

It is informed that the construction of this Bypass Road will provide alternate route of the west and east part of Zamboanga City which reduce travel time of approximately two (2) hours. It is also designed to decongest traffic within the city and along N1 Route/Asian Highway 26 of the said city.

Further, the said bypass will traverse seventeen (17) barangays which give comfort to the commuters and thereby improving the lives of the people of Zamboanga and to the nearby places as well.

Attached are the required documents, such as Evaluation Form (2017 version 2.1), BP202, Program of Work, Location Map, Certificate of Availability of Funds (CAF) and Geotagged Photos.


In view of the above, the request for Modification of the Project is respectfully recommended for consideration and approval.


DIMAS S. SOGUILON, CESO II

Assistant Secretary
Mindanao Operations

APPROVED/ ~~DISAPPROVED~~:

MARK A. VILLAR
Secretary


RAFAEL C. YABUT
Senior Undersecretary
Officer-In-Charge

Department of Public Works and Highways
Office of the Secretary



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Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
OFFICE OF THE SECRETARY
Manila

16 May 2017

MEMORANDUM

FOR : MARK A. VILLAR
Secretary
This Department

Respectfully submitted is the Memorandum of even date of **Regional Director JORGE U. SEBASTIAN, JR., CESO III** of DPWH-IX, requesting for approval the Modification of Project to be implemented by the said region under the FY 2017 GAA in the prescribed form (2017, version 2.1), to wit:

FROM	TO																																																												
MFO 1 – National Road Network Services:	MFO 1 – National Road Network Services:																																																												
Network Development – Construction of By-Passes/Diversion Road, Including ROW	Network Development – Construction of By-Passes/Diversion Road, Including ROW																																																												
Construction of Concrete Road and Concrete Bridge – Zamboanga City By-Pass Road, Zamboanga City (Culianan – Patalon Section), Package 2	Construction of Concrete Bridges - Zamboanga City By-Pass Road (Culianan – Patalon Section), Package 2, including ROW, Zamboanga City																																																												
Allocation - Php 200.000 M (Total) Php 140.000 M (Concrete Road) Php 60.000 M (Const. of Concrete Bridge)	San Roque Bridge and Approaches: Sta. 1982+580.00 – Sta. 1983+036.00 San Roque Br. (Length - 45.84 ln.m.) Abutment A: Sta. 1982+770.00, Abutment B: Sta. 1982+815.84																																																												
Physical Target - 7.24 lane km (Concrete Road) 439.20 sq.m. (Const. of Concrete Bridge)																																																													
Unit Cost - Php 19,337,016.57/lane km (Concrete Road) Php 136,612.02/sq.m. (Concreting of Bridges)																																																													
	<table><tr><th></th><th>Quantity</th><th>Amount (P)</th><th>Unit Cost (P)</th><th>% Wt.</th></tr><tr><td>1.San Roque Br.</td><td>437.31 sq.m.</td><td>43,841,669.30</td><td>100,253.07/ sq.m.</td><td>26.83 %</td></tr><tr><td>2. Road Approaches</td><td></td><td></td><td></td><td></td></tr><tr><td>a. Earthworks</td><td></td><td></td><td></td><td></td></tr><tr><td>a.1 Embankment from Excavation</td><td>91,630 cu.m.</td><td>25,667,023.24</td><td>280.116/ cu.m.</td><td>15.71 %</td></tr><tr><td>a.2 Embankment, Common Borrow</td><td>88,564 cu.m.</td><td>70,871,436.6</td><td>800.228/ cu.m.</td><td>43.37 %</td></tr><tr><td>a.3 Subgrade Preparation</td><td>3,304 sq.m.</td><td>64,301.83</td><td>19.462/ sq.m.</td><td>0.04 %</td></tr><tr><td>b. Aggregate Subbase Course</td><td>2,091 cu.m.</td><td>2,766,065.99</td><td>1,322.844/ cu.m.</td><td>1.69 %</td></tr><tr><td>c. Surface Course</td><td>5,455 sq.m.</td><td>8,458,191.07</td><td>1,550.539/ sq.m.</td><td>5.18 %</td></tr><tr><td>d. Drainage & Slope Protection Structure</td><td></td><td>6,576,380.35</td><td></td><td>4.02 %</td></tr><tr><td>e. Miscellaneous Structure</td><td></td><td>5,149,159.34</td><td></td><td>3.15%</td></tr><tr><td>TOTAL</td><td></td><td>163,394,227.72</td><td></td><td>100.00 %</td></tr></table>		Quantity	Amount (P)	Unit Cost (P)	% Wt.	1.San Roque Br.	437.31 sq.m.	43,841,669.30	100,253.07/ sq.m.	26.83 %	2. Road Approaches					a. Earthworks					a.1 Embankment from Excavation	91,630 cu.m.	25,667,023.24	280.116/ cu.m.	15.71 %	a.2 Embankment, Common Borrow	88,564 cu.m.	70,871,436.6	800.228/ cu.m.	43.37 %	a.3 Subgrade Preparation	3,304 sq.m.	64,301.83	19.462/ sq.m.	0.04 %	b. Aggregate Subbase Course	2,091 cu.m.	2,766,065.99	1,322.844/ cu.m.	1.69 %	c. Surface Course	5,455 sq.m.	8,458,191.07	1,550.539/ sq.m.	5.18 %	d. Drainage & Slope Protection Structure		6,576,380.35		4.02 %	e. Miscellaneous Structure		5,149,159.34		3.15%	TOTAL		163,394,227.72		100.00 %
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	Malagutay Bridge: (Length – 30.84 ln.m.) Abutment A: Sta. 1980+057.60, Abutment B: Sta. 1980+088.44																																																												
	Allocation - Php 200,000,000.00 (Total) Php 163,394,227.72 (San Roque Bridge & Approaches) Php 34,574,088.76 (Malagutay Bridge) Php 2,031,683.52 (ROW Acquisition)																																																												
	Physical Target - 437.31 sq.m (San Roque Bridge) 294.21 sq.m (Malagutay Bridge) 1,015.84 sq.m (ROW Acquisition)																																																												
	Unit Cost - Php 373,634.784/sq.m (San Roque Bridge & Approaches) Php 117,515.002/sq.m (Malagutay Bridge) Php 2,000.00/sq.m (ROW Acquisition)																																																												

JUSTIFICATION:

The Construction of Zamboanga City Bypass Road per FY 2017 GAA has two (2) components, namely;

A.) Construction of Bridge of 430.0 sq.m. in the amount of P 60,000,000.00

B.) Concreting of Road of 7.24 lane km. in the amount of P 140,000,000.00

TOTAL - P 200,000,000.00

After the conduct of the Detailed Engineering Activities, the actual requirements of the project resulted to the following components:

A.) Construction of San Roque Br. and Approaches

- The construction of San Roque Br. and approaches has a total cost of P 163,394,227.72 broken down as follows: follows: Earthwork=P 96,602,761.67 (59.12%), Aggregate Subbase & Base Course =P 2,766,065.99 (1.69%), Surface Course = P 8,458,191.07 (5.18%), Bridge Construction = P 43,841,669.30 (26.83%), Drainage and Slope Protection Structures = P 6,576,380.35 (4.02%) and Miscellaneous Structures = P 5,149,159.34 (3.15%). The considerable cost to the construction of said bridge due to various scopes of work incorporated in the road component, to wit:

1. The road approach at Sta. 1982+580-Sta.1983+036 with a net length of 0.82032 lane km. is mountainous (sloping terrain) that requires **massive excavation** in order to meet the allowable gradeline of 12% reckoning from the top of the bridge elevation at 44.50 m (where freeboard was based on the Highest flood level of 40.66 m).

2. **Concreting of Barangay Road** of 0.3066 lane km. that traverse the Road Approach that requires **massive embankment** so as to meet the same design elevation for smooth transition.

3. **The provision of Grouted Riprap** - Item 505(1)a for slope protection in the said road approaches to ensure quality and safety of the road which is deemed necessary to produce a good road in compliance to D.O. 11 series of 2015.

Thus, the said component has a computed unit cost of P 373,634.78 per sq.m. Attached are Breakdown of Cost and Detailed Cross Section Plan for information and ready reference.

B.) Construction of Malagutay Br.

- The construction of Malagutay Br. has a total cost of P34,574,088.76 broken down as follows: Bridge Construction = P 24,907,613.74 (72.04%), Miscellaneous Structures = P 9,666,475.02 (27.96%). Further, the work involves the construction of concrete fence on both sides of the road to provide protection and safety of the travelling public.

C.) Payment of Right of Way Acquisition

- The inclusion of payment of ROW Acquisition for smooth implementation of the project which was not provided for in the FY 2017 GAA.