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 : **Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road**	Approriation : P 150,000,000.00 Source of Funds : CY-2018 Issued Obligated Authority : Released : Cal. Days to Complete : 207.00 Cal. Days
PROJECT CATEGORY : NATIONAL ROAD	Desirable Starting Date : Upon Approval Mode of Implementation :
PROJECT DESCRIPTION : Scope of Work : Road Widening Road Width : 6.70 m. Roadbed Width : 12.00 m. Subbase Course : 0.30 mtrs thick Surface Course : 0.15 mtrs thick	NET LENGTH : K1763+300.00 - K1763+489.00 K1763+631.00 - K1766+037.00 K1766+165.00 - K1768+196.12 K1768+196.12 - K1768+700.00 Net Length : **10.26** lane km Net Length : **5,130.00** ln.m. / **5.130** 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(2)a	Removal of Existing Electric Post	0.015	each	19.00	17,952.06	944.85
101(4)a1	Removal of Existing RCPC	0.026	each	82.50	30,360.00	368.00
101(3b2)	Removal of Existing PCCP	0.003	sq.m	33.50	4,063.59	121.30
101(2)b	Removal of Existing Headwall	0.001	each	4.00	1,447.03	361.76
101(8)	Removal of Existing Guardrails	0.064	ln.m	2,737.66	74,824.49	27.33
101(9)	Removal of Existing Guardrails Post	0.016	each	681.00	18,612.79	27.33
102(2)	Surplus Common Excavation	0.860	cu.m.	5,511.00	999,013.87	181.28
103 (1)a	Structure Excavation	0.208	cu.m.	1,049.50	241,506.37	230.12
103(3)	Foundation Fill	0.028	cu.m.	37.00	32,689.43	883.50
103(6)a	Pipe Culvert and Drain Excavation	0.085	cu.m.	429.50	98,834.67	230.12
104(1)a1	Embankment from Roadway Excavation	6.019	cu.m.	30,193.00	6,992,222.66	231.58
105 (1)a	Subgrade Preparation	0.606	sq.m.	45,948.00	704,467.08	15.33
200 (1)	Aggregate Subbase Course	26.207	cu.m.	19,114.00	30,446,518.57	1,592.89
300 (1)	Aggregate Surface Course	1.804	cu.m.	1,634.00	2,095,783.11	1,282.61
311(1)e1a	Portland Cement Concrete Pavement-using Conventional Method, 0.28m thick	49.920	sq.m.	34,758.50	57,996,267.29	1,668.55
311(1)a	Portland Cement Concrete Pavement, 0.15m. Thick	2.865	sq.m	3,633.00	3,328,639.78	916.22
404 (1)a	Reinforcing Steel Bar, Grade 40	0.885	kg.	21,516.00	1,028,704.46	47.81
405 (1) a3	Structural Concrete, Class A	3.388	cu.m	531.50	3,936,230.85	7,405.89
500(1)b3	Pipe Culvert & Storm Drain	0.398	ln.m	125.00	461,983.59	3,695.87
500 (1)b4	Pipe Culvert & Storm Drain	0.349	ln.m	137.00	405,638.60	2,960.87
505(5)	Grouted Riprap, Class A	0.328	cu.m	94.50	381,217.42	4,034.05
506(1)	Stone Masonry	1.065	cu.m	298.50	1,237,531.62	4,145.83

607(1)b	Reflective Pavement Studs, Flush Type	0.309	each	439.00	358,429.08	816.47
611(1)	Trees (Furnishing and Transplanting)	1.304	each	373.00	1,514,982.40	4,061.62
612(1)	Reflectorized Thermoplastic Pavement Markings (White)	0.966	sq.m	1,540.00	1,122,374.02	728.81
500 (1)a1	RC Culvert Pipe, 610 mm	0.033	ln.m	18.00	38,582.78	2,143.49
502(3)e	Catch Basin	0.012	each	6.00	13,836.42	2,306.07
502(4)a	Concrete Cover	0.005	each	6.00	5,827.00	971.17
503 (1)	Metal Frame & Grating	0.006	set	6.00	7,189.17	1,198.20
600(3)	Concrete Curb and Gutter	0.097	ln.m	122.00	113,015.06	926.35
601	Sidewalk	0.126	sq.m.	244.00	146,921.19	602.14
605(2)z2	Regulatory Signs	0.013	units	2.00	14,557.19	7,278.59
A.1.1(3)	Const. of Field Office for the Engineer	0.351	LS	1.00	407,748.04	407,748.04
A.1.1(11)	Prov. Of Furniture, Equipment and Appliances for Field Engineer	0.211	LS	1.00	244,863.32	244,863.32
A.1.2(5)	Operation & Maintenance of Gov't. Service Vehicle	0.280	L.S	1.00	325,128.00	325,128.00
B.5	Project Billboard	0.004	Unit	2.00	4,864.90	2,432.45
B.7	Occupational Safety & Health Program	0.144	L.S	1.00	167,436.12	167,436.12
B.9	Mobilization and Demobilization	0.837	L.S	1.00	972,312.00	972,312.00
B.4(1)	Construction Survey and Staking	0.160	Km.	5.13	185,420.18	36,144.28
TOTAL		**100.000**			**P 116,177,996.19**	

Name of Project : **Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road**

Station Limits : K1763+300.00 - K1763+489.00 K1766+165.00 - K1768+196.12
K1876+377.00 - K1877+534.00 K1768+196.12 - K1768+700.00

BREAKDOWN OF ESTIMATED EXPENDITURES	% OF TOTAL		AMOUNT
I. ESTIMATED COST			
A. DIRECT COST			
A.1 Materials	61.11		91,660,168.86
A.2 Labor	1.46		2,187,643.46
A.3 Equipment Expenses	14.89		22,330,183.87
SUB-TOTAL (DIRECT COST)	77.45	P	116,177,996.19
B. INDIRECT COST (Per DO # 197 s. 2016)			
B.1 Overhead, Contingency & Misc. (10% Max. of D.C.)	7.63		11,446,825.67
B.2 Profit (8% Max. D.C.)	6.11		9,170,855.43
C. VAT (5% of D.C. and I.C. per D.O. # 197)	4.56		6,839,783.86
SUB-TOTAL (CONTRACT COST)	95.76	P	143,635,461.16
II. ESTIMATED GOVERNMENT EXPENDITURES			
1 Engineering and Administrative Overhead (3.5%)	3.50		5,250,000.00
2 Detailed Engineering (1%)			
3 Reserved for the Payment of RROW)	0.74		1,114,538.84
4 Physical Reserved	0.00		
TOTAL ESTIMATED PROJECT COST	100.00	P	150,000,000.00

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., CESO III
Regional Director

APPRO[illegible]UDGET FOR THE CONTRACT

Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road

Project Name and Location

Station Limits : K1763+300.00 - K1763+489.00 K1763+631.00 - K1766+037.00 K1766+165.00 - K1768+196.12 K1768+196.12 - K1768+700.00

Length : 5,130.00 ln.m. *Contract Duration* : 207.00 *Calendar Days*

Item No.	Description	Quantity	Unit	Estimated Direct Cost	MARK-UP IN PERCENT		TOTAL MARK-UPS		VAT	TOTAL INDIRECT COST	TOTAL COST	TOTAL COST
					OCM	PROFIT	%	VALUE				
(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	407,748.04	10.00	8.00	18.00	73,394.65	24,057.13	97,451.78	505,199.82	505,199.82
A.1.1(11)	Prov. Of Furniture, Equipment and Appliances for Field Engineer	1.00	LS	244,863.32	0.00	0.00	0.00	-	12,243.17	12,243.17	257,106.49	257,106.49
A.1.2(5)	Operation & Maintenance of Gov't. Service Vehicle	1.00	L.S	325,128.00	0.00	0.00	0.00	-	16,256.40	16,256.40	341,384.40	341,384.40
	TOTAL OF PART A			**977,739.36**				**73,394.65**	**52,556.70**	**125,951.35**	**1,103,690.70**	
PART B	OTHER GENERAL REQUIREMENTS											
B.5	Project Billboard	2.00	Unit	4,864.90	10.00	8.00	18.00	875.68	287.03	1,162.71	6,027.61	3,013.81
B.7	Occupational Safety & Health Program	1.00	L.S	167,436.12	0.00	8.00	8.00	13,394.89	9,041.55	22,436.44	189,872.56	189,872.56
B.9	Mobilization and Demobilization	1.00	L.S	972,312.00	0.00	0.00	0.00	-	48,615.60	48,615.60	1,020,927.60	1,020,927.60
B.4(1)	Construction Survey and Staking	5.13	Km.	185,420.18	10.00	8.00	18.00	33,375.63	10,939.79	44,315.42	229,735.60	44,782.77
	TOTAL OF PART B			**1,330,033.20**				**47,646.20**	**68,883.97**	**116,530.17**	**1,446,563.37**	
PART C	EARTHWORKS											
101(2)a	Removal of Existing Electric Post	19.00	each	17,952.06	10.00	8.00	18.00	3,231.37	1,059.17	4,290.54	22,242.60	1,170.66
101(4)a1	Removal of Existing RCPC	82.50	each	30,360.00	10.00	8.00	18.00	5,464.80	1,791.24	7,256.04	37,616.04	455.95
101(3b2)	Removal of Existing PCCP	33.50	sq.m	4,063.59	10.00	8.00	18.00	731.45	239.75	971.20	5,034.79	150.29
101(2)b	Removal of Existing Headwall	4.00	each	1,447.03	10.00	8.00	18.00	260.46	85.37	345.84	1,792.87	448.22
101(8)	Removal of Existing Guardrails	2,737.66	ln.m	74,824.49	10.00	8.00	18.00	13,468.41	4,414.64	17,883.05	92,707.54	33.86
101(9)	Removal of Existing Guardrails Post	681.00	each	18,612.79	10.00	8.00	18.00	3,350.30	1,098.15	4,448.46	23,061.24	33.86
102(2)	Surplus Common Excavation	5,511.00	cu.m.	999,013.87	10.00	8.00	18.00	179,822.50	58,941.82	238,764.32	1,237,778.19	224.60
103 (1)a	Structure Excavation	1,049.50	cu.m.	241,506.37	10.00	8.00	18.00	43,471.15	14,248.88	57,720.02	299,226.40	285.11
103(3)	Foundation Fill	37.00	cu.m.	32,689.43	10.00	8.00	18.00	5,884.10	1,928.68	7,812.77	40,502.20	1,094.65
103(6)a	Pipe Culvert and Drain Excavation	429.50	cu.m.	98,834.67	10.00	8.00	18.00	17,790.24	5,831.25	23,621.49	122,456.16	285.11
104(1)a1	Embankment from Roadway Excavation	30,193.00	cu.m.	6,992,222.66	10.00	8.00	18.00	1,258,600.08	412,541.14	1,671,141.21	8,663,363.87	286.93
105 (1)a	Subgrade Preparation	45,948.00	sq.m.	704,467.08	10.00	8.00	18.00	126,804.07	41,563.56	168,367.63	872,834.71	19.00
	TOTAL OF PART C			**9,215,994.03**				**1,658,878.93**	**543,743.65**	**2,202,622.57**	**11,418,616.60**	
PART D	SUBBASE AND BASE COURSE											
200 (1)	Aggregate Subbase Course	19,114.00	cu.m.	30,446,518.57	10.00	8.00	18.00	5,480,373.34	1,796,344.60	7,276,717.94	37,723,236.51	1,973.59
	TOTAL OF PART D			**30,446,518.57**				**5,480,373.34**	**1,796,344.60**	**7,276,717.94**	**37,723,236.51**	
PART E	SURFACE COURSES											
300 (1)	Aggregate Surface Course	1,634.00	cu.m.	2,095,783.11	10.00	8.00	18.00	377,240.96	123,651.20	500,892.16	2,596,675.27	1,589.15
311(1)e1a	Portland Cement Concrete Pavement-using Conventional Method, 0.28m thick	34,758.50	sq.m.	57,996,267.29	10.00	8.00	18.00	10,439,328.11	3,421,779.77	13,861,107.88	71,857,375.17	2,067.33
311(1)a	Portland Cement Concrete Pavement, 0.15m. Thick	3,633.00	sq.m	3,328,639.78	10.00	8.00	18.00	599,155.16	196,389.75	795,544.91	4,124,184.69	1,135.20
	TOTAL OF PART E			**63,420,690.18**				**11,415,724.23**	**3,741,820.72**	**15,157,544.95**	**78,578,235.13**	
PART F	BRIDGE CONSTRUCTION											
404 (1)a	Reinforcing Steel Bar, Grade 40	21,516.00	kg.	1,028,704.46	10.00	8.00	18.00	185,166.80	60,693.56	245,860.37	1,274,564.83	59.24
405 (1) a3	Structural Concrete, Class A	531.50	cu.m	3,936,230.85	10.00	8.00	18.00	708,521.55	232,237.62	940,759.17	4,876,990.02	9,175.90
	TOTAL OF PART F			**4,964,935.31**				**893,688.36**	**292,931.18**	**1,186,619.54**	**6,151,554.85**	
PART G	DRAINAGE AND SLOPE PROTECTION STRUCTURES											
500 (1)a1	RC Culvert Pipe, 610 mm	18.00	ln.m	38,582.78	10.00	8.00	18.00	6,944.90	2,276.38	9,221.28	47,804.06	2,655.78
502(3)e	Catch Basin	6.00	each	13,836.42	10.00	8.00	18.00	2,490.56	816.35	3,306.91	17,143.33	2,857.22
502(4)a	Concrete Cover	6.00	each	5,827.00	10.00	8.00	18.00	1,048.86	343.79	1,392.65	7,219.65	1,203.28
503 (1)	Metal Frame & Grating	6.00	set	7,189.17	10.00	8.00	18.00	1,294.05	424.16	1,718.21	8,907.38	1,484.56
500(1)b3	Pipe Culvert & Storm Drain	125.00	ln.m	461,983.59	10.00	8.00	18.00	83,157.05	27,257.03	110,414.08	572,397.67	4,579.18
500 (1)b4	Pipe Culvert & Storm Drain	137.00	ln.m	405,638.60	10.00	8.00	18.00	73,014.95	23,932.68	96,947.62	502,586.22	3,668.51
505(5)	Grouted Riprap, Class A	94.50	cu.m	381,217.42	10.00	8.00	18.00	68,619.14	22,491.83	91,110.96	472,328.39	4,998.18
506(1)	Stone Masonry	298.50	cu.m	1,237,531.62	10.00	8.00	18.00	222,755.69	73,014.37	295,770.06	1,533,301.67	5,136.69
	TOTAL OF PART G			**2,551,806.60**				**459,325.19**	**150,556.59**	**609,881.78**	**3,161,688.38**	
PART H	MISCELLANEOUS STRUCTURES											
600(3)	Concrete Curb and Gutter	122.00	ln.m	113,015.06	10.00	8.00	18.00	20,342.71	6,667.89	27,010.60	140,025.65	1,147.75
601	Sidewalk	244.00	sq.m.	146,921.19	10.00	8.00	18.00	26,445.82	8,668.35	35,114.17	182,035.36	746.05
605(2)z2	Regulatory Signs	2.00	units	14,557.19	10.00	8.00	18.00	2,620.29	858.87	3,479.17	18,036.36	9,018.18
607(1)b	Reflective Pavement Studs, Flush Type	439.00	each	358,429.08	10.00	8.00	18.00	64,517.23	21,147.32	85,664.55	444,093.63	1,011.60
611(1)	Trees (Furnishing and Transplanting)	373.00	each	1,514,982.40	10.00	8.00	18.00	272,696.83	89,383.96	362,080.79	1,877,063.19	5,032.34
612(1)	Reflectorized Thermoplastic Pavement Markings (White)	1,540.00	sq.m	1,122,374.02	10.00	8.00	18.00	202,027.32	66,220.07	268,247.39	1,390,621.41	903.00
	TOTAL OF PART H			**3,270,278.94**				**588,650.21**	**192,946.46**	**781,596.67**	**4,051,875.60**	
	TOTAL			***116,177,996.19***				***20,617,681.10***	***5,043,439.27***	***27,457,464.97***	***143,635,461.16***	

SUMMARY

Name of Project : **Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road**

Item No.	Description	Quantity	Unit	Labor	Equipment	Materials	OCM	Profit	VAT	TOTAL
101(2)a	Removal of Existing Electric Post	19.00	each	4,131.55	12,300.51	1,520.00	1,795.21	1,436.16	1,059.17	22,242.60
101(4)a1	Removal of Existing RCPC	82.50	each	2,228.19	28,131.81	-	3,036.00	2,428.80	1,791.24	37,616.04
101(3b2)	Removal of Existing PCCP	33.50	sq.m	135.72	3,927.88	-	406.36	325.09	239.75	5,034.79
101(2)b	Removal of Existing Headwall	4.00	each	70.01	1,377.02	-	144.70	115.76	85.37	1,792.87
101(8)	Removal of Existing Guardrails	2,737.66	ln.m	4,436.38	70,388.11	-	7,482.45	5,985.96	4,414.64	92,707.54
101(9)	Removal of Existing Guardrails Post	681.00	each	1,103.56	17,509.23	-	1,861.28	1,489.02	1,098.15	23,061.24
102(2)	Surplus Common Excavation	5,511.00	cu.m.	18,813.64	980,200.24	-	99,901.39	79,921.11	58,941.82	1,237,778.19
103 (1)a	Structure Excavation	1,049.50	cu.m.	10,748.45	230,757.92	-	24,150.64	19,320.51	14,248.88	299,226.40
103(3)	Foundation Fill	37.00	cu.m.	7,329.26	4,366.00	20,994.17	3,268.94	2,615.15	1,928.68	40,502.20
103(6)a	Pipe Culvert and Drain Excavation	429.50	cu.m.	4,398.72	94,435.95	-	9,883.47	7,906.77	5,831.25	122,456.16
104(1)a1	Embankment from Roadway Excavation	30,193.00	cu.m.	179,075.59	6,813,147.07	-	699,222.27	559,377.81	412,541.14	8,663,363.87
105 (1)a	Subgrade Preparation	45,948.00	sq.m.	24,819.58	679,647.50	-	70,446.71	56,357.37	41,563.56	872,834.71
200 (1)	Aggregate Subbase Course	19,114.00	cu.m.	61,948.47	2,398,807.00	27,985,763.10	3,044,651.86	2,435,721.49	1,796,344.60	37,723,236.51
300 (1)	Aggregate Surface Course	1,634.00	cu.m.	5,295.79	145,017.50	1,945,469.81	209,578.31	167,662.65	123,651.20	2,596,675.27
311(1)e1a	Portland Cement Concrete Pavement-using Conventional Method, 0.28m thick	34,758.50	sq.m.	488,817.76	7,251,199.90	50,256,249.63	5,799,626.73	4,639,701.38	3,421,779.77	71,857,375.17
311(1)a	Portland Cement Concrete Pavement, 0.15m. Thick	3,633.00	sq.m	27,466.67	426,375.19	2,874,797.92	332,863.98	266,291.18	196,389.75	4,124,184.69
404 (1)a	Reinforcing Steel Bar, Grade 40	21,516.00	kg.	63,296.49	48,180.90	917,227.08	102,870.45	82,296.36	60,693.56	1,274,564.83
405 (1) a3	Structural Concrete, Class A	531.50	cu.m	457,154.54	227,295.41	3,251,780.90	393,623.08	314,898.47	232,237.62	4,876,990.02
500(1)b3	Pipe Culvert & Storm Drain	125.00	ln.m	44,801.25	108,230.13	308,952.22	46,198.36	36,958.69	27,257.03	572,397.67
500 (1)b4	Pipe Culvert & Storm Drain	137.00	ln.m	49,102.17	79,958.82	276,577.61	40,563.86	32,451.09	23,932.68	502,586.22
505(5)	Grouted Riprap, Class A	94.50	cu.m	40,032.47	89,092.82	252,092.13	38,121.74	30,497.39	22,491.83	472,328.39
506(1)	Stone Masonry	298.50	cu.m	101,161.41	95,740.27	1,040,629.94	123,753.16	99,002.53	73,014.37	1,533,301.67
607(1)b	Reflective Pavement Studs, Flush Type	439.00	each	8,992.04	44,613.00	304,824.04	35,842.91	28,674.33	21,147.32	444,093.63
611(1)	Trees (Furnishing and Transplanting)	373.00	each	81,108.85	1,330,395.89	103,477.66	151,498.24	121,198.59	89,383.96	1,877,063.19
612(1)	Reflectorized Thermoplastic Pavement Markings (White)	1,540.00	sq.m	27,348.55	91,984.20	1,003,041.27	112,237.40	89,789.92	66,220.07	1,390,621.41
500 (1)a1	RC Culvert Pipe, 610 mm	18.00	ln.m	2,867.28	6,926.73	28,788.77	3,858.28	3,086.62	2,276.38	47,804.06
502(3)e	Catch Basin	6.00	each	6,354.36	1,469.44	6,012.63	1,383.64	1,106.91	816.35	17,143.33
502(4)a	Concrete Cover	6.00	each	2,118.12	628.81	3,080.07	582.70	466.16	343.79	7,219.65
503 (1)	Metal Frame & Grating	6.00	set	1,304.70	2,476.47	3,408.00	718.92	575.13	424.16	8,907.38
600(3)	Concrete Curb and Gutter	122.00	ln.m	7,584.49	5,248.56	100,182.01	11,301.51	9,041.20	6,667.89	140,025.65
601	Sidewalk	244.00	sq.m.	9,899.69	7,828.72	129,192.78	14,692.12	11,753.70	8,668.35	182,035.36
605(2)z2	Regulatory Signs	2.00	units	434.90	451.97	13,670.32	1,455.72	1,164.58	858.87	18,036.36
A.1.1(3)	Const. of Field Office for the Engineer	1.00	LS	53,245.60	31,804.56	322,697.88	40,774.80	32,619.84	24,057.13	505,199.82
A.1.1(11)	Prov. Of Furniture, Equipment and Appliances for Field Engineer	1.00	LS	-	-	244,863.32	-	-	12,243.17	257,106.49
A.1.2(5)	Operation & Maintenance of Gov't. Service Vehicle	1.00	L.S	91,742.40	-	233,385.60	-	-	16,256.40	341,384.40
B.5	Project Billboard	2.00	Unit	434.90	-	4,430.00	486.49	389.19	287.03	6,027.61
B.7	Occupational Safety & Health Program	1.00	L.S	155,076.12	-	12,360.00	-	13,394.89	9,041.55	189,872.56
B.9	Mobilization and Demobilization	1.00	L.S	-	972,312.00	-	-	-	48,615.60	1,020,927.60
B.4(1)	Construction Survey and Staking	5.13	Km.	142,763.80	27,956.38	14,700.00	18,542.02	14,833.61	10,939.79	229,735.60
	TOTAL			**2,187,643.46**	**22,330,183.87**	**91,660,168.86**	**11,446,825.67**	**9,170,855.43**	**6,839,783.86**	**143,635,461.16**

Name of Project : **Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road**
Net Length : 5,130.00 ln.m.

Item No.	Description	Quantity	Unit	DURATION # OF DAYS
101(2)a	Removal of Existing Electric Post	19.00	each	2.38
101(4)a1	Removal of Existing RCPC	82.50	each	1.72
101(3b2)	Removal of Existing PCCP	33.50	each	0.10
101(2)b	Removal of Existing Headwall	4.00	each	0.05
101(8)	Removal of Existing Guardrails	2,737.66	ln.m	3.42
101(9)	Removal of Existing Guardrails Post	681.00	each	0.85
102(2)	Surplus Common Excavation	5,511.00	cu.m.	11.48
103 (1)a	Structure Excavation	1,049.50	cu.m.	6.56
103(3)	Foundation Fill	37.00	cu.m.	3.70
103(6)a	Pipe Culvert and Drain Excavation	429.50	cu.m.	2.68
104(1)a1	Embankment from Roadway Excavation	30,193.00	cu.m.	62.65
105 (1)a	Subgrade Preparation	45,948.00	sq.m.	19.15
200 (1)	Aggregate Subbase Course	19,114.00	cu.m.	47.79
300 (1)	Aggregate Surface Course	1,634.00	cu.m.	4.09
311(1)e1a	Portland Cement Concrete Pavement-using Conventional Method, 0.28m thick	34,758.50	sq.m.	75.30
311(1)a	Portland Cement Concrete Pavement, 0.15m. Thick	3,633.00	sq.m	4.23
404 (1)a	Reinforcing Steel Bar, Grade 40	21,516.00	kg.	14.94
405 (1) a3	Structural Concrete, Class A	531.50	cu.m	47.46
500(1)b3	Pipe Culvert & Storm Drain	125.00	ln.m	15.63
500 (1)b4	Pipe Culvert & Storm Drain	137.00	ln.m	17.13
505(5)	Grouted Riprap, Class A	94.50	cu.m	9.45
506(1)	Stone Masonry	298.50	cu.m	23.88
607(1)b	Reflective Pavement Studs, Flush Type	439.00	each	5.49
611(1)	Trees (Furnishing and Transplanting)	373.00	each	46.63
612(1)	Reflectorized Thermoplastic Pavement Markings (White)	1,540.00	sq.m	7.70
500 (1)a1	RC Culvert Pipe, 610 mm	18.00	ln.m	1.00
502(3)e	Catch Basin	6.00	each	1.50
502(4)a	Concrete Cover	6.00	each	0.50
503 (1)	Metal Frame & Grating	6.00	set	0.75
600(3)	Concrete Curb and Gutter	122.00	ln.m	1.48
601	Sidewalk	244.00	sq.m.	1.53
605(2)z2	Regulatory Signs	2.00	units	0.25
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	
A.1.2(5)	Operation & Maintenance of Gov't. Service Vehicle	1.00	LS	207.00
B.5	Project Billboard	2.00	Unit	0.25
B.7	Occupational Safety & Health Program	1.00	LS	138.00
B.9	Mobilization and Demobilization	1.00	LS	4.00
B.4(1)	Construction Survey and Staking	5.13	Km.	68.40

WEEKS (6 WORKING DAYS): 1–60

TOTAL NO. OF WORKING DAYS	:	138
INCLEMENT WEATHER & CURING TIME	:	46
NUMBER OF SUNDAYS	:	23
TOTAL NO. CALENDAR DAYS	:	**207**

Prepared by:

JERALD R. BARRERA
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 : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

Item No./Description : 101(2)a Removal of Existing Electric Post
Unit of Measurement : each
Output per hour : 1.00
Quantity : 19.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	2.38	611.92	1,453.31
	b. Skilled Laborer	1	2.38	443.20	1,052.60
	c. Laborer	2	2.38	342.24	1,625.64
	Sub-total for A			P	4,131.55
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe	1	0.59	12,296.00	7,300.75
	b. Dumptruck	1	0.40	11,360.00	4,586.60
	Minor Tools (5% of Labor Cost)				413.16
	Sub-total for B			P	12,300.51
C.	Total (A+B)			P	16,432.06
D.	Output/day 8.00 each/day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Rope, 1" dia.	76.00	m	20.00	1,520.00
	Sub-total for E			P	1,520.00
F.	Direct Cost (C+E)				17,952.06
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		1,795.21
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		1,436.16
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		1,059.17
J.	Total Unit Cost				1,170.66

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

Item No./Description : 101(4)a1 Removal of Existing RCPC
Unit of Measurement : each
Output per hour : 6.00
Quantity : 82.50

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	1.72	611.92	1,051.74
	b. Laborer	2	1.72	342.24	1,176.45
	Sub-total for A			P	2,228.19
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe	1	1.72	12,296.00	21,133.75
	b. Boom Truck	1	0.86	8,143.20	6,998.06
	Sub-total for B			P	28,131.81
C.	Total (A+B)			P	30,360.00
D.	Output/day 48.00 each /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	Sub-total for E			P	0.00
F.	Direct Cost (C+E)				30,360.00
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		3,036.00
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		2,428.80
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		1,791.24
J.	Total Unit Cost				455.95

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening including Drainage and RROW Acquisition - Dipolog - Oroquieta National Road, Zamboanga del Norte 3rd DEO

Item No./Description : 101(3b2) Removal of Existing PCCP
Unit of Measurement : sq.m
Output per hour : 40.00
Quantity : 33.50

	Designation	No. of Person	No. of Days	Daily Rate		Amount
A.	Labor					
	a. Construction Foreman	1	0.10	611.92		64.06
	b. Laborer	2	0.10	342.24		71.66
	Sub-total for A				P	135.72
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate		Amount
B	Equipment, (2014 ACEL Rates)					
	a. Backhoe	1	0.10	12,296.00		1,287.24
	b. Payloader	1	0.10	13,864.00		1,451.39
	c. Dumptruck	1	0.10	11,360.00		1,189.25
	Sub-total for B				P	3,927.88
C.	Total (A+B)				P	4,063.59
D.	Output/day 320.00 sq.m /day					
	Name and Specifications	Quantity	Unit	Unit Cost		Amount
E.	Materials					
	Sub-total for E				P	0.00
F.	Direct Cost (C+E)					4,063.59
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016			406.36
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016			325.09
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016			239.75
J.	Total Unit Cost					150.29

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

Item No./Description : 101(2)b Removal of Existing Headwall
Unit of Measurement : cu.m
Output per hour : 10.00
Quantity : 4.00 each
4.32

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.05	611.92	33.04
	b. Laborer	2	0.05	342.24	36.96
	Sub-total for A			P	70.01
	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	431.59
	b. Backhoe	1	0.03	12,296.00	331.99
	c. Dumptruck	1	0.05	11,360.00	613.44
	Sub-total for B			P	1,377.02
C.	Total (A+B)			P	1,447.03
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)				1,447.03
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		144.70
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		115.76
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		85.37
J.	Total Unit Cost				448.22

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

Item No./Description : 101(8) Removal of Existing Guardrails
Unit of Measurement : ln.m
Output per hour : 100.00
Quantity : 2,737.66

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	3.42	611.92	2,094.04
	b. Laborer	2	3.42	342.24	2,342.34
	Sub-total for A			P	4,436.38
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe	1	3.42	12,296.00	42,077.83
	b. Boom Truck	1	3.42	8,143.20	27,866.64
	Minor Tools (10% of Labor Cost)				443.64
	Sub-total for B			P	70,388.11
C.	Total (A+B)			P	74,824.49
D.	Output/day 800.00 ln.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	Sub-total for E			P	0.00
F.	Direct Cost (C+E)				74,824.49
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	7,482.45
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	5,985.96
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	4,414.64
J.	Total Unit Cost				33.86

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

Item No./Description : 101(9) Removal of Existing Guardrails Post
Unit of Measurement : each
Output per hour : 100.00
Quantity : 681.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.85	611.92	520.90
	b. Laborer	2	0.85	342.24	582.66
	Sub-total for A			P	1,103.56
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe	1	0.85	12,296.00	10,466.97
	b. Boom Truck	1	0.85	8,143.20	6,931.90
	Minor Tools (10% of Labor Cost)				110.36
	Sub-total for B			P	17,509.23
C.	Total (A+B)			P	18,612.79
D.	Output/day 800.00 each /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	Sub-total for E			P	0.00
F.	Direct Cost (C+E)				18,612.79
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	1,861.28
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	1,489.02
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	1,098.15
J.	Total Unit Cost				33.86

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

Item No./Description : 102(2) Surplus Common Excavation
Unit of Measurement : cu.m.
Output per hour : 60.00
Quantity : 5,511.00

	Designation	No. of Person	No. of Days	Daily Rate		Amount
A.	Labor					
	a. Construction Foreman	1	11.48	611.92		7,025.61
	b. Laborer	3	11.48	342.24		11,788.03
	Sub-total for A				P	18,813.64
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate		Amount
B	Equipment, (2014 ACEL Rates)					
	a. Bulldozer	1	11.48	27,032.00		310,361.15
	b. Payloader	1	11.48	13,864.00		159,176.05
	c. Payloader	1	8.61	13,864.00		119,382.04
	d. Dumptruck	3	11.48	11,360.00		391,281.00
	Sub-total for B				P	980,200.24
C.	Total (A+B)				P	999,013.87
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)					999,013.87
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016		99,901.39
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016		79,921.11
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016		58,941.82
J.	Total Unit Cost					224.60

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

Item No./Description : 103 (1)a Structure Excavation
Unit of Measurement : cu.m.
Output per hour : 20.00
Quantity : 1,049.50

Designation	No. of Person	No. of Days	Daily Rate	Amount
A. Labor				
a. Construction Foreman	1	6.56	611.92	4,013.81
b. Laborers	3	6.56	342.24	6,734.64
Sub-total for A			P	10,748.45
Name and Capacity	**No. of Equip.**	**No. of Days**	**Daily Rate**	**Amount**
B Equipment, (2014 ACEL Rates)				
a. Dumptruck	2	6.56	11,360.00	149,029.00
b. Backhoe	1	6.56	12,296.00	80,654.08
Minor Tools (10% of Labor)				1,074.85
Sub-total for B			P	230,757.92
C. Total (A+B)			P	241,506.37
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)				241,506.37
G. Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		24,150.64
H. Contractor's Profit (CP)		8% per D.O 197 s 2016		19,320.51
I. Value Added Tax (VAT)		5% per D.O 197 s 2016		14,248.88
J. Total Unit Cost				285.11

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

Item No./Description : 103(3) Foundation Fill
Unit of Measurement : cu.m.
Output per hour : 1.25
Quantity : 37.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
A. Labor				
a. Construction Foreman	1	3.70	611.92	2,264.10
b. Laborer	4	3.70	342.24	5,065.15
Sub-total for A			P	7,329.26
Name and Capacity	**No. of Equip.**	**No. of Days**	**Daily Rate**	**Amount**
B Equipment, (2014 ACEL Rates)				
a. Plate Compactor	1	3.70	984.00	3,640.80
b. Water Truck	1	0.04	19,600.00	725.20
c. Minor Tools (10% of Labor)				
Sub-total for B			P	4,366.00
C. Total (A+B)			P	11,695.26
D. Output/day 10.00 cu.m.	/day			
Name and Specifications	**Quantity**	**Unit**	**Unit Cost**	**Amount**
E. Materials				
a. Filling Materials	42.55	cu.m.	493.40	20,994.17
Sub-total for E			P	20,994.17
F. Direct Cost (C+E)				32,689.43
G. Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		3,268.94
H. Contractor's Profit (CP)		8% per D.O 197 s 2016		2,615.15
I. Value Added Tax (VAT)		5% per D.O 197 s 2016		1,928.68
J. Total Unit Cost				1,094.65

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

Item No./Description : 103(6)a Pipe Culvert and Drain Excavation
Unit of Measurement : cu.m.
Output per hour : 20.00
Quantity : 429.50

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	2.68	611.92	1,642.62
	b. Laborer	3	2.68	342.24	2,756.10
	Sub-total for A			P	4,398.72
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Dumptruck	2	2.68	11,360.00	60,989.00
	b. Backhoe	1	2.68	12,296.00	33,007.08
	Minor Tools (10% of Labor)				439.87
	Sub-total for B			P	94,435.95
C.	Total (A+B)			P	98,834.67
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)				98,834.67
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		9,883.47
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		7,906.77
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		5,831.25
J.	Total Unit Cost				285.11

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

Item No./Description : 104(1)a1 Embankment from Roadway Excavation
Unit of Measurement : cu.m.
Output per hour : 50.00
Quantity : 30,193.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	For Excavation Work				
	a. Construction Foreman	1	62.65	611.92	38,337.08
	b. Laborer	2	62.65	342.24	42,883.00
	Spreading & Compaction				
	a. Construction Foreman	1	75.48	611.92	46,189.25
	b. Laborer	2	75.48	342.24	51,666.26
	Sub-total for A			P	179,075.59
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	For Excavation Work				
	a. Bulldozer	1	62.65	27,032.00	1,693,567.64
	b. Payloader	1	62.65	13,864.00	868,586.19
	c. Dumptruck	2	62.65	11,360.00	1,423,418.79
	Spreading and Compaction				
	a. Road Grader	1	75.48	17,384.00	1,312,187.78
	b. Road Roller	1	75.48	13,216.00	997,576.72
	c. Water Truck	1	26.42	19,600.00	517,809.95
	Sub-total for B			P	6,813,147.07
C.	Total (A+B)			P	6,992,222.66
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)				6,992,222.66
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	699,222.27
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	559,377.81
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	412,541.14
J.	Total Unit Cost				286.93

gerald_0101

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

Item No./Description : 105 (1)a Subgrade Preparation
Unit of Measurement : sq.m.
Output per hour : 300.00
Quantity : 45,948.00

Note: Provision for Turn-outs

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	19.15	611.92	11,715.21
	b. Laborer	2	19.15	342.24	13,104.37
	Sub-total for A			P	24,819.58
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Road Grader	1	19.15	17,384.00	332,816.68
	b. Road Roller	1	19.15	13,216.00	253,020.32
	c. Water Truck	1	4.79	19,600.00	93,810.50
	Sub-total for B			P	679,647.50
C.	Total (A+B)			P	704,467.08
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)				704,467.08
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		70,446.71
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		56,357.37
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		41,563.56
J.	Total Unit Cost				19.00

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

Item No./Description : 200 (1) Aggregate Subbase Course
Unit of Measurement : cu.m.
Output per hour : 50.00
Quantity : 19,114.00

Note: Provision for Turn-outs

Designation	No. of Person	No. of Days	Daily Rate	Amount
A. Labor				
a. Construction Foreman	1	47.79	611.92	29,240.60
b. Laborer	2	47.79	342.24	32,707.88
Sub-total for A			P	61,948.47
Name and Capacity	**No. of Equip.**	**No. of Days**	**Daily Rate**	**Amount**
B Equipment, (2014 ACEL Rates)				
a. Road Grader	1	47.79	17,384.00	830,694.44
b. Road Roller	1	47.79	13,216.00	631,526.56
c. Water Truck	1	47.79	19,600.00	936,586.00
Sub-total for B			P	2,398,807.00
C. Total (A+B)			P	2,460,755.47
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%)	23,892.50	cu.m.	1,171.32	27,985,763.10
Sub-total for E			P	27,985,763.10
F. Direct Cost (C+E)				30,446,518.57
G. Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	3,044,651.86
H. Contractor's Profit (CP)		8%	per D.O 197 s 2016	2,435,721.49
I. Value Added Tax (VAT)		5%	per D.O 197 s 2016	1,796,344.60
J. Total Unit Cost				1,973.59

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

Item No./Description : 300 (1) Aggregate Surface Course
Unit of Measurement : cu.m.
Output per hour : 50.00
Quantity : 1,634.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
A. Labor				
a. Construction Foreman	1	4.09	611.92	2,499.69
b. Laborer	2	4.09	342.24	2,796.10
Sub-total for A			P	5,295.79
Name and Capacity	**No. of Equip.**	**No. of Days**	**Daily Rate**	**Amount**
B Equipment, (2014 ACEL Rates)				
a. Road Grader	1	4.09	17,384.00	71,013.64
b. Road Roller	1	4.09	13,216.00	53,987.36
c. Water Truck	1	1.02	19,600.00	20,016.50
Sub-total for B			P	145,017.50
C. Total (A+B)			P	150,313.29
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%)	1,879.10	cu.m.	1,035.32	1,945,469.81
Sub-total for E			P	1,945,469.81
F. Direct Cost (C+E)				2,095,783.11
G. Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	209,578.31
H. Contractor's Profit (CP)		8%	per D.O 197 s 2016	167,662.65
I. Value Added Tax (VAT)		5%	per D.O 197 s 2016	123,651.20
J. Total Unit Cost				1,589.15

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd 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 : 34,758.50

Note: Provision for Turn-outs

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	75.30	611.92	46,077.60
	b. Skilled	4	75.30	443.20	133,491.92
	c. Laborer	12	75.30	342.24	309,248.24
	Sub-total for A			P	488,817.76
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Transit Mixer	4	75.30	10,544.00	3,175,854.63
	b. Concrete Vibrator	2	75.30	730.00	109,938.06
	c. Batching Plant	1	75.30	14,076.00	1,059,923.41
	d. Pay Loader	1	75.30	13,864.00	1,043,959.80
	e. Concrete Screeder	1	75.30	4,360.00	328,308.19
	f. Water Truck	1	75.30	19,600.00	1,475,880.85
	g. Concrete Saw	1	75.30	261.04	19,656.32
	h. Bar Cutter	1	7.53	1,758.00	13,237.75
	Minor Tools (5% of labor)				24,440.89
	Sub-total for B			P	7,251,199.90
C.	Total (A+B)			P	7,740,017.66
D.	Output/day 461.60 sq.m. /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Reinforcing Steel Bar	17,379.25	kg	39.00	677,790.75
	b. Curing Compound	10,079.97	lit	45.00	453,598.43
	c. Asphalt Sealant	5,908.95	lit	75.00	443,170.88
	d. Sand	5,352.81	cu.m	1,275.32	6,826,544.37
	e. Gravel	9,732.38	cu.m	1,382.32	13,453,263.52
	f. Cement	92,457.61	bag	295.91	27,359,084.97
	g. Concrete Saw	5.21	pc	8,000.00	41,710.20
	h. Pipe Sleeve, 2" dia.	271.12	l.m	133.00	36,058.47
	i. Grease/Tar	271.12	lit	21.00	5,693.44
	j. Steel Forms	15,988.91	lit	60.00	959,334.60
	Sub-total for E			P	50,256,249.63
F.	Direct Cost (C+E)				57,996,267.29
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		5,799,626.73
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		4,639,701.38
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		3,421,779.77
J.	Total Unit Cost				2,067.33

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd 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 : 3,633.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	4.23	611.92	2,589.10
	b. Skilled	4	4.23	443.20	7,500.91
	c. Laborer	12	4.23	342.24	17,376.66
	Sub-total for A			P	27,466.67
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Transit Mixer	4	4.23	10,544.00	178,451.28
	b. Concrete Vibrator	2	4.23	730.00	6,177.42
	c. Batching Plant	1	4.23	14,076.00	59,557.10
	d. Pay Loader	1	4.23	13,864.00	58,660.10
	e. Concrete Screeder	1	4.23	4,360.00	18,447.64
	f. Water Truck	1	4.23	19,600.00	82,929.75
	g. Concrete Saw	1	4.23	261.04	1,104.49
	h. Bar Cutter	1	0.42	1,758.00	743.83
	Minor Tools (5% of Labor)				20,303.58
	Sub-total for B			P	426,375.19
C.	Total (A+B)			P	453,841.86
D.	Output/day 858.64 sq.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Reinforcing Steel Bar	1,198.89	kg	39.00	46,756.71
	b. Curing Compound	1,053.57	lit	45.00	47,410.65
	c. Asphalt Sealant	435.96	lit	75.00	32,697.00
	d. Steel Form	1,671.18	l.m	40.00	66,847.20
	e. Sand	299.72	cu.m	1,275.32	382,242.10
	f. Gravel	544.95	cu.m	1,382.32	753,295.28
	g. Cement	5,195.19	bag	295.91	1,537,306.07
	h. Concrete Saw	0.54	pc	8,000.00	4,359.60
	i. Pipe Sleeve, 1" dia.	28.34	l.m	133.00	3,768.87
	j. Grease/Tar	5.45	lit	21.00	114.44
	Sub-total for E			P	2,874,797.92
F.	Direct Cost (C+E)				3,328,639.78
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	332,863.98
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	266,291.18
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	196,389.75
J.	Total Unit Cost				1,135.20

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

Item No./Description : 404 (1)a Reinforcing Steel Bar, Grade 40
Unit of Measurement : kg.
Output per hour : 180.00
Quantity : 21,516.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	14.94	611.92	9,143.10
	b. Skilled Laborer	2	14.94	443.20	13,244.29
	c. Laborer	8	14.94	342.24	40,909.09
	Sub-total for A			P	63,296.49
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2009 ACEL Rates)				
	a. Bar Cutter	1	7.47	1,758.00	13,133.73
	b. Bar Bender	1	7.47	2,812.00	21,007.98
	c. Cargo Truck	1	2.24	6,264.00	14,039.19
	Sub-total for B			P	48,180.90
C.	Total (A+B)			P	111,477.38
D.	Output/day 1,440.00 kg. /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Tie Wire	451.84	kg	80.00	36,146.88
	b. Reinforcing Steel Bar, Grade 40	22,591.80	kg	39.00	881,080.20
	Sub-total for E			P	917,227.08
F.	Direct Cost (C+E)				1,028,704.46
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	102,870.45
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	82,296.36
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	60,693.56
J.	Total Unit Cost				59.24

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

Item No./Description : 405 (1) a3 Structural Concrete, Class A
Unit of Measurement : cu.m
Output per hour : 1.40
Quantity : 531.50

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	47.46	611.92	29,038.88
	b. Skilled Laborer	4	47.46	443.20	84,128.86
	c. Laborer	8	47.46	342.24	129,928.97
	Installation/Removal of Form Works				
	a. Skilled Laborer	4	47.46	443.20	84,128.86
	b. Laborer	8	47.46	342.24	129,928.97
	Sub-total for A			P	457,154.54
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. One Bagger Mixer	1	47.46	1,376.00	65,298.57
	b. Concrete Vibrator	1	47.46	972.00	46,126.61
	c. Water Truck	1	4.75	19,600.00	93,012.50
	Minor Tools (5% of Labor)				22,857.73
	Sub-total for B			P	227,295.41
C.	Total (A+B)			P	684,449.94
D.	Output/day 11.20 cu.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Form Lumber	9,301.25	bd.ft	40.00	372,050.00
	b. Plywood	212.60	pc	1,345.00	285,947.00
	c. Assorted CW Nails	372.05	kg.	70.00	26,043.50
	d. Portland Cement	5,049.25	bag	295.91	1,494,121.03
	e. Sand	265.75	cu.m	1,275.32	338,916.29
	f. Gravel	531.50	cu.m	1,382.32	734,703.08
	Sub-total for E			P	3,251,780.90
F.	Direct Cost (C+E)				3,936,230.85
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	393,623.08
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	314,898.47
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	232,237.62
J.	Total Unit Cost				9,175.90

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

Item No./Description : 500(1)b3 Pipe Culvert & Storm Drain
Unit of Measurement : ln.m
Output per hour : 1.00
Quantity : 125.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	15.63	611.92	9,561.25
	b. Skilled Laborer	2	15.63	443.20	13,850.00
	c. Laborer	4	15.63	342.24	21,390.00
	Sub-total for A			P	44,801.25
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe	1	7.81	12,296.00	96,062.50
	b. Plate Compactor	1	7.81	984.00	7,687.50
	Minor Tools (10% of Labor)				4,480.13
	Sub-total for B			P	108,230.13
C.	Total (A+B)			P	153,031.38
D.	Output/day 8.00 ln.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Portland Cement	135.00	bag	295.91	39,947.78
	b. Sand	7.63	cu.m	1,275.32	9,724.32
	c. RC Pipes (910 mm dia.)	125.00	pc	1,911.00	238,875.00
	d. Sand Bedding	16.00	cu.m	1,275.32	20,405.12
	Sub-total for E			P	308,952.22
F.	Direct Cost (C+E)				461,983.59
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		46,198.36
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		36,958.69
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		27,257.03
J.	Total Unit Cost				4,579.18

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

Item No./Description : 500 (1)b4 Pipe Culvert & Storm Drain
Unit of Measurement : ln.m
Output per hour : 1.00
Quantity : 137.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
A. Labor				
a. Construction Foreman	1	17.13	611.92	10,479.13
b. Skilled Laborer	2	17.13	443.20	15,179.60
c. Laborer	4	17.13	342.24	23,443.44
Sub-total for A			P	49,102.17
Name and Capacity	**No. of Equip.**	**No. of Days**	**Daily Rate**	**Amount**
B Equipment, (2014 ACEL Rates)				
a. Backhoe	1	5.65	12,296.00	69,487.77
b. Plate Compactor	1	5.65	984.00	5,560.83
Minor Tools (10% of Labor)				4,910.22
Sub-total for B			P	79,958.82
C. Total (A+B)			P	129,060.99
D. Output/day 8.00 ln.m /day				
Name and Specifications	**Quantity**	**Unit**	**Unit Cost**	**Amount**
E. Materials				
a. Portland Cement	170.15	bag	295.91	50,350.18
b. Sand	9.59	cu.m	1,275.32	12,230.32
c. RC Pipes (610 mm dia.)	137.00	pc	1,372.00	187,964.00
d. Sand Bedding	20.41	cu.m	1,275.32	26,033.11
Sub-total for E			P	276,577.61
F. Direct Cost (C+E)				405,638.60
G. Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		40,563.86
H. Contractor's Profit (CP)		8% per D.O 197 s 2016		32,451.09
I. Value Added Tax (VAT)		5% per D.O 197 s 2016		23,932.68
J. Total Unit Cost				3,668.51

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

Item No./Description : 505(5) Grouted Riprap, Class A
Unit of Measurement : cu.m
Output per hour : 1.25
Quantity : 94.50

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	9.45	611.92	5,782.64
	b. Skilled Laborer	2	9.45	443.20	8,376.48
	c. Laborer	8	9.45	342.24	25,873.34
	Sub-total for A			P	40,032.47
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. One Bagger Mixer	1	9.45	1,376.00	13,003.20
	b. Water Truck	1	3.78	19,600.00	74,088.00
	Minor Tools (5% of Labor)				2,001.62
	Sub-total for B			P	89,092.82
C.	Total (A+B)			P	129,125.29
D.	Output/day 10.00 cu.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Cement	283.50	bag	295.91	83,890.34
	b. Sand	23.63	cu.m	1,275.32	30,129.44
	c. Gravel Fill	1.42	cu.m	1,382.32	1,959.44
	d. Weep Holes (PVC), 2" dia.	28.35	ln.m	133.00	3,770.55
	e. Filter Cloth	1.42	sq.m	160.00	226.80
	f. Boulders	99.23	cu.m	1,306.32	129,619.60
	Miscellaneous (1% of Materials)				2,495.96
	Sub-total for E			P	252,092.13
F.	Direct Cost (C+E)				381,217.42
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		38,121.74
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		30,497.39
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		22,491.83
J.	Total Unit Cost				4,998.18

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

Item No./Description : 506(1) Stone Masonry
Unit of Measurement : cu.m
Output per hour : 1.56
Quantity : 298.50

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	23.88	611.92	14,612.65
	b. Skilled Laborer	2	23.88	443.20	21,167.23
	c. Laborer	8	23.88	342.24	65,381.53
	Sub-total for A			P	101,161.41
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. One Bagger Mixer	1	23.88	1,376.00	32,858.88
	b. Water Truck	1	1.19	19,600.00	23,402.40
	c. Backhoe	1	2.39	12,296.00	29,362.85
	Minor Tools (10% of Labor)				10,116.14
	Sub-total for B			P	95,740.27
C.	Total (A+B)			P	196,901.68
D.	Output/day 12.50 cu.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Cement	1,641.75	bag	295.91	485,809.42
	b. Sand	89.55	cu.m	1,275.32	114,204.91
	c. Gravel Fill	5.97	cu.m	1,382.32	8,252.45
	d. Weep Holes (PVC)	89.55	ln.m	133.00	11,910.15
	e. Filter Cloth	4.48	sq.m	160.00	716.40
	f. Boulders	313.43	cu.m	1,306.32	409,433.35
	Miscellaneous (1% of Materials)				10,303.27
	Sub-total for E			P	1,040,629.94
F.	Direct Cost (C+E)				1,237,531.62
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		123,753.16
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		99,002.53
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		73,014.37
J.	Total Unit Cost				5,136.69

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

Item No./Description : 607(1)b Reflective Pavement Studs, Flush Type
Unit of Measurement : each
Output per hour : 10.00
Quantity : 439.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	5.49	611.92	3,357.91
	b. Laborer	3	5.49	342.24	5,634.13
	Sub-total for A			P	8,992.04
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Diamond Drill	1	5.49	1,608.00	8,823.90
	b. Cargo Truck	1	1.37	9,696.00	13,301.70
	c. Air Compressor	1	5.49	4,016.00	22,037.80
	Minor Tools (5% of Labor Cost)				449.60
	Sub-total for B			P	44,613.00
C.	Total (A+B)			P	53,605.04
D.	Output/day 80.00 each /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Reflective Stud Catcheye Flush Surface	439	pc	667.00	292,813.00
	b. Concrete Epoxy A & B	5.268	ltr	2,280.00	12,011.04
	Sub-total for E			P	304,824.04
F.	Direct Cost (C+E)				358,429.08
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		35,842.91
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		28,674.33
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		21,147.32
J.	Total Unit Cost				1,011.60

gerald_0101

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

Item No./Description : 611(1) Trees (Furnishing and Transplanting)
Unit of Measurement : each
Output per hour : 1.00
Quantity : 373.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	46.63	611.92	28,530.77
	b. Skilled Laborer	1	46.63	443.20	20,664.20
	c. Laborer	2	46.63	342.24	31,913.88
	Sub-total for A			P	81,108.85
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Cargo Truck	1	46.63	6,264.00	292,059.00
	b. Backhoe	1	46.63	12,296.00	573,301.00
	c. Water Truck	1	23.31	19,600.00	456,925.00
	Minor Tools (10% of Labor)				8,110.89
	Sub-total for B			P	1,330,395.89
C.	Total (A+B)			P	1,411,504.74
D.	Output/day 8.00 each /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Fertilizers	1,119.00	kg	27.00	30,213.00
	b. Bamboo Pole	1,119.00	pc	10.00	11,190.00
	c. Polyethylene	1,119.00	sq.m	40.00	44,760.00
	d. Tie Wire	93.25	kg	61.68	5,751.66
	e. Trees (Delivered at site)	373.00	each	31.00	11,563.00
	Sub-total for E			P	103,477.66
F.	Direct Cost (C+E)				1,514,982.40
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		151,498.24
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		121,198.59
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		89,383.96
J.	Total Unit Cost				5,032.34

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

Item No./Description : 612(1) Reflectorized Thermoplastic Pavement Markings (White)
Unit of Measurement : sq.m
Output per hour : 25.00
Quantity : 1,540.00

	Designation	No. of Person	No. of Days	Daily Rate		Amount
A.	Labor					
	a. Construction Foreman	1	7.70	611.92		4,711.78
	b. Skilled Laborer	2	7.70	443.20		6,825.28
	c. Laborer	6	7.70	342.24		15,811.49
	Sub-total for A				P	27,348.55
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate		Amount
B	Equipment, (2014 ACEL Rates)					
	a. Cargo Truck/Delivery Truck	1	7.70	9,696.00		74,659.20
	b. Applicator Machine	1	7.70	750.00		5,775.00
	c. Kneading Machine	1	7.70	1,500.00		11,550.00
	Minor Tools (10% of labor)					
	Sub-total for B				P	91,984.20
C.	Total (A+B)				P	119,332.75
D.	Output/day 200.00 sq.m /day					
	Name and Specifications	Quantity	Unit	Unit Cost		Amount
E.	Materials					
	a. Thermoplastic Paint (white)	500.50	bag	1,585.00		793,292.50
	b. Glass Beads	50.82	bag	2,500.00		127,050.00
	c. Primer	184.80	liter	180.00		33,264.00
	d. LPG (50 kg.)	6.16	cyl	90.00		554.40
	e. LPG (12 kg.)	3.08	cyl	50.00		154.00
	f. Calsumine	192.50	kg	5.00		962.50
	Miscellaneous (5% of Materials)					47,763.87
	Sub-total for E				P	1,003,041.27
F.	Direct Cost (C+E)					1,122,374.02
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016		112,237.40
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016		89,789.92
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016		66,220.07
J.	Total Unit Cost					903.00

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

Item No./Description : 500 (1)a1 RC Culvert Pipe, 610 mm
Unit of Measurement : ln.m
Output per hour : 2.25
Quantity : 18.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	1.00	611.92	611.92
	b. Skilled Laborer	2	1.00	443.20	886.40
	c. Laborer	4	1.00	342.24	1,368.96
	Sub-total for A			P	2,867.28
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe	1	0.50	12,296.00	6,148.00
	b. Plate Compactor	1	0.50	984.00	492.00
	Minor Tools (10% of Labor)				286.73
	Sub-total for B			P	6,926.73
C.	Total (A+B)			P	9,794.01
D.	Output/day 18.00 ln.m	/day			
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Portland Cement	13.93	bag	295.91	4,122.61
	b. Sand	0.79	cu.m	1,275.32	1,010.05
	c. RC Pipes (610 mm dia.)	18.00	pc	1,202.00	21,636.00
	d. Sand Bedding	1.58	cu.m	1,275.32	2,020.11
	Sub-total for E			P	28,788.77
F.	Direct Cost (C+E)				38,582.78
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		3,858.28
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		3,086.62
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		2,276.38
J.	Total Unit Cost				2,655.78

gerald_0101

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

Item No./Description : 502(3)e Catch Basin
Unit of Measurement : each
Output per hour : 1.00
Quantity : 6.00

(Note: for the Provision of turn-out)

Designation	No. of Person	No. of Days	Daily Rate	Amount
A. Labor				
a. Construction Foreman	1	1.50	611.92	917.88
b. Skilled Foreman	2	1.50	443.20	1,329.60
c. Laborer	8	1.50	342.24	4,106.88
Sub-total for A			P	6,354.36
Name and Capacity	**No. of Equip.**	**No. of Days**	**Daily Rate**	**Amount**
B Equipment, (2014 ACEL Rates)				
a. Concrete Mixer (1 bagger)	1	0.25	1,376.00	344.00
b. Water Truck	1	0.03	19,600.00	490.00
Minor Tools, 10% of labor				635.44
Sub-total for B			P	1,469.44
C. Total (A+B)			P	7,823.80
D. Output/day 4.00 each /day				
Name and Specifications	**Quantity**	**Unit**	**Unit Cost**	**Amount**
E. Materials				
a. Portland Cement	4.00	bag	295.91	1,183.64
b. Fine Aggregates	0.25	cu.m	1,275.32	318.83
c. Course Aggregates	0.50	cu.m	1,382.32	691.16
d. Form Lumber	20.00	bd.ft	39.00	780.00
e. # 16 GI Tie Wire	1.50	kls	80.00	120.00
f. 14pc-10mm dia. Std. def. bars	51.80	kgs	55.00	2,849.00
g. CW Nails	1.00	kls	70.00	70.00
Sub-total for E			P	6,012.63
F. Direct Cost (C+E)				13,836.42
G. Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	1,383.64
H. Contractor's Profit (CP)		8%	per D.O 197 s 2016	1,106.91
I. Value Added Tax (VAT)		5%	per D.O 197 s 2016	816.35
J. Total Unit Cost				2,857.22

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

Item No./Description : 502(4)a Concrete Cover
Unit of Measurement : each
Output per hour :
Quantity : 6.00

(Note: for the Provision of turn-out)

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.50	611.92	305.96
	b. Skilled Foreman	2	0.50	443.20	443.20
	c. Laborer	8	0.50	342.24	1,368.96
	Sub-total for A			P	2,118.12
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Concrete Mixer (1 Bagger)	1	0.13	1,376.00	172.00
	b. Water Truck	1	0.01	19,600.00	245.00
	c. Minor Tools, 10% of Laborer)				211.81
	Sub-total for B			P	628.81
C.	Total (A+B)			P	2,746.93
D.	Output/day 0.00 each /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Portland Cement	1.00	bag	295.91	295.91
	b. Fine Aggregates	0.25	cu.m	1,275.32	318.83
	c. Coarse Aggregates	0.25	cu.m	1,382.32	345.58
	d. Form Lumber	20.00	bd.ft	39.00	780.00
	e. # 16 GI Tie Wire	1.00	kls	80.00	80.00
	f. 1-pc-10mm dia. Std. def. bars	22.20	kgs	55.00	1,221.00
	g. CW Nails	0.50	kls	70.00	35.00
	h. Water	0.25	cu.m	15.00	3.75
	Sub-total for E			P	3,080.07
F.	Direct Cost (C+E)				5,827.00
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		582.70
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		466.16
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		343.79
J.	Total Unit Cost				1,203.28

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

Item No./Description : 503 (1) Metal Frame & Grating
Unit of Measurement : set
Output per hour :
Quantity : 6.00

(Note: for the Provision of turn-out)

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.75	611.92	458.94
	b. Skilled Foreman	1	0.75	443.20	332.40
	c. Laborer	2	0.75	342.24	513.36
	Sub-total for A			P	1,304.70
	Name and Capacity	**No. of Equip.**	**No. of Days**	**Daily Rate**	**Amount**
B	Equipment, (2014 ACEL Rates)				
	a. Welding Machine	1	0.75	3,128.00	2,346.00
	Minor Tools, 10% of Laborer)				130.47
	Sub-total for B			P	2,476.47
C.	Total (A+B)			P	3,781.17
D.	Output/day 0.00 set /day				
	Name and Specifications	**Quantity**	**Unit**	**Unit Cost**	**Amount**
E.	Materials				
	a. Angle Bar (75mm X 75mm x 9 mm)	1.00	pc	3,040.00	3,040.00
	b. Flat Bar (25mm X 65 mm X 3 mm)	1.00	pc	170.00	170.00
	c. Weldind Rod	1.50	kg	132.00	198.00
	Sub-total for E			P	3,408.00
F.	Direct Cost (C+E)				7,189.17
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		718.92
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		575.13
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		424.16
J.	Total Unit Cost				1,484.56

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

Item No./Description : 600(3) Concrete Curb and Gutter
Unit of Measurement : ln.m
Output per hour : 10.30
Quantity : 122.00

(Note: for the Provision of turn-out)

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	1.48	611.92	906.00
	b. Skilled Foreman	4	1.48	443.20	2,624.78
	c. Laborer	8	1.48	342.24	4,053.72
	Sub-total for A			P	7,584.49
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Concrete Vibrator	1	1.48	730.00	1,080.83
	b. Bagger Mixer	1	1.48	1,376.00	2,037.28
	c. Water Truck	1	0.07	19,600.00	1,372.00
	Minor Tools, 10% of Labor				758.45
	Sub-total for B			P	5,248.56
C.	Total (A+B)			P	12,833.05
D.	Output/day 82.40 ln.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Portland Cement	157.38	bag	295.91	46,570.24
	b. Fine Aggregates	8.54	cu.m	1,275.32	10,891.23
	c. Coarse Aggregates	17.08	cu.m	1,382.32	23,610.03
	d. Marine Plywood	7.32	pcs	445.00	3,257.40
	e. Form Lumber	349.84	bd.ft	39.00	13,643.76
	f. CW Nails	3.50	kls	70.00	245.00
	Miscellaneous (2% of Materails)				1,964.35
	Sub-total for E			P	100,182.01
F.	Direct Cost (C+E)				113,015.06
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		11,301.51
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		9,041.20
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		6,667.89
J.	Total Unit Cost				1,147.75

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

Item No./Description : 601 Sidewalk
Unit of Measurement : sq.m.
Output per hour : 20.00
Quantity : 244.00

(Note: for the Provision of turn-out)

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	1.53	611.92	933.18
	b. Skilled Foreman	4	1.53	443.20	2,703.52
	c. Laborer	12	1.53	342.24	6,262.99
	Sub-total for A			P	9,899.69
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Concrete Vibrator	1	1.53	730.00	1,113.25
	b. Bagger Mixer	1	1.53	1,376.00	2,098.40
	c. Water Truck	1	0.19	19,600.00	3,724.00
	d. Concrete Saw	1	1.53	261.04	398.09
	Minor Tools, 5% of Labor				494.98
	Sub-total for B			P	7,828.72
C.	Total (A+B)			P	17,728.41
D.	Output/day 160.00 sq.m. /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Curing Compound	70.76	lit	45.00	3,184.20
	b. Asphalt Sealant	29.28	lit	75.00	2,196.00
	c. Forms	112.24	l.m	39.00	4,377.36
	d. Sand	13.42	cu.m	1,275.32	17,114.79
	e. Gravel	24.40	cu.m	1,382.32	33,728.61
	f. Cement	231.80	bag	295.91	68,591.82
	Sub-total for E			P	129,192.78
F.	Direct Cost (C+E)				146,921.19
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	14,692.12
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	11,753.70
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	8,668.35
J.	Total Unit Cost				746.05

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

Item No./Description : 605(2)z2 Regulatory Signs
Unit of Measurement : units
Output per hour :
Quantity : 2.00

(Note: for the Provision of turn-out)

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.25	611.92	152.98
	b. Mason	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)				
	a. Stake Truck	1	0.06	6,808.00	408.48
	Minor Tools, 10% of Labor				43.49
	Sub-total for B			P	451.97
C.	Total (A+B)			P	886.87
D.	Output/day 0.00 units /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Informative Signs	2.00	set	3,000.00	6,000.00
	b. Portland Cement	1.00	bags	295.91	295.91
	c. Fine Aggregates	0.25	cu.m	1,275.32	318.83
	d. Coarse Aggregates	0.25	cu.m	1,382.32	345.58
	e. Highway Traffic Sign post with Dowel	2.00	each	3,355.00	6,710.00
	Sub-total for E			P	13,670.32
F.	Direct Cost (C+E)				14,557.19
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		1,455.72
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		1,164.58
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		858.87
J.	Total Unit Cost				9,018.18

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

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	1,382.32	4,838.12
	b. Selected Fill	10.00	cu.m	493.40	4,934.00
	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	295.91	26,631.85
	b. Crushed Gravel	20.00	cu.m	1,382.32	27,646.40
	c. Washed Sand	17.00	cu.m	1,275.32	21,680.44
	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	68.00	1,360.00
	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	44.00	220.00
	V. Masonry Works (masonry walls & plastering)				
	a. CHB 6" thk	650.00	pc	18.00	11,700.00
	b. Portland Cement	50.00	bag	295.91	14,795.47
	c. Washed Sand	10.00	cu.m	1,275.32	12,753.20
	d. 10mm dia. X 6m RSB	75.00	kg	43.00	3,225.00
	e. No. 16 GI Tie Wire	2.50	kg	81.00	202.50
	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				179,171.53
	Sub-total for E			P	322,697.88
F.	Direct Cost (C+E)				407,748.04
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	40,774.80
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	32,619.84
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	24,057.13
J.	Total Unit Cost				505,199.82

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

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 : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

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 : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd 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
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	4.60	mons	1,200.00	5,520.00
	b. Water Bill	4.60	mons	1,000.00	4,600.00
	c. LPG Gasul (11 kg)	4.60	mons	1,000.00	4,600.00
	Sub-Total for E				244,863.32
	Sub-total for E			P	244,863.32
F.	Direct Cost (C+E)				244,863.32
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	12,243.17
J.	Total Unit Cost				257,106.49

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd 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
A.	Labor				
	a. Service Driver	1	207.00	443.20	91,742.40
	Sub-total for A			P	91,742.40
	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	91,742.40
D.	Output/day 0.00 L.S /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Liters, Diesel Fuel	2,070.00	liters	35.00	72,450.00
	b. Engine Oil & Lubricants	1.00	ls	22,935.60	22,935.60
	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	233,385.60
F.	Direct Cost (C+E)				325,128.00
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		16,256.40
J.	Total Unit Cost				341,384.40

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

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	445.00	890.00
b. Tarpaulin (4' x 8')	2.00	pc	800.00	1,600.00
c. Assorted Sizes Lumber	100.00	bd. Ft	18.00	1,800.00
d. Assorted Sizes CW Nails	2.00	kg	70.00	140.00
Sub-total for E			P	4,430.00
F. Direct Cost (C+E)				4,864.90
G. Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	486.49
H. Contractor's Profit (CP)		8%	per D.O 197 s 2016	389.19
I. Value Added Tax (VAT)		5%	per D.O 197 s 2016	287.03
J. Total Unit Cost				3,013.81

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

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	103.50	611.92	63,333.72
	b. First Aider	1	207.00	443.20	91,742.40
	Sub-total for A			P	155,076.12
	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	155,076.12
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)				167,436.12
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	13,394.89
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	9,041.55
J.	Total Unit Cost				189,872.56

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd 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	4.00	34,043.00	272,344.00
	b. Water Truck	1	4.00	19,600.00	78,400.00
	c. Backhoe	2	4.00	12,296.00	98,368.00
	d. Payloader	2	4.00	13,864.00	110,912.00
	e. Dumptruck	4	4.00	11,360.00	181,760.00
	f. Bulldozer	1	4.00	27,032.00	108,128.00
	g. Road Roller	1	4.00	13,216.00	52,864.00
	h. Road Grader	1	4.00	17,384.00	69,536.00
	Sub-total for B			P	972,312.00
C.	Total (A+B)			P	972,312.00
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)				972,312.00
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	48,615.60
J.	Total Unit Cost				1,020,927.60

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME : Road Widening Lanao - Pagadian - Zamboanga City Road, Zamboanga Sibugay 2nd DEO

Item No./Description : B.4(1) Construction Survey and Staking
Unit of Measurement : Km.
Output per hour : 0.04
Quantity : 5.13

Designation	No. of Person	No. of Days	Daily Rate	Amount
A. Labor				
(For Field Works)				
a. Geodetic Engineer	1	17.10	833.31	14,249.60
b. Skilled Laborer	3	17.10	443.20	22,736.16
c. Laborer	3	17.10	342.24	17,556.91
(For Office Works)				
a. Geodetic Engineer	1	51.30	833.31	42,748.80
b. Skilled Laborer	2	51.30	443.20	45,472.32
Sub-total for A			P	142,763.80
Name and Capacity	**No. of Equip.**	**No. of Days**	**Daily Rate**	**Amount**
B Equipment, (2014 ACEL Rates)				
a. Total Station w/ complete accessories	1	17.10	800.00	13,680.00
Minor Tools (10% of labor)				14,276.38
Sub-total for B			P	27,956.38
C. Total (A+B)			P	170,720.18
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)				185,420.18
G. Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		18,542.02
H. Contractor's Profit (CP)		8% per D.O 197 s 2016		14,833.61
I. Value Added Tax (VAT)		5% per D.O 197 s 2016		10,939.79
J. Total Unit Cost				44,782.77

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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 SIBUGAY 2ND 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	38.00	X	10.14	=	385.32	+	890.00	=	1,275.32
Cost of Coarse Aggregates	38.00	X	10.14	=	385.32	+	997.00	=	1,382.32
Cost of Item 200 Materails	38.00	X	10.14	=	385.32	+	786.00	=	1,171.32
Cost of Item 201 Materails	38.00	X	10.14	=	385.32	+	690.00	=	1,075.32
Cost of Item 300 Materails	38.00	X	10.14	=	385.32	+	650.00	=	1,035.32
Cost of Boulders	38.00	X	10.14	=	385.32	+	921.00	=	1,306.32
Cost of Embankment, Common Borrow	10.00	X	10.14	=	101.40	+	272.00	=	373.40
Cost of Embankment, Selected Borrow	10.00	X	10.14	=	101.40	+	392.00	=	493.40

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	92,457.61
Portland Cement Concrete Pavement, 0.15m. Thick	5,195.19
Structural Concrete, Class A	5,049.25
Grouted Riprap, Class A	283.50
Stone Masonry	1,641.75
Const. of Field Office for the Engineer	90.00
	50.00
Concrete Structure (Lean Concrete)	-
TOTAL	***104,767.30***

Quantity = 104,767.30 Bags

Delivery Charge = P 0.12 /bag/km

SITE	*HAULING DISTANCE*
Zamboanga Sibugay 2nd DEO	43.00
PROJECT SITE	

* Average Hauling Distance from source to assumed stockpilling area:
say 43.00 km.

Delivery Charge = P 0.12 X 43.00
Delivery Charge = P 5.16 /bag

* Delivery Truck : 104,767.30 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 $= \dfrac{43.00 \times 60.00}{30.00} =$ 86 mins.

Unloading Running $= \dfrac{43.00 \times 60.00}{40.00} =$ 64.5 mins.

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

Total Cycle Time = *195.50 mins.*

No. of trips for Dumptruck per day $= \dfrac{8.00 \times 60.00}{195.50} =$ 2.46 trips

Dumptruck Daily Outpout = 500.00 X 2.46 = 1,227.62 cu.m.
Using 4 Dumptruck = 1,227.62 X 4.00 = 4,910.49 cu.m.

No. of Days for Dumptruck $= \dfrac{104{,}767.30}{4{,}910.49} =$ 21.34 days

No. of Days for Labor for unloading = complimentary to D.Truck days = 21.34 days

DELIVERY COST:

104,767.30	Bags, Portland Cement	@ P	5.16	/bag	= P	540,599.27
				Sub-total		**540,599.27**

LABOR:

1	Foreman	@ P	558.00	/day	X	21.34	days	= P	11,905.17
10	Laborers	@ P	312.24	/day	X	21.34	days	=	66,617.73
							Sub-total		**78,522.89**

MATERIALS:

104,767.30	Bags, Portland Cement	@ P	290.00	/bag	= P	30,382,517.00
				Sub-total		**30,382,517.00**

Estimated Quantity : 104,767.30 Bags

Unit Cost	P	295.91
Grand Total	P	31,001,639.16
Delivery Cost	P	540,599.27
Labor	P	78,522.89
Materials	P	30,382,517.00