Department of Public Works and Highways

Bureau : DPWH
Region : IX
District/City : Zamboanga City

PROGRAM OF WORK

(For all types of Project)

NAME/LOCATION OF PROJECT : **Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur**	Approriation : P 180,000,000.00 Source of Funds : CY-2018 Issued Obligated Authority : Released : Cal. Days to Complete : 252.00 Cal. Days Desirable Starting Date : Upon Approval Mode of Implementation :
PROJECT CATEGORY : NATIONAL ROAD	
PROJECT DESCRIPTION : Scope of Work : Road Concreting Road Width : 6.70 m. Roadbed Width : 12.00 m. Subbase Course : 0.30 mtrs thick Surface Course : 0.15 mtrs thick	NET LENGTH : K6+140.00 to K7+315.48 K7+315.48 to K9+540.00 Net Length : **6.80** lane km Net Length : **3,400.00** ln.m. / **3.400** km

MINIMUM EQUIPMENT REQUIREMENT : TECHNICAL PERSONNEL REQUIRED :

DESCRIPTION	NO.	DESCRIPTION	NO.	DESCRIPTION	NO.
Dumptruck (10 Wheeler)	10	Water Pump	1	Project Engineer	1
Bullduzer	2	Portable Screed	1	Materials Engineer	1
Backhoe	3	Concrete Vibrator	2	Geometric Control	1
Road Grader	2	Concrete Cutter	2	Foreman	1
Road Roller	2	Bar Cutter	1	Materials Lab. Tech	1
Pay Loader	4	Bar Bender	1	Mason	10
Water Truck	2	Conc. Mixer (1-Bagger)	2	Carpenter	6
Water Tank	2	Plate Compactor	1	Laborers (Skilled)	10
Transit Mixer	4			Laborers (Unskilled)	20

ESTIMATED COST OF PROPOSED WORK

ITEM NO.	DESCRIPTION	% OF TOTAL	UNIT	QUANTITY	DIRECT COST	
					TOTAL	UNIT COST
101(2)	Removal of Existing Headwall	0.002	cu.m.	5.00	1,674.80	334.96
101(2)a	Removal of RCPC (610 mmΦ)	0.004	ea	6.00	2,733.16	455.53
102(2)	Surplus Common Excavation	0.831	cu.m.	3,684.00	614,618.91	166.83
103 (1)a	Structure Excavation	0.353	cu.m.	1,134.00	260,951.15	230.12
103(3)	Foundation Fill	0.005	cu.m.	5.00	4,003.49	800.70
103(6)a	Pipe Culvert and Drain Excavation	0.017	cu.m.	54.00	12,426.25	230.12
104(1)a1	Embankment from Roadway Excavation	5.470	cu.m.	17,843.00	4,044,726.72	226.68
105 (1)a	Subgrade Preparation	0.416	sq.m.	20,051.29	307,423.04	15.33
200 (1)	Aggregate Subbase Course	22.480	cu.m.	13,314.00	16,621,610.33	1,248.43
300 (1)	Aggregate Surface Course	2.277	cu.m.	1,235.00	1,683,837.29	1,363.43
311(1)e1a	Portland Cement Concrete Pavement-using Conventional Method, 0.28m thick	49.252	sq.m.	23,860.00	36,416,683.87	1,526.27
311(1)a	Portland Cement Concrete Pavement, 0.15m. Thick	1.789	sq.m	1,577.00	1,322,906.07	838.88
404(1)a	Reinforcing Steel Bar, Grade 40	1.039	kg.	15,727.00	768,439.13	48.86
404 (1)b	Reinforcing Steel Bar, Grade 60	0.856	kg.	12,415.00	632,682.54	50.96
405 (1) a3	Structural Concrete, Class A	9.134	cu.m	1,006.00	6,753,824.04	6,713.54
407(8)	Concrete Structure (Lean Concrete)	0.108	cu.m	10.12	79,947.38	7,899.94
500(1)b3	Pipe Culvert & Storm Drain	0.212	ln.m	41.00	156,639.67	3,820.48
611(1)	Trees Furnishing and Transplanting) 150mr	1.954	each	342.00	1,445,016.69	4,225.20
506(1)	Stone Masonry	0.049	cu.m	9.00	36,339.98	4,037.78
612(2)	Reflectorized Thermoplastic Pavement Markings (Yellow)	0.123	sq.m	125.00	91,101.79	728.81
612(2)	Reflectorized Thermoplastic Pavement Markings (Yellow)	0.822	sq.m	832.00	607,851.03	730.59
A.1.1(3)	Const. of Field Office for the Engineer	0.534	LS	1.00	394,701.68	394,701.68
A.1.1(11)	Prov. Of Furniture, Equipment and Appliances for Field Engineer	0.335	LS	1.00	248,063.32	248,063.32
A.1.2(5)	Operation & Maintenance of Gov't. Service Vehicle	0.495	L.S	1.00	365,808.00	365,808.00
B.5	Project Billboard	0.009	Unit	2.00	6,678.56	3,339.28
B.7	Occupational Safety & Health Program	0.272	L.S	1.00	201,148.32	201,148.32
B.9	Mobilization and Demobilization	0.986	L.S	1.00	729,234.00	729,234.00
B.4(1)	Construction Survey and Staking	0.173	Km.	3.40	127,847.87	37,602.32
TOTAL		**100.000**			P **73,938,919.07**	

Name of Project	: Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur
Station Limits	: K6+140.00 to K7+315.48
	K7+315.48 to K9+540.00

BREAKDOWN OF ESTIMATED EXPENDITURES	% OF TOTAL		AMOUNT
I. ESTIMATED COST			
A. DIRECT COST			
A.1 Materials	32.07		57,734,791.68
A.2 Labor	1.12		2,021,528.41
A.3 Equipment Expenses	7.88		14,182,598.98
SUB-TOTAL (DIRECT COST)	41.08	P	73,938,919.07
B. INDIRECT COST (Per DO # 197 s. 2016)			
B.1 Overhead, Contingency & Misc. (10% Max. of D.C.)	4.02		7,239,466.54
B.2 Profit (8% Max. D.C.)	3.23		5,807,665.10
C. VAT (5% of D.C. and I.C. per D.O. # 197)	2.42		4,349,302.54
SUB-TOTAL (CONTRACT COST)	50.74	P	91,335,353.25
II. ESTIMATED GOVERNMENT EXPENDITURES			
1 Engineering and Administrative Overhead (3.5%)	3.50		6,300,000.00
2 Detailed Engineering (1%)			
3 Reserved for the Payment of RROW)	45.76		82,364,646.75
4 Physical Reserved	0.00		
TOTAL ESTIMATED PROJECT COST	100.00	P	180,000,000.00

Prepared by:

SHERMIENEH M. BETONGGA
Engineer II

Checked by:

JERALD R. BARRERA
Engineer II

Submitted by:

LEONCIO B. SOLAMILLO
Chief, Construction Division

Recommending Approval:

CAYAMOMBAO D. DIA
Assistant Regional Director

APPROVED:

JORGE U. SEBASTIAN, JR., CESO III
Regional Director

APPROVED BUDGET FOR THE CONTRACT

Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur

Project Name and Location

Station Limits : K6+140.00 to K7+315.48 K7+315.48 to K9+540.00

Length : 3,400.00 ln.m.

Contract Duration : 252.00 *Calendar Days*

Item No.	Description	Quantity	Unit	Estimated Direct Cost	MARK-UP IN PERCENT OCM	MARK-UP IN PERCENT PROFIT	TOTAL MARK-UPS %	TOTAL MARK-UPS VALUE	VAT	TOTAL INDIRECT COST	TOTAL COST	TOTAL COST
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9) = (5)X(8)	(10) = [(5)+(9)]*5%	(11) = (9) + (10)	(12) = (5) + (11)	(13) = (12) / (3)
PART A	**FACILITIES FOR THE ENGINEER**				10.00	8.00	18.00					
A.1.1(3)	Const. of Field Office for the Engineer	1.00	LS	394,701.68	10.00	8.00	18.00	71,046.30	23,287.40	94,333.70	489,035.39	489,035.39
A.1.1(11)	Prov. Of Furniture, Equipment and Appliances for Field Engineer	1.00	LS	248,063.32	0.00	0.00	0.00	-	12,403.17	12,403.17	260,466.49	260,466.49
A.1.2(5)	Operation & Maintenance of Gov't. Service Vehicle	1.00	L.S	365,808.00	0.00	0.00	0.00	-	18,290.40	18,290.40	384,098.40	384,098.40
	TOTAL OF PART A			**1,008,573.00**				**71,046.30**	**53,980.97**	**125,027.27**	**1,133,600.27**	
PART B	**OTHER GENERAL REQUIREMENTS**											
B.5	Project Billboard	2.00	Unit	6,678.56	10.00	8.00	18.00	1,202.14	394.04	1,596.18	8,274.74	4,137.37
B.7	Occupational Safety & Health Program	1.00	L.S	201,148.32	0.00	8.00	8.00	16,091.87	10,862.01	26,953.87	228,102.19	228,102.19
B.9	Mobilization and Demobilization	1.00	L.S	729,234.00	0.00	0.00	0.00	-	36,461.70	36,461.70	765,695.70	765,695.70
B.4(1)	Construction Survey and Staking	3.40	Km.	127,847.87	10.00	8.00	18.00	23,012.62	7,543.02	30,555.64	158,403.52	46,589.27
	TOTAL OF PART B			**1,064,908.75**				**40,306.62**	**55,260.77**	**95,567.39**	**1,160,476.15**	
PART C	**EARTHWORKS**											
101(2)	Removal of Existing Headwall	5.00	cu.m.	1,674.80	10.00	8.00	18.00	301.46	98.81	400.28	2,075.08	415.02
101(2)a	Removal of RCPC (610 mmΦ)	6.00	ea	2,733.16	10.00	8.00	18.00	491.97	161.26	653.22	3,386.38	564.40
102(2)	Surplus Common Excavation	3,684.00	cu.m.	614,618.91	10.00	8.00	18.00	110,631.40	36,262.52	146,893.92	761,512.83	206.71
103 (1)a	Structure Excavation	1,134.00	cu.m.	260,951.15	10.00	8.00	18.00	46,971.21	15,396.12	62,367.32	323,318.47	285.11
103(3)	Foundation Fill	5.00	cu.m.	4,003.49	10.00	8.00	18.00	720.63	236.21	956.83	4,960.32	992.06
103(6)a	Pipe Culvert and Drain Excavation	54.00	cu.m.	12,426.25	10.00	8.00	18.00	2,236.72	733.15	2,969.87	15,396.12	285.11
104(1)a1	Embankment from Roadway Excavation	17,843.00	cu.m.	4,044,726.72	10.00	8.00	18.00	728,050.81	238,638.88	966,689.69	5,011,416.40	280.86
105 (1)a	Subgrade Preparation	20,051.29	sq.m.	307,423.04	10.00	8.00	18.00	55,336.15	18,137.96	73,474.11	380,897.14	19.00
	TOTAL OF PART C			**5,248,557.50**				**944,740.35**	**309,664.89**	**1,254,405.24**	**6,502,962.74**	
PART D	**SUBBASE AND BASE COURSE**											
200 (1)	Aggregate Subbase Course	13,314.00	cu.m.	16,621,610.33	10.00	8.00	18.00	2,991,889.86	980,675.01	3,972,564.87	20,594,175.20	1,546.81
	TOTAL OF PART D			**16,621,610.33**				**2,991,889.86**	**980,675.01**	**3,972,564.87**	**20,594,175.20**	
PART E	**SURFACE COURSES**											
300 (1)	Aggregate Surface Course	1,235.00	cu.m.	1,683,837.29	10.00	8.00	18.00	303,090.71	99,346.40	402,437.11	2,086,274.40	1,689.29
311(1)e1a	Portland Cement Concrete Pavement-using Conventional Method, 0.28m thick	23,860.00	sq.m.	36,416,683.87	10.00	8.00	18.00	6,555,003.10	2,148,584.35	8,703,587.45	45,120,271.32	1,891.04
311(1)a	Portland Cement Concrete Pavement, 0.15m. Thick	1,577.00	sq.m	1,322,906.07	10.00	8.00	18.00	238,123.09	78,051.46	316,174.55	1,639,080.62	1,039.37
	TOTAL OF PART E			**39,423,427.23**				**7,096,216.90**	**2,325,982.21**	**9,422,199.11**	**48,845,626.33**	
PART F	**BRIDGE CONSTRUCTION**											
404(1)a	Reinforcing Steel Bar, Grade 40	15,727.00	kg.	768,439.13	10.00	8.00	18.00	138,319.04	45,337.91	183,656.95	952,096.08	60.54
404 (1)b	Reinforcing Steel Bar, Grade 60	12,415.00	kg.	632,682.54	10.00	8.00	18.00	113,882.86	37,328.27	151,211.13	783,893.67	63.14
405 (1) a3	Structural Concrete, Class A	1,006.00	cu.m	6,753,824.04	10.00	8.00	18.00	1,215,688.33	398,475.62	1,614,163.95	8,367,987.99	8,318.08
407(8)	Concrete Structure (Lean Concrete)	10.12	cu.m	79,947.38	10.00	8.00	18.00	14,390.53	4,716.90	19,107.42	99,054.80	9,788.02
	TOTAL OF PART F			**8,234,893.09**				**1,482,280.76**	**485,858.69**	**1,968,139.45**	**10,203,032.54**	
PART G	**DRAINAGE AND SLOPE PROTECTION STRUCTURES**											
500(1)b3	Pipe Culvert & Storm Drain	41.00	ln.m	156,639.67	10.00	8.00	18.00	28,195.14	9,241.74	37,436.88	194,076.56	4,733.57
506(1)	Stone Masonry	9.00	cu.m	36,339.98	10.00	8.00	18.00	6,541.20	2,144.06	8,685.26	45,025.24	5,002.80
	TOTAL OF PART G			**192,979.66**				**34,736.34**	**11,385.80**	**46,122.14**	**239,101.79**	
PART H	**MISCELLANEOUS STRUCTURES**											
611(1)	Trees Furnishing and Transplanting) 150mm Φ or less	342.00	each	1,445,016.69	10.00	8.00	18.00	260,103.00	85,255.98	345,358.99	1,790,375.68	5,235.02
612(2)	Reflectorized Thermoplastic Pavement Markings (Yellow)	125.00	sq.m	91,101.79	10.00	8.00	18.00	16,398.32	5,375.01	21,773.33	112,875.11	903.00
612(2)	Reflectorized Thermoplastic Pavement Markings (Yellow)	832.00	sq.m	607,851.03	10.00	8.00	18.00	109,413.19	35,863.21	145,276.40	753,127.43	905.20
	TOTAL OF PART H			**2,143,969.51**				**385,914.51**	**126,494.20**	**512,408.71**	**2,656,378.22**	
	TOTAL			**73,938,919.07**				**13,047,131.64**	**3,368,627.53**	**17,396,434.18**	**91,335,353.25**	

Prepared by:

BELEN A. SAPALLEDA
Head TWG, BAC

Recommending Approval:

CAYAMOMBAO D. DIA
Assistant Regional Director

APPROVED:

JORGE U. SEBASTIAN, JR., CESO III
Regional Director

SUMMARY

Name of Project : **Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur**

Item No.	Description	Quantity	Unit	Labor	Equipment	Materials	OCM	Profit	VAT	TOTAL
101(2)	Removal of Existing Headwall	5.00	cu.m.	81.03	1,593.78	-	167.48	133.98	98.81	2,075.08
101(2)a	Removal of RCPC (610 mmΦ)	6.00	ea	162.05	2,571.11	-	273.32	218.65	161.26	3,386.38
102(2)	Surplus Common Excavation	3,684.00	cu.m.	12,576.56	602,042.35	-	61,461.89	49,169.51	36,262.52	761,512.83
103 (1)a	Structure Excavation	1,134.00	cu.m.	11,613.86	249,337.29	-	26,095.11	20,876.09	15,396.12	323,318.47
103(3)	Foundation Fill	5.00	cu.m.	990.44	590.00	2,423.05	400.35	320.28	236.21	4,960.32
103(6)a	Pipe Culvert and Drain Excavation	54.00	cu.m.	553.04	11,873.20	-	1,242.62	994.10	733.15	15,396.12
104(1)a1	Embankment from Roadway Excavation	17,843.00	cu.m.	105,827.37	3,938,899.35	-	404,472.67	323,578.14	238,638.88	5,011,416.40
105 (1)a	Subgrade Preparation	20,051.29	sq.m.	10,831.04	296,592.00	-	30,742.30	24,593.84	18,137.96	380,897.14
200 (1)	Aggregate Subbase Course	13,314.00	cu.m.	43,150.67	1,181,617.50	15,396,842.16	1,662,161.03	1,329,728.83	980,675.01	20,594,175.20
300 (1)	Aggregate Surface Course	1,235.00	cu.m.	4,002.64	109,606.25	1,570,228.40	168,383.73	134,706.98	99,346.40	2,086,274.40
311(1)e1a	Portland Cement Concrete Pavement-using Conventional Method, 0.28m thick	23,860.00	sq.m.	336,716.47	4,994,905.31	31,085,062.10	3,641,668.39	2,913,334.71	2,148,584.35	45,120,271.32
311(1)a	Portland Cement Concrete Pavement, 0.15m. Thick	1,577.00	sq.m	11,922.64	185,079.46	1,125,903.97	132,290.61	105,832.49	78,051.46	1,639,080.62
404(1)a	Reinforcing Steel Bar, Grade 40	15,727.00	kg.	46,266.21	35,217.56	686,955.36	76,843.91	61,475.13	45,337.91	952,096.08
404 (1)b	Reinforcing Steel Bar, Grade 60	12,415.00	kg.	36,522.86	27,800.98	568,358.70	63,268.25	50,614.60	37,328.27	783,893.67
405 (1) a3	Structural Concrete, Class A	1,006.00	cu.m	837,800.39	428,840.73	5,487,182.91	675,382.40	540,305.92	398,475.62	8,367,987.99
407(8)	Concrete Structure (Lean Concrete)	10.12	cu.m	4,628.67	19,612.92	55,705.78	7,994.74	6,395.79	4,716.90	99,054.80
500(1)b3	Pipe Culvert & Storm Drain	41.00	ln.m	14,694.81	35,499.48	106,445.38	15,663.97	12,531.17	9,241.74	194,076.56
611(1)	Trees Furnishing and Transplanting) 150mm Φ or less	342.00	each	74,367.90	1,219,826.79	150,822.00	144,501.67	115,601.34	85,255.98	1,790,375.68
506(1)	Stone Masonry	9.00	cu.m	3,050.09	2,886.64	30,403.25	3,634.00	2,907.20	2,144.06	45,025.24
612(2)	Reflectorized Thermoplastic Pavement Markings (Yellow)	125.00	sq.m	2,219.85	7,466.25	81,415.69	9,110.18	7,288.14	5,375.01	112,875.11
612(2)	Reflectorized Thermoplastic Pavement Markings (Yellow)	832.00	sq.m	14,775.32	51,172.89	541,902.82	60,785.10	48,628.08	35,863.21	753,127.43
A.1.1(3)	Const. of Field Office for the Engineer	1.00	LS	53,245.60	31,804.56	309,651.52	39,470.17	31,576.13	23,287.40	489,035.39
A.1.1(11)	Prov. Of Furniture, Equipment and Appliances for Field Engineer	1.00	LS	-	-	248,063.32	-	-	12,403.17	260,466.49
A.1.2(5)	Operation & Maintenance of Gov't. Service Vehicle	1.00	L.S	111,686.40	-	254,121.60	-	-	18,290.40	384,098.40
B.5	Project Billboard	2.00	Unit	434.90	-	6,243.66	667.86	534.28	394.04	8,274.74
B.7	Occupational Safety & Health Program	1.00	L.S	188,788.32	-	12,360.00	-	16,091.87	10,862.01	228,102.19
B.9	Mobilization and Demobilization	1.00	L.S	-	729,234.00	-	-	-	36,461.70	765,695.70
B.4(1)	Construction Survey and Staking	3.40	Km.	94,619.28	18,528.59	14,700.00	12,784.79	10,227.83	7,543.02	158,403.52
TOTAL				**2,021,528.41**	**14,182,598.98**	**57,734,791.68**	**7,239,466.54**	**5,807,665.10**	**4,349,302.54**	**91,335,353.25**

Name of Project : **Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur**

Net Length : 3,400.00 ln.m.

Item No.	Description	Quantity	Unit	DURATION # OF DAYS
101(2)	Removal of Existing Headwall	5.00	cu.m.	0.06
101(2)a	Removal of RCPC (610 mmΦ)	6.00	ea	0.13
102(2)	Surplus Common Excavation	3,684.00	cu.m.	7.68
103 (1)a	Structure Excavation	1,134.00	cu.m.	7.09
103(3)	Foundation Fill	5.00	cu.m.	0.50
103(6)a	Pipe Culvert and Drain Excavation	54.00	cu.m.	0.34
104(1)a1	Embankment from Roadway Excavation	17,843.00	cu.m.	37.02
105 (1)a	Subgrade Preparation	20,051.29	sq.m.	8.35
200 (1)	Aggregate Subbase Course	13,314.00	cu.m.	33.29
300 (1)	Aggregate Surface Course	1,235.00	cu.m.	3.09
311(1)e1a	Portland Cement Concrete Pavement-using Conventional Method, 0.28m thick	23,860.00	sq.m.	51.87
311(1)a	Portland Cement Concrete Pavement, 0.15m. Thick	1,577.00	sq.m	1.84
404(1)a	Reinforcing Steel Bar, Grade 40	15,727.00	kg.	10.92
404 (1)b	Reinforcing Steel Bar, Grade 60	12,415.00	kg.	8.62
405 (1) a3	Structural Concrete, Class A	1,006.00	cu.m	44.91
407(8)	Concrete Structure (Lean Concrete)	10.12	cu.m	0.90
500(1)b3	Pipe Culvert & Storm Drain	41.00	ln.m	5.13
506(1)	Stone Masonry	9.00	cu.m	0.72
611(1)	Trees Furnishing and Transplanting) 150mm Φ or less	342.00	each	42.75
612(2)	Reflectorized Thermoplastic Pavement Markings (Yellow)	125.00	sq.m	0.63
612(2)	Reflectorized Thermoplastic Pavement Markings (Yellow)	832.00	sq.m	4.16
A.1.1(3)	Const. of Field Office for the Engineer	1.00	LS	10.00
A.1.1(11)	Prov. Of Furniture, Equipment and Appliances for Field Engineer	1.00	LS	12.00
A.1.2(5)	Operation & Maintenance of Gov't. Service Vehicle	1.00	L.S	252.00
B.5	Project Billboard	2.00	Unit	0.25
B.7	Occupational Safety & Health Program	1.00	L.S	168.00
B.9	Mobilization and Demobilization	1.00	L.S	3.00
B.4(1)	Construction Survey and Staking	3.40	Km.	11.33

WEEKS (6 WORKING DAYS): 1–60

TOTAL NO. OF WORKING DAYS	:	168
INCLEMENT WEATHER & CURING TIME	:	56
NUMBER OF SUNDAYS	:	28
TOTAL NO. CALENDAR DAYS	:	**252**

Prepared by:

SHERMIEKEH M. BETONGGA
Engineer II

Submitted by:

LEONCIO B. SOLAMILLO
Chief, Construction Division

APPROVED:

JORGE U. SEBASTIAN, JR., CESO III
Regional Director

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur

Item No./Description : 101(2) Removal of Existing Headwall
Unit of Measurement : cu.m
Output per hour : 10.00
Quantity : 5.00 cu.m.
5.00 cu.m.

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.06	611.92	38.25
	b. Laborer	2	0.06	342.24	42.78
	Sub-total for A			P	81.03
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe w/ breaker	1	0.03	15,984.80	499.53
	b. Backhoe	1	0.03	12,296.00	384.25
	c. Dumptruck	1	0.06	11,360.00	710.00
	Sub-total for B			P	1,593.78
C.	Total (A+B)			P	1,674.80
D.	Output/day 80.00 cu.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	Sub-total for E			P	0.00
F.	Direct Cost (C+E)				1,674.80
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	167.48
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	133.98
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	98.81
J.	Total Unit Cost				415.02

mae b.

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur

Item No./Description : 102(2) Surplus Common Excavation
Unit of Measurement : cu.m.
Output per hour : 60.00
Quantity : 3,684.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	7.68	611.92	4,696.49
	b. Laborer	3	7.68	342.24	7,880.08
	Sub-total for A			P	12,576.56
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Bullduzer	1	7.68	27,032.00	207,470.60
	b. Payloader	1	7.68	13,864.00	106,406.20
	c. Payloader	1	1.92	13,864.00	26,601.55
	d. Dumptruck	3	7.68	11,360.00	261,564.00
	Sub-total for B			P	602,042.35
C.	Total (A+B)			P	614,618.91
D.	Output/day 480.00 cu.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	Sub-total for E			P	0.00
F.	Direct Cost (C+E)				614,618.91
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		61,461.89
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		49,169.51
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		36,262.52
J.	Total Unit Cost				206.71

mae b.

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur

Item No./Description : 103 (1)a Structure Excavation
Unit of Measurement : cu.m.
Output per hour : 20.00
Quantity : 1,134.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	7.09	611.92	4,336.98
	b. Laborers	3	7.09	342.24	7,276.88
	Sub-total for A			P	11,613.86
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Dumptruck	2	7.09	11,360.00	161,028.00
	b. Backhoe	1	7.09	12,296.00	87,147.90
	Minor Tools (10% of Labor)				1,161.39
	Sub-total for B			P	249,337.29
C.	Total (A+B)			P	260,951.15
D.	Output/day 160.00 cu.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	Sub-total for E			P	0.00
F.	Direct Cost (C+E)				260,951.15
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		26,095.11
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		20,876.09
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		15,396.12
J.	Total Unit Cost				285.11

mae b.

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur

Item No./Description : 103(3) Foundation Fill
Unit of Measurement : cu.m.
Output per hour : 1.25
Quantity : 5.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.50	611.92	305.96
	b. Laborer	4	0.50	342.24	684.48
	Sub-total for A			P	990.44
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Plate Compactor	1	0.50	984.00	492.00
	b. Water Truck	1	0.01	19,600.00	98.00
	c. Minor Tools (10% of Labor)				
	Sub-total for B			P	590.00
C.	Total (A+B)			P	1,580.44
D.	Output/day 10.00 cu.m. /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Filling Materials	5.75	cu.m.	421.40	2,423.05
	Sub-total for E			P	2,423.05
F.	Direct Cost (C+E)				4,003.49
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		400.35
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		320.28
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		236.21
J.	Total Unit Cost				992.06

mae b.

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur

Item No./Description : 103(6)a Pipe Culvert and Drain Excavation
Unit of Measurement : cu.m.
Output per hour : 20.00
Quantity : 54.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.34	611.92	206.52
	b. Laborer	3	0.34	342.24	346.52
	Sub-total for A			P	553.04
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Dumptruck	2	0.34	11,360.00	7,668.00
	b. Backhoe	1	0.34	12,296.00	4,149.90
	Minor Tools (10% of Labor)				55.30
	Sub-total for B			P	11,873.20
C.	Total (A+B)			P	12,426.25
D.	Output/day 160.00 cu.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a.				
	Sub-total for E			P	0.00
F.	Direct Cost (C+E)				12,426.25
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	1,242.62
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	994.10
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	733.15
J.	Total Unit Cost				285.11

mae b.

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	: Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur
Item No./Description	: 104(1)a1 Embankment from Roadway Excavation
Unit of Measurement	: cu.m.
Output per hour	: 50.00
Quantity	: 17,843.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	For Excavation Work				
	a. Construction Foreman	1	37.02	611.92	22,655.86
	b. Laborer	2	37.02	342.24	25,342.34
	Spreading & Compaction				
	a. Construction Foreman	1	44.61	611.92	27,296.22
	b. Laborer	2	44.61	342.24	30,532.94
	Sub-total for A			P	105,827.37
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	For Excavation Work				
	a. Bulldozer	1	37.02	27,032.00	1,000,838.85
	b. Payloader	1	37.02	13,864.00	513,303.86
	c. Dumptruck	2	37.02	11,360.00	841,190.39
	Spreading and Compaction				
	a. Road Grader	1	44.61	17,384.00	775,456.78
	b. Road Roller	1	44.61	13,216.00	589,532.72
	c. Water Truck	1	11.15	19,600.00	218,576.75
	Sub-total for B			P	3,938,899.35
C.	Total (A+B)			P	4,044,726.72
D.	Output/day 400.00 cu.m.	/day			
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	Sub-total for E			P	0.00
F.	Direct Cost (C+E)				4,044,726.72
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	404,472.67
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	323,578.14
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	238,638.88
J.	Total Unit Cost				280.86

mae b.

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur

Item No./Description : 105 (1)a Subgrade Preparation

Unit of Measurement : sq.m.

Output per hour : 300.00

Quantity : 20,051.29

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	8.35	611.92	5,112.41
	b. Laborer	2	8.35	342.24	5,718.63
	Sub-total for A			P	10,831.04
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Road Grader	1	8.35	17,384.00	145,238.18
	b. Road Roller	1	8.35	13,216.00	110,415.77
	c. Water Truck	1	2.09	19,600.00	40,938.05
	Sub-total for B			P	296,592.00
C.	Total (A+B)			P	307,423.04
D.	Output/day 2,400.00 sq.m. /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a.				
	Sub-total for E			P	0.00
F.	Direct Cost (C+E)				307,423.04
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	30,742.30
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	24,593.84
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	18,137.96
J.	Total Unit Cost				19.00

mae b.

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur

Item No./Description : 200 (1) Aggregate Subbase Course
Unit of Measurement : cu.m.
Output per hour : 50.00
Quantity : 13,314.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	33.29	611.92	20,367.76
	b. Laborer	2	33.29	342.24	22,782.92
	Sub-total for A			P	43,150.67
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Road Grader	1	33.29	17,384.00	578,626.44
	b. Road Roller	1	33.29	13,216.00	439,894.56
	c. Water Truck	1	8.32	19,600.00	163,096.50
	Sub-total for B			P	1,181,617.50
C.	Total (A+B)			P	1,224,768.17
D.	Output/day 400.00 cu.m. /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Aggregate Subbase Course (w/ Shrinkage of 15%)	15,311.10	cu.m.	1,005.60	15,396,842.16
	Sub-total for E			P	15,396,842.16
F.	Direct Cost (C+E)				16,621,610.33
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		1,662,161.03
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		1,329,728.83
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		980,675.01
J.	Total Unit Cost				1,546.81

mae b.

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur

Item No./Description : 300 (1) Aggregate Surface Course
Unit of Measurement : cu.m.
Output per hour : 50.00
Quantity : 1,235.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	3.09	611.92	1,889.30
	b. Laborer	2	3.09	342.24	2,113.33
	Sub-total for A			P	4,002.64
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Road Grader	1	3.09	17,384.00	53,673.10
	b. Road Roller	1	3.09	13,216.00	40,804.40
	c. Water Truck	1	0.77	19,600.00	15,128.75
	Sub-total for B			P	109,606.25
C.	Total (A+B)			P	113,608.89
D.	Output/day 400.00 cu.m. /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Aggregate Surface Course (w/ shrinkage of 15%)	1,420.25	cu.m.	1,105.60	1,570,228.40
	Sub-total for E			P	1,570,228.40
F.	Direct Cost (C+E)				1,683,837.29
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		168,383.73
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		134,706.98
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		99,346.40
J.	Total Unit Cost				1,689.29

mae b.

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur
Item No./Description	:	311(1)e1a Portland Cement Concrete Pavement-using Conventional Method, 0.28m thick
Unit of Measurement	:	sq.m.
Output per hour	:	57.50
Quantity	:	23,860.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	51.87	611.92	31,740.02
	b. Skilled	4	51.87	443.20	91,954.37
	c. Laborer	12	51.87	342.24	213,022.08
	Sub-total for A			P	336,716.47
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Transit Mixer	4	51.87	10,544.00	2,187,650.78
	b. Concrete Vibrator	2	51.87	730.00	75,729.57
	c. Batching Plant	1	51.87	14,076.00	730,116.00
	d. Pay Loader	1	51.87	13,864.00	719,119.65
	e. Concrete Screeder	1	51.87	4,360.00	226,151.30
	f. Water Truck	1	51.87	19,600.00	1,016,643.48
	g. Concrete Saw	1	51.87	261.04	13,540.03
	h. Bar Cutter	1	5.19	1,758.00	9,118.67
	Minor Tools (5% of labor)				16,835.82
	Sub-total for B			P	4,994,905.31
C.	Total (A+B)			P	5,331,621.78
D.	Output/day 460.00 sq.m.	/day			
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Reinforcing Steel Bar	11,930.00	kg	40.00	477,200.00
	b. Curing Compound	6,919.40	lit	40.00	276,776.00
	c. Asphalt Sealant	4,056.20	lit	75.00	304,215.00
	d. Sand	3,674.44	cu.m	1,105.60	4,062,460.86
	e. Gravel	6,680.80	cu.m	1,155.60	7,720,332.48
	f. Cement	63,467.60	bag	276.18	17,528,249.12
	g. Concrete Saw	3.58	pc	8,000.00	28,632.00
	h. Pipe Sleeve, 2" dia.	186.11	l.m	133.00	24,752.36
	i. Grease/Tar	186.11	lit	21.00	3,908.27
	j. Steel Forms	10,975.60	m	60.00	658,536.00
	Sub-total for E			P	31,085,062.10
F.	Direct Cost (C+E)				36,416,683.87
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		3,641,668.39
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		2,913,334.71
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		2,148,584.35
J.	Total Unit Cost				1,891.04

mae b.

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	: Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur
Item No./Description	: 311(1)a Portland Cement Concrete Pavement, 0.15m. Thick
Unit of Measurement	: sq.m
Output per hour	: 107.33
Quantity	: 1,577.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	1.84	611.92	1,123.87
	b. Skilled	4	1.84	443.20	3,255.97
	c. Laborer	12	1.84	342.24	7,542.80
	Sub-total for A			P	11,922.64
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Transit Mixer	4	1.84	10,544.00	77,461.51
	b. Concrete Vibrator	2	1.84	730.00	2,681.47
	c. Batching Plant	1	1.84	14,076.00	25,852.34
	d. Pay Loader	1	1.84	13,864.00	25,462.97
	e. Concrete Screeder	1	1.84	4,360.00	8,007.69
	f. Water Truck	1	1.84	19,600.00	35,997.86
	g. Concrete Saw	1	1.84	261.04	479.43
	h. Bar Cutter	1	0.18	1,758.00	322.88
	Minor Tools (5% of Labor)				8,813.31
	Sub-total for B			P	185,079.46
C.	Total (A+B)			P	197,002.10
D.	Output/day 858.64 sq.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Reinforcing Steel Bar	520.41	kg	40.00	20,816.40
	b. Curing Compound	457.33	lit	40.00	18,293.20
	c. Asphalt Sealant	189.24	lit	75.00	14,193.00
	d. Steel Form	725.42	l.m	40.00	29,016.80
	e. Sand	130.10	cu.m	1,105.60	143,841.32
	f. Gravel	236.55	cu.m	1,155.60	273,357.18
	g. Cement	2,255.11	bag	276.18	622,808.01
	h. Concrete Saw	0.24	pc	8,000.00	1,892.40
	i. Pipe Sleeve, 1" dia.	12.30	l.m	133.00	1,635.98
	j. Grease/Tar	2.37	lit	21.00	49.68
	Sub-total for E			P	1,125,903.97
F.	Direct Cost (C+E)				1,322,906.07
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		132,290.61
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		105,832.49
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		78,051.46
J.	Total Unit Cost				1,039.37

mae b.

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	: Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur
Item No./Description	: 404(1)a Reinforcing Steel Bar, Grade 40
Unit of Measurement	: kg.
Output per hour	: 180.00
Quantity	: 15,727.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	10.92	611.92	6,683.10
	b. Skilled	2	10.92	443.20	9,680.84
	c. Laborer	8	10.92	342.24	29,902.27
	Sub-total for A			P	46,266.21
	Name and Capacity	**No. of Equip.**	**No. of Days**	**Daily Rate**	**Amount**
B	Equipment, (2014 ACEL Rates)				
	a. Bar Cutter	1	5.46	1,758.00	9,600.02
	b. Bar Bender	1	5.46	2,812.00	15,355.67
	c. Cargo Truck	1	1.64	6,264.00	10,261.87
	Sub-total for B			P	35,217.56
C.	Total (A+B)			P	81,483.77
D.	Output/day 1,440.00 kg. /day				
	Name and Specifications	**Quantity**	**Unit**	**Unit Cost**	**Amount**
E.	Materials				
	a. Tie Wire	330.27	kgs	80.00	26,421.36
	b. Reinforcing Steel Bar, Grade 40	16,513.35	kgs	40.00	660,534.00
	Sub-total for E			P	686,955.36
F.	Direct Cost (C+E)				768,439.13
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		76,843.91
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		61,475.13
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		45,337.91
J.	Total Unit Cost				60.54

mae b.

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur

Item No./Description : 404 (1)b Reinforcing Steel Bar, Grade 60

Unit of Measurement : kg.

Output per hour : 180.00

Quantity : 12,415.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	8.62	611.92	5,275.69
	b. Skilled Laborer	2	8.62	443.20	7,642.12
	c. Laborer	8	8.62	342.24	23,605.05
	Sub-total for A			P	36,522.86
	Name and Capacity	**No. of Equip.**	**No. of Days**	**Daily Rate**	**Amount**
B	Equipment, (2009 ACEL Rates)				
	a. Bar Cutter	1	4.31	1,758.00	7,578.32
	b. Bar Bender	1	4.31	2,812.00	12,121.87
	c. Cargo Truck	1	1.29	6,264.00	8,100.79
	Sub-total for B			P	27,800.98
C.	Total (A+B)			P	64,323.84
D.	Output/day 1,440.00 kg. /day				
	Name and Specifications	**Quantity**	**Unit**	**Unit Cost**	**Amount**
E.	Materials				
	a. Tie Wire	260.72	kg	80.00	20,857.20
	b. Reinforcing Steel Bar, Grade 60	13,035.75	kg	42.00	547,501.50
	Sub-total for E			P	568,358.70
F.	Direct Cost (C+E)				632,682.54
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		63,268.25
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		50,614.60
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		37,328.27
J.	Total Unit Cost				63.14

mae b.

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur

Item No./Description : 405 (1) a3 Structural Concrete, Class A
Unit of Measurement : cu.m
Output per hour : 1.40
Quantity : 1,006.00

Note: Use Two (2) gangs

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	44.91	611.92	27,481.76
	b. Skilled Laborer	8	44.91	443.20	159,235.43
	c. Laborer	16	44.91	342.24	245,923.89
	Installation/Removal of Form Works				
	a. Skilled Laborer	8	44.91	443.20	159,235.43
	b. Laborer	16	44.91	342.24	245,923.89
	Sub-total for A			P	837,800.39
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. One Bagger Mixer	2	44.91	1,376.00	123,594.29
	b. Concrete Vibrator	2	44.91	972.00	87,306.43
	c. Water Truck	2	4.49	19,600.00	176,050.00
	Minor Tools (5% of Labor)				41,890.02
	Sub-total for B			P	428,840.73
C.	Total (A+B)			P	1,266,641.13
D.	Output/day 22.40 cu.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Form Lumber	17,605.00	bd.ft	37.00	651,385.00
	b. Plywood	402.40	pc	1,072.00	431,372.80
	c. Assorted CW Nails	704.20	kg.	65.83	46,357.49
	d. Portland Cement	9,557.00	bag	276.18	2,639,417.23
	e. Sand	503.00	cu.m	1,105.60	556,116.80
	f. Gravel	1,006.00	cu.m	1,155.60	1,162,533.60
	Sub-total for E			P	5,487,182.91
F.	Direct Cost (C+E)				6,753,824.04
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		675,382.40
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		540,305.92
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		398,475.62
J.	Total Unit Cost				8,318.08

mae b.

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur
Item No./Description	:	407(8) Concrete Structure (Lean Concrete)
Unit of Measurement	:	cu.m
Output per hour	:	1.40
Quantity	:	10.12

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.90	611.92	552.91
	b. Skilled Laborer	4	0.90	443.20	1,601.85
	c. Laborer	8	0.90	342.24	2,473.91
	Sub-total for A			P	4,628.67
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. One Bagger Mixer	1	0.90	1,376.00	1,243.31
	b. Concrete Vibrator	1	0.90	730.00	659.61
	c. Water Truck	1	0.90	19,600.00	17,710.00
	Sub-total for B			P	19,612.92
C.	Total (A+B)			P	24,241.59
D.	Output/day 11.20 cu.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Form Lumber	3.34	bd.ft	37.00	123.57
	b. Plywood	16.19	pc	691.00	11,188.67
	c. Assorted CW Nails	8.40	kg.	65.83	552.95
	d. Portland Cement	96.14	bag	276.18	26,551.59
	e. Sand	5.06	cu.m	1,105.60	5,594.34
	f. Gravel	10.12	cu.m	1,155.60	11,694.67
	Sub-total for E			P	55,705.78
F.	Direct Cost (C+E)				79,947.38
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		7,994.74
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		6,395.79
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		4,716.90
J.	Total Unit Cost				9,788.02

mae b.

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur

Item No./Description : 500(1)b3 Pipe Culvert & Storm Drain
Unit of Measurement : ln.m
Output per hour : 1.00
Quantity : 41.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	5.13	611.92	3,136.09
	b. Skilled Laborer	2	5.13	443.20	4,542.80
	c. Laborer	4	5.13	342.24	7,015.92
	Sub-total for A			P	14,694.81
	Name and Capacity	**No. of Equip.**	**No. of Days**	**Daily Rate**	**Amount**
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe	1	2.56	12,296.00	31,508.50
	b. Plate Compactor	1	2.56	984.00	2,521.50
	Minor Tools (10% of Labor)				1,469.48
	Sub-total for B			P	35,499.48
C.	Total (A+B)			P	50,194.29
D.	Output/day 8.00 ln.m /day				
	Name and Specifications	**Quantity**	**Unit**	**Unit Cost**	**Amount**
E.	Materials				
	a. Portland Cement	44.28	bag	276.18	12,229.09
	b. Sand	2.50	cu.m	1,105.60	2,765.11
	c. RC Pipes (910 mm dia.)	41.00	pc	2,089.00	85,649.00
	d. Sand Bedding	5.25	cu.m	1,105.60	5,802.19
	Sub-total for E			P	106,445.38
F.	Direct Cost (C+E)				156,639.67
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		15,663.97
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		12,531.17
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		9,241.74
J.	Total Unit Cost				4,733.57

mae b.

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	: Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur
Item No./Description	: 611(1) Trees Furnishing and Transplanting) 150mm Φ or less
Unit of Measurement	: each
Output per hour	: 1.00
Quantity	: 342.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	42.75	611.92	26,159.58
	b. Skilled Laborer	1	42.75	443.20	18,946.80
	c. Laborer	2	42.75	342.24	29,261.52
	Sub-total for A			P	74,367.90
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Cargo Truck	1	42.75	6,264.00	267,786.00
	b. Backhoe	1	42.75	12,296.00	525,654.00
	c. Water Truck/Pump	1	21.38	19,600.00	418,950.00
	Minor Tools (10% of Labor)				7,436.79
	Sub-total for B			P	1,219,826.79
C.	Total (A+B)			P	1,294,194.69
D.	Output/day 8.00 each /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Trees	342.00	pc	28.00	9,576.00
	b. Fertilizers	1,026.00	kg	10.00	10,260.00
	c. Bamboo Pole	1,026.00	pc	40.00	41,040.00
	d. Polyethylene Sheets	1,026.00	cu.m.	81.00	83,106.00
	e. Tie Wire	85.50	kg	80.00	6,840.00
	Sub-total for E			P	150,822.00
F.	Direct Cost (C+E)				1,445,016.69
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		144,501.67
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		115,601.34
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		85,255.98
J.	Total Unit Cost				5,235.02

mae b.

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur

Item No./Description : 506(1) Stone Masonry

Unit of Measurement : cu.m

Output per hour : 1.56

Quantity : 9.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.72	611.92	440.58
	b. Skilled Laborer	2	0.72	443.20	638.21
	c. Laborer	8	0.72	342.24	1,971.30
	Sub-total for A			P	3,050.09
	Name and Capacity	**No. of Equip.**	**No. of Days**	**Daily Rate**	**Amount**
B	Equipment, (2014 ACEL Rates)				
	a. One Bagger Mixer	1	0.72	1,376.00	990.72
	b. Water Truck	1	0.04	19,600.00	705.60
	c. Backhoe	1	0.07	12,296.00	885.31
	Minor Tools (10% of Labor)				305.01
	Sub-total for B			P	2,886.64
C.	Total (A+B)			P	5,936.73
D.	Output/day 12.50 cu.m /day				
	Name and Specifications	**Quantity**	**Unit**	**Unit Cost**	**Amount**
E.	Materials				
	a. Cement	49.50	bag	276.18	13,670.73
	b. Sand	2.70	cu.m	1,105.60	2,985.12
	c. Gravel Fill	0.18	cu.m	1,155.60	208.01
	d. Weep Holes (PVC)	2.70	ln.m	133.00	359.10
	e. Filter Cloth	0.14	sq.m	160.00	21.60
	f. Boulders	9.45	cu.m	1,360.60	12,857.67
	Miscellaneous (1% of Materials)				301.02
	Sub-total for E			P	30,403.25
F.	Direct Cost (C+E)				36,339.98
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	3,634.00
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	2,907.20
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	2,144.06
J.	Total Unit Cost				5,002.80

mae b.

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur

Item No./Description : 612(2) Reflectorized Thermoplastic Pavement Markings (Yellow)
Unit of Measurement : sq.m
Output per hour : 25.00
Quantity : 832.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	4.16	611.92	2,545.59
	b. Skilled Laborer	2	4.16	443.20	3,687.42
	c. Laborer	6	4.16	342.24	8,542.31
	Sub-total for A			P	14,775.32
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Cargo Truck/Delivery Truck	1	4.16	9,696.00	40,335.36
	b. Applicator Machine	1	4.16	750.00	3,120.00
	c. Kneading Machine	1	4.16	1,500.00	6,240.00
	Minor Tools (10% of Labor)				1,477.53
	Sub-total for B			P	51,172.89
C.	Total (A+B)			P	65,948.21
D.	Output/day 200.00 sq.m	/day			
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Thermoplastic Paint (yellow)	270.40	sq.m	1,585.00	428,584.00
	b. Glass Beads	27.46	25.00	2,500.00	68,640.00
	c. Primer	99.84	832.00	180.00	17,971.20
	d. LPG (50 kg)	3.33	0.00	90.00	299.52
	e. LPG (12 kg)	1.66	0.00	50.00	83.20
	f. Calsumine	104.00	0.00	5.00	520.00
	Miscellaneous (5% of Materials)				25,804.90
	Sub-total for E			P	541,902.82
F.	Direct Cost (C+E)				607,851.03
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		60,785.10
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		48,628.08
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		35,863.21
J.	Total Unit Cost				905.20

mae b.

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur

Item No./Description : B.5 Project Billboard
Unit of Measurement : Unit
Output per hour :
Quantity : 2.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.25	611.92	152.98
	b. Carpenters	1	0.25	443.20	110.80
	c. Laborer	2	0.25	342.24	171.12
	Sub-total for A			P	434.90
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	Sub-total for B			P	0.00
C.	Total (A+B)			P	434.90
D.	Output/day 0.00 Unit /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Marine Plywood 3/16" thk. X 4' x 8'	2.00	pc	406.00	812.00
	b. Tarpaulin (4' x 8')	2.00	pc	800.00	1,600.00
	c. Assorted Sizes Lumber	100.00	bd. Ft	37.00	3,700.00
	d. Assorted Sizes CW Nails	2.00	kg	65.83	131.66
	Sub-total for E			P	6,243.66
F.	Direct Cost (C+E)				6,678.56
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		667.86
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		534.28
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		394.04
J.	Total Unit Cost				4,137.37

mae b.

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur
Item No./Description	:	B.7 Occupational Safety & Health Program
Unit of Measurement	:	L.S
Output per hour	:	
Quantity	:	1.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Safety Practitioner	1	126.00	611.92	77,101.92
	b. First Aider	1	252.00	443.20	111,686.40
	Sub-total for A			P	188,788.32
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	Sub-total for B			P	0.00
C.	Total (A+B)			P	188,788.32
D.	Output/day 0.00 L.S /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Pairs, Rubber Boots Men, Long with Steel Toe, Black	24.00	pair	400.00	9,600.00
	b. Pairs, Working Gloves (Maong Materials)	24.00	pair	15.00	360.00
	c. Pcs. Rain Coats (Rain Forced, Hip Length Small, Medium & Large)	24.00	pcs	100.00	2,400.00
	Sub-total for E			P	12,360.00
F.	Direct Cost (C+E)				201,148.32
G.	Overhead, Contingencies and Miscellaneous			per D.O 197 s 2016	0.00
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	16,091.87
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	10,862.01
J.	Total Unit Cost				228,102.19

mae b.

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur

Item No./Description : B.9 Mobilization and Demobilization

Unit of Measurement : L.S

Output per hour :

Quantity : 1.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	Sub-total for A			P	0.00
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Low Bed Trailer	2	3.00	34,043.00	204,258.00
	b. Water Truck	1	3.00	19,600.00	58,800.00
	c. Backhoe	2	3.00	12,296.00	73,776.00
	d. Payloader	2	3.00	13,864.00	83,184.00
	e. Dumptruck	4	3.00	11,360.00	136,320.00
	f. Bulldozer	1	3.00	27,032.00	81,096.00
	g. Road Roller	1	3.00	13,216.00	39,648.00
	h. Road Grader	1	3.00	17,384.00	52,152.00
	Sub-total for B			P	729,234.00
C.	Total (A+B)			P	729,234.00
D.	Output/day 0.00 L.S /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	Sub-total for E			P	0.00
F.	Direct Cost (C+E)				729,234.00
G.	Overhead, Contingencies and Miscellaneous			per D.O 197 s 2016	0.00
H.	Contractor's Profit (CP)			per D.O 197 s 2016	0.00
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	36,461.70
J.	Total Unit Cost				765,695.70

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur

Item No./Description : A.1.1(3) Const. of Field Office for the Engineer
Unit of Measurement : LS
Output per hour :
Quantity : 1.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	10.00	611.92	6,119.20
	b. Masons	3	10.00	443.20	13,296.00
	c. Carpenters	3	10.00	443.20	13,296.00
	d. Laborers	6	10.00	342.24	20,534.40
	Sub-total for A			P	53,245.60
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Bagger Mixer	1	5.00	1,376.00	6,880.00
	b. Water Truck	1	1.00	19,600.00	19,600.00
	Minor Tools (10% of Labor)				5,324.56
	Sub-total for B			P	31,804.56
C.	Total (A+B)			P	85,050.16
D.	Output/day 0.00 LS	/day			
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	I. Earthworks (Excavation, Embankment, Bedding)				
	a. Gravel Bedding	3.50	cu.m	1,155.60	4,044.60
	b. Selected Fill	10.00	cu.m	421.40	4,214.00
	c. Soil Poisoning	2.50	lit	1,900.00	4,750.00
	II. Concrete Works (Footing, Columns, Beams & Slab on Grade)				
	a. Portland Cement	90.00	bag	276.18	24,855.87
	b. Crushed Gravel	20.00	cu.m	1,155.60	23,112.00
	c. Washed Sand	17.00	cu.m	1,105.60	18,795.20
	III. Reinforcing Bars(Footing Columns, Beams, & Slabs on Grade)				
	a. Deformed Round Bar, Grade 40	500.00	kg	40.00	20,000.00
	b. No. 16 GI Tie Wire	20.00	kg	80.00	1,600.00
	IV. Formworks (Columns & Beams)				
	a. Coco Lumber	400.00	bd.ft	15.00	6,000.00
	b. Ordinary Plywood, 1/4"x4'x8'	18.00	pc	520.00	9,360.00
	c. CWN, Assorted	5.00	kg	65.83	329.15
	V. Masonry Works (masonry walls & plastering)				
	a. CHB 6" thk	650.00	pc	18.00	11,700.00
	b. Portland Cement	50.00	bag	276.18	13,808.82
	c. Washed Sand	10.00	cu.m	1,105.60	11,056.00
	d. 10mm dia. X 6m RSB	75.00	kg	43.00	3,225.00
	e. No. 16 GI Tie Wire	2.50	kg	80.00	200.00
	VI. Doors and Windows				
	a. D-1, Hollow Core Flush Type swing door, complete w/ accessories, 0.90mx2.1m	2.00	set	1,765.27	3,530.54
	b. W-1, Jalousie window, 1.4m x 1.2m	2.00	set	924.00	1,848.00
	c. W-2, Jalousie window, 2.8m x 1.2m	2.00	set	1,848.00	3,696.00
	Sub-Total for E				166,125.17
	Sub-total for E			P	309,651.52
F.	Direct Cost (C+E)				394,701.68
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		39,470.17
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		31,576.13
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		23,287.40
J.	Total Unit Cost				489,035.39

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur

Item No./Description : A.1.1(3) Const. of Field Office for the Engineer
Unit of Measurement : LS
Output per hour :
Quantity : 1.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	16.00	611.92	
	b. Masons	3	16.00	443.20	
	c. Carpenters	3	16.00	443.20	
	d. Laborers	6	16.00	342.24	
	Sub-total for A			P	0.00
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Bagger Mixer	1	5.00	1,376.00	
	b. Water Truck	1	1.00	19,600.00	
	Minor Tools (10% of Labor)				
	Sub-total for B			P	0.00
C.	Total (A+B)			P	0.00
D.	Output/day 0.00 LS	/day			
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	VII Steel Works				
	a. 65 x 65 x 6mm. L	300.00	kg	48.00	14,400.00
	b. 50 x 50 x 6mm. L	200.00	kg	48.00	9,600.00
	c. 50 x 50 x 4mm. L	100.00	kg	48.00	4,800.00
	d. Purlins C- 150 x 50 x 3mm.	19.00	kg	45.00	855.00
	e. 16mm dia. Cross bracing	32.00	kg	50.00	1,600.00
	f. 16mm dia. Turn buckle	15.00	pc	123.00	1,845.00
	g. 12mm thk base plate	22.00	kg	45.00	990.00
	h. 10mm thk batten plate	15.00	kg	45.00	675.00
	i. 10mm dia. Sag rod	7.50	kg	50.00	375.00
	j. 20mm dia. X 350 mm anchor bolts	7.00	pc	60.00	420.00
	k. Welding Rod	12.50	kg	125.00	1,562.50
	l. Primer, Zinc Cromate	5.00	gal	531.00	2,655.00
	VII Roofing Works				
	a. Pre-painted GI Roofing Sheet long span	55.00	sq.m	420.00	23,100.00
	b. Pre-painted ridge roll ga 24, 0.60m width	10.00	ln.m	189.00	1,890.00
	c. Pre-painted flashing, ga. 24	2.00	ln.m	189.00	378.00
	d. Teckscrew 11/2"	500.00	pc	1.25	625.00
	e. Roof Sealant	2.00	lit	242.84	485.68
	IX. Carpentry Works				
	a. Rough Lumber, sun dried tanguile	350.00	bd.ft	37.00	12,950.00
	b. Plywood, ordinary 1/4" x 4' x 8'	30.00	pc	350.00	10,500.00
	c. Finishing Nails	5.00	kg	74.00	370.00
	d. Common Wire Nails	10.00	kg	74.00	740.00
	e. Wood Preservative Brown	5.00	lit	900.00	4,500.00
	Sub-Total for E				95,316.18
	Sub-total for E			P	95,316.18
F.	Direct Cost (C+E)				
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		
J.	Total Unit Cost				

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur

Item No./Description : A.1.1(3) Const. of Field Office for the Engineer
Unit of Measurement : LS
Output per hour :
Quantity : 1.00

	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	X. Electrical Works				
	a. 2 x 40w Flourescent lighting fixtures	5.00	set	1,500.00	7,500.00
	b. Porcelain Ceiling Outlet w/ femal	2.00	pc	50.00	100.00
	c. douplex Convinience outlet	3.00	pc	170.00	510.00
	d. two gang switch	3.00	pc	132.00	396.00
	e. 3.5mm2 thw	3.00	roll	3,600.00	10,800.00
	f. 8.00mm2 thw	25.00	m	69.33	1,733.25
	g. 15mm dia. PVC pipe	20.00	pc	76.00	1,520.00
	h. 15mm dia. PVC Coupling	25.00	pc	27.00	675.00
	i. 15mm dia. PVC Elbow	25.00	pc	26.00	650.00
	j. 15mm dia. PVC Clamp	55.00	pc	8.00	440.00
	k. 20mm dia. RSC Pipe	4.00	pc	240.00	960.00
	l. 20mm dia. RSC Coupling	3.00	pc	36.00	108.00
	m. 20mm dia. RSC elbow	3.00	pc	30.00	90.00
	n. 20mm dia. RSC Clamp	10.00	pc	18.00	180.00
	o. 20mm dia. Service entrance cap	2.00	pc	101.49	202.98
	p. wire holder	2.00	pc	50.00	100.00
	q. utility box	7.00	pc	32.00	224.00
	r. octagonal box	8.00	pc	34.00	272.00
	s. electrical tape (big)	7.00	pc	28.00	196.00
	t. panel board (side main w/ braches)	2.00	set	3,000.00	6,000.00
	XI. Plumbing Works				
	a. Water Closet (include. Fitting & Accessories	1.00	set	7,631.94	7,631.94
	b. Lavatory (include fitting & Accessories)	1.00	set	5,000.00	5,000.00
	c. 1/2" GI Pipe S-40	2.00	pc	292.00	584.00
	d. 1/2" Water Faucet	2.00	pc	165.00	330.00
	e. 1/2" Assorted Connector	8.00	pc	19.00	152.00
	f. 4" PVC series 1000	1.00	pc	640.00	640.00
	g. 2" PVC series 1000	1.00	pc	305.00	305.00
	h. 4" PVC assorted Connector	6.00	pc	77.00	462.00
	i. 2" PVC assorted Connector	8.00	pc	56.00	448.00
	Sub-Total for E				48,210.17
	Sub-total for E			P	48,210.17
F.	Direct Cost (C+E)				
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		
J.	Total Unit Cost				

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur

Item No./Description : A.1.1(11) Prov. Of Furniture, Equipment and Appliances for Field Engineer
Unit of Measurement : LS
Output per hour :
Quantity : 1.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
A.				
Sub-total for A			P	0.00
Name and Capacity	**No. of Equip.**	**No. of Days**	**Daily Rate**	**Amount**
B				
Sub-total for B			P	0.00
C. Total (A+B)			P	0.00
D. Output/day 0.00 LS /day				
Name and Specifications	**Quantity**	**Unit**	**Unit Cost**	**Amount**
E. Materials				
Office Equipment/Facilities & Supplies				
a. Office Table, Executive type w/ chair	2.00	unit	7,000.00	14,000.00
b. 1/2" wooden office table	2.00	each	2,830.00	5,660.00
c. Drawing Table	2.00	unit	5,000.00	10,000.00
d. Electric Desk Fan	3.00	unit	1,370.00	4,110.00
e. Folding Beds, Good Quality	3.00	each	2,700.00	8,100.00
f. 6" sleeping beds w/ pillows and blanket	3.00	each	5,000.00	15,000.00
g. Double burner gas stove (Gasul)	1.00	unit	3,700.00	3,700.00
h. 10 cups Rice Cooker	1.00	unit	2,500.00	2,500.00
i. Aluminum Cookware	1.00	set	3,500.00	3,500.00
j. Plate, Glass, Spoon and fork	1.00	dozen	2,000.00	2,000.00
k. 6 seater dinning table	1.00	each	2,800.00	2,800.00
l. Monoblock Backrest chair	2.00	dozen	2,500.00	5,000.00
m. Plastic Pail & Basin	2.00	pc	500.00	1,000.00
n. White Board	3.00	Unit	7,000.00	21,000.00
o. Bond Paper (Long)	20.00	ream	300.00	6,000.00
p. Bond Paper (Short)	20.00	ream	270.00	5,400.00
q. Yellow Pad	6.00	pad	35.00	210.00
r. White Board Marker	10.00	pc	75.00	750.00
s. Sign Pen (assorted color)	2.00	dozen	650.00	1,300.00
t. Ballpen (assorted color)	4.00	box	180.00	720.00
u. Mechanical Pencil	6.00	unit	350.00	2,100.00
v. Pencil Lead, No. 5	4.00	box	145.00	580.00
w. Puncher	1.00	Unit	253.32	253.32
x. Staple Pad w/ wire	2.00	Unit	275.00	550.00
y. Cutter Blade	2.00	box	240.00	480.00
z. Scotch Tape	10.00	roll	45.00	450.00
aa Brown Envelop	7.00	dozen	125.00	875.00
bb Folder, Long	7.00	dozen	85.00	595.00
cc Folder, Short	7.00	dozen	70.00	490.00
dd Data File Folder	12.00	pc	85.00	1,020.00
ee Desktop w/ complete accessories	1.00	unit	60,000.00	60,000.00
ff Printer (3in1)	1.00	unit	20,000.00	20,000.00
gg Camera	2.00	unit	15,000.00	30,000.00
Lighting/Water Fixtures				
a. Electric Bill	5.60	mons	1,200.00	6,720.00
b. Water Bill	5.60	mons	1,000.00	5,600.00
c. LPG Gasul (11 kg)	5.60	mons	1,000.00	5,600.00
Sub-Total for E				248,063.32
Sub-total for E			P	248,063.32
F. Direct Cost (C+E)				248,063.32
G. Overhead, Contingencies and Miscellaneous			per D.O 197 s 2016	
H. Contractor's Profit (CP)			per D.O 197 s 2016	
I. Value Added Tax (VAT)		5%	per D.O 197 s 2016	12,403.17
J. Total Unit Cost				260,466.49

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME	:	Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur
Item No./Description	:	612(2) Reflectorized Thermoplastic Pavement Markings (Yellow)
Unit of Measurement	:	sq.m
Output per hour	:	25.00
Quantity	:	125.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.63	611.92	382.45
	b. Skilled Laborer	2	0.63	443.20	554.00
	c. Laborer	6	0.63	342.24	1,283.40
	Sub-total for A			P	2,219.85
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Cargo Truck/Delivery Truck	1	0.63	9,696.00	6,060.00
	b. Applicator Machine	1	0.63	750.00	468.75
	c. Kneading Machine	1	0.63	1,500.00	937.50
	Minor Tools (10% of labor)				
	Sub-total for B			P	7,466.25
C.	Total (A+B)			P	9,686.10
D.	Output/day 200.00 sq.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Thermoplastic Paint (yellow)	40.63	bag	1,585.00	64,390.63
	b. Glass Beads	4.13	bag	2,500.00	10,312.50
	c. Primer	15.00	liter	180.00	2,700.00
	d. LPG (50 kg.)	0.50	cyl	90.00	45.00
	e. LPG (12 kg.)	0.25	cyl	50.00	12.50
	f. Calsumine	15.63	kg	5.00	78.13
	Miscellaneous (5% of Materials)				3,876.94
	Sub-total for E			P	81,415.69
F.	Direct Cost (C+E)				91,101.79
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	9,110.18
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	7,288.14
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	5,375.01
J.	Total Unit Cost				903.00

mae b.

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur

Item No./Description : B.4(1) Construction Survey and Staking

Unit of Measurement : Km.

Output per hour : 0.04

Quantity : 3.40

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	(For Field Works)				
	a. Geodetic Engineer	1	11.33	833.31	9,444.18
	b. Skilled Laborer	3	11.33	443.20	15,068.80
	c. Laborer	3	11.33	342.24	11,636.16
	(For Office Works)				
	a. Geodetic Engineer	1	34.00	833.31	28,332.54
	b. Skilled Laborer	2	34.00	443.20	30,137.60
	Sub-total for A			P	94,619.28
	Name and Capacity	**No. of Equip.**	**No. of Days**	**Daily Rate**	**Amount**
B	Equipment, (2014 ACEL Rates)				
	a. Total Station w/ complete accessories	1	11.33	800.00	9,066.67
	Minor Tools (10% of labor)				9,461.93
	Sub-total for B			P	18,528.59
C.	Total (A+B)			P	113,147.87
D.	Output/day 0.30 Km. /day				
	Name and Specifications	**Quantity**	**Unit**	**Unit Cost**	**Amount**
E.	Materials				
	a. Standard Stake Plan (800 mm x 910 mm)	35.00	pcs	200.00	7,000.00
	b. Blue Printing	175.00	pcs	40.00	7,000.00
	Miscellaneous (5% of Materials)				700.00
	Sub-total for E			P	14,700.00
F.	Direct Cost (C+E)				127,847.87
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		12,784.79
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		10,227.83
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		7,543.02
J.	Total Unit Cost				46,589.27

mae b.

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur

Item No./Description : A.1.2(5) Operation & Maintenance of Gov't. Service Vehicle
Unit of Measurement : L.S
Output per hour :
Quantity : 1.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Service Driver	1	252.00	443.20	111,686.40
	Sub-total for A			P	111,686.40
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	Sub-total for B			P	0.00
C.	Total (A+B)			P	111,686.40
D.	Output/day 0.00 L.S /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Liters, Diesel Fuel	2,520.00	liters	35.00	88,200.00
	b. Engine Oil & Lubricants	1.00	ls	27,921.60	27,921.60
	c. Tires	4.00	pcs	9,500.00	38,000.00
	d. Spare parts etc.	1.00	ls	100,000.00	100,000.00
	Sub-total for E			P	254,121.60
F.	Direct Cost (C+E)				365,808.00
G.	Overhead, Contingencies and Miscellaneous		0%	per D.O 197 s 2016	0.00
H.	Contractor's Profit (CP)		0%	per D.O 197 s 2016	0.00
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	18,290.40
J.	Total Unit Cost				384,098.40

mae b.

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Missing Links/NewRoads-Labangan-Midsalip Road, Including ROW, Zamboanga del Sur

Item No./Description : 101(2)a Removal of RCPC (610 mmΦ)

Unit of Measurement : ea

Output per hour : 6.00

Quantity : 6.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.13	611.92	76.49
	b. Laborer	2	0.13	342.24	85.56
	Sub-total for A			P	162.05
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe	1	0.13	12,296.00	1,537.00
	b. Boom Truck	1	0.13	8,143.20	1,017.90
	Minor Tools (10% of Labor Cost)				16.21
	Sub-total for B			P	2,571.11
C.	Total (A+B)			P	2,733.16
D.	Output/day 48.00 ea /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	Sub-total for E			P	0.00
F.	Direct Cost (C+E)				2,733.16
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		273.32
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		218.65
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		161.26
J.	Total Unit Cost				564.40

mae b.

UNIT COST ANALYSIS FOR HAULING COST FOR ALL AGGREGATES

Hauling Cost from the District Office to Site

Item No	: *ALL AGGREGATES*	*Terrain*	: *Flat to Rolling*
Quantity	: *1,000.00*	*Unit*	: *cu.m.*
		Hauling Distance	: *5.00 km.*
		Effective Working Hours	: *8.00 hrs.*

Hauling : *Using 10.00 cu.m. capacity Dumptruck*

Weight of Dumptruck (cap. 10.00 cu.m.)	: *16,000.00*	kgs
Unit Weight of Fine Aggrgates	: *1,640.00*	kg/cu.m.
Unit Weight of Course Aggrgates	: *1,534.00*	kg/cu.m.
Maximum Volumeto be Carried per DT	: *11.57*	cu.m.

* Dumptruck (10 Wheeler) days computation : **TIME-MOTION ANALYSIS**

Speed when loaded : *30.00* kph

Speed when unloaded : *40.00* kph

Loaded Running $= \dfrac{5.00 \times 60.00}{30.00} = 10$ mins.

Unloaded Running $= \dfrac{5.00 \times 60.00}{40.00} = 7.5$ mins.

Loading & Unloading = *5.00 mins.*

Capacity of Dumptruck = *10.00 cu.m.*

Total Cycle Time = *22.50 mins.*

No. of trips for Dumptruck per day $= \dfrac{8.00 \times 60.00}{22.50} = 21.33$ trips

Dumptruck Daily Outpout = *10.00 X 21.33 = 213.33* cu.m.

Using 4 Dumptruck = *213.33 X 4.00 = 853.33* cu.m.

No. of Days for Dumptruck $= \dfrac{1{,}000.00}{853.33} = 1.17$ days

EQUIPMENT USED: (2009 ACEL RATES)

4.00 - Unit Dumptruck @ P 10,816.00 / day X 1.17 days = P 50,700.00

Sub-Total **P 50,700.00**

Estimated Quantity	=	1,000.00 cu.m.
Unit Cost	***P***	***10.14*** **/cu.m/km. (unit cost hauling per cu.m. per km.)**
Grand Total	*P*	*50,700.00*
Equipment	*P*	*50,700.00*
Labor	*P*	
Equipment	*P*	

ZAMBOANGA DEL SUR 1ST DEO *(using 2nd Quarter 2017)*

	Hauling Distance		Unit Cost per cu.m/km		Hauling Cost per km.		Unit Price		Unit cost per cu.m.
Cost of Fine Aggregates	40.00	X	10.14	=	405.60	+	700.00	=	1,105.60
Cost of Coarse Aggregates	40.00	X	10.14	=	405.60	+	750.00	=	1,155.60
Cost of Item 200 Materails	40.00	X	10.14	=	405.60	+	600.00	=	1,005.60
Cost of Item 201 Materails	40.00	X	10.14	=	405.60	+	630.00	=	1,035.60
Cost of Item 300 Materails	40.00	X	10.14	=	405.60	+	700.00	=	1,105.60
Cost of Boulders	40.00	X	10.14	=	405.60	+	955.00	=	1,360.60
Cost of Embankment, Common Borrow	10.00	X	10.14	=	101.40	+	285.00	=	386.40
Cost of Embankment, Selected Borrow	10.00	X	10.14	=	101.40	+	320.00	=	421.40

UNIT COST DERIVATION FOR PORTLAND CEMENT

TOTAL QUANTITY REQUIREMENTS FOR PORTLAND CEMENT

Description	Quantity (Bags)
Portland Cement Concrete Pavement-using Conventional Method, 0.28m thick	63,467.60
Portland Cement Concrete Pavement, 0.15m. Thick	2,255.11
Structural Concrete, Class A	9,557.00
Trees Furnishing and Transplanting) 150mm Φ or less	342.00
Stone Masonry	49.50
Const. of Field Office for the Engineer	90.00
	50.00
Concrete Structure (Lean Concrete)	96.14
TOTAL	***75,907.35***

Quantity = 75,907.35 Bags

Delivery Charge = P 0.12 /bag/km

SITE	*HAULING DISTANCE*
Zamboanga del Sur 1st DEO	45.00
PROJECT SITE	

* Average Hauling Distance from source to assumed stockpilling area:
say 45.00 km.

Delivery Charge = P 0.12 X 45.00
Delivery Charge = P 5.40 /bag

* Delivery Truck : 75,907.35 bags (hauling works)
20,000.00 kgs., (capacity per haul)
500.00 bags, (capacity per haul)

* Capacity of Laborers unloading bags of Cement from Delivery Truck:
Assume 10 laborers can unload 500.00 bags of Cement
*Dumptruck (10 Wheeler) days computation : **TIME - MOTION ANALYSIS**
Speed when loaded : *30.00* kph
Speed when unloaded : *40.00* kph

Loaded Running $= \frac{45.00 \times 60.00}{30.00} =$ 90 mins.

Unloading Running $= \frac{45.00 \times 60.00}{40.00} =$ 67.5 mins.

Loading & Unloading = *45.00 mins.*
Capacity of Dumptruck = *8.00 cu.m.*
500.00 bags
Total Cycle Time = *202.50 mins.*

No. of trips for Dumptruck per day	=	$\frac{8.00 \times 60.00}{202.50}$	=	2.37	trips
Dumptruck Daily Outpout	=	*500.00 X 2.37*	=	*1,185.19*	cu.m.
Using 4 Dumptruck	=	*1,185.19 X 4.00*	=	*4,740.74*	cu.m.
No. of Days for Dumptruck	=	$\frac{75{,}907.35}{4{,}740.74}$	=	16.01	days
No. of Days for Labor for unloading	=	complimentary to D.Truck days	=	16.01	days

DELIVERY COST:

75,907.35 Bags, Portland Cement	@ P	5.40	/bag	= P		409,899.69
				Sub-total		**409,899.69**

LABOR:

1	Foreman	@ P	558.00	/day	X	16.01	days	= P	8,934.53
10	Laborers	@ P	312.24	/day	X	16.01	days	=	49,994.95
							Sub-total		**58,929.49**

MATERIALS:

75,907.35 Bags, Portland Cement	@ P	270.00	/bag	= P		20,494,984.50
				Sub-total		**20,494,984.50**

Estimated Quantity : 75,907.35 Bags

Unit Cost	P	276.18
Grand Total	P	20,963,813.68
Delivery Cost	P	409,899.69
Labor	P	58,929.49
Materials	P	20,494,984.50