

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 :

<b>NAME/LOCATION OF PROJECT :</b>  CONSTRUCTION OF TAWI-TAWI MAINLAND CIRCUMFERENTIAL ROAD, TARAWAKAN-MARANG-MARANG SECT., PANGLIMA SUGALA, TAWI-TAWI	Appropriation : <b>P 65,000,000.00</b> Source of Funds : CY 2017 Regular Infra Project Issued Obligated Authority : Released : Cal. Days to Complete : 129 Calendar Days Desirable Starting Date : Upon Approval Mode of Implementation : By Contract
<b>PROJECT CATEGORY :</b>  NATIONAL ROAD	
<b>PROJECT DESCRIPTION :</b> Scope of Work : Unpaved to paved Road Width : 6.70 meters, (PCCP 0.23 m. thk.) Roadbed Width : 12.00 meters Subbase Course : 0.30 meters Surface Course : 0.15 meters	<b>NET LENGTH :</b> Sta.31+540.00 to Sta.33+130.00  <b>N.L. = 1,590.00 In.m.</b> <b>1.590 km.</b> <b>3.18 lane km.</b>

**MINIMUM EQUIPMENT REQUIREMENT :**

**TECHNICAL PERSONNEL REQUIRED :**

Description	No.	Description	No.	Description	No.
Bulldozer (155 HP), D6H	1	Cargo Truck (10T, 270 Hp)	1	Project Engineer	1
Payloader (1.50 cu.m.), LX80-2C	2	Batching Plant (30 cu.m.)	1	Materials Engineer	1
Motorized Road Grader, G710A	2	Concrete Saw, Blade Ø 14" (7.5 Hp)	1	Materials Lab. Tech.	1
Vibratory Roller (10 m.t.), SD 100 DC	2	Bar Cutter, Single Phase	1	Surveyor	1
Dumptruck (10 cu.m.)	4	Bar Bender	1	Carpenter	10
Backhoe (0.80 cu.m.), SE 130 LC-2	1	Plate Compactor (5Hp)	1	Mason	10
Water Truck/Pump(16000 lit.)	2	One Bagger Mixer	2	Laborer	25
Transit Mixer (5 cu.m.)	4	Concrete Vibrator	2		

**ESTIMATED COST OF PROPOSED WORK**

ITEM NO.	DESCRIPTION	% OF TOTAL	UNIT	QUANTITY	DIRECT COST	
					TOTAL	UNIT COST
101(3)b1	Removal of Actual Structures/Obstruction	0.623	sq.m.	2,610.00	299,441.25	114.73
102(2)	Surplus Common Excavation	1.326	cu.m.	4,407.00	637,003.20	144.54
103(3)	Foundation Fill	0.036	cu.m.	5.00	17,415.29	3,483.06
103(6)a	Pipe Culvert and Drain Excavation	0.022	cu.m.	47.00	10,725.76	228.21
104(1)a	Embankment (from Roadway Excavation)	5.139	cu.m.	10,851.00	2,468,345.64	227.48
105(1)a	Subgrade Preparation	0.3443	sq.m.	10,410.00	165,382.98	15.89
200(1)	Aggregate Subbase Course, 0.30m. Thick	40.467	cu.m.	6,245.00	19,438,267.50	3,112.61
300(1)	Gravel Surface Course, 0.15m thk.	5.288	cu.m.	787.00	2,540,131.34	3,227.61
311(1)c1	Portland Cement Concrete Pavement, 0.23m. Thick	42.443	sq.m.	10,653.00	20,387,785.31	1,913.81
500(1)b3	Reinf. Conc. Culvert Pipe, (910mm dia.)	0.310	ln.m.	32.00	148,932.34	4,654.14
505(2)a	Grouted Riprap, Class "A"	0.072	cu.m.	6.00	34,789.63	5,798.27
506(1)	Stone Masonry	0.320	cu.m.	23.00	153,495.65	6,673.72
612(1)	Reflectorized Thermoplastic Pavement Markings (White)	0.735	sq.m.	482.00	352,851.57	732.06
A.1.1(3)	Construction of Field Office for the Engineer	0.824	l.s.	1.00	395,718.85	395,718.85
A.1.1(11)	Prov. of Furniture/Fixture, Equipment and Appliances for the Field Office for the Engineer	0.282	l.s.	1.00	135,305.00	135,305.00
A.1.2(5)	Operation and Maintenance of Govt. Service Vehicle	0.488	l.s.	1.00	234,261.68	234,261.68
B.4(1)	Construction Survey and Staking	0.139	km.	1.59	66,960.76	42,113.68
B.5	Project Billboard	0.018	each	2.00	8,483.12	4,241.56
B.7	Occupational Safety and Health Program	0.203	l.s.	1.00	97,397.92	97,397.92
B.9	Mobilization/Demobilization	0.92	l.s.	1.00	442,569.00	442,569.00
<b>TOTAL</b>		<b>98.05</b>			<b>P 48,035,263.79</b>	

**NAME OF PROJECT :** CONSTRUCTION OF TAWI-TAWI MAINLAND CIRCUMFERENTIAL ROAD,  
**TARAWAKAN-MARANG-MARANG SECT., PANGLIMA SUGALA, TAWI-TAWI**  
**STATION LIMIT :** Sta.31+540.00 to Sta.33+130.00

BREAKDOWN OF ESTIMATED EXPENDITURES	% OF TOTAL	AMOUNT
I. ESTIMATED COST		
A. DIRECT COST		
A.1. Materials	63.23	41,100,371.24
A.2. Labor	0.66	425,997.19
A.3. Equipment Expenses	10.01	6,508,895.36
SUB-TOTAL (DIRECT COST)	73.90	P 48,035,263.79
B. INDIRECT COST (Per D.O. No.197, S,2016)		
B.1. Overhead, Contingency & Misc. (10% Max. of D.C.)	8.69	5,647,052.33
B.2. Profit (8 % Max. of D.C.)	5.83	3,788,674.65
C. VAT (5% of D.C. and I.C. Per D.O. No.197, S,2016)	7.71	5,013,364.98
SUBTOTAL (CONTRACT COST)	96.13	P 62,484,355.75
II. ESTIMATED GOVERNMENT EXPENDITURES		
1. Engineering and Administrative Overhead (3.50%)	3.50	2,275,000.00
2. Detailed Engineering (1%)		
3. Reserved for the Payment of RROW	0.37	240,644.25
4. Physical Reserved		
<b>TOTAL ESTIMATED PROJECT COST</b>	<b>100.00</b>	<b>P 65,000,000.00</b>

Prepared by :

Checked :

Submitted :

**ROBERTO L. STA. TERESA**

Engineer II

**JERALD R. BARRERA**

Engineer II

**LEONCIO B. SOLAMILLO**

Chief, Construction Division

Recommending Approval :

**CAYAMOMBAO D. DIA**

OIC-Assistant Regional Director

Approved :

**JORGE U. SEBASTIAN, JR., CESO III**

Regional Director

**APPROVED BUDGET FOR THE CONTRACT**

CONSTRUCTION OF TAWI-TAWI MAINLAND CIRCUMFERENTIAL ROAD, TARAWAKAN-MARANG-MARANG SECT., PANGLIMA SUGALA, TAWI-TAWI  
Sta.31+540.00 to Sta.33+130.00

Contract Duration : **129 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)
<b>PART-A, FACILITIES FOR THE ENGINEER</b>												
A.1.1(3)	Construction of Field Office for the Engineer	1.00	l.s.	395,718.85	12.00	8.00	20.00	79,143.77	23,743.13	102,886.90	498,605.75	498,605.75
A.1.1(11)	Prov. of Furniture/Fixture, Equipment and Appliances for	1.00	l.s.	135,305.00	-	8.00	8.00	10,824.40	7,306.47	18,130.87	153,435.87	153,435.87
A.1.2(5)	Operation and Maintenance of Govt. Service Vehicle	1.00	l.s.	234,261.68	-	-	-	-	11,713.08	11,713.08	245,974.76	245,974.76
SUB TOTAL PART A				765,285.53					42,762.68		898,016.38	
<b>PART-B, OTHER GENERAL REQUIREMENT:</b>												
B.4(1)	Construction Survey and Staking	1.59	km.	66,960.76	-	8.00	8.00	5,356.86	3,615.88	8,972.74	75,933.50	47,756.92
B.5	Project Billboard	2.00	each	8,483.12	12.00	8.00	20.00	1,696.62	508.99	2,205.61	10,688.73	5,344.37
B.7	Occupational Safety and Health Program	1.00	l.s.	97,397.92	-	8.00	8.00	7,791.83	5,259.49	13,051.32	110,449.24	110,449.24
B.9	Mobilization/Demobilization	1.00	l.s.	442,569.00	-	-	-	-	2,161,943.90	2,161,943.90	2,604,512.90	2,604,512.90
SUB TOTAL PART B				615,410.80					2,171,328.25		2,801,584.37	
<b>PART-C, EARTHWORKS</b>												
101(3)b1	Removal of Actual Structures/Obstruction	2,610.00	sq.m.	299,441.25	12.00	8.00	20.00	59,888.25	17,966.48	77,854.73	377,295.98	144.56
102(2)	Surplus Common Excavation	4,407.00	cu.m.	637,003.20	12.00	8.00	20.00	127,400.64	38,220.19	165,620.83	802,624.04	182.12
103(3)	Foundation Fill	5.00	cu.m.	17,415.29	12.00	8.00	20.00	3,483.06	1,044.92	4,527.97	21,943.26	4,388.65
103(6)a	Pipe Culvert and Drain Excavation	47.00	cu.m.	10,725.76	12.00	8.00	20.00	2,145.15	643.55	2,788.70	13,514.46	287.54
104(1)a	Embankment (from Roadway Excavation)	10,851.00	cu.m.	2,468,345.64	12.00	8.00	20.00	493,669.13	148,100.74	641,769.87	3,110,115.50	286.62
105(1)a	Subgrade Preparation	10,410.00	sq.m.	165,382.98	12.00	8.00	20.00	33,076.60	9,922.98	42,999.57	208,382.55	20.02
SUB TOTAL PART C				3,598,314.12					215,898.85		4,533,875.79	
<b>PART-D, SUBBASE AND BASE COURSE</b>												
200(1)	Aggregate Subbase Course, 0.30m. Thick	6,245.00	cu.m.	19,438,267.50	12.00	8.00	20.00	3,887,653.50	1,166,296.05	5,053,949.55	24,492,217.05	3,921.89
300(1)	Gravel Surface Course, 0.15m thk.	787.00	cu.m.	2,540,131.34	12.00	8.00	20.00	508,026.27	152,407.88	660,434.15	3,200,565.49	4,066.79
SUB TOTAL PART D				21,978,398.84					1,318,703.93		27,692,782.54	
<b>PART-E, SURFACE COURSE</b>												
311(1)c1	Portland Cement Concrete Pavement, 0.23m. Thick	10,653.00	sq.m.	20,387,785.31	12.00	8.00	20.00	4,077,557.06	1,223,267.12	5,300,824.18	25,688,609.49	2,411.40
SUB TOTAL PART E				20,387,785.31					1,223,267.12		25,688,609.49	
<b>PART-G, DRAINAGE AND SLOPE PROTECTION STRUCTURE</b>												
500(1)b3	Reinf. Conc. Culvert Pipe, (910mm dia.)	32.00	ln.m.	148,932.34	12.00	8.00	20.00	29,786.47	8,935.94	38,722.41	187,654.75	5,864.21
505(2)a	Grouted Riprap, Class "A"	6.00	cu.m.	34,789.63	12.00	8.00	20.00	6,957.93	2,087.38	9,045.30	43,834.94	7,305.82
506(1)	Stone Masonry	23.00	cu.m.	153,495.65	12.00	8.00	20.00	30,699.13	9,209.74	39,908.87	193,404.51	8,408.89
SUB TOTAL PART G				337,217.62					20,233.06		424,894.20	
<b>PART-H, MISCELLANEOUS STRUCTURE</b>												
612(1)	Reflectorized Thermoplastic Pavement Markings (White)	482.00	sq.m.	352,851.57	12.00	8.00	20.00	70,570.31	21,171.09	91,741.41	444,592.98	922.39
SUB TOTAL PART H				352,851.57					21,171.09		444,592.98	
<b>T O T A L</b>				<b>48,035,263.79</b>					<b>5,013,364.98</b>		<b>62,484,355.75</b>	

Prepared by :

Submitted :

Approved :

**BELEN A. SAPALLEDA**  
Head, BAC-TWG

**CAYAMOMBAO D. DIA**  
OIC-Assistant Regional Director

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