



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

21 MAY 2018

MEMORANDUM

FOR : Secretary MARK A. VILLAR
Secretary
This Department

This refers to the Memorandum dated 03 May 2018 of **DPWH Region XI Regional Director ALLAN S. BORRAMEO, CESO IV**, requesting for the approval of the Modification of the hereunder project for FY 2018 General Appropriation Act (GAA), to wit:

As per GAA/Original			As Modified		
Project Description					
UACS No. 31020410012000 Project ID: P00200385MN OO1: Ensure Safe and Reliable National Road System Network Development Construction of By-Pass and Diversion Roads Alternate Road from Region XI to Region X (Jct Davao City Diversion Road - Catalunan Grande – Talandag – Sumimao – Panalum – Tapak – Cabanglasan - Aglayan, Malaybalay), Package B, incl. ROW and Bridge, Davao del Norte			 OO1: Ensure Safe and Reliable National Road System Network Development Construction of By-Pass and Diversion Roads Alternate Road from Region XI to Region X (Jct Davao City Diversion Road - Catalunan Grande – Talandag – Sumimao – Panalum – Tapak – Cabanglasan - Aglayan, Malaybalay), Package B, incl. ROW and Bridge, Davao del Norte		
Physical Target	Unit Cost (P'000)	Allocation (P'000)	Physical Target	Unit Cost (P'000)	Estimated Cost (P'000)
CW-1 Construction of Gravel Road: 8.56 lane km	P 12,062.50/ lane km	P 103,255.00	CW-1 Construction of Gravel Road: 4.714 lane km	P 29,703.55/ lane km	P 140,022.54417
CW-2 Construction of Concrete Bridge: 286.20 sq.m.	P 98.62/ sq.m.	P 28,226.25	CW-2 Construction of Concrete Bridge: 429.30 sq.m.	P 120.48/ sq.m.	P 51,720.65319
CW-3 Construction of Concrete Bridge: 286.20 sq.m.	P 98.62/ sq.m.	P 28,226.25	CW-3 Construction of Concrete Bridge: 429.30 sq.m.	P 100.71/ sq.m.	P 43,234.30264
CW-4 Construction of Concrete Bridge: 477.00 sq.m.	P 98.62/ sq.m.	P 47,043.75	EAO	-	P 8,750.00
CW-5 Construction of Concrete Bridge: 286.20 sq.m.	P 98.62/ sq.m.	P 28,226.25	ROW: 65,535.60 sq.m.	P 0.10/ sq.m.	P 6,272.50
EAO	-	P 8,750.00			
ROW: 65,535.60 sq.m.	P 0.10/ sq.m.	P 6,272.50			
Total:		P 250,000.00	Total:		P 250,000.00

Justification:

Decrease in physical target from 8.56 lane km to 4.714 lane km for construction of gravel road (with considerable cost) due to the following:

- Actual terrain is very mountainous for the entire stretch instead of combination of rolling and mountainous;
- This is a road opening of which the existing gradeline in the area is very steep reaching even up to 40%. Hence, the alignment of the road was shifted to the most economical alignment for this project, however, will still require huge volume of excavation since the lowest existing gradeline is about 36%. Massive excavation (mostly common with soft and hard rock) constitutes 41.5% of the project cost (attached are the cross sections and back-up computations);
- Opening of the road requires substantial vertical correction having excavation/cut ranging from 3-22m (average of 12m) to conform with the DPWH Design Guidelines and Standards (Horizontal and Vertical Alignment and Road Width); and
- The design also requires offsetting of the horizontal alignment (from bank of the steep slope to the mountain side) of up to 24 m and high side cuts (average of 17 m, highest is 38 m).

Change in physical targets for CW-2 and CW-3 (construction of bridges) including deletion of CW-4 and CW-5 (construction of bridges) due to the following:

- Only two bridges are included instead of four since the other two bridges are beyond the 2.46 km net length covered by the project due to reduction of physical target caused by considerable amount needed for road; and
- As per survey and design, the required length for the two bridges (CW-2 and CW-3) is 45 m on bored piles instead of 30 m, however, CW-2 has higher unit cost than that of CW-3 due to inclusion of 167 lm detour/access road (which requires embankment and pipe series) for CW-2.

Based on our evaluation, the herein request is found in order, hence approval is hereby recommended.


RAFAEL C. YABUT

Senior Undersecretary

Undersecretary for Regional Mindanao Operations

APPROVED/DISAPPROVED:


MARK A. VILLAR

Secretary

2.1 MSQ/ACF/RCY

Department of Public Works and Highways
Office of the Secretary



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