



Republic of the Philippines  
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS  
**CENTRAL OFFICE**  
Manila



August 15, 2024

**MEMORANDUM**

**TO :** **KHADAFFY D. TANGGOL**  
Regional Director  
DPWH-CAR  
Engineer's Hill, Baguio City

**ATTENTION :** **RUBY A. UYAM**  
District Engineer  
Lower Kalinga District Engineering Office  
Bulanao, Tabuk City, Kalinga

Transmitted herewith are the **APPROVED** requests for the **modification** of hereunder stated projects:

1. OO1: Ensure Safe and Reliable National Road System - Asset Preservation - Preventive Maintenance - Tertiary Roads Bulanao-Paracelis Rd, K0508 + 645 - K0513 + 1105 - - - **₱125,000,000.00**
2. OO1: Ensure Safe and Reliable National Road System - Asset Preservation - Preventive Maintenance - Tertiary Roads Malalao Nat'l RD (Agbannawag-Malalao-Bulo Sect) Road, K0514 + 000 - **K0516** + 000, K0512 + 716 - K0513 + 000, K0516 + 415 - K0520 + 000, Tabuk City, Kalinga - - - **₱150,000,000.00**

Please be reminded that all approved modifications **shall be posted in the DPWH website within five (5) days** from its approval. Failure to comply with this requirement shall be dealt with accordingly.

  
**REY PETER B. GILLE, D.M.**

Assistant Secretary for Regional Operations  
in CAR, Regions I, II, IX, X, XI, XII, and XIII

2.3 mksa/AVS/RPBG/ERP

**Project Modification of Allotment under the GAA Request Evaluation Form**

Date of Evaluation: 08/05/2024

<b>P/A/P 1 (OO1, OO2, CSSP, LP):</b>	<b>Appropriation Source:</b>	FY 2024 GAA
ORGANIZATIONAL OUTCOME 1 : Ensure Safe and Reliable National Road System	<b>UACS:</b>	310103101368000
<b>P/A/P 2 (Program):</b>	<b>Project ID:</b>	P00804228LZ
Asset Preservation Program	<b>Region:</b>	Cordillera Administrative Region
<b>P/A/P 3 (Sub-Program):</b>	<b>Implementing Office:</b>	Lower Kalinga District Engineering Office
Preventive Maintenance - Tertiary Roads	<b>Appropriation (Php):</b>	150,000,000

**Name of Project per GAA:**

Malalao Nat'l RD (Agbannawag-Malalao-Bulo Sect) Road, K0514 + 000 -K0056 + 000, K0512 + 716 - K0513 + 000, K0516 + 415 - K0520 + 000, Tabuk City, Kalinga

**A Justification for Modification:**

- The correct physical target for the given station limits based on GAA (K0514+000 -K0056+000, K0512+716 - K0513+000 & K0516+415 - K0520+000) is 11.738 lane km.
- The decrease in the physical target/increase in the unit cost is brought about by the introduction/inclusion of other features of roads particularly Item 624(8)-Solar LED Street Light, Pavement Milling and Pavement Reblocking.
- The change in station-limits is to correct the typographical error on the given-station limits based on GAA
- The asphalt overlay project is 50mm thick also includes Solar LED Street Light and Thermoplastic Pavement Markers.
- The utilization of the prevailing construction cost of materials necessary for the completion of all pertinent Scopes of work contributed to the variance in unit cost thereon causing a decrease in the target length of the proposed asphalt overlay

A.1 ☒ Certificate of Reasonableness of Cost Estimateapproved by: RD Khadaffy D. Tanggol dated: June 08, 2024**B. PER PLANNING SERVICE EVALUATION**B.1 ☒ **PROJECT MODIFICATION ON PROJECT DESCRIPTION**B.1.1 ☐ Typographical Error/sB.1.2 ☐ Change in Location (for non-existent locations only)B.1.3 ☒ Change in Station LimitsB.1.4 ☐ Addition/ Deletion of Word/sB.2 ☒ **PROJECT MODIFICATION/ADJUSTMENTS ON PROJECT COMPONENTS**B.2.1 ☒ Change in TargetsB.2.2 ☐ Change in Scope of WorkB.2.3 ☐ Change in Component AmountB.2.3.1 ☐ Addition of Component (including excess amount)B.2.3.2 ☐ Deletion of ComponentB.2.3.3 ☐ Movement of Funds between Components**C. RESULTANT AFTER MODIFICATION**C.1 ☐ Additional Project Component/sC.2 Component/s:

COMP	SCOPE OF WORK		TARGET		INCREASE/DECREASE (%)	
	FROM	TO	FROM	TO	Unit Cost	Target
CW1	Preventive Maintenance of Road: Asphalt Overlay	Preventive Maintenance of Road: Asphalt Overlay	27.214 lane km	8.031 lane km	238.02%	-70.49%
CW2	-	-	-	-	-	-
CW3	-	-	-	-	-	-
CW4	-	-	-	-	-	-

**D. AS EVALUATED**D.1 ☒ ALLOWED as per the GAA ProvisionsD.2 ☐ NOT ALLOWED as per the GAA ProvisionsD.3 Remarks (to be filled-up by Planning Service):

- Increase in Unit cost is evaluated and reviewed by the Bureau of Construction (BOC) per memorandum dated 03 July 2024 of Director Allan Borromeo.
- The original Php 150,000,000.00 estimated cost was reduced to Php149,634,330.87 resulting to an excess of Php265,669.13.

Evaluated By:

ALEX G. BOTE

Director, Planning Service

Noted By:

CONSTANTE A. LLANES JR., CESO III

Assistant Secretary, Planning Service and the Legislative Liaison Office

**E. Approving Authority as per latest Approved Guidelines on Modification of Allotment under the GAA**E.1 ☒ SecretaryE.2 ☐ Undersecretary for Operations
☒ Recommended for Approval  
☐ Remarks:

MARIA CATALINA E. CABRAL, Ph.D., CESO I  
 Undersecretary for Planning and PPP Services

**DPWH - OSEC**  
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Republic of the Philippines  
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS  
**OFFICE OF THE SECRETARY**  
Manila



July 17, 2024

**MEMORANDUM**

**FOR :** **MANUEL M. BONOAN**  
Secretary  
This Department

This refers to the memorandum dated April 16, 2024, of **DPWH CAR Regional Director KHADAFFY D. TANGGOL**, endorsing the request of **District Engineer RUBY A. UYAM, Lower Kalinga District Engineering Office**, for the **modification** of the project under FY 2024 GAA, to wit;

As per GAA/Original			As Modified		
Project Description					
<b>UACS No. 310103101368000</b> <b>Project ID: P00804228LZ</b>  OO1: Ensure Safe and Reliable National Road System - Asset Preservation - Preventive Maintenance - Tertiary Roads  Malalao Nat'l RD (Agbannawag-Malalao-Bulo Sect) Road, K0514 + 000 -K0056 + 000, K0512 + 716 - K0513 + 000, K0516 + 415 - K0520 + 000, Tabuk City, Kalinga			  OO1: Ensure Safe and Reliable National Road System - Asset Preservation - Preventive Maintenance - Tertiary Roads  Malalao Nat'l RD (Agbannawag-Malalao-Bulo Sect) Road, K0514 + 000 - <b>K0516</b> + 000, K0512 + 716 - K0513 + 000, K0516 + 415 - K0520 + 000, Tabuk City, Kalinga		
Type of Work/ Physical Target	Unit Cost	Allocation	Type of Work/ Physical Target	Unit Cost	Estimated Cost
CW1- Preventive Maintenance of Road: Asphalt Overlay/ 27.214 Lane Kilometers	₱ 5,318,953.48/ Lane Kilometer	₱ 144,750,000.00	CW1- Preventive Maintenance of Road: Asphalt Overlay / <b>8.03063</b> Lane Kilometers	₱ <b>17,979,203.48/</b> Lane Kilometer <i>₱ 35.8 M / km</i>	₱ <b>144,384,330.87</b>
EAO	—	₱ 5,250,000.00	EAO	—	₱ 5,250,000.00
			<b>EXCESS</b>		₱ <b>365,669.13</b>
<b>Total:</b>		<b>₱ 150,000,000.00</b>	<b>Total:</b>		<b>₱ 150,000,000.00</b>

*Excess to be returned to PS w/in 30 cd after approval hereof.*

*Q*

AL- CO- 202407-02847

**Justification:**

The project is to be modified in view of the following:

- The correct physical target for the given station limits based on GAA (K0514+000 – K0056+000, K0512+716 – K0513+000 & K0516+415 – K0520+000) is 11.738 lane km.
- From the corrected physical target of 11.738 lane km. is modified to 8.03063 lane km.
- The decrease in the physical target/increase in the unit cost is brought about by the introduction/inclusion of other features of roads particularly Item 624(8)-Solar LED Street Light, Pavement Milling and Pavement Reblocking.
- The change in station limits is to correct the typographical error on the given station limits based on GAA.
- The asphalt overlay project is 50mm thick also includes Solar LED Street Light and Thermoplastic Pavement Markers.
- The utilization of the prevailing construction cost of materials necessary for the completion of all pertinent scopes of work contributed to the variance in unit cost thereon causing a decrease in the target length of the proposed asphalt overlay
- The unit cost has also been evaluated and reviewed by the Bureau of Construction (BOC). The original Php 150,000,000.00 estimated cost was reduced to Php 149,634,330.87 resulting to an excess of Php 365,669.13.
- The derived unit cost is based on the approved Program of Work (POW) with Detailed Unit Price Analysis (DUPA)

Attached are the following supporting documents: Approved Program of Works (POW) with Detailed Unit Price Analysis (DUPA), Detailed Engineering Design (DED), Certificate of Availability of Funds (CAF), BP 202, Geotagged photos, GIS Map and Certification of No overlapping (Certified by the District Engineer, Planning & Design, Construction and Maintenance Division Chief).


Based on our evaluation, the submitted request for modification of the said project is in order; hence, approval hereof is recommended.

  
**REY PETER B. GILLE, D.M.**

Assistant Secretary for Regional Operations  
in CAR, Regions I, II, IX, X, XI, XII and XIII

**RECOMMENDING APPROVAL:**

  
**MARIA CATALINA E. CABRAL, Ph.D., CESO I**  
Undersecretary for Planning  
and Public-Private Partnership Services

  
**EUGENIO R. PIHO, JR.**  
Undersecretary for Regional Operations  
in CAR, Regions I, II, IX, X, XI, XII, and  
XIII

**APPROVED/~~DISAPPROVED~~:**

  
**MANUEL M. BONOAN**  
Secretary

Department of Public Works and Highways  
Office of the Secretary



WIN4XW00132





April 16, 2024

## MEMORANDUM

**FOR : MANUEL M. BONOAN**  
Secretary

**THRU : EUGENIO R. PIPO, JR.**  
Undersecretary for Regional Operations  
CAR, Regions I, II, IX, X, XI, XII, and XIII

**SUBJECT : Request for Modification of the Project: ORGANIZATIONAL OUTCOME 1: Ensure Safe and Reliable National Road System - Asset Preservation - Preventive Maintenance – Tertiary Roads- Malalao Nat'l RD (Agbannawag-Malalao-Bulo Sect) Road, K0514 + 000 -K0516 + 000, K0512 + 716 - K0513 + 000, K0516 + 415 - K0520 + 000, Tabuk City, Kalinga , under the FY 2024 General Appropriations Act.**

We are respectfully forwarding the Memorandum dated April 15, 2024 from District Engineer Ruby A. Uyam, Lower Kalinga District Engineering Office, regarding the modification of the above project in the amount of **One Hundred Fifty Million Pesos (Php 150,000,000.00)** as indicated below:

	FROM	TO
Project ID	<b>P00804228LZ</b>	
Project Title	Malalao Nat'l RD (Agbannawag-Malalao-Bulo Sect) Road, K0514 + 000 - <b>K0056</b> + 000, K0512 + 716 - K0513 + 000, K0516 + 415 - K0520 + 000, Tabuk City, Kalinga	Malalao Nat'l RD (Agbannawag-Malalao-Bulo Sect) Road, K0514 + 000 - <b>K0516</b> + 000, K0512 + 716 - K0513 + 000, K0516 + 415 - K0520 + 000, Tabuk City, Kalinga
Type of Work	CW1- Preventive Maintenance of Road: Asphalt Overlay	CW1- Preventive Maintenance of Road: Asphalt Overlay
Physical Target	CW1- <b>27.214</b> Lane Kilometers	CW1- <b>8.03063</b> Lane Kilometer
Allocation	CW1- Php 144,750,000.00 EAO- Php 5,250,000.00	CW1- Php 144,384,330.87 EAO- Php 5,250,000
		EXCESS – Php 365,669.13

The supporting documents based on D.O No. 23, series of 2023 are attached for your ready reference.

For the consideration of the Secretary.

  
**KHADAFFY D. TANGGOL**  
Regional Director

CAR.1 RBP/EFD/JWC/ABM



Republic of the Philippines  
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS  
**LOWER KALINGA DISTRICT ENGINEERING OFFICE**  
Bulanao, Tabuk City, Kalinga, Cordillera Administrative Region



April 15, 2024

**MEMORANDUM**

**FOR : KHADAFFY D. TANGGOL**  
Regional Director

**THRU : ANGELITA B. MABITAZAN**  
Chief, Planning & Design Division

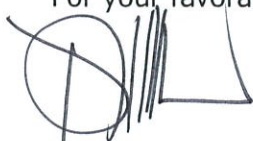
**SUBJECT : Modification CY 2024 GAA – Asset Preservation - Preventive Maintenance - Tertiary Roads - Malalao Nat'l RD (Agbannawag-Malalao-Bulo Sect) Road, K0514 + 000 -K0056 + 000, K0512 + 716 - K0513 + 000, K0516 + 415 - K0520 + 000, Tabuk City, Kalinga, Tabuk City, Kalinga, under the FY 2024 General Appropriations Act**

May we submit for review and evaluation the Modification of the project stated below:

FROM	TO
Malalao Nat'l RD (Agbannawag-Malalao-Bulo Sect) Road, K0514 + 000 -K0056 + 000, K0512 + 716 - K0513 + 000, <b>K0516</b> + 415 - K0520 + 000, Tabuk City, Kalinga	Malalao Nat'l RD (Agbannawag-Malalao-Bulo Sect) Road, K0514 + 000 -K0056 + 000, K0512 + 716 - K0513 + 000, <b>K0516</b> + 415 - K0520 + 000, Tabuk City, Kalinga
Physical Target: <b>27.214</b> Lane Kilometer Amount : ₱ 150,000,000.00	Physical Target: <b>8.03063</b> Lane Kilometer Amount : ₱ 150,000,000.00

Attached are all Supporting documents based on D.O No. 37, series of 2018 for your ready reference.

For your favorable consideration.

  
**RUBY A. UYAM**  
District Engineer

CAR 15.1 MAE/ABN/EMJE





Republic of the Philippines  
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS  
**CENTRAL OFFICE**



July 3, 2024

**MEMORANDUM**

**FOR** : **Undersecretary EUGENIO R. PIPO, JR.**  
Regional Operations in CAR, Regions I, II, IX, X, XI, XII and XIII

**SUBJECT** : **Request for the Approval of Modification of the Project under FY2024 GAA:**

**Organizational Outcome 1: Ensure Safe and Reliable National Road System – Asset Preservation Program– Preventive Maintenance – Tertiary Roads**

1. P00802254LZ: Balbalan – Pinukpuk Rd – K0516+200 – K0518+939, K0519+053 – K0519+759, Pinukpuk, Kalinga
2. P00804227LZ: Bulanao – Paracelis Rd, K0508+645 – K0513+1105, Tabuk City, Kalinga

**Organizational Outcome 1: Ensure Safe and Reliable National Road System – Asset Preservation Program – Preventive Maintenance – Secondary Roads**

3. P00804225LZ: Mt. Province Bdry – Calanan – Pinukpuk – Abbut Rd (Calanan – Pinukpuk Section), K0512+000 – K0513+398, K0514+000 -K0515+000, K0515+265 – K0518+000, Tabuk City, Kalinga

**Organizational Outcome 1: Ensure Safe and Reliable National Road System – Asset Preservation Program – Preventive Maintenance – Tertiary Roads**

4. **P00804228LZ**: Malalao National Road (Agbannawag – Malalao – Bulu Section), K0514+000 – K0516+000, K0512+716 – K0513+000, K516+415 – K0520+000, Tabuk City, Kalinga
5. P00802251LZ: Rizal National Road (Liwan West – Babalag – Macutay Sect), K0522+(-569) – K0522+(-092.871), Rizal, Kalinga

Forwarded herewith are the results of the evaluation for the above-mentioned requests, which was resubmitted to this Office per Memorandum dated June 7, 2024 (**Annex "A"**).

The requested amount of **P517,139,000.00** (inclusive of EAO) for the five (5) asphalt overlay projects was reduced to **P513,962,380.54** (inclusive of EAO) due to corrections made on the utilization of manpower, rental rate of equipment and utilization of material component. Likewise, the items of work involved and corresponding quantities were based



on the approved Program of Works (POW), Detailed Engineering Design Plan, and other pertinent documents, duly approved by the District Engineer, DPWH - Lower Kalinga District Engineering Office.

## PROJECT NO.1

The requested amount of **P80,139,000.00** (inclusive of EAO) for the 6.884 lane kilometer of Balbalan – Pinukpuk Rd – K0516+200 – K0518+939, K0519+053 – K0519+759, Pinukpuk, Kalinga, as submitted, was reduced to **P77,625,407.10** (inclusive of EAO) due to the corrections made on the productivity output, manpower components, rental rate of equipment and material component. Likewise, the items of work involved and corresponding quantities were based on the approved Program of Works (POW), Detailed Engineering Design Plan, and other pertinent documents, duly approved by the District Engineer, DPWH - Lower Kalinga District Engineering Office.

## SCOPE OF WORK

ITEM NO.	DESCRIPTION	AMOUNT (Total Cost)	PERCENT WEIGHT (%)
Part B	Other General Requirements	P 249,616.23	0.33%
Part C	Earthworks	P 24,712.67	0.03%
Part D	Subbase and Base Course	P 12,240.42	0.02%
Part E	Surface Course	P 72,644,932.74	96.98%
Part G	Drainage and Slope Protection Structures	P 1,977,015.79	2.64%
<b>Grand Total</b>		<b>P 74,908,517.85</b>	<b>100.00%</b>

Cost per lane kilometer =  $\frac{P72,644,932.74}{6.884 \text{ lane km}} = \text{P10,552,721.20 /lane km}$   
 Of Asphalt Overlay  
 (Part E only)

The estimated cost of **P10,552,721.20** per lane kilometer is due to the design requirements as reflected in the Approved Detailed Engineering Design Plan for the asphalt overlay, which involves the provision of 0.28 meter thick reblocking of concrete pavement, Bituminous Concrete Surface Wearing Course, Hot-Laid; 50mm thick and Emulsified Asphalt, which accounts to **96.98%** of the total project cost, aggregate subbase course, and reflectorized thermoplastic pavement markings, coupled with recent price escalation and hauling of construction materials at 127.26 km away from the project. Hence, the evaluated cost is considered reasonable as the Unit Costs of the items of work involved are within the range of the prevailing cost of the Department.



## PROJECT NO.2

The requested amount of **P125,000,000.00** (inclusive of EAO) for the 6.93154 lane kilometer of Bulanao – Paracelis Rd, K0508+645 – K0513+1105, Tabuk City, Kalinga, as submitted, was reduced to **P124,800,928.42** (inclusive of EAO) due to the corrections made on the productivity output, manpower components, rental rate of equipment and material component. Likewise, the items of work involved and corresponding quantities were based on the approved Program of Works (POW), Detailed Engineering Design Plan, and other pertinent documents, duly approved by the District Engineer, DPWH - Lower Kalinga District Engineering Office.

## SCOPE OF WORK

ITEM NO.	DESCRIPTION	AMOUNT (Total Cost)	PERCENT WEIGHT (%)
Part B	Other General Requirements	P 463,361.06	0.38%
Part C	Earthworks	P 806,993.70	0.67%
Part D	Base and Subbase Course	P 563,239.62	0.47%
Part E	Surface Course	P 72,735,474.07	60.40%
Part H	Miscellaneous Structures	P 45,863,827.48	38.08%
<b>Grand Total</b>		<b>P 120,432,895.93</b>	<b>100.00%</b>

Cost per lane kilometer =  $\frac{P\ 72,735,474.07}{6.93154\ \text{lane km}} = \mathbf{P10,493,407.54 /lane\ km}$   
 Of Asphalt Overlay  
 (Part E only)

The estimated cost of **P10,493,407.54** per lane kilometer is due to the design requirements as reflected in the Approved Detailed Engineering Design Plan for the asphalt overlay, which involves the provision of 0.28 meter thick reblocking of concrete pavement, Bituminous Concrete Surface Wearing Course, Hot-Laid; 50mm thick and Emulsified Asphalt, which accounts to **60.40%** of the total project cost, aggregate subbase course, and miscellaneous structures such as reflectorized thermoplastic pavement markings and solar LED street light which accounts to **38.08%** of the total project cost, coupled with recent price escalation and hauling of construction materials at 127.26 km away from the project. Hence, the evaluated cost is considered reasonable as the Unit Costs of the items of work involved are within the range of the prevailing cost of the Department.

## PROJECT NO.3

The requested amount of **P150,000,000.00** (inclusive of EAO) for the 8.13557 lane kilometer of Mt. Province Bdry – Calanan – Pinukpuk – Abbut Rd (Calanan – Pinukpuk Section) K0512+000 – K513+398, K0514+000 – K515+000, K0515+265 – K0518+000, Tabuk City,



Kalinga, as submitted, was reduced to **P149,723,434.31** (inclusive of EAO) due to the corrections made on the productivity output, manpower components, equipment components, and material component. Likewise, the items of work involved and corresponding quantities were based on the approved Program of Works (POW), Detailed Engineering Design Plan, and other pertinent documents, duly approved by the District Engineer, DPWH - Lower Kalinga District Engineering Office.

## SCOPE OF WORK

ITEM NO.	DESCRIPTION	AMOUNT (Total Cost)	PERCENT WEIGHT (%)
Part B	Other General Requirements	P 358,459.29	0.25%
Part C	Earthworks	P 994,976.43	0.69%
Part D	Base and Subbase Course	P 590,310.74	0.41%
Part E	Surface Course	P 84,257,886.91	58.31%
Part H	Miscellaneous Structures	P 58,281,480.74	40.34%
<b>Grand Total</b>		<b>P 144,483,114.11</b>	<b>100.00%</b>

Cost per lane kilometer =  $\frac{P84,257,886.91}{8.13557 \text{ lane km}}$  = **P10,356,728.16 /lane km**  
Of Asphalt Overlay  
(Part E only)

The estimated cost of **P10,356,728.16** per lane kilometer is due to the design requirements as reflected in the Approved Detailed Engineering Design Plan for the asphalt overlay, which involves the provision of 0.28 meter thick reblocking of concrete pavement, Bituminous Concrete Surface Wearing Course, Hot-Laid; 50mm thick and Emulsified Asphalt, which accounts to **58.31%** of the total project cost, aggregate subbase course, and miscellaneous structures such as reflectorized thermoplastic pavement markings and solar LED street light which accounts to **40.34%** of the total project cost, coupled with recent price escalation and hauling of construction materials at 122.26 km away from the project. Hence, the evaluated cost is considered reasonable as the Unit Costs of the items of work involved are within the range of the prevailing cost of the Department.

## PROJECT NO.4

The requested amount of **P150,000,000.00** (inclusive of EAO) for the 8.03063 lane kilometer of Malalao Nat'l Rd (Agbannawag – Malalao – Bulu Sect) Road, K0514+000 – K0516+000, K0512+716 – K0513+000, K516+415 – K0520+000, Tabuk City, Kalinga as submitted, was reduced to **P149,844,012.31** (inclusive of EAO) due to the corrections made on the productivity output, manpower components, and material component. Likewise, the items of work and corresponding quantities were based on the approved Program of Works



(POW), Detailed Engineering Design Plan, and pertinent documents, duly approved by the District Engineer, DPWH Lower Kalinga District Engineering Office.

## SCOPE OF WORK

ITEM NO.	DESCRIPTION	AMOUNT (Total Cost)	PERCENT WEIGHT (%)
Part B	Other General Requirements	P 429,404.25	0.30%
Part C	Earthworks	P 1,323,187.20	0.92%
Part D	Base and Subbase Course	P 423,784.73	0.29%
Part E	Surface Course	P 85,521,822.13	59.14%
Part H	Miscellaneous Structures	P 56,901,273.57	39.35%
<b>Grand Total</b>		<b>P 144,599,471.88</b>	<b>100.00%</b>

Cost per lane kilometer =  $\frac{P85,521,822.13}{8.03063 \text{ lane km}}$  = **P10,649,453.67 /lane km**  
 Of Asphalt Overlay  
 (Part E only)

The estimated cost of **P10,649,453.67** per lane kilometer is due to the design requirements as reflected in the Approved Detailed Engineering Design Plan for the asphalt overlay, which involves the provision of 0.28 meter thick reblocking of concrete pavement, Bituminous Concrete Surface Wearing Course, Hot-Laid; 50mm thick and Emulsified Asphalt, which accounts to **59.14%** of the total project cost, aggregate subbase course, and miscellaneous structures such as reflectorized thermoplastic pavement markings and solar LED street light which accounts to **39.35%** of the total project cost, coupled with recent price escalation and hauling of construction materials at 127.22 km away from the project. Hence, the evaluated cost is considered **reasonable as the Unit Costs** of the items of work involved are within the range of the prevailing cost of the Department.

## PROJECT NO.5

The requested amount of **P12,000,000.00** (inclusive of EAO) for the 0.9262 lane kilometer of Rizal Nat'l Rd (Liwan West – Babalag – Macutay Sect) – K0522+(-569) – K0522+(-092.871), Rizal, Kalinga as submitted, was reduced to **P11,968,598.40** (inclusive of EAO) due to the corrections made on the productivity output, manpower components, and material component. Likewise, the items of work and corresponding quantities were based on the approved Program of Works (POW), Detailed Engineering Design Plan, and other pertinent documents, duly approved by the District - Engineer, DPWH Lower Kalinga District Engineering Office.



## SCOPE OF WORK

ITEM NO.	DESCRIPTION	AMOUNT (Total Cost)	PERCENT WEIGHT (%)
Part B	Other General Requirements	P 146,857.40	1.24%
Part C	Earthworks	P 248,923.62	2.13%
Part D	Base and Subbase Course	P 42,914.00	0.37%
Part E	Surface Course	P 11,057,835.86	94.28%
Part H	Miscellaneous Structures	P 232,695.55	1.98%
<b>Grand Total</b>		<b>P 11,729,226.43</b>	<b>100.00%</b>

Cost per lane kilometer =  $\frac{P11,057,835.56}{0.9262 \text{ lane km}}$  = **P11,938,928.81 /lane km**  
Of Asphalt Overlay  
(Part E only)

The estimated cost of **P11,938,928.81** per lane kilometer is due to the design requirements as reflected in the Approved Detailed Engineering Design Plan for the asphalt overlay, which involves the provision of 0.28 meter thick reblocking of concrete pavement, Bituminous Concrete Surface Wearing Course, Hot-Laid; 50mm thick and Emulsified Asphalt, which accounts to **94.28%** of the total project cost, aggregate subbase course, and miscellaneous structures such as reflectorized thermoplastic pavement markings and internally illuminated (solar) pavement levelled marker/stud flush type-bi-directional, coupled with recent price escalation and hauling of construction materials at 107.00 km away from the project. Hence, the evaluated cost is considered reasonable as the Unit Costs of the items of work involved are within the range of the prevailing cost of the Department.

**ALLAN S. BORRAMEO, CESO III**  
Director, Bureau of Construction

CC: Undersecretary ADOR G. CANLAS, CESO IV, for Technical Services and Information Management Service (IMS)  
Assistant Secretary REY PETER B. GILLE, D.M., For Regional Operations in CAR, Regions I, II, IX, X, XI, XII and XIII  
Regional Director KHADAFFY D. TANGGOL, DPWH-Cordillera Administrative Region



**CHECKLIST**  
**PROJECT MODIFICATION**

Implementing Office : Lower Kalinga DEO

**Organizational Outcome 1: Ensure Safe and Reliable National Road System**  
**- Asset Preservation - Preventive Maintenance -Tertiary Roads - Malalao**  
**Natl Rd (Agbannawag-Malalao-Bulo Sect) - K0514 + 000 - K0516 + 000,**  
**K0512 + 716 - K0513 + 000, K0516 + 415 - K0520 + 000**

Project ID : P00804228LZ  
Project Allocation : P150,000,000.00

UACS Code : 310103101368000

- ☒ 1. Modification Request Form
- ☒ 2. AIP
- ☒ 3. Certificate of Availability of Funds
- ☒ 4. Supporting Data & Analysis
- ☒ a. Road Condition (RBIA Latest Official Database )
- ☒ b. Traffic Volume Capacity Ratio (for Widening Projects )
- ☒ c. Bridge Condition (BMS Latest Official Database )
- ☒ d. Hydraulic & Hydrologic Analysis (for New/Replacement Bridges )
- ☒ e. RSM Forms (for Road Slips )
- ☒ f. Project Impact Analysis (for Flood Control Projects )
- ☒ g. Master Plan (for Flood Control Projects )
- ☒ 5. BP 202
- ☒ 6. Geotagged Photos
- ☒ a. Hard Copy
- ☒ b. Electronic Copy
- ☒ c. Plotted in the GIS Map
- ☒ 7. Certificate of No Overlapping (Certified by DE, Construction and Maintenance Division Chiefs)
- ☒ 8. ROW Clearance
- ☒ a. District Engineer
- ☒ b. LGU
- ☒ 9. Environmental Clearances
- ☒ a. Not Within a "No Build Zone" (MGB )
- ☒ b. Tree Cutting Permit (If Applicable-EMB )
- ☒ c. CNC/ECC/EIA (EMB )
- ☒ 10. Social Clearance (not within a Declared Heritage/Cultural Site-NCCA )
- ☒ 11. Certificate of Reasonableness (for Projects with Changes in Unit Cost )
- ☒ 12. Project Details
- ☒ a. POW
- ☒ b. DUPA
- ☒ c. Plans
- ☒ 1. Coverpage
- ☒ 2. Summary of Quantities
- ☒ 3. Cross Section Showing Changes (if Applicable )
- ☒ d. Materials Source Map
- ☒ 13. Certificate of Local Government Unit

Checked by:

  
**ERLINDA F. DOLIENTE**

Engineer III  
Chief, Planning Section

## A. GENERAL

### 1. REGION

Cordillera Administrative Region

### 2. DEO

Lower Kalinga District Engineering Office

### 3. LEGISLATIVE DISTRICT

KALINGA (LONE DISTRICT)

## B. ORIGINAL PROJECT

## C. PROPOSED REVISED PROJECT

### 4. UACS (Unified Account Code Structure as defined in GAA)

310103101368000

### 5. Project Id

P00804228LZ

### 6. Project Category

OO1: Ensure Safe and Reliable National Road System

### 7. Sub-Program (P/A/P)

Asset Preservation - Preventive Maintenance - Tertiary Roads

### 8. Operating Unit

Central Office

### 18. Operating Unit (Change subject to DBM approval)

Central Office

### 9. Type of Work (Enter Details for all Components below)

#### Component ID

#### Type of Work

CW1

Preventive Maintenance of Road:  
Asphalt Overlay

### 19. Type of Work (Enter Details for all Components below)

#### Component ID

#### Type of Work

CW1

Preventive Maintenance of Road:  
Asphalt Overlay

### 10. PROJECT DESCRIPTION (as recorded in GAA)

Malalao Nat'l RD (Agbannawag-Malalao-Bulo Sect) Road, K0514 + 000 - ~~K0056~~ + 000, K0512 + 716 - K0513 + 000, K0516 + 415 - K0520 + 000, Tabuk City, Kalinga

### 20. PROJECT DESCRIPTION (of the revised project)

Malalao Nat'l RD (Agbannawag-Malalao-Bulo Sect) Road, K0514 + 000 - ~~K0516~~ + 000, K0512 + 716 - K0513 + 000, K0516 + 415 - K0520 + 000, Tabuk City, Kalinga

### 11. ALLOTMENT (P'000) (as recorded in GAA)

150,000

### 21. REVISED ESTIMATED COST (P'000) (Equal to, or lower than GAA allotment)

150,000

### 22. CAF (To be obtained from Financial Management office)

☒ YES

### 12. PHYSICAL TARGET (Enter Details for all Components below)

#### Component ID

#### Target

#### Target Unit

CW1

27.214

Lane Km

### 23. PHYSICAL TARGET (Enter Details for all Components below)

#### Component ID

#### Target

#### Target Unit

CW1

8.03063

Lane Km

### 13. UNIT COST (Enter Details for all Components below)

#### Component ID

#### Component Cost (P'000)

#### Target Unit Cost (P'000/Target Unit)

CW1

144,750

5,318.953

EAO

5,250

### 24. UNIT COST (Enter Details for all Components below)

#### Component ID

#### Component Cost (P'000)

#### Target Unit Cost (P'000/Target Unit)

CW1

144,384.33087

17,979.20348

EAO

5,250

EXCESS

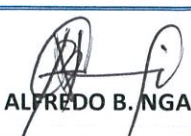
365.66913




<b>14. PROJECT WORK LOCATION (Must be defined in strict accordance with DO 65 Series 2014)</b> Malalao Nat'l RD (Agbannawag-Malalao-Bulo Sect) Road, K0514 + 000 - <del>K0056</del> + 000, K0512 + 716 - K0513 + 000, K0516 + 415 - K0520 + 000, Tabuk City, Kalinga				<b>25. PROJECT WORK LOCATION (Must be defined in strict accordance with DO 65 Series 2014. Also complete "ANNEX A" for National Road projects under OO-1)</b> Malalao Nat'l RD (Agbannawag-Malalao-Bulo Sect) Road, K0514 + 000 - <del>K0516</del> + 000, K0512 + 716 - K0513 + 000, K0516 + 415 - K0520 + 000, Tabuk City, Kalinga			
Start X	121.53510	End X	121.5633857	Start X	121.53510	End X	121.55355
Start Y	17.361980	End Y	17.35240060	Start Y	17.361980	End Y	17.326070
<b>15. ROAD CLASSIFICATION (if applicable)</b> Tertiary				<b>26. ROAD CLASSIFICATION (if applicable)</b> Tertiary			
<b>16. IMPLEMENTING OFFICE (Record the Implementing Office of the original project)</b> Lower Kalinga District Engineering Office				<b>27. IMPLEMENTING OFFICE (Record the Implementing Office of the proposed revised project)</b> Lower Kalinga District Engineering Office			
<b>17. PROJECT IMPLEMENTATION PLAN (PIP)</b>				<b>28. PROJECT IMPLEMENTATION PLAN (PIP)</b>			
Planned Start Date		Planned End Date		Planned Start Date		Planned End Date	
25/02/2024		22/09/2024		06/05/2024		02/12/2024	
				<b>29. OVERLAP?</b> <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES		<b>30. UNDER WARRANTY?</b> <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES	

D. ATTACHMENTS & JUSTIFICATIONS	
<b>31. PROJECT IMPACT ANALYSIS ATTACHED? (For Flood Control Projects)</b> <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A	
<b>32. TECHNICAL JUSTIFICATION (Explain in detail in Bullet point format; minimum of 2 points)</b> Decrease in physical target for CW1 - Preventive Maintenance of Road: Asphalt Overlay from 27.214 Lane Kilometer to 8.03063 Lane Kilometer due to the following: <ul style="list-style-type: none"> <li>The correct physical target for the given station limits based on GAA (K0514+000 – K0056+000, K0512+716 – K0513+000 &amp; K0516+415 – K0520+000) is 11.738 lane km.</li> <li>From the corrected physical target of 11.738 lane km. is modified to 8.03063 lane km.</li> <li>The decrease in the physical target/increase in the unit cost is brought about by the introduction/inclusion of other features of roads particularly Item 624(8)-Solar LED Street Light, Pavement Milling and Pavement Reblocking.</li> <li>The change in station limits is to correct the typographical error on the given station limits based on GAA.</li> <li>The asphalt overlay project is 50mm thick also includes Solar LED Street Light and Thermoplastic Pavement Markers.</li> <li>The utilization of the prevailing construction cost of materials necessary for the completion of all pertinent scopes of work contributed to the variance in unit cost thereon causing a decrease in the target length of the proposed asphalt overlay</li> <li>The unit cost has also been evaluated and reviewed by the Bureau of Construction (BOC). The original Php 150,000,000.00 estimated cost was reduced to Php 149,634,330.87 resulting to an excess of Php 365,669.13.</li> <li>The derived unit cost is based on the approved Program of Work (POW) with Detailed Unit Price Analysis (DUPA)</li> </ul> <p>See also the attached evaluation of the Bureau of Construction on the unit cost of similar type projects. Attached are the following supporting documents: Approved Program of Works (POW) with Detailed Unit Price Analysis (DUPA), Detailed Engineering Design (DED), Certificate of Availability of Funds (CAF), BP 202, Geotagged photos, Certificate of Reasonableness, SLD, and GIS Map.</p>	
<b>33. PHOTOS SUBMITTED</b> <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES	
<b>34. A MAP OF THE PROPOSED PROJECT WORK LOCATION SUBMITTED</b>	

**35. PREPARED BY:**

<b>Name:</b>	 <b>ALFREDO B. NGAO-I</b>	<b>Position:</b>	Engineer II
<b>Office:</b>	Lower Kalinga District Engineering Office	<b>Date:</b>	

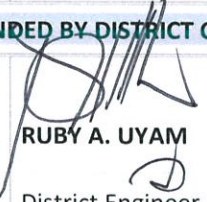
**36. REVIEWED BY DISTRICT OFFICE (If Required)**

<b>Name:</b>	 <b>EUGENE MICHAEL J. ESPITA</b>
<b>Position:</b>	OIC-Chief, Planning & Design Section
<b>Date:</b>	

**38. REVIEWED BY REGIONAL OFFICE**

<b>Name:</b>	 <b>ANGELITA B. MABITAZAN</b>
<b>Position:</b>	Chief, Planning and Design Division
<b>Date:</b>	

**37. RECOMMENDED BY DISTRICT OFFICE (If Required)**

<b>Name:</b>	 <b>RUBY A. UYAM</b>
<b>Position:</b>	District Engineer
<b>Date:</b>	

**39. RECOMMENDED BY REGIONAL OFFICE**

<b>Name:</b>	 <b>KHADAFFY D. TANGGOL</b>
<b>Position:</b>	Regional Director
<b>Date:</b>	



UACS (Unified Account Code Structure as defined in GAA)

310103101368000

Project Id

P00804228LZ

**40. DPWH OFFICE OF THE UNDERSECRETARIES FOR OPERATIONS**

Primary Reason for Request (based on Category of Modification): (choose one)

Category A	Category B	Category C	Category D	Impact
<input type="checkbox"/> Typographical error on Project Description	<input type="checkbox"/> Overlapping Sections <input type="checkbox"/> Change in Station Limits <input type="checkbox"/> Change in Physical Target	<input type="checkbox"/> No such Barangay <input type="checkbox"/> No such City or Municipality	<input type="checkbox"/> Change in (IO), requiring a change in the (OU)	<input type="checkbox"/> No change or decrease in unit cost <input type="checkbox"/> 20% or less increase in unit cost <input type="checkbox"/> > 20% increase in unit cost

Reviewed by Office of the Undersecretary for Operations

Name:	Engr. MANUEL L. SINGSON	Engr. ANTONIO V. SOBREVÍÑAS, JR.
Signature		
Position:	Project Manager I	Project Manager III
Date:	7/18/24	7/17/24

**41. DPWH PLANNING SERVICE**

Category of Modification (please check the appropriate)	<input type="checkbox"/> Category A – Typographical Error <input type="checkbox"/> Category B – Change in Station Limits <input type="checkbox"/> Category C – Change in Location, due to non-existing location <input type="checkbox"/> Category D – Change in Operating Unit (requires DBM approval) <input type="checkbox"/> Modification does not comply with DBM Categories
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Reviewed by Planning Service

Name:	ANNA ANDREA M. NOCHE	Name:	PETER PAUL R. CORTEZ
Signature		Signature:	
Position:	Regional Coordinator	Position:	OIC - Chief of Programming Division
Date:	8/5/24	Date:	

## ANNEX A: Project Work Location Details for National Roads

Component ID	Section ID	Start Limit LRP + Disp	End Limit LRP + Disp	Start Chainage	End Chainage	Length (m)	Type of Work	Detail Scope of Work	Target Unit	Physical Target
P00804228LZ - CW1	S00600LZ	K0514 + 000	K0516 + 000	3091	5091	2000	Preventive Maintenance of Road: Asphalt Overlay	Asphalt Overlay 50mm with Correction, Solar Studs, Pavement Markings	Lane Kilometer	4
		K0512 + 716	K0513 + 000	1807	2091	284				0.568
		K0516 + 415	K0520 + 000	5506	9091	3585				3.46263