916 6,400	35 39 44 49 55 62 1,81
0 0 0 0 0 0 0 0 0 0 0	647 845 1,104 1,439 1,871 2,428 7,079 8,824 10,627 12,670 14,975	135 177 234 307 405 533 700 919 1,175 1,497		0 0 0 0 0 0 0		0 0 0 0 0 0 0		22 22 22 22 22 22 22 22 22 22 22	2 2 2 2 2 2 2 2 2 2 2 2 2	0 0 0 0 0 0 0 0		0 0 0 0 0 0	533 688 891 1,152 1,487 1,916 6,400	35 39 44 49 55 62 1,81
0 0 0 0 0 0 0 0	845 1,104 1,439 1,871 2,428 7,079 8,824 10,627 12,670 14,975	177 234 307 405 533 700 919 1,175 1,497		000000000000000000000000000000000000000		0 0 0 0 0 0		22 22 22 22 22 22 22 22 22 22	2 2 2 2 2 2 2 2 2 2	0 0 0 0 0 0 0		0 0 0 0 0	688 891 1,152 1,487 1,916 6,400	39 44 49 55 62 1,81
0 0 0 0 0 0 0	1,104 1,439 1,871 2,428 7,079 8,824 10,527 12,670 14,975	234 307 405 533 700 919 1,175 1,497		000000000000000000000000000000000000000		0 0 0 0 0		22 22 22 22 22 22 22 22	2 2 2 2 2 2 2	0 0 0 0 0		0 0 0 0	891 1,152 1,487 1,916 6,400	44 49 55 62 1,81
0 0 0 0 0 0	1,439 1,871 2,428 7,079 8,824 10,627 12,670 14,975	307 405 533 700 919 1,175 1,497		000000000000000000000000000000000000000		000000000000000000000000000000000000000		22 22 22 22 22 22	2 2 2 2 2	0 0 0 0	 .	0 0 0	1,152 1,487 1,916 6,400	49 55 62 1,81
0 0 0 0 0	1,871 2,428 7,079 8,824 10,627 12,670 14,975	405 533 700 919 1,175 1,497		0 0 0 0		000000000000000000000000000000000000000		22 22 22 22 22	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0 0 0 0	 . '	0 0 0	1,487 1,916 6,400	55 62 1,81
0 0 0 0	2,428 7,079 8,824 10,627 12,670 14,975	533 700 919 1,175 1,497		0 0 0		0	14 1541 1	22 22 22	2 2	0 0 0	Г., Г ¹	0 0	1,916 6,400	62 1;81
0 0 0	7,079 8,824 10,627 12,670 14,975	700 919 1,175 1,497		0		0	15.	22 22	2	0 0		0	6,400	1;81
0 0 0	8,824 10,627 12,670 14,975	919 1,175 1,497		0		0		22	. 2	0				•
0	10,627 12,670 14,975	1,175 1,497		0		• • •	2.1					0 -	7,925	1,95
0 .	12,670 14,975	1,497		-	÷	-	1.1	22						
	14,975			° 0	1			44	Z	0	1	0	9,473	2,03
• • •	· ·	1,907				- Q		22	× 2	0	· ·	0	11,193	2,09
				Û		. 0		22	2	0	۱.	0	13,089	2,12
0	17,534	2,425	· .	0	1.1	. 0		22	. 2	0	۱.	0	15,130	2,13
Q	20,309	3,072		0		0	111	22	2	0		0	17,257	2,12
0 : .	23,326	3,886		; Q	1	0		22	2	0	()	Ο,	19,460	2,08
Ó.	26,503	4,893		0	1.1	0		22	2	0	1	0	21,631	2,01
0	29,870	6,141		Û		0		22	2	0	н. ¹ .	0	23,750	1,91
0	33,363	7,666	÷.	0		0		22	2	0		٥	25,717	1,80
0	36,993	9,522		0		· , 0		22	2	0		0	27,492	1,68
0	40,717	11,749	3.5	0	111	0		22	2	0		0	28,988	1,54
0	44,545	14,399	19.2	0	. t	19 0		22	2	0		0	30,167	1,39
0	48,452	17,504	.*	0	· · · .	5 0	1.1	22	2	0	13	0	30,968	1,24
0	52,456	21,103		Ò	'	_ 0		22	- 2	0		178	31,551	1,10
679	437,735	111,507		Û		¢	. 5	550	110	Ő	1	178	326,858	31,93
	0 0 0	0 40,717 0 44,545 0 48,452 0 52,456 679 437,735 31,259	0 40,717 11,749 0 44,545 14,399 0 48,452 17,504 0 52,456 21,103 679 437,735 111,507 31,259	0 40,717 11,749 0 44,545 14,399 0 48,452 17,504 0 52,456 21,103 679 437,735 111,507 31,259	0 40,717 11,749 0 0 44,545 14,399 0 0 48,452 17,504 0 0 52,456 21,103 0 679 437,735 111,507 0 31,259	0 40,717 11,749 0 0 44,545 14,399 0 0 48,452 17,504 0 0 52,456 21,103 0 679 437,735 111,507 0 31,259	0 40,717 11,749 0 0 0 44,545 14,399 0 0 0 48,452 17,504 0 0 0 52,456 21,103 0 0 679 437,735 111,507 0 0 31,259	0 40,717 11,749 0 0 0 44,545 14,399 0 0 0 48,452 17,504 0 0 0 52,456 21,103 0 0 679 437,735 111,507 0 0 31,259	0 40,717 11,749 0 0 22 0 44,545 14,399 0 0 22 0 48,452 17,504 0 0 22 0 52,456 21,103 0 0 22 679 437,735 111,507 0 0 550 31,259 31,259 31,259 31,259 31,259 31,259	0 36,993 9,522 0 0 22 2 0 40,717 11,749 0 0 22 2 0 44,545 14,399 0 0 22 2 0 48,452 17,504 0 0 22 2 0 52,456 21,103 0 0 22 2 679 437,735 111,507 0 0 550 110 31,259<	0 36,993 9,522 0 0 22 2 0 0 40,717 11,749 0 0 22 2 0 0 44,545 14,399 0 0 22 2 0 0 48,452 17,504 0 0 22 2 0 0 52,456 21,103 0 0 22 2 0 679 -437,735 111,507 0 0 550 110 0 31,259	0 36,993 9,522 0 0 22 2 0 0 40,717 11,749 0 0 22 2 0 0 44,545 14,399 0 0 22 2 0 0 48,452 17,504 0 0 22 2 0 0 52,456 21,103 0 0 22 2 0 679 -437,735 111,507 0 0 550 110 0	0 36,993 9,522 0 0 22 2 0 0 0 40,717 11,749 0 0 22 2 0 0 0 44,545 14,399 0 0 22 2 0 0 0 48,452 17,504 0 0 22 2 0 0 0 52,456 21,103 0 0 22 2 0 178 679 437,735 111,507 0 0 550 110 0 178 31,259 31,25	0 36,993 9,522 0 0 22 2 0 0 27,492 0 40,717 11,749 0 0 22 2 0 0 28,988 0 44,545 14,399 0 0 22 2 0 0 30,167 0 48,452 17,504 0 0 22 2 0 0 30,968 0 52,456 21,103 0 0 22 2 0 178 31,551 679 -437,735 111,507 0 0 550 110 0 178 326,858 31,259 31,

Internal Rate of Return 92.8%

	Cost		EVL		TCH	V	MCost		Flood	Residual	Total B	enefits
Yeer		Dis'd	W/o	with	w/o	with	W/0	with	w/o	Value		Dis'd
1990	0	0	466	466	23,563	23,563	39	39	0	ı 0	0	· · · (
1991.	81	70	611	611	25,053	25,053	39	- 39	c	• 0	0	· · · (
1992	1,471	1,112	2,060	2,060	26,610	26,610	39	39	C	n, 10-	0	ť
1993	0	. 0	2,666	218	28,303	26,888	. 39	3	C	e 0	3,898	2,56
1994	0	0	3,438	287	30,131	28,625	39	3	c) () (4,694	2,68
1995	0	0	4,412	377	32,027	30,425	39	- 3	¢	<u>)</u> (5,672	2,82
1996	.0	¢ -	5,643	496	34,058	32,355	- 39	- 3	C) ()	6,885	2,97
1997	0	· • • •	7,176	653	36,157	34,349	39	. 3	. 0	e 0	6,368	3,14
1998	0	0	9,073	858	38,460	36,537	39	3	C) 0	10,174	3,32
1999	. 0	· 0.	11,390	1,126	40,897	38,852	39	3	¢) ()	12,344	3,50
2000	0	0	14,178	1,477	43,470	41,297	39	3	C	0	14,910	3,68
2001	0	0	17,066	1,886	45,366	43,098	39	- 3	Ċ) Q	17,484	3,75
2002	0	0	20,339	2,404	47,262	44,899	39	3.	C	0	20,334	3,80
2003	• 🗘 •	0	24,026	3,059	49,293	46,829	39	3	· 0	0	23,467	3,81
2004	0	0	28,098	3,885	51,392	48,823	39	3	¢) ()	26,818	3,79
2005	0	. 0	32,533	4,921	53,559	50,881	39	3.	0	0	30,326	3,72
2006	. 0	· 0	37,301	6,215	55,793	53,004	39	3	· 0	0 0	33,911	3,62
2007	0	0	42,365	7,622	58,095	55,191	39	3	Û	ı O	37,484	3,48
2008	0	·: 0	47,688	9,804	60,533	57,506	39	3	0	0	40,946	3,30
2009	.0	. 0 .	53,229	12,231	63,106	59,951	39	3	0	-	44,189	3,10
2010	:0	· 0	58,947	15,173	65,747	62,459	39	3	0	-	47,097	2,87
2011	٥.	0	64,815	18,703	68,455	65,032	39	3	Ó	-	49,571	2,63
2012	0	0,-	70,819	22,892	71,299	67,734	39	- 3	-	i Q	51,528	2,38
2013	0.	Ó.	76,971	27,808	74,278	70,564	39	3	0	-	52,913	2,12
2014	0	0	83,256	33,494	77,393	73,523	39	3	0		53,978	1,88
otal		1,183	718,566	178,926	1,200,301	1,144,049	975	183	<u> </u>	310	596,991	69,02

67,841 Net Present Velue 8/C Retio 58.35 243.5% Internet Rote of Return

	Cost		EVL	· .	TCH	V ve i i	M.Co	şt	F1000 R		Totel B	
ear	Rehab.	Dis'd	w/o	s with ± 1	w/o	with	W/0		W/0	Value		D19'd
990	0	0	466	466	34,036	34,036	68	68	0		¢	1.24
991	139	121	611	611	36,187	36,187	68	68	0	0	0	1.1
992	2,594	1,961	2,060	2,060	38,437	38,437	68	68	0	0	0	
993	.0	.0	2,666	216	40,862	38,836	68		Ŭ.	0	4,554	2,9
994	0	,Q	3,438	287	43,523	41,347	68	∵5	0	0	5,390	3 06
995	9	ò	4,412	377	46,261	43,948	68	5	0	. Q Ì	6,411	3 18
996	0 .	. Q	5,643	496	49,195	46,736	68	ં 5	Q, F	0	7,669	3,3
997	0	0	7,176	653	52,227	49,616	68	5	0	0	9,198	3,4
998	ó	0	9,073	858	55,553	52,775	68	5	Q	. 1 0 - 1	11,055	3,6
999	. 0	0	11,390	1,126	59,074	56,120	- 68	5	0	0	13,280	3,7
000	0	0	14,178	1,477	62,790	59,651	68	5	0	Q	15,903	3,9
001	0.	0	17,066	1,886	65,529	62,252	68	- 5	0	0	18,519	3,98
002	0	0	20,339	2,404	68,267	64,854	68	5	0	0	21,412	4,00
003	0	0	24,026	3,059	71,201	67,641	68	5	0	0	24,589	3,99
004	0	0	28,098	3,885	74,233	70,522	68	5	0	0	27,980	3,9
005	0	0	32,533	4,921	77,363	73,495	68	. 5	0	Ō	31,543	3,8
006	. 0	0	37,301	6,215	80,590	76,561	68	5	0	0 .1	35,178	3,7
007	0	Q	42,365	7,822	83,916	79,720	68	5	0	0.1	38,802	3,6
008	0.	0	47,688	9,604	87,437	83,065	68	. 5.	· • • •	. Q (1)	42,319	3,4
009	O,	0	53,229	12,231	91,153	86,596	68	5	0	· 0	45,619	3,20
010	. 0	0	58,947	15,173	94,968	90,219	68	5	0.1	. (1. 1 . 0. 1.	48,585	2,90
011	0	0	64,815	18,703	98,860	93,936	68	5		0	51,119	2,7
012	0	· 0	70,819	22,892	102,988	97,838	68	5	0	0	53,140	2,4
013	. 0.	O.	76.971	27,808	107 291	101,926	68	5	0	• • • • •	54,591	2 1
014	0	0	83,256	33,494	111 790	106,200	68	5	0	547	55,961	1,9
tal	2,733	2,082	718,566	178,926	1,733,771	1,652,516	1,700	314	0	547	622,825	73,4

Net Present Value 71,365 B/C Retio 35.28 Internal Rate of Return 172.08

Unit: 1000 Pesos 40.GUMACA (PPH South 173) Replacement of Superstructure Total Benefits EVL TCHY M.Cost F1000 Residual Cost Dis'd w/o with w/o Value with w/o Dis'd with w/0 Year Rehab. 64 Ò 0 Ó 0 693 ō 64 127 1990 127 693 Û Ô 64 0 0 0 :-- **0** 307 ¢ 64 907 1991 Ô Û ¢ 0 Ø Ô ø 64 64 1992 Û 0 1,187 1,187 0 Q •0 1,551 1,551 Ô 0 64 64 Ø Ô 1993 1,599 2,432 1,117 Û 2,024 129 0 0 64 5 ΰ 0 1,954 1994 Û 5 0 Û 2,528 1 257 1995 170 0 ¢ 64 Û 0 2,639 ø 64 5 0 0 3,263 1411 223 0 1996 ¢ 0 3,427 1,582 0 0 4,209 0 5 64 1997 Q ¢ 4,443 293 Û, 5,415 1 770 0 Ð 5,742 385 Û Û 64 5 0 1998 0 ¢ 6,949 1.975 506 0 0 64 5 0 1999 ¢ 7,396 Ô 2,195 5 0 0 8,680 666 0 0 64 2000 0 0 9,487 874 0 0 64 5 0 Q 11,285 2,426 0 12,100 2001 0 0 2,665 14,261 ۰**5** 0 ¢ 2002 Û 0 15,348 1,146 0 64 Ô. 17,903 2,910 5 Q 19,347 1,503 0 0 64 Û 2003 Ô 22,313 3:153 1,971 0 0 64 5 0 Û ¢ 24,225 2004 0 :5 ¢. 0 27,572 3,368 2,582 Q 0 64 2005 Û Ø 30,095 5 0 33,775 3,609 0 Ó 64 0 0 37,097 3.381 2006 Û Q. 40,958 3,806 5 0 0 64 2007 0 Q 45,322 4,423 0 3,970 Ô. 49,132 2008 0 0 54,851 5,779 Ó Ø 64 5 0 4 0 9 5 7,539 Û Ó 64 5 0 Û 58,278 2009 0 0 65,758 4,173 0 5 0 Ø 68,290 9,814 Û 64 2010 0 Ô 78,045 ø 79,070 4 201 ¢ 64 5 0 Ô 91,759 12.748 Û 2011 Q ¢ 90,423 4,178 5 0 Û 64 2012 ¢ Q 106,876 16,512 ¢ 4,102 5 0 Û. 102,108 2013 0 ¢ 123,361 21,312 Ø Û 64 27,398 ¢ Ô 64 5 Ó 853 114,717 4,008 ¢ 141,203 ¢ 2014 853 763,283 61,992 0 ¢ 1,600 361 o 123,692 Totol 2,559 1,726 884,883

Net Present Value60,266B/C Ratio35.92Internal Rate of Return88.2%