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/LOCATION OF PROJECT : CONSTRUCTION/MAINTENANCE OF FLOOD MITIGATION STRUCTURES AND DRAINAGE SYSTEMS - EXTENSION OF FLOOD CONTROL STRUCTURE ALONG SIOCON RIVER (DOWNSTREAM) , SIOCON, ZAMBOANGA DEL NORTE	Appropriation	:	P 109,213,000.00
	Source of Funds	:	CY-2018
	Issued Obligated Authority	:	
	Released	:	
PROJECT CATEGORY : FLOOD CONTROL	Cal. Days to Complete	:	247 Calendar Days
	Desirable Starting Date	:	Upon Approval
	Mode of Implementation	:	

PROJECT DESCRIPTION :
Scope of Work : Construction of Flood Control

NET LENGTH :
Downstream:

Beg. Of Project	0 + 000.00	
End Of Project	0 + 569.5	569.50

Net Length : **569.50000** ln.m.

MINIMUM EQUIPMENT REQUIREMENT :

Description	No.	Description	No.
Dumptruck (10-Wheeler)	12	Water Pump	1
Drop Hammer	4	Cutting Outfit	1
Crawler Crane	2	Concrete Vibrator	2
Truck mounted Crane	1	Air compressor	2
Road Grader	2	Bar Cutter	1
Road Roller	2	Bar Bender	1
Payloader	4	Conc. Mixer (1-Bagger)	2
Water Truck	2	Plate Compactor	1
Water Tank	2	Jack Hammer	1
Backhoe with breaker	1	Diesel Hammer	1
Vibro Hammer	1	Service Truck	1

TECHNICAL PERSONNEL REQUIRED :

Description	No.
Project Engineer	1
Materials Engineer	1
Geometric Surveyor	1
Foreman	1
Materials Lab. Tech.	1
Mason	10
Carpenter	6
Laborers (Skilled)	10
Laborers (Unskilled)	20

ESTIMATED COST OF PROPOSED WORK

ITEM NO.	DESCRIPTION	% OF TOTAL	UNIT	QUANTITY	DIRECT COST TOTAL	DIRECT COST UNIT COST
PART B - OTHER GENERAL REQUIREMENTS						
A.1.1(3)	Construction of Field Office for the Engineer	0.566	L. S.	1.00	481,851.56	481,851.56
A.1.1(11)	Provision of Furnitures/Fixtures, Equipment & Appliances for the Field Office for the Engineer	0.230	L. S.	1.00	196,288.00	196,288.00
A.1.2 (5)	Operation & Maintenance of Go'vt Service Vehicle	0.421	L.S.	1.00	358,604.73	358,604.73
B.4(1)	Construction Survey and Staking	0.070	k.m.	0.570	59,646.82	104,735.41
B.5	Project Billboard	0.009	units	2.00	7,538.90	3,769.45
B.7	Occupational Safety and Health Program	0.552	L. S.	1.00	470,334.00	470,334.00
B.9	Mobilization & Demobilization	0.639	L. S.	1.00	544,688.00	544,688.00
PART C - EARTHWORKS						
1702(1)	Structure Excavation	1.052	cu.m.	3,897.00	896,760.69	230.12
PART J - FLOOD CONTROL AND DRAINAGE						
404(1)a	Reinforcing Steel, (Grade 40)	0.536	kg.	9,278.00	456,706.94	49.22
404(1)b	Reinforcing Steel, (Grade 60)	0.488	kg.	8,088.00	415,987.25	51.43
405(1)b3	Structural Concrete, fc" = 27.58 MPA	3.597	cu.m.	473.00	3,064,573.95	6,479.01
1716(6)	Structural Steel Sheet Piles, Furnished	43.717	ln.m.	11,392.00	37,249,332.74	3,269.78
1716 (12)	Structural Steel Sheet Piles, Driven	9.626	ln.m.	11,392.00	8,202,267.58	720.00
1716(16)	Steel Sheet Test Piles, Furnished and Driven	0.105	ln.m.	16.00	89,576.95	5,598.56
PART G - DRAINAGE AND SLOPE PROTECTION						
1710(5)	Grouted Riprap, Class "A"	9.158	cu.m.	1,568.00	7,802,998.24	4,976.40
1713(1)	Rubble Concrete	6.641	cu.m.	1,600.00	5,658,396.92	3,536.50
508(1)	Handlaid Rock Embankment	22.593	cu.m.	13,471.00	19,250,433.91	1,429.03
	TOTAL	100.000			**P 85,205,987.19**	

NAME OF PROJECT : CONSTRUCTION/MAINTENANCE OF FLOOD MITIGATION STRUCTURES AND DRAINAGE SYSTEMS - EXTENSION OF FLOOD CONTROL STRUCTURE ALONG SIOCON RIVER (DOWNSTREAM) , SIOCON, ZAMBOANGA DEL NORTE

BREAKDOWN OF ESTIMATED EXPENDITURES	% OF TOTAL	AMOUNT
I. ESTIMATED COST		
A. DIRECT COST		
A.1. Materials	60.90	66,510,503.50
A.2. Labor	4.54	4,960,119.15
A.3. Equipment Expenses	12.58	13,735,364.54
SUB-TOTAL (DIRECT COST)	78.02	P 85,205,987.19
B. INDIRECT COST (Per D.O. # 57)		
B.1. Overhead, Contingency & Misc. (10 % Max. of D.C.)	7.66	8,363,607.25
B.2. Profit (8 % Max. of D.C.)	6.18	6,744,215.56
C. VAT (5 % of D.C. and I.C. per D.O. 197 S. 2016)	4.59	5,015,690.50
SUBTOTAL (CONTRACT COST)	96.44	P 105,329,500.49
II. ESTIMATED GOVERNMENT EXPENDITURES		
1. Engineering and Administrative Overhead (3.5%)	3.50	3,822,455.00
2. Detailed Engineering (1%)	0.00	
3. Reserved for the Payment of RROW	0.06	61,044.51
4. Provisional Sum	0.00	
TOTAL ESTIMATED PROJECT COST	100.00	P 109,213,000.00

Prepared :

JOSEPHINE B. RENGQUIJO
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

APPROVED BUDGET FOR THE CONTRACT

CONSTRUCTION/MAINTENANCE OF FLOOD MITIGATION STRUCTURES AND DRAINAGE SYSTEMS - EXTENSION OF FLOOD CONTROL STRUCTURE ALONG SIOCON RIVER (DOWNSTREAM) , SIOCON, ZAMBOANGA DEL NORTE

Project Name and Location

Stations : Downstream:

Length : 569.50000

Contract Duration : **247 Calendar Days**

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	ESTIMATED DIRECT COST	MARK-UPS IN PERCENT		TOTAL MARK-UPS		VAT	TOTAL INDIRECT COST	TOTAL COST	UNIT COST
					OCM	PROFIT	%	VALUE				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9) (5) x (8)	(10) 5%[(5) + (9)]	(11) (9) + (10)	(12) (5) + (11)	(13) (12) / (3)
PART B - OTHER GENERAL REQUIREMENTS												
A.1.1(3)	Construction of Field Office for the Engineer	1.00	L. S.	481,851.56	10.00	8.00	18.00	86,733.28	28,429.24	115,162.52	597,014.08	597,014.08
A.1.1(11)	Provision of Furnitures/Fixtures, Equipment & Appliances for the Field Office for the Engineer	1.00	L. S.	196,288.00		8.00	8.00	15,703.04	10,599.55	26,302.59	222,590.59	222,590.59
A.1.2 (5)	Operation & Maintenance of Go'vt Service Vehicle	1.00	L.S.	358,604.73				-	17,930.24	17,930.24	376,534.97	376,534.97
B.4(1)	Construction Survey and Staking	0.57	k.m.	59,646.82	10.00	8.00	18.00	10,736.43	3,519.16	14,255.59	73,902.41	129,767.18
B.5	Project Billboard	2.00	units	7,538.90	10.00	8.00	18.00	1,357.00	444.80	1,801.80	9,340.70	4,670.35
B.7	Occupational Safety and Health Program	1.00	L. S.	470,334.00		8.00	8.00	37,626.72	25,398.04	63,024.76	533,358.76	533,358.76
B.9	Mobilization & Demobilization	1.00	L. S.	544,688.00			0.00	-	27,234.40	27,234.40	571,922.40	571,922.40
PART C - EARTHWORKS												
1702(1)	Structure Excavation	3,897.00	cu.m.	896,760.69	10.00	8.00	18.00	161,416.92	52,908.88	214,325.80	1,111,086.49	285.11
PART J - FLOOD CONTROL AND DRAINAGE												
404(1)a	Reinforcing Steel, (Grade 40)	9,278.00	kg.	456,706.94	10.00	8.00	18.00	82,207.25	26,945.71	109,152.96	565,859.90	60.99
404(1)b	Reinforcing Steel, (Grade 60)	8,088.00	kg.	415,987.25	10.00	8.00	18.00	74,877.70	24,543.25	99,420.95	515,408.20	63.73
405(1)b3	Structural Concrete, fc" = 27.58 MPA	473.00	cu.m.	3,064,573.95	10.00	8.00	18.00	551,623.31	180,809.86	732,433.17	3,797,007.12	8,027.50
1716(6)	Structural Steel Sheet Piles, Furnished	11,392.00	ln.m.	37,249,332.74	10.00	8.00	18.00	6,704,879.89	2,197,710.63	8,902,590.53	46,151,923.27	4,051.26
1716 (12)	Structural Steel Sheet Piles, Driven	11,392.00	ln.m.	8,202,267.58	10.00	8.00	18.00	1,476,408.17	483,933.79	1,960,341.95	10,162,609.54	892.08
1716(16)	Steel Sheet Test Piles, Furnished and Driven	16.00	ln.m.	89,576.95	10.00	8.00	18.00	16,123.85	5,285.04	21,408.89	110,985.85	6,936.62
PART G - DRAINAGE AND SLOPE PROTECTION												
1710(5)	Grouted Riprap, Class "A"	1,568.00	cu.m.	7,802,998.24	10.00	8.00	18.00	1,404,539.68	460,376.90	1,864,916.58	9,667,914.82	6,165.76
1713(1)	Rubble Concrete	1,600.00	cu.m.	5,658,396.92	10.00	8.00	18.00	1,018,511.45	333,845.42	1,352,356.86	7,010,753.79	4,381.72
508(1)	Handlaid Rock Embankment	13,471.00	cu.m.	19,250,433.91	10.00	8.00	18.00	3,465,078.10	1,135,775.60	4,600,853.71	23,851,287.62	1,770.57
				85,205,987.19				**15,107,822.80**	**5,015,690.50**	**20,123,513.30**	**105,329,500.49**	

Prepared /Submitted by :

BELEN A. SAPALLEDA
Engineer IV - Chairman Estimating Committee

Recommending Approval:

CAYAMOMBAO D. DIA
Assistant Regional Director

Approved :

JORGE U. SEBASTIAN JR., CESO III
Regional Director

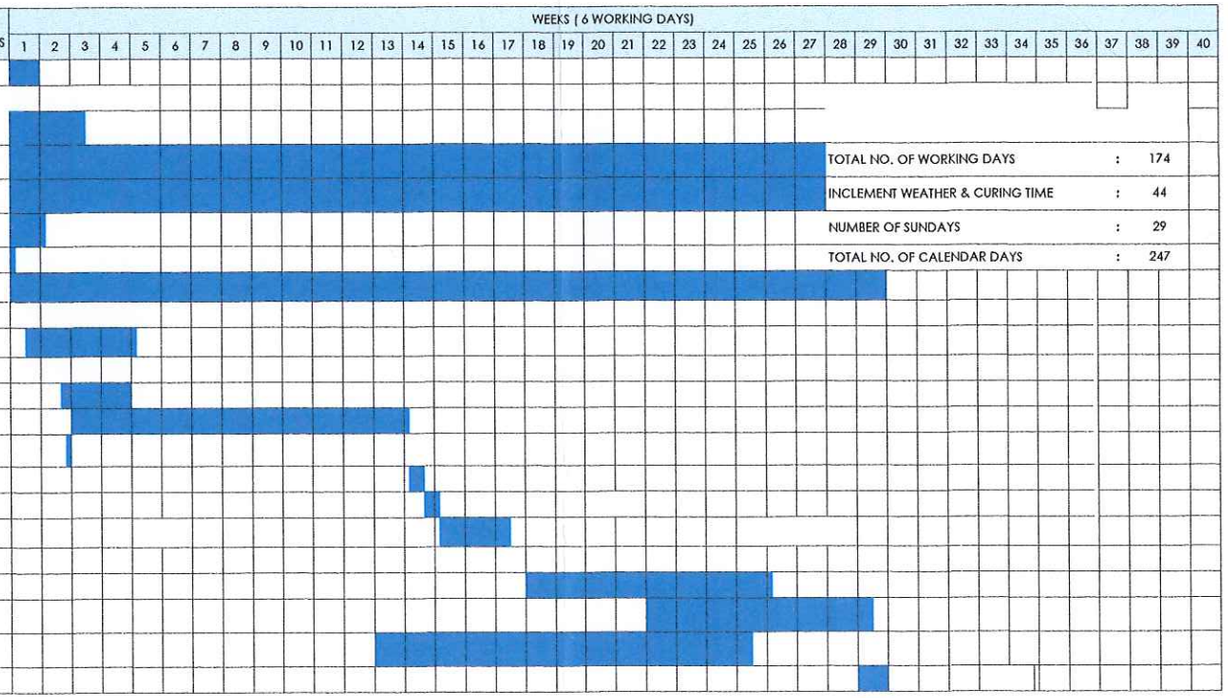
PROJECT : CONSTRUCTION/MAINTENANCE OF FLOOD MITIGATION STRUCTURES AND DRAINAGE SYSTEMS - EXTENSION OF FLOOD CONTROL STRUCTURE ALONG SIOCON RIVER (DOWNSTREAM) , SIOCON, ZAMBOANGA DEL NORTE

LIMITS : 0

NET LENGTH : 569.50

WORK PROGRAMME/SCHEDULE

ITEM NO.	DESCRIPTION	QUANTITY	UNIT	DURATION NO. OF DAYS
	MOBILIZATION			
PART B - OTHER GENERAL REQUIREMENTS				
A.1.1(3)	Construction of Field Office for the Engineer	1.00	L. S.	15.00
A.1.1(11)	Provision of Furnitures/Fixtures, Equipment & Appliances for the Field	1.00	L. S.	247.00
A.1.2 (5)	Operation & Maintenance of Go'vt Service Vehicle	1.00	L.S.	247.00
B.4(1)	Construction Survey and Staking	0.57	k.m.	5.70
B.5	Project Billboard	2.00	units	0.25
B.7	Occupational Safety and Health Program	1.00	L. S.	247.00
PART B - EARTHWORKS				
1702(1)	Structure Excavation	3,897.00	cu.m.	24.36
PART J - FLOOD CONTROL AND DRAINAGE				
1716(6)	Structural Steel Sheet Piles, Furnished	11,392.00	ln.m.	14.83
1716 (12)	Structural Steel Sheet Piles, Driven	11,392.00	ln.m.	71.20
1716(16)	Steel Sheet Test Piles, Furnished and Driven	16.00	ln.m.	0.25
404(1)a	Reinforcing Steel, (Grade 40)	9,278.00	kg.	3.22
404(1)b	Reinforcing Steel, (Grade 60)	8,088.00	kg.	2.81
405(1)b3	Structural Concrete, fc" = 27.58 MPA	473.00	cu.m.	14.08
PART G - DRAINAGE AND SLOPE PROTECTION				
1710(5)	Grouted Riprap, Class "A"	1,568.00	cu.m.	52.27
1713(1)	Rubble Concrete	1,600.00	cu.m.	47.62
508(1)	Handlaid Rock Embankment	13,471.00	cu.m.	53.88
	DEMOBILIZATION			



TOTAL NO. OF WORKING DAYS : 174

INCLEMENT WEATHER & CURING TIME : 44

NUMBER OF SUNDAYS : 29

TOTAL NO. OF CALENDAR DAYS : 247

Prepared:

JOSEPHINE B. RENGOBIJO
Engineer II

Submitted:

LEONCIO B. SOLAMILLO
Chief, Construction Division

Approved:

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

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: CONSTRUCTION/MAINTENANCE OF FLOOD MITIGATION STRUCTURES AND DRAINAGE SYSTEMS - EXTENSION OF FLOOD CONTROL STRUCTURE ALONG SIOCON RIVER (DOWNSTREAM) , SIOCON, ZAMBOANGA DEL NORTE

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

	Designation	No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
a.	Const. Foreman	1	15.00	611.92	9,178.80
b.	Masons	4	15.00	443.20	26,592.00
c.	Carpenters	4	15.00	443.20	26,592.00
d.	Laborers	8	15.00	342.24	41,068.80
					-
	Sub-total for A			P	103,431.60
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
a.	Bagger Mixer	1	15.00	1,376.00	20,640.00
b.	Water Truck	1	1.00	19,600.00	19,600.00
c.	Minor Tools, 10% of Labor				10,343.16
	Sub-total for B			P	50,583.16
C.	Total (A+B)				154,014.76
D.	Output/day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	Gravel Bedding	0.00	cu.m.	956.50	-
	Selected Fill	0.00	cu. m.	456.50	-
	Soil Poisoning	0.00	lit.	1,900.00	-
	Portland Cement	220.00	bag	283.00	62,260.00
	Crushed gravel	15.00	cu.m.	956.50	14,347.50
	Washed Sand	25.00	cu.m.	956.50	23,912.50
	Deformed Bars, Grade 60	800.00	kg.	42.00	33,600.00
	No. #16 G.I. Tie Wire	35.00	kg.	70.00	2,450.00
	Coco Lumber	600.00	bd.ft.	15.00	9,000.00
	Ordinary Plywood, 1/4" x 4' x8"	0.00	pcs.	853.00	-
	CWN, Assorted	20.00	kg.	75.00	1,500.00
	CHB 6" thick	850.00	pc.	20.00	17,000.00
	10mm dia. X 6m RSB	150.00	kg.	43.00	6,450.00
	D-1,Hollow Core Flush Type	1.00	set	1,495.20	1,495.20
	swing door,complete w/				-
	accessories				-
	W-1,Ja;lousie window, 1.4mx 1.2m.	0.00	set	1,176.00	-
	W-2, Jalousie window, 2.8m x 1.2m	0.00	set	2,352.00	-
	65 x 65 x 6mm Angle Bar	400.00	kg.	48.00	19,200.00
	50 x 50 x 6mm Angle Bar	200.00	kg.	48.00	9,600.00
	50 x 50 x 4mm Angle Bar	120.00	kg.	48.00	5,760.00
	Purlins C-150x50x3mm	35.00	kg.	48.00	1,680.00
	16mm dia. Cross Bracing	65.00	kg.	50.00	3,250.00
	16mm dia. Turn Buckle	30.00	pc.	230.00	6,900.00
	12mm thk. Base plate	45.00	kg.	48.00	2,160.00
	10mmthk batten plate	30.00	kg.	48.00	1,440.00
	Sub-total for E			P	222,005.20
	Total Cost For Materials				327,836.80
F.	Direct Cost (C + E)				481,851.56
G.	Overhead, Contingencies and Miscellaneous		10% per D.O.197 s 2016		48,185.16
H.	Contractor's Profit(CP)		8% per D.O.197 s 2016		38,548.12
I.	Value Added Tax (VAT)		5% per D.O.197 s 2016		28,429.24
L.	Total Unit Cost				597,014.08

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: CONSTRUCTION/MAINTENANCE OF FLOOD MITIGATION STRUCTURES AND DRAINAGE SYSTEMS - EXTENSION OF FLOOD CONTROL STRUCTURE ALONG SIOCON RIVER (DOWNSTREAM) , SIOCON, ZAMBOANGA DEL NORTE

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

	Designation	No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Const. Foreman	1		611.92	-
	b. Masons	4		443.20	-
	c. Carpenters	6		443.20	-
	d. Laborers	10		342.24	-
	Sub-total for A			P	-
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
	a. Bagger Mixer	1		1,376.00	-
	b. Water Truck	1		19,600.00	-
	c. Minor Tools, 10% of Labor			0.00	-
	Sub-total for B			P	-
C.	Total (A+B)				-
D.	Output/day				
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	10mm dia. Sag rod	15.00	kg.	48.00	720.00
	20mm dia. X 350mm Anchor Bolts	15.00	pc.	150.00	2,250.00
	Welding Rod	25.00	kg.	130.00	3,250.00
	Primer, Zinc Cromate	5.00	gal.	531.00	2,655.00
	Pre-panited G.I. Roofing Sht. Long span	55.00	sq.m.	420.00	23,100.00
	Pre-painted flashing Ridge Roll GA24,0.60m w	10.00	ln.m.	189.00	1,890.00
	Pre-painted flashing, GA 24	2.00	ln.m.	189.00	378.00
	Teckscrew 1-1/2"	1,000.00	pc.	1.25	1,250.00
	Roof Sealant	2.00	lit.	230.00	460.00
	Rough Lumber, Sun dries Tanguile	700.00	bd.ft.	37.00	25,900.00
	Finishing Nails	5.00	kg.	280.00	1,400.00
	Wood Preservative Brown	-	lit.	7,245.00	-
	2 x 40w Flourescent lighting fixtures	5.00	set	1,450.00	7,250.00
	Porcelain Ceiling Outlet w/female	2.00	pc.	50.00	100.00
	Duplex Convenience Outlet	3.00	pc.	170.00	510.00
	Two gang Switch	3.00	pc.	132.00	396.00
	3.50mm2 THW	2.00	roll	3,600.00	7,200.00
	8.00mm2 THW	20.00	m.	69.33	1,386.60
	15mm dia. PVC pipe	20.00	pc.	76.00	1,520.00
	15mm dia. PVC Coupling	20.00	pc.	27.00	540.00
	15mm dia. PVC Elbow	20.00	pc.	26.00	520.00
	15mm dia. PVC Clamp	50.00	pc.	8.00	400.00
	20mm dia. RSC Pipe	4.00	pc.	240.00	960.00
	20mm dia. RSC Coupling	3.00	pc.	36.00	108.00
	20mm dia. RSC Elbow	3.00	pc.	30.00	90.00
	20mm dia. RSC Clamp	10.00	pc.	18.00	180.00
	20mm dia. Service Entrance Cap	2.00	pc.	101.50	203.00
	Wire Holder	2.00	pc.	50.00	100.00
	Utility Box	7.00	pc.	32.00	224.00
	Octagon Box	50.00	pc.	34.00	1,700.00
	Sub-total for E			P	86,640.60
F.	Direct Cost (C + E)				86,640.60
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		
L.	Total Unit Cost				

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: CONSTRUCTION/MAINTENANCE OF FLOOD MITIGATION STRUCTURES AND DRAINAGE SYSTEMS - EXTENSION OF FLOOD CONTROL STRUCTURE ALONG SIOCON RIVER (DOWNSTREAM) , SIOCON, ZAMBOANGA DEL NORTE

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

Name and Specifications	Quantity	Unit	Unit Cost	Amount
E. Materials				
Electrical Tape(big)	7.00	pc.	28.00	196.00
Panel Board9Side main w/ branches)	2.00	set	2,750.00	5,500.00
Water Closet(include,fitting&Accessories)	1	set	6,062.00	6,062.00
Lavatory(include fitting & accessories)	1	set	4,512.00	4,512.00
1/2' GI Pipe S-40	2	pc.	292.00	584.00
1/2" Water Faucet	2	pc.	165.00	330.00
1/2' Assorted Connector	8	pc.	19.00	152.00
4" PVC Series 1000	1	pc.	640.00	640.00
2" PVC Series 1000	1	pc.	305.00	305.00
4" PVC Assorted Connector	6	pc.	77.00	462.00
2" PVC Assorted Connector	8	pc.	56.00	448.00
				-
				-
Sub-total for E			P	19,191.00
F. Direct Cost (C + E)				19,191.00
G. Overhead, Contingencies and Miscellaneous				-
H. Contractor's Profit(CP)				
I. Value Added Tax (VAT)				
L. Total Unit Cost				

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: CONSTRUCTION/MAINTENANCE OF FLOOD MITIGATION STRUCTURES AND DRAINAGE SYSTEMS - EXTENSION OF FLOOD CONTROL STRUCTURE ALONG SIOCON RIVER (DOWNSTREAM) , SIOCON, ZAMBOANGA DEL NORTE

Item No./Description: A.1.1(11) Provision of Furnitures/Fixtures, Equipment & Appliances for the Field Office for the Engineer
Unit of Measurement: L. S.
Output per hour:
Quantity: 1.00

Name and Specifications	Quantity	Unit	Unit Cost	Amount
E. Materials				
Office Equipment/Facilities& Supplies				
				-
				-
				-
White Board , 3' x 6'	1	each.	2,000.00	2,000.00
8-seater Monoblock Dining Table	1	unit	3,000.00	3,000.00
Monoblock Backrest Chair	12	pcs.	500.00	6,000.00
Plastic Pail & Basin	2	set	300.00	600.00
Aluminum Cookware	1	set	3,000.00	3,000.00
each Plate, Glass, Spoon & Fork	1	doz	1,900.00	1,900.00
6" Sleeping Bed, Good Quality w/ pillows & blanket	3	each.	5,000.00	15,000.00
Office Table, Jr. Executive type	1	each.	7,000.00	7,000.00
w/ chair				-
Drawing Table	1	each.	5,000.00	5,000.00
Computer Table	1	each.	3,000.00	3,000.00
Cartridge(Computer Printer/Ink)	6	sets	1,800.00	10,800.00
CD RW	15	pc.	35.00	525.00
DVD Recordable & Writer	2	pc.	55.00	110.00
Bond paper (Long)	16	ream	330.00	5,280.00
Bond paper (Short)	15	ream	270.00	4,050.00
Yellow pad	6	pads	34.00	204.00
Scotch Tape	6	rolls	45.00	270.00
Masking Tape	6	rolls	134.00	804.00
Batteries" Energizer"	15	pc.	48.00	720.00
Ballpen	4	box	200.00	800.00
Pencil Lead, No. 5	4	box	150.00	600.00
Paper Clip(Plastic coated)	4	box	40.00	160.00
Fastener(plastic coated)	6	box	60.00	360.00
Eraser(Ink, pencil)	6	box	20.00	120.00
Staple wire	6	box	250.00	1,500.00
Cutter blade	3	box	250.00	750.00
Glue, 130 grams	6	bottle	85.00	510.00
Correction Fluid Pen	6	bottle	50.00	300.00
Brown Envelope, Long & Short	5	doz.	85.00	425.00
Expanded Envelope, long	5	doz.	125.00	625.00
Colored Pencil, 12's	6	set	145.00	870.00
Folder, short	6	doz.	90.00	540.00
Folder, long	6	doz.	95.00	570.00
Pentel pen (Assorted colors)	6	pcs.	60.00	360.00
White Board Marker(Assorted colors)	6	pcs.	85.00	510.00
Letter Envelope, White(Long)	1	box	100.00	100.00
Data File Folder	6	pcs.	100.00	600.00
Sign Pen, Assorted Colors	2	doz.	900.00	1,800.00
				-
Sub-total for E			P	80,763.00

F.	Direct Cost (C + E)		196,288.00
G.	Overhead, Contingencies and Miscellaneous		-
H.	Contractor's Profit(CP)	8% per D.O.197 s 2016	15,703.04
I.	Value Added Tax (VAT)	5% per D.O.197 s 2016	10,599.55
L.	Total Unit Cost		222,590.59

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: CONSTRUCTION/MAINTENANCE OF FLOOD MITIGATION STRUCTURES AND DRAINAGE SYSTEMS - EXTENSION OF FLOOD CONTROL STRUCTURE ALONG SIOCON RIVER (DOWNSTREAM) , SIOCON, ZAMBOANGA DEL NORTE

Item No./Description: A.1.1(11) Provision of Furnitures/Fixtures, Equipment & Appliances for the Field Office for the Engineer
Unit of Measurement: L. S.
Output per hour:
Quantity: 1.00

Name and Specifications	Quantity	Unit	Unit Cost	Amount
E. Materials				
Office Equipment/Facilities& Supplies				
Desktop Computer	1	unit	60,000.00	60,000.00
Digital Camera (12 MP)	1	unit	10,000.00	10,000.00
Computer Printer (Scanner & Xerox)	1	unit	5,000.00	5,000.00
USB (16GB)	2	pcs.	800.00	1,600.00
Water Dispenser	1	unit	7,000.00	7,000.00
Electric Fan	2	pcs.	1,500.00	3,000.00
Steel Cabinet	1	unit	4,500.00	4,500.00
Gas Stove w/tank	1	set	3,500.00	3,500.00
stove tank refill	6	tanks	890.00	5,340.00
Wall Clock	2	pcs.	350.00	700.00
Rice Cooker	1	unit	1,200.00	1,200.00
Scientific Calculator	1	pc.	2,500.00	2,500.00
Electric Airpot	1	unit	1,500.00	1,500.00
water container	4	pcs.	200.00	800.00
puncher	1	pc.	250.00	250.00
Stapler no. 35	2	pcs.	350.00	700.00
Bulletin/Cork Board 2" x 3"	2	pc.	500.00	1,000.00
Scissors	5	pcs.	35.00	175.00
Record Book (500 leaves)	6	pcs.	110.00	660.00
Folding beds	2	pcs.	1,700.00	3,400.00
Bedsheets (Single)	6	pcs.	200.00	1,200.00
Rechargeable Lamps	2	unit	750.00	1,500.00
				-
				-
				-
				-
				-
				-
				-
				-
				-
Sub-total for E			P	115,525.00
F. Direct Cost (C + E)				115,525.00
G. Overhead, Contingencies and Miscellaneous				-
H. Contractor's Profit(CP)				
I. Value Added Tax (VAT)				
L. Total Unit Cost				

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: CONSTRUCTION/MAINTENANCE OF FLOOD MITIGATION STRUCTURES AND DRAINAGE SYSTEMS - EXTENSION OF FLOOD CONTROL STRUCTURE ALONG SIOCON RIVER (DOWNSTREAM) , SIOCON, ZAMBOANGA DEL NORTE

Item No./Description: A.1.2 (5) Operation & Maintenance of Go'vt Service Vehicle
Unit of Measurement: L.S.
Output per hour:
Quantity: 1.00

	Designation	No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
	a. Service Driver	1	247.00	443.20	109,470.40
					-
					-
					-
					-
					-
					-
					-
					-
					-
	Sub-total for A			P	109,470.40

	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	a. GOV'T SERVICE VEHICLE	1	8.23		-
					-
					-
					-
					-
					-
					-
					-
					-
					-
					-
	Sub-total for B			P	-
C.	Total (A+B)				109,470.40
D.	Output/day				

	Name and Specifications	Quantity	Unit	Unit Cost	Amount	
E.	Materials					
	a. liters, Diesel Fuel	2,470.00	liter	42.00	103,740.00	38
	b. Engine Oil & Lubricants	1.00	l.s.	15,561.00	15,561.00	
	c. Tires	5.00	pcs.	9,500.00	47,500.00	
	d. Spare parts etc.	1.00	L.S.	82,333.33	82,333.33	
					-	
					-	
					-	
					-	
					-	
					-	
					-	
	Sub-total for E			P	249,134.33	
F.	Direct Cost (C + E)				358,604.73	
G.	Overhead, Contingencies and Miscellaneous				-	
H.	Contractor's Profit(CP)				-	
I.	Value Added Tax (VAT)		5% per D.O.197 s 2016		17,930.24	
L.	Total Unit Cost				376,534.97	

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: CONSTRUCTION/MAINTENANCE OF FLOOD MITIGATION STRUCTURES AND DRAINAGE SYSTEMS - EXTENSION OF FLOOD CONTROL STRUCTURE ALONG SIOCON RIVER (DOWNSTREAM) , SIOCON, ZAMBOANGA DEL NORTE

Item No./Description: B.4(1) Construction Survey and Staking
Unit of Measurement: k.m.
Output per hour:
Quantity: 0.57

Designation	No. of Persons	No. of Days	Daily Rate	Amount
A. Labor				
For Fieldworks:				
(assumed output = 300 ln.m.)				
a. Geodetic Engineer	1	1.90	833.31	1,581.90
b. Skilled Laborer	1	1.90	443.20	841.34
c. Laborer	1	1.90	342.24	649.69
				-
For Office works:				
(assumed output = 100 ln.m.)				
a. Geodetic Engineer	1	5.70	833.31	4,745.70
b. Skilled Laborer	1	5.70	443.20	2,524.02
				-
				-
Sub-total for A			P	10,342.65
Name and Capacity	**No. of Equipment**	**No. of Days**	**Daily Rate**	**Amount**
B. Equipment, (2014 ACEL Rates)				
a. Total Station complete w/ accessories	1	1.90	800.00	1,518.67
				-
				-
				-
				-
				-
				-
				-
				-
				-
Sub-total for B			P	1,518.67
C. Total (A+B)				11,861.32
D. Output/day				
Name and Specifications	**Quantity**	**Unit**	**Unit Cost**	**Amount**
E. Materials				
a. Standard Stake Plan (800mm x 910mm plotting)	123.00	sheets	200.00	24,600.00
				-
b. blue print as stake plan	615.00	pcs.	34.00	20,910.00
miscellaneous(5% of Materials)				2,275.50
				-
				-
				-
				-
				-
				-
				-
				-
Sub-total for E			P	47,785.50
F. Direct Cost (C + E)				59,646.82
G. Overhead, Contingencies and Miscellaneous		10% per D.O.197 s 2016		5,964.68
H. Contractor's Profit(CP)		8% per D.O.197 s 2016		4,771.75
I. Value Added Tax (VAT)		5% per D.O.197 s 2016		3,519.16
L. Total Unit Cost				129,767.18

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: CONSTRUCTION/MAINTENANCE OF FLOOD MITIGATION STRUCTURES AND DRAINAGE SYSTEMS - EXTENSION OF FLOOD CONTROL STRUCTURE ALONG SIOCON RIVER (DOWNSTREAM) , SIOCON, ZAMBOANGA DEL NORTE

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

Designation	No. of Persons	No. of Days	Daily Rate	Amount
A. Labor				
a. 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 Equipment	No. of Days	Daily Rate	Amount
B. Equipment, (2014 ACEL Rates)				
a.				
				-
				-
				-
				-
				-
				-
				-
				-
				-
Sub-total for B			P	-
C. Total (A+B)				434.90
D. Output/day				

Name and Specifications	Quantity	Unit	Unit Cost	Amount
E. Materials				
a. Marine Plywood 3/16" thk 4' x 8'	2.00	pc.	577.00	1,154.00
b. Tarpaulin (4' x 8')	2.00	pc.	800.00	1,600.00
c. Assorted Sizes Lumber	100.00	bd. ft.	42.00	4,200.00
d. Assorted Sizes C.W. Nails	2.00	kg.	75.00	150.00
				-
				-
				-
				-
				-
				-
				-
				-
Sub-total for E			P	7,104.00

F.	Direct Cost (C + E)		7,538.90
G.	Overhead, Contingencies and Miscellaneous	10% per D.O.197 s 2016	753.89
H.	Contractor's Profit(CP)	8% per D.O.197 s 2016	603.11
I.	Value Added Tax (VAT)	5% per D.O.197 s 2016	444.80
L.	Total Unit Cost		4,670.35

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: CONSTRUCTION/MAINTENANCE OF FLOOD MITIGATION STRUCTURES AND DRAINAGE SYSTEMS - EXTENSION OF FLOOD CONTROL STRUCTURE ALONG SIOCON RIVER (DOWNSTREAM) , SIOCON, ZAMBOANGA DEL NORTE

Item No./Description: B.7 Occupational Safety and Health Program
Unit of Measurement: L. S.
Output per hour:
Quantity: 1.00

Designation	No. of Persons	No. of Days	Daily Rate	Amount
A. Labor				
a. Safety Practitioner	1	61.75	443.20	27,367.60
b. First Aider	1	247.00	342.24	84,533.28
c. *laborers (flagmen) - 2 laborers/shift*	4	247.00	342.24	338,133.12
				-
				-
				-
				-
				-
				-
				-
Sub-total for A			P	450,034.00

Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B. Equipment, (2014 ACEL Rates)				
a.				
				-
				-
				-
				-
				-
				-
				-
				-
				-
Sub-total for B			P	-
C. Total (A+B)				450,034.00
D. Output/day				

Name and Specifications	Quantity	Unit	Unit Cost	Amount
E. Materials				
				-
a. Pairs, Rubber Boots Men, Long, with	20.00	pair	400.00	8,000.00
b. Steel Toe, Black				
c. Pairs, Working Gloves (Maong Materials)	20.00	pair	15.00	300.00
d. Pcs., Rain Coats (Rainforced, Hip Length Small, Medium, & Large)	20.00	pcs.	100.00	2,000.00
				-
e. Barricades/Signboards	1.00	L.S	10,000.00	10,000.00
				-
				-
				-
				-
				-
				-
Sub-total for E			P	20,300.00
F. Direct Cost (C + E)				470,334.00
G. Overhead, Contingencies and Miscellaneous				
H. Contractor's Profit(CP)		8% per D.O.197 s 2016		37,626.72
I. Value Added Tax (VAT)		5% per D.O.197 s 2016		25,398.04
L. Total Unit Cost				533,358.76

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: CONSTRUCTION/MAINTENANCE OF FLOOD MITIGATION STRUCTURES AND DRAINAGE SYSTEMS - EXTENSION OF FLOOD CONTROL STRUCTURE ALONG SIOCON RIVER (DOWNSTREAM) , SIOCON, ZAMBOANGA DEL NORTE

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	4	4.00	34,043.00	544,688.00
					-
					-
					-

DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: CONSTRUCTION/MAINTENANCE OF FLOOD MITIGATION STRUCTURES AND DRAINAGE SYSTEMS - EXTENSION OF FLOOD CONTROL STRUCTURE ALONG SIOCON RIVER (DOWNSTREAM) , SIOCON, ZAMBOANGA DEL NORTE

Item No./Description: 1702(1) Structure Excavation
Unit of Measurement: cu.m.
Output per hour: 20.00 cu.m./hr.
Quantity: 3,897.00

Designation	No. of Persons	No. of Days	Daily Rate	Amount
A. Labor				
a. Const. Foreman	1	24.36	611.92	14,904.08
b. Laborers	3	24.36	342.24	25,007.05
				-
				-
				-
				-
				-
				-
Sub-total for A			P	39,911.13

	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				-
a.	Dump Truck	2	24.36	11,360.00	553,374.00
b.	Backhoe	1	24.36	12,296.00	299,484.45
	Minor Tools(10% of Labor Cost)				3,991.11
					-
					-
					-
					-
					-
					-
					-
					-
	Sub-total for B			P	856,849.56
C.	Total (A+B)				896,760.69
D.	Output/day 160.00 cu.m./day				

	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a.				-
					-
					-
					-
					-
					-
					-
					-
					-
					-
	Sub-total for E			P	-

F.	Direct Cost (C + E)		896,760.69
G.	Overhead, Contingencies and Miscellaneous	10% per D.O.197 s 2016	89,676.07
H.	Contractor's Profit(CP)	8% per D.O.197 s 2016	71,740.86
I.	Value Added Tax (VAT)	5% per D.O.197 s 2016	52,908.88
L.	Total Unit Cost		285.11

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: CONSTRUCTION/MAINTENANCE OF FLOOD MITIGATION STRUCTURES AND DRAINAGE SYSTEMS - EXTENSION OF FLOOD CONTROL STRUCTURE ALONG SIOCON RIVER (DOWNSTREAM) , SIOCON, ZAMBOANGA DEL NORTE

Item No./Description: 404(1)a Reinforcing Steel, (Grade 40)
Unit of Measurement: kg.
Output per hour: 180.00 kg./hr.
Quantity: 9,278.00 Use 2 gangs of labor & equipment

Designation	No. of Persons	No. of Days	Daily Rate	Amount
A. Labor				
a. Foreman	1	3.22	611.92	1,971.32
b. Skilled	4	3.22	443.20	5,711.12
c. Laborers, Unskilled	16	3.22	342.24	17,640.57
				-
				-
				-
				-
				-
				-
				-
Sub-total for A			P	25,323.01

Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B. Equipment, (2014 ACEL Rates)				
a. Bar Cutter	2	1.61	1,758.00	5,663.45
b. Bar Bender	2	1.61	2,812.00	9,058.94
c. Cargo Truck	2	0.24	9,696.00	4,685.39
				-
				-
				-
				-
				-
				-
				-
Sub-total for B			P	19,407.77
C. Total (A+B)				44,730.78
D. Output/day 2,880.00 sq.m./day				

Name and Specifications	Quantity	Unit	Unit Cost	Amount
E. Materials				
a. Reinforcing Steel Bars,Grade 40	9,742.00	kgs.	40.89	398,326.15
b. Tie Wire	195.00	kgs.	70.00	13,650.00
				-
				-
				-
				-
				-
				-
				-
				-
				-
				-
Sub-total for E			P	411,976.15

F.	Direct Cost (C + E)		456,706.94
G.	Overhead, Contingencies and Miscellaneous	10% per D.O.197 s 2016	45,670.69
H.	Contractor's Profit(CP)	8% per D.O.197 s 2016	36,536.56
I.	Value Added Tax (VAT)	5% per D.O.197 s 2016	26,945.71
L.	Total Unit Cost		60.99

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: CONSTRUCTION/MAINTENANCE OF FLOOD MITIGATION STRUCTURES AND DRAINAGE SYSTEMS - EXTENSION OF FLOOD CONTROL STRUCTURE ALONG SIOCON RIVER (DOWNSTREAM) , SIOCON, ZAMBOANGA DEL NORTE

Item No./Description: 404(1)b Reinforcing Steel, (Grade 60)
Unit of Measurement: kg.
Output per hour: 180.00 kg./hr.
Quantity: 8,088.00 Use 2 gangs of labor * equipment

Designation	No. of Persons	No. of Days	Daily Rate	Amount
A. Labor				
a. Foreman	1	2.81	611.92	1,718.48
b. Skilled	4	2.81	443.20	4,978.61
c. Laborers, Unskilled	16	2.81	342.24	15,377.98
				-
				-
				-
				-
				-
				-
				-
Sub-total for A			P	22,075.07

Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B. Equipment, (2014 ACEL Rates)				
a. Bar Cutter	2	1.40	1,758.00	4,937.05
b. Bar Bender	2	1.40	2,812.00	7,897.03
c. Cargo Truck	2	0.21	9,696.00	4,084.44
				-
				-
				-
				-
				-
				-
				-
Sub-total for B			P	16,918.52
C. Total (A+B)				38,993.60
D. Output/day 2,880.00 sq.m./day				

Name and Specifications	Quantity	Unit	Unit Cost	Amount
E. Materials				
a. Reinforcing Steel Bars,Grade 60	8,493.00	kgs.	42.89	364,243.65
b. Tie Wire	170.00	kgs.	75.00	12,750.00
				-
				-
				-
				-
				-
				-
				-
				-
				-
				-
Sub-total for E			P	376,993.65

F.	Direct Cost (C + E)		415,987.25
G.	Overhead, Contingencies and Miscellaneous	10% per D.O.197 s 2016	41,598.72
H.	Contractor's Profit(CP)	8% per D.O.197 s 2016	33,278.98
I.	Value Added Tax (VAT)	5% per D.O.197 s 2016	24,543.25
L.	Total Unit Cost		63.73

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: CONSTRUCTION/MAINTENANCE OF FLOOD MITIGATION STRUCTURES AND DRAINAGE SYSTEMS - EXTENSION OF FLOOD CONTROL STRUCTURE ALONG SIOCON RIVER (DOWNSTREAM) , SIOCON, ZAMBOANGA DEL NORTE

Item No./Description: 405(1)b3 Structural Concrete, fc" = 27.58 MPA
Unit of Measurement: cu.m.
Output per hour: 1.40 cu.m./hr.
Quantity: 473.00 Use 3 gangs of equipment & labor

Designation	No. of Persons	No. of Days	Daily Rate	Amount
A. Labor				
a. Foreman	1	14.08	611.92	8,614.23
b. Skilled	12	14.08	443.20	74,869.14
c. Unskilled	24	14.08	342.24	115,628.23
Installation/Removal of Formworks				
b. Skilled	6	14.08	443.20	37,434.57
c. Unskilled	12	14.08	342.24	57,814.11
				-
				-
Sub-total for A			P	294,360.29

	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
a.	One bagger mixer	3	14.08	1,376.00	58,111.43
b.	Concrete vibrator	3	14.08	730.00	30,829.46
c.	Water truck	3	1.41	19,600.00	82,775.00
	Minor Tools (5% of Labor)				14,718.01
					-
					-
					-
					-
					-
					-
	Sub-total for B			P	186,433.91
C.	Total (A+B)				480,794.20
D.	Output/day 33.60 ln.m./day				

	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
a.	Portland Cement	5,203.00	bag	283.00	1,472,449.00
b.	Fine Aggregates	236.50	cu.m.	956.50	226,212.25
c.	Coarse Aggregates	473.00	pc.	956.50	452,424.50
d.	Form lumber	8,278.00	pc.	42.00	347,676.00
e.	Plywood	190.00	pc.	423.00	80,370.00
f.	Assorted CWNails	83.00	pc.	56.00	4,648.00
					-
					-
					-
					-
					-
					-
	Sub-total for E			P	2,583,779.75
F.	Direct Cost (C + E)				3,064,573.95
G.	Overhead, Contingencies and Miscellaneous		10% per D.O.197 s 2016		306,457.39
H.	Contractor's Profit(CP)		8% per D.O.197 s 2016		245,165.92
I.	Value Added Tax (VAT)		5% per D.O.197 s 2016		180,809.86
L.	Total Unit Cost				8,027.50

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: CONSTRUCTION/MAINTENANCE OF FLOOD MITIGATION STRUCTURES AND DRAINAGE SYSTEMS - EXTENSION OF FLOOD CONTROL STRUCTURE ALONG SIOCON RIVER (DOWNSTREAM) , SIOCON, ZAMBOANGA DEL NORTE

Item No./Description: 1716(6) Structural Steel Sheet Piles, Furnished
Unit of Measurement: ln.m.
Output per hour: 48 ln.m./hr.
Quantity: 11,392.00 Use 2 gangs of labor & equipment

Designation	No. of Persons	No. of Days	Daily Rate	Amount
A. Labor				
a. Const. Foreman	1	14.83	611.92	9,076.81
b. Skilled Laborers	4	14.83	443.20	26,296.53
c. Unskilled Laborers	4	14.83	342.24	20,306.24
				-
				-
				-
				-
				-
				-
				-
Sub-total for A			P	55,679.59
Name and Capacity	**No. of Equipment**	**No. of Days**	**Daily Rate**	**Amount**
B. Equipment, (2014 ACEL Rates)				
a. Truck Mounted Crane	2	14.83	20,848.00	618,490.67
				-
				-
				-
				-
				-
				-
				-
				-
				-
Sub-total for B			P	618,490.67
C. Total (A+B)				674,170.25
D. Output/day 768.00	ln.m./day			
Name and Specifications	**Quantity**	**Unit**	**Unit Cost**	**Amount**
E. Materials				
a. Steel Sheet Pile FY50	546,816.00	kg.	66.89	36,575,162.49
				-
				-
				-
				-
				-
				-
				-
				-
				-
				-
Sub-total for E			P	36,575,162.49
F. Direct Cost (C + E)				37,249,332.74
G. Overhead, Contingencies and Miscellaneous		10% per D.O.197 s 2016		3,724,933.27
H. Contractor's Profit(CP)		8% per D.O.197 s 2016		2,979,946.62
I. Value Added Tax (VAT)		5% per D.O.197 s 2016		2,197,710.63
L. Total Unit Cost				4,051.26

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: CONSTRUCTION/MAINTENANCE OF FLOOD MITIGATION STRUCTURES AND DRAINAGE SYSTEMS - EXTENSION OF FLOOD CONTROL STRUCTURE ALONG SIOCON RIVER (DOWNSTREAM) , SIOCON, ZAMBOANGA DEL NORTE

Item No./Description: 1716 (12) Structural Steel Sheet Piles, Driven
Unit of Measurement: ln.m.
Output per hour: 10.00 ln.m./hr.
Quantity: 11,392.00 ***Use 2 gangs for labor & equipment***

Designation	No. of Persons	No. of Days	Daily Rate	Amount
A. Labor				
a. Const. Foreman	1	71.20	611.92	43,568.70
b. Skilled Laborers	12	71.20	443.20	378,670.08
c. Unskilled Laborers	12	71.20	342.24	292,409.86
				-
				-
				-
				-
				-
				-
				-
Sub-total for A			P	714,648.64

Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B. Equipment, (2014 ACEL Rates)				
a. Truck Mounted Crane	2	71.20	20,848.00	2,968,755.20
b. Vibro Hammer	2	71.20	16,984.00	2,418,521.60
c. Gen. Set	2	71.20	10,373.36	1,477,166.46
d. Welding Machine	2	71.20	2,968.00	422,643.20
e. Cutting Outfit	2	35.60	363.60	25,888.32
				-
				-
				-
Sub-total for B			P	7,312,974.78
C. Total (A+B)				8,027,623.42
D. Output/day 160.00	ln.m./day			

Name and Specifications	Quantity	Unit	Unit Cost	Amount
E. Materials				
a. Welding Rod	273.41	m.	145.00	39,644.16
b. Oxygen/Acetylene	36.00	set	3,750.00	135,000.00
				-
				-
				-
				-
				-
				-
				-
				-
				-
Sub-total for E			P	174,644.16

F.	Direct Cost (C + E)		8,202,267.58
G.	Overhead, Contingencies and Miscellaneous	10% per D.O.197 s 2016	820,226.76
H.	Contractor's Profit(CP)	8% per D.O.197 s 2016	656,181.41
I.	Value Added Tax (VAT)	5% per D.O.197 s 2016	483,933.79
L.	Total Unit Cost		892.08

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: CONSTRUCTION/MAINTENANCE OF FLOOD MITIGATION STRUCTURES AND DRAINAGE SYSTEMS - EXTENSION OF FLOOD CONTROL STRUCTURE ALONG SIOCON RIVER (DOWNSTREAM) , SIOCON, ZAMBOANGA DEL NORTE

Item No./Description: 1716(16) Steel Sheet Test Piles, Furnished and Driven
Unit of Measurement: ln.m.
Output per hour: 8.000 ln.m./hr.
Quantity: 16.00

Designation	No. of Persons	No. of Days	Daily Rate	Amount
A. Labor				
a. Const. Foreman	1	0.25	611.92	152.98
b. Skilled	6	0.25	443.20	664.80
c. Laborers, Unskilled	6	0.25	342.24	513.36
				-
				-
				-
				-
				-
				-
				-
				-
Sub-total for A			P	1,331.14

Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B. Equipment, (2014 ACEL Rates)				
a. Truck Mounted Crane	1	0.25	20,848.00	5,212.00
b. Vibro Hammer	1	0.25	16,984.00	4,246.00
c. Gen. Set	1	0.25	10,373.36	2,593.34
d. Welding Machine	1	0.25	2,968.00	742.00
e. Cutting Outfit	1	0.13	363.60	133.11
				-
				-
				-
				-
Sub-total for B			P	12,926.45
C. Total (A+B)				14,257.59
D. Output/day 64.00	ln.m./day			

Name and Specifications	Quantity	Unit	Unit Cost	Amount
E. Materials				
a. Coco logs	13.60	m.	520.00	7,072.00
b. Good Lumber	64.00	bd.ft.	42.00	2,688.00
c. Nail/Spike	2.56	kg.	42.00	107.52
d. Steel Sheet Pile	16.00	m.	4,051.26	64,820.16
e. Welding Rod	0.38	kg.	145.00	55.68
f. Oxy/Acetylelene	0.15	set	3,750.00	576.00
				-
				-
				-
				-
				-
				-
				-
				-
Sub-total for E			P	75,319.36

F.	Direct Cost (C + E)		89,576.95
G.	Overhead, Contingencies and Miscellaneous	10% per D.O.197 s 2016	8,957.70
H.	Contractor's Profit(CP)	8% per D.O.197 s 2016	7,166.16
I.	Value Added Tax (VAT)	5% per D.O.197 s 2016	5,285.04
L.	Total Unit Cost		6,936.62

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: CONSTRUCTION/MAINTENANCE OF FLOOD MITIGATION STRUCTURES AND DRAINAGE SYSTEMS - EXTENSION OF FLOOD CONTROL STRUCTURE ALONG SIOCON RIVER (DOWNSTREAM) , SIOCON, ZAMBOANGA DEL NORTE

Item No./Description: 1710(5) Grouted Riprap, Class "A"
Unit of Measurement: cu.m.
Output per hour: 1.25 cu.m./hr.
Quantity: 1,568.00 Use 3 gangs for labor & equipment

Designation	No. of Persons	No. of Days	Daily Rate	Amount
A. Labor				
a. Const. Foreman	1	52.27	611.92	31,983.02
b. Skilled laborer	6	52.27	443.20	138,987.52
c. Unskilled Laborer	24	52.27	342.24	429,305.86
				-
				-
				-
				-
				-
				-
				-
Sub-total for A			P	600,276.39

Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B. Equipment, (2014 ACEL Rates)				
a. One bagger mixer	3	52.27	1,376.00	215,756.80
b. Water truck	3	52.27	19,600.00	3,073,280.00
				-
Minor Tools(10% of Labor)				60,027.64
				-
				-
				-
				-
				-
				-
Sub-total for B			P	3,349,064.44
C. Total (A+B)				3,949,340.83
D. Output/day 30.00 cu.m./day				

Name and Specifications	Quantity	Unit	Unit Cost	Amount
E. Materials				
a. Portland Cement	4,704.00	bag	283.00	1,331,232.00
b. Fine Aggregates	392.00	cu.m.	956.50	374,948.00
c. Gravel Fill	23.52	cu.m.	956.50	22,496.88
d. Weep Holes	470.00	m.	204.00	95,880.00
e. Filter Cloth	24.00	sq.m.	160.00	3,840.00
f. Boulders	1,647.00	cu.m.	1,206.50	1,987,105.50
Miscellaneous(1% Materials)				38,155.02
				-
				-
				-
				-
				-
Sub-total for E			P	3,853,657.40

F.	Direct Cost (C + E)		7,802,998.24
G.	Overhead, Contingencies and Miscellaneous	10% per D.O.197 s 2016	780,299.82
H.	Contractor's Profit(CP)	8% per D.O.197 s 2016	624,239.86
I.	Value Added Tax (VAT)	5% per D.O.197 s 2016	460,376.90
L.	Total Unit Cost		6,165.76

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: CONSTRUCTION/MAINTENANCE OF FLOOD MITIGATION STRUCTURES AND DRAINAGE SYSTEMS - EXTENSION OF FLOOD CONTROL STRUCTURE ALONG SIOCON RIVER (DOWNSTREAM) , SIOCON, ZAMBOANGA DEL NORTE

Item No./Description: 1713(1) Rubble Concrete
Unit of Measurement: cu.m.
Output per hour: 1.40 cu.m./hr.
Quantity: 1,600.00

	Designation	No. of Persons	No. of Days	Daily Rate	Amount
A.	Labor				
a.	Const. Foreman	1	47.62	611.92	29,139.05
b.	Skilled laborer	6	47.62	443.20	126,628.57
c.	Unskilled Laborer	24	47.62	342.24	391,131.43
					-
					-
					-
					-
					-
					-
	Sub-total for A			P	546,899.05
	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
a.	One bagger mixer	3	47.62	1,376.00	196,571.43
b.	Water truck	3	2.38	19,600.00	140,000.00
c.	Backhoe	3	4.76	12,296.00	175,657.14
	Minor Tools(10% of Labor)				54,689.90
					-
					-
					-
					-
					-
	Sub-total for B			P	566,918.48
C.	Total (A+B)				1,113,817.52
D.	Output/day 33.60	cu.m./day			
	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
					-
a.	Portland Cement	6,720.00	bag	283.00	1,901,760.00
b.	Fine Aggregates	420.00	cu.m.	956.50	401,730.00
c.	Gravel Fill	32.00	cu.m.	956.50	30,608.00
d.	Weep Holes	480.00	m.	204.00	97,920.00
e.	Filter Cloth	24.00	sq.m.	160.00	3,840.00
f.	Boulders	1,008.00	cu.m.	1,206.50	1,216,152.00
g.	Coarse Aggregates	840.00	cu.m.	956.50	803,460.00
	Miscellaneous(2% Materials)				89,109.40
					-
					-
					-
					-
	Sub-total for E			P	4,544,579.40
F.	Direct Cost (C + E)				5,658,396.92
G.	Overhead, Contingencies and Miscellaneous		10% per D.O.197 s 2016		565,839.69
H.	Contractor's Profit(CP)		8% per D.O.197 s 2016		452,671.75
I.	Value Added Tax (VAT)		5% per D.O.197 s 2016		333,845.42
L.	Total Unit Cost				4,381.72

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DETAILED UNIT PRICE ANALYSIS

PROJECT NAME: CONSTRUCTION/MAINTENANCE OF FLOOD MITIGATION STRUCTURES AND DRAINAGE SYSTEMS - EXTENSION OF FLOOD CONTROL STRUCTURE ALONG SIOCON RIVER (DOWNSTREAM) , SIOCON, ZAMBOANGA DEL NORTE

Item No./Description: 508(1) Handlaid Rock Embankment
Unit of Measurement: cu.m.
Output per hour: 3.125 cu.m./hr.
Quantity: 13,471.00 *Use 10 gangs for labor*

Designation	No. of Persons	No. of Days	Daily Rate	Amount
A. Labor				
a. Const. Foreman	1	53.88	611.92	32,972.70
b. Skilled laborer	20	53.88	443.20	477,627.78
c. Unskilled Laborer	80	53.88	342.24	1,475,300.81
				-
				-
				-
				-
				-
				-
Sub-total for A			P	1,985,901.29

	Name and Capacity	No. of Equipment	No. of Days	Daily Rate	Amount
B.	Equipment, (2014 ACEL Rates)				
					-
					-
					-
	Minor Tools(10% of Labor)				198,590.13
					-
					-
					-
					-
					-
	Sub-total for B			P	198,590.13
C.	Total (A+B)				2,184,491.41
D.	Output/day 250.00 cu.m./day				

	Name and Specifications	Quantity	Unit	Unit Cost	Amount
E.	Materials				
	a. Boulders	14,145.00	cu.m.	1,206.50	17,065,942.50
					-
					-
					-
					-
					-
					-
					-
					-
					-
					-
					-
	Sub-total for E			P	17,065,942.50
F.	Direct Cost (C + E)				19,250,433.91
G.	Overhead, Contingencies and Miscellaneous		10% per D.O.197 s 2016		1,925,043.39
H.	Contractor's Profit(CP)		8% per D.O.197 s 2016		1,540,034.71
I.	Value Added Tax (VAT)		5% per D.O.197 s 2016		1,135,775.60
L.	Total Unit Cost				1,770.57

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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 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.			
Capacity of Dumptruck	:	10.00	cu.m.			
Total Cycle time	:	22.50	mins.			
No. of trips for Dumptruck per day	=	$\frac{8 \times 60.00}{22.50}$	=	21.33	say 21.33	trips
Dumptruck daily output	=	10 x 21.33	=	213.33	cu.m.	
Using (4) Dumptrucks	=	4 x 213.33	=	853.33	cu.m.	

1. No. of days for Dumptrucks = $\frac{1,000.00}{853.33}$ = 1.17 say 1.17 days

EQUIPMENT USED : (2009 ACEL RATES)

4	- Unit Dumptruck	@ P	11,360.00 /day	x	1.17 days	= P	53,250.00
					Sub - Total	**P**	**53,250.00**

Estimated Quantity		1,000.00	cu.m.
Unit Cost	***P***	***10.65***	***/ cu. m./km. (Unit Cost, Hauling per cu.m.per km.)***
Grand Total	P	53,250.00	
Equipment	P	53,250.00	
Labor	P		
Materials	P		

ZAMBOANGA DEL NORTE 2nd DEO

	Ave. Hauling Distance		Unit Cost per cu.m./km.		Hauling Cost per cu.m.		Unit Pirce		Unit Cost per cu.m.
Cost of Fine Aggregates:	10.00	x	10.65	=	106.50	+	850.00	=	**956.50**
Cost of Coarse Aggregates:	10.00	x	10.65	=	106.50	+	850.00	=	**956.50**
Cost of Item 200 Materials:	10.00	x	10.65	=	106.50	+	618.00	=	**724.50**
Cost of Item 201 Materials:	10.00	x	10.65	=	106.50	+	663.00	=	**769.50**
Cost of Item 300 Materials:	10.00	x	10.65	=	106.50	+	755.00	=	**861.50**
Cost of Boulders:	10.00	x	10.65	=	106.50	+	1,100.00	=	**1,206.50**
Cost of Embankmen, Common Borrow:	10.00	x	10.65	=	106.50	+	270.00	=	**376.50**
Cost of Embankmen, Selected Borrow:	10.00	x	10.65	=	106.50	+	350.00	=	**456.50**

UNIT COST DERIVATION FOR PORTLAND CEMENT

TOTAL QUANTITY REQUIREMENTS FOR PORTLAND CEMENT

DESCRIPTION	QUANTITY (Bags)
Portland Cement Concrete Pavement, 0.28 m. thick	13.60
Reinforced Concrete Culvert Pipe, 910 mm. (36") diameter	0.00
Structural Concrete, fc" = 27.58 MPA	5,203.00
Elastomeric Bearing Pad	0.00
Grouted Riprap, Class "A"	1,224.00
Construction of Field Office for the Engineer	220.00
RCCP, 610 mm dia.	14.00
Catch Basin	4.00
Concrete Cover	1.00
Concrete Curb & Gutter	157.38
Sidewalk	231.80
Informatory Signs	1.00
T O T A L	**7,069.78**

Quantity = **7,069.78** Bags

Delivery Charge = P 0.120 / bag / km.

S I T E	HAULING DISTANCE
Zamboanga DEL Norte 2nd DEO	90.00
PROJECT SITE	

*Average hauling distance from Source to assumed Stockpiling area :

say 90.00 km.

Delivery Charge = P 0.120 x 90.00

= P 10.80 / bag

*Delivery Truck : 7,069.78 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 $= \frac{90.00 \times 60}{30.00} =$ 180.00 mins.

Unloaded running	=	$\frac{90.00 \times 60}{40.00}$	=	135.00	mins.		
Loading and Unloading	:	45.00	mins.				
Capacity of Dumptruck	:	8.00	cu.m.				
	:	500.00	bags				
Total Cycle time	:	360.00	mins.				
No. of trips for Dumptruck per day	=	$\frac{8.0 \times 60.00}{360.00}$	=	1.33	say	1.33	trip
Dumptruck daily output	=	500 x 1.33	=	666.67	cu.m.		
Using (4) Dumptrucks	=	4 x 666.67	=	2,666.67	cu.m.		

1. No. of days for Delivery Truck = $\frac{7,069.78}{2,666.67}$ = 2.65 say 0.00 days

2. No. of days for Labor, for unloading = complimentary to D. Truck days = 0.00 days

DELIVERY COST :

7,069.78	- Bags, Portland Cement	@ P	10.80	/ bag		= P	76,353.62
				Sub - Total		**P**	**76,353.62**

LABOR :

1	- Foreman	@ P	611.92 /day	x	0.00	days	= P	0.00
10	- Laborers, unloading	@ P	342.24 /day	x	0.00	days	= P	0.00
					Sub - Total		**P**	**0.00**

MATERIALS :

7,069.78	- Bags, Portland Cement	@ P	283.00	/ bag		= P	2,000,747.74
	(Pick-Up Price)			**Sub - Total**		**P**	**2,000,747.74**

Estimated Quantity		7,069.78 Bags			
Unit Cost	P	293.80 / Bag,	say	P	283.00 / Bag
Grand Total	P	2,077,101.36			
Delivery Cost	P	76,353.62			
Labor	P	0.00			
Materials	P	2,000,747.74			

UNIT COST DERIVATION FOR Steel Sheet Piles

TOTAL QUANTITY REQUIREMENTS FOR Steel Sheet Piles

DESCRIPTION	QUANTITY (Bags)
Steel Sheet Piles	546,816.00
T O T A L	**546,816.00**

Quantity = **546,816.00** kgs.

Delivery Charge = P 0.120 / bag / km.

S I T E	HAULING DISTANCE
Zamboanga DEL Norte 2nd DEO	90.00
PROJECT SITE	

*Average hauling distance from Source to assumed Stockpiling area :

say 90.00 km.

*Cargo Truck (12T) : 12,000.00 kgs., (capacity per haul)

*Crawler Crane (45T) or loading and unloading (Complimentary to Cargo truck

*Capacity of Laborers unloading bags of Cement from Delivery Truck :

Assume (10) laborers can unload (Compli bags of Cement.

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

Speed when loaded : 40.00 kph

Speed when unloaded : 50.00 kph

Loaded running $= \frac{90.00 \times 60}{40.00} =$ 135.00 mins.

Unloaded running	=	$\frac{90.00 \times 60}{50.00}$	=	108.00	mins.	
Loading and Unloading	:	45.00	mins.			
Capacity of Cargotruck	:	8.00	cu.m.			
	:	12,000.00	bags kgs.			
Total Cycle time	:	288.00	mins.			
No. of trips for Cargotruck per day	=	$\frac{8.0 \times 60.00}{288.00}$	=	1.67	say 1.67	trip
Cargo truck daily output	=	12,000 x 1.67	=	20,000.00	kgs.	
Using (2)Cargotrucks	=	2 x 12000.00	=	24,000.00	days	

1. No. of days for Cargo Truck	=	$\frac{546,816.00}{24,000.00}$	=	22.78	say 22.78	days
2. No. of days for Labor, for unloading	=	complimentary to C Truck days	=	22.78	days	

Equipment:

1	- Cargo Truck	@ P	611.92 /day	x	22.78 days	= P	13,941.99
2	- Crawler Crane	@ P	9,696.00 /day	x	22.78 days	= P	441,827.33
					Sub - Total	**P**	**455,769.31**

LABOR :

1	- Foreman	@ P	611.92 /day	x	22.78 days	= P	13,941.99
2	- Laborers, unloading	@ P	342.24 /day	x	22.78 days	= P	15,595.19
					Sub - Total	**P**	**29,537.18**

MATERIALS :

546,816.00	-kgs ,Steel Bars	@ P	66.00	/ kg	= P	36,089,856.00
	(Pick-Up Price)			**Sub - Total**	**P**	**36,089,856.00**

Estimated Quantity		546,816.00 kgs.			
Unit Cost	P	66.89 /kgs.,	say	P	66.89 / kg
Grand Total	P	36,575,162.49			
Equipment	P	455,769.31			
Labor	P	29,537.18			
Materials	P	36,089,856.00			

UNIT COST DERIVATION FOR Reinforcing Steel Grade40

TOTAL QUANTITY REQUIREMENTS FOR Grade 40

DESCRIPTION	QUANTITY (Bags)
Reinforcing Steel Bars Grade 40	9,742.00
T O T A L	**9,742.00**

Quantity = **9,742.00** kgs.

Delivery Charge = P 0.120 / bag / km.

S I T E	HAULING DISTANCE
Zamboanga DEL Norte 2nd DEO	90.00
PROJECT SITE	

*Average hauling distance from Source to assumed Stockpiling area :

say 90.00 km.

*Cargo Truck (12T) : 12,000.00 kgs., (capacity per haul)

*Crawler Crane (45T) or loading and unloading (Complimentary to Cargo truck

*Capacity of Laborers unloading bags of Cement from Delivery Truck :

Assume (10) laborers can unload (Compli bags of Cement.

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

Speed when loaded : 40.00 kph

Speed when unloaded : 50.00 kph

Loaded running $= \frac{90.00 \times 60}{40.00} =$ 135.00 mins.

Unloaded running	=	$\frac{90.00 \times 60}{50.00}$	=	108.00	mins.		
Loading and Unloading	:	45.00	mins.				
Capacity of Cargotruck	:	8.00	cu.m.				
	:	12,000.00	bags kgs.				
Total Cycle time	:	288.00	mins.				
No. of trips for Cargotruck per day	=	$\frac{8.0 \times 60.00}{288.00}$	=	1.67	say	1.67	trip
Cargo truck daily output	=	12,000 x 1.67	=	20,000.00	kgs.		
Using (2)Cargotrucks	=	2 x 12000.00	=	24,000.00	days		

1. No. of days for Cargo Truck	=	$\frac{9,742.00}{24,000.00}$	=	0.41	say	0.41	days
2. No. of days for Labor, for unloading	=	complimentary to C Truck days	=	0.41	days		

Equipment:

1	- Cargo Truck	@ P	611.92 /day	x	0.41	days	= P	248.39
2	- Crawler Crane	@ P	9,696.00 /day	x	0.41	days	= P	7,871.54
					Sub - Total		**P**	**8,119.92**

LABOR :

1	- Foreman	@ P	611.92 /day	x	0.41	days	= P	248.39
2	- Laborers, unloading	@ P	342.24 /day	x	0.41	days	= P	277.84
					Sub - Total		**P**	**526.23**

MATERIALS :

9,742.00	-kgs ,Steel Bars	@ P	40.00	/ kg		= P	389,680.00
	(Pick-Up Price)			**Sub - Total**		**P**	**389,680.00**

Estimated Quantity		9,742.00 kgs.			
Unit Cost	P	40.89 /kgs.,	say	P	40.89 / kg
Grand Total	P	398,326.15			
Equipment	P	8,119.92			
Labor	P	526.23			
Materials	P	389,680.00			

UNIT COST DERIVATION FOR Reinforing Steel Grade 60

TOTAL QUANTITY REQUIREMENTS FOR Grade 60

DESCRIPTION	QUANTITY (Bags)
Reinforcing Steel Bars Grade 60	8,493.00
T O T A L	**8,493.00**

Quantity = **8,493.00** kgs.

Delivery Charge = P 0.120 / bag / km.

S I T E	HAULING DISTANCE
Zamboanga DEL Norte 2nd DEO	90.00
PROJECT SITE	

*Average hauling distance from Source to assumed Stockpiling area :

say 90.00 km.

*Cargo Truck (12T) : 12,000.00 kgs., (capacity per haul)

*Crawler Crane (45T) or loading and unloading (Complimentary to Cargo truck

*Capacity of Laborers unloading bags of Cement from Delivery Truck :

Assume (10) laborers can unload (Compli bags of Cement.

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

Speed when loaded : 40.00 kph

Speed when unloaded : 50.00 kph

Loaded running $= \frac{90.00 \times 60}{40.00} =$ 135.00 mins.

Unloaded running	=	$\frac{90.00 \times 60}{50.00}$	=	108.00	mins.	
Loading and Unloading	:	45.00	mins.			
Capacity of Cargotruck	:	8.00	cu.m.			
	:	12,000.00	bags kgs.			
Total Cycle time	:	288.00	mins.			
No. of trips for Cargotruck per day	=	$\frac{8.0 \times 60.00}{288.00}$	=	1.67	say 1.67	trip
Cargo truck daily output	=	12,000 x 1.67	=	20,000.00	kgs.	
Using (2)Cargotrucks	=	2 x 12000.00	=	24,000.00	days	

1. No. of days for Cargo Truck	=	$\frac{8,493.00}{24,000.00}$	=	0.35	say 0.35	days
2. No. of days for Labor, for unloading	=	complimentary to C Truck days	=	0.35	days	

Equipment:

1	- Cargo Truck	@ P	611.92 /day	x	0.35	days	= P	216.54
2	- Crawler Crane	@ P	9,696.00 /day	x	0.35	days	= P	6,862.34
					Sub - Total		**P**	**7,078.89**

LABOR :

1	- Foreman	@ P	611.92 /day	x	0.35	days	= P	216.54
2	- Laborers, unloading	@ P	342.24 /day	x	0.35	days	= P	242.22
					Sub - Total		**P**	**458.76**

MATERIALS :

8,493.00	-kgs ,Steel Bars	@ P	42.00	/ kg		= P	356,706.00
	(Pick-Up Price)			**Sub - Total**		**P**	**356,706.00**

Estimated Quantity		8,493.00 kgs.			
Unit Cost	P	42.89 /kgs.,	say	P	42.89 / kg
Grand Total	P	364,243.65			
Equipment	P	7,078.89			
Labor	P	458.76			
Materials	P	356,706.00			

CERTUSO Structural Specialists
303 Lee Business Corner, Juan Luna St., Davao City, Philippines
Fax: +6382-2210577, Phone: +6382-2275215
Email: info@certuso.com.ph

DPWH-IX, RO (RMS)
RECEIVED
DATE: MAR 21 2018
FILE NO.: 109.6
M-924

FORMAL QUOTATION

March 20, 2018

RD JORGE U. SEBASTIAN JR.
Regional Director - DPWH Region 9 Office
Tetuan, Zamboanga City

CC: DPWH Design and Planning Division
DPWH Region 9 Office
Tetuan, Zamboanga City

Subject : Steel Sheet Pile Quotation

Dear Sir Jorge,

I am pleased to offer you my best price below items, subject to our standard terms and conditions of sale, as follows:

Description	Unit Price	Price per kg	Qty	Total Amount	REMARKS
HOT ROLLED Type 2 x 12m (U TYPE) 400mm x 100mm x 10.5mm x 48 kg/m x 12meters SECTION MODULUS: 874 CM3/M Steel Grade: SY 295	Php 38,016.00	Php 66.00	1000 pcs	Php 38,016,000.00	READILY AVAILABLE
HOT ROLLED Type 3 x 12m (U TYPE) 400mm x 125mm x 13mm x 60 kg/m x 12meters SECTION MODULUS: 1340 CM3/M Steel Grade: SY 295	Php 47,520.00	Php 66.00	1000 pcs	Php 47,520,000.00	READILY AVAILABLE
COLD FORMED MMU 9-4 x 12m 600mm x 355mm x 7mm x 53.4 kg/m x 12meters SECTION MODULUS: 947 CM3/M Steel Grade: Q235 B	Php 48,060.00	Php 75.00	667 pcs	Php 32,056,020.00	READILY AVAILABLE
COLD FORMED MMU 12-3 x 12m 600mm x 310mm x 9.5mm x 68.1 kg/m x 12meters SECTION MODULUS: 1240 CM3/M Steel Grade: Q235 B	Php 70,279.20	Php 75.00	667 pcs	Php 46,876,226.40	READILY AVAILABLE

PRODUCT SPECS AND STEEL GRADE:

- **STEEL GRADES AVAILABLE: SY 295 / Q235B / S 355**
- **MILL CERTIFICATE INCLUDED**

TERMS AND CONDITIONS FOR SHEET PILE:
Price above is Delivered ZAMBOANGA CITY PORT
Payment Terms – 50% DOWNPAYMENT 50% BALANCE BEFORE DELIVERY
Lead time is 14-21 days from date of confirmed order and SUBJECT TO AVAILABILITY OF VESSEL
All orders must be supported with a formal Purchase Order
Offer is valid within 15 days from date above
All other terms and conditions to be mutually agreed prior to confirmation of order.

Thank you and we look forward to receiving your valued order soon.

Very truly yours,

CERTUSO Structural Specialists

JAY LANCE KERWIN L. CINCO
Sales Manager

MAR 22 2018

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03.226557

Davao Golden Hardware, Inc.
Goldcrest Building, Km. 3, MacArthur Highway, Matina, 8000 Davao City
Phone: (+63 82) 298-5849/ 298-5850/ 296-0878
Fax: (+63 82) 297-7700 Email: davgol168@yahoo.com

SALES QUOTATION

March 20, 2018

RD JORGE U. SEBASTIAN JR.
Regional Director - DPWH Region 9 Office
Tetuan, Zamboanga City

CC: DPWH Design and Planning Division
DPWH Region 9 Office
Tetuan, Zamboanga City

Subject : Steel Sheet Pile Quotation

Dear RD Jorge,

Please see our offer for steel sheet piles:

Description	Unit Price
STEEL SHEET PILES 400mm x 100mm x 10.5mm x 48 kg/m x 12meters SECTION MODULUS: 874 CM3/M	Php 38,432.00
STEEL SHEET PILES 400mm x 125mm x 13mm x 60 kg/m x 12meters SECTION MODULUS: 1340 CM3/M	Php 47,860.00
STEEL SHEET PILES 600mm x 355mm x 7mm x 53.4 kg/m x 12meters SECTION MODULUS: 947 CM3/M	Php 48,164.40
STEEL SHEET PILES 600mm x 310mm x 9.5mm x 68.1 kg/m x 12meters SECTION MODULUS: 1240 CM3/M	Php 70,280.20

TERMS AND CONDITION:

- Vat inclusive and Cash before delivery
- Delivered Zamboanga City Port
- Subject to change without prior notice
- Subject to availability
- Price validity 7 days

Thank you.

Very truly yours,

ARTURO A. YUTIG, JR.
Sales Manager