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

Manila

June 30, 2020

## MEMORANDUM

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FOR

MARK A. VILLAR

Secretary This Department

This refers to the memorandum dated 02 June 2020 of **DPWH Region XI Director ALLAN S. BORROMEO** requesting for the approval of the Modification of the hereunder project covered by CY 2020 General Appropriation Act (GAA), to wit;

As per GAA/Original			As Modified		
		Project	Description		
UACS No. 300116202246000 Project ID : P00443425MN			â		
Local Program - Local Roads and Bridges - Local Roads - Onstruction / Repair / Rehabilitation /Improvement of arious Infrastructure including Local Projects Road Widening & Replacement of Bridge along Jct. Davao City Diversion Rd Magtuod Rd New Carmen - Biao Escuela - Biao Joaquin - Jct. Davao Bukidnon Rd., Davao City			Local Program - Local Roads and Bridges - Local Roads - Construction / Repair / Rehabilitation /Improvement of Various Infrastructure including Local Projects Road Widening & Replacement of Bridge along Jct. Davao City Diversion Rd Magtuod Rd New Carmen - Biao Escuela - Biao Joaquin - Jct. Davao Bukidnon Rd., Davao City		
Type of Work/ Physical Target	Unit Cost	Allocation	Type of Work/ Physical Target	Unit Cost	Estimated Cost
CW1 – Road Widening 5.0 Jane km	₽ 20,072,000.00/ lane km	₽ 100,360,000.00	CW1 – Road Widening 9.512 lane km	₽ 17,232,122.00 lane km / ₽ 34 M / km	+103,911,944.00
CW2 - Construction of Road Slope Protection Structure 3,730.0 sq. m.	₽ 50,707.77 / sq. m.	₽ 189,140,000.00	CW2 Construction of Road Slope Protection Structure <b>4,440.0</b> sq. m.	₽ <b>28,285.60</b> / sq. m.	₽125,588,056.00
EAO	-	₽ 10,500,000.00	EAO	-	₽ 10,500,000.00
	Total	₽ 300,000,000.00	Total		I \$300,000,000.00

## Justification:

Increase in physical target for road widening from 5.00 lane km to 9.512 lane km due to the following:

- The road traverses mostly on flat sections and portions on ridge sections instead of the anticipated mostly ridge sections, hence, lesser unit cost;
  - Excess funds generated from the slope protection works could still cover 1.844 km road section that needs widening, hence, increase in physical target;
  - Road widening includes drainage with pipe culverts having diameter of 910 mm with 428 manholes including inlets; and
  - Inclusion of miscellaneous structures such as sidewalk with curb and gutter, installation of metal guardrails (metal beam) including post, warning signs and application of reflectorized thermoplastic pavement.

Increase in physical target for slope protection from 3,730.00 sq. m. to 4,440.00 sq. m. including decrease in amount with considerable cost due the following:

- The appropriate design for the road slope protection structure is Mechanically Stabilized Earth (MSE) retaining wall and steel sheet pile to support more weight on steeper slope;
- The design for MSE retaining wall includes modular block which is less costly than the anticipated cellular confinement system (using geocell), hence, allocation for road slope protection structure is reduced. The design also includes geogrids (having a height of 3.5-4m) and drainage geotextile, separation geotextile and basal reinforcement woven geotextile having a total area of 84,653.70 sq. m. to reinforce soil and improve resistance to erosion;
- The generated unit cost for slope protection is lesser than the original unit cost. As such, increase in area to cover adjacent
  sections of the road which need slope protection structures.

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Based on our evaluation, the submitted request for modification of the said project is in order hence, it is respectfully recommended to the Secretary for his consideration and approval.

DIMAS S. SOGUILON, CESO I Undersecretary for Regional Operations in Mindanao

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APPROVED/DISAPPROVED:

MARK A. VILLAR Segretary

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Department of Public Works and Highways Office of the Secretary

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