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 : K1758+296.00 - K1759+182.00 K1759+335.00 - K1760+071.00 K1760+222.00 - K1763+300.00 Net Length : **9.40** lane km Net Length : **4,700.00** ln.m. / **4.700** 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	0.013	each	15.00	14,172.68	944.85
101(4)a1	Removal of Existing RCPC	0.004	each	12.50	4,600.00	368.00
101(3b2)	Removal of Existing PCCP	0.002	sq.m	17.00	2,062.12	121.30
101(2)b	Removal of Existing Headwall	0.001	each	2.00	723.51	361.76
101(8)	Removal of Existing Guardrails	0.053	ln.m	2,160.50	59,049.81	27.33
101(9)	Removal of Existing Guardrails Post	0.014	each	565.00	15,442.33	27.33
101(10)	Removal of Existing Road Signs	0.001	each	4.00	1,472.00	368.00
102(2)	Surplus Common Excavation	0.847	cu.m.	5,201.50	942,908.85	181.28
103 (1)a	Structure Excavation	0.275	cu.m.	1,329.00	305,823.70	230.12
103(3)	Foundation Fill	0.007	cu.m.	8.50	7,509.73	883.50
103(6)a	Pipe Culvert and Drain Excavation	0.023	cu.m.	109.50	25,197.66	230.12
104(1)a1	Embankment from Roadway Excavation	7.042	cu.m.	33,856.00	7,840,515.69	231.58
105 (1)a	Subgrade Preparation	0.580	sq.m.	42,095.50	645,401.19	15.33
200 (1)	Aggregate Subbase Course	26.004	cu.m.	17,891.50	28,952,758.85	1,618.24
300 (1)	Aggregate Surface Course	1.815	cu.m.	1,547.50	2,020,928.22	1,305.93
311(1)e1a	Portland Cement Concrete Pavement-using Conventional Method, 0.28m thick	48.019	sq.m.	31,860.50	53,463,846.63	1,678.06
311(1)a	Portland Cement Concrete Pavement, 0.15m. Thick	4.017	sq.m	4,854.00	4,472,087.88	921.32
404 (1)a	Reinforcing Steel Bar, Grade 40	1.213	kg.	28,250.00	1,350,664.67	47.81
405 (1) a3	Structural Concrete, Class A	4.496	cu.m	673.00	5,006,343.04	7,438.85
500(1)a3	Pipe Culvert & Storm Drain	0.186	ln.m	56.00	207,199.43	3,699.99
500 (1)b4	Pipe Culvert & Storm Drain	0.051	ln.m	19.00	56,347.13	2,965.64
505(5)	Grouted Riprap, Class A	0.120	cu.m	33.00	134,039.08	4,061.79
506(1)	Stone Masonry	0.334	cu.m	89.00	371,608.67	4,175.38

607(1)	Reflective Pavement Studs, Flush Type	0.292	each	398.00	324,953.93	816.47
611(1)	Trees (Furnishing and Transplanting)	1.302	each	357.00	1,449,996.56	4,061.62
612(1)	Reflectorized Thermoplastic Pavement Markings (White)	0.923	sq.m	1,410.50	1,027,992.57	728.81
500 (1)a1	RC Culvert Pipe, 610 mm	0.035	ln.m	18.00	38,634.68	2,146.37
502(3)e	Catch Basin	0.012	each	6.00	13,852.70	2,308.78
502(4)a	Concrete Cover	0.005	each	6.00	5,837.41	972.90
503 (1)	Metal Frame & Grating	0.006	set	6.00	7,189.17	1,198.20
600(3)	Concrete Curb and Gutter	0.102	ln.m	122.00	113,587.86	931.05
601	Sidewalk	0.133	sq.m.	244.00	147,750.04	605.53
605(2)z2	Regulatory Signs	0.013	units	2.00	14,567.60	7,283.80
A.1.1(3)	Const. of Field Office for the Engineer	0.367	LS	1.00	408,809.53	408,809.53
A.1.1(11)	Prov. Of Furniture, Equipment and Appliances for Field Engineer	0.220	LS	1.00	244,863.32	244,863.32
A.1.2(5)	Operation & Maintenance of Gov't. Service Vehicle	0.292	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	0.150	L.S	1.00	167,436.12	167,436.12
B.9	Mobilization and Demobilization	0.873	L.S	1.00	972,312.00	972,312.00
B.4(1)	Construction Survey and Staking	0.154	Km.	4.70	171,110.30	36,406.45
TOTAL		**100.000**			**P 111,339,589.55**	

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

Station Limits : K1758+296.00 - K1759+182.00 K1760+222.00 - K1763+300.00
K1876+377.00 - K1877+534.00

BREAKDOWN OF ESTIMATED EXPENDITURES	% OF TOTAL		AMOUNT
I. ESTIMATED COST			
A. DIRECT COST			
A.1 Materials	58.07		87,105,177.39
A.2 Labor	1.41		2,119,384.10
A.3 Equipment Expenses	14.74		22,115,028.06
SUB-TOTAL (DIRECT COST)	74.23	P	111,339,589.55
B. INDIRECT COST (Per DO # 197 s. 2016)			
B.1 Overhead, Contingency & Misc. (10% Max. of D.C.)	7.31		10,962,985.01
B.2 Profit (8% Max. D.C.)	5.86		8,783,782.90
C. VAT (5% of D.C. and I.C. per D.O. # 197)	4.37		6,554,317.87
SUB-TOTAL (CONTRACT COST)	91.76	P	137,640,675.33
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)	4.74		7,109,324.67
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
OIC-Assistant Regional Director

APPROVED:

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

APPROVED BUDGET F[illegible]E CONTRACT

Road Widening - Primary Roads Lanao - Pagadian - Zamboanga City Road
Project Name and Location

Station Limits : K1758+296.00 - K1759+182.00 K1759+335.00 - K1760+071.00 K1760+222.00 - K1763+300.00

Length : 4,700.00 ln.m.

Contract Duration : 207.00 Calendar Days

Item No.	Description	Quantity	Unit	Estimated Direct Cost	MARK-UP IN PERCENT OCM	MARK-UP IN PERCENT PROFIT	TOTAL MARK-UPS %	TOTAL MARK-UPS VALUE	VAT	TOTAL INDIRECT COST	TOTAL COST	TOTAL COST
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9) = (5)X(8)	(10) = [(5)+(9)]*5%	(11) = (9) + (10)	(12) = (5) + (11)	(13) = (12) / (3)
PART A	**FACILITIES FOR THE ENGINEER**				10.00	8.00	18.00					
A.1.1(3)	Const. of Field Office for the Engineer	1.00	LS	408,809.53	10.00	8.00	18.00	73,585.72	24,119.76	97,705.48	506,515.01	506,515.01
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	LS	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			**978,800.85**				**73,585.72**	**52,619.33**	**126,205.04**	**1,105,005.90**	
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	4.70	Km.	171,110.30	10.00	8.00	18.00	30,799.85	10,095.51	40,895.36	212,005.66	45,107.59
	TOTAL OF PART B			**1,315,723.32**				**45,070.43**	**68,039.69**	**113,110.11**	**1,428,833.43**	
PART C	**EARTHWORKS**											
101(2)a	Removal of Existing Electric Post	15.00	each	14,172.68	10.00	8.00	18.00	2,551.08	836.19	3,387.27	17,559.94	1,170.66
101(4)a1	Removal of Existing RCPC	12.50	each	4,600.00	10.00	8.00	18.00	828.00	271.40	1,099.40	5,699.40	455.95
101(3b2)	Removal of Existing PCCP	17.00	sq.m	2,062.12	10.00	8.00	18.00	371.18	121.67	492.85	2,554.97	150.29
101(2)b	Removal of Existing Headwall	2.00	each	723.51	10.00	8.00	18.00	130.23	42.69	172.92	896.43	448.22
101(8)	Removal of Existing Guardrails	2,160.50	ln.m	59,049.81	10.00	8.00	18.00	10,628.97	3,483.94	14,112.91	73,162.72	33.86
101(9)	Removal of Existing Guardrails Post	565.00	each	15,442.33	10.00	8.00	18.00	2,779.62	911.10	3,690.72	19,133.04	33.86
101(10)	Removal of Existing Road Signs	4.00	each	1,472.00	10.00	8.00	18.00	264.96	86.85	351.81	1,823.81	455.95
102(2)	Surplus Common Excavation	5,201.50	cu.m.	942,908.85	10.00	8.00	18.00	169,723.59	55,631.62	225,355.21	1,168,264.06	224.60
103 (1)a	Structure Excavation	1,329.00	cu.m.	305,823.70	10.00	8.00	18.00	55,048.27	18,043.60	73,091.86	378,915.56	285.11
103(3)	Foundation Fill	8.50	cu.m.	7,509.73	10.00	8.00	18.00	1,351.75	443.07	1,794.83	9,304.56	1,094.65
103(6)a	Pipe Culvert and Drain Excavation	109.50	cu.m.	25,197.66	10.00	8.00	18.00	4,535.58	1,486.66	6,022.24	31,219.91	285.11
104(1)a1	Embankment from Roadway Excavation	33,856.00	cu.m.	7,840,515.69	10.00	8.00	18.00	1,411,292.82	462,590.43	1,873,883.25	9,714,398.94	286.93
105 (1)a	Subgrade Preparation	42,095.50	sq.m.	645,401.19	10.00	8.00	18.00	116,172.21	38,078.67	154,250.88	799,652.07	19.00
	TOTAL OF PART C			**9,864,879.27**				**1,775,678.27**	**582,027.88**	**2,357,706.15**	**12,222,585.42**	
PART D	**SUBBASE AND BASE COURSE**											
200 (1)	Aggregate Subbase Course	17,891.50	cu.m.	28,952,758.85	10.00	8.00	18.00	5,211,496.59	1,708,212.77	6,919,709.37	35,872,468.22	2,005.00
	TOTAL OF PART D			**28,952,758.85**				**5,211,496.59**	**1,708,212.77**	**6,919,709.37**	**35,872,468.22**	
PART E	**SURFACE COURSES**											
300 (1)	Aggregate Surface Course	1,547.50	cu.m.	2,020,928.22	10.00	8.00	18.00	363,767.08	119,234.77	483,001.85	2,503,930.07	1,618.05
311(1)e1a	Portland Cement Concrete Pavement-using Conventional Method, 0.28m thick	31,860.50	sq.m.	53,463,846.63	10.00	8.00	18.00	9,623,492.39	3,154,366.95	12,777,859.34	66,241,705.97	2,079.12
311(1)a	Portland Cement Concrete Pavement, 0.15m. Thick	4,854.00	sq.m	4,472,087.88	10.00	8.00	18.00	804,975.82	263,853.18	1,068,829.00	5,540,916.88	1,141.52
	TOTAL OF PART E			**59,956,862.73**				**10,792,235.29**	**3,537,454.90**	**14,329,690.19**	**74,286,552.92**	
PART F	**BRIDGE CONSTRUCTION**											
404 (1)a	Reinforcing Steel Bar, Grade 40	28,250.00	kg.	1,350,664.67	10.00	8.00	18.00	243,119.64	79,689.22	322,808.86	1,673,473.53	59.24
405 (1) a3	Structural Concrete, Class A	673.00	cu.m	5,006,343.04	10.00	8.00	18.00	901,141.75	295,374.24	1,196,515.99	6,202,859.03	9,216.73
	TOTAL OF PART F			**6,357,007.72**				**1,144,261.39**	**375,063.46**	**1,519,324.84**	**7,876,332.56**	
PART G	**DRAINAGE AND SLOPE PROTECTION STRUCTURES**											
500 (1)a1	RC Culvert Pipe, 610 mm	18.00	ln.m	38,634.68	10.00	8.00	18.00	6,954.24	2,279.45	9,233.69	47,868.37	2,659.35
502(3)e	Catch Basin	6.00	each	13,852.70	10.00	8.00	18.00	2,493.49	817.31	3,310.80	17,163.50	2,860.58
502(4)a	Concrete Cover	6.00	each	5,837.41	10.00	8.00	18.00	1,050.73	344.41	1,395.14	7,232.55	1,205.42
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)a3	Pipe Culvert & Storm Drain	56.00	ln.m	207,199.43	10.00	8.00	18.00	37,295.90	12,224.77	49,520.66	256,720.10	4,584.29
500 (1)b4	Pipe Culvert & Storm Drain	19.00	ln.m	56,347.13	10.00	8.00	18.00	10,142.48	3,324.48	13,466.96	69,814.09	3,674.43
505(5)	Grouted Riprap, Class A	33.00	cu.m	134,039.08	10.00	8.00	18.00	24,127.03	7,908.31	32,035.34	166,074.42	5,032.56
506(1)	Stone Masonry	89.00	cu.m	371,608.67	10.00	8.00	18.00	66,889.56	21,924.91	88,814.47	460,423.14	5,173.29
	TOTAL OF PART G			**834,708.27**				**150,247.49**	**49,247.79**	**199,495.28**	**1,034,203.54**	
PART H	**MISCELLANEOUS STRUCTURES**											
600(3)	Concrete Curb and Gutter	122.00	ln.m	113,587.86	10.00	8.00	18.00	20,445.81	6,701.68	27,147.50	140,735.35	1,153.57
601	Sidewalk	244.00	sq.m.	147,750.04	10.00	8.00	18.00	26,595.01	8,717.25	35,312.26	183,062.30	750.26
605(2)z2	Regulatory Signs	2.00	units	14,567.60	10.00	8.00	18.00	2,622.17	859.49	3,481.66	18,049.25	9,024.63
607(1)	Reflective Pavement Studs, Flush Type	398.00	each	324,953.93	10.00	8.00	18.00	58,491.71	19,172.28	77,663.99	402,617.91	1,011.60
611(1)	Trees (Furnishing and Transplanting)	357.00	each	1,449,996.56	10.00	8.00	18.00	260,999.38	85,549.80	346,549.18	1,796,545.73	5,032.34
612(1)	Reflectorized Thermoplastic Pavement Markings (White)	1,410.50	sq.m	1,027,992.57	10.00	8.00	18.00	185,038.66	60,651.56	245,690.22	1,273,682.79	903.00
	TOTAL OF PART H			**3,078,848.54**				**554,192.74**	**181,652.06**	**735,844.80**	**3,814,693.34**	
	TOTAL			**111,339,589.55**				**19,746,767.91**	**4,846,105.10**	**26,301,085.78**	**137,640,675.33**	

Prepared by:

BELEN A. SAPALLEDA
Head TWG, BAC

Recommending Approval:

CAYAMOMBAO D. DIA
OIC-Assistant Regional Director

APPROVED:

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

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	15.00	each	3,261.75	9,710.93	1,200.00	1,417.27	1,133.81	836.19	17,559.94
101(4)a1	Removal of Existing RCPC	12.50	each	337.60	4,262.40	-	460.00	368.00	271.40	5,699.40
101(3b2)	Removal of Existing PCCP	17.00	sq.m	68.87	1,993.25	-	206.21	164.97	121.67	2,554.97
101(2)b	Removal of Existing Headwall	2.00	each	35.00	688.51	-	72.35	57.88	42.69	896.43
101(8)	Removal of Existing Guardrails	2,160.50	ln.m	3,501.09	55,548.72	-	5,904.98	4,723.99	3,483.94	73,162.72
101(9)	Removal of Existing Guardrails Post	565.00	each	915.58	14,526.74	-	1,544.23	1,235.39	911.10	19,133.04
101(10)	Removal of Existing Road Signs	4.00	each	108.03	1,363.97	-	147.20	117.76	86.85	1,823.81
102(2)	Surplus Common Excavation	5,201.50	cu.m.	17,757.05	925,151.79	-	94,290.88	75,432.71	55,631.62	1,168,264.06
103 (1)a	Structure Excavation	1,329.00	cu.m.	13,610.95	292,212.75	-	30,582.37	24,465.90	18,043.60	378,915.56
103(3)	Foundation Fill	8.50	cu.m.	1,683.75	1,003.00	4,822.99	750.97	600.78	443.07	9,304.56
103(6)a	Pipe Culvert and Drain Excavation	109.50	cu.m.	1,121.44	24,076.22	-	2,519.77	2,015.81	1,486.66	31,219.91
104(1)a1	Embankment from Roadway Excavation	33,856.00	cu.m.	200,800.95	7,639,714.74	-	784,051.57	627,241.26	462,590.43	9,714,398.94
105 (1)a	Subgrade Preparation	42,095.50	sq.m.	22,738.59	622,662.60	-	64,540.12	51,632.10	38,078.67	799,652.07
200 (1)	Aggregate Subbase Course	17,891.50	cu.m.	57,986.35	2,245,383.25	26,649,389.25	2,895,275.89	2,316,220.71	1,708,212.77	35,872,468.22
300 (1)	Aggregate Surface Course	1,547.50	cu.m.	5,015.45	137,340.63	1,878,572.15	202,092.82	161,674.26	119,234.77	2,503,930.07
311(1)e1a	Portland Cement Concrete Pavement-using Conventional Method, 0.28m thick	31,860.50	sq.m.	448,062.44	6,646,629.01	46,369,155.18	5,346,384.66	4,277,107.73	3,154,366.95	66,241,705.97
311(1)a	Portland Cement Concrete Pavement, 0.15m. Thick	4,854.00	sq.m	36,697.83	569,673.87	3,865,716.17	447,208.79	357,767.03	263,853.18	5,540,916.88
404 (1)a	Reinforcing Steel Bar, Grade 40	28,250.00	kg.	83,106.79	63,260.38	1,204,297.50	135,066.47	108,053.17	79,689.22	1,673,473.53
405 (1) a3	Structural Concrete, Class A	673.00	cu.m	578,861.72	287,807.73	4,139,673.59	500,634.30	400,507.44	295,374.24	6,202,859.03
500(1)a3	Pipe Culvert & Storm Drain	56.00	ln.m	20,070.96	48,487.10	138,641.38	20,719.94	16,575.95	12,224.77	256,720.10
500 (1)b4	Pipe Culvert & Storm Drain	19.00	ln.m	6,809.79	11,089.18	38,448.16	5,634.71	4,507.77	3,324.48	69,814.09
505(5)	Grouted Riprap, Class A	33.00	cu.m	13,979.59	31,111.78	88,947.70	13,403.91	10,723.13	7,908.31	166,074.42
506(1)	Stone Masonry	89.00	cu.m	30,162.03	28,545.67	312,900.96	37,160.87	29,728.69	21,924.91	460,423.14
607(1)	Reflective Pavement Studs, Flush Type	398.00	each	8,152.23	40,446.41	276,355.28	32,495.39	25,996.31	19,172.28	402,617.91
611(1)	Trees (Furnishing and Transplanting)	357.00	each	77,629.65	1,273,327.97	99,038.94	144,999.66	115,999.72	85,549.80	1,796,545.73
612(1)	Reflectorized Thermoplastic Pavement Markings (White)	1,410.50	sq.m	25,048.79	84,249.17	918,694.62	102,799.26	82,239.41	60,651.56	1,273,682.79
500 (1)a1	RC Culvert Pipe, 610 mm	18.00	ln.m	2,867.28	6,926.73	28,840.67	3,863.47	3,090.77	2,279.45	47,868.37
502(3)e	Catch Basin	6.00	each	6,354.36	1,469.44	6,028.91	1,385.27	1,108.22	817.31	17,163.50
502(4)a	Concrete Cover	6.00	each	2,118.12	628.81	3,090.48	583.74	466.99	344.41	7,232.55
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	100,754.81	11,358.79	9,087.03	6,701.68	140,735.35
601	Sidewalk	244.00	sq.m.	9,899.69	7,828.72	130,021.63	14,775.00	11,820.00	8,717.25	183,062.30
605(2)z2	Regulatory Signs	2.00	units	434.90	451.97	13,680.73	1,456.76	1,165.41	859.49	18,049.25
A.1.1(3)	Const. of Field Office for the Engineer	1.00	LS	53,245.60	31,804.56	323,759.37	40,880.95	32,704.76	24,119.76	506,515.01
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	4.70	Km.	130,797.24	25,613.06	14,700.00	17,111.03	13,688.82	10,095.51	212,005.66
	TOTAL			***2,119,384.10***	***22,115,028.06***	***87,105,177.39***	***10,962,985.01***	***8,783,782.90***	***6,554,317.87***	***137,640,675.33***

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

Net Length : 4,700.00 ln.m.

Item No.	*Description*	*Quantity*	*Unit*	*DURATION # OF DAYS*	*WEEKS (6 WORKING DAYS)* 1–60
101(2)a	Removal of Existing Electric Post	15.00	each	1.88	
101(4)a1	Removal of Existing RCPC	12.50	each	0.26	
101(3b2)	Removal of Existing PCCP	17.00	each	0.05	
101(2)b	Removal of Existing Headwall	2.00	each	0.03	
101(8)	Removal of Existing Guardrails	2,160.50	ln.m	2.70	
101(9)	Removal of Existing Guardrails Post	565.00	each	0.71	
101(10)	Removal of Existing Road Signs	4.00	each	0.08	
102(2)	Surplus Common Excavation	5,201.50	cu.m.	10.84	
103 (1)a	Structure Excavation	1,329.00	cu.m.	8.31	
103(3)	Foundation Fill	8.50	cu.m.	0.85	
103(6)a	Pipe Culvert and Drain Excavation	109.50	cu.m.	0.68	
104(1)a1	Embankment from Roadway Excavation	33,856.00	cu.m.	70.25	
105 (1)a	Subgrade Preparation	42,095.50	sq.m.	17.54	
200 (1)	Aggregate Subbase Course	17,891.50	cu.m.	44.73	
300 (1)	Aggregate Surface Course	1,547.50	cu.m.	3.87	
311(1)e1a	Portland Cement Concrete Pavement-using Conventional Method, 0.28m thick	31,860.50	sq.m.	69.02	
311(1)a	Portland Cement Concrete Pavement, 0.15m. Thick	4,854.00	sq.m	5.65	
404 (1)a	Reinforcing Steel Bar, Grade 40	28,250.00	kg.	19.62	
405 (1) a3	Structural Concrete, Class A	673.00	cu.m	60.09	
500(1)a3	Pipe Culvert & Storm Drain	56.00	ln.m	7.00	
500 (1)b4	Pipe Culvert & Storm Drain	19.00	ln.m	2.38	
505(5)	Grouted Riprap, Class A	33.00	cu.m	3.30	
506(1)	Stone Masonry	89.00	cu.m	7.12	
607(1)	Reflective Pavement Studs, Flush Type	398.00	each	4.98	
611(1)	Trees (Furnishing and Transplanting)	357.00	each	44.63	
612(1)	Reflectorized Thermoplastic Pavement Markings (White)	1,410.50	sq.m	7.05	
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	L.S	207.00	
B.5	Project Billboard	2.00	Unit	0.25	
B.7	Occupational Safety & Health Program	1.00	L.S	138.00	
B.9	Mobilization and Demobilization	1.00	L.S	4.00	
B.4(1)	Construction Survey and Staking	4.70	Km.	62.67	

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 : 15.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	1.88	611.92	1,147.35
	b. Skilled Laborer	1	1.88	443.20	831.00
	c. Laborer	2	1.88	342.24	1,283.40
	Sub-total for A			P	3,261.75
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe	1	0.47	12,296.00	5,763.75
	b. Dumptruck	1	0.32	11,360.00	3,621.00
	Minor Tools (5% of Labor Cost)				326.18
	Sub-total for B			P	9,710.93
C.	Total (A+B)			P	12,972.68
D.	Output/day 8.00 each /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Rope, 1" dia.	60.00	m	20.00	1,200.00
	Sub-total for E			P	1,200.00
F.	Direct Cost (C+E)				14,172.68
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		1,417.27
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		1,133.81
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		836.19
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 : 12.50

Designation	No. of Person	No. of Days	Daily Rate	Amount
A. Labor				
a. Construction Foreman	1	0.26	611.92	159.35
b. Laborer	2	0.26	342.24	178.25
Sub-total for A			P	337.60
Name and Capacity	**No. of Equip.**	**No. of Days**	**Daily Rate**	**Amount**
B Equipment, (2014 ACEL Rates)				
a. Backhoe	1	0.26	12,296.00	3,202.08
b. Boom Truck	1	0.13	8,143.20	1,060.31
Sub-total for B			P	4,262.40
C. Total (A+B)			P	4,600.00
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)				4,600.00
G. Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	460.00
H. Contractor's Profit (CP)		8%	per D.O 197 s 2016	368.00
I. Value Added Tax (VAT)		5%	per D.O 197 s 2016	271.40
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 : 17.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.05	611.92	32.51
	b. Laborer	2	0.05	342.24	36.36
	Sub-total for A			P	68.87
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe	1	0.05	12,296.00	653.23
	b. Payloader	1	0.05	13,864.00	736.53
	c. Dumptruck	1	0.05	11,360.00	603.50
	Sub-total for B			P	1,993.25
C.	Total (A+B)			P	2,062.12
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)				2,062.12
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		206.21
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		164.97
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		121.67
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 : 2.00 each
2.16

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.03	611.92	16.52
	b. Laborer	2	0.03	342.24	18.48
	Sub-total for A			P	35.00
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe w/ breaker	1	0.01	15,984.80	215.79
	b. Backhoe	1	0.01	12,296.00	166.00
	c. Dumptruck	1	0.03	11,360.00	306.72
	Sub-total for B			P	688.51
C.	Total (A+B)			P	723.51
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)				723.51
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		72.35
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		57.88
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		42.69
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 : 2,160.50

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	2.70	611.92	1,652.57
	b. Laborer	2	2.70	342.24	1,848.52
	Sub-total for A			P	3,501.09
	Name and Capacity	**No. of Equip.**	**No. of Days**	**Daily Rate**	**Amount**
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe	1	2.70	12,296.00	33,206.89
	b. Boom Truck	1	2.70	8,143.20	21,991.73
	Minor Tools (10% of Labor Cost)				350.11
	Sub-total for B			P	55,548.72
C.	Total (A+B)			P	59,049.81
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)				59,049.81
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	5,904.98
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	4,723.99
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	3,483.94
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 : 565.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.71	611.92	432.17
	b. Laborer	2	0.71	342.24	483.41
	Sub-total for A			P	915.58
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe	1	0.71	12,296.00	8,684.05
	b. Boom Truck	1	0.71	8,143.20	5,751.14
	Minor Tools (10% of Labor Cost)				91.56
	Sub-total for B			P	14,526.74
C.	Total (A+B)			P	15,442.33
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)				15,442.33
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	1,544.23
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	1,235.39
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	911.10
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(10) Removal of Existing Road Signs
Unit of Measurement : each
Output per hour : 6.00
Quantity : 4.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.08	611.92	50.99
	b. Laborer	2	0.08	342.24	57.04
	Sub-total for A			P	108.03
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe	1	0.08	12,296.00	1,024.67
	b. Boom Truck	1	0.04	8,143.20	339.30
	Sub-total for B			P	1,363.97
C.	Total (A+B)			P	1,472.00
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)				1,472.00
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		147.20
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		117.76
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		86.85
J.	Total Unit Cost				455.95

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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 : 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	2	2.38	443.20	2,105.20
	c. Laborer	4	2.38	342.24	3,251.28
	Sub-total for A			P	6,809.79
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Backhoe	1	0.78	12,296.00	9,636.99
	b. Plate Compactor	1	0.78	984.00	771.21
	Minor Tools (10% of Labor)				680.98
	Sub-total for B			P	11,089.18
C.	Total (A+B)			P	17,898.97
D.	Output/day 8.00 ln.m	/day			
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Portland Cement	23.60	bag	296.18	6,989.17
	b. Sand	1.33	cu.m	1,295.60	1,723.15
	c. RC Pipes (610 mm dia.)	19.00	pc	1,372.00	26,068.00
	d. Sand Bedding	2.83	cu.m	1,295.60	3,667.84
	Sub-total for E			P	38,448.16
F.	Direct Cost (C+E)				56,347.13
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	5,634.71
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	4,507.77
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	3,324.48
J.	Total Unit Cost				3,674.43

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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 : 5,201.50

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	10.84	611.92	6,631.05
	b. Laborer	3	10.84	342.24	11,126.01
	Sub-total for A			P	17,757.05
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Bullduzer	1	10.84	27,032.00	292,931.14
	b. Payloader	1	10.84	13,864.00	150,236.66
	c. Payloader	1	8.13	13,864.00	112,677.49
	d. Dumptruck	3	10.84	11,360.00	369,306.50
	Sub-total for B			P	925,151.79
C.	Total (A+B)			P	942,908.85
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)				942,908.85
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		94,290.88
H.	Contractor's Profit (CP).		8% per D.O 197 s 2016		75,432.71
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		55,631.62
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 : 1,329.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	8.31	611.92	5,082.76
	b. Laborers	3	8.31	342.24	8,528.19
	Sub-total for A			P	13,610.95
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Dumptruck	2	8.31	11,360.00	188,718.00
	b. Backhoe	1	8.31	12,296.00	102,133.65
	Minor Tools (10% of Labor)				1,361.10
	Sub-total for B			P	292,212.75
C.	Total (A+B)			P	305,823.70
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)				305,823.70
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		30,582.37
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		24,465.90
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		18,043.60
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 : 8.50

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.85	611.92	520.13
	b. Laborer	4	0.85	342.24	1,163.62
	Sub-total for A			P	1,683.75
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Plate Compactor	1	0.85	984.00	836.40
	b. Water Truck	1	0.01	19,600.00	166.60
	c. Minor Tools (10% of Labor)				
	Sub-total for B			P	1,003.00
C.	Total (A+B)			P	2,686.75
D.	Output/day 10.00 cu.m.	/day			
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Filling Materials	9.78	cu.m.	493.40	4,822.99
	Sub-total for E			P	4,822.99
F.	Direct Cost (C+E)				7,509.73
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	750.97
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	600.78
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	443.07
J.	Total Unit Cost				1,094.65

gerald_0101

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 : 109.50

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	0.68	611.92	418.78
	b. Laborer	3	0.68	342.24	702.66
	Sub-total for A			P	1,121.44
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Dumptruck	2	0.68	11,360.00	15,549.00
	b. Backhoe	1	0.68	12,296.00	8,415.08
	Minor Tools (10% of Labor)				112.14
	Sub-total for B			P	24,076.22
C.	Total (A+B)			P	25,197.66
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)				25,197.66
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	2,519.77
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	2,015.81
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	1,486.66
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 : 33,856.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	For Excavation Work				
	a. Construction Foreman	1	70.25	611.92	42,988.11
	b. Laborer	2	70.25	342.24	48,085.54
	Spreading & Compaction				
	a. Construction Foreman	1	84.64	611.92	51,792.91
	b. Laborer	2	84.64	342.24	57,934.39
	Sub-total for A			P	200,800.95
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	For Excavation Work				
	a. Bulldozer	1	70.25	27,032.00	1,899,030.44
	b. Payloader	1	70.25	13,864.00	973,962.64
	c. Dumptruck	2	70.25	11,360.00	1,596,107.26
	Spreading and Compaction				
	a. Road Grader	1	84.64	17,384.00	1,471,381.76
	b. Road Roller	1	84.64	13,216.00	1,118,602.24
	c. Water Truck	1	29.62	19,600.00	580,630.40
	Sub-total for B			P	7,639,714.74
C.	Total (A+B)			P	7,840,515.69
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)				7,840,515.69
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	784,051.57
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	627,241.26
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	462,590.43
J.	Total Unit Cost				286.93

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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 : 42,095.50

Note: Provision for Turn-outs

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	17.54	611.92	10,732.95
	b. Laborer	2	17.54	342.24	12,005.64
	Sub-total for A			P	22,738.59
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Road Grader	1	17.54	17,384.00	304,911.74
	b. Road Roller	1	17.54	13,216.00	231,805.89
	c. Water Truck	1	4.38	19,600.00	85,944.98
	Sub-total for B			P	622,662.60
C.	Total (A+B)			P	645,401.19
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)				645,401.19
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		64,540.12
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		51,632.10
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		38,078.67
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 : 17,891.50

Note: Provision for Turn-outs

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	44.73	611.92	27,370.42
	b. Laborer	2	44.73	342.24	30,615.93
	Sub-total for A			P	57,986.35
	Name and Capacity	**No. of Equip.**	**No. of Days**	**Daily Rate**	**Amount**
B	Equipment, (2014 ACEL Rates)				
	a. Road Grader	1	44.73	17,384.00	777,564.59
	b. Road Roller	1	44.73	13,216.00	591,135.16
	c. Water Truck	1	44.73	19,600.00	876,683.50
	Sub-total for B			P	2,245,383.25
C.	Total (A+B)			P	2,303,369.60
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%)	22,364.38	cu.m.	1,191.60	26,649,389.25
	Sub-total for E			P	26,649,389.25
F.	Direct Cost (C+E)				28,952,758.85
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		2,895,275.89
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		2,316,220.71
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		1,708,212.77
J.	Total Unit Cost				2,005.00

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DETAILED UNIT PRICE ANALYSIS

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

Item No./Description : 300 (1) Aggregate Surface Course
Unit of Measurement : cu.m.
Output per hour : 50.00
Quantity : 1,547.50

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	3.87	611.92	2,367.37
	b. Laborer	2	3.87	342.24	2,648.08
	Sub-total for A			P	5,015.45
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Road Grader	1	3.87	17,384.00	67,254.35
	b. Road Roller	1	3.87	13,216.00	51,129.40
	c. Water Truck	1	0.97	19,600.00	18,956.88
	Sub-total for B			P	137,340.63
C.	Total (A+B)			P	142,356.07
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%)	1,779.63	cu.m.	1,055.60	1,878,572.15
	Sub-total for E			P	1,878,572.15
F.	Direct Cost (C+E)				2,020,928.22
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	202,092.82
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	161,674.26
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	119,234.77
J.	Total Unit Cost				1,618.05

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DETAILED UNIT PRICE ANALYSIS

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

Item No./Description : 311(1)e1a Portland Cement Concrete Pavement-using Conventional Method, 0.28m thick
Unit of Measurement : sq.m.
Output per hour : 57.70
Quantity : 31,860.50

Note: Provision for Turn-outs

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	69.02	611.92	42,235.87
	b. Skilled	4	69.02	443.20	122,361.99
	c. Laborer	12	69.02	342.24	283,464.58
	Sub-total for A			P	448,062.44
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Transit Mixer	4	69.02	10,544.00	2,911,066.83
	b. Concrete Vibrator	2	69.02	730.00	100,771.95
	c. Batching Plant	1	69.02	14,076.00	971,551.99
	d. Pay Loader	1	69.02	13,864.00	956,919.35
	e. Concrete Screeder	1	69.02	4,360.00	300,935.40
	f. Water Truck	1	69.02	19,600.00	1,352,828.86
	g. Concrete Saw	1	69.02	261.04	18,017.47
	h. Bar Cutter	1	6.90	1,758.00	12,134.05
	Minor Tools (5% of labor)				22,403.12
	Sub-total for B			P	6,646,629.01
C.	Total (A+B)			P	7,094,691.45
D.	Output/day 461.60 sq.m. /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Reinforcing Steel Bar	15,930.25	kg	39.00	621,279.75
	b. Curing Compound	9,239.55	lit	45.00	415,779.53
	c. Asphalt Sealant	5,416.29	lit	75.00	406,221.38
	d. Sand	4,906.52	cu.m	1,295.60	6,356,883.43
	e. Gravel	8,920.94	cu.m	1,402.60	12,512,510.44
	f. Cement	84,748.93	bag	296.18	25,100,627.43
	g. Concrete Saw	4.78	pc	8,000.00	38,232.60
	h. Pipe Sleeve, 2" dia.	248.51	l.m	133.00	33,052.08
	i. Grease/Tar	248.51	lit	21.00	5,218.75
	j. Steel Forms	14,655.83	lit	60.00	879,349.80
	Sub-total for E			P	46,369,155.18
F.	Direct Cost (C+E)				53,463,846.63
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	5,346,384.66
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	4,277,107.73
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	3,154,366.95
J.	Total Unit Cost				2,079.12

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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 : 4,854.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	5.65	611.92	3,459.26
	b. Skilled	4	5.65	443.20	10,021.86
	c. Laborer	12	5.65	342.24	23,216.71
	Sub-total for A			P	36,697.83
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Transit Mixer	4	5.65	10,544.00	238,426.24
	b. Concrete Vibrator	2	5.65	730.00	8,253.56
	c. Batching Plant	1	5.65	14,076.00	79,573.40
	d. Pay Loader	1	5.65	13,864.00	78,374.94
	e. Concrete Screeder	1	5.65	4,360.00	24,647.63
	f. Water Truck	1	5.65	19,600.00	110,801.27
	g. Concrete Saw	1	5.65	261.04	1,475.69
	h. Bar Cutter	1	0.57	1,758.00	993.82
	Minor Tools (5% of Labor)				27,127.33
	Sub-total for B			P	569,673.87
C.	Total (A+B)			P	606,371.70
D.	Output/day 858.64 sq.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Reinforcing Steel Bar	1,601.82	kg	39.00	62,470.98
	b. Curing Compound	1,407.66	lit	45.00	63,344.70
	c. Asphalt Sealant	582.48	lit	75.00	43,686.00
	d. Steel Form	2,232.84	l.m	40.00	89,313.60
	e. Sand	400.46	cu.m	1,295.60	518,829.50
	f. Gravel	728.10	cu.m	1,402.60	1,021,233.06
	g. Cement	6,941.22	bag	296.18	2,055,825.10
	h. Concrete Saw	0.73	pc	8,000.00	5,824.80
	i. Pipe Sleeve, 1" dia.	37.86	l.m	133.00	5,035.54
	j. Grease/Tar	7.28	lit	21.00	152.90
	Sub-total for E			P	3,865,716.17
F.	Direct Cost (C+E)				4,472,087.88
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	447,208.79
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	357,767.03
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	263,853.18
J.	Total Unit Cost				1,141.52

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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 : 28,250.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	19.62	611.92	12,004.68
	b. Skilled Laborer	2	19.62	443.20	17,389.44
	c. Laborer	8	19.62	342.24	53,712.67
	Sub-total for A			P	83,106.79
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2009 ACEL Rates)				
	a. Bar Cutter	1	9.81	1,758.00	17,244.27
	b. Bar Bender	1	9.81	2,812.00	27,582.99
	c. Cargo Truck	1	2.94	6,264.00	18,433.13
	Sub-total for B			P	63,260.38
C.	Total (A+B)			P	146,367.17
D.	Output/day 1,440.00 kg. /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Tie Wire	593.25	kg	80.00	47,460.00
	b. Reinforcing Steel Bar, Grade 40	29,662.50	kg	39.00	1,156,837.50
	Sub-total for E			P	1,204,297.50
F.	Direct Cost (C+E)				1,350,664.67
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	135,066.47
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	108,053.17
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	79,689.22
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 : 673.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	60.09	611.92	36,769.84
	b. Skilled Laborer	4	60.09	443.20	106,526.29
	c. Laborer	8	60.09	342.24	164,519.66
	Installation/Removal of Form Works				
	a. Skilled Laborer	4	60.09	443.20	106,526.29
	b. Laborer	8	60.09	342.24	164,519.66
	Sub-total for A			P	578,861.72
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. One Bagger Mixer	1	60.09	1,376.00	82,682.86
	b. Concrete Vibrator	1	60.09	972.00	58,406.79
	c. Water Truck	1	6.01	19,600.00	117,775.00
	Minor Tools (5% of Labor)				28,943.09
	Sub-total for B			P	287,807.73
C.	Total (A+B)			P	866,669.45
D.	Output/day 11.20 cu.m /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Form Lumber	11,777.50	bd.ft	40.00	471,100.00
	b. Plywood	269.20	pc	1,345.00	362,074.00
	c. Assorted CW Nails	471.10	kg.	70.00	32,977.00
	d. Portland Cement	6,393.50	bag	296.18	1,893,603.39
	e. Sand	336.50	cu.m	1,295.60	435,969.40
	f. Gravel	673.00	cu.m	1,402.60	943,949.80
	Sub-total for E			P	4,139,673.59
F.	Direct Cost (C+E)				5,006,343.04
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		500,634.30
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		400,507.44
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		295,374.24
J.	Total Unit Cost				9,216.73

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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)a3 Pipe Culvert & Storm Drain
Unit of Measurement : ln.m
Output per hour : 1.00
Quantity : 56.00

Designation	No. of Person	No. of Days	Daily Rate	Amount
A. Labor				
a. Construction Foreman	1	7.00	611.92	4,283.44
b. Skilled Laborer	2	7.00	443.20	6,204.80
c. Laborer	4	7.00	342.24	9,582.72
Sub-total for A			P	20,070.96
Name and Capacity	**No. of Equip.**	**No. of Days**	**Daily Rate**	**Amount**
B Equipment, (2014 ACEL Rates)				
a. Backhoe	1	3.50	12,296.00	43,036.00
b. Plate Compactor	1	3.50	984.00	3,444.00
Minor Tools (10% of Labor)				2,007.10
Sub-total for B			P	48,487.10
C. Total (A+B)			P	68,558.06
D. Output/day 8.00 ln.m /day				
Name and Specifications	**Quantity**	**Unit**	**Unit Cost**	**Amount**
E. Materials				
a. Portland Cement	60.48	bag	296.18	17,912.74
b. Sand	3.42	cu.m	1,295.60	4,425.77
c. RC Pipes (910 mm dia.)	56.00	pc	1,911.00	107,016.00
d. Sand Bedding	7.17	cu.m	1,295.60	9,286.86
Sub-total for E			P	138,641.38
F. Direct Cost (C+E)				207,199.43
G. Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		20,719.94
H. Contractor's Profit (CP)		8% per D.O 197 s 2016		16,575.95
I. Value Added Tax (VAT)		5% per D.O 197 s 2016		12,224.77
J. Total Unit Cost				4,584.29

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DETAILED UNIT PRICE ANALYSIS

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

Item No./Description : 505(5) Grouted Riprap, Class A
Unit of Measurement : cu.m
Output per hour : 1.25
Quantity : 33.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	3.30	611.92	2,019.34
	b. Skilled Laborer	2	3.30	443.20	2,925.12
	c. Laborer	8	3.30	342.24	9,035.14
	Sub-total for A			P	13,979.59
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. One Bagger Mixer	1	3.30	1,376.00	4,540.80
	b. Water Truck	1	1.32	19,600.00	25,872.00
	Minor Tools (5% of Labor)				698.98
	Sub-total for B			P	31,111.78
C.	Total (A+B)			P	45,091.37
D.	Output/day 10.00 cu.m	/day			
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Cement	99.00	bag	296.18	29,321.46
	b. Sand	8.25	cu.m	1,295.60	10,688.70
	c. Gravel Fill	0.50	cu.m	1,402.60	694.29
	d. Weep Holes (PVC), 2" dia.	9.90	ln.m	133.00	1,316.70
	e. Filter Cloth	0.50	sq.m	160.00	79.20
	f. Boulders	34.65	cu.m	1,326.60	45,966.69
	Miscellaneous (1% of Materials)				880.67
	Sub-total for E			P	88,947.70
F.	Direct Cost (C+E)				134,039.08
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	13,403.91
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	10,723.13
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	7,908.31
J.	Total Unit Cost				5,032.56

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DETAILED UNIT PRICE ANALYSIS

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

Item No./Description : 506(1) Stone Masonry
Unit of Measurement : cu.m
Output per hour : 1.56
Quantity : 89.00

	Designation	No. of Person	No. of Days	Daily Rate		Amount
A.	Labor					
	a. Construction Foreman	1	7.12	611.92		4,356.87
	b. Skilled Laborer	2	7.12	443.20		6,311.17
	c. Laborer	8	7.12	342.24		19,493.99
	Sub-total for A				P	30,162.03
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate		Amount
B	Equipment, (2014 ACEL Rates)					
	a. One Bagger Mixer	1	7.12	1,376.00		9,797.12
	b. Water Truck	1	0.36	19,600.00		6,977.60
	c. Backhoe	1	0.71	12,296.00		8,754.75
	Minor Tools (10% of Labor)					3,016.20
	Sub-total for B				P	28,545.67
C.	Total (A+B)				P	58,707.70
D.	Output/day 12.50 cu.m /day					
	Name and Specifications	Quantity	Unit	Unit Cost		Amount
E.	Materials					
	a. Cement	489.50	bag	296.18		144,978.32
	b. Sand	26.70	cu.m	1,295.60		34,592.52
	c. Gravel Fill	1.78	cu.m	1,402.60		2,496.63
	d. Weep Holes (PVC)	26.70	ln.m	133.00		3,551.10
	e. Filter Cloth	1.34	sq.m	160.00		213.60
	f. Boulders	93.45	cu.m	1,326.60		123,970.77
	Miscellaneous (1% of Materials)					3,098.03
	Sub-total for E				P	312,900.96
F.	Direct Cost (C+E)					371,608.67
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016			37,160.87
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016			29,728.69
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016			21,924.91
J.	Total Unit Cost					5,173.29

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DETAILED UNIT PRICE ANALYSIS

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

Item No./Description : 607(1) Reflective Pavement Studs, Flush Type
Unit of Measurement : each
Output per hour : 10.00
Quantity : 398.0

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	4.98	611.92	3,044.30
	b. Laborer	3	4.98	342.24	5,107.93
	Sub-total for A			P	8,152.23
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Diamond Drill	1	4.98	1,608.00	7,999.80
	b. Cargo Truck	1	1.24	9,696.00	12,059.40
	c. Air Compressor	1	4.98	4,016.00	19,979.60
	Minor Tools (5% of Labor Cost)				407.61
	Sub-total for B			P	40,446.41
C.	Total (A+B)			P	48,598.65
D.	Output/day 80.00 each /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Reflective Stud Catcheye Flush Surface	398	pc	667.00	265,466.00
	b. Concrete Epoxy A & B	4.776	ltr	2,280.00	10,889.28
	Sub-total for E			P	276,355.28
F.	Direct Cost (C+E)				324,953.93
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	32,495.39
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	25,996.31
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	19,172.28
J.	Total Unit Cost				1,011.60

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DETAILED UNIT PRICE ANALYSIS

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

Item No./Description : 611(1) Trees (Furnishing and Transplanting)
Unit of Measurement : each
Output per hour : 1.00
Quantity : 357.00

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	44.63	611.92	27,306.93
	b. Skilled Laborer	1	44.63	443.20	19,777.80
	c. Laborer	2	44.63	342.24	30,544.92
	Sub-total for A			P	77,629.65
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Cargo Truck	1	44.63	6,264.00	279,531.00
	b. Backhoe	1	44.63	12,296.00	548,709.00
	c. Water Truck	1	22.31	19,600.00	437,325.00
	Minor Tools (10% of Labor)				7,762.97
	Sub-total for B			P	1,273,327.97
C.	Total (A+B)			P	1,350,957.62
D.	Output/day 8.00 each /day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Fertilizers	1,071.00	kg	27.00	28,917.00
	b. Bamboo Pole	1,071.00	pc	10.00	10,710.00
	c. Polyethylene	1,071.00	sq.m	40.00	42,840.00
	d. Tie Wire	89.25	kg	61.68	5,504.94
	e. Trees (Delivered at site)	357.00	each	31.00	11,067.00
	Sub-total for E			P	99,038.94
F.	Direct Cost (C+E)				1,449,996.56
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		144,999.66
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		115,999.72
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		85,549.80
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 : 1,410.50

	Designation	No. of Person	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Construction Foreman	1	7.05	611.92	4,315.57
	b. Skilled Laborer	2	7.05	443.20	6,251.34
	c. Laborer	6	7.05	342.24	14,481.89
	Sub-total for A			P	25,048.79
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate	Amount
B	Equipment, (2014 ACEL Rates)				
	a. Cargo Truck/Delivery Truck	1	7.05	9,696.00	68,381.04
	b. Applicator Machine	1	7.05	750.00	5,289.38
	c. Kneading Machine	1	7.05	1,500.00	10,578.75
	Minor Tools (10% of labor)				
	Sub-total for B			P	84,249.17
C.	Total (A+B)			P	109,297.95
D.	Output/day 200.00 sq.m	/day			
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Thermoplastic Paint (white)	458.41	bag	1,585.00	726,583.81
	b. Glass Beads	46.55	bag	2,500.00	116,366.25
	c. Primer	169.26	liter	180.00	30,466.80
	d. LPG (50 kg.)	5.64	cyl	90.00	507.78
	e. LPG (12 kg.)	2.82	cyl	50.00	141.05
	f. Calsumine	176.31	kg	5.00	881.56
	Miscellaneous (5% of Materials)				43,747.36
	Sub-total for E			P	918,694.62
F.	Direct Cost (C+E)				1,027,992.57
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	102,799.26
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	82,239.41
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	60,651.56
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	296.18	4,126.33
	b. Sand	0.79	cu.m	1,295.60	1,026.12
	c. RC Pipes (610 mm dia.)	18.00	pc	1,202.00	21,636.00
	d. Sand Bedding	1.58	cu.m	1,295.60	2,052.23
	Sub-total for E			P	28,840.67
F.	Direct Cost (C+E)				38,634.68
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		3,863.47
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		3,090.77
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		2,279.45
J.	Total Unit Cost				2,659.35

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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(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	296.18	1,184.71
	b. Fine Aggregates	0.25	cu.m	1,295.60	323.90
	c. Course Aggregates	0.50	cu.m	1,402.60	701.30
	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	6,028.91
F.	Direct Cost (C+E)				13,852.70
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		1,385.27
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		1,108.22
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		817.31
J.	Total Unit Cost				2,860.58

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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	296.18	296.18
	b. Fine Aggregates	0.25	cu.m	1,295.60	323.90
	c. Coarse Aggregates	0.25	cu.m	1,402.60	350.65
	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	3,090.48
F.	Direct Cost (C+E)				5,837.41
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		583.74
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		466.99
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		344.41
J.	Total Unit Cost				1,205.42

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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	296.18	46,612.23
	b. Fine Aggregates	8.54	cu.m	1,295.60	11,064.42
	c. Coarse Aggregates	17.08	cu.m	1,402.60	23,956.41
	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)				1,975.58
	Sub-total for E			P	100,754.81
F.	Direct Cost (C+E)				113,587.86
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	11,358.79
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	9,087.03
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	6,701.68
J.	Total Unit Cost				1,153.57

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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	1,295.60	17,386.95
	e. Gravel	24.40	cu.m	1,402.60	34,223.44
	f. Cement	231.80	bag	296.18	68,653.67
	Sub-total for E			P	130,021.63
F.	Direct Cost (C+E)				147,750.04
G.	Overhead, Contingencies and Miscellaneous		10% per D.O 197 s 2016		14,775.00
H.	Contractor's Profit (CP)		8% per D.O 197 s 2016		11,820.00
I.	Value Added Tax (VAT)		5% per D.O 197 s 2016		8,717.25
J.	Total Unit Cost				750.26

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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	296.18	296.18
	c. Fine Aggregates	0.25	cu.m	1,295.60	323.90
	d. Coarse Aggregates	0.25	cu.m	1,402.60	350.65
	e. Highway Traffic Sign post with Dowel	2.00	each	3,355.00	6,710.00
	Sub-total for E			P	13,680.73
F.	Direct Cost (C+E)				14,567.60
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	1,456.76
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	1,165.41
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	859.49
J.	Total Unit Cost				9,024.63

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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	1,402.60	4,909.10
	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	296.18	26,655.87
	b. Crushed Gravel	20.00	cu.m	1,402.60	28,052.00
	c. Washed Sand	17.00	cu.m	1,295.60	22,025.20
	III. Reinforcing Bars(Footing Columns, Beams, & Slabs on Grade)				
	a. Deformed Round Bar, Grade 40	500.00	kg	40.00	20,000.00
	b. No. 16 GI Tie Wire	20.00	kg	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	296.18	14,808.82
	c. Washed Sand	10.00	cu.m	1,295.60	12,956.00
	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				180,233.02
	Sub-total for E			P	323,759.37
F.	Direct Cost (C+E)				408,809.53
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016	40,880.95
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016	32,704.76
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016	24,119.76
J.	Total Unit Cost				506,515.01

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 : 4.70

	Designation	No. of Person	No. of Days	Daily Rate		Amount
A.	Labor					
	(For Field Works)					
	a. Geodetic Engineer	1	15.67	833.31		13,055.19
	b. Skilled Laborer	3	15.67	443.20		20,830.40
	c. Laborer	3	15.67	342.24		16,085.28
	(For Office Works)					
	a. Geodetic Engineer	1	47.00	833.31		39,165.57
	b. Skilled Laborer	2	47.00	443.20		41,660.80
	Sub-total for A				P	130,797.24
	Name and Capacity	No. of Equip.	No. of Days	Daily Rate		Amount
B	Equipment, (2014 ACEL Rates)					
	a. Total Station w/ complete accessories	1	15.67	800.00		12,533.33
	Minor Tools (10% of labor)					13,079.72
	Sub-total for B				P	25,613.06
C.	Total (A+B)				P	156,410.30
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)					171,110.30
G.	Overhead, Contingencies and Miscellaneous		10%	per D.O 197 s 2016		17,111.03
H.	Contractor's Profit (CP)		8%	per D.O 197 s 2016		13,688.82
I.	Value Added Tax (VAT)		5%	per D.O 197 s 2016		10,095.51
J.	Total Unit Cost					45,107.59

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

Unloaded Running $= \frac{5.00 \times 60.00}{40.00} = 7.5$ 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 $= \frac{8.00 \times 60.00}{22.50} = 21.33$ 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 $= \frac{1,000.00}{853.33} = 1.17$ 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	40.00	X	10.14	=	405.60	+	890.00	=	1,295.60
Cost of Coarse Aggregates	40.00	X	10.14	=	405.60	+	997.00	=	1,402.60
Cost of Item 200 Materails	40.00	X	10.14	=	405.60	+	786.00	=	1,191.60
Cost of Item 201 Materails	40.00	X	10.14	=	405.60	+	690.00	=	1,095.60
Cost of Item 300 Materails	40.00	X	10.14	=	405.60	+	650.00	=	1,055.60
Cost of Boulders	40.00	X	10.14	=	405.60	+	921.00	=	1,326.60
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	84,748.93
Portland Cement Concrete Pavement, 0.15m. Thick	6,941.22
Structural Concrete, Class A	6,393.50
Grouted Riprap, Class A	99.00
Stone Masonry	489.50
Const. of Field Office for the Engineer	90.00
	50.00
Concrete Structure (Lean Concrete)	-
TOTAL	***98,812.15***

Quantity = 98,812.15 Bags

Delivery Charge = P 0.12 /bag/km

SITE	*HAULING DISTANCE*
Zamboanga Sibugay 2nd DEO PROJECT SITE	45.00

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

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

* Delivery Truck : 98,812.15 bags (hauling works)
20,000.00 kgs., (capacity per haul)
500.00 bags, (capacity per haul)

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

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

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

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

No. of trips for Dumptruck per day $= \frac{8.00 \times 60.00}{202.50} =$ 2.37 trips

Dumptruck Daily Outpout	=	*500.00*	*X*	*2.37*	=	*1,185.19*	cu.m.
Using 4 Dumptruck	=	*1,185.19*	*X*	*4.00*	=	*4,740.74*	cu.m.

No. of Days for Dumptruck $= \frac{98{,}812.15}{4{,}740.74} =$ 20.84 days

No. of Days for Labor for unloading = complimentary to D.Truck days = 20.84 days

DELIVERY COST:

98,812.15	Bags, Portland Cement	@	P	5.40	/bag	=	P	533,585.61
					Sub-total			**533,585.61**

LABOR:

1	Foreman	@	P	558.00	/day	X	20.84	days	=	P	11,630.50
10	Laborers	@	P	312.24	/day	X	20.84	days	=		65,080.77
								Sub-total			**76,711.27**

MATERIALS:

98,812.15	Bags, Portland Cement	@	P	290.00	/bag	=	P	28,655,523.50
					Sub-total			**28,655,523.50**

Estimated Quantity : 98,812.15 Bags

Unit Cost	P	296.18
Grand Total	P	29,265,820.38
Delivery Cost	P	533,585.61
Labor	P	76,711.27
Materials	P	28,655,523.50