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## JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)

THE DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE Õ₽-E REPUBLIC OF EL SALVADOR INAL REPORT MATE REPORT **Jtility Works** 0/18 LIBRARY J1169698[6] **OCTOBER 2002** NIPPON KOEI CO., LTD.



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## JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) COMISION EJECUTIVA PORTUARIA AUTONOMA (CEPA)

## THE DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR

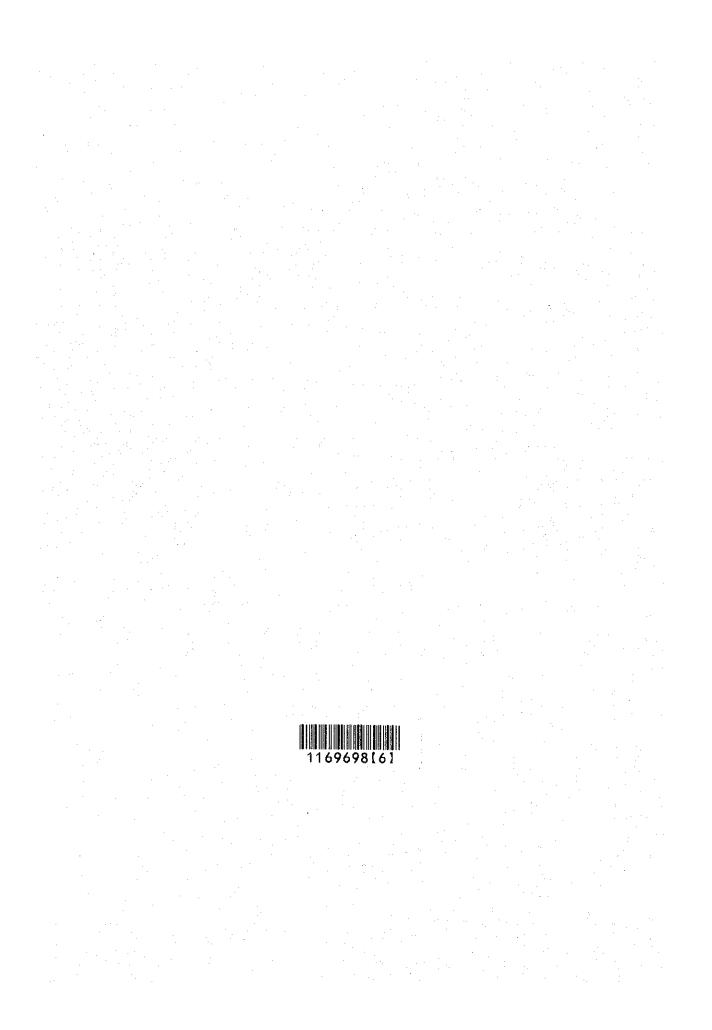
# FINAL REPORT

## COST ESTIMATE REPORT

**Utility Works** 

### **OCTOBER 2002**

## NIPPON KOEI CO., LTD.



## COST ESTIMATION REPORT

## THE DETAILED DESIGN ON PORT REACTIVATION PROJECT IN LA UNION PROVINCE OF THE REPUBLIC OF EL SALVADOR

## **UTILITY WORK**

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> Cost Estimation Report Utilities

#### General

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#### 1.1 Basis of Cost Estimation

#### 1.1.1 General

This report presents the Project cost estimate. The unit rates and prices for labor, materials, plant and equipment used in the cost estimation are based on the current price level as of July 2002.

#### 1.1.2 Conditions for Cost Estimation

#### Exchange Rate

The exchange rate used in the estimation of the Project cost is US\$ 1= \$ 120.00 and US\$ 1= \$ 8.75

#### (2) Local Currency Portion

The local currency portion includes the following items;

a) The cost of local materials, equipment and labor for both the permanent and temporary work of the Project;

b) The cost of local transportation, custom clearance, dealer's commissions, handling charges of agent, temporary storage, etc for imported materials and equipment; and

c) The Contractor's overhead and profit.

#### Foreign Currency Portion

The foreign currency portion includes the following items;

a)The cost of imported materials, equipment and foreign expatriates.

b)The cost of overseas transportation of imported materials and equipment

(dealer's commissions, handling charges, etc.)

c)The Contractor's overhead and profit.

#### Taxes

The value added tax (IVA) and the municipal tax imposed in accordance with the laws and regulations of the Government of the Republic of El Salvador are not included in the Project cost estimate.

#### 1.1.3 Unit Rates

The availability and cost of local materials and labor at site such as stone, gravel, reclamation material, cement, skilled and skilled workers are investigated through interviews and queries from local suppliers as well as authorities concerned.

#### 1.1.4 Reference Information

In preparing the unit rate analysis, the estimated costs or unit rates applied to the projects being implemented in the country and current prices of international contracts are considered as reference prices in the estimate

### 2. BASIC DATA FOR UNIT COST ANALYSIS

Based upon the collected data and with reference to the current costs and prices, basic data for cost estimate have been set down as summarized below for the cost estimators in each section of the works in order to maintain consistency in estimation throughout.

### 2.1 Labor Wages

Please refer to Appendix 1.

2.2 Basic Construction Material Costs Please refer to Appendix 2.

## **2.3 Construction Machine Operation Cost** Please refer to Appendix 3.

#### 2.4 Indirect and Overhead Ratios

DescriptionIndirect and OverheadUtilities15%



Cost Estimation Report Utilities

## **3. COST ESTIMATION FOR BILL ITEMS**

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1US\$=¥120

						CURRENCY		URRENCY	TOTAL AMOUNT
PAY	DESCRIPTION	· · ·	UNIT	QUANTITY		(en)		SS)	IN
ITEM		· · · · · · · · · · · · · · · · · · ·			UNIT COST	AMOUNT	UNIT COST	AMOUNT	(Yen)
4A	FIRE FIGHTING SYSTEM		LS			95,358		337,611	40,608,639.06
4B	WATER SUPPLY SYSTEM	· · · · · ·	LS			112,652		657,594	79,023,961.72
4C	WASTEWATER AND SEWER SYSTEM		LS			9,346,001	an a	402,850	57,688,033.64
4D	VENTILATION AND AIR-CONDITIONING		LS			0		374,562	44.947,440.00
4E	PLUMBING AND SANITARY APPLIANCES		LS			0		36,793	4,415,139.60
4F	TRANSMISSION LINE AND SUBSTATION		LS			0		575,920	69,110,400.00
4G	EMERGENCY POWER GENERATION EQUIPMENT	· ·	LS			0		668,000	80,160,000.00
4H	POWER DISTRIBUTION EQUIPMENT		LS			. 0		732,160	87,859,200.00
4I	CABLING AND PIPING		LS		- 1	0		375,845	45,101,400.00
4J	AREA LIGHTING SYSTEM AND POWER OUTLET		LS			0		384,440	46,132,800.00
4K	FIRE ALARM SYSTEM	, ·	LS			0		21,850	2,622,000.00
4L	TELEPHONE/DATA NETWORK		LS			0		110,439	13,252,680.00
4M	ELECTRICAL WORK FOR BUILDING		LS			0		258,664	31,039,716.00
4N	MISCELLANEUOS EQUIPMENT		LS	· · · · ·		27,200,000		178,570	48,628,400.00
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1					and the second second	36,754,011.00		5,115,298	
				1	1		Grand	Total of Section 4	650,589,810.02
						· .			

PAY	DESCRIPTION	UNIT	QUANTITY	FOREIGN C (Ye	n)	LOCAL CURRENCY (USS)		TOTAL AMOUNT IN
ITEM				UNIT COST	AMOUNT	UNIT COST	AMOUNT	(Yen)
	E FIGHTING SYSTEM							
	PIPE WORK							
	Galvanized Iron Pipe, Diameter 63 mm	m	3.00	0.00	0.00	14.48	43.44	5,212.26
	Galvanized Iron Pipe, Diameter 75 mm	m	30.00	0.00	. 0.00	18.38	551.31	66,157.20
A02	OUTDOOR HYDRAULIC FIRE FIGHTING EQUIPMENT							
1	Gate Valve, Cast Iron, Flanged, 75 mm	nos.	5.00	0.00	0.00	227.66	1,138.30	136.596.00
	Angle Valve, Bronze, Threaded, 63 mm	nos.	28.00	0.00	0.00	440.00	12,320.00	1,478,400.00
	Meter, Cast Iron, Flanged, 63 mm	nos.	4.00	0.00	0.00	316.25	1,265.00	151,800.00
	Fire Monitor, Bronze, Flanged, 75 mm	nos.	5.00	0.00	0.00	3,300.00	16,500.00	1,980,000.0
	Standing Hydrant	nos.	6.00	0.00	0.00	1,850.00	11,100.00	1,332,000.0
A03	INDOOR HYDRANTS	nos.	6.00	0.00	0.00	1,990.00	11,940.00	1,432.800.0
A04 <sup>:</sup>	FIRE STATIONS	nos.	7.00	0.00	0.00	9,411.00	65,877.00	7,905,240.0
A05	STATIONARY FIRE PUMP	no.	1.00	0.00	0.00	2,600.00	2,600.00	312,000.0
A06	MOBILE FIRE PUMP	no.	1.00	0.00	0.00	163,000.00	163,000.00	19,560,000.0
A07	FIRE EXTINGUISHERS							and the second second
A0701	AFFF Foam Extinguisher, 6 liters	nos.	17.00	0.00	0.00	160.00	2,720.00	326,400.0
	CO2 Extinguisher, 4.5 Kg	nos.	40.00	0.00	0.00	217.00	8,680.00	1,041,600.0
A0703	CO2 Extinguisher, 7 Kg	nos.	5.00	0.00	0.00	350.00	1,750.00	210,000.0
A0704	Dry Chemical Multi Purpose Extinguisher, 4.5 Kg	nos.	24.00	0.00	0.00	85.00	2,040.00	244,800.0
40705	Dry Chemical Multi Purpose Extinguisher, 9 Kg	nos.	30.00	0.00	0.00	140.00	4,200.00	504,000.0
	Dry Chemical Multi Purpose Wheeled Extinguisher, 56.7 Kg	nos.	7.00	0.00	0.00	2,300.00	16,100.00	1,932,000.0
A0707	Wet Chemical Class K Extinguisher	nos.	6.00	0.00	0.00	190.00	1,140.00	136,800.0

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#### Bill No 400A FIRE FIGHTING SYSTEM

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PAY ITEM		DESCRIPTION	UNIT	QUANTITY		CURRENCY en) AMOUNT	LOCAL CU (US UNIT COST		TOTAL AMOUN' IN (Yen)
<b>4A FIR</b> 4A08 4A0801 4A0802	E FIGHTING SYSTEM PITS Type 1A Type 1B Type 2A		nos. nos. nos.	7.00 2.00 15.00	1,118.00 5,546.00 3,185.00		455.51 781.65 431.56	3,188.57 1,563.30 6,473.40	198,688.00 824,583.00
4A0804	Type 2B		nos.	9.00	3,185.00	28.665.00	380.04	3,420.36	439,108.20

Total for Bill No. 4A 40,608,639.06

4A-2

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					CURRENCY	LOCAL CI (US		TOTAL AMOUNT
PAY ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	(en) AMOUNT	UNIT COST	AMOUNT	(Yen)
I I Divi		<u> </u>					······································	l
B WAT	TER SUPPLY SYSTEM						<b>-</b> -	
4B01	PIPE WORK							
	PVC pipe, diameter 12 mm	m '	322.80	0.00	0.00	1.60	516.48	61,977.60
	PVC pipe, diameter 18 mm	ĺm	175.90	0.00	0.00	1.94	341.25	40,949.52
	PVC pipe, diameter 25 mm	m	412.40	0.00	0.00	1.89	779.44	93,532.3
	PVC pipe, diameter 31 mm	m	15.20	0.00	0.00	3.04	46.21	5,544.9
	PVC pipe, diameter 38 mm	m	118.60	0.00	0.00	3.94	467.28	56,074.0
	PVC pipe, diameter 50 mm	m	56.60	0.00	0.00	3.85	217.91	26,149.2
	PVC pipe, diameter 75 mm	m	37.60	0.00	0.00	8.32	312.83	37,539.8
	PVC pipe, diameter 100 mm	m	123.42	0.00	0.00	13.32	1,643.95	197,274.5
	PVC pipe, diameter 150 mm	m	2979.27	0.00	0.00	23.92	71,264.14	8,551,696.0
	PVC pipe, diameter 200 mm	m	50.39	0.00	0.00	49.98	2,518.49	302,219.0
	Ductile Iron pipe, diameter 63 mm	m	30.20	0.00	0.00	14.48	437.25	52,470.
	Ductile Iron pipe, diameter 75 mm	m	26.00	0.00	0.00	18.38	477.80	57.336.3
	Ductile Iron pipe, diameter 100 mm	m	27.60	0.00	0.00	57.78	1,594.73	191,367.
	Ductile Iron pipe, diameter 150 mm	m	555.00	0.00	0.00	63.02	34,976.10	4,197,132.
	Ductile Iron pipe, diameter 300 mm	m	976.00	0.00	0.00	94.51	92,241.76	11,069,011.
			· ·				-	
B02	VALVES AND METERS	ļ					)	
	Gate Valve, Bronze, threaded, diameter 25 mm	nos.	15.00	0.00	0.00	- 29.24	438.67	52,640.
	Gate Valve, Bronze, threaded, diameter 31 mm	nos.	2.00	0.00	0.00	37.63	75.26	9,031.3
	Gate Valve, Bronze, threaded, diameter 38 mm	nos.	6.00	0.00	0.00	46.73	280.38	33,645.
	Gate Valve, Bronze, threaded, diameter 50 mm	nos.	7.00	0.00	0.00	38.33	268.31	32,197.
	Gate Valve, Bronze, threaded, diameter 75 mm	no.	1.00	0.00	0.00	145.70	145.70	17,484.
	Gate Valve, Cast Iron, flanged, diameter 100 mm	nos.	2.00	· 0.00	0.00	340.32	680.64	81,676.
	Gate Valve, Cast Iron, flanged, diameter 150 mm	nos.	26.00	0.00	0.00	607.23	15,787.98	1,894,557.0
						Sub T	otal for This Page	27,061,507.

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PAY DESCRIPTION	UNIT	QUANTITY	FOREIGN C (Ye	n)	LOCAL CURRENCY (USS)		TOTAL AMOUNT IN
ITEM	·		UNIT COST	AMOUNT	UNIT COST	AMOUNT	(YEN)
4B Water Supply System							
4B02 VALVES AND METERS					· · · · ·		
4B0208 Gate Valve, Cast Iron, Flanged, Diameter 300 mm	nos.	3.00	0.00	0.00	1,732.00	5,196.00	623,520.00
4B0209 Swing Check Valve, Diameter 50 mm	nos	3.00	0.00	0.00	119.63	358.90	43,068.42
4B0210 Swing Check Valve, Diameter 63 mm	nos.	3.00	0.00	0.00	299.81	899.42	107,929.80
4B0211 Air Release Valve, Diameter 50 mm	no.	1.00	0.00	0.00	263.33	263.33	31,599.60
4B0212 Float Operated Valve, Diameter 50 mm	no.	1.00	0.00	0.00	110.65	110.65	13,278.00
4B0213 Meter, Ductile Iron, Diameter 38 mm	nos.	6.00	0.00	0.00	228.00	1,368.00	164,160.00
4B0214 Meter, Ductile Iron, Diameter 75 mm	no.	1.00	0.00	0.00	302.28	.302.28	36,273.60
4B03         PITS AND MANHOLES           4B0301         Type 3           4B0302         Type 4           4B0303         Type 5A           4B0304         Type 5B	nos. nos. nos. nos.	7.00 7.00 7.00 13.00	885.00 2,111.00 4,584.00 4,584.00	6,195.00 14,777.00 32,088.00 59,592.00	172.22 180.34 540.07 488.55	1,205.54 1,262.38 3,780.49 6,351.15	150,859.80 166,262.60 485,746.80 821,730.00
4B04 WATER STORAGE TANKS	LS	1.00	0.00	0.00	130,830.00	130,830.00	15,699,600.00
4B05 WATER PURIFICATION SYSTEM	LS	1.00	0.00	0.00	144,000.00	144,000.00	17,280,000.00
4B06 SERVICE HOUSE AND EXTERIOR WORKS							
4B0601 Service House	LS	1.00	0.00	0.00	7,500.00	7,500.00	900,000.00
4B0602 Exterior Works	LS	1.00	0.00	0.00	128,653.55	128,653.55	15,438,426.00
		<u> </u>			Sub T	otal for This Page	51,962,454.62

Total for Bill No 4B01

79,023,961.72

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PAY	DESCRIPTION	UNIT	QUANTITY	FOREIGN C (Ye		LOCAL CL (US	SS)	TOTAL AMOUNT IN
ITEM			`	UNIT COST	AMOUNT	UNIT COST	AMOUNT	(Yen)
							· · · ·	
4C WA	STEWATER SYSTEM							
4C01	PIPE WORK							
	PVC Pipe, Diameter 50 mm	m	379.65	0.00	0.00	2.88	1,093,39	131,207.04
	PVC Pipe, Diameter 63 mm	1 m -	222.10	0.00	0.00	5.11	1,134.93	136,191.72
	PVC Pipe, Diameter 75 mm	m	302.65	0.00	0.00	5.23	1,582.86	189,943.14
	PVC Pipe, Diameter 100 mm	m	149.60	0.00	0.00	7.54	1,127.98	135,358.0
	PVC Pipe, Diameter 150 mm	m	363.94	0.00	0.00	17.55	6,387.15	766,457.64
	PVC Pipe, Diameter 200 mm	m	23.50	0.00	0.00	27.98	657.53	78,903.60
	PVC Pipe, Diameter 300 mm	m	144.55	0.00	0.00	65.87	9,521.51	1,142,581.02
4C0108	PVC Pipe, Diameter 400 mm	m	185.00	0.00	0.00	105.36	19,491.60	2,338,992.0
4C02	MANHOLES AND GREASE TRAPS							
	Manhole	nos.	16.00	8,418.00	134,688.00	795.05	12,720.80	1,661,184.0
‡C0202	Grease Trap	nos.	2.00	2,934.00	5,868.00	334.89	669.78	86,241.6
4C03	CATCH BASINS						· · · ·	
	Catch Basin	nos.	6.00	5,460.00	32,760.00	611.68	3,670.08	473,169.6
4C04	OIL/WATER SEPARATORS							•
	Oil/Water Separator - 1 (M&R Shop)	nos.	1.00	248,799.00	248,799.00	18,363.59	18,363.59	2,452,429.8
	Oil/Water Separator - 2 (Route-A)	nos.	1.00	2,212,997.00	2,212,997.00	43,540.11	43,540.11	7,437,810.2
	Oil/Water Separator - 3 (Route-B)	nos.	1.00	2,275,580.00	2,275,580.00	49,385.42	49,385.42	8,201,830.4
	Oil/Water Separator - 4 (Route-C)	nos.	1.00	2,275,580.00	2,275,580.00	51,095.74	51,095.74	8,407,068.8
	Oil/Water Separator - 5 (Route-D)	nos.	1.00	2,159,729.00	2,159,729.00	46,607.80	46,607.80	7,752,665.0
4C05	WASTEWATER TREATMENT FACILITIES		н н. -					
	Wastewater Treatment Facility N°1	LS	1.00	0.00	0.00	90,500.00	90,500.00	10,860,000.0
	Wastewater Treatment Facility N°2	LS	1.00	0.00	0.00	45,300.00	45,300.00	5,436,000.0
	rradomilior additional a denity in d		1.00					
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		·				Sub T	otal for This Page	57,688,033.6

Total for Bill No 4C01

57,688,033.64

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PAY DESCRIPTIO	N	UNIT	QUANTITY	· (Y	en)		SS)	IN
ITEM				UNIT COST	AMOUNT	UNIT COST	AMOUNT	(Yen)
4D01 ADMINISTRATION BUILDING		1						
4D0101 60 Ton Chiller		set	2.00	0.00	0.00	35,000.00	70,000.00	- 8,400,000.0
4D0102 Air Handling Unit 8 Ton		set	1.00	0.00	0.00	3,250.00	3,250.00	390,000.0
D0103 Air Handling Unit 12 Ton		set	1.00	0.00	0.00	3,458.00	3,458.00	414,960.0
4D0104 Air Handling Unit 14 Ton		set	2.00	. 0.00	. 0.00	4,264.00	8,528.00	1,023,360.0
D0105 Fan Coil Unit 1 Ton		set	56.00	0.00	0.00	546.00	30,576.00	3,669,120.0
D0106 Water Pumps		set	2.00	0.00	0.00	4,550.00	9,100.00	1,092,000.0
4D0107 Ductwork And Accessories		LS	1.00	0.00	0.00	50,000.00	50,000.00	6,000;000.0
4D0108 Pipping And Accessories	· .	LS	1.00	0.00	0.00	35,000.00	35,000.00	4,200,000.0
D0109 Exaust Fan 165 CFM And Accessories		set	. 1.00	0.00	0.00	476.00	476.00	57,120.0
D0110 Exaust Fan 630 CFM And Accessories		set	8.00	0.00	0.00	748.00	5,984.00	718,080.0
D0111 Exaust Fan 820 CFM And Accessories		set	1.00	0.00	0.00	980.00	980.00	117,600.0
D0112 Exaust Fan 1,000 CFM And Accessories		set	2.00	0.00	0.00	1,085.00	2,170.00	260,400.0
D0113 Labor Work		LS	1.00	0.00	0.00	50.000.00	50,000.00	6,000,000.0
D02 CONTAINER FREIGH STATION								
D0201 8.5 Kw Mini Split System		set	4.00	0.00	0.00	5,650.00	22,600.00	2,712,000.(
D0202 Exaust Fan 165 CMF And Accessories		set	1.00	0.00	0.00	2,500.00	2,500.00	300,000.0
D0203 Exaust Fan 630 CMF And Accessories		set	2.00	0.00	0.00	1,900.00	3,800.00	456,000.0
D03 MAINTENANCE AND REPAIR SHOP								
D0301 8.5 Kw Mini Split System		set	1.00	0.00	0.00	5,650.00	5,650.00	678,000.0
D0302 7 Kw Mini Split System		set	2.00	0.00	0.00	4,560.00	9,120.00	1,094,400.0
D0303 Exaust Fan 630 CMF And Accessories		set	2.00	0.00	0.00	2,460.00	4,920.00	590,400.4
D04 CONTAINER GATE	· · · · ·					, 		
D0401 3.5 Kw Mini Split System		set	4.00	0.00	0.00	3,250.00	13,000.00	1,560,000.0
D0402 2.625 Kw Mini Split System		- set	6.00	0.00	0.00	2,590.00	15,540.00	1,864,800.0
D05 CARGO GATE								
D0501 [3.5 Kw Mini Split System		set	4.00	0.00	0.00	3,250.00	13,000.00	1,560,000.
D0502 2.625 Kw Mini Split System		set	2.00	0.00	0.00	2,590.00	5,180.00	621,600.0
D06 POWER SUPPLY STATION		1				_,	2,200.00	
D0601 Exaust Fan 820 CFM And Accessories		set	4.00	0.00	0.00	1,890.00	7,560.00	907.200.(
D0602 Exaust Fan 1,000 CFM And Accessories		set	2.00	0.00	0.00	1.085.00	2,170.00	260,400.0
		301	2.00	0.00	0.00	1,000.00	2.170.00	200,400.0
	· · · · · · · · · · · · · · · · · · ·				L	Grand To	tal of Section 4F	44,947,440.0

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Total for Bill No. 4F01 44,947,440.00

PAY	DESCRIPTION	UNIT	QUANTITY	FOREIGN C	1	LOCAL CU (US		TOTAL AMOUNT
ITEM	DESCRIPTION		QUAITI		AMOUNT	UNIT COST	AMOUNT	(Yen)
4E PLU	MBING AND SANITARY APPLIANCES							
4E01	SANITARY APPLIANCES							
4E0101	Water Closet, American Standard model "Hydra"	nos.	31.00	0.00	0.00	201.30	6,240.30	748,836.00
	Wash Basin, American Standard model "Saturno"	nos.	39.00	0.00	0.00	160.50	6,259.50	751,140.00
4E0103	Urinal, American Standard model "Artico"	nos.	21.00	0.00	0.00	453.90	9,531.90	1,143,828.00
4E0104	Metal Sink Type 1, stainless steel, one bowl-one drainboard	nos.	4.00	0.00	0.00	159.90	639.60	76,752.00
	Metal Sink Type 2, stainless steel, two bowls-two drainboards	no.	1.00	0.00	0.00	363.90	363.90	43,668.00
4E0106	Concrete Sink	по.	1.00	0.00	0.00	276.80	276.80	33,216.00
4E0107	Service Floor Sink	nos.	7.00	0.00	0.00	191.20	1,338.40	160,608.00
4E02	PLUMBING ACCESSORIES							
4E0201	Shower, chromium plated bronze head and gate valve	nos.	7.00	0.00	0.00	115.89	811.23	97,347.60
	Sanitary Cleanout, cast iron body, nickel plated bronze cover, 50mm	nos.	3.00	0.00	0.00	45.00	135.00	16,200.00
	Sanitary Cleanout, cast iron body, nickel plated bronze cover, 63mm	nos.	10.00	0.00	0.00	65.00	650.00	78,000.00
	Sanitary Cleanout, cast iron body, nickel plated bronze cover, 75mm	nos.	33.00	0.00	0.00	75.00	2,475.00	297,000.00
	Sanitary Cleanout, cast iron body, nickel plated bronze cover, 100 mm	nos.	6.00	0.00	0.00	100.00	600.00	72,000.00
	Shower Drain, cast iron body, nickel plated bronze grating, 50 mm	nos.	7.00	0.00	0.00	36.00	252.00	30,240.00
	Floor Drain, cast iron body, nickel plated bronze grating, 75 mm	nos.	21.00	0.00	0.00	98.00	2,058.00	246,960.00
4E03	TOILET ACCESSORIES		· .					
	Shower Curtain Holder	nos.	7.00	0.00	0.00	15.00	105.00	12,600.00
4E0302	Toilet Tissue Dispenser	nos.	31.00	0.00	0.00	55.00	1,705.00	204,600.00
	Hand Drier, electrical, automatic	nos.	18.00	0.00	0.00	98.40	1,771.20	212,544.00
	Grab Bars, stainless steel	nos.	10.00	0.00	0.00	158.00	1,580.00	189,600.00
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						Sub T	otal for This Page	4,415,139.60

Total for Bill No 4E01

4,415,139.60

4E-1

PAY	DESCRIPTION	UNIT	QUANTITY	FOREIGN C (Ye	en)	LOCAL CU (US	\$)	TOTAL AMOUNT IN
ITEM				UNIT COST	AMOUNT	UNIT COST	AMOUNT	(Yen)
4F TRA	NSMISSION LINE AND SUBSTATION			[				
4F01	46KV TRANSMISSION LINE	L.S.	1.00	0.00	0.00	133,000.00	133,000.00	15,960,000.00
	46KV 3P Pole Mounted Section Switches x 1 Set							
	KWH, KVAR Meter Including CT & PT x 1 Set							
	46KV Aerial Line Including Poles And Fittings x About 650 M							
4F02	46KV SUBSTATION	L.S.	1.00	0.00	0.00	442,920.00	442,920.00	53,150,400.00
	46KV Circuit Breaker x 1 Set							
	46KV Disconnecting Switche x 1 Set							
	46KV 1P Potential Transformers x 3 Set							,
	46KV 1P Current Transformers x 3 Set							
	46KV 1P Arresters x 3 Set							
	46KV Outdoor Structure x 1 Unit						:	
	46/4.16KV, 3 Phase 60Hz 4,000KVA Transformer x 1 Set							
	Neutral Grounding Transformer x 1 Set		· ·					
	Grounding System x 1 Set							
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						Grand To	al of Section 4F	69,110,400.00

Total for Bill No. 4F01 69,110,400.00

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PAY	DESCRIPTION	UNIT	QUANȚI	TY	(Ye	CURRENCY en)	U)	S\$)	TOTAL AMOUN IN
ITEM		<u> </u>			UNIT COST	AMOUNT	UNIT COST	AMOUNT	(YEN)
4G EM 4G01 4G02 4G03	ERGENCY POWER GENERATION EQUIPMENT Dieşel Engine Generator (4.16KV, 60Hz, 1000KVA) Switchgear And Control Equipment (4.16 KV) Fuel Tank, (8 M <sup>3</sup> Underground Type)	unit set set	1	.00 .00 .00	0.00 0.00 0.00	0.00 0.00 0.00	250.000.00 160,000.00 8,000.00	500,000.00 160,000.00 8,000.00	60,000.000.0 19,200,000.0 960,000.0
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PAY ITEM	DESCRIPTION	UNIT	QUANTITY	(Ye	AMOUNT	UNIT COST	AMOUNT	(YEN)
	VER DISTRIBUTION EQUIPMENT							
	SWITCHGEAR CUBICLE							
	4.16KV Switchgear Cubicle	unit	1.00	0.00	0.00	350,000.00	350,000.00	42,000,000.
	480V Switchgear Cubicle	unit	1.00	0.00	0.00	210,000.00	210,000.00	25,200,000.
	208-120V Switchgear Cubicle	unit	1.00	0.00	0.00	70,000.00	70,000.00	8,400,000.
	DISTRIBUTION TRANSFORMER							
	4.16/0.48KV 3 Phase 60 Hz 1,000KVA Transformer	set	2.00	0.00	0.00	22,480.00	44,960.00	5,395,200.
	4.16/0.208-0.12KV 3 Phase, 4 Wire 60Hz 500KVA Transformer	set	1.00	0.00	0.00	13,200.00	13,200.00	1,584,000.
	CONTROL SWITCHBOARD AND AUXILIARY							
	Main Control Switchboard (Monitor Control Board)	panel	1.00	0.00	0.00	20,000.00	20,000.00	2,400,000.
	AC Panel	panel	1.00	0.00	0.00	5,000.00	5,000.00	600,000.
	DC Panel	panel	1.00	0.00	0.00	8,000.00	8,000.00	960,000.
	Battery Charger	panel	1.00	0.00	0.00	6,000.00	6,000.00	720,000.
	Battery	set	1.00	0.00	0.00	5.000.00	5,000.00	k.
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PAY	DESCRIPTION	UNIT	QUANTITY	(Y			<u>S\$)</u>	IN
ITEM				UNIT COST	AMOUNT	UNIT COST	AMOUNT	(YEN)
4	LING AND PIPING							
4101	CABLING							
	HV11 4.16KV XLPE/PVC Cu (1C x 400mm <sup>2</sup> )	m	60.00	0.00	0.00	155.00	9,300.00	1,116,000.00
410102	HV12 4.16KV XLPE/PVC Cu (3C x 100mm <sup>2</sup> )	m	20.00	0.00	0.00	41.00	820.00	98,400.00
410103	HV13 4.16KV XLPE/PVC Cu (3C x 100mm <sup>2</sup> )	m	25.00	0.00	0.00	41.00	1,025.00	123,000.00
	HV21 4.16KV XLPE/PVC Cu (3C x 100mm <sup>2</sup> )	m ·	490.00	0.00	0.00	41.00	20,090.00	2,410.800.00
410105	HV22 4.16KV XLPE/PVC Cu (3C x 100mm <sup>2</sup> )	m	490.00	0.00	0.00	41.00	20,090.00	2,410,800.00
4	HV25 4.16KV XLPE/PVC Cu (3C x 60mm <sup>2</sup> )	m	20.00	0.00	0.00	38.00	760.00	91,200.00
,	HV26 4.16KV XLPE/PVC Cu (3C x 60mm <sup>2</sup> )	m	20.00	0.00	0.00	38.00	760.00	91,200.00
	HV27 4.16KV XLPE/PVC Cu (3C x 22mm <sup>2</sup> )	m	20.00	0.00	0.00	20.00	400.00	48,000.00
	4.16 Cable Terminal For Above	set	20.00	0.00	0.00	300.00	6.000.00	720,000.00
	MV10 480V XLPE/PVC Cu (1C x 400mm <sup>2)</sup>	m	120.00	0.00	0.00	72.00	8,640.00	1,036,800.00
4	MV11 480V XLPE/PVC Cu (3C x 100mm <sup>2</sup> )	m	710.00	0.00	0.00	17.00	12,070.00	1,448,400.00
2	MV12 480V XLPE/PVC Cu (3C x 60mm <sup>2</sup> )	m	460.00	0.00	0.00	14.00	6,440.00	772,800.00
	MV13 480V XLPE/PVC Cu (3C x 60mm <sup>2</sup> )	m	585.00	0.00	0.00	14.00	8,190.00	982,800.00
2	MV14 480V XLPE/PVC Cu (3C x 60mm <sup>2</sup> )	m	545.00	0.00	0.00	14.00	7,630.00	915,600.00
	MV15 480V XLPE/PVC Cu (3C x 100mm <sup>2</sup> )	m	805.00	0.00	0.00	17.00	13,685.00	1,642,200.00
	MV16 480V XLPE/PVC Cu (3C x 38mm <sup>2</sup> )	m	575.00	0.00	0.00	8.00	4,600.00	552,000.00
	MV17 480V XLPE/PVC Cu (3C x 60mm2)	m	520.00	0.00	0.00	14.00	7,280.00	873,600.00
	MV18 480V XLPE/PVC Cu (3C x 22mm2)	m	415.00	0.00	0.00	6.00	2,490.00	298,800.00
	MV19 480V XLPE/PVC Cu (3C x 22mm <sup>2</sup> )	m	580.00	0.00	0.00	6.00	3,480.00	417.600.00
	MV20 480V XLPE/PVC Cu (1C x 400mm <sup>2</sup> )	m	90.00	0.00	0.00	72.00	6,480.00	777,600.00
410121	MV21 480V XLPE/PVC Cu (3C x 100mm <sup>2</sup> )	m	270.00	0.00	0.00	17.00	4,590.00	550,800.00
	MV22 480V XLPE/PVC Cu (3C x 100mm <sup>2</sup> )	m	310.00	0.00	0.00	17.00	5.270.00	632,400.00
	MV23 480V XLPE/PVC Cu (3C x 22mm <sup>2</sup> )	m	2,060.00	0.00	0.00	6.00	12,360.00	1,483,200.00
	MV24 480V XLPE/PVC Cu (3C x 22mm <sup>2</sup> )	m	2,060.00	0.00	0.00	6.00	12,360.00	1,483,200.00
	MV25 480V XLPE/PVC Cu (3C x 100mm <sup>2</sup> )	m	210.00	0.00	0.00	17.00	3,570.00	428,400.00
410126	MV26 480V XLPE/PVC Cu (3C x 100mm <sup>2</sup> )	m	540.00	0.00	0.00	17.00	9,180.00	1,101,600.00
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Sub Total for This Page 22,507,200.00

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					FOREIGN C	1	LOCAL CL		TOTAL AMOUNT
PAY	DESCRIPTION		UNIT	QUANTITY	(Ye		(US		IN
<b>ITEM</b>					UNIT COST	AMOUNT	UNIT COST	AMOUNT	(YEN)
\$	LING AND PIPING					ľ			
4101	CABLING								
	480V Cable Terminal For Above		set	54.00	0.00	0.00	25.00	1,350.00	162,000.00
	LV10 208-120V XLPE/PVC Cu (1C x 500mm <sup>2</sup> )		m	80.00	0.00	0.00	90.00	7,200.00	864,000.00
	LV11 208-120V XLPE/PVC Cu (4C x 200mm <sup>2</sup> )		m	185.00	0.00	0.00	51.00	9,435.00	1,132,200.00
410130	LV12 208-120V XLPE/PVC Cu (4C x 150mm <sup>2</sup> )	·	m	360.00	0.00	0.00	39.00	14,040.00	1,684,800.00
	LV13 208-120V XLPE/PVC Cu (4C x 38mm <sup>2</sup> )		m	165.00	0.00	0.00	12.00	1,980.00	237,600.00
	LV14 208-120V XLPE/PVC Cu (4C x 38mm <sup>2</sup> )		m .	20.00	0.00	0.00	12.00	240.00	28.800.00
410133	LV15 208-120V XLPE/PVC Cu (4C x 14mm <sup>2</sup> )		m	130.00	0.00	0.00	3.00	390.00	46,800.00
	208-120V Cable Terminal For Above		set	14.00	0.00	0.00	25.00	350.00	42,000.00
410135	Control Cable		LS	1.00	0.00	0.00	4,000.00	4,000.00	480,000.00
4102	PIPING								
410201	PVC Pipe Dia. 150mm		m	2,300.00	0.00	0.00	15.00	34,500.00	4,140,000.00
	PVC Pipe Dia. 100mm	·	m	400.00	0.00	0.00	11.00	4,400.00	528,000.00
410203	PVC Pipe Dia. 75mm	ļ	m	2,400.00	0.00	0.00	8.00	19,200.00	2,304,000.00
410204	PVC Pipe Dia. 50mm		m	800.00	0.00	.0.00	5.00	4,000.00	480,000.00
410205	Steel Pipe Dia. 150mm		m	1,000.00	0.00	0.00	44.00	44,000.00	5,280,000.00
410206	Steel Pipe Dia. 100mm		m	200.00	0.00	0.00	31.00	6,200.00	744,000.00
410207	Steel Pipe Dia. 75mm	-	m	1,200.00	0.00	0.00	22.00	26,400.00	3,168,000.00
410208	Steel Pipe Dia. 50mm		m	400.00	0.00	0.00	14.00	5,600.00	672,000.00
410205	Cable Support in Trench		LS	1.00	0.00	0.00	5,000.00	5,000.00	600,000.00
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 Sub Total for This Page
 22,594,200.00

 Total for Bill No. 4101
 45,101,400.00

PAY         DESCRIPTION         UNIT         QUANTITY         (Yen)         (USS)           4701         AREA LIGHTING SYSTEM         UNIT COST         AMOUNT         UNIT COST         AMOUNT           4701         AREA LIGHTING SYSTEM AND POWER OUTLET         pole         8.00         0.00         0.00         8.300.00         66,400.00           470102         Flood Light Mast 25M For 6X1000W         pole         8.00         0.00         0.00         8.300.00         66,400.00           470103         Flood Light Mast 25M For 6X1000W         pole         28.00         0.00         0.00         2.300.00         64,400.00           470104         Street Light Pole 12M For 1X250W         pole         28.00         0.00         0.00         2.100.00         42.00.00           470105         Dable Bracket         nos.         14.00         0.00         6.00         1.120.00           470105         State Porture 250W, High Pressure Sodium 1P 480V 60Hz         nos.         56.00         0.00         0.00         2.100.00         4.000.00           40108         Road Light Pixture 250W, High Pressure Sodium 1P 480V 60Hz         nos.         56.00         0.00         0.00         2.000.00         4.000.00           401020         Service Oute	OTAL AMOUI IN		LOCAL CUI	1	FOREIGN C		LINITO		
AJ AREA LIGHTING SYSTEM         pole         8.00         0.00         11,800.00         94,400.00           4J01         AREA LIGHTING SYSTEM AND POWER OUTLET         pole         8.00         0.00         0.00         11,800.00         94,400.00           4J0102         Flood Light Mast 36M For 6X1000W         pole         8.00         0.00         0.00         8.300.00         66,400.00           4J0103         Flood Light Fixture 1000W High Pressure Sodium 1P 480V 60Hz         Nos         96.00         0.00         0.00         2.300.00         66,400.00           4J0104         Street Light Pole 12M For 1X250W         pole         28.00         0.00         0.00         2.300.00         64,400.00           4J0105         Area Light Pole 12M For 2X250W         pole         2.00         0.00         0.00         2.100.00         4,200.00           4J0106         Double Bracket         nos.         14.00         0.00         0.00         1,120.00         4,000.00         1,120.00         1,120.00         1,120.00         1,120.00         1,120.00         1,120.00         1,120.00         1,000.00         2,000.00         4,000.00         4,000.00         2,000.00         4,000.00         4,000.00         1,000.00         4,000.00         1,000.00         3,000	(YEN)			/	<b></b>	QUANTITY	UNIT	DESCRIPTION	
4J0101       Flood Light Mast 36M For 6X1000W       pole       8.00       0.00       0.00       11,800.00       94,400.00         4J0102       Flood Light Mast 25M For 6X1000W       pole       8.00       0.00       0.00       8,300.00       66,400.00         4J0103       Flood Light Mast 25M For 6X1000W High Pressure Sodium 1P 480V 60Hz       Nos       96.00       0.00       0.00       400.00       38,400.00         4J0104       Street Light Pole 12M For 1X250W       pole       28.00       0.00       0.00       2,300.00       64,400.00         4J0105       Area Light Pole 12M For 2X250W       pole       2.00       0.00       0.00       2,100.00       4,200.00         4J0106       Duble Bracket       nos.       14.00       0.00       0.00       2,100.00       4,200.00         4J0105       Single Bracket       nos.       14.00       0.00       0.00       2,100.00       1,120.00         4J0106       Duble Bracket       nos.       56.00       0.00       0.00       2,000.00       4,000.00         4J0107       Single Bracket       nos.       56.00       0.00       0.00       2,000.00       4,000.00         4J0109       Lighting Panel For Steet Light       panel       2.00 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>A LIGHTING SYSTEM</td> <td></td>								A LIGHTING SYSTEM	
AUG1011 Flood Light Mast OM Flor ALION (AUGUN)       pole       R.00       0.00       0.00       8,300.00       66,400.00         4JO102       Flood Light Mast 25M For 6X1000W       pole       8.00       0.00       0.00       8,300.00       66,400.00         4JO103       Flood Light Fixture 1000W High Pressure Sodium 1P 480V 60Hz       Nos       96.00       0.00       0.00       2,300.00       64,400.00         4JO104       Street Light Pole 12M For 1X250W       pole       28.00       0.00       0.00       2,300.00       64,400.00         4JO105       Area Light Pole 12M For 2X250W       pole       2.00       0.00       0.00       2,100.00       4,200.00         4JO106       Double Bracket       nos.       14.00       0.00       0.00       40.00       1,120.00         4JO107       Single Bracket       nos.       28.00       0.00       0.00       275.00       15,400.00         4JO108       Road Light Fixture 250W, High Pressure Sodium 1P 480V 60Hz       nos.       56.00       0.00       0.00       2,000.00       4,000.00         4JO109       Lighting Panel For Steet Light       panel       2.00       0.00       0.00       2,000.00       4,000.00         4JO201       Service Outlet For Crane : 3 P									
No.s       No.s       96.00       0.00       0.00       400.00       38.400.00         4JO103       Flood Light Fixture 1000W High Pressure Sodium 1P 480V 60Hz       pole       28.00       0.00       0.00       2,300.00       64,400.00         4JO105       Area Light Pole 12M For 1X250W       pole       2.00       0.00       0.00       2,300.00       64,400.00         4JO105       Area Light Pole 12M For 2X250W       pole       2.00       0.00       0.00       2,100.00       4,200.00         4JO106       Double Bracket       nos.       14.00       0.00       0.00       80.00       1,120.00         4JO107       Single Bracket       nos.       28.00       0.00       0.00       2,000.00       40.00       1,120.00         4JO107       Single Bracket       nos.       28.00       0.00       0.00       275.00       15,400.00         4JO109       Lighting Panel For Steet Light       panel       2.00       0.00       0.00       2,000.00       4,000.00         4JO201       Service Outlet For Crane : 3 P 480V 38KW       set       3.00       0.00       0.00       1,000.00       3,000.00         4JO202       Service Outlet For Ship With 480/440V TR : 3P 440V-/3P 240V/1P 120V       set	11,328,000.0	1	· · · · · · · · · · · · · · · · · · ·				1 1		
AUO103       Fiber Digital Fixture 250W       For 1X250W       pole       28.00       0.00       0.00       2,300.00       64,400.00         4JO104       Street Light Pole 12M For 1X250W       pole       2.00       0.00       0.00       2,100.00       4,200.00         4JO106       Double Bracket       nos.       14.00       0.00       0.00       2,100.00       4,200.00         4JO107       Single Bracket       nos.       14.00       0.00       0.00       275.00       1,120.00         4JO108       Road Light Fixture 250W, High Pressure Sodium 1P 480V 60Hz       nos.       56.00       0.00       0.00       275.00       15,400.00         4JO209       Lighting Panel For Steet Light       panel       2.00       0.00       0.00       2,000.00       4,000.00         4JO201       Service Outlet For Crane : 3 P 480V 38KW       set       3.00       0.00       0.00       1,000.00       3,000.00         4JO202       Service Outlet For Ship With 480/440V TR : 3P 440V-/3P 240V/1P 120V       set       4.00       0.00       0.00       6,400.00       25,600.00	7,968,000.0	-					1 ° 1		
4JO105       Area Light Pole 12M For 2X250W       pole       2.00       0.00       0.00       2,100.00       4,200.00         4JO106       Double Bracket       nos.       14.00       0.00       0.00       80.00       1,120.00         4JO107       Single Bracket       nos.       14.00       0.00       0.00       40.00       1,120.00         4JO107       Single Bracket       nos.       28.00       0.00       0.00       275.00       1,120.00         4JO108       Road Light Fixture 250W, High Pressure Sodium 1P 480V 60Hz       nos.       56.00       0.00       0.00       2,000.00       4,000.00         4JO109       Lighting Panel For Steet Light       panel       2.00       0.00       0.00       2,000.00       4,000.00         4JO201       Service Outlet For Crane : 3 P 480V 38KW       set       3.00       0.00       0.00       1,000.00       3,000.00         4JO202       Service Outlet For Ship With 480/440V TR : 3P 440V-/3P 240V/1P 120V       set       4.00       0.00       0.00       6,400.00       25,600.00	4,608,000.0	,	1	1	L. L	1			
NO106         Double Bracket         nos.         14.00         0.00         0.00         80.00         1,120.00           NO107         Single Bracket         nos.         14.00         0.00         0.00         40.00         1,120.00           NO108         Road Light Fixture 250W, High Pressure Sodium 1P 480V 60Hz         nos.         28.00         0.00         0.00         275.00         15,400.00           NO109         Lighting Panel For Steet Light         panel         2.00         0.00         0.00         2,000.00         4,000.00           NO201         Service Outlet For Crane : 3 P 480V 38KW         set         3.00         0.00         0.00         1,000.00         3,000.00           NO202         Service Outlet For Ship With 480/440V TR : 3P 440V-/3P 240V/1P 120V         set         4.00         0.00         0.00         6,400.00         25,600.00	7,728,000.0								
NO107         Single Bracket         nos.         28.00         0.00         0.00         40.00         1,120.00           NO107         Single Bracket         nos.         28.00         0.00         0.00         275.00         15,400.00           NO109         Lighting Panel For Steet Light         panel         2.00         0.00         0.00         2,000.00         4,000.00           NO2         POWER OUTLET         set         3.00         0.00         0.00         1,000.00         3,000.00           NO201         Service Outlet For Crane : 3 P 480V 38KW         set         3.00         0.00         0.00         6,400.00         25,600.00	504,000.0								
AJO108       Road Light Fixture 250W, High Pressure Sodium 1P 480V 60Hz       nos.       56.00       0.00       0.00       275.00       15,400.00         AJO109       Lighting Panel For Steet Light       panel       2.00       0.00       0.00       2,000.00       4,000.00         AJO201       POWER OUTLET       set       3.00       0.00       0.00       1,000.00       3,000.00         AJO202       Service Outlet For Ship With 480/440V TR : 3P 440V-/3P 240V/IP 120V       set       4.00       0.00       0.00       6,400.00       25,600.00	134,400.0	1	1	,					
JJO109       Lighting Panel For Steet Light       panel       2.00       0.00       0.00       2,000.00       4,000.00         JJO2       POWER OUTLET       set       3.00       0.00       0.00       1,000.00       3,000.00         JJO201       Service Outlet For Crane : 3 P 480V 38KW       set       3.00       0.00       0.00       1,000.00       3,000.00         JJO202       Service Outlet For Ship With 480/440V TR : 3P 440V-/3P 240V/IP 120V       set       4.00       0.00       0.00       6,400.00       25,600.00	134,400.0 1,848,000.0		}				1 1		
JU02         POWER OUTLET           JJ0201         Service Outlet For Crane : 3 P 480V 38KW           JJ0201         Service Outlet For Crane : 3 P 480V 38KW           JJ0202         Service Outlet For Ship With 480/440V TR : 3P 440V-/3P 240V/1P 120V           Set         3.00           JJ0202         Service Outlet For Ship With 480/440V TR : 3P 440V-/3P 240V/1P 120V           Set         4.00           JJ0202         Service Outlet For Ship With 480/440V TR : 3P 440V-/3P 240V/1P 120V	480,000.0			1			1 1		
JO2O1         Service Outlet For Crane : 3 P 480V 38KW         set         3.00         0.00         1,000.00         3,000.00           JO2O2         Service Outlet For Ship With 480/440V TR : 3P 440V-/3P 240V/IP 120V         set         4.00         0.00         0.00         6,400.00         25,600.00	460,000.0	4,000.00	2,000.00	0.00	0.00	2.00	panel		
JO2O2 Service Outlet For Ship With 480/440V TR : 3P 440V-/3P 240V/1P 120V set 4.00 0.00 0.00 6,400.00 25,600.00	360,000.0	3 000 00	1 000 00	0.00	· · · 0.00	3.00	cot		
	3,072,000.0		· · ·				1		
	7,968,000.0	1					1 1		
	7,700,000.	00,400.00	0,000.00	0.00		0.00	301	Reefer Outlet with 480/240 V TR: SP 480 V A 8, SF 240 V A 4	JU203
	1		·						
•	46,132,800.0								

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PAY	DESCRIPTION	UNIT	QUANTITY	FOREIGN (Ye		LOCAL CU		TOTAL AMOUN
ITEM			Quintin	UNIT COST	AMOUNT	UNIT COST	AMOUNT	(YEN)
4K	FIRE ALARM SYSTEM							
	OUTDOOR							
	Fire Alarm System For Outdoor	unit	1.00	0.00	0.00	4,700.00	4,700.00	564,000.00
	BUILDINGS		1.00	0.00	0.00	10 000 00	10 000 00	1 004 000 00
	Fire Alarm Equipment And Cabling In Port Administration Building	LS	1.00	0.00	0.00	10,200.00 1,450.00	10,200.00 1,450.00	1,224,000.00
	Fire Alarm Equipment And Cabling In Container Freight Station Fire Alarm Equipment And Cabling In Maintenance And Repaire Shop	LS LS	1.00 1.00	0.00 0.00	0.00 0.00	1,430.00	1,840.00	ſ ·
	Fire Alarm Equipment And Cabling In Maintenance And Reparte Shop	LS	1.00	0.00	0.00	950.00	950.00	114,000.00
	Fire Alarm Equipment And Cabling In Cargo Gate	LS	1.00	0.00	0.00	910.00	910.00	109,200.00
	Fire Alarm Equipment And Cabling In Power Supply Station	LS	1.00	0.00	0.00	1,800.00	1,800.00	216,000.00
							otal for This Page for Bill No. 4K01	

				FOREIGN C		LOCAL CL		TOTAL AMOU
ΡΑΥ	DESCRIPTION	UNIT	QUANTITY	(Ye UNIT COST	amount	UNIT COST	S) AMOUNT	IN (YEN)
ITEM					AMOUNT		AWOUNT	
IL	TELEPHONE/DATA NETWORK							
L01	TELEPHONE AND DATA SYSTEM		1.00	0.00		29,915.00	29,915.00	3,589,800.
	Backbone Network, Structured Network	LS	1.00	0.00	0.00	(		· · ·
	Backbone Network, Labor Force/Manpower	LS	1.00	0.00	0.00	23,561.00	23,561.00	2,827,320.
	Telephone System Equipment, Totally Digital Communication Sever	LS	1.00	0.00	0.00	34,878.00	34,878.00	4,185,360
	Telephone System Equipment, Model Alcatel 4740	set	1.00	0.00	0.00	3,238.00	3,238.00	388,560.
	Telephone System Equipment, Model Alcatel 4635H	set	1.00	0.00	0.00	12,921.00	12,921.00	1,550,520.
L02	MOBILE PHONE AND VHF SYSTEM	ţ						
	Mobile Phone, 2-Channel Base Station System	unit	2.00	0.00	0.00	1,018.00	2,036.00	244,320
	VHF System, Motorola Gp Mobile Topdesk Set	unit	6.00	0.00	0.00	457.00	2,742.00	329.040
L0203	VHF System, 6-Channel Base Station System	unit	1.00	0.00	0.00	1,148.00	1,148.00	137.760
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			I			Sub T	otal for This Page	13,252,680
					·		for Bill No. 4L01	

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			FOREIGN C	· · ·	LOCAL CU		TOTAL AMOUN
PAY DESCRIPTION	UNIT	QUANTITY	(Yei	.,	(US		IN
ITEM			UNIT COST	AMOUNT	UNIT COST	AMOUNT	(YEN)
M ELECTRICAL WORK FOR BUILDING							
MOI ADMINISTRATION BUILDING							
LIGHTING					1.5.4.0.0	~~ ~~ ~~ ~~	
M0101 Type A, Fluorescent Fixture 4'X2', 3X32W, 120V Recessed In Ceiling	nos.	152.00	0.00	0.00	136.00	20,672.00	2,480,640.0
M0102 Type B, Fluorescent Fixture 2'X2', 2X22W, 120V Recessed In Ceiling	nos.	22.00	0.00	0.00	136.00	2,992.00	359,040.(
M0103 Type C, Fluorescent Downlight 2X26W, 120V	nos.	111.00	0.00	0.00	150.00	16,650.00	1,998,000.0
M0104 Type D, Fluorescent Fixture Round, 32W+40W, 120V, Surface Mounted	nos.	14.00	0.00	0.00	125.00	1,750.00	210,000.0
M0105 Type E, Incandescent 1X60W, 120V	nos.	13.00	0.00	0.00	24.00	312.00	37,440.0
M0106 Type F, Fluorescent Fixture, 4X32W, 120V, Industrial Type	nos.	11.00	0.00	0.00	127.00	1,397.00	167,640.0
M0107 Type G, Metal Halide Fixture, 100W, 120V, Wall Mounted	nos.	24.00	0.00	0.00	805.00	19,320.00	2,318,400.
M0108 Type G1, Metal Halide Fixture, 100W, 120V, Wall Mounted	nos.	20.00	0.00	0.00	805.00	16,100.00	1,932,000.
M0109 Type I, Fluorescent Fixture, 2X32W, 120V, Emergengy	nos.	12.00	0.00	0.00	230.00	2,760.00	331,200. 30,240.
M0110 Type T, Fluorescent Fixture, 1X32W, 120V, Outdoor Wall Mounted	nos.	6.00	0.00	0.00	42.00	252.00	
V10111 Exit Light	nos.	17.00	0.00	0.00	155.00	2,635.00 1,365.00	316,200. 163,800.
M0112 Single Switch	nos.	91.00	0.00	0.00	15.00 17.00	221.00	25,520
M0113 Double Switch	nos.	13.00 15.00	0.00	0.00	12.00	180.00	23,520.
M0114 Switch, Piping & Box Only	nos.	1 1		i		117.00	14,040.
M0115 Junction Box (120V)	nos.	9.00	0.00	0.00	13.00	117.00	14,040.
OUTLETS		100.00			15.00	0.950.00	343.000
M0116 Duplex Receptacle 120V	nos.	190.00	0.00	0.00	15.00	2,850.00	342,000.
M0117 Duplex Receptacle Industrial Type 120V	nos.	24.00	0.00	0.00	17.00	408.00	48,960.
M0118 Single Receptacle 120V For Hand Dryer	nos.	13.00	0.00	0.00	15.00	195.00	23,400.
M0119 Single Floor Receptacle 120V	nos.	5.00	0.00	0.00	63.00	315.00	37,800.
M0120 Weather Proof Receptacle 120V	nos.	6.00	0.00	0.00	21.00	126.00	15,120.
M0121 120V Junction Box Concealed In Ceiling	nos.	9.00	0.00	0.00	13.00	117.00	14,040.
M0122 Connection For Fan Coil Unit 120V 1 Phase, Concealed In Ceiling	nos.	56.00	0.00	0.00	13.00	728.00	87,360.
M0123 Connection For Exhaust Fan, 120V 1 Phase, Concealed In Ceiling	nos.	15.00	0.00	0.00	13.00	195.00	23,400.
M0124 Connection For Chiller 480V-3 Phase	nos.	2.00	0.00	0.00	475.00	950.00	114,000.
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1					50D 1	otal for This Page	11,112,840.

4M-1

1				FOREIGN (				TOTAL AMOUN
PAY	DESCRIPTION	UNIT	QUANTITY	(Y		(=	SS)	IN
ITEM				UNIT COST	AMOUNT	UNIT COST	AMOUNT	(YEN)
	JTLETS				0		0.55.60	
	nnection For A/C Pump 480V-3 Phase	nos.	2.00	0.00	0.00	475.00	950.00	114,000.
	nnection For Air Handling Unit, 480V-3 Phase	nos.	4.00	0.00	0.00	325.00	1,300.00	156,000.
M0127 Cor	nnection For Elevator, 480V-3 Phase	no.	1.00	0.00	0.00	490.00	490.00	58,800.
M0128 Con	nnection For Firefighting Pump, 480V-3 Phase	no.	1.00	0.00	0.00	340.00	340.00	40,800.
	ABLING/PIPING							
M0129 Cab	ble PVC 2.1 mm <sup>2</sup>	m ·	3,440.00	0.00	0.00	0.11	378.40	45,408.
M0130 Cab	ble PVC 3.3 mm <sup>2</sup>	m	3,460.00	0.00	0.00	0.15	519.00	62,280.
M0131 Cat	ble PVC 5.3 mm <sup>2</sup>	m ·	5,385.00	0.00	0.00	0.25	1,346.25	161,550
M0132 Cab	ble PVC 8.4 mm <sup>2</sup>	m	40.00	0.00	0.00	0.44	17.60	2,112
M0133 Pip	e PVC Dia. 13 mm	m	2,425.00	. 0.00	0.00	1.75	4,243.75	509,250
	e PVC Dia. 19 mm	m	2,770.00	0.00	0.00	1.90	5,263.00	631,560
	THERS							
	ansformer, Dry Type, 500 Kva, 480V/208-120V	no.	1.00	0.00	0.00	8,000.00	8,000.00	960,000
	nelboard TG	no.	1.00	0.00	0.00	4,800.00	4,800.00	576,000
	nelboard ST-C	no.	1.00	0.00	0.00	1,800.00	1,800.00	216,000
	neiboard ST-AAN	no.	1.00	0.00	0.00	1,800.00	1,800.00	216,000
	nelboard ST-AAE	no.	1.00	0.00	0.00	375.00	375.00	45,000
	nelboard ST-Al	no.	1.00	0.00	0.00	600.00	600.00	72,000
	helboard ST-A2	по.	1.00	0.00	0.00	600.00	600.00	72,000
	helboard ST-A2	no.	1.00	0.00	0.00	600.00	600.00	72.000
	helboard ST-AS	no.	1.00	0.00	0.00	375.00	375.00	45,000
	helboard ST-AA	no.	1.00	0.00	0.00	375.00	375.00	45.000
	helboard ST-A6	по.	1.00	0.00	0.00	375.00	375.00	45,000
	helboard ST-AA1	no.	1.00	0.00	0.00	410.00	410.00	49,200
	helboard ST-AA2	no.	1.00	0.00	0.00	375.00	375.00	45,000
	helboard ST-AA3	no.	1.00	0.00	0.00	410.00	410.00	49,200
	helboard ST-AA5	no.	1.00	0.00	0.00	410.00	410.00	49,200
			1.00	0.00	0.00	2,725.00	2,725.00	327,000
	tive Lightning Terminal W/Fitting And Lightning Strike Counter	no.	45.00	0.00	0.00	4.00	180.00	21,600
1	lvanized Steel Down Conductor (Dia 8 mm)	m				290.00	290.00	34,800
	amps, Fitting Hardware	LS	1.00	0.00	0.00			
40153 Ligi	htning System Grounding (Ground Rods, Clamps, Conductor)	LS	1.00	0.00	0.00	230.00	230.00	27,600
		Ll				C.L.	otal for This Page	4,749,360

4M-2

PAY DESCRIPTION	UNIT	QUANTITY	(Y	CURRENCY	LOCAL CU		TOTAL AMOUN IN
ITEM			UNIT COST	AMOUNT	UNIT COST	AMOUNT	(YEN)
M ELECTRICAL WORK FOR BUILDING							
M02 CONTAINER FREIGHT STATION							· ·
LIGHTING							
M0201 Type A, Fluorescent Fixture 4'X2', 3X32W 120V Recessed In Ceiling	nos.	16.00	0.00	0.00	136.00	2,176.00	261,120.0
M0202 Type F, Fluorescent Fixture 4X32W, 120V, Industrial Type	nos.	19.00	0.00	0.00	157.00	2,983.00	357,960.0
M0203 Type N1, High Pressure Sodium Fixture, 150W 208V Low Bay Industrial	nos.	14.00	0.00	0.00	212.00	2,968.00	356,160.0
M0204 Type M, Metal Halide Fixture, 400W 208V High Bay Industrial	nos.	14.00	0.00	0.00	190.00	2,660.00	319,200.0
M0205 Exit Light	nos.	2.00	0.00	0.00	295.00	590.00	70,800.0
M0206 Single Switch	nos.	4.00	0.00	0.00	15.00	60.00	7,200.0
M0207 Single Switch Industrial	nos.	7.00	0.00	0.00	17.00	. 119.00	14,280.0
M0208 2 Pole 240V Switch	nos.	5.00	0.00.	0.00	19.00	95.00	11,400.0
OUTLETS		Í					
M0209 Duplex Receptacle 120V	nos.	16.00	0.00	0.00	15.00	240.00	28,800.0
M0210 Duplex Receptacle Industrial, 120∨	nos.	20.00	0.00	0.00	17.00	340.00	40,800.0
M0211 Single Receptacle 120V For Hand Dryer	nos.	2.00	0.00	0.00	15.00	30.00	3,600.0
M0212 Connection For Exhaust Fan, 120V 1 Phase, Concealed In Ceiling	nos.	3.00	0.00	0.00	13.00	39.00	4,680.0
M0213 Connection For Fork Lift Battery Charger, 120V, 1 Phase	nos.	4.00	0.00	0.00	24.00	96.00	11,520.0
M0214 Connection For Air Conditioning Unit, 208V, 1 Phase	nos.	4.00	0.00	0.00	21.00	84.00	10,080.0
M0215 Connection For Weigh Bridge, 208V, 1 Phase	no.	1.00	0.00	0.00	21.00	21.00	2,520.0
M0216 Connection For Roll Up Door, 208V, 1 Phase	nos.	16.00	0.00	0.00	21.00	336.00	40,320.0
M0217 Connection For Wastewater Treatment Facility No 2, 208V, 3 Phase	no.	1.00	0.00	0.00	390.00	390.00	46,800.0
					Sub T	otal for This Page	1,587,240.0

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DIX		TINET		FOREIGN C	ľ	LOCAL CU		TOTAL AMOUN IN
PAY ITEM	DESCRIPTION	UNIT	QUANTITY	(Ye UNIT COST	AMOUNT	UNIT COST	AMOUNT	(YEN)
	CABLING/PIPING					ĺ		1
4M0218	Cable PVC 2.1 mm <sup>2</sup>	m	750.00	0.00	0.00	0.11	82.50	9,900.00
4M0219	Cable PVC 3.3 mm <sup>2</sup>	m	2,500.00	0.00	0.00	. 0.15	375.00	45,000.00
4M0220	Cable PVC 5.3 mm <sup>2</sup>	m	2,900.00	0.00	0.00	0.25	725.00	87,000.00
4M0221	Cable PVC 8.4 mm <sup>2</sup>	m	380.00	0.00	0.00	0.44	167.20	20,064.00
4M0222	Pipe PVC Dia. 13 mm	m	270.00	0.00	0.00	1.75	472.50	56,700.00
4M0223	Pipe PVC Dia. 19 mm	m	300.00	. 0.00	0.00	1.90	570.00	68,400.00
4M0224	Pipe EMT Dia. 13 mm	m	440.00	0.00	0.00	2.80	1,232.00	147,840.00
4M0225	Pipe EMT Dia. 19 mm	m	200.00	0.00	0.00	4.00	800.00	96.000.00
4M0226	Pipe EMT Dia. 51 mm	[ m	200.00	0.00	0.00	13.50	2,700.00	324,000.00
	OTHERS					19 - A.		
4M0227	Transformer, Dry Type, 300 Kva, 480V/208-120V	no.	- 1.00	0.00	0.00	8,000.00	8,000.00	960,000.00
4M0228	Panelboard TG-CFS	no.	. 1.00	0.00	0.00	1,800.00	1,800.00	216,000.00
4M0229	Panelboard T-CFS	по.	. 1.00	0.00	0.00	1,240.00	1,240.00	148,800.00
4M0230	Panelboard ST-CFS	no.	1.00	0.00	0.00	600.00	600.00	72,000.00
4M0231	Panelboard ST-RD	no.	1.00	0.00	0.00	600.00	600.00	72,000.00
4M0232	Active Lightning Terminal W/Fitting And Lightning Strike Counter	no.	1.00	0.00	0.00	2,725.00	2,725.00	327,000.00
4M0233	Galvanized Steel Down Conductor (Dia 8 mm)	m	80.00	0.00	0.00	4.00	320.00	38,400.00
4M0234	Clamps, Fitting Hardware	LS	1.00	0.00	0.00	512.00	512.00	61,440.00
IM0235	Lightning System Grounding (Ground Rods, Clamps, Conductor)	LS	2.00	0.00	0.00	230.00	460.00	55,200.00
d			I	í	<u>I</u>	Sub T	otal for This Page	2,805.744.00

4M-4 ·

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PAY DESCRIPTION	UNIT	QUANTITY	FOREIGN ( (Ye		LOCAL CU		TOTAL AMOUN IN
ITEM		QUANTIT	UNIT COST	AMOUNT	UNIT COST	AMOUNT	(YEN)
4M ELECTRICAL WORK FOR BUILDING	1						
4M03 MAINTENANCE AND REPAIR SHOP		<u>n</u>					
LIGHTING					į		l
4M0301 Type A, Fluorescent Fixture 4'X2', 3X32W 120V Recessed In Ceiling	nos.	16.00	0.00	0.00	136.00	2,176.00	261,120.00
4M0302 Type F, Fluorescent Fixture 4X32W, 120V, Industrial Type	nos.	5.00	0.00	0.00	157.00	785.00	94,200.00
4M0303 Type L, Fluorescent Fixture 4X32W, 120V, Wrap-Around, Surface Mounted	nos.	5.00	0.00	0.00	144.00	720.00	86,400.00
4M0304 Type J, Fluorescent Fixture 2X32W, 120V, Rought Use, Angle Mounted	nos.	10.00	0.00	0.00	517.00	5,170.00	620,400.00
4M0305 Type N1, High Pressure Sodium Fixture, 150W 208V Low Bay Industrial	nos.	14.00	0.00	0.00	212.00	2,968.00	356,160.00
4M0306 Type M, Metal Halide Fixture, 400W 208V High Bay Industrial	nos.	21.00	0.00	0.00	190.00	3,990.00	478,800.00
4M0307 Exit Light	nos.	2.00	0.00	0.00	295.00	590.00	70,800.00
4M0308 Single Switch	nos.	4.00	0.00	0.00	15.00	60.00	7,200.00
4M0309 Single Switch Industrial	nos.	7.00	0.00	0.00	17.00	119.00	14,280.00
4M0310 2 Pole 240V Switch	nos.	6.00	0.00	0.00	19.00	114.00	13.680.00
OUTLETS				• • • •			
4M0311 Duplex Receptacle 120V	nos.	13.00	0.00	0.00	15.00	195.00	23,400.00
4M0312 Duplex Receptacle Industrial, 120V	nos.	13.00	0.00	0.00	17.00	221.00	26,520.00
4M0313 Weather Proof Receptacle, 120V	nos.	4.00	0.00	0.00	21.00	84.00	10,080.00
4M0314 Single Receptacle 120V For Hand Dryer	nos.	2.00	0.00	0.00	15.00	30.00	3,600.00
4M0315 Connection For Exhaust Fan, 120V 1 Phase, Concealed In Ceiling	nos.	2.00	0.00	0.00	13.00	26.00	3,120.00
4M0316 Connection For Air Conditioning Unit, 208V, 1 Phase	nos.	3.00	0.00	0.00	21.00	63.00	7,560.00
4M0317 Connection For Roll Up Door, 208V, 1 Phase	nos.	6.00	0.00	0.00	21.00	126.00	15,120.00
4M0318 Connection For Travelling Crane, 208V, 3 Phase	no.	1.00	0.00	0.00	375.00	375.00	45,000.00
4M0319 208V. 1 Phase Outlet	nos.	8.00	0.00	0.00	38.00	304.00	36,480.00
4M0320 208V, 3 Phase Outlet	nos.	4.00	0.00	0.00	70.00	280.00	33,600.00
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				· · · · · ·	Sub T	otal for This Page	2,207,520.00

4M-5

PAY DESCRIPTION	UNIT	QUANTITY	FOREIGN C (Ye		LOCAL CU (US		TOTAL AMOUN
ITEM			UNIT COST	AMOUNT	UNIT COST	AMOUNT	(YEN)
CABLING/PIPING							1
4M0321 Cable PVC 2.1 mm <sup>2</sup>	m	665.00	0.00 [	0.00	0.11	73.15	8,778.00
4M0322 Cabe PVC 3.3 mm <sup>2</sup>	m	2,350.00	0.00	0.00	0.15	352.50	42,300.00
4M0323 Cable PVC 5.3 mm <sup>4</sup>	m	3,625.00	0.00	0.00	0.25	906.25	108,750.00
4M0324 Cable PVC 8.4 mm <sup>2</sup>	m	730.00	0.00	0.00	0.44	321.20	38,544.00
4M0325 Cable PVC 13.2 mm <sup>2</sup>	m	1,280.00	0.00	- 0.00	0.70	896.00	107,520.00
M0326 Cable PVC 85 mm <sup>2</sup>	m	120.00	0.00	0.00	4.30	516.00	61,920.00
M0327 Pipe PVC Dia. 13 mm	m	240.00	0.00	0.00	1.75	420.00	50,400.00
M0328 Pipe PVC Dia. 19 mm	m	200.00	0.00	0.00	1.90	380.00	45,600.00
M0329 Pipe EMT Dia. 13 mm	m	230.00	0.00	0.00	2.80	644.00	77,280.00
M0330 Pipe EMT Dia. 19 mm	m	1,040.00	0.00	0.00	4.00	4,160.00	499,200.00
M0331 Pipe EMT Dia. 25 mm	m	790.00	0.00	0.00	6.80	5,372.00	644,640.00
M0332 Pipe EMT Dia. 51 mm	m	30.00	0.00	0.00	13.50	405.00	48,600.00
OTHERS			ł				
M0333 Panelboard TG-MRS	no.	1.00	0.00	0.00	1,800.00	1,800.00	216,000.00
M0334 Panelboard T-MRS	no.	1.00	0.00	0.00	1,240.00	1,240.00	148,800.00
M0335 Panelboard ST-MRS	no.	1.00	0.00	0.00	600.00	600.00	72,000.00
M0336 Panelboard ST-MRS2	no.	1.00	0.00	0.00	600.00	600.00	72,000.00
M0337 Active Lightning Terminal W/Fitting And Lightning Strike Counter	по.	1.00	0.00	0.00	2,725.00	2,725.00	327,000.00
M0338 Galvanized Steel Down Conductor (Dia 8 mm)	m	80.00	0.00	0.00	4.00	320.00	38,400.00
M0339 Clamps, Fitting Hardware	LS	1.00	0.00	0.00	512.00	512.00	61,440.00
M0340 Lightning System Grounding (Ground Rods, Clamps, Conductor)	LS	2.00	0.00	0.00	230.00	460.00	55,200.00
					Sub To	tal for This Page	2,724,372.00

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		10.05		FOREIGN C	1	LOCAL CU		TOTAL AMOUN
PAY	DESCRIPTION	UNIT	QUANTITY	(Yo UNIT COST	AMOUNT	UNIT COST	AMOUNT	IN (YEN)
ITEM	I ECTRICAL WORK FOR BUILDING	ł		0111 0001				(11,7)
M04	CONTAINER GATE							
11104								
34040	Type L. Fluorescent Fixture 4X32W, 120V, Wrap-Around, Surface Mounted	nos.	12.00	0.00	0.00	144.00	1,728.00	207,360.
	Type L1, Fluorescent Fixture 3X32W, 120V, Wrap-Around, Surface Mounted	nos.	12.00	0.00	0.00	142.00	1,704.00	204,480.
	Type Q, Metal Halide Fixture, 400W 208V High Mast	nos.	12.00	0.00	0.00	325.00	5.850.00	702.000.
	Single Switch	nos.	10.00	0.00	0.00	15.00	150.00	18,000.
	2 Pole 240V Switch	nos.	3.00	0.00	0.00	19.00	57.00	6.840.
	Connection For Sign Light, 120V 1 Phase, Concealed In Ceiling	nos.	12.00	0.00	0.00	13.00	156.00	18,720.
	OUTLETS							
M0401	Duplex Receptacle 120V	nos.	26.00	0.00	0.00	15.00	390.00	46,800.
	120V Junction Box Concealed In Floor	nos.	12.00	0.00	0.00	15.00	180.00	21,600.
	Connection For Air Conditioning Unit, 208V, 1 Phase	поз.	10.00	0.00	0.00	21.00	210.00	25,200.
	Connection For Weigh Bridge, 208V, 1 Phase	nos.	2.00	0.00	0.00	21.00	42.00	5,040
	CABLING/PIPING							
M041	Cable PVC 2.1 mm <sup>2</sup>	m	350.00	0.00	0.00	0.11	38.50	4,620.
	Cable PVC 3.3 mm <sup>4</sup>	m	1,020,00	0.00	0.00	0.15	153.00	18,360.
	Cable PVC 5.3 mm <sup>2</sup>	m	810.00	0.00	0.00	0.25	202.50	24,300.
M0414	Cable PVC 8.4 mm <sup>2</sup>	m	520.00	0.00	0.00	0.44	228.80	27,456.
	Pipe PVC Dia, 13 mm	m	240.00	0.00	0.00	1.75	420.00	50,400.
	Pipe PVC Dia. 19 mm	m	465.00	. 0.00	0.00	1.90	883.50	106,020.
M041	Pipe EMT Dia. 13 mm	m	1,110.00	0.00	0.00	2.80	3,108.00	372,960.
M0418	Pipe EMT Dia. 19 mm	m	280.00	0.00	0.00	4.00	1,120.00	134,400.
M0419	Pipe EMT Dia. 25 mm	m	280.00	0.00	0.00	6.80	1,904.00	228,480.
	OTHERS				1			
M0420	Panelboard T-CG	no.	1.00	0.00	0.00	8.90	8.90	1,068.
M0421	Panelboard ST-CG	no.	1.00	0.00	0.00	600.00	600.00	72,000
M0422	Active Lightning Terminal W/Fitting And Lightning Strike Counter	no.	1.00	0.00	0.00	2,725.00	2,725.00	327,000.
M0423	Galvanized Steel Down Conductor (Dia 8 mm)	m	60.00	0.00	0.00	4.00	240.00	28,800.
	Clamps, Fitting Hardware	LS	1.00	0.00	0.00	390.00	390.00	46.800
M042:	Lightning System Grounding (Ground Rods, Clamps, Conductor)	LS	1.00	0.00	0.00	230.00	230.00	27,600.
	L				1	Sub T	otal for This Page	2,726,304

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#### SECTION 4M ELECTRICAL WORK FOR BUILDING

			FOREIGN C	URRENCY	LOCAL CL	JRRENCY	TOTAL AMOUN
PAY DESCRIPTION	UNIT	QUANTITY	(Ye		(US		IN
ITEM			UNIT COST	AMOUNT	UNIT COST	AMOUNT	(YEN)
4M ELECTRICAL WORK FOR BUILDING							
IM05 CARGO GATE					]		
LIGHTING							
4M0501 Type L, Fluorescent Fixture 4X32W, 120V, Wrap-Around, Surface Mounted	nos.	12.00	0.00	0.00	144.00	1,728.00	207,360.0
4M0502 Type L1, Fluorescent Fixture 3X32W, 120V, Wrap-Around, Surface Mounted	nos.	4.00	0.00	0.00	142.00	568.00	68,160.0
M0503 Type Q, Metal Halide Fixture, 400W 208V High Mast	nos.	9.00	0.00	0.00	325.00	2,925.00	351,000.0
4M0504 Single Switch	nos.	6.00	0.00	0.00	15.00	90.00	10,800.0
M05052 Pole 240V Switch	nos.	3.00	0.00	0.00	19.00	57.00	6,840.0
4M0506 Connection For Sign Light, 120V 1 Phase, Concealed In Ceiling	nos.	6.00	0.00	0.00	13.00	78.00	9.360.0
OUTLETS	1		i i i			•	
4M0507 Duplex Receptacle 120V	nos.	18.00	0.00	0.00	15.00	270.00	32,400.0
M0508 120V Junction Box Concealed In Floor	nos.	6.00	0.00	0.00	15.00	90.00	10,800.0
M0509 Connection For Air Conditioning Unit, 208V, 1 Phase	nos.	6.00	0.00	0.00	21.00	126.00	15,120.0
M0510 Connection For Weigh Bridge, 208V, 1 Phase	nos.	2.00	0.00	0.00	21.00	42.00	5,040.0
CABLING/PIPING							
4M0511 Cable PVC 2.1 mm <sup>2</sup>	m	205.00	0.00	0.00	0.11	22.55	2.706.0
4M0512 Cable PVC 3.3 mm <sup>2</sup>	m	515.00	0.00	0.00	0.15	77.25	9,270.0
M0513 Cable PVC 5.3 mm <sup>2</sup>	m	510.00	0.00	0.00	0.25	127.50	15.300.0
4M0514 Cable PVC 8.4 mm <sup>2</sup>	m	260.00	0.00	0.00	0.44	114.40	13,728,0
4M0515 Pipe PVC Dia. 13 mm	m	100.00	0.00	0.00	1.75	175.00	21,000.0
4M0516 Pipe PVC Dia. 19 mm	m	260.00	0.00	0.00	1.90	494.00	59,280.0
IM0517 Pipe EMT Dia. 13 mm	m	55.00	0.00	0.00	2.80	154.00	18,480.0
M0518 Pipe EMT Dia. 19 mm	m	200.00	0.00	0.00	4.00	800.00	96.000.0
M0519 Pipe EMT Dia. 25 mm	m	130.00	0.00	0.00	6.80	884.00	106.080.0
OTHERS							
M0520 Panelboard T-CAG	no.	1.00	0.00	0.00	890.00	890.00	106.800.0
M0521 Panelboard ST-CAG	no.	1.00	0.00	0.00	600.00	600.00	72,000.0
M0522 Active Lightning Terminal W/Fitting And Lightning Strike Counter	по.	1.00	0.00	0.00	2,725.00	2,725.00	327,000.0
M0523 Galvanized Steel Down Conductor (Dia 8 mm)	m	60.00	0.00	0.00	4.00	240.00	28,800.0
M0524 Clamps, Fitting Hardware	LS	1.00	0.00	0.00	390.00	390.00	46,800.0
M0525 Lightning System Grounding (Ground Rods, Clamps, Conductor)	LS	2.00	0.00	0.00	230.00	460.00	55,200.
	<b>~</b>	2.00	0.00		220.00		55,200.0
	1	i	I		Sub T	otal for This Page	1,695,324.0

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PAY ITEM	DESCRIPTION	UNIT	QUANTITY	FOREIGN CURRENCY (Yen)		LOCAL CURRENCY (US\$)		TOTAL AMOUN IN
				UNIT COST	AMOUNT	UNITCOST	AMOUNT	(YEN)
	CTRICAL WORK FOR BUILDING	1						{
M06	POWER SUPPLY STATION							
	LIGHTING			•				
M0601	Type L, Fluorescent Fixture 4X32W, 120V, Wrap-Around, Surface Mounted	nos.	3.00	0.00	0.00	144.00	432.00	51,840.0
M0602	Type L1, Fluorescent Fixture 3X32W, 120V, Wrap-Around, Surface Mounted	no.	1.00	0.00	0.00	142.00	142.00	17,040.0
M0603	Type N1, Hps Fixture, 150W, 208V	nos.	7.00	0.00	0.00	212.00	1,484.00	178,080.0
M0604	Type R, Metal Halide Fixture, 250W 208V	nos.	14.00	0.00	0.00	287.00	4,018.00	482,160.0
M0605	Exit Light	nos.	2.00	0.00	0.00	295.00	590.00	70,800.0
	Single Switch	nos.	2.00	0.00	0.00	15.00	30.00	3,600.0
	2 Pole 240V Switch	nos.	5.00	0.00	0.00	19.00	95.00	11,400.
	OUTLETS							
M0608	Duplex Receptacle 120V, Industrial Type	nos.	9.00	0.00	0.00	17.00	153.00	18,360.
M0609	Connection For Exhaust Fan, 120V 1 Phase, Concealed In Ceiling	nos.	5.00	0.00	0.00	19.00	95.00	I 1,400.
	CABLING/PIPING							
M0610	Cable PVC 2.1 mm <sup>4</sup>	m	60.00	0.00	0.00	0.11	6.60	792.
	Cable PVC 3.3 mm <sup>2</sup>	m	250.00	0.00	0.00	0.15	37.50	4.500.
M0612	Cable PVC 5.3 mm <sup>e</sup>	m	220.00	0.00	0.00	0.25	55.00	6,600.
M0613	Pipe EMT Dia. 13 mm	m	40.00	0.00	0.00	2.80	112.00	13,440.
M0614	Pipe EMT Dia. 19 mm	m	150.00	0.00	0.00	4.00	600.00	72,000.
	OTHERS							
M0615	Panelboard T-Pps	no.	1.00	0.00	0.00	600.00	600.00	72,000.
	Active Lightning Terminal W/Fitting And Lightning Strike Counter	no.	1.00	0.00	0.00	2,725.00	2,725.00	327,000.
M0617	Galvanized Steel Down Conductor (Dia 8 mm)	m	50.00	0.00	0.00	4.00	200.00	24,000.
	Clamps, Fitting Hardware	LS	1.00	0.00	0.00	320.00	320.00	38,400.
M0619	Lightning System Grounding (Ground Rods, Clamps, Conductor)	LS	1.00	0.00	0.00	230.00	230.00	27,600.
·,	<u> </u>	<u>t</u>	1			Sub 1	otal for This Page	1,431,012.
						Tatal	for Bill No. 4M61	21 (120 716

Total for Bill No. 4M01 31,039,716.00

FOREIGN CURRENCY LOCAL CURRENCY TOTAL AMOUNT DESCRIPTION (US\$) IN UNIT QUANTITY (Yen) PAY UNIT COST (YEN) AMOUNT UNIT COST AMOUNT ITEM 4N MISCELLANEUOS EQUIPMENT Fuel Supply 1.00 0.00 0.00 28,000.00 28,000.00 3,360,000.00 4N01 set 7,668,000.00 4N02 Elevator 63,900.00 63,900.00 set 1.00 0.00 0.00 8,361,600.00 4N03 Overhead Crane 1.00 0.00 0.00 69,680.00 69,680.00 set 4N04 Weighing Bridge 6,800,000.00 27,200,000.00 0.00 27,200,000.00 4.00 0.00 set 4N05 Weigh Scale 0.00 2,038,800.00 1.00 0.00 16,900.00 16,990.00 set Sub Total for This Page 48,628,400.00 Total for Bill No 4N01 48,628,400.00

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