# 4. ITEM OF PROCESS COST

1A01 UNIT

Mobilization of dredging fleet and associated equipment for dredging work

FC: YEN

	From El Salvador to No	orth Ame	rica 6,222kr	m		LC: US\$	Total estimate for 1 L.S	US\$=¥120
No.	Work Item	Unit	Quantity	Basic Price	-	Unit Cost		Total
			a t			Amount		in
				FC	LC_	FC	LC	YEN
1A0101	Dredging fleet	L.S	, 1	41,599,272	116,380	41,599,272	116,380	55,564,872
1A0102	Dredging fleet	L.S	1	38,920,968	98,035	38,920,968	98,035	50,685,192
	Total					80,520,240	214,415	106,250,064
				Total		80,520,240	214,415	106,250,064

1A0101

Mobilization of dredging fleet and associated equipment for dredging work

UNIT

	From North America to	El Salva	dor 6,222k	m				LC: US\$		Total estimate	or 1 LS	US\$=¥120
No	Work Item		Quantity		_	Bas	ic Price			Unit C	ost	Total
				Ma	aterial	L	abor	Equipo	nent	Amou	int	in
				FC	LC	FC	LC	FC	LC	FC	LC	YEN
1	Material										•	
	TSH Dredger 8000m3	dayunit	11	0	9,200		-			. 0	101.200	12,144,000
	Sub Total		1		·					0	101,200	12,144,00
2	Labor											
	TSH Dredger 8000m3	dayunit	11		1	543,600	C	)	•	5,979,600	0	5,979,60
	Sub Total				1					5,979,600	. 0	5,979,60
3	Equipment		] .								·	•
	TSH Dredger 8000m3	dayunit	11					2,744,880		30,193,680	0	30,193,68
	Sub Total		1					1		30,193,680	0	30,193,689
	Total		1						· .	36,173,280	101,200	48,317,280
			<u> </u>					Total		36,173,280	101,200	48,317,28
	the second second							Unit Price pe	r 1 LS	36,173,280	101,200	48,317,28
	INDIRECT COST								15	5,425,992	15,180	7,247,592
	TOTAL UNIT COST									41,599,272	116,380	55,564,872

1A0102

Mobilization of dredging fleet and associated equipment for dredging work

UNIT FC: YEN

From North America to El Salvador 6,222km LC: US\$ Total estimate for 1 LS US\$=¥120 Work Item Unit Quantity Basic Price Unit Cost Total Equipment Amount Material Labor in FC FC FC LC LC LC FC LC YEN 1 Material Tug Boat 4000PS 12 6,700 80,400 9,648,000 dayunit 201,600 Submersible Pontoon 10000 dayunit 12 140 1.680 82,080 Sub Total 9,849,600 2 Labor Tug Boat 4000PS 228,000 132 1,584 2,926,080 dayunit 12 2,736,000 Submersible Pontoon 10000 dayunit 12 24,000 132 288,000 1,584 478,080 Sub Total 3,024,000 3,168 3,404,160 3 Equipment Tug Boat 4000PS 963,960 11,567,520 dayunit 12 11,567,520 19,252,800 Submersible Pontoon 10000 dayunit 12 1,604,400 19,252,800 Sub Total 30,820,320 30,820,320 33,844,320 44,074,080 Total 85,248 44,074,080 Total 33,844,320 85,248 Unit Price per 1 LS 33,844,320 85,248 44,074,080 INDIRECT COST 15% 5,076,648 12,787 6,611,112 TOTAL UNIT COST 38,920,968 98,035 50,685,192

1A02

Demobilization of dredging fleet and associated equipment for dredging work

UNIT FC: YEN

	From El Salvador to	North Ame	rica 6,222km	1	L	.C: US\$	Total estimate for 1 L.S	US\$=¥120
No.	Work Item	Unit	Quantity	Basic Price		Unit Cost		Total
		İ				Amount		in
				FC	LC	FC	LC	YEN
1A0201	Dredging fleet	L.S	1	41,599,272	116,380	41,599,272	116,380	55,564,872
1A0202	Dredging fleet	LS	1	38,920,968	98,035	38,920,968	98,035	50,685,192
	Total		]			80,520,240	214,415	106,250,064
				Total		80,520,240	214,415	106,250,064

1A0201

Demobilization of dredging fleet and associated equipment for dredging work

UNIT FC: YEN

From El Salvador to North America 6,222km LC: US\$ Total estimate for 1 LS US\$=¥120 Basic Price Work Item Unit | Quantity Unit Cost Total Material Labor Equipment Amount in LC FC LC FO LC FC LC FC YEN 1 Material TSH Dredger 8000m3 11 9,200 101,200 12,144,000 dayunit Sub Total 101,200 12,144,000 2 Labor TSH Dredger 8000m3 11 543,600 5,979,600 5,979,600 dayunit 5,979,600 Sub Total 5,979,600 3 Equipment TSH Dredger 8000m3 2,744,880 30,193,680 30,193,680 11 dayunit | 30,193,680 30193680 Sub Total 48,317,280 Total 36,173,280 101,200 36,173,280 48,317,280 Total 101,200 Unit Price per 1 LS 36,173.280 101,200 48,317,280 INDIRECT COST 5,425,992 15,180 7,247,592 TOTAL UNIT COST 41,599,272 116,380 55,564,872

1A0202

Demobilization of dredging fleet and associated equipment for dredging work

UNIT

	From El Salvador to Nort	th Amer	rica 6,222k	m				LC: US\$		Total estimate	for 1 LS	US\$=¥120
No	Work Item	Unit	Quantity			Basi	ic Price			Unit (	Cost	Total
	•			Ma	terial	Le	abor	Equipr	nent	Amo	unt	in
				FC	LC LC	FC	LC	FC	LC	FC	LC	YEN
1	Material											
	Tug Boat 4000PS	đayunit	12	oļ	6.700			1		0	80,400	9,648,000
	Submersible Pontoon 10000	dayunit	12	o	140	,	*.			이	1,680	201,600
	Sub Total									• 0	82,080	9,849,600
2	Labor						,					
	Tug Boat 4000PS	dayunit	12			228,000	132	·		2,736,000	1,584	2,926,08
	Submersible Pontoon 10000	dayunit	12	.		24,000	132			288,000	1,584	478,08
	Sub Total		] ]	}	1		ļ			3,024,000	3,168	3,404,16
3	Equipment	. !					Ī					
	Tug Boat 4000PS	dayunit	12				ļ	963,960	0	11,567,520	0	11,567,52
1	Submersible Pontoon 10000	dayunit	12				ļ	1,604,400	0	19,252,800	0	19,252,80
	Sub Total				i . 1					30,820,320	0	30,820,32
1	Total									33,844,320	85,248	44,074,080
								Total		33,844,320	85,248	44,074,08
								Unit Price pe	r 1 LS	33,844,320	85,248	44,074,08
	INDIRECT COST								15%.	5,076,648	12,787	6,611,11
	TOTAL UNIT COST									38,920,968	98,035	50,685,19

1A0301 and 1A0302

No.

UNIT FC: YEN

US\$=¥120

Mobilization of other construction plant and equipment

From North America to El Salvador 6,222km LC: US\$ Total estimate for 1 LS Unit Cost Total Work Item Basic Price Unit Quantity Amount FC LC FC LC

in YEN L.S 38,920,968 98,035 38,920,968 98,035 50,685,192 1A0301 Other construction Plant 38,920,968 98,035 50,685,192 1A0302 Other construction Plant LS 38,920,968 98,035 Total 77,841,936 196,070 101,370,384 101,370,384 77,841,936 196,070 Total

1A0301 and 1A0302

Mobilization of other construction plant and equipment

UNIT

	From North America to E	El Salva	dor 6,222k	m				LC: US\$		Total estimate	e for 1 LS	US\$=¥12
No	Work Item	Unit	Quantity			Bas	ic Price			Unit	Cost	Total-
		ĺ		Mat	terial	L	abor	Equip	ment	Am	ount	in
				FC	LC	FC_	LC	FC	LC	FC	LC	YEN
1	Material										1	
	Tug Boat 4000PS	dayunit	12	0	6,700					0	80,400	9,648,00
	Submersible Pontoon 10000	dayunit	12	0	140				-	0	1,680	201,60
	Sub Total		}					1		0	82,080	9,849,60
2	Labor						1					
	Tug Boat 4000PS	dayunit	12	1		228,000	132			2,736,000	1,584	2,926,08
	Submersible Pontoon 10000	dayunit	12	·		24,000	132	1		288,000	1,584	478,08
	Sub Total									3,024,000	3,168	3,404,16
3	Equipment			ĺ				·				
Ì	Tug Boat 4000PS	dayunit	12	İ				963,960	0	11,567,520	이	11,567,52
i	Submersible Pontoon 10000	dayunit	12	. [	ĺ		l	1,604,400	0	19,252,800	. 0	19,252,80
	Sub Total			ŀ	·					30,820,320	0	30,820,32
	Total					100				33,844,320	85,248	44,074,08
								Total		33,844,320	85,248	44,074,08
								Unit Price pe	er 1 LS	33,844,320	85,248	44,074,08
	INDIRECT COST								15%	5,076,648	12,787	6,611,11
	TOTAL UNIT COST									38,920,968	98,035	50,685,19

1A0401 and 1A0402

UNIT

Demobilization of other construction plant and equipment

	From El Salvador to No	rth America	6,222km		LC: US\$	Total estimate for 1	<u>LS</u>	US\$=¥120_
No.	Work Item	Unit	Quantity	Basic Price		Unit Cost		Total
			Amount		in			
<u> </u>				FC	LC	FC FC	LC	YEN
1A0401	Other construction Plant	L.S	. 1	31,136,774	78,428	31,136,774	78,428	40,548,154
1A0402	Other construction Plant	L.S	1	31,136,774	78,428	31,136,774	78,428	40,548,154
	Total	·				62,273,549	156,856	81,096,307
				Total		62,273,549	156,856	81,096,307

1A0401 and 1A0402

Demobilization of other construction plant and equipment

UNIT

	From El Salvadante Nam		·					LC: US\$		Total estimate 1	For 11S	US\$=¥12
NI.	From El Salvador to Nor	~		· · · · · · · · · · · · · · · · · · ·			ic Price	LO. 034		Unit C		Total
No	Work Item	Unit	Quantity	Mat	erial		abor	Equipa	mant	Amou		in
			-	FC	LC LC	FC	LC	FC	LC	FC FC	LC	YEN
	Material	-										
	Tug Boat 4000PS	dayunit	9.6	0	6,700					o	64,320	7,718,40
	Submersible Pontoon 10000	1 1	9,6	o	140					o	1,344	161,2
	Sub Total						٠			ol	65,664	7,879,6
2	Labor				1	1						
•	Tug Boat 4000PS	dayunit	9.6	1		228,000	132			2,188,800	1,267	2,340,8
	Submersible Pontoon 10000	dayunit	9.6	}		24,000	132			230,400	1,267	382,4
	Sub Total				1					2,419,200	2,534	2,723,3
3	Equipment			1	[							
	Tug Boat 4000PS	dayunit	9.6		}			963,960	0	9,254,016	0	9,254,0
	Submersible Pontoon 10000	dayunit	9.6	1	1			1,604,400	0	15,402,240	. 0	15,402,2
	Sub Total			İ	İ		•			24,656,256	0	24,656,2
	Total									27,075,456	68,198	35,259,26
								Total		27,075,456	68,198	35,259,2
								Unit Price pe	er 1 LS	27,075,456	68,198	35,259,2
	INDIRECT COST								15%	4,061,318	10,230	5,288,89
	TOTAL UNIT COST								·	31,136,774	78,428	40,548,15

UNIT

1B01

	Provision of temporary jetty			LC	): US\$	Total estimate for 9	05 m2	US\$=¥120	
No	Work Item	Unit	Quantity	Basic Pri	ce	Unit C	ost	Total	
			. [			Amou	nt	in l	
				FC	LC	FC	LC	YEN	
1B01	Provision of temporary jetty	m2	905	11,955	94.55	10,818,859	85,570	21,087,214	
	Total			·	·	10,818,859	85,570	21,087,214	
				Total		10,818,859	85,570	21,087,214	

UNIT FC: YEN

US\$=¥120

Total estimate for 100 m2 LC: US\$ Provision of temporary jetty Unit Cost Total Basic Price Work Item Unit Quantity No in Equipment Amount Labor Material LC YEN FC LC FC FC FC LC FC Material 2.219 266,256 m3 430 5.16 Rubble stone 34,358 34,358 4.772 7200 Guide pile H350x350x12(15%) ton 10,296 10,296 Guide beam H300x300(15%) 1.43 7200 ton 525,000 525,000 Steel Deck(15%) m2 100 5250 2,232 2,232 0.31 7200 Wasted steel(5%) ton 60 7,200 48 1.25 Bolt & Nut pcs 36,000 120 36,000 300.00 Welding rod kg 15 1,786 m3 24 0.62 Oxygen 50 6,048 1.05 48 ٥l Acetylen 4,146 4,146 829.2 Other material 414 49,738 52 Fuel Crawler crane 30t day.unit 333 39,917 Generator 100KVA 42 day.unit 554 66,528 69 Tug boat 250PS day.unit 840 100,742 210 Backhoe 1.5m3 day.unit 612.032 4.485 1,150,247 Sub Total Labor 306 36,672 38.2 Foreman man.day 915 109,824 64 14.3 man,day Labour 264 31,680 33 Crawler crane 30t day.unit 264 31,680 33. Generator 100KVA day.unit 1,328 159,360 Tug boat 250PS 166 day.unit 528 63,360 66 Pontoon 500ton day.unit 15,840 132 33 day.unit Backhoe 1.5m3 3,737 448,418 Sub Total 3 Equipment 107,520 13,440 107,520 Crawler crane 30t day.unit 14,400 1,800 14,400 Generator 100KVA day.unit 14,400 1.800 14,400 Vibrohammer day.unit 94,080 11,760 94,080 Tug boat 250PS day.unit 14,400 115,200 115,200 Pontoon 500ton day.unit 893 111.6 893 Welder 500A day.unit 3,240 3,240 3,240 Other equipment 19,440 77,760 77,760 day.unit Backhoe 1.5m3 427,493 427,493 Sub Total 8,222 2,026,156 1.039,525 Total Unit Price per No. 10,395.25 82.22 20,261,56 3,039,23 1,559.29 12,33 15% INDIRECT COST 11,955 94.55 23,301 TOTAL

UNIT FC: YEN

1802

Total

Nο

1802

Demolition and clearance of temporary jetty

Work Item

Demolition and clearance of temporary jetty

Unit

Quantity

905

FC

US\$=¥120 Total estimate for 905 m2 LC: US\$ Unit Cost Total Basic Price in Amount LC YEN FC LC 4.053,929 10,463,534 53,413 4,479 59.02

<u>53,41</u>3 10,463,534 4,053,929 10,463,534 53,413 4,053,929

UNIT

1B02

	Demolition and clearar	ice of ten	nporary jet	ty			LC: US\$			Total estimate	for 100 m2	US\$=¥12
No	Work Item		Quantity			Ba	sic Price			Unit (	Cost	Total
				Ma	terial	L	abor	Equipme		Amo		in
				FC	LC	FC	LC	FC	LC	FC	LC	YEN
1	Material			İ								•
	Oxygen	m3	24	0	0.62					0	15	1,78
	Acetylen	kg	48		1.05					o	50	6,04
	Fuel Crawler crane 30t	day.unit		ő	52		·	·		o	414	49,73
	" Tug boat 250PS	day.unit	1 1	ň	69		, ,			0	554	66,52
	" Backhoe 1.5m3	day.unit		n	210					ol	630	75,55
	Sub Total	uay.unc	1 1	ا"				l ·		0	1,664	199,65
2	Labor				į					1		
•	Foreman	man.day	8			0	38.2	1.		o	306	36,67
	Labour	man.day	i I	}	ĺ	0	14.3			0	944	113,25
	Crawler crane 30t	day.unit				0	33			0	264	31,68
	Tug boat 250PS	day.unit		ŀ		0	166			0	1,328	159.36
	Pontoon 500ton	day.unit				. 0	66			· O	528	63,36
	Backhoe 1.5m3	day.unit	3			0	. 33	1.		. 0	99	11.88
	Sub Total							.		0	3,468	416.20
3	Equipment			İ							}	
	Crawler crane 30t	day.unit	8					13,440	0	107.520	0	107,52
	Vibrohammer	day.unit	8					1,800	. 0	14.400	. 0	14,40
	Tug boat 250PS	day.unit	! I		i			11,760	0	94,080	0	94,08
	Pontoon 500ton	day.unit						14,400	0	115.200	o	115,20
	Backhoe 1.5m3	day.unit	3			•		19,440	0	58.320	. 0	58,32
	Sub Total			}						389.520	0	389,52
		ļ			4 2							
	<u> </u>	<u> </u>	L				L	Total		389.520	5,132	1,005,38
								Unit Price per	No.	3,895.20	51.32	10,053.8
	INDIRECT COST			<del></del>					15%	584.28	7.70	1,508.0
	TOTAL		·	· · · · ·						4,479	59.02	11,56

UNIT FC: YEN

	Shooting of Digital Video Films of the Pro	ject	·	[	.C: US\$	Total estimate for	36 Mon.	US\$=¥120
No	Work Item	Unit	Quantity	Basic F	Price	Unit	Cost	Total
		1.				Amo	unt	វិភា
		<u> </u>		FC	LC	FC	LC	YEN
1 -	Video tape	Mon.	36	0	96.0	0 0	3,456	414,720
. 3	Video camera	Mon.	36	3,300	0.0	118,800	.0	118,800
	Total					118,800	3,456.00	533,520
			υ	nit Price per Mon.		3,300	96	14,820

UNIT

1804

npilation and submission of degital video documentary film of the project

FC: YEN

I C: IIS\$ Total estimate f

US\$=¥120

				Total			0	5,400	648,000
1	Compilation at El Sarvador	LS	1		0	5,400.00	. 0	5,400	648,000
				FC		LC	FC	LC	YEN
1							Ām	ount	. in
No	Work Item	Unit	Quantity		asic P	rice	Unit	: Cost	Total
	Compliation and Submission of degical viol	eo oocume	meary min or	trie project		U. UUW	TOTAL ESTIMATE TO	7 ( L.S	U34-#120

UNIT

Renovation of CEPA's temporary office

FC: YEN LC: US\$ Total estimate for 400 m2

US\$=¥120

								404
No	Work Item	Unit	Quantity	Basic I	Basic Price Unit Cost			Total
					Amount			in
			<u> </u>	FC	LC	FC	LC	YEN
. 1	Renovation of CEPA's temporary office	m2	400	0	8	0 . 0	32,000	3,840,000
	Total				<u> </u>	c	32,000	3,840,000
				Unit Price per m2		0	80	9,600

1C02

No

3

UNIT

FC

FC: YEN

Maintenance for CEPA's temporary office	
Work Item	Γ

Water, electric and telephon fees

Office consumable goods

Other expense

Total

Unit

Mon.

Mon.

Mon.

Quantity

LC: US\$ Total estimate for 8 Mon. US\$=¥120 Basic Price Unit Cost Total Amount in LC YEN LC FC 1,000.00 960,000 8,000 500.00 4,000 480,000

500.00 4,000 480,000 16,000.00 1,920,000.00 2,000 Total 240,000

UNIT

1 C03

	Construction and furnishing office for th			_C: US\$	Total estimate for	US\$=¥120			
No	Work Item	Unit	Quantity	Ba	asic F	Price	Unit C	ost	Total
, ,,,							Amount		in
· ·				FC	$\neg \neg$	LC	FC	LC	YEN
1	Construction office	m2	720		. 0	300.00	0	216,000	25,920,000
2	Furnishing	L.S	1		0	131,485.00	0	131,485	15,778,200
				and the second	.				
L		<u></u>	J	Total			0	347,485	41,698,200

1C04

UNIT FC: YEN

,	Maintenance for the office of the Employ	er and the	Engineer		US\$=¥120			
No	Work Item	Unit	Quantity	Basic	Price	Unit	Total	
}		ļ					Amount	
		<u> </u>		FC	LC	FC	LC	YEN
1	Water, electric and telephon fees	Mon.	28	0	1,000.00	. 0	28,000	3,360,000
2	Office consumable goods	Mon.	28	. 0	1,000.00	0	28,000	3,360,000
3	Other expense	Mon.	28	. 0	500.00	0	14,000	1,680,000
	Total					0	70,000.00	8,400,000
				Unit Price per Mon.		0	2,500	300,000

HINTT

1C05

· .	Renovation before hand over for the office	e of the E	mployer/Enginee	er L	.C: US\$	Total estimate for	US\$=¥120	
No	Work Item	Unit	Quantity	Basic P	Basic Price Unit Cost			
						An	nount	រក
[	<u> </u>			FC	LC	FC	LC	YEN
1	Renovation for the office of Employer/Engineer	m2	720	0	. 2	7	19,440	2,332,800
	Total		L_				19,440	2,332,800
			Un	it Price per m2			27	3,240

1C06

UNIT FO: YEN

	Renovation of laboratory					LC	: US\$	Total estima	te for 1	LS	US\$=¥120
No	Work Item	Unit	Quantity		Basic Price			Unit Cost			Total
1			1				Amount		nt	in	
	·		<u> </u>		FC		LC	FC		LC	YEN
1	Renovation of laboratory	L.S	1			0	1,600		0	1,600	192,000
			<u></u>	Total			···········		0	1,600	192,000

UNIT FC: YEN

		Provision and maintenance of laborato	y equipment			LC: US\$	Total estimate for	36 Mon.	US\$=¥120
	No	Work Item	Unit	Quantity	Basic	Basic Price Unit Cost		Total	
١.							Amo	ount	in
Ĺ					FC	LC	FC	LC	YEN
	1	Equipment	Mon.	36		224.00	0	8,064	967,680
	2	Laboratory Engineer	Mon.	36	il e	500.00	0	18,000	2,160,000
1	3 .	Laboratory assistant labor	Mon.	36		900.00	0	32,400	3,888,000
	4 .	Others	Mon.	36	(	26		936	112,320
	<u> </u>	Total					<u>                                     </u>	59,400	7,128,000
					Unit Price per Mon		0	1.650	198,000

1C08

UNIT FC: YEN

	Provision,maintenance and services of bo	ats for the	Engineer	··	LC: US\$	Total estimate for 36 Mon.		US\$=¥120
No	Work Item	Unit	Quantity	Basic	Price	Unit Co	ost	Total
] .						Amount		, in
			L	FC	LC	FC	LC	YEN
1	Boats	Mon.	36	0	800.00	0	28,800	3,456,000
2	High class crew	Mon.	36	O	700.00	0	25,200	3,024,000
3	Low class crew	Mon.	36	0	900.00	0	32,400	3,888,000
	Total					0	86,400	10,368,000
				Unit Price per Mon.		0	2,400	288,000

UNIT

1C09, 1C10, 1C11 and 1C12

	Provision of vehicles				Ĺ	C: US\$	Total estimate fo	r 4 Nos.	US\$=¥120					
No.	Work Item	Unit	Quantity	Quantity Basi		rice	Unit	Total						
	1	1					. Am	in						
	·			<u> </u>		• .	·	· 	FC		LC	FC	LC	YEN
1C09	Provision of vehicle Type-A	Nos.	1		0	34,400.00	. 0	34,400	4,128,000					
1 C09	Above for insurance and others	Nos.	•		0	3,300.00	ο	3,300	396,000					
1010	Provision of vehicle Type~B	Nos.	2	}	0	23,900.00	0	47,800	5,736,000					
1010	Above for insurance and others	Nos.	2		0	3,040.00	0	6,080	729,600					
1011	Provision of vehicle Type-C	Nos.	6	1	0	32,700.00	0	196,200	23,544,000					
1011:	Above for insurance and others	Nos.	6		0	3,850.00	0	23,100	2,772,000					
1C12	Provision of vehicle Type-D	Nos.	4		o	27,200.00	0	108,800	13,056,000					
1012	Above for insurance and others	Nos.	4		0	3,350.00	0	13,400	1,608,000					
				Total			0	433,080	51,969,600					

UNIT

1013 Mainta

		Maintenance of vehicles for Type-A,B,C a	and D			L(	J: US\$	Total estimate	for 30 Mon.	US\$=¥120
Γ	No	Work Item	Unit	Quantity		Basic Price		Unit	Total	
				İ				Am	ount	in
				·		FC	LC	FC	LC	YEN
Γ	1	Fuel and lubricant	Mon.	36		0	1,989,00	. 0	71,604	8,592,480
1	2	Driver	Mon.	36		0	1,625.00	. 0	58.500	7.020.000
L		Total	·					0	130,104	15,612,480
					Total			0	3,614	433,680

UNIT

1014

	Provision and maintenance of Engineer's	survey equ	ipment		LC: US\$ Total estimate for 36 Mon.				
No	Work Item	Unit Quantity		Basi	c Price	Uni	Total		
1.							Amount		
				FC	LC	FC	LC	YEN	
1	Equipment	Mon.	36		0 775.00		27,900	3,348,000	
2	Laboratory Engineer	Mon.	36		650.00	)	23,400	2,808,000	
3	Laboratory assistant labor	Mon.	36		0 900.00	) (	32,400	3,888,000	
1	Total						83,700	10,044,000	
			Total			2,325	279,000		

UNIT

1D01

	Demolition and clearance of the building	foundation	and others in	the project site	LC: US\$	Total estimate	for 18000 m3	US\$=¥120	
No	Work Item	Work Item Unit Quantity			Price	Unit	Unit Cost		
						Amo	ount	in	
				FC	LC ·	FC	LC	YEN	
1	Demolition and clearance	m3	18,000	11	8 2.1	1 2,124,000	37,980	6,681,600	
	Total		<u> </u>			2,124,000	37,980	6,681,600	
				Unit Price per m3		118	2	371	

UNIT

1D02

		Demolition and clearance of the existing I	perth and	others in the	project site	LC: US\$	Total estimate f	or 1 L.S	US\$=¥120
	No	Work Item	Unit	Quantity	Basic Pr	Basic Price		ost	Total
ļ			1	1.			Amou	ınt	in [
			L·		FC	LC	FC	LC	YEN
	1	Demolition and clearance of land side	m3	1,510	118	2,11	178,180	3,186	560,512
	2	Demolition and clearance of sea side	L.S	1	394,594	5,572,44	394,594	5,572	1,063,287
			L				<u>                                     </u>		
					Total		572,774	8,759	1,623,799

UNIT

1D03

	Demolition and clearance of the tree and	others in t	he project si	te	LC: US\$			Total estimate for 1000 m3		
No	No Work Item		Quantity	Basic Price			Unit	Total		
							Amo	ount	în	
				FC	LC		FC	LC	YEN	
1	Demolition and clearance of the tree and others	m3	1,000		9	1.45	79.000	1,450	253,000	
	Total						79,000	1,450	253,000	
				Total			79	1	253	

UNIT

FC; YEN

Total estimate for 659750m3 Outer Channel Dredging (-14.5) Offshore Dumping LC: US\$ US\$=¥120 Basic Price Work Item Unit Quantity Unit Cost Total Equipment Material Labor Amount in FC LC FC LC FC LC FC LC YEN 1 Material 229,990 27,598,800 TSH Dredger 8000m3 25 9,200 dayunit 419,970 Working Boat 480PS 25 140 3,500 Passenger Boat 100PS 25 991 1,111 Survey Boat 70PS 25 20 510 61,212 234,991 28,081,093 Sub Total 2 Labor 27,180,000 TSH Dredger 8000m3 27,180,000 dayunit 25 1,087,200 600,000 798,000 Working Boat 480PS 25 24,000 1,650 Passenger Boat 100PS 25 1,650 198,000 66 396,000 25 132 3,300 Survey Boat 70PS 28,572,000 Sub Total 27,780,000 6,600 3 Equipment 68622000 TSH Dredger 8000m3 68,622,000 dayunit 25 2,744,880 3,573,000 25 3.573.000 Working Boat 480PS 142,920 25 87,000 87,000 Passenger Boat 100PS 3,480 25 2,280 57,000 57,000 Survey Boat 70PS 72,339,000 72339000 Sub Total Total 100,119,000 241,591 128,992,093 Total 100,119,000 241,591 128,992,093 Unit Price per m3 0.37 195.52 151.75 INDIRECT COST 0.05 29.33 22.76 TOTAL UNIT COST 175 0.42

UNIT FC: YEN

195

0.55

261

Total estimate for 609,000m3 US\$=¥120 Outer Channel Dredging (-14.5) Onshore Dumping LC: US\$ Unit Cost Total Basic Price No Work Item Unit Quantity Material Labor Equipment Amount ìΠ FC FC FC LC FC LC YEN LC 1 Material 440 52,800 Balt and Nut Nos 800 0.55 800 96,000 m2 1000 0.8 Vinyl Sheet 11500 1,380,000 11,500 LS Over Flow 11900 1,428,000 11,900 Silt Protector LS 229,990 27,598,800 25 9,200 TSH Dredger 8000m3 dayunit 3,500 419,970 25 140 Working Boat 480PS 991 1,111 40 Passenger Boat 100PS 25 510 61,212 25 20 Survey Boat 70PS 187 8,326 999,108 50 Bulldozer 21t 6,093 731,148 244 25 Backhoe 1.6m3 1,005 120,582 Generator 45KVA 40 275,055 32,888,731 Sub Total 2 Labor 2865 343,800 75 38.2 manday Foremen 4290 514,800 14,3 300 Labor manday 27,180,000 27,180,000 25 1.087.200 TSH Dredger 8000m3 dayunit 24,000 66 600,000 1,650 798,000 Working Boat 480PS 25 1,650 198,000 25 Passenger Boat 100PS 132 3,300 396,000 Survey Boat 70PS 25 33 1,650 198,000 50 Bulldozer 21t 825 99,000 33 25 Backhoe 1.6m3 99,000 25 825 Generator 45KVA 17,055 29.826,600 27,780,000 Sub Total 3 Equipment 2,744,880 68,622,000 88822000 TSH Dredger 8000m3 dayunit 3,573,000 142,920 3,573,000 Working Boat 480PS 25 25 3,480 87,000 87,000 Passenger Boat 100PS 2,280 57,000 57,000 25 Survey Boat 70PS 618,000 618,000 12,360 50 Buildozer 21t 19,440 489,000 486,000 25 Backhoe 1.6m3 27,000 27,000 1,080 25 Generator 45KVA 1,119.60 671,760 671,760 800 Floater 5m x 1500mm Nos 285.60 685,440 685,440 Steel Pipe 8m x 800mm Nos 2,400 497,520 497,520 829.20 600 Ruber Sleeve 1.7m x 800mm Nos 273.60 16,416 16,416 Nos 60 Curve Pipe 75341136 75,341,136 Sub Total 138,056,467 103,121,136 292,110 Total Total 103,121,136 292,110 138,056,467 Unit Price per m3 169,33 0.48 226,69 25.40 0.07 34,00 INDIRECT COST

TOTAL UNIT COST

UNIT

2B0404 and 2C0404
Concrete Work for Caisson Production

Concrete Work for Caisson Production							Total estimate for 1118m3		US\$=¥120			
No	Work Item	Unit	Quantity			Bas	Unit	Unit Cost				
					aterial	Labor		Equipment			ount	in
				FC	LC	FC	LC	FC	LC	FC	LC	YEN
1	Material	-										
	Ready mixed concrete	cu.m	1118	0	70.00	{				0	78,260	9,391,20
	Wasted concrete(2.5%)	cu.m	22	0	70.00					o	1,565	187,82
	Metal form	sq.m	5818	0	6.50						37,817	4,538,04
	Other materials	%	2	0	756		·		1.	ol	756	90,76
	Fuel Generator 100KVA	dayunit	12	. 0	44						531	63,67
	" Truck mixer 4.5m3	dayunit	30	. 0	53		į			0	1.594	191,26
	" Truck crane 16t	dayunit	24	. 0	31						752	90,28
	Sub Total		'				•				121,275	14,553,05
2	Labor											
	Foreman	man.day	30			0	38.20				1,146	137,52
	Labor	man.day	600			0	14.30				8,580	1,029,60
	Generator 100KVA	man.day	12			] :0	33	·		0	396	47,52
	Truck crane 16t	man.day	24			0	33:				792	95,04
	Truck mixer 4.5m3	man.day	30		•	0	33			0	990	118.80
	Concrete pump 45m3/h	man.day	6			. 0	66			0	396	47,52
	Sub Total	1						• •		0	11,904	1,476,00
3	Equipment		] }		,						į	
	Generator 100KVA	dayunit	12				·	1,800	0	21,600	0	21,60
	Vibrator	dayunit	24	•		1		120	0	2,880	0	2,88
	Truck crane 16t	dayunit	24		}			9,480	0	227,520	0	227,52
	Concrete pump 45m3/h	dayunit	6					9,120	0	54,720	0	54,72
	Truck mixer 4.5m3	dayunit	30					5,280	0	158,400	0	158,40
	Sub Total									465,120	0	465,12
								Total		465,120	133,179	16,494,17
								Unit Price p	er m3	416.03	119.12	14753.2
	INDIRECT COST								15%	62,40	17.87	2212.9
	TOTAL									478	136.99	16,966

UNIT

2B05 and 2C05

	Temporary Anchoring of		· · · · · · · · · · · · · · · · · · ·		LC: US\$	Total estimate	US\$=¥120					
No	Work Item	Unit	Quantity			Bas	Unit Cost		Total			
				Material		Labor		Equipment		Amo		in
				FC	LC	FC	LC	FC	<u>LC</u>	FC	LC	YEN
1	Material					1						
	Floating Dock 6000t	day	1	oj.	110	1				0	110	13,1
	Tug boat 250PS	day	2	0	70					0	141	16,8
	Anchor boat 400PS	day	1	0	120	- 1			**	0	120	14,3
	Generator 100KVA	day	2	0	45					0	90 .	10,8
	Others	L.S.	] 1]	0	230	J				0	230	27.6
	Sub Total					1				0	691	82,9
2	Labor		ì :			ĺ			٠			
	Foreman	man.day	2			0	38.2	.		0	76	91
	Labour	man,day	8		į	0	14.3			0	114	13
	Floating Dock	day	: 1		•	114,000	66		*	114,000	66	121.
	Tug boat 250PS	day	2			12,000	66			24,000	132	39,8
	Anchor boat 400PS	day	1		ĺ	24,000	66			24,000	66	31,
	Generator 100KVA	day	2		}	0	33	4.4		0	66	7,
	Sub Total					İ				162,000	521	224,
3	Equipment										ļ	
	Floating Dock	day	1		İ			367,800	C	367,800	0	367,
	Tug boat 250PS	day	2					11,760	C	23,520	0	23.
	Anchor boat 400PS	day	1		}	l		91,200	C	91,200	. 0	91,
	Generator 100KVA	dayunit	2		Ì	-		1,800	Ċ	3,600	0	3,
	Submersible pump 11kw	dayunit	8		Ì			2.97		24	0	
	Sub Total		<u> </u>				·			486,144	0	486,
								Total		648,144	1,212	793,
							·	Unit Price pe		324,072	606.05	396,
	INDIRECT COST						<u></u>		15%		90.91	59,
	TOTAL									372,683	696.96	456,3

UNIT

2B06 and 2C06

FC: YEN LC: US\$

	ZDOU BIIG ZCOU						FO. TEN					
<u> </u>	Placing of Caisson				·		LC: US\$			Total estimate		US\$=¥120
No ,	Work Item	Unit	Quantity				ic Price	Unit Cost		Total		
	·	1. 12	] ]	Mate	erial	Labor		Equipment			nount	in
		_L		FC	LC	FC	LC	FC	LC	FC	LC	YEN
1	Material											
	Tug boat 250PS	day	2	. 0	79					0	141	16,87
	Anchor boat 400PS	day	1	0	120			Ì		0	120	14,38
	Generator 100KVA	day	1	0	45			*		0	45	5,42
	Others	L.S.	1	. 0	153	}					153	18.34
	Sub Total									0	459	55,02
2	Labor		1								•	
	High class crew	manday	[ 2	i		45000	- 0		i . '	90000	o	9000
	Middle class crew	manday	2			12000	0			24000	0	2400
	Foreman	man.day	1			0	38.2			0	38	458
	Labor	man.day	4	. [		0	14.3			0	57	686
	Pontoon 1000t	day	1			. 0	66			0	66	7,92
	Tug boat 250PS	day	2	}		12,000	66	ļ		24,000	132	39,84
	Anchor boat 400PS	day	1			24,000	66		•	24,000	. 66	31,92
	Generator 100KVA	day	- 1			0	33	!		0	33	3,96
	Sub Total					ļ		j		162,000	392	209,08
3	Equipment	1	]				·					
	Pontoon 1000t	day	1					25,080	0	25,080	. 0	25,08
	Tug boat 250P\$	day	2	ļ	. 1			11,760	٥	23.520	0	23,52
	Anchor boat 400PS	day	1		·			91,200	0	91,200	. 0	91,20
	Generator 100KVA	dayunit	j 1				*,	1,800	. 0	1,800	0	1,80
	Submersible pump 11kw	dayunit	4	}			1	360	0	1,440	٥	1.44
	Sub Total		<u> </u>		·					143,040	0	143,04
								Total		305,040	851	407,15
								Unit Price pe		305040	851	40715
	INDIRECT COST			<del></del>					15%	<del>}</del>	127.64	61073.11
	TOTAL									350,796	978,59	468,22

UNIT

2B07 and 2C07

	Sand Filling into CAISSO	N					LC: US\$		· · · · · · · · · · · · · · · · · · ·	Totalestimate	for 4975m3	US\$=¥128
No	Work Item	Unit	Quantity			Ba	sic Price			Unit	Cost	Total
	Ì			Mate	rial	La	bor	Equip	ment	Am	ount	in
		<u> </u>		FC	LC	FC	LC	FC	LC	FC	LC	YEN
1	Material											
	Sand	m3	4975	. 0	4,00					. 0	19,900	2,388,00
	Wasted Sand(10%)	m3	498	0	4.00					0	1,992	239,04
	Crushed stone	m3	200	0	8.40			1		0	1,680	201,60
	Self-propelled Hopper B.850	day	4	0	620		ļ	İ		0	2,480	297,59
	Others	L.S.	1	o	0					0	0	. 1
٠.	Sub Total						1			0	26,052	3,126,23
. 2	Labor											
	Foreman	man.day	4			0	38.2	}	İ	. 0	153	1833
	Labor	man.day	16			. 0	143			.0	229	2745
	Self-propelled Hopper B.850	day	. 4			93,000	132			372,000	528	435,36
	Sub Total								1	372,000	910	481,15
3	Equipment							· ·	<u>.</u>		·	
	Self-propelled Hopper B.850	đay	4		i			288,720	0	1,154,880	0	1,154,88
	Sub Total							<u>.</u>		1,154,880	0	1,154,88
								Total		1,526,880	26,962	4,762,26
					······································			Unit Price pe	er m3	306.91	5,42	957.2
	INDIRECT COST								15%	46.04	0.81	143,5
	TOTAL									353	6.23	1,10

2B08 and 2C08

UNIT FC: YEN

LC: US\$ Total estimate for 164m3 US\$=¥120 Covere Concrete of Caisson Basic Price Unit Cost Work Item Total No Unit | Quantity Material Labor Equipment Amount ìn FC LC LC FC LC FC LC YEN FC 1 Material 1,279,200 Ready mixed concrete m3 164 65.00 10,660 Wasted concrete(2.5%) m3 4.1 65.00 267 31,980 218.53 219 26,224 Other material Fuel Concrete pump day 1.5 0 1.5 67 Generator 125KVA day 45 8,080 Truck crane 16t day 1.5 30 45 5,364 Sub Total 11,257 1,350,848 2 Labor 57 6.876 Foreman man.day 1.5 38.20 15 215 25,740 Labor 14,30 man.day 1.5 33 50 5,940 Truck crane 16t man,day 50 Generator 125KVA man.day 1.5 33 5.940 Concrete pump 45m3 33 50 5,940 man.day Sub Total 321 50,436 3 Equipment 2,280 Generator 125KVA 1.5 3,420 3,420 day 1.5 9.480 14,220 14,220 Truck crane 16t day Concrete pump 45m3 1.5 9,120 13,680 13,680 day Vibrator dayunit 120 720 720 Sub Total 32.040 32,040 Total 32,040 11,578 1,433,324 Unit Price per m3 195.37 70,60 8,739,78 INDIRECT COST 29.30 10.59 1,310,97 15% TOTAL 225 81.19 10,051

2B09 and 2C09

UNIT FC: YEN

LC: US\$ Total estimate for 278m3(20m) US\$=¥120 Coping concrete Basic Price Unit Cost Total Work Item Unit Quantity No Material Labor Equipment Amount in FC LC FC LC YEN FC LC FC LC 1 Material 2,335,200 19,460 Ready mixed concrete 278 70,00 cu.m 487 58,380 Wasted concrete(2.5%) 7.0 70.00 cu.m 110 13,145 Elas tigh board 13.2 8.33 sq.m 807,840 18.7 360 6,732 Reinforcement ton 360 135 16.157 Wasted reinforcement(2%) 0.4 ton 896 107,546 3.83 Metal form(10%) 234 sq.m 62,861 524 524 Other material 460 20 23 Corner protection Fuel Concrete pump day 0 45 224 26,934 Generator 125KVA day 17,879 149 Truck crane 16t day 29,176 3,445,942 Sub Total 2 Labor 22,920 38.20 191 Foreman man.day 85,800 50 14.30 715 Labor man.day 165 19,800 33 Truck crane 16t man.day 33 165 19,800 Generator 125KVA man.day 33 165 19,800 Concrete pump 45m3 man.day 1,071 168,120 Sub Total 3 Equipment 2.280 11,400 11,400 Generator 125KVA day 47,400 Truck crane 16t 9,480 47,400 day 9.120 45,600 45,600 Concrete pump 45m3 day 20 120 2,400 2,400 Vibrator dayunit 106,800 106,800 Sub Total Total 30,247 3,720,862 106,800 Unit Price per m3 13,384,40 384.17 108,80 15% 57.63 16.32 2.007.66 INDIRECT COST TOTAL 442 125,12 15.392

LA UNION PORT DEVELOPMENT PROJECT 2B10 and 2C10

UNIT

	Apron Concrete Paven	nent	· .				LC	: US\$	<u>:</u>				Total estimat		US\$=¥120
No	Work Item	Unit	Quantity			Ва	sic	Price					Unit	Cost	Total
		ļ	[	Ma	terial		Labo	or		Equip	ment		Amo	ount	in
				FC	LC	FC	]	LC	] 1	FC	1	C	FC	LC	YEN
- 1	Material														
	Ready mixed concrete	cu.m	180	0	70.00								0	12,600	1,512,00
	Wasted concrete(2.5%)	cu.m	4.55	0	70.00	·	1	•	1				0	319	. 38,22
	Other material	%	2	. 0	258.37				ļ				0	258	31,00
	Elas tigh board	sq.m	63	٥	8.33		- 1						0	525	62,97
	Fuel Concrete pump	day	2.0	0	. 0		- (				ĺ		( - 0	0	- 1
	" Generator 125KVA	day	2.0	0	45								0	90	10,77
	" Truck crane 16t	day	2.0	0)	30	1	]						) 0	60	7,15
	Sub Total	1		į									. 0	13,851	1,662,12
2	Labor				I								<u>'</u>		
	Foreman	man.day	2	}			0	38.20	l		}		0	76	9,16
	Labor	man.day	6		·		0	14.30		-			0	86	10,29
	Truck crane 16t	man.day	2				0	33					0	66	7,92
	Generator 125KVA	man.day	2				0	33	(		·		( o	66	7,92
	Concrete pump 45m3	man.day	2				0	33			ŀ		0	66	7,92
٠,	Sub Total	-	]	j		,			ļ				0	228	43,22
3	Equipment		j	1											
	Generator 125KVA	day	2							2,280		0	4,560	0	4,56
	Truck crane 16t	day	2				-			9,480		0	18,960	0	18,96
	Concrete pump 45m3	day	2							9,120		0	18,240	0	18,24
	Vibrator	dayunit	6				1			120		0	720	0	72
	Sub Total			[					·				42,480	0	42.48
									Total				42,480	14,079	1,747.82
								····	Unit I	Price p	er m3		236	78.22	9,71
	INDIRECT COST							~				15%	35	11.73	1,45
	TOTAL.												271	89.95	11,16

UNIT

2B11 and 2C11

	2511 and 2011						1 O. ILIN			_		
	Sand Protection Sheet			·			LC: US\$	·		Total estimate		US\$=¥12
No	Work Item	Unit	Quantity				ic Price			Unit		Total
			[	Ma	terial	L	abor	Equip:	ment	Amo		in
				FC	LC	FC	LC	FC	LC	FC	LC	YEN
1	Material											
	Protection sheet	m	120	540	0.00					64800	0	64,80
	Steel plate	kg	144	5280	0,00					760320	0	760,32
	Drive, pin	nos.	480	9.6	0.00					4,608	0	4,60
	Fuel Crawler crane 16t	day	2.00	0	30					0	61	. 7,29
	Tug boat 250PS	day	0.10	0	140			į	· ·	0	14	1,67
	Sub Total							}		829,728	61	838,6
2	Labor									<u> </u>		
	Diver	man.day	1			. 0	100.00			0	100	12,0
	Labour	man.day	. 2			. 0	14.30		į	. 0	29	3,43
	Crawler crane 16t	day.unit	1			. 0	33			0	33	3,96
	Tug boat 250PS	day,unit	0.1			. 0	166			0	17	1,99
	Sub Total									0	178	21,38
3	Equipment		. 1	İ								
	Crawler crane 16t	day.unit	t					8,640	0	8,640	0	8,64
	Pontoon 500t	day.unit	1					14,400	0	14,400	0 :	14.40
	Tug boat 250PS	day.unit	0.1					11,760	0	1,176	0	1.1
	Sub Total	1	<u> </u>					<u> </u>	<u> </u>	24,216	0	24,2
								Total	er en en en en en en en en en en en en en	853,944	239	884,29
								Unit Price po	er m	7116.20	1.99	7369.
	INDIRECT COST								15%	1067.43	0.30	1105,
	TOTAL									8,184	2.29	8,47

2B12 and 2C12

UNIT FC: YEN

	Backfilling behind CAIS	SON					LC: US\$			Total estimate	for 4538m3	US\$=¥120
No	Work Item	Unit	Quantity			Bas	ic Price			Unit	Cost	Total
		1		Ma	terial	L	abor	Equip	ment	Amo	ount	in
		<u> </u>		FC	LC	FC	LC	FC	LC	FC	LC	YEN
1	Material											
i i	Rubble stone	m3 .	4,538	0	5.16			·	j .	0	23,416	2,809,930
	Wasted rubble stone(25%)	m3	1,135	0	5.16						5,854	702,482
	Geotextile	m2	620	0	1.47					o	911	109368
	Fuel Tug boat 450PS	day	19.0	0	130						2,465	295,807
	" Backhoe 1.2m3	day	19.0	. 0	180	·				0	3,411	409.351
	" Working boat	day	19.0	0	60			<i>.</i>			1,148	137,803
	Sub Total		}						<b>,</b>	] 0	37,206	4,464,742
2	Labor									1		
	Foreman	manday	19.0			0	38.2			0	726	87,096
	Labor	manday	76,0			0	14.3		İ	0	1,087	130,416
	Diver	manday	38.0			0	100			0	3,800	456,000
	Tug boat 450PS	day	19.0			٥	166			0	3,154	378,480
	Pontoon 500t	dayunit	38.0			0	66		1	0	2,508	300,960
	Backhoe 1.2m3	day	19.0			0	33			0	627	75,240
	Working boat	day	19.0		;	0	66			0	1,254	150,480
	Sub Total	1	[ [				·			0	13,156	1,578,672
.3	Equipment										. 1	
	Tug boat 450PS	day	19.00					19,320	. 0	367,080	0	367,080
	Pontoon 500t	day,unit	38.00					14,400	0	547,200	0	547,200
	Backhoe 1.2m3	day	19.00			. •		15,240	0	289,560	0	289,560
	Working boat	day	19.00					3,480	0	66,120	0	66,120
	Sub Total	<u> </u>	,							1,269,960	0	1,269,960
								Total		1,269,960	50,362	7,313,374
			· · · · · · · · · · · · · · · · · · ·					Unit Price pr		279.85	11.10	1611.59
	INDIRECT COST								15%	41.98	1.66	241.74
	TOTAL									322	12.76	1,853

UNIT

2B13 and 2C13

	Driving of Steel Pipe	Pile for (	Crane Rail	Foundati	on		LC: US	\$		Total estimat	e for 1No.	US\$=¥120
No	Work Item	Unit	Quantity			Basic	Price			Unit Cost		Total
				Material		Others		Equipmen	t	Amount		in .
	]	j	}	FC	LC	FC	LC	FC	LC	FC	LC	YEN
2B1301 2C1301	SUPPLY AND TRANSPORT	STEEL PIP	E PILE							569,774	0.00	569,774
281302 2C1302	FABLICATION OF PILING									1,255	29.67	4,815
2B1303 2C1303	INSTALLATION AND REMO	VAL OF GU	ID BEAM							28,296	245.11	57,709
2B1304 2C1304	DRIVING STEEL PIPE PILE									53,924	. 150.30	71,960
2B1305 2C1305	STEEL PIPE PILE REINFOR	RCEMENT OF	EDGE							6,257	16.19	8,200
	Total									659,506	441.27	712,458

2B1301 and 2C1301

UNIT FC: YEN

	Supply and Transport S	teel Pip	e Pile				LC: US\$			Total estimate for	or 10 Nos.	US\$=¥120
No	Work Item	Unit	Quantity			Ba	sic Price			Unit	Cost	Total
				Ma	terial		)thers	Equip	ment	Amo	ount	in
		<u> </u>		FC	LC	FC	LC	FC	LC	FC	LC	YEN
		1	1 1	· 1				1	ĺ	1		. !
1	Material	1		•	ļ.		1		}	l . l		
1	Steel Pipe Pile	ton	47.50	48,000	0		1	Į	1	2,280,000	0	2,280,000
(	Other material	<b>%</b>	[ 1]	22,800	0		[			22,800	. 0	22,800
	Sub Total									2,302,800	0	2,302,800
2	Others										Í	
	Loading & Unloading Fee	FT	160	4560	0		}		}	729,600	. 0	729,600
	Transpotation fee by ship	FT	160	12000	o		1	}		1,920,000	0	1,920,000
	Miscellaneous	L.S	1	2160	oí		1		1	2,160	0	2,160
	Sub Total									2,651,760	0	2,651,760
<u> </u>	<u> </u>	┸	<u> </u>	L	1		<u> </u>	Total	<u> </u>	4,954,560	0	4,954,560
								Unit Price p	er No.	495,456.00	0	495,456,00
	INDIRECT COST								15%	74318.40	0	74318.40
	TOTAL									569,774	0	569,774

UNIT

2B1302 and 2C1302
Eablication of Piline

FC: YEN 10:115\$

	2B1302 and 2C1302						LO. HOR.			Total estimate	a for 10 Nac	US\$=¥120
	Fablication of Piling	11				Do	LC: US\$				nit Cost	Total
Νo	Work Item	Unit	Quantity		,			T ======			Amount	in
	1				terial		abor	Equip				
		<b>.</b>	<b>├</b>	FC	LC	FC	LC	FC	LC	FC	LC	YEN
1	Material				÷.							
	Oxygen	m3	1.88	0	0.62		1				1	14
	Acetylen	kg	0.90	o	1.05		l				1	. 11
	Timber	cu.m	0.19	9	. 380						72	8,66
	Fuel Trailer 28t	day	0.50	0	. 50	•				0	25	2,99
	" Truck crane 25t	day	0.50	0	70				,	0	35	4,21
	Sub Total									0	134	16,12
2	Labor	1										
-	Foreman	man.day	0.5			0	38.20	ol .	ļ ·		19	2,29
	Labor	man.day	1 1			0	14.3	ol		0	72	8,58
	Trailer 28t	man.day	i l			. 0	3:	í .			17	1,98
	Truck crane 25t	man.day	i I			0	3:	1		· · o	17	1,98
	Sub Total	,,,,a,,,				_	ŀ	1			124	14.83
3	Equipment	İ	.									
	Trailer 28t	day	0.5			•		8,760	] (	4,380	0	4,38
	Truck crane 25t	day	0.5		·			12,960		6,480	0	6,48
	Other equipment	au,	0.5					54		54	o	
	Sub Total	}"	, ,,,,			•		]	•	10,914	٥	10,91
	Sub Total		1						1			
•									<u> </u>			
•	1	<del></del>				·		Total		10,914	258	41,87
٠.								Unit Price p	er No.	1091.43	25,80	4187.1
	INDIRECT COST	····							159	163.71	3.87	628.0
										1 255	20.67	4.91

1,255 29.67 4,815 TOTAL.

UNIT

2B1303 and 2C1303

FC: YEN

Installation and removal of guide beam LC: US\$ Total estimate for 10 Nos. US\$=¥120 Basic Price No Work Item Unit Quantity Unit Cost Total Material Labor Equipment Amount FC LC FC LC FC LC FC LC YEN Material Guide pile H350x350x12(15% ton 4.772 7200 34,358 34,358 Guide beam H300x300(15%) ton 1.43 7200 10,296 10.296 2,232 Wasted steel(5%) 0.31 7200 2,232 ton 48 1.25 7,200 Bolt & Nut pcs Welding rod 120 300.00 36,000 36,000 kg Oxygen m3 24 0.62 15 1,786 Acetylen kg 48 1.05 50 6.048 Fuel Crawler crane 30t 60 241 28,867 day.unit Generator 45KVA 20 82 9,830 day.unit Tug boat 250PS 70 281 33.744 day.unit Sub Total 82,886 729 170,362 2 Labor Foreman 38.2 153 18.336 man.day 458 54.912 man.day 14.3 Labor 132 Crawler crane 30t 33 15,840 day.unit 15,840 Generator 45KVA day.unit 33 132 264 31,680 Tug boat 250PS 66 day.unit 264 31,680 Pontoon 500ton day.unit Sub Total 1,402 168,288 3 Equipment Crawler crane 30t 13,440 53,760 53,760 day.unit Generator 45KVA 1.080 4,320 4,320 day.unit Tug boat 250PS 11.760 47,040 47,040 day.unit 57,600 Pontoon 500ton 14,400 57,600 day.unit 111.6 446 Welder 500A day.unit 446 163,166 163,166 Sub Total Total 246,053 2,131 501,816 Unit Price per No. 24,605.28 213.14 50,181.60 INDIRECT COST 15% 3,690.79 31,97 7,527.24 TOTAL 28,296 245.11 57,709

#### LA UNION PORT DREDGING PROJECT 2A03

UNIT FC: YEN

Inner channel dredging (-14) Offshore Dumping

Total estimate for 613000m3 US\$=¥120 LC: US\$ Unit Cost Total Unit Quantity Basic Price Work Item No Material Equipment Amount in Labor FC FC LC FC LC LC FC LC YEN 1 Material 9,200 229,990 27,598,800 25 TSH Dredger 8000m3 dayunit 25 3.500 419,970 140 Working Boat 480PS 25 118,950 40 991 Passenger Boat 100PS 25 20 61,212 510 Survey Boat 70PS 234,991 28,198,932 Sub Total 2 Labor 1,087,200 27,180,000 27,180,000 TSH Dredger 8000m3 25 dayunit 25 600,000 798,000 24,000 66 1,650 Working Boat 480PS 25 66 1,650 198,000 Passenger Boat 100PS 25 132 3,300 396,000 Survey Boat 70PS 6,600 28,572,000 27,780,000 Sub Total 3 Equipment 68,622,000 68622000 TSH Dredger 8000m3 25 2,744,880 dayunit 3,573,000 25 142,920 3.573,000 Working Boat 480PS 25 3,480 87,000 87,000 Passenger Boat 100PS 57,000 57,000 25 2,280 Survey Boat 70PS 72,339,000 72339000 Sub Total 241.591 129,109,932 100.119.000 Total 129,109,932 Total 100,119,000 241,591 Unit Price per m3 163.33 0.39 210.62 15% 24.50 0.06 31.59 INDIRECT COST 0.45 242 188 **TOTAL UNIT COST** 

UNIT FC: YEN

Total estimate for 650,000m3 Inner Channel Dredging (-14.5) Onshore Dumping LC: US\$ US\$=¥120 Basic Price Unit Cost Total Work Item Unit Quantity Equipment in Amount Material Labor FC LC FC LC FC LC FC LC YEN ! Material Bolt and Nut Nos 800 440 52,800 800 96,000 Vinyl Sheet m2 1000 0.8 11500 1,380,000 Over Flow LS 11,500 LS 11,900 11900 1,428,000 Silt Protector 229,990 27,598,800 9,200 TSH Dredger 8000m3 dayunit 25 Working Boat 480PS 25 140 3,500 419,970 25 991 1,111 40 Passenger Boat 100PS 61,212 Survey Soat 70PS 25 20 510 50 167 8,326 999,108 Buildozer 21t 244 6,093 731,148 Backhoe 1.6m3 25 Generator 45KVA 25 1.005 120,582 275,055 32,888,731 Sub Total Labor 343,800 Foremen manday 75 38.2 2865 Labor manday 300 14.3 4290 514,800 25 27,180,000 TSH Dredger 6000m3 1,087,200 27,180,000 dayunit Working Boat 480PS 25 24,000 96 600,000 1,650 798,000 Passenger Boat 100PS 25 66 1,650 198,000 Survey Boat 70PS 25 132 3,300 396,000 50 33 1,650 198,000 Bulldozer 21t . 25 33 825 99,000 Backhoe 1,6m3 Generator 45KVA 33 825 99,000 25 17,055 29,826,800 Sub Total 27,780,000 3 Equipment TSH Dredger 8000m3 dayunit 25 2.744.880 68.622,000 68622000 25 3,573,000 3,573,000 Working Boat 480PS 142,920 25 3,480 87,000 87,000 Passenger Boat 100PS 25 2,280 57,000 57,000 Survey Boat 70PS 50 12,360 618,000 618,000 Bulldozer 21t Backhoe 1.8m3 25 19,440) 486,000 486,000. 25 1,080 27,000 27,000 Generator 45KVA Floater 5m x 1500mm Nos 600 1,119.50 671,760 671,760 285.60 685,440 685,440 Steel Pipe 6m x 600mm Nos 2,400 600 829.20 497,520 497,520 Ruber Sleeve 1.7m x 800mm Nos Curve Pipe 273.60 16,416 16,416 Nos Sub Total 75,341,136 75341136 103.121.136 292,110 138,056,467 Total Total 103.121.136 292,110 138,056,467 Unit Price per m3 158.65 0.45 212.39 INDIRECT COST 15% 23.80 0.07 31.86 TOTAL UNIT COST 182 0.52 244

#### LA UNION PORT DREDGING PROJECT 2A05,2A07,2A08 and 2A09

TOTAL UNIT COST

UNIT FC: YEN

Turning Basin dredging (-14) Offshore Dumping

Total estimate for 567000m3 LC: US\$ US\$=¥120 Basic Price Unit Cost Total Nο Work Item Unit Quantity Amount Material Labour Equipment in FC LC YEN FC LC FC LC FC LC 1 Material 229,990 27,598,800 9,200 TSH Dredger 8000m3 dayunit 25 oi 419,970 140 3.500 25 Working Boat 480PS 25 40 991 118,950 Passenger Boat 100PS Survey Boat 70PS 25 20 510 61,212 234,991 28,198,932 Sub Total 2 Labour TSH Dredger 8000m3 25 1,087,200 27,180,000 27,180,000 dayunit 600,000 798,000 Working Boat 480PS 25 24,000 66 1,650 25 66 1.650 198,000 Passenger Boat 100PS 25 132 3,300 396,000 Survey Boat 70PS 27,780,000 6,600 28,572,000 Sub Total 3 Equipment 2,744,880 0 68,622,000 68622000 25 TSH Dredger 8000m3 dayunit 0 3,573,000 142,920 3,573,000 Working Boat 480PS 25 87,000 Passenger Boat 100PS 25 3,480 0 87,000 25 2,280 57,000 57,000 Survey Boat 70PS 72,339,000 72339000 Sub Total 241,591 100,119,000 129,109,932 Total 100,119,000 241,591 129,109,932 Total 176.58 0.43 227.71 Unit Price per m3 15% 26,49 0.06 34.16 INDIRECT COST

203

0.49

262

UNIT FC: YEN

Total estimate for 673,750m3 Turning Basin Dredging (-14.5) Offshore Dumping LC: US\$ US\$=¥120 No Work Item Unit Quantity Basic Price Unit Cost Total Material Labor Equipment Amount in FC LC FC LC FC LC FC LC YEN 1 Material Bolt and Nut 52,800 Nos 800 0.55 440 1000 0,8 96,000 Vinyl Sheet m2 900 11,500 11500. 1,380,000 Over Flow LS Silt Protector LS 11,900 11900 1,428,000 TSH Dredger 8000m3 9,200 27,598,800 229,990 dayunit Working Boat 480PS 140 3,500 419,970 Passenger Boat 100PS 40 991 1,111 61,212 Survey Boat 70PS 25 20 510 Bulldozer 21t 167 8,326 999,108 50 Backhoe 1,6m3 25 244 8,093 731,148 Generator 45KVA 1,005 120,582 Sub Total 275,055 32,888,731 2 Labor Foremen 343,800 manday 38.2 2865 300 514,800 Labor manday 14.3 4290 TSH Dredger 8000m3 dayunit 25 1,087,200 27,180,000 27,180,000 Working Boat 480PS 25 24,000 66 800,000 1.650 798,000 Passenger Boat 100PS 25 1,650 198,000 66 Survey Boat 70PS 132 3,300 396,000 Buildozer 21t 33 198,000 50 1,650 Backhoe 1.6m3 25 33 825 99,000 Generator 45KVA 33 825 99,000 Sub Total 29,828,600 27,780,000 17,055 3 Equipment TSH Dredger 8000m3 2,744,880 68,622,000 68622000 dayunit 25 Working Boat 480PS 25 142,920 3,573,000 3,573,000 25 Passenger Boat 100PS 3,480 87,000 87,000 25 Survey Boat 70PS 2,280 57,000 57,000 Bulldozer 21t 12,360 618,000 618,000 Backhoe 1,6m3 25 19,440 486,000 486,000 Generator 45KVA 25 1,080 27,000 27,000 Floater 5m x 1500mm Nos 600 1,119.50 671,760 671,760 Steel Pipe 6m x 800mm 2,400 285.60 685,440 685,440 Nos Ruber Sleeve 1.7m x 800mm Nos 600 829.20 497,520 497,520 Curve Pipe 60 273.60 16,418 16,416 Nos Sub Total 75,341,136 75341136 103,121,138 292,110 138,056,467 Total Total 103,121,136 292,110 138,056,467 Unit Price per m3 153.06 0.43 204,91 INDIRECT COST 15% 22,96 0.07 30.74 TOTAL UNIT COST 178 0,50

# LA UNION PORT DEVELOPMENT PROJECT 2A10,2A11 and 2A12

UNIT FC: YEN

Total estimate for 270,000m3 LC: US\$ US\$=¥120 Removal of Soft Soil

No	Work Item	Unit	Quantity			Un	it Cost			Unit	Cost	Total
			[	Ma	iterial	L	abor	Eguip	ment	Am	ount	in
				FC	LC	FC	LC.	FC	LC	FC	LC	YEN
1	Material			· · · · · · · ·								
	Grab Bucket Dredger 20m3	dayunit	25	0	2,652				}	0	66,295	7,955,40
	Pusher Boat 3000PS	"	25	0	3,177					0	79,413	9,529,50
	Anchor Boat 480PS	"	25	0	140				<b>j</b>	0	3,500	419,97
	Hopper Barge 3500m3	<b>#</b> .	50	0	. 0					0	0	
	Passenger Boat 100PS	"	25	. 0	40					0	991	118,95
	Survey Boat 70PS	"	25	0	20					0	510	51
	Sub Total									0	150,709	18,024,33
2	Labor							ļ.				
	Grab Bucket Dredger 20m3	dayunit	25			300,000	198		<b>!</b>	7,500,000	4,950	8,094,00
	Pusher Boat 3000PS	"	25			81,000	66			2,025,000	1,650	2,223.00
	Anchor Boat 480PS	"	25		*	24,000	66		· ·	600,000	1,650	2,223,00
	Hopper Barge 3500m3	"	50			0	66			0	3,300	396,00
	Passenger Boat 100PS	"	25			0	66			. 0	1,650	198,00
	Survey Boat 70PS	"	25			0	66		1	0	1.650	198,00
	Sub Total		1 1							10,125,000	14.850	13,332,00
3	Equipment						:					
	Grab Bucket Dredger 20m3	dayunit	25					986,760	0	24,669,000	0	24,669,00
	Pusher Boat 3000PS	"	25					164.880	0	4,122,000	. 0	4,122,00
	Anchor Boat 480PS	~	25					142,920	0	3,573,000	0	3,573,00
	Hopper Barge 3500m3	"	50			·		195,000	0	9,750,000	C	9,750,00
	Passenger Boat 100PS	"	25					3,480	0	87,000	.0	87.00
	Survey Boat 70PS	. "	25				· ·	2,280	0	57,000	. 0	57,00
	Sub Total	<u> </u>	<u> </u>							42,258,000	0	42,258,00
							•	Total		52,383,000	165,559	73,614,33
								Unit Price p		194.01	0.61	272.6
	INDIRECT COST							,	15%	29.10	0,09	40.9
	TOTAL UNIT COST									223	0.71	31

UNIT FC: YEN

Temporary revetment and bund for onshore dumping LC: US\$ Total estimate for 119160m3 US\$=¥120 No Basic Price Work Item Unit Quantity Unit Cost Total Labor Amount Material Equipment in FC FC LC FC LC FC LC LC YEN 1 Material 14112240 Rubble rock 10~500kg m3 16.520 6.35 117,602 Wasted rubble rock(30%) m3 5.556 6.35 35,281 4.233.672 m3 Sand 116,230 4.10 476,543 57,185,160 17,155,548 m3 142,963 Wasted sand (30%) 34,869 4.10 m2 32,472 3896676 Geotextile 22,090 1.47 256,077 30,729,283 Fuel Bulidozer 21t day 1,788 143 Backhoe 1.5m3 dayunit 1,788 378,841 45,460,973 212 Sub Total 1,439,780 172,773,552 2 Labor 596 38.2 22.767 2,732,064 Foreman manday Labour manday 7,152 14.3 102,274 12,272,832 Bulldozer 21t day 1,788 33 59,004 7,080,480 Backhoe 1.5m3 1,788 59,004 7,080,480 dayunit Sub Total 243,049 29,165,856 3 Equipment Buildozer 21t 22,099,680 22,099,680 1,788 day 12,360 Backhoe 1.5m3 1,788 15,240 27,249,120 27,249,120 dayunit 49,348,800 49,348,800 Sub Total Total 49,348,800 1,682,828 251,288,208 Unit Price per m3 49348800.00 1,682,828.40 251288208.00 INDIRECT COST 7402320.00 252,424.26 37693231.20 15% TOTAL 56.751.120 1.935.252.66 288.981,439

# LA UNION PORT DEVELOPMENT PROJECT 2B01 and 2C01

UNIT FC: YEN LC: US\$

Total estimate for 1000m3

US\$=¥120

Rubble Mound of Caisson

Basic Price Unit Cost Total Unit Quantity No Work Item Material Labour Equipment Amount in FC LC YEN FC LC FC LC FÇ LC 1 Material 619200 5.16 5,160 Rubble rock 1,000 cu.m 154,800 5.16 1,290 Wasted rubble rock(25%) 250 cu.m 130 649 77,844 5.0 Fuel Tug boat 450PS day 898 107,724 180 5.0 Backhoe 1.2m3 day 451 54.096 90 Crawler crane 30t 5.0 day 277 33,264 Working boat day 5.0 8,724 1,046,928 Sub Total 2 Labour 38.2 191 22,920 5.0 Foreman manday 14.3 286 34,320 20.0 Labour manday 240,000 100 2,000 20.0 Diver manday 99,600 830 5.0 166 day Tug boat 450PS 79,200 660 10.0 66 Pontoon 500t dayunit 165 19,800 5.0 33 Backhoe 1.2m3 day 33 165 19.800 5.0 Crawler crane 30t day 66 330 39,600 5.0 Working boat day 555,240 4,627 Sub Total 3 Equipment 19,320 96,600 96,600 Tug boat 450PS day 5.00 14,400 144,000 144,000 Pontoon 500t day.unit 10.00 5.00 15,240 0 76,200 76,200 Backhoe 1.2m3 day 13,440 67,200 67,200 5.00 Crawler crane 30t day 17,400 3,480 17,400 5.00 Working boat day 401.400 401,400 Sub Total Total 13,351 2,003,568 401,400 Unit Price for m3 401.40 13.35 2003,57 15% 60.21 2.00 300.54 INDIRECT COST 462 15.35 2,304 TOTAL

LA UNION PORT DEVELOPMENT PROJECT 2B02 and 2C02 Asphalt Mat UNIT

FC: YEN LC: US\$

	Asphalt Mat				· · · · · · · · · · · · · · · · · · ·		LC: US\$			Total estimate	for 1000m2	US <b>\$=</b> ¥120
No	Work Item	Unit	Quantity			Bas	ic Price			Unit	Cost	Total
		1	-  -	Mate	erial	L	abor	Equip	ment	Ame	ount	in
				FC	LC	FC	LC	FC	LC	FC	LC	YEN
1	Material			[					,	[ [		
	Asphalt Mat 17mx4.8mx5mπ	pcs	13.00	0	3,000.00					. 0	39,000	4,680,000
	Fuel Crawler crane 16t	day	1.00	0	26					0	26	3,168
	Fuel Tug boat 250PS	day	0.5	이	17					0	9	1,040
	Sub Total									이	39,035	4,684,208
2	Labor											•
	Foreman	man.day	1			0	38.20			0	38	4,58
٠	Labor	man.day	4.0			0	14.30			0	57	6,86
	Diver	man.day	2.0			0	22.06	21 .		0	44	5,29
	Crawler crane 16t	man.day	1			0	33	·			33	3,960
	Tug boat 250PS	man.day	0.5	1		0	133		,	0	67	7,98
٠	Pontoon 100t	man.day	1			. 0	29			- 0	29	3,43
	Sub Total	{	}	1							239	3 <b>2</b> ,114
3	Equipment	Ì		-								
	Crawler crane 16t	day	1			·		8,640	0	8,640	0	8,640
	Tug boat 250PS	day	0.5					11,760	0	5.880	. 0	5,886
	Pontoon 100t	day	1					4,200	0	4,200	0	4,200
	Sub Total_									10,080	0	18,720
								Total		10,080	39,274	4,735,042
								Unit Price pe	er m2	10.08	39.27	4,735.04
	INDIRECT COST								15%	1.51	5.89	710.26
	TOTAL									12	45.17	5,445

# LA UNION PORT DEVELOPMENT PROJECT 2B03 and 2C03

UNIT

	Armour Stone						LC: US\$			Total estimat	e for 1000m3	US\$=¥120
No	Work Item	Unit	Quantity			Bas	ic Price			Unit	Cost	Total
				Ma	terial	L	abor	Equip	ment	Am	ount	in
			L	FC	LC	FC	LC	FC	LC	FC	LC	YEN
1	Material											
	Armour stone	cu.m	1,000	. 0	6.2		* :	•		0	6,200	744000
	Wasted armour stone(25%)	cu.m	250	. 0	6.2					.0	1,550	186,000
1	Fuel Tug boat 450PS	day	5.9	0	130					. 0	765	91,856
	" Backhoe 1,2m3	day	5.9	0	180				•	0	1,059	127,114
]	" Working boat	day	5.9	0	60		* * *			0	357	42,792
	Sub Total	İ					·			. 0	9,931	1,191,762
2	Labor	1		į							ļ	.*
	Foreman	manday	5,9			0	. 38.2	,		0	225	27,046
	Labor	manday	23.6			0	14.3			0	337	40,498
	Diver	manday	11.8			0	100		,	0	1,180	141,600
	Tug boat 450PS	day	5.9			0	166			0	979	117,528
	Pontoon 500t	dayunit	11.8			0	66			0	779	93,456
<b>.</b>	Backhoe 1.2m3	day	5.9			0	33	•		0	195	23,364
	Working boat	day	5.9			0	66	•		0	389	46,728
	Sub Total	ļ								0	4.085	490,219
јз	Equipment			j				·				
	Tug boat 450PS	day	5.90					19,320	. 0	113,988	0	113,988
	Pontoon 500t	day.unit	11.80					14,400	0	169,920	0	169,920
	Backhoe 1.2m3	day	5.90					15,240	0	89,916	0	89,916
	Working boat	day	5.90					3,480	.0	20,532	0	20,532
·	Sub Total	<u> </u>	<u> </u>							394,356	0	394,356
								Total		394,356	14,017	2,076,337
						• •	· · · · · · · · · · · · · · · · · · ·	Unit Price pe		394.36	14.02	2076.34
	INDIRECT COST			<del>,,</del>		<del>, , , , , , , , , , , , , , , , , , , </del>			15%			311,45
	TOTAL					·				454	16.12	2,388

UNIT

2B0401

Requirement for Caisso No Work Item		Quantity	ty such as	rloating		LC: US\$ ic Price			Total estimate for Unit C		US4=¥120 Total
two work trem	Ome	[Quantity]		1.1			F		<del>                                     </del>		
		1 -	Mate		Lat		Equipo		Amot		in
	ļ	<u> </u>	FC	LC	FC	LC	FC	LC	FC	LC LC	YEN
		1 1							1	1	
1 Material			ĺ	;			l	-		.	
Floating Dock	day	378	- 0	. 110			· }			41,561	4,987,33
Others	L.S.	1	0	382					0	382	45,84
Sub Total	1	1 1							0	41,943	5,033,17
2 Labor	[				· [		.[			: [	
Floating Dock	day	378			114,000	66			43,092,000	24,948	46,085,76
Pontoon 1000t	day	378			0	66			] [		
Sub Total									43,092,000	24,948	46,085,76
3 Equipment			•						1		
Floating Dock	day	378	1		Ì		367,800	0	139,028,400	ol	139,028,40
Pontoon 1000t	day	378					25,080	0			
Sub Total									139,028,400	o	139,028,40
							Total		182,120,400	66,891	190,147,33
						-	Unit Price pe	r day	481800,00	176.96	503035.2
INDIRECT COST								15%		26.54	75455.29
TOTAL									554,070	203.50	578,49

UNIT

2B0402 and 2C0402

	Fabrication and Remov	al of Sca	ffolding				LC: US\$			Total estimate	for 1900m2	US\$=¥12
No	Work Item	Unit	Quantity			Bas	ic Price			Unit	Cost	Total
		ł	1 [	M	aterial	L	abor	Equip	ment	Amo	ount	in
		ļ		FC	LC	FC	LC	FC	LC	FC	LC	YEN
1	Material		}									
	Scafforlding(Outer)	m2	1300	· 0	7.0					0	9,100	1,092,00
	Scafforlding(Inner)	m2	600	. 0	4.0					0	2,400	288,00
	Other material	%	10	0	1,150.0	ļ	•			0	1,150	138,0
	Fuel Generator 45KVA	day	1.2	0	20					0	25	2.9
	" Truck crane 30t	day	1.2	O	65					0	78	9,4
	" Tug boat 250PS	day	1.2	O	70	]				o	84	10.1
	" Truck 8t with crane	day	1,2	0	41					0	49	5.8
	Sub Total		}							0	12,837	1,546,3
2	Labor				]							
	Foreman	man.day	6		1	0	38.2			l o	229	27,
	Labor	man.day	60			0	14.3		·	l o	858	102,
	Generator 45KVA	day	1.2			0	33			0	40	4,7
	Truck crane 30t	day	1.2			0	33			0	40	4,7
	Truck 8t with crane	.day	1.2		İ	0	33			0	40	4,7
	Tug boat 250PS	day	1.2			12,000	66			o	79	9.5
	Pontoon 500t	day	1.2			0	66			· o	79	9,
	Sub Total	.	1		-			ı	,	l ol	1,285	163,7
3	Equipment	1			ł					ļ		
•	Generator 45KVA	day .	1.2					960	0	1.152	0	1,1
	Truck 8t with crane	day	1.2	•				5,520	0	i i	0	6,6
	Truck crane 30t	day	1.2		Ī			16,200		19,440	0	19,4
	Pontoon 500t	day	1.2					14,400	0	1	0	17,2
	Tug boat 250PS	day	1.2					11,760	٥	14,112	Ð	14,1
	Sub Total		"-							58,608	0	58,6
	1 2 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		L <u>.</u>		<del></del>			Total		58,608	14.122.57	1,768,7
							and the second second	Unit Price p	er m2	30.85	7.43	9
•	INDIRECT COST			<del></del>		• • •			15%	,	1.11	1
•	TOTAL				<del></del>					35	8,55	1,0

# LA UNION PORT DEVELOPMENT PROJECT 280403 and 200403

UNIT FC: YEN

Reinforcement bar including Material Supply, Bar Cutting. Bar Bending and Site Assembly LC: US\$ Total estimate for 170ton US\$=¥120 Basic Price Unit Cost Total No Work Item Unit Quantity Equipment Material Labor Amount in FC LÇ FC LC LC FC LC YEN FC CP-02 Fabrication of reinforcement bar Material Reinforcement bar 013 25.60 360 9,216 1,105,920 5,891,520 49,096 Reinforcement bar D13-D25 ton 144.40 340 138,720 Wasted steel bar D16(2%) 3.4 340 1,156 887 106,488 Small size steel 2175 0.408 23 23 Welding rod kg 7.2 3.2 55 298,452 Fuel Generator 100KVA 45 2,487 dayunit Truck crane 16t dayunit 10 31 314 37,620 Trailer 28ton 10 49 488 58,608 dayunit 352 42,180 Tug boat dayunit 70 23 63,996 7,679,531 Sub Total 2 Labor 38.20 2.101 252,120 Foreman man.day 55 14.30 15,730 1,887,600 Labor man.day 1100 23.10 110 2,541 304,920 Welder man.day 55 33 1,815 217,800 Generator 100KVA day Truck crane 16t 10 330 39,600 day 10 33 330 39,600 Trailer 28 day 66 330 39,600 Pontoon 500t day 330 99,600 12,000 60000 Tug boat Sub Total 60000 23,507 2,880,840 3 Equipment Generator 100KVA 55 1.800 99,000 99,000 dayunit Welder 300A dayunit 110 110 110 55 55 55 Bar outter dayunit 55 55 55 Bar bender dayunit 10 94,800 94,800 Truck crane 16t dayunit 9,480 8.760 87,600 87,600 Trailer 28t 10 dayunit Pontoon 500t dayunit 14,400 72,000 72,000 Tug boat 250PS 11,760 58.800 58,800 dayunit 412.420 412,420 Sub Total Total 472,443 87,503 10,972,791 Unit Price per ton 2779.08 514.72 64545.83 INDIRECT COST 15% 416.86 77.21 9681.87 591,93 TOTAL 3,198 74,228

UNIT FC: YEN

2B1304 and 2C1304 Driving Steel Pipe Pile

US\$=¥120 LC: US\$ Total estimate for 10 Nos. Unit Cost Total Basic Price Work Item Unit Quantity No Amount in Labor Equipment Material FC FC FC LC YEN FC LC LC 1 Material 300 35,954 240 Fuel Piling barge D-72 1,25 day.unit 70 88 10.545 Tug boat 250PS 1,25 day.unit 15 1.832 1,25 12 Anchor boat 180PS day.unit 88 10.556 1.25 70 Crawler crane 50t day.unit 491 58.886 Sub Total 2 Labor 1,25 38.2 48 5,730 Foreman man.day 107 12,870 7.50 14.3 Labour man.day 41 4.950 1.25 33 Crawler crane 50t man.day 248 29,700 69000 198 Piling barge D-72 1,25 man.day 12000 66 83 9.900 Tug boat 250PS 1.25 man.day 208 166 24,900 Anchor boat 180PS 1.25 day.unit 9,900 83 Pontoon 1000t 1.25 66 man.day 97,950 816 Sub Total 3 Equipment 266,160 0 332,700 332,700 Pile driving barge D-72 day.unit 1.25 25,080 31,350 31,350 Pontoon 1000t 1,25 day.unit 11.760 0 14,700 14,700 Tug boat 250PS day.unit 1,25 62,250 1.25 49,800 62,250 Anchor boat 180PS day.unit 27.900 22,320 27.900 Crawler crane 50t day.unit 1.25 468,900 468,900 Sub Total Total 468,900 1,307 625,736 Unit Price per No. 46,890.00 62,573,55 130,70 15% 7033.50 19,60 9386.03 INDIRECT COST 53,924 150.30 71,960 TOTAL

LA UNION PORT DEVELOPMENT PROJECT 281305 and 2C1305

TOTAL

UNIT FC: YEN

Steel Pipe Pile reinforcement of edge US\$=¥120 LC: US\$ Total estimate for 10 Nos. Basic Price No Work Item Unit Quantity Unit Cost Total Material Labor Equipment Amount in FC LC FC LC FC LC FC LC YEN 1 Material Steel bar D13-D25 40800 45,900 45,900 1,125 ton 918 0.0225 40800 918 Wasted steel(2%) ton 1.575 1,575 Welding rod kg 5.25 300.00 2,25 0.62 187 Oxygen m3 0.9 1.05 113 Acetylen kg 2,380 Fuel Generator 100KVA 50 dayunit 3,374 " Truck crane 25t 70 28 dayunit 50 54,428 48,393 Sub Total 2 Labor Mechanic 31.00 12 1.488 man.day Welder 23.10 23 2,772 man.day 3,432 29 Labor 14.30 man.day 13 1,584 Generator 100KVA man.day 0.4 33 0.4 13 1,584 Truck crane 25t man.dayi 10.860 Sub Total 3 Equipment Generator 100KVA 0.4 1,800 720 720 day -12,960 5,184 5,184 Truck crane 25t day 111,60 112 Welder 112 day.unit Sub Total 6,016 6,016 Total 54,409 141 71,304 Unit Price per No. 5440.86 7130.36 14.08 1069.55 INDIRECT COST 15% 816.13 2.11

6,257

8,200

16.19

UNIT

2B14 and 2C14

	Concrete for Crane Ra	ail Found	ation				LC: US\$			Total estimate	for 480m3	US\$=¥12
No	Work Item	Unit	Quantity			Bas	ic Price			Unit	Cost	Total
				Mat	terial	L	abor	Equip	ment	Amo	ount	in
			l [	FC	LC	FC	LC	FC	L	FC	LC	YEN
1	Material	1										•
	Ready mixed concrete	m3	480	0	70.00					0	33,600	4,032,00
	Wasted concrete(2.5%)	m3	12	0	70.00	į				0	840	100,80
	Elas tigh board	m2	48	0	8.33					0	400	47,98
	Reinforcement	ton	34.00	0	360.00					0	12,240	1,468,80
	Wested reinforcement(2%)	ton	0.68	0	360.00		3			0	245	29,37
	Metal form(10%)	m2	637	0	3.83		-			0	2,440	292,76
	Crushed stone	m3	27	0	5.16					0	139	16,71
	Lean concrete	m3	27	0	65.00					0	1,755	210,60
	Fuel Concrete pump	day	7.00	. 0	0	İ				0	0	
	" Generator 125KVA	day	7.00	0	63					0	444	53,32
	" Truck crane 16t	day	7.00	. 0	36					0	250	30,0
	Sub Total	]		1						0	52,353	6,282,3
2	Labor		1							1		
	Foreman	man.day	7]			0	38.20			0	267	32,08
	Labor	man.day	70			0	14.30			0	1,001	120,12
	Concrete pump	day.unit	7			0	33			0	231	27.7
	Generator 125KVA	day.unit	7	*		0	33			0	231	27,7
	Truck crane 16t	day.unit	7			0	33			0	231	27.7
-	Sub Total	] .		J	j					. 0	1,961	235,3
3	Equipment					. 1				· .		
	Generator 125KVA	day.unit	7					2,280	0	15,960	0	15,9
	Truck crane 16t	day.unit	7	1	ŀ	. }		9,480	0	66,360	0	66,30
	Concrete pump 45m3	day.unit	7					9,120	0	63,840	. • 0	63,8
	Vibrator	day.unit	31	}				120	0	3,720	0	3,7
	Sub Total	<u> </u>			<u> </u>				· ·	149,880	0	149,8
							4.19	Total		149,880	54,315	6,667,6
				· · · · · · · · · · · · · · · · · · ·		· · ·		Unit Price p		312.25	113.16	13890.8
	INDIRECT COST			<u></u>					15%	<del></del>	16.97	2083.6
	TOTAL									359	130.13	15,97

UNIT

2B15 and 2C15

100	Crane Rail with Access	ories	•				LC: US\$			Total estimate	for 1m	US\$=¥120
No	Work Item	Unit	Quantity			Basic	Price			Unit C	ost	Total
				Mat	terial	Lat	our	Equi	pment	Amou	int	in
ļ				FC	LC	FC	LC	FC	LC	FC	LC L	YEN
2B1501 2C1501	Installation of Crane Rail									19,461	3.86	19,925
2B1502 2C1502	1									0	9.83	1,179
2B1503 2C1503		,								13	8.15	991
	Total									19,474	21.84	22,095

UNIT

2B1501 and 2C1501

	Installation of Grane Ra	il					LC: US\$			Total estimat	e for 320m	US\$=¥12
No	Work Item	Unit	Quantity			Ва	sic Price			Unit Cost		Total
				Ma	terial		Labor	Equip	ment	Am	ount	in
				FC	LC	FC	LC	FC	LC	FC	LC	YEN
1	Material											
	Crane Rail 73kg	ton	24	138720	0.00					3,329,280	1 1	3,329,28
	Accessories	LS	[ 1	2035200	0.00					2,035,200	1	2,035,20
	Fuel Truck crane 16t	day	3	0	30					0.	89	10,72
	" Truck 8t	day	3	. 0	40					0	119	14,26
	" Trailer 20t	day	1.5	0	50					. 0	75	8,97
	Sub Total				·					5,364,480	283	5,398,43
2	Labor						1		1 .			
	Foreman	man.day	3	·		,	38.20	ol .		0	115	13,75
	Labor	man.day	30			\$	14.30	o  .		0	429	51,48
	Truck crane 16t	man.day	3	*		1	o <b> </b> 3:	3		0	99	11,88
	Truck 8t	man.day	3				3:	3		0	99	11,88
	Trailer 20t	man.day	1.5		·	. •	3:	3		0	50	5,94
	Sub Total		'					1	1	0	. 791	94,93
3	Equipment		l j	*								
	Truck crane 16t	day	3					9,480	0	28,440	. 0	28,44
	Truck 8t	day	3			٠	1	3,480	0	10,440	0	10,44
	Trailer 20t	day	1.5					7,320	0	10,980	. 0	10,98
	Other equipment	%	2					997	0	997	o	99
	Sub Total					*				50,857	0	50,85
	I THE CONTRACTOR OF THE CONTRA		<del> </del>	······································				Total	·	5,415,337	1,074	5,544,22
							·	Unit Price p	er m	16,922.93	3.36	17,325.7
	INDIRECT COST		<del></del>						15%	2,538.44	0.50	2,598.8
	TOTAL		· · · · · · · · · · · · · · · · · · ·	*******		/,				19,461	3.86	19,92

UNIT

2B1502 and 2C1502

	201002 610 201002						, O. ILI						
	Placing of Asphalt						LC: US\$				Total estimate	for 320 m	US\$=¥120
10	Work Item	Unit	Quantity			Bas	ic Price				Unit Co	ost	Total
		1		Ma	terial	L	abor		Equipm	nent	Amou	nt	in
]			l [	FC	LC	FC	LC	FC	:	LC	FC_	LC .	YEN
1	Material												
- 1	Asphalt mixture	ton	26	. 0	84.75				İ			2,204	264,42
.	Miscellaneous	L.S.	1	0	220.35		-	ļ			0	220	26,44
- 1	Sub Total				·			1	· [		0	2,424	290,86
2	Labor									•			•
- 1	Foreman	man.day	1		·	. 0	38.20		. ]		0	. 38	4,58
	Labor	man.day	10			0	14.30				0	143	17,16
	Sub Total				,	-					0	181	21,74
. 3	Equipment	-									]		
f	Miscellaneous	L.S.	1					<u> </u>	0	130		130	15,60
	Sub Total										0	130	15,60
								Total		. :	0	2,735	328,20
								Unit Pr	ice pe	r m	0.00	8.55	1,025.6
	INDIRECT COST									15%	0.00	1.28	153.8
	TOTAL										0	9.83	1,17

UNIT

2B1503 and 2C1503

Placing Corner Angle						LC: US\$		Total estimat	e for 320m	US\$=¥120	
No Work Item	Unit	Quantity			Bas	ic Price			Unit (	Cost	Total
			Mate	erial	L	abor	Equip	nent	Amo	unt	in
			FC	LC	FC	LC	FC	LC	FC	LC	YEN
1 Material					•						
Corner Angle 100*100*4	5 ton	3	0	463,30					0	1,390	166,788
Steel bar D13*250	ton	0.21	0	360.00	•			•	[ 0	76	9,072
Miscellaneous	L.S	1	0	29					0	29	3,517
Fuel Generator 45KVA	day	3	0	20					0	61	7,373
Sub Total						,			0	1,556	186,750
2 Labor											
Foreman	man.day	· 3			0	38.20			0	115	13,752
Labor	man.day	30	j	İ	. 0	14,30			. 0	429	51,480
Welder	man,day	3			0	23.09			0	69	8,312
Generator 45KVA	man.day	3			0	33			0	99	11,880
Sub Total									0	712	85,424
3 Equipment								 			•
Generator 45KVA	day	3				·	1,080	0	3,240	0	3,240
Welder 500A	day	3					111.6	0	335	0	335
Sub Total		1	<u> </u>						3,575	0	3.575
							Totai		3,575	2,268	275,749
							Unit Price pe	er m	11.17	7.09	861.72
INDIRECT COST								15%	1.68	1.06	129.26
TOTAL									13	8.15	991

UNIT FC: YEN

2B16 and 2C16 Cable Trench LC: US\$

	Cable Trench						LC: US\$			Total estimate	e for 1 LS	US\$=¥12
No	Work Item	Unit	Quantity			Bas	sic Price			Unit Cost		Total
		Ì		Ma	terial		abor	Equip	ment	Amo	ount	in
			I	FC	LC	FC	LC	FC	LC	FC	LC	YEN
1	Material					×						
	Ready mixed concrete	cu.m	0.48	0	70.00		1 .			0	34	4,03
	Metal form (10%)	sq.m	8.08	0	3.83					0	31	3,71
	Corner Angle 100*100*4.5	ton	6.00	· 0	360.00		j		,	0	2,160	259,20
	Steel bar D13*250	ton	1.64	0	360.00		ĺ		į.	0	590	70.84
	Other material	%	2	0	28.15	•	1			0	56	6,75
	Fuel Generator 45KVA	day	3.00	0	20				į	0	61	7.37
	" Truck 8t	day	3.00	. 0	60		ì		ł		179	21,51
	". Truck crane 16t	day	1.00	. 0	65					0	65	7,76
•	Sub Total	İ						4	Į.	0	3,177	381,19
2	Labor	1					1		ļ	ļ , ,		
	Foreman	man.day	3			0	38,20			0	115	13,75
	Labor	man.day	60			0	14.30		1		858	102,96
	Welder	man.day	3		·	0	14.30			0	43	5,14
	Generator 45KVA	day.unit	3			٥	33		ļ	. 0	99	11.88
	Truck 8t	day.unit	3		·	0	33			0	99	11,88
	Truck crane 16t	day.unit	1			0	33			. 0	33	3.96
	Sub Total									0	1,247	149.58
3	Equipment	i										
	Generator 45KVA	day.unit	3					1,080	0	3,240	0	3,24
	Truck crane 16t	day.unit	1				1	9,480	0	9,480	0	9.48
	Truck 8t	day.unit	3					3,480	0	10,440	0	10,44
	Vibrator	day.unit	3					127.2	0	382	0	38
	Bar cutter	day.unit	1	1				270	ì	270	0	27
	Bar bender	day.unit	1					270		270	0	27
	Welder 300A	day.unit	3					68.4	0	205	0	20
	Sub Total	<u> </u>	<u> </u>						<u> </u>	23,542	0	24.28
								Total		23,542	4,423	555.06
								Unit Price p		23541.60	4,423,14	555063.0
	INDIRECT COST					·····			15%		663.47	83259.4
	TOTAL									27,073	5,086.61	638,32

UNIT

2817

	Jack-up base		LC: US\$						Total estimate	for 16 Nos.	US\$=¥120	
No	Work Item	Unit	Quantity			Bas	ic Price			Unit	Cost	Total
			1	Ma	terial	L	abor	Equip	ment	Amo	ount	in
	ł	1	1 [	FC	LC	FC	LC	FC	LC	FC	LC	YEN
1	Material											
	Steel Plate	Nos	16.00	12000	0.00					192000	0	192,000
	Base angle	Nos	32	360	0.00	1				11520	0	11,520
	Fuel Truck with crane 8t	day	2.00	0	45	·		}		0	90	10,781
	Sub Total	Į	1					* .	·	203520	. 90	214,301
2	Labor		[ [			[			. '			
	Foreman	man.day	. 2			· •	38.20		·	0	76	9,168
	Labor	man.day	8			0	14.30		j	0	114	13,728
	Truck with crane 8t	day.unit	2		į	0	33			0	66	7.920
	Sub Total	}		·	5	· • •				0	257	30,816
- 3	Equipment	}				1	· ·		ļ <u>"</u>	· ]		-
1.	Truck with crane 8t	day.unit	2			•		5,520	0	11,040	0	11.040
	Sub Total									11,040	0	11,040
								Total		214,560	347	256,157
		· · ·			·			Unit Price p	er No.	13410.00	21.67	16009.80
	INDIRECT COST								15%	2011.50	3.25	2401.47
	TOTAL									15,422	24.91	18,411

UNIT

2B18

	End stopper						LC: US\$			Total estimat	e for 4Nos.	US\$=¥120
No	Work Item	Unit	Quantity			Bas	sic Price			Unit	Cost	Total
			1 [	Ma	terial	L	abor ·	Equip	ment	Amo	ount	in
		1		FC	LC	FC	LC	FC	LC	FC	LC	YEN
1	Material								j			:
	Steel Plate and Bolt	Nos	4	44160	0.00			ļ		176640	0	176,640
	Concrete Con	m3 .	] 3]	. 0	70.00		]		j	0	210	25,200
	Fuel Truck with crane 8t	day	[ 2	0	45			ĺ	l	0	90	10,781
	Sub Total			1.			1	· .	1	176540	300	212,621
2	Labor	İ	ļ					1		}		
	Foreman	man.day	[ [	1 .		0	38.20		<b>.</b>	[ 0	38	4,584
	Labor	man.day	4			0	14.30			0	57	6,864
	Truck with crane 8t	day.unit	] 1]		٠	0	33		·	0	33	3,960
-	Sub Total		[ [					1	· .	0	128	15,408
- 3	Equipment		]		!			· ·				
	Truck with crane 8t	day.unit	1				1	5.520	0	5,520	0	5,520
	Sub Total							L	<u> </u>	5.520	0	5,520
			•					Total		182,160	428	233,549
				·				Unit Price p	er No.	45540.00	107.06	58387.20
	INDIRECT COST								15%	6831.00	16.06	8758.08
	TOTAL									52,371	123.12	67,145

UNIT

2B19

2819						LOT LEIA		27			
Socket block		_		<u> </u>		LC: US\$			Total estimate	e for 8 Nos.	US\$=¥12
lo Work Item	Unit	Quantity			Bas	ic Price			Unit	Cost	Total
[		[ [	Mat	erial	L	abor	Equip	ment	Amo	unt	in
		Ι	FC	LC	FC_	LC	FC	LC	FC	LC	YEN
1 Material											
Steel Plate & Bolt	Nos	8	44160	0.00					353280	0	353,2
Concrete	m3	1.2	0	70.00	•					84	10,0
Fuel Truck with crane 8t	day	2.00	0	45			,		. 0	90	10,7
Sub Total			ļ						353280	174	374,1
2 Labor	į.			-						1	
Foreman .	man.day	1	Ì		0	38.20			0	38	4,5
Labour	man.day	4		į	0	14.30		1	0	57	6,8
Truck with crane 8t	day.unit	1	}		0	33			0	. 33	3,9
Sub Total									0	128	15.4
3 Equipment			. ]						}		
Truck with crane 8t	đay.unit	1	ļ				5,520	·	5.520	. 0	5.5
Sub Total								<u> </u>	5,520	0	5.5
							Total		358,800	302	395,6
	· .						Unit Price p	er No.	44850.00	37.78	49383
INDIRECT COST								15%	6727.50	5.67	7407
TOTAL									51,578	43.45	56,7

UNIT

FC: YEN

LC: US\$ Total estimate for 16 Nos. Crane anchoring frame US\$=¥120 Work Item Basic Price Unit Cost Total Nο Unit Quantity Material Labor Equipment Amount in LC FC LC FC FC LC FC YEN LÇ 1 Material 691,200 Steel Plate & Bolt Nos 16 43200 0.00 691200 Angle & Re-bar 308 4200 0:00 1293600 1,293,600 kg 10,781 45 90 Fuel Truck with crane 8t day 1,995,581 90 Sub Total 1984800 2 Labor Foreman 38.20 76 9,168 man.day Labor man.day 14.30 57 6,864 7,920 33 66 Truck with crane 8t day.unit Sub Total 200 23,952 3 Equipment Truck with crane 8t 5,520 11,040 11,040 day.unit Sub Total 11.040 11,040 2,030,573 Total 1,995,840 289 Unit Price per No. 124740.00 18.09 126910.80 INDIRECT COST 2.71 19036.62 18711.00 TOTAL 143,451 145,947 20.80

UNIT FC: YEN

2B21 and 2C20 LC: US\$

	2B21 and 2C20						PO. TEN			·	r orn	11D0-1/10
	Fender	·	<del>,</del>		<u></u>		LC: US\$			Total estimate		US\$=¥12
Nο	Work Item	Unit	Quantity				ic Price			Unit (		Total
					terial		abor	Equip		Amo		in
				FC	LC	FC	LC	FC	LC	FC	LC	YEN
1	Material								1			
	Rubber Fender	Nos	35	1200000	0.00				Ì	42000000	. 0	42,000,0
	Fender breast & Breast bed	ton	16.6	46200	0.00					766920	0	766,9
	Anchor bolt & other	L.S.	1	939360	0.00			]		939360	0	939,3
	Steel bar	ton	3.50	. 0	360.00				ļ ·	0	1,260	151,2
	Other material	%	2	0	25.20					0	25	3,0
	Fuel Generator 45KVA	day	7.00	0	20				}	0	139	16,6
,	" Truck crane 16t	day	7.00	. 0	65			i	-	0	453	54,3
	" Truck 8t	day	7.00	0	40			·		o	277	33,
	Sub Total							}		43706280	2,154	43,964,
2	Labor											-
_	Foreman	man.day	7			. 0	38.20	<b>i</b> .		0	267	32.0
	Labor	man.day	35			0	14.30			0	501	60.0
	Generator 45KVA	day.unit	7			0	33			0	231	27,
	Truck crane 16t	day.unit	7			0	33			0	231	27.
	Truck 8t	day.unit	7			0	33		ļ	0	231	27,
	Sub Total									. 0	1,461	175,
3	Equipment											
٠	Generator 45KVA	day.unit	7	•				1,080	C	7,560	0	7,5
	Truck crane 16t	day.unit	7		·			9,480	0	66,360	. 0	66,3
	Truck 8t	day.unit	7	•	•	-		3,480		24,360	0	24.3
	Welder 500A	day.unit	31					111.6	. · · · · · · · · · · ·	3,460	0	3,4
	Misxellaneous	%	2	1				2.035	0	2,035	o]	2,0
	Sub Total									103,774	0	103,7
								Total		43,810,054	3,615	44,243,
			:		÷ .		·	Unit Price p	er No.	1251715.84	103,28	1264109
_	INDIRECT COST								15%	187757.38	15.49	189616
	TOTAL									1,439,473	118.78	1,453,7

UNIT

2B22 and 2C21

	Bollard						LC: US\$			Total estimate	for 14 Nos.	US\$=¥120
No	Work Item	Unit	Quantity			Bas	ic Price			Unit (	Cost	Total
			] [	Ma	nterial		abor	Eguipi	ment	Amo	unt	in
				FC	LC .	FC	LC	FC	LC	FC	LC	YEN
1	Material											
	Bollard 100t with anchor bol	Nos	14	600000	0.00			·		8400000	0	8,400,000
	Other material	%	2	46200	0.00					168000		168,000
	Fuel Generator 45KVA	day	4.00	0	20		* A		·	0	79	9,509
	" Truck crane 16t	day	4.00	0	65						259	31,056
	" Truck 8t	day	4.00	٥	40	·			,		158	19,013
	Sub Total		1							8568000	496	8,627,578
2	Labor	١.	}							} }		
	Foreman	man.day	4			0	38.20				. 153	18,336
	Labor	man.day	20			. 0	14.30			0	286	34,320
	Generator 45KVA	day.unit	4			0	33			0	132	15,840
	Truck crane 16t	day.unit	4			0	33				132	15,840
	Truck 8t	day.unit	4			. 0	33	-		0	132	15,840
	Sub Total	!			}					0	835	100,176
3	Equipment											
	Generator 45KVA	day.unit	4		· .			1,080	0	4,320	0	4,320
	Truck crane 16t	day.unit	4					9,480	0	37,920	0	37,920
	Truck 8t	day.unit	4					3,480	0	13,920	0	13,920
	Welder 500A	day.unit	4					111.6	. 0	446	0	446
	Misxellaneous	%	2					1,132	0	1,132	0	1,132
	Sub Total									57,739	0	57,739
								Total		8,625,739	1,331	8,785,492
							· · · ·	Unit Price pe	er No.	616124.18	95.09	627535.15
	INDIRECT COST								15%	92418.63	14.26	94130.27
	TOTAL									708,543	109.36	721,665

UNIT

2B23 and 2C22

	Ladder						LC: US\$			Total estimate	e for 7 Nos.	US\$=¥120
No	Work Item	Unit	Quantity			Bas	ic Price			Unit	Cost	Total
				Ma	terial	L	abor	Equip	nent	Amo	ount	· in
				FC	LC	FC	LC	FC	LC	FC	LC	YEN
1	Material											
	Ladder	Nos	7	612000	0.00					4284000	0	4,284,000
	Other material	%	2	46200	0.00					85680	0	85,680
	Fuel Generator 45KVA	day	2.00	0	20					1 0	40	4,754
	" Truck crane 16t	day	2.00	0	65						129	15,528
	" Truck 8t	day	2.00	. 0	40				_	0	79	9,50
	Sub Total									4369680	248	4,399,469
2	Labor	-	1	1						i !		
	Foreman	man.day	2			0	38.20				76	9,168
	Labor	man day	4			0	14.30			0	57	6,864
	Generator 45KVA	day.unit	2			0	33			l o	66	7,920
	Truck crane 16t	day.unit	2	1		0	- 33	1		o	66	7,920
	Truck 8t	day.unit	2	1		0	33	ļ		0	66	7,920
	Sub Total	1									332	39,792
3	Equipment									[ {		
	Generator 45KVA	day.unit	2					1,080	0	2,160	0	2,160
	Truck crane 16t	day.unit	2					9,480	0	18,960	0	18,960
	Truck 8t	day.unit	2					3,480	0	6,960	ol	6,960
	Welder 500A	day.unit	2	l				111.6	0	223	ol	223
	Misxellaneous	%	2	į				566	0	566	o	560
	Sub Total	1 1		1				1		28,869	ol	28,869
				····				Total		4,398,549	580	4,468,130
								Unit Price po	er No.	628364.18	82.83	638304.29
	INDIRECT COST								15%		12.43	95745.64
	TOTAL	<del></del>								722,619	95.26	734,050

UNIT

2C0401

No	Requirement for Caisso Work Item		Quantity		Floating		LC: US\$	······································		Total estimate Unit	Cost	US\$=¥12 Total
				Mate	erial	La	bor	Equip	nent	· Am	ount	in
	•	<u> </u>		FC	LC	FC	LC	FC	LC	FC	LC	YEN
1	Material						:	1				
	Floating Dock	day	252	0	110					0	27,707	3,324,8
	Others	L.S.	1 1	0	350					0	350	42.0
	Sub Total		] -}							0	28,057	3,366,8
2	Labor	1	1				•				ŀ	
	Floating Dock	day	252			114,000	. 66			28,728,000	16,632	30,723,8
- 1	Pontoon 1000t	day	252			o	66	} **		].		
	Sub Total									28,728,000	16,632	30,723.8
3	Equipment		1		5 - 53 - L					[	ļ	
	Floating Dock	day	252					367,800	0	92,685,600	. 0	92,685,6
ı	Pontoon 1000t	day	252					25,080	· 0			
- 1	Sub Total	1								92,685,600	0	92,685,6
								Total		121,413,600	44,689	126,776,
								Unit Price pe	r day	481800.00	177.34	503080
	INDIRECT COST				······································				15%	72270,00	26,60	75462
-	TOTAL									554,070	203,94	578,5

UNIT

2C17

	End stopper			•			LC: US\$	•		Total estimate	for 2 Nos.	US\$=¥126
Νo		Unit	Quantity		·	Bas	ic Price			Unit C		Total
-				Mat	erial	L	abor	Equip	ment	Amou	int	in
		\		FC	LC	FC	LC	FC	LC	FC	LC	YEN
1	Material											
	Angle and Re-bar	kg	52.0	33.6	0.00				1	1747.2	0	1,74
	Concrete & Sand	m3	8	0	15.3			1	]	0	122	14.68
	Fuel Truck with crane 8t	day	1	0	45					.0	45	5,39
	Sub Total				ĺ					1747.2	167	21,82
2	Labor	ļ			i							
	Foreman	man.day	1		}	. 0	38.20			0	38	4,58
	Labor	man.day	[ 2	İ		0	14.30	·		0	29	3,43
	Truck with crane 8t	day.unit	1		1	0	33			0	33	3,96
	Sub Total	1						]		0	100	11,97
3	Equipment	1		.								
	Truck with crane 8t	day.unit	1		j			5,520	. (	5,520	0	5, <b>52</b>
	Sub Total	-		. [_				<u> </u>		5,520	0	5,52
								Total		7,267	267	39,32
				.·				Unit Price p	er No.	3633.60	133.56	19660.8
	INDIRECT COST								159	545,04	20.03	2949.1
-	TOTAL									4,179	153.59	22,610

2C18

UNIT FC: YEN

	Socket block				· · · · · · · · · · · · · · · · · · ·		LC: US\$			Total estimate	for 4 Nos.	US\$=¥120
No	Work Item	Unit	Quantity			Bas	sic Price			Unit (	Cost	Total
		<b>{</b>	l - [	Ma	terial	į	-abor	Equip	ment	Amo	unt	in ·
		1:		FC	LC	FC	LC	FC	LC	FC_	LC	YEN
1	Material											
	Angle and Re-bar	kg .	73.0	33.6	0.00					2452.8	0	2,453
	Concrete and sand	m3	0.6	. 0	17.20		İ	ļ	İ	0	10	1,238
	Fuel Truck with crane 8t	day	1.00	0	45			j	}		45	5,390
	Sub Total		}		•			· .	i .	2452.8	55	9,082
. 2	Labor		i l		•		<u> </u>			]	·	
	Foreman	man,day	1 1		!	. 0	38.20	ł: ·	}	0	38	4,584
	Labor	man.day	4			C	14.30				57	6,864
	Truck with crane 8t	day.unit	1	. [		C	33	1		0	33	3,960
	Sub Total	1	( - (	1				ļ <sup>:</sup>	1		128	15,408
3	Equipment		{							1	. }	·
	Truck with crane 8t	day.unit	] 1]				]	5,520	] (	5,520	0	5,520
	Sub Total	<u></u>	<u> </u>					! !		5,520	o	5,520
								Total		7,973	184	30,010
								Unit Price p	er No.	1993.20	45.91	7502.40
	INDIRECT COST								15%	298.98	6.89	1125.36
	TOTAL									2,292	52.80	8,628

UNIT

2C19

	Crane anchoring frame						LC: US\$	··			Total estimat	te for 8 Nos.	US\$=¥120
No	Work Item	Unit	Quantity			Basic I	Price				Unit Cost		Total
				Material		Labor			Equipment		Amount		în 💛
				FC	LC	FC	LC		FC	LC	FC	LC	YEN
1	Material												
	Concrete & Sand	m3	6.80	. 0	7.10			ŀ			] 0	48	5,794
	Angle & Re-bar	kg	154	4200	0.00						646800		646,800
	Fuel Truck with crane 8t	day	1	0	45	ŀ			•	•	0	45	5,390
	Sub Total					}			•	]	646800	93	657,984
2	Labor				٠.			.					
	Foreman	man.day	1			l	0) 38	3.20			0	38	4,584
	Labour	man.day	2				0 14	1.30		ļ	] 0	29	3,432
	Truck with crane 8t	day.unit	. 1			ł	0	33		·	·	33	3,960
	Sub Total										0	100	11,976
3	Equipment				ļ			•		ļ			
	Truck with crane 8t	day.unit	1				T .		5.520	0	5,520		5,520
	Sub Total		<u> </u>		<u> </u>	<u> </u>					5,520	0	5,520
									Total		652,320	193	675,4B0
					·				Unit Price p	er No.	81540.00	24.13	84435.00
	INDIRECT COST									15%	12231.00	3.62	12665.25
	TOTAL										93,771	27.74	97,100

UNIT

2001

	Driving of Steel Pipe Pile				LC: US\$	Total estimate for	37Nos.	US\$=¥120
No	Work Item	Unit	Quantity	Basic I	Price	Unit (	Cost	Total
		l l				Ámo	unt	in
			1	FC	LC	FC	LC	YEN
200701	Supply & Transport Steel Pipe Pile	Nos.	. 37	814,416.32	0.00	30,133,404	0.00	30,133,404
2D0702	Welding Joint of Steel Pipe Pile	Nos.	37	4,784.74	57.31	177,035	2,120,63	431,511
200703	Fabrication of Piling	Nos.	37	1,606.58	38.11	59,444	1,410,18	228,665
2D0704	Installation and removal of guide beam	Nos.	37	47,909.60	496.66	1,772,655	18,376,49	3,977,834
200705	Driving Steel Pipe Pile	Nos.	37	234,117.00	498.91	8,662,329	18,459,81	10,877,506
200706	Steel Pipe Pile reinforcement of edge	Nos.	.37	8,116.26	21.78	300,302	805.74	396,990
	Total		<u> </u>			41,105,169	41,172.84	46,045,910
				Unit Price per No		1 110 951	1 112 78	1 244 484

2D0101

UNIT FC: YEN

	Supply and Transport S	Steel Pip	e Pile				LC: US\$		Total estima	ate for 10 Nos		U\$\$=¥120
No	Work Item	Unit	Quantity			Ba	sic Price			Unit C	ost	Total
		1	l	Mat	erial		thers	Equip	ment	Ато	int	in
		1	<u> </u>	FC	LC	FC	LC	FC	LC	FC	LC	YEN
1	Material			i			ł					
	Steel Pipe Pile	ton	315	48,000	0		1			15,120,000	0	15,120,00
	Other material	%	1 1	151,200	0					151,200	0	151,200
	Sub Total		[ ]				1		[ [	15,271,200	0	15,271,20
		<b>.</b>			j	-	-			. 1		
2	Others			1			!				Ţ	
	Loading & Unloading Fee	FT	660	4560				1		3,009,600	0	3,009,609
	Transpotation fee by ship	FT	660	12000						7,920,000	. 0	7,920,000
	Miscellaneous	L.S	1	2160	1					2,160	0	2,160
	Sub Total			1						10,931,760	. 0	10,931,760
		.1		l		<del></del>	<u> </u>	Total	L	26,202.960	0	26,202,960
							•	Unit Price p	er No.	708,186.11	0	708,188.1
	INDIRECT COST								15%	106228.22	0	106228,22
	TOTAL									814.416		814.416

UNIT FC: YEN

Welding Joint of Steel Pipe Pile LC: US\$ Total estimate for 10 Nos. US\$=¥120 No Work Item Unit Quantity Basic Price Unit Cost Total Material Labor Equipment Amount in LC FC FC LC LC LC FC YEN FC Material Welding rod 58 300.00 17,400 17,400 kg mЗ 0.620 372 Oxygen Acetylen kg 1.050 315 Fuel Generator 100KVA 42 62 7,484 day " Truck crane 25t 69 104 12,474 day 172 Sub Total 17,400 38,045 Labor Mechanic man.day 1.5 31 47 5,580 19,127 Welder man.day 23.1 159 1.5 14.3 21 2,574 Labour man.day 1.5 33 50 5,940 Generator 100KVA man.day 33 50 5,940 Truck crane 25t man,day 1.5 326 Sub Total 39,161 Equipment Generator 100KVA 1.5 1,800 2,700 2,700 day 19,440 19,440 Truck crane 25t day 1.5 12,960 295.20 2,066 2,066 Sem-Auto Welder day.unit Sub Total 24,206 24,206 Total 41,606 498 101,413 Unit Price per No. 4160.64 49.84 10141.26 INDIRECT COST 15% 624.10 7.48 1521.19 TOTAL 4.785 57.31 11,662

2D0103

UNIT FC: YEN

	Fablication of Piling						LC: US\$	1		Total estimate	e for 10 Nos.	US\$=¥12
No	Work Item	Unit	Quantity			Bas	sic Price			Unit	Cost	Total
				M	aterial	L	abor	Equip	ment	Amo	ount	in
				FC	LC .	FC	LC	FC ·	LC	FC	LC	YEN
1	Material		!				1		ļ			
	Oxygen	m3	2.50	ŧ.	0.62		}	}			2	1.
	Acetylen	kg	1.20	0	1						1	t!
	Timber	cu.m	0.25	0	380			1		이	95	11,4
	Fuel Trailer 28t	day	0.64	. 0	49			1		이	31	3,72
	" Truck crane 25t	day	0.64	0	69					이	44	5,3
	Sub Total							ļ ·		이	173	20,78
2	Labor							l .	·			
	Foreman	man.day	0.64			. 0	38.20			0	24	2,93
	Labour	man.day	6.40		1 1	0	14.30	ł .			92	10,98
	Trailer 28t	man.day	0.64			0	33	ļ ·	i	0	21	2,53
	Truck crane 25t	man.day	0.64		] ]	0	33			ol	21	2,53
	Sub Total									l oi	158	18,91
	Equipment			•					i .			
	Trailer 28t	day	0.64					8,760	! · o	5,606	0	5,60
٠.	Truck crane 25t	day	0.64					12,960	<b>.</b>	8,294		8,29
	Other equipment	%	0.5		1			240		70	. 0	· ,
	Sub Total		· · · · · ·		1 1		[		ĺ	13.970	o	13,9
	Gub rouer :	`	,		1		ļ ·	1		1		
								* -				•
	·		<u> </u>				<u> </u>	Total	<del></del>	13,970	331	53,7
								Unit Price p	er No.	1397:03	33.14	5374.
	INDIRECT COST								15%	209.55	4.97	806.
	TOTAL									1,607	38.11	6,1

TOTAL

UNIT FC: YEN

Installation and Removal of Guide Beam LC: US\$ Total estimate for 10 Nos. US\$=¥120 Work Item Unit Quantity Basic Price Unit Cost Total No Equipment Material Labor Amount in FO LC FC LC FC LC FC LC YEN 1 Material Guide pile H350x350x12(15% ton 4.772 7200 34,358 34,358 Guide beam H300x300(15%) Iton 10.296 1.43 7200 10,296 2,232 Wasted steel(5%) 2,232 0.31 7200 ton Bolt & Nut 48 1.25 7.200 pcs Welding rod 120 36,000 36.000 kg 300.00 1,786 m3 24 0.62 Oxygen Acetylen 48 1.05 50 6.048 Other material 829.2 4,146 4,146 Fuel Crawler crane 30t 52 414 49,738 day.unit Generator 45KVA 18 148 17,741 day.unit 554 66,528 Tug boat 250PS day.unit 69 87,032 1,242 236,072 Sub Total 2 Labor 306 36,672 Foreman 38.2 man.day 915 109,824 Labour man.day 14.3 Crawler crane 30t 33 264 31,680 day.unit Generator 45KVA 33 264 31,680 day.unit 159,360 Tug boat 250PS 166 1,328 day.unit 63,360 Pontoon 500ton day.unit 528 432,576 Sub Total 3,077 3 Equipment Crawler crane 30t 13,440 107,520 107,520 day.unit 1,080 8,640 Generator 45KVA day.unit 8,640 Tug boat 250PS day.unit 11,760 94,080 94,080 14,400 115,200 Pontoon 500ton 115,200 day.unit Welder 500A 111.6 893 893 day.unit 3.240 Other equipment 3.240 3.240 329,573 Sub Total 329,573 Total 416,605 4,319 998,221 Unit Price per No. 41,660.52 431.88 99.822.12 INDIRECT COST 6,249.08 64.78 14,973.32 496,66

47.910

114,795

2D0105

UNIT FC: YEN

Total estimate for 10 Nos. Driving Steel Pipe Pile LC: US\$ US\$=¥120 Basic Price Unit Cost Total Unit Quantity No Work Item Amount in Material Labor Equipment FÇ FC YEN FC LC FC LC LC LC 1 Material 1,143 137,214 229 Fuel Piling barge D-72 day.unit 5.0 " Tug boat 250PS 5.0 347 41,580 day.unit 69 " Anchor boat 180PS 75 1.0 . 75 8,950 day.unit " Crawler crane 50t day.unit 5.0 62 312 37,422 1,876 225,186 Sub Total 2 Labor 38.2 191 22,920 Foreman man.day 14.3 286 34,320 Labor man.day 20 33 165 19,800 Crawler crane 50t man.day 69000 198 990 118,800 Piling barge D-72 man.day 166 830 Tug boat 250PS man.day 99,600 166 166 19,920 Anchor boat 180PS man.day 66 330 39,600 Pontoon 1000t man.day Sub Total 2,462 354,960 3 Equipment 338,040 1,690,200 1,690,200 Pile driving barge D-72 day.unit 25,080 125,400 125,400 Pontoon 1000t day.unit Tug boat 250PS day.unit | 11,760 58,800 58,800 Anchor boat 180PS 49,800 49,800 49,800 day.unit 22,320 111,800 111,600 Crawler crane 50t day.unit 2.035.800 2,035,800 Sub Total 2,035,800 4,338 Total 2,615,926 Unit Price per No. 203,580.00 433,84 261,592.56 INDIRECT COST 15% 65.08 30537.00 39238.88 498.91 TOTAL 234,117 300,831

UNIT FC: YEN

Steel Pipe Pile Reinforcement of Edge LC: US\$ Total estimate for 10 Nos. US\$=¥120 Work Item Unit Quantity Basic Price Unit Cost Total Material Labor Equipment Amount in FC LC LC FQ. LC FC LC FC YEN PD-6 Steel Pipe Pile reinforcement of edge Material Steel bar D13-D25 1.50 61,200 40800 61,200 Wasted steel(2%) 0.03 40800 1,224 1224 ton Welding rod kg 300.00 2,025 2,025 0.62 186 Oxygen m3 1.05 151 Acetylen kg : 42 1,996 Fuel Generator 100KVA dayunit 0.4 Truck crane 25t dayunit 69 28 3,326 Sub Total 64,449 70,108 Labor Mechanic 0.4 31.00 1,488 man.day 5,544 Welder 23.10 man.day 14.30 57 6.864 Labour man.day 1,584 Generator 100KVA man.day 0.4 13 Truck crane 25t man.day 0.4 13 1,584 Sub Total 142 17,064 3 Equipment Generator 100KVA 1,800 720 720 day 12,960 5,184 Truck crane 25t 5,184 day 0.4 223 223 Welder day.unit | 111.60 6,127 Sub Total 6,127 Total 70,576 189 93,300 Unit Price per No. 18.94 9329.96 7057.62 INDIRECT COST 1058.64 2.84 1399.49 TOTAL 8,116 21.78 10,729

UNIT

2D02

	Superstructure				LC: US\$	Total estimate for	or 823m3	US\$=¥120
No	Work Item	Unit	Quantity	Basic	Price	Unit C	Cost	Total
·.						Amount		in
				FC	LC	FC	FC	YEN
2D0201	Installation and removal of scafforld for beam concrete	sq.m	900	980.12	10.73	882,112	9,659.18	2,041,214
2D0202	Fabrication of reinforcement	ton	91	13,296.07	654.96	1,209,942	59,601,52	8,362,125
2D0203	Placing of concrete	cu.m	823	1,144.37	156.67	941,812	128,940.23	16,414,640
	Total					3,033,867	198,200.93	26,817,979
				Unit Price per	m3	2,939	191.98	25,976

UNIT FC: YEN

LC: US\$ US\$=¥120 Total estimate for 900m2 Installation and removal of scafforld for beam concrete Work Item Unit Quantity Basic Price Unit Cost Total No Material Labor Equipment **Amount** in FC YEN FC LC LC FC LC FC LC 1 Material Scafforld pileH350x350(15%) 60 1,800 216,000 ton 30 Scafforld beamH300x300(15%) ton 11 60 660 79,200 60 123 14,760 Wasted steel(5%) ton 2.05 200 1.02 204 24,480 Bolt & Nut pcs Welding rod 500 226.8 113,400 113,400 kg 840 0.07 m3 100 Oxygen 0.21 5,040 200 Acetylen 142 22,686 Other material 1134 28.36 5,670 Fuel Crawler crane 50t day 48 434 52,091 Crawler crane 30t 40 362 43,410 day Generator 125KVA day 63 571 68,559 Tug boat 250PS 67 603 72,349 day Sub Total 119.070 4.948 712.816 2 Labor Foreman 344 41,256 man.day 38.20 36 14.30 515 61,776 Labor man.day 208 24,937 Welder man.day 23.09 297 35,640 Crawler crane 50t 33 day Crawler crane 30t 33 297 35,640 day Generator 125KVA 33 297 35,640 day Tug boat 250PS 166 1,494 179,280 day 3,451 Sub Total 414,169 3 Equipment Generator 125KVA 2280 20,520 20,520 day Welder 500A 18 120 2,160 2,160 day 22,320 200,880 200,880 Crawler crane 50t day 13,440 120,960 120,960 Crawler crane 30t day Vibro-Hammer 60KW 7200 64,800 64,800 day 14,400 129,600 129,600 Pontoon 500t day Tug boat 250PS 11,780 105,840 105,840 day Other equipment 0.5 6448 3,224 3,224 647,984 647,984 Sub Total 767.054 1,774,969 Total 8,399 Unit Price per m2 852.28 9.33 1972.19 INDIRECT COST 15% 127.84 1.40 295.83 TOTAL 10.73 2,268

UNIT FO: YEN

LC: US\$ Total estimate for 100ton US\$=¥125 Fabrication of Reinforcement for Concrete Beam Basic Price Unit Cost Total No Work Item Unit Quantity Labor Amount in Material Equipment FC LC FC FC LC FC LC YEN LC 1 Material 957 119,625 Plate & Ribband 2.90 330 ton 100.00 360 36,000 4,500,000 Steel bar D10-D13 ton 360 720 90,000 Wasted steel par D8(2%) ton 1,237 0.36 445 55,665 Small size steel kg 236.25 93,555 93,555 Welding rod 396 kg Fuel Generator 125KVA day 25 63 1,587 198,378 40 1,005 125,606 Crawler grane 30t 25 day Tug boat 250PS 25 67 1,675 209,344 day 93,555 42,389 5,392,173 Sub Total 2 Labor 955 119,375 38.20 Foreman man.day 25 425 14.30 6,078 759,688 Labor man.day 23.09 1,732 216,469 75 Welder man.day 25 33 825 103,125 Generator 125KVA day 825 103,125 Crawler crane 30t day 25 33 4,150 518,750 25 166 Tug boat 250PS day 14,564 1,820,531 Sub Total 3 Equipment Generator 125KVA 25 2,280 57,000 57,000 day.unit 75 9,375 9,375 Welder 300A day.unit 125 25 125 3,125 3,125 Bar cutter day.unit 3.125 Bar bender day.unit 25 125 3.125 25 13,440 336,000 336,000 Crawler crane 30t day.unit Pontoon 500t 25 14,400 360,000 360,000 day.unit Tug boat 250PS day.unit 25 11,760 294,000 294,000 1,062,625 Sub Total 1,062,625 Total 1,156,180 56,953 8,275,329 Unit Price per T 11561.80 570 82753.29 INDIRECT COST 15% 1734.27 85.43 12412.99 13.296 654.96 95,166 TOTAL

200203

UNIT FO: YEN

LC: US\$ Total estimate for ma US\$=¥125 Placing of Concrete Unit, Basic Price Unit Cost Total Work Item Quantity Material Labor Equipment **Amount** in FC LC FC FC LC YEN LC 1 Material m3 7,335 916,875 Ready mixed concrete 100 73.35 183 22,922 Wasted concrete(2.5%) m3 2.5 73.35 295 36,900 Matal form bottom m2 82 3.60 110,56\$ 5.46 885 side m2 162 175 87.37 21,843 Other material 3,726 465,750 Coner Protection 162 23.00 2.00 127 15,870 Fuel Generator 125KVA 63 day Crawler crane 30t 2.00 80 10,049 day Tug boat 250PS day 2.00 134 16,748 12,940 1,617,521 Sub Total 2 Labor Foremen 38.20 76 9.550 man.day 143 17.875 Labor man.day 14.30 68 8,250 Generator 125KVA day.unit 33 Crawler crane 30t day.unit 33 66 8,250 Tug boat 250PS 166 332 41,500 day.unit 683 85,425 Sub Total 3 Equipment 2,280 4,560 4,560 Generator 125KVA day.unit 15,500 15.500 Concrete mixer 0.6m3 day.unit 7750 Vibrator 125 250 250 day.unit Crawler crane 30t day.unit 13,440 26,880 26,880 28,800 Pontoon 500t 14,400 28,800 day.unit Tug boat 250PS day.unit 11,760 23,520 23,520 Sub Total 99,510 99,510 Total 99,510 13,624 1,802,456 136.24 995.10 18024.56 Unit Price per m3 INDIRECT COST 15% 149.27 20.44 5407.37 TOTAL 1 144 156.67 23.432

UNIT FC: YEN

Total estimate for 37 Nos. US\$=¥120 LC: US\$ Corrosion-Proof Unit Cost Total Basic Price Work Item Unit Quantity No Labor Amount in Material Equipment LC FC FC YEN FC LC FC LC LC 1 Material 1739520 1,739,520 12 144,960 0.00 Aluminum Alloy 3.5A x 20year Nos 3831600 3,831,600 31 123,600 0.00 3.0A x 20year Nos. 180000 180,000 180000 0.00 other materials LS. 138,000 138000 138,000 0.00 No. Measurement instrument 12668400 12,668,400 414 30600 0.00 Petrolatum-lining with Accessory m2 20 2,377 20 1,00 Fuel Generator 45KVA day 65 7,764 1,00 65 Truck crane 16t day 40 4,753 40 1.00 Truck 8t day 18,557,520 18,572,414 124 Sub Total 2 Labor 0 38.20 1,413 169,608 37 man.day Foreman 74 ٥ 100.00 7,400 883,000 man.day Diver 0 1,221 146,520 37 33 Generator 45KVA day.unit 146,520 1,221 37 33 Truck crane 16t day.unit 146,520 33 1,221 37 day.unit Truck 8t 12,476 1,497,168 Sub Total 3 Equipment 39,960 1,080 39,960 37 Generator 45KVA day.unit 350,760 350,760 9,480 37 Truck crane 16t day.unit 128,760 128,760 3.480 37 Truck 8t day.unit 4,129 4,129 37 111.6 Welder 500A day.unit 10,472 5,236 10,472 Misxellaneous 534,081 534.081 Sub Total Total 19,091,601 12.601 20,693,664 Unit Price per No. 515989.23 340.55 556855.78 15% 77398,38 51.08 83528.37 INDIRECT COST 593,388 391.64 640,384 TOTAL

UNIT FC: YEN

LC: US\$ Total estimate for 2 Nos. US\$=¥120 Catwalk Unit Cost No Basic Price Total Work Item Unit | Quantity Material Labor Equipment Amount in FC LC FC LC LC YEN LC FC FC 1 Material 594,000 Grating 1500 3.3 4,950 kg 8580 5,663 679,536 Base steel kε 0.66 265,680 Pipe rail 738 2,214 kg 3.0 145 17,400 Welding rod kg 58 2.5 372 0.620 Oxygen m3 315 Acetylen kg 1,050 8,732 Fuel Trailer 28t day 49 73 12,474 Truck crane 25t 1.5 69 104 day 18 28 3,326 Generator 45KVA day 1.5 1,581,835 Sub Total 13,182 2 Labor 31 5,580 Mechanic 1.5 47 man.day 23,1 159 19,127 Welder man.day 2,574 Labour 1.5 14.3 21 man.day 50 5,940 33 Generator 45KVA man.day 1.5 33 50 5.940 Truck crane 25t 1.5 man.day 33 50 5.940 Trailer 28t man.day 1.5 376 45,101 Sub Total 3 Equipment 13,140 Trailer 28t 8,760 13,140 day 1.5 19,440 Truck crane 25t 1.5 12,960 19,440 day 1,620 Generator 45KVA day 1.5 1,080 1,620 2,066 Sem-Auto Welder 295.20 2.066 day.unit 36,266 Sub Total 36,266 13,558 Total 36,266 1,663,202 Unit Price per No. 18133.20 6,778.90 831601.20 INDIRECT COST 15% 2719.98 1,016.84 124740.18 20,853 7,795,74 956,341 TOTAL

UNIT FC: YEN

	Fender	*							LC: US\$				Total estima	te for 4 No	s	US\$=¥12
No	Work Item	Unit	Quantity				Basic	Pric	е	Ţ			Unit Cost			Total
I				Material			Labor			Equipme			Amount			in
-				FC	LC		FC		LC C	FC	]	LC	FC	LC		YEN
1	Material									•	Ī					
ı	Rubber Fender	Nos	4	744000		0.00					- 1		297600	0	0	2,976,00
	Fender breast & Breast bed	ton	0.4	46200	Ì	0.00							1848	3	0	18,48
	Anchor bolt & other	L.S.	1	107400	1	0.00					ŀ	4.5	10740	0	0	107.40
	Steel bar	ton	0.40	0	36	00.08					1	•		0	144	17,28
	Other material	%	2	. 0		2.88								0	3	34
	Fuel Generator 45KVA	day	1.00	0	1	20					- 1			0	20	2,37
	" Truck crane 16t	day	1.00	0		65				Ì	- 1		1	0	65	7,76
	" Truck 8t	day	1.00	0		40				1				0	40	4,75
- 1	Sub Total					- 1				1			3,101,88	0 :	271	3,134,40
2	Labor	Ì		ł	İ	- 1				1	1		1			
ļ	Foreman	man.day	1		į	1		0	38.20	i i			1	0	38	4,58
- 1	Labor	man.day	5			i		0	14.30	ļ				o	72	8,58
	Generator 45KVA	day.unit	1			- {		0	. 33	r <del>l</del>				0	33	3,96
. 1	Truck crane 16t	day,unit	1					0	33	I <mark>.</mark>	[		1	0	33	3,96
.	Truck 8t	day.unit	1		}			0	33				-	0	33	3,96
	Sub Total	}				1						* .		0 1	209	25,04
3	Equipment											•		1	ŀ	
l	Generator 45KVA	day.unit	1							1,	080		0 1,08	0	0	1,08
ļ	Truck crane 16t	day.unit	1			1				9,	480		0 9.48	0	0	9,48
ı	Truck 8t	day.unit	1							3.	480		0 3,48	0	0	3,48
ľ	Welder 500A	day.unit	2		1	1		j		11	11.6		0 22	3	0	22
	Misxellaneous	%	2							1	143		0 28	5	0	28
	Sub Total	·	1.						4 4 4	· ·			14.54	8	0	14,54
										Total		,	3,116,42	8	180	3,173,99
-		·								Unit Pri	сер	er No.	779107.1	2 119	.93	793498.1
	INDIRECT COST											15	% 11 <b>6</b> 866.0	7 17	.99	119024.7
	TOTAL												895,97	3 137	.91	912,52

UNIT

FC: YEN LC: US\$ 2006 Bollard

	Bollard						LC: US\$			Total estimate		US\$=¥120
No	Work Item	Unit	Quantity			Bas	sic Price			Unit C	ost	Total
				Ma	terial	. <u>L</u>	.abor	Equip	ment	Amou	nt	in
				FC	LC	FC	LC	FC	LC	FC	LC	YEN
1	Material											
٠.	Bollard 100t with anchor bol	Nos	8	625000	0.00	2				5000000	0	5,000,000
	Bitt 15t with anchor bolt	Nos	2	100000	0.00					200000	0	200,000
	Moring ring with attachment	Nos	9	10800	0.00					97200	9	97,20
	Fuel Generator 45KVA	day	2.00	0	20					0	40	4,754
	" Truck crane 16t	day	2.00	0	65				1	O	129	15,528
	" Truck 8t	day	2.00	0	40					0	79	9,506
	Sub Total		] }							5,297,200	248	5,326,989
2	Labor											
	Foreman	man.day	2			. 0	38.20	l .		0	76	9,168
	Labor	man.day	10			0	14.30		ļ	0	143	17,16
	Generator 45KVA	day.unit	2		Ì	0	- 33			0	66	7,920
	Truck crane 16t	day.unit	2			0	33		·	0	66	7,920
	Truck 8t	day.unit	2			0	33			0	66	7,920
	Sub Total	1								0	417	50,088
. 3	Equipment											
	Generator 45KVA	day.unit	2					1,080	0	2,160	0	2,166
٠.	Truck crane 16t	day.unit	2					9,480	0	18,960	0	18,960
	Truck 8t	day.unit	2					3,480	,	6,960	0	6,960
	Welder 500A	day.unit	2		ł			111.6	0	223	٥	22:
	Misxellaneous	%	2					283	0	566	0	566
	Sub Total	<u>l</u>				·		<u> </u>		28,869	0	28,869
								Total		5,326,069	666	5,405,946
								Unit Price po	er No.	665758.66	83.21	675743.26
	INDIRECT COST								15%	99863.80	12.48	101361.49
	TOTAL									765,622	95.69	777,105

UNIT FC: YEN

	Access Bridge						LC: US\$			Total estimate	e for 10 Nos.	US\$=¥120
No	Work Item	Unit	Quantity			Bas	sic Price			Unit	Cost	Total
				Ма	terial	L	abor	Equip	ment	Amo	ount	. in
			<u> </u>	FC	LC	FC	LC	FC	LC	FC	LC	YEN
1	Material								•			
	Concrete	m3	16.6	. 0	70,00				1	. 0	1.162	139.44
	Form	m2	27.8	. 0	3.83					0	106	12,77
	Reinforcement bar and Angle	ton	5.6	0	360.00		-			0	2,016	241,92
	Lifting Bar & Plate	kg	142	0	0.46			1		0	65	7,83
	Rubber Shoe	m	40	. 0	8.00		İ			0	320	38,40
	Fuel Truck crane 25t	day	2.00	0	73				1 6	0	147	17,59
	" Trailer 28t	day	2.00	0	49			1		0	97	11,64
	Sub Total						ŀ			0	3,913	469,61
2	Labor				·							
	Foreman	man.day	2	4		0	38.20		İ	0	76	9,16
	Labor	man.day	4		·	. 0	14.30	1		0	57	6,86
	Truck crane 25t	day.unit	2			0	33	ł		0	66	7,92
	Trailer 28t	day.unit	2			0	33			0	66	7,92
	Sub Total						ļ			0	266	31,87
	Equipment						•					
-	Truck crane 25t	day.unit	2				i .	12,960		0 25,920	0	25,92
	Trailer 28t	day.unit	2	<b>3</b> °				8,760	-	17,520	0	17,52
. !	Sub Total			*			İ	1		43,440	0	43,44
	<u> </u>	<u>,                                    </u>						Total		43,440	4,179	544,92
	4 · *		*			· · ·		Unit Price p	er No.	4344.00	417.90	54492.1
	INDIRECT COST								15	% 651.60	62.69	8173.8
-	TOTAL	<del></del>						-		4,996	480.59	62,66

2D08

UNIT FC: YEN

Total estimate for 7 Nos. Ladder LC: US\$ US\$=¥120 Nο Basic Price Unit Cost Work Item Unit | Quantity Total Labor Equipment Amount Material in : FC LC FC LC FC LC FC LC YEN 1 Material Ladder Nos 612000 0.00 4284000 4,284,000 46200 0,00 85680 85,680 Other material 2.00 20 4,754 Fuel Generator 45KVA day 2,00 65 129 15,528 Truck crane 16t day " Truck 8t 40 79 9,506 2,00 day Sub Total 4369680 248 4,399,469 2 Labor 38.20 76 9,168 Foreman man.day Labour 14.30 57 6,864 man.day Generator 45KVA day.unit 66 7,920 33 Truck crane 16t 33 66 7,920 day.unit Truck 8t 33 66 7,920 day.unit 39,792 Sub Total 332 3 Equipment Generator 45KVA 2,160 day.unit 1.080 2,160 Truck crane 16t 9,480 18.960 18,960 day.unit 2 3.480 Truck 8t day.unit 6,960 6,960 Welder 500A day.unit 111.6 223 223 566 566 Misxellaneous 566 28.869 28,869 Sub Total Total 4.398.549 580 4.468,130 Unit Price per No. 628364.18 638304.29 82.83 INDIRECT COST 95745.64 94254.63 12.43 TOTAL 722,619 95.26 734,050

UNIT FC: YEN LC: US\$

Total estimate for 1000m3

US\$=¥120

Rubble Stone including Geotextile

No	Work Item		Quantity			Bas	Unit (	Total				
				Ma	terial		abor	Equip	ment	Amount		in
				FC	LC	FC	LC	FC	LC	FC	LC	YEN
1	Material											
	Rubble rock	m3	1,000	0	5.16				ļ	0	5,160	619,200
	Wasted rubble rock(25%)	m3	250	0	5.16					0	1,290	154,800
	Filter rock	m3	17.5	. 0	14.20					이	249	29,820
	Geotextile	m2	130.0	0	1.47			·		0	191	22,932
	Fuel Tug boat 450PS	day	4.2	. 0	130					0	545	65,389
	" Backhoe 1.2m3	day	4.2	0	180					이	754	90,488
	" Working boat	day	4.2	0	60	-			ŀ	0	254	30,462
	Sub Total					·				이	8,442	1,013,091
2	Labor								1		•	
	Foreman	manday	4.2			0	38.2			0	160	19,253
	Labor	manday	16.8			0	14.3			0	240	28,829
	Diver	manday	8.4	. 1		0	100			0	840	100,800
	Tug boat 450PS	day	4.2			0	166		ļ	0	697	83,664
	Pontoon 500t	dayunit	8.4			0	. 66			이	554	66,528
	Backhoe 1.2m3	day	4.2			0	33			0	139	16,632
٠	Working boat	day	4.2			0	66			이	277	33,264
	Sub Total	}		-	i				:	0	2,908	3 <b>48,9</b> 70
. 3	Equipment	1					<b>i</b> .			34.44		04.44
	Tug boat 450PS	day	4.20					19,320		81,144	. 0	81,144
	Pontoon 500t	day.unit	8.40					14,400	L	120,960	0	120,960
	Backhoe 1.2m3	day	4.20			·	:	15,240		64,008	0	64,008
	Working boat	day	4.20					3,480	0		υ <sub>ι</sub>	14,616
	Sub Total		1				<u> </u>		<u> </u>	280,728	U)	280,728
								Total		280,728 280,73	11,351	1,642,788
	AIDIDEAT AGET							Unit Price p	er m3 15%:	42.11	1.70	1,643 246
	INDIRECT COST			<del></del>					: 5%:		13.05	1,889
	TOTAL	· · · · · · · · · · · · · · · · · · ·								323	13.03	₹,863

LA UNION PORT DEVELOPMENT PROJECT 2E0102 and 2E0202

UNIT FC: YEN

Total estimate for 1000m3 LC: US\$ US\$=¥120 Armour Stone Unit Cost No Work Item Unit Quantity Basic Price Total Material Labor Equipment Amount in LC LC FC LC YEN FC FC LC FC 1 Material 744000 Armour stone 1,000 6.2 6,200 cu,m 1,550 250 6.2 186,000 Wasted armour stone(25%) cu.m 130 765 91,856 Fuel Tug boat 450PS day 5.9 Backhoe 1.2m3 day 5.9 180 1,059 127,114 42,792 Working boat day 5,9 60 357 1,191,762 Sub Total 9,931 2 Labor 27,046 Foreman manday 5.9 38.2 225 23.6 337 40,498 Labor manday 14.3 100 141,600 Diver manday 11.8 1,180 Tug boat 450PS day 5.9 166 979 117,528 Pontoon 500t 66 779 93,456 dayunit 11.8 33 195 23,364 Backhoe 1.2m3 day 5.9 66 Working boat 46,728 day 5.9 389 490,219 Sub Total 4,085 3 Equipment Tug boat 450PS day 5.90 19,320 113,988 113,988 Pontoon 500t day.unit 11.80 14,400 169,920 169,920 Backhoe 1.2m3 5.90 15,240 89,916 89,916 day Working boat 5,90 3,480 20,532 20,532 394,356 394,356 Sub Total 2,076,337 Total 394,356 14,017 Unit Price per m3 394.36 2076,34 14.02 INDIRECT COST 2.10 15% 59.15 311.45 TOTAL 454 16.12 2,388

UNIT FC: YEN LC: US\$

	Concrete Block						LC: US\$		·	Total estimate		US\$=¥1 Total	
Νo	Work Item	Unit	Quantity								Unit Cost		
- 1		İ			erial	Labor		Equipment		Amo		, în	
				FC	LC	FC	ГC	FC	7	FC	LC	YEN	
7	Material				l [						[		
	Ready mixed concrete Type A	m3	42	0	1					0	2,940	352,8	
	Ready mixed concrete Type B	m3	53	0	l					- 0	3,710	445.2	
	Ready mixed concrete Type C	m3	60	. 0	!	•				- 0	4,200	504,	
	Wasted concrete(2.5%)	m3	4	0	70.00		1			0	280	33,	
	Metał form(10%)	m2 .	226	. 0	3.83					0	866	103,	
	Other material	%	2.5	0	108.40					. 0	271	32,	
	Fuel Crawler crane 50t	day	3	- 0	89			1		0	266	31.	
	" Trailer 28t	day	2	0	49		1		-	0	98	11.	
	" Truck crane 25t	day	2	0	69					0	139	16,	
	" Tug boat 250PS	day	2	0	17		l			0	35	4.	
	Sub Total						1			. 0	12,769	1,532	
2	Labor									Ī			
	Foreman	man.day	3			0	38.20			0	115	13	
	Labor	man.day	30			. 0	14.30			. 0	429	51,	
	Diver	man.day	30		ľ	0	14.30			0	429	51.	
٠.	Crawler crane 50t	day	3		] ;	0	33			0	99	11,	
	Trailer 28t	day	3			0	33	1	,	0	99	11.	
	Truck crane 25t	day	3		] [	0	33			0	99	17.	
	Tug boat 250PS	day	. 3		1	0	133			0	399	47.	
	Pontoon 500t	day	3			0	66	•		0	198	23.	
	Sub Total	1								0	1,072	152,	
. 3	Equipment	ļ	•										
	Crawler crane 50t	day	3					22,320	0	66,960	. 0	66.	
,	Trailer 28t	day	3					8,760	0	26,280	. 0	26	
٠.	Truck crane 25t	day	3					12,960	. 0	38,880	. 0	38.	
	Tug boat 250PS	day	3					11,760	0	35.280	0	35,	
	Pontoon 500t	day	3					14,400	0	43,200		43.	
	Vibrator	dayunit	6			43		120	0	720	0		
	Sub Total	· 1	l		<u> </u>		<u> </u>	<u> </u>		211,320	0	211.	
								Total		211,320	13,841	1,896.	
								Unit Price	e per m3	1,363.35	89.30	1223	
	INDIRECT COST								15%	204.50	13.39	183-	
	TOTAL									1,568	102.69	14,	

UNIT FC: YEN

Concrete Wall

TOTAL

LC: US\$ Total estimate for 100 m3 US\$=¥120 Basic Price Unit Cost Total Work Item No Unit | Quantity Labor Equipment Amount Material in FC LC FC LC FC LC FC LC YEN 1 Material 840,000 70.00 7,000 Ready mixed concrete m3 100 21,000 Wasted concrete(2.5%) m3 2.5 70.00 175 47 5,598 Elas tigh board m2 5.6 8.33 Metal form(10%) m2 133 3.83 509 61,127 24,960 Other material 104.00 208 day Fuel Concrete pump 17,960 Generator 125KVA 50 150 day 89 10,728 Truck crane 16t 30 day Sub Total 8,178 981,373 2 Labor Foreman 38.20 115 13,752 man.day 14.30 429 51,480 Labor 30 man.day 33 99 11,880 Truck crane 16t man.day 33 Generator 125KVA 11,880 man.day 33 11,880 Concrete pump 45m3 man.day. Sub Total 100,872 643 3 Equipment 6,840 Generator 125KVA day 2,280 6,840 day 9,480 28,440 28,440 Truck crane 16t 27,360 9.120 27,360 Concrete pump 45m3 day Vibrator 120 1,440 1.440 dayunit Sub Total 64,080 64,080 Total 64,080 8,821 1,146,325 Unit Price per m3 11463.25 640.80 88.21 INDIRECT COST 1719,49 96.12 13.23 13,183

737

101,44

UNIT FC: YEN

LC: US\$ Total estimate for 1000m3 US\$=¥120 Rubble Stone including Geotextile **Basic Price** Unit Cost Total Work Item Unit Quantity Equipment Material Labor Amount in YEN FC LC FC LC FC LC FC LC 1 Material 619200 Rubble rock m3 1.000 5.16 5,160 5.16 1,290 154,800 Wasted rubble rock(25%) 250 m3 14.20 249 29,820 Filter rock m3 17.5 1.47 25931 216 Geotextile m2 147.0 130 65,389 Fuel Tug boat 450PS day 4.2 545 90,488 180 754 Backhoe 1.2m3 4.2 day 60 30,462 254 Working boat day 4.2 1,016,090 Sub Total 8,467 2 Labor 38.2 160 19,253 4.2 Foreman manday 16.8 14.3 240 28,829 Labor manday 100,800 Diver manday 8.4 100 840 166 697 83,664 Tug boat 450PS day 4.2 66,528 66 554 Pontoon 500t dayunit Backhoe 1.2m3 33 139 16,632 day 66 277 33,264 Working boat day 348,970 Sub Total 2,908 3 Equipment 19,320 81,144 81,144 Tug boat 450PS 4.20 day 14,400 120,960 Pontoon 500t day.unit 8.40 120,960 15,240, 64,008 Backhoe 1.2m3 4.20 64,008 day 14,616 4.20 3,480 14,616 Working boat day 280,728 280,728 Sub Total Total 1,645,787 280,728 11,375 Unit Price per m3 280.73 11,38 1645.79 15% 246.87 INDIRECT COST 42.11 1.71 TOTAL 323 13.08 1,893

UNIT

2E0203

	Concrete Wall	1000					LC: US\$			Total estimat	e for 100 m3	US\$=¥12
No	Work Item	Unit	Quantity			Bas	Unit	Total				
?				Material		Labor		Equipment		Amo	ount	in
				FC	LC	FC	FC	FC	LC	FC	LC	YEN
1	Material											
	Ready mixed concrete	m3	100	0	70.00			•		. 0	7,000	854,00
	Wasted concrete(2.5%)	m3	2.5	0	70.00					0	175	21,35
	Elas tigh board	m2	6.5	0	8.33					0	54	6.60
	Metal form(10%)	m2	125	0	3.83					0	479	58,40
	Other material	<b>%</b>	2	0	104.00					0	208	25,37
	Fuel Concrete pump	day	3	. 0	0			·	}	. 0	0	
	" Generator 125KVA	day	] 3	0	50			]		0	150	18,26
	" Truck crane 16t	day	. 3	0	30			·		0	89	10,90
	Sub Total		}							0	8.155	994,90
2	Labor		}		}			}			1	
	Foreman	man.day	3			. 0	38.20			0	115	13,98
	Labor	man.day	30		1	0	14.30			. 0	429	52,33
	Truck crane 16t	man.day	3			o!	- 33	į .		0	99	. 12,07
	Generator 125KVA	man.day	3			0	33			0	99	12,07
	Concrete pump 45m3	man.day	3		] . ]	0	33		+	٥	99	12,07
	Sub Total	]					<del>-</del>			0	643	102,55
3	Equipment		i - i		]					ļ		
	Generator 125KVA	day	3		1			2,280	C	6,840	0	6,84
	Truck crane 16t	day	3					9,480	C	28,440	0	28,44
	Concrete pump 45m3	day	3		] - ]			9,120	)	27,360	0	27,36
	Vibrator	dayunit	12					122	0	1,464	o	1,46
	Sub Total									64,104	0	64,10
					·			Total		64,104	8,798	1,161,56
					·			Unit Price pe	er <b>m3</b>	641.04	87.98	11615.6
	INDIRECT COST								15%	96.16	13.20	1742.3
	TOTAL					<del></del>				737	101,17	13,35

UNIT FC: YEN

Total estimate for 10,000m3 US\$=¥120 Land reclamation including fill material supply LC: US\$ Unit Cost Total Basic Price Work Item Unit | Quantity No Labor Equipment Amount in Material LO FC LC FC YEN LC FC FC LC 1 Material 9.500 Sand (behind project site) 246,000 2,050 m3 500 4.10 Sand 73,800 615 4.10 lm3 150 Wasted sand (30%) 1,432 143 10 Fuel Bulldozer 21t day 4,238 20 212 Backhoe 1.5m3 dayunit 7,763 931,536 129 dayunit 60 Dump truck 10t 16,098 1.251.336 Sub Total 2 Labor 382 45.840 10 38.2 Foreman manday 68,640 572 40 14.3 manday Labour 330 39,600 33 day 10 Buildozer 21t 79,200 660 33 20 Backhoe 1.5m3 dayunit 1,980 237,600 60 Dump truck 10t dayunit 470,880 3,924 Sub Total 3 Equipment 123,600 0 123,600 12,360 10 Bulldozer 21t day 304,800 15,240 304,800 Backhoe 1.5m3 dayunit 20 403,200 403.200 6,720 dayunit 60 Dump truck 10t 831,600 831,600 Sub Total 2,553,816 831,600 20,022 Total 255.38 Unit Price per m3 83.16 2.00 15% 12.47 0.30 38.31 INDIRECT COST

2.30

294

TOTAL

UNIT

FC: YEN 10:115\$

	Concrete pavemen type 1 for RTG traffic	lane		LO: 022	Total estimate for	US\$≈¥120		
No	Work Item	Unit	Quantity	Basic Price		Unit Cost	Total in	
		}				Amount		
				FC	LC	FC	LC	YEN
2G0101	Subgrade preparation	m2	5,000	24.84	1.27	124,200	6,366	888,124
2G0102	Subbase course	m2	5,000	26.30	2.13	131,514	10,641	1,408,491
2G0103	Base course	m2	5,000	17.64	4.50	88,182	22,523	2,790,987
2G0104	Prim coating	m2	5,000	2.32	0.47	11,592	2,328	290,934
2G0105	Concrete slab	m2	5,000	37.40	36.53	186,990	182,673	22,107,766
	Total					542,478	224,532	27,486,302
7.				Unit Price per m2		108	44.91	5,497

UNIT FC: YEN

Total estimate for 5000 m2 Subgrade preparation LC: US\$ US\$=¥120 Unit Quantity Unit Cost Work Item Basic Price Total Nο Material Labor Equipment Amount in FC FC FC LC YEN LC FC LC LC Material Mechanical stabilized course m3 500 6.00 3,000 360000 300 36,000 Wasted " (10%) 50 6.00 40 201 24174 Fuel Steel roller 10-12t. day 40 200 23,958 Tire roller 10t day Bulldozer 21t 120 599 71,904 day 55 55 Vibration roller 10t 6,574 day Motor grader 2.8m 110 13,152 Sub Total 4,465 535,762 2 Labor 38.2 191 22,920 Foreman manday 20 14.3 286 34,320 Labor mandav 165 Steel roller 10-12t day 33 19,800 33 165 19,800 Tire roller 10t ldav 165 19,800 Bulldozer 21t dav 33 Vibration roller 10t 3.960 day 66 7,920 Motor grader 2.8m 1,071 128,520 Sub Total 3 Equipment 3,120 15,600 15,600 Steel roller 10-12t dayunit 16,800 16,800 Tire roller 10t day.unit 3,360 0 61,800 Buildozer 21t dayunit 12,360 61,800 6,360 6.360 6,360 Vibration roller 10t dayunit 3.720 7,440 7,440 Motor grader 2.8m dayunit 108,000 108,000 Sub Total Total 108,000 5,536 772,282 Unit Price per m2 21.60 1.11 154.46 15% 3.24 0.17 23.17 INDIRECT COST 1.27 TOTAL 25 178