

#### **4. ITEM OF PROCESS COST**

## LA UNION PORT DEVELOPMENT PROJECT

4A0801

FC: YEN

PIT TYPE 1A

LC: US\$

Total estimate for 15 Nos

No	Work Item	Unit	Quantity	Basic Price		Unit Cost	
						Amount	
				FC	LC	FC	LC
4A080101	Corner Angle	Nos.	15	914.94	60.18	13,724	902.77
4A080102	Concrete Placing	Nos.	15	158.24	395.32	2,374	5,929.87
	Total					16,098	6,832.64
Unit Price per No.						1,073	455.51

LA UNION PORT DEVELOPMENT PROJECT

4A080101

FC: YEN

LC: US\$

Corner Angle for Manhole

Total estimate for 15 Nos

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Coner angle	kg	172.65	0	0.36					0	62	
	Wasted corner angle(2%)	kg	3.45	0	0.36					0	1	
	Miscellaneous	L. S.	1	0	1.27					0	1	
	Fuel Truck 8t	day	2.5	0	80					0	200	
	Generator 45KVA	day	2.50	0	24					0	59	
	Sub Total									0	324	
2	Labor											
	Foreman	man. day	2.5			0	38.20			0	96	
	Labor	man. day	10			0	14.30			0	143	
	Welder	man. day	2.5			0	23.09			0	58	
	Truck 8t	man. day	2.5			0	33			0	83	
	Generator 45KVA	man. day	2.5			0	33			0	83	
	Sub Total									0	461	
3	Equipment											
	Truck 8t	day	2.5					3,480	0	8,700	0	
	Generator 45KVA	day	2.5					1,080	0	2,700	0	
	Welder 300A	day	2.5					120	0	300	0	
	Other equipment	L. S.	1					234	0	234	0	
	Sub Total									11,934	0	
Total										11,934	785	
Unit Price per No.										795.60	52.33	
INDIRECT COST										15%	119.34	7.85
TOTAL										915	60.18	

LA UNION PORT DEVELOPMENT PROJECT

4A080102

FC: YEN

LC: US\$

Total estimate for 15 Nos

Concrete Placing

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Cover for manhole	Nos	15.00	0	290.03					0	4,350	
	Ready mixed concrete	m3	4.20	0	70.00					0	294	
	Wasted concrete(5%)	m3	0.21	0	70.00					0	15	
	Formwork	m2	83.00	0	5.50					0	457	
	Fuel Truck crane 16t	day	0.1	0	77					0	8	
	" Concrete mixer 0.6m3	day	0.1	0	0					0	0	
	" Generator 45KVA	day	0.1	0	24					0	2	
	" Truck 8t	day	0.1	0	80					0	8	
	Sub Total									0	5,134	
2	Labor											
	Foreman	man. day	0.1			0	38.20			0	4	
	Labor	man. day	0.4			0	14.30			0	6	
	Truck crane 16t	man. day	0.1			0	33			0	3	
	Concrete mixer 0.6m3	man. day	0.1			0	33			0	3	
	Generator 45KVA	man. day	0.1			0	33			0	3	
	Truck 8t	man. day	0.1			0	33			0	3	
	Sub Total									0	23	
3	Equipment											
	Truck crane 16t	day	0.1					9,480	0	948	0	
	Concrete mixer 0.6m3	day	0.1					6,480	0	648	0	
	Generator 45KVA	day	0.1					1,080	0	108	0	
	Truck 8t	day	0.1					3,480	0	348	0	
	Vibrator	day	0.1					120	0	12	0	
	Sub Total									2,064	0	
Total										2,064	5,156	
Unit Price per No.										137.60	343.76	
INDIRECT COST										15%	20.64	51.56
TOTAL										158	395.32	

APPENDIX-3. EQUIPMENT COST  
 LA UNION PORT DEVELOPMENT PROJECT  
 4A0801

FC: YEN

LC: US\$

Truck with crane 8t per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	232.00	0	0.33					0	77
	Others	L. S.	1	0	0.00					0	0
	Sub Total									0	77
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L. S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Truck with crane 8t	day	1					9480	0	9,480	0
	Sub Total									9,480	0
	Total									9,480	110

Fuel & Lubricant: 230ps x 0.11 x 4 x 1.05

100ps x 0.2 x 6 x 1.05

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APPENDIX-3. EQUIPMENT COST  
 LA UNION PORT DEVELOPMENT PROJECT  
 4A0801  
 Truck 8t per day

FC: YEN

LC: US\$

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	233.00	0	0.33					0	77
	Others	L. S.	1	0	3.00					0	3
	Sub Total									0	80
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L. S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Truck 8t	day	1					3480	0	3,480	0
	Sub Total									3,480	0
	Total									3,480	113

Fuel &amp; Lubricant: 253ps x 0.11 x 8 x 1.05

APPENDIX-3. EQUIPMENT COST

LA UNION PORT DEVELOPMENT PROJECT

4A0801

FC: YEN

Dump truck 10t per day

LC: US\$

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	309.00	0	0.33					0	102
	Others	L.S.	1	0	3.00					0	3
	Sub Total									0	105
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Dump truck 10t	day	1					6720	0	6,720	0
	Sub Total									6,720	0
	Total									6,720	138

Fuel & Lubricant: 335ps x 0.11 x 8 x 1.05

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## APPENDIX-3. EQUIPMENT COST

LA UNION PORT DEVELOPMENT PROJECT

4A0801

FC: YEN

LC: US\$

Generator 45KVA per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	72.00	0	0.33					0	24
	Others	L.S.	1	0	0.00					0	0
	Sub Total									0	24
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Generator 45KVA	day	1					1080	0	1,080	0
	Sub Total									1,080	0
	Total									1,080	57

Fuel &amp; Lubricant: 57ps x 0.2 x 6 x 1.05



APPENDIX-3. EQUIPMENT COST  
 LA UNION PORT DEVELOPMENT PROJECT  
 4A0801

FC: YEN

LC: US\$

Backhoe 0.8 m3 per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	283.00	0	0.33					0	93
	Others	L. S.	1	0	2.00					0	2
	Sub Total									0	95
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L. S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Backhoe 0.8m3	day	1					11280	0	11,280	0
	Sub Total									11,280	0
	Total									11,280	128

Fuel & Lubricant: 169ps x 0.2 x 8 x 1.05

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APPENDIX-3. EQUIPMENT COST  
EA UNION PORT DEVELOPMENT PROJECT  
4A0801

FC: YEN

LC: US\$

Tire roller 8-20t per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	161.00	0	0.33					0	53
	Others	L.S.	1	0	2.00					0	2
	Sub Total									0	55
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Tire roller 8-20t	day	1					3360	0	3,360	0
	Sub Total									3,360	0
	Total									3,360	88

Fuel &amp; Lubricant: 96ps x 0.2 x 8 x 1.05

APPENDIX-3. EQUIPMENT COST  
 LA UNION PORT DEVELOPMENT PROJECT

4A0801

FC: YEN

Tampa 60-100kg per day

LC: US\$

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	5.00	0	0.33					0	2
	Others	L. S.	1	0	0.00					0	0
	Sub Total									0	2
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L. S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Tampa	day	1					212.4	0	212.40	0
	Sub Total									212.40	0
	Total									212.40	35

Fuel & Lubricant: 5ps x 0.2 x 5 x 1.05

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## APPENDIX-3. EQUIPMENT COST

LA UNION PORT DEVELOPMENT PROJECT

4A0801

FC: YEN

LC: US\$

Concrete Mixer 0.6m3 per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	0	0	0.33					0	0
	Others	L.S.	1	0	0.00					0	0
	Sub Total									0	0
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Concrete Mixer 0.6m3	day	1					6480	0	6,480.00	0
	Sub Total									6,480.00	0
	Total									6,480.00	33

LA UNION PORT DEVELOPMENT PROJECT

4A0802

PIT TYPE 1B

FC: YEN

LC: US\$

Total estimate for 15 Nos

No	Work Item	Unit	Quantity	Basic Price		Unit Cost	
						Amount	
				FC	LC	FC	LC
4A080201	Excavation & Disposal	Nos.	15	379.04	6.42	5,686	96.28
4A080202	Crushed Stone for Foundation	Nos.	15	44.05	2.55	661	38.31
4A080203	Lean Concrete	Nos.	15	58.88	10.55	883	158.24
4A080204	Reinforcement	Nos.	15	2,846.48	164.06	42,697	2,460.89
4A080205	Corner Angle	Nos.	15	1,463.90	125.36	21,959	1,880.35
4A080206	Concrete Placing	Nos.	15	474.72	467.26	7,121	7,008.86
4A080207	Backfill Sand & Compaction	Nos.	15	56.93	5.45	854	81.82
	Total					79,860	11,724.76
Unit Price per No.						5,324	781.65

## LA UNION PORT DEVELOPMENT PROJECT

4A080201

FC: YEN

LC: US\$

Total estimate for 15 Nos

## Excavation &amp; Disposal for Manhole

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Excavation sand	m3	53.16	0	0.00					0	0	
	Fuel Backhoe 0.8m3	day	0.2	0	95					0	19	
	" Dump truck 10t	day	0.40	0	105					0	42	
	Sub Total									0	61	
2	Labor											
	Foreman	man. day				0	38.20			0	0	
	Labor	man. day	0.2			0	14.30			0	3	
	Backhoe 0.8m3	man. day	0.2			0	33			0	7	
	Dump truck 10t	man. day	0.40			0	33			0	13	
	Sub Total									0	23	
3	Equipment											
	Backhoe 0.8m3	day	0.2					11,280	0	2,256	0	
	Dump truck 10t	day	0.40					6,720	0	2,688	0	
	Sub Total									4,944	0	
Total										4,944	84	
Unit Price per No.										329.60	5.58	
INDIRECT COST										15%	49.44	0.84
TOTAL										379	6.42	

LA UNION PORT DEVELOPMENT PROJECT

4A080202

FC: YEN

LC: US\$

Crushed stone for Foundation of Manhole

Total estimate for 15 Nos

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Crushed stone	m3	3.75	0	5.16					0	19.35	
	Wasted crushed stone (25%)	m3	0.94	0	5.16					0	4.84	
	Fuel Backhoe 0.8m3	day	0.05	0	95					0	4.77	
	" Tampa 60kg	day	0.05	0	2					0	0.08	
	Sub Total									0	29.04	
2	Labor											
	Foreman	man. day	0.05			0	38.20			0	1.91	
	Labor	man. day	0.05			0	14.30			0	0.72	
	Backhoe 0.8m3	man. day	0.05			0	33			0	1.65	
	Sub Total									0	4.28	
3	Equipment											
	Backhoe 0.8m3	day	0.05					11,280	0	564.00	0	
	Tampa 60kg	day	0.05					212.40	0	10.62	0	
	Sub Total									575	0	
Total:										575	33	
Unit Price per No.										38.31	2.22	
INDIRECT COST										15%	5.75	0.33
TOTAL										44	2.55	

## LA UNION PORT DEVELOPMENT PROJECT

4A080203

FC: YEN

LC: US\$

Total estimate for 15Nos

Lean Concrete

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Ready mixed concrete	m3	1.87	0	65.00					0	122	
	Wasted concrete(1.5%)	m3	0.03	0	65.00					0	2	
	Fuel Concrete mixer 0.6m3	day	0.10	0	0					0	0	
	Generator 45KVA	day	0.10	0	24					0	2	
	Sub Total									0	126	
2	Labor											
	Foreman	man. day	0.10			0	38.20			0	4	
	Labor	man. day	0.10			0	14.30			0	1	
	Concrete mixer 0.6m3	day	0.10			0	33			0	3	
	Generator 45KVA	day	0.10			0	33			0	3	
	Sub Total									0	12	
3	Equipment											
	Concrete mixer 0.6m3	day	0.10					6,480	0	648	0	
	Generator 45KVA	day	0.10					1,080	0	108	0	
	Vibrator	day	0.10					120	0	12	0	
	Sub Total									768	0	
Total										768	138	
Unit Price per No.										51.20	9.17	
INDIRECT COST										15%	7.68	1.38
TOTAL										59	10.55	



LA UNION PORT DEVELOPMENT PROJECT

4A080204

FC: YEN

LC: US\$

Total estimate for 15 Nos

Reinforcement

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Reinforcement bar	kg	2416.00	0	0.36					0	870	
	Wasted steel bar(1.5%)	kg	36.24	0	0.36					0	13	
	Fuel Truck crane 16t	day	2.6	0	77					0	199	
	" Truck 8t	day	2.6	0	80					0	208	
	" Generator 45KVA	day	2.6	0	24					0	62	
	Sub Total									0	1,351	
2	Labor											
	Foreman	man. day	2.6			0	38.20			0	99	
	Labor	man. day	26			0	14.30			0	372	
	Welder	man. day	2.6			0	23.09			0	60	
	Truck crane 16t	man. day	2.6			0	33			0	86	
	Truck 8t	man. day	2.6			0	33			0	86	
	Generator 45KVA	man. day	2.6			0	33			0	86	
	Sub Total									0	789	
3	Equipment											
	Truck crane 16t	day	2.6					9,480	0	24648	0	
	Truck 8t	day	2.6					3,480	0	9,048	0	
	Generator 45KVA	day	2.6					1,080	0	2,808	0	
	Bar cutter	day	2.6					120	0	312	0	
	Bar bender	day	2.6					120	0	312	0	
	Sub Total									37,128	0	
Total										37,128	2,140	
Unit Price per No.										2,475.20	142.66	
INDIRECT COST										15%	371.28	21.40
TOTAL										2,846	164.06	

## LA UNION PORT DEVELOPMENT PROJECT

4A080205

FC: YEN

LC: US\$

Total estimate for 15 Nos

Corner Angle for Manhole

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Coner angle	kg	372.00	0	0.36					0	134	
	Wasted corner angle(2%)	kg	7.44	0	0.36					0	3	
	Miscellaneous	L. S.	1	0	2.73					0	3	
	Fuel Truck 8t	day	4	0	80					0	320	
	" Generator 45KVA	day	4.00	0	24					0	95	
	Sub Total									0	554	
2	Labor											
	Foreman	man. day	4			0	38.20			0	153	
	Labor	man. day	40			0	14.30			0	572	
	Welder	man. day	4			0	23.09			0	92	
	Truck 8t	man. day	4			0	33			0	132	
	Generator 45KVA	man. day	4			0	33			0	132	
	Sub Total									0	1,081	
3	Equipment											
	Truck 8t	day	4					3,480	0	13,920	0	
	Generator 45KVA	day	4					1,080	0	4,320	0	
	Welder 300A	day	4					120	0	480	0	
	Other equipment	L. S.	1					374	0	374	0	
	Sub Total									19,094	0	
Total										19,094	1,635	
Unit Price per No.										1,272.96	109.01	
INDIRECT COST										15%	190.94	16.35
TOTAL										1,464	125.36	

LA UNION PORT DEVELOPMENT PROJECT

4A080206

FC: YEN

LC: US\$

Concrete Placing

Total estimate for 15 Nos

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Cover for manhole	Nos	15.00	0	290.06					0	4,351	
	Ready mixed concrete	m3	15.85	0	70.00					0	1,110	
	Wasted concrete(5%)	m3	0.79	0	70.00					0	55	
	Formwork	m2	88.00	0	5.50					0	457	
	Fuel Truck crane 16t	day	0.3	0	77					0	23	
	" Concrete mixer 0.6m3	day	0.3	0	0					0	0	
	" Generator 45KVA	day	0.3	0	24					0	7	
	" Truck 8t	day	0.3	0	80					0	24	
	Sub Total									0	6,026	
2	Labor											
	Foreman	man. day	0.3			0	38.20			0	11	
	Labor	man. day	1.2			0	14.30			0	17	
	Truck crane 16t	man. day	0.3			0	33			0	10	
	Concrete mixer 0.6m3	man. day	0.3			0	33			0	10	
	Generator 45KVA	man. day	0.3			0	33			0	10	
	Truck 8t	man. day	0.3			0	33			0	10	
	Sub Total									0	68	
3	Equipment											
	Truck crane 16t	day	0.3					9,480	0	2844	0	
	Concrete mixer 0.6m3	day	0.3					6,480	0	1,944	0	
	Generator 45KVA	day	0.3					1,080	0	324	0	
	Truck 8t	day	0.3					3,480	0	1,044	0	
	Vibrator	day	0.3					120	0	36	0	
	Sub Total									6,192	0	
Total										6,192	6,095	
Unit Price per No.										412.80	406.31	
INDIRECT COST										15%	61.92	60.95
TOTAL										475	467.26	

## LA UNION PORT DEVELOPMENT PROJECT

4A080207

Backfill sand &amp; Compaction

FC: YEN

LC: US\$

Total estimate for 15 Nos

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Backfill sand	m3	11.38	0	4.00					0	46	
	Wasted Backfill sand (25%)	m3	2.85	0	4.00					0	11	
	Fuel Backhoe 0.8m3	day	0.05	0	95					0	5	
	" Tire roller 8-20t	day	0.05	0	55					0	3	
	" Tampa 60kg	day	0.05	0	2					0	0	
	Sub Total									0	65	
2	Labor											
	Foreman	man. day	0.05			0	38.20			0	2	
	Labor	man. day	0.1			0	14.30			0	1	
	Backhoe 0.8m3	man. day	0.05			0	33			0	2	
	Tire roller 8-20t	man. day	0.05			0	33			0	2	
	Sub Total									0	7	
3	Equipment											
	Backhoe 0.8m3	day	0.05					11,280	0	564	0	
	Tire roller 8-20t	day	0.05					3,360	0	168	0	
	Tampa 60kg	day	0.05					212	0	11	0	
	Sub Total									743	0	
Total										743	71	
Unit Price per No.										49.51	4.74	
INDIRECT COST										15%	7.43	0.71
TOTAL										57	5.45	

APPENDIX-3. EQUIPMENT COST  
 LA UNION PORT DEVELOPMENT PROJECT  
 4A0802

FC: YEN  
 LC: US\$

Truck crane 16t per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	232.00	0	0.33					0	77
	Others	L. S.	1	0	0.00					0	0
	Sub Total									0	77
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L. S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Truck with crane 8t	day	1					9480	0	9,480	0
	Sub Total									9,480	0
	Total									9,480	110

Fuel & Lubricant: 230ps x 0.11 x 4 x 1.05

100ps x 0.2 x 6 x 1.05

4A0802-1

## APPENDIX-3. EQUIPMENT COST

LA UNION PORT DEVELOPMENT PROJECT

4A0802

FC: YEN

LC: US\$

Truck 8t per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	233.00	0	0.33					0	77
	Others	L.S.	1	0	3.00					0	3
	Sub Total									0	80
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Truck 8t	day	1					3480	0	3,480	0
	Sub Total									3,480	0
	Total									3,480	113

Fuel &amp; Lubricant: 253ps x 0.11 x 8 x 1.05

APPENDIX-3. EQUIPMENT COST

LA UNION PORT DEVELOPMENT PROJECT

4A0802

FC: YEN

LC: US\$

Dump truck 10t per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	309.00	0	0.33					0	102
	Others	L. S.	1	0	3.00					0	3
	Sub Total									0	105
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L. S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Dump truck 10t	day	1					6720	0	6,720	0
	Sub Total									6,720	0
	Total									6,720	138

Fuel & Lubricant: 335ps x 0.11 x 8 x 1.05

4A0802-3

## APPENDIX-3. EQUIPMENT COST

LA UNION PORT DEVELOPMENT PROJECT

4A0802

FC: YEN

LC: US\$

Generator 45KVA per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	72.00	0	0.33					0	24
	Others	L. S.	1	0	0.00					0	0
	Sub Total									0	24
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L. S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Generator 45KVA	day	1					1080	0	1,080	0
	Sub Total									1,080	0
	Total									1,080	57

Fuel &amp; Lubricant: 57ps x 0.2 x 6 x 1.05



APPENDIX-3. EQUIPMENT COST

LA UNION PORT DEVELOPMENT PROJECT

4A0802

FC: YEN

Backhoe 0.8 m3 per day

LC: US\$

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	283.00	0	0.33					0	93
	Others	L.S.	1	0	2.00					0	2
	Sub Total									0	95
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Backhoe 0.8m3	day	1					11280	0	11,280	0
	Sub Total									11,280	0
	Total									11,280	128

Fuel & Lubricant: 169ps x 0.2 x 8 x 1.05

4A0802-5

APPENDIX-3. EQUIPMENT COST  
 LA UNION PORT DEVELOPMENT PROJECT  
 4A0802  
 Tire roller 8-20t per day

FC: YEN

LC: US\$

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	161.00	0	0.33					0	53
	Others	L.S.	1	0	2.00					0	2
	Sub Total									0	55
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Tire roller 8-20t	day	1					3360	0	3,360	0
	Sub Total									3,360	0
	Total									3,360	88

Fuel &amp; Lubricant: 96ps x 0.2 x 8 x 1.05

APPENDIX-3. EQUIPMENT COST

LA UNION PORT DEVELOPMENT PROJECT

4A0802

FC: YEN

Tampa 60-100kg per day

LC: US\$

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	5.00	0	0.33					0	2
	Others	L.S.	1	0	0.00					0	0
	Sub Total									0	2
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Tampa	day	1					212.4	0	212.40	0
	Sub Total									212.40	0
	Total									212.40	35

Fuel & Lubricant: 5ps x 0.2 x 5 x 1.05

4A0802-7

## APPENDIX-3. EQUIPMENT COST

LA UNION PORT DEVELOPMENT PROJECT

4A0802

FC: YEN

LC: US\$

Concrete Mixer 0.6m3 per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	0	0	0.33					0	0
	Others	L.S.	1	0	0.00					0	0
	Sub Total									0	0
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Concrete Mixer 0.6m3	day	1					6480	0	6,480.00	0
	Sub Total									6,480.00	0
	Total									6,480.00	33

LA UNION PORT DEVELOPMENT PROJECT

4A0803

PIT TYPE 2A

FC: YEN

LC: US\$

Total estimate for 15 Nos

No	Work Item	Unit	Quantity	Basic Price		Unit Cost	
						Amount	
				FC	LC	FC	LC
4A080301	Excavation & Disposal	Nos.	15	227.42	3.85	3,411	57.77
4A080302	Crushed Stone for Foundation	Nos.	15	35.24	1.63	529	24.42
4A080303	Lean Concrete	Nos.	15	47.10	6.34	707	95.03
4A080304	Reinforcement	Nos.	15	1,642.20	55.65	24,633	834.68
4A080305	Corner Angle	Nos.	15	731.95	62.68	10,979	940.22
4A080306	Concrete Placing	Nos.	15	316.48	295.74	4,747	4,436.15
4A080307	Backfill Sand & Compaction	Nos.	15	56.93	5.67	854	85.10
	Total					45,860	6,473.37
Unit Price per No.						3,057	431.56

LA UNION PORT DEVELOPMENT PROJECT

4A080301

FC: YEN

LC: US\$

Total estimate for 15 Nos

Excavation & Disposal for Manhole

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Excavation sand	m3	32	0	0.00					0	0	
	Fuel Backhoe 0.8m3	day	0.12	0	95					0	11	
	" Dump truck 10t	day	0.24	0	105					0	25	
	Sub Total									0	37	
2	Labor											
	Foreman	man. day				0	38.20			0	0	
	Labor	man. day	0.12			0	14.30			0	2	
	Backhoe 0.8m3	man. day	0.12			0	33			0	4	
	Dump truck 10t	man. day	0.24			0	33			0	8	
	Sub Total									0	14	
3	Equipment											
	Backhoe 0.8m3	day	0.12					11,280	0	1,354	0	
	Dump truck 10t	day	0.24					6,720	0	1,613	0	
	Sub Total									2,966	0	
Total										2,966	50	
Unit Price per No.										197.76	3.35	
INDIRECT COST										15%	29.66	0.50
TOTAL										227	3.85	

LA UNION PORT DEVELOPMENT PROJECT

4A080302

FC: YEN

Crushed stone for Foundation of Manhole

LC: US\$

Total estimate for 15 Nos

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Crushed stone	m3	2.16	0	5.16					0	11.15	
	Wasted crushed stone (25%)	m3	0.54	0	5.16					0	2.79	
	Fuel, Backhoe 0.8m3	day	0.04	0	95					0	3.82	
	" Tampa 60kg	day	0.04	0	2					0	0.07	
	Sub Total									0	17.81	
2	Labor											
	Foreman	man. day	0.04			0	38.20			0	1.53	
	Labor	man. day	0.04			0	14.30			0	0.57	
	Backhoe 0.8m3	man. day	0.04			0	33			0	1.32	
	Sub Total									0	3.42	
3	Equipment											
	Backhoe 0.8m3	day	0.04					11,280	0	451.20	0	
	Tampa 60kg	day	0.04					212.40	0	8.50	0	
	Sub Total									460	0	
Total										460	21	
Unit Price per No.										30.65	1.42	
INDIRECT COST										15%	4.60	0.21
TOTAL										35	1.63	

## LA UNION PORT DEVELOPMENT PROJECT

4A080303

FC: YEN

LC: US\$

Total estimate for 15Nos

Lean Concrete

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Ready mixed concrete	m3	1.08	0	65.00					0	70	
	Wasted concrete(1.5%)	m3	0.02	0	65.00					0	1	
	Fuel Concrete mixer 0.6m3	day	0.08	0	0					0	0	
	Generator 45KVA	day	0.08	0	24					0	2	
	Sub Total									0	73	
2	Labor											
	Foreman	man. day	0.08			0	38.20			0	3	
	Labor	man. day	0.08			0	14.30			0	1	
	Concrete mixer 0.6m3	day	0.08			0	33			0	3	
	Generator 45KVA	day	0.08			0	33			0	3	
	Sub Total									0	9	
3	Equipment											
	Concrete mixer 0.6m3	day	0.08					6,480	0	518.4	0	
	Generator 45KVA	day	0.08					1,080	0	86.4	0	
	Vibrator	day	0.08					120	0	9.6	0	
	Sub Total									614	0	
Total										614	83	
Unit Price per No.										40.96	5.51	
INDIRECT COST										15%	6.14	0.83
TOTAL										47	6.34	



LA UNION PORT DEVELOPMENT PROJECT

4A080304

Reinforcement

FC: YEN

LC: US\$

Total estimate for 15 Nos

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Reinforcement bar	kg	1.53	0	0.36					0	1	
	Wasted steel bar(1.5%)	kg	0.02	0	0.36					0	0	
	Fuel Truck crane 16t	day	1.5	0	77					0	115	
	" Truck 8t	day	1.5	0	80					0	120	
	" Generator 45KVA	day	1.5	0	24					0	36	
	Sub Total									0	271	
2	Labor											
	Foreman	man. day	1.5			0	38.20			0	57	
	Labor	man. day	15			0	14.30			0	215	
	Welder	man. day	1.5			0	23.09			0	35	
	Truck crane 16t	man. day	1.5			0	33			0	50	
	Truck 8t	man. day	1.5			0	33			0	50	
	Generator 45KVA	man. day	1.5			0	33			0	50	
	Sub Total									0	455	
3	Equipment											
	Truck crane 16t	day	1.5					9,480	0	14220	0	
	Truck 8t	day	1.5					3,480	0	5,220	0	
	Generator 45KVA	day	1.5					1,080	0	1,620	0	
	Bar cutter	day	1.5					120	0	180	0	
	Bar bender	day	1.5					120	0	180	0	
	Sub Total									21,420	0	
Total										21,420	726	
Unit Price per No.										1,428.00	48.39	
INDIRECT COST										15%	214.20	7.26
TOTAL										1,642	55.65	

## LA UNION PORT DEVELOPMENT PROJECT

4A080305

FC: YEN

Corner Angle for Manhole

LC: US\$

Total estimate for 15 Nos

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Coner angle	kg	186.10	0	0.36					0	67	
	Wasted corner angle(2%)	kg	3.72	0	0.36					0	1	
	Miscellaneous	L. S.	1	0	1.37					0	1	
	Fuel Truck 8t	day	2	0	80					0	160	
	" Generator 45KVA	day	2.00	0	24					0	48	
	Sub Total									0	277	
2	Labor											
	Foreman	man. day	2			0	38.20			0	76	
	Labor	man. day	20			0	14.30			0	286	
	Welder	man. day	2			0	23.09			0	46	
	Truck 8t	man. day	2			0	33			0	66	
	Generator 45KVA	man. day	2			0	33			0	66	
	Sub Total		2							0	541	
3	Equipment											
	Truck 8t	day	2					3,480	0	6,960	0	
	Generator 45KVA	day	2					1,080	0	2,160	0	
	Welder 300A	day	2					120	0	240	0	
	Other equipment	L. S.	1					187	0	187	0	
	Sub Total									9,547	0	
Total										9,547	818	
Unit Price per No.										636.48	54.51	
INDIRECT COST										15%	95.47	8.18
TOTAL										732	62.68	

LA UNION PORT DEVELOPMENT PROJECT

4A080306

FC: YEN

LC: US\$

Total estimate for 15 Nos

Concrete Placing

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Cover for manhole	Nos.	15.00	0	162.40					0	2,436	
	Ready mixed concrete	m3	10.00	0	70.00					0	700	
	Wasted concrete(5%)	m3	0.50	0	70.00					0	35	
	Formwork	m2	110.00	0	5.50					0	605	
	Fuel Truck crane 16t	day	0.2	0	77					0	15	
	Concrete mixer 0.6m3	day	0.2	0	0					0	0	
	Generator 45KVA	day	0.2	0	24					0	5	
	Truck 8t	day	0.2	0	80					0	16	
	Sub Total									0	3,812	
2	Labor											
	Foreman	man. day	0.2			0	38.20			0	8	
	Labor	man. day	0.8			0	14.30			0	11	
	Truck crane 16t	man. day	0.2			0	33			0	7	
	Concrete mixer 0.6m3	man. day	0.2			0	33			0	7	
	Generator 45KVA	man. day	0.2			0	33			0	7	
	Truck 8t	man. day	0.2			0	33			0	7	
	Sub Total									0	45	
3	Equipment											
	Truck crane 16t	day	0.2					9,480	0	1896	0	
	Concrete mixer 0.6m3	day	0.2					6,480	0	1,296	0	
	Generator 45KVA	day	0.2					1,080	0	216	0	
	Truck 8t	day	0.2					3,480	0	696	0	
	Vibrator	day	0.2					120	0	24	0	
	Sub Total									4,128	0	
Total										4,128	3,858	
Unit Price per No.										275.20	257.17	
INDIRECT COST										15%	41.28	38.58
TOTAL										316	295.74	

## LA UNION PORT DEVELOPMENT PROJECT

4A080307

FC: YEN

LC: US\$

Total estimate for 15 Nos

## Backfill sand &amp; Compaction

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Backfill sand	m3	11.95	0	4.00					0	48	
	Wasted Backfill sand (25%)	m3	2.99	0	4.00					0	12	
	Fuel Backhoe 0.8m3	day	0.05	0	95					0	5	
	" Tire roller 8-20t	day	0.05	0	55					0	3	
	" Tampa 60kg	day	0.05	0	2					0	0	
	Sub Total									0	67	
2	Labor											
	Foreman	man. day	0.05			0	38.20			0	2	
	Labor	man. day	0.1			0	14.30			0	1	
	Backhoe 0.8m3	man. day	0.05			0	33			0	2	
	Tire roller 8-20t	man. day	0.05			0	33			0	2	
	Sub Total									0	7	
3	Equipment											
	Backhoe 0.8m3	day	0.05					11,280	0	564	0	
	Tire roller 8-20t	day	0.05					3,360	0	168	0	
	Tampa 60kg	day	0.05					212	0	11	0	
	Sub Total									743	0	
Total										743	74	
Unit Price per No.										49.51	4.93	
INDIRECT COST										15%	7.43	0.74
TOTAL										57	5.67	

APPENDIX-3. EQUIPMENT COST

LA UNION PORT DEVELOPMENT PROJECT

4A0803

FC: YEN

LC: US\$

Truck crane 16t per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	232.00	0	0.33					0	77
	Others	L.S.	1	0	0.00					0	0
	Sub Total									0	77
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Truck with crane 8t	day	1					9480	0	9,480	0
	Sub Total									9,480	0
	Total									9,480	110

Fuel & Lubricant: 230ps x 0.11 x 4 x 1.05

100ps x 0.2 x 6 x 1.05

4A0803-1

APPENDIX-3. EQUIPMENT COST  
 LA UNION PORT DEVELOPMENT PROJECT  
 4A0803  
 Truck 8t per day

FC: YEN

LC: US\$

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	233.00	0	0.33					0	77
	Others	L. S.	1	0	3.00					0	3
	Sub Total									0	80
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L. S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Truck 8t	day	1					3480	0	3,480	0
	Sub Total									3,480	0
	Total									3,480	113

Fuel & Lubricant: 253ps x 0.11 x 8 x 1.05

APPENDIX-3. EQUIPMENT COST

LA UNION PORT DEVELOPMENT PROJECT

4A0803

FC: YEN

LC: US\$

Dump truck 10t per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	309.00	0	0.33					0	102
	Others	L. S.	1	0	3.00					0	3
	Sub Total									0	105
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L. S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Dump truck 10t	day	1					6720	0	6,720	0
	Sub Total									6,720	0
	Total									6,720	138

Fuel & Lubricant: 335ps x 0.11 x 8 x 1.05

APPENDIX-3. EQUIPMENT COST  
LA UNION PORT DEVELOPMENT PROJECT

4A0803

FC: YEN

LC: US\$

Generator 45KVA per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	72.00	0	0.33					0	24
	Others	L.S.	1	0	0.00					0	0
	Sub Total									0	24
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Generator 45KVA	day	1					1080	0	1,080	0
	Sub Total									1,080	0
	Total									1,080	57

Fuel &amp; Lubricant: 57ps x 0.2 x 6 x 1.05



APPENDIX-3. EQUIPMENT COST

LA UNION PORT DEVELOPMENT PROJECT

4A0803

FC: YEN

Backhoe 0.8 m3 per day

LC: US\$

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	283.00	0	0.33					0	93
	Others	L. S.	1	0	2.00					0	2
	Sub Total									0	95
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L. S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Backhoe 0.8m3	day	1					11280	0	11,280	0
	Sub Total									11,280	0
	Total									11,280	128

Fuel & Lubricant: 169ps x 0.2 x 8 x 1.05

APPENDIX-3. EQUIPMENT COST  
LA UNION PORT DEVELOPMENT PROJECT

4A0803

FC: YEN

Tire roller 8-20t per day

LC: US\$

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	161.00	0	0.33					0	53
	Others	L. S.	1	0	2.00					0	2
	Sub Total									0	55
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L. S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Tire roller 8-20t	day	1					3360	0	3,360	0
	Sub Total									3,360	0
	Total									3,360	88

Fuel &amp; Lubricant: 96ps x 0.2 x 8 x 1.05

APPENDIX-3. EQUIPMENT COST

LA UNION PORT DEVELOPMENT PROJECT

4A0803

FC: YEN

LC: US\$

Tampa 60-100kg per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	5.00	0	0.33					0	2
	Others	L.S.	1	0	0.00					0	0
	Sub Total									0	2
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Tampa	day	1					212.4	0	212.40	0
	Sub Total									212.40	0
	Total									212.40	35

Fuel & Lubricant: 5ps x 0.2 x 5 x 1.05

4A0803-7

APPENDIX-3. EQUIPMENT COST  
 LA UNION PORT DEVELOPMENT PROJECT  
 4A0803  
 Concrete Mixer 0.6m3 per day

FC: YEN

LC: US\$

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	0	0	0.33					0	0
	Others	L. S.	1	0	0.00					0	0
	Sub Total									0	0
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L. S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Concrete Mixer 0.6m3	day	1					6480	0	6,480.00	0
	Sub Total									6,480.00	0
	Total									6,480.00	33

LA UNION PORT DEVELOPMENT PROJECT

4A0804

FC: YEN

PIT TYPE 2B

LC: US\$

Total estimate for 15 Nos

No	Work Item	Unit	Quantity	Basic Price		Unit Cost	
						Amount	
				FC	LC	FC	LC
4A080401	Excavation & Disposal	Nos.	15	227.42	3.85	3,411	57.77
4A080402	Crushed Stone for Foundation	Nos.	15	35.24	1.63	529	24.42
4A080403	Lean Concrete	Nos.	15	47.10	6.34	707	95.03
4A080404	Reinforcement	Nos.	15	1,642.20	55.65	24,633	834.68
4A080405	Corner Angle	Nos.	15	731.95	62.68	10,979	940.22
4A080406	Concrete Placing	Nos.	15	316.48	244.22	4,747	3,663.35
4A080407	Backfill Sand & Compaction	Nos.	15	56.93	5.67	854	85.10
	Total					45,860	5,700.57
Unit Price per No.						3,057	380.04

## LA UNION PORT DEVELOPMENT PROJECT

4A080401

FC: YEN

LC: US\$

Total estimate for 15 Nos

## Excavation &amp; Disposal for Manhole

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Excavation sand	m3	32	0	0.00					0	0	
	Fuel Backhoe 0.8m3	day	0.12	0	95					0	11	
	" Dump truck 10t	day	0.24	0	105					0	25	
	Sub Total									0	37	
2	Labor											
	Foreman	man. day				0	38.20			0	0	
	Labor	man. day	0.12			0	14.30			0	2	
	Backhoe 0.8m3	man. day	0.12			0	33			0	4	
	Dump truck 10t	man. day	0.24			0	33			0	8	
	Sub Total									0	14	
3	Equipment											
	Backhoe 0.8m3	day	0.12					11,280	0	1,354	0	
	Dump truck 10t	day	0.24					6,720	0	1,613	0	
	Sub Total									2,966	0	
Total										2,966	50	
Unit Price per No.										197.76	3.35	
INDIRECT COST										15%	29.66	0.50
TOTAL										227	3.85	

LA UNION PORT DEVELOPMENT PROJECT

4A080402

FC: YEN

LC: US\$

Crushed stone for Foundation of Manhole

Total estimate for 15 Nos

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Crushed stone	m3	2.16	0	5.16					0	11.15	
	Wasted crushed stone (25%)	m3	0.54	0	5.16					0	2.79	
	Fuel Backhoe 0.8m3	day	0.04	0	95					0	3.82	
	" Tampa 60kg	day	0.04	0	2					0	0.07	
	Sub Total									0	17.81	
2	Labor											
	Foreman	man. day	0.04			0	38.20			0	1.53	
	Labor	man. day	0.04			0	14.30			0	0.57	
	Backhoe 0.8m3	man. day	0.04			0	33			0	1.32	
	Sub Total									0	3.42	
3	Equipment											
	Backhoe 0.8m3	day	0.04					11,280	0	451.20	0	
	Tampa 60kg	day	0.04					212.40	0	8.50	0	
	Sub Total									460	0	
Total										460	21	
Unit Price per No.										30.65	1.42	
INDIRECT COST										15%	4.60	0.21
TOTAL										35	1.63	

## LA UNION PORT DEVELOPMENT PROJECT

4A080403

FC: YEN

LC: US\$

Total estimate for 15Nos

Lean Concrete

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Ready mixed concrete	m3	1.08	0	65.00					0	70	
	Wasted concrete(1.5%)	m3	0.02	0	65.00					0	1	
	Fuel Concrete mixer 0.6m3	day	0.08	0	0					0	0	
	Generator 45KVA	day	0.08	0	24					0	2	
	Sub Total									0	73	
2	Labor											
	Foreman	man. day	0.08			0	38.20			0	3	
	Labor	man. day	0.08			0	14.30			0	1	
	Concrete mixer 0.6m3	day	0.08			0	33			0	3	
	Generator 45KVA	day	0.08			0	33			0	3	
	Sub Total									0	9	
3	Equipment											
	Concrete mixer 0.6m3	day	0.08					6,480	0	518.4	0	
	Generator 45KVA	day	0.08					1,080	0	86.4	0	
	Vibrator	day	0.08					120	0	9.6	0	
	Sub Total									614	0	
Total										614	83	
Unit Price per No.										40.96	5.51	
INDIRECT COST										15%	6.14	0.83
TOTAL										47	6.34	



LA UNION PORT DEVELOPMENT PROJECT

4A080404

FC: YEN

Reinforcement

LC: US\$

Total estimate for 15 Nos

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Reinforcement bar	kg	1.53	0	0.36					0	1	
	Wasted steel bar(1.5%)	kg	0.02	0	0.36					0	0	
	Fuel Truck crane 16t	day	1.5	0	77					0	115	
	" Truck 8t	day	1.5	0	80					0	120	
	" Generator 45KVA	day	1.5	0	24					0	36	
	Sub Total									0	271	
2	Labor											
	Foreman	man. day	1.5			0	38.20			0	57	
	Labor	man. day	15			0	14.30			0	215	
	Welder	man. day	1.5			0	23.09			0	35	
	Truck crane 16t	man. day	1.5			0	33			0	50	
	Truck 8t	man. day	1.5			0	33			0	50	
	Generator 45KVA	man. day	1.5			0	33			0	50	
	Sub Total									0	455	
3	Equipment											
	Truck crane 16t	day	1.5					9,480	0	14220	0	
	Truck 8t	day	1.5					3,480	0	5,220	0	
	Generator 45KVA	day	1.5					1,080	0	1,620	0	
	Bar cutter	day	1.5					120	0	180	0	
	Bar bender	day	1.5					120	0	180	0	
	Sub Total									21,420	0	
Total										21,420	726	
Unit Price per No.										1,428.00	48.39	
INDIRECT COST										15%	214.20	7.26
TOTAL										1,642	55.65	

## LA UNION PORT DEVELOPMENT PROJECT

4A080405

FC: YEN

LC: US\$

Corner Angle for Manhole

Total estimate for 15 Nos

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Coner angle	kg	186.10	0	0.36					0	67	
	Wasted corner angle(2%)	kg	3.72	0	0.36					0	1	
	Miscellaneous	L. S.	1	0	1.37					0	1	
	Fuel Truck 8t	day	2	0	80					0	160	
	" Generator 45KVA	day	2.00	0	24					0	48	
	Sub Total									0	277	
2	Labor											
	Foreman	man. day	2			0	38.20			0	76	
	Labor	man. day	20			0	14.30			0	286	
	Welder	man. day	2			0	23.09			0	46	
	Truck 8t	man. day	2			0	33			0	66	
	Generator 45KVA	man. day	2			0	33			0	66	
	Sub Total		2							0	541	
3	Equipment		2									
	Truck 8t	day	2					3,480	0	6,960	0	
	Generator 45KVA	day	2					1,080	0	2,160	0	
	Welder 300A	day	2					120	0	240	0	
	Other equipment	L. S.	1					187	0	187	0	
	Sub Total									9,547	0	
Total										9,547	818	
Unit Price per No.										636.48	54.51	
INDIRECT COST										15%	95.47	8.18
TOTAL										732	62.68	

LA UNION PORT DEVELOPMENT PROJECT

4A080406

FC: YEN

Concrete Placing

LC: US\$

Total estimate for 15 Nos

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Cover for manhole	Nos	15.00	0	117.60					0	1,764	
	Ready mixed concrete	m3	10.00	0	70.00					0	700	
	Wasted concrete(5%)	m3	0.50	0	70.00					0	35	
	Formwork	m2	110.00	0	5.50					0	605	
	Fuel Truck crane 16t	day	0.2	0	77					0	15	
	" Concrete mixer 0.6m3	day	0.2	0	0					0	0	
	" Generator 45KVA	day	0.2	0	24					0	5	
	" Truck 8t	day	0.2	0	80					0	16	
	Sub Total									0	3,140	
2	Labor											
	Foreman	man. day	0.2			0	38.20			0	8	
	Labor	man. day	0.8			0	14.30			0	11	
	Truck crane 16t	man. day	0.2			0	33			0	7	
	Concrete mixer 0.6m3	man. day	0.2			0	33			0	7	
	Generator 45KVA	man. day	0.2			0	33			0	7	
	Truck 8t	man. day	0.2			0	33			0	7	
	Sub Total									0	45	
3	Equipment											
	Truck crane 16t	day	0.2					9,480	0	1896	0	
	Concrete mixer 0.6m3	day	0.2					6,480	0	1,296	0	
	Generator 45KVA	day	0.2					1,080	0	216	0	
	Truck 8t	day	0.2					3,480	0	696	0	
	Vibrator	day	0.2					120	0	24	0	
	Sub Total									4,128	0	
Total										4,128	3,186	
Unit Price per No.										275.20	212.37	
INDIRECT COST										15%	41.28	31.86
TOTAL										316	244.22	

## LA UNION PORT DEVELOPMENT PROJECT

4A080407

FC: YEN

LC: US\$

Total estimate for 15 Nos

## Backfill sand &amp; Compaction

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Backfill sand	m3	11.95	0	4.00					0	48	
	Wasted Backfill sand (25%)	m3	2.99	0	4.00					0	12	
	Fuel Backhoe 0.8m3	day	0.05	0	95					0	5	
	" Tire roller 8-20t	day	0.05	0	55					0	3	
	" Tampa 60kg	day	0.05	0	2					0	0	
	Sub Total									0	67	
2	Labor											
	Foreman	man. day	0.05			0	38.20			0	2	
	Labor	man. day	0.1			0	14.30			0	1	
	Backhoe 0.8m3	man. day	0.05			0	33			0	2	
	Tire roller 8-20t	man. day	0.05			0	33			0	2	
	Sub Total									0	7	
3	Equipment											
	Backhoe 0.8m3	day	0.05					11,280	0	564	0	
	Tire roller 8-20t	day	0.05					3,360	0	168	0	
	Tampa 60kg	day	0.05					212	0	11	0	
	Sub Total									743	0	
Total										743	74	
Unit Price per No.										49.51	4.93	
INDIRECT COST										15%	7.43	0.74
TOTAL										57	5.67	

APPENDIX-3. EQUIPMENT COST

LA UNION PORT DEVELOPMENT PROJECT

4A0804

FC: YEN

LC: US\$

Truck crane 16t per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	232.00	0	0.33					0	77
	Others	L.S.	1	0	0.00					0	0
	Sub Total									0	77
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Truck with crane 8t	day	1					9480	0	9,480	0
	Sub Total									9,480	0
	Total									9,480	110

Fuel & Lubricant: 230ps x 0.11 x 4 x 1.05

100ps x 0.2 x 6 x 1.05

4A0804-1

## APPENDIX-3. EQUIPMENT COST

LA UNION PORT DEVELOPMENT PROJECT

4A0804

FC: YEN

LC: US\$

Truck 8t per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	233.00	0	0.33					0	77
	Others	L. S.	1	0	3.00					0	3
	Sub Total									0	80
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L. S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Truck 8t	day	1					3480	0	3,480	0
	Sub Total									3,480	0
	Total									3,480	113

Fuel &amp; Lubricant: 253ps x 0.11 x 8 x 1.05

APPENDIX-3. EQUIPMENT COST

LA UNION PORT DEVELOPMENT PROJECT

4A0804

FC: YEN

LC: US\$

Dump truck 10t per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	309.00	0	0.33					0	102
	Others	L. S.	1	0	3.00					0	3
	Sub Total									0	105
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L. S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Dump truck 10t	day	1					6720	0	6,720	0
	Sub Total									6,720	0
	Total									6,720	138

Fuel & Lubricant: 335ps x 0.11 x 8 x 1.05

APPENDIX-3. EQUIPMENT COST  
 LA UNION PORT DEVELOPMENT PROJECT  
 4A0804  
 Generator 45KVA per day

FC: YEN

LC: US\$

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	72.00	0	0.33					0	24
	Others	L.S.	1	0	0.00					0	0
	Sub Total									0	24
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Generator 45KVA	day	1					1080	0	1,080	0
	Sub Total									1,080	0
	Total									1,080	57

Fuel &amp; Lubricant: 57ps x 0.2 x 6 x 1.05



APPENDIX-3. EQUIPMENT COST

LA UNION PORT DEVELOPMENT PROJECT

4A0804

FC: YEN

Backhoe 0.8 m3 per day

LC: US\$

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	283.00	0	0.33					0	93
	Others	L. S.	1	0	2.00					0	2
	Sub Total									0	95
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L. S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Backhoe 0.8m3	day	1					11280	0	11,280	0
	Sub Total									11,280	0
	Total									11,280	128

Fuel & Lubricant: 169ps x 0.2 x 8 x 1.05

4A0804-5

US\$=¥120

Total in YEN
11,207
240
11,447
3,960
0
3,960
11,280
11,280
26,687

APPENDIX-3. EQUIPMENT COST  
 LA UNION PORT DEVELOPMENT PROJECT

4A0804

FC: YEN

Tire roller 8-20t per day

LC: US\$

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	161.00	0	0.33					0	53
	Others	L.S.	1	0	2.00					0	2
	Sub Total									0	55
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Tire roller 8-20t	day	1					3360	0	3,360	0
	Sub Total									3,360	0
	Total									3,360	88

Fuel & Lubricant: 96ps x 0.2 x 8 x 1.05

## APPENDIX-3. EQUIPMENT COST

LA UNION PORT DEVELOPMENT PROJECT

4A0804

FC: YEN

Tampa 60-100kg per day

LC: US\$

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	5.00	0	0.33					0	2
	Others	L. S.	1	0	0.00					0	0
	Sub Total									0	2
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L. S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Tampa	day	1					212.4	0	212.40	0
	Sub Total									212.40	0
	Total									212.40	35

Fuel &amp; Lubricant: 5ps x 0.2 x 5 x 1.05

APPENDIX-3. EQUIPMENT COST  
 LA UNION PORT DEVELOPMENT PROJECT  
 4A0804  
 Concrete Mixer 0.6m3 per day

FC: YEN  
 LC: US\$

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	0	0	0.33					0	0
	Others	L.S.	1	0	0.00					0	0
	Sub Total									0	0
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Concrete Mixer 0.6m3	day	1					6480	0	6,480.00	0
	Sub Total									6,480.00	0
	Total									6,480.00	33

## LA UNION PORT DEVELOPMENT PROJECT

4B0105

FC: YEN

PVC pipe, diameter 38mm

LC: US\$

Total estimate for 100m

No	Work Item	Unit	Quantity	Basic Price		Unit Cost	
						Amount	
				FC	LC	FC	LC
4B010501	Excavation & Disposal	M	100	10.38	0.21	1,038	20.59
4B010502	Sand	M	100	0.24	1.40	24	139.98
4B010503	Installation PVC Pipe	M	100	11.59	2.03	1,159	202.94
4B010504	Backfill & Compaction	M	100	0.24	0.11	24	11.39
	Total					2,246	374.90
Unit Price per m						22	3.75

LA UNION PORT DEVELOPMENT PROJECT

4B010501

FC: YEN

LC: US\$

Excavation & Disposal for PVC pipe 38 mm

Total estimate for 100m

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Excavation & Disposal	m3	50	0	0.00					0	0	
	Fuel Backhoe 0.8m3	day	0.08	0	95					0	8	
	" Dump truck 10t	day	0.00	0	105					0	0	
	Sub Total									0	8	
2	Labor											
	Foreman	man. day	0.08			0	38.20			0	3	
	Labor	man. day	0.32			0	14.30			0	5	
	Backhoe 0.8m3	man. day	0.08			0	33			0	3	
	Dump truck 10t	man. day	0			0	33			0	0	
	Sub Total									0	10	
3	Equipment											
	Backhoe 0.8m3	day	0.08					11,280	0	902	0	
	Dump truck 10t	day	0					6,720	0	0	0	
	Sub Total									902	0	
Total										902	18	
Unit Price per m										9.02	0.18	
INDIRECT COST										15%	1.35	0.03
TOTAL										10	0.21	

LA UNION PORT DEVELOPMENT PROJECT

4B010502

FC: YEN

LC: US\$

Total estimate for 100 m

Sand for Foundation of PVC Pipe 38mm

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Sand	m3	19.70	0	5.16					0	102	
	Wasted sand (10%)	m3	1.97	0	5.16					0	10	
	Fuel Backhoe 0.8m3	day	0	0	95					0	0	
	Plate compactor 50kg	day	0.1	0	4					0	0	
	Sub Total									0	112	
2	Labor											
	Foreman	man. day	0.1			0	38.20			0	4	
	Labor	man. day	0.4			0	14.30			0	6	
	Backhoe 0.8m3	man. day	0			0	33			0	0	
	Sub Total									0	10	
3	Equipment											
	Backhoe 0.8m3	day	0					11,280	0	0	0	
	Plate compactor 50kg	day	0.1					212.40	0	21.24	0	
	Sub Total									21.24	0	
Total										21.24	122	
Unit Price per m										0.21	1.22	
INDIRECT COST										15%	0.03	0.18
TOTAL										0	1.40	



LA UNION PORT DEVELOPMENT PROJECT

4B010503

Installation of PVC Pipe 38mm

FC: YEN

LC: US\$

Total estimate for 100m

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	PVC Pipe 150mm	m	100	0	0.88					0	88	
	Above others 4%	L.S	4	0	0.88					0	4	
	Concrete anchor	m3	0	0	90.00					0	0	
	Fuel Truck 4t with crane	day	0.3	0	69					0	21	
	Sub Total									0	112	
2	Labor											
	Foreman	man. day	0.3			0	38.20			0	11	
	Labor	man. day	3			0	14.30			0	43	
	Truck 4t with crane	man. day	0.3			0	33			0	10	
	Sub Total									0	64	
3	Equipment											
	Truck 4t with crane	day	0.3					3,360	0	1,008	0	
	Sub Total									1,008	0	
Total										1,008	176	
Unit Price per m										10.08	1.76	
INDIRECT COST										15%	1.51	0.26
TOTAL										12	2.03	

## 4 LA UNION PORT DEVELOPMENT PROJECT

4B010504

FC: YEN

LC: US\$

Total estimate for 100 m

Backfill sand &amp; Compaction for PVC pipe 38mm

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Backfill material	m3	25	0	0.00					0	0	
	Wasted Backfill sand (25%)	m3	6.25	0	0.00					0	0	
	Fuel Backhoe 0.8m3	day	0	0	95					0	0	
	" Plate compactor	day	0.1	0	4					0	0	
	Sub Total									0	0	
2	Labor											
	Foreman	man. day	0.1			0	38.20			0	4	
	Labor	man. day	0.4			0	14.30			0	6	
	Backhoe 0.8m3	man. day	0			0	33			0	0	
	Sub Total									0	10	
3	Equipment											
	Backhoe 0.8m3	day	0					11,280	0	0	0	
	Plate compactor	day	0.1					212.40	0	21	0	
	Sub Total									21	0	
Total										21	10	
Unit Price per m										0.21	0.10	
INDIRECT COST										15%	0.03	0.01
TOTAL										0	0.11	

Appendix-3. Equipment Cost

LA UNION PORT DEVELOPMENT PROJECT

4B0105

FC: YEN

Truck 4t with crane per day

LC: US\$

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	209.00	0	0.33					0	69
	Others	L. S.	1	0	0.00					0	0
	Sub Total									0	69
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L. S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Truck 4t with crane	day	1					3360	0	3,360	0
	Sub Total									3,360	0
	Total									3,360	102

Fuel & Lubricant: 180ps x 0.11 x 4 x 1.05

100ps x 0.2 x 6 x 1.05

4B0105-1

## Appendix-3. Equipment Cost

LA UNION PORT DEVELOPMENT PROJECT

4B0105

FC: YEN

LC: US\$

Dump truck 10t per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	309.00	0	0.33					0	102
	Others	L.S.	1	0	3.00					0	3
	Sub Total									0	105
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Dump truck 10t	day	1					6720	0	6,720	0
	Sub Total									6,720	0
	Total									6,720	138

Fuel &amp; Lubricant: 335ps x 0.11 x 8 x 1.05

4B0105-2

Appendix-3. Equipment Cost

LA UNION PORT DEVELOPMENT PROJECT

4B0105

FC: YEN

Backhoe 0.8 m3 per day

LC: US\$

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	283.00	0	0.33					0	93
	Others	L.S.	1	0	2.00					0	2
	Sub Total									0	95
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Backhoe 0.8m3	day	1					11280	0	11,280	0
	Sub Total									11,280	0
	Total									11,280	128

Fuel & Lubricant: 169ps x 0.2 x 8 x 1.05

4B0105-3

## Appendix-3. Equipment Cost

LA UNION PORT DEVELOPMENT PROJECT

4B0105

FC: YEN

LC: US\$

Plate Compactor 60-100kg per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	5.00	0	0.33					0	2
	Others	L. S.	1	0	2.00					0	2
	Sub Total									0	4
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L. S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Plate Compactor	day	1					212.4	0	212.40	0
	Sub Total									212.40	0
	Total									212	37

Fuel &amp; Lubricant: 5ps x 0.2 x 5 x 1.05

LA UNION PORT DEVELOPMENT PROJECT

4B0107

PVC pipe, diameter 75mm

FC: YEN

LC: US\$

Total estimate for 100m

No	Work Item	Unit	Quantity	Basic Price		Unit Cost	
						Amount	
				FC	LC	FC	LC
4B010701	Excavation & Disposal	M	100	31.05	0.57	3,105	56.71
4B010702	Sand	M	100	13.22	2.17	1,322	216.76
4B010703	Installation PVC Pipe	M	100	23.18	4.64	2,318	464.49
4B010704	Backfill & Compaction	M	100	13.22	0.26	1,322	26.16
	Total					8,067	764.11
Unit Price per m						81	7.64

## LA UNION PORT DEVELOPMENT PROJECT

4B010701

FC: YEN

Excavation &amp; Disposal for PVC pipe 75 mm

LC: US\$

Total estimate for 100m

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Excavation & Disposal	m3	100	0	0.00					0	0	
	Fuel Backhoe 0.8m3	day	0.15	0	95					0	14	
	" Dump truck 10t	day	0.15	0	105					0	16	
	Sub Total									0	30	
2	Labor											
	Foreman	man. day	0.15			0	38.20			0	6	
	Labor	man. day	0.6			0	14.30			0	9	
	Backhoe 0.8m3	man. day	0.15			0	33			0	5	
	Dump truck 10t	man. day	0.15			0	33			0	5	
	Sub Total									0	19	
3	Equipment											
	Backhoe 0.8m3	day	0.15					11,280	0	1,692	0	
	Dump truck 10t	day	0.15					6,720	0	1,008	0	
	Sub Total									2,700	0	
Total										2,700	49	
Unit Price per m										27.00	0.49	
INDIRECT COST										15%	4.05	0.07
TOTAL										31	0.57	



LA UNION PORT DEVELOPMENT PROJECT

4B010702

FC: YEN

Sand for Foundation of PVC Pipe 75mm

LC: US\$

Total estimate for 100 m

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Sand	m3	29.20	0	5.16					0	151
	Wasted sand (10%)	m3	2.92	0	5.16					0	15
	Fuel Backhoe 0.8m3	day	0.1	0	95					0	10
	Plate compactor 50kg	day	0.1	0	4					0	0
	Sub Total									0	176
2	Labor										
	Foreman	man. day	0.1			0	38.20			0	4
	Labor	man. day	0.4			0	14.30			0	6
	Backhoe 0.8m3	man. day	0.1			0	33			0	3
	Sub Total									0	13
3	Equipment										
	Backhoe 0.8m3	day	0.1					11,280	0	1,128	0
	Plate compactor 50kg	day	0.1					212.40	0	21.24	0
	Sub Total									1,149.24	0
Total										1,149.24	188
Unit Price per m										11.49	1.88
INDIRECT COST										15%	0.28
TOTAL										13	2.17

## LA UNION PORT DEVELOPMENT PROJECT

4B010703

FC: YEN

LC: US\$

Total estimate for 100m

Installation of PVC Pipe 75mm

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	PVC Pipe 150mm	m	100	0	2.25					0	225	
	Above others 4%	L.S	4	0	2.25					0	9	
	Concrete anchor	m3	0	0	90.00					0	0	
	Fuel Truck 4t with crane	day	0.6	0	69					0	41	
	Sub Total									0	275	
2	Labor											
	Foreman	man. day	0.6			0	38.20			0	23	
	Labor	man. day	6			0	14.30			0	86	
	Truck 4t with crane	man. day	0.6			0	33			0	20	
	Sub Total									0	129	
3	Equipment											
	Truck 4t with crane	day	0.6					3,360	0	2,016	0	
	Sub Total									2,016	0	
Total										2,016	404	
Unit Price per m										20.16	4.04	
INDIRECT COST										15%	3.02	0.61
TOTAL										23	4.64	

4 LA UNION PORT DEVELOPMENT PROJECT

4B010704

FC: YEN

Backfill sand & Compaction for PVC pipe 75mm

LC: USS

Total estimate for 100 m

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Backfill material	m3	40	0	0.00					0	0	
	Wasted Backfill sand (25%)	m3	10	0	0.00					0	0	
	Fuel Backhoe 0.8m3	day	0.1	0	95					0	10	
	" Plate compactor	day	0.1	0	4					0	0	
	Sub Total									0	10	
2	Labor											
	Foreman	man. day	0.1			0	38.20			0	4	
	Labor	man. day	0.4			0	14.30			0	6	
	Backhoe 0.8m3	man. day	0.1			0	33			0	3	
	Sub Total									0	13	
3	Equipment											
	Backhoe 0.8m3	day	0.1					11,280	0	1,128	0	
	Plate compactor	day	0.1					212.40	0	21	0	
	Sub Total									1,149	0	
Total										1,149	23	
Unit Price per m										11.49	0.23	
INDIRECT COST										15%	1.72	0.03
TOTAL										13	0.26	

## Appendix-3. Equipment Cost

LA UNION PORT DEVELOPMENT PROJECT

4B0107

FC: YEN

LC: US\$

Truck 4t with crane per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	209.00	0	0.33					0	69
	Others	L. S.	1	0	0.00					0	0
	Sub Total									0	69
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L. S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Truck 4t with crane	day	1					3360	0	3,360	0
	Sub Total									3,360	0
	Total									3,360	102

Fuel &amp; Lubricant: 180ps x 0.11 x 4 x 1.05

100ps x 0.2 x 6 x 1.05

Appendix-3. Equipment Cost

LA UNION PORT DEVELOPMENT PROJECT

4B0107

FC: YEN

LC: US\$

Dump truck 10t per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	309.00	0	0.33					0	102
	Others	L. S.	1	0	3.00					0	3
	Sub Total									0	105
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L. S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Dump truck 10t	day	1					6720	0	6,720	0
	Sub Total									6,720	0
	Total									6,720	138

Fuel & Lubricant: 335ps x 0.11 x 8 x 1.05

4B0107-2

## Appendix-3. Equipment Cost

LA UNION PORT DEVELOPMENT PROJECT

4B0107

FC: YEN

LC: US\$

Backhoe 0.8 m3 per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	283.00	0	0.33					0	93
	Others	L. S.	1	0	2.00					0	2
	Sub Total									0	95
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L. S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Backhoe 0.8m3	day	1					11280	0	11,280	0
	Sub Total									11,280	0
	Total									11,280	128

Fuel &amp; Lubricant: 169ps x 0.2 x 8 x 1.05

Appendix-3. Equipment Cost

LA UNION PORT DEVELOPMENT PROJECT

4B0107

FC: YEN

LC: US\$

Plate Compactor 60-100kg per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	5.00	0	0.33					0	2
	Others	L.S.	1	0	2.00					0	2
	Sub Total									0	4
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Plate Compactor	day	1					212.4	0	212.40	0
	Sub Total									212.40	0
	Total									212	37

Fuel & Lubricant: 5ps x 0.2 x 5 x 1.05

4B0107-4

## LA UNION PORT DEVELOPMENT PROJECT

4B0108

FC: YEN

LC: US\$

Total estimate for 100m

PVC pipe, diameter 100mm

No	Work Item	Unit	Quantity	Basic Price		Unit Cost	
						Amount	
				FC	LC	FC	LC
4B010801	Excavation & Disposal	M	100	56.86	1.00	5,686	99.76
4B010802	Sand	M	100	26.92	3.74	2,692	373.59
4B010803	Installation PVC Pipe	M	100	38.64	7.18	3,864	718.08
4B010804	Backfill & Compaction	M	100	13.46	0.27	1,346	26.58
	Total					13,588	1,218.00
				Unit Price per m		136	12.18



LA UNION PORT DEVELOPMENT PROJECT

4B010801

FC: YEN

Excavation & Disposal for PVC pipe 100 mm

LC: US\$

Total estimate for 100m

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Excavation & Disposal	m3	105	0	0.00					0	0	
	Fuel Backhoe 0.8m3	day	0.2	0	95					0	19	
	" Dump truck 10t	day	0.4	0	105					0	42	
	Sub Total									0	61	
2	Labor											
	Foreman	man. day	0.2			0	38.20			0	8	
	Labor	man. day	0.8			0	14.30			0	11	
	Backhoe 0.8m3	man. day	0.2			0	33			0	7	
	Dump truck 10t	man. day	0.4			0	33			0	13	
	Sub Total									0	26	
3	Equipment											
	Backhoe 0.8m3	day	0.2					11,280	0	2,256	0	
	Dump truck 10t	day	0.4					6,720	0	2,688	0	
	Sub Total									4,944	0	
Total										4,944	87	
Unit Price per m										49.44	0.87	
INDIRECT COST										15%	7.42	0.13
TOTAL										57	1.00	

## LA UNION PORT DEVELOPMENT PROJECT

4B010802

FC: YEN

LC: US\$

Total estimate for 100 m

Sand for Foundation of PVC Pipe 100mm

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Sand	m3	45.00	0	5.16					0	232	
	Wasted sand (20%)	m3	9.00	0	5.16					0	46	
	Fuel Backhoe 0.8m3	day	0.2	0	95					0	19	
	" Plate compactor 50kg	day	0.4	0	4					0	1	
	Sub Total									0	299	
2	Labor											
	Foreman	man. day	0.2			0	38.20			0	8	
	Labor	man. day	0.8			0	14.30			0	11	
	Backhoe 0.8m3	man. day	0.2			0	33			0	7	
	Sub Total									0	26	
3	Equipment											
	Backhoe 0.8m3	day	0.2					11,280	0	2,256	0	
	Plate compactor 50kg	day	0.4					212.40	0	84.96	0	
	Sub Total									2,340.96	0	
Total										2,340.96	325	
Unit Price per m										23.41	3.25	
INDIRECT COST										15%	3.51	0.49
TOTAL										27	3.74	

LA UNION PORT DEVELOPMENT PROJECT

4B010802

FC: YEN

Sand for Foundation of PVC Pipe 100mm

LC: US\$

Total estimate for 100 m

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Sand	m3	45.00	0	5.16					0	232
	Wasted sand (20%)	m3	9.00	0	5.16					0	46
	Fuel Backhoe 0.8m3	day	0.2	0	95					0	19
	" Plate compactor 50kg	day	0.4	0	4					0	1
	Sub Total									0	299
2	Labor										
	Foreman	man. day	0.2			0	38.20			0	8
	Labor	man. day	0.8			0	14.30			0	11
	Backhoe 0.8m3	man. day	0.2			0	33			0	7
	Sub Total									0	26
3	Equipment										
	Backhoe 0.8m3	day	0.2					11,280	0	2,256	0
	Plate compactor 50kg	day	0.4					212.40	0	84.96	0
	Sub Total									2,340.96	0
Total										2,340.96	325
Unit Price per m										23.41	3.25
INDIRECT COST										15%	0.49
TOTAL										27	3.74

## LA UNION PORT DEVELOPMENT PROJECT

4B010803

FC: YEN

LC: US\$

Total estimate for 100m

Installation of PVC Pipe 100mm

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	PVC Pipe 150mm	m	100	0	3.25					0	325	
	Above others 5%	L.S	5	0	3.25					0	16	
	Concrete anchor	m3	0	0	90.00					0	0	
	Fuel Truck 4t with crane	day	1	0	69					0	69	
	Sub Total									0	410	
2	Labor											
	Foreman	man. day	1			0	38.20			0	38	
	Labor	man. day	10			0	14.30			0	143	
	Truck 4t with crane	man. day	1			0	33			0	33	
	Sub Total									0	214	
3	Equipment											
	Truck 4t with crane	day	1					3,360	0	3,360	0	
	Sub Total									3,360	0	
Total										3,360	624	
Unit Price per m										33.60	6.24	
INDIRECT COST										15%	5.04	0.94
TOTAL										39	7.18	

4 LA UNION PORT DEVELOPMENT PROJECT

4B010804

FC: YEN

Backfill sand & Compaction for PVC pipe 100mm

LC: US\$

Total estimate for 100 m

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Backfill material	m3	45	0	0.00					0	0	
	Wasted Backfill sand (25%)	m3	11.25	0	0.00					0	0	
	Fuel Backhoe 0.8m3	day	0.1	0	95					0	10	
	" Plate compactor	day	0.2	0	4					0	1	
	Sub Total									0	10	
2	Labor											
	Foreman	man. day	0.1			0	38.20			0	4	
	Labor	man. day	0.4			0	14.30			0	6	
	Backhoe 0.8m3	man. day	0.1			0	33			0	3	
	Sub Total									0	13	
3	Equipment											
	Backhoe 0.8m3	day	0.1					11,280	0	1,128	0	
	Plate compactor	day	0.2					212.40	0	42	0	
	Sub Total									1,170	0	
Total										1,170	23	
Unit Price per m										11.70	0.23	
INDIRECT COST										15%	1.76	0.03
TOTAL										13	0.27	

Appendix-3. Equipment Cost  
 LA UNION PORT DEVELOPMENT PROJECT  
 4B0108

FC: YEN

LC: US\$

Truck 4t with crane per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	209.00	0	0.33					0	69
	Others	L.S.	1	0	0.00					0	0
	Sub Total									0	69
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Truck 4t with crane	day	1					3360	0	3,360	0
	Sub Total									3,360	0
	Total									3,360	102

Fuel &amp; Lubricant: 180ps x 0.11 x 4 x 1.05

100ps x 0.2 x 6 x 1.05

Appendix-3. Equipment Cost

LA UNION PORT DEVELOPMENT PROJECT

4B0108

FC: YEN

Dump truck 10t per day

LC: US\$

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	309.00	0	0.33					0	102
	Others	L. S.	1	0	3.00					0	3
	Sub Total									0	105
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L. S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Dump truck 10t	day	1					6720	0	6,720	0
	Sub Total									6,720	0
	Total									6,720	138

Fuel & Lubricant: 335ps x 0.11 x 8 x 1.05

4B0108-2

## Appendix-3. Equipment Cost

LA UNION PORT DEVELOPMENT PROJECT

4B0108

FC: YEN

LC: US\$

Backhoe 0.8 m3 per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	283.00	0	0.33					0	93
	Others	L.S.	1	0	2.00					0	2
	Sub Total									0	95
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Backhoe 0.8m3	day	1					11280	0	11,280	0
	Sub Total									11,280	0
	Total									11,280	128

Fuel &amp; Lubricant: 169ps x 0.2 x 8 x 1.05



Appendix-3. Equipment Cost

LA UNION PORT DEVELOPMENT PROJECT

4B0108

FC: YEN

Plate Compactor 60-100kg per day

LC: US\$

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	5.00	0	0.33					0	2
	Others	L. S.	1	0	2.00					0	2
	Sub Total									0	4
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L. S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Plate Compactor	day	1					212.4	0	212.40	0
	Sub Total									212.40	0
	Total									212	37

Fuel & Lubricant: 5ps x 0.2 x 5 x 1.05

4B0108-4

## LA UNION PORT DEVELOPMENT PROJECT

4B0109

FC: YEN

PVC pipe, diameter 150mm

LC: US\$

Total estimate for 100m

No	Work Item	Unit	Quantity	Basic Price		Unit Cost	
						Amount	
				FC	LC	FC	LC
4B010901	Excavation & Disposal	M	100	142.14	2.49	14,214	249.39
4B010902	Sand	M	100	26.92	4.55	2,692	455.48
4B010903	Installation PVC Pipe	M	100	57.96	14.22	5,796	1,422.04
4B010904	Backfill & Compaction	M	100	26.92	0.53	2,692	53.15
	Total					25,394	2,180.06
Unit Price per m						254	21.80

LA UNION PORT DEVELOPMENT PROJECT

4B010901

FC: YEN

Excavation & Disposal for PVC pipe 150 mm

LC: US\$

Total estimate for 100m

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Excavation & Disposal	m3	120	0	0.00					0	0	
	Fuel Backhoe 0.8m3	day	0.5	0	95					0	48	
	" Dump truck 10t	day	1	0	105					0	105	
	Sub Total									0	153	
2	Labor											
	Foreman	man. day	0.5			0	38.20			0	19	
	Labor	man. day	2			0	14.30			0	29	
	Backhoe 0.8m3	man. day	0.5			0	33			0	17	
	Dump truck 10t	man. day	1			0	33			0	33	
	Sub Total									0	64	
3	Equipment											
	Backhoe 0.8m3	day	0.5					11,280	0	5,640	0	
	Dump truck 10t	day	1					6,720	0	6,720	0	
	Sub Total									12,360	0	
Total										12,360	217	
Unit Price per m										123.60	2.17	
INDIRECT COST										15%	18.54	0.33
TOTAL										142	2.49	

## LA UNION PORT DEVELOPMENT PROJECT

4B010902

FC: YEN

LC: US\$

Total estimate for 100 m

Sand for Foundation of PVC Pipe 150mm

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Sand	m3	56.50	0	5.16					0	292	
	Wasted sand (20%)	m3	11.30	0	5.16					0	58	
	Fuel Backhoe 0.8m3	day	0.2	0	95					0	19	
	" Plate compactor 50kg	day	0.4	0	4					0	1	
	Sub Total									0	370	
2	Labor											
	Foreman	man. day	0.2			0	38.20			0	8	
	Labor	man. day	0.8			0	14.30			0	11	
	Backhoe 0.8m3	man. day	0.2			0	33			0	7	
	Sub Total									0	26	
3	Equipment											
	Backhoe 0.8m3	day	0.2					11,280	0	2,256	0	
	Plate compactor 50kg	day	0.4					212.40	0	84.96	0	
	Sub Total									2,340.96	0	
Total										2,340.96	396	
Unit Price per m										23.41	3.96	
INDIRECT COST										15%	3.51	0.59
TOTAL										27	4.55	

LA UNION PORT DEVELOPMENT PROJECT

4B010903

FC: YEN

LC: US\$

Installation of PVC Pipe 150mm

Total estimate for 100m

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	PVC Pipe 150mm	m	100	0	7.56					0	756	
	Above others 5%	L. S	5	0	7.56					0	38	
	Concrete anchor	m3	0.2	0	90.00					0	18	
	Fuel Truck 4t with crane	day	1.5	0	69					0	103	
	Sub Total									0	915	
2	Labor											
	Foreman	man. day	1.5			0	38.20			0	57	
	Labor	man. day	15			0	14.30			0	215	
	Truck 4t with crane	man. day	1.5			0	33			0	50	
	Sub Total									0	321	
3	Equipment											
	Truck 4t with crane	day	1.5					3,360	0	5,040	0	
	Sub Total									5,040	0	
Total										5,040	1,237	
Unit Price per m										50.40	12.37	
INDIRECT COST										15%	7.56	1.85
TOTAL										58	14.22	

## 4 LA UNION PORT DEVELOPMENT PROJECT

4B010904

FC: YEN

Backfill sand &amp; Compaction for PVC pipe 150mm

LC: US\$

Total estimate for 100 m

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Backfill material	m3	65	0	0.00					0	0	
	Wasted Backfill sand (25%)	m3	16.25	0	0.00					0	0	
	Fuel Backhoe 0.8m3	day	0.2	0	95					0	19	
	Plate compactor	day	0.4	0	4					0	1	
	Sub Total									0	21	
2	Labor											
	Foreman	man. day	0.2			0	38.20			0	8	
	Labor	man. day	0.8			0	14.30			0	11	
	Backhoe 0.8m3	man. day	0.2			0	33			0	7	
	Sub Total									0	26	
3	Equipment											
	Backhoe 0.8m3	day	0.2					11,280	0	2,256	0	
	Plate compactor	day	0.4					212.40	0	85	0	
	Sub Total									2,341	0	
Total										2,341	46	
Unit Price per m										23.41	0.46	
INDIRECT COST										15%	3.51	0.07
TOTAL										27	0.53	

Appendix-3. Equipment Cost  
 LA UNION PORT DEVELOPMENT PROJECT  
 4B0109  
 Truck 4t with crane per day

FC: YEN

LC: US\$

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	209.00	0	0.33					0	69
	Others	L. S.	1	0	0.00					0	0
	Sub Total									0	69
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L. S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Truck 4t with crane	day	1					3360	0	3,360	0
	Sub Total									3,360	0
	Total									3,360	102

Fuel & Lubricant: 180ps x 0.11 x 4 x 1.05

100ps x 0.2 x 6 x 1.05

4B0109-1

Appendix-3. Equipment Cost  
 LA UNION PORT DEVELOPMENT PROJECT  
 4B0109

FC: YEN

LC: US\$

Dump truck 10t per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	309.00	0	0.33					0	102
	Others	L.S.	1	0	3.00					0	3
	Sub Total									0	105
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Dump truck 10t	day	1					6720	0	6,720	0
	Sub Total									6,720	0
	Total									6,720	138

Fuel &amp; Lubricant: 335ps x 0.11 x 8 x 1.05



Appendix-3. Equipment Cost

LA UNION PORT DEVELOPMENT PROJECT

4B0109

FC: YEN

Backhoe 0.8 m3 per day

LC: US\$

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	283.00	0	0.33					0	93
	Others	L.S.	1	0	2.00					0	2
	Sub Total									0	95
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Backhoe 0.8m3	day	1					11280	0	11,280	0
	Sub Total									11,280	0
	Total									11,280	128

Fuel & Lubricant: 169ps x 0.2 x 8 x 1.05

4B0109-3

## Appendix-3. Equipment Cost

LA UNION PORT DEVELOPMENT PROJECT

4B0109

FC: YEN

LC: US\$

Plate Compactor 60-100kg per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	5.00	0	0.33					0	2
	Others	L. S.	1	0	2.00					0	2
	Sub Total									0	4
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L. S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Plate Compactor	day	1					212.4	0	212.40	0
	Sub Total									212.40	0
	Total									212	37

Fuel &amp; Lubricant: 5ps x 0.2 x 5 x 1.05

LA UNION PORT DEVELOPMENT PROJECT

4B0110

PVC pipe, diameter 200mm

FC: YEN

LC: US\$

Total estimate for 100m

No	Work Item	Unit	Quantity	Basic Price		Unit Cost	
						Amount	
				FC	LC	FC	LC
4B011001	Excavation & Disposal	M	100	207.00	4.77	20,700	476.74
4B011002	Sand	M	100	132.16	8.87	13,216	886.87
4B011003	Installation PVC Pipe	M	100	115.92	25.71	11,592	2,570.55
4B011004	Backfill & Compaction	M	100	134.61	5.73	13,461	572.80
	Total					58,969	4,506.97
Unit Price per m						590	45.07

## LA UNION PORT DEVELOPMENT PROJECT

4B011001

FC: YEN

Excavation &amp; Disposal for PVC pipe 200 mm

LC: US\$

Total estimate for 100m

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Excavation & Disposal	m3	130	0	0.00					0	0	
	Fuel Backhoe 0.8m3	day	1	0	95					0	95	
	" Dump truck 10t	day	1	0	105					0	105	
	Sub Total									0	200	
2	Labor											
	Foreman	man. day	1			0	38.20			0	38	
	Labor	man. day	10			0	14.30			0	143	
	Backhoe 0.8m3	man. day	1			0	33			0	33	
	Dump truck 10t	man. day	1			0	33			0	33	
	Sub Total									0	214	
3	Equipment											
	Backhoe 0.8m3	day	1					11,280	0	11,280	0	
	Dump truck 10t	day	1					6,720	0	6,720	0	
	Sub Total									18,000	0	
Total										18,000	415	
Unit Price per m										180.00	4.15	
INDIRECT COST										15%	27.00	0.62
TOTAL										207	4.77	

LA UNION PORT DEVELOPMENT PROJECT

4B011002

FC: YEN

Sand for Foundation of PVC Pipe 200mm

LC: US\$

Total estimate for 100 m

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Sand	m3	71.00	0	5.16					0	366	
	Wasted sand (25%)	m3	17.75	0	5.16					0	92	
	Fuel Backhoe 0.8m3	day	1	0	95					0	95	
	" Plate compactor 50kg	day	1.0	0	4					0	4	
	Sub Total									0	557	
2	Labor											
	Foreman	man. day	1			0	38.20			0	38	
	Labor	man. day	10			0	14.30			0	143	
	Backhoe 0.8m3	man. day	1			0	33			0	33	
	Sub Total									0	214	
3	Equipment											
	Backhoe 0.8m3	day	1					11,280	0	11,280	0	
	Plate compactor 50kg	day	1					212.40	0	212.40	0	
	Sub Total									11,492.40	0	
Total										11,492.40	771	
Unit Price per m										114.92	7.71	
INDIRECT COST										15%	17.24	1.16
TOTAL										132	8.87	

## LA UNION PORT DEVELOPMENT PROJECT

4B011003

FC: YEN

LC: US\$

Total estimate for 100m

Installation of PVC Pipe 200mm

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	PVC Pipe 200mm	m	100	0	12.05					0	1,205	
	Above others 15%	L.S	15	0	12.05					0	181	
	Concrete anchor	m3	0	0	90.00					0	0	
	Fuel Truck 4t with crane	day	3	0	69					0	207	
	Sub Total									0	1,593	
2	Labor											
	Foreman	man. day	3			0	38.20			0	115	
	Labor	man. day	30			0	14.30			0	429	
	Truck 4t with crane	man. day	3			0	33			0	99	
	Sub Total									0	643	
3	Equipment											
	Truck 4t with crane	day	3					3,360	0	10,080	0	
	Sub Total									10,080	0	
Total										10,080	2,235	
Unit Price per m										100.80	22.35	
INDIRECT COST										15%	15.12	3.35
TOTAL										116	25.71	

4 LA UNION PORT DEVELOPMENT PROJECT

4B011004

Backfill sand & Compaction for PVC pipe 200mm

FC: YEN

LC: US\$

Total estimate for 100 m

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Backfill material	m3	65	0	0.00					0	0	
	Wasted Backfill sand (25%)	m3	16.25	0	0.00					0	0	
	Fuel Backhoe 0.8m3	day	1	0	95					0	95	
	" Plate compactor	day	2.0	0	4					0	7	
	Sub Total									0	103	
2	Labor											
	Foreman	man. day	2			0	38.20			0	76	
	Labor	man. day	20			0	14.30			0	286	
	Backhoe 0.8m3	man. day	1			0	33			0	33	
	Sub Total									0	395	
3	Equipment											
	Backhoe 0.8m3	day	1					11,280	0	11,280	0	
	Plate compactor	day	2					212.40	0	425	0	
	Sub Total									11,705	0	
Total										11,705	498	
Unit Price per m										117.05	4.98	
INDIRECT COST										15%	17.56	0.75
TOTAL										135	5.73	

Appendix-3. Equipment Cost  
 LA UNION PORT DEVELOPMENT PROJECT  
 4B0110

FC: YEN

LC: US\$

Truck 4t with crane per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	209.00	0	0.33					0	69
	Others	L.S.	1	0	0.00					0	0
	Sub Total									0	69
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Truck 4t with crane	day	1					3360	0	3,360	0
	Sub Total									3,360	0
	Total									3,360	102

Fuel &amp; Lubricant: 180ps x 0.11 x 4 x 1.05

100ps x 0.2 x 6 x 1.05



Appendix-3. Equipment Cost

LA UNION PORT DEVELOPMENT PROJECT

4B0110

FC: YEN

Dump truck 10t per day

LC: US\$

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	309.00	0	0.33					0	102
	Others	L.S.	1	0	3.00					0	3
	Sub Total									0	105
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Dump truck 10t	day	1					6720	0	6,720	0
	Sub Total									6,720	0
	Total									6,720	138

Fuel & Lubricant: 335ps x 0.11 x 8 x 1.05

4B0110-2

## Appendix-3. Equipment Cost

LA UNION PORT DEVELOPMENT PROJECT

4B0110

FC: YEN

LC: US\$

Backhoe 0.8 m3 per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	283.00	0	0.33					0	93
	Others	L.S.	1	0	2.00					0	2
	Sub Total									0	95
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Backhoe 0.8m3	day	1					11280	0	11,280	0
	Sub Total									11,280	0
	Total									11,280	128

Fuel &amp; Lubricant: 169ps x 0.2 x 8 x 1.05

Appendix-3. Equipment Cost

LA UNION PORT DEVELOPMENT PROJECT

4B0110

FC: YEN

Plate Compactor 60-100kg per day

LC: US\$

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	5.00	0	0.33					0	2
	Others	L.S.	1	0	2.00					0	2
	Sub Total									0	4
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Plate Compactor	day	1					212.4	0	212.40	0
	Sub Total									212.40	0
	Total									212	37

Fuel & Lubricant: 5ps x 0.2 x 5 x 1.05

4B0110-4

## LA UNION PORT DEVELOPMENT PROJECT

4B0114

FC: YEN

LC: US\$

Total estimate for 100m

## Installation of Ductile Iron Pipe 300mm

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Ductile Iron Pipe 300mm	m	100	0	50.00					0	5,000	
	Above others 2.75%	L.S	2.75	0	50.00					0	138	
	Concrete anchor	m3	0	0	90.00					0	0	
	Fuel Truck 8t with crane	day	1	0	83					0	83	
	Sub Total									0	5,220	
2	Labor											
	Foreman	man. day	1			0	38.20			0	38	
	Labor	man. day	10			0	14.30			0	143	
	Truck 4t with crane	man. day	1			0	33			0	33	
	Sub Total									0	214	
3	Equipment											
	Truck 8t with crane	day	1					5,520	0	5,520	0	
	Sub Total									5,520	0	
Total										5,520	5,434	
Unit Price per m										55.20	54.34	
INDIRECT COST										15%	8.28	8.15
TOTAL										63	62.49	

Appendix-3. Equipment Cost  
LA UNION PORT DEVELOPMENT PROJECT

4B0114

FC: YEN

Truck 4t with crane per day

LC: US\$

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	250.00	0	0.33					0	83
	Others	L.S.	1	0	0.00					0	0
	Sub Total									0	83
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Truck 4t with crane	day	1					5520	0	5,520	0
	Sub Total									5,520	0
	Total									5,520	116

Fuel & Lubricant: 269ps x 0.11 x 4 x 1.05

100ps x 0.2 x 6 x 1.05

4B0114-1

**Detailed Design on Port Reactivation Project in La Union Province (JICA)**



**NIPPON KOEI CO., LTD.**  
Consulting Engineers

Boulevard de los Héroes, Torre Roble, 7ª Planta  
Tel. 261-2941; Fax 261-2943

Our Ref. : FOTBU-02-008

San Salvador, 15 de agosto de 2002

Señores

**N.H.A. Compañía de Ingenieros, S.A. de C.V.**

Atención: Licenciada Alma Rosa de Pineda

Presente

**Asunto: Entrega de Equipos de Cóputo**

Estimada Licenciada de Pineda:

Por este medio, dejamos constancia de la entrega de tres computadores personales de acuerdo al siguiente detalle, no omitimos manifestar que los equipos funcionan en forma óptima:

**Equipo No. 1: ( Código de Inventario No. NK-PC-CEPA-01-0100-16 )**

**CPU**

- Cpu Dell S/N 8TWG01 Mod. DHM
- Keyboard Dell S/N TH-094PCU-37171-173-0895
- Mouse Dell S/N LNB13209658

**Monitor**

- Monitor Dell S/N MX-0419TG-47801-19K-H0E2
- 2 Cables Power

**Sobre**

- Dell E771P Color Monitor Quick Setup Guide
- Dell-Installed Microsoft Windows 98 second edition setup guide
- Setup and quick reference guide
- Introduction Microsoft Windows 98 second edition & CD Reinstalling Operative S.
- CD-ROM E771p Color Monitor Quick Setup
- CD-ROM Drivers and utilities for use with Dell Optiplex Reinstalling
- Certificate of Authenticity Microsoft Office XP Small Business version 2002
- Cable for connect monitor 1 y 2

Licencia de Autocad

**Equipo No. 2: ( Código de Inventario No. NK-PC-CEPA-01-0100-18 )**

**CPU**

- Cpu Dell S/N 8TWGX01 Mod. DHM
- Keyboard Dell S/N TH-094PCU-37171-173-1711
- Mouse Dell S/N INA13442941

**Monitor**

- Monitor Dell S/N MX-0419TG-19K-H0E9
- 2 Cables Power

**Sobre**

- Dell E771P Color Monitor Quick Setup Guide
- Dell-Installed Microsoft Windows 98 second edition setup guide
- Setup and quick reference guide
- Introduction Microsoft Windows 98 second edition & CD Reinstalling Operative S.
- CD-ROM E771p Color Monitor Quick Setup
- CD-ROM Drivers and utilities for use with Dell Optiplex Reinstalling
- Certificate of Authenticity Microsoft Office XP Small Business version 2002
- Cable for connect monitor 1 y 2

**Equipo No. 3: ( Código de Inventario No. NK-PC-CEPA-01-0100-19 )**

**CPU**

- Cpu Dell S/N 9TWG01 Mod. DHM
- Keyboard Dell S/N TH-094PCU-37171-173-0924
- Mouse Dell S/N INB13209693

**Monitor**

- Monitor Dell S/N MX 0419TG-47801-19K-H0E1/E771P
- 2 Cables Power

**Sobre**

- Dell E771P Color Monitor Quick Setup Guide
- Dell-Installed Microsoft Windows 98 second edition setup guide
- Setup and quick reference guide
- Introduction Microsoft Windows 98 second edition & CD Reinstalling Operative S.
- CD-ROM E771p Color Monitor Quick Setup
- CD-ROM Drivers and utilities for use with Dell Optiplex Reinstalling
- Certificate of Authenticity Microsoft Office XP Small Business version 2002
- Cable for connect monitor 1 y 2

Licencia de Autocad

Atentamente,

Entregado por Nippon Koei Co., Ltd.

Recibido por N.H.A.

\_\_\_\_\_  
Ing. Orlando Escobar

\_\_\_\_\_  
2/2

## LA UNION PORT DEVELOPMENT PROJECT

4B0115

FC: YEN

Ductile Iron pipe, diameter 300mm

LC: US\$

Total estimate for 100m

No	Work Item	Unit	Quantity	Basic Price		Unit Cost	
						Amount	
				FC	LC	FC	LC
4B011501	Excavation & Disposal	M	100	284.28	5.97	28,428	597.46
4B011502	Sand	M	100	132.16	9.54	13,216	953.63
4B011503	Installation Ductile Iron Pipe	M	100	190.44	135.64	19,044	13,563.96
4B011504	Backfill & Compaction	M	100	134.61	5.73	13,461	572.80
	Total					74,149	15,687.85
Unit Price per m						741	156.88



LA UNION PORT DEVELOPMENT PROJECT

4B011501

FC: YEN

Excavation & Disposal for Ductile Iron pipe 300 mm

LC: US\$

Total estimate for 100m

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Excavation & Disposal	m3	180	0	0.00					0	0	
	Fuel Backhoe 0.8m3	day	1	0	95					0	95	
	" Dump truck 10t	day	2	0	105					0	210	
	Sub Total									0	305	
2	Labor											
	Foreman	man. day	1			0	38.20			0	38	
	Labor	man. day	10			0	14.30			0	143	
	Backhoe 0.8m3	man. day	1			0	33			0	33	
	Dump truck 10t	man. day	2			0	33			0	66	
	Sub Total									0	214	
3	Equipment											
	Backhoe 0.8m3	day	1					11,280	0	11,280	0	
	Dump truck 10t	day	2					6,720	0	13,440	0	
	Sub Total									24,720	0	
Total										24,720	520	
Unit Price per m										247.20	5.20	
INDIRECT COST										15%	37.08	0.78
TOTAL										284	5.97	

## LA UNION PORT DEVELOPMENT PROJECT

4B011502

FC: YEN

Sand for Foundation of Ductile Iron Pipe 300mm

LC: US\$

Total estimate for 100 m

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Sand	m3	80.00	0	5.16					0	413	
	Wasted sand (25%)	m3	20.00	0	5.16					0	103	
	Fuel Backhoe 0.8m3	day	1	0	95					0	95	
	Plate compactor 50kg	day	1.0	0	4					0	4	
	Sub Total									0	615	
2	Labor											
	Foreman	man. day	1			0	38.20			0	38	
	Labor	man. day	10			0	14.30			0	143	
	Backhoe 0.8m3	man. day	1			0	33			0	33	
	Sub Total									0	214	
3	Equipment											
	Backhoe 0.8m3	day	1					11,280	0	11,280	0	
	Plate compactor 50kg	day	1					212.40	0	212.40	0	
	Sub Total									11,492.40	0	
Total										11,492.40	829	
Unit Price per m										114.92	8.29	
INDIRECT COST										15%	17.24	1.24
TOTAL										132	9.54	

LA UNION PORT DEVELOPMENT PROJECT

4B011503

FC: YEN

Installation of Ductile Iron Pipe 300mm

LC: US\$

Total estimate for 100m

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Ductile Iron Pipe 300mm	m	100	0	94.51					0	9,451	
	Above others 15%	L.S	15	0	94.51					0	1,418	
	Concrete anchor	m <sup>3</sup>	0.4	0	90.00					0	36	
	Fuel Truck 8t with crane	day	3	0	83					0	248	
	Sub Total									0	11,152	
2	Labor											
	Foreman	man. day	3			0	38.20			0	115	
	Labor	man. day	30			0	14.30			0	429	
	Truck 4t with crane	man. day	3			0	33			0	99	
	Sub Total									0	643	
3	Equipment											
	Truck 8t with crane	day	3					5,520	0	16,560	0	
	Sub Total									16,560	0	
Total										16,560	11,795	
Unit Price per m										165.60	117.95	
INDIRECT COST										15%	24.84	17.69
TOTAL										190	135.64	

## 4 LA UNION PORT DEVELOPMENT PROJECT

4B011504

FC: YEN

Backfill sand &amp; Compaction for Ductile Iron pipe 300mm

LC: US\$

Total estimate for 100 m

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Backfill material	m3	82	0	0.00					0	0	
	Wasted Backfill sand (25%)	m3	20.5	0	0.00					0	0	
	Fuel Backhoe 0.8m3	day	1	0	95					0	95	
	" Plate compactor	day	2.0	0	4					0	7	
	Sub Total									0	103	
2	Labor											
	Foreman	man. day	2			0	38.20			0	76	
	Labor	man. day	20			0	14.30			0	286	
	Backhoe 0.8m3	man. day	1			0	33			0	33	
	Sub Total									0	395	
3	Equipment											
	Backhoe 0.8m3	day	1					11,280	0	11,280	0	
	Plate compactor	day	2					212.40	0	425	0	
	Sub Total									11,705	0	
Total										11,705	498	
Unit Price per m										117.05	4.98	
INDIRECT COST										15%	17.56	0.75
TOTAL										135	5.73	

Appendix-3. Equipment Cost

LA UNION PORT DEVELOPMENT PROJECT

4B0115

FC: YEN

Truck 4t with crane per day

LC: US\$

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	250.00	0	0.33					0	83
	Others	L.S.	1	0	0.00					0	0
	Sub Total									0	83
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Truck 4t with crane	day	1					5520	0	5,520	0
	Sub Total									5,520	0
	Total									5,520	116

Fuel & Lubricant: 269ps x 0.11 x 4 x 1.05

100ps x 0.2 x 6 x 1.05

4B0115-1

Appendix-3. Equipment Cost  
 LA UNION PORT DEVELOPMENT PROJECT  
 4B0115

FC: YEN

LC: US\$

Dump truck 10t per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	309.00	0	0.33					0	102
	Others	L. S.	1	0	3.00					0	3
	Sub Total									0	105
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L. S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Dump truck 10t	day	1					6720	0	6,720	0
	Sub Total									6,720	0
	Total									6,720	138

Fuel &amp; Lubricant: 335ps x 0.11 x 8 x 1.05

Appendix-3. Equipment Cost

LA UNION PORT DEVELOPMENT PROJECT

4B0115

FC: YEN

Backhoe 0.8 m3 per day

LC: US\$

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	283.00	0	0.33					0	93
	Others	L.S.	1	0	2.00					0	2
	Sub Total									0	95
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Backhoe 0.8m3	day	1					11280	0	11,280	0
	Sub Total									11,280	0
	Total									11,280	128

Fuel & Lubricant: 169ps x 0.2 x 8 x 1.05

## Appendix-3. Equipment Cost

LA UNION PORT DEVELOPMENT PROJECT

4B0115

FC: YEN

LC: US\$

Plate Compactor 60-100kg per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	5.00	0	0.33					0	2
	Others	L. S.	1	0	2.00					0	2
	Sub Total									0	4
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L. S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Plate Compactor	day	1					212.4	0	212.40	0
	Sub Total									212.40	0
	Total									212	37

Fuel &amp; Lubricant: 5ps x 0.2 x 5 x 1.05



LA UNION PORT DEVELOPMENT PROJECT

4B0205

FC: YEN

Installation of Gate valve diameter 75mm

LC: US\$

Total estimate for 8 Nos.

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Ductile Iron Pipe 300mm	nos.	8	0	26.14					0	209	
	Above others 10%	L.S	0.8	0	26.14					0	21	
	Truck with crane 8t	day	1	0	83					0	83	
	Sub Total									0	313	
2	Labor											
	Foreman	man. day	4			0	38.20			0	153	
	Labor	man. day	33			0	14.30			0	472	
	Truck 4t with crane	man. day	1			0	33			0	33	
	Sub Total									0	658	
3	Equipment											
	Truck 8t with crane	day	1					5,520	0	5,520	0	
	Sub Total									5,520	0	
Total										5,520	970	
Unit Price per no.										690.00	121.28	
INDIRECT COST										15%	103.50	18.19
TOTAL										794	139.47	

## Appendix-3. Equipment Cost

LA UNION PORT DEVELOPMENT PROJECT

4B0205

FC: YEN

LC: US\$

Truck 4t with crane per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	250.00	0	0.33					0	83
	Others	L. S.	1	0	0.00					0	0
	Sub Total									0	83
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L. S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Truck 4t with crane	day	1					5520	0	5,520	0
	Sub Total									5,520	0
	Total									5,520	116

Fuel &amp; Lubricant: 269ps x 0.11 x 4 x 1.05

100ps x 0.2 x 6 x 1.05

LA UNION PORT DEVELOPMENT PROJECT

4B0206

FC: YEN

LC: US\$

Installation of Gate valve diameter 100mm

Total estimate for 3 Nos.

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Gate valve	nos.	3	0	190.30					0	571	
	Above others 10.5%	L.S	0.315	0	190.30					0	60	
	Truck with crane 4t	day	1	0	83					0	83	
	Sub Total									0	713	
2	Labor											
	Foreman	man. day	1			0	38.20			0	38	
	Labor	man. day	4			0	14.30			0	57	
	Truck 4t with crane	man. day	1			0	33			0	33	
	Sub Total									0	128	
3	Equipment											
	Truck 4t with crane	day	1					5,520	0	5,520	0	
	Sub Total									5,520	0	
Total										5,520	842	
Unit Price per no.										1,840.00	280.58	
INDIRECT COST										15%	276.00	42.09
TOTAL										2,116	322.67	

## Appendix-3. Equipment Cost

LA UNION PORT DEVELOPMENT PROJECT

4B0206

FC: YEN

LC: US\$

Truck 4t with crane per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	250.00	0	0.33					0	83
	Others	L. S.	1	0	0.00					0	0
	Sub Total									0	83
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L. S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Truck 4t with crane	day	1					5520	0	5,520	0
	Sub Total									5,520	0
	Total									5,520	116

Fuel &amp; Lubricant: 269ps x 0.11 x 4 x 1.05

100ps x 0.2 x 6 x 1.05

LA UNION PORT DEVELOPMENT PROJECT

4B0207

FC: YEN

Installation of Gate valve diameter 150mm

LC: US\$

Total estimate for 3 Nos.

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Gate valve	nos.	3	0	295.90					0	888	
	Above others 18.5%	L.S	0.555	0	295.90					0	164	
	Fuel Truck 8t with crane	day	1	0	83					0	83	
	"    Truck crane 16t	day	1	0	78					0	78	
	Sub Total									0	1,212	
2	Labor											
	Foreman	man. day	1			0	38.20			0	38	
	Labor	man. day	10			0	14.30			0	143	
	Truck 4t with crane	man. day	1			0	33			0	33	
	Truck crane 16t	man. day	1			0	33			0	33	
	Sub Total									0	247	
3	Equipment											
	Truck 8t with crane	day	1					5,520	0	5,520	0	
	Truck crane 16t	day	1					9,480	0	9,480	0	
	Sub Total									15,000	0	
Total										15,000	1,459	
Unit Price per no.										5,000.00	486.39	
INDIRECT COST										15%	750.00	72.96
TOTAL										5,750	559.35	

## Appendix-3. Equipment Cost

LA UNION PORT DEVELOPMENT PROJECT

4B0207

FC: YEN

LC: US\$

Truck 4t with crane per day

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	250.00	0	0.33					0	83
	Others	L. S.	1	0	0.00					0	0
	Sub Total									0	83
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L. S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Truck 4t with crane	day	1					5520	0	5,520	0
	Sub Total									5,520	0
	Total									5,520	116

Fuel &amp; Lubricant: 269ps x 0.11 x 4 x 1.05

100ps x 0.2 x 6 x 1.05

Appendix-3. Equipment Cost

LA UNION PORT DEVELOPMENT PROJECT

4B0207

FC: YEN

Truck crane 16t per day

LC: US\$

No	Work Item	Unit	Quantity	Basic Price						Unit Cost	
				Material		Labor		Equipment		Amount	
				FC	LC	FC	LC	FC	LC	FC	LC
1	Material										
	Fuel & Lubricant	lr.	235.00	0	0.33					0	78
	Others	L.S.	1	0	0.00					0	0
	Sub Total									0	78
2	Labor										
	Operator	man. day	1			0	33.00			0	33
	Others	L.S.	1			0	0.00			0	0
	Sub Total									0	33
3	Equipment										
	Truck crane 16t	day	1					9480	0	9,480	0
	Sub Total									9,480	0
	Total									9,480	111

Fuel & Lubricant: 230ps x 0.11 x 4 x 1.05

100ps x 0.2 x 6 x 1.05

4B0207-2

## LA UNION PORT DEVELOPMENT PROJECT

4B0208

FC: YEN

LC: US\$

Installation of Gate valve diameter 300mm

Total estimate for 1 No.

No	Work Item	Unit	Quantity	Basic Price						Unit Cost		
				Material		Labor		Equipment		Amount		
				FC	LC	FC	LC	FC	LC	FC	LC	
1	Material											
	Gate valve	nos.	1	0	875.00					0	875	
	Above others 11.3%	L.S	0.113	0	875.00					0	99	
	Fuel Truck 8t with crane	day	1	0	83					0	83	
	Truck crane 16t	day	1	0	78					0	78	
	Sub Total									0	1,134	
2	Labor											
	Foreman	man. day	1			0	38.20			0	38	
	Labor	man. day	10			0	14.30			0	143	
	Truck 4t with crane	man. day	1			0	33			0	33	
	Truck crane 16t	man. day	1			0	33			0	33	
	Sub Total									0	247	
3	Equipment											
	Truck 8t with crane	day	1					5,520	0	5,520	0	
	Truck crane 16t	day	1					9,480	0	9,480	0	
	Sub Total									15,000	0	
Total										15,000	1,381	
Unit Price per no.										15,000.00	1,381.13	
INDIRECT COST										15%	2,250.00	207.17
TOTAL										17,250	1,588.29	