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

BAGONG PILIPINAS

November 04, 2024

MEMORANDUM

TO : **KHADAFFY D. TANGGOL**
Regional Director
DPWH-Cordillera Administrative Region (CAR)
Engineer's Hill, Baguio City

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

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

1. OO2: Protect Lives and Properties - Construction/ Rehabilitation of Flood Mitigation Facilities within Major River Basins and Principal Rivers - Construction of Ngipen Bridge, Bantay Flood Control along Chico River, Bantay Tabuk City, Kalinga- - - - - - - - - **₱60,000,000.00.**
2. OO2: Protect Lives and Properties - Construction/ Maintenance of Flood Mitigation Structures and Drainage Systems - Construction of Drainage Canal along Mt. Province Bdry. - Calanan - Pinukpuk - Abbut Road, Calanan-Pinukpuk Junction Section, K0496+(-150) - K0497+346, Calanan, Tabuk City, Kalinga - - - - - - - - **₱27,998,000.00.**

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.

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

2.3 aap/AVS/ERP

Project Modification of Allotment under the GAA Request Evaluation Form

Date of Evaluation: 10/17/2024

P/A/P 1 (OO1, OO2, CSSP, LP):	Appropriation Source:	FY 2024 GAA
ORGANIZATIONAL OUTCOME 2 : Protect Lives and Properties Against Major Floods	UACS:	320102106096000
P/A/P 2 (Program):	Project ID:	P00824847LZ
Flood Management Program	Region:	Cordillera Administrative Region
P/A/P 3 (Sub-Program):	Implementing Office:	Lower Kalinga District Engineering Office
Construction/ Rehabilitation of Flood Mitigation Facilities within Major River Basins and Principal Rivers	Appropriation (Php):	60,000,000

Name of Project per GAA:

Construction of Ngipen Bridge, Bantay Flood Control along Chico River, Bantay Tabuk City, Kalinga

A Implementing Office Justification for Modification:

• CW1 consists of a Concrete Revetment-Crib Wall with a nominal height of 11.9 meters and a penetration depth of 3 meters. Additionally, sheet piles were included to prevent overturning since the section is prone to soil collapse due to the river's meandering, which causes the river current to directly impact the structure. Lastly, Hexapods are used to prevent scouring at the base of a river structure by dissipating the energy of flowing water, which reduces its erosive potential. Their unique shape and increased surface area help distribute the forces of the water more evenly, preventing localized erosion. By interlocking and creating a stable, flexible barrier, hexapods stabilize the riverbed and the base of the structure, preventing sediment movement and undercutting, thereby ensuring the structure's stability and longevity.
• The unit cost has also been evaluated and reviewed by Bureau of Construction (BOC) last September 12, 2024. The original Php 60,000,000.00 estimated cost was reduced to Php 59,960,538.14 resulting to an excess of Php 39,461.86.

A.1 [✓] Certificate of Reasonableness of Cost Estimate approved by: RD Khadaffy D. Tanggol dated: May 21, 2024

DPWH - OSEC RECEIVED OCT 29 2024 By: Time: Control No 24-17936 IDTS No. 16608

B. PER PLANNING SERVICE EVALUATION

B.1 [ ] **PROJECT MODIFICATION ON PROJECT DESCRIPTION**

- B.1.1 [ ] Typographical Error/s
- B.1.2 [ ] Change in Location (for non-existent locations only)
- B.1.3 [ ] Change in Station Limits
- B.1.4 [ ] Addition/ Deletion of Word/s

B.2 [✓] **PROJECT MODIFICATION/ADJUSTMENTS ON PROJECT COMPONENTS**

- B.2.1 [✓] Change in Targets
- B.2.2 [ ] Change in Scope of Work
- B.2.3 [ ] Change in Component Amount
  - B.2.3.1 [ ] Addition of Component (including excess amount)
  - B.2.3.2 [ ] Deletion of Component
  - B.2.3.3 [ ] Movement of Funds between Components

C. RESULTANT AFTER MODIFICATION

C.1 [ ] Additional Project Component/s

C.2

COMP	SCOPE OF WORK		TARGET		INCREASE/ DECREASE (%)	
	FROM	TO	FROM	TO	Unit Cost	Target
CW1	Construction of Flood Mitigation Structure	Construction of Flood Mitigation Structure	492.298 lm	150.0 lm	227.98%	-97.21%
CW2	-	-	-	-	-	-
CW3	-	-	-	-	-	-
CW4	-	-	-	-	-	-

D. AS EVALUATED

D.1 [✓] ALLOWED as per the GAA Provisions

D.2 [ ] NOT ALLOWED as per the GAA Provisions

D.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 12 September 2024 of Director Allan Borromeo.
• The original Php 60,000,000.00 estimated cost was reduced to Php 59,960,538.14 resulting to an excess of Php 39,461.86.

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

10/18/24

E. Approving Authority as per latest Approved Guidelines on Modification of Allotment under the GAA

E.1 [✓] Secretary

E.2 [ ] Undersecretary for Operations

[✓] Recommended for Approval
[ ] Remarks:

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

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

BAGONG PILIPINAS

September 16, 2024

MEMORANDUM

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

This refers to the memorandum dated June 25, 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					
UACS No. 320102106096000 **Project ID: P00824847LZ** OO2: Protect Lives and Properties - Construction/ Rehabilitation of Flood Mitigation Facilities within Major River Basins and Principal Rivers Construction of Ngipen Bridge, Bantay Flood Control along Chico River, Bantay Tabuk City, Kalinga			OO2: Protect Lives and Properties - Construction/ Rehabilitation of Flood Mitigation Facilities within Major River Basins and Principal Rivers Construction of Ngipen Bridge, Bantay Flood Control along Chico River, Bantay Tabuk City, Kalinga		
Type of Work/ Physical Target	**Unit Cost**	**Allocation**	**Type of Work/ Physical Target**	**Unit Cost**	**Estimated Cost**
CW1- Construction of Flood Mitigation Structure/ 492.298 Lineal Meters	₱ 117,611.69 / Lineal Meter	**₱ 57,900,000.00**	CW1- Construction of Flood Mitigation Structure / **150** Lineal Meters	**₱ 385,746.13** / Lineal Meter	₱ 57,861,919.31
EAO	–	₱ 2,100,000.00	EAO	–	₱ 2,098,618.83
			EXCESS		**₱ 39,461.86**
		₱ 60,000,000.00		**Total:**	**₱ 60,000,000.00**

Excess to be returned to the Finance Service
₱ w/in 30 cd from approval
hereof

AC-eo-202410-03695

Justification:

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

- The increase in the unit cost and decrease in the physical target of CW1 from 492.30 linear meters to 150 linear meters is based on the Approved Program of Works (POW) with Detailed Unit Price Analysis (DUPA).
- CW1 consists of a Concrete Revetment-Crib Wall with a nominal height of 11.9 meters and a penetration depth of 3 meters. Additionally, sheet piles were included to prevent overturning since the section is prone to soil collapse due to the river's meandering, which causes the river current to directly impact the structure. Lastly, Hexapods are used to prevent scouring at the base of a river structure by dissipating the energy of flowing water, which reduces its erosive potential. Their unique shape and increased surface area help distribute the forces of the water more evenly, preventing localized erosion. By interlocking and creating a stable, flexible barrier, hexapods stabilize the riverbed and the base of the structure, preventing sediment movement and undercutting, thereby ensuring the structure's stability and longevity.
- The unit cost has also been evaluated and reviewed by Bureau of Construction (BOC) last September 12, 2024. The original Php. 60,000,000.00 estimated cost was reduced to Php. 59,960,538.14 resulting to an excess of Php. 39,461.86.

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
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 PPP Services

EUGENIO R. PIPO, 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
WIN4XW00165

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

BAGONG PILIPINAS

September 12, 2024

MEMORANDUM

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

SUBJECT : **Request for Approval of Modification of Three (3) Projects under FY 2024 General Appropriations Act:**

OO2: Protect Lives and Properties – Construction/Maintenance of Flood Mitigation Structures and Drainage Systems

1.) P00820754LZ: Construction of Drainage Canal along Mt. Province Bdry. – Calanan – Pinukpuk – Abbut Road, Calanan – Pinukpuk Junction Section, K0508+414 – K0508+856, Tabuk City, Kalinga

2.) P00820753LZ: Construction of Drainage Canal along Mt. Province Bdry. – Calanan – Pinukpuk – Abbut Road, Calanan – Pinukpuk Junction Section, K0496+(-150) – K0497+346, Calanan, Tabuk City, Kalinga

OO2: Protect Lives and Properties – Construction/Rehabilitation of Flood Mitigation Facilities within Major River Basins and Principal Rivers

3.) P00824847LZ: Construction of Ngipen Bridge, Bantay Flood Control along Chico River, Bantay Tabuk City, Kalinga

Forwarded herewith are the results of the evaluation for the above-mentioned requests.

PROJECT NO. 1

The requested amount of **P35,000,000.00** (inclusive of EAO) for the **442.00 lineal meters** for the Construction of Drainage Canal along Mt. Province Bdry. – Calanan – Pinukpuk – Abbut Road, Calanan – Pinukpuk Junction Section, Tabuk City, Kalinga, may be considered reasonable as evaluated, subject to updating of cost/price prior to bidding based on the items of work involved and its corresponding quantities as reflected in 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.

PCO # 408

SCOPE OF WORK

ITEM NO.	DESCRIPTION	AMOUNT (Total Cost)	PERCENT WEIGHT (%)
Part B	Other General Requirements	P 561,187.72	1.64%
Part C	Earthwork	P 2,349,193.15	6.85%
Part D	Reinforced Concrete	P 3,270,162.58	9.53%
Part E	Surface Courses	P 674,131.66	1.96%
Part I	Materials Details	P 27,445,324.89	80.02%
	GRAND TOTAL	**P 34,300,000.00**	**100.00%**

Cost per lineal meter for CW1 – Construction of Drainage Structure:
(Excludes Part B)

$$\frac{\text{P 33,738,812.28}}{\text{442.00 lineal meters}} = \textbf{P76,332.15 / lineal meter}$$

The estimated cost of **P76,332.15** per lineal meter is due to the design requirements as reflected in the approved design plans considering the appropriate Pay Items under Parts C, D, E, and I. The said unit cost per lineal meter includes provision of 21,372.03 kilograms of grade 40, reinforcing steel, 39.52 cubic meters of lean concrete & 168.57 cubic meters of 3000 psi, Class A, structural concrete, which accounts to **9.53%** of the total project cost and concrete clay, plastic and fiber pipe (408.00 l.m.), which accounts to **80.02%** of the total project cost. Hence, it is considered reasonable as the Unit Costs of the items of work involved are within the range of the prevailing cost of the Department.

Further, please be informed that the prices of materials used in the Detailed Unit Price Analysis (DUPA) not included in the Construction Materials Price Data (CMPD) were supported with canvass prices provided by the Implementing Office (**Annex "A"**) (e.g., structural wall pipe and electrofusion wire).

PROJECT NO. 2

The requested amount of **P27,998,000.00** (inclusive of EAO) for the **1,573.00 lineal meters** for the Construction of Drainage Canal along Mt. Province Bdry. – Calanan – Pinukpuk – Abbut Road, Calanan – Pinukpuk Junction Section, Calanan, Tabuk City, Kalinga, as submitted was reduced to **P27,962,821.92** (inclusive of EAO) due to corrections made on the unit price of materials. Likewise, the items of work and corresponding quantities were based on the Program of Works (POW) and Detailed Engineering Design Plan, 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 267,544.53	0.97%
Part C	Earthworks	P 29,629.52	0.11%
Part D	Subbase and Base Course	P 283,159.37	1.03%
Part E	Surface Courses	P 2,397,300.56	8.75%
Part L-A	Earthworks	P 2,556,165.12	9.33%
Part L-B	Drainage and Slope Protection	P 21,423,190.00	78.18%
Part F	Miscellaneous Structures	P 446,576.38	1.63%
	GRAND TOTAL	**P 27,403,565.48**	**100.00%**

Cost per lineal meter for CW1 – Construction of Drainage Structure:
(Excludes Part B)

$$\frac{\text{P 27,136,020.95}}{\text{1,573.00 lineal meters}} = \textbf{P17,251.12 / lineal meter}$$

The estimated cost of **P17,251.12** per lineal meter is due to the design requirements as reflected in the approved design plans considering the appropriate Pay Items under Parts C, D, E, L-A, L-B and F. The said unit cost per lineal meter includes provision of 7,671.43 cubic meters of structure excavation, which accounts to **9.33%** of the total project cost and 104,475.63 kilograms of grade 40, reinforcing steel, 540.00 cubic meters of stone masonry & 1,329.82 cubic meters of Class A, structural concrete, which accounts to **78.18%** of the total project cost. Hence, it is considered reasonable as the Unit Costs of the items of work involved are within the range of the prevailing cost of the Department.

Further, please be informed that the prices of materials used in the Detailed Unit Price Analysis (DUPA) not included in the Construction Materials Price Data (CMPD) were supported with canvass prices provided by the Implementing Office (**Annex "A"**) (e.g., concrete saw).

PROJECT NO. 3

The requested amount of **P60,000,000.00** (inclusive of EAO) for the **150.00 lineal meters** for the Construction of Ngipen Bridge, Bantay Flood Control along Chico River Bantay Tabuk City, Kalinga, as submitted was reduced to **P59,960,538.14** (inclusive of EAO) due to corrections made on the unit price of materials. Likewise, the items of work and corresponding quantities were based on the Program of Works (POW) and Detailed Engineering Design Plan, duly approved by the District Engineer, DPWH – Lower Kalinga District Engineering Office.

SCOPE OF WORK

ITEM NO.	DESCRIPTION	AMOUNT (Total Cost)	PERCENT WEIGHT (%)
Part A	Facilities for the Engineer	P 1,858,154.22	3.21%
Part B	Other General Requirements	P 357,893.21	0.62%
Part D	Reinforced Concrete	P 12,670,974.56	21.90%
Part I	Protective Works and Accessories	P 18,416,147.33	31.83%
Part L-A	Flood Control and Drainage	P 4,883,536.94	8.44%
Part L-B	Bank and Slope Protection Works	P 19,675,213.05	34.00%
	GRAND TOTAL	**P 57,861,919.31**	**100.00%**

Cost per lineal meter for CW1 – Construction of Flood Mitigation Structure:
(Excludes Part A and B)

$$\frac{\text{P 55,645,871.88}}{\text{150.00 lineal meters}} = \textbf{P370,972.48 / lineal meter}$$

The estimated cost of **P370,972.48** per lineal meter is due to the design requirements as reflected in the approved design plans considering the appropriate Pay Items under Parts D, I, L-A and L-B. The said unit cost per lineal meter includes provision of 2,494.80 cubic meters of hexapod, which accounts to **31.83%** of the total project cost and 1,152.52 cubic meters of stone masonry, sheet piles, cofferdamming (1,791.25 l.m.) & furnished and driven of steel sheet pile (1,168.83 l.m.), which accounts to **34.00%** of the total project cost. Hence, it is considered reasonable as the Unit Costs of the items of work involved are within the range of the prevailing cost of the Department.

Further, please be informed that the prices of materials used in the Detailed Unit Price Analysis (DUPA) not included in the Construction Materials Price Data (CMPD) were supported with canvass prices/certification provided by the Implementing Office (**Annex "A"**) (e.g., autodesk autocad software and desktop).

ALLAN S. BORROMEO, CESO III
Director, Bureau of Construction

cc: Undersecretary ADOR G. CANLAS, 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
District Engineer RUBY A. UYAM, Lower Kalinga District Engineering Office

6.1.1 LRP/CBC/JTS/MIP
Tabuk City, Kalinga – Lower Kalinga DEO (Evaluated)
BOC Ref. No.: 6.1.-11376

Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
CORDILLERA ADMINISTRATIVE REGION
Engineer's Hill, Baguio City

BAGONG PILIPINAS

June 25, 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 2 : Protect Lives and Properties Against Major Floods- Flood Management Program-Construction/ Rehabilitation of Flood Mitigation Facilities within Major River Basins and Principal Rivers- Construction of Ngipen Bridge, Bantay Flood Control along Chico River, Bantay Tabuk City, Kalinga**

We are respectfully forwarding the Memorandum dated June 24, 2024 from District Engineer Ruby A. Uyam, Lower Kalinga District Engineering Office, regarding the modification of the above project in the amount of **Sixty Million Pesos (Php 60,000,000.00)** as indicated below:

	FROM	TO
P00824847LZ		
	ORGANIZATIONAL OUTCOME 2 : Protect Lives and Properties Against Major Floods- Flood Management Program-Construction/ Rehabilitation of Flood Mitigation Facilities within Major River Basins and Principal Rivers- Construction of Ngipen Bridge, Bantay Flood Control along Chico River, Bantay Tabuk City, Kalinga	ORGANIZATIONAL OUTCOME 2 : Protect Lives and Properties Against Major Floods- Flood Management Program-Construction/ Rehabilitation of Flood Mitigation Facilities within Major River Basins and Principal Rivers- Construction of Ngipen Bridge, Bantay Flood Control along Chico River, Bantay Tabuk City, Kalinga
Type of work	CW1: Construction of Flood Mitigation Structure	CW1: Construction of Flood Mitigation Structure
Physical	CW1 – **492.298** Lineal Meters	CW1 – **150** Lineal Meters
Allocation	CW1 – Php 57,900,00.00 EAO – Php 2,100,000.00	CW1 – Php 57,900,00.00 EAO – Php 2,100,000.00

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

BAGONG PILIPINAS

June 24, 2024

MEMORANDUM

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

THRU : **ARNOLD O. DACWAG**
OIC-Chief, Planning & Design Division

SUBJECT : **Modification CY 2024 GAA – ORGANIZATIONAL OUTCOME 2 : Protect Lives and Properties Against Major Floods- Flood Management Program-Construction/ Rehabilitation of Flood Mitigation Facilities within Major River Basins- Construction of Ngipen Bridge, Bantay Flood Control along Chico River, Bantay 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
ORGANIZATIONAL OUTCOME 2 : Protect Lives and Properties Against Major Floods- Flood Management Program-Construction/ Rehabilitation of Flood Mitigation Facilities within Major River Basins- Construction of Ngipen Bridge, Bantay Flood Control along Chico River, Bantay Tabuk City, Kalinga Physical Target: **492.298** Lineal Meters Amount : ₱ 60,000,000.00	ORGANIZATIONAL OUTCOME 2 : Protect Lives and Properties Against Major Floods- Flood Management Program-Construction/ Rehabilitation of Flood Mitigation Facilities within Major River Basins- Construction of Ngipen Bridge, Bantay Flood Control along Chico River, Bantay Tabuk City, Kalinga Physical Target: **150** Lineal Meters Amount : ₱ 60,000,000.00

Attached are all Supporting documents based on D.O No. 23, series of 2023 for your ready reference.

For your favorable consideration.

RUBY A. UYAM
District Engineer

CAR 15.1 MAE/ABN/EMJE

SOCOTEC ISO 9001

Modification Request Form

A. GENERAL

1. REGION	2. DEO	3. LEGISLATIVE DISTRICT
Cordillera Administrative Region	Lower Kalinga District Engineering Office	Kalinga Lone District

B. ORIGINAL PROJECT

C. PROPOSED REVISED PROJECT

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

320102106096000

5. Project Id

P00824847LZ

6. Project Category

OO2: Protect Lives and Properties

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

Construction/ Rehabilitation of Flood Mitigation Facilities within Major River Basins and Principal Rivers

8. Operating Unit

Lower Kalinga District Engineering Office

18. Operating Unit (Change subject to DBM approval)

Lower Kalinga District Engineering Office

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

Component ID	Type of Work
CW1	Construction of Flood Mitigation Structure

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

Component ID	Type of Work
CW1	Construction of Flood Mitigation Structure

10. PROJECT DESCRIPTION (as recorded in GAA)

Construction of Ngipen Bridge, Bantay Flood Control along Chico River, Bantay Tabuk City, Kalinga

20. PROJECT DESCRIPTION (of the revised project)

Construction of Ngipen Bridge, Bantay Flood Control along Chico River, Bantay Tabuk City, Kalinga

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

60,000

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

60,000

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	**492.298**	Lineal Meters (lm)

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

Component ID	Target	Target Unit
CW1	**150**	Lineal Meters (lm)

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

Component ID	Component Cost (P'000)	Target Unit Cost (P'000/Target Unit)
CW1	57,900	**117.61169**
EAO	2,100	

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

Component ID	Component Cost (P'000)	Target Unit Cost (P'000/Target Unit)
CW1	**57,861.91931**	**385.7461287**
EAO	2,098.61883	
EXCESS	**39,461.86**	

14. PROJECT WORK LOCATION (Must be defined in strict accordance with DO 65 Series 2014)				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 and MVUC)**			
Bantay Tabuk City, Kalinga				Bantay Tabuk City, Kalinga			
Start X	121.4323245	**End X**	**121.4300000**	**Start X**	121.4330556	**End X**	**121.4300000**
Start Y	17.3038027	**End Y**	**17.30277778**	**Start Y**	17.30444444	**End Y**	**17.30277778**
15. ROAD CLASSIFICATION (if applicable)				**26. ROAD CLASSIFICATION** (if applicable)			
16. IMPLEMENTING OFFICE (Record the Implementing Office of the original project)				**27. IMPLEMENTING OFFICE** (Record the Implementing Office of the proposed revised project)			
Lower Kalinga District Engineering Office				Lower Kalinga District Engineering Office			
17. PROJECT IMPLEMENTATION PLAN (PIP)				**28. PROJECT IMPLEMENTATION PLAN (PIP)**			
Planned Start Date	**Planned End Date**			**Planned Start Date**	**Planned End Date**		
March 18, 2024	**October 21, 2025**			**June 15, 2024**	**January 18, 2025**		
				29. OVERLAP? ☒ NO ☐ YES		**30. UNDER WARRANTY?** ☒ NO ☐ YES	

D. ATTACHMENTS & JUSTIFICATIONS

31. PROJECT IMPACT ANALYSIS ATTACHED? (For Flood Control Projects)

☐ NO ☐ YES ☒ N/A

32. TECHNICAL JUSTIFICATION (Explain in detail in Bullet point format; minimum of 2 points)

Decrease in physical target for CW1 - Construction of Flood Mitigation Structure from 492.30 Lineal meters to 150 Lineal meters due to the following:

- *The increase in the unit cost and decrease in the physical target of CW1 from 492.30 linear meters to 150 linear meters is based on the Approved Program of Works (POW) with Detailed Unit Price Analysis (DUPA).*
- *CW1 consists of a Concrete Revetment-Crib Wall with a nominal height of 11.9 meters and a penetration depth of 3 meters. Additionally, sheet piles were included to prevent overturning since the section is prone to soil collapse due to the river's meandering, which causes the river current to directly impact the structure. Lastly, Hexapods are used to prevent scouring at the base of a river structure by dissipating the energy of flowing water, which reduces its erosive potential. Their unique shape and increased surface area help distribute the forces of the water more evenly, preventing localized erosion. By interlocking and creating a stable, flexible barrier, hexapods stabilize the riverbed and the base of the structure, preventing sediment movement and undercutting, thereby ensuring the structure's stability and longevity.*
- *The unit cost has also been evaluated and reviewed by Bureau of Construction (BOC) last September 12, 2024. The original Php. 60,000,000.00 estimated cost was reduced to Php. 59,960,538.14 resulting to an excess of Php. 39,461.86.*

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, Certification of No overlapping (Certified by the District Engineer, Construction and Maintenance Division Chief), Certification of Right-of-Way Clearance (Certified by the District Engineer), Environmental Clearances (Not Within a "No Build Zone" and CNC/ECC) and Certificate of Reasonableness.

33. PHOTOS SUBMITTED

☐NO ☒YES

34. A MAP OF THE PROPOSED PROJECT WORK LOCATION SUBMITTED

☐NO ☒YES

34. A MAP OF THE PROPOSED PROJECT WORK LOCATION SUBMITTED

☐NO ☒YES

35. PREPARED BY:

Name:	**ALFREDO B. NGAO-I**	**Position:**	**Engineer II**
Office:	Lower Kalinga District Engineering Office	**Date:**	

36. REVIEWED BY DISTRICT OFFICE (If Required)		**38. REVIEWED BY REGIONAL OFFICE**	
Name:	**EUGENE MICHAEL J. ESPITA**	**Name:**	**ARNOLD O. DACWAG**
Position:	**Chief, Planning and Design Section**	**Position:**	**OIC-Chief of Planning Division**
Date:		**Date:**	

37. RECOMMENDED BY DISTRICT OFFICE (If Required)		**39. RECOMMENDED BY REGIONAL OFFICE**	
Name:	**RUBY A. UYAM**	**Name:**	**KHADAFFY D. TANGGOL**
Position:	**District Engineer**	**Position:**	**Regional Director**
Date:		**Date:**	

Modification Request Form

UACS (Unified Account Code Structure as defined in GAA)
320102106096000

Project Id
P00824847LZ

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
☐ Typographical error on Project Description ☐ Addition/ Deletion of Words	☐ Overlapping Sections ☐ Change in Station Limits ☐ Change in Physical Target	☐ No such Barangay ☐ No such City or Municipality	☐ Change in (IO), requiring a change in the (OU)	☐ No change or decrease in unit cost ☐ 20% or less increase in unit cost ☐ > 20% increase in unit cost

Reviewed by Office of the Undersecretary for Operations

Name:	**Engr. MANUEL L. SINGSON**	**Engr. ANTONIO V. SOBREVIÑAS, JR.**
Signature		
Position:	Project Manager I	Project Manager III
Date:		9/16/23

41. DPWH PLANNING SERVICE

Category of Modification
(please check the appropriate)

- ☐ Category A – Typographical Error; Addition/Deletion of Words
- ☐ Category B – Change in Station Limits; Change in Target
- ☐ Category C – Change in Location, due to non-existing location
- ☐ Category D – Change in Operating Unit (requires DBM approval)
- ☐ Modification does not comply with as per GAA Provisions

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:	10/17/24	**Date:**	

*Please refer to the Request Evaluation Form (DPWH-QMSP-03-02 Rev 01) for the complete details of evaluation