

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 OF FLOOD CONTROL STRUCTURE (POBLACION SIDE) ALONG LAYAWAN RIVER, POLANCO, ZAMBOANGA DEL NORTE	Appropriation	:	P	100,000,000.00
	Source of Funds	:		CY-2017
	Issued Obligated Authority	:		
	Released	:		
PROJECT CATEGORY : FLOOD CONTROL	Cal. Days to Complete	:		207 Calendar Days
	Desirable Starting Date	:		Upon Approval
	Mode of Implementation	:		
PROJECT DESCRIPTION : Scope of Work : Construction of Flood Control Structure	NET LENGTH :			
	Beg. Of Project		1 + 047.00	
	End Of Project		1 + 571.30	524.30
		Net Length	:	524.3000 km.

MINIMUM EQUIPMENT REQUIREMENT :

Description	No.	Description	No.	Description	No.
Dumptruck (10-Wheeler)	12	Water Pump	1	Project Engineer	1
Drop Hammer	4	Cutting Outfit	1	Materials Engineer	1
Crawler Crane	2	Concrete Vibrator	2	Geometric Surveyor	1
Truck mounted Crane	1	Air compressor	2	Foreman	1
Road Grader	2	Bar Cutter	1	Materials Lab. Tech.	1
Road Roller	2	Bar Bender	1	Mason	10
Payloader	4	Conc. Mixer (1-Bagger)	2	Carpenter	6
Water Truck	2	Plate Compactor	1	Laborers (Skilled)	10
Water Tank	2	Jack Hammer	1	Laborers (Unskilled)	20
Backhoe with breaker	1	Diesel Hammer	1	Laborers (Unskilled)	20
Vibro Hammer	1	Service Truck	1		

ESTIMATED COST OF PROPOSED WORK

ITEM NO.	DESCRIPTION	% OF TOTAL	UNIT	QUANTITY	DIRECT COST	
					TOTAL	UNIT COST
PART A- OFACILITIES FOR THE ENGINEERS						
A.1.1(3)	Construction of Field Office for the Engineer	0.604	L. S.	1.00	469,501.56	469,501.56
A.1.1(11)	Provision of Furnitures/Fixtures, Equipment & Appliances for the Field Office for the Engineer	0.253	L. S.	1.00	196,288.00	196,288.00
A.1.2 (5)	Operation & Maintenance of Go'vt Service Vehicle	0.419	L.S.	1.00	326,077.15	326,077.15
PART B - OTHER GENERAL REQUIREMENTS						
B.4(1)	Construction Survey and Staking	0.071	k.m.	0.5243	55,208.91	105,300.23
B.5	Project Billboard	0.007	units	1.00	5,812.90	5,812.90
B.7	Occupational Safety and Health Program	0.511	L. S.	1.00	397,454.00	397,454.00
B.9	Mobilization & Demobilization	0.701	L. S.	1.00	544,688.00	544,688.00
PART C - EARTHWORKS						
1702(1)	Structure Excavation	0.225	cu.m.	759.00	174,657.78	230.12
1703(1)	Dredging-Soils	2.115	cu.m.	14,957.00	1,644,285.33	109.93
1704(1)	Embankment	14.975	cu.m.	17,499.00	11,640,287.02	665.20
PART J - FLOOD CONTROL AND DRAINAGE						
404(1)a	Reinforcing Steel, (Grade 40)	0.472	kg.	7,446.00	367,153.41	49.31
404(1)b	Reinforcing Steel, (Grade 60)	0.430	kg.	6,498.00	334,032.94	51.41
405(1)b3	Structural Concrete, Class"A"	3.349	cu.m.	435.00	2,603,062.27	5,984.05
1716(6)	Structural Steel Sheet Piles, Furnished(0.40m wide)	24.885	ln.m.	7,866.00	19,343,904.14	2,459.18
1716(12)	Structural Steel Sheet Piles, Driven	7.296	ln.m.	7,866.00	5,671,491.87	721.01
1716(16)	Steel Sheet Test Piles, Furnished and Driven	0.070	ln.m.	12.00	54,496.59	4,541.38
PART G - DRAINAGE AND SLOPE PROTECTION						
508(1)	Handlaid Rock Embankment	24.279	cu.m.	14,534.00	18,872,468.71	1,298.50
1710(5)	Grouted Riprap, Class "A"	11.522	cu.m.	1,887.00	8,956,282.32	4,746.31
1713(1)	Rubble Concrete	7.815	cu.m.	1,835.00	6,074,837.20	3,310.54
T O T A L		100.000			P 77,731,990.11	

NAME OF PROJECT :

CONSTRUCTION OF FLOOD CONTROL STRUCTURE (POBLACION SIDE) ALONG
LAYAWAN RIVER, POLANCO, ZAMBOANGA DEL NORTE

BREAKDOWN OF ESTIMATED EXPENDITURES	% OF TOTAL	AMOUNT
I. ESTIMATED COST		
A. DIRECT COST		
A.1. Materials	59.24	59,240,457.80
A.2. Labor	5.00	4,998,622.02
A.3. Equipment Expenses	13.49	13,492,910.29
SUB-TOTAL (DIRECT COST)	77.73	P 77,731,990.11
B. INDIRECT COST (Per D.O. # 57)		
B.1. Overhead, Contingency & Misc. (10 % Max. of D.C.)	7.63	7,626,748.30
B.2. Profit (8 % Max. of D.C.)	6.15	6,148,898.00
C. VAT (5 % of D.C. and I.C. Per D.O. # 197 S.2016)	4.58	4,575,381.82
SUBTOTAL (CONTRACT COST)	96.08	P 96,083,018.22
II. ESTIMATED GOVERNMENT EXPENDITURES		
1. Engineering and Administrative Overhead (3.5%)	3.50	3,500,000.00
2. Detailed Engineering (1%)	0.00	
3. Reserved for the Payment of RROW	0.42	416,981.78
4. Provisional Sum	0.00	
TOTAL ESTIMATED PROJECT COST	100.00	P 100,000,000.00

Prepared :

Checked :

JOSEPHINE B. RENGQUIJO

Engineer II

JERALD R. BARRERA

Engineer II

Submitted :

Recommending Approval:

LEONCIO B. SOLAMILLO

Chief, Construction Division

CAYAMOMBAO D. DIA

OIC-Assistant Regional Director

Approved:

JORGE U. SEBASTIAN, JR., CESO III

Regional Director

APPROVED BUDGET FOR THE CONTRACT												
CONSTRUCTION OF FLOOD CONTROL STRUCTURE (POBLACION SIDE) ALONG LAYAWAN RIVER, POLANCO, ZAMBOANGA DEL NORTE												
Stations : 0.00				Project Name and Location								
Length : 524.30000				Contract Duration : 207 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 - FACILITIES FOR THE ENGINEERS												
A.1.1(3)	Construction of Field Office for the Engineer	1.00	L. S.	469,501.56	10.00	8.00	18.00	84,510.28	27,700.59	112,210.87	581,712.43	581,712.43
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.	326,077.15				-	16,303.86	16,303.86	342,381.01	342,381.01
PART B - OTHER GENERAL REQUIREMENTS												
B.4(1)	Construction Survey and Staking	0.5243	k.m.	55,208.91	10.00	8.00	18.00	9,937.60	3,257.33	13,194.93	68,403.84	130,466.99
B.5	Project Billboard	1.00	units	5,812.90	10.00	8.00	18.00	1,046.32	342.96	1,389.28	7,202.18	7,202.18
B.7	Occupational Safety and Health Program	1.00	L. S.	397,454.00		8.00	8.00	31,796.32	21,462.52	53,258.84	450,712.84	450,712.84
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	759.00	cu.m.	174,657.78	10.00	8.00	18.00	31,438.40	10,304.81	41,743.21	216,400.99	285.11
1703(1)	Dredging-Soils	14,957.00	cu.m.	1,644,285.33	10.00	8.00	18.00	295,971.36	97,012.83	392,984.19	2,037,269.52	136.21
1704(1)	Embankment	17,499.00	cu.m.	11,640,287.02	10.00	8.00	18.00	2,095,251.66	686,776.93	2,782,028.60	14,422,315.62	824.18
PART J -FLOOD CONTROL AND DRAINAGE												
404(1)a	Reinforcing Steel, (Grade 40)	7,446.00	kg.	367,153.41	10.00	8.00	18.00	66,087.61	21,662.05	87,749.66	454,903.07	61.09
404(1)b	Reinforcing Steel, (Grade 60)	6,498.00	kg.	334,032.94	10.00	8.00	18.00	60,125.93	19,707.94	79,833.87	413,866.81	63.69
405(1)b3	Structural Concrete, Class"A"	435.00	cu.m.	2,603,062.27	10.00	8.00	18.00	468,551.21	153,580.67	622,131.88	3,225,194.16	7,414.24
1716(6)	Structural Steel Sheet Piles, Furnished(0.40m wide)	7,866.00	ln.m.	19,343,904.14	10.00	8.00	18.00	3,481,902.75	1,141,290.34	4,623,193.09	23,967,097.23	3,046.92
1716(12)	Structural Steel Sheet Piles, Driven	7,866.00	ln.m.	5,671,491.87	10.00	8.00	18.00	1,020,868.54	334,618.02	1,355,486.56	7,026,978.43	893.34
1716(16)	Steel Sheet Test Piles, Furnished and Driven	12.00	ln.m.	54,496.59	10.00	8.00	18.00	9,809.39	3,215.30	13,024.69	67,521.28	5,626.77
PART G - DRAINAGE AND SLOPE PROTECTION												
508(1)	Handlaid Rock Embankment	14,534.00	cu.m.	18,872,468.71	10.00	8.00	18.00	3,397,044.37	1,113,475.65	4,510,520.02	23,382,988.73	1,608.85
1710(5)	Grouted Riprap, Class "A"	1,887.00	cu.m.	8,956,282.32	10.00	8.00	18.00	1,612,130.82	528,420.66	2,140,551.47	11,096,833.79	5,880.68
1713(1)	Rubble Concrete	1,835.00	cu.m.	6,074,837.20	10.00	8.00	18.00	1,093,470.70	358,415.39	1,451,886.09	7,526,723.29	4,101.76
				77,731,990.11				13,775,646.29	4,575,381.82	18,351,028.11	96,083,018.22	
Prepared /Submitted by :				Recommending Approval:				Approved :				
BELEN A. SAPALLEDA Engineer IV - Chairman Estimating Committee				CAYAMOMBAO D. DIA OIC - Assistant Regional Director				JORGE U. SEBASTIAN, JR., CESO III Regional Director				