

Republic of the Philippines
Department of Public Works and Highways
 Bureau : DPWH
 Region : IX
 District/City : Zamboanga City

PROGRAM OF WORK (For all types of Project)																																			
					Date : _____																														
NAME OF PROJECT : Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga Economic Zone), Talisayan, Zamboanga City			Appropriation : P 125,000,000.00 Source of Funds : CY-2018 GAA Issued Obligated Authority : _____ Released : _____ Cal. Days to Complete : 250 Calendar Days Desirable Starting Date : upon approval Mode of Implementation : by contract																																
LOCATION: Zamboanga City																																			
PROJECT CATEGORY : NATIONAL ROAD																																			
PROJECT DESCRIPTION : Scope of Work : Road Opening Road Width : 6.70 m. Roadbed Width : 12.00 m. Subbase Course : 0.30 m. thk. Surface Course : 0.15 m. thk.			Station Limits: <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th></th> <th></th> <th></th> <th style="text-align: right;">Length</th> </tr> </thead> <tbody> <tr> <td>I</td> <td>0+000.00</td> <td>-</td> <td>0+416.78</td> <td style="text-align: right;">416.78</td> </tr> <tr> <td>II</td> <td>0+000.00</td> <td>-</td> <td>2+151.57</td> <td style="text-align: right;">2,151.57</td> </tr> <tr> <td>II</td> <td>0+003.35</td> <td>-</td> <td>0+530.44</td> <td style="text-align: right;">527.09</td> </tr> <tr> <td>IV</td> <td>0+007.79</td> <td>-</td> <td>0+241.97</td> <td style="text-align: right;">234.18</td> </tr> <tr> <td>V</td> <td>0+000.00</td> <td>-</td> <td>0+786.55</td> <td style="text-align: right;">786.55</td> </tr> </tbody> </table> Net Length: 4,116.17 In.m. / 4.12 km. Lane Kilometer: 8.23 km.							Length	I	0+000.00	-	0+416.78	416.78	II	0+000.00	-	2+151.57	2,151.57	II	0+003.35	-	0+530.44	527.09	IV	0+007.79	-	0+241.97	234.18	V	0+000.00	-	0+786.55	786.55
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MINIMUM EQUIPMENT REQUIREMENT :			TECHNICAL PERSONNEL REQUIRED :																																
Description	No.	Description	No.	Description	No.																														
Dump Truck	12	Water Pump	1	Project Engineer	1																														
Transit Mixer	4	Concrete Screeder	1	Materials Engineer	1																														
Bulldozer	2	Concrete Vibrator	2	Geometric Surveyor	1																														
Backhoe	3	Concrete Cutter	2	Foreman	1																														
Road Grader	2	Bar Cutter	1	Materials Lab. Tech.	1																														
Road Roller	2	Bar Bender	1	Mason	12																														
Payloader	4	One Bagger Mixer	2	Carpenter	8																														
Water Truck	2	Batching Plant	1	Laborers (Skilled)	20																														
Water Tank	2	Plate Compactor	1	Laborers (Unskilled)	30																														
Kneading Machine	1	Cargo Truck	1	Safety Practitioner	1																														
Applicator Machine	1																																		
ESTIMATED COST OF PROPOSED WORK																																			
ITEM NO.	DESCRIPTION	% OF TOTAL	UNIT	QUANTITY	DIRECT COST																														
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PART A - FACILITIES FOR THE ENGINEER																																			
A.1.1(3)	Construction of Field Office for the Engineer	0.43	L.S.	1.00	411,691.59	411,691.59																													
A.1.1(11)	Provision of Furnitures/Fixtures, Equipment and Appliances for the Field Office for the Field Engineer	0.31	L.S.	1.00	297,173.33	297,173.33																													
A.1.2(5)	Operation and Maintenance of 4x4 Pick Up Type Service Vehicle for the Engineer	0.28	month	8.33	264,705.00	31,764.60																													
PART B - OTHER GENERAL REQUIREMENTS																																			
B.4(1)	Construction Survey & Staking	0.16	km.	4.12	153,357.32	37,257.29																													
B.5	Project Billboard/Signboard	0.01	each	2.00	10,979.20	5,489.60																													
B.7	Occupation Safety and Health Program	0.29	month	8.33	274,050.00	32,886.00																													
B.9	Mobilization & Demobilization	0.91	L.S.	1.00	874,591.00	874,591.00																													
PART C - EARTHWORKS																																			
100(1)	Clearing and Grubbing	1.39	has.	8.23	1,335,572.63	162,281.00																													
102(2)	Surplus Common Excavation	4.17	cu.m.	28,084.50	4,000,777.45	142.46																													
103(1)a	Structure Excavation	0.13	cu.m.	524.00	120,580.60	230.12																													
103(3)	Foundation Fill	0.02	cu.m.	10.00	23,206.70	2,320.67																													
103(6)a	Pipe Culverts and Drain Excavation	0.01	cu.m.	24.00	5,522.78	230.12																													
104(1)a	Embankment from Roadway Excavation	3.15	cu.m.	13,096.00	3,019,469.16	230.56																													
105(1)a	Subgrade Preparation	0.47	sq.m.	28,442.00	454,460.50	15.98																													

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ITEM NO.	DESCRIPTION	% OF TOTAL	UNIT	QUANTITY	% COST	
					TOTAL	UNIT COST
PART D - SUBBASE AND BASE COURSE						
200(1)	Aggregate Subbase Course	20.92	cu.m.	16,027.00	20,076,133.40	1,252.64
PART E - SURFACE COURSES						
311(1)a	Portland Cement Concrete Pavement	12.06	sq.m.	12,349.00	11,578,921.33	937.64
311(1)e1	Portland Cement Concrete Pavement	50.31	sq.m.	28,039.00	48,285,091.33	1,722.07
PART G - DRAINAGE AND SLOPE PROTECTION STRUCTURES						
404(1)a	Reinforcing Steel (Grade 40)	0.52	kg.	10,643.00	503,718.70	47.33
404(1)b	Reinforcing Steel (Grade 60)	0.39	kg.	7,658.00	378,524.52	49.43
405(1)a3	Structural Concrete, Class "A"	2.60	cu.m.	337.00	2,499,359.90	7,416.50
500(1)b3	Pipe Culverts	0.23	ln.m.	75.00	225,383.72	3,005.12
505(2)a	Grouted Riprap, Class "A"	0.11	cu.m.	27.00	103,199.64	3,822.21
506(1)	Stone Masonry	0.24	cu.m.	54.00	230,351.18	4,265.76
PART H - MISCELLANEOUS STRUCTURES						
612(1)	Reflectorized Thermoplastic Pavement Markings (White)	0.76	sq.m.	990.50	732,103.05	739.12
612(2)	Reflectorized Thermoplastic Pavement Markings (Yellow)	0.12	sq.m.	146.00	118,899.99	814.38
TOTAL		100.00			P 95,977,824.01	

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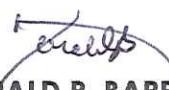
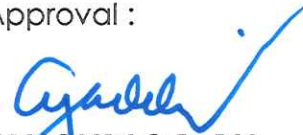
NAME OF PROJECT : Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga Economic Zone), Talisayan, Zamboanga City
Zamboanga City

BREAKDOWN OF ESTIMATED EXPENDITURES	% OF TOTAL	AMOUNT
I. ESTIMATED COST		
A. DIRECT COST		
A.1. Labor	1.28	1,606,181.32
A.2. Equipment Expenses	15.01	18,757,238.47
A.3. Materials	60.49	75,614,404.22
SUB-TOTAL (DIRECT COST)	76.78	P 95,977,824.01
B. INDIRECT COST (Per D.O. # 197, s. 2016)		
B.1. Overhead, Contingency & Misc. (12 % Max. of D.C.)	7.54	9,426,730.47
B.2. Profit (8 % Max. of D.C.)	6.07	7,587,082.24
C. VAT (5% of D.C. and I.C. Per D.O. # 197, s. 2016)	4.52	5,649,581.84
SUBTOTAL (CONTRACT COST)	94.91	P 118,641,218.55
II. ESTIMATED GOVERNMENT EXPENDITURES		
1. Engineering and Administrative Overhead (3.5%)	3.50	4,375,000.00
2. Detailed Engineering (1%)		
3. Reserved for the Payment of RROW	1.59	1,983,781.45
4. Physical Reserved		
TOTAL ESTIMATED PROJECT COST	100.00	P 125,000,000.00

Prepared :  MARK ANTHON P. REBOLLOS Engineer II	Checked :  JERALD R. BARRERA Engineer II
Submitted :  LEONCIO B. SOLAMILLO Chief, Construction Division	Recommending Approval :  CAYAMOMBAO D. DIA Assistant Regional Director
Approved :  JORGE U. SEBASTIAN, JR. CESO III Regional Director	

NAME OF PROJECT : Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga Economic Zone), Talisayan, Zamboanga City
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APPROVED BUDGET FOR THE CONTRACT

Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga Economic Zone), Talisayan, Zamboanga City

Stations :	0+000.00	to	0+416.78
	0+000.00		2+151.57
	0+003.35		0+530.44
	0+007.79		0+241.97
	0+000.00		0+786.55

Length : 4,116.17 In.m.

Contract Duration : 250 CD

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	ESTIMATED DIRECT COST	MARK-UPS IN % OCM	PROFIT	%	TOTAL MARK-UPS VALUE	VAT	TOTAL INDIRECT COST	TOTAL COST	UNIT COST
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
								(5) x (9)	5%[(5) + (9)]	(9) + (10)	(5) + (11)	(12) / (3)
PART A - FACILITIES FOR THE ENGINEER												
A.1.1(3)	Construction of Field Office for the Engineer	1.00	L.S.	411,691.59	10.00	8.00	18.00	74,104.49	24,289.80	98,394.29	510,085.88	510,085.88
A.1.1(11)	Provision of Furnitures/Fixtures, Equipment and Appliances for the Field Office for the Field Engineer	1.00	L.S.	297,173.33	-	8.00	8.00	23,773.87	16,047.36	39,821.23	336,994.56	336,994.56
A.1.2(5)	Operation and Maintenance of 4x4 Pick Up Type Service Vehicle for the Engineer	8.33	month	264,705.00	-	-	-	-	13,235.25	13,235.25	277,940.25	33,352.83
	TOTAL OF PART A			973,569.93				97,878.35	53,572.41	151,450.77	1,125,020.69	
PART B - OTHER GENERAL REQUIREMENTS												
B.4(1)	Construction Survey & Staking	4.12	km.	153,357.32	10.00	8.00	18.00	27,604.32	9,048.08	36,652.40	190,009.72	46,161.78
B.5	Project Billboard/Signboard	2.00	each	10,979.20	10.00	8.00	18.00	1,976.26	647.77	2,624.03	13,603.23	6,801.61
B.7	Occupation Safety and Health Program	8.33	month	274,050.00	-	8.00	8.00	21,924.00	14,798.70	36,722.70	310,772.70	37,292.72
B.9	Mobilization & Demobilization	1.00	L.S.	874,591.00	-	-	-	-	43,729.55	43,729.55	918,320.55	918,320.55
	TOTAL OF PART B			1,312,977.52				51,504.57	68,224.10	119,728.68	1,432,706.20	
PART C - EARTHWORKS												
100(1)	Clearing and Grubbing	8.23	has.	1,335,572.63	10.00	8.00	18.00	240,403.07	78,798.79	319,201.86	1,654,774.49	201,066.16
102(2)	Surplus Common Excavation	28,084.50	cu.m.	4,000,777.45	10.00	8.00	18.00	720,139.94	236,045.87	956,185.81	4,956,963.26	176.50
103(1)a	Structure Excavation	524.00	cu.m.	120,580.60	10.00	8.00	18.00	21,704.51	7,114.26	28,818.76	149,399.36	285.11
103(3)	Foundation Fill	10.00	cu.m.	23,206.70	10.00	8.00	18.00	4,177.21	1,369.20	5,546.40	28,753.11	2,875.31
103(6)a	Pipe Culverts and Drain Excavation	24.00	cu.m.	5,522.78	10.00	8.00	18.00	994.10	325.84	1,319.94	6,842.72	285.11
104(1)a	Embankment from Roadway Excavation	13,096.00	cu.m.	3,019,469.16	10.00	8.00	18.00	543,504.45	178,148.68	721,653.13	3,741,122.28	285.67
105(1)a	Subgrade Preparation	28,442.00	sq.m.	454,460.50	10.00	8.00	18.00	81,802.89	26,813.17	108,616.06	563,076.56	19.80
	TOTAL OF PART C			8,959,589.81				1,612,726.17	528,615.80	2,141,341.96	11,100,931.77	
PART D - SUBBASE AND BASE COURSE												
200(1)	Aggregate Subbase Course	16,027.00	cu.m.	20,076,133.40	10.00	8.00	18.00	3,613,704.01	1,184,491.87	4,798,195.88	24,874,329.28	1,552.03
	TOTAL OF PART D			20,076,133.40				3,613,704.01	1,184,491.87	4,798,195.88	24,874,329.28	
PART E - SURFACE COURSES												
311(1)a	Portland Cement Concrete Pavement	12,349.00	sq.m.	11,578,921.33	10.00	8.00	18.00	2,084,205.84	683,156.36	2,767,362.20	14,346,283.53	1,161.74
311(1)e1	Portland Cement Concrete Pavement	28,039.00	sq.m.	48,285,091.33	10.00	8.00	18.00	8,691,316.44	2,848,820.39	11,540,136.83	59,825,228.15	2,133.64
	TOTAL OF PART E			59,864,012.65				10,775,522.28	3,531,976.75	14,307,499.02	74,171,511.68	

AK

APPROVED BUDGET FOR THE CONTRACT

Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga Economic Zone), Talisayan, Zamboanga City

Stations :	0+000.00	to	0+416.78
	0+000.00		2+151.57
	0+003.35		0+530.44
	0+007.79		0+241.97
	0+000.00		0+786.55

length : 4,116.17 in.m.

4,116.17 In.m.													250 CD		
Contract Duration :															
ITEM NO.	DESCRIPTION	QUANTITY	UNIT	ESTIMATED DIRECT COST	MARK-UPS IN %	TOTAL MARK-UPS		VAT	TOTAL INDIRECT COST	TOTAL COST	UNIT COST				
(1)	(2)	(3)	(4)	(5)	PROFIT	%	VALUE	(10)	(11)	(12)	(13)				
					(7)	(8)	(5) x (8)	5%[(5) + (9)]	(9) + (10)	(5) + (11)	(12) / (3)				
PART A - FACILITIES FOR THE ENGINEER															
A.1.1(3)	Construction of Field Office for the Engineer	1.00	L.S.	411,691.59	8.00	18.00	74,104.49	24,289.80	98,394.29	510,085.88	510,085.88				
A.1.1(11)	Provision of Furnitures/Fixtures, Equipment and Appliances for the Field Office for the Field Engineer	1.00	L.S.	297,173.33	8.00	8.00	23,773.87	16,047.36	39,821.23	336,994.56	336,994.56				
A.1.2(5)	Operation and Maintenance of 4x4 Pick Up Type Service Vehicle for the Engineer	8.33	month	264,705.00	-	-	-	13,235.25	13,235.25	277,940.25	33,352.83				
TOTAL OF PART A				973,569.93			97,878.35	53,572.41	151,450.77	1,125,020.69					
PART B - OTHER GENERAL REQUIREMENTS															
B.4(1)	Construction Survey & Staking	4.12	km.	153,357.32	8.00	18.00	27,604.32	9,048.08	36,652.40	190,009.72	46,161.78				
B.5	Project Billboard/Signboard	2.00	each	10,979.20	8.00	18.00	1,976.26	647.77	2,624.03	13,603.23	6,801.61				
B.7	Occupation Safety and Health Program	8.33	month	274,050.00	-	8.00	21,924.00	14,798.70	36,722.70	310,772.70	37,292.72				
B.9	Mobilization & Demobilization	1.00	L.S.	874,591.00	-	-	-	43,729.55	43,729.55	918,320.55	918,320.55				
TOTAL OF PART B				1,312,977.52			51,504.57	68,224.10	119,728.68	1,432,706.20					
PART C - EARTHWORKS															
100(1)	Cleaning and Grubbing	8.23	has.	1,335,572.63	8.00	18.00	240,403.07	78,798.79	319,201.86	1,654,774.49	201,066.16				
102(2)	Surplus Common Excavation	28,084.50	cu.m.	4,000,777.45	8.00	18.00	720,139.94	236,045.87	956,185.81	4,956,963.26	176.50				
103(1)a	Structure Excavation	524.00	cu.m.	120,580.60	8.00	18.00	21,704.51	7,114.26	28,818.76	149,399.36	285.11				
103(3)	Foundation Fill	10.00	cu.m.	23,206.70	8.00	18.00	4,177.21	1,369.20	5,546.40	28,753.11	2,875.31				
103(6)a	Pipe Culverts and Drain Excavation	24.00	cu.m.	5,522.78	8.00	18.00	994.10	325.84	1,319.94	6,842.72	285.11				
104(1)a	Embankment from Roadway Excavation	13,096.00	cu.m.	3,019,469.16	8.00	18.00	543,504.45	178,148.68	721,653.13	3,741,122.28	285.67				
105(1)a	Subgrade Preparation	28,442.00	sq.m.	454,460.50	8.00	18.00	81,802.89	26,813.17	108,616.06	563,076.56	19.80				
TOTAL OF PART C				8,959,589.81			1,612,726.17	528,615.80	2,141,341.96	11,100,931.77					
PART D - SUBBASE AND BASE COURSE															
200(1)	Aggregate Subbase Course	16,027.00	cu.m.	20,076,133.40	8.00	18.00	3,613,704.01	1,184,491.87	4,798,195.88	24,874,329.28	1,552.03				
TOTAL OF PART D				20,076,133.40			3,613,704.01	1,184,491.87	4,798,195.88	24,874,329.28					
PART E - SURFACE COURSES															
311(1)a	Portland Cement Concrete Pavement	12,349.00	sq.m.	11,578,921.33	8.00	18.00	2,084,205.84	683,156.36	2,767,362.20	14,346,283.53	1,161.74				
311(1)e1	Portland Cement Concrete Pavement	28,039.00	sq.m.	48,285,091.33	8.00	18.00	8,691,316.44	2,848,820.39	11,540,136.83	59,825,228.15	2,133.64				
TOTAL OF PART E				59,864,012.65			10,775,522.28	3,531,976.75	14,307,499.02	74,171,511.68					

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ITEM NO.	DESCRIPTION	QUANTITY	UNIT	ESTIMATED DIRECT COST	MARK-UPS IN % OCM	PROFIT	%	TOTAL MARK-UPS VALUE	VAT	TOTAL INDIRECT COST	TOTAL COST	UNIT COST
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	5%[(5) + (9)]	(11)	(12)	(13)
PART G - DRAINAGE AND SLOPE PROTECTION STRUCTURES												
404(1)a	Reinforcing Steel (Grade 40)	10,643.00	kg.	503,718.70	10.00	8.00	18.00	90,669.37	29,719.40	120,388.77	624,107.47	58.64
404(1)b	Reinforcing Steel (Grade 60)	7,658.00	kg.	378,524.52	10.00	8.00	18.00	68,134.41	22,332.95	90,467.36	468,991.88	61.24
405(1)a3	Structural Concrete, Class "A"	337.00	c.u.m.	2,499,359.90	10.00	8.00	18.00	449,884.78	147,462.23	597,347.02	3,096,706.91	9,189.04
500(1)b3	Pipe Culverts	75.00	ln.m.	225,383.72	10.00	8.00	18.00	40,569.07	13,297.64	53,866.71	279,250.43	3,723.34
505(2)a	Grouled Riprap, Class "A"	27.00	c.u.m.	103,199.64	10.00	8.00	18.00	18,575.94	6,088.78	24,664.71	127,864.36	4,735.72
506(1)	Stone Masonry	54.00	c.u.m.	230,351.18	10.00	8.00	18.00	41,463.21	13,590.72	55,053.93	285,405.11	5,285.28
TOTAL OF PART G				3,940,537.66				709,296.78	232,491.72	941,788.50	4,882,326.16	
PART H - MISCELLANEOUS STRUCTURES												
612(1)	Reflectoized Thermoplastic Pavement Markings (White)	990.50	sq.m.	732,103.05	10.00	8.00	18.00	131,778.55	43,194.08	174,972.63	907,075.67	915.78
612(2)	Reflectoized Thermoplastic Pavement Markings (Yellow)	146.00	sq.m.	118,899.99	10.00	8.00	18.00	21,402.00	7,015.10	28,417.10	147,317.09	1,009.02
TOTAL OF PART H				851,003.03				153,180.55	50,209.18	203,389.72	1,054,392.76	
TOTAL				95,977,824.01				17,013,812.71	5,649,581.84	22,663,394.54	118,641,218.55	

Prepared by :


BELEN A. SAPALLERA
 Head, BAC Technical Working Group

Submitted by :


LEONCIO B. SOLAMILLO
 Chief, Construction Division

Recommending Approval:


CAYANAN BAO D. DIA
 Assistant Regional Director

Approved by :


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

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	ESTIMATED DIRECT COST	MARK-UPS IN %		TOTAL MARK-UPS		VAT	TOTAL INDIRECT COST	TOTAL COST	UNIT COST
					OCM	PROFIT	%	VALUE				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
								(5) x (8)	5%[(5) + (9)]	(9) + (10)	(5) + (11)	(12) / (3)
PART G - DRAINAGE AND SLOPE PROTECTION STRUCTURES												
404(1)a	Reinforcing Steel (Grade 40)	10,643.00	kg.	503,718.70	10.00	8.00	18.00	90,669.37	29,719.40	120,388.77	624,107.47	58.64
404(1)b	Reinforcing Steel (Grade 60)	7,658.00	kg.	378,524.52	10.00	8.00	18.00	68,134.41	22,332.95	90,467.36	468,991.88	61.24
405(1)a3	Structural Concrete, Class "A"	337.00	cum.	2,499,359.90	10.00	8.00	18.00	449,884.78	147,462.23	597,347.02	3,096,706.91	9,189.04
500(1)b3	Pipe Culverts	75.00	ln.m.	225,383.72	10.00	8.00	18.00	40,569.07	13,297.64	53,866.71	279,250.43	3,723.34
505(2)a	Grouted Riprap, Class "A"	27.00	cum.	103,199.64	10.00	8.00	18.00	18,575.94	6,088.78	24,664.71	127,864.36	4,735.72
506(1)	Stone Masonry	54.00	cum.	230,351.18	10.00	8.00	18.00	41,463.21	13,590.72	55,053.93	285,405.11	5,285.28
	TOTAL OF PART G			3,940,537.66				709,296.78	232,491.72	941,788.50	4,882,326.16	
PART H - MISCELLANEOUS STRUCTURES												
612(1)	ReflectORIZED Thermoplastic Pavement Markings (White)	990.50	sq.m.	732,103.05	10.00	8.00	18.00	131,778.55	43,194.08	174,972.63	907,075.67	915.78
612(2)	ReflectORIZED Thermoplastic Pavement Markings (Yellow)	146.00	sq.m.	118,899.99	10.00	8.00	18.00	21,402.00	7,015.10	28,417.10	147,317.09	1,009.02
	TOTAL OF PART H			851,003.03				153,180.55	50,209.18	203,389.72	1,054,392.76	
	TOTAL			95,977,824.01				17,013,612.71	5,649,581.84	22,663,394.54	118,641,218.55	

Prepared by :

BELEN A SAPALUEDA
Head, BAC Technical Working Group

Submitted by :

LEONCIO B. SOLAMILLO
Chief, Construction Division

Recommending Approval:

CAYANGMBAO D. DIA
Assistant Regional Director

Approved by :

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

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones
 - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga
 Economic Zone), Talisayan, Zamboanga City
 Item No./Description: A.1.1(3) Construction of Field Office for the Engineer
 Unit of Measurement: L.S.
 Output per hour:
 Quantity: 1.00

*7.00 m. x 9.00 m., 1 - Classroom, for
 Government Field Office, fully furnished as
 shown on plans*

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	8.00	611.92	4,895.36
	b. Mason	3	8.00	443.20	10,636.80
	c. Carpenter	3	8.00	443.20	10,636.80
	d. Laborer	6	8.00	342.24	16,427.52
Sub-total for A					P 42,596.48
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. One Bagger Mixer	1	6.00	1,376.00	8,256.00
	b. Water Truck	1	1.00	19,600.00	19,600.00
	Minor Tools 10% of Labor				4,259.65
Sub-total for B					P 32,115.65
C.	Total (A+B)				74,712.13
D.	Output/day	- L.S./day			
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	I. Earthworks (Excavation, Embankment, Bedding)				
	a. Gravel Bedding	3.50	cu.m.	1,425.89	4,990.62
	b. Selected Fill	10.00	cu.m.	388.35	3,883.50
	c. Soil Poisoning	2.50	L	1,900.00	4,750.00
	II. Concrete Works (Footings, Columns, Beams & Slab on Grade)				
	a. Portland Cement	90.00	bag	285.00	25,650.00
	b. Crushed Gravel	21.00	cu.m.	1,425.89	29,943.69
	c. Washed Sand	18.00	cu.m.	1,725.89	31,066.02
	III. Reinforcing Bars(Footing Columns, Beams, & Slabs on Grade)				
	a. Deformed Round Bar, Grade 40	435.00	kg.	38.00	16,530.00
	b. No. 16 GI Tie Wire	20.00	kg.	90.00	1,800.00
	IV. Formworks (Columns & Beams)				
	a. Coco Lumber	400.00	bd.ft.	25.00	10,000.00
	b. Ordinary Plywood, 1/4"x4'x8'	18.00	pc.	420.00	7,560.00
	c. CWN, Assorted	5.00	kg.	70.00	350.00
	V. Masonry Works (masonry walls & plastering)				
	a. CHB 6" thk	650.00	pc.	18.00	11,700.00
	b. Portland Cement	45.00	bag	285.00	12,825.00
	c. Washed Sand	8.00	cu.m.	1,725.89	13,807.12
	d. 10mm dia. X 6m RSB	65.00	kg.	38.00	2,470.00
	e. No. 16 GI Tie Wire	2.50	kg.	90.00	225.00
	VI. Doors and Windows				
	a. D-1, Hollow Core Flush Type swing door, complete w/ accessories, 0.90mx2.1m	2.00	set	1,765.26	3,530.52
	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					P 186,625.47
Sub-total for E (I + II + III)					P 336,979.47
F.	Direct Cost (C + E)				411,691.59
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		41,169.16
H.	Contractor's Profit(CP)		8% per D.O. 197, s. 2016		32,935.33
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		24,289.80
J.	Total Unit Cost				510,085.88

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones
 - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga
 Economic Zone), Talisayan, Zamboanga City
 Item No./Description: A.1.1(3) Bunkhouse, 7.00 m. x 9.00 m.
 Unit of Measurement: L.S.
 Output per hour:
 Quantity: 1.00

*For Government Field Office, fully
furnished as shown on plans*

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
Sub-total for A				P	-
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
Sub-total for B				P	-
C.	Total (A+B)				-
D.	Output/day	-	L.S./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	X. Electrical Works				
	a. 2 x 40w Flourescent lighting fixtures	5.00	set	1,030.00	5,150.00
	b. Porcelain Ceiling Outlet w/ female socket	2.00	pc	50.00	100.00
	c. Duplex Convenience 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	70.00	1,750.00
	g. 15mm dia. PVC pipe	20.00	pc	73.00	1,460.00
	h. 15mm dia. PVC Coupling	25.00	pc	5.00	125.00
	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	9.00	27.00
	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	100.00	200.00
	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	31.00	217.00
	t. panel board (side main w/ braches)	2.00	set	1,627.00	3,254.00
	XI. Plumbing Works				
	a. Water Closet (include. Fitting & Accessories)	1.00	set	7,375.00	7,375.00
	b. Lavatory (include fitting & Accessories)	1.00	set	6,615.00	6,615.00
	c. 1/2" GI Pipe S-40	2.00	pc	166.00	332.00
	d. 1/2" Water Faucet	2.00	pc	321.00	642.00
	e. 1/2" Assorted Connector	8.00	pc	20.00	160.00
	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				P	43,884.00
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				

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones
 - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga
 Economic Zone), Talisayan, Zamboanga City
 Item No./Description: A.1.1(3) Bunkhouse, 7.00 m. x 9.00 m.
 Unit of Measurement: L.S.
 Output per hour:
 Quantity: 1.00

*For Government Field Office, fully
furnished as shown on plans*

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
Sub-total for A				P	-
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				-
Sub-total for B				P	-
C.	Total (A+B)				-
D.	Output/day	-	L.S./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	VII. Steel Works				
	a. 65 x 65 x 6mm. L	350.00	kg.	48.00	16,800.00
	b. 50 x 50 x 6mm. L	250.00	kg.	48.00	12,000.00
	c. 50 x 50 x 4mm. L	100.00	kg.	48.00	4,800.00
	d. Purlins C- 150 x 50 x 3mm.	18.00	kg.	48.00	864.00
	e. 16mm dia. Cross bracing	35.00	kg.	38.00	1,330.00
	f. 16mm dia. Turn buckle	20.00	pc.	118.00	2,360.00
	g. 12mm thk base plate	25.00	kg.	47.00	1,175.00
	h. 10mm thk batten plate	15.00	kg.	47.00	705.00
	i. 10mm dia. Sag rod	10.00	kg.	38.00	380.00
	j. 20mm dia. X 350 mm anchor bolts	10.00	pc.	36.00	360.00
	k. Welding Rod	15.00	kg.	169.00	2,535.00
	l. Primer, Zinc Chromate	5.00	gal.	531.00	2,655.00
	VIII 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.	113.00	1,130.00
	c. Pre-painted flashing, ga. 24	2.00	ln.m.	113.00	226.00
	d. Teckscrew 1 1/2"	1,000.00	pc.	1.25	1,250.00
	e. Roof Sealant	2.00	L	250.00	500.00
	IX. Carpentry Works				
	a. Rough Lumber, sun dried tanguile	500.00	bd.ft.	37.00	18,500.00
	b. Plywood, ordinary 1/4" x 4' x 8'	30.00	pc.	420.00	12,600.00
	c. Finishing Nails	5.00	kg.	100.00	500.00
	d. Common Wire Nails	10.00	kg.	70.00	700.00
	e. Wood Preservative Brown	5.00	L	400.00	2,000.00
Sub-total for E				P	106,470.00
F.	Direct Cost (C + E)				
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		
J.	Total Unit Cost				



DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones
- Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga
Economic Zone), Talisayan, Zamboanga City

Item No./Description: A.1.1(11) Provision of Furnitures/Fixtures, Equipment and Appliances for the Field Office for the
Field Engineer

Unit of Measurement: L.S.

Output per hour:

Quantity: 1.00

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
Sub-total for A				P	-
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
Sub-total for B				P	-
C.	Total (A+B)				-
D.	Output/day	- L.S./day			
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	Office Equipment/Facilities & Supplies				
	Electric Desk Fan	2.00	unit	1,370.00	2,740.00
	Folding Beds, Good Quality	2.00	each	2,700.00	5,400.00
	pillows w/ pillow cases, fitted sheets and blanket	2.00	each	5,000.00	10,000.00
	Double burner gas stove (Gasul)	1.00	unit	3,700.00	3,700.00
	10 cups Rice Cooker	1.00	unit	2,500.00	2,500.00
	Various Office Supply	1.00	L.S.	45,000.00	45,000.00
	(Folders, Bond Paper, Yellow Pads, Ball Pens, Pencil, Envelopes, etc.)				
	Kitchenware	1.00	L.S.	30,000.00	30,000.00
	(Plates, Spoons & Forks, Glasses, etc.)				
	Dining Table	1.00	set	8,000.00	8,000.00
	Digital Camera	2.00	set	12,000.00	24,000.00
	Cellphone	4.00	set	15,000.00	60,000.00
	Desktop Computer	1.00	set	60,000.00	60,000.00
	Lighting/Water Fixtures				
	a. Electrical Bill	8.33	mos.	3,000.00	25,000.00
	b. Water Bill	8.33	mos.	1,500.00	12,500.00
	c. LPG (11 kg)	8.33	mos.	1,000.00	8,333.33
Sub-total for E				P	297,173.33
F.	Direct Cost (C + E)				297,173.33
G.	Overhead, Contingencies and Miscellaneous			per D.O. 197, s. 2016	-
H.	Contractor's Profit (CP)			8% per D.O. 197, s. 2016	23,773.87
I.	Value Added Tax (VAT)			5% per D.O. 197, s. 2016	16,047.36
J.	Total Unit Cost				336,994.56

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones
 - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga
 Economic Zone), Talisayan, Zamboanga City
 Item No./Description: A.1.2(5) Operation and Maintenance of 4x4 Pick Up Type Service Vehicle for the Engineer
 Unit of Measurement: month
 Output per hour:
 Quantity: 8.33

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Driver	1	250	422.32	105,580.00
Sub-total for A					P 105,580.00
Name and Capacity		No. of Equipment	No. of Months	Monthly Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
Sub-total for B					P -
C.	Total (A+B)				105,580.00
D.	Output/day	-	L.S./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Diesel	2,500.00	L	31.00	77,500.00
	b. Spare Parts	1.00	L.S.	40,000.00	40,000.00
	c. Engine Oil & Lubricants	1.00	L.S.	11,625.00	11,625.00
	d. Miscellaneous	1.00	L.S.	30,000.00	30,000.00
Sub-total for E					P 159,125.00
F.	Direct Cost (C + E)				264,705.00
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		13,235.25
J.	Total Unit Cost				33,352.83

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones
 - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga
 Economic Zone), Talisayan, Zamboanga City
 Item No./Description: B.4(1) Construction Survey & Staking
 Unit of Measurement: km.
 Output per hour: 0.04
 Quantity: 4.116

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	For Field Works				
	a. Geodetic Engineer	1	12.86	833.31	10,718.89
	b. Skilled Laborer	3	12.86	443.20	17,102.69
	c. Laborer	3	12.86	342.24	13,206.73
	For Office Works				
	a. Geodetic Engineer	1	38.59	833.31	32,156.68
	b. Skilled Laborer	2	38.59	443.20	34,205.37
Sub-total for A				P	107,390.36
Name and Capacity		No. of Equipment	No. of Days	Unit Cost	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Total Station w/ complete accessories	1	12.86	800.00	10,290.43
	Minor Tools 10% of Labor				10,739.04
Sub-total for B				P	21,029.46
C.	Total (A+B)				128,419.82
D.	Output/day	0.32	km./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Standard Stake Plan (800 mm x 910 mm)	50.00	pc	400.00	20,000.00
	b. Blue Printing	250.00	pc	15.00	3,750.00
	Miscellaneous 5% of Materials Cost				1,187.50
Sub-total for E				P	24,937.50
F.	Direct Cost (C + E)				153,357.32
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		15,335.73
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		12,268.59
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		9,048.08
J.	Total Unit Cost				46,161.78



DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones
 - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga
 Economic Zone), Talisayan, Zamboanga City
 Item No./Description: B.5 Project Billboard/Signboard
 Unit of Measurement: each
 Output per hour:
 Quantity: 2.00 Per D.O. 141, s. 2016

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	2.00	611.92	1,223.84
	b. Skilled Labor	1	2.00	443.20	886.40
	c. Unskilled Labor	2	2.00	342.24	1,368.96
Sub-total for A					P 3,479.20
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
Sub-total for B					P -
C.	Total (A+B)				3,479.20
D.	Output/day	-	each/day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Ordinary Plywood 1/2" thk. x 4' x 8'	2.00	pc.	780.00	1,560.00
	b. Tarpaulin (4' x 8')	2.00	pc.	1,000.00	2,000.00
	c. Assorted Lumber	100.00	bd.ft.	38.00	3,800.00
	d. Assorted CW Nails	2.00	kg.	70.00	140.00
Sub-total for E					P 7,500.00
F.	Direct Cost (C + E)				10,979.20
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		1,097.92
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		878.34
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		647.77
J.	Total Unit Cost				6,801.61

dk

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones
 - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga
 Economic Zone), Talisayan, Zamboanga City
 Item No./Description: 8.7 Occupation Safety and Health Program
 Unit of Measurement: month
 Output per hour:
 Quantity: 8.33

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Safety Practioner	1	125.00	611.92	76,490.00
	b. First Aider	1	250.00	443.20	110,800.00
Sub-total for A					P 187,290.00
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Warning Signs and Barricades				60,000.00
Sub-total for B					P 60,000.00
C.	Total (A+B)				247,290.00
D.	Output/day	-	L.S./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Rubber Boots (Long w/ steel toe, Black)	24.00	pair	400.00	9,600.00
	b. Working Gloves (Maong Material)	24.00	pair	15.00	360.00
	c. Rain Coats (Reinforced, Hip Length)	24.00	pc.	100.00	2,400.00
	d. Safety Hats	24.00	pc,	600.00	14,400.00
Sub-total for E					P 26,760.00
F.	Direct Cost (C + E)				274,050.00
G.	Overhead, Contingencies and Miscellaneous			per D.O. 197, s. 2016	-
H.	Contractor's Profit (CP)			8% per D.O. 197, s. 2016	21,924.00
I.	Value Added Tax (VAT)			5% per D.O. 197, s. 2016	14,798.70
J.	Total Unit Cost				37,292.72

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones
 - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga
 Economic Zone), Talisayan, Zamboanga City
 Item No./Description: B.9 Mobilization & Demobilization
 Unit of Measurement: L.S.
 Output per hour:
 Quantity: 1.00

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
Sub-total for A				P	-
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Low Bed Trailer	1	5.00	34,043.00	170,215.00
	b. Water Truck	1	5.00	19,600.00	98,000.00
	c. Backhoe	2	5.00	12,296.00	122,960.00
	d. Bulldozer	1	5.00	27,032.00	135,160.00
	e. DumpTruck	3	5.00	11,360.00	170,400.00
	f. Road Roller	2	2.00	13,216.00	52,864.00
	g. Grader	2	2.00	17,384.00	69,536.00
	h. Payloader	2	2.00	13,864.00	55,456.00
Sub-total for B				P	874,591.00
C.	Total (A+B)				874,591.00
D.	Output/day	-	L.S./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
Sub-total for E				P	-
F.	Direct Cost (C + E)				874,591.00
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		43,729.55
J.	Total Unit Cost				918,320.55

dk

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones
- Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga
Economic Zone), Talisayan, Zamboanga City

Item No./Description: 100(1) Clearing and Grubbing

Unit of Measurement: has.

Output per hour: 0.05 ha./hr.

Quantity: 8.23 each

Variable width

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	20.58	611.92	12,590.25
	b. Unskilled Labor	2	20.58	342.24	14,083.18
Sub-total for A					P 26,673.43
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Dump Truck (12 cu.yd.)	2	20.58	11,360.00	467,464.00
	b. Payloader (1.50 cu.m)	1	20.58	13,864.00	285,251.80
	c. Bulldozer, D6H SERIES II PSDS/DD	1	20.58	27,032.00	556,183.40
Sub-total for B					P 1,308,899.20
C.	Total (A+B)				1,335,572.63
D.	Output/day	0.40	ha/day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
Sub-total for E					P -
F.	Direct Cost (C + E)				1,335,572.63
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		133,557.26
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		106,845.81
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		78,798.79
J.	Total Unit Cost				201,066.16

AK

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones
 - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga
 Economic Zone), Talisayan, Zamboanga City
 Item No./Description: 102(2) Surplus Common Excavation
 Unit of Measurement: cu.m.
 Output per hour: 60.00
 Quantity: 28,084.50 For Disposal

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	58.51	611.92	35,803.06
	b. Unskilled Labor	2	58.51	342.24	40,048.50
Sub-total for A					P 75,851.55
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Bulldozer, D6H SERIES II PSDS/DD	1	58.51	27,032.00	1,581,625.43
	b. Payloader (1.50 cu.m.)	1	58.51	13,864.00	811,173.98
	c. Payloader (1.50 cu.m.) - at disposal area	1	14.63	13,864.00	202,793.49
	d. Dump Truck (12 cu.yd.)	2	58.51	11,360.00	1,329,333.00
Sub-total for B					P 3,924,925.89
C.	Total (A+B)				4,000,777.45
D.	Output/day	480.00	cu.m./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
Sub-total for E					P -
F.	Direct Cost (C + E)				4,000,777.45
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		400,077.74
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		320,062.20
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		236,045.87
J.	Total Unit Cost				176.50



DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones
 - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga
 Economic Zone), Talisayan, Zamboanga City
 Item No./Description: 103(1)a Structure Excavation
 Unit of Measurement: cu.m.
 Output per hour: 20.00
 Quantity: 524.00 *For lined canal and RCBC*

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	3.28	611.92	2,004.04
	b. Unskilled Labor	3	3.28	342.24	3,362.51
Sub-total for A					P 5,366.55
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Dump Truck (12 cu.yd.)	2	3.28	11,360.00	74,408.00
	b. Backhoe (0.80 cu.m.)	1	3.28	12,296.00	40,269.40
	Minor tools (10% labor cost)				536.65
Sub-total for B					P 115,214.05
C.	Total (A+B)				120,580.60
D.	Output/day	160.00	cu.m./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
Sub-total for E					P -
F.	Direct Cost (C + E)				120,580.60
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		12,058.06
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		9,646.45
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		7,114.26
J.	Total Unit Cost				285.11

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones
 - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga
 Economic Zone), Talisayan, Zamboanga City
 103(3) Foundation Fill

Item No./Description:
 Unit of Measurement: cu.m.
 Output per hour: 1.25
 Quantity: 10.00

For RCPC Beddings

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	1.00	611.92	611.92
	b. Unskilled Labor	4	1.00	342.24	1,368.96
Sub-total for A					P 1,980.88
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Plate Compactor (5 hp)	1	1.00	984.00	984.00
	b. Water Truck/Pump (16000 L)	1	0.01	19,600.00	196.00
	Minor Tools 10% of Labor Cost				198.09
Sub-total for B					P 1,378.09
C.	Total (A+B)				3,358.97
D.	Output/day 10.00	cu.m./day			
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Filling Materials (well-graded sand)	11.50	cu.m.	1,725.89	19,847.74
Sub-total for E					P 19,847.74
F.	Direct Cost (C + E)				23,206.70
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		2,320.67
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		1,856.54
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		1,369.20
J.	Total Unit Cost				2,875.31

AP

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones
 - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga
 Economic Zone), Talisayan, Zamboanga City
 103(6)a Pipe Culverts and Drain Excavation

Item No./Description:
 Unit of Measurement: cu.m.
 Output per hour: 20.00
 Quantity: 24.00

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	0.15	611.92	91.79
	b. Unskilled Labor	3	0.15	342.24	154.01
Sub-total for A				P	245.80
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Dump Truck (12 cu.yd.)	2	0.15	11,360.00	3,408.00
	b. Backhoe (0.80 cu.m.)	1	0.15	12,296.00	1,844.40
	Minor Tools 10% of Labor Cost				24.58
Sub-total for B				P	5,276.98
C.	Total (A+B)				5,522.78
D.	Output/day	160.00	cu.m./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
Sub-total for E				P	-
F.	Direct Cost (C + E)				5,522.78
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		552.28
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		441.82
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		325.84
J.	Total Unit Cost				285.11

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones
 - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga
 Economic Zone), Talisayan, Zamboanga City
 Item No./Description: 104(1)a Embankment from Roadway Excavation
 Unit of Measurement: cu.m.
 Output per hour: 50.00
 Quantity: 13,096.00 Compacted Volume

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	For Excavation Work				
	a. Const. Foreman	1	27.17	611.92	16,628.44
	c. Unskilled Laborer	2	27.17	342.24	18,600.20
	Spreading and Compaction				
	a. Const. Foreman	1	32.74	611.92	20,034.26
	c. Unskilled Laborer	2	32.74	342.24	22,409.88
Sub-total for A					P 77,672.77
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	For Excavation Work				
	a. Bulldozer, D6H Series II PSDS/DD	1	27.17	27,032.00	734,572.97
	b. Payloader (1.50 cu.m.)	1	27.17	13,864.00	376,743.11
	c. Dump Truck (12 cu.yd.)	2	27.17	11,360.00	617,397.82
	Spreading and Compaction				
	a. Motorized Road Grader (140 hp), G170A	1	32.74	17,384.00	569,152.16
	b. Vibratory Roller (10 mt), SD100C	1	32.74	14,768.00	483,504.32
	c. Water Truck/Pump (16000 L)	1	8.19	19,600.00	160,426.00
Sub-total for B					P 2,941,796.39
C.	Total (A+B)				3,019,469.16
D.	Output/day	400.00	cu.m./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
Sub-total for E					P -
F.	Direct Cost (C + E)				3,019,469.16
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		301,946.92
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		241,557.53
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		178,148.68
J.	Total Unit Cost				285.67



DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones
 - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga
 Economic Zone), Talisayan, Zamboanga City
 105(1)a Subgrade Preparation

Item No./Description:
 Unit of Measurement: sq.m.
 Output per hour: 300.00
 Quantity: 28,442.00

Variable Width

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	11.85	611.92	7,251.76
	b. Unskilled Laborer	2	11.85	342.24	8,111.66
Sub-total for A					P 15,363.42
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Motorized Road Grader (140 hp), G710A	1	11.85	17,384.00	206,014.89
	b. Vibratory Roller (10 mt), SD100DC	1	11.85	14,768.00	175,013.11
	c. Water Truck/Pump (16000 L)	1	2.96	19,600.00	58,069.08
Sub-total for B					P 439,097.08
C.	Total (A+B)				454,460.50
D.	Output/day	2,400.00	sq.m./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
Sub-total for E					P -
F.	Direct Cost (C + E)				454,460.50
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		45,446.05
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		36,356.84
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		26,813.17
J.	Total Unit Cost				19.80

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones
 - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga
 Economic Zone), Talisayan, Zamboanga City
 Item No./Description: 200(1) Aggregate Subbase Course
 Unit of Measurement: cu.m.
 Output per hour: 50.00
 Quantity: 16,027.00 03.0 m. thk. (min) compacted volume

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	40.07	611.92	24,518.10
	b. Unskilled Labor	2	40.07	342.24	27,425.40
Sub-total for A					P 51,943.51
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Motorized Road Grader (140 hp), G710A	1	40.07	17,384.00	696,533.42
	b. Vibratory Roller (10 mt), SD100DC	1	40.07	14,768.00	591,716.84
	c. Water Truck/Pump (16000 L)	1	10.02	19,600.00	196,330.75
Sub-total for B					P 1,484,581.01
C.	Total (A+B)				1,536,524.52
D.	Output/day	400.00	cu.m./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Aggregate Subbase Course (w/ 15% Shrinkage Factor)	18,431.05	cu.m.	1,005.89	18,539,608.88
Sub-total for E					P 18,539,608.88
F.	Direct Cost (C + E)				20,076,133.40
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		2,007,613.34
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		1,606,090.67
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		1,184,491.87
J.	Total Unit Cost				1,552.03

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones
 - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga
 Economic Zone), Talisayan, Zamboanga City
 Item No./Description: 311(1)a Portland Cement Concrete Pavement
 Unit of Measurement: sq.m.
 Output per hour: 107.33
 Quantity: 12,349.00 for shouldering

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	14.38	611.92	8,800.66
	b. Skilled Labor	4	14.38	443.20	25,496.49
	c. Unskilled Labor	12	14.38	342.24	59,065.34
Sub-total for A					P 93,362.49
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Transit Mixer (5 cu.m.)	4	14.38	10,544.00	606,577.17
	b. Concrete Vibrator	2	14.38	730.00	20,997.79
	c. Concrete Batch Plant (30 cu.m.)	1	14.38	14,076.00	202,441.68
	d. Payloader (1.50 cu.m.), LX80-2C	1	14.38	13,864.00	199,392.69
	e. Concrete Screeder (5.5 hp)	1	14.38	4,360.00	62,705.72
	f. Water truck/Pump (16000 L)	1	14.38	19,600.00	281,888.10
	g. Concrete Saw (7.5 hp), 14" Blade Ø	1	14.38	261.04	3,754.29
	h. Bar Cutter, Single Phase	1	1.44	1,758.00	2,528.36
	Minor Tools 5% of Labor				4,668.12
Sub-total for B					P 1,384,953.93
C.	Total (A+B)				1,478,316.42
D.	Output/day	858.64	sq.m./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Reinforcing Steel Bar	4,075.17	kg.	38.00	154,856.46
	b. Curing Compound	3,581.21	L	35.00	125,342.35
	c. Asphalt Sealant	1,481.88	L	100.00	148,188.00
	d. Steel Forms (Rental)	5,680.54	m	40.00	227,221.60
	e. Sand	1,018.79	cu.m.	1,725.89	1,758,323.79
	f. Gravel	1,852.35	cu.m.	1,425.89	2,641,247.34
	g. Cement	17,659.07	bag	285.00	5,032,834.95
	h. Concrete Saw (Diamond Blade 14" Ø)	1.85	pc.	2,500.00	4,630.88
	i. Pipe Sleeve, 2" Ø	96.32	m.	61.00	5,875.65
	j. Grease/Tar	18.52	L	112.50	2,083.89
Sub-total for E					P 10,100,604.91
F.	Direct Cost (C + E)				11,578,921.33
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		1,157,892.13
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		926,313.71
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		683,156.36
J.	Total Unit Cost				1,161.74

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones
 - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga
 Economic Zone), Talisayan, Zamboanga City
 Item No./Description: 311(1)e1 Portland Cement Concrete Pavement
 Unit of Measurement: sq.m.
 Output per hour: 57.50
 Quantity: 28,039.00 0.28 m. thick, includes widening

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	60.95	611.92	37,299.18
	b. Skilled Labor	4	60.95	443.20	108,059.87
	c. Unskilled Labor	12	60.95	342.24	250,332.19
Sub-total for A					P 395,691.24
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Transit Mixer (5 cu.m.)	4	60.95	10,544.00	2,570,810.57
	b. Concrete Vibrator	2	60.95	730.00	88,993.35
	c. Concrete Batch Plant (30 cu.m.)	1	60.95	14,076.00	857,993.40
	d. Payloader (1.50 cu.m.), LX80-2C	1	60.95	13,864.00	845,071.08
	e. Concrete Screeder (5.5 hp)	1	60.95	4,360.00	265,760.96
	f. Water truck/Pump (16000 L)	1	60.95	19,600.00	1,194,705.22
	g. Concrete Saw (7.5 hp), 14" Blade Ø	1	60.95	261.04	15,911.52
	h. Bar Cutter, Single Phase	1	6.10	1,758.00	10,715.77
	Minor Tools 5% of Labor				19,784.56
Sub-total for B					P 5,869,746.43
C.	Total (A+B)				6,265,437.68
D.	Output/day	460.00	sq.m./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Reinforcing Steel Bar	14,019.50	kg.	38.00	532,741.00
	b. Curing Compound	8,131.31	L	35.00	284,595.85
	c. Asphalt Sealant	4,766.63	L	100.00	476,663.00
	d. Steel Forms (Rental)	12,897.94	m	60.00	773,876.40
	e. Sand	4,318.01	cu.m.	1,725.89	7,452,403.38
	f. Gravel	7,850.92	cu.m.	1,425.89	11,194,548.32
	g. Cement	74,583.74	bag	285.00	21,256,365.90
	h. Concrete Saw (Diamond Blade 14" Ø)	4.21	pc.	2,500.00	10,514.63
	i. Pipe Sleeve, 2" Ø	218.70	m.	61.00	13,340.96
	j. Grease/Tar	218.70	L	112.50	24,604.22
Sub-total for E					P 42,019,653.65
F.	Direct Cost (C + E)				48,285,091.33
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		4,828,509.13
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		3,862,807.31
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		2,848,820.39
J.	Total Unit Cost				2,133.64

AP

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones
 - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga
 Economic Zone), Talisayan, Zamboanga City
 Item No./Description: 404(1)a Reinforcing Steel (Grade 40)
 Unit of Measurement: kg.
 Output per hour: 180.00
 Quantity: 10,643.00 Grade 40, For Lined Canal

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	7.39	611.92	4,522.68
	b. Skilled Labor	2	7.39	443.20	6,551.36
	c. Unskilled Labor	8	7.39	342.24	20,235.89
Sub-total for A					P 31,309.93
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Bar Cutter	1	3.70	1,758.00	6,496.66
	b. Bar Bender	1	3.70	2,812.00	10,391.71
	c. Cargo Truck (9 - 10 mt.)	1	1.11	9,696.00	10,749.43
Sub-total for B					P 27,637.80
C.	Total (A+B)				58,947.73
D.	Output/day	1,440.00	ln.m./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Tie Wire (2% of RSB)	223.50	kg.	90.00	20,115.27
	b. Reinforcing Steel Bar, Grade 40 (with 5% wastage)	11,175.15	kg.	38.00	424,655.70
Sub-total for E					P 444,770.97
F.	Direct Cost (C + E)				503,718.70
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		50,371.87
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		40,297.50
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		29,719.40
J.	Total Unit Cost				58.64

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones
 - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga
 Economic Zone), Talisayan, Zamboanga City
 Item No./Description: 404(1)b Reinforcing Steel (Grade 60)
 Unit of Measurement: kg.
 Output per hour: 180.00
 Quantity: 7,658.00 Grade 60, For RCBC

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	5.32	611.92	3,254.22
	b. Skilled Labor	2	5.32	443.20	4,713.92
	c. Unskilled Labor	8	5.32	342.24	14,560.41
Sub-total for A					P 22,528.56
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Bar Cutter	1	2.66	1,758.00	4,674.57
	b. Bar Bender	1	2.66	2,812.00	7,477.19
	c. Cargo Truck (9 - 10 mt.)	1	0.80	9,696.00	7,734.58
Sub-total for B					P 19,886.34
C.	Total (A+B)				42,414.90
D.	Output/day	1,440.00	ln.m./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Tie Wire (2% of RSB)	160.82	kg.	90.00	14,473.62
	b. Reinforcing Steel Bar, Grade 60 (with 5% wastage)	8,040.90	kg.	40.00	321,636.00
Sub-total for E					P 336,109.62
F.	Direct Cost (C + E)				378,524.52
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		37,852.45
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		30,281.96
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		22,332.95
J.	Total Unit Cost				61.24



DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones
 - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga
 Economic Zone), Talisayan, Zamboanga City
 Item No./Description: 405(1)a3 Structural Concrete, Class "A"
 Unit of Measurement: cu.m.
 Output per hour: 1.40
 Quantity: 337.00 For RCBC and Lined Canal

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	30.09	611.92	18,412.24
	b. Skilled Labor	4	30.09	443.20	53,342.29
	c. Unskilled Labor	8	30.09	342.24	82,382.06
	Installation/Removal of Formworks				
	b. Skilled Labor	4	30.09	443.20	53,342.29
	c. Unskilled Labor	8	30.09	342.24	82,382.06
Sub-total for A					P 289,860.92
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. One Bagger Mixer	1	30.09	1,376.00	41,402.86
	b. Concrete Vibrator	1	30.09	730.00	21,965.18
	c. Water Truck/Pump (16000 L)	1	3.01	19,600.00	58,975.00
	Minor Tools 5% of Labor				14,493.05
Sub-total for B					P 136,836.08
C.	Total (A+B)				426,697.00
D.	Output/day	11.20	In.m./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Lumber, Good - 4 uses	23,590.00	bd.ft.	38.00	224,105.00
	b. Marine Plywood (1/2" x 4' x 8') - 4 uses	539.20	pc.	1,100.00	148,280.00
	c. Assorted CWN (1kg./100 bd.ft. of Lumber)	235.90	kg.	70.00	16,513.00
	d. Cement	3,201.50	bag	285.00	912,427.50
	e. Sand	168.50	cu.m.	1,725.89	290,812.47
	f. Gravel	337.00	cu.m.	1,425.89	480,524.93
Sub-total for E					P 2,072,662.90
F.	Direct Cost (C + E)				2,499,359.90
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		249,935.99
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		199,948.79
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		147,462.23
J.	Total Unit Cost				9,189.04

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones
 - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga
 Economic Zone), Talisayan, Zamboanga City
 Item No./Description: 500(1)b3 Pipe Culverts
 Unit of Measurement: In.m.
 Output per hour: 1.00
 Quantity: 75.00

Class IV, Wall B, AASHTO M - 170 - 85

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	5.34	611.92	3,269.95
	b. Skilled Labor	2	5.34	443.20	4,736.70
	c. Unskilled Labor	4	5.34	342.24	7,315.38
Sub-total for A					P 15,322.03
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Backhoe (0.80 cu.m.)	1	2.72	12,296.00	33,429.75
	b. Plate Compactor (5 hp)	1	2.72	984.00	2,675.25
	Minor Tools 10% of Labor				1,532.20
Sub-total for B					P 37,637.20
C.	Total (A+B)				52,959.23
D.	Output/day 8.00	In.m./day			
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Cement	81.00	bag	285.00	23,085.00
	b. Sand	4.58	cu.m.	1,725.89	7,895.95
	c. RC Pipes (910 mm. dia.)	75.00	cu.m.	1,665.00	124,875.00
	d. Sand Bedding/Selected Sandy Soil	9.60	m.	1,725.89	16,568.54
Sub-total for E					P 172,424.49
F.	Direct Cost (C + E)				225,383.72
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		22,538.37
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		18,030.70
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		13,297.64
J.	Total Unit Cost				3,723.34



DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones
 - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga
 Economic Zone), Talisayan, Zamboanga City
 Item No./Description: 505(2)a Grouted Riprap, Class "A"
 Unit of Measurement: cu.m.
 Output per hour: 1.25
 Quantity: 27.00 *Headwall apron*

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	2.70	611.92	1,652.18
	c. Skilled Labor	8	2.70	443.20	9,573.12
	d. Unskilled Labor	8	2.70	342.24	7,392.38
Sub-total for A					P 18,617.69
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. One Bagger Mixer	1	2.70	1,376.00	3,715.20
	b. Water Truck/Pump (16000 L)	1	0.14	19,600.00	2,646.00
	Minor Tools 5% of Labor				930.88
Sub-total for B					P 7,292.08
C.	Total (A+B)				25,909.77
D.	Output/day 10.00 cu.m./day				
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Cement	81.00	bag	285.00	23,085.00
	b. Sand	6.75	cu.m.	1,725.89	11,649.76
	c. Gravel	0.41	cu.m.	1,425.89	577.49
	d. Weep Holes (PVC)	8.10	m.	89.33	723.60
	e. Filter Cloth	0.41	sq.m.	160.00	64.80
	f. Boulders (15 - 25 kg.)	28.35	cu.m.	1,425.89	40,423.98
	Miscellaneous 1% of Materials Cost				765.25
Sub-total for E					P 77,289.87
F.	Direct Cost (C + E)				103,199.64
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		10,319.96
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		8,255.97
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		6,088.78
J.	Total Unit Cost				4,735.72

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones
 - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga
 Economic Zone), Talisayan, Zamboanga City
 Item No./Description: 506(1) Stone Masonry
 Unit of Measurement: cu.m.
 Output per hour: 1.60
 Quantity: 54.00 *For headwall and wingwall*

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	4.22	611.92	2,581.54
	b. Skilled Labor	2	4.22	443.20	3,739.50
	c. Unskilled Labor	8	4.22	342.24	11,550.60
Sub-total for A					P 17,871.64
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. One Bagger Mixer	1	4.22	1,376.00	5,805.00
	b. Water Truck/Pump (16000 L)	1	0.21	19,600.00	4,134.38
	c. Backhoe (Wheel Type 0.28 cu.m.)	1	0.42	7,376.00	3,111.75
	Minor Tools 5% of Labor				893.58
Sub-total for B					P 13,944.71
C.	Total (A+B)				31,816.34
D.	Output/day	12.80	cu.m./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Cement	297.00	bag	285.00	84,645.00
	b. Sand	16.20	cu.m.	1,725.89	27,959.42
	c. Gravel	1.08	cu.m.	1,425.89	1,539.96
	d. Weep Holes (PVC)	16.20	m.	89.33	1,447.20
	e. Filter Cloth	0.81	sq.m.	160.00	129.60
	f. Boulders	56.70	cu.m.	1,425.89	80,847.96
	Miscellaneous 1% of Materials Cost				1,965.69
Sub-total for E					P 198,534.83
F.	Direct Cost (C + E)				230,351.18
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		23,035.12
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		18,428.09
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		13,590.72
J.	Total Unit Cost				5,285.28

AK

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones
 - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga
 Economic Zone), Talisayan, Zamboanga City
 Item No./Description: 612(1) ReflectORIZED Thermoplastic Pavement Markings (White)
 Unit of Measurement: sq.m.
 Output per hour: 25.00
 Quantity: 990.50

For Center Line (Separation & Edge Lines)

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	4.95	611.92	3,030.53
	b. Skilled Labor	2	4.95	443.20	4,389.90
	c. Unskilled Labor	6	4.95	342.24	10,169.66
Sub-total for A					P 17,590.09
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Cargo Truck/Delivery Truck (2-5 mt)	1	4.95	6,264.00	31,022.46
	b. Applicator Machine	1	4.95	750.00	3,714.38
	c. Kneading Machine	1	4.95	1,500.00	7,428.75
	Minor Tools 10% of Labor				1,759.01
Sub-total for B					P 43,924.59
C.	Total (A+B)				61,514.69
D.	Output/day	200.00	sq.m./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Thermoplastic Paint (White)	321.91	bag	1,585.00	510,231.31
	b. Glass Beads	32.69	bag	2,500.00	81,716.25
	c. Primer	118.86	L	160.00	19,017.60
	d. LPG (50 kg)	3.96	cyl.	3,450.00	13,668.90
	e. LPG (12 kg)	1.98	cyl.	828.00	1,640.27
	f. Calsumine	123.81	kg.	100.00	12,381.25
	Miscellaneous 5% of Materials Cost				31,932.78
Sub-total for E					P 670,588.36
F.	Direct Cost (C + E)				732,103.05
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		73,210.30
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		58,568.24
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		43,194.08
J.	Total Unit Cost				915.78

dk

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones
 - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga
 Economic Zone), Talisayan, Zamboanga City
 Item No./Description: 612(2) ReflectORIZED Thermoplastic Pavement Markings (Yellow)
 Unit of Measurement: sq.m.
 Output per hour: 25.00
 Quantity: 146.00

For Barrier Lines

Designation		No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1	0.73	611.92	446.70
	b. Skilled Labor	2	0.73	443.20	647.07
	c. Unskilled Labor	6	0.73	342.24	1,499.01
Sub-total for A					P 2,592.78
Name and Capacity		No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Cargo Truck/Delivery Truck (2-5 mt)	1	0.73	6,264.00	4,572.72
	b. Applicator Machine	1	0.73	750.00	547.50
	c. Kneading Machine	1	0.73	1,500.00	1,095.00
	Minor Tools 10% of Labor				259.28
Sub-total for B					P 6,474.50
C.	Total (A+B)				9,067.28
D.	Output/day	200.00	sq.m./day		
Name and Specifications		Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Thermoplastic Paint (Yellow)	47.45	bag	1,800.00	85,410.00
	b. Glass Beads	4.82	bag	2,500.00	12,045.00
	c. Primer	17.52	L	175.00	3,066.00
	d. LPG (50 kg)	0.58	cyl.	3,450.00	2,014.80
	e. LPG (12 kg)	0.29	cyl.	828.00	241.78
	f. Calsumine	18.25	kg.	100.00	1,825.00
	Miscellaneous 5% of Materials Cost				5,230.13
Sub-total for E					P 109,832.70
F.	Direct Cost (C + E)				118,899.99
G.	Overhead, Contingencies and Miscellaneous		10% per D.O. 197, s. 2016		11,890.00
H.	Contractor's Profit (CP)		8% per D.O. 197, s. 2016		9,512.00
I.	Value Added Tax (VAT)		5% per D.O. 197, s. 2016		7,015.10
J.	Total Unit Cost				1,009.02



Name of Project : Construction/Improvement of Access Roads Leading to Trades, Industries and Economic Zones - Road Network of the First Philippine Halal Hub - The Asian Halal Center (Zamboanga Economic Zone), Talisayan, Zamboanga City

Station limits	+	0+000.00	-	0+416.78
		0+000.00	-	2+151.57
		0+003.35	-	0+530.44
		0+007.79	-	0+241.97
		0+000.00	-	0+786.55

Net Length : 4,116.17 h.m.

Item No.	Description	Quantity	Unit	DURATION # OF DAYS
PART A - FACILITIES FOR THE ENGINEER				
A.1.1(3)	Construction of Field Office for the Engineer	1.00	L.S.	8.00
A.1.1(11)	Provision of Furnitures/Fixtures, Equipment and Appliances for the	1.00	L.S.	250
A.1.2(5)	Operation and Maintenance of 4x4 Pick Up Type Service Vehicle	8.33	month	250
PART B - OTHER GENERAL REQUIREMENTS				
B.4(1)	Construction Survey & Staking	4.12	km.	38.59
B.5	Project Billboard/Signboard	2.00	each	2.00
B.7	Occupation Safety and Health Program	8.33	month	250
B.9	Mobilization & Demobilization	1.00	L.S.	5.00
PART C - EARTHWORKS				
100(1)	Clearing and Grubbing	8.23	has.	20.58
102(2)	Surplus Common Excavation	28,084.50	cum.	20.58
103(1)a	Structure Excavation	524.00	cum.	58.51
103(3)	Foundation Fill	10.00	cum.	1.00
103(6)a	Pipe Culverts and Drain Excavation	24.00	cum.	0.15
104(1)a	Embankment from Roadway Excavation	13,096.00	cum.	32.74
105(1)a	Subgrade Preparation	28,442.00	sq.m.	11.85
PART D - SUBBASE AND BASE COURSE				
200(1)	Aggregate Subbase Course	16,027.00	cum.	40.07
PART E - SURFACE COURSES				
311(1)a	Portland Cement Concrete Pavement	12,349.00	sq.m.	14.38
311(1)e1	Portland Cement Concrete Pavement	28,039.00	sq.m.	60.95
PART G - DRAINAGE AND SLOPE PROTECTION STRUCTURES				
404(1)a	Reinforcing Steel (Grade 40)	10,643.00	kg.	7.39
404(1)b	Reinforcing Steel (Grade 60)	7,658.00	kg.	5.32
405(1)a3	Structural Concrete, Class "A"	337.00	cum.	30.09
500(1)b3	Pipe Culverts	75.00	ln.m.	5.34
505(2)a	Grouted Riprap, Class "A"	27.00	cum.	2.70
506(1)	Stone Masonry	54.00	cum.	4.22
PART H - MISCELLANEOUS STRUCTURES				
612(1)	ReflectORIZED Thermoplastic Pavement Markings (White)	990.50	sq.m.	4.95
612(2)	ReflectORIZED Thermoplastic Pavement Markings (Yellow)	146.00	sq.m.	0.73

Prepared by:

Submitted by:

MARK ANTHON P. REBOLLOS
Engineer II

LEONCIO B. SOLAMILLO
Chief, Construction Division

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

net length : 4,116.17 In.m.

SUMMARY OF DETAILED ESTIMATES

ITEM NO.	DESCRIPTION	QTY.	UNIT	LABOR	EQUIPMENT	MATERIALS	OCM	PROFIT	VAT	TOTAL
PART A - FACILITIES FOR THE ENGINEER										
A.1.1(3)	Construction of Field Office for the Engineer	1.00	L.S.	42,596.48	32,115.65	336,979.47	41,169.16	32,935.33	24,289.80	510,085.88
A.1.1(11)	Provision of Furnitures/Fixtures, Equipment and Appliances for the Field Office for the Field Engineer	1.00	L.S.	-	-	297,173.33	-	23,773.87	16,047.36	336,994.56
A.1.2(5)	Operation and Maintenance of 4x4 Pick Up Type Service Vehicle for the Engineer	8.33	month	105,580.00	-	159,125.00	-	-	13,235.25	277,940.25
TOTAL OF PART A										
				148,176.48	32,115.65	793,277.80	41,169.16	56,709.19	53,572.41	1,125,020.69
PART B - OTHER GENERAL REQUIREMENTS										
B.4(1)	Construction Survey and Staking	4.12	km.	107,390.36	21,029.46	24,937.50	15,335.73	12,248.59	9,048.08	190,009.72
B.5	Project Billboard/Signboard	2.00	each	3,479.20	-	7,500.00	1,097.92	878.34	647.77	13,603.23
B.7	Occupation Safety and Health Program	8.33	month	187,290.00	60,000.00	26,740.00	-	21,924.00	14,798.70	310,772.70
B.9	Mobilization & Demobilization	1.00	L.S.	-	874,591.00	-	-	-	43,729.55	918,320.55
TOTAL OF PART B										
				298,159.56	955,620.46	59,197.50	16,433.65	35,070.92	68,224.10	1,432,706.20
PART C - EARTHWORKS										
100(1)	Cleaning and Grubbing	8.23	has.	26,673.43	1,308,899.20	-	133,557.26	106,845.81	78,798.79	1,654,774.49
102(2)	Surplus Common Excavation	28,084.50	cum.	75,851.55	3,924,925.89	-	400,077.74	320,042.20	236,045.87	4,956,963.26
103(1)a	Structure Excavation	524.00	cum.	5,366.55	115,214.05	-	12,058.06	9,646.45	7,114.26	149,399.36
103(3)	Foundation Fill	10.00	cum.	1,980.88	1,378.09	19,847.74	2,320.67	1,856.54	28,753.11	28,753.11
103(6)a	Pipe Culverts and Drain Excavation	24.00	cum.	245.80	5,276.98	-	552.28	441.82	325.84	6,842.72
104(1)a	Embankment from Roadway Excavation	13,096.00	cum.	77,672.77	2,941,796.39	-	301,946.92	241,557.53	178,148.68	3,741,122.28
105(1)a	Subgrade Preparation	28,442.00	sq.m.	15,363.42	439,097.08	-	45,446.05	36,356.84	26,813.17	563,076.56
TOTAL OF PART C										
				203,154.39	8,736,587.68	19,847.74	895,958.98	716,767.18	528,615.80	11,100,931.77
PART D - SUBBASE AND BASE COURSE										
200(1)	Aggregate Subbase Course	16,027.00	cum.	51,943.51	1,484,581.01	18,539,608.88	2,007,613.34	1,606,090.67	1,184,491.87	24,874,329.28
TOTAL OF PART D										
				51,943.51	1,484,581.01	18,539,608.88	2,007,613.34	1,606,090.67	1,184,491.87	24,874,329.28
PART E - SURFACE COURSES										
311(1)a	Portland Cement Concrete Pavement	12,349.00	sq.m.	93,362.49	1,384,953.93	10,100,604.91	1,157,892.13	926,313.71	683,156.36	14,346,283.53
311(1)e1	Portland Cement Concrete Pavement	28,039.00	sq.m.	395,691.24	5,869,746.43	42,019,653.65	4,828,509.13	3,862,807.31	2,848,820.39	59,825,228.15
TOTAL OF PART E										
				489,053.73	7,254,700.36	52,120,258.56	5,986,401.27	4,789,121.01	3,531,976.75	74,171,511.68
PART G - DRAINAGE AND SLOPE PROTECTION STRUCTURES										
404(1)a	Reinforcing Steel (Grade 40)	10,643.00	kg.	31,309.93	27,637.80	444,770.97	50,371.87	40,297.50	29,719.40	624,107.47
404(1)b	Reinforcing Steel (Grade 60)	7,658.00	kg.	22,528.56	19,886.34	336,109.62	37,852.45	30,281.96	22,332.95	468,991.88
405(1)a3	Structural Concrete, Class "A"	337.00	cum.	289,860.92	136,836.08	2,072,662.90	249,935.99	199,948.79	147,462.23	3,096,706.91
500(1)b3	Pipe Culverts	75.00	In.m.	15,322.03	37,637.20	172,424.49	22,538.37	18,030.70	13,297.64	279,250.43
505(2)a	Grouted Riprap, Class "A"	27.00	cum.	18,617.69	7,292.08	77,289.87	10,319.96	8,255.97	6,088.78	127,864.36
506(1)	Stone Masonry	54.00	cum.	17,871.64	13,944.71	198,534.83	23,035.12	18,428.09	13,590.72	285,405.11
TOTAL OF PART G										
				395,510.77	243,234.21	3,301,792.68	394,053.77	315,243.01	232,491.72	4,882,326.16
PART H - MISCELLANEOUS STRUCTURES										
612(1)	Reflectolized Thermoplastic Pavement Markings (White)	990.50	sq.m.	17,590.09	43,924.59	670,588.36	73,210.30	58,568.24	43,194.08	907,075.67
612(2)	Reflectolized Thermoplastic Pavement Markings (Yellow)	146.00	sq.m.	2,592.78	6,474.50	109,832.70	11,890.00	9,512.00	7,015.10	147,317.09
TOTAL OF PART H										
				20,182.88	50,399.09	780,421.06	85,100.30	68,080.24	50,209.18	1,054,392.76
TOTAL										
				1,606,181.32	18,757,238.47	75,614,404.22	9,426,730.47	7,587,082.24	5,649,581.84	118,641,218.55

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UNIT COST ANALYSIS FOR HAULING COST FOR PORTLAND CEMENT

TOTAL QUANTITY REQUIREMENTS FOR PORTLAND CEMENT

DESCRIPTION	QUANTITY (Bags)
Portland Cement Concrete Pavement	74,583.74
Portland Cement Concrete Pavement	17,659.07
Structural Concrete, Class "A"	3,201.50
Pipe Culverts	81.00
Grouted Riprap, Class "A"	81.00
Stone Masonry	297.00
Construction of Field Office for the Engineer	90.00
T O T A L	95,993.31

Quantity = **95,993.31** Bags

Delivery Charge = P 0.120 / bag / km.

S I T E	HAULING DISTANCE
Zamboanga City DEO	33.00
Batching plant	

*Average hauling distance from Source to assumed Stockpiling area :
say 33.00 km.

Delivery Charge = P 0.120 x 33.00
= P **3.96** / bag

*Delivery Truck : 95,993.31 bags., (hauling works)
20,000.00 kgs., (capacity per haul)
or 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	=	$\frac{33.00 \times 60}{30.00}$	=	66.00 mins.
Unloaded running	=	$\frac{33.00 \times 60}{40.00}$	=	49.50 mins.
Loading and Unloading	:	45.00	mins.	
allowance for delay/traffic	:	3.00	mins.	
Capacity of Dumptruck	:	8.00	cu.m.	
	:	500.00	bags	
Total Cycle time	:	163.50	mins.	
No. of trips for Dumptruck per day	=	$\frac{8.0 \times 60.00}{163.50}$	=	2.94 say 2.94 trip
Dumptruck daily output	=	500 x 2.94	=	1,467.89 cu.m.
Using (3) Dumptrucks	=	3 x 1467.89	=	4,403.67 cu.m.

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1. No. of days for Delivery Truck = $\frac{95,993.31}{4,403.67} = 21.80$ say 21.80 days
2. No. of days for Labor, for unloading = complimentary to D. Truck days = 21.80 days

DELIVERY COST :

95,993.31 - Bags, Portland Cement	@ P	3.96	/ bag	= P	380,133.51
Sub - Total				P	380,133.51

LABOR :

1 - Foreman	@ P	611.92 /day	x 21.80 days	= P	13,338.93
10 - Laborers, unloading	@ P	342.24 /day	x 21.80 days	= P	74,603.12
Sub - Total				P	87,942.05

MATERIALS :

95,993.31 - Bags, Portland Cement (Pick-Up Price)	@ P	280.00	/ bag	= P	26,878,126.80
Sub - Total				P	26,878,126.80

Estimated Quantity		95,993.31 Bags			
Unit Cost	P	284.88 / Bag,	say P	285.00 / Bag	
Grand Total	P	27,346,202.35			
Delivery Cost	P	380,133.51			
Labor	P	87,942.05			
Materials	P	26,878,126.80			

dk

UNIT COST ANALYSIS FOR HAULING COST FOR ALL AGGREGATES

Hauling Cost from the Quarry to Batching plant

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 Aggregates : 1,640.00 kg/m³
 Unit weight of Coarse Aggregates : 1,534.00 kg/m³
 Maximum Volume to 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 = $\frac{5.00 \times 60}{30.00} = 10.00$ mins.
 Unloaded running = $\frac{5.00 \times 60}{40.00} = 7.50$ mins.
 Loading and Unloading : 5.00 mins.
 allowance for delay/traffic : 3.00 mins.
 Capacity of Dumptruck : 10.00 cu.m.
 Total Cycle time : 25.50 mins.
 No. of trips for Dumptruck per day = $\frac{8 \times 60.00}{25.50} = 18.82$ say 18.82 trips
 Dumptruck daily output = 10 x 18.82 = 188.24 cu.m.
 Using (5) Dumptrucks = 5 x 188.24 = 941.18 cu.m.

1. No. of days for Dumptrucks = $\frac{1,000.00}{941.18} = 1.06$ say 1.06 days

EQUIPMENT USED : (2009 ACEL RATES)

5 - Unit Dumptruck @ P 11,360.00 /day x 1.06 days = P 60,350.00
 Sub - Total P 60,350.00

Estimated Quantity 1,000.00 cu.m.
 Unit Cost P 12.07 /cu. m./km. (Unit Cost, Hauling per cu.m.per km.)
 Grand Total P 60,350.00
 Equipment P 60,350.00
 Labor P
 Materials P

	Hauling Distance		Unit Cost per cu.m./km.		Hauling Cost per cu.m.	Unit Price	Unit Cost per cu.m.
Cost of Fine Aggregates:	27.00	x	12.07	=	325.89	+	1,725.89
Cost of Coarse Aggregates:	27.00	x	12.07	=	325.89	+	1,425.89
Cost of Item 200 Materials:	27.00	x	12.07	=	325.89	+	1,005.89
Cost of Item 201 Materials:	27.00	x	12.07	=	325.89	+	1,005.89
Cost of Item 300 Materials:	27.00	x	12.07	=	325.89	+	1,060.89
Cost of Boulders:	27.00	x	12.07	=	325.89	+	1,425.89
Cost of Embankment, Common Borrow:	5.00	x	12.07	=	60.35	+	388.35

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