

**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 :  <b>Construction of Missing Links/New Roads - Midsalip - Buboan Road, including ROW Zamboanga del Sur</b>	Appropriation : P 120,000,000.00
	Source of Funds : CY-2018
PROJECT CATEGORY : NATIONAL ROAD	Issued Obligated Authority : _____
	Released : _____
PROJECT DESCRIPTION :  Scope of Work : Construction of Missing Links/New Roads Road Width : 6.70 m. Roadbed Width : 12.00 m. Subbase Course : 0.30 mtrs thick Surface Course : 0.15 mtrs thick	Cal. Days to Complete : 171.00 Cal. Days
	Desirable Starting Date : Upon Approval
	Mode of Implementation : _____
NET LENGTH : Sta. 6+060.00 - Sta. 7+540.00 Sta. 7+860.00 - Sta. 8+280.00  Net Length : <b>3.80</b> lane km. Net Length : <b>1,900.00</b> In.m. / <b>1.900</b> km	

MINIMUM EQUIPMENT REQUIREMENT :			TECHNICAL PERSONNEL REQUIRED :		
DESCRIPTION	NO.	DESCRIPTION	NO.	DESCRIPTION	NO.
Dumptruck (10 Wheeler)	10	Water Pump	1	Project Engineer	1
Bulldozer	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(4)a	Removal of Structures & Obstruction (Existing RCPC,610mm)	0.006	each	15.00	5,560.51	370.70
102(2)	Surplus Common Excavation	29.537	cu.m.	159,899.00	26,523,812.93	165.88
103(1)a	Structure Excavation	0.130	cu.m.	509.00	117,128.87	230.12
103(3)	Foundation Fill	0.052	cu.m.	58.00	46,440.48	800.70
103(6)a	Pipe Culvert and Drain Excavation	0.026	cu.m.	100.00	23,011.57	230.12
104(1)a1	Embankment (from excavation)	8.694	cu.m.	34,439.00	7,806,778.20	226.68
105 (1)a	Subgrade Preparation	0.298	sq.m.	17,465.00	267,770.47	15.33
200 (1)	Aggregate Subbase Course	9.214	cu.m.	7,163.00	8,274,289.31	1,155.14
300 (1)	Aggregate Surface Course	0.921	cu.m.	651.00	826,863.09	1,270.14
311(1)e1a	Portland Cement Concrete Pavement-using Conventional Method, 0.28m thick	21.433	sq.m.	13,175.00	19,246,636.62	1,460.85
311(1)a	Portland Cement Concrete Pavement, 0.15m. Thick	1.725	sq.m	1,926.00	1,548,866.90	804.19
404(1)a	Reinforcing Steel Bar, Grade 40	1.013	kg.	18,695.00	909,533.04	48.65
404 (1)b	Reinforcing Steel Bar, Grade 60	1.039	kg.	12,092.00	932,581.06	77.12
405 (1) a3	Structural Concrete, Class A	4.252	cu.m	587.00	3,818,039.22	6,504.33
407(8)	Lean Concrete	0.065	cu.m	7.72	58,556.35	7,585.02
500(1)b3	RC Culvert Pipe, 910 mm (36" dia.)	0.198	ln.m	59.00	177,856.47	3,014.52
505(2)a	Grouted Riprap, Class A	0.204	cu.m	58.00	183,178.88	3,158.26
506 (1)	Stone Masonry	0.176	cu.m	41.00	158,426.09	3,864.05
508 (1)	Handlaid Rock Embankment	0.112	cu.m	65.72	100,541.65	1,529.85
612(1)	Reflectorized Thermoplastic Pavement Markings (White)	0.328	sq.m	404.00	294,440.98	728.81
612(2)	Reflectorized Thermoplastic Pavement Markings (Yellow)	0.182	sq.m	202.00	163,389.93	808.86

622(1)	Bio-Engineered Erosion Coco Fiber Erosion Control Net	7.762	sq.m	32,311.00	6,969,872.37	215.71
622(2)	Bio-Engineered Erosion Coco Logs/Fascine Control System	2.792	ln.m	4,080.00	2,507,188.02	614.51
622(3)	Bio-Engineered Erosion Control System Vegetation	7.753	sq.m	32,311.00	6,961,883.15	215.46
A.1.1(3)	Construction of Field Office for the Engineer	0.435	LS	1.00	390,791.55	390,791.55
A.1.1(11)	Prov. Of Furniture, Equipment and Appliances for Field Engineer	0.270	LS	1.00	242,303.32	242,303.32
A.1.2(5)	Operation & Maintenance of Gov't. Service Vehicle	0.322	LS	1.00	289,164.00	289,164.00
B.5	Project Billboard	0.006	each	2.00	5,100.90	2,550.45
B.7	Construction Safety and Health Program	0.156	LS	1.00	140,466.36	140,466.36
B.9	Mobilization and Demobilization	0.812	LS	1.00	729,234.00	729,234.00
B.4(1)	Construction Survey and Staking	0.087	Km.	1.90	77,929.69	41,015.63
<b>TOTAL</b>		<b>100.000</b>			<b>P 89,797,635.98</b>	

Name of Project : Construction of Missing Links/New Roads - Midsalip - Buboan Road, including ROW Zamboanga del Sur

Station Limits : Sta. 6+060.00 - Sta. 7+540.00  
Sta. 7+860.00 - Sta. 8+280.00

BREAKDOWN OF ESTIMATED EXPENDITURES	% OF TOTAL	AMOUNT
I. ESTIMATED COST		
A. DIRECT COST		
A.1 Materials	39.18	47,012,511.95
A.2 Labor	1.92	2,298,398.66
A.3 Equipment Expenses	33.74	40,486,725.36
SUB-TOTAL (DIRECT COST)	74.83	P 89,797,635.98
B. INDIRECT COST (Per DO # 197 s. 2016)		
B.1 Overhead, Contingency & Misc. (10% Max. of D.C.)	7.37	8,839,646.83
B.2 Profit (8% Max. D.C.)	5.90	7,082,954.77
C. VAT (5% of D.C. and I.C. per D.O. # 197)	4.41	5,286,011.88
SUB-TOTAL (CONTRACT COST)	92.51	P 111,006,249.46
II. ESTIMATED GOVERNMENT EXPENDITURES		
1 Engineering and Administrative Overhead (3.5%)	3.50	4,200,000.00
2 Detailed Engineering (1%)		
3 Reserved for the Payment of RROW)	3.99	4,793,750.54
4 Physical Reserved		
TOTAL ESTIMATED PROJECT COST	100.00	P 120,000,000.00

Prepared 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., CESOS III**  
 Regional Director



**SUMMARY**

Name of Project : Construction of Missing Links/New Roads - Midsalip - Buboan Road, including ROW Zamboanga del Sur

Sta. 7+840.00 - Sta. 8+280.00

Station Limits : Sta. 6+040.00 - Sta. 7+540.00

Item No.	Description	Quantity	Unit	Labor	Equipment	Materials	OCM	Profit	VAT	TOTAL
101(4)a	Removal of Structures & Obstruction (Existing RCP:610mm)	15.00	each	405.13	5,155.39	-	556.05	444.84	328.07	6,889.47
102(2)	Surplus Common Excavation	159,899.00	cu.m.	392,985.10	26,130,827.83	-	2,652,381.29	2,121,905.03	1,564,904.96	32,863,004.23
103(1)a	Structure Excavation	509.00	cu.m.	5,212.92	111,915.94	-	11,712.89	9,370.31	6,910.60	145,122.66
103(3)	Foundation Fill	58.00	cu.m.	11,489.10	6,844.00	28,107.38	4,644.05	3,715.24	2,739.99	57,539.76
103(6)a	Pipe Culvert and Drain Excavation	100.00	cu.m.	1,024.15	21,987.42	-	2,301.16	1,840.93	1,357.68	28,511.33
104(1)a1	Embankment (from excavation)	34,439.00	cu.m.	204,258.74	7,602,519.45	-	780,677.82	624,542.26	460,599.91	9,672,598.19
105 (1)a	Subgrade Preparation	17,465.00	sq.m.	9,434.01	258,336.46	-	26,777.05	21,421.64	15,798.46	331,767.61
200 (1)	Aggregate Subbase Course	7,163.00	cu.m.	23,215.28	635,716.25	7,615,357.78	827,428.93	661,943.14	488,183.07	10,251,844.45
300 (1)	Aggregate Surface Course	651.00	cu.m.	2,109.89	57,776.25	766,976.95	82,686.31	66,149.05	48,784.92	1,024,483.37
311(1)e1a	Portland Cement Concrete Pavement-using Conventional Method, 0.28m thick	13,175.00	sq.m.	185,283.43	2,748,523.63	16,312,829.56	1,924,663.66	1,539,730.93	1,135,551.56	23,846,582.78
311(1)a	Portland Cement Concrete Pavement, 0.15m. Thick	1,926.00	sq.m.	14,561.19	226,038.71	1,308,267.00	154,888.69	123,909.35	91,383.15	1,919,046.09
404(1)a	Reinforcing Steel Bar, Grade 40	18,695.00	kg.	54,997.57	41,863.82	812,671.65	90,953.30	72,762.64	53,662.45	1,126,911.44
404 (1)b	Reinforcing Steel Bar, Grade 60	12,092.00	kg.	33,841.48	30,292.14	868,447.44	93,258.11	74,606.48	55,022.28	1,155,467.93
405 (1) a3	Structural Concrete, Class A	587.00	cu.m.	504,891.28	251,029.92	3,062,118.02	381,803.92	305,443.14	225,264.31	4,730,550.59
407(8)	Lean Concrete	7.72	cu.m.	3,330.96	14,961.64	40,063.75	5,855.64	4,684.51	3,454.82	72,551.32
500(1)b3	RC Culvert Pipe, 910 mm (36" dia.)	59.00	ln.m	12,083.54	29,191.21	136,581.72	17,785.65	14,228.52	10,493.53	220,364.17
500(1)b	RC Culvert Pipe, 1070 mm (42" dia.)	0.00	ln.m	-	-	-	-	-	-	-
505(2)a	Grouted Riprap, Class A	58.00	cu.m	24,570.19	14,893.31	143,715.38	18,317.89	14,654.31	10,807.55	226,958.63
506 (1)	Stone Masonry	41.00	cu.m	13,894.87	13,150.25	131,380.97	15,842.61	12,674.09	9,347.14	196,289.93
508 (1)	Handlaid Rock Embankment	65.72	cu.m	11,136.23	1,113.62	88,291.80	10,054.16	8,043.33	5,931.96	124,571.10
612(1)	ReflectORIZED Thermoplastic Pavement Markings (White)	404.00	sq.m	7,174.56	24,130.92	263,135.50	29,444.10	23,555.28	17,372.02	364,812.37
612(2)	ReflectORIZED Thermoplastic Pavement Markings (Yellow)	202.00	sq.m	3,587.28	12,065.46	147,737.19	16,338.99	13,071.19	9,640.01	202,440.13
622(1)	Bio-Engineered Erosion Coco Fiber Erosion Control Net	32,311.00	sq.m	270,591.70	422,868.92	6,276,411.75	696,987.24	557,589.79	411,222.47	8,635,671.87
622(2)	Bio-Engineered Erosion Coco Log/Fascine Control System	4,080.00	ln.m	113,894.56	11,389.46	2,381,904.00	250,718.80	200,575.04	147,924.09	3,106,405.95
622(3)	Bio-Engineered Erosion Control System Vegetation	32,311.00	sq.m	83,775.96	1,042,740.59	5,835,366.60	696,188.32	556,950.65	410,751.11	8,625,773.23
A.1.1(3)	Construction of Field Office for the Engineer	1.00	LS	53,245.60	31,804.56	305,741.39	39,079.15	31,263.32	23,056.70	484,190.73
A.1.1(11)	Prov. Of Furniture, Equipment and Appliances for Field Engineer	1.00	LS	-	-	242,303.32	-	-	12,115.17	254,418.49
A.1.2(5)	Operation & Maintenance of Gov't. Service Vehicle	1.00	L.S	75,787.20	-	213,376.80	-	-	14,458.20	303,622.20
B.5	Project Billboard	2.00	each	434.90	-	4,666.00	510.09	408.07	300.95	6,320.02
B.7	Construction Safety and Health Program	1.00	L.S	128,106.36	-	12,360.00	-	11,237.31	7,585.18	159,288.85
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	1.90	km,	52,875.48	10,354.21	14,700.00	7,992.97	6,234.38	4,597.85	96,554.89
	<b>TOTAL</b>			<b>2,298,398.66</b>	<b>40,486,725.36</b>	<b>47,012,511.95</b>	<b>8,039,646.03</b>	<b>7,082,954.77</b>	<b>5,286,011.88</b>	<b>110,999,399.98</b>



### DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

Item No./Description : 101(4)a Removal of Structures & Obstruction (Existing RCPC,610mm)

Unit of Measurement : each

Output per hour : 6.00

Quantity : 15.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
<b>A. Labor</b>				
a. Construction Foreman	1	0.31	611.92	191.23
b. Laborer	2	0.31	342.24	213.90
Sub-total for A			P	405.13
Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
<b>B Equipment, (2014 ACEL Rates)</b>				
a. Backhoe	1	0.31	12,296.00	3,842.50
b. Boom Truck	1	0.16	8,143.20	1,272.38
Minor Tools (10% of Labor Cost)				40.51
Sub-total for B			P	5,155.39
<b>C. Total (A+B)</b>			P	5,560.51
<b>D. Output/day 48.00 each /day</b>				
Name and Specifications	Quantity	Unit	Unit Cost	Amount
<b>E. Materials</b>				
Sub-total for E			P	0.00
<b>F. Direct Cost (C+E)</b>				5,560.51
<b>G. Overhead, Contingencies and Miscellaneous</b>		10% per D.O 197 s 2016		556.05
<b>H. Contractor's Profit (CP)</b>		8% per D.O 197 s 2016		444.84
<b>I. Value Added Tax (VAT)</b>		5% per D.O 197 s 2016		328.07
<b>J. Total Unit Cost</b>				459.30

### DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO  
 Item No./Description : 102(2) Surplus Common Excavation  
 Unit of Measurement : cu.m.  
 Output per hour : 60.00  
 Quantity : 159,899.00

*Note: Use Four (4) gangs*

Designation	No. of Person	No. of Days	Daily Rate	Amount
<b>A. Labor</b>				
a. Construction Foreman	1	83.28	611.92	50,961.14
b. Laborer	12	83.28	342.24	342,023.96
Sub-total for A				P 392,985.10
Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
<b>B Equipment, (2014 ACEL Rates)</b>				
a. Bullduzer	4	83.28	27,032.00	9,004,978.68
b. Payloader	4	83.28	13,864.00	4,618,416.12
c. Payloader	4	20.82	13,864.00	1,154,604.03
d. Dumptruck	12	83.28	11,360.00	11,352,829.00
Sub-total for B				P 26,130,827.83
<b>C. Total (A+B)</b>				P 26,523,812.93
<b>D. Output/day 1,920.00 cu.m /day</b>				
Name and Specifications	Quantity	Unit	Unit Cost	Amount
<b>E. Materials</b>				
Sub-total for E				P 0.00
<b>F. Direct Cost (C+E)</b>				26,523,812.93
<b>G. Overhead, Contingencies and Miscellaneous</b>		10% per D.O 197 s 2016		2,652,381.29
<b>H. Contractor's Profit (CP)</b>		8% per D.O 197 s 2016		2,121,905.03
<b>I. Value Added Tax (VAT)</b>		5% per D.O 197 s 2016		1,564,904.96
<b>J. Total Unit Cost</b>				205.52



### DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

Item No./Description : 103(1)a Structure Excavation

Unit of Measurement : cu.m.

Output per hour : 20.00

Quantity : 509.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
<b>A. Labor</b>				
a. Construction Foreman	1	3.18	611.92	1,946.67
b. Laborers	3	3.18	342.24	3,266.25
Sub-total for A			P	5,212.92
Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
<b>B Equipment, (2014 ACEL Rates)</b>				
a. Dumptruck	2	3.18	11,360.00	72,278.00
b. Backhoe	1	3.18	12,296.00	39,116.65
Minor Tools (10% of Labor)				521.29
Sub-total for B			P	111,915.94
<b>C. Total (A+B)</b>			P	117,128.87
<b>D. Output/day 160.00 cu.m /day</b>				
Name and Specifications	Quantity	Unit	Unit Cost	Amount
<b>E. Materials</b>				
Sub-total for E			P	0.00
<b>F. Direct Cost (C+E)</b>				117,128.87
<b>G. Overhead, Contingencies and Miscellaneous</b>		10% per D.O 197 s 2016		11,712.89
<b>H. Contractor's Profit (CP)</b>		8% per D.O 197 s 2016		9,370.31
<b>I. Value Added Tax (VAT)</b>		5% per D.O 197 s 2016		6,910.60
<b>J. Total Unit Cost</b>				285.11

### DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

Item No./Description : 103(3) Foundation Fill

Unit of Measurement : cu.m.

Output per hour : 1.25

Quantity : 58.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
<b>A. Labor</b>				
a. Construction Foreman	1	5.80	611.92	3,549.14
b. Laborer	4	5.80	342.24	7,939.97
Sub-total for A				P 11,489.10
Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
<b>B Equipment, (2014 ACEL Rates)</b>				
a. Plate Compactor	1	5.80	984.00	5,707.20
b. Water Truck	1	0.06	19,600.00	1,136.80
c. Minor Tools (10% of Labor)				
Sub-total for B				P 6,844.00
<b>C. Total (A+B)</b>				P 18,333.10
<b>D. Output/day 10.00 cu.m. /day</b>				
Name and Specifications	Quantity	Unit	Unit Cost	Amount
<b>E. Materials</b>				
a. Filling Materials	66.70	cu.m.	421.40	28,107.38
Sub-total for E				P 28,107.38
<b>F. Direct Cost (C+E)</b>				46,440.48
<b>G. Overhead, Contingencies and Miscellaneous</b>			10% per D.O 197 s 2016	4,644.05
<b>H. Contractor's Profit (CP)</b>			8% per D.O 197 s 2016	3,715.24
<b>I. Value Added Tax (VAT)</b>			5% per D.O 197 s 2016	2,739.99
<b>J. Total Unit Cost</b>				992.06

### DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

Item No./Description : 103(6)a Pipe Culvert and Drain Excavation

Unit of Measurement : cu.m.

Output per hour : 20.00

Quantity : 100.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
<b>A. Labor</b>				
a. Construction Foreman	1	0.63	611.92	382.45
b. Laborer	3	0.63	342.24	641.70
Sub-total for A			P	1,024.15
Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
<b>B Equipment, (2014 ACEL Rates)</b>				
a. Dumptruck	2	0.63	11,360.00	14,200.00
b. Backhoe	1	0.63	12,296.00	7,685.00
Minor Tools (10% of Labor)				102.42
Sub-total for B			P	21,987.42
<b>C. Total (A+B)</b>			P	23,011.57
<b>D. Output/day 160.00 cu.m /day</b>				
Name and Specifications	Quantity	Unit	Unit Cost	Amount
<b>E. Materials</b>				
a.				
Sub-total for E			P	0.00
<b>F. Direct Cost (C+E)</b>				23,011.57
<b>G. Overhead, Contingencies and Miscellaneous</b>			10% per D.O 197 s 2016	2,301.16
<b>H. Contractor's Profit (CP)</b>			8% per D.O 197 s 2016	1,840.93
<b>I. Value Added Tax (VAT)</b>			5% per D.O 197 s 2016	1,357.68
<b>J. Total Unit Cost</b>				285.11

### DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

Item No./Description : 104(1)a1 Embankment (from excavation)

Unit of Measurement : cu.m.

Output per hour : 50.00

Quantity : 34,439.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
<b>A. Labor</b>				
<i>For Excavation Work</i>				
a. Construction Foreman	1	71.46	611.92	43,728.37
b. Laborer	2	71.46	342.24	48,913.57
<i>Spreading &amp; Compaction</i>				
a. Construction Foreman	1	86.10	611.92	52,684.78
b. Laborer	2	86.10	342.24	58,932.02
Sub-total for A			P	204,258.74
Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
<b>B Equipment, (2014 ACEL Rates)</b>				
<i>For Excavation Work</i>				
a. Bulldozer	1	71.46	27,032.00	1,931,731.72
b. Payloader	1	71.46	13,864.00	990,734.26
c. Dumptruck	2	71.46	11,360.00	1,623,592.22
<i>Spreading and Compaction</i>				
a. Road Grader	1	86.10	17,384.00	1,496,718.94
b. Road Roller	1	86.10	13,216.00	1,137,864.56
c. Water Truck	1	21.52	19,600.00	421,877.75
Sub-total for B			P	7,602,519.45
<b>C. Total (A+B)</b>			P	<b>7,806,778.20</b>
<b>D. Output/day 400.00 cu.m. /day</b>				
Name and Specifications	Quantity	Unit	Unit Cost	Amount
<b>E. Materials</b>				
Sub-total for E			P	0.00
<b>F. Direct Cost (C+E)</b>				<b>7,806,778.20</b>
<b>G. Overhead, Contingencies and Miscellaneous</b>		10% per D.O 197 s 2016		780,677.82
<b>H. Contractor's Profit (CP)</b>		8% per D.O 197 s 2016		624,542.26
<b>I. Value Added Tax (VAT)</b>		5% per D.O 197 s 2016		460,599.91
<b>J. Total Unit Cost</b>				<b>280.86</b>

### DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

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

Unit of Measurement : sq.m.

Output per hour : 300.00

Quantity : 17,465.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
<b>A. Labor</b>				
a. Construction Foreman	1	7.28	611.92	4,452.99
b. Laborer	2	7.28	342.24	4,981.02
Sub-total for A			P	9,434.01
Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
<b>B Equipment, (2014 ACEL Rates)</b>				
a. Road Grader	1	7.28	17,384.00	126,504.82
b. Road Roller	1	7.28	13,216.00	96,173.93
c. Water Truck	1	1.82	19,600.00	35,657.71
Sub-total for B			P	258,336.46
<b>C. Total (A+B)</b>			P	267,770.47
<b>D. Output/day 2,400.00 sq.m./day</b>				
Name and Specifications	Quantity	Unit	Unit Cost	Amount
<b>E. Materials</b>				
a.				
Sub-total for E			P	0.00
<b>F. Direct Cost (C+E)</b>				267,770.47
<b>G. Overhead, Contingencies and Miscellaneous</b>		10% per D.O 197 s 2016		26,777.05
<b>H. Contractor's Profit (CP)</b>		8% per D.O 197 s 2016		21,421.64
<b>I. Value Added Tax (VAT)</b>		5% per D.O 197 s 2016		15,798.46
<b>J. Total Unit Cost</b>				19.00

### DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

Item No./Description : 200 (1) Aggregate Subbase Course

Unit of Measurement : cu.m.

Output per hour : 50.00

Quantity : 7,163.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
A. Labor				
a. Construction Foreman	1	17.91	611.92	10,957.96
b. Laborer	2	17.91	342.24	12,257.33
Sub-total for A			P	23,215.28
Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B Equipment, (2014 ACEL Rates)				
a. Road Grader	1	17.91	17,384.00	311,303.98
b. Road Roller	1	17.91	13,216.00	236,665.52
c. Water Truck	1	4.48	19,600.00	87,746.75
Sub-total for B			P	635,716.25
C. Total (A+B)			P	658,931.53
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%)	8,237.45	cu.m.	924.48	7,615,357.78
Sub-total for E			P	7,615,357.78
F. Direct Cost (C+E)				8,274,289.31
G. Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		827,428.93
H. Contractor's Profit (CP)		8% per D.O 197 s 2016		661,943.14
I. Value Added Tax (VAT)		5% per D.O 197 s 2016		488,183.07
J. Total Unit Cost				1,431.22

### DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

Item No./Description : 300 (1) Aggregate Surface Course

Unit of Measurement : cu.m.

Output per hour : 50.00

Quantity : 651.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
<b>A. Labor</b>				
a. Construction Foreman	1	1.63	611.92	995.90
b. Laborer	2	1.63	342.24	1,113.99
Sub-total for A			P	2,109.89
Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
<b>B Equipment, (2014 ACEL Rates)</b>				
a. Road Grader	1	1.63	17,384.00	28,292.46
b. Road Roller	1	1.63	13,216.00	21,509.04
c. Water Truck	1	0.41	19,600.00	7,974.75
Sub-total for B			P	57,776.25
<b>C. Total (A+B)</b>			P	<b>59,886.14</b>
<b>D. Output/day 400.00 cu.m. /day</b>				
Name and Specifications	Quantity	Unit	Unit Cost	Amount
<b>E. Materials</b>				
a. Aggregate Surface Course (w/ shrinkage of 15%)	748.65	cu.m.	1,024.48	766,976.95
Sub-total for E			P	766,976.95
<b>F. Direct Cost (C+E)</b>				<b>826,863.09</b>
<b>G. Overhead, Contingencies and Miscellaneous</b>			10% per D.O 197 s 2016	82,686.31
<b>H. Contractor's Profit (CP)</b>			8% per D.O 197 s 2016	66,149.05
<b>I. Value Added Tax (VAT)</b>			5% per D.O 197 s 2016	48,784.92
<b>J. Total Unit Cost</b>				<b>1,573.71</b>

### DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

Item No./Description : 311(1)e1a Portland Cement Concrete Pavement-using Conventional Method, 0.28m thick

Unit of Measurement : sq.m.

Output per hour : 57.70

Quantity : 13,175.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
<b>A. Labor</b>				
a. Construction Foreman	1	28.54	611.92	17,465.44
b. Skilled	4	28.54	443.20	50,599.31
c. Laborer	12	28.54	342.24	117,218.68
Sub-total for A				P 185,283.43
Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
<b>B Equipment, (2014 ACEL Rates)</b>				
a. Transit Mixer	4	28.54	10,544.00	1,203,788.56
b. Concrete Vibrator	2	28.54	730.00	41,671.36
c. Batching Plant	1	28.54	14,076.00	401,757.58
d. Pay Loader	1	28.54	13,864.00	395,706.67
e. Concrete Screeder	1	28.54	4,360.00	124,443.24
f. Water Truck	1	28.54	19,600.00	559,423.74
g. Concrete Saw	1	28.54	261.04	7,450.61
h. Bar Cutter	1	2.85	1,758.00	5,017.69
Minor Tools (5% of labor)				9,264.17
Sub-total for B				P 2,748,523.63
<b>C. Total (A+B)</b>				P 2,933,807.06
<b>D. Output/day 461.60 sq.m. /day</b>				
Name and Specifications	Quantity	Unit	Unit Cost	Amount
<b>E. Materials</b>				
a. Reinforcing Steel Bar	6,587.50	kg	40.00	263,500.00
b. Curing Compound	3,820.75	lit	40.00	152,830.00
c. Asphalt Sealant	2,239.75	lit	75.00	167,981.25
d. Sand	2,028.95	cu.m	1,024.48	2,078,618.70
e. Gravel	3,689.00	cu.m	1,074.48	3,963,756.72
f. Cement	35,045.50	bag	265.11	9,290,877.09
g. Concrete Saw	1.98	pc	8,000.00	15,810.00
h. Pipe Sleeve, 2' dia.	102.77	l.m	133.00	13,667.75
i. Grease/Tar	102.77	lit	21.00	2,158.07
j. Steel Forms	6,060.50	lit	60.00	363,630.00
Sub-total for E				P 16,312,829.56
<b>F. Direct Cost (C+E)</b>				19,246,636.62
<b>G. Overhead, Contingencies and Miscellaneous</b>		10% per D.O 197 s 2016		1,924,663.66
<b>H. Contractor's Profit (CP)</b>		8% per D.O 197 s 2016		1,539,730.93
<b>I. Value Added Tax (VAT)</b>		5% per D.O 197 s 2016		1,135,551.56
<b>J. Total Unit Cost</b>				1,809.99



### DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

Item No./Description : 311(1)a Portland Cement Concrete Pavement, 0.15m. Thick

Unit of Measurement : sq.m

Output per hour : 107.33

Quantity : 1,926.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
<b>A. Labor</b>				
a. Construction Foreman	1	2.24	611.92	1,372.59
b. Skilled	4	2.24	443.20	3,976.54
c. Laborer	12	2.24	342.24	9,212.07
Sub-total for A				P 14,561.19
Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
<b>B Equipment, (2014 ACEL Rates)</b>				
a. Transit Mixer	4	2.24	10,544.00	94,604.23
b. Concrete Vibrator	2	2.24	730.00	3,274.90
c. Batching Plant	1	2.24	14,076.00	31,573.62
d. Pay Loader	1	2.24	13,864.00	31,098.09
e. Concrete Screeder	1	2.24	4,360.00	9,779.84
f. Water Truck	1	2.24	19,600.00	43,964.41
g. Concrete Saw	1	2.24	261.04	585.53
h. Bar Cutter	1	0.22	1,758.00	394.33
Minor Tools (5% of Labor)				10,763.75
Sub-total for B				P 226,038.71
<b>C. Total (A+B)</b>				P 240,599.90
<b>D. Output/day 858.64 sq.m /day</b>				
Name and Specifications	Quantity	Unit	Unit Cost	Amount
<b>E. Materials</b>				
a. Reinforcing Steel Bar	635.58	kg	40.00	25,423.20
b. Curing Compound	558.54	lit	40.00	22,341.60
c. Asphalt Sealant	231.12	lit	75.00	17,334.00
d. Steel Form	885.96	l.m	40.00	35,438.40
e. Sand	158.90	cu.m	1,024.48	162,784.75
f. Gravel	288.90	cu.m	1,074.48	310,417.27
g. Cement	2,754.18	bag	265.11	730,157.88
h. Concrete Saw	0.29	pc	8,000.00	2,311.20
i. Pipe Sleeve, 1" dia.	15.02	l.m	133.00	1,998.03
j. Grease/Tar	2.89	lit	21.00	60.67
Sub-total for E				P 1,308,267.00
<b>F. Direct Cost (C+E)</b>				1,548,866.90
<b>G. Overhead, Contingencies and Miscellaneous</b>			10% per D.O 197 s 2016	154,886.69
<b>H. Contractor's Profit (CP)</b>			8% per D.O 197 s 2016	123,909.35
<b>I. Value Added Tax (VAT)</b>			5% per D.O 197 s 2016	91,383.15
<b>J. Total Unit Cost</b>				996.39

### DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

Item No./Description : 404(1)a Reinforcing Steel Bar, Grade 40

Unit of Measurement : kg.

Output per hour : 180.00

Quantity : 18,695.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
<b>A. Labor</b>				
a. Construction Foreman	1	12.98	611.92	7,944.34
b. Skilled	2	12.98	443.20	11,507.81
c. Laborer	8	12.98	342.24	35,545.43
Sub-total for A			P	54,997.57
Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
<b>B Equipment, (2014 ACEL Rates)</b>				
a. Bar Cutter	1	6.49	1,758.00	11,411.74
b. Bar Bender	1	6.49	2,812.00	18,253.59
c. Cargo Truck	1	1.95	6,264.00	12,198.49
Sub-total for B			P	41,863.82
<b>C. Total (A+B)</b>			P	96,861.39
<b>D. Output/day 1,440.00 kg. /day</b>				
Name and Specifications	Quantity	Unit	Unit Cost	Amount
<b>E. Materials</b>				
a. Tie Wire	392.60	kgs	70.00	27,481.65
b. Reinforcing Steel Bar, Grade 40	19,629.75	kgs	40.00	785,190.00
Sub-total for E			P	812,671.65
<b>F. Direct Cost (C+E)</b>				909,533.04
<b>G. Overhead, Contingencies and Miscellaneous</b>			10% per D.O 197 s 2016	90,953.30
<b>H. Contractor's Profit (CP)</b>			8% per D.O 197 s 2016	72,762.64
<b>I. Value Added Tax (VAT)</b>			5% per D.O 197 s 2016	53,662.45
<b>J. Total Unit Cost</b>				60.28

### DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

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

Unit of Measurement : kg.

Output per hour : 180.00

Quantity : 12,092.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
<b>A. Labor</b>				
a. Construction Foreman	1	8.40	584.16	4,905.32
b. Skilled Laborer	2	8.40	422.32	7,092.63
c. Laborer	8	8.40	325.16	21,843.53
Sub-total for A				P 33,841.48
Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
<b>B. Equipment, (2009 ACEL Rates)</b>				
a. Bar Cutter	1	4.20	1,758.00	7,381.16
b. Bar Bender	1	4.20	2,812.00	11,806.49
c. Cargo Truck	1	1.26	8,816.00	11,104.49
Sub-total for B				P 30,292.14
<b>C. Total (A+B)</b>				P 64,133.62
<b>D. Output/day 1,440.00 kg. /day</b>				
Name and Specifications	Quantity	Unit	Unit Cost	Amount
<b>E. Materials</b>				
a. Tie Wire	253.93	kg	70.00	17,775.24
b. Reinforcing Steel Bar, Grade 60	12,696.60	kg	67.00	850,672.20
Sub-total for E				P 868,447.44
<b>F. Direct Cost (C+E)</b>				932,581.06
<b>G. Overhead, Contingencies and Miscellaneous</b>		10% per D.O 197 s 2016		93,258.11
<b>H. Contractor's Profit (CP)</b>		8% per D.O 197 s 2016		74,606.48
<b>I. Value Added Tax (VAT)</b>		5% per D.O 197 s 2016		55,022.28
<b>J. Total Unit Cost</b>				95.56

### DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

Item No./Description : 405 (1) a3 Structural Concrete, Class A

Unit of Measurement : cu.m

Output per hour : 1.40

Quantity : 587.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
<b>A. Labor</b>				
a. Construction Foreman	1	52.41	611.92	32,071.16
b. Skilled Laborer	4	52.41	443.20	92,913.71
c. Laborer	8	52.41	342.24	143,496.34
<i>Installation/Removal of Form Works</i>				
a. Skilled Laborer	4	52.41	443.20	92,913.71
b. Laborer	8	52.41	342.24	143,496.34
Sub-total for A			P	504,891.28
Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
<b>B. Equipment, (2014 ACEL Rates)</b>				
a. One Bagger Mixer	1	52.41	1,376.00	72,117.14
b. Concrete Vibrator	1	52.41	972.00	50,943.21
c. Water Truck	1	5.24	19,600.00	102,725.00
Minor Tools (5% of Labor)				25,244.56
Sub-total for B			P	251,029.92
<b>C. Total (A+B)</b>			P	755,921.20
<b>D. Output/day 11.20 cu.m /day</b>				
Name and Specifications	Quantity	Unit	Unit Cost	Amount
<b>E. Materials</b>				
a. Form Lumber	10,272.50	bd.ft	37.00	380,082.50
b. Plywood	234.80	pc	1,058.00	248,418.40
c. Assorted CW Nails	410.90	kg.	58.00	23,832.20
d. Portland Cement	5,576.50	bag	265.11	1,478,380.28
e. Sand	293.50	cu.m	1,024.48	300,684.88
f. Gravel	587.00	cu.m	1,074.48	630,719.76
Sub-total for E			P	3,062,118.02
<b>F. Direct Cost (C+E)</b>				3,818,039.22
<b>G. Overhead, Contingencies and Miscellaneous</b>		10% per D.O 197 s 2016		381,803.92
<b>H. Contractor's Profit (CP)</b>		8% per D.O 197 s 2016		305,443.14
<b>I. Value Added Tax (VAT)</b>		5% per D.O 197 s 2016		225,264.31
<b>J. Total Unit Cost</b>				8,058.86

### DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

Item No./Description : 407(8) Lean Concrete

Unit of Measurement : cu.m

Output per hour : 1.40

Quantity : 7.72

Designation	No. of Person	No. of Days	Daily Rate	Amount
A. Labor				
a. Construction Foreman	1	0.69	611.92	421.79
b. Skilled Laborer	4	0.69	443.20	1,221.97
c. Laborer	8	0.69	342.24	1,887.21
Sub-total for A			P	3,530.96
Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B. Equipment, (2014 ACEL Rates)				
a. One Bagger Mixer	1	0.69	1,376.00	948.46
b. Concrete Vibrator	1	0.69	730.00	503.18
c. Water Truck	1	0.69	19,600.00	13,510.00
Sub-total for B			P	14,961.64
C. Total (A+B)			P	18,492.60
D. Output/day 11.20 cu.m /day				
Name and Specifications	Quantity	Unit	Unit Cost	Amount
E. Materials				
a. Form Lumber	2.55	bd.ft	37.00	94.26
b. Plywood	12.35	pc	640.00	7,905.28
c. Assorted CW Nails	6.41	kg.	58.00	371.64
d. Portland Cement	73.34	bag	265.11	19,443.09
e. Sand	3.86	cu.m	1,024.48	3,954.49
f. Gravel	7.72	cu.m	1,074.48	8,294.99
Sub-total for E			P	40,063.75
F. Direct Cost (C+E)				58,556.35
G. Overhead, Contingencies and Miscellaneous			10% per D.O 197 s 2016	5,855.64
H. Contractor's Profit (CP)			8% per D.O 197 s 2016	4,684.51
I. Value Added Tax (VAT)			5% per D.O 197 s 2016	3,454.82
J. Total Unit Cost				9,397.84

### DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

Item No./Description : 500(1)b3 RC Culvert Pipe, 910 mm (36" dia.)

Unit of Measurement : In.m

Output per hour : 1.75

Quantity : 59.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
<b>A. Labor</b>				
a. Construction Foreman	1	4.21	611.92	2,578.81
b. Skilled Laborer	2	4.21	443.20	3,735.54
c. Laborer	4	4.21	342.24	5,769.19
Sub-total for A				P 12,083.54
Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
<b>B Equipment, (2014 ACEL Rates)</b>				
a. Backhoe	1	2.11	12,296.00	25,909.43
b. Plate Compactor	1	2.11	984.00	2,073.43
Minor Tools (10% of Labor)				1,208.35
Sub-total for B				P 29,191.21
<b>C. Total (A+B)</b>				P 41,274.75
<b>D. Output/day 14.00 In.m /day</b>				
Name and Specifications	Quantity	Unit	Unit Cost	Amount
<b>E. Materials</b>				
a. Portland Cement	63.72	bag	265.11	16,892.74
b. Sand	3.60	cu.m	1,024.48	3,687.10
c. RC Pipes (910 mm dia.)	59.00	pc	1,835.00	108,265.00
d. Sand Bedding	7.55	cu.m	1,024.48	7,736.87
Sub-total for E				P 136,581.72
<b>F. Direct Cost (C+E)</b>				177,856.47
<b>G. Overhead, Contingencies and Miscellaneous</b>		10% per D.O 197 s 2016		17,785.65
<b>H. Contractor's Profit (CP)</b>		8% per D.O 197 s 2016		14,228.52
<b>I. Value Added Tax (VAT)</b>		5% per D.O 197 s 2016		10,493.53
<b>J. Total Unit Cost</b>				3,734.99

## DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

Item No./Description : 505(2)a Grouted Riprap, Class A

Unit of Measurement : cu.m

Output per hour : 1.25

Quantity : 58.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
<b>A. Labor</b>				
a. Construction Foreman	1	5.80	611.92	3,549.14
b. Skilled Laborer	2	5.80	443.20	5,141.12
c. Laborer	8	5.80	342.24	15,879.94
<b>Sub-total for A</b>				<b>P 24,570.19</b>
Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
<b>B. Equipment, (2014 ACEL Rates)</b>				
a. One Bagger Mixer	1	5.80	1,376.00	7,980.80
b. Water Truck	1	0.29	19,600.00	5,684.00
Minor Tools (5% of Labor)				1,228.51
<b>Sub-total for B</b>				<b>P 14,893.31</b>
<b>C. Total (A+B)</b>				<b>P 39,463.50</b>
<b>D. Output/day 10.00 cu.m /day</b>				
Name and Specifications	Quantity	Unit	Unit Cost	Amount
<b>E. Materials</b>				
a. Cement	174.00	bag	265.11	46,128.96
b. Sand	14.50	cu.m	1,024.48	14,854.96
c. Gravel Fill	0.87	cu.m	1,074.48	934.80
d. Weep Holes (PVC), 2' dia.	17.40	ln.m	133.00	2,314.20
e. Filter Cloth	0.87	sq.m	160.00	139.20
f. Boulders	60.90	cu.m	1,279.48	77,920.33
Miscellaneous (1% of Materials)				1,422.92
<b>Sub-total for E</b>				<b>P 143,715.38</b>
<b>F. Direct Cost (C+E)</b>				<b>183,178.88</b>
<b>G. Overhead, Contingencies and Miscellaneous</b>		10% per D.O 197 s 2016		18,317.89
<b>H. Contractor's Profit (CP)</b>		8% per D.O 197 s 2016		14,654.31
<b>I. Value Added Tax (VAT)</b>		5% per D.O 197 s 2016		10,807.55
<b>J. Total Unit Cost</b>				<b>3,913.08</b>

### DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

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

Unit of Measurement : cu.m

Output per hour : 1.56

Quantity : 41.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
<b>A. Labor</b>				
a. Construction Foreman	1	3.28	611.92	2,007.10
b. Skilled Laborer	2	3.28	443.20	2,907.39
c. Laborer	8	3.28	342.24	8,980.38
Sub-total for A				P 13,894.87
Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
<b>B Equipment, (2014 ACEL Rates)</b>				
a. One Bagger Mixer	1	3.28	1,376.00	4,513.28
b. Water Truck	1	0.16	19,600.00	3,214.40
c. Backhoe	1	0.33	12,296.00	4,033.09
Minor Tools (10% of Labor)				1,389.49
Sub-total for B				P 13,150.25
<b>C. Total (A+B)</b>				P 27,045.12
<b>D. Output/day 12.50 cu.m /day</b>				
Name and Specifications	Quantity	Unit	Unit Cost	Amount
<b>E. Materials</b>				
a. Cement	225.50	bag	265.11	59,782.08
b. Sand	12.30	cu.m	1,024.48	12,601.10
c. Gravel Fill	0.82	cu.m	1,074.48	881.07
d. Weep Holes (PVC)	12.30	ln.m	133.00	1,635.90
e. Filter Cloth	0.62	sq.m	160.00	98.40
f. Boulders	43.05	cu.m	1,279.48	55,081.61
Miscellaneous (1% of Materials)				1,300.80
Sub-total for E				P 131,380.97
<b>F. Direct Cost (C+E)</b>				158,426.09
<b>G. Overhead, Contingencies and Miscellaneous</b>			10% per D.O 197 s 2016	15,842.61
<b>H. Contractor's Profit (CP)</b>			8% per D.O 197 s 2016	12,674.09
<b>I. Value Added Tax (VAT)</b>			5% per D.O 197 s 2016	9,347.14
<b>J. Total Unit Cost</b>				4,787.56



### DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

Item No./Description : 508 (1) Handlaid Rock Embankment

Unit of Measurement : cu.m

Output per hour : 3.13

Quantity : 65.72

Designation	No. of Person	No. of Days	Daily Rate	Amount
<b>A. Labor</b>				
a. Construction Foreman	1	2.63	611.92	1,608.62
b. Skilled Laborer	2	2.63	443.20	2,330.17
c. Laborer	8	2.63	342.24	7,197.44
Sub-total for A			P	11,136.23
Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
<b>B. Equipment, (2014 ACEL Rates)</b>				
Minor Tools (10% of Labor)				1,113.62
Sub-total for B			P	1,113.62
<b>C. Total (A+B)</b>			P	12,249.85
<b>D. Output/day 25.00 cu.m /day</b>				
Name and Specifications	Quantity	Unit	Unit Cost	Amount
<b>E. Materials</b>				
a. Boulders	69.01	cu.m	1,279.48	88,291.80
Sub-total for E			P	88,291.80
<b>F. Direct Cost (C+E)</b>				100,541.65
<b>G. Overhead, Contingencies and Miscellaneous</b>		10% per D.O 197 s 2016		10,054.16
<b>H. Contractor's Profit (CP)</b>		8% per D.O 197 s 2016		8,043.33
<b>I. Value Added Tax (VAT)</b>		5% per D.O 197 s 2016		5,931.96
<b>J. Total Unit Cost</b>				1,895.48

### DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

Item No./Description : 612(1) Reflectorized Thermoplastic Pavement Markings (White)

Unit of Measurement : sq.m

Output per hour : 25.00

Quantity : 404.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
<b>A. Labor</b>				
a. Construction Foreman	1	2.02	611.92	1,236.08
b. Skilled Laborer	2	2.02	443.20	1,790.53
c. Laborer	6	2.02	342.24	4,147.95
Sub-total for A			P	7,174.56
Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
<b>B Equipment, (2014 ACEL Rates)</b>				
a. Cargo Truck/Delivery Truck	1	2.02	9,696.00	19,585.92
b. Applicator Machine	1	2.02	750.00	1,515.00
c. Kneading Machine	1	2.02	1,500.00	3,030.00
Minor Tools (10% of labor)				
Sub-total for B			P	24,130.92
<b>C. Total (A+B)</b>			P	31,305.48
<b>D. Output/day 200.00 sq.m /day</b>				
Name and Specifications	Quantity	Unit	Unit Cost	Amount
<b>E. Materials</b>				
a. Thermoplastic Paint (white)	131.30	bag	1,585.00	208,110.50
b. Glass Beads	13.33	bag	2,500.00	33,330.00
c. Primer	48.48	liter	180.00	8,726.40
d. LPG (50 kg.)	1.62	cyl	90.00	145.44
e. LPG (12 kg.)	0.81	cyl	50.00	40.40
f. Calsumine	50.50	kg	5.00	252.50
Miscellaneous (5% of Materials)				12,530.26
Sub-total for E			P	263,135.50
<b>F. Direct Cost (C+E)</b>				294,440.98
<b>G. Overhead, Contingencies and Miscellaneous</b>			10% per D.O 197 s 2016	29,444.10
<b>H. Contractor's Profit (CP)</b>			8% per D.O 197 s 2016	23,555.28
<b>I. Value Added Tax (VAT)</b>			5% per D.O 197 s 2016	17,372.02
<b>J. Total Unit Cost</b>				903.00

## DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

Item No./Description : 612(2) Reflectorized Thermoplastic Pavement Markings (Yellow)

Unit of Measurement : sq.m

Output per hour : 25.00

Quantity : 202.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
<b>A. Labor</b>				
a. Construction Foreman	1	1.01	611.92	618.04
b. Skilled Laborer	2	1.01	443.20	895.26
c. Laborer	6	1.01	342.24	2,073.97
Sub-total for A				P 3,587.28
Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
<b>B Equipment, (2014 ACEL Rates)</b>				
a. Cargo Truck/Delivery Truck	1	1.01	9,696.00	9,792.96
b. Applicator Machine	1	1.01	750.00	757.50
c. Kneading Machine	1	1.01	1,500.00	1,515.00
Minor Tools (10% of labor)				
Sub-total for B				P 12,065.46
<b>C. Total (A+B)</b>				P 15,652.74
<b>D. Output/day 200.00 sq.m /day</b>				
Name and Specifications	Quantity	Unit	Unit Cost	Amount
<b>E. Materials</b>				
a. Thermoplastic Paint (yellow)	65.65	bag	1,800.00	118,170.00
b. Glass Beads	6.67	bag	2,500.00	16,665.00
c. Primer	24.24	liter	233.00	5,647.92
d. LPG (50 kg.)	0.81	cyl	90.00	72.72
e. LPG (12 kg.)	0.40	cyl	50.00	20.20
f. Calsumine	25.25	kg	5.00	126.25
Miscellaneous (5% of Materials)				7,035.10
Sub-total for E				P 147,737.19
<b>F. Direct Cost (C+E)</b>				163,389.93
<b>G. Overhead, Contingencies and Miscellaneous</b>			10% per D.O 197 s 2016	16,338.99
<b>H. Contractor's Profit (CP)</b>			8% per D.O 197 s 2016	13,071.19
<b>I. Value Added Tax (VAT)</b>			5% per D.O 197 s 2016	9,640.01
<b>J. Total Unit Cost</b>				1,002.18

### DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

Item No./Description : 622(1) Bio-Engineered Erosion Coco Fiber Erosion Control Net

Unit of Measurement : sq.m

Output per hour : 50.00

Quantity : 32,311.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
A. Labor				
a. Construction Foreman	1	80.78	611.92	49,429.37
b. Laborer	8	80.78	342.24	221,162.33
Sub-total for A			P	270,591.70
Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B. Equipment, (2014 ACEL Rates)				
a. Water Truck	1	20.19	19,600.00	395,809.75
Minor Tools (10% of Labor)				27,059.17
Sub-total for B			P	422,868.92
C. Total (A+B)			P	693,460.62
D. Output/day 400.00 sq.m /day				
Name and Specifications	Quantity	Unit	Unit Cost	Amount
E. Materials				
a. Erosion Control Net CGN 400 w/ 5% wastage (Price includes bamboo pegs)	33,926.55	sq.m	185.00	6,276,411.75
Sub-total for E			P	6,276,411.75
F. Direct Cost (C+E)				6,969,872.37
G. Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		696,987.24
H. Contractor's Profit (CP)		8% per D.O 197 s 2016		557,589.79
I. Value Added Tax (VAT)		5% per D.O 197 s 2016		411,222.47
J. Total Unit Cost				267.27

### DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

Item No./Description : 622(2) Bio-Engineered Erosion Coco Logs/Fascine Control System

Unit of Measurement : In.m

Output per hour : 15.00

Quantity : 4,080.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
A. Labor				
a. Construction Foreman	1	34.00	611.92	20,805.28
b. Laborer	8	34.00	342.24	93,089.28
Sub-total for A				P 113,894.56
Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B Equipment, (2014 ACEL Rates) Minor Tools (10% of Labor)				11,389.46
Sub-total for B				P 11,389.46
C. Total (A+B)				P 125,284.02
D. Output/day 120.00 In.m /day				
Name and Specifications	Quantity	Unit	Unit Cost	Amount
E. Materials				
a. Coco Fiber Roll (CGR 200) (Please includes nylon ropes and live stakes)	4,284.00	In.m	556.00	2,381,904.00
Sub-total for E				P 2,381,904.00
F. Direct Cost (C+E)				2,507,188.02
G. Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		250,718.80
H. Contractor's Profit (CP)		8% per D.O 197 s 2016		200,575.04
I. Value Added Tax (VAT)		5% per D.O 197 s 2016		147,924.09
J. Total Unit Cost				761.37

### DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

Item No./Description : 622(3) Bio-Engineered Erosion Control System Vegetation

Unit of Measurement : sq.m

Output per hour : 62.50

Quantity : 32,311.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
A. Labor				
a. Construction Foreman	1	64.62	611.92	39,543.49
b. Laborer	2	64.62	342.24	44,232.47
Sub-total for A				P 83,775.96
Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B. Equipment, (2014 ACEL Rates)				
a. Hydroseeding Machine	1	64.62	7,616.00	492,161.15
b. Water Truck	1	64.62	8,520.00	550,579.44
Sub-total for B				P 1,042,740.59
C. Total (A+B)				P 1,126,516.55
D. Output/day 500.00 sq.m /day				
Name and Specifications	Quantity	Unit	Unit Cost	Amount
E. Materials				
a. Grass Cover (Please includes grass seeds, mulch, cocopeat & binding agent for hydroseeding)	33,926.55	sq.m	172.00	5,835,366.60
Sub-total for E				P 5,835,366.60
F. Direct Cost (C+E)				6,961,883.15
G. Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		696,188.32
H. Contractor's Profit (CP)		8% per D.O 197 s 2016		556,950.65
I. Value Added Tax (VAT)		5% per D.O 197 s 2016		410,751.11
J. Total Unit Cost				266.96

## DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO  
 Item No./Description : A.1.1(3) Construction 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
<b>A. Labor</b>				
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>B Equipment, (2014 ACEL Rates)</b>				
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
<b>C. Total (A+B)</b>				P 85,050.16
<b>D. Output/day</b>	0.00	LS	/day	
Name and Specifications	Quantity	Unit	Unit Cost	Amount
<b>E. Materials</b>				
I. Earthworks (Excavation, Embankment, Bedding)				
a. Gravel Bedding	3.50	cu.m	1,074.48	3,760.68
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	265.11	23,859.81
b. Crushed Gravel	20.00	cu.m	1,074.48	21,489.60
c. Washed Sand	17.00	cu.m	1,024.48	17,416.16
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	70.00	1,400.00
IV. Formworks (Columns & Beams)				
a. Coco Lumber	400.00	bd.ft	20.00	8,000.00
b. Ordinary Plywood, 1/4"x4'x8'	18.00	pc	520.00	9,360.00
c. CWN, Assorted	5.00	kg	58.00	290.00
V. Masonry Works (masonry walls & plastering)				
a. CHB 6" thk	650.00	pc	18.00	11,700.00
b. Portland Cement	50.00	bag	265.11	13,255.45
c. Washed Sand	10.00	cu.m	1,024.48	10,244.80
d. 10mm dia. X 6m RSB	75.00	kg	43.00	3,225.00
e. No. 16 GI Tie Wire	2.50	kg	70.00	175.00
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				162,215.04
Sub-total for E				P 305,741.39
<b>F. Direct Cost (C+E)</b>				390,791.55
<b>G. Overhead, Contingencies and Miscellaneous</b>		10%	per D.O 197 s 2016	39,079.15
<b>H. Contractor's Profit (CP)</b>		8%	per D.O 197 s 2016	31,263.32
<b>I. Value Added Tax (VAT)</b>		5%	per D.O 197 s 2016	23,056.70
<b>J. Total Unit Cost</b>				484,190.73

## DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

Item No./Description : A.1.1(3) Construction 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
<b>A. Labor</b>				
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>B Equipment, (2014 ACEL Rates)</b>				
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
<b>C. Total (A+B)</b>			P	0.00
<b>D. Output/day</b> 0.00 LS /day				
Name and Specifications	Quantity	Unit	Unit Cost	Amount
<b>E. Materials</b>				
<b>VII Steel Works</b>				
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
<b>VII Roofing Works</b>				
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 1 1/2"	500.00	pc	1.25	625.00
e. Roof Sealant	2.00	lit	242.84	485.68
<b>IX. Carpentry Works</b>				
a. Rough Lumber, sun dried tanguile	350.00	bd.ff	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
<b>F. Direct Cost (C+E)</b>				
<b>G. Overhead, Contingencies and Miscellaneous</b>		10%	per D.O 197 s 2016	
<b>H. Contractor's Profit (CP)</b>		8%	per D.O 197 s 2016	
<b>I. Value Added Tax (VAT)</b>		5%	per D.O 197 s 2016	
<b>J. Total Unit Cost</b>				



### DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

Item No./Description : A.1.1(3) Construction 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 Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

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
<b>E. Materials</b>				
<i>Office Equipment/Facilities &amp; Supplies</i>				
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 dining 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
<i>Lighting/Water Fixtures</i>				
a. Electric Bill	3.80	mons	1,200.00	4,560.00
b. Water Bill	3.80	mons	1,000.00	3,800.00
c. LPG Gasul (11 kg)	3.80	mons	1,000.00	3,800.00
Sub-Total for E				242,303.32
Sub-total for E			P	242,303.32
F. Direct Cost (C+E)				242,303.32
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	
J. Total Unit Cost			254,418.49	

### DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

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
<b>A. Labor</b>				
a. Service Driver	1	171.00	443.20	75,787.20
Sub-total for A			P	75,787.20
Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
<b>B Equipment, (2014 ACEL Rates)</b>				
Sub-total for B			P	0.00
<b>C. Total (A+B)</b>			P	75,787.20
<b>D. Output/day</b> 0.00    L.S    /day				
Name and Specifications	Quantity	Unit	Unit Cost	Amount
<b>E. Materials</b>				
a. Liters, Diesel Fuel	1,710.00	liters	33.00	56,430.00
b. Engine Oil & Lubricants	1.00	ls	18,946.80	18,946.80
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	213,376.80
<b>F. Direct Cost (C+E)</b>				289,164.00
<b>G. Overhead, Contingencies and Miscellaneous</b>			0% per D.O 197 s 2016	0.00
<b>H. Contractor's Profit (CP)</b>			0% per D.O 197 s 2016	0.00
<b>I. Value Added Tax (VAT)</b>			5% per D.O 197 s 2016	14,458.20
<b>J. Total Unit Cost</b>				303,622.20

### DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

Item No./Description : B.5 Project Billboard

Unit of Measurement : each

Output per hour :

Quantity : 2.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
<b>A. Labor</b>				
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>B. Equipment, (2014 ACEL Rates)</b>				
Sub-total for B			P	0.00
<b>C. Total (A+B)</b>			P	434.90
<b>D. Output/day 0.00 each /day</b>				
Name and Specifications	Quantity	Unit	Unit Cost	Amount
<b>E. Materials</b>				
a. Marine Plywood 3/16" thk. X 4' x 8'	2.00	pc	475.00	950.00
b. Tarpaulin (4' x 8')	2.00	pc	800.00	1,600.00
c. Assorted Sizes Lumber	100.00	bd. Ft	20.00	2,000.00
d. Assorted Sizes CW Nails	2.00	kg	58.00	116.00
Sub-total for E			P	4,666.00
<b>F. Direct Cost (C+E)</b>				5,100.90
<b>G. Overhead, Contingencies and Miscellaneous</b>			10% per D.O 197 s 2016	510.09
<b>H. Contractor's Profit (CP)</b>			8% per D.O 197 s 2016	408.07
<b>I. Value Added Tax (VAT)</b>			5% per D.O 197 s 2016	300.95
<b>J. Total Unit Cost</b>				3,160.01

### DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

Item No./Description : B.7 Construction Safety and Health Program

Unit of Measurement : L.S

Output per hour :

Quantity : 1.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
<b>A. Labor</b>				
a. Safety Practitioner	1	85.50	611.92	52,319.16
b. First Aider	1	171.00	443.20	75,787.20
Sub-total for A				P 128,106.36
Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
<b>B. Equipment, (2014 ACEL Rates)</b>				
Sub-total for B				P 0.00
<b>C. Total (A+B)</b>				P 128,106.36
<b>D. Output/day 0.00 L.S /day</b>				
Name and Specifications	Quantity	Unit	Unit Cost	Amount
<b>E. Materials</b>				
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
<b>F. Direct Cost (C+E)</b>				140,466.36
<b>G. Overhead, Contingencies and Miscellaneous</b>			per D.O 197 s 2016	0.00
<b>H. Contractor's Profit (CP)</b>			8% per D.O 197 s 2016	11,237.31
<b>I. Value Added Tax (VAT)</b>			5% per D.O 197 s 2016	7,585.18
<b>J. Total Unit Cost</b>				159,288.85

### DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Construction of Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

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. Bullduzer	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 Concrete Road including RROW Acquisition - Midsalip - Buboan Road, Zamboanga del Sur, Zamboanga del Sur 1st DEO

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

Unit of Measurement : Km.

Output per hour : 0.04

Quantity : 1.90

Designation	No. of Person	No. of Days	Daily Rate	Amount
<b>A. Labor</b>				
<i>(For Field Works)</i>				
a. Geodetic Engineer	1	6.33	833.31	5,277.63
b. Skilled Laborer	3	6.33	443.20	8,420.80
c. Laborer	3	6.33	342.24	6,502.56
<i>(For Office Works)</i>				
a. Geodetic Engineer	1	19.00	833.31	15,832.89
b. Skilled Laborer	2	19.00	443.20	16,841.60
Sub-total for A			P	52,875.48
Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
<b>B. Equipment, (2014 ACEL Rates)</b>				
a. Total Station w/ complete accessories	1	6.33	800.00	5,066.67
Minor Tools (10% of labor)				5,287.55
Sub-total for B			P	10,354.21
<b>C. Total (A+B)</b>			P	63,229.69
<b>D. Output/day 0.30 Km. /day</b>				
Name and Specifications	Quantity	Unit	Unit Cost	Amount
<b>E. Materials</b>				
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
<b>F. Direct Cost (C+E)</b>				77,929.69
<b>G. Overhead, Contingencies and Miscellaneous</b>		10% per D.O 197 s 2016		7,792.97
<b>H. Contractor's Profit (CP)</b>		8% per D.O 197 s 2016		6,234.38
<b>I. Value Added Tax (VAT)</b>		5% per D.O 197 s 2016		4,597.85
<b>J. Total Unit Cost</b>				50,818.36

## 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

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

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

Loading & Unloading	= 5.00	mins.
Capacity of Dumptruck	= 10.00	cu.m.
Total Cycle Time	= 22.50	mins.

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

Dumptruck Daily Output	= 10.00 X 21.33	= 213.33	cu.m.
Using 4 Dumptruck	= 213.33 X 4.00	= 853.33	cu.m.

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

**EQUIPMENT USED: (2009 ACEL RATES)**

4.00 - Unit Dumptruck	@ P 10,816.00 / day	X 1.17 days	= P 50,700.00
		Sub-Total	<b>P 50,700.00</b>

Estimated Quantity	= 1,000.00	cu.m.
<b>Unit Cost</b>	<b>P 10.14</b>	<b>/cu.m./km. (unit cost hauling per cu.m. per km.)</b>
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	32.00	X	10.14	=	324.48	+	700.00	=	1,024.48
Cost of Coarse Aggregates	32.00	X	10.14	=	324.48	+	750.00	=	1,074.48
Cost of Item 200 Materails	32.00	X	10.14	=	324.48	+	600.00	=	924.48
Cost of Item 201 Materails	32.00	X	10.14	=	324.48	+	630.00	=	954.48
Cost of Item 300 Materails	32.00	X	10.14	=	324.48	+	700.00	=	1,024.48
Cost of Boulders	32.00	X	10.14	=	324.48	+	955.00	=	1,279.48
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	35,045.50
Portland Cement Concrete Pavement, 0.15m. Thick	2,754.18
Structural Concrete, Class A	5,576.50
Grouted Riprap, Class A	174.00
Stone Masonry	225.50
Construction of Field Office for the Engineer	90.00
	50.00
Lean Concrete	73.34
<b>TOTAL</b>	<b>43,989.02</b>

Quantity = 43,989.02 Bags

Delivery Charge = P 0.12 /bag/km

SITE	HAULING DISTANCE
Zamboanga del Sur 1st DEO	37.00
PROJECT SITE	

\* Average Hauling Distance from source to assumed stockpiling area:  
say 37.00 km.

Delivery Charge = P 0.12 X 37.00

Delivery Charge = P 4.44 /bag

\* Delivery Truck : 43,989.02 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 =  $\frac{37.00 \times 60.00}{30.00} = 74$  mins.

Unloading Running =  $\frac{37.00 \times 60.00}{40.00} = 55.5$  mins.

Loading & Unloading = 45.00 mins.

Capacity of Dumptruck = 8.00 cu.m.

500.00 bags

Total Cycle Time = 174.50 mins.

$$\begin{aligned} \text{No. of trips for Dumptruck per day} &= \frac{8.00 \times 60.00}{174.50} = 2.75 \text{ trips} \\ \text{Dumptruck Daily Outpout} &= 500.00 \times 2.75 = 1,375.36 \text{ cu.m.} \\ \text{Using 4 Dumptruck} &= 1,375.36 \times 4.00 = 5,501.43 \text{ cu.m.} \\ \text{No. of Days for Dumptruck} &= \frac{43,989.02}{5,501.43} = 8.00 \text{ days} \\ \text{No. of Days for Labor for unloading} &= \text{complimentary to D.Truck days} = 8.00 \text{ days} \end{aligned}$$

**DELIVERY COST:**

$$43,989.02 \text{ Bags, Portland Cement @ P } 4.44 \text{ /bag} = \text{P } \frac{195,311.25}{195,311.25}$$

**Sub-total**

**LABOR:**

$$\begin{aligned} 1 \text{ Foreman @ P } 558.00 \text{ /day} &\times 8.00 \text{ days} = \text{P } 4,461.72 \\ 10 \text{ Laborers @ P } 312.24 \text{ /day} &\times 8.00 \text{ days} = \frac{24,966.46}{29,428.19} \\ \text{Sub-total} & \end{aligned}$$

**MATERIALS:**

$$43,989.02 \text{ Bags, Portland Cement @ P } 260.00 \text{ /bag} = \text{P } \frac{11,437,145.20}{11,437,145.20}$$

**Sub-total**

Estimated Quantity : 43,989.02 Bags

Unit Cost	P	265.11
Grand Total	P	11,661,884.64
Delivery Cost	P	195,311.25
Labor	P	29,428.19
Materials	P	11,437,145.20