

4. Breakdown of Direct Cost

Part A Facilities for the Engineer

A(1)a Provision of Combined Field Office/Laboratory Bldg. and Living Quarter

Unit: 1.00 L.S.

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W3001	Site Preparation for Engineer's Field Office and Living Quarters	m2	1,800.00	1.5%	8.2%	90.3%	54.4%	45.6%	2.53	68.31	373.43	4,112.26	2,477.48	2,076.52	4,554.00	
W0105	Excavation, Backhoe 0.61m3	m3	181.28	4.4%	8.4%	87.2%	52.9%	47.1%	40.90	326.23	622.81	6,465.31	3,920.61	3,493.74	7,414.35	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	52.77	8.1%	14.9%	77.1%	51.5%	48.5%	93.00	399.72	724.01	3,783.88	2,526.14	2,381.47	4,907.61	
W0132	Backfill H	m3	128.51	7.7%	10.0%	82.3%	51.3%	48.7%	111.00	1,091.51	1,428.48	11,744.62	7,313.52	6,951.09	14,264.61	
W0161	Gravel Foundation Fill	m3	59.98	24.8%	13.1%	62.1%	39.0%	61.0%	390.00	5,806.67	3,057.75	14,527.78	9,119.01	14,273.19	23,392.20	
W0203	Concrete (Class A, 21MPa, max agg. 38mm)	m3	16.93	2.5%	79.7%	17.7%	56.7%	43.3%	1,630.00	701.31	22,000.54	4,894.05	15,645.26	11,950.64	27,595.90	
W0202	Concrete (Class B, 17MPa, max agg. 50mm)	m3	54.00	3.0%	75.5%	21.5%	56.1%	43.9%	1,400.00	2,281.45	57,091.46	16,227.68	42,404.79	33,195.21	75,600.00	
W0232	Concrete Pouring by Pump Vehicle (reinforced concrete)	m3	70.93	15.5%	0.2%	84.3%	45.2%	54.8%	257.00	2,831.93	35.74	15,361.34	8,232.16	9,996.85	18,229.01	
W0237	Concrete Curing (reinforced concrete)	m3	70.93	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	222.85	22.73	53.04	41.67	256.95	298.62	
W0241	Formwork (reinforced concrete K4m)	m2	138.16	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	18,347.75	12,357.36	242.73	903.07	30,044.77	30,947.84	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	2,584.50	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	9,145.34	46,371.76	4,701.75	32,515.13	27,703.72	60,218.85	
W3002	150mm Thick Concrete Hollow Block Wall	m2	116.00	12.5%	84.4%	3.0%	36.5%	63.5%	331.00	4,808.10	32,420.08	1,167.82	14,011.30	24,384.70	38,396.00	
W3002a	100mm Thick Concrete Hollow Block Wall	m2	44.88	13.6%	83.1%	3.4%	37.4%	62.6%	305.00	1,859.54	11,369.40	459.46	5,125.11	8,563.29	13,688.40	
W3003	Structural Steel Fabrication and Erection for Engineers Office and Living Quarter	t	21.31	7.6%	66.3%	26.1%	60.1%	38.9%	39,600.00	64,252.57	559,732.57	219,890.86	507,230.38	336,645.62	843,876.00	
W3004	Prepainted Corrugated G.I. Roofing Fabrication & Erection	m2	526.19	8.2%	79.6%	12.2%	54.4%	45.6%	160.00	6,897.62	87,021.40	10,271.38	45,784.39	38,406.01	84,190.40	
W3005	Prepainted Steel Wall Panels on Steel Frames with Insulation	m2	150.27	2.5%	92.9%	4.6%	62.1%	37.9%	628.00	2,337.00	87,715.93	4,316.63	58,624.05	35,746.51	94,369.56	
W3006	Prepainted Steel Wall Partitions on Steel Frames with Insulation (Double Walling)	m2	152.31	2.5%	92.9%	4.6%	62.1%	37.9%	624.00	2,369.17	88,299.31	4,372.96	59,055.05	35,986.39	95,041.44	
W3007	Plain Cement Floor Finish	m2	312.00	7.6%	85.6%	6.9%	54.3%	45.7%	63.20	1,497.48	16,870.12	1,350.79	10,712.45	9,085.95	19,718.40	
W3008	Plain Cement Floor Finish with non skid cement with groove lines	m2	204.00	8.0%	85.1%	6.8%	54.1%	45.9%	63.50	1,042.69	11,026.64	884.67	7,002.76	5,951.24	12,954.00	
W3009	Un glazed Tile Finish (8" x 8")	m2	24.00	1.6%	97.9%	0.5%	60.2%	39.8%	589.00	233.07	13,832.95	69.98	8,514.82	5,621.18	14,136.00	
W3010	Gypsum Board Ceiling	m2	336.00	1.6%	97.9%	0.5%	60.2%	39.8%	351.00	1,944.46	115,407.70	583.84	71,038.71	46,897.29	117,936.00	
W3013	Doors & Windows for Engineer's Field Office and Living Quarters	L.S.	1.00	5.2%	90.7%	4.1%	41.3%	58.7%	355,000.00	18,636.48	321,979.49	14,384.02	146,761.79	208,238.21	355,000.00	
W3014	Lighting and Powers	L.S.	1.00	5.0%	93.5%	1.5%	56.6%	43.4%	138,000.00	6,913.31	129,057.28	2,029.41	78,158.91	59,841.09	138,000.00	
W3015	Sewer Water Line	L.S.	1.00	4.4%	94.9%	0.7%	49.8%	50.2%	115,000.00	5,106.03	109,096.94	797.03	57,252.15	57,747.85	115,000.00	
W3016	Septic Tank	each	1.00	14.3%	63.6%	22.0%	44.2%	55.8%	20,700.00	2,968.28	13,171.89	4,559.83	9,146.09	11,553.91	20,700.00	
W3017	Cyclone Fence and Gate for the Engineer's Office	m	40.00	3.2%	93.2%	3.6%	49.1%	50.9%	1,840.00	2,350.85	68,601.50	2,647.66	36,133.88	37,466.12	73,600.00	
W3018	Barbed Wire Fence for the Engineer's Office	m	130.00	5.4%	92.8%	1.7%	14.7%	85.3%	127.00	895.76	15,325.71	288.52	2,418.94	14,091.06	16,510.00	
W3019	Temporary Office Rental	month	3.00	0.0%	0.0%	100.0%	15.0%	85.0%	18,000.00	0.00	0.00	54,000.00	8,100.00	45,900.00	54,000.00	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										165,335.48	1,805,014.99	404,188.72	1,250,169.61	1,124,369.58	2,374,539.19	
Components (%)										7.0%	76.0%	17.0%	52.6%	47.4%	100.0%	
Unit Rate			L.S.							165,019.43	1,801,564.51	403,416.06	1,247,779.78	1,122,220.22	2,370,000.00	

A(1)b Maintenance of Field Office/Laboratory Bldg. and Living Quarter

Unit: 1.00 month

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L020	Unskilled Labor	md	122.50	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	38,465.00	0.00	0.00	0.00	38,465.00	38,465.00	
L020	Unskilled Labor	md	50.00	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	15,700.00	0.00	0.00	0.00	15,700.00	15,700.00	
L019	Skilled Labor	md	25.00	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	10,075.00	0.00	0.00	0.00	10,075.00	10,075.00	
L020	Unskilled Labor	md	25.00	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	7,850.00	0.00	0.00	0.00	7,850.00	7,850.00	
MO1009	Electric Supply	kWh	2,269.00	0.0%	100.0%	0.0%	50.0%	50.0%	4.00	0.00	8,800.00	0.00	4,400.00	4,400.00	8,800.00	
MO1010	Water Supply	m3	20.00	0.0%	100.0%	0.0%	10.0%	90.0%	66.20	0.00	1,324.00	0.00	132.40	1,191.60	1,324.00	
MO1020	Propane Gas	kg	25.00	0.0%	100.0%	0.0%	50.0%	50.0%	32.60	0.00	815.00	0.00	407.50	407.50	815.00	
W3101	Miscellaneous For Office & Living Quarter Maintenance	month	1.00	0.0%	85.9%	14.1%	34.4%	65.6%	1,010.00	0.00	867.95	142.05	347.41	662.59	1,010.00	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										72,090.00	11,806.95	142.05	5,287.31	78,751.69	84,038.00	
Components (%)										85.8%	14.0%	0.2%	6.3%	93.7%	100.0%	
Unit Rate			month							72,056.55	11,801.47	141.98	5,284.86	78,715.14	84,000.00	

A(1)c Provision of Furniture and Fixtures for the Field Office/Laboratory and Living Quarter

Unit: 1.00 L.S.

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W3102	Furniture and Fixtures for Field Office	L.S.	1.00	0.1%	99.1%	0.8%	34.5%	65.5%	332,000.00	493.07	328,877.23	2,629.70	114,671.09	217,328.91	332,000.00	
W3105	Furniture and Fixtures for Living Quarter	L.S.	1.00	0.1%	99.1%	0.8%	31.9%	68.1%	217,000.00	323.28	214,958.91	1,718.81	69,301.41	147,698.59	217,000.00	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										815.35	543,836.14	4,348.51	183,972.49	365,027.51	549,000.00	
Components (%)										0.1%	99.1%	0.8%	31.5%	66.5%	100.0%	
Unit Rate			L.S.							815.35	543,836.14	4,348.51	183,972.49	365,027.51	549,000.00	

A(1)d Provision of Equipment and Appliances for the Field Office/Laboratory Bldg. and Living Quarter

Unit: 1.00 L.S.

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W3103	Equipment and Appliances for Field Office	L.S.	1.00	0.1%	99.1%	0.8%	73.0%	27.0%	225,000.00	334.16	222,883.66	1,782.18	164,316.33	60,683.67	225,000.00	
W3106	Equipment and Appliances for Living Quarter	L.S.	1.00	0.1%	99.1%	0.8%	39.8%	60.2%	87,600.00	130.10	86,776.04	693.86	34,892.75	52,707.25	87,600.00	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										464.26	309,659.70	2,476.04	199,209.08	113,390.92	312,600.00	
Components (%)										0.1%	99.1%	0.8%	33.7%	63.3%	100.0%	
Unit Rate			L.S.							464.85	310,055.94	2,479.21	199,463.99	113,536.01	313,000.00	

A(1)e Provision of Office Supplies and Consumable

Unit: 36.00 month

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W3111	Office & Living Quarter Supplies	L.S.	1.00	0.3%	98.1%	1.6%	50.9%	49.1%	14,300.00	42.06	14,033.63	224.31	7,275.31	7,024.69	14,300.00	
W3112	Office & Living Quarter Consumables	month	36.00	0.3%	98.1%	1.6%	35.6%	64.4%	16,200.00	1,715.29	572,336.47	9,148.24	207,538.96	375,666.94	583,200.00	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										1,757.35	586,370.10	9,372.55	214,815.27	382,684.73	597,500.00	
Components (%)										0.3%	98.1%	1.6%	36.0%	64.0%	100.0%	
Unit Rate			month							48.82	16,290.78	260.39	5,968.09	10,631.91	16,600.00	

A(1)f Provide/Operate/Maintain Communication Equipment

Unit: 36.00 month

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
	Office Telephone	set	1.00	0.0%	100.0%	0.0%	80.0%	20.0%	1,000.00	0.00	1,000.00	0.00	800.00	200.00	1,000.00	
	Facsimile Machine	set	1.00	0.0%	100.0%	0.0%	80.0%	20.0%	27,000.00	0.00	27,000.00	0.00	21,600.00	5,400.00	27,000.00	
	Radio System (1 base + 4 portable receiver)	set	1.00	0.0%	100.0%	0.0%	80.0%	20.0%	41,000.00	0.00	41,000.00	0.00	32,800.00	8,200.00	41,000.00	
L012	Electrician	md	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	421.00	421.00	0.00	0.00	0.00	421.00	421.00	
MO1015	Telecommunication Fare	min	108,000.00	0.0%	100.0%	0.0%	45.0%	55.0%	1.00	0.00	108,000.00	0.00	48,600.00	59,400.00	108,000.00	
	Miscellaneous	LS	1.00	5.0%	55.0%	40.0%	55.0%	45.0%		88.71	975.82	709.68	975.82	799.39	1,774.21	1.0%
Total										509.71	177,975.82	709.68	104,775.82	74,419.39	179,195.21	
Components (%)										0.3%	99.3%	0.4%	58.5%	41.5%	100.0%	
Unit Rate			month							14.17	4,946.11	19.72	2,911.82	2,068.18	4,980.00	

Miscellaneous covers the costs for cables & wires, maintenance, etc.

A(2)a Provision of vehicles (sedan) for the Engineer (Rental including operation & maintenance)

Unit: 1.00 veh-m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
1.004 MO1006	Mazda B2200 double cab (diesel)	month	1.00	0.0%	0.0%	100.0%	85.0%	15.0%	52,800.00	0.00	0.00	52,800.00	44,880.00	7,920.00	52,800.00	
	Driver	md	34.38	100.0%	0.0%	0.0%	0.0%	368.00	12,651.84	0.00	0.00	0.00	0.00	12,651.84	12,651.84	
	Gasoline	ltr	375.00	0.0%	100.0%	0.0%	65.0%	35.0%	14.20	0.00	5,325.00	0.00	3,461.25	1,863.75	5,325.00	
	Miscellaneous	LS	1.00	10.0%	55.0%	35.0%	55.0%	45.0%	70.78	389.27	247.72	389.27	318.50	707.77	1.0%	
	<b>Total</b>									12,722.62	5,714.27	53,047.72	48,730.52	22,754.09	71,484.61	
Components (%)									17.8%	8.0%	74.2%	68.2%	31.8%	100.0%		
Unit Rate				veh-m					12,725.36	5,715.50	53,059.14	48,741.01	22,758.99	71,500.00		

Miscellaneous covers the cost for ancillaries, maintenance expense, extra overtime, etc.  
Bare Monthly Rental Cost = 52,800.00 PP/month

A(2)b Provision of vehicles (wagon) for the Engineer (Rental including operation & maintenance)

Unit: 1.00 veh-m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
1.004 MO1006	Nissan Pathfinder, 4x4	month	1.00	0.0%	0.0%	100.0%	85.0%	15.0%	67,800.00	0.00	0.00	67,800.00	57,630.00	10,170.00	67,800.00	
	Driver	md	34.38	100.0%	0.0%	0.0%	0.0%	368.00	12,651.84	0.00	0.00	0.00	12,651.84	12,651.84		
	Gasoline	ltr	375.00	0.0%	100.0%	0.0%	65.0%	35.0%	14.20	0.00	5,325.00	0.00	3,461.25	1,863.75	5,325.00	
	Miscellaneous	LS	1.00	10.0%	55.0%	35.0%	55.0%	45.0%	85.78	471.77	300.22	471.77	386.00	857.77	1.0%	
	<b>Total</b>									12,737.62	5,796.77	68,100.22	61,563.02	25,071.59	86,634.61	
Components (%)									14.7%	6.7%	78.6%	71.1%	28.9%	100.0%		
Unit Rate				veh-m					12,732.53	5,794.46	68,073.01	61,538.43	25,061.57	86,600.00		

Miscellaneous covers the cost for ancillaries, maintenance expense, extra overtime, etc.  
Bare Monthly Rental Cost = 67,800.00 PP/month

A(2)c Provision of vehicles (pick-up) for the Engineer (Rental including operation & maintenance)

Unit: 1.00 veh-m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
1.004 MO1006	Isuzu Pickup 2 door	month	1.00	0.0%	0.0%	100.0%	85.0%	15.0%	31,550.00	0.00	0.00	31,550.00	26,817.50	4,732.50	31,550.00	
	Driver	md	34.38	100.0%	0.0%	0.0%	0.0%	368.00	12,651.84	0.00	0.00	0.00	12,651.84	12,651.84		
	Gasoline	ltr	375.00	0.0%	100.0%	0.0%	65.0%	35.0%	14.20	0.00	5,325.00	0.00	3,461.25	1,863.75	5,325.00	
	Miscellaneous	LS	1.00	10.0%	55.0%	35.0%	55.0%	45.0%	49.53	272.40	173.34	272.40	222.87	495.27	1.0%	
	<b>Total</b>									12,701.37	5,597.40	31,723.34	30,551.15	19,470.96	50,022.11	
Components (%)									25.4%	11.2%	63.4%	61.1%	38.9%	100.0%		
Unit Rate				veh-m					12,695.75	5,594.92	31,709.32	30,537.64	19,462.36	50,000.00		

Miscellaneous covers the cost for ancillaries, maintenance expense, extra overtime, etc.  
Bare Monthly Rental Cost = 31,550.00 PP/month

A(3) Provision of Testing Equipment, Apparatus and Publications

Unit: 1.00 L.S.

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
	Testing equipment & apparatus for soil & aggregates	L.S.	1.00	0.0%	100.0%	0.0%	70.0%	30.0%	318,000.00	0.00	318,000.00	0.00	222,600.00	95,400.00	318,000.00	
	Testing equipment & apparatus for concrete	L.S.	1.00	0.0%	100.0%	0.0%	75.0%	25.0%	447,000.00	0.00	447,000.00	0.00	335,250.00	111,750.00	447,000.00	
	Testing equipment & apparatus for bituminous materials	L.S.	1.00	0.0%	100.0%	0.0%	70.0%	30.0%	250,000.00	0.00	250,000.00	0.00	175,000.00	75,000.00	250,000.00	
	Publication	L.S.	1.00	0.0%	100.0%	0.0%	100.0%	0.0%	20,700.00	0.00	20,700.00	0.00	20,700.00	0.00	20,700.00	
	Miscellaneous	LS	1.00	15.0%	15.0%	70.0%	45.0%	55.0%	776.78	776.78	3,624.95	2,330.33	2,848.18	5,178.50	0.5%	
<b>Total</b>									776.78	1,036,476.78	3,624.95	755,880.33	284,998.18	1,040,878.50		
Components (%)									0.1%	99.6%	0.3%	72.6%	27.4%	100.0%		
Unit Rate				L.S.					776.12	1,035,601.99	3,621.89	755,242.36	284,757.64	1,040,000.00		

Miscellaneous covers the costs for delivery, installation, etc.

A(4) Progress Photographs

Unit: 100.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L019	Skilled Labor	md	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	403.00	0.00	0.00	0.00	403.00	403.00	
M15101	Film ASA 400 x 36	each	11.11	0.0%	100.0%	0.0%	70.0%	30.0%	169.00	0.00	1,877.59	0.00	1,314.31	563.28	1,877.59	Loss 300.0%
M15102	Film Development	each	11.11	0.0%	100.0%	0.0%	15.0%	85.0%	45.00	0.00	499.95	0.00	74.99	424.96	499.95	Loss 300.0%
M15103	Picture Prints	each	1,400.00	0.0%	100.0%	0.0%	15.0%	85.0%	6.00	0.00	8,400.00	0.00	1,260.00	7,140.00	8,400.00	Loss 300.0%
	Miscellaneous	LS	1.00	0.0%	90.0%	10.0%	55.0%	45.0%		0.00	503.12	55.90	307.46	251.56	559.03	5.0%
	<b>Total</b>									403.00	11,280.66	55.90	2,956.77	8,782.80	11,739.57	
	<b>Components (%)</b>									3.4%	96.1%	0.5%	25.2%	74.8%	100.0%	
	<b>Unit Rate</b>	each								4.02	112.43	0.56	29.47	87.53	117.00	

Miscellaneous covers the cost for album, glue, scissors, etc.  
Number of copies to be submitted = 10

Part C Earthwork

100(l) Clearing and Grubbing

Unit: 1.00 ha

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0001	Grass Cutting	m2	10,000.00	90.9%	0.9%	8.2%	4.5%	95.5%	1.09	9,909.09	99.09	891.82	495.45	10,404.55	10,900.00	
W0002	Tree Cutting	m2	1,000.00	92.6%	0.7%	6.7%	3.7%	96.3%	0.91	845.37	6.76	60.87	33.81	879.19	913.00	
W0003	Grubbing	m2	1,000.00	4.0%	7.9%	88.1%	53.0%	47.0%	24.90	996.74	1,975.41	21,927.55	13,208.68	11,691.32	24,900.00	
W0004	Burning	m2	1,000.00	100.0%	0.0%	0.0%	0.0%	100.0%	1.90	1,900.00	0.00	0.00	0.00	1,900.00	1,900.00	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									13,651.20	2,031.26	22,880.53	13,737.95	24,875.05	38,611.00	
	<b>Components (%)</b>									35.4%	5.4%	59.3%	35.6%	64.4%	100.0%	
	<b>Unit Rate</b>	ha								13,646.61	2,080.50	22,872.83	13,733.33	24,866.67	38,606.00	

100(3) Individual Removal of Trees, small (150mm ≤ φ < 900mm)

Unit: 30.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.88	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	498.08	0.00	0.00	0.00	498.08	498.08	
L019	Skilled Labor	md	1.65	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	664.95	0.00	0.00	0.00	664.95	664.95	
L020	Unskilled Labor	md	3.26	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	1,023.64	0.00	0.00	0.00	1,023.64	1,023.64	
L020	Unskilled Labor	md	0.82	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	257.48	0.00	0.00	0.00	257.48	257.48	
	Miscellaneous	LS	1.00	0.0%	10.0%	90.0%	55.0%	45.0%		0.00	19.55	175.98	107.54	87.99	195.53	8.0%
	<b>Total</b>									2,441.15	19.55	175.98	107.54	2,532.14	2,639.68	
	<b>Components (%)</b>									92.6%	0.7%	6.7%	4.1%	95.9%	100.0%	
	<b>Unit Rate</b>	each								81.48	0.65	5.87	3.59	84.41	88.00	

Miscellaneous covers the cost for chain saw, ax, etc.

100(4) Individual Removal of Trees, large (φ > 900mm)

Unit: 25.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	1.01	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	571.66	0.00	0.00	0.00	571.66	571.66	
L019	Skilled Labor	md	2.13	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	858.39	0.00	0.00	0.00	858.39	858.39	
L020	Unskilled Labor	md	3.53	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	1,108.42	0.00	0.00	0.00	1,108.42	1,108.42	
L020	Unskilled Labor	md	0.82	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	257.48	0.00	0.00	0.00	257.48	257.48	
	Miscellaneous	LS	1.00	0.0%	10.0%	90.0%	55.0%	45.0%		0.00	22.37	201.31	123.02	100.65	223.68	8.0%
	<b>Total</b>									2,795.95	22.37	201.31	123.02	2,896.60	3,019.63	
	<b>Components (%)</b>									92.5%	0.7%	6.7%	4.1%	95.9%	100.0%	
	<b>Unit Rate</b>	each								112.04	0.90	8.07	4.93	116.07	121.00	

Miscellaneous covers the cost for chain saw, ax, etc.

101(i) Removal of Structures and Obstructions

Unit: 1.00 L.S.

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0011	Demolition by Crawler Drill (Lightly Reinforced Structures)	m3	131.3	11.6%	11.3%	82.0%	48.7%	51.3%	624.00	9,525.61	5,202.54	67,203.05	39,872.67	42,058.53	81,931.20	
W0025	Disposal of Demolished Debris	m3	131.3	16.2%	12.9%	70.9%	46.9%	53.1%	137.00	2,922.68	2,318.66	12,746.76	8,432.30	9,555.80	17,988.10	
	Miscellaneous	LS	1.0	0.0%	15.0%	85.0%	55.0%	45.0%		0.00	1,498.79	8,493.14	5,495.56	4,496.37	9,991.93	10.0%
	<b>Total</b>									12,448.29	9,019.99	88,442.94	53,800.54	56,110.69	109,911.23	
	<b>Components (%)</b>									11.3%	8.2%	80.5%	48.9%	51.1%	100.0%	
	<b>Unit Rate</b>	L.S.								12,458.35	9,027.28	88,514.37	53,843.99	56,156.01	110,000.00	

Miscellaneous covers the cost for earthworks, clearing, etc.

101(2)a Removal of Existing Pedestrian Bridge (San Jose, at Bridge No.2)

Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0012	Demolition by Crawler Drill (Heavily Reinforced Structures)	m3	44.80	12.5%	7.5%	80.0%	48.2%	51.8%	1,280.00	7,173.19	4,316.52	45,854.29	27,627.18	29,716.82	57,344.00	
W0025	Disposal of Demolished Debris	m3	44.80	16.2%	12.9%	70.9%	46.9%	53.1%	137.00	997.23	791.14	4,349.24	2,877.13	3,260.47	6,137.60	
	Miscellaneous	LS	1.00	0.0%	15.0%	85.0%	55.0%	45.0%		0.00	476.11	2,697.97	1,745.74	1,428.34	3,174.08	5.0%
	<b>Total</b>									8,170.42	5,583.77	52,901.50	32,250.85	34,405.63	66,655.68	
	<b>Components (%)</b>									12.3%	6.4%	79.4%	48.4%	51.6%	100.0%	
	<b>Unit Rate</b>	each								8,175.85	5,587.48	52,936.67	32,271.49	34,428.61	66,700.00	

Miscellaneous covers the cost for clearing, extra earthworks, etc.

101(2)b Removal of Existing Bridge (Plaridel at Bridge No.9)

Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0012	Demolition by Crawler Drill (Heavily Reinforced Structures)	m3	68.25	12.5%	7.5%	80.0%	48.2%	51.8%	1,280.00	10,927.90	6,575.95	69,856.15	42,088.28	45,271.72	87,360.00	
W0025	Disposal of Demolished Debris	m3	68.25	16.2%	12.9%	70.9%	46.9%	53.1%	137.00	1,519.22	1,205.25	6,625.79	4,383.13	4,967.12	9,350.25	
	Miscellaneous	LS	1.00	0.0%	15.0%	85.0%	55.0%	45.0%		0.00	725.33	4,110.19	2,659.53	2,175.98	4,835.51	5.0%
	<b>Total</b>									12,447.12	8,506.62	80,592.12	49,130.94	52,414.82	101,545.76	
	<b>Components (%)</b>									12.3%	8.4%	79.4%	48.4%	51.6%	100.0%	
	<b>Unit Rate</b>	each								12,502.80	8,544.57	80,952.63	49,350.71	52,649.29	102,000.00	

Miscellaneous covers the cost for clearing, extra earthworks, etc.

101(3)a Removal of Existing PCC Pavement

Unit: 10.00 m2

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0015	Demolition of PCC Pavement by Crawler Drill	m2	10.00	3.4%	6.5%	90.1%	53.2%	46.8%	56.50	19.16	36.57	509.27	300.59	264.41	565.00	
W0025	Disposal of Demolished Debris	m3	2.50	16.2%	12.9%	70.9%	46.9%	53.1%	137.00	55.65	44.15	242.70	160.55	181.95	342.50	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									74.81	80.72	751.97	461.15	446.35	907.50	
	<b>Components (%)</b>									8.2%	8.9%	82.9%	50.8%	49.2%	100.0%	
	<b>Unit Rate</b>	m2								7.48	8.08	75.24	46.14	44.66	90.80	

101(3)b Removal of Existing Gravel Pavement

Unit: 10.00 m2

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0016	Excavation of Gravel Pavement	m3	2.50	4.4%	8.4%	87.2%	52.9%	47.1%	10.30	1.13	2.16	22.45	13.62	12.13	25.75	
W0025	Disposal of Demolished Debris	m3	2.50	16.2%	12.9%	70.9%	46.9%	53.1%	137.00	55.65	44.15	242.70	160.55	181.95	342.50	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									56.78	46.31	265.16	174.17	194.08	368.25	
	<b>Components (%)</b>									15.4%	12.6%	72.0%	47.3%	52.7%	100.0%	
	<b>Unit Rate</b>	m2								5.67	4.63	26.50	17.41	19.39	36.80	

101(4)a Removal of Existing Fence (Net Fence with Barbed Wire and Wooden Posts)

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
1.002	Foreman	md	0.50	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	283.00	0.00	0.00	0.00	283.00	283.00	
1.009	Welder	md	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	500.00	0.00	0.00	0.00	500.00	500.00	
1.020	Unskilled Labor	md	1.50	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	471.00	0.00	0.00	0.00	471.00	471.00	
W0025	Disposal of Demolished Debris	m3	4.32	16.2%	12.9%	70.9%	46.9%	53.1%	137.00	96.16	76.29	419.39	277.44	314.40	591.84	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	18.46
	<b>Total</b>									1,350.16	76.29	419.39	277.44	1,568.40	1,864.30	
	<b>Components (%)</b>									72.4%	4.1%	22.5%	14.9%	84.1%	100.0%	
	<b>Unit Rate</b>	m								13.47	0.76	4.18	2.77	15.65	18.60	

Miscellaneous covers the cost for wire cutter, acetylene gas, etc.

101(4)b Removal of Existing Fence (Net Fence with Barbed Wire and Concrete Posts)

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.50	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	283.00	0.00	0.00	0.00	283.00	283.00	
L009	Welder	md	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	500.00	0.00	0.00	0.00	500.00	500.00	
L020	Unskilled Labor	md	1.50	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	471.00	0.00	0.00	0.00	471.00	471.00	
R0204-020	Pneumatic Breaker, Handhold	day	0.09	0.0%	0.0%	100.0%	54.3%	45.7%	467.00	0.00	0.00	41.13	22.33	18.80	41.13	
W0025	Disposal of Demolished Debris	m3	5.76	16.2%	12.9%	70.9%	46.9%	53.1%	137.00	128.22	101.72	559.19	369.92	419.20	789.12	
	Miscellaneous	LS	1.00	0.0%	20.0%	80.0%	55.0%	45.0%		0.00	4.17	16.67	11.46	9.39	28.84	1.0%
Total									1,382.22	105.89	616.99	403.71	1,701.38	2,105.09		
Components (%)									65.7%	5.0%	29.3%	19.2%	89.8%	100.0%		
Unit Rate			m						13.85	1.06	6.18	4.05	17.05	21.10		

Miscellaneous covers the cost for wire cutter, acetylene gas, etc.

101(4)c Removal of Existing Fence (Concrete Hollow Block)

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	1.30	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	735.80	0.00	0.00	0.00	735.80	735.80	
L019	Skilled Labor	md	4.88	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	1,958.58	0.00	0.00	0.00	1,958.58	1,958.58	
L020	Unskilled Labor	md	3.32	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	1,042.48	0.00	0.00	0.00	1,042.48	1,042.48	
R0204-020	Pneumatic Breaker, Handhold	day	3.40	0.0%	0.0%	100.0%	54.3%	45.7%	457.00	0.00	0.00	1,553.80	843.61	710.19	1,553.80	
W0025	Disposal of Demolished Debris	m3	27.00	16.2%	12.9%	70.9%	46.9%	53.1%	137.00	681.01	476.80	2,621.19	1,733.98	1,965.02	3,699.00	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total									4,337.87	476.80	4,174.99	2,577.60	6,412.06	8,989.66		
Components (%)									48.3%	5.3%	46.4%	28.7%	71.3%	100.0%		
Unit Rate			m						43.38	4.77	41.75	25.78	64.12	89.90		

101(5)a Removal of Existing Guardrails

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L020	Unskilled Labor	md	8.70	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	2,731.80	0.00	0.00	0.00	2,731.80	2,731.80	
R0601-006	Dump Truck, 8.0-9.0 cu-yds (4.6-6.9m3)	hr	2.25	10.0%	17.9%	72.1%	50.8%	49.2%	603.00	135.68	242.86	978.22	688.93	667.82	1,356.75	
	Miscellaneous	LS	1.00	0.0%	20.0%	80.0%	55.0%	45.0%		0.00	16.35	65.42	44.97	36.80	81.77	2.0%
Total									2,867.48	259.21	1,043.63	733.90	3,436.42	4,170.32		
Components (%)									68.8%	6.2%	25.0%	17.6%	82.4%	100.0%		
Unit Rate			m						28.67	2.59	10.44	7.34	34.36	41.70		

Miscellaneous covers the cost for minor tools such as hammer, shovels, carts, etc.

101(5)b Relocation of Existing Guardrails

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L020	Unskilled Labor	md	37.70	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	11,837.80	0.00	0.00	0.00	11,837.80	11,837.80	
	Miscellaneous	LS	1.00	0.0%	60.0%	40.0%	55.0%	45.0%		0.00	355.13	236.76	325.54	266.35	591.89	5.0%
Total									11,837.80	355.13	236.76	325.54	12,104.15	12,429.69		
Components (%)									95.2%	2.9%	1.9%	2.6%	97.4%	100.0%		
Unit Rate			m						118.10	3.54	2.36	3.25	120.75	124.00		

Miscellaneous covers the cost for missing fixtures, minor tools such as hammer, shovels, carts, etc.

101(7) Removal of Existing Slope Protection

Unit: 10.00 m3

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0011	Demolition by Crawler Drill (Lightly Reinforced Structures)	m3	10.00	11.6%	6.3%	82.0%	48.7%	51.3%	624.00	725.48	396.23	5,118.28	3,036.76	3,203.24	6,240.00	
W0025	Disposal of Demolished Debris	m3	10.00	16.2%	12.9%	70.9%	46.9%	53.1%	137.00	222.60	176.59	970.81	642.22	727.78	1,370.00	
	Miscellaneous	LS	1.00	5.0%	10.0%	85.0%	55.0%	45.0%		3.81	7.61	64.69	41.86	34.25	76.10	1.0%
Total									951.89	580.44	6,153.78	3,720.83	3,965.27	7,686.10		
Components (%)									12.4%	7.6%	80.1%	48.4%	51.6%	100.0%		
Unit Rate			m3						95.24	58.07	615.69	372.27	396.73	769.00		

Miscellaneous covers the cost for earthworks, clearing, etc. as required.

101(8) Removal of Existing Slope Protection (Hand-laid Rock)

Unit: 10.00 m3

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0105	Excavation, Backhoe 0.61m3	m3	10.00	4.4%	8.4%	87.2%	52.9%	47.1%	40.90	18.00	34.36	356.65	216.27	192.73	409.00	
W0025	Disposal of Demolished Debris	m3	10.00	16.2%	12.9%	70.9%	46.9%	53.1%	137.00	222.60	176.59	970.81	642.22	727.78	1,370.00	
	Miscellaneous	LS	1.00	5.0%	10.0%	85.0%	55.0%	45.0%		0.89	1.78	15.12	9.78	8.01	17.79	1.0%
Total										241.49	212.73	1,342.58	868.27	928.52	1,796.79	
Components (%)										13.4%	11.8%	74.7%	48.3%	51.7%	100.0%	
Unit Rate			m3							24.15	21.27	134.26	86.83	92.85	180.00	

Miscellaneous covers the cost for earthworks, clearing, etc. as required.

101(9) Removal of Existing Gabion

Unit: 10.00 m3

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L020	Unskilled Labor	md	0.40	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	125.60	0.00	0.00	0.00	125.60	125.60	
W0105	Excavation, Backhoe 0.61m3	m3	10.00	4.4%	8.4%	87.2%	52.9%	47.1%	40.90	18.00	34.36	356.65	216.27	192.73	409.00	
W0025	Disposal of Demolished Debris	m3	10.00	16.2%	12.9%	70.9%	46.9%	53.1%	137.00	222.60	176.59	970.81	642.22	727.78	1,370.00	
	Miscellaneous	LS	1.00	0	0	1	1	0		0.95	1.90	16.19	10.48	8.57	19.05	1.0%
Total										367.14	212.85	1,343.65	868.97	1,054.68	1,923.65	
Components (%)										19.1%	11.1%	69.8%	45.2%	54.8%	100.0%	
Unit Rate			m3							36.61	21.25	134.11	86.73	105.27	192.00	

Miscellaneous covers the cost for earthworks, clearing, etc. as required.

SPL 101(10)a Relocation of Existing Transmission Line

Unit: 1.00 L.S.

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0011	Demolition by Crawler Drill (Lightly Reinforced Structures)	m3	9.00	11.6%	6.3%	82.0%	48.7%	51.3%	624.00	652.94	356.61	4,606.45	2,733.08	2,882.92	5,616.00	
W0025	Disposal of Demolished Debris	m3	9.00	16.2%	12.9%	70.9%	46.9%	53.1%	137.00	200.34	158.93	873.73	577.99	655.01	1,233.00	
W0105	Excavation, Backhoe 0.61m3	m3	525.46	4.4%	8.4%	87.2%	52.9%	47.1%	40.90	945.62	1,805.27	18,740.42	11,364.32	10,126.99	21,491.31	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	278.45	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	2,109.18	3,820.38	19,966.29	13,329.61	12,566.24	25,895.85	
W0132	Backfill B	m3	247.01	7.7%	10.0%	82.3%	51.3%	48.7%	111.00	2,098.00	2,745.70	22,574.41	14,057.38	13,360.73	27,418.11	
W0201	Lean Concrete (17MPa, max agg. 38mm)	m3	13.72	2.7%	78.1%	19.1%	56.4%	43.6%	1,510.00	566.92	16,185.90	3,964.38	11,691.66	9,025.54	20,717.20	Loss 2.0%
W0231	Concrete Pouring by Pump Vehicle (plain concrete)	m3	13.45	18.8%	0.2%	81.0%	43.4%	56.6%	213.00	538.50	5.62	2,320.73	1,243.83	1,621.02	2,864.85	
W0236	Concrete Curing (plain concrete)	m3	13.45	70.9%	8.7%	20.4%	16.0%	84.0%	8.85	34.42	10.38	24.23	19.04	99.99	119.03	
W0243	Formwork (lean concrete)	m2	6.56	41.3%	58.0%	0.8%	3.8%	96.2%	152.00	411.34	577.96	7.82	38.09	959.03	997.12	
W0203	Concrete (Class A, 21MPa, max agg. 38mm)	m3	284.07	2.5%	79.7%	17.7%	56.7%	43.3%	1,630.00	11,767.29	369,149.12	82,117.70	262,513.26	200,520.84	463,034.10	Loss 2.0%
W0232	Concrete Pouring by Pump Vehicle (reinforced concrete)	m3	278.50	15.5%	0.2%	84.3%	45.2%	54.8%	257.00	11,119.29	140.34	60,314.86	32,322.80	39,251.70	71,574.50	
W0237	Concrete Curing (reinforced concrete)	m3	278.50	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	874.99	89.25	208.25	163.62	1,008.87	1,172.49	
W0241	Formwork (reinforced concrete 114m)	m2	188.00	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	24,966.54	16,815.17	330.29	1,228.85	40,883.15	42,112.00	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	33,420.00	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	118,420.35	637,554.30	62,815.36	446,078.54	372,711.46	818,790.00	
L002	Foreman	md	3.00	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	1,698.00	0.00	0.00	0.00	1,698.00	1,698.00	
L009	Welder	md	5.00	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	2,500.00	0.00	0.00	0.00	2,500.00	2,500.00	
L012	Electrician	md	10.00	100.0%	0.0%	0.0%	0.0%	100.0%	421.00	4,210.00	0.00	0.00	0.00	4,210.00	4,210.00	
L019	Skilled Labor	md	5.00	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	2,015.00	0.00	0.00	0.00	2,015.00	2,015.00	
L020	Unskilled Labor	md	5.00	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	1,570.00	0.00	0.00	0.00	1,570.00	1,570.00	
M02015	Structural Steel (Plates, SS400)	kg	50,246.00	0.0%	100.0%	0.0%	70.0%	30.0%	20.20	0.00	1,014,969.20	0.00	710,478.44	304,490.76	1,014,969.20	
M13051	Electric Cable	m	12,960.00	0.0%	100.0%	0.0%	55.0%	45.0%	82.30	0.00	807,408.00	0.00	444,074.40	363,333.60	807,408.00	
R0604-020	Trailer 20t	hr	3.14	3.8%	10.7%	85.5%	53.3%	46.7%	1,670.00	199.26	561.09	4,483.45	2,795.27	2,448.53	5,243.80	
R0901-025	Welding Machine 250A	day	5.00	0.0%	39.8%	60.2%	58.6%	41.4%	588.00	0.00	1,170.12	1,769.88	1,722.42	1,217.58	2,940.00	
R1001-200	Generator 151-200 kW	day	5.00	0.0%	47.6%	52.4%	59.4%	40.6%	5,280.00	0.00	12,566.40	13,833.60	15,687.09	10,712.91	26,400.00	
R0402-060	Truck Crane, Hydraulic 51-60t	hr	17.13	2.9%	5.1%	92.0%	53.4%	46.6%	2,500.00	1,241.93	2,184.08	39,399.00	22,848.31	19,976.69	42,825.00	
R0601-006	Dump Truck, 6.0-9.0 cu-yds (4.6-6.9m3)	hr	6.29	10.0%	17.9%	72.1%	50.8%	49.2%	603.00	378.68	677.84	2,730.31	1,922.88	1,863.96	3,786.84	
	Miscellaneous	LS	1.00	10.0%	40.0%	50.0%	55.0%	45.0%		102,558.04	410,232.17	512,780.21	564,069.23	461,511.19	1,025,580.42	30.0%
Total										291,126.61	3,299,183.82	853,871.39	2,560,960.11	1,883,221.71	4,444,181.82	
Components (%)										6.6%	74.2%	19.2%	42.4%	100.0%		
Unit Rate			L.S.							290,852.67	3,298,079.41	853,067.93	2,558,550.33	1,881,449.67	4,440,000.00	

Miscellaneous covers the costs for ancillary electric instruments and fixtures, overhead of the electric company, arrangement expense, minor tools, etc.

SPL 101(10)b Shutdown Charge for the Relocation of Transmission Line

Unit: 1.00 day

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	566.00	0.00	0.00	0.00	566.00	566.00	
L012	Electrician	md	2.00	100.0%	0.0%	0.0%	0.0%	100.0%	421.00	842.00	0.00	0.00	0.00	842.00	842.00	
M01009	Electric Supply	kWh	500,000.00	0.0%	100.0%	0.0%	50.0%	50.0%	4.00	0.00	2,000,000.00	0.00	1,000,000.00	1,000,000.00	2,000,000.00	
	Miscellaneous	LS	1.00	15.0%	60.0%	25.0%	30.0%	70.0%		6,004.22	24,016.90	10,007.04	12,008.45	28,019.71	40,028.16	2.0%
Total										7,412.22	2,024,016.90	10,007.04	1,012,008.45	1,029,427.71	2,041,436.16	
Components (%)										0.4%	99.1%	0.5%	49.6%	50.4%	100.0%	
Unit Rate			day							7,407.01	2,022,592.99	10,000.00	1,011,296.50	1,028,703.50	2,040,000.00	

Miscellaneous covers the cost for maintenance expense, compensation, etc.  
 Average daily consumption per household = 100.00 kWh/day  
 Affected number of household = 5,000 household

101(11) Removal of Existing Combination Concrete Curb & Gutter/Side Strip

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0013	Demolition by Pneumatic Handhold Breaker (Lightly Reinforced Structures)	m3	13.55	27.3%	14.7%	58.0%	40.9%	59.1%	892.00	3,299.87	1,772.15	7,014.58	4,947.10	7,139.50	12,086.60	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	13.55	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	102.64	185.91	871.60	648.65	611.50	1,260.15	
	Miscellaneous	LS	1.00	10.0%	30.0%	60.0%	50.0%	50.0%		13.35	40.04	80.08	66.73	66.73	133.47	1.0%
Total										3,415.85	1,998.10	8,066.23	5,662.48	7,817.33	13,480.22	
Components (%)										25.3%	14.8%	59.8%	42.0%	58.0%	100.0%	
Unit Rate			m							34.21	20.01	80.78	56.71	78.29	135.00	

Miscellaneous covers the costs for recovering, recompaction, etc. of the disturbed base course, cart, shovels, minor tools, etc.

101(12) Relocation of Existing Road Signs

Unit: 10.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0106	Excavation, Backhoe 0.61m3 + Manpower	m3	13.27	24.6%	6.6%	68.8%	41.7%	58.3%	59.50	193.97	52.33	543.26	329.44	460.13	789.57	
W0133	Backfill C	m3	13.27	11.4%	11.8%	76.7%	49.4%	50.6%	145.00	219.74	227.66	1,476.76	950.58	973.57	1,924.15	
W0013	Demolition by Pneumatic Handhold Breaker (Lightly Reinforced Structures)	m3	1.26	27.3%	14.7%	58.0%	40.9%	59.1%	892.00	306.85	164.79	652.28	460.03	663.89	1,123.92	
L002	Foreman	md	0.25	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	141.50	0.00	0.00	0.00	141.50	141.50	
L020	Unskilled Labor	md	0.75	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	235.50	0.00	0.00	0.00	235.50	235.50	
W0106	Excavation, Backhoe 0.61m3 + Manpower	m3	13.27	24.6%	6.6%	68.8%	41.7%	58.3%	59.50	193.97	52.33	543.26	329.44	460.13	789.57	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	1.26	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	9.54	17.29	90.35	60.32	56.86	117.18	
W0133	Backfill C	m3	12.01	11.4%	11.8%	76.7%	49.4%	50.6%	145.00	198.87	206.04	1,336.54	860.32	881.13	1,741.45	
W0203	Concrete (Class A, 21MPa, max agr. 38mm)	m3	1.26	2.5%	79.7%	17.7%	56.7%	43.3%	1,630.00	52.19	1,637.37	364.24	1,164.38	889.42	2,053.80	
W0240	Formwork (plain concrete 11k4m)	m2	12.57	58.9%	40.4%	0.8%	2.9%	97.1%	222.00	1,642.50	1,126.15	21.89	82.02	2,708.52	2,700.54	
L002	Foreman	md	0.80	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	452.80	0.00	0.00	0.00	452.80	452.80	
L020	Unskilled Labor	md	2.60	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	816.40	0.00	0.00	0.00	816.40	816.40	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										4,463.84	3,483.96	5,028.57	4,236.52	8,739.86	12,976.38	
Components (%)										34.4%	26.8%	38.8%	32.6%	67.4%	100.0%	
Unit Rate			each							447.20	349.03	503.77	424.42	875.58	1,300.00	

101(13) Removal of Existing Road Signs

Unit: 10.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0106	Excavation, Backhoe 0.61m3 + Manpower	m3	13.27	24.6%	6.6%	68.8%	41.7%	58.3%	59.50	193.97	52.33	543.26	329.44	460.13	789.57	
W0133	Backfill C	m3	13.27	11.4%	11.8%	76.7%	49.4%	50.6%	145.00	219.74	227.66	1,476.76	950.58	973.57	1,924.15	
W0013	Demolition by Pneumatic Handhold Breaker (Lightly Reinforced Structures)	m3	1.26	27.3%	14.7%	58.0%	40.9%	59.1%	892.00	306.85	164.79	652.28	460.03	663.89	1,123.92	
L002	Foreman	md	0.25	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	141.50	0.00	0.00	0.00	141.50	141.50	
L020	Unskilled Labor	md	0.75	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	235.50	0.00	0.00	0.00	235.50	235.50	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										1,097.56	444.78	2,672.30	1,740.04	2,474.64	4,214.64	
Components (%)										26.0%	10.6%	63.4%	41.3%	58.7%	100.0%	
Unit Rate			each							109.64	44.43	266.94	173.81	247.19	421.00	



101(14) Removal of Existing Concrete Revetment

Unit: 1.00 t.S.

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0011	Demolition by Crawler Drill (lightly Reinforced Structures)	m3	75.00	11.6%	6.3%	82.0%	48.7%	51.3%	624.00	5,441.13	2,971.75	38,387.12	22,775.71	24,024.29	46,800.00	
W0025	Disposal of Demolished Debris	m3	75.00	16.2%	12.9%	70.9%	46.9%	53.1%	137.00	1,669.47	1,324.45	7,281.09	4,816.62	5,458.38	10,275.00	
	Miscellaneous	LS	1.00	0.0%	15.0%	85.0%	55.0%	45.0%		0.00	856.13	4,851.38	3,139.13	2,568.38	5,707.50	10.0%
Total										7,110.60	5,152.32	50,519.58	30,731.46	32,051.04	62,782.50	
Components (%)										11.3%	8.2%	80.5%	48.9%	51.1%	100.0%	
Unit Rate			L.S.							7,112.58	5,153.76	50,533.66	30,749.02	32,059.93	62,800.00	

Miscellaneous covers the cost for earthworks, clearing, etc.

102(1) Unsuitable Excavation

Unit: 100.00 m3

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
R0101-021	Tractor, crawler w/dozer (Bulldozer, 21t)	hr	0.61	1.5%	8.2%	90.3%	54.4%	45.6%	4,150.00	37.97	207.58	2,285.94	1,377.19	1,154.31	2,531.50	
R0102-061	Backhoe, hydraulic, crawler, 0.61m3	hr	1.77	4.4%	8.4%	87.2%	52.9%	47.1%	1,740.00	135.51	258.70	2,685.59	1,628.56	1,451.24	3,079.80	
R0601-006	Dump Truck, 6.0-9.0 cu-yds (4.6-6.9m3)	hr	11.45	10.0%	17.9%	72.1%	50.8%	49.2%	603.00	690.44	1,235.88	4,978.04	3,505.89	3,398.46	6,904.35	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										863.92	1,702.16	9,949.57	6,511.64	6,004.01	12,515.65	
Components (%)										6.9%	13.6%	79.5%	52.0%	48.0%	100.0%	
Unit Rate			m3							8.63	17.00	99.37	65.03	59.97	125.00	

Q = 60 · q · f · E / Cm (Bulldozer)

Q : Excavation capacity per hour = 184.04 m3/hr

q : Standard capacity per cycle = 2.81 m3/cycle

f : Volume coefficient = 1.00

E : Efficiency = 0.90

Cm: Cycle Time = 0.027 · L + 0.79 = 0.93 min

L : Average pushing distance = 5.00 m

Q = q · f · E / Cm (Dump Truck)

Q : Transportation Volume per hour = 8.73 m3/hr

q : Loading Capacity of a Truck = 6.50 m3

f : Volume Coefficient = 1.00

E : Efficiency = 0.90

Cm: Cycle Time = A + 2 · L / V = 0.67 hr

V : Vehicle speed = 25.00 km/hr

a : Loading time = 0.27 hr

L : Average Distance to Disposal Point = 5.00 km

Q = 3600 · q · f · E / Cm (Backhoe)

Q : Excavation Volume per hour = 56.64 m3/h

q : Excavation Volume per Cycle = 0.59 m3

f : Volume Coefficient = 1.00

E : Efficiency = 0.80

Cm: Cycle Time = 30.00 sec

102(2) Surplus Common Excavation

Unit: 100.00 m3

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
R0101-021	Tractor, crawler w/dozer (Bulldozer, 21t)	hr	0.61	1.5%	8.2%	90.3%	54.4%	45.6%	4,150.00	37.97	207.58	2,285.94	1,377.19	1,154.31	2,531.50	
R0102-061	Backhoe, hydraulic, crawler, 0.61m3	hr	1.77	4.4%	8.4%	87.2%	52.9%	47.1%	1,740.00	135.51	258.70	2,685.59	1,628.56	1,451.24	3,079.80	
R0601-006	Dump Truck, 6.0-9.0 cu-yds (4.6-6.9m3)	hr	11.45	10.0%	17.9%	72.1%	50.8%	49.2%	603.00	690.44	1,235.88	4,978.04	3,505.89	3,398.46	6,904.35	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										863.92	1,702.16	9,949.57	6,511.64	6,004.01	12,515.65	
Components (%)										6.9%	13.6%	79.5%	52.0%	48.0%	100.0%	
Unit Rate			m3							8.63	17.00	99.37	65.03	59.97	125.00	

Q = 60 · q · f · E / Cm (Bulldozer)

Q : Excavation capacity per hour = 184.04 m3/hr

q : Standard capacity per cycle = 2.81 m3/cycle

f : Volume coefficient = 1.00

E : Efficiency = 0.90

Cm: Cycle Time = 0.027 · L + 0.79 = 0.93 min

L : Average pushing distance = 5.00 m

Q = q · f · E / Cm (Dump Truck)

Q : Transportation Volume per hour = 8.73 m3/hr

q : Loading Capacity of a Truck = 6.50 m3

f : Volume Coefficient = 1.00

E : Efficiency = 0.90

Cm: Cycle Time = A + 2 · L / V = 0.67 hr

V : Vehicle speed = 25.00 km/hr

a : Loading time = 0.27 hr

L : Average Distance to Disposal Point = 5.00 km

Q = 3600 · q · f · E / Cm (Backhoe Loading)

Q : Excavation Volume per hour = 56.64 m3/h

q : Excavation Volume per Cycle = 0.59 m3

f : Volume Coefficient = 1.00

E : Efficiency = 0.80

Cm: Cycle Time = 30.00 sec

103(1) Structure Excavation													Unit: 100.00 m3			
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
W0105	Excavation, Backhoe 0.61m3	m3	100.00	4.4%	8.4%	87.2%	52.9%	47.1%	40.90	179.96	343.56	3,566.48	2,162.74	1,927.26	4,090.00	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	31.90	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	241.63	437.67	2,287.39	1,527.08	1,439.62	2,966.70	
W0132	Backfill B	m3	68.10	7.7%	10.0%	82.3%	51.3%	48.7%	111.00	578.41	756.98	6,223.71	3,875.50	3,683.52	7,559.10	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										1,000.01	1,538.21	12,077.58	7,565.39	7,050.41	14,615.80	
Components (%)										6.8%	10.5%	82.6%	51.8%	48.2%	100.0%	
Unit Rate			m3							9.99	15.37	120.65	75.57	70.43	146.00	

103(2)a Bridge Excavation above OWL (Common Soil)													Unit: 100.00 m3			
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
W0105	Excavation, Backhoe 0.61m3	m3	100.00	4.4%	8.4%	87.2%	52.9%	47.1%	40.90	179.96	343.56	3,566.48	2,162.74	1,927.26	4,090.00	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	33.60	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	254.51	461.00	2,409.29	1,608.46	1,516.34	3,124.80	
W0132	Backfill B	m3	66.40	7.7%	10.0%	82.3%	51.3%	48.7%	111.00	563.97	738.08	6,068.34	3,778.83	3,591.57	7,370.40	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										998.44	1,542.64	12,044.11	7,550.03	7,035.17	14,585.20	
Components (%)										6.8%	10.6%	82.6%	51.8%	48.2%	100.0%	
Unit Rate			m3							9.99	15.44	120.56	75.58	70.42	146.00	

103(2)b Bridge Excavation above OWL (Rocky Soil)													Unit: 100.00 m3			
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
W0108	Excavation, Backhoe 0.61m3 + Crawler Drill	m3	100.00	3.0%	6.5%	90.1%	53.2%	46.8%	185.00	627.26	1,197.50	16,675.23	9,842.39	8,657.61	18,500.00	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	100.00	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	757.47	1,372.02	7,170.51	4,787.07	4,512.93	9,300.00	
W0132	Backfill B	m3	0.00	7.7%	10.0%	82.3%	51.3%	48.7%	111.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										1,384.73	2,569.52	23,845.75	14,629.46	13,170.54	27,800.00	
Components (%)										5.0%	9.2%	85.8%	52.6%	47.4%	100.0%	
Unit Rate			m3							13.85	25.70	238.46	146.29	131.71	278.00	

103(2)c Bridge Excavation below OWL (Common Soil)													Unit: 100.00 m3			
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
W0401	Temporary Sheet Pile Driving for excavation, (Vibro Hammer, Common Soil)	m2	123.90	10.2%	13.5%	76.3%	49.9%	50.1%	199.00	2,517.41	3,328.53	18,810.16	12,309.83	12,346.27	24,656.10	
W0403	Temporary Sheet Pile Removal for excavation, (Vibro Hammer)	m2	123.90	10.2%	13.5%	76.3%	49.9%	50.1%	169.00	2,135.95	2,824.87	15,978.27	10,454.89	10,484.21	20,939.10	
W0411	Temporary Struts & Supports Installation	t	1.98	33.7%	9.5%	56.9%	36.9%	63.1%	1,390.00	926.75	260.44	1,565.01	1,015.04	1,737.16	2,752.20	
W0412	Temporary Struts & Supports Removal	t	1.98	35.3%	9.1%	55.5%	35.7%	64.3%	827.00	578.41	149.46	909.59	585.19	1,052.27	1,637.46	
W05031	Temporary Sheet Pile Depreciation	t-d	520.20	0.0%	100.0%	0.0%	50.0%	50.0%	33.30	0.00	17,322.66	0.00	8,661.33	8,661.33	17,322.66	
W05041	Temporary Steel Shapes Depreciation	t-d	55.60	0.0%	100.0%	0.0%	50.0%	50.0%	31.30	0.00	1,740.28	0.00	870.14	870.14	1,740.28	
W0105	Excavation, Backhoe 0.61m3	m3	100.00	4.4%	8.4%	87.2%	52.9%	47.1%	40.90	179.96	343.56	3,566.48	2,162.74	1,927.26	4,090.00	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	23.30	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	176.49	319.68	1,670.73	1,115.39	1,051.51	2,166.90	
W0132	Backfill B	m3	76.70	7.7%	10.0%	82.3%	51.3%	48.7%	111.00	651.46	852.58	7,009.67	4,365.01	4,148.69	8,513.70	
W0431	Temporary Drain Pump Installation & Removal	set	0.72	46.2%	7.1%	46.6%	29.9%	70.1%	2,880.00	958.77	148.01	966.82	620.84	1,452.76	2,073.60	
W0432	Temporary Drain Pump Operation	day	20.10	8.2%	20.8%	71.1%	51.3%	48.7%	1,190.00	1,949.86	4,963.39	17,005.75	12,280.39	11,638.61	23,919.00	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										10,075.07	32,253.45	67,482.48	54,440.78	55,370.22	109,811.00	
Components (%)										9.2%	29.4%	61.5%	49.6%	50.4%	100.0%	
Unit Rate			m3							100.92	323.09	675.99	545.34	554.66	1,100.00	

103(2)d Bridge Excavation below OWL (Rocky Soil)

Unit: 100.00 m3

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0402	Temporary Sheet Pile Driving for excavation, (Vibro Hammer, Rocky Soil)	m2	123.90	10.2%	13.5%	76.3%	49.9%	50.1%	255.00	3,227.96	4,267.38	24,099.16	15,773.01	15,821.49	31,594.50	
W0403	Temporary Sheet Pile Removal for excavation, (Vibro Hammer)	m2	123.90	10.2%	13.5%	76.3%	49.9%	50.1%	169.00	2,135.95	2,824.87	15,978.27	10,454.89	10,484.21	20,939.10	
W0411	Temporary Struts & Supports Installation	t	1.98	33.7%	9.5%	56.9%	36.9%	63.1%	1,390.00	926.75	260.44	1,565.01	1,015.04	1,737.16	2,752.20	
W0412	Temporary Struts & Supports Removal	t	1.98	35.3%	9.1%	55.5%	35.7%	64.3%	827.00	578.41	149.46	909.59	585.19	1,052.27	1,637.46	
M05031	Temporary Sheet Pile Depreciation	t-d	520.20	0.0%	100.0%	0.0%	50.0%	50.0%	33.30	0.00	17,322.66	0.00	8,661.33	8,661.33	17,322.66	
M05041	Temporary Steel Shapes Depreciation	t-d	55.60	0.0%	100.0%	0.0%	50.0%	50.0%	31.30	0.00	1,740.28	0.00	870.14	870.14	1,740.28	
W0108	Excavation, Backhoe 0.61m3 + Crawler Drill	m3	100.00	3.4%	6.5%	90.1%	53.2%	46.8%	185.00	627.26	1,197.50	16,675.23	9,842.39	8,657.61	18,500.00	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	100.00	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	757.47	1,372.02	7,170.51	4,787.07	4,512.93	9,300.00	
W0132	Backfill B	m3	0.00	7.7%	10.0%	82.3%	51.3%	48.7%	111.00	0.00	0.00	0.00	0.00	0.00	0.00	
W0431	Temporary Drain Pump Installation & Removal	set	0.72	46.2%	7.1%	46.6%	29.9%	70.1%	2,880.00	958.77	148.01	966.82	620.84	1,452.76	2,073.60	
W0432	Temporary Drain Pump Operation	day	20.10	8.2%	20.8%	71.1%	51.3%	48.7%	1,190.00	1,949.86	4,963.39	17,005.75	12,280.39	11,638.61	23,919.00	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										11,162.44	34,246.00	84,370.36	64,890.29	64,888.51	129,778.80	
Components (%)										8.6%	26.4%	65.0%	50.0%	50.0%	100.0%	
Unit Rate			m3							111.81	343.04	845.14	650.01	649.99	1,300.00	

103(3)a Gravel Foundation Fill

Unit: 10.00 m3

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L019	Skilled Labor	md	0.30	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	120.90	0.00	0.00	0.00	120.90	120.90	
L020	Unskilled Labor	md	1.80	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	565.20	0.00	0.00	0.00	565.20	565.20	
W0122	Crushed Aggregate, transported	m3	12.00	9.1%	15.5%	75.4%	47.0%	53.0%	258.00	280.90	480.85	2,334.25	1,466.21	1,639.79	3,096.00	Loss 20.0%
	Miscellaneous	LS	1.00	0.0%	20.0%	80.0%	55.0%	45.0%		0.00	22.69	90.77	62.40	51.06	113.46	3.0%
Total										967.00	503.54	2,425.02	1,518.61	2,376.95	3,895.58	
Components (%)										24.8%	12.9%	62.3%	39.0%	61.0%	100.0%	
Unit Rate			m3							80.58	50.41	202.08	152.03	237.97	390.00	

Miscellaneous covers the cost for depreciation of compaction equipment, fuel, etc.

103(3)b Selected Sand Bedding

Unit: 10.00 m3

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L019	Skilled Labor	md	0.30	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	120.90	0.00	0.00	0.00	120.90	120.90	
L020	Unskilled Labor	md	1.80	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	565.20	0.00	0.00	0.00	565.20	565.20	
W0128	Selected Sand, transported	m3	12.00	12.7%	20.0%	67.2%	43.6%	56.4%	166.00	253.04	399.37	1,339.58	867.98	1,124.02	1,992.00	Loss 20.0%
	Miscellaneous	LS	1.00	0.0%	20.0%	80.0%	55.0%	45.0%		0.00	16.07	64.27	44.19	36.15	80.34	3.0%
Total										939.14	415.44	1,403.86	912.17	1,846.27	2,758.44	
Components (%)										34.0%	15.1%	50.9%	33.1%	66.9%	100.0%	
Unit Rate			m3							93.97	41.57	140.47	91.27	184.73	276.00	

Miscellaneous covers the cost for depreciation of compaction equipment, fuel, etc.

103(6) Pipe Culverts and Drain Excavation

Unit: 100.00 m3

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0105	Excavation, Backhoe 0.61m3	m3	100.00	4.4%	8.4%	87.2%	52.9%	47.1%	40.90	179.96	343.56	3,566.48	2,162.74	1,927.26	4,090.00	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	83.90	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	635.52	1,151.12	6,016.06	4,016.35	3,786.35	7,802.70	
W0133	Backfill C	m3	16.10	11.4%	11.8%	76.7%	49.4%	50.6%	145.00	266.60	276.21	1,791.69	1,153.30	1,181.20	2,334.50	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										1,082.08	1,770.89	11,374.23	7,332.39	6,894.81	14,227.20	
Components (%)										7.6%	12.4%	79.9%	51.5%	48.5%	100.0%	
Unit Rate			m3							10.80	17.68	113.52	73.18	68.82	142.00	

103(7) Granular Backfill for Pipe Culverts

Unit: 10.00 m3

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
W0128	Selected Sand, transported	m3	12.00	12.7%	20.0%	67.2%	43.6%	56.4%	166.00	253.04	399.37	1,339.58	867.98	1,124.02	1,992.00	Loss 20.0%
1.020	Unskilled Labor	md	1.90	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	596.60	0.00	0.00	0.00	596.60	696.60	
R0307-009	Plate Compactor	day	0.16	0.0%	17.7%	82.3%	56.2%	43.8%	780.00	0.00	22.09	102.71	70.14	54.66	124.80	
R0306-006	Vibration Hammer, 6in	day	0.27	0.0%	49.4%	50.6%	59.7%	40.3%	158.00	0.00	21.07	21.59	25.46	17.20	42.66	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									849.64	442.54	1,463.88	963.58	1,792.48	2,756.06	
	<b>Components (%)</b>									30.8%	16.1%	53.1%	35.0%	66.0%	100.0%	
	<b>Unit Rate</b>									85.99	44.32	146.60	96.50	179.50	276.00	

104(1) Embankment from Excavated Soil

Unit: 100.00 m3

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
W0101	Excavation, Bulldozer 21t	m3	120.00	1.5%	8.2%	90.3%	54.4%	45.6%	25.30	45.54	248.95	2,741.51	1,651.65	1,384.35	3,036.00	Loss 20.0%
W0123	Excavated Soil, transported	m3	120.00	7.5%	13.7%	78.8%	51.7%	48.3%	69.70	624.41	1,146.02	6,588.57	4,324.72	4,039.28	8,364.00	Loss 20.0%
W0141	Filling & Laying, bulldozer 15t	m3	100.00	3.0%	7.8%	89.2%	53.6%	46.4%	27.50	82.50	214.50	2,453.00	1,473.42	1,276.58	2,750.00	
W0147	Compaction, tire roller 8~20t	m3	100.00	4.3%	8.0%	87.7%	52.7%	47.3%	10.40	44.72	83.20	912.08	548.38	491.62	1,040.00	
W0151	Slope Formation by Bulldozer	m2	9.74	7.5%	7.4%	85.1%	51.1%	48.9%	39.60	28.78	28.70	328.22	197.15	188.55	385.70	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									830.95	1,721.37	13,023.38	8,195.33	7,380.37	15,575.70	
	<b>Components (%)</b>									5.3%	11.1%	83.6%	52.6%	47.4%	100.0%	
	<b>Unit Rate</b>									8.32	17.24	130.44	82.08	73.92	156.00	

104(3) Embankment from Borrow Soil

Unit: 100.00 m3

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
W0121	Borrow Soil, transported	m3	120.00	6.9%	22.1%	71.0%	48.5%	51.5%	221.00	1,836.85	5,849.76	18,833.38	12,871.09	13,648.91	26,520.00	Loss 20.0%
W0141	Filling & Laying, bulldozer 15t	m3	100.00	3.0%	7.8%	89.2%	53.6%	46.4%	27.50	82.50	214.50	2,453.00	1,473.42	1,276.58	2,750.00	
W0147	Compaction, tire roller 8~20t	m3	100.00	4.3%	8.0%	87.7%	52.7%	47.3%	10.40	44.72	83.20	912.08	548.38	491.62	1,040.00	
W0151	Slope Formation by Bulldozer	m2	9.74	7.5%	7.4%	85.1%	51.1%	48.9%	39.60	28.78	28.70	328.22	197.15	188.55	385.70	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									1,992.85	6,176.16	22,526.69	15,080.95	15,605.65	30,685.70	
	<b>Components (%)</b>									6.5%	20.1%	73.4%	49.2%	50.8%	100.0%	
	<b>Unit Rate</b>									19.93	61.77	225.30	150.92	156.08	307.00	

104(4) Embankment from Borrow (Selected Granular Material) for Bridge

Unit: 100.00 m3

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
W0128	Selected Sand, transported	m3	120.00	12.7%	20.0%	67.2%	43.6%	56.4%	166.00	2,530.43	3,993.73	13,395.83	8,679.80	11,240.20	19,920.00	Loss 20.0%
W0141	Filling & Laying, bulldozer 15t	m3	100.00	3.0%	7.8%	89.2%	53.6%	46.4%	27.50	82.50	214.50	2,453.00	1,473.42	1,276.58	2,750.00	
W0145	Compaction, bulldozer 15t	m3	100.00	3.0%	7.8%	89.2%	53.6%	46.4%	24.00	72.00	187.20	2,146.80	1,285.90	1,114.10	2,400.00	
W0151	Slope Formation by Bulldozer	m2	9.74	7.5%	7.4%	85.1%	51.1%	48.9%	39.60	28.78	28.70	328.22	197.15	188.55	385.70	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									2,713.71	4,424.13	18,317.86	11,636.27	13,819.43	25,455.70	
	<b>Components (%)</b>									10.7%	17.4%	72.0%	45.7%	54.3%	100.0%	
	<b>Unit Rate</b>									27.18	44.32	183.50	116.57	138.43	255.00	

105(1) Subgrade Preparation (Common Soil)

Unit: 100.00 m2

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
L020	Unskilled Labor	md	0.13	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	40.82	0.00	0.00	0.00	40.82		
R0301-371	Motor Grader, 3.71m	hr	0.26	3.6%	6.9%	89.5%	53.2%	46.8%	2,230.00	20.87	40.01	518.92	308.27	271.53	579.40	
R0305-106	Vibratory Tandem Smooth Drum 10.6t (Vibration Roller, tandem, 8~10t)	hr	0.17	4.0%	9.0%	87.0%	53.2%	46.8%	2,030.00	13.80	31.06	300.24	183.62	161.48	345.11	
R0304-016	Four Tamping Foot Wheels (Tire Roller) 16t	hr	0.17	4.3%	8.0%	87.7%	52.7%	47.3%	1,970.00	14.40	26.79	293.71	176.59	158.31	334.90	
R1103-450	Water Wagon/Pump Truck 500-1000 gal (2200-4500 ltr)	hr	0.11	11.3%	24.6%	64.1%	50.8%	49.2%	545.00	6.77	14.75	38.43	30.46	29.49	59.95	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									96.67	112.60	1,151.29	698.94	661.63	1,360.57	
	<b>Components (%)</b>									7.1%	8.3%	84.6%	51.4%	48.6%	100.0%	
	<b>Unit Rate</b>									0.97	1.13	11.51	6.99	6.61	13.60	

105(2) Subgrade Preparation (Existing Gravel Surface)

Unit: 100.00 m2

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L020	Unskilled Labor	md	0.13	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	40.82	0.00	0.00	0.00	40.82	40.82	
R0301-371	Motor Grader, 3.71m	hr	0.26	3.6%	6.9%	89.5%	53.2%	46.8%	2,230.00	20.87	40.01	518.92	308.27	271.53	579.80	
R0305-106	Vibratory Tandem Smooth Drum 10.6t (Vibration Roller, tandem, 8~10t)	hr	0.17	4.0%	9.0%	87.0%	53.2%	46.8%	2,030.00	13.80	31.06	300.24	183.62	161.48	345.10	
R0304-016	Four Tamping Foot Wheels (Tire Roller) 16t	hr	0.17	4.3%	8.0%	87.7%	52.7%	47.3%	1,970.00	14.40	26.79	293.71	176.59	158.31	334.90	
R1103-450	Water Wagon/Pump Truck 500-1000 gal (2200-4500 ltr)	hr	0.11	11.3%	24.6%	64.1%	50.8%	49.2%	545.00	6.77	14.75	38.43	30.46	29.49	59.95	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										96.67	112.60	1,151.29	698.94	661.63	1,360.57	
Components (%)										7.1%	8.3%	84.6%	51.4%	48.6%	100.0%	
Unit Rate			m2							0.97	1.13	11.51	6.99	6.61	13.60	

Part D Subbase and Base Course

200(1) Aggregate Subbase Course

Unit: 100.00 m3

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L020	Unskilled Labor	md	1.36	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	427.04	0.00	0.00	0.00	427.04	427.04	
R0301-371	Motor Grader, 3.71m	hr	2.48	3.6%	6.9%	89.5%	53.2%	46.8%	2,230.00	199.09	381.60	4,949.71	2,940.39	2,590.01	5,530.40	
R0305-106	Vibratory Tandem Smooth Drum 10.6t (Vibration Roller, tandem, 8~10t)	hr	2.08	4.0%	9.0%	87.0%	53.2%	46.8%	2,030.00	168.90	380.02	3,673.49	2,246.70	1,975.70	4,222.40	
R0304-016	Four Tamping Foot Wheels (Tire Roller) 16t	hr	2.08	4.3%	8.0%	87.7%	52.7%	47.3%	1,970.00	176.20	327.81	3,593.60	2,160.62	1,936.98	4,097.60	
R1103-450	Water Wagon/Pump Truck 500-1000 gal (2200-4500 ltr)	hr	1.36	11.3%	24.6%	64.1%	50.8%	49.2%	545.00	83.76	182.34	475.11	376.56	364.64	741.20	
W0122	Crushed Aggregate, transported	m3	128.00	9.1%	15.5%	75.4%	47.0%	53.0%	258.00	2,996.26	5,129.06	24,898.68	15,532.88	17,491.12	33,024.00	Loss 28.0%
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										4,051.24	6,400.81	37,590.58	23,257.15	24,785.49	48,042.64	
Components (%)										8.4%	13.3%	78.2%	48.4%	51.6%	100.0%	
Unit Rate			m3							40.48	63.95	375.57	232.37	247.63	480.00	

Thickness = 0.250 m  
Compaction layer thickness = 0.200 m

200(2) Aggregate Subbase Course using materials born by removal of existing gravel pavement

Unit: 100.00 m3

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L020	Unskilled Labor	md	1.36	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	427.04	0.00	0.00	0.00	427.04	427.04	
R0301-371	Motor Grader, 3.71m	hr	2.48	3.6%	6.9%	89.5%	53.2%	46.8%	2,230.00	199.09	381.60	4,949.71	2,940.39	2,590.01	5,530.40	
R0305-106	Vibratory Tandem Smooth Drum 10.6t (Vibration Roller, tandem, 8~10t)	hr	2.08	4.0%	9.0%	87.0%	53.2%	46.8%	2,030.00	168.90	380.02	3,673.49	2,246.70	1,975.70	4,222.40	
R0304-016	Four Tamping Foot Wheels (Tire Roller) 16t	hr	2.08	4.3%	8.0%	87.7%	52.7%	47.3%	1,970.00	176.20	327.81	3,593.60	2,160.62	1,936.98	4,097.60	
R1103-450	Water Wagon/Pump Truck 500-1000 gal (2200-4500 ltr)	hr	1.36	11.3%	24.6%	64.1%	50.8%	49.2%	545.00	83.76	182.34	475.11	376.56	364.64	741.20	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										1,054.98	1,271.76	12,691.90	7,724.27	7,294.37	15,018.64	
Components (%)										7.0%	8.5%	84.5%	51.4%	48.6%	100.0%	
Unit Rate			m3							10.54	12.70	126.76	77.15	72.85	150.00	

Thickness = 0.250 m  
Compaction layer thickness = 0.200 m

201(1) Aggregate Base Course		Unit: 100.00 m3														
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L020	Unskilled Labor	md	1.76	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	552.64	0.00	0.00	0.00	552.64	552.64	
R0301-371	Motor Grader, 3.71m	hr	2.48	3.6%	6.9%	89.5%	53.2%	46.8%	2,230.00	199.09	381.60	4,949.71	2,940.39	2,590.01	5,530.40	
R0305-106	Vibratory Tandem Smooth Drum 10.6t (Vibration Roller, tandem, 8~10t)	hr	2.64	4.0%	9.0%	87.0%	53.2%	46.8%	2,030.00	214.37	482.33	4,662.50	2,851.58	2,607.62	5,359.20	
R0304-016	Four Tamping Foot Wheels (Tire Roller) 16t	hr	2.64	4.3%	8.0%	87.7%	52.7%	47.3%	1,970.00	223.63	416.05	4,561.10	2,742.33	2,458.47	5,200.80	
R1103-450	Water Wagon/Pump Truck 500-1000 gal (2200-4500 ltr)	hr	1.68	11.3%	24.6%	64.1%	50.8%	49.2%	545.00	103.46	225.24	586.90	465.17	450.43	915.60	
W0122	Crushed Aggregate, transported	m3	128.00	9.1%	15.5%	75.4%	47.0%	53.0%	258.00	2,996.26	5,129.06	24,898.68	15,532.88	17,491.12	33,024.00	Loss 28.0%
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										4,289.46	6,634.28	39,658.90	24,532.34	26,050.30	60,582.64	
Components (%)										8.5%	13.1%	78.4%	48.5%	51.5%	100.0%	
Unit Rate			m3							42.91	66.37	396.73	245.41	260.59	506.00	
Thickness =																
Compaction layer thickness =																

204(1) Cement Stabilized Sand Base Course		Unit: 100.00 m3														
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L020	Unskilled Labor	md	1.67	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	524.38	0.00	0.00	0.00	524.38	524.38	
W0128	Selected Sand, transported	m3	120.75	12.7%	20.0%	67.2%	43.6%	56.4%	166.00	2,546.25	4,018.69	13,479.56	8,734.05	11,310.45	20,044.50	Loss 28.0%
M03011	Portland Cement, ordinary	t	5.77	0.0%	100.0%	0.0%	60.0%	40.0%	3,375.00	0.00	19,473.75	0.00	11,684.25	7,789.50	19,473.75	Loss 2.0%
R0402-005	Truck Crane, Hydraulic 2-5t	hr	1.90	17.9%	10.9%	71.2%	45.7%	54.3%	412.00	140.12	85.33	557.35	357.90	424.90	782.60	
R0302-000	Soil Stabilizer/Road Reclaimer	hr	2.00	1.4%	4.2%	94.4%	54.0%	46.0%	5,840.00	163.52	490.56	11,025.92	6,303.36	5,376.64	11,680.00	
R0301-371	Motor Grader, 3.71m	hr	1.67	3.6%	6.9%	89.5%	53.2%	46.8%	2,230.00	134.07	256.96	3,333.07	1,980.02	1,744.08	3,724.10	
R0304-016	Four Tamping Foot Wheels (Tire Roller) 16t	hr	1.67	4.3%	8.0%	87.7%	52.7%	47.3%	1,970.00	141.47	263.19	2,885.24	1,734.73	1,555.17	3,289.90	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										3,649.80	24,588.48	31,281.14	30,794.30	28,725.13	59,519.43	
Components (%)										6.1%	41.3%	52.6%	51.7%	48.3%	100.0%	
Unit Rate			m3							36.49	245.80	312.71	307.84	287.16	595.00	
Thickness =																
Cement 6.0%																

Part E Surface Courses

300(1) Gravel Surface Course		Unit: 100.00 m3														
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L020	Unskilled Labor	md	2.20	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	690.80	0.00	0.00	0.00	690.80	690.80	
R0301-371	Motor Grader, 3.71m	hr	3.10	3.6%	6.9%	89.5%	53.2%	46.8%	2,230.00	248.87	477.00	6,187.14	3,675.48	3,237.52	8,913.00	
R0305-106	Vibratory Tandem Smooth Drum 10.6t (Vibration Roller, tandem, 8~10t)	hr	3.30	4.0%	9.0%	87.0%	53.2%	46.8%	2,030.00	267.96	602.91	5,828.13	3,564.47	3,134.53	6,699.00	
R0304-016	Four Tamping Foot Wheels (Tire Roller) 16t	hr	3.30	4.3%	8.0%	87.7%	52.7%	47.3%	1,970.00	279.54	520.08	5,701.38	3,427.91	3,073.09	6,501.00	
R1103-450	Water Wagon/Pump Truck 500-1000 gal (2200-4500 ltr)	hr	2.10	11.3%	24.6%	64.1%	50.8%	49.2%	545.00	129.33	281.55	733.62	581.46	563.04	1,144.50	
W0129	Gravel/Stone, transported	m3	132.00	11.7%	18.7%	69.7%	44.9%	55.1%	196.00	3,019.19	4,827.42	18,025.39	11,616.28	14,255.72	25,872.00	Loss 32.0%
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										4,635.69	6,708.96	36,475.66	22,965.61	24,954.69	47,820.30	
Components (%)										9.7%	14.0%	76.3%	47.8%	52.2%	100.0%	
Unit Rate			m3							46.34	67.06	364.60	228.56	249.44	478.00	
Thickness =																
Compaction layer thickness =																

301(1) Prime Coat

Unit: 1.00 t

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L020	Unskilled Labor	md	0.40	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	125.60	0.00	0.00	0.00	125.60	125.60	
M07011	Prime Coat	t	1.00	0.0%	100.0%	0.0%	65.0%	35.0%	22,635.00	0.00	22,635.00	0.00	14,712.75	7,922.25	22,635.00	
	Miscellaneous	LS	1.00	0.0%	10.0%	90.0%	50.0%	50.0%		0.00	22.76	204.85	113.80	113.80	227.61	1.0%
	<b>Total</b>									125.60	22,657.76	204.85	14,826.55	8,161.65	22,988.21	
	<b>Components (%)</b>									0.5%	98.6%	0.9%	64.5%	35.5%	100.0%	
	<b>Unit Rate</b>									125.60	22,669.39	204.95	14,834.16	8,165.84	23,000.00	

Miscellaneous covers the costs for minor tools, cleaning, etc.

302(1) Tack Coat

Unit: 1.00 t

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L020	Unskilled Labor	md	0.47	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	147.58	0.00	0.00	0.00	147.58	147.58	
M07012	Tack Coat	t	1.00	0.0%	100.0%	0.0%	65.0%	35.0%	22,635.00	0.00	22,635.00	0.00	14,712.75	7,922.25	22,635.00	
	Miscellaneous	LS	1.00	0.0%	10.0%	90.0%	50.0%	50.0%		0.00	22.78	205.04	113.91	113.91	227.83	1.0%
	<b>Total</b>									147.58	22,657.78	205.04	14,826.66	8,183.74	23,010.41	
	<b>Components (%)</b>									0.6%	98.5%	0.9%	64.4%	35.6%	100.0%	
	<b>Unit Rate</b>									147.51	22,647.54	204.95	14,819.96	8,180.04	23,000.00	

Miscellaneous covers the costs for minor tools, cleaning, etc.

310(1) Bituminous Concrete Surface Course, hot laid

Unit: 10.00 t

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.03	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	16.98	0.00	0.00	0.00	16.98	16.98	
L019	Skilled Labor	md	0.18	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	72.54	0.00	0.00	0.00	72.54	72.54	
L020	Unskilled Labor	md	0.18	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	56.52	0.00	0.00	0.00	56.52	56.52	
R0802-047	Asphalt Paver/Finisher, 4.7m	hr	0.28	3.2%	4.3%	92.5%	53.1%	46.9%	2,420.00	21.68	29.14	626.78	359.89	317.71	677.60	
R0305-106	Vibratory Tandem Smooth Drum 10.6t (Vibration Roller, tandem, 8~10t)	hr	0.28	4.0%	9.0%	87.0%	53.2%	46.8%	2,030.00	22.74	51.16	494.51	302.44	265.96	568.40	
R0304-016	Four Tamping Foot Wheels (Tire Roller) 16t	hr	0.28	4.3%	8.0%	87.7%	52.7%	47.3%	1,970.00	23.72	44.13	483.75	290.85	260.75	551.60	
M07021	Asphalt Mixture	t	11.20	0.0%	100.0%	0.0%	65.0%	35.0%	2,500.00	0.00	28,000.00	0.00	18,200.00	9,800.00	28,000.00	Loss 12.0%
	Miscellaneous	LS	1.00	0.0%	20.0%	80.0%	50.0%	50.0%		0.00	59.89	239.55	149.72	149.72	299.44	1.0%
	<b>Total</b>									214.18	28,184.31	1,844.59	19,302.90	10,940.18	30,243.08	
	<b>Components (%)</b>									0.7%	93.2%	6.1%	63.8%	36.2%	100.0%	
	<b>Unit Rate</b>									21.39	2,814.42	184.20	1,927.54	1,092.46	3,020.00	

Miscellaneous covers the cost for spraying equipment, heating fuel, formwork, etc.  
Asphalt Pavement Thickness = 50.000 mm Unit Weight = 2.35 t/m3

310(2) Asphalt Mixture Wearing Course (t=50mm) for bridge pavement

Unit: 100.00 m2

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.04	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	22.64	0.00	0.00	0.00	22.64	22.64	
L019	Skilled Labor	md	0.21	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	84.63	0.00	0.00	0.00	84.63	84.63	
L020	Unskilled Labor	md	0.21	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	65.94	0.00	0.00	0.00	65.94	65.94	
R0802-047	Asphalt Paver/Finisher, 4.7m	hr	0.33	3.2%	4.3%	92.5%	53.1%	46.9%	2,420.00	25.56	34.34	738.71	424.15	374.45	798.60	
R0305-106	Vibratory Tandem Smooth Drum 10.6t (Vibration Roller, tandem, 8~10t)	hr	0.33	4.0%	9.0%	87.0%	53.2%	46.8%	2,030.00	26.80	60.29	582.81	356.45	313.45	669.90	
R0304-016	Four Tamping Foot Wheels (Tire Roller) 16t	hr	0.33	4.3%	8.0%	87.7%	52.7%	47.3%	1,970.00	27.95	52.01	570.14	342.79	307.31	650.10	
M07012	Tack Coat	t	0.04	0.0%	100.0%	0.0%	65.0%	35.0%	22,635.00	0.00	905.40	0.00	588.51	316.89	905.40	
M07021	Asphalt Mixture	t	13.16	0.0%	100.0%	0.0%	65.0%	35.0%	2,500.00	0.00	32,900.00	0.00	21,385.00	11,515.00	32,900.00	Loss 12.0%
	Miscellaneous	LS	1.00	0.0%	20.0%	80.0%	50.0%	50.0%		0.00	72.19	288.78	180.49	180.49	360.97	1.0%
	<b>Total</b>									253.52	34,024.23	2,180.43	23,277.39	13,180.80	36,458.19	
	<b>Components (%)</b>									0.7%	93.3%	6.0%	63.8%	36.2%	100.0%	
	<b>Unit Rate</b>									2.54	340.63	21.81	233.04	131.96	365.00	

Miscellaneous covers the cost for spraying equipment, heating fuel, formwork, etc.  
Asphalt Pavement Thickness = 50 mm Unit Weight = 2.35 t/m3  
Tack Coat = 0.428 ltr/m2 Unit Weight = 1.00 t/m3

310(3) Waterproofing Layer for Pampanga Deck Slab										Unit: 100.00 m <sup>2</sup>						
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.50	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	283.00	0.00	0.00	0.00	283.00	283.00	
L019	Skilled Labor	md	1.20	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	483.60	0.00	0.00	0.00	483.60	483.60	
L020	Unskilled Labor	md	0.70	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	219.80	0.00	0.00	0.00	219.80	219.80	
M07051	Rubberized Asphalt Agent	kg	52.50	0.0%	100.0%	0.0%	65.0%	35.0%	24.40	0.00	1,281.00	0.00	832.65	148.35	1,281.00	Loss 5.0%
M07052	Rubberized Asphalt	kg	42.00	0.0%	100.0%	0.0%	65.0%	35.0%	18.70	0.00	785.40	0.00	510.51	274.89	785.40	Loss 5.0%
	Miscellaneous	LS	1.00	0.0%	10.0%	90.0%	50.0%	50.0%		0.00	15.26	137.38	76.32	76.32	152.64	5.0%
Total										986.40	2,081.66	137.38	1,419.48	1,785.96	3,205.44	
Components (%)										30.8%	64.3%	4.3%	44.3%	55.7%	100.0%	
Unit Rate			m <sup>2</sup>							9.88	20.85	1.38	14.21	17.89	32.10	

Miscellaneous covers the costs for asphalt kettle, generator, air compressor, sponge roller, brushes, minor tools, etc.

311(1)a PCC Pavement (Plain), t=280mm										Unit: 100.00 m <sup>2</sup>						
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.40	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	226.40	0.00	0.00	0.00	226.40	226.40	
L019	Skilled Labor	md	1.67	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	673.01	0.00	0.00	0.00	673.01	673.01	
L020	Unskilled Labor	md	6.71	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	2,106.94	0.00	0.00	0.00	2,106.94	2,106.94	
W0211	Concrete (for PCC Pavement, 24.1MPa, max agg. 50mm)	m <sup>3</sup>	28.84	2.8%	77.6%	19.6%	57.1%	42.9%	1,530.00	1,214.42	34,249.58	8,661.20	25,181.84	18,943.36	44,125.20	Loss 3.0%
M07103	Joint Filler (bituminous t=18mm)	m <sup>2</sup>	0.83	0.0%	100.0%	0.0%	60.0%	40.0%	514.00	0.00	426.62	0.00	255.97	170.65	426.62	
M07113	Joint Sealant (18x18mm)	m	3.18	0.0%	100.0%	0.0%	60.0%	40.0%	103.00	0.00	327.54	0.00	196.52	131.02	327.54	
M07117	Joint Sealant (liquid type)	kg	10.20	0.0%	100.0%	0.0%	60.0%	40.0%	96.20	0.00	981.24	0.00	588.74	392.50	981.24	
M02011	Structural Steel (Round Bar, SS400)	kg	94.49	0.0%	100.0%	0.0%	70.0%	30.0%	21.80	0.00	2,059.88	0.00	1,441.92	617.96	2,059.88	
M08700	Steel Gas Pipe, φ20	m	1.42	0.0%	100.0%	0.0%	60.0%	40.0%	76.70	0.00	108.91	0.00	65.35	43.56	108.91	
Q0705-075	Concrete Spreader, 3~7.5m	hr	1.15	2.2%	1.5%	96.3%	52.9%	47.1%	3,260.00	82.28	57.03	3,609.69	1,983.76	1,765.21	3,749.00	
R0706-090	Concrete Paver/Finisher	hr	1.15	5.0%	9.6%	85.4%	52.6%	47.4%	1,400.00	80.50	154.56	1,374.94	847.44	762.56	1,610.00	
R0402-025	Truck Crane, Hydraulic 21-25t	hr	1.71	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	125.09	154.65	1,994.56	1,181.76	1,092.54	2,274.30	
	Miscellaneous	LS	1.00	0.0%	30.0%	70.0%	50.0%	50.0%		0.00	1,056.84	2,464.10	1,760.07	1,760.07	3,520.14	6.0%
Total										4,508.63	39,576.06	18,104.49	33,503.38	28,695.81	62,189.18	
Components (%)										7.2%	63.6%	29.1%	53.9%	46.1%	100.0%	
Unit Rate			m <sup>2</sup>							45.09	395.83	181.03	335.09	286.91	622.00	

Miscellaneous covers the cost for formwork, truck, concrete cutter, curing materials, chairs, biding wires, etc.  
Thickness = 0.280 m

311(1)b PCC Pavement (Plain), t=250mm										Unit: 100.000 m <sup>2</sup>						
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.40	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	226.40	0.00	0.00	0.00	226.40	226.40	
L019	Skilled Labor	md	1.67	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	673.01	0.00	0.00	0.00	673.01	673.01	
L020	Unskilled Labor	md	6.71	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	2,106.94	0.00	0.00	0.00	2,106.94	2,106.94	
W0211	Concrete (for PCC Pavement, 24.1MPa, max agg. 50mm)	m <sup>3</sup>	26.00	2.8%	77.6%	19.6%	57.1%	42.9%	1,530.00	1,094.83	30,876.88	7,808.29	22,702.07	17,077.93	39,780.00	Loss 4.0%
M07103	Joint Filler (bituminous t=18mm)	m <sup>2</sup>	0.74	0.0%	100.0%	0.0%	60.0%	40.0%	514.00	0.00	380.36	0.00	228.22	152.14	380.36	
M07113	Joint Sealant (18x18mm)	m	3.18	0.0%	100.0%	0.0%	60.0%	40.0%	103.00	0.00	327.54	0.00	196.52	131.02	327.54	
M07117	Joint Sealant (liquid type)	kg	10.20	0.0%	100.0%	0.0%	60.0%	40.0%	96.20	0.00	981.24	0.00	588.74	392.50	981.24	
M02011	Structural Steel (Round Bar, SS400)	kg	94.49	0.0%	100.0%	0.0%	70.0%	30.0%	21.80	0.00	2,059.88	0.00	1,441.92	617.96	2,059.88	
M08700	Steel Gas Pipe, φ20	m	1.42	0.0%	100.0%	0.0%	60.0%	40.0%	76.70	0.00	108.91	0.00	65.35	43.56	108.91	
Q0705-075	Concrete Spreader, 3~7.5m	hr	1.15	2.2%	1.5%	96.3%	52.9%	47.1%	3,260.00	82.28	57.03	3,609.69	1,983.76	1,765.21	3,749.00	
R0706-090	Concrete Paver/Finisher	hr	1.15	5.0%	9.6%	85.4%	52.6%	47.4%	1,400.00	80.50	154.56	1,374.94	847.44	762.56	1,610.00	
R0402-025	Truck Crane, Hydraulic 21-25t	hr	1.71	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	125.09	154.65	1,994.56	1,181.76	1,092.54	2,274.30	
	Miscellaneous	LS	1.00	0.0%	30.0%	70.0%	50.0%	50.0%		0.00	977.00	2,279.66	1,628.33	1,628.33	3,256.65	6.0%
Total										4,389.04	36,078.05	17,067.15	30,864.11	26,670.12	57,534.23	
Components (%)										7.6%	62.7%	29.7%	53.6%	46.4%	100.0%	
Unit Rate			m <sup>2</sup>							43.86	360.57	170.57	308.46	266.54	575.00	

Miscellaneous covers the cost for formwork, truck, concrete cutter, curing materials, chairs, biding wires, etc.  
Thickness = 0.250 m



311(i)c PCC Pavement (Plain), t=230mm

Unit: 100.00 m2

Item No.	Description	Unit	Quantity	Unit Rate						Total (PP)	Amount					Remarks
				Component (%)					Total (PP)		Component (PP)					
				Lab.	Mat.	Equip.	For.	Local			Labor	Material	Equipment	Foreign	Local	
L002	Foreman	md	0.40	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	226.40	0.00	0.00	0.00	226.40	226.40	
L019	Skilled Labor	md	1.67	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	673.01	0.00	0.00	0.00	673.01	673.01	
L020	Unskilled Labor	md	6.71	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	2,106.94	0.00	0.00	0.00	2,106.94	2,106.94	
W0211	Concrete (for PCC Pavement, 24.1MPa, max agg. 50mm)	m3	23.92	2.8%	77.6%	19.6%	57.1%	42.9%	1,530.00	1,907.24	28,406.73	7,183.63	20,885.91	15,711.69	36,597.60	Loss 4.0%
M07103	Joint Filler (bituminous t=18mm)	m2	0.67	0.0%	100.0%	0.0%	60.0%	40.0%	514.00	0.00	344.38	0.00	206.63	137.75	344.38	
M07113	Joint Sealant (18x18mm)	m	3.18	0.0%	100.0%	0.0%	60.0%	40.0%	103.00	0.00	327.54	0.00	196.52	131.02	327.54	
M07117	Joint Sealant (liquid type)	kg	10.20	0.0%	100.0%	0.0%	60.0%	40.0%	96.20	0.00	981.24	0.00	588.74	392.50	981.24	
M02011	Structural Steel (Round Bar, SS400)	kg	97.02	0.0%	100.0%	0.0%	70.0%	30.0%	21.80	0.00	2,115.04	0.00	1,480.53	634.51	2,115.04	
M08700	Steel Gas Pipe, φ20	m	1.42	0.0%	100.0%	0.0%	60.0%	40.0%	76.70	0.00	108.91	0.00	65.35	43.56	108.91	
Q0705-075	Concrete Spreader, 3~7.5m	hr	1.15	2.2%	1.5%	96.3%	52.9%	47.1%	3,260.00	82.28	57.03	3,609.69	1,983.76	1,765.24	3,749.00	
R0706-090	Concrete Paver/Finisher	hr	1.15	5.0%	9.6%	85.4%	52.6%	47.4%	1,400.00	80.50	154.56	1,374.94	847.44	762.56	1,610.00	
R0402-025	Truck Crane, Hydraulic 21-25t	hr	1.71	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	125.09	154.65	1,994.56	1,181.76	1,092.54	2,274.30	
	Miscellaneous	LS	1.00	0.0%	30.0%	70.0%	50.0%	50.0%		0.00	920.06	2,146.80	1,533.43	1,533.43	3,066.80	6.0%
Total										4,381.46	33,570.14	16,309.63	28,970.07	25,211.15	54,181.22	
Components (%)										7.9%	62.0%	30.1%	53.5%	46.5%	100.0%	
Unit Rate			m2							43.03	335.82	163.15	289.80	252.20	542.00	

Miscellaneous covers the cost for formwork, truck, concrete cutter, curing materials, chairs, biding wires, etc.  
Thickness = 0.230 m

311(i)d PCC Pavement (Plain), t=180mm

Unit: 100.00 m2

Item No.	Description	Unit	Quantity	Unit Rate						Total (PP)	Amount					Remarks
				Component (%)					Total (PP)		Component (PP)					
				Lab.	Mat.	Equip.	For.	Local			Labor	Material	Equipment	Foreign	Local	
L002	Foreman	md	0.40	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	226.40	0.00	0.00	0.00	226.40	226.40	
L019	Skilled Labor	md	1.67	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	673.01	0.00	0.00	0.00	673.01	673.01	
L020	Unskilled Labor	md	6.71	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	2,106.94	0.00	0.00	0.00	2,106.94	2,106.94	
W0211	Concrete (for PCC Pavement, 24.1MPa, max agg. 50mm)	m3	18.72	2.8%	77.6%	19.6%	57.1%	42.9%	1,530.00	788.28	22,231.35	5,621.97	16,345.49	12,296.11	28,641.60	Loss 4.0%
M07103	Joint Filler (bituminous t=18mm)	m2	0.51	0.0%	100.0%	0.0%	60.0%	40.0%	514.00	0.00	262.14	0.00	157.28	104.86	262.14	
M07113	Joint Sealant (18x18mm)	m	3.18	0.0%	100.0%	0.0%	60.0%	40.0%	103.00	0.00	327.54	0.00	196.52	131.02	327.54	
M07117	Joint Sealant (liquid type)	kg	10.20	0.0%	100.0%	0.0%	60.0%	40.0%	96.20	0.00	981.24	0.00	588.74	392.50	981.24	
M02011	Structural Steel (Round Bar, SS400)	kg	114.78	0.0%	100.0%	0.0%	70.0%	30.0%	21.80	0.00	2,502.20	0.00	1,751.54	750.66	2,502.20	
M08700	Steel Gas Pipe, φ20	m	1.42	0.0%	100.0%	0.0%	60.0%	40.0%	76.70	0.00	108.91	0.00	65.35	43.56	108.91	
Q0705-075	Concrete Spreader, 3~7.5m	hr	1.15	2.2%	1.5%	96.3%	52.9%	47.1%	3,260.00	82.28	57.03	3,609.69	1,983.76	1,765.24	3,749.00	
R0706-090	Concrete Paver/Finisher	hr	1.15	5.0%	9.6%	85.4%	52.6%	47.4%	1,400.00	80.50	154.56	1,374.94	847.44	762.56	1,610.00	
R0402-025	Truck Crane, Hydraulic 21-25t	hr	1.71	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	125.09	154.65	1,994.56	1,181.76	1,092.54	2,274.30	
	Miscellaneous	LS	1.00	0.0%	30.0%	70.0%	50.0%	50.0%		0.00	782.34	1,825.46	1,303.90	1,303.90	2,607.80	6.0%
Total										4,082.49	27,561.96	14,426.62	24,421.79	21,649.28	46,071.08	
Components (%)										8.9%	59.8%	31.3%	53.0%	47.0%	100.0%	
Unit Rate			m2							40.85	275.79	144.36	244.37	216.63	461.00	

Miscellaneous covers the cost for formwork, truck, concrete cutter, curing materials, chairs, biding wires, etc.  
Thickness = 0.180 m

SPL 311(i)e PCC Pavement (Lean Mix Concrete)

Unit: 10.00 m3

Item No.	Description	Unit	Quantity	Unit Rate						Total (PP)	Amount					Remarks
				Component (%)					Total (PP)		Component (PP)					
				Lab.	Mat.	Equip.	For.	Local			Labor	Material	Equipment	Foreign	Local	
L002	Foreman	md	0.33	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	186.78	0.00	0.00	0.00	186.78	186.78	
L019	Skilled Labor	md	1.39	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	560.17	0.00	0.00	0.00	560.17	560.17	
L020	Unskilled Labor	md	5.59	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	1,755.26	0.00	0.00	0.00	1,755.26	1,755.26	
W0202	Concrete (Class B, 17MPa, max agg. 50mm)	m3	10.40	3.0%	75.5%	21.5%	56.1%	43.9%	1,400.00	439.39	10,995.39	3,125.22	8,166.85	6,393.15	14,560.00	Loss 4.0%
Q0705-075	Concrete Spreader, 3~7.5m	hr	0.96	2.2%	1.5%	96.3%	52.9%	47.1%	3,260.00	68.68	47.61	3,013.31	1,656.01	1,473.59	3,129.60	
R0706-090	Concrete Paver/Finisher	hr	0.96	5.0%	9.6%	85.4%	52.6%	47.4%	1,400.00	67.20	129.02	1,147.78	707.43	636.67	1,344.00	
R0402-025	Truck Crane, Hydraulic 21-25t	hr	1.43	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	104.60	129.33	1,667.97	988.26	913.64	1,901.90	
	Miscellaneous	LS	1.00	0.0%	30.0%	70.0%	50.0%	50.0%		0.00	421.88	984.38	703.13	703.13	1,406.26	6.0%
Total										3,182.09	11,723.23	9,938.65	12,221.68	12,622.30	24,843.97	
Components (%)										12.8%	47.2%	40.0%	49.2%	50.8%	100.0%	
Unit Rate			m3							317.65	1,170.25	992.11	1,220.00	1,260.00	2,480.00	

Miscellaneous covers the cost for joints, formwork, truck, concrete cutter, curing materials, chairs, biding wires, etc.  
Average Thickness = 0.120 m

SPL 311(2) PCC Pavement (Reinforced), t=300mm (Approach Slab)

Unit: 100.00 m<sup>2</sup>

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0203	Concrete (Class A, 21MPa, max agg. 38mm)	m <sup>3</sup>	33.66	2.5%	79.7%	17.7%	56.7%	43.3%	1,630.00	1,394.33	43,741.19	9,730.28	31,105.70	23,760.10	54,865.80	Loss 2.0%
W0232	Concrete Pouring by Pump Vehicle (reinforced concrete)	m <sup>3</sup>	33.00	15.5%	0.2%	84.3%	45.2%	54.8%	257.00	1,317.55	16.63	7,146.82	3,829.99	4,651.01	8,481.00	
W0237	Concrete Curing (reinforced concrete)	m <sup>3</sup>	23.00	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	103.68	10.58	24.68	119.39	119.54	138.93	
W0241	Formwork (reinforced concrete 11K4m)	m <sup>2</sup>	18.62	59.3%	39.9%	0.6%	2.9%	97.1%	224.00	2,472.75	1,665.42	32.71	121.71	4,049.17	4,170.88	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	1,444.40	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	5,111.06	25,915.79	2,627.67	18,171.74	15,482.78	33,654.52	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	3,805.50	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	13,484.40	72,597.63	7,152.72	50,794.49	42,440.26	93,234.75	
M07102	Joint Filler (bituminous t=12mm)	m <sup>2</sup>	9.27	0.0%	100.0%	0.0%	60.0%	40.0%	343.00	0.00	3,179.61	0.00	1,907.77	1,271.84	3,179.61	
M07112	Joint Sealant (12x12mm)	m	32.20	0.0%	100.0%	0.0%	60.0%	40.0%	75.20	0.00	2,421.44	0.00	1,452.86	969.58	2,421.44	
M02811	Structural Steel (Round Bar, SS400)	kg	118.89	0.0%	100.0%	0.0%	70.0%	30.0%	21.80	0.00	2,591.80	0.00	1,814.25	777.54	2,591.80	
	Miscellaneous	LS	1.00	10.0%	20.0%	70.0%	50.0%	50.0%		405.48	810.95	2,838.34	2,027.39	4,054.77	4,054.77	2.0%
	<b>Total</b>									<b>24,289.24</b>	<b>152,951.04</b>	<b>29,553.22</b>	<b>111,245.29</b>	<b>95,548.21</b>	<b>206,793.50</b>	
	<b>Components (%)</b>									<b>11.7%</b>	<b>74.0%</b>	<b>14.3%</b>	<b>53.8%</b>	<b>46.2%</b>	<b>100.0%</b>	
	<b>Unit Rate</b>	m <sup>2</sup>								<b>243.13</b>	<b>1,531.01</b>	<b>295.83</b>	<b>1,113.56</b>	<b>956.44</b>	<b>2,070.00</b>	

Miscellaneous covers the cost for surface finishing, minor tools, etc.  
Thickness = 0.300 m

Part F Bridge Construction

400(3)a Steel H Piles (450mmx260kg/m), furnished

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.20	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	113.20	0.00	0.00	0.00	113.20	113.20	
L009	Welder	md	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	500.00	0.00	0.00	0.00	500.00	500.00	
L019	Skilled Labor	md	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	403.00	0.00	0.00	0.00	403.00	403.00	
M02015	Structural Steel (Plates, SS400)	kg	25,396.80	0.0%	100.0%	0.0%	70.0%	30.0%	20.20	0.00	513,015.36	0.00	359,110.75	153,904.61	513,015.36	Loss 4.0%
R0901-025	Welding Machine 250A	day	1.00	0.0%	39.8%	60.2%	58.6%	41.4%	588.00	0.00	234.02	353.98	344.48	588.00	588.00	
R1001-150	Generator 101-150 kW	day	1.00	0.0%	52.2%	47.8%	59.9%	40.1%	3,610.00	0.00	1,884.42	1,725.58	2,164.17	1,445.83	3,610.00	
R0402-020	Truck Crane, Hydraulic 16-20t	hr	0.61	6.9%	7.7%	85.4%	51.5%	48.5%	1,070.00	45.04	50.26	557.41	335.83	316.87	652.70	
R0604-020	Trailer 20t	hr	12.53	3.8%	10.7%	85.5%	53.3%	46.7%	1,670.00	795.15	2,238.99	17,890.96	11,154.38	9,770.72	20,925.10	
	Miscellaneous	LS	1.00	10.0%	20.0%	70.0%	50.0%	50.0%		13,495.18	26,990.37	94,460.29	67,475.92	67,475.92	134,951.84	25.0%
	<b>Total</b>									<b>15,351.57</b>	<b>544,413.42</b>	<b>114,994.21</b>	<b>440,585.54</b>	<b>234,173.66</b>	<b>674,759.20</b>	
	<b>Components (%)</b>									<b>2.3%</b>	<b>80.7%</b>	<b>17.0%</b>	<b>65.3%</b>	<b>34.7%</b>	<b>100.0%</b>	
	<b>Unit Rate</b>	m								<b>153.57</b>	<b>5,446.08</b>	<b>1,150.35</b>	<b>4,407.43</b>	<b>2,342.57</b>	<b>6,750.00</b>	

Miscellaneous covers the cost for fabricator's overhead, facilities, etc.

400(4)a Precast RC Concrete Pile (400mm x 400mm), furnished

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0206	Concrete (Class AA3, 28MPa, max agg. 20mm)	m <sup>3</sup>	15.94	2.2%	82.7%	15.1%	57.8%	42.2%	1,860.00	647.23	24,513.11	4,488.06	17,144.21	12,504.19	29,648.40	Loss 2.0%
W0232	Concrete Pouring by Pump Vehicle (reinforced concrete)	m <sup>3</sup>	15.63	15.5%	0.2%	84.3%	45.2%	54.8%	257.00	634.04	7.88	3,385.00	1,814.02	2,202.89	4,016.91	
W0237	Concrete Curing (reinforced concrete)	m <sup>3</sup>	15.63	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	49.10	5.01	11.69	9.18	56.62	65.80	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	4,696.70	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	16,619.44	84,269.39	8,544.29	59,088.34	50,344.77	109,433.11	
R0402-025	Truck Crane, Hydraulic 21-25t	hr	0.59	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	43.16	53.36	688.18	407.74	376.96	784.78	
R0604-020	Trailer 20t	hr	1.49	3.8%	10.7%	85.5%	53.3%	46.7%	1,670.00	94.56	266.25	2,127.50	1,326.42	1,161.88	2,488.30	
	Miscellaneous	LS	1.00	5.0%	25.0%	70.0%	50.0%	50.0%		585.75	2,928.74	8,200.48	5,857.49	5,857.49	11,714.98	0.0%
	<b>Total</b>									<b>18,663.27</b>	<b>112,043.73</b>	<b>27,445.19</b>	<b>85,647.40</b>	<b>72,504.79</b>	<b>158,152.20</b>	
	<b>Components (%)</b>									<b>11.8%</b>	<b>70.8%</b>	<b>17.4%</b>	<b>54.2%</b>	<b>45.8%</b>	<b>100.0%</b>	
	<b>Unit Rate</b>	m								<b>186.45</b>	<b>1,119.36</b>	<b>274.19</b>	<b>855.65</b>	<b>724.35</b>	<b>1,580.00</b>	

Miscellaneous covers the cost for mould, forms, maintenance of fabrication yard, minor tools and devices, etc.

400(4)b Precast RC Concrete Pile (450mmx450mm) furnished

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0206	Concrete (Class AA2, 28M <sup>2</sup> , max agg. 20mm)	m <sup>3</sup>	20.04	2.2%	82.7%	15.1%	57.8%	42.2%	1,860.00	813.71	30,818.23	5,642.46	21,553.95	15,720.45	37,274.40	Loss 2.0%
W0232	Concrete Pouring by Pump Vehicle (reinforced concrete)	m <sup>3</sup>	19.66	16.5%	0.2%	84.3%	45.2%	54.8%	257.00	784.54	9.90	4,255.61	2,280.59	2,769.46	5,050.05	
W0237	Concrete Curing (reinforced concrete)	m <sup>3</sup>	19.66	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	61.74	6.30	14.89	11.55	71.18	82.73	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	5,985.30	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	21,179.19	107,349.78	10,888.52	75,299.98	64,157.51	139,457.49	
R0402-025	Truck Crano, Hydraulic 21-25t	hr	0.74	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	54.13	66.93	863.14	511.41	472.79	984.20	
R0604-020	Trailer 20t	hr	1.88	3.8%	10.7%	85.5%	53.3%	46.7%	1,670.00	119.30	335.94	2,684.35	1,673.60	1,466.00	3,139.60	
	Miscellaneous	LS	1.00	5.0%	25.0%	70.0%	50.0%	50.0%		743.95	3,719.77	10,415.35	7,439.54	7,439.54	14,879.08	8.0%
	<b>Total</b>									<b>23,756.57</b>	<b>142,346.84</b>	<b>34,764.14</b>	<b>108,770.61</b>	<b>92,096.94</b>	<b>200,867.55</b>	
	<b>Components (%)</b>									<b>11.8%</b>	<b>70.9%</b>	<b>17.3%</b>	<b>54.2%</b>	<b>45.8%</b>	<b>100.0%</b>	
	<b>Unit Rate</b>	<b>m</b>								<b>237.72</b>	<b>1,424.41</b>	<b>347.87</b>	<b>1,088.42</b>	<b>921.58</b>	<b>2,010.00</b>	

Miscellaneous covers the cost for mould, forms, maintenance of fabrication yard, minor tools and devices, etc.

400(10)a Steel H Piles (450mmx260kg/m), driven

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	1.40	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	792.40	0.00	0.00	0.00	792.40	792.40	
L009	Welder	md	1.40	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	700.00	0.00	0.00	0.00	700.00	700.00	
L019	Skilled Labor	md	2.80	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	1,128.40	0.00	0.00	0.00	1,128.40	1,128.40	
L020	Unskilled Labor	md	1.40	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	439.60	0.00	0.00	0.00	439.60	439.60	
R0501-025	Diesel Hammer w/o Cranc, 2.5t	hr	8.80	0.0%	0.0%	100.0%	55.6%	44.4%	1,670.00	0.00	0.00	14,696.00	8,173.10	6,522.90	14,696.00	
R0431-035	Crawler Crane, 31-35t	hr	8.80	4.3%	9.8%	85.9%	52.9%	47.1%	1,680.00	635.71	1,448.83	12,699.46	7,822.46	6,961.54	14,784.00	
M02001	Reinforcing Bars, Grade 40	kg	938.40	0.0%	100.0%	0.0%	65.0%	35.0%	16.00	0.00	15,014.40	0.00	9,759.36	5,255.04	15,014.40	Loss 2.0%
R0402-025	Truck Crane, Hydraulic 21-25t	hr	5.28	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	386.23	477.52	6,158.64	3,648.95	3,373.45	7,022.40	
R0901-050	Welding Machine 500A	day	1.40	0.0%	60.4%	39.6%	60.6%	39.4%	1,470.00	0.00	1,243.03	814.97	1,247.90	810.10	2,058.00	
R1001-150	Generator 101-150 kW	day	1.40	0.0%	52.2%	47.8%	59.9%	40.1%	3,610.00	0.00	2,638.19	2,415.81	3,029.84	2,024.16	5,054.00	
	Miscellaneous	LS	1.00	5.0%	20.0%	75.0%	50.0%	50.0%		30.84	123.38	462.67	308.45	308.45	616.89	1.0%
	<b>Total</b>									<b>4,113.19</b>	<b>20,945.35</b>	<b>37,247.55</b>	<b>33,990.06</b>	<b>28,316.03</b>	<b>62,306.09</b>	
	<b>Components (%)</b>									<b>6.6%</b>	<b>33.6%</b>	<b>59.8%</b>	<b>54.6%</b>	<b>45.4%</b>	<b>100.0%</b>	
	<b>Unit Rate</b>	<b>m</b>								<b>41.13</b>	<b>209.43</b>	<b>372.41</b>	<b>339.87</b>	<b>283.13</b>	<b>623.00</b>	

Miscellaneous covers the cost for welding rods, scaffolding, lubricant, etc.

$T_c = (T_h + T_w + T_p) / F$	=	26.39 min	L : Pile Driving Length	5.00 m
Tc: Cycle time per pile	=		0 : Pile size	0.45 m
T <sub>h</sub> : Driving Time = $K \cdot \alpha \cdot L \cdot \beta$	=	5.75 min	n : number of joint	0.00
T <sub>w</sub> : Welding Time = $17 \cdot n$	=	0.00 min	f1: Obstruction factor	0.00
T <sub>p</sub> : Preparation Time = $6 \cdot (n+1) + 12$	=	18.00 min	f2: Space factor	0.00
F : Efficiency = $0.9 + (f1 + f2 + f3)$	=	0.90	f3: Volume factor	0.00
K : Pile Coefficient	=	1.00	T : Daily Operation hour	6.29 hr
α : Soil factor	=	1.15	Pile head re-bars	46.00 kg/each
β : Hammer factor	=	1.00		

400(13)a Precast Concrete Piles (400mm x 400mm), driven

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
1.002	Foreman	md	0.98	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	554.68	0.00	0.00	0.00	554.68	564.68	
1.009	Welder	md	0.98	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	490.00	0.00	0.00	0.00	490.00	490.00	
1.019	Skilled Labor	md	1.96	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	789.88	0.00	0.00	0.00	789.88	789.88	
1.020	Unskilled Labor	md	0.98	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	307.72	0.00	0.00	0.00	307.72	307.72	
R0501-025	Diesel Hammer w/o Crane, 2.5t	hr	6.17	0.0%	0.0%	100.0%	55.6%	44.4%	1,670.00	0.00	0.00	10,303.90	5,730.45	4,573.45	10,303.90	
R0401-035	Crawler Crane, 31-35t	hr	6.17	4.3%	9.8%	85.9%	52.9%	47.1%	1,680.00	145.72	1,015.83	8,904.05	5,484.61	4,880.99	10,365.60	
R0402-025	Truck Crane, Hydraulic 21-25t	hr	3.70	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	270.66	334.63	4,315.72	2,557.03	2,363.97	4,921.00	
R0901-050	Welding Machine 500A	day	0.98	0.0%	60.4%	39.6%	60.6%	39.4%	1,470.00	0.00	870.12	570.48	873.53	567.07	1,440.60	
R1001-150	Generator 101-150 kW	day	0.98	0.0%	52.2%	47.8%	59.9%	40.1%	3,610.00	0.00	1,846.73	1,691.07	2,120.89	1,416.91	3,537.80	
	Miscellaneous	LS	1.00	5.0%	20.0%	75.0%	55.0%	45.0%		15.36	65.42	245.33	179.91	147.20	327.11	1.0%
Total										2,875.01	4,132.73	26,030.55	16,946.43	16,091.86	33,038.29	
Components (%)										8.7%	12.5%	78.8%	51.3%	48.7%	100.0%	
Unit Rate			m							28.72	41.28	260.00	169.27	160.73	330.00	

Miscellaneous covers the cost for welding rods, scaffolding, lubricant, etc.

$T_c = (T_h + T_w + T_p) / F$	=						
$T_c$ : Cycle time per pile	=	43.10 min	$L$ : File Driving Length	=	11.65 m		
$T_h$ : Driving Time = $K \cdot \alpha \cdot L \cdot \beta$	=	20.79 min	$D$ : File size	=	0.40 m		
$T_w$ : Welding Time = $17 \cdot n$	=	0.00 min	$n$ : number of joint	=	0.00		
$T_p$ : Preparation time = $6 \cdot (n+1) + 12$	=	18.00 min	$f1$ : Obstruction factor	=	0.00		
$F$ : Efficiency = $0.9 + (f1 + f2 + f3)$	=	0.90	$f2$ : Space factor	=	0.00		
$K$ : Pile Coefficient	=	1.60	$f3$ : Volume factor	=	0.00		
$\alpha$ : Soil Factor	=	1.15	$T$ : Daily Operation hour	=	6.29 hr		
$\beta$ : Hammer factor	=	0.97					

400(13)b Precast Concrete Piles (450mm x 450mm), driven

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
1.002	Foreman	md	1.04	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	588.64	0.00	0.00	0.00	588.64	588.64	
1.009	Welder	md	1.04	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	520.00	0.00	0.00	0.00	520.00	520.00	
1.019	Skilled Labor	md	2.08	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	838.24	0.00	0.00	0.00	838.24	838.24	
1.020	Unskilled Labor	md	1.04	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	326.56	0.00	0.00	0.00	326.56	326.56	
R0501-025	Diesel Hammer w/o Crane, 2.5t	hr	6.54	0.0%	0.0%	100.0%	55.6%	44.4%	1,670.00	0.00	0.00	10,921.80	6,074.10	4,847.70	10,921.80	
R0401-035	Crawler Crane, 31-35t	hr	6.54	4.3%	9.8%	85.9%	52.9%	47.1%	1,680.00	472.45	1,076.75	9,438.00	5,813.51	5,173.69	10,987.20	
R0402-025	Truck Crane, Hydraulic 21-25t	hr	3.92	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	286.75	354.52	4,572.33	2,709.07	2,504.53	5,213.60	
R0901-050	Welding Machine 500A	day	1.04	0.0%	60.4%	39.6%	60.6%	39.4%	1,470.00	0.00	923.40	605.40	927.01	601.79	1,528.80	
R1001-150	Generator 101-150 kW	day	1.04	0.0%	52.2%	47.8%	59.9%	40.1%	3,610.00	0.00	1,959.80	1,794.60	2,250.74	1,503.66	3,754.40	
	Miscellaneous	LS	1.00	5.0%	20.0%	75.0%	55.0%	45.0%		17.34	69.36	260.09	190.74	156.06	346.79	1.0%
Total										3,049.98	4,383.82	27,592.23	17,965.17	17,060.87	35,026.03	
Components (%)										8.7%	12.5%	78.8%	51.3%	48.7%	100.0%	
Unit Rate			m							30.48	43.81	275.72	179.52	170.48	350.00	

Miscellaneous covers the cost for welding rods, scaffolding, lubricant, etc.

$T_c = (T_h + T_w + T_p) / F$	=						
$T_c$ : Cycle time per pile	=	41.78 min	$L$ : File Driving Length	=	10.65 m		
$T_h$ : Driving Time = $K \cdot \alpha \cdot L \cdot \beta$	=	19.60 min	$D$ : File size	=	0.45 m		
$T_w$ : Welding Time = $17 \cdot n$	=	0.00 min	$n$ : number of joint	=	0.00		
$T_p$ : Preparation time = $6 \cdot (n+1) + 12$	=	18.00 min	$f1$ : Obstruction factor	=	0.00		
$F$ : Efficiency = $0.9 + (f1 + f2 + f3)$	=	0.90	$f2$ : Space factor	=	0.00		
$K$ : Pile Coefficient	=	1.60	$f3$ : Volume factor	=	0.00		
$\alpha$ : Soil Factor	=	1.15	$T$ : Daily Operation hour	=	6.29 hr		
$\beta$ : Hammer factor	=	1.00					

400(15)a Test Piles (400mm x 400mm), furnished & driven

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
1.002	Foreman	md	0.77	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	435.82	0.00	0.00	0.00	435.82	435.82	
1.009	Welder	md	0.77	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	385.00	0.00	0.00	0.00	385.00	385.00	
1.019	Skilled Labor	md	1.53	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	616.59	0.00	0.00	0.00	616.59	616.59	
1.020	Unskilled Labor	md	0.77	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	241.78	0.00	0.00	0.00	241.78	241.78	
400(4)a	Precast RC Concrete Pile (400mm x 400mm), Furnished	m	100.00	11.8%	70.8%	17.4%	54.2%	45.8%	1,580.00	18,645.31	111,935.90	27,418.78	85,564.98	72,435.02	158,000.00	
R0501-025	Diesel Hammer w/o Crane, 2.5t	hr	4.82	0.0%	0.0%	100.0%	55.6%	44.4%	1,670.00	0.00	0.00	8,049.40	4,476.63	3,572.77	8,049.40	
R0401-035	Crawler Crane, 31-35t	hr	4.82	4.3%	9.8%	85.9%	52.9%	47.1%	1,680.00	348.20	793.56	6,955.84	4,284.58	3,813.02	8,097.60	
R0402-025	Truck Crane, Hydraulic 21-25t	hr	2.89	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	211.40	261.37	3,370.92	1,997.25	1,846.45	3,843.70	
R0901-050	Welding Machine 500A	day	0.77	0.0%	60.4%	39.6%	60.6%	39.4%	1,470.00	0.00	683.67	448.23	686.35	445.55	1,131.90	
R1001-150	Generator 101-150 kW	day	0.77	0.0%	52.2%	47.8%	59.9%	40.1%	3,610.00	0.00	1,451.00	1,328.70	1,666.41	1,113.29	2,779.70	
	Miscellaneous	LS	1.00	10.0%	20.0%	70.0%	55.0%	45.0%		183.58	367.16	1,285.07	1,009.70	826.12	1,835.81	1.0%
Total										21,067.69	115,492.67	48,856.95	99,685.89	85,731.41	185,417.30	
Components (%)										11.4%	62.3%	26.3%	53.8%	46.2%	100.0%	
Unit Rate			m							210.20	1,152.93	487.47	994.62	855.38	1,850.00	

Miscellaneous covers the cost for welding rods, scaffolding, lubricant, etc.

$T_c = (T_b + T_w + T_p) / F$	=		Lf: Pile Furnished Length	14.90 m
$T_c$ : Cycle time per pile	=	43.10 min	Ld: Pile Driving Length	11.65 m
$T_b$ : Driving Time = $K \cdot \alpha \cdot L \cdot \beta$	=	20.79 min	D: Pile size	0.40 m
$T_w$ : Welding Time = $17 \cdot n$	=	0.00 min	n: number of joint	0.00
$T_p$ : Preparation Time = $6 \cdot (n+1) + 12$	=	18.00 min	f1: Obstruction factor	0.00
F: Efficiency = $0.9 + (f1 + f2 + f3)$	=	0.90	f2: Space factor	0.00
K: Pile Coefficient	=	1.60	f3: Volume factor	0.00
$\alpha$ : Soil factor	=	1.15	T: Daily Operation hour	6.29 hr
$\beta$ : Hammer factor	=	0.97		

400(15)b Test Piles (450mm x 450mm), furnished & driven

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
1.002	Foreman	md	0.80	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	452.80	0.00	0.00	0.00	452.80	452.80	
1.009	Welder	md	0.80	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	400.00	0.00	0.00	0.00	400.00	400.00	
1.019	Skilled Labor	md	1.59	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	640.77	0.00	0.00	0.00	640.77	640.77	
1.020	Unskilled Labor	md	0.80	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	251.20	0.00	0.00	0.00	251.20	251.20	
400(4)b	Precast RC Concrete Pile (450mmx450mm) Furnished	m	100.00	11.8%	70.9%	17.3%	54.2%	45.8%	2,010.00	23,772.24	142,440.70	34,787.06	108,842.33	92,157.67	231,000.00	
R0501-025	Diesel Hammer w/o Crane, 2.5t	hr	5.01	0.0%	0.0%	100.0%	55.6%	44.4%	1,670.00	0.00	0.00	8,366.70	4,653.09	3,713.61	8,366.70	
R0401-035	Crawler Crane, 31-35t	hr	5.01	4.3%	9.8%	85.9%	52.9%	47.1%	1,680.00	361.92	824.85	7,230.03	4,453.47	3,963.33	8,416.80	
R0402-025	Truck Crane, Hydraulic 21-25t	hr	3.01	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	220.18	272.22	3,510.89	2,080.18	1,923.12	4,003.30	
R0901-050	Welding Machine 500A	day	0.80	0.0%	60.4%	39.6%	60.6%	39.4%	1,470.00	0.00	710.30	465.70	713.09	462.91	1,176.00	
R1001-150	Generator 101-150 kW	day	0.80	0.0%	52.2%	47.8%	59.9%	40.1%	3,610.00	0.00	1,507.54	1,380.46	1,731.34	1,156.66	2,888.00	
	Miscellaneous	LS	1.00	10.0%	20.0%	70.0%	55.0%	45.0%		227.60	455.19	1,593.17	1,251.78	1,024.18	2,275.96	1.0%
Total										26,326.70	146,210.81	57,334.02	123,725.28	106,146.25	229,871.53	
Components (%)										11.5%	63.6%	24.9%	53.8%	46.2%	100.0%	
Unit Rate			m							263.41	1,462.93	573.66	1,237.94	1,062.06	2,300.00	

Miscellaneous covers the cost for welding rods, scaffolding, lubricant, etc.

$T_c = (T_b + T_w + T_p) / F$	=		Lf: Pile Furnished Length	13.90 m
$T_c$ : Cycle time per pile	=	41.78 min	Ld: Pile Driving Length	10.65 m
$T_b$ : Driving Time = $K \cdot \alpha \cdot L \cdot \beta$	=	19.60 min	D: Pile size	0.45 m
$T_w$ : Welding Time = $18 \cdot n$	=	0.00 min	n: number of joint	0.00
$T_p$ : Preparation time = $6 \cdot (n+1) + 12$	=	18.00 min	f1: Obstruction factor	0.00
F: Efficiency = $0.9 + (f1 + f2 + f3)$	=	0.90	f2: Space factor	0.00
K: Pile Coefficient	=	1.60	f3: Volume factor	0.00
$\alpha$ : Soil factor	=	1.15	T: Daily Operation hour	6.29 hr
$\beta$ : Hammer factor	=	1.00		

400(15)c Test Piles (Steel H Piles 460mmx260kg/m), furnished & driven

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
1002	Foreman	md	0.99	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	560.34	0.00	0.00	0.00	660.34	560.34	
1009	Welder	md	0.99	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	495.00	0.00	0.00	0.00	495.00	495.00	
1019	Skilled Labor	md	1.98	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	797.94	0.00	0.00	0.00	797.94	797.94	
1020	Unskilled Labor	md	0.99	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	310.86	0.00	0.00	0.00	310.86	310.86	
400(3)a	Steel H Piles (450mmx260kg/m), furnished	m	100.00	2.3%	80.7%	17.0%	65.3%	34.7%	6,750.00	15,357.05	544,607.70	115,035.25	140,742.77	234,257.23	675,000.00	
R0501-025	Diesel Hammer w/o Crane, 2.5t	hr	6.24	0.0%	0.0%	100.0%	55.6%	44.4%	1,670.00	0.00	0.00	10,420.80	5,795.47	4,625.33	10,420.80	
R0401-035	Crawler Crane, 31-35t	hr	6.24	4.3%	9.8%	85.9%	52.9%	47.1%	1,680.00	450.78	1,027.35	9,005.07	5,546.84	4,936.36	10,483.20	
R0402-025	Truck Crane, Hydraulic 21-25t	hr	3.74	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	273.58	338.25	4,362.37	2,584.67	2,389.53	4,974.20	
R0901-050	Welding Machine 500A	day	0.99	0.0%	0.0%	60.4%	39.6%	60.6%	1,470.00	0.00	879.00	576.30	882.45	572.85	1,465.30	
R1001-150	Generator 101-150 kW	day	0.99	0.0%	52.2%	47.8%	59.9%	40.1%	3,610.00	0.00	1,865.58	1,708.32	2,142.53	1,431.37	3,573.90	
	Miscellaneous	LS	1.00	10.0%	20.0%	70.0%	55.0%	45.0%		708.07	1,416.14	4,956.50	3,894.39	3,186.32	7,080.72	1.0%
	<b>Total</b>									<b>18,953.62</b>	<b>550,134.02</b>	<b>146,064.61</b>	<b>461,589.11</b>	<b>253,563.14</b>	<b>715,152.26</b>	
	Components (%)									2.7%	76.9%	20.4%	64.5%	35.5%	100.0%	
	Unit Rate	m								189.5	5,500.2	1,460.3	4,614.9	2,535.1	7,150.0	

Miscellaneous covers the cost for welding rods, scaffolding, lubricant, etc.

Tc = (Th + Tw + Tp) / F	=		Lf: Pile Furnished Length	=	7.00 m
Tc: Cycle time per pile	=	26.20 min	L: Pile Driving Length	=	5.00 m
Tb: Driving Time = K · α · L · B	=	5.58 min	D: Pile size	=	0.40 m
Tw: Welding Time = 18 · n	=	0.00 min	n: number of joint	=	0.00
Tp: Preparation time = 6 · (n+1) + 12	=	18.00 min	f1: Obstruction factor	=	0.00
F: Efficiency = 0.9 + (f1 + f2 + f3)	=	0.90	f2: Space factor	=	0.00
K: Pile Coefficient	=	1.00	f3: Volume factor	=	0.00
α: Soil factor	=	1.15	T: Daily Operation hour	=	6.29 hr
B: Hammer factor	=	0.97			

400(16)a Cast-in-place Concrete Bored Piles φ1000mm

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
1002	Foreman	md	5.44	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	3,079.04	0.00	0.00	0.00	3,079.04	3,079.04	
1019	Skilled Labor	md	9.14	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	3,683.42	0.00	0.00	0.00	3,683.42	3,683.42	
1020	Unskilled Labor	md	8.40	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	2,637.60	0.00	0.00	0.00	2,637.60	2,637.60	
W0205	Concrete (Class A1, 28MPa, max seg. 25mm)	m3	84.82	2.3%	81.4%	16.3%	57.6%	42.4%	1,780.00	3,503.63	122,926.09	24,549.87	87,028.64	63,950.96	150,979.60	Loss 8.0%
W0232	Concrete Pouring by Pump Vehicle (reinforced concrete)	m3	78.54	15.5%	0.2%	84.3%	45.2%	64.8%	257.00	3,135.76	39.58	17,009.44	9,115.38	11,069.40	20,184.78	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	157.00	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	555.55	2,816.93	285.62	1,975.19	1,682.91	3,658.10	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	21,049.00	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	74,584.98	401,552.37	39,563.15	280,954.73	234,745.77	515,700.50	
Q0513-120	All Casing Excavator, φ1200max	hr	34.35	1.0%	4.4%	94.6%	55.4%	44.6%	6,200.00	2,167.74	9,303.94	201,498.33	117,997.57	94,972.43	212,970.00	
R0401-035	Crawler Crane, 31-35t	hr	30.91	4.3%	9.8%	85.9%	52.9%	47.1%	1,680.00	2,232.94	5,089.02	44,606.84	27,476.40	24,452.40	51,928.80	
Q0514-100	Hammer Grab, φ1000	day	5.28	0.0%	0.0%	100.0%	67.0%	33.0%	5,660.00	0.00	0.00	29,884.80	20,011.07	9,873.73	29,884.80	
Q0515-001	Hammer Crown, φ1200	day	5.28	0.0%	0.0%	100.0%	70.7%	29.3%	1,430.00	0.00	0.00	7,550.40	5,338.53	2,211.87	7,550.40	
Q0516-105	Casing Tube, φ1000, l=5m	day	116.07	0.0%	0.0%	100.0%	68.5%	31.5%	1,780.00	0.00	0.00	206,604.60	141,572.06	65,032.54	206,604.60	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	77.52	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	587.19	1,063.59	5,558.58	3,710.94	3,498.42	7,209.36	
	Miscellaneous	LS	1.00	5.0%	30.0%	65.0%	55.0%	45.0%		1,824.11	10,944.64	23,713.38	20,065.17	16,416.96	36,482.13	3.0%
	<b>Total</b>									<b>97,991.95</b>	<b>553,736.17</b>	<b>600,825.01</b>	<b>715,245.68</b>	<b>537,307.45</b>	<b>1,252,553.13</b>	
	Components (%)									7.8%	44.2%	48.0%	57.1%	42.9%	100.0%	
	Unit Rate	m								977.92	5,526.07	5,996.00	7,137.88	5,362.12	12,500.00	

Miscellaneous covers the cost for stand pipe, tremay pipe, welder, vessel, slash tank, suction hose, water pump, etc.

Tc = Tso + Te	=		Excavator Operation Time TD1 = Tc - 16.4	=	556.44 min/pile
Tc: Cycle time per pile	=	573 min/pile	Crawler Crane Operation Time TD2 = 0.9xTD1	=	500.80 min/pile
Tso: Preparation Time = 46.8+11.3xL2	=	348 min/pile	D: Pile diameter	=	1.000 m
Te: Excavation Time = ΣaixLi	=	225 min/pile	L: Pile Length	=	27.000 m
			I2: Excavation depth	=	26.650 m
			Steel Casing Length	=	29.650 m
			T: Daily Operation hour	=	6.50 hr

	a1	Li	aixLi
N < 20	8.30	23.650	196.30
N < 40	9.20	2.000	18.40
N > 40	10.20	1.000	10.20
Total		26.650	224.90

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
1.002	Foreman	md	5.62	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	3,180.92	0.00	0.00	0.00	3,180.92	3,180.92	
1.019	Skilled Labor	md	10.89	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	4,388.67	0.00	0.00	0.00	4,388.67	4,388.67	
1.020	Unskilled Labor	md	9.84	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	3,089.76	0.00	0.00	0.00	3,089.76	3,089.76	
W0205	Concrete (Class A41, 28MPa, max agg. 25mm)	m3	122.15	2.3%	81.4%	16.3%	57.6%	42.4%	1,783.00	5,045.61	177,026.91	35,354.48	125,330.68	92,096.32	217,427.00	Loss 8.0%
W0232	Concrete Pouring by Pump Vehicle (reinforced concrete)	m3	113.10	15.5%	0.2%	84.3%	45.2%	54.8%	257.00	4,515.59	56.99	24,494.12	13,126.42	15,940.28	29,066.70	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	226.00	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	799.71	4,054.95	411.14	2,843.27	2,422.53	5,265.80	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	30,311.00	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	107,403.92	578,243.81	56,971.76	404,580.68	338,038.82	742,619.50	
Q0513-120	All Casing Excavator, $\phi$ 1200max	hr	35.12	1.0%	4.4%	94.6%	55.4%	44.6%	6,200.00	2,216.33	9,512.50	206,015.17	120,642.64	97,101.36	217,744.00	
R0401-035	Crawler Crane, 31-35t	hr	31.61	4.3%	9.8%	85.9%	52.9%	47.1%	1,680.00	2,283.51	5,204.27	45,617.02	28,098.64	25,006.16	53,104.80	
Q0514-120	Hammer Grab, $\phi$ 1200	day	5.40	0.0%	0.0%	100.0%	67.0%	33.0%	5,910.00	0.00	0.00	31,914.00	21,369.83	18,544.17	31,914.00	
Q0515-001	Hammer Crown, $\phi$ 1200	day	5.40	0.0%	0.0%	100.0%	70.7%	29.3%	1,430.00	0.00	0.00	7,722.00	5,459.86	2,262.14	7,722.00	
Q0516-125	Casing Tube, $\phi$ 1200, L=5m	day	128.82	0.0%	0.0%	100.0%	68.5%	31.5%	2,080.00	0.00	0.00	267,945.60	183,604.87	84,340.73	267,945.60	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	111.01	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	840.87	1,523.08	7,959.99	5,314.13	5,009.80	10,323.93	
	Miscellaneous	LS	1.00	5.0%	30.0%	65.0%	55.0%	45.0%		2,390.69	14,344.13	31,078.96	26,297.58	21,516.20	47,813.78	3.0%
Total										136,155.58	789,966.64	715,484.24	936,668.62	704,937.84	1,641,606.46	
Components (%)										8.3%	48.1%	43.6%	57.1%	42.9%	100.0%	
Unit Rate			m							1,360.22	7,891.94	7,147.84	9,357.52	7,042.48	16,400.00	

Miscellaneous covers the cost for stand pipe, tremmy pipe, welder, vessel, slash tank, suction hose, water pump, etc.

$T_c = T_{so} + T_e$

$T_c$ : Cycle time per pile = 416.78 min/pile

$T_{so}$ : Preparation Time = 46.8+11.3xL2 = 257.55 min/pile

$T_e$ : Excavation Time =  $\sum a_i x L_i$  = 159.24 min/pile

Excavator Operation Time  $TD1 = T_c - 16.4$

Crawler Crane Operation Time  $TD2 = 0.9 \times TD1$

D : Pile diameter

L : Pile Length

L2: Excavation depth

Steel Casing Length

T : Daily Operation hour

400.38 min/pile

360.34 min/pile

1.200 m

19.000 m

18.650 m

22.650 m

6.50 hr

	$a_i$	$L_i$	$a_i x L_i$
N < 20	8.30	15.050	124.92
N < 40	9.20	2.400	22.08
N > 40	10.20	1.200	12.24
Total		18.650	159.24

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
1002	Foreman	md	5.61	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	3,175.26	0.00	0.00	0.00	3,175.26	3,175.26	
1019	Skilled Labor	md	10.61	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	4,275.83	0.00	0.00	0.00	4,275.83	4,275.83	
1020	Unskilled Labor	md	9.61	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	3,017.54	0.00	0.00	0.00	3,017.54	3,017.54	
W0205	Concrete (Class AAI, 28MPa, max agg. 25mm)	m3	190.85	2.3%	81.4%	16.3%	57.6%	42.4%	1,780.00	7,883.38	276,590.96	55,238.66	195,819.57	143,893.43	339,713.00	Loss 8.0%
W0232	Concrete Pouring by Pump Vehicle (reinforced concrete)	m3	176.71	15.5%	0.2%	84.3%	45.2%	54.8%	257.00	7,055.26	89.05	38,270.16	20,509.02	24,905.45	45,414.47	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	353.00	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	1,249.10	6,333.62	642.18	4,441.03	3,783.87	8,224.90	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	47,358.00	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	167,808.22	903,449.92	89,012.86	632,118.11	528,152.89	1,160,271.00	
Q0513-150	All Casing Excavator, φ 1500max	hr	35.09	0.7%	2.1%	97.2%	55.3%	44.7%	8,630.00	2,215.05	6,323.86	294,287.79	167,613.21	135,213.49	302,826.70	
R0401-035	Crawler Crane, 31-35t	hr	31.58	4.3%	9.8%	85.9%	52.9%	47.1%	1,680.00	2,281.34	5,199.33	45,573.73	28,071.98	24,982.42	53,064.40	
Q0514-150	Hammer Grab, φ 1500	day	5.40	0.0%	0.0%	100.0%	67.0%	33.0%	10,100.00	0.00	0.00	54,540.00	36,520.36	18,019.64	54,540.00	
Q0515-002	Hammer Crown, > φ 1200	day	5.40	0.0%	0.0%	100.0%	70.7%	29.3%	1,920.00	0.00	0.00	10,368.00	7,330.72	3,037.28	10,368.00	
Q0516-155	Casing Tube, φ 1500, L=5m	day	133.07	0.0%	0.0%	100.0%	68.5%	31.5%	2,890.00	0.00	0.00	357,958.30	245,284.45	112,673.85	357,958.30	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	173.62	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	1,315.12	2,382.09	12,449.45	8,311.32	7,835.34	16,146.66	
	Miscellaneous	LS	1.00	5.0%	30.0%	65.0%	55.0%	45.0%		3,538.48	21,230.87	46,000.23	38,923.27	31,846.31	70,769.58	3.0%
	<b>Total</b>									<b>203,814.58</b>	<b>1,221,599.70</b>	<b>1,004,341.36</b>	<b>1,384,943.04</b>	<b>1,044,812.60</b>	<b>2,429,755.64</b>	
	<b>Components (%)</b>									<b>8.4%</b>	<b>50.3%</b>	<b>41.3%</b>	<b>57.0%</b>	<b>43.0%</b>	<b>100.0%</b>	
	<b>Unit Rate</b>	<b>m</b>								<b>2,038.35</b>	<b>12,217.23</b>	<b>10,044.42</b>	<b>13,850.82</b>	<b>10,449.18</b>	<b>24,300.00</b>	

Miscellaneous covers the cost for stand pipe, tremy pipe, welder, vessel, slash tank, suction hose, water pump, etc.

Tc = Tso + Te

Tc: Cycle time per pile = 437.49 min/pile

Tso: Preparation Time = 46.8+11.3x1.2 = 268.85 min/pile

Te: Excavation Time = EaixLi = 168.65 min/pile

Excavator Operation Time TD1 = Tc - 16.4

Crawler Crane Operation Time TD2 = 0.9xTD1

D : Pile diameter

L : Pile Length

I2: Excavation depth

Steel Casing Length

T : Daily Operation hour

421.09 min/pile

378.98 min/pile

1,500 m

20,000 m

19,650 m

24,650 m

6.50 hr

	ai	li	aixLi
N < 20	8.30	15.150	125.75
N < 40	9.20	3.000	27.60
N > 40	10.20	1.500	15.30
<b>Total</b>		<b>19.650</b>	<b>168.65</b>



400(16)d Cast-in-place Concrete Bored Piles  $\phi$ 800mm

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	5.94	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	3,362.04	0.00	0.00	0.00	3,362.04	3,362.04	
L019	Skilled Labor	md	14.28	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	5,754.84	0.00	0.00	0.00	5,754.84	5,754.84	
L020	Unskilled Labor	md	12.61	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	3,959.54	0.00	0.00	0.00	3,959.54	3,959.54	
W0205	Concrete (Class A41, 28MPa, max agg. 25mm)	m3	54.29	2.3%	81.4%	16.3%	57.6%	42.4%	1,780.00	2,242.54	78,680.24	15,713.42	55,703.67	40,932.53	96,636.20	Less 8.0%
W0232	Concrete Pouring by Pump Vehicle (reinforced concrete)	m3	50.27	15.5%	0.2%	84.3%	45.2%	54.8%	257.00	2,007.06	25.33	10,887.00	5,834.35	7,085.04	12,919.39	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	3,137.00	15.2%	77.0%	7.8%	54.0%	46.0%	23.33	11,100.38	56,284.85	5,706.86	39,466.03	33,626.07	73,092.10	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	13,975.00	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	49,518.98	266,601.47	26,267.04	186,533.44	155,854.06	342,387.50	
Q0513-120	All Casing Excavator, $\phi$ 1200max	hr	36.35	1.0%	4.4%	94.6%	55.4%	44.6%	6,200.00	2,293.95	9,845.65	213,230.40	124,867.88	100,502.12	225,370.00	
R0401-035	Crawler Crane, 31-35t	hr	32.71	4.3%	9.8%	85.9%	52.8%	47.1%	1,680.00	2,362.97	5,385.37	47,204.46	29,076.45	25,876.35	54,952.80	
Q0514-080	Hammer Grab, $\phi$ 800	day	5.59	0.0%	0.0%	100.0%	67.0%	33.0%	5,170.00	0.00	0.00	28,900.30	19,351.84	9,548.46	28,900.30	
Q0515-002	Hammer Crown, $>$ $\phi$ 1200	day	5.59	0.0%	0.0%	100.0%	70.7%	29.3%	1,920.00	0.00	0.00	10,732.80	7,588.66	3,144.14	10,732.80	
Q0516-085	Casing Tube, $\phi$ 800, L=5m	day	117.90	0.0%	0.0%	100.0%	68.5%	31.5%	1,710.00	0.00	0.00	201,609.00	138,148.92	63,460.08	201,609.00	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	48.80	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	369.65	669.54	3,499.21	2,336.09	2,202.31	4,538.40	
	Miscellaneous	LS	1.00	5.0%	30.0%	65.0%	55.0%	45.0%		1,596.32	9,577.93	20,752.19	17,559.55	14,366.90	31,926.45	3.0%
	<b>Total</b>									<b>84,568.28</b>	<b>427,070.40</b>	<b>584,502.68</b>	<b>626,466.87</b>	<b>469,674.49</b>	<b>1,096,141.36</b>	
	<b>Components (%)</b>									<b>7.7%</b>	<b>39.0%</b>	<b>53.3%</b>	<b>57.2%</b>	<b>42.8%</b>	<b>100.0%</b>	
	<b>Unit Rate</b>	m								<b>848.66</b>	<b>4,285.74</b>	<b>5,865.60</b>	<b>6,286.72</b>	<b>4,713.28</b>	<b>11,000.00</b>	

Miscellaneous covers the cost for stand pipe, tremmy pipe, welder, vessel, slash tank, suction hose, water pump, etc.

Tc = Tso + Te

Tc: Cycle time per pile =

278.10 min/pile

Excavator Operation Time TD1 = Tc - 16.4

261.70 min/pile

Tso: Preparation Time = 46.8+1.3xL2

= 178.45 min/pile

Crawler Crane Operation Time TD2 = 0.9xTD1

235.53 min/pile

Te: Excavation Time =  $\sum a_i x L_i$

= 99.66 min/pile

D : Pile diameter

0.800 m

L : Pile Length

12.000 m

L2: Excavation depth

11.650 m

Steel Casing Length

12.650 m

T : Daily Operation hour

6.50 hr

	a <sub>i</sub>	L <sub>i</sub>	a <sub>i</sub> xL <sub>i</sub>
N < 20	8.30	9.250	76.78
N < 40	9.20	1.600	14.72
N > 40	10.20	0.800	8.16
<b>Total</b>		<b>11.650</b>	<b>99.66</b>

400(19)a Pile shoes for 400mm x 400mm Piles

Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L009	Welder	md	0.05	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	25.00	0.00	0.00	0.00	25.00	25.00	
L019	Skilled Labor	md	0.05	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	20.15	0.00	0.00	0.00	20.15	20.15	
W02015	Structural Steel (Plates, SS400)	kg	11.99	0.0%	100.0%	0.0%	70.0%	30.0%	20.20	0.00	242.20	0.00	169.54	72.66	242.20	
W02002	Reinforcing Bars, Grade 60	kg	22.70	0.0%	100.0%	0.0%	65.0%	35.0%	17.00	0.00	385.90	0.00	250.84	135.07	385.90	
R0901-025	Welding Machine 250A	day	0.05	0.0%	39.8%	60.2%	58.6%	41.4%	588.00	0.00	11.70	17.70	17.22	12.18	29.40	
	Miscellaneous	LS	1.00	10.0%	30.0%	60.0%	50.0%	50.0%		1.41	4.22	8.43	7.03	7.03	14.05	2.0%
	<b>Total</b>									<b>46.56</b>	<b>644.02</b>	<b>26.13</b>	<b>444.63</b>	<b>272.08</b>	<b>716.70</b>	
	<b>Components (%)</b>									<b>6.5%</b>	<b>89.9%</b>	<b>3.6%</b>	<b>62.0%</b>	<b>38.0%</b>	<b>100.0%</b>	
	<b>Unit Rate</b>	each								<b>46.57</b>	<b>644.28</b>	<b>26.14</b>	<b>444.81</b>	<b>272.19</b>	<b>717.00</b>	

Miscellaneous covers the cost for steel cutters, acetylene gas, welding rods, wires, etc.

400(19)b Pile shoes for 450mm x 450mm Piles

Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L009	Welder	md	0.05	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	25.00	0.00	0.00	0.00	25.00	25.00	
L019	Skilled Labor	md	0.05	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	20.15	0.00	0.00	0.00	20.15	20.15	
W02015	Structural Steel (Plates, SS400)	kg	11.99	0.0%	100.0%	0.0%	70.0%	30.0%	20.20	0.00	242.20	0.00	169.54	72.66	242.20	
W02002	Reinforcing Bars, Grade 60	kg	22.70	0.0%	100.0%	0.0%	65.0%	35.0%	17.00	0.00	385.90	0.00	250.84	135.07	385.90	
R0901-025	Welding Machine 250A	day	0.05	0.0%	39.8%	60.2%	58.6%	41.4%	588.00	0.00	11.70	17.70	17.22	12.18	29.40	
	Miscellaneous	LS	1.00	10.0%	30.0%	60.0%	50.0%	50.0%		1.41	4.22	8.43	7.03	7.03	14.05	2.0%
	<b>Total</b>									<b>46.56</b>	<b>644.02</b>	<b>26.13</b>	<b>444.63</b>	<b>272.08</b>	<b>716.70</b>	
	<b>Components (%)</b>									<b>6.5%</b>	<b>89.9%</b>	<b>3.6%</b>	<b>62.0%</b>	<b>38.0%</b>	<b>100.0%</b>	
	<b>Unit Rate</b>	each								<b>46.57</b>	<b>644.28</b>	<b>26.14</b>	<b>444.81</b>	<b>272.19</b>	<b>717.00</b>	

Miscellaneous covers the cost for steel cutters, acetylene gas, welding rods, wires, etc.

400(20)a Splices for 400mm x 400mm Piles											Unit: 100.00 each					
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
L019	Skilled Labor	md	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	403.00	0.00	0.00	0.00	403.00	403.00	
M02011	Structural Steel (Round Bar, SS400)	kg	5,752.40	0.0%	100.0%	0.0%	70.0%	30.0%	21.80	0.00	125,402.32	0.00	87,781.62	37,620.70	125,402.32	
W0225	Grout (non-shrink)	m3	0.78	1.0%	96.5%	2.6%	61.3%	38.7%	3,050.00	22.76	2,294.71	61.52	1,457.61	921.39	2,379.00	
	Miscellaneous	LS	1.00	10.0%	30.0%	60.0%	50.0%	50.0%		256.37	769.11	1,538.21	1,281.84	1,281.84	2,563.69	2.0%
	<b>Total</b>									<b>682.13</b>	<b>128,466.14</b>	<b>1,599.74</b>	<b>90,521.08</b>	<b>40,226.93</b>	<b>130,748.01</b>	
	Components (%)									0.5%	98.3%	1.2%	69.2%	30.8%	100.0%	
	Unit Rate	each								6.83	1,287.14	16.03	906.96	403.04	1,310.00	

Miscellaneous covers the cost for steel cutters, acetylene gas, welding rods, wires, etc.

400(20)b Splices for 450mm x 450mm Piles											Unit: 100.00 each					
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
L019	Skilled Labor	md	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	403.00	0.00	0.00	0.00	403.00	403.00	
M02011	Structural Steel (Round Bar, SS400)	kg	5,762.10	0.0%	100.0%	0.0%	70.0%	30.0%	21.80	0.00	125,613.78	0.00	87,929.65	37,684.13	125,613.78	
W0225	Grout (non-shrink)	m3	0.82	1.0%	96.5%	2.6%	61.3%	38.7%	3,050.00	23.93	2,412.39	64.68	1,532.36	968.64	2,501.00	
	Miscellaneous	LS	1.00	10.0%	30.0%	60.0%	50.0%	50.0%		257.04	771.11	1,542.21	1,285.18	1,285.18	2,570.36	2.0%
	<b>Total</b>									<b>683.97</b>	<b>128,797.28</b>	<b>1,606.89</b>	<b>90,747.18</b>	<b>40,300.95</b>	<b>131,088.14</b>	
	Components (%)									0.5%	98.3%	1.2%	69.2%	30.8%	100.0%	
	Unit Rate	each								6.84	1,287.11	16.06	906.86	403.14	1,310.00	

Miscellaneous covers the cost for steel cutters, acetylene gas, welding rods, wires, etc.

400(21) Static Pile Load Test for φ1500mm Bored Piles											Unit: 1.00 each					
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
L002	Foreman	md	0.50	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	283.00	0.00	0.00	0.00	283.00	283.00	
L019	Skilled Labor	md	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	403.00	0.00	0.00	0.00	403.00	403.00	
	Static Pile Load Test for φ1500mm Bored Piles	each	1.00	30.0%	15.0%	55.0%	45.0%	55.0%	92,700.00	27,810.00	13,905.00	50,985.00	41,715.00	50,985.00	92,700.00	
	Miscellaneous	LS	1.00	30.0%	10.0%	60.0%	40.0%	60.0%		8,404.74	2,801.58	16,809.48	11,206.32	16,809.48	28,015.80	30.0%
	<b>Total</b>									<b>36,900.74</b>	<b>16,706.58</b>	<b>67,794.48</b>	<b>52,921.32</b>	<b>68,480.48</b>	<b>121,401.80</b>	
	Components (%)									30.4%	13.8%	55.8%	43.6%	56.4%	100.0%	
	Unit Rate	each								36,778.61	16,651.29	67,570.10	52,746.17	68,253.83	121,000.00	

Miscellaneous covers the cost for overhead, mobilization, etc. of subcontractor, etc.

SPL 400(23)a High Strain Dynamic Pile Test for φ1000mm Bored Piles											Unit: 1.00 each					
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
L002	Foreman	md	0.50	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	283.00	0.00	0.00	0.00	283.00	283.00	
L019	Skilled Labor	md	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	403.00	0.00	0.00	0.00	403.00	403.00	
	Dynamic Pile Load Test for φ1000mm Bored Piles	each	1.00	30.0%	15.0%	55.0%	45.0%	55.0%	94,000.00	28,200.00	14,100.00	51,700.00	42,300.00	51,700.00	94,000.00	
	Miscellaneous	LS	1.00	30.0%	10.0%	60.0%	40.0%	60.0%		8,521.74	2,840.58	17,043.48	11,362.32	17,043.48	28,405.80	30.0%
	<b>Total</b>									<b>37,407.74</b>	<b>16,940.58</b>	<b>68,743.48</b>	<b>53,662.32</b>	<b>69,429.48</b>	<b>123,091.80</b>	
	Components (%)									30.4%	13.8%	55.8%	43.6%	56.4%	100.0%	
	Unit Rate	each								37,379.84	16,927.95	68,692.21	53,622.30	69,377.70	123,000.00	

Miscellaneous covers the cost for overhead, mobilization, etc. of subcontractor, etc.

SPL 400(23)b High Strain Dynamic Pile Test for φ1200mm Bored Piles											Unit: 1.00 each					
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
L002	Foreman	md	0.50	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	283.00	0.00	0.00	0.00	283.00	283.00	
L019	Skilled Labor	md	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	403.00	0.00	0.00	0.00	403.00	403.00	
	Dynamic Pile Load Test for φ1500mm Bored Piles	each	1.00	30.0%	15.0%	55.0%	45.0%	55.0%	96,000.00	28,800.00	14,400.00	52,800.00	43,200.00	52,800.00	96,000.00	
	Miscellaneous	LS	1.00	30.0%	10.0%	60.0%	40.0%	60.0%		8,701.74	2,900.58	17,403.48	11,602.32	17,403.48	29,005.80	30.0%
	<b>Total</b>									<b>38,187.74</b>	<b>17,300.58</b>	<b>70,203.48</b>	<b>54,802.32</b>	<b>70,899.48</b>	<b>126,691.80</b>	
	Components (%)									30.4%	13.8%	55.8%	43.6%	56.4%	100.0%	
	Unit Rate	each								38,281.38	17,343.00	70,375.62	54,936.70	71,063.30	126,000.00	

Miscellaneous covers the cost for overhead, mobilization, etc. of subcontractor, etc.

SPL 400(23)c High Strain Dynamic Pile Test for  $\phi$ 800mm Bored Piles

Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
1.002	Foreman	md	0.50	100.0%	0.0%	0.0%	0.0%	100.0%	586.00	283.00	0.00	0.00	0.00	283.00	283.00	
1.019	Skilled Labor	md	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	403.00	0.00	0.00	0.00	403.00	403.00	
	Dynamic Pile Load Test for $\phi$ 800mm Bored Piles	each	1.00	30.0%	15.0%	55.0%	45.0%	55.0%	92,000.00	27,600.00	13,800.00	50,600.00	41,400.00	50,600.00	92,000.00	
	Miscellaneous	LS	1.00	30.0%	10.0%	60.0%	40.0%	60.0%		8,341.74	2,780.58	16,683.48	11,122.32	16,683.48	27,805.80	30.0%
Total									36,627.74	16,580.58	67,283.48	52,522.32	67,969.48	120,491.80		
Components (%)									30.4%	13.8%	55.8%	43.6%	56.4%	100.0%		
Unit Rate			each						36,478.24	16,512.90	67,008.86	52,307.94	67,692.06	120,000.00		

Miscellaneous covers the cost for overhead, mobilization, etc. of subcontractor, etc.

SPL 400(24) Pile Integrity Test for Bored Piles of various diameter

Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
1.002	Foreman	md	0.50	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	283.00	0.00	0.00	0.00	283.00	283.00	
1.019	Skilled Labor	md	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	403.00	0.00	0.00	0.00	403.00	403.00	
	Dynamic Pile Load Test for $\phi$ 1500mm Bored Piles	each	1.00	30.0%	15.0%	55.0%	45.0%	55.0%	125,000.00	37,500.00	18,750.00	68,750.00	56,250.00	68,750.00	125,000.00	
	Miscellaneous	LS	1.00	30.0%	10.0%	60.0%	40.0%	60.0%		11,311.74	3,770.58	22,623.48	15,082.32	22,623.48	37,705.80	30.0%
Total									49,497.74	22,520.58	91,373.48	71,332.32	92,059.48	163,391.80		
Components (%)									30.3%	13.8%	55.9%	43.7%	56.3%	100.0%		
Unit Rate			each						49,379.05	22,466.58	91,154.37	71,181.27	91,838.73	163,000.00		

Miscellaneous covers the cost for overhead, mobilization, etc. of subcontractor, etc.

401(1)a Concrete Railing Type A (Concrete Posts and Precast Beams)

Unit: 10.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0203	Concrete (Class A, 21MPa, max agg. 38mm)	m3	1.13	2.5%	79.7%	17.7%	56.7%	43.3%	1,630.00	46.81	1,468.44	326.66	1,014.25	797.65	1,841.90	Loss 2.0%
W0232	Concrete Pouring by Pump Vehicle (reinforced concrete)	m3	1.11	15.5%	0.2%	84.3%	45.2%	54.8%	257.00	14.32	0.56	240.39	128.83	156.44	285.27	
W0237	Concrete Curing (reinforced concrete)	m3	1.11	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	3.49	0.36	0.83	0.65	4.02	4.67	
W0241	Formwork (reinforced concrete 114m)	m2	17.00	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	2,257.61	1,520.52	29.87	111.12	3,696.88	3,808.00	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	189.90	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	671.97	3,407.23	345.47	2,389.10	2,035.57	4,424.67	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	81.90	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	290.20	1,562.41	153.94	1,093.17	913.38	2,006.55	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	
Total									3,314.40	7,959.51	1,097.15	4,767.12	7,603.94	12,371.06		
Components (%)									26.8%	64.3%	8.9%	38.5%	61.5%	100.0%		
Unit Rate			m						332.21	797.81	109.71	477.83	762.17	1,240.00		

401(1)b Concrete Railing Type B (Concrete Wall Type)

Unit: 180.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0203	Concrete (Class A, 21MPa, max agg. 38mm)	m3	44.27	2.5%	79.7%	17.7%	56.7%	43.3%	1,630.00	1,833.84	57,528.89	12,797.38	40,910.56	31,249.54	72,160.10	Loss 2.0%
W0232	Concrete Pouring by Pump Vehicle (reinforced concrete)	m3	43.40	15.5%	0.2%	84.3%	45.2%	54.8%	257.00	1,732.77	21.87	9,399.16	5,037.02	6,116.78	11,153.80	
W0237	Concrete Curing (reinforced concrete)	m3	43.40	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	136.35	13.91	32.45	25.50	157.21	182.71	
W0241	Formwork (reinforced concrete 114m)	m2	340.90	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	46,271.77	30,490.92	598.91	2,228.27	74,133.33	76,361.60	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	3,786.50	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	13,398.66	67,938.35	6,888.44	47,637.27	40,588.18	88,225.45	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	
Total									62,373.39	155,993.93	29,716.34	95,838.62	152,245.04	248,083.66		
Components (%)									25.1%	62.9%	12.0%	38.6%	61.4%	100.0%		
Unit Rate			m						346.96	867.74	165.30	533.12	846.88	1,380.00		

401(2)a Steel Railing Type A for Angat and Talavera Bridge, and Approach of Pampanga Bridge

Unit: 30.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks	
				Component (%)						Component (PP)							
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local			
L002	Foreman	md	0.48	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	271.68	0.00	0.00	0.00	271.68	271.68		
L009	Welder	md	0.48	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	240.00	0.00	0.00	0.00	240.00	240.00		
L019	Skilled Labor	md	1.44	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	580.32	0.00	0.00	0.00	580.32	580.32		
L020	Unskilled Labor	md	0.96	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	301.44	0.00	0.00	0.00	301.44	301.44		
M02015	Structural Steel (Plates, SS400)	kg	301.50	0.0%	100.0%	0.0%	70.0%	30.0%	20.20	0.00	6,090.30	0.00	4,263.21	1,827.09	6,090.30		
M02031	Steel Pipe	kg	1,342.50	0.0%	100.0%	0.0%	70.0%	30.0%	23.90	0.00	32,085.75	0.00	22,460.03	9,625.73	32,085.75		
M02011	Structural Steel (Round Bar, SS400)	kg	35.50	0.0%	100.0%	0.0%	70.0%	30.0%	21.80	0.00	773.90	0.00	541.73	232.17	773.90		
M06003	Zinc Rich Primer for Steel	kg	4.02	0.0%	100.0%	0.0%	65.0%	35.0%	374.00	0.00	1,503.48	0.00	977.26	526.22	1,503.48		
M06011	Rustproof Lead Paint for Steel	kg	8.71	0.0%	100.0%	0.0%	65.0%	35.0%	209.00	0.00	1,402.39	0.00	911.55	490.84	1,402.39		
M06022	Epoxy Resin Paint for Steel	kg	4.56	0.0%	100.0%	0.0%	65.0%	35.0%	495.00	0.00	2,261.76	0.00	1,470.14	791.62	2,261.76		
R0901-025	Welding Machine 250A	day	0.48	0.0%	0.0%	39.8%	60.2%	58.6%	41.4%	588.00	0.00	112.33	169.91	165.35	116.89	282.24	
R1001-200	Generator 151-200 kW	day	0.48	0.0%	0.0%	47.6%	52.4%	59.4%	40.6%	5,280.00	0.00	1,286.37	1,328.03	1,505.96	1,028.44	2,534.40	
R0402-010	Truck Crane, Hydraulic 6-10t	hr	2.74	15.2%	9.3%	75.5%	47.0%	53.0%	485.00	201.99	123.59	1,003.32	625.13	703.77	1,328.90		
R0601-003	Dump Truck, 3.0-6.0 cu-yds (2.3-4.6m3)	hr	1.54	13.5%	19.3%	67.2%	49.0%	51.0%	446.00	92.72	132.56	461.56	336.49	350.35	686.84		
	Miscellaneous	LS	1.00	20.0%	20.0%	60.0%	50.0%	50.0%		3,020.60	3,020.60	9,061.81	7,551.51	7,551.51	15,103.02	30.0%	
Total										4,708.76	48,713.04	12,024.62	40,808.37	24,638.05	65,446.42		
Components (%)										7.2%	74.4%	18.4%	62.4%	37.6%	100.0%		
Unit Rate			m							156.85	1,622.62	400.54	1,359.31	820.69	2,180.00		

Miscellaneous covers the costs for fabricator's overhead, facilities, minor tools and materials, falseworks, etc.

401(2)b Steel Railing Type B for Pampanga Main Bridge

Unit: 20.35 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks	
				Component (%)						Component (PP)							
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local			
L002	Foreman	md	0.33	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	186.78	0.00	0.00	0.00	186.78	186.78		
L009	Welder	md	0.33	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	165.00	0.00	0.00	0.00	165.00	165.00		
L019	Skilled Labor	md	0.98	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	394.94	0.00	0.00	0.00	394.94	394.94		
L020	Unskilled Labor	md	0.65	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	204.10	0.00	0.00	0.00	204.10	204.10		
M02015	Structural Steel (Plates, SS400)	kg	1,068.00	0.0%	100.0%	0.0%	70.0%	30.0%	20.20	0.00	21,573.60	0.00	15,101.52	6,472.08	21,573.60		
M02031	Steel Pipe	kg	312.70	0.0%	100.0%	0.0%	70.0%	30.0%	23.90	0.00	7,473.53	0.00	5,231.47	2,242.06	7,473.53		
M02011	Structural Steel (Round Bar, SS400)	kg	37.90	0.0%	100.0%	0.0%	70.0%	30.0%	21.80	0.00	826.22	0.00	578.35	247.87	826.22		
M06003	Zinc Rich Primer for Steel	kg	6.78	0.0%	100.0%	0.0%	65.0%	35.0%	374.00	0.00	2,535.72	0.00	1,648.22	887.50	2,535.72		
M06011	Rustproof Lead Paint for Steel	kg	11.30	0.0%	100.0%	0.0%	65.0%	35.0%	209.00	0.00	2,361.70	0.00	1,535.11	826.60	2,361.70		
M06022	Epoxy Resin Paint for Steel	kg	7.68	0.0%	100.0%	0.0%	65.0%	35.0%	496.00	0.00	3,809.28	0.00	2,476.03	1,333.25	3,809.28		
R0901-025	Welding Machine 250A	day	0.33	0.0%	0.0%	39.8%	60.2%	58.6%	41.4%	588.00	0.00	77.23	116.81	80.36	194.94		
R1001-200	Generator 151-200 kW	day	0.33	0.0%	0.0%	47.6%	52.4%	59.4%	40.6%	5,280.00	0.00	829.38	913.02	1,035.35	707.05	1,742.40	
R0402-010	Truck Crane, Hydraulic 6-10t	hr	1.88	15.2%	9.3%	75.5%	47.0%	53.0%	485.00	138.59	84.80	688.41	428.92	482.88	911.80		
R0601-003	Dump Truck, 3.0-6.0 cu-yds (2.3-4.6m3)	hr	1.30	13.5%	19.3%	67.2%	49.0%	51.0%	446.00	78.27	111.90	389.63	284.05	295.75	579.80		
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	12,887.67	30.0%	
Total										1,167.69	39,683.36	2,107.86	28,432.70	14,526.21	55,846.58		
Components (%)										2.1%	71.1%	3.8%	50.9%	26.0%	100.0%		
Unit Rate			m							57.29	1,946.98	103.42	1,394.99	712.70	2,740.00		

Miscellaneous covers the costs for fabricator's overhead, facilities, minor tools and materials, falseworks, etc.

SPL 401(3)a Bridge Name Plate, 1000 x 600 mm for Angat Bridge

Unit: 10.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.43	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	243.38	0.00	0.00	0.00	243.38	243.38	
L019	Skilled Labor	md	1.60	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	644.80	0.00	0.00	0.00	644.80	644.80	
L020	Unskilled Labor	md	1.60	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	502.40	0.00	0.00	0.00	502.40	502.40	
M02501	Brass Plate	kg	1,068.00	0.0%	100.0%	0.0%	70.0%	30.0%	228.00	0.00	243,504.00	0.00	170,452.80	73,051.20	243,504.00	
M0225	Grout (non-shrink)	m3	0.09	1.0%	96.5%	2.6%	61.3%	38.7%	3,050.00	2.63	264.77	7.10	188.19	106.31	274.50	
R0602-002	Cargo truck 2.0-5.0t	hr	2.53	14.4%	13.7%	71.9%	48.0%	52.0%	570.00	207.66	197.57	1,036.87	691.77	750.33	1,442.10	
	Miscellaneous	LS	1.00	20.0%	40.0%	40.0%	50.0%	50.0%		14,796.67	29,593.34	29,593.34	36,991.68	36,991.68	73,983.35	30.0%
Total										16,397.54	273,559.68	30,637.31	208,304.44	112,290.10	320,594.53	
Components (%)										5.1%	85.3%	9.6%	65.0%	35.0%	100.0%	
Unit Rate			each							1,641.83	27,390.57	3,067.61	20,856.79	11,243.21	32,100.00	

Miscellaneous covers the cost for overhead of fabricators, anchors, fixtures, carving, chipping, cleaning, minor tools, etc.

Plate Size = 1,000 x 600 x 20 mm  
Unit Weight = 8,900 kg/m3

SPL 401(3)b Bridge Name Plate, 1000 x 600 mm for Pampanga Bridge

Unit: 10.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.43	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	243.38	0.00	0.00	0.00	243.38	243.38	
L019	Skilled Labor	md	1.60	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	644.80	0.00	0.00	0.00	644.80	644.80	
L020	Unskilled Labor	md	1.60	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	502.40	0.00	0.00	0.00	502.40	502.40	
W02501	Brass Plate	kg	1,068.00	0.0%	100.0%	0.0%	70.0%	30.0%	228.00	0.00	243,504.00	0.00	170,452.80	73,051.20	243,504.00	
W0225	Grout (non-shrink)	m3	0.09	1.0%	96.5%	2.6%	61.3%	38.7%	3,050.00	2.63	264.77	7.10	168.19	106.31	274.50	
R0602-002	Cargo truck 2.0-5.0t	hr	2.53	14.4%	13.7%	71.9%	48.0%	52.0%	570.00	207.66	197.57	1,036.87	691.77	750.33	1,442.10	
	Miscellaneous	LS	1.00	20.0%	40.0%	40.0%	50.0%	50.0%		14,796.67	29,593.34	29,593.34	36,991.68	36,991.68	73,983.35	30.0%
Total										16,397.54	273,559.68	30,637.31	208,304.44	112,290.10	320,594.53	
Components (%)										5.1%	85.3%	9.6%	65.0%	35.0%	100.0%	
Unit Rate			each							1,641.83	27,390.57	3,067.61	20,856.79	11,243.21	32,100.00	

Miscellaneous covers the cost for overhead of fabricators, anchors, fixtures, carving, chipping, cleaning, minor tools, etc.  
 Plate Size = 1,000 x 600 x 20 mm  
 Unit Weight = 8,900 kg/m3

SPL 401(3)c Bridge Name Plate, 1000 x 600 mm for Talavera Bridge

Unit: 10.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.43	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	243.38	0.00	0.00	0.00	243.38	243.38	
L019	Skilled Labor	md	1.60	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	644.80	0.00	0.00	0.00	644.80	644.80	
L020	Unskilled Labor	md	1.60	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	502.40	0.00	0.00	0.00	502.40	502.40	
W02501	Brass Plate	kg	1,068.00	0.0%	100.0%	0.0%	70.0%	30.0%	228.00	0.00	243,504.00	0.00	170,452.80	73,051.20	243,504.00	
W0225	Grout (non-shrink)	m3	0.09	1.0%	96.5%	2.6%	61.3%	38.7%	3,050.00	2.63	264.77	7.10	168.19	106.31	274.50	
R0602-002	Cargo truck 2.0-5.0t	hr	2.53	14.4%	13.7%	71.9%	48.0%	52.0%	570.00	207.66	197.57	1,036.87	691.77	750.33	1,442.10	
	Miscellaneous	LS	1.00	20.0%	40.0%	40.0%	50.0%	50.0%		14,796.67	29,593.34	29,593.34	36,991.68	36,991.68	73,983.35	30.0%
Total										16,397.54	273,559.68	30,637.31	208,304.44	112,290.10	320,594.53	
Components (%)										5.1%	85.3%	9.6%	65.0%	35.0%	100.0%	
Unit Rate			each							1,641.83	27,390.57	3,067.61	20,856.79	11,243.21	32,100.00	

Miscellaneous covers the cost for overhead of fabricators, anchors, fixtures, carving, chipping, cleaning, minor tools, etc.  
 Plate Size = 1,000 x 600 x 20 mm  
 Unit Weight = 8,900 kg/m3

SPL 401(3)d Bridge Name Plate, 1000 x 600 mm for Interchange Ramp

Unit: 10.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.43	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	243.38	0.00	0.00	0.00	243.38	243.38	
L019	Skilled Labor	md	1.60	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	644.80	0.00	0.00	0.00	644.80	644.80	
L020	Unskilled Labor	md	1.60	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	502.40	0.00	0.00	0.00	502.40	502.40	
W02501	Brass Plate	kg	1,068.00	0.0%	100.0%	0.0%	70.0%	30.0%	228.00	0.00	243,504.00	0.00	170,452.80	73,051.20	243,504.00	
W0225	Grout (non-shrink)	m3	0.09	1.0%	96.5%	2.6%	61.3%	38.7%	3,050.00	2.63	264.77	7.10	168.19	106.31	274.50	
R0602-002	Cargo truck 2.0-5.0t	hr	2.53	14.4%	13.7%	71.9%	48.0%	52.0%	570.00	207.66	197.57	1,036.87	691.77	750.33	1,442.10	
	Miscellaneous	LS	1.00	20.0%	40.0%	40.0%	50.0%	50.0%		14,796.67	29,593.34	29,593.34	36,991.68	36,991.68	73,983.35	30.0%
Total										16,397.54	273,559.68	30,637.31	208,304.44	112,290.10	320,594.53	
Components (%)										5.1%	85.3%	9.6%	65.0%	35.0%	100.0%	
Unit Rate			each							1,641.83	27,390.57	3,067.61	20,856.79	11,243.21	32,100.00	

Miscellaneous covers the cost for overhead of fabricators, anchors, fixtures, carving, chipping, cleaning, minor tools, etc.  
 Plate Size = 1,000 x 600 x 20 mm  
 Unit Weight = 8,900 kg/m3

403(g) Structural Steel for Pampanga River Bridge, furnished and fabricated

Unit: 1,707,860.00 kg

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	320.47	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	181,386.02	0.00	0.00	0.00	181,386.02	181,386.02	
L009	Welder	md	1,281.90	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	640,950.00	0.00	0.00	0.00	640,950.00	640,950.00	
L010	Painter	md	0.00	100.0%	0.0%	0.0%	0.0%	100.0%	440.00	0.00	0.00	0.00	0.00	0.00	0.00	
L019	Skilled Labor	md	1,922.85	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	774,908.55	0.00	0.00	0.00	774,908.55	774,908.55	
M02017	Structural Steel (Plates SMA490W)	kg	1,844,488.80	0.0%	100.0%	0.0%	75.0%	25.0%	45.00	0.00	83,001,996.00	0.00	62,251,497.00	20,750,499.00	83,001,996.00	Loss 8.0%
M02072	High Tension Bolt M20	each	85,400.00	0.0%	100.0%	0.0%	70.0%	30.0%	29.20	0.00	2,493,680.00	0.00	1,745,576.00	748,104.00	2,493,680.00	
M06001	Etching Primer for Steel	kg	0.00	0.0%	100.0%	0.0%	65.0%	35.0%	274.00	0.00	0.00	0.00	0.00	0.00	0.00	Loss 3.0%
M06011	Rustproof Lead Paint for Steel	kg	0.00	0.0%	100.0%	0.0%	65.0%	35.0%	209.00	0.00	0.00	0.00	0.00	0.00	0.00	Loss 3.0%
M06011	Rustproof Lead Paint for Steel	kg	0.00	0.0%	100.0%	0.0%	65.0%	35.0%	209.00	0.00	0.00	0.00	0.00	0.00	0.00	Loss 3.0%
R0901-050	Welding Machine 500A	day	1,281.90	0.0%	60.4%	39.6%	60.6%	39.4%	1,470.00	0.00	1,138,173.37	746,219.63	1,142,632.84	741,760.16	1,884,393.00	
R0402-080	Truck Crane, Hydraulic 71-B01	hr	108.46	2.4%	4.2%	93.4%	53.5%	46.5%	3,080.00	7,426.00	12,995.51	288,995.29	105,548.11	143,868.69	309,416.80	
R0604-020	Trailer 20t	hr	1,080.97	3.8%	10.7%	85.5%	53.3%	46.7%	1,670.00	68,598.36	193,158.53	1,543,463.01	962,294.12	842,925.78	1,805,219.90	
	Miscellaneous	LS	1.00	5.0%	30.0%	65.0%	50.0%	50.0%		1,821,839.01	10,931,034.03	23,683,907.07	18,218,390.05	16,218,390.05	36,436,780.11	40.0%
	<b>Total</b>									3,495,107.93	97,771,037.44	26,262,585.00	84,485,938.13	43,042,792.25	127,528,730.38	
	Components (%)									2.7%	76.7%	20.8%	66.2%	33.8%	100.0%	
	Unit Rate	kg								2.05	57.27	15.38	49.49	25.21	74.78	

Miscellaneous covers the cost for overhead & facilities of fabricators, electricity and fuel consumption, welding rods, acetylene gas, etc.  
 Total Steel Weight = 1,707.86 t  
 Welding Length = 3.19 m/t  
 $y = \alpha \cdot (0.013 \cdot L + 6.0)$ , ( $9 \leq y \leq 17$ )  
 $y$ : Daily Welding Capacity = 17.00 m/day  
 $L$ : Welding Length = 5,448.07 m  
 $\alpha$ : Coefficient = 1.00  
 Paint Area = 8.54 m<sup>2</sup>/t  
 Primer = 0.130 kg/m<sup>2</sup>  
 Rustproof-1 = 0.170 kg/m<sup>2</sup>  
 Rustproof-2 = 0.170 kg/m<sup>2</sup>

hauling time =  $2 \times L/V + a = 10.76$  hr/trip  
 $a$ : Loading Time = 1.00 hr  
 $L$ : Haulage Distance = 122.00 km  
 $V$ : Traveling Speed = 25.00 km/hr

403(5) Structural Steel for Pampanga River Bridge, erected

Unit: 1,707,860.00 kg

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0501	Ground Assembly of Structural Steel Bridge Members	t	1,196.00	11.4%	3.1%	85.5%	48.2%	51.8%	1,260.00	172,385.97	46,266.68	1,288,307.35	727,029.21	779,930.79	1,506,960.00	
W0502	Erection of Structural Steel Bridge Members	t	1,707.90	10.8%	4.8%	84.4%	48.4%	51.6%	1,290.00	238,489.81	105,709.18	1,858,992.01	1,065,693.53	1,137,497.47	2,263,191.00	
W0503	Bolting of Structural Steel Bridge Members	each	27,326.00	4.4%	93.3%	2.3%	66.1%	33.9%	43.60	52,914.12	1,111,005.32	27,494.16	787,784.92	403,628.88	1,191,413.60	
W0504	Finish Painting of Structural Steel Bridge Members	m <sup>2</sup>	0.00	42.1%	48.8%	9.1%	36.3%	63.7%	132.00	0.00	0.00	0.00	0.00	0.00	0.00	
W0505	Temporary Bent for Steel Bridge Erection	t	556.70	4.5%	91.2%	4.3%	49.3%	51.7%	16,000.00	401,564.48	8,128,511.60	379,023.92	4,303,459.65	4,603,740.35	8,907,200.00	
W0506	Site Welding for Steel Bridge	m	446.50	23.4%	34.8%	42.0%	44.5%	55.5%	3,120.00	325,635.25	481,997.47	585,447.28	619,321.12	773,758.88	1,393,080.00	
	Miscellaneous	LS	1.00	0.0%	35.0%	65.0%	55.0%	45.0%		0.00	1,596,193.68	2,964,359.70	2,508,304.36	2,052,249.02	4,560,553.38	30.0%
	<b>Total</b>									1,190,989.63	11,467,783.93	7,103,624.42	10,011,592.78	9,750,805.20	19,762,397.98	
	Components (%)									6.0%	58.0%	35.9%	50.7%	49.3%	100.0%	
	Unit Rate	kg								0.70	6.73	4.17	5.88	5.72	11.60	

Miscellaneous covers the cost for temporary scaffolding, supports, safety measures, etc.

403(8)a Bearing Shoe for Steel Plate Girder Type 1 (Max. R=250t) in Pampanga Bridge

Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.41	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	232.06	0.00	0.00	0.00	232.06	232.06	
L019	Skilled Labor	md	1.64	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	860.92	0.00	0.00	0.00	660.92	660.92	
L020	Unskilled Labor	md	0.41	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	128.74	0.00	0.00	0.00	128.74	128.74	
M09104	Bearing Shoe (rubber enclosed type), 250t	each	1.00	0.0%	100.0%	0.0%	70.0%	30.0%	291,000.00	0.00	291,000.00	0.00	203,700.00	87,300.00	291,000.00	
R0402-025	Truck Crane, Hydraulic 21-25t	hr	1.17	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	85.59	105.81	1,364.70	808.57	747.53	1,556.10	
W0225	Grout (non-shrink)	m <sup>3</sup>	0.06	1.0%	96.5%	2.6%	61.3%	38.7%	3,050.00	1.75	176.52	4.73	112.12	70.88	183.00	Loss 3.0%
	Miscellaneous	LS	1.00	0.0%	50.0%	50.0%	55.0%	45.0%		0.00	2,937.61	2,937.61	3,231.37	2,643.85	5,875.22	2.0%
	<b>Total</b>									1,109.06	294,219.94	4,307.04	207,852.47	91,783.97	299,636.04	
	Components (%)									0.4%	98.2%	1.4%	69.4%	30.6%	100.0%	
	Unit Rate	each								1,110.40	294,577.32	4,312.27	208,104.54	91,895.46	300,000.00	

Miscellaneous covers the costs for depreciation of temporary supports, minor tools, generator, etc.  
 $y = N / [0.2 \cdot a \cdot (N+8)]$   
 $y$ : Work capacity = 2.44 each/day  
 $N$ : Total number of shoes = 22  
 $a$ : Coefficient = 1.50

403(B)b Bearing Shoe for Steel Plate Girder Type 2 (Max. R=650t) in Pampanga Bridge

Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate						Amount						Remarks
				Component (%)					Total (PP)	Component (PP)					Total (PP)	
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
1.002	Foreman	md	0.41	100.0%	0.0%	0.0%	0.0%	100.0%	586.00	232.06	0.00	0.00	0.00	232.06	232.06	
1.019	Skilled Labor	md	1.64	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	660.92	0.00	0.00	0.00	660.92	660.92	
1.020	Unskilled Labor	md	0.41	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	128.74	0.00	0.00	0.00	128.74	128.74	
M09106	Bearing Shoe (rubber enclosed type), 650t	each	1.00	0.0%	100.0%	0.0%	70.0%	30.0%	764,000.00	0.00	764,000.00	0.00	534,800.00	229,200.00	764,000.00	
R0402-025	Truck Crane, Hydraulic 21-25t	hr	1.17	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	85.59	105.81	1,364.70	808.57	747.53	1,556.10	
W0225	Grout (non-shrink)	m3	0.07	1.0%	96.5%	2.6%	61.3%	38.7%	3,050.00	2.04	205.94	5.52	130.81	82.69	213.50	Loss 3.0%
	Miscellaneous	LS	1.00	0.0%	50.0%	50.0%	55.0%	45.0%		0.00	7,667.91	7,667.91	8,434.70	6,901.12	15,335.83	2.0%
Total										1,109.35	771,979.66	9,038.13	544,174.09	237,953.06	782,127.15	
Components (%)										0.1%	98.7%	1.2%	69.6%	30.4%	100.0%	
Unit Rate			each							1,109.17	771,854.17	9,036.67	544,085.63	237,914.37	782,000.00	

Miscellaneous covers the costs for depreciation of temporary supports, minor tools, generator, etc.

$y = N/[0.2 \cdot a \cdot (N+8)]$

y : Work capacity

= 2.44 each/day

N: Total number of shoes

22

a : Coefficient

1.50

403(B)c Bearing Shoe for Steel Plate Girder Type 3 (Max. R=650t) in Pampanga Bridge

Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate						Amount						Remarks
				Component (%)					Total (PP)	Component (PP)					Total (PP)	
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
1.002	Foreman	md	0.41	100.0%	0.0%	0.0%	0.0%	100.0%	586.00	232.06	0.00	0.00	0.00	232.06	232.06	
1.019	Skilled Labor	md	1.64	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	660.92	0.00	0.00	0.00	660.92	660.92	
1.020	Unskilled Labor	md	0.41	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	128.74	0.00	0.00	0.00	128.74	128.74	
M09108	Bearing Shoe (rubber enclosed type), 650t	each	1.00	0.0%	100.0%	0.0%	70.0%	30.0%	764,000.00	0.00	764,000.00	0.00	534,800.00	229,200.00	764,000.00	
R0402-025	Truck Crane, Hydraulic 21-25t	hr	1.17	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	85.59	105.81	1,364.70	808.57	747.53	1,556.10	
W0225	Grout (non-shrink)	m3	0.07	1.0%	96.5%	2.6%	61.3%	38.7%	3,050.00	2.04	205.94	5.52	130.81	82.69	213.50	Loss 3.0%
	Miscellaneous	LS	1.00	0.0%	50.0%	50.0%	55.0%	45.0%		0.00	7,667.91	7,667.91	8,434.70	6,901.12	15,335.83	2.0%
Total										1,109.35	771,979.66	9,038.13	544,174.09	237,953.06	782,127.15	
Components (%)										0.1%	98.7%	1.2%	69.6%	30.4%	100.0%	
Unit Rate			each							1,109.17	771,854.17	9,036.67	544,085.63	237,914.37	782,000.00	

Miscellaneous covers the costs for depreciation of temporary supports, minor tools, generator, etc.

$y = N/[0.2 \cdot a \cdot (N+8)]$

y : Work capacity

= 2.44 each/day

N: Total number of shoes

22

a : Coefficient

1.50

SPL 403(G) Steel Grating for Sunlight Opening in Underpasses

Unit: 10.00 m2

Item No.	Description	Unit	Quantity	Unit Rate						Amount						Remarks
				Component (%)					Total (PP)	Component (PP)					Total (PP)	
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
1.002	Foreman	md	0.57	100.0%	0.0%	0.0%	0.0%	100.0%	586.00	322.62	0.00	0.00	0.00	322.62	322.62	
1.009	Welder	md	1.91	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	955.00	0.00	0.00	0.00	955.00	955.00	
1.019	Skilled Labor	md	1.91	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	769.73	0.00	0.00	0.00	769.73	769.73	
1.020	Unskilled Labor	md	0.95	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	298.30	0.00	0.00	0.00	298.30	298.30	
M02012	Structural Steel (Flat Bar, SS400)	kg	1,284.43	0.0%	100.0%	0.0%	70.0%	30.0%	22.70	0.00	29,156.56	0.00	20,409.59	8,746.97	29,156.56	Loss 7.0%
M02014	Structural Steel (Shapes, SS400)	kg	623.06	0.0%	100.0%	0.0%	70.0%	30.0%	17.60	0.00	10,965.86	0.00	7,676.10	3,289.76	10,965.86	Loss 7.0%
R0901-025	Welding Machine 250A	day	1.91	0.0%	39.8%	60.2%	58.6%	41.4%	588.00	0.00	446.99	676.09	657.96	465.12	1,123.08	
R0402-025	Truck Crane, Hydraulic 21-25t	hr	0.10	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	6.99	8.63	111.25	65.91	60.94	126.85	
R0601-006	Dump Truck, 6.0-9.0 cu-yds (4.6-6.9m3)	hr	1.92	10.0%	17.9%	72.1%	50.8%	49.2%	603.00	115.78	207.24	834.74	587.89	569.87	1,157.76	
	Miscellaneous	LS	1.00	10.0%	35.0%	55.0%	50.0%	50.0%		1,346.27	4,711.95	7,404.50	6,731.36	6,731.36	13,462.71	30.0%
Total										3,814.68	45,497.23	9,026.59	36,128.82	22,209.66	58,338.49	
Components (%)										6.5%	78.0%	15.5%	61.9%	38.1%	100.0%	
Unit Rate			m2							381.22	4,546.72	902.66	3,610.50	2,219.50	5,830.00	

Miscellaneous covers the cost for fabricator's overhead & facilities, painting or galvanizing, etc.

404(1) Reinforcement Steel Grade 40 Unit: 1,000.00 kg

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.70	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	396.20	0.00	0.00	0.00	396.20	396.20	
L006	Re-Bar Worker	md	4.60	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	1,853.80	0.00	0.00	0.00	1,853.80	1,853.80	
L019	Skilled Labor	md	0.60	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	241.80	0.00	0.00	0.00	241.80	241.80	
L020	Unskilled Labor	md	3.20	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	1,004.80	0.00	0.00	0.00	1,004.80	1,004.80	
M02001	Reinforcing Bars, Grade 40	kg	1,070.00	0.0%	100.0%	0.0%	65.0%	35.0%	16.00	0.00	17,120.00	0.00	11,128.00	5,992.00	17,120.00	Loss 7.0%
R0402-025	Truck Crane, Hydraulic 21-25t	hr	0.57	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	41.70	51.55	664.85	393.92	364.18	758.10	
	Miscellaneous	LS	1.00	0.0%	40.0%	60.0%	55.0%	45.0%		0.00	769.49	1,154.23	1,058.05	865.68	1,923.72	9.0%
	<b>Total</b>									<b>3,538.30</b>	<b>17,941.04</b>	<b>1,819.09</b>	<b>12,579.97</b>	<b>10,718.45</b>	<b>23,298.42</b>	
	<b>Components (%)</b>									<b>15.2%</b>	<b>77.0%</b>	<b>7.8%</b>	<b>54.0%</b>	<b>46.0%</b>	<b>100.0%</b>	
	<b>Unit Rate</b>	kg								<b>3.54</b>	<b>17.94</b>	<b>1.82</b>	<b>12.58</b>	<b>10.72</b>	<b>23.30</b>	

Miscellaneous covers the cost for bar cutter, bar bender, binding wire, spacer, etc.

404(2) Reinforcement Steel Grade 60 Unit: 1,000.00 kg

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.70	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	396.20	0.00	0.00	0.00	396.20	396.20	
L006	Re-Bar Worker	md	4.60	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	1,853.80	0.00	0.00	0.00	1,853.80	1,853.80	
L019	Skilled Labor	md	0.60	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	241.80	0.00	0.00	0.00	241.80	241.80	
L020	Unskilled Labor	md	3.20	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	1,004.80	0.00	0.00	0.00	1,004.80	1,004.80	
M02002	Reinforcing Bars, Grade 60	kg	1,070.00	0.0%	100.0%	0.0%	65.0%	35.0%	17.00	0.00	18,190.00	0.00	11,823.50	6,366.50	18,190.00	Loss 7.0%
R0402-025	Truck Crane, Hydraulic 21-25t	hr	0.57	5.5%	6.8%	87.7%	52.0%	48.0%	1,330.00	41.70	51.55	664.85	393.92	364.18	758.10	
	Miscellaneous	LS	1.00	0.0%	40.0%	60.0%	55.0%	45.0%		0.00	808.01	1,212.01	1,111.01	909.01	2,020.02	9.0%
	<b>Total</b>									<b>3,538.30</b>	<b>19,049.56</b>	<b>1,876.87</b>	<b>13,328.43</b>	<b>11,136.29</b>	<b>24,464.72</b>	
	<b>Components (%)</b>									<b>14.5%</b>	<b>77.9%</b>	<b>7.7%</b>	<b>54.5%</b>	<b>45.5%</b>	<b>100.0%</b>	
	<b>Unit Rate</b>	kg								<b>3.54</b>	<b>19.08</b>	<b>1.88</b>	<b>13.35</b>	<b>11.15</b>	<b>24.50</b>	

Miscellaneous covers the cost for bar cutter, bar bender, binding wire, spacer, etc.

405(1)a Structural Concrete Class A (fc'=21MPa, max. aggregate 38mm) for heavily reinforced structures Unit: 10.00 m3

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0203	Concrete (Class A, 21MPa, max agg. 38mm)	m3	10.20	2.5%	79.7%	17.7%	56.7%	43.3%	1,630.00	422.52	13,254.91	2,948.57	9,425.97	7,200.03	16,626.00	Loss 2.0%
W0232	Concrete Pouring by Pump Vehicle (reinforced concrete)	m3	10.00	15.5%	0.2%	84.3%	45.2%	54.8%	257.00	399.26	5.04	2,165.70	1,160.60	1,409.40	2,570.00	
W0237	Concrete Curing (reinforced concrete)	m3	10.00	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	31.42	3.20	7.48	5.88	36.22	42.10	
W0241	Formwork (reinforced concrete H<4m)	m2	49.20	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	6,533.80	4,400.57	86.44	321.59	10,699.21	11,020.80	
W0441	Temporary Frame Support Installation & Removal	m3	20.00	58.9%	3.9%	37.1%	22.5%	77.5%	52.50	618.97	41.16	389.87	236.32	813.68	1,050.00	
W0442	Temporary Frame Support Depreciation	m3-d	560.00	0.0%	96.3%	3.7%	50.0%	50.0%	0.76	0.00	410.92	15.80	213.36	213.36	426.72	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									<b>8,005.97</b>	<b>18,115.79</b>	<b>5,613.86</b>	<b>11,363.72</b>	<b>20,371.90</b>	<b>31,735.62</b>	
	<b>Components (%)</b>									<b>25.2%</b>	<b>67.1%</b>	<b>17.7%</b>	<b>35.8%</b>	<b>64.2%</b>	<b>100.0%</b>	
	<b>Unit Rate</b>	m3								<b>799.70</b>	<b>1,809.55</b>	<b>560.76</b>	<b>1,135.10</b>	<b>2,034.90</b>	<b>3,170.00</b>	

Depreciation period for temporary support = 28 days

405(1)b Structural Concrete Class A (fc'=21MPa, max. aggregate 38mm) for small & medium bridges substructures Unit: 10.00 m3

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0203	Concrete (Class A, 21MPa, max agg. 38mm)	m3	10.20	2.5%	79.7%	17.7%	56.7%	43.3%	1,630.00	422.52	13,254.91	2,948.57	9,425.97	7,200.03	16,626.00	Loss 2.0%
W0232	Concrete Pouring by Pump Vehicle (reinforced concrete)	m3	10.00	15.5%	0.2%	84.3%	45.2%	54.8%	257.00	399.26	5.04	2,165.70	1,160.60	1,409.40	2,570.00	
W0237	Concrete Curing (reinforced concrete)	m3	10.00	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	31.42	3.20	7.48	5.88	36.22	42.10	
W0241	Formwork (reinforced concrete H<4m)	m2	14.90	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	1,978.73	1,332.69	26.18	97.39	3,240.21	3,337.60	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									<b>2,831.93</b>	<b>14,595.84</b>	<b>5,147.93</b>	<b>10,689.84</b>	<b>11,895.86</b>	<b>22,575.70</b>	
	<b>Components (%)</b>									<b>12.5%</b>	<b>64.7%</b>	<b>22.8%</b>	<b>47.4%</b>	<b>52.6%</b>	<b>100.0%</b>	
	<b>Unit Rate</b>	m3								<b>283.50</b>	<b>1,461.16</b>	<b>515.35</b>	<b>1,079.13</b>	<b>1,189.87</b>	<b>2,260.00</b>	



405(1)c Structural Concrete Class A1 (fc'=21MPa, max. aggregate 20mm) for small & medium bridges RCDG superstructures										Unit: 10.00 m3						
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0203a	Concrete (Class A1, 21MPa, max agg. 20mm)	m3	10.20	2.4%	80.9%	16.7%	56.9%	43.1%	1,700.00	418.08	14,029.03	2,892.89	9,858.56	7,481.44	17,340.00	Loss 2.0%
W0232	Concrete Pouring by Pump Vehicle (reinforced concrete)	m3	10.00	15.5%	0.2%	84.3%	45.2%	54.8%	257.00	399.26	5.04	2,165.70	1,160.60	1,409.40	2,570.00	
W0237	Concrete Curing (reinforced concrete)	m3	10.00	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	31.42	3.20	7.48	5.88	36.22	42.10	
W0441	Temporary Frame Support Installation & Removal	m3	102.30	58.9%	3.9%	37.1%	22.5%	77.5%	52.50	3,166.04	210.52	1,994.19	1,208.78	4,161.97	5,370.75	
W0442	Temporary Frame Support Depreciation	m3-d	6,138.00	0.0%	96.3%	3.7%	50.0%	50.0%	0.76	0.00	4,503.93	173.23	2,338.58	2,338.58	4,677.16	
W0241	Formwork (reinforced concrete 11'4m)	m2	50.10	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	6,653.32	4,481.07	88.02	327.48	10,894.92	11,222.40	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									<b>10,668.11</b>	<b>23,232.80</b>	<b>7,321.50</b>	<b>14,899.87</b>	<b>26,322.54</b>	<b>41,222.41</b>	
	<b>Components (%)</b>									<b>25.9%</b>	<b>56.4%</b>	<b>17.8%</b>	<b>36.1%</b>	<b>43.9%</b>	<b>100.0%</b>	
	<b>Unit Rate</b>	m3								<b>1,066.23</b>	<b>2,322.02</b>	<b>731.75</b>	<b>1,489.18</b>	<b>2,630.82</b>	<b>4,120.00</b>	

Depreciation period for temporary support = 60 days

405(1)d Structural Concrete Class A1 (fc'=21MPa, max. aggregate 20mm) for small & medium bridges PCDG superstructures										Unit: 10.00 m3						
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0203a	Concrete (Class A1, 21MPa, max agg. 20mm)	m3	10.20	2.4%	80.9%	16.7%	56.9%	43.1%	1,700.00	418.08	14,029.03	2,892.89	9,858.56	7,481.44	17,340.00	Loss 2.0%
W0232	Concrete Pouring by Pump Vehicle (reinforced concrete)	m3	10.00	15.5%	0.2%	84.3%	45.2%	54.8%	257.00	399.26	5.04	2,165.70	1,160.60	1,409.40	2,570.00	
W0237	Concrete Curing (reinforced concrete)	m3	10.00	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	31.42	3.20	7.48	5.88	36.22	42.10	
W0411	Temporary Struts & Supports Installation	t	2.60	33.7%	9.5%	56.9%	36.9%	63.1%	1,390.00	1,216.94	341.99	2,055.07	1,332.88	2,281.12	3,614.00	
W0412	Temporary Struts & Supports Removal	t	2.60	35.3%	9.1%	55.5%	35.7%	64.3%	827.00	759.53	196.26	1,194.41	768.44	1,381.76	2,150.20	
W05041	Temporary Steel Shapes Depreciation	t-d	156.00	0.0%	100.0%	0.0%	50.0%	50.0%	31.30	0.00	4,882.80	0.00	2,441.40	2,441.40	4,882.80	
W0241	Formwork (reinforced concrete 11'4m)	m2	42.60	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	5,657.31	3,810.25	74.84	278.45	9,263.95	9,542.40	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									<b>8,482.54</b>	<b>23,268.57</b>	<b>8,390.39</b>	<b>15,816.20</b>	<b>24,295.30</b>	<b>40,141.50</b>	
	<b>Components (%)</b>									<b>21.1%</b>	<b>58.0%</b>	<b>20.9%</b>	<b>39.5%</b>	<b>60.5%</b>	<b>100.0%</b>	
	<b>Unit Rate</b>	m3								<b>847.38</b>	<b>2,324.45</b>	<b>838.17</b>	<b>1,582.98</b>	<b>2,427.02</b>	<b>4,010.00</b>	

Depreciation period for temporary support = 60 days

405(1)e Structural Concrete Class AA1 (fc'=28MPa, max. aggregate 25) for long bridge substructures										Unit: 10.00 m3						
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0205	Concrete (Class AA1, 28MPa, max agg. 25mm)	m3	10.20	2.3%	81.4%	16.3%	57.6%	42.4%	1,780.00	421.33	14,782.44	2,952.24	10,465.60	7,690.40	18,156.00	Loss 2.0%
W0232	Concrete Pouring by Pump Vehicle (reinforced concrete)	m3	10.00	15.5%	0.2%	84.3%	45.2%	54.8%	257.00	399.26	5.04	2,165.70	1,160.60	1,409.40	2,570.00	
W0237	Concrete Curing (reinforced concrete)	m3	10.00	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	31.42	3.20	7.48	5.88	36.22	42.10	
W0241	Formwork (reinforced concrete 11'4m)	m2	13.10	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	1,739.69	1,171.70	23.81	85.63	2,848.77	2,934.40	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									<b>2,591.69</b>	<b>15,962.37</b>	<b>5,148.43</b>	<b>11,717.71</b>	<b>11,984.79</b>	<b>23,702.50</b>	
	<b>Components (%)</b>									<b>10.9%</b>	<b>67.3%</b>	<b>21.7%</b>	<b>49.4%</b>	<b>50.6%</b>	<b>100.0%</b>	
	<b>Unit Rate</b>	m3								<b>259.14</b>	<b>1,596.07</b>	<b>514.79</b>	<b>1,171.65</b>	<b>1,198.35</b>	<b>2,370.00</b>	

405(1)f Structural Concrete Class AA2 (fc'=28MPa, max. aggregate 20mm) for long bridge superstructures										Unit: 10.00 m3						
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0206	Concrete (Class AA2, 28MPa, max agg. 20mm)	m3	10.20	2.2%	82.7%	15.1%	57.8%	42.2%	1,860.00	414.16	15,685.93	2,871.91	10,970.58	8,001.42	18,972.00	Loss 2.0%
W0232	Concrete Pouring by Pump Vehicle (reinforced concrete)	m3	10.00	15.5%	0.2%	84.3%	45.2%	54.8%	257.00	399.26	5.04	2,165.70	1,160.60	1,409.40	2,570.00	
W0237	Concrete Curing (reinforced concrete)	m3	10.00	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	31.42	3.20	7.48	5.88	36.22	42.10	
W0411	Temporary Struts & Supports Installation	t	2.90	33.7%	9.5%	56.9%	36.9%	63.1%	1,390.00	1,367.36	381.45	2,292.19	1,486.67	2,544.33	4,031.00	
W0412	Temporary Struts & Supports Removal	t	2.90	35.3%	9.1%	55.5%	35.7%	64.3%	827.00	847.16	218.91	1,332.23	857.10	1,541.20	2,398.30	
W05041	Temporary Steel Shapes Depreciation	t-d	174.00	0.0%	100.0%	0.0%	50.0%	50.0%	31.30	0.00	5,446.20	0.00	2,723.10	2,723.10	5,446.20	
W0241	Formwork (reinforced concrete 11'4m)	m2	49.20	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	6,533.80	4,400.57	86.44	321.59	10,699.21	11,020.80	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
	<b>Total</b>									<b>9,583.16</b>	<b>26,141.29</b>	<b>8,765.95</b>	<b>17,525.52</b>	<b>26,954.88</b>	<b>44,480.40</b>	
	<b>Components (%)</b>									<b>21.5%</b>	<b>58.8%</b>	<b>19.7%</b>	<b>39.4%</b>	<b>60.6%</b>	<b>100.0%</b>	
	<b>Unit Rate</b>	m3								<b>958.74</b>	<b>2,615.28</b>	<b>875.98</b>	<b>1,753.32</b>	<b>2,696.68</b>	<b>4,450.00</b>	

Depreciation period for temporary support = 60 days

405(2) Structural Concrete Class B (fc'=17MPa, max. aggregate 50mm) for plain or lightly reinforced structures										Unit: 10.00 m3						
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
W0202	Concrete (Class B, 17MPa, max agg. 50mm)	m3	10.20	3.0%	75.5%	21.5%	56.1%	43.9%	1,400.00	430.94	10,783.94	3,065.12	8,009.79	6,270.21	14,280.00	Loss 2.0%
W0231	Concrete Pouring by Pump Vehicle (plain concrete)	m3	10.00	18.8%	0.2%	81.0%	43.4%	56.6%	213.00	400.37	4.18	1,725.45	924.78	1,205.22	2,130.00	
W0236	Concrete Curing (plain concrete)	m3	10.00	70.9%	8.7%	20.4%	16.0%	84.0%	8.85	62.77	7.72	18.01	14.15	74.35	88.50	
W0241	Formwork (reinforced concrete R(4m)	m2	33.30	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	4,422.26	2,978.43	58.50	217.66	7,241.54	7,459.20	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										5,316.34	13,774.27	4,867.09	9,166.39	14,791.31	23,957.70	
Components (%)										22.2%	37.5%	20.3%	38.3%	61.7%	100.0%	
Unit Rate			m3							532.57	1,379.85	487.57	918.25	1,481.74	2,400.00	

405(3) Structural Concrete Class C (fc'=21MPa, max. aggregate 12mm) for thin reinforced members										Unit: 10.00 m3						
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
W0204	Concrete (Class C, 21MPa, max agg. 12mm)	m3	10.20	2.4%	81.5%	16.1%	56.9%	43.1%	1,720.00	412.60	14,298.09	2,833.31	9,987.75	7,556.25	17,544.00	Loss 2.0%
W0232	Concrete Pouring by Pump Vehicle (reinforced concrete)	m3	10.00	15.6%	0.2%	84.3%	45.2%	54.8%	257.00	399.26	5.04	2,165.70	1,160.60	1,409.40	2,570.00	
W0237	Concrete Curing (reinforced concrete)	m3	10.00	74.0%	7.6%	17.8%	14.0%	86.0%	4.21	31.42	3.20	7.48	5.88	36.22	42.10	
W0241	Formwork (reinforced concrete R(4m)	m2	25.80	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	3,426.26	2,307.61	45.33	168.64	5,610.56	5,779.20	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										4,269.54	16,613.94	5,051.82	11,322.87	14,612.43	25,935.30	
Components (%)										16.5%	64.1%	19.5%	43.7%	56.3%	100.0%	
Unit Rate			m3							426.37	1,659.13	504.49	1,130.75	1,459.25	2,580.00	

405(4)b Structural Concrete Class PP (41MPa, max. agg. 20mm) for prestressed box girders in Angat Bridge										Unit: 10.00 m3						
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
W0208	Concrete (Class PP, 41MPa, max agg. 20mm)	m3	10.20	1.9%	85.0%	13.1%	58.2%	41.8%	2,150.00	416.51	18,645.30	2,868.19	12,772.64	9,157.36	21,930.00	Loss 2.0%
W0233	Concrete Pouring by Pump Vehicle for PC box girder cantilever construction	m3	10.00	29.1%	0.2%	70.7%	37.9%	62.1%	508.00	1,478.72	9.96	3,591.32	1,925.70	3,154.30	5,080.00	
W0237	Concrete Curing (reinforced concrete)	m3	10.00	74.0%	7.6%	17.8%	14.0%	86.0%	4.21	31.42	3.20	7.48	5.88	36.22	42.10	
W0245	Formwork Installation and Removal for PC Box Girder (Cantilever Construction)	m2	31.60	62.6%	21.6%	15.8%	11.4%	88.6%	468.00	9,260.29	3,191.11	2,337.40	1,686.37	13,102.43	14,788.80	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										11,186.93	21,849.58	8,804.39	16,390.59	25,450.31	41,840.90	
Components (%)										26.7%	52.2%	21.0%	39.2%	60.8%	100.0%	
Unit Rate			m3							1,117.60	2,182.82	879.58	1,637.46	2,542.54	4,180.00	

405(4)c Structural Concrete Class PP (41MPa, max. agg. 20mm) for prestressed hollow slab girders										Unit: 10.00 m3						
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
L002	Foreman	md	0.90	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	509.40	0.00	0.00	0.00	509.40	509.40	
L005	Carpenter	md	4.80	100.0%	0.0%	0.0%	0.0%	100.0%	444.00	2,131.20	0.00	0.00	0.00	2,131.20	2,131.20	
L019	Skilled Labor	md	0.80	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	322.40	0.00	0.00	0.00	322.40	322.40	
L019	Skilled Labor	md	0.80	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	322.40	0.00	0.00	0.00	322.40	322.40	
L020	Unskilled Labor	md	4.60	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	1,444.40	0.00	0.00	0.00	1,444.40	1,444.40	
W0208	Concrete (Class PP, 41MPa, max agg. 20mm)	m3	10.20	1.9%	85.0%	13.1%	58.2%	41.8%	2,150.00	416.51	18,645.30	2,868.19	12,772.64	9,157.36	21,930.00	Loss 2.0%
R0702-100	Concrete Pump Vehicle 100cu-yds/hr (76.5m3/hr)	hr	0.50	0.0%	0.0%	100.0%	53.4%	46.6%	2,190.00	0.00	0.00	1,095.00	585.05	509.95	1,095.00	
W0242	Formwork (reinforced concrete R(4m)	m2	44.00	47.1%	33.6%	19.3%	13.6%	86.4%	283.00	5,869.38	4,185.43	2,397.19	1,699.09	10,752.91	12,452.00	
W0441	Temporary Frame Support Installation & Removal	m3	81.50	58.9%	3.9%	37.1%	22.5%	77.5%	52.50	2,522.31	167.72	1,588.72	963.01	3,115.74	4,278.75	
W0442	Temporary Frame Support Depreciation	m3-d	4,890.00	0.0%	96.3%	3.7%	50.0%	50.0%	0.76	0.00	3,588.17	138.01	1,863.09	1,863.09	3,726.18	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										13,538.00	26,586.62	8,087.11	17,882.88	30,328.85	48,211.73	
Components (%)										28.1%	55.1%	16.8%	37.1%	62.9%	100.0%	
Unit Rate			m3							1,353.47	2,658.02	808.51	1,787.85	3,032.15	4,820.00	

Depreciation period for temporary support = 60 days

405(6) Lean Concrete (17MPa, max. agg. 38mm), poured		Unit: 10.00 m3														
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local	Labor	Material	Equipment	Foreign	Local			
W0201	Lean Concrete (17MPa, max. agg. 38mm)	m3	10.20	2.7%	78.1%	19.1%	56.4%	43.6%	1,510.00	421.47	12,033.25	2,947.28	8,692.05	6,708.95	15,402.00	Loss 2.0%
W0231	Concrete Pouring by Pump Vehicle (plain concrete)	m3	10.00	18.8%	0.2%	81.0%	43.4%	56.6%	213.00	400.37	4.18	1,725.45	924.78	1,205.22	2,130.00	
W0236	Concrete Curing (plain concrete)	m3	10.00	70.9%	8.7%	20.4%	16.0%	84.0%	8.85	62.77	7.72	18.01	14.15	71.35	88.50	
W0243	Formwork (lean concrete)	m2	12.50	41.3%	58.0%	0.8%	3.8%	96.2%	152.00	783.80	1,101.30	14.90	72.57	1,827.43	1,900.00	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
<b>Total</b>									1,668.41	13,146.44	4,705.65	9,703.56	9,816.94	19,520.50		
Components (%)									8.5%	67.3%	24.1%	49.7%	50.3%	100.0%		
Unit Rate				m3					166.67	1,313.26	470.07	969.34	980.66	1,950.00		

405(1)a Precast Prestressed Structural Concrete Members (AASHTO Girder Type IV L=20m), fabricated & erected		Unit: 1.00 each														
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local	Labor	Material	Equipment	Foreign	Local			
W0521	Precast PC Girder Fabrication Base Construction & Removal	girder	1.00	76.3%	11.8%	11.8%	13.0%	87.0%	502.00	383.21	59.40	59.40	65.34	436.66	502.00	
W0522	Precast PC Girder Fabrication Base Maintenance	girder	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	493.00	493.00	0.00	0.00	493.00	493.00		
W0208	Concrete (Class PP, 41MPa, max. agg. 20mm)	m3	11.59	1.9%	85.0%	13.1%	58.2%	41.8%	2,150.00	473.27	21,186.18	3,259.05	14,513.23	10,405.27	24,918.50	Loss 2.0%
W0231	Concrete Pouring by Pump Vehicle (plain concrete)	m3	11.36	18.8%	0.2%	81.0%	43.4%	56.6%	213.00	454.82	4.74	1,960.11	1,050.55	1,369.13	2,419.88	
W0237	Concrete Curing (reinforced concrete)	m3	11.36	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	35.69	3.64	8.50	6.67	41.16	47.83	
W0241	Formwork (reinforced concrete 11<4m)	m2	62.46	58.3%	39.9%	0.8%	2.9%	97.1%	224.00	8,294.73	5,586.57	109.73	408.27	13,582.77	13,991.04	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	761.00	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	2,692.83	13,654.06	1,384.42	9,574.00	8,157.30	17,731.30	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	959.00	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	3,398.12	18,294.87	1,802.51	12,800.40	10,695.10	23,495.50	
W0537	PC Strand (12-T12.7, 225t) Installation for Precast PC Girder	m	40.80	4.8%	95.0%	0.2%	65.9%	34.1%	1,340.00	2,622.11	51,931.65	118.24	36,035.63	18,636.37	54,672.00	
W0547	PC Strand (12-T12.7, 225t) Tensioning for Precast PC Girder	cable	2.00	2.5%	96.6%	1.0%	72.6%	27.4%	19,600.00	969.30	37,854.18	376.52	28,473.15	10,726.85	39,200.00	
W0555	Precast PC Girder Erection (20.0 ≤ W < 35.0 t)	t	28.40	15.3%	3.6%	81.0%	46.4%	53.6%	213.00	925.90	220.47	4,902.83	2,808.54	3,240.66	6,049.20	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
<b>Total</b>									20,742.98	148,795.76	13,981.31	105,735.78	77,784.27	183,520.05		
Components (%)									11.3%	81.1%	7.6%	57.6%	42.4%	100.0%		
Unit Rate				each					20,797.23	149,184.90	14,017.87	106,012.30	77,987.70	184,000.00		

405(1)b Precast Prestressed Structural Concrete Members (AASHTO Girder Type IV L=22m), fabricated & erected		Unit: 1.00 each														
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local	Labor	Material	Equipment	Foreign	Local			
W0521	Precast PC Girder Fabrication Base Construction & Removal	girder	1.00	76.3%	11.8%	11.8%	13.0%	87.0%	502.00	383.21	59.40	59.40	65.34	436.66	502.00	
W0522	Precast PC Girder Fabrication Base Maintenance	girder	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	493.00	493.00	0.00	0.00	493.00	493.00		
W0208	Concrete (Class PP, 41MPa, max. agg. 20mm)	m3	12.63	1.9%	85.0%	13.1%	58.2%	41.8%	2,150.00	515.73	23,087.27	3,551.50	15,815.54	11,338.96	27,154.50	Loss 2.0%
W0231	Concrete Pouring by Pump Vehicle (plain concrete)	m3	12.38	18.8%	0.2%	81.0%	43.4%	56.6%	213.00	495.66	5.17	2,136.11	1,144.88	1,492.06	2,636.94	
W0237	Concrete Curing (reinforced concrete)	m3	12.38	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	38.90	3.97	9.26	7.27	44.85	52.12	
W0241	Formwork (reinforced concrete 11<4m)	m2	68.53	58.3%	39.9%	0.8%	2.9%	97.1%	224.00	9,100.83	6,129.49	120.40	447.94	14,902.78	15,350.72	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	804.00	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	2,844.98	14,425.57	1,462.65	10,114.98	8,618.22	18,733.20	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	1,045.00	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	3,702.85	19,935.49	1,964.15	13,948.30	11,654.20	25,602.50	
W0537	PC Strand (12-T12.7, 225t) Installation for Precast PC Girder	m	44.88	4.8%	95.0%	0.2%	65.9%	34.1%	1,340.00	2,884.32	57,124.82	130.06	39,639.20	20,500.00	60,139.20	
W0547	PC Strand (12-T12.7, 225t) Tensioning for Precast PC Girder	cable	2.00	2.5%	96.6%	1.0%	72.6%	27.4%	19,600.00	969.30	37,854.18	376.52	28,473.15	10,726.85	39,200.00	
W0555	Precast PC Girder Erection (20.0 ≤ W < 35.0 t)	t	30.95	15.3%	3.6%	81.0%	46.4%	53.6%	213.00	1,009.04	240.27	5,343.04	3,080.71	3,531.64	6,592.35	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
<b>Total</b>									22,437.82	158,865.62	15,153.09	112,717.30	83,739.23	196,456.53		
Components (%)									11.4%	80.9%	7.7%	57.4%	42.6%	100.0%		
Unit Rate				each					22,385.68	158,496.45	15,117.87	112,455.36	83,544.64	196,000.00		

406(1)c Precast Prestressed Structural Concrete Members (AASHTO Girder Type IV L=24m), fabricated & erected										Unit: 1.00 each						
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0521	Precast PC Girder Fabrication Base Construction & Removal	girder	1.00	76.3%	11.8%	11.8%	13.0%	87.0%	502.00	383.21	59.40	59.40	65.34	436.66	502.00	
W0522	Precast PC Girder Fabrication Base Maintenance	girder	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	493.00	493.00	0.00	0.00	0.00	493.00	493.00	
W0208	Concrete (Class PP, 41MPa, max agg. 20mm)	m3	13.67	1.9%	85.0%	13.1%	58.2%	41.8%	2,150.00	558.20	24,988.36	3,843.94	17,117.85	12,272.65	29,390.50	Loss 2.0%
W0231	Concrete Pouring by Pump Vehicle (plain concrete)	m3	13.40	18.8%	0.2%	81.0%	43.4%	56.6%	213.00	536.50	5.60	2,312.11	1,238.21	1,614.99	2,854.20	
W0237	Concrete Curing (reinforced concrete)	m3	13.40	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	42.10	4.29	10.02	7.87	48.54	56.41	
W0241	Formwork (reinforced concrete H<4m)	m2	74.65	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	9,913.57	6,676.88	131.15	487.94	16,233.66	16,721.60	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	879.00	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	3,110.37	15,771.24	1,599.09	11,058.54	9,422.16	20,480.70	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	1,154.00	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	4,089.08	22,014.89	2,169.03	15,403.19	12,869.81	28,273.00	
W0537	PC Strand (12-T12.7, 225t) Installation for Precast PC Girder	m	48.96	4.8%	95.0%	0.2%	65.9%	34.1%	1,340.00	3,146.53	62,317.98	141.88	43,242.76	22,363.64	65,606.40	
W0547	PC Strand (12-T12.7, 225t) Tensioning for Precast PC Girder	cable	2.00	2.5%	96.6%	1.0%	72.6%	27.4%	19,600.00	969.30	37,854.18	376.52	28,473.15	10,726.85	39,200.00	
W0536	PC Strand (10-T12.7, 190t) Installation for Precast PC Girder	m	24.48	5.3%	94.5%	0.2%	65.5%	34.5%	1,140.00	1,467.63	26,379.07	60.50	18,291.21	9,615.99	27,907.20	
W0546	PC Strand (10-T12.7, 190t) Tensioning for Precast PC Girder	cable	1.00	2.4%	96.7%	0.9%	72.7%	27.3%	19,600.00	467.05	18,951.11	181.84	14,251.10	5,348.90	19,600.00	
W0555	Precast PC Girder Erection (20.0 ≤ W < 35.0 t)	t	33.50	15.3%	3.6%	81.0%	46.4%	53.6%	213.00	1,092.18	260.06	5,783.26	3,312.89	3,822.61	7,135.50	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										26,268.72	215,283.05	16,668.74	152,951.04	105,289.47	258,220.51	
Components (%)										10.2%	83.4%	6.5%	59.2%	40.8%	100.0%	
Unit Rate			each							26,246.29	215,099.21	16,654.50	152,820.43	105,179.57	258,000.00	

406(1)d Precast Prestressed Structural Concrete Members (AASHTO Girder Type IV L=25m), fabricated & erected										Unit: 1.00 each						
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0521	Precast PC Girder Fabrication Base Construction & Removal	girder	1.00	76.3%	11.8%	11.8%	13.0%	87.0%	502.00	383.21	59.40	59.40	65.34	436.66	502.00	
W0522	Precast PC Girder Fabrication Base Maintenance	girder	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	493.00	493.00	0.00	0.00	0.00	493.00	493.00	
W0208	Concrete (Class PP, 41MPa, max agg. 20mm)	m3	14.19	1.9%	85.0%	13.1%	58.2%	41.8%	2,150.00	579.43	23,938.90	3,990.16	17,769.00	12,739.50	30,508.50	Loss 2.0%
W0231	Concrete Pouring by Pump Vehicle (plain concrete)	m3	13.91	18.8%	0.2%	81.0%	43.4%	56.6%	213.00	556.92	5.81	2,400.10	1,286.37	1,676.46	2,962.83	
W0237	Concrete Curing (reinforced concrete)	m3	13.91	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	43.70	4.46	10.40	8.17	50.39	58.56	
W0241	Formwork (reinforced concrete H<4m)	m2	77.71	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	10,319.94	6,950.57	136.53	507.95	16,899.09	17,407.04	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	918.00	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	3,248.38	16,470.99	1,670.04	11,549.19	9,840.21	21,389.40	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	1,177.00	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	4,170.58	22,453.66	2,212.26	15,710.19	13,126.31	28,836.50	
W0537	PC Strand (12-T12.7, 225t) Installation for Precast PC Girder	m	51.00	4.8%	95.0%	0.2%	65.9%	34.1%	1,340.00	3,277.64	64,914.56	147.80	45,044.54	23,295.46	68,340.00	
W0547	PC Strand (12-T12.7, 225t) Tensioning for Precast PC Girder	cable	2.00	2.5%	96.6%	1.0%	72.6%	27.4%	19,600.00	969.30	37,854.18	376.52	28,473.15	10,726.85	39,200.00	
W0536	PC Strand (10-T12.7, 190t) Installation for Precast PC Girder	m	25.50	5.3%	94.5%	0.2%	65.5%	34.5%	1,140.00	1,528.78	27,478.28	63.02	19,053.34	10,016.66	29,070.00	
W0546	PC Strand (10-T12.7, 190t) Tensioning for Precast PC Girder	cable	1.00	2.4%	96.7%	0.9%	72.7%	27.3%	19,600.00	467.05	18,951.11	181.84	14,251.10	5,348.90	19,600.00	
W0555	Precast PC Girder Erection (20.0 ≤ W < 35.0 t)	t	34.78	15.3%	3.6%	81.0%	46.4%	53.6%	213.00	1,133.91	270.00	6,004.24	3,439.47	3,968.67	7,408.14	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										27,171.84	221,351.84	17,252.30	157,157.81	108,618.16	265,775.97	
Components (%)										10.2%	83.3%	6.5%	59.1%	40.9%	100.0%	
Unit Rate			each							27,194.74	221,538.42	17,266.84	157,290.28	108,709.72	265,000.00	

406(l)e Precast Prestressed Structural Concrete Members (AASHTO Girder Type IV-B L=30m), fabricated & erected Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0521	Precast PC Girder Fabrication Base Construction & Removal	girder	1.00	76.3%	11.8%	11.8%	13.0%	87.0%	502.00	383.21	59.40	59.40	65.34	436.66	502.00	
W0522	Precast PC Girder Fabrication Base Maintenance	girder	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	493.00	493.00	0.00	0.00	0.00	493.00	493.00	
W0208	Concrete (Class PP, 41MPa, max agg. 20mm)	m3	18.78	1.9%	85.0%	13.1%	58.2%	41.8%	2,150.00	766.86	34,329.29	5,280.85	23,516.69	16,860.31	40,377.00	Loss 2.0%
W0231	Concrete Pouring by Pump Vehicle (plain concrete)	m3	18.41	18.8%	0.2%	81.0%	43.4%	56.6%	213.00	737.08	7.69	3,176.56	1,702.53	2,218.80	3,921.33	
W0237	Concrete Curing (reinforced concrete)	m3	18.41	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	57.84	5.90	13.77	10.82	66.69	77.51	
W0241	Formwork (reinforced concrete 114m)	m2	94.89	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	12,601.46	8,487.19	166.71	620.24	20,635.12	21,255.36	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	1,156.00	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	4,090.55	20,741.25	2,103.01	14,543.43	12,391.37	26,934.80	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	1,471.00	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	5,212.34	28,062.31	2,764.85	19,634.40	16,405.10	36,039.50	
W0537	PC Strand (12-T12.7, 225t) Installation for Precast PC Girder	m	61.20	4.8%	95.0%	0.2%	65.9%	34.1%	1,340.00	3,933.17	77,897.48	177.36	54,053.45	27,954.55	82,008.00	
W0547	PC Strand (12-T12.7, 225t) Tensioning for Precast PC Girder	cable	2.00	2.5%	96.6%	1.0%	72.6%	27.4%	19,600.00	969.30	37,854.18	376.52	28,473.15	10,726.85	39,200.00	
W0536	PC Strand (10-T12.7, 190t) Installation for Precast PC Girder	m	61.20	5.3%	94.5%	0.2%	65.5%	34.5%	1,140.00	3,669.08	65,947.68	151.24	45,728.03	24,039.97	69,768.00	
W0546	PC Strand (10-T12.7, 190t) Tensioning for Precast PC Girder	cable	2.00	2.4%	96.7%	0.9%	72.7%	27.3%	19,600.00	934.10	37,902.21	363.69	28,502.20	10,697.80	39,200.00	
W0556	Precast PC Girder Erection (35.0 ≤ W < 60.0 t)	t	46.03	7.3%	1.8%	90.9%	50.5%	49.5%	377.00	1,275.13	308.88	15,769.30	8,765.05	8,588.26	17,353.31	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										35,123.11	311,603.45	30,403.24	225,615.30	151,514.51	377,129.81	
Components (%)										9.3%	82.6%	8.1%	59.8%	40.2%	100.0%	
Unit Rate			each							35,111.62	311,496.20	30,392.78	225,537.64	151,462.36	377,000.00	

406(l)f Precast Prestressed Structural Concrete Members (AASHTO Girder Type IV-B L=31m), fabricated & erected Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0521	Precast PC Girder Fabrication Base Construction & Removal	girder	1.00	76.3%	11.8%	11.8%	13.0%	87.0%	502.00	383.21	59.40	59.40	65.34	436.66	502.00	
W0522	Precast PC Girder Fabrication Base Maintenance	girder	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	493.00	493.00	0.00	0.00	0.00	493.00	493.00	
W0208	Concrete (Class PP, 41MPa, max agg. 20mm)	m3	19.36	1.9%	85.0%	13.1%	58.2%	41.8%	2,150.00	790.54	35,389.51	5,443.94	24,242.98	17,381.02	41,624.00	Loss 2.0%
W0231	Concrete Pouring by Pump Vehicle (plain concrete)	m3	18.98	18.8%	0.2%	81.0%	43.4%	56.6%	213.00	759.90	7.93	3,274.91	1,755.24	2,287.50	4,042.74	
W0237	Concrete Curing (reinforced concrete)	m3	18.98	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	59.63	6.08	14.19	11.15	68.76	79.91	
W0241	Formwork (reinforced concrete 114m)	m2	97.95	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	13,007.83	8,760.88	172.08	640.24	21,300.56	21,940.80	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	1,199.00	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	4,242.70	21,512.76	2,181.23	15,084.40	12,862.30	27,936.70	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	1,452.00	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	5,145.01	27,699.85	2,729.14	19,380.79	16,193.21	35,574.00	
W0537	PC Strand (12-T12.7, 225t) Installation for Precast PC Girder	m	63.24	4.8%	95.0%	0.2%	65.9%	34.1%	1,340.00	4,064.27	80,494.06	183.27	55,855.23	28,886.37	84,741.60	
W0547	PC Strand (12-T12.7, 225t) Tensioning for Precast PC Girder	cable	2.00	2.5%	96.6%	1.0%	72.6%	27.4%	19,600.00	969.30	37,854.18	376.52	28,473.15	10,726.85	39,200.00	
W0536	PC Strand (10-T12.7, 190t) Installation for Precast PC Girder	m	63.24	5.3%	94.5%	0.2%	65.5%	34.5%	1,140.00	3,791.38	68,145.94	156.28	47,252.29	24,841.31	72,093.60	
W0546	PC Strand (10-T12.7, 190t) Tensioning for Precast PC Girder	cable	2.00	2.4%	96.7%	0.9%	72.7%	27.3%	19,600.00	934.10	37,902.21	363.69	28,502.20	10,697.80	39,200.00	
W0556	Precast PC Girder Erection (35.0 ≤ W < 60.0 t)	t	47.45	7.3%	1.8%	90.9%	50.5%	49.5%	377.00	1,314.47	318.41	16,255.77	9,036.44	8,853.21	17,888.65	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										35,955.36	318,151.21	31,210.43	230,298.45	165,018.55	385,317.00	
Components (%)										9.3%	82.6%	8.1%	59.8%	40.2%	100.0%	
Unit Rate			each							35,925.78	317,889.47	31,184.75	230,108.99	164,891.01	385,000.00	

406(L)g Precast Prestressed Structural Concrete Members (AASHTO Girder Type V L=29.4m), fabricated & erected										Unit: 1.00 each						
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0521	Precast PC Girder Fabrication Base Construction & Removal	girder	1.00	76.3%	11.8%	11.8%	13.0%	87.0%	502.00	383.21	59.40	59.40	65.34	436.66	502.00	
W0522	Precast PC Girder Fabrication Base Maintenance	girder	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	493.00	493.00	0.00	0.00	0.00	493.00	493.00	
W0208	Concrete (Class PP, 41MPa, max agg. 20mm)	m3	21.52	1.9%	85.0%	13.1%	58.2%	41.8%	2,150.00	878.75	39,337.93	6,051.32	26,947.77	19,320.23	46,268.00	Loss 2.0%
W0231	Concrete Pouring by Pump Vehicle (plain concrete)	m3	21.10	18.8%	0.2%	81.0%	43.4%	56.6%	213.00	844.78	8.81	3,640.70	1,951.29	2,543.01	4,494.30	
W0237	Concrete Curing (reinforced concrete)	m3	21.10	74.0%	7.6%	17.8%	14.0%	86.0%	4.21	66.29	6.76	15.78	12.40	76.43	88.83	
W0241	Formwork (reinforced concrete 114m)	m2	116.31	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	15,446.05	10,403.05	204.34	760.25	25,293.19	26,053.44	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	0.00	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	0.00	0.00	0.00	0.00	0.00	0.00	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	4,387.67	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	15,547.26	83,703.71	8,246.95	58,565.10	48,932.82	107,497.92	
W0537	PC Strand (12-T12.7, 225t) Installation for Precast PC Girder	m	59.98	4.8%	95.0%	0.2%	65.9%	34.1%	1,340.00	3,854.76	76,344.62	173.82	52,975.91	27,397.29	80,373.20	
W0547	PC Strand (12-T12.7, 225t) Tensioning for Precast PC Girder	cable	2.00	2.5%	96.6%	1.0%	72.6%	27.4%	19,600.00	969.30	37,854.18	376.52	28,473.15	10,726.85	39,200.00	
W0536	PC Strand (10-T12.7, 190t) Installation for Precast PC Girder	m	59.98	5.3%	94.5%	0.2%	65.5%	34.5%	1,140.00	3,595.93	64,633.04	148.23	44,816.45	23,560.75	68,377.20	
W0546	PC Strand (10-T12.7, 190t) Tensioning for Precast PC Girder	cable	2.00	2.4%	96.7%	0.9%	72.7%	27.3%	19,600.00	934.10	37,902.21	363.69	28,502.20	10,697.80	39,200.00	
W0556	Precast PC Girder Erection (35.0 ≤ W < 60.0 t)	t	52.75	7.3%	1.8%	90.9%	50.5%	49.5%	377.00	1,461.29	353.98	18,071.49	10,044.67	9,842.08	19,886.75	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										44,474.72	350,607.68	37,352.23	253,114.53	179,320.11	432,434.64	
Components (%)										10.3%	81.1%	8.6%	58.5%	41.5%	100.0%	
Unit Rate			each							44,430.02	350,255.29	37,314.69	252,860.12	179,139.88	432,000.00	

406(1)h Precast Prestressed Structural Concrete Member (AASHTO Girder Type V L=29.55m), fabricated & erected										Unit: 1.00 each						
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0521	Precast PC Girder Fabrication Base Construction & Removal	girder	1.00	76.3%	11.8%	11.8%	13.0%	87.0%	502.00	383.21	59.40	59.40	65.34	436.66	502.00	
W0522	Precast PC Girder Fabrication Base Maintenance	girder	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	493.00	493.00	0.00	0.00	0.00	493.00	493.00	
W0208	Concrete (Class PP, 41MPa, max agg. 20mm)	m3	21.62	1.9%	85.0%	13.1%	58.2%	41.8%	2,150.00	882.83	39,520.73	6,079.44	27,072.99	19,410.01	46,483.00	Loss 2.0%
W0231	Concrete Pouring by Pump Vehicle (plain concrete)	m3	21.20	18.8%	0.2%	81.0%	43.4%	56.6%	213.00	848.79	8.85	3,657.96	1,960.54	2,555.06	4,515.60	
W0237	Concrete Curing (reinforced concrete)	m3	21.20	74.0%	7.6%	17.8%	14.0%	86.0%	4.21	66.60	6.79	15.85	12.46	76.79	89.25	
W0241	Formwork (reinforced concrete 114m)	m2	116.92	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	15,527.06	10,457.61	205.41	764.24	25,425.84	26,190.08	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	0.00	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	0.00	0.00	0.00	0.00	0.00	0.00	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	4,396.75	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	15,579.42	83,876.83	8,264.01	58,686.22	49,034.03	107,720.25	
W0537	PC Strand (12-T12.7, 225t) Installation for Precast PC Girder	m	60.28	4.8%	95.0%	0.2%	65.9%	34.1%	1,340.00	3,874.04	76,726.47	174.69	53,240.88	27,534.32	80,775.20	
W0547	PC Strand (12-T12.7, 225t) Tensioning for Precast PC Girder	cable	2.00	2.5%	96.6%	1.0%	72.6%	27.4%	19,600.00	969.30	37,854.18	376.52	28,473.15	10,726.85	39,200.00	
W0536	PC Strand (10-T12.7, 190t) Installation for Precast PC Girder	m	60.28	5.3%	94.5%	0.2%	65.5%	34.5%	1,140.00	3,613.92	64,956.31	148.97	45,040.61	23,678.59	68,719.20	
W0546	PC Strand (10-T12.7, 190t) Tensioning for Precast PC Girder	cable	2.00	2.4%	96.7%	0.9%	72.7%	27.3%	19,600.00	934.10	37,902.21	363.69	28,502.20	10,697.80	39,200.00	
W0556	Precast PC Girder Erection (35.0 ≤ W < 60.0 t)	t	53.00	7.3%	1.8%	90.9%	50.5%	49.5%	377.00	1,468.21	355.66	18,157.13	10,092.27	9,888.73	19,981.00	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0
Total										44,640.48	351,725.03	37,503.07	253,910.90	179,957.68	433,868.58	
Components (%)										10.3%	81.1%	8.6%	58.5%	41.5%	100.0%	
Unit Rate			each							44,654.00	351,831.57	37,514.43	253,987.81	180,012.19	434,000.00	

406(1) i Precast Prestressed Structural Concrete Members (AASHTO Girder Type V L=33.5m), fabricated & erected										Unit: 1.00 each						
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0521	Precast PC Girder Fabrication Base Construction & Removal	girder	1.00	76.3%	11.8%	11.8%	13.0%	87.0%	502.00	383.21	59.40	59.40	65.34	436.66	502.00	
W0522	Precast PC Girder Fabrication Base Maintenance	girder	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	493.00	493.00	0.00	0.00	0.00	493.00	493.00	
W0208	Concrete (Class PP, 41MPa, max agg. 20mm)	m3	24.26	1.9%	85.0%	13.1%	58.2%	41.8%	2,150.00	990.63	44,346.57	6,821.80	30,378.85	21,780.15	52,159.00	Loss 2.0%
W0231	Concrete Pouring by Pump Vehicle (plain concrete)	m3	23.78	18.8%	0.2%	81.0%	43.4%	56.6%	213.00	952.08	9.93	4,103.13	2,199.14	2,886.00	5,065.14	
W0237	Concrete Curing (reinforced concrete)	m3	23.78	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	74.71	7.62	17.78	13.97	86.14	100.11	
W0241	Formwork (reinforced concrete 11<4m)	m2	132.80	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	17,635.94	11,877.95	233.31	868.04	28,879.16	29,747.20	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	1,975.00	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	6,988.61	35,435.95	3,592.94	24,847.12	21,170.38	46,017.50	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	1,612.00	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	5,711.96	30,752.17	3,029.87	21,516.42	17,977.58	39,494.00	
W0537	PC Strand (12-T12.7, 225t) Installation for Precast PC Girder	m	102.51	4.8%	95.0%	0.2%	65.9%	34.1%	1,340.00	6,588.06	130,478.27	297.07	90,539.53	46,823.87	137,363.40	
W0547	PC Strand (12-T12.7, 225t) Tensioning for Precast PC Girder	cable	3.00	2.5%	96.6%	1.0%	72.6%	27.4%	19,600.00	1,453.95	56,781.27	564.78	42,709.72	16,090.28	58,800.00	
W0535	PC Strand (8-T12.7, 150t) Installation for Precast PC Girder	m	68.34	5.9%	93.9%	0.2%	65.0%	35.0%	934.00	3,769.38	59,921.38	138.80	41,495.97	22,333.59	63,829.56	
W0545	PC Strand (8-T12.7, 150t) Tensioning for Precast PC Girder	cable	2.00	3.0%	96.0%	1.1%	72.2%	27.8%	14,600.00	867.83	28,020.27	311.90	21,093.73	8,106.27	29,200.00	
W0556	Precast PC Girder Erection (35.0 ≤ W < 60.0 t)	t	59.45	7.3%	1.8%	90.9%	50.5%	49.5%	377.00	1,646.89	398.94	20,366.82	11,320.49	11,092.16	22,412.65	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										47,556.23	398,089.73	39,537.60	287,048.30	198,135.26	485,183.56	
Components (%)										9.8%	82.0%	8.1%	59.2%	40.8%	100.0%	
Unit Rate		each								47,538.24	397,939.12	39,522.64	286,939.70	198,060.30	485,000.00	

406(1) j Precast Prestressed Structural Concrete Members (AASHTO Girder Type VI L=35m), fabricated & erected										Unit: 1.00 each						
Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0521	Precast PC Girder Fabrication Base Construction & Removal	girder	1.00	76.3%	11.8%	11.8%	13.0%	87.0%	502.00	383.21	59.40	59.40	65.34	436.66	502.00	
W0522	Precast PC Girder Fabrication Base Maintenance	girder	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	493.00	493.00	0.00	0.00	0.00	493.00	493.00	
W0208	Concrete (Class PP, 41MPa, max agg. 20mm)	m3	27.33	1.9%	85.0%	13.1%	58.2%	41.8%	2,150.00	1,115.99	49,958.44	7,685.07	34,223.17	24,536.33	58,759.50	Loss 2.0%
W0231	Concrete Pouring by Pump Vehicle (plain concrete)	m3	26.79	18.8%	0.2%	81.0%	43.4%	56.6%	213.00	1,072.59	11.19	4,622.49	2,477.50	3,228.77	5,706.27	
W0237	Concrete Curing (reinforced concrete)	m3	26.79	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	84.17	8.59	20.03	15.74	97.05	112.79	
W0241	Formwork (reinforced concrete 11<4m)	m2	154.83	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	20,561.54	13,848.37	272.02	1,012.04	33,669.88	34,681.92	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	1,936.00	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	6,850.60	34,736.20	3,521.99	24,356.47	20,752.33	45,108.89	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	1,677.00	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	5,942.28	31,992.18	3,152.05	22,384.01	18,702.49	41,086.50	
W0537	PC Strand (12-T12.7, 225t) Installation for Precast PC Girder	m	107.10	4.8%	95.0%	0.2%	65.9%	34.1%	1,340.00	6,883.04	136,320.58	310.37	94,593.54	48,920.46	143,514.00	
W0547	PC Strand (12-T12.7, 225t) Tensioning for Precast PC Girder	cable	3.00	2.5%	96.6%	1.0%	72.6%	27.4%	19,600.00	1,453.95	56,781.27	564.78	42,709.72	16,090.28	58,800.00	
W0536	PC Strand (10-T12.7, 190t) Installation for Precast PC Girder	m	71.40	5.3%	94.5%	0.2%	65.5%	34.5%	1,140.00	4,280.59	76,938.96	176.45	53,349.36	28,046.64	81,396.00	
W0546	PC Strand (10-T12.7, 190t) Tensioning for Precast PC Girder	cable	2.00	2.4%	96.7%	0.9%	72.7%	27.3%	19,600.00	934.10	37,902.21	363.69	28,502.20	10,697.80	39,200.00	
W0557	Precast PC Girder Erection (60.0 ≤ W < 75.0 t)	t	68.98	6.2%	1.8%	92.0%	51.1%	48.9%	423.00	1,768.11	509.31	26,055.12	14,483.13	13,849.41	28,332.54	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										51,823.17	439,066.69	46,803.45	318,172.20	219,521.12	537,693.32	
Components (%)										9.6%	81.7%	8.7%	59.2%	40.8%	100.0%	
Unit Rate		each								51,852.73	439,317.12	46,830.15	318,353.68	219,646.32	538,000.00	

406(1)k Precast Prestressed Structural Concrete Members (AASHTO Girder Type VI L=36m), fabricated & erected

Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0521	Precast PC Girder Fabrication Base Construction & Removal	girder	1.00	76.3%	11.8%	11.8%	13.0%	87.0%	502.00	383.21	59.40	59.40	65.34	436.66	502.00	
W0522	Precast PC Girder Fabrication Base Maintenance	girder	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	493.00	493.00	0.00	0.00	0.00	493.00	493.00	
W0208	Concrete (Class PP, 41MPa, max agg. 20mm)	m3	28.04	1.9%	85.0%	13.1%	58.2%	41.8%	2,150.00	1,144.98	51,256.30	7,884.72	35,112.24	25,173.76	60,286.00	Loss 2.0%
W0231	Concrete Pouring by Pump Vehicle (plain concrete)	m3	27.49	18.8%	0.2%	81.0%	43.4%	66.6%	213.00	1,100.62	11.48	4,743.27	2,542.23	3,313.14	5,855.37	
W0237	Concrete Curing (reinforced concrete)	m3	27.49	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	86.37	8.81	20.56	16.15	99.58	115.73	
W0241	Formwork (reinforced concrete H<4m)	m2	159.31	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	21,156.48	14,249.07	279.89	1,041.32	34,644.12	35,685.44	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	2,017.00	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	7,137.23	36,189.53	3,669.35	25,375.51	21,620.59	46,996.10	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	1,721.00	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	6,098.19	32,891.57	3,234.75	22,971.31	19,193.19	42,164.50	
W0537	PC Strand (12-T12.7, 225t) Installation for Precast PC Girder	m	110.16	4.8%	95.0%	0.2%	65.9%	34.1%	1,340.00	7,079.70	140,215.46	319.24	97,296.21	50,318.19	147,614.40	
W0547	PC Strand (12-T12.7, 225t) Tensioning for Precast PC Girder	cable	3.00	2.5%	96.6%	1.0%	72.6%	27.4%	19,600.00	1,453.95	56,781.27	564.78	42,709.72	16,090.29	58,800.00	
W0536	PC Strand (10-T12.7, 190t) Installation for Precast PC Girder	m	73.44	5.3%	94.5%	0.2%	65.5%	34.5%	1,140.00	4,402.89	79,137.22	181.49	54,873.63	28,847.97	83,721.60	
W0546	PC Strand (10-T12.7, 190t) Tensioning for Precast PC Girder	cable	2.00	2.4%	96.7%	0.9%	72.7%	27.3%	19,600.00	934.10	37,802.21	363.69	28,502.20	10,687.80	39,200.00	
W0557	Precast PC Girder Erection (60.0 ≤ W < 75.0 t)	t	68.73	6.2%	1.8%	92.0%	51.1%	48.9%	423.00	1,814.30	522.61	26,735.87	14,861.53	14,211.26	29,072.79	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										53,285.02	449,164.92	48,056.99	325,367.39	225,139.54	550,506.93	
Components (%)										9.7%	81.6%	8.7%	59.1%	40.9%	100.0%	
Unit Rate			each							53,332.75	449,567.22	48,100.03	325,653.81	225,341.19	551,000.00	

406(1)l Precast Prestressed Structural Concrete Members (AASHTO Girder Type VI(mod) L=39.4m), fabricated & erected

Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0521	Precast PC Girder Fabrication Base Construction & Removal	girder	1.00	76.3%	11.8%	11.8%	13.0%	87.0%	502.00	383.21	59.40	59.40	65.34	436.66	502.00	
W0522	Precast PC Girder Fabrication Base Maintenance	girder	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	493.00	493.00	0.00	0.00	0.00	493.00	493.00	
W0208	Concrete (Class PP, 41MPa, max agg. 20mm)	m3	32.18	1.9%	85.0%	13.1%	58.2%	41.8%	2,150.00	1,314.04	58,824.10	9,048.87	40,296.43	28,890.57	69,187.00	Loss 2.0%
W0231	Concrete Pouring by Pump Vehicle (plain concrete)	m3	31.55	18.8%	0.2%	81.0%	43.4%	66.6%	213.00	1,263.17	13.18	5,443.80	2,917.69	3,802.46	6,720.15	
W0237	Concrete Curing (reinforced concrete)	m3	31.55	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	99.13	10.11	23.59	18.54	114.29	132.83	
W0241	Formwork (reinforced concrete H<4m)	m2	188.02	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	24,969.19	16,816.96	330.33	1,228.99	40,887.50	42,116.48	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	4,298.00	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	15,208.62	77,115.81	7,818.97	54,072.36	46,071.04	100,143.40	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	3,674.00	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	13,018.44	70,089.00	6,905.55	49,039.27	40,973.73	90,013.00	
W0537	PC Strand (12-T12.7, 225t) Installation for Precast PC Girder	m	200.94	4.8%	95.0%	0.2%	65.9%	34.1%	1,340.00	12,913.90	255,763.38	582.32	177,475.49	91,784.11	269,259.60	
W0547	PC Strand (12-T12.7, 225t) Tensioning for Precast PC Girder	cable	5.00	2.5%	96.6%	1.0%	72.6%	27.4%	19,600.00	2,423.25	94,635.45	941.30	71,182.86	26,817.14	98,000.00	
W0558	Precast PC Girder Erection (75.0 ≤ W < 80.0 t)	t	78.88	5.7%	1.8%	92.5%	51.4%	48.6%	430.00	1,947.93	612.34	31,358.13	17,435.22	16,483.18	33,918.40	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										74,033.88	573,939.72	62,512.26	413,732.19	296,753.67	710,485.86	
Components (%)										10.4%	80.8%	8.8%	58.2%	41.8%	100.0%	
Unit Rate			each							73,983.25	573,547.24	62,469.51	413,449.26	296,550.74	710,000.00	



406(1)m Precast Prestressed Structural Concrete Members (AASHTO Girder Type VI(mod) L=99.55m), fabricated & erected Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0521	Precast PC Girder Fabrication Base Construction & Removal	girder	1.00	76.3%	11.8%	11.8%	13.0%	87.0%	502.00	383.21	59.40	59.40	65.34	436.66	502.00	
W0522	Precast PC Girder Fabrication Base Maintenance	girder	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	493.00	493.00	0.00	0.00	0.00	493.00	493.00	
W0208	Concrete (Class PP, 41MPa, max agg. 20mm)	m3	32.29	1.9%	85.0%	13.1%	58.2%	41.8%	2,150.00	1,318.53	59,025.17	9,079.80	40,434.18	28,989.32	69,423.50	Loss 2.0%
W0231	Concrete Pouring by Pump Vehicle (plain concrete)	m3	31.66	18.8%	0.2%	81.0%	43.4%	56.6%	213.00	1,267.57	13.22	5,462.78	2,927.87	3,815.71	6,743.58	
W0237	Concrete Curing (reinforced concrete)	m3	31.66	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	99.47	10.15	23.67	18.60	114.69	133.29	
W0241	Formwork (reinforced concrete 11(4m)	m2	188.74	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	25,064.81	16,891.36	331.59	1,233.69	41,044.07	42,277.76	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	4,386.00	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	15,520.01	78,694.73	7,979.06	65,179.49	47,014.32	102,193.80	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	3,572.00	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	12,657.02	68,143.15	6,713.84	47,677.81	39,836.19	87,514.00	
W0537	PC Strand (12-T12.7, 225t) Installation for Precast PC Girder	m	201.71	4.8%	95.0%	0.2%	65.9%	34.1%	1,340.00	12,963.39	256,743.46	584.55	178,165.58	92,135.82	270,291.40	
W0547	PC Strand (12-T12.7, 225t) Tensioning for Precast PC Girder	cable	5.00	2.5%	96.6%	1.0%	72.6%	27.4%	19,600.00	2,423.25	94,635.45	941.30	71,182.86	26,817.14	98,000.00	
W0558	Precast PC Girder Erection (75.0 ≤ W < 80.0 t)	t	79.15	5.7%	1.8%	92.5%	51.4%	48.6%	430.00	1,954.60	614.43	31,465.47	17,494.90	16,539.60	34,034.50	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										74,144.85	574,820.52	62,641.46	414,370.29	297,236.54	711,686.83	
Components (%)										10.4%	80.8%	8.8%	58.2%	41.8%	100.0%	
Unit Rate			each							74,185.82	575,138.11	62,676.07	414,589.24	297,400.76	712,000.00	

406(1)n Precast Prestressed Structural Concrete Members (AASHTO Girder Type VI(mod) L=40m), fabricated & erected Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0521	Precast PC Girder Fabrication Base Construction & Removal	girder	1.00	76.3%	11.8%	11.8%	13.0%	87.0%	502.00	383.21	59.40	59.40	65.34	436.66	502.00	
W0522	Precast PC Girder Fabrication Base Maintenance	girder	1.00	100.0%	0.0%	0.0%	0.0%	100.0%	493.00	493.00	0.00	0.00	0.00	493.00	493.00	
W0208	Concrete (Class PP, 41MPa, max agg. 20mm)	m3	32.62	1.9%	85.0%	13.1%	58.2%	41.8%	2,150.00	1,332.00	59,628.40	9,172.59	40,847.41	29,285.59	70,133.00	Loss 2.0%
W0231	Concrete Pouring by Pump Vehicle (plain concrete)	m3	31.98	18.8%	0.2%	81.0%	43.4%	56.6%	213.00	1,280.39	13.36	5,518.00	2,957.46	3,854.28	6,811.74	
W0237	Concrete Curing (reinforced concrete)	m3	31.98	74.6%	7.6%	17.8%	14.0%	86.0%	4.21	100.48	10.25	23.91	18.79	115.85	134.64	
W0241	Formwork (reinforced concrete 11(4m)	m2	190.92	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	25,354.31	17,076.35	335.42	1,247.94	41,518.14	42,766.08	
W0251	Reinforcement Grade 40, cutting, bending & assembly	kg	3,060.00	15.2%	77.0%	7.8%	54.0%	46.0%	23.30	10,827.92	54,903.30	5,566.78	38,497.31	32,800.69	71,298.00	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	1,895.00	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	6,714.74	36,150.97	3,561.79	25,293.80	21,133.70	46,427.50	
W0537	PC Strand (12-T12.7, 225t) Installation for Precast PC Girder	m	204.00	4.8%	95.0%	0.2%	65.9%	34.1%	1,340.00	13,110.56	259,658.25	591.18	180,178.17	93,181.83	273,360.00	
W0547	PC Strand (12-T12.7, 225t) Tensioning for Precast PC Girder	cable	5.00	2.5%	96.6%	1.0%	72.6%	27.4%	19,600.00	2,423.25	94,635.45	941.30	71,182.86	26,817.14	98,000.00	
W0558	Precast PC Girder Erection (75.0 ≤ W < 80.0 t)	t	79.95	5.7%	1.8%	92.5%	51.4%	48.6%	430.00	1,974.35	620.64	31,783.60	17,671.72	16,706.78	34,378.50	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										63,994.21	522,756.36	57,553.89	377,960.79	266,343.67	644,304.46	
Components (%)										9.9%	81.1%	8.9%	58.7%	41.3%	100.0%	
Unit Rate			each							63,963.97	522,509.34	57,526.69	377,782.19	266,217.81	644,000.00	

406(1)p Precast Prestressed Structural Concrete (PC Deck Slab, 210 x 2000 x 9950mm)

Unit: 100.00 m2

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0208	Concrete (Class PP, 41MPa, max agg. 20mm)	m3	27.78	1.9%	85.0%	13.1%	58.2%	41.8%	2,150.00	1,134.37	50,781.03	7,811.61	34,786.67	24,940.33	59,727.00	Loss 2.0%
W0231	Concrete Pouring by Pump Vehicle (plain concrete)	m3	27.24	18.8%	0.2%	81.0%	43.4%	56.6%	213.00	1,090.61	11.38	4,700.13	2,519.11	3,283.01	5,802.12	
W0237	Concrete Curing (reinforced concrete)	m3	27.24	74.6%	7.8%	17.8%	14.0%	86.0%	4.21	85.58	8.73	20.37	16.00	98.68	114.68	
W0241	Formwork (reinforced concrete) (K4m)	m2	59.63	59.3%	39.9%	0.8%	2.9%	97.1%	224.00	7,387.70	4,975.68	97.73	363.62	12,097.50	12,461.12	
W0252	Reinforcement Grade 60, cutting, bending & assembly	kg	7,844.22	14.5%	77.9%	7.7%	54.5%	45.5%	24.50	27,795.19	149,644.43	14,743.79	104,701.94	87,481.48	192,183.42	
W0538	PC Strand (1-T15.2, 30t) Installation for Precast PC Deck Slab	m	900.00	8.2%	91.6%	0.2%	62.8%	37.2%	216.00	15,924.01	178,055.46	420.53	122,038.06	72,361.94	194,400.00	
W0548	PC Strand (1-T15.2, 30t) Tensioning for Precast PC Deck Slab	cable	90.45	4.9%	93.5%	1.7%	70.7%	29.3%	2,060.00	9,837.17	174,191.34	3,098.50	131,746.17	54,580.83	186,327.00	
W0551	Precast PC Girder Erection (W < 12.5t)	t	68.10	25.1%	3.9%	70.9%	41.1%	58.9%	218.00	3,731.68	583.75	10,530.37	6,106.79	8,739.01	14,845.80	
W0549	Secondary Concrete for Precast PC Deck Slab	m3	3.78	6.0%	74.0%	20.0%	55.3%	44.7%	2,140.00	483.57	5,985.80	1,619.83	4,473.76	3,615.44	8,089.20	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										66,669.88	564,237.60	43,042.86	406,752.10	267,198.24	673,950.34	
Components (%)										9.9%	83.7%	6.4%	60.4%	39.6%	100.0%	
Unit Rate			m2							666.75	5,642.79	430.46	4,067.82	2,672.18	6,740.00	

406(3)a Prestressing Steel 12-T12.7 for PC Box Girders of Angat Bridge, Longitudinal

Unit: 1,000.00 kg

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0671	PC Cable Installation, (12-T12.7, 225t) for PC Box Girder (Longitudinal)	t	1.00	11.5%	84.4%	4.1%	60.4%	39.6%	153,000.00	17,664.93	129,167.28	6,267.80	92,457.23	60,542.77	153,000.00	
W0672	PC Cable Anchorage, (12-T12.7, 225t) for PC Box Girder (Longitudinal)	each	3.25	0.9%	92.4%	6.7%	71.0%	29.0%	12,900.00	393.99	38,736.01	2,795.00	29,750.76	12,174.24	41,925.00	
W0673	PC Cable Tensioning, (12-T12.7, 225t) for PC Box Girder (Longitudinal)	each	3.25	6.3%	87.5%	6.2%	68.3%	31.7%	9,560.00	1,956.56	27,197.95	1,915.49	21,231.75	9,838.25	31,070.00	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										19,915.48	195,101.23	10,978.29	143,439.74	82,555.26	225,995.00	
Components (%)										8.8%	86.3%	4.9%	63.5%	36.5%	100.0%	
Unit Rate			kg							19.92	195.11	10.98	143.44	82.56	226.00	
Total weight of PC cables =				106,536.0 kg	Total numbers of cables =			346								

406(3)b Prestressing Steel 5-T12.7 for PC Box Girders of Angat Bridge, Transversal in Top Slab

Unit: 1,000.00 kg

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0676	PC Cable Installation, (5-T12.7, 90t) for PC Box Girder (Transversal)	t	1.00	11.2%	84.7%	4.1%	60.6%	39.4%	152,000.00	17,052.66	128,707.70	6,239.65	92,129.09	59,870.91	152,000.00	
W0677	PC Cable Anchorage, (5-T12.7, 90t) for PC Box Girder (Transversal)	each	26.77	5.0%	86.7%	8.3%	67.1%	32.9%	1,680.00	2,263.34	38,998.15	3,712.11	30,176.64	14,796.96	44,973.60	
W0678	PC Cable Tensioning, (5-T12.7, 90t) for PC Box Girder (Transversal)	each	26.77	40.1%	23.4%	36.5%	34.6%	65.4%	823.00	8,824.97	5,159.99	8,046.75	7,620.41	14,411.30	22,031.71	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										28,140.97	172,865.84	17,988.50	129,926.14	89,079.17	219,005.31	
Components (%)										12.8%	78.9%	8.2%	59.3%	40.7%	100.0%	
Unit Rate			kg							28.14	172.86	18.00	129.92	89.08	219.00	
Total weight of PC cables =				28,992.0 kg	Total numbers of cables =			776								

406(3)c Prestressing Bar  $\phi$ 32mm for PC Box Girders of Angat Bridge, Transversal in Diaphragms

Unit: 1,000.00 kg

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0681	PC Bar Installation, (1- $\phi$ 32mm) for PC Box Girder (Transversal)	t	1.00	5.7%	91.1%	3.3%	64.8%	35.2%	157,000.00	8,924.58	142,971.83	5,103.59	101,781.65	55,218.35	157,000.00	
W0682	PC Bar Anchorage, (1- $\phi$ 32mm) for PC Box Girder (Transversal)	each	29.12	2.4%	92.0%	5.5%	70.4%	29.6%	1,810.00	1,287.80	48,511.82	2,907.98	37,110.71	15,596.49	52,707.20	
W0683	PC Bar Tensioning, ( $\phi$ 32mm) for PC Box Girder (Transversal)	each	29.12	16.3%	71.4%	12.2%	59.9%	40.1%	1,800.00	8,564.14	37,437.61	6,414.24	31,378.83	21,037.17	52,418.00	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										18,776.52	228,921.06	14,425.82	170,271.19	91,852.01	262,123.20	
Components (%)										7.2%	87.3%	5.5%	65.0%	35.0%	100.0%	
Unit Rate			kg							18.77	228.81	14.42	170.19	91.81	262.00	
Total weight of PC cables =				4,669.8 kg	Total numbers of cables =			136								

406(3)d Prestressing Bar  $\phi$ 32mm for PC Box Girders of Angat Bridge, Vertical in Webs

Unit: 1,000.00 kg

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0686	PC Bar Installation, (1- $\phi$ 32mm) for PC Box Girder (Vertical in Web)	t	1.00	5.7%	91.1%	3.3%	64.8%	35.2%	157,000.00	8,924.58	142,971.83	5,103.59	101,781.65	55,218.35	157,000.00	
W0687	PC Bar Anchorage, (1- $\phi$ 32mm) for PC Box Girder (Vertical in Web)	each	61.38	2.4%	92.0%	5.5%	70.4%	29.6%	1,810.00	2,714.04	192,254.22	6,129.53	78,223.05	32,874.75	111,097.80	
W0688	PC Bar Tensioning, (1- $\phi$ 32mm) for PC Box Girder (Vertical in Web)	each	61.38	16.3%	71.4%	12.2%	59.9%	40.1%	1,800.00	18,051.75	78,912.11	13,520.13	66,141.23	44,342.77	110,484.00	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										29,690.38	324,138.17	24,753.26	246,145.93	132,435.87	378,581.80	
Components (%)										7.8%	85.6%	6.5%	65.0%	35.0%	100.0%	
Unit Rate			kg							29.72	324.50	24.78	246.42	132.58	379.00	
Total weight of PC tendons =				5,473.8 kg	Total numbers of tendons =			336								

406(3)e Prestressing Steel 12-T12.7 for PC Hollow Slab Bridge for Burgol Ramp C, Longitudinal

Unit: 1,000.00 kg

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0671	PC Cable Installation, (12-T12.7, 225L) for PC Box Girder (Longitudinal)	t	1.00	11.5%	84.4%	4.1%	60.4%	39.6%	153,000.00	17,564.93	129,167.28	6,247.80	92,457.23	60,542.77	153,000.00	
W0672	PC Cable Anchorage, (12-T12.7, 225L) for PC Box Girder (Longitudinal)	each	1.42	0.9%	92.4%	6.7%	71.0%	29.0%	12,900.00	172.14	16,924.66	1,221.20	12,998.79	5,319.21	18,318.00	
W0673	PC Cable Tensioning, (12-T12.7, 225L) for PC Box Girder (Longitudinal)	each	1.42	6.3%	87.5%	6.2%	68.3%	31.7%	9,560.00	854.87	11,883.41	836.92	9,276.64	4,298.56	13,575.20	
	Miscellaneous	LS	1.00							0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total										18,591.94	157,975.34	8,325.92	114,732.67	70,160.53	184,893.20	
Components (%)										10.1%	85.4%	4.5%	62.1%	37.9%	100.0%	
Unit Rate			kg							18.60	158.07	8.33	114.80	70.20	185.00	
Total weight of PC cables =				14,114.8 kg	Total numbers of cables =			20								

407(1)a Elastomeric Bearing Pad, Duro 60 (400x300x50mm)

Unit: 14.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	1.40	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	792.40	0.00	0.00	0.00	792.40	792.40	
L019	Skilled Labor	md	2.20	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	886.60	0.00	0.00	0.00	886.60	886.60	
L020	Unskilled Labor	md	4.90	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	1,538.60	0.00	0.00	0.00	1,538.60	1,538.60	
M09001	Laminated Elastomeric Bearing Pad (400x300x50mm)	each	10.00	0.0%	100.0%	0.0%	65.0%	35.0%	11,000.00	0.00	110,000.00	0.00	71,500.00	38,500.00	110,000.00	
M02011	Structural Steel (Round Bar, SS400)	kg	0.00	0.0%	100.0%	0.0%	70.0%	30.0%	21.80	0.00	0.00	0.00	0.00	0.00	0.00	
M02015	Structural Steel (Plates, SS400)	kg	0.00	0.0%	100.0%	0.0%	70.0%	30.0%	20.20	0.00	0.00	0.00	0.00	0.00	0.00	
M02001	Reinforcing Bars, Grade 40	kg	0.00	0.0%	100.0%	0.0%	65.0%	35.0%	16.00	0.00	0.00	0.00	0.00	0.00	0.00	
M09013	Elastomeric Pad (t=50mm)	m2	0.00	0.0%	100.0%	0.0%	65.0%	35.0%	25,700.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Miscellaneous	LS	1.00	0.0%	40.0%	60.0%	55.0%	45.0%		0.00	905.74	1,368.61	1,245.39	1,018.96	2,264.35	2.0%
Total										3,217.60	110,905.74	1,368.61	72,745.39	42,736.56	115,481.95	
Components (%)										2.8%	96.0%	1.2%	63.0%	37.8%	100.0%	
Unit Rate			each							320.42	11,044.29	135.29	7,244.18	4,255.82	11,500.00	
Miscellaneous covers the cost for welding equipment, welding rods, minor tools, etc.																

407(1)b Elastomeric Bearing Pad, Duro 60 (600x300x50mm)

Unit: 10.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	1.40	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	792.40	0.00	0.00	0.00	792.40	792.40	
L019	Skilled Labor	md	2.20	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	886.60	0.00	0.00	0.00	886.60	886.60	
L020	Unskilled Labor	md	4.90	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	1,538.60	0.00	0.00	0.00	1,538.60	1,538.60	
M08002	Laminated Elastomeric Bearing Pad (600x300x50mm)	each	10.00	0.0%	100.0%	0.0%	65.0%	35.0%	15,800.00	0.00	158,000.00	0.00	102,700.00	55,300.00	158,000.00	
M02011	Structural Steel (Round Bar, SS400)	kg	216.00	0.0%	100.0%	0.0%	70.0%	30.0%	21.80	0.00	4,708.80	0.00	3,298.16	1,412.64	4,708.80	
M02015	Structural Steel (Plates, SS400)	kg	92.30	0.0%	100.0%	0.0%	70.0%	30.0%	20.20	0.00	1,864.46	0.00	1,305.12	559.34	1,864.46	
M02001	Reinforcing Bars, Grade 40	kg	16.60	0.0%	100.0%	0.0%	65.0%	35.0%	16.00	0.00	265.60	0.00	172.64	92.96	265.60	
M09013	Elastomeric Pad (t=50mm)	m2	0.79	0.0%	100.0%	0.0%	65.0%	35.0%	25,700.00	0.00	20,303.00	0.00	13,196.95	7,106.05	20,303.00	
	Miscellaneous	LS	1.00	0.0%	40.0%	60.0%	55.0%	45.0%		0.00	1,506.88	2,260.31	2,071.95	1,695.24	3,767.19	2.0%
Total										3,217.60	186,648.74	2,260.31	122,742.83	69,383.82	192,126.65	
Components (%)										1.7%	97.1%	1.2%	63.9%	36.1%	100.0%	
Unit Rate			each							321.55	18,652.57	225.88	12,266.19	6,933.81	19,200.00	
Miscellaneous covers the cost for welding equipment, welding rods, minor tools, etc.																

407(1)c Elastomeric Bearing Pad, Duro 60 (800x350x50mm) Unit: 10.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
L002	Foreman	md	1.40	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	792.40	0.00	0.00	0.00	792.40	792.40	
L019	Skilled Labor	md	2.20	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	886.60	0.00	0.00	0.00	886.60	886.60	
L020	Unskilled Labor	md	4.90	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	1,538.60	0.00	0.00	0.00	1,538.60	1,538.60	
M09003	Laminated Elastomeric Bearing Pad (600x350x50mm)	each	10.00	0.0%	100.0%	0.0%	65.0%	35.0%	18,400.00	0.00	184,000.00	0.00	119,600.00	64,400.00	184,000.00	
M02011	Structural Steel (Round Bar, SS400)	kg	212.30	0.0%	100.0%	0.0%	70.0%	30.0%	21.80	0.00	4,628.14	0.00	3,239.70	1,388.44	4,628.14	
M02015	Structural Steel (Plates, SS400)	kg	172.90	0.0%	100.0%	0.0%	70.0%	30.0%	20.20	0.00	3,492.58	0.00	2,494.81	1,047.77	3,492.58	
M02001	Reinforcing Bars, Grade 40	kg	47.90	0.0%	100.0%	0.0%	65.0%	35.0%	16.00	0.00	766.40	0.00	498.16	268.24	766.40	
M09013	Elastomeric Pad (t=50mm)	m2	0.56	0.0%	100.0%	0.0%	65.0%	35.0%	25,700.00	0.00	14,392.00	0.00	9,354.80	5,037.20	14,392.00	
	Miscellaneous	LS	1.00	0.0%	40.0%	60.0%	55.0%	45.0%		0.00	1,683.97	2,525.96	2,315.46	1,694.47	4,209.93	2.0%
Total										3,217.60	208,963.09	2,525.96	137,452.93	77,253.73	214,706.65	
Components (%)										1.5%	97.3%	1.2%	64.0%	36.0%	100.0%	
Unit Rate			each							322.20	20,924.86	252.94	13,764.07	7,735.93	21,500.00	

Miscellaneous covers the cost for welding equipment, welding rods, minor tools, etc.

407(1)d Elastomeric Bearing Pad, Duro 60 (600x700x89mm) Unit: 10.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
L002	Foreman	md	1.40	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	792.40	0.00	0.00	0.00	792.40	792.40	
L019	Skilled Labor	md	2.20	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	886.60	0.00	0.00	0.00	886.60	886.60	
L020	Unskilled Labor	md	4.90	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	1,538.60	0.00	0.00	0.00	1,538.60	1,538.60	
M09004	Laminated Elastomeric Bearing Pad (600x700x89mm)	each	10.00	0.0%	100.0%	0.0%	65.0%	35.0%	66,600.00	0.00	666,000.00	0.00	432,900.00	233,100.00	666,000.00	
M02011	Structural Steel (Round Bar, SS400)	kg	2,882.30	0.0%	100.0%	0.0%	70.0%	30.0%	21.80	0.00	62,834.14	0.00	43,983.90	18,850.24	62,834.14	
M02015	Structural Steel (Plates, SS400)	kg	2,330.60	0.0%	100.0%	0.0%	70.0%	30.0%	20.20	0.00	47,078.12	0.00	32,954.68	14,123.44	47,078.12	
M02001	Reinforcing Bars, Grade 40	kg	177.60	0.0%	100.0%	0.0%	65.0%	35.0%	16.00	0.00	2,841.60	0.00	1,847.94	994.56	2,841.60	
M09013	Elastomeric Pad (t=50mm)	m2	2.06	0.0%	100.0%	0.0%	65.0%	35.0%	25,700.00	0.00	52,942.00	0.00	34,412.30	18,529.70	52,942.00	
	Miscellaneous	LS	1.00	0.0%	40.0%	60.0%	55.0%	45.0%		0.00	6,679.31	10,018.96	9,184.95	7,514.22	16,698.27	2.0%
Total										3,217.60	838,375.17	10,018.96	555,281.97	296,329.76	851,611.73	
Components (%)										0.4%	98.4%	1.2%	65.2%	34.8%	100.0%	
Unit Rate			each							321.91	83,875.74	1,002.35	55,553.51	29,646.49	85,200.00	

Miscellaneous covers the cost for welding equipment, welding rods, minor tools, etc.

407(1)e Elastomeric Bearing Pad, Duro 60 (600x400x60mm) Unit: 10.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
L002	Foreman	md	1.40	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	792.40	0.00	0.00	0.00	792.40	792.40	
L019	Skilled Labor	md	2.20	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	886.60	0.00	0.00	0.00	886.60	886.60	
L020	Unskilled Labor	md	4.90	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	1,538.60	0.00	0.00	0.00	1,538.60	1,538.60	
M09005	Laminated Elastomeric Bearing Pad (600x400x60mm)	each	10.00	0.0%	100.0%	0.0%	65.0%	35.0%	25,300.00	0.00	253,000.00	0.00	164,450.00	88,550.00	253,000.00	
M02011	Structural Steel (Round Bar, SS400)	kg	994.20	0.0%	100.0%	0.0%	70.0%	30.0%	21.80	0.00	21,673.56	0.00	15,171.49	6,502.07	21,673.56	
M02015	Structural Steel (Plates, SS400)	kg	135.60	0.0%	100.0%	0.0%	70.0%	30.0%	20.20	0.00	2,739.12	0.00	1,917.38	821.74	2,739.12	
M02001	Reinforcing Bars, Grade 40	kg	22.20	0.0%	100.0%	0.0%	65.0%	35.0%	16.00	0.00	355.20	0.00	230.88	124.32	355.20	
M09013	Elastomeric Pad (t=50mm)	m2	0.53	0.0%	100.0%	0.0%	65.0%	35.0%	25,700.00	0.00	13,621.00	0.00	8,853.65	4,767.35	13,621.00	
	Miscellaneous	LS	1.00	0.0%	40.0%	60.0%	55.0%	45.0%		0.00	2,356.85	3,535.28	3,240.67	2,651.46	5,892.13	2.0%
Total										3,217.60	293,745.73	3,535.28	193,864.08	106,634.53	300,498.61	
Components (%)										1.1%	97.8%	1.2%	64.5%	35.5%	100.0%	
Unit Rate			each							321.23	29,325.83	352.94	19,354.24	10,645.76	30,000.00	

Miscellaneous covers the cost for welding equipment, welding rods, minor tools, etc.

407(l)f Elastomeric Bearing Pad, Duro 60 (450x300x60mm)

Unit: 10.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Labor	Material	Component (PP)				Total (PP)
				Lab.	Mat.	Equip.	For.	Local				Equipment	Foreign	Local		
L002	Foreman	md	1.40	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	792.40	0.00	0.00	0.00	792.40	792.40	
L019	Skilled Labor	md	2.20	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	886.60	0.00	0.00	0.00	886.60	886.60	
L020	Unskilled Labor	md	4.90	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	1,538.60	0.00	0.00	0.00	1,538.60	1,538.60	
M09006	Laminated Elastomeric Bearing Pad (450x300x60mm)	each	10.00	0.0%	100.0%	0.0%	65.0%	35.0%	14,200.00	0.00	142,000.00	0.00	92,300.00	49,700.00	142,000.00	
M02011	Structural Steel (Round Bar, SS400)	kg	1,315.30	0.0%	100.0%	0.0%	70.0%	30.0%	21.80	0.00	28,673.54	0.00	20,071.48	8,602.06	28,673.54	
M02015	Structural Steel (Plates, SS400)	kg	300.00	0.0%	100.0%	0.0%	70.0%	30.0%	20.20	0.00	6,060.00	0.00	4,242.00	1,818.00	6,060.00	
M02001	Reinforcing Bars, Grade 40	kg	336.70	0.0%	100.0%	0.0%	65.0%	35.0%	16.00	0.00	5,387.20	0.00	3,501.68	1,885.52	5,387.20	
M09013	Elastomeric Pad (t=50mm)	m2	0.83	0.0%	100.0%	0.0%	65.0%	35.0%	25,700.00	0.00	21,331.00	0.00	13,865.15	7,465.85	21,331.00	
	Miscellaneous	LS	1.00	0.0%	40.0%	60.0%	55.0%	45.0%		0.00	1,653.35	2,480.03	2,273.36	1,860.02	4,133.39	2.0%
Total										3,217.60	205,105.09	2,480.03	136,253.67	74,549.06	210,802.73	
Components (%)										1.5%	97.3%	1.2%	64.6%	35.4%	100.0%	
Unit Rate			each							322.06	20,529.70	248.24	13,638.12	7,461.88	21,100.00	

Miscellaneous covers the cost for welding equipment, welding rods, minor tools, etc.

407(l)g Elastomeric Bearing Pad, Duro 60 (550x300x60mm)

Unit: 10.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Labor	Material	Component (PP)				Total (PP)
				Lab.	Mat.	Equip.	For.	Local				Equipment	Foreign	Local		
L002	Foreman	md	1.40	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	792.40	0.00	0.00	0.00	792.40	792.40	
L019	Skilled Labor	md	2.20	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	886.60	0.00	0.00	0.00	886.60	886.60	
L020	Unskilled Labor	md	4.90	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	1,538.60	0.00	0.00	0.00	1,538.60	1,538.60	
M09007	Laminated Elastomeric Bearing Pad (550x300x60mm)	each	10.00	0.0%	100.0%	0.0%	65.0%	35.0%	14,500.00	0.00	145,000.00	0.00	94,250.00	50,750.00	145,000.00	
M02011	Structural Steel (Round Bar, SS400)	kg	0.00	0.0%	100.0%	0.0%	70.0%	30.0%	21.80	0.00	0.00	0.00	0.00	0.00	0.00	
M02015	Structural Steel (Plates, SS400)	kg	0.00	0.0%	100.0%	0.0%	70.0%	30.0%	20.20	0.00	0.00	0.00	0.00	0.00	0.00	
M02001	Reinforcing Bars, Grade 40	kg	0.00	0.0%	100.0%	0.0%	65.0%	35.0%	16.00	0.00	0.00	0.00	0.00	0.00	0.00	
M09013	Elastomeric Pad (t=50mm)	m2	0.00	0.0%	100.0%	0.0%	65.0%	35.0%	25,700.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Miscellaneous	LS	1.00	0.0%	40.0%	60.0%	55.0%	45.0%		0.00	1,185.74	1,778.61	1,630.39	1,333.98	2,964.35	2.0%
Total										3,217.60	146,185.74	1,778.61	95,880.39	55,301.56	151,181.95	
Components (%)										2.1%	96.7%	1.2%	63.4%	36.6%	100.0%	
Unit Rate			each							321.37	14,600.98	177.65	9,576.50	5,523.50	15,100.00	

Miscellaneous covers the cost for welding equipment, welding rods, minor tools, etc.

407(l)h Elastomeric Bearing Pad, Duro 60 (500x400x60mm)

Unit: 10.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Labor	Material	Component (PP)				Total (PP)
				Lab.	Mat.	Equip.	For.	Local				Equipment	Foreign	Local		
L002	Foreman	md	1.40	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	792.40	0.00	0.00	0.00	792.40	792.40	
L019	Skilled Labor	md	2.20	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	886.60	0.00	0.00	0.00	886.60	886.60	
L020	Unskilled Labor	md	4.90	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	1,538.60	0.00	0.00	0.00	1,538.60	1,538.60	
M09008	Laminated Elastomeric Bearing Pad (500x400x60mm)	each	10.00	0.0%	100.0%	0.0%	65.0%	35.0%	21,100.00	0.00	211,000.00	0.00	137,150.00	73,850.00	211,000.00	
M02011	Structural Steel (Round Bar, SS400)	kg	1,315.30	0.0%	100.0%	0.0%	70.0%	30.0%	21.80	0.00	28,673.54	0.00	20,071.48	8,602.06	28,673.54	
M02015	Structural Steel (Plates, SS400)	kg	300.00	0.0%	100.0%	0.0%	70.0%	30.0%	20.20	0.00	6,060.00	0.00	4,242.00	1,818.00	6,060.00	
M02001	Reinforcing Bars, Grade 40	kg	336.70	0.0%	100.0%	0.0%	65.0%	35.0%	16.00	0.00	5,387.20	0.00	3,501.68	1,885.52	5,387.20	
M09013	Elastomeric Pad (t=50mm)	m2	0.83	0.0%	100.0%	0.0%	65.0%	35.0%	25,700.00	0.00	21,331.00	0.00	13,865.15	7,465.85	21,331.00	
	Miscellaneous	LS	1.00	0.0%	40.0%	60.0%	55.0%	45.0%		0.00	2,285.35	3,308.03	3,032.36	2,481.02	5,513.39	2.0%
Total										3,217.60	274,657.09	3,308.03	181,862.67	99,320.06	284,182.73	
Components (%)										1.1%	97.7%	1.2%	64.7%	35.3%	100.0%	
Unit Rate			each							321.55	27,467.86	330.59	18,174.45	9,925.55	28,100.00	

Miscellaneous covers the cost for welding equipment, welding rods, minor tools, etc.

407(2)a Expansion Joint, Multiflex M80 (Elastomeric)

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	1.50	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	849.00	0.00	0.00	0.00	849.00	849.00	
L019	Skilled Labor	md	6.00	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	2,418.00	0.00	0.00	0.00	2,418.00	2,418.00	
L020	Unskilled Labor	md	3.00	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	942.00	0.00	0.00	0.00	942.00	942.00	
M09200	Expansion Joint, Multiflex 80	m	100.00	0.0%	100.0%	0.0%	65.0%	35.0%	64,600.00	0.00	6,460,000.00	0.00	4,199,000.00	2,261,000.00	6,460,000.00	
W0225	Grout (non-shrink)	m3	0.38	1.0%	96.5%	2.6%	61.3%	38.7%	3,050.00	10.51	1,059.10	28.40	672.74	425.26	1,098.00	
M07021	Asphalt Mixture	t	2.54	0.0%	100.0%	0.0%	65.0%	35.0%	2,500.00	0.00	6,350.00	0.00	4,127.50	2,222.50	6,350.00	
	Miscellaneous	LS	1.00	10.0%	30.0%	60.0%	55.0%	45.0%		12,943.31	38,829.94	77,659.88	71,188.23	58,244.91	129,433.14	2.0%
	<b>Total</b>									17,162.82	6,506,239.04	77,688.28	4,274,988.47	2,326,101.67	6,601,890.14	
	Components (%)									0.3%	98.6%	1.2%	64.8%	35.2%	100.0%	
	Unit Rate	m								171.60	65,051.65	776.75	42,742.82	23,257.18	66,000.00	

Miscellaneous covers the cost for chipping, surface preparation, minor tools, etc.

407(2)b Expansion Joint, Multiflex M100 (Elastomeric)

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	1.50	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	849.00	0.00	0.00	0.00	849.00	849.00	
L019	Skilled Labor	md	6.00	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	2,418.00	0.00	0.00	0.00	2,418.00	2,418.00	
L020	Unskilled Labor	md	3.00	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	942.00	0.00	0.00	0.00	942.00	942.00	
M09201	Expansion Joint, Multiflex 100	m	100.00	0.0%	100.0%	0.0%	65.0%	35.0%	74,400.00	0.00	7,440,000.00	0.00	4,836,000.00	2,604,000.00	7,440,000.00	
W0225	Grout (non-shrink)	m3	0.39	1.0%	96.5%	2.6%	61.3%	38.7%	3,050.00	11.38	1,147.38	30.76	728.80	460.70	1,189.50	
M07021	Asphalt Mixture	t	2.96	0.0%	100.0%	0.0%	65.0%	35.0%	2,500.00	0.00	7,400.00	0.00	4,810.00	2,590.00	7,400.00	
	Miscellaneous	LS	1.00	10.0%	30.0%	60.0%	55.0%	45.0%		14,905.60	44,716.79	89,433.58	81,989.78	67,075.19	149,055.97	2.0%
	<b>Total</b>									19,125.98	7,493,254.15	89,464.34	4,923,519.59	2,678,334.88	7,601,854.47	
	Components (%)									0.3%	98.6%	1.2%	64.8%	35.2%	100.0%	
	Unit Rate	m								191.21	74,914.36	894.43	49,223.18	26,776.82	76,000.00	

Miscellaneous covers the cost for chipping, surface preparation, minor tools, etc.

407(2)c Expansion Joint, Multiflex M140 (Elastomeric)

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	1.50	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	849.00	0.00	0.00	0.00	849.00	849.00	
L019	Skilled Labor	md	6.00	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	2,418.00	0.00	0.00	0.00	2,418.00	2,418.00	
L020	Unskilled Labor	md	3.00	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	942.00	0.00	0.00	0.00	942.00	942.00	
M09202	Expansion Joint, Multiflex 140	m	100.00	0.0%	100.0%	0.0%	65.0%	35.0%	93,800.00	0.00	9,380,000.00	0.00	6,097,000.00	3,283,000.00	9,380,000.00	
W0225	Grout (non-shrink)	m3	0.82	1.0%	96.5%	2.6%	61.3%	38.7%	3,050.00	23.93	2,412.39	64.68	1,532.36	968.64	2,501.00	
M07021	Asphalt Mixture	t	4.28	0.0%	100.0%	0.0%	65.0%	35.0%	2,500.00	0.00	10,700.00	0.00	6,955.00	3,745.00	10,700.00	
	Miscellaneous	LS	1.00	10.0%	30.0%	60.0%	55.0%	45.0%		18,794.82	56,384.46	112,768.92	103,371.51	84,576.69	187,948.20	2.0%
	<b>Total</b>									23,027.75	9,449,496.85	112,833.60	6,208,858.87	3,376,499.33	9,585,358.20	
	Components (%)									0.2%	98.6%	1.2%	64.8%	35.2%	100.0%	
	Unit Rate	m								230.39	94,540.73	1,128.88	62,118.66	33,781.34	95,900.00	

Miscellaneous covers the cost for chipping, surface preparation, minor tools, etc.

407(2)d Expansion Joint, Multiflex M160 (Elastomeric)

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	1.50	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	849.00	0.00	0.00	0.00	849.00	849.00	
L019	Skilled Labor	md	6.00	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	2,418.00	0.00	0.00	0.00	2,418.00	2,418.00	
L020	Unskilled Labor	md	3.00	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	942.00	0.00	0.00	0.00	942.00	942.00	
M09203	Expansion Joint, Multiflex 160	m	100.00	0.0%	100.0%	0.0%	65.0%	35.0%	107,000.00	0.00	10,700,000.00	0.00	6,955,000.00	3,745,000.00	10,700,000.00	
W0225	Grout (non-shrink)	m3	0.54	1.0%	96.5%	2.6%	61.3%	38.7%	3,050.00	15.76	1,588.65	42.59	1,009.11	637.89	1,647.00	
M07021	Asphalt Mixture	t	3.85	0.0%	100.0%	0.0%	65.0%	35.0%	2,500.00	0.00	9,625.00	0.00	6,256.25	3,368.75	9,625.00	
	Miscellaneous	LS	1.00	10.0%	30.0%	60.0%	55.0%	45.0%		21,430.96	64,292.89	128,585.77	117,870.29	96,439.33	214,309.62	2.0%
	<b>Total</b>									25,658.72	10,775,506.53	128,628.37	7,080,135.65	3,849,654.97	10,929,780.62	
	Components (%)									0.2%	98.6%	1.2%	64.8%	35.2%	100.0%	
	Unit Rate	m								255.86	107,461.36	1,282.78	70,608.38	38,391.62	109,000.00	

Miscellaneous covers the cost for chipping, surface preparation, minor tools, etc.

407(2)e Expansion Joint, Multiflex M200 (Elastomeric)

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	1.50	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	849.00	0.00	0.00	0.00	849.00	849.00	
L019	Skilled Labor	md	6.00	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	2,418.00	0.00	0.00	0.00	2,418.00	2,418.00	
L020	Unskilled Labor	md	3.00	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	942.00	0.00	0.00	0.00	942.00	942.00	
M09204	Expansion Joint, Multiflex 200	m	100.00	0.0%	100.0%	0.0%	65.0%	35.0%	122,000.00	0.00	12,200,000.00	0.00	7,930,000.00	4,270,000.00	12,200,000.00	
W0225	Grout (non-shrink)	m3	1.60	1.0%	96.5%	2.6%	61.3%	38.7%	3,050.00	46.70	4,707.10	126.20	2,989.97	1,890.03	4,880.00	
M07021	Asphalt Mixture	t	4.18	0.0%	100.0%	0.0%	65.0%	35.0%	2,500.00	0.00	10,450.00	0.00	6,792.50	3,657.50	10,450.00	
	Miscellaneous	LS	1.00	10.0%	30.0%	60.0%	55.0%	45.0%		24,439.08	73,317.23	146,634.47	134,414.93	109,975.85	244,390.78	2.0%
Total										28,694.78	12,288,474.33	146,760.67	8,074,197.39	4,389,732.39	12,463,929.78	
Components (%)										0.2%	98.6%	1.2%	64.8%	35.2%	100.0%	
Unit Rate			m							287.78	123,240.37	1,471.85	80,975.64	44,024.36	125,000.00	

Miscellaneous covers the cost for chipping, surface preparation, minor tools, etc.

407(2)f Expansion Joint, Multiflex M330 (Elastomeric)

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	1.50	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	849.00	0.00	0.00	0.00	849.00	849.00	
L019	Skilled Labor	md	6.00	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	2,418.00	0.00	0.00	0.00	2,418.00	2,418.00	
L020	Unskilled Labor	md	3.00	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	942.00	0.00	0.00	0.00	942.00	942.00	
M09206	Expansion Joint, Multiflex 330	m	100.00	0.0%	100.0%	0.0%	65.0%	35.0%	250,000.00	0.00	25,000,000.00	0.00	16,250,000.00	8,750,000.00	25,000,000.00	
W0225	Grout (non-shrink)	m3	2.21	1.0%	96.5%	2.6%	61.3%	38.7%	3,050.00	64.50	6,501.68	174.32	4,129.89	2,610.61	6,740.50	
M07021	Asphalt Mixture	t	5.64	0.0%	100.0%	0.0%	65.0%	35.0%	2,500.00	0.00	14,100.00	0.00	9,165.00	4,935.00	14,100.00	
	Miscellaneous	LS	1.00	10.0%	30.0%	60.0%	55.0%	45.0%		50,050.10	150,150.30	300,300.59	275,275.54	225,225.45	500,500.99	2.0%
Total										54,323.60	25,170,751.98	300,474.91	16,538,570.43	8,986,980.06	25,525,550.49	
Components (%)										0.2%	98.6%	1.2%	64.8%	35.2%	100.0%	
Unit Rate			m							542.69	251,455.57	3,001.74	165,220.16	89,779.84	255,000.00	

Miscellaneous covers the cost for chipping, surface preparation, minor tools, etc.

407(2)g Expansion Joint, 30mm for bridge sidewalk

Unit: 100.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.80	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	452.80	0.00	0.00	0.00	452.80	452.80	
L019	Skilled Labor	md	1.60	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	644.80	0.00	0.00	0.00	644.80	644.80	
L020	Unskilled Labor	md	1.60	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	502.40	0.00	0.00	0.00	502.40	502.40	
M07104	Joint Filler (bituminous t=20mm)	m2	7.50	0.0%	100.0%	0.0%	60.0%	40.0%	571.00	0.00	4,282.50	0.00	2,569.50	1,713.00	4,282.50	
M07117	Joint Sealant (liquid type)	kg	91.80	0.0%	100.0%	0.0%	60.0%	40.0%	96.20	0.00	8,831.16	0.00	5,298.70	3,532.46	8,831.16	
	Miscellaneous	LS	1.00	0.0%	30.0%	70.0%	55.0%	45.0%		0.00	44.14	103.00	80.93	66.21	147.14	1.0%
Total										1,600.00	13,157.80	103.00	7,949.12	6,911.68	14,860.80	
Components (%)										10.8%	88.5%	0.7%	53.5%	46.5%	100.0%	
Unit Rate			m							16.04	131.93	1.03	79.70	69.30	149.00	

Miscellaneous covers the cost for minor materials, minor tools, etc.

SPL 407(3)a Restraining Bar φ 32 x 1495mm

Unit: 10.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.60	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	339.60	0.00	0.00	0.00	339.60	339.60	
L009	Welder	md	3.00	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	1,500.00	0.00	0.00	0.00	1,500.00	1,500.00	
L019	Skilled Labor	md	3.60	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	1,450.80	0.00	0.00	0.00	1,450.80	1,450.80	
L020	Unskilled Labor	md	2.20	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	690.80	0.00	0.00	0.00	690.80	690.80	
M09313	PC Tendon, φ 32	kg	94.40	0.0%	100.0%	0.0%	70.0%	30.0%	136.00	0.00	12,838.40	0.00	8,986.88	3,851.52	12,838.40	
M08302	PVC Pipe, φ 50	m	7.50	0.0%	100.0%	0.0%	50.0%	50.0%	66.70	0.00	500.25	0.00	250.13	250.13	500.25	
M09012	Elastomeric Pad (t=40mm)	m2	1.41	0.0%	100.0%	0.0%	65.0%	35.0%	20,500.00	0.00	28,905.00	0.00	18,788.25	10,116.75	28,905.00	
M02015	Structural Steel (Plates, SS400)	kg	491.40	0.0%	100.0%	0.0%	70.0%	30.0%	20.20	0.00	9,926.28	0.00	6,948.40	2,977.88	9,926.28	
M02001	Reinforcing Bars, Grade 40	kg	63.70	0.0%	100.0%	0.0%	65.0%	35.0%	16.00	0.00	1,019.20	0.00	662.48	356.72	1,019.20	
	Miscellaneous	LS	1.00	0.0%	30.0%	70.0%	55.0%	45.0%		0.00	1,372.09	3,201.54	2,515.49	2,058.13	4,573.63	8.0%
Total										3,981.20	54,561.22	3,201.54	38,151.63	23,592.33	61,743.96	
Components (%)										6.4%	88.4%	5.2%	61.8%	28.2%	100.0%	
Unit Rate			each							397.84	5,452.24	319.93	3,812.45	2,357.55	6,170.00	

Miscellaneous covers the cost for steel cutter, welding equipment, welding rods, tensioning jack, minor tools, etc.

SPL 407(3)b Restraining Bar  $\phi$ 32 x 1900mm

Unit: 10.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
L002	Foreman	md	0.60	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	339.60	0.00	0.00	0.00	339.60	339.60	
L009	Welder	md	3.00	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	1,500.00	0.00	0.00	0.00	1,500.00	1,500.00	
L019	Skilled Labor	md	3.60	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	1,450.80	0.00	0.00	0.00	1,450.80	1,450.80	
L020	Unskilled Labor	md	2.20	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	690.80	0.00	0.00	0.00	690.80	690.80	
M09313	PC Tendon, $\phi$ 32	kg	118.70	0.0%	100.0%	0.0%	70.0%	30.0%	136.00	0.00	16,143.20	0.00	11,300.24	4,842.96	16,143.20	
M08302	PVC Pipe, $\phi$ 50	m	8.00	0.0%	100.0%	0.0%	50.0%	50.0%	66.70	0.00	533.60	0.00	266.80	266.80	533.60	
M09012	Elastomeric Pad (t=40mm)	m2	1.41	0.0%	100.0%	0.0%	65.0%	35.0%	20,500.00	0.00	28,905.00	0.00	18,788.25	10,116.75	28,905.00	
M02015	Structural Steel (Plates, SS400)	kg	515.10	0.0%	100.0%	0.0%	70.0%	30.0%	20.20	0.00	10,405.02	0.00	7,283.51	3,121.51	10,405.02	
M02001	Reinforcing Bars, Grade 40	kg	64.40	0.0%	100.0%	0.0%	65.0%	35.0%	16.00	0.00	1,030.40	0.00	669.76	360.64	1,030.40	
	Miscellaneous	LS	1.00	0.0%	30.0%	70.0%	55.0%	45.0%		0.00	1,463.96	3,415.91	2,683.93	2,195.94	4,879.87	8.0%
Total										3,981.20	58,481.18	3,415.91	40,992.49	24,885.80	65,878.29	
Components (%)										6.0%	88.8%	5.2%	62.2%	37.8%	100.0%	
Unit Rate			each							398.25	5,850.05	341.70	4,100.60	2,489.40	6,590.00	

Miscellaneous covers the cost for steel cutter, welding equipment, welding rods, tensioning jack, minor tools, etc.

SPL 407(3)c Restraining Cable  $\phi$ 65 x 4121mm (PC 7-T15.2)

Unit: 10.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
L002	Foreman	md	1.30	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	735.80	0.00	0.00	0.00	735.80	735.80	
L009	Welder	md	3.90	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	1,950.00	0.00	0.00	0.00	1,950.00	1,950.00	
L019	Skilled Labor	md	7.60	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	3,062.80	0.00	0.00	0.00	3,062.80	3,062.80	
L020	Unskilled Labor	md	4.60	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	1,444.40	0.00	0.00	0.00	1,444.40	1,444.40	
M09307	PC Strand, T15.2	kg	317.60	0.0%	100.0%	0.0%	70.0%	30.0%	119.00	0.00	37,794.40	0.00	26,456.08	11,338.32	37,794.40	
M09332	PC Sheath, $\phi$ 65	m	37.81	0.0%	100.0%	0.0%	65.0%	35.0%	123.00	0.00	4,650.63	0.00	3,022.91	1,627.72	4,650.63	
M09013	Elastomeric Pad (t=50mm)	m2	2.04	0.0%	100.0%	0.0%	65.0%	35.0%	25,700.00	0.00	52,428.00	0.00	34,078.20	18,349.80	52,428.00	
M02015	Structural Steel (Plates, SS400)	kg	783.60	0.0%	100.0%	0.0%	70.0%	30.0%	20.20	0.00	15,828.72	0.00	11,080.10	4,748.62	15,828.72	
M02511	Stainless Plate	kg	908.10	0.0%	100.0%	0.0%	70.0%	30.0%	135.00	0.00	122,593.50	0.00	85,815.45	36,778.05	122,593.50	
	Miscellaneous	LS	1.00	0.0%	60.0%	40.0%	55.0%	45.0%		0.00	11,543.44	7,695.62	10,581.48	8,657.58	19,239.06	8.0%
Total										7,193.00	244,838.69	7,695.62	171,034.23	88,683.08	259,727.31	
Components (%)										2.8%	94.3%	3.0%	65.9%	34.1%	100.0%	
Unit Rate			each							720.06	24,509.57	770.37	17,121.38	8,878.62	26,000.00	

Miscellaneous covers the cost for steel cutter, welding equipment, welding rods, tensioning jack, minor tools, etc.

SPL 407(3)d Restraining Cable  $\phi$ 65 x 4224mm (PC 7-T15.2)

Unit: 10.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
L002	Foreman	md	1.30	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	735.80	0.00	0.00	0.00	735.80	735.80	
L009	Welder	md	3.90	100.0%	0.0%	0.0%	0.0%	100.0%	500.00	1,950.00	0.00	0.00	0.00	1,950.00	1,950.00	
L019	Skilled Labor	md	7.60	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	3,062.80	0.00	0.00	0.00	3,062.80	3,062.80	
L020	Unskilled Labor	md	4.60	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	1,444.40	0.00	0.00	0.00	1,444.40	1,444.40	
M09307	PC Strand, T15.2	kg	325.50	0.0%	100.0%	0.0%	70.0%	30.0%	119.00	0.00	38,734.50	0.00	27,114.15	11,620.35	38,734.50	
M09332	PC Sheath, $\phi$ 65	m	38.84	0.0%	100.0%	0.0%	65.0%	35.0%	123.00	0.00	4,777.32	0.00	3,105.26	1,672.06	4,777.32	
M09013	Elastomeric Pad (t=50mm)	m2	2.04	0.0%	100.0%	0.0%	65.0%	35.0%	25,700.00	0.00	52,428.00	0.00	34,078.20	18,349.80	52,428.00	
M02015	Structural Steel (Plates, SS400)	kg	960.00	0.0%	100.0%	0.0%	70.0%	30.0%	20.20	0.00	19,392.00	0.00	13,574.40	5,817.60	19,392.00	
M02511	Stainless Plate	kg	613.50	0.0%	100.0%	0.0%	70.0%	30.0%	135.00	0.00	82,822.50	0.00	57,975.75	24,846.75	82,822.50	
	Miscellaneous	LS	1.00	0.0%	60.0%	40.0%	55.0%	45.0%		0.00	9,856.67	6,571.11	9,035.28	7,392.50	16,427.79	8.0%
Total										7,193.00	208,010.99	6,571.11	144,883.04	76,892.07	221,775.11	
Components (%)										3.2%	93.8%	3.0%	65.3%	34.7%	100.0%	
Unit Rate			each							720.03	20,822.19	657.78	14,503.00	7,697.00	22,260.00	

Miscellaneous covers the cost for steel cutter, welding equipment, welding rods, tensioning jack, minor tools, etc.



407(4) G.I. Drain Pipe  $\phi$ 150mm for Bridge Drainage

Unit: 10.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
L002	Foreman	md	0.40	100.0%	0.0%	0.0%	0.0%	100.0%	566.00	226.40	0.00	0.00	0.00	226.40	226.40	
L019	Skilled Labor	md	1.10	100.0%	0.0%	0.0%	0.0%	100.0%	403.00	443.30	0.00	0.00	0.00	443.30	443.30	
L020	Unskilled Labor	md	0.70	100.0%	0.0%	0.0%	0.0%	100.0%	314.00	219.80	0.00	0.00	0.00	219.80	219.80	
M08709	Steel Gas Pipe, $\phi$ 150	m	10.00	0.0%	100.0%	0.0%	60.0%	40.0%	707.00	0.00	7,070.00	0.00	4,242.00	2,828.00	7,070.00	
M02012	Structural Steel (Flat Bar, SS400)	kg	10.48	0.0%	100.0%	0.0%	70.0%	30.0%	22.70	0.00	237.90	0.00	166.53	71.37	237.90	
	Miscellaneous	LS	1.00	0.0%	30.0%	70.0%	55.0%	45.0%		0.00	73.78	172.15	135.26	110.66	245.92	3.0%
Total										889.50	7,381.68	172.15	4,643.79	3,899.53	8,443.32	
Components (%)										10.5%	87.4%	2.0%	53.8%	46.2%	100.0%	
Unit Rate			m							88.92	737.88	17.21	454.20	389.80	844.00	

Miscellaneous covers the costs for falseworks, galvanizing or painting, welding equipment, welding rods, minor tools, etc.

SPL 407(5)a Pier Protection Concrete Blocks for Angat Bridge

Unit: 1,344.00 m<sup>2</sup>

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0601	Pier Protection Concrete Block Type A Production & Laying	each	112.00	14.2%	62.0%	23.8%	50.3%	49.7%	3,080.00	48,958.26	213,781.80	82,219.94	173,546.28	171,413.71	344,960.00	
W0602	Pier Protection Concrete Block Type B Production & Laying	each	32.00	14.6%	61.6%	23.8%	50.1%	49.9%	2,940.00	13,736.13	57,951.24	22,392.63	47,119.54	46,960.46	94,080.00	
W0603	Pier Protection Concrete Block Type C Production & Laying	each	160.00	14.6%	61.4%	24.0%	50.0%	50.0%	2,890.00	67,493.77	283,856.92	111,049.31	231,334.32	231,065.68	462,400.00	
W0611	Stone Laying	m <sup>3</sup>	483.50	9.9%	14.3%	75.8%	47.5%	52.5%	378.00	15,035.54	21,830.38	115,657.08	72,505.98	80,017.02	152,523.00	
M02011	Structural Steel (Round Bar, SS400)	kg	681.80	0.0%	100.0%	0.0%	70.0%	30.0%	21.80	0.00	14,863.24	0.00	10,404.27	4,458.97	14,863.24	
	Miscellaneous	LS	1.00	10.0%	30.0%	60.0%	50.0%	50.0%		1,068.83	3,206.48	6,412.96	5,344.13	5,344.13	10,688.26	1.0%
Total										146,292.52	595,490.05	337,731.92	540,254.52	539,259.98	1,079,514.50	
Components (%)										13.6%	55.2%	31.3%	50.0%	50.0%	100.0%	
Unit Rate			m <sup>2</sup>							108.82	442.96	251.22	401.87	401.13	803.00	

Miscellaneous covers the costs for bed preparation, extra earthworks, adjustment, etc.

SPL 407(5)b Pier Protection Concrete Blocks for Panganga Bridge

Unit: 840.00 m<sup>2</sup>

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0601	Pier Protection Concrete Block Type A Production & Laying	each	70.00	14.2%	62.0%	23.8%	50.3%	49.7%	3,080.00	30,598.91	133,613.63	51,387.46	108,466.43	107,133.57	215,600.00	
W0602	Pier Protection Concrete Block Type B Production & Laying	each	20.00	14.6%	61.6%	23.8%	50.1%	49.9%	2,940.00	8,585.08	36,219.52	13,995.40	29,449.71	29,350.29	58,800.00	
W0603	Pier Protection Concrete Block Type C Production & Laying	each	100.00	14.6%	61.4%	24.0%	50.0%	50.0%	2,890.00	42,183.61	177,410.57	69,405.82	144,583.95	144,416.05	289,000.00	
W0611	Stone Laying	m <sup>3</sup>	254.10	9.9%	14.3%	75.8%	47.5%	52.5%	378.00	9,468.48	13,747.46	72,833.86	45,659.90	50,389.90	96,049.80	
M02011	Structural Steel (Round Bar, SS400)	kg	426.20	0.0%	100.0%	0.0%	70.0%	30.0%	21.80	0.00	9,291.16	0.00	6,503.81	2,787.35	9,291.16	
	Miscellaneous	LS	1.00	10.0%	30.0%	60.0%	50.0%	50.0%		668.74	2,006.22	4,012.45	3,343.70	3,343.70	6,687.41	1.0%
Total										91,504.82	372,288.56	211,634.99	338,007.51	337,420.86	675,428.37	
Components (%)										13.5%	55.1%	31.3%	50.0%	50.0%	100.0%	
Unit Rate			m <sup>2</sup>							108.92	443.16	251.92	402.35	401.65	804.00	

Miscellaneous covers the costs for bed preparation, extra earthworks, adjustment, etc.

SPL 407(5)c Pier Protection Concrete Blocks for Talavera Bridge

Unit: 896.00 m<sup>2</sup>

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0601	Pier Protection Concrete Block Type A Production & Laying	each	24.00	14.2%	62.0%	23.8%	50.3%	49.7%	3,080.00	10,491.06	45,810.39	17,618.56	37,188.49	36,731.51	73,920.00	
W0602	Pier Protection Concrete Block Type B Production & Laying	each	104.00	14.6%	61.6%	23.8%	50.1%	49.9%	2,940.00	44,642.42	188,341.51	72,776.06	153,138.50	152,621.50	305,760.00	
W0603	Pier Protection Concrete Block Type C Production & Laying	each	88.00	14.6%	61.4%	24.0%	50.0%	50.0%	2,890.00	37,121.57	156,121.30	61,077.12	127,233.87	127,086.13	254,320.00	
W0611	Stone Laying	m <sup>3</sup>	262.80	9.9%	14.3%	75.8%	47.5%	52.5%	378.00	9,792.66	14,218.15	75,327.59	47,223.23	52,115.17	99,338.40	
M02011	Structural Steel (Round Bar, SS400)	kg	568.20	0.0%	100.0%	0.0%	70.0%	30.0%	21.80	0.00	12,386.76	0.00	8,670.73	3,716.03	12,386.76	
	Miscellaneous	LS	1.00	10.0%	30.0%	60.0%	50.0%	50.0%		745.73	2,237.18	4,474.35	3,728.63	3,728.63	7,457.25	1.0%
Total										102,793.44	419,115.29	231,273.68	377,183.45	375,998.96	753,182.41	
Components (%)										13.6%	55.6%	30.7%	50.1%	49.9%	100.0%	
Unit Rate			m <sup>2</sup>							114.78	467.98	258.24	421.16	419.84	841.00	

Miscellaneous covers the costs for bed preparation, extra earthworks, adjustment, etc.

SPL 420(1) Temporary Access Road Crossing Streams/Rivers

Unit: 1.00 U.S.

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0121	Borrow Soil, transported	m3	1,840.80	6.9%	22.1%	71.0%	48.5%	51.6%	221.00	28,177.31	89,736.38	288,904.11	197,442.54	209,374.26	406,816.80	Loss 20.0%
W0149	Filling, Laying & Compaction, bulldozer 21t	m3	1,534.00	1.6%	8.2%	90.3%	54.4%	45.6%	56.00	1,288.56	7,044.13	77,571.91	46,733.73	39,170.27	85,904.00	
W0332	Precast Reinforced Concrete Pipe (Extra Strength 32MPa), fabrication φ610 (24")	m	21.20	10.2%	68.0%	21.8%	53.6%	46.4%	1,120.00	2,422.62	16,141.48	5,179.90	12,723.85	11,020.15	23,744.00	
W0342	Precast Concrete Pipe Laying φ610 (24")	m	21.20	45.6%	8.2%	46.2%	29.7%	70.3%	244.00	2,357.01	425.83	2,389.95	1,535.94	3,636.66	5,172.80	
W0352	Precast Concrete Pipe Removal φ610 (24")	m	21.20	44.9%	6.1%	49.1%	30.1%	69.9%	75.30	716.30	96.70	783.35	481.04	1,115.32	1,596.36	
W0334	Precast Reinforced Concrete Pipe (Extra Strength), fabrication φ910 (36")	m	0.00	10.8%	68.1%	21.1%	53.5%	46.5%	2,660.00	0.00	0.00	0.00	0.00	0.00	0.00	
W0344	Precast Concrete Pipe Laying φ910 (36")	m	0.00	31.0%	8.6%	60.4%	37.7%	62.3%	513.00	0.00	0.00	0.00	0.00	0.00	0.00	
W0354	Precast Concrete Pipe Removal φ910 (36")	m	0.00	30.7%	6.4%	62.8%	37.9%	62.1%	158.00	0.00	0.00	0.00	0.00	0.00	0.00	
W0335	Precast Reinforced Concrete Pipe (Extra Strength 32MPa), fabrication φ1070 (42")	m	100.80	11.2%	68.4%	20.4%	53.4%	46.6%	3,990.00	44,906.33	275,056.47	82,229.20	214,893.62	187,298.38	402,192.00	
W0345	Precast Concrete Pipe Laying φ1070 (42")	m	100.80	31.4%	8.6%	60.0%	37.4%	62.6%	590.00	18,688.25	5,111.37	35,672.38	22,259.61	37,212.39	59,472.00	
W0355	Precast Concrete Pipe Removal φ1070 (42")	m	100.80	31.2%	6.4%	62.4%	37.6%	62.4%	182.00	5,718.24	1,174.95	11,452.41	6,903.18	11,442.42	18,345.60	
W0336	Precast Reinforced Concrete Pipe (Extra Strength 32MPa), fabrication φ1220 (48")	m	0.00	10.7%	68.1%	21.2%	53.5%	46.5%	4,350.00	0.00	0.00	0.00	0.00	0.00	0.00	
W0346	Precast Concrete Pipe Laying φ1220 (48")	m	0.00	31.2%	8.6%	60.2%	37.6%	62.4%	661.00	0.00	0.00	0.00	0.00	0.00	0.00	
W0356	Precast Concrete Pipe Removal φ1220 (48")	m	0.00	30.9%	6.4%	62.7%	37.8%	62.2%	204.00	0.00	0.00	0.00	0.00	0.00	0.00	
W0105	Excavation, Backhoe 0.61m3	m3	1,534.00	4.4%	8.4%	87.2%	52.9%	47.1%	40.90	2,760.59	5,270.21	54,789.80	33,176.39	29,564.21	82,740.60	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	1,534.00	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	11,619.60	21,046.73	109,995.68	73,433.71	69,228.29	142,662.00	
	Miscellaneous	LS	1.00	15.0%	40.0%	45.0%	50.0%	50.0%		1,812.97	4,634.58	5,438.91	6,043.23	6,043.23	12,086.46	1.0%
	<b>Total</b>									120,467.78	425,937.83	674,327.01	615,626.85	605,165.77	1,220,732.62	
	<b>Components (%)</b>									9.9%	34.9%	55.2%	50.4%	49.6%	100.0%	
	<b>Unit Rate</b>	U.S.								120,395.48	425,682.21	673,922.31	615,257.38	604,742.62	1,220,000.00	

Miscellaneous covers the cost for temporary paving, maintenance, safety measures, etc.

SPL 420(2) Realignment of River/Stream

Unit: 1.00 U.S.

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0105	Excavation, Backhoe 0.61m3	m3	0.00	4.4%	8.4%	87.2%	52.9%	47.1%	40.90	0.00	0.00	0.00	0.00	0.00	0.00	
W0121	Borrow Soil, transported	m3	0.00	6.9%	22.1%	71.0%	48.5%	51.6%	221.00	0.00	0.00	0.00	0.00	0.00	0.00	Loss 20.0%
W0149	Filling, Laying & Compaction, bulldozer 21t	m3	0.00	1.5%	8.2%	90.3%	54.4%	45.6%	56.00	0.00	0.00	0.00	0.00	0.00	0.00	
W0202	Concrete (Class B, 17MPa, max agg. 50mm)	m3	0.00	3.0%	75.5%	21.5%	56.1%	43.9%	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00	Loss 2.0%
W0235	Concrete Pouring by Manpower for small structures	m3	0.00	98.0%	0.2%	1.8%	1.1%	98.9%	224.00	0.00	0.00	0.00	0.00	0.00	0.00	
W0236	Concrete Curing (plain concrete)	m3	0.00	70.9%	8.7%	20.4%	16.0%	84.0%	8.85	0.00	0.00	0.00	0.00	0.00	0.00	
W0240	Formwork (plain concrete H<4m)	m2	0.00	58.9%	40.4%	11.8%	2.9%	97.1%	222.00	0.00	0.00	0.00	0.00	0.00	0.00	
W0741	Grouted Riprap Class A	m3	0.00	15.6%	63.8%	20.6%	48.0%	52.0%	734.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Miscellaneous	LS	1.00	15.0%	40.0%	45.0%	50.0%	50.0%		0.00	0.00	0.00	0.00	0.00	0.00	3.0%
	<b>Total</b>									0.00	0.00	0.00	0.00	0.00	0.00	
	<b>Components (%)</b>									0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
	<b>Unit Rate</b>	U.S.								0.00	0.00	0.00	0.00	0.00	0.00	

Miscellaneous covers the cost for temporary shoring, revetment, maintenance, safety measures, etc.

SPL 420(3) False Works Required for Cantilever Construction for PC Box Girder (Angat River)

Unit: 1.00 L.S.

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0651	Temporary Support at Pier Head for Cantilever Construction	v-m3	5.10	34.3%	17.8%	47.9%	35.4%	64.6%	426.00	745.60	385.81	1,041.20	768.18	1,404.42	2,172.60	
W0652	Temporary Bracket Support at Pier Head for Cantilever Construction	t	299.20	24.4%	44.6%	31.0%	39.2%	60.8%	7,810.00	571,320.06	1,046,168.85	728,239.09	919,258.08	1,426,469.92	2,345,728.00	
W0653	Temporary External & Internal Support at Pier Head for Cantilever Construction	v-m3	1,293.20	29.2%	30.0%	40.8%	37.5%	62.5%	172.00	64,889.39	66,813.69	90,727.32	83,394.92	139,035.48	222,430.40	
W0654	Temporary Suspension Support at Center Connection for Cantilever Construction	t	42.20	24.6%	29.2%	46.2%	39.9%	60.1%	8,330.00	86,420.07	102,619.29	162,486.64	140,113.23	211,412.77	351,526.00	
W0655	Temporary External & Internal Support at Center Connection for Cantilever Construction	v-m3	185.10	28.0%	28.7%	43.3%	38.0%	62.0%	179.00	9,286.47	9,506.81	14,339.62	12,585.02	20,547.88	33,132.90	
W0656	Temporary Frame Support at Side Span for Cantilever Construction	v-m3	3,622.50	21.4%	40.6%	38.0%	41.2%	58.8%	93.90	72,641.60	138,142.18	129,368.96	140,247.72	199,905.00	340,152.75	
W0657	Temporary External & Internal Support at Side Span for Cantilever Construction	v-m3	530.60	29.7%	28.8%	41.5%	37.3%	62.7%	169.00	26,651.49	25,835.69	37,184.22	33,409.30	56,262.10	89,671.40	
W0661	Assembly & Disassembly of Form Traveler	set	12.00	23.4%	17.7%	58.9%	41.0%	59.0%	335,000.00	939,626.63	713,336.13	2,367,037.24	1,648,909.10	2,371,090.90	4,020,000.00	
W0662	Form Traveler Shifting	time	96.00	78.7%	12.8%	8.5%	10.6%	89.4%	2,080.00	157,228.35	25,470.99	16,980.66	21,225.83	178,454.17	199,680.00	
W0663	Form Traveler Lifting	time	96.00	100.0%	0.0%	0.0%	0.0%	100.0%	4,980.00	478,080.00	0.00	0.00	0.00	478,080.00	478,080.00	
W0664	Form Traveler Pulling Back	m	376.00	100.0%	0.0%	0.0%	0.0%	100.0%	114.00	42,864.00	0.00	0.00	0.00	42,864.00	42,864.00	
Q1521-014	PC Bridge Cantilever Construction Form Traveler, W≤14m	day	1,393.00	0.0%	0.0%	100.0%	60.9%	39.1%	16,700.00	0.00	0.00	23,263,100.00	14,178,100.34	9,084,999.66	23,263,100.00	
	Miscellaneous	LS	1.00	5.0%	40.0%	55.0%	50.0%	50.0%		31,388.54	251,108.30	345,273.92	313,885.38	313,885.38	627,770.76	2.0%
Total										2,481,142.20	2,379,387.74	27,165,778.87	17,491,897.11	14,524,411.70	32,016,308.81	
Components (%)										7.7%	7.4%	84.8%	54.6%	45.4%	100.0%	
Unit Rate										2,479,878.33	2,378,175.70	27,141,945.97	17,482,986.90	14,517,013.10	32,000,000.00	

Miscellaneous covers the cost for the depreciation of minor tools and equipment, etc.

SPL 420(4)a Temporary Craneway for Angat Bridge Construction

Unit: 416.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0406	H-Pile Driving for Temporary Access Bridge (Vibro Hammer)	m	5,845.50	10.2%	13.5%	76.2%	49.9%	50.1%	117.00	70,033.08	92,533.52	521,356.91	341,371.02	342,552.48	683,923.50	
W0407	H-Pile Removal for Temporary Access Bridge (Vibro Hammer)	m	5,845.50	10.2%	13.5%	76.4%	49.9%	50.1%	102.00	60,641.88	80,248.54	455,350.58	297,778.41	298,462.59	596,241.00	
W0421	Temporary Access Bridge Superstructure Installation	t	568.60	21.6%	8.0%	70.4%	43.3%	56.7%	1,450.00	177,894.68	65,878.30	580,697.02	357,244.16	467,225.84	824,470.00	
W0422	Temporary Access Bridge Superstructure Removal	t	568.60	23.1%	8.2%	68.7%	42.5%	57.5%	1,010.00	132,517.40	47,294.66	394,473.94	244,055.85	330,230.15	574,286.00	
W0415	Temporary Deck Plate Installation	m2	4,784.00	35.3%	5.9%	58.8%	35.8%	64.2%	78.20	132,147.93	21,924.40	220,036.47	133,800.15	240,308.65	374,108.80	
W0416	Temporary Deck Plate Removal	m2	4,784.00	35.3%	5.9%	58.8%	35.8%	64.2%	42.70	72,106.02	11,976.17	120,194.61	73,088.14	131,188.66	204,276.80	
W0423	Temporary Access Bridge Railing Installation	m	1,196.00	36.1%	6.8%	57.1%	35.3%	64.7%	106.00	45,797.19	8,583.31	72,395.50	44,737.98	82,038.02	126,776.00	
W0424	Temporary Access Bridge Railing Removal	m	1,196.00	38.1%	5.4%	56.5%	34.2%	65.8%	56.90	25,914.49	3,679.21	38,468.70	23,289.73	44,762.67	68,052.40	
M05041	Temporary Steel Shapes Depreciation	t-d	624,576.00	0.0%	100.0%	0.0%	50.0%	50.0%	31.30	0.00	19,549,228.80	0.00	9,774,614.40	9,774,614.40	19,549,228.80	
M05051	Temporary Deck Plate Depreciation	m-d	2,296,320.00	0.0%	100.0%	0.0%	50.0%	50.0%	11.10	0.00	25,489,152.00	0.00	12,744,576.00	12,744,576.00	25,489,152.00	
M05055	Temporary Pipe Railing Depreciation	m-d	674,080.00	0.0%	100.0%	0.0%	50.0%	50.0%	1.33	0.00	763,528.40	0.00	381,763.20	381,763.20	763,528.40	
	Miscellaneous	LS	1.00	15.0%	40.0%	45.0%	55.0%	45.0%		73,881.06	197,016.17	221,643.19	270,897.23	221,643.19	492,540.42	1.0%
Total										790,933.73	46,331,041.47	2,624,606.92	24,687,216.28	25,059,365.83	49,746,582.12	
Components (%)										1.6%	93.1%	6.3%	49.6%	50.4%	100.0%	
Unit Rate										1,907.91	111,760.94	6,331.15	59,551.15	60,448.85	120,000.00	

Miscellaneous covers the costs for material haulage, maintenance, etc.

H-Pile = 7,794.0 m      732.6 t      Pile Driving Length = 5,845.5 m  
 Superstructure = 568.6 t      Deck Plate = 4,784.0 m<sup>2</sup>  
 Depreciation Period = 480 days      Railing = 1,196.0 m

SPL 420(4)b Temporary Craneway for Pampanga Bridge Construction

Unit: 320.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Labor	Material	Component (PP)		Total (PP)		
				Lab.	Mat.	Equip.	For.	Local				Equipment	Foreign			
W0406	H-Pile Driving for Temporary Access Bridge (Vibro Hammer)	m	3,290.60	10.2%	13.5%	76.2%	49.9%	50.1%	117.00	39,423.63	52,089.78	293,486.79	192,167.56	192,832.64	385,000.20	
W0407	H-Pile Removal for Temporary Access Bridge (Vibro Hammer)	m	3,290.60	10.2%	13.5%	76.4%	49.9%	50.1%	102.00	34,137.05	45,174.21	256,329.93	167,628.03	168,013.17	335,641.20	
W0421	Temporary Access Bridge Superstructure Installation	t	428.90	21.6%	8.0%	70.4%	43.3%	56.7%	1,450.00	134,187.53	49,692.58	438,024.89	269,472.43	352,432.57	621,905.00	
W0422	Temporary Access Bridge Superstructure Removal	t	428.90	23.1%	8.2%	68.7%	42.5%	57.5%	1,010.00	99,959.04	35,674.78	297,555.18	184,093.49	249,095.51	433,189.00	
W0415	Temporary Deck Plate Installation	m2	3,470.00	35.3%	5.9%	58.8%	35.8%	64.2%	78.20	95,851.45	15,902.52	159,600.03	97,049.86	174,304.14	271,354.00	
W0416	Temporary Deck Plate Removal	m2	3,470.00	35.3%	5.9%	58.8%	35.8%	64.2%	42.70	52,300.98	8,686.73	87,181.29	53,013.35	95,155.65	148,169.00	
W0423	Temporary Access Bridge Railing Installation	m	900.00	36.1%	6.8%	57.1%	35.3%	64.7%	106.00	34,462.77	6,459.01	54,478.22	33,665.71	61,734.29	95,400.00	
W0424	Temporary Access Bridge Railing Removal	m	900.00	38.1%	5.4%	56.5%	34.2%	65.8%	56.90	19,500.87	2,768.64	28,940.49	17,525.72	33,684.28	51,210.00	
W05041	Temporary Steel Shapes Depreciation	t-d	504,780.00	0.0%	100.0%	0.0%	50.0%	50.0%	31.30	0.00	15,799,614.00	0.00	7,899,807.00	7,899,807.00	15,799,614.00	
W05051	Temporary Deck Plate Depreciation	m2-d	2,082,000.00	0.0%	100.0%	0.0%	50.0%	50.0%	11.10	0.00	23,110,200.00	0.00	11,555,100.00	11,555,100.00	23,110,200.00	
W05055	Temporary Pipe Railing Depreciation	m-d	540,000.00	0.0%	100.0%	0.0%	50.0%	50.0%	1.33	0.00	718,200.00	0.00	359,100.00	359,100.00	718,200.00	
	Miscellaneous	LS	1.00	15.0%	40.0%	45.0%	55.0%	45.0%		62,954.82	187,879.53	188,864.47	230,834.35	188,864.47	419,698.82	1.0%
	<b>Total</b>									572,778.15	40,012,341.78	1,804,461.30	21,059,457.40	21,330,123.74	42,389,581.22	
	<b>Components (%)</b>									1.4%	94.4%	4.2%	49.7%	50.3%	100.0%	
	<b>Unit Rate</b>	m								1,783.62	124,597.34	5,619.04	65,578.58	66,421.42	132,000.00	

Miscellaneous covers the cost for material haulage, maintenance, etc.

H-Pile = 4,387.5 m 412.4 t Pile Driving Length = 3,290.6 m  
 Superstructure = 428.9 t Deck Plate = 3,470.0 m2  
 Depreciation Period = 600 days Railing = 900.0 m

SPL 420(4)c Temporary Craneway for Talavera Bridge Construction

Unit: 80.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Labor	Material	Component (PP)		Total (PP)		
				Lab.	Mat.	Equip.	For.	Local				Equipment	Foreign			
W0406	H-Pile Driving for Temporary Access Bridge (Vibro Hammer)	m	1,042.88	10.2%	13.5%	76.2%	49.9%	50.1%	117.00	12,494.35	16,508.58	93,013.45	60,902.80	61,113.58	122,016.38	
W0407	H-Pile Removal for Temporary Access Bridge (Vibro Hammer)	m	1,042.88	10.2%	13.5%	76.4%	49.9%	50.1%	102.00	10,818.90	14,316.88	81,237.49	53,125.59	53,247.66	106,373.25	
W0421	Temporary Access Bridge Superstructure Installation	t	126.00	21.6%	8.0%	70.4%	43.3%	56.7%	1,450.00	39,422.41	14,598.98	128,685.54	79,167.20	103,539.73	182,706.93	
W0422	Temporary Access Bridge Superstructure Removal	t	126.00	23.1%	8.2%	68.7%	42.5%	57.5%	1,010.00	29,366.56	10,480.75	87,417.52	54,084.07	73,180.76	127,264.83	
W0415	Temporary Deck Plate Installation	m2	1,004.00	35.3%	5.9%	58.8%	35.8%	64.2%	78.20	27,733.39	4,601.19	46,178.22	28,080.13	50,432.67	78,512.80	
W0416	Temporary Deck Plate Removal	m2	1,004.00	35.3%	5.9%	58.8%	35.8%	64.2%	42.70	15,132.62	2,513.39	25,224.79	15,338.73	27,532.07	42,870.80	
W0423	Temporary Access Bridge Railing Installation	m	264.00	36.1%	6.8%	57.1%	35.3%	64.7%	106.00	10,109.08	1,894.64	15,980.28	9,875.27	18,108.73	27,984.00	
W0424	Temporary Access Bridge Railing Removal	m	264.00	38.1%	5.4%	56.5%	34.2%	65.8%	56.90	5,720.26	812.13	8,489.21	5,140.88	9,880.72	15,021.60	
W05041	Temporary Steel Shapes Depreciation	t-d	100,117.50	0.0%	100.0%	0.0%	50.0%	50.0%	31.30	0.00	3,133,680.57	0.00	1,566,840.29	1,566,840.29	3,133,680.57	
W05051	Temporary Deck Plate Depreciation	m2-d	391,560.00	0.0%	100.0%	0.0%	50.0%	50.0%	11.10	0.00	4,346,316.00	0.00	2,173,158.00	2,173,158.00	4,346,316.00	
W05055	Temporary Pipe Railing Depreciation	m-d	102,960.00	0.0%	100.0%	0.0%	50.0%	50.0%	1.33	0.00	136,936.80	0.00	68,468.40	68,468.40	136,936.80	
	Miscellaneous	LS	1.00	15.0%	40.0%	45.0%	55.0%	45.0%		12,479.53	31,278.74	37,438.58	45,758.26	37,438.58	83,196.84	1.0%
	<b>Total</b>									163,277.09	7,715,938.63	523,665.08	4,159,939.63	4,242,941.17	8,402,880.80	
	<b>Components (%)</b>									1.9%	91.8%	6.2%	49.5%	50.5%	100.0%	
	<b>Unit Rate</b>	m								2,040.26	96,416.17	6,543.57	51,981.42	53,018.58	105,000.00	

Miscellaneous covers the cost for material haulage, maintenance, etc.

H-Pile = 1,390.5 m 130.7 t Pile Driving Length = 1,042.9 m  
 Superstructure = 126.0 t Deck Plate = 1,004.0 m2  
 Depreciation Period = 390 days Railing = 264.0 m

SPL 420(5)a Temporary Access Road (Causeway) for Angat Bridge Construction

Unit: 710.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
W0121	Borrow Soil, transported	m3	14,179.50	6.9%	22.1%	71.0%	48.5%	51.5%	221.00	217,047.04	691,222.72	2,225,399.75	1,520,880.36	1,612,789.14	3,133,669.50	Loss 15.0%
W0149	Filling, Laying & Compaction, bulldozer 21t	m3	12,330.00	1.5%	8.2%	90.3%	54.4%	45.6%	56.00	10,357.20	56,619.36	623,503.44	375,636.84	314,843.16	690,480.00	
W0122	Crushed Aggregate, transported	m3	1,338.75	9.1%	15.5%	75.4%	47.0%	53.0%	258.00	31,361.23	53,684.81	260,609.46	162,579.47	183,076.03	345,655.50	Loss 15.0%
W0149	Filling, Laying & Compaction, bulldozer 21t	m3	1,165.00	1.5%	8.2%	90.3%	54.4%	45.6%	56.00	978.60	5,349.68	58,911.72	35,492.05	29,747.95	65,240.00	
W0105	Excavation, Backhoe 0.61m3	m3	13,495.00	4.4%	8.4%	87.2%	52.9%	47.1%	40.90	24,285.60	46,363.42	481,296.48	291,861.38	260,084.12	551,945.50	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	13,495.00	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	102,220.65	185,153.57	967,660.78	646,015.58	609,019.42	1,256,035.00	
	Miscellaneous	LS	1.00	15.0%	40.0%	45.0%	45.0%	55.0%		9,063.04	24,168.10	27,189.11	27,189.11	33,231.14	60,420.26	1.0%
	<b>Total</b>									395,313.36	1,062,561.66	4,644,570.74	3,059,654.78	3,042,790.97	6,102,445.76	
	Components (%)									6.5%	17.4%	76.1%	50.1%	49.9%	100.0%	
	Unit Rate	m								556.46	1,495.70	6,537.85	4,306.87	4,283.13	8,590.00	

Miscellaneous covers the costs for maintenance works, minor works, etc.

SPL 420(5)b Temporary Access Road (Causeway) for Pampanga Bridge Construction

Unit: 880.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
W0121	Borrow Soil, transported	m3	14,099.00	6.9%	22.1%	71.0%	48.5%	51.5%	221.00	215,914.82	687,298.50	2,212,765.68	1,512,246.00	1,603,633.00	3,115,879.00	Loss 15.0%
W0149	Filling, Laying & Compaction, bulldozer 21t	m3	12,260.00	1.5%	8.2%	90.3%	54.4%	45.6%	56.00	10,298.40	56,297.92	619,963.68	373,504.27	313,055.73	686,560.00	
W0122	Crushed Aggregate, transported	m3	1,660.60	9.1%	15.5%	75.4%	47.0%	53.0%	258.00	38,871.77	66,541.51	323,021.52	201,514.81	226,919.99	428,434.80	Loss 15.0%
W0149	Filling, Laying & Compaction, bulldozer 21t	m3	1,444.00	1.5%	8.2%	90.3%	54.4%	45.6%	56.00	1,212.96	6,630.85	73,020.19	43,991.86	36,872.14	80,864.00	
W0105	Excavation, Backhoe 0.61m3	m3	13,704.00	4.4%	8.4%	87.2%	52.9%	47.1%	40.90	24,661.72	47,081.46	488,750.42	296,381.50	264,112.10	560,493.60	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	13,704.00	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	103,803.76	188,021.08	982,647.15	656,020.56	618,451.44	1,274,472.00	
	Miscellaneous	LS	1.00	15.0%	40.0%	45.0%	45.0%	55.0%		9,220.06	24,586.81	27,660.17	27,660.17	33,896.87	61,467.03	1.0%
	<b>Total</b>									403,883.49	1,076,458.14	4,727,828.81	3,111,319.16	3,096,851.27	6,208,170.43	
	Components (%)									6.5%	17.3%	76.2%	50.1%	49.9%	100.0%	
	Unit Rate	m								458.65	1,222.43	5,368.92	3,533.21	3,516.79	7,050.00	

Miscellaneous covers the costs for maintenance works, minor works, etc.

SPL 420(5)c Temporary Access Road (Causeway) for Talavera Bridge Construction

Unit: 300.00 m

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Remarks	
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		Total (PP)
W0121	Borrow Soil, transported	m3	7,762.50	6.9%	22.1%	71.0%	48.5%	51.5%	221.00	118,821.37	378,406.60	1,218,284.53	832,598.74	882,913.76	1,715,512.50	Loss 15.0%
W0149	Filling, Laying & Compaction, bulldozer 21t	m3	6,750.00	1.5%	8.2%	90.3%	54.4%	45.6%	56.00	5,670.00	30,996.00	341,334.00	205,640.61	173,359.39	378,000.00	
W0122	Crushed Aggregate, transported	m3	565.80	9.1%	15.5%	75.4%	47.0%	53.0%	258.00	13,244.40	22,672.04	110,059.96	68,660.17	77,316.23	145,976.40	Loss 15.0%
W0149	Filling, Laying & Compaction, bulldozer 21t	m3	492.00	1.5%	8.2%	90.3%	54.4%	45.6%	56.00	413.28	2,269.26	24,879.46	14,988.92	12,563.08	27,552.00	
W0105	Excavation, Backhoe 0.61m3	m3	7,242.00	4.4%	8.4%	87.2%	52.9%	47.1%	40.90	13,032.70	24,880.62	258,284.48	156,625.42	139,572.38	296,197.80	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	7,242.00	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	54,856.02	99,361.41	519,288.58	346,679.87	326,826.13	673,506.00	
	Miscellaneous	LS	1.00	15.0%	40.0%	45.0%	45.0%	55.0%		4,855.12	12,946.98	14,565.35	14,565.35	17,802.10	32,367.45	1.0%
	<b>Total</b>									210,892.89	571,522.90	2,486,696.36	1,639,759.07	1,629,353.08	3,269,112.15	
	Components (%)									6.5%	17.5%	76.1%	50.2%	49.8%	100.0%	
	Unit Rate	m								703.17	1,905.59	8,291.24	5,467.35	5,432.65	10,900.00	

Miscellaneous covers the costs for maintenance works, minor works, etc.

SPL 420(6)b Temporary Cofferdam for Pier Construction (Angat Bridge Type 1)

Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0451	Temporary Sheet Pile Driving for cofferdam, (Vibro Hammer)	m	3,494.00	9.6%	14.8%	75.6%	50.4%	49.6%	126.00	42,264.99	65,160.57	332,818.44	221,919.43	218,324.57	440,244.00	
W0452	Temporary Sheet Pile Removal for cofferdam, (Vibro Hammer)	m	3,494.00	9.6%	14.8%	75.6%	50.4%	49.6%	77.70	26,116.95	40,257.76	205,109.09	136,830.69	134,653.11	271,483.80	
W0455	H-Pile Driving for Temporary Access Bridge (Vibro Hammer)	m	124.00	9.6%	14.9%	75.5%	50.4%	49.6%	149.00	1,781.61	2,746.21	13,948.18	9,310.55	9,165.45	18,476.00	
W0456	H-Pile Removal for Temporary Access Bridge (Vibro Hammer)	m	124.00	9.7%	14.9%	75.4%	50.4%	49.6%	85.70	1,027.70	1,583.77	8,015.33	5,354.03	5,272.77	10,626.80	
W0413	Temporary Struts & Tie Rod Installation	t	61.60	31.0%	11.1%	58.0%	38.4%	61.6%	4,210.00	80,347.23	28,691.52	150,297.25	99,515.99	159,820.01	259,336.00	
W0414	Temporary Struts & Supports Removal	t	61.60	28.8%	9.4%	61.7%	39.3%	60.7%	2,120.00	37,658.24	12,296.08	80,637.68	51,358.59	79,233.41	130,592.00	
W0423	Temporary Access Bridge Railing Installation	m	49.20	36.1%	6.8%	57.1%	35.3%	64.7%	106.00	1,883.96	353.09	2,978.14	1,840.39	3,374.81	5,215.20	
W0424	Temporary Access Bridge Railing Removal	m	49.20	38.1%	5.4%	56.5%	34.2%	65.8%	56.90	1,066.05	151.35	1,582.08	958.07	1,841.41	2,799.48	
M05031	Temporary Sheet Pile Depreciation	t-d	20,045.00	0.0%	100.0%	0.0%	50.0%	50.0%	33.30	0.00	667,498.50	0.00	333,749.25	333,749.25	667,498.50	
M05041	Temporary Steel Shapes Depreciation	t-d	4,551.00	0.0%	100.0%	0.0%	50.0%	50.0%	31.30	0.00	142,446.30	0.00	71,223.15	71,223.15	142,446.30	
M05055	Temporary Pipe Railing Depreciation	m-d	4,200.00	0.0%	100.0%	0.0%	50.0%	50.0%	1.33	0.00	5,586.00	0.00	2,793.00	2,793.00	5,586.00	
W0431	Temporary Drain Pump Installation & Removal	set	1.00	46.2%	7.1%	46.6%	29.9%	70.1%	2,880.00	1,331.63	205.57	1,342.80	862.27	2,017.73	2,880.00	
W0432	Temporary Drain Pump Operation	day	60.00	8.2%	20.8%	71.1%	51.3%	48.7%	1,190.00	5,820.48	14,816.08	50,763.44	36,657.89	34,742.11	71,400.00	
W0121	Borrow Soil, transported	m3	671.88	6.9%	22.1%	71.0%	48.5%	51.5%	221.00	10,284.53	32,752.83	105,448.12	72,065.24	76,420.24	148,485.48	Loss 10.0%
W0131	Backfill A	m3	610.80	3.5%	8.0%	88.4%	53.3%	46.7%	88.80	1,924.75	4,358.18	47,956.11	28,911.88	25,327.16	54,239.04	
W0105	Excavation, Backhoe 0.61m3	m3	610.80	4.4%	8.4%	87.2%	52.9%	47.1%	40.90	1,099.20	2,098.46	21,784.06	13,210.00	11,771.72	24,981.72	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	610.80	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	4,626.63	8,380.27	43,797.50	29,239.45	27,564.95	56,804.40	
	Miscellaneous	LS	1.00	15.0%	40.0%	45.0%	50.0%	50.0%		3,469.64	9,252.38	10,408.93	11,565.47	11,565.47	23,130.95	1.0%
Total										220,703.60	1,038,634.92	1,076,887.15	1,127,365.35	1,208,860.32	2,336,225.67	
Components (%)										9.4%	44.5%	46.1%	48.3%	51.7%	100.0%	
Unit Rate			each							221,060.16	1,040,312.91	1,078,626.93	1,129,186.69	1,210,813.31	2,340,000.00	

Miscellaneous covers the costs for maintenance works, minor works, etc.

SPL 420(6)b Temporary Cofferdam for Pier Construction (Angat Bridge Type 2)

Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0451	Temporary Sheet Pile Driving for cofferdam, (Vibro Hammer)	m	5,020.00	9.6%	14.8%	75.6%	50.4%	49.6%	126.00	60,724.17	93,619.36	478,176.47	318,842.46	313,677.54	632,520.00	
W0452	Temporary Sheet Pile Removal for cofferdam, (Vibro Hammer)	m	5,020.00	9.6%	14.8%	75.6%	50.4%	49.6%	77.70	37,523.50	57,840.28	294,690.23	196,591.32	193,462.68	380,054.00	
W0455	H-Pile Driving for Temporary Access Bridge (Vibro Hammer)	m	124.00	9.6%	14.9%	75.5%	50.4%	49.6%	149.00	1,781.61	2,746.21	13,948.18	9,310.55	9,165.45	18,476.00	
W0456	H-Pile Removal for Temporary Access Bridge (Vibro Hammer)	m	124.00	9.7%	14.9%	75.4%	50.4%	49.6%	85.70	1,027.70	1,583.77	8,015.33	5,354.03	5,272.77	10,626.80	
W0413	Temporary Struts & Tie Rod Installation	t	86.00	31.0%	11.1%	58.0%	38.4%	61.6%	4,210.00	112,173.09	40,856.34	209,836.57	138,934.67	223,125.33	362,060.00	
W0414	Temporary Struts & Supports Removal	t	86.00	28.8%	9.4%	61.7%	39.3%	60.7%	2,120.00	52,574.81	17,166.60	112,578.58	71,701.93	110,618.07	182,320.00	
W0423	Temporary Access Bridge Railing Installation	m	52.80	36.1%	6.8%	57.1%	35.3%	64.7%	106.00	2,021.82	378.93	3,196.06	1,975.05	3,621.75	5,596.80	
W0424	Temporary Access Bridge Railing Removal	m	52.80	38.1%	5.4%	56.5%	34.2%	65.8%	56.90	1,144.05	162.43	1,697.84	1,028.18	1,976.14	3,004.32	
M05031	Temporary Sheet Pile Depreciation	t-d	22,921.00	0.0%	100.0%	0.0%	50.0%	50.0%	33.30	0.00	763,269.30	0.00	381,634.65	381,634.65	763,269.30	
M05041	Temporary Steel Shapes Depreciation	t-d	6,019.00	0.0%	100.0%	0.0%	50.0%	50.0%	31.30	0.00	188,394.70	0.00	94,197.35	94,197.35	188,394.70	
M05055	Temporary Pipe Railing Depreciation	m-d	3,168.00	0.0%	100.0%	0.0%	50.0%	50.0%	1.33	0.00	4,213.44	0.00	2,106.72	2,106.72	4,213.44	
W0431	Temporary Drain Pump Installation & Removal	set	1.00	46.2%	7.1%	46.6%	29.9%	70.1%	2,880.00	1,331.63	205.57	1,342.80	862.27	2,017.73	2,880.00	
W0432	Temporary Drain Pump Operation	day	60.00	8.2%	20.8%	71.1%	51.3%	48.7%	1,190.00	5,820.48	14,816.08	50,763.44	36,657.89	34,742.11	71,400.00	
W0121	Borrow Soil, transported	m3	770.88	6.9%	22.1%	71.0%	48.5%	51.5%	221.00	11,799.94	37,578.88	120,985.66	82,683.89	87,680.59	170,364.48	Loss 10.0%
W0131	Backfill A	m3	700.80	3.5%	8.0%	88.4%	53.3%	46.7%	88.80	2,208.36	5,000.35	55,022.33	33,171.98	29,059.06	62,231.04	
W0105	Excavation, Backhoe 0.61m3	m3	700.80	4.4%	8.4%	87.2%	52.9%	47.1%	40.90	1,261.16	2,407.67	24,993.89	15,156.46	13,506.26	28,662.72	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	700.80	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	5,308.35	9,615.09	50,250.96	33,547.81	31,626.59	65,174.40	
	Miscellaneous	LS	1.00	15.0%	40.0%	45.0%	50.0%	50.0%		4,441.87	11,844.99	13,325.62	14,806.24	14,806.24	29,612.48	1.0%
Total										301,142.53	1,250,899.99	1,438,817.98	1,438,563.45	1,552,297.03	2,990,860.48	
Components (%)										10.1%	41.8%	48.1%	48.1%	51.9%	100.0%	
Unit Rate			each							301,055.89	1,250,540.10	1,438,404.01	1,438,149.57	1,551,850.43	2,990,000.00	

Miscellaneous covers the costs for maintenance works, minor works, etc.

SPL 420(6)c Temporary Cofferdam for Pier Construction (Pampanga Bridge)

Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0451	Temporary Sheet Pile Driving for cofferdam. (Vibro Hammer)	m	3,852.00	9.6%	14.8%	75.6%	50.4%	49.6%	126.00	46,595.52	71,837.01	366,919.47	244,657.60	240,694.40	485,352.00	
W0452	Temporary Sheet Pile Removal for cofferdam. (Vibro Hammer)	m	3,852.00	9.6%	14.8%	75.6%	50.4%	49.6%	77.70	28,792.93	44,382.62	226,124.85	150,850.55	148,449.85	299,300.40	
W0455	H-Pile Driving for Temporary Access Bridge (Vibro Hammer)	m	92.00	9.6%	14.9%	75.5%	50.4%	49.6%	149.00	1,321.84	2,037.51	10,348.65	6,907.82	6,800.18	13,708.00	
W0456	H-Pile Removal for Temporary Access Bridge (Vibro Hammer)	m	92.00	9.7%	14.9%	75.4%	50.4%	49.6%	85.70	762.49	1,175.05	5,946.86	3,972.35	3,912.05	7,884.40	
W0413	Temporary Struts & Tie Rod Installation	t	69.50	31.0%	11.1%	58.0%	38.4%	61.6%	4,210.00	90,651.50	32,371.11	169,572.38	112,278.60	180,316.40	292,595.00	
W0414	Temporary Struts & Supports Removal	t	69.50	28.8%	9.4%	61.7%	39.3%	60.7%	2,120.00	42,487.79	13,873.01	90,979.20	57,945.16	89,394.84	147,340.00	
W0423	Temporary Access Bridge Railing Installation	m	52.80	36.1%	6.8%	57.1%	35.3%	64.7%	106.00	2,021.82	378.93	3,196.06	1,975.05	3,621.75	5,586.80	
W0424	Temporary Access Bridge Railing Removal	m	52.80	38.1%	5.4%	56.5%	34.2%	65.8%	56.90	1,144.05	162.43	1,697.84	1,028.18	1,976.14	3,004.32	
M05031	Temporary Sheet Pile Depreciation	t-d	17,588.00	0.0%	100.0%	0.0%	50.0%	50.0%	33.30	0.00	585,680.40	0.00	292,840.20	292,840.20	585,680.40	
M05041	Temporary Steel Shapes Depreciation	t-d	4,845.00	0.0%	100.0%	0.0%	50.0%	50.0%	31.30	0.00	151,648.50	0.00	75,824.25	75,824.25	151,648.50	
M05055	Temporary Pipe Railing Depreciation	m-d	3,168.00	0.0%	100.0%	0.0%	50.0%	50.0%	1.33	0.00	4,213.44	0.00	2,106.72	2,106.72	4,213.44	
W0431	Temporary Drain Pump Installation & Removal	set	1.00	46.2%	7.1%	46.6%	29.9%	70.1%	2,880.00	1,331.63	205.57	1,342.80	862.27	2,017.73	2,880.00	
W0432	Temporary Drain Pump Operation	day	60.00	8.2%	20.8%	71.1%	51.3%	48.7%	1,190.00	5,820.48	14,816.08	50,763.44	36,657.89	34,742.11	71,400.00	
W0121	Borrow Soil, transported	m3	818.40	6.9%	22.1%	71.0%	48.5%	51.5%	221.00	12,527.33	39,895.39	128,443.68	87,780.84	93,085.56	180,886.40	Loss 10.0%
W0131	Backfill A	m3	744.00	3.5%	8.0%	88.4%	53.3%	46.7%	88.80	2,344.49	5,308.59	58,414.12	35,216.83	30,850.37	66,067.20	
W0105	Excavation, Backhoe 0.6m3	m3	744.00	4.4%	8.4%	87.2%	52.9%	47.1%	40.90	1,338.90	2,556.09	26,534.61	16,090.76	14,328.84	30,429.60	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	744.00	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	5,635.58	10,207.80	53,348.62	35,615.83	33,576.17	69,192.00	
	Miscellaneous	LS	1.00	15.0%	40.0%	45.0%	50.0%	50.0%		3,625.74	9,668.63	10,877.21	12,085.79	12,085.79	24,171.58	1.0%
Total										246,402.09	990,418.16	1,204,509.80	1,174,696.70	1,266,633.35	2,441,330.04	
Components (%)										10.1%	40.6%	49.3%	48.1%	61.9%	100.0%	
Unit Rate			each							246,267.85	989,878.58	1,203,853.58	1,174,056.72	1,265,943.28	2,440,000.00	

Miscellaneous covers the costs for maintenance works, minor works, etc.

SPL 420(6)d Temporary Cofferdam for Pier Construction (Talavera Bridge)

Unit: 1.00 each

Item No.	Description	Unit	Quantity	Unit Rate					Total (PP)	Amount					Total (PP)	Remarks
				Component (%)						Component (PP)						
				Lab.	Mat.	Equip.	For.	Local		Labor	Material	Equipment	Foreign	Local		
W0451	Temporary Sheet Pile Driving for cofferdam. (Vibro Hammer)	m	2,470.00	9.6%	14.8%	75.6%	50.4%	49.6%	126.00	29,878.23	46,063.71	235,278.05	156,880.65	154,339.35	311,220.00	
W0452	Temporary Sheet Pile Removal for cofferdam. (Vibro Hammer)	m	2,470.00	9.6%	14.8%	75.6%	50.4%	49.6%	77.70	18,462.76	28,459.26	144,996.98	96,729.19	95,189.81	191,919.00	
W0455	H-Pile Driving for Temporary Access Bridge (Vibro Hammer)	m	92.00	9.6%	14.9%	75.5%	50.4%	49.6%	149.00	1,321.84	2,037.51	10,348.65	6,907.82	6,800.18	13,708.00	
W0456	H-Pile Removal for Temporary Access Bridge (Vibro Hammer)	m	92.00	9.7%	14.9%	75.4%	50.4%	49.6%	85.70	762.49	1,175.05	5,946.86	3,972.35	3,912.05	7,884.40	
W0413	Temporary Struts & Tie Rod Installation	t	37.40	31.0%	11.1%	58.0%	38.4%	61.6%	4,210.00	48,782.25	17,419.85	91,251.90	60,420.42	97,033.58	157,454.00	
W0414	Temporary Struts & Supports Removal	t	37.40	28.8%	9.4%	61.7%	39.3%	60.7%	2,120.00	22,863.93	7,465.48	48,958.59	31,182.00	48,106.00	79,288.00	
W0423	Temporary Access Bridge Railing Installation	m	49.10	36.1%	6.8%	57.1%	35.3%	64.7%	106.00	1,880.14	352.38	2,972.09	1,836.65	3,367.95	5,204.60	
W0424	Temporary Access Bridge Railing Removal	m	49.10	38.1%	5.4%	56.5%	34.2%	65.8%	56.90	1,063.88	151.04	1,578.86	956.13	1,837.66	2,793.79	
M05031	Temporary Sheet Pile Depreciation	t-d	15,369.00	0.0%	100.0%	0.0%	50.0%	50.0%	33.30	0.00	511,787.70	0.00	255,893.85	255,893.85	511,787.70	
M05041	Temporary Steel Shapes Depreciation	t-d	2,918.00	0.0%	100.0%	0.0%	50.0%	50.0%	31.30	0.00	91,333.40	0.00	45,666.70	45,666.70	91,333.40	
M05055	Temporary Pipe Railing Depreciation	m-d	2,943.00	0.0%	100.0%	0.0%	50.0%	50.0%	1.33	0.00	3,914.19	0.00	1,957.10	1,957.10	3,914.19	
W0431	Temporary Drain Pump Installation & Removal	set	1.00	46.2%	7.1%	46.6%	29.9%	70.1%	2,980.00	1,331.63	205.57	1,342.80	862.27	2,017.73	2,880.00	
W0432	Temporary Drain Pump Operation	day	60.00	8.2%	20.8%	71.1%	51.3%	48.7%	1,190.00	5,820.48	14,816.08	50,763.44	36,657.89	34,742.11	71,400.00	
W0121	Borrow Soil, transported	m3	587.95	6.9%	22.1%	71.0%	48.5%	51.5%	221.00	8,999.81	28,661.41	92,275.73	63,062.99	66,873.96	129,936.95	Loss 10.0%
W0131	Backfill A	m3	534.50	3.5%	8.0%	88.4%	53.3%	46.7%	88.80	1,684.32	3,813.76	41,965.52	25,300.26	22,163.34	47,463.60	
W0105	Excavation, Backhoe 0.6m3	m3	534.50	4.4%	8.4%	87.2%	52.9%	47.1%	40.90	961.89	1,836.33	19,062.84	11,559.83	10,301.22	21,861.05	
W0111	Disposal of Surplus Soil (backhoe loading)	m3	534.50	8.1%	14.8%	77.1%	51.5%	48.5%	93.00	4,048.68	7,333.43	38,326.39	25,586.91	24,121.59	49,708.50	
	Miscellaneous	LS	1.00	15.0%	40.0%	45.0%	50.0%	50.0%		2,549.64	6,799.03	7,548.91	8,498.79	8,498.79	16,997.57	1.0%
Total										150,411.94	773,625.17	792,717.64	833,931.80	882,622.95	1,716,754.75	
Components (%)										8.8%	45.1%	46.2%	48.6%	51.4%	100.0%	
Unit Rate			each							150,696.27	775,087.59	794,216.14	835,508.21	884,491.79	1,720,000.00	

Miscellaneous covers the costs for maintenance works, minor works, etc.