

Republic of the Philippines PROVINCE OF LA UNION City of San Fernando



Procurement of INFRASTRUCTURE PROJECT

Improvement of Plaza Road, Gomez St. including Parking Space from Gen. Luna St. to F. Ortega Highway (Provincial Road), City of San Fernando, La Union INFRA-22-00-DF-014

October 25, 2022

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Glossary of Terms, Abbreviations, and Acronyms

ABC – Approved Budget for the Contract.

ARCC – Allowable Range of Contract Cost.

BAC – Bids and Awards Committee.

Bid – A signed offer or proposal to undertake a contract submitted by a bidder in response to and in consonance with the requirements of the bidding documents. Also referred to as *Proposal* and *Tender*. (2016 revised IRR, Section 5[c])

Bidder – Refers to a contractor, manufacturer, supplier, distributor and/or consultant who submits a bid in response to the requirements of the Bidding Documents. (2016 revised IRR, Section 5[d])

Bidding Documents – The documents issued by the Procuring Entity as the bases for bids, furnishing all information necessary for a prospective bidder to prepare a bid for the Goods, Infrastructure Projects, and/or Consulting Services required by the Procuring Entity. (2016 revised IRR, Section 5[e])

BIR – Bureau of Internal Revenue.

BSP – Bangko Sentral ng Pilipinas.

CDA – Cooperative Development Authority.

Consulting Services – Refer to services for Infrastructure Projects and other types of projects or activities of the GOP requiring adequate external technical and professional expertise that are beyond the capability and/or capacity of the GOP to undertake such as, but not limited to: (i) advisory and review services; (ii) pre-investment or feasibility studies; (iii) design; (iv) construction supervision; (v) management and related services; and (vi) other technical services or special studies. (2016 revised IRR, Section 5[i])

Contract – Refers to the agreement entered into between the Procuring Entity and the Supplier or Manufacturer or Distributor or Service Provider for procurement of Goods and Services; Contractor for Procurement of Infrastructure Projects; or Consultant or Consulting Firm for Procurement of Consulting Services; as the case may be, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.

Contractor – is a natural or juridical entity whose proposal was accepted by the Procuring Entity and to whom the Contract to execute the Work was awarded. Contractor as used in these Bidding Documents may likewise refer to a supplier, distributor, manufacturer, or consultant.

CPI – Consumer Price Index.

DOLE – Department of Labor and Employment.

DTI – Department of Trade and Industry.

Foreign-funded Procurement or Foreign-Assisted Project – Refers to procurement whose funding source is from a foreign government, foreign or international financing institution as specified in the Treaty or International or Executive Agreement. (2016 revised IRR, Section 5[b]).

GFI – Government Financial Institution.

GOCC – Government-owned and/or –controlled corporation.

Goods – Refer to all items, supplies, materials and general support services, except Consulting Services and Infrastructure Projects, which may be needed in the transaction of public businesses or in the pursuit of any government undertaking, project or activity, whether in the nature of equipment, furniture, stationery, materials for construction, or personal property of any kind, including non-personal or contractual services such as the repair and maintenance of equipment and furniture, as well as trucking, hauling, janitorial, security, and related or analogous services, as well as procurement of materials and supplies provided by the Procuring Entity for such services. The term "related" or "analogous services" shall include, but is not limited to, lease or purchase of office space, media advertisements, health maintenance services, and other services essential to the operation of the Procuring Entity. (2016 revised IRR, Section 5[r])

GOP – Government of the Philippines.

Infrastructure Projects – Include the construction, improvement, rehabilitation, demolition, repair, restoration or maintenance of roads and bridges, railways, airports, seaports, communication facilities, civil works components of information technology projects, irrigation, flood control and drainage, water supply, sanitation, sewerage and solid waste management systems, shore protection, energy/power and electrification facilities, national buildings, school buildings, hospital buildings, and other related construction projects of the government. Also referred to as *civil works or works*. (2016 revised IRR, Section 5[u])

LGUs – Local Government Units.

NFCC – Net Financial Contracting Capacity.

NGA – National Government Agency.

PCAB – Philippine Contractors Accreditation Board.

PhilGEPS - Philippine Government Electronic Procurement System.

Procurement Project – refers to a specific or identified procurement covering goods, infrastructure project or consulting services. A Procurement Project shall be described, detailed, and scheduled in the Project Procurement Management Plan prepared by the agency which shall be consolidated in the procuring entity's Annual Procurement Plan. (GPPB Circular No. 06-2019 dated 17 July 2019)

PSA – Philippine Statistics Authority.

SEC – Securities and Exchange Commission.

SLCC – Single Largest Completed Contract.

UN – United Nations.

Section I. Invitation to Bid



Republic of the Philippines PROVINCE OF LA UNION City of San Fernando



Invitation to Bid for the Improvement of Plaza Road, Gomez St. including Parking Space from Gen. Luna St. to F. Ortega Highway (Provincial Road), City of San Fernando, La Union

- The Provincial Government of La Union, through the Annual Budget CY2022 intends to apply the sum of ₱6,000,000.00 being the Approved Budget for the Contract (ABC) to payments under the contract for Improvement of Plaza Road, Gomez St. including Parking Space from Gen. Luna St. to F. Ortega Highway (Provincial Road), City of San Fernando, La Union / INFRA-22-00-DF-014. Bids received in excess of the ABC shall be automatically rejected at bid opening.
- 2. The *Provincial Government of La Union* now invites bids for the above Procurement Project. Completion of the Works is required *15 calendar days*. Bidders should have completed a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II (Instructions to Bidders).
- 3. Bidding will be conducted through open competitive bidding procedures using nondiscretionary "*pass/fail*" criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.
- 4. Interested bidders may obtain further information from *Provincial Government of La Union* and inspect the Bidding Documents at the address given below from *Monday to Friday at 8:00 AM to 5;00 PM*.
- 5. A complete set of Bidding Documents may be acquired by interested bidders on *October 25 November 15, 2022* from given address and website/s below upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of *P10,000.00*. The Procuring Entity shall allow the bidder to present its proof of payment for the fees in person, by facsimile, or through electronic means.
- 6. The *Provincial Government of La Union* will hold a Pre-Bid Conference on 10:00 AM, November 3, 2022 at the BAC Conference Room, Provincial Capitol, San Fernando City, La Union which shall be open to prospective bidders.
- 7. Bids must be duly received by the BAC Secretariat through manual submission at the office address as indicated below. Late bids shall not be accepted.
- 8. All bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 16.

- 9. Bid opening shall be on *10:00 AM*, *November 15, 2022* at the given address below *BAC Conference Room, Provincial Capitol, San Fernando City, La Union.* Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.
- 10. The *Provincial Government of La Union* reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of the 2016 revised Implementing Rules and Regulations (IRR) of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.
- 11. For further information, please refer to:

PGLU-BAC Secretariat BAC Conference Room Provincial Capitol, Brgy. II City of San Fernando, Province of La Union Email Add: pglu_bacsu@launion.gov.ph Telefax No. (072) 242-5550 Loc. 249 www.launion.gov.ph

12. You may visit the following websites:

For downloading of Bidding Documents: https://launion.gov.ph/infrastructure-3/

October 25, 2022

SGD.

RESSIE A. ESTRELLA Chairperson, Bids and Awards Committee (BAC)

Section II. Instructions to Bidders

1. Scope of Bid

The Procuring Entity, *Provincial Government of La Union* invites Bids for the **Improvement of Plaza Road, Gomez St. including Parking Space from Gen. Luna St. to F. Ortega Highway (Provincial Road), City of San Fernando, La Union**, with Project Identification Number *INFRA-22-00-DF-014*.

The Procurement Project (referred to herein as "Project") is for the construction of Works, as described in Section VI (Specifications).

2. Funding Information

- 2.1. The GOP through the source of funding as indicated below for *Annual Budget CY2022* in the amount of *P6,000,000.00*.
- 2.2. The source of funding is LGUs, the Annual or Supplemental Budget, as approved by the Sanggunian.

3. Bidding Requirements

The Bidding for the Project shall be governed by all the provisions of RA No. 9184 and its 2016 revised IRR, including its Generic Procurement Manual and associated policies, rules and regulations as the primary source thereof, while the herein clauses shall serve as the secondary source thereof.

Any amendments made to the IRR and other GPPB issuances shall be applicable only to the ongoing posting, advertisement, or invitation to bid by the BAC through the issuance of a supplemental or bid bulletin.

The Bidder, by the act of submitting its Bid, shall be deemed to have inspected the site, determined the general characteristics of the contracted Works and the conditions for this Project, such as the location and the nature of the work; (b) climatic conditions; (c) transportation facilities; (c) nature and condition of the terrain, geological conditions at the site communication facilities, requirements, location and availability of construction aggregates and other materials, labor, water, electric power and access roads; and (d) other factors that may affect the cost, duration and execution or implementation of the contract, project, or work and examine all instructions, forms, terms, and project requirements in the Bidding Documents.

4. Corrupt, Fraudulent, Collusive, Coercive, and Obstructive Practices

The Procuring Entity, as well as the Bidders and Contractors, shall observe the highest standard of ethics during the procurement and execution of the contract. They or through an agent shall not engage in corrupt, fraudulent, collusive, coercive, and obstructive practices defined under Annex "I" of the 2016 revised IRR of RA No. 9184 or other integrity violations in competing for the Project.

5. Eligible Bidders

- 5.1. Only Bids of Bidders found to be legally, technically, and financially capable will be evaluated.
- 5.2. The Bidder must have an experience of having completed a Single Largest Completed Contract (SLCC) that is similar to this Project, equivalent to at least fifty percent (50%) of the ABC adjusted, if necessary, by the Bidder to current prices using the PSA's CPI, except under conditions provided for in Section 23.4.2.4 of the 2016 revised IRR of RA No. 9184.

A contract is considered to be "similar" to the contract to be bid if it has the major categories of work stated in the **BDS**.

- 5.3. For Foreign-funded Procurement, the Procuring Entity and the foreign government/foreign or international financing institution may agree on another track record requirement, as specified in the Bidding Document prepared for this purpose.
- 5.4. The Bidders shall comply with the eligibility criteria under Section 23.4.2 of the 2016 IRR of RA No. 9184.

6. Origin of Associated Goods

There is no restriction on the origin of Goods other than those prohibited by a decision of the UN Security Council taken under Chapter VII of the Charter of the UN.

7. Subcontracts

7.1. The Bidder may subcontract portions of the Project to the extent allowed by the Procuring Entity as stated herein, but in no case more than fifty percent (50%) of the Project.

The Procuring Entity has prescribed that:

a. Subcontracting is not allowed.

8. **Pre-Bid Conference**

The Procuring Entity will hold a pre-bid conference for this Project on the specified date and time and either at its physical address {*[insert if applicable]* and/or through videoconferencing/webcasting} as indicated in paragraph 6 of the **IB**.

9. Clarification and Amendment of Bidding Documents

Prospective bidders may request for clarification on and/or interpretation of any part of the Bidding Documents. Such requests must be in writing and received by the

Procuring Entity, either at its given address or through electronic mail indicated in the **IB**, at least ten (10) calendar days before the deadline set for the submission and receipt of Bids.

10. Documents Comprising the Bid: Eligibility and Technical Components

- 10.1. The first envelope shall contain the eligibility and technical documents of the Bid as specified in Section IX. Checklist of Technical and Financial Documents.
- 10.2. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. For Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.
- 10.3. In case of joint ventures, a special PCAB License, and registration for the type and cost of the contract for this Project, shall be required. Any additional type of Contractor license or permit shall be indicated in the **BDS**.
- 10.4. A List of Contractor's key personnel (e.g., Project Manager, Project Engineers, Materials Engineers, and Foremen) assigned to the contract to be bid, with their complete qualification and experience data shall be provided. These key personnel must meet the required minimum years of experience set in the **BDS**.
- 10.5. A List of Contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership, certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be, must meet the minimum requirements for the contract set in the **BDS**.

11. Documents Comprising the Bid: Financial Component

- 11.1. The second bid envelope shall contain the financial documents for the Bid as specified in **Section IX. Checklist of Technical and Financial Documents**.
- 11.2. Any bid exceeding the ABC indicated in paragraph 1 of the **IB** shall not be accepted.
- 11.3. For Foreign-funded procurement, a ceiling may be applied to bid prices provided the conditions are met under Section 31.2 of the 2016 revised IRR of RA No. 9184.

12. Alternative Bids

Bidders shall submit offers that comply with the requirements of the Bidding Documents, including the basic technical design as indicated in the drawings and specifications. Unless there is a value engineering clause in the **BDS**, alternative Bids shall not be accepted.

13. Bid Prices

All bid prices for the given scope of work in the Project as awarded shall be considered as fixed prices, and therefore not subject to price escalation during contract implementation, except under extraordinary circumstances as determined by the NEDA and approved by the GPPB pursuant to the revised Guidelines for Contract Price Escalation guidelines.

14. Bid and Payment Currencies

- 14.1. Bid prices may be quoted in the local currency or tradeable currency accepted by the BSP at the discretion of the Bidder. However, for purposes of bid evaluation, Bids denominated in foreign currencies shall be converted to Philippine currency based on the exchange rate as published in the BSP reference rate bulletin on the day of the bid opening.
- 14.2. Payment of the contract price shall be made in Philippine Pesos.

15. Bid Security

- 15.1. The Bidder shall submit a Bid Securing Declaration or any form of Bid Security in the amount indicated in the **BDS**, which shall be not less than the percentage of the ABC in accordance with the schedule in the **BDS**.
- 15.2. The Bid and bid security shall be valid until *[indicate date]*. Any bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

16. Sealing and Marking of Bids

Each Bidder shall submit one copy of the first and second components of its Bid.

The Procuring Entity may request additional hard copies and/or electronic copies of the Bid. However, failure of the Bidders to comply with the said request shall not be a ground for disqualification.

If the Procuring Entity allows the submission of bids through online submission to the given website or any other electronic means, the Bidder shall submit an electronic copy of its Bid, which must be digitally signed. An electronic copy that cannot be opened or is corrupted shall be considered non-responsive and, thus, automatically disqualified.

17. Deadline for Submission of Bids

The Bidders shall submit on the specified date and time and either at its physical address or through online submission as indicated in paragraph 7 of the **IB**.

18. Opening and Preliminary Examination of Bids

18.1. The BAC shall open the Bids in public at the time, on the date, and at the place specified in paragraph 9 of the **IB**. The Bidders' representatives who are present shall sign a register evidencing their attendance. In case videoconferencing, webcasting or other similar technologies will be used, attendance of participants shall likewise be recorded by the BAC Secretariat.

In case the Bids cannot be opened as scheduled due to justifiable reasons, the rescheduling requirements under Section 29 of the 2016 revised IRR of RA No. 9184 shall prevail.

18.2. The preliminary examination of Bids shall be governed by Section 30 of the 2016 revised IRR of RA No. 9184.

19. Detailed Evaluation and Comparison of Bids

- 19.1. The Procuring Entity's BAC shall immediately conduct a detailed evaluation of all Bids rated "*passed*" using non-discretionary pass/fail criteria. The BAC shall consider the conditions in the evaluation of Bids under Section 32.2 of 2016 revised IRR of RA No. 9184.
- 19.2. If the Project allows partial bids, all Bids and combinations of Bids as indicated in the **BDS** shall be received by the same deadline and opened and evaluated simultaneously so as to determine the Bid or combination of Bids offering the lowest calculated cost to the Procuring Entity. Bid Security as required by **ITB** Clause 16 shall be submitted for each contract (lot) separately.
- 19.3. In all cases, the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184 must be sufficient for the total of the ABCs for all the lots participated in by the prospective Bidder.

20. Post Qualification

Within a non-extendible period of five (5) calendar days from receipt by the Bidder of the notice from the BAC that it submitted the Lowest Calculated Bid, the Bidder shall submit its latest income and business tax returns filed and paid through the BIR Electronic Filing and Payment System (eFPS), and other appropriate licenses and permits required by law and stated in the **BDS**.

21. Signing of the Contract

The documents required in Section 37.2 of the 2016 revised IRR of RA No. 9184 shall form part of the Contract. Additional Contract documents are indicated in the **BDS**.

Section III. Bid Data Sheet

ITB Clause For this purpose, contracts similar to the Project refer to contracts which have 5.2 the same major categories of work, which shall be: Road Construction 7.1 n/a 10.3 n/a 10.4 The key personnel must meet the required minimum years of experience set below: **Relevant Experience** Key Personnel General Experience 1. Project Engineer 5 years 3 years 2. Materials Engineer 3 years 3 years The minimum major equipment requirements are the following: 10.5 Number of Units Equipment Capacity Asphalt Distributor, 10 ft, wide (5tons) 1 Power Broom (20 m. wide) 1 Asphalt Paver (80 Hp) 1 Pneumatic Tire Roller (10 m.t.) 1 Tandem Steel Roller (10.1 m.t.), CC421 1 Water Truck (16000 L) 1 Cargo truck 1 **Applicator Machine** 1 **Kneading Machine** 1 12 n/a 15.1 The bid security shall be in the form of a Bid Securing Declaration or any of the following forms and amounts: The amount of not less than ₱120,000.00, if bid security is in cash, a. cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit: The amount of not less than ₱300,000.00 if bid security is in Surety b. Bond. 19.2 Partial bid is not allowed. The infrastructure project is packaged in a single lot and the lot shall not be divided into sub-lots for the purpose of bidding, evaluation, and contract award. None 20 21 Additional contract documents relevant to the Project: 1. Construction Schedule and S-curve, 2. Manpower Schedule, 3. Construction Methods, 4. Equipment Utilization Schedule, and Construction safety and health program approved by the DOLE 5.

Bid Data Sheet

Section IV. General Conditions of Contract

1. Scope of Contract

This Contract shall include all such items, although not specifically mentioned, that can be reasonably inferred as being required for its completion as if such items were expressly mentioned herein. All the provisions of RA No. 9184 and its 2016 revised IRR, including the Generic Procurement Manual, and associated issuances, constitute the primary source for the terms and conditions of the Contract, and thus, applicable in contract implementation. Herein clauses shall serve as the secondary source for the terms and conditions of the Contract.

This is without prejudice to Sections 74.1 and 74.2 of the 2016 revised IRR of RA No. 9184 allowing the GPPB to amend the IRR, which shall be applied to all procurement activities, the advertisement, posting, or invitation of which were issued after the effectivity of the said amendment.

2. Sectional Completion of Works

If sectional completion is specified in the **Special Conditions of Contract (SCC)**, references in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date shall apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).

3. Possession of Site

- 3.1 The Procuring Entity shall give possession of all or parts of the Site to the Contractor based on the schedule of delivery indicated in the **SCC**, which corresponds to the execution of the Works. If the Contractor suffers delay or incurs cost from failure on the part of the Procuring Entity to give possession in accordance with the terms of this clause, the Procuring Entity's Representative shall give the Contractor a Contract Time Extension and certify such sum as fair to cover the cost incurred, which sum shall be paid by Procuring Entity.
- 3.2 If possession of a portion is not given by the above date, the Procuring Entity will be deemed to have delayed the start of the relevant activities. The resulting adjustments in contract time to address such delay may be addressed through contract extension provided under Annex "E" of the 2016 revised IRR of RA No. 9184.

4. The Contractor's Obligations

The Contractor shall employ the key personnel named in the Schedule of Key Personnel indicating their designation, in accordance with **ITB** Clause 10.3 and specified in the **BDS**, to carry out the supervision of the Works.

The Procuring Entity will approve any proposed replacement of key personnel only if their relevant qualifications and abilities are equal to or better than those of the personnel listed in the Schedule.

5. **Performance Security**

- 5.1. Within ten (10) calendar days from receipt of the Notice of Award from the Procuring Entity but in no case later than the signing of the contract by both parties, the successful Bidder shall furnish the performance security in any of the forms prescribed in Section 39 of the 2016 revised IRR.
- 5.2. The Contractor, by entering into the Contract with the Procuring Entity, acknowledges the right of the Procuring Entity to institute action pursuant to RA No. 3688 against any subcontractor be they an individual, firm, partnership, corporation, or association supplying the Contractor with labor, materials and/or equipment for the performance of this Contract.

6. Site Investigation Reports

The Contractor, in preparing the Bid, shall rely on any Site Investigation Reports referred to in the **SCC** supplemented by any information obtained by the Contractor.

7. Warranty

- 7.1. In case the Contractor fails to undertake the repair works under Section 62.2.2 of the 2016 revised IRR, the Procuring Entity shall forfeit its performance security, subject its property(ies) to attachment or garnishment proceedings, and perpetually disqualify it from participating in any public bidding. All payables of the GOP in his favor shall be offset to recover the costs.
- 7.2. The warranty against Structural Defects/Failures, except that occasioned-on force majeure, shall cover the period from the date of issuance of the Certificate of Final Acceptance by the Procuring Entity. Specific duration of the warranty is found in the **SCC**.

8. Liability of the Contractor

Subject to additional provisions, if any, set forth in the **SCC**, the Contractor's liability under this Contract shall be as provided by the laws of the Republic of the Philippines.

If the Contractor is a joint venture, all partners to the joint venture shall be jointly and severally liable to the Procuring Entity.

9. Termination for Other Causes

Contract termination shall be initiated in case it is determined *prima facie* by the Procuring Entity that the Contractor has engaged, before, or during the implementation of the contract, in unlawful deeds and behaviors relative to contract acquisition and implementation, such as, but not limited to corrupt, fraudulent, collusive, coercive, and obstructive practices as stated in **ITB** Clause 4.

10. Dayworks

Subject to the guidelines on Variation Order in Annex "E" of the 2016 revised IRR of RA No. 9184, and if applicable as indicated in the **SCC**, the Dayworks rates in the Contractor's Bid shall be used for small additional amounts of work only when the Procuring Entity's Representative has given written instructions in advance for additional work to be paid for in that way.

11. Program of Work

- 11.1. The Contractor shall submit to the Procuring Entity's Representative for approval the said Program of Work showing the general methods, arrangements, order, and timing for all the activities in the Works. The submissions of the Program of Work are indicated in the **SCC**.
- 11.2. The Contractor shall submit to the Procuring Entity's Representative for approval an updated Program of Work at intervals no longer than the period stated in the **SCC**. If the Contractor does not submit an updated Program of Work within this period, the Procuring Entity's Representative may withhold the amount stated in the **SCC** from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program of Work has been submitted.

12. Instructions, Inspections and Audits

The Contractor shall permit the GOP or the Procuring Entity to inspect the Contractor's accounts and records relating to the performance of the Contractor and to have them audited by auditors of the GOP or the Procuring Entity, as may be required.

13. Advance Payment

The Procuring Entity shall, upon a written request of the Contractor which shall be submitted as a Contract document, make an advance payment to the Contractor in an amount not exceeding fifteen percent (15%) of the total contract price, to be made in lump sum, or at the most two installments according to a schedule specified in the **SCC**, subject to the requirements in Annex "E" of the 2016 revised IRR of RA No. 9184.

14. Progress Payments

The Contractor may submit a request for payment for Work accomplished. Such requests for payment shall be verified and certified by the Procuring Entity's Representative/Project Engineer. Except as otherwise stipulated in the **SCC**, materials and equipment delivered on the site but not completely put in place shall not be included for payment.

15. Operating and Maintenance Manuals

- 15.1. If required, the Contractor will provide "as built" Drawings and/or operating and maintenance manuals as specified in the **SCC.**
- 15.2. If the Contractor does not provide the Drawings and/or manuals by the dates stated above, or they do not receive the Procuring Entity's Representative's approval, the Procuring Entity's Representative may withhold the amount stated in the **SCC** from payments due to the Contractor.

Section V. Special Conditions of Contract

Special Conditions of Contract

GCC Clause	
2	n/a
3.1	Within 10 calendar days after receipt of the Notice to Proceed (NTP)
6	The site investigation reports are: Certificate of Site Inspection
7.2	Five (5) years
10	No dayworks are applicable to the contract.
11.1	The Contractor shall submit the Program of Work to the Procuring Entity's Representative within 15 days of delivery of the Notice of Award.
11.2	The amount to be withheld for late submission of an updated Program of Work is P10,000.00.
13	The amount of the advance payment is 15% of the total contract price.
14	Materials and equipment delivered on the site but not completely put in place shall be included for payment.
15.1	The date by which operating and maintenance manuals are required is <i>December 13, 2022</i> . The date by which "as built" drawings are required is <i>December 28, 2022</i> .
15.2	
13.2	The amount to be withheld for failing to produce "as built" drawings and/or operating and maintenance manuals by the date required is P20,000.00 .

Section VI. Specifications

B.5 – PROJECT BILLBOARD / SIGNBOARD

Description

This Item shall consist of furnishing and installing project billboard in accordance with this Specification and details shown on the Plans, or as required by the Engineer.

The project billboard shall comply in all respects with the "COA Circular No. 2013-004" dated January 30, 2013. The information and publicity on projects of Government Agencies including Foreign Funded Projects are being guided by this Circular.

The project billboard will be erected as soon as the award has been made. It will be located at the beginning and at the end of the subproject throughout the project duration.

The size, materials and design to be used for the project signboard will specifically adhere to the General Guidelines No. 2.2.3 of the Circular while the content of the information shall conform to the General Guidelines No. 2.2.6 and the sample format shown in "Annex A" of the Circular.

Material Requirements

Tarpaulin

The design and format of the tarpaulin shall have the following specifications:

Color	:	White		
Size	:	8 ft. x 8 ft.		
Resolution	:	70 dpi		
Font	:	Helvetica		
Font Size of Main Information : 3 inches				
Font Size of Sub-Information : 1 inch				
Font Color	:	Black		
Suitable Frame: Rigid wood frame with post; and				
Posting: Outside display at the project location after award has been made.				

ANNEX 14 PROJECT BILLBOARD

Name of Agency Business Address						PLGU LOGO	
Project Cost Fund Source/s: LP, GOP, LGU Implementing Agency/less Fund Source/s: LP, GOP, LGU Implementing Agency/less Development Partner/s: Development Partner/s: Brief Description of Project Project Details:							
Project Date		Project Status			Remarks		
Duration	Started	Target Date of Completion	Percentage of Completion	As of (Date)	Cost Incurred to Date	Date Completed	
For particulars or complaints about this project, please contact the Regional Office or Cluster which has audit jurisdiction on this project: COA Regional Office No./Cluster:							

The information shall contain but not limited to i.) logo of the funding agencies, ii.) the name of implementing agencies, iii.) name of contractor, iv.) subproject's title, location, cost and description, v.) project details to include duration, date started, target date of completion and project status, and vi.) COA and WB Anti-corruption Hotline.

The display/and or affixture of the picture, image, motto, logo, color motif, initials or other symbol or graphic representation associated with the top leadership of the project proponent or implementing agency/unit/office, on project billboard, is considered unnecessary. (General Guidelines No. 2.2.6)

Post and Frame

Posts and frames/braces shall be made from good lumber with a 2X3 and 2x2 inches size respectively and shall be well-seasoned, straight and free of injurious defects. The frame will be covered with 2 pieces ¹/₄ inch thick marine plywood where the tarpaulin will be attached.

Concrete Foundation Blocks

The concrete for the foundation blocks shall be Class A in accordance with Item 405, Structural Concrete and shall be of the size shown on the Plans.

Construction Requirements

Excavation and Backfilling

Holes shall be excavated to the required depth to the bottom of the concrete foundation as shown on the Plans.

The space around the post shall be backfilled to the ground line with approved material in layers not exceeding 100 mm and each layer shall be moistened and thoroughly compacted. Surplus excavated material shall be disposed of by the Contractor as directed by the Engineer.

Erection of Posts

The posts shall be erected vertically in position inside the formwork of the foundation block prior to the placing of the concrete and shall be adequately supported by bracing to prevent movement of the post during the placing and setting of concrete. The posts shall be located at the positions shown on the Plans.

Tarpaulin Installation

Tarpaulin shall be installed in accordance with the details shown on the Plans. The frame should be covered with the marine plywood before the tarpaulin is attached.

Method of Measurement

The quantities of project billboard shall be in pieces of such signs of the size specified, including the necessary posts and supports erected and accepted.

Basis of Payment

The quantities measured as determined in the Method of Measurement, shall be paid for at the contract unit price for the Pay Items shown in the Bid Schedule which price and payment shall be full compensation for furnishing and installing project billboard, for excavation, backfilling and construction of foundation blocks, and all labor, equipment, tools and incidentals necessary to complete the Item.

Payment will be made under:

Pay Item No.DescriptionUnit of MeasurementB.5Project BillboardEach

B.7 - OCCUPATIONAL SAFETY AND HEALTH PROGRAM

B.7.1 Description

This Item covers the implementation of construction safety in all stages of project procurement (design, estimate, construction and maintenance), requirements, provisions, and instructions for the guidance of the Engineer.

B.7.2 Construction safety and Health Program (CSHP)

Every construction project shall have suitable and approved Construction Safety and Health Program (CSHP) as required in all projects regardless of amount, funding source and mode of implementation which shall comply with the minimum safety and health requirements as specified in the Occupational Safety and Health Standards.

The required CHSP shall include but not limited to the following:

- 1. Composition of the Safety and Health personnel responsible for the implementation of CSHP.
- 2. Specific safety policies which shall be undertaken in the construction site, including frequency of and persons responsible for conducting toolbox and gang meetings.
- 3. Penalties and sanction for violation of the CSHP.
- 4. Frequency, content and persons responsible for orienting, instructing and training all workers at the site with regard to the CHSP which they operate.
- 5. The manner of disposing waste arising from the construction

B.7.3 Construction Safety and Health Personnel

At the start of the project, the Contractor shall have an established construction safety and health committee composed of the following personnel:

1. Project Manager/Project Engineer

The Contractor must provide for a full time Project Manager/Project Engineer, who is tasked to observe, monitor and supervise if the enforcement of CSHP was being followed strictly and correctly.

2. Safety Engineer/Officer

The General Contractor must provide for a full time Officer, who shall be assigned as the General Construction Safety and Health Officer to oversee and enforce full time the overall management of the Construction Safety and Health Program (CSHP). Furthermore, deployment of part-time or full-time safety man depending on the number of workers shall be complied in accordance with Rule 1033 of the Occupational Safety and Health Standards (OSHS) and applicable provisions under Section 7.0, Safety Personnel of Department of Labor and Employment (DOLE) D.O. 13, Series of 1998.

3. Health Personnel

The Contractor's health personnel may be full time or part time certified first-aider, registered nurse, physician and dentist depending on the total number of workers conforms with Section 8.0, Emergency Occupational Health Personnel and Facilities or DOLE D.O. 13, Series of 1998.

4. Safety Practitioner

The Contractor must provide a full time or part time Safety Practitioner, who shall initiate and supervise safety and health training for employees.

B.7.4 Supervision, Control and Monitoring

Overall supervision, control and monitoring of the implementation of CSHP for projects undertaken by administration/contracts shall be under the implementing office.

B.7.5 Construction Safety and Health Training

The Construction Safety and Health seminar (COSH) shall be a 40 hrs. training course as prescribed by the DOLE-Bureau of Working Conditions (BWC). All safety personnel involved in a construction project shall be required to complete such basic training course.

The Contractor shall provide continuing construction safety and health training to all technical personnel under his organization. Continuing training shall be a minimum of 16 h per year for every full-time safety personnel.

B.7.6 Construction Safety and Health Reports

The Contractor shall be required to submit a monthly construction safety and health report to the Department of Labor and Employment (DOLE) Regional Office concerned. The report shall include a monthly summary of all safety and health committee meeting agreements, a summary of all accident investigations/reports and periodic hazards assessment with the corresponding remedial measures/action for each hazard.

In case of any dangerous occurrence or major accident resulting in death or permanent total disability, the concerned employer shall initially notify the DOLE Regional Office within 24 hours from occurrence. After the conduct of investigation by the concerned construction safety and health officer, the employer shall report all permanent total disabilities to DOLE Regional Office on or before the 20th of the month following the date of occurrence of accident using the DOLE Employer's Work Accident Illness Report.

B.7.7 Personnel Protective Equipment (PPE) and Devices

The Contractor shall furnish his workers with protective equipment for eyes, face, hands and feet, lifeline, safety belt/harness, protective shields and barriers whenever necessary by reason of the hazardous work process or environment, chemical or radiological or other

mechanical irritants of hazards capable of causing injury or impairment in the function of any part of the body through absorption, inhalation or physical agent.

All PPE and Devices shall be in accordance with the requirements of the Occupation Safety and Health Standards (OSHS) and should pass the test conducted and/or standards set by the Occupational Safety and Health Center (OSHC).

For General Construction Work, the required basic PPEs for all workers shall be safety helmet, safety gloves and safety shoes. Specialty PPEs shall be provided to workers in addition to or in lieu of the corresponding basic PPE as the work or activity requires. Workers within the construction project site shall be required to wear the necessary PPE at all times. Moreover, all other persons who are either authorized or allowed to be at a construction site shall also wear appropriate PPEs.

Construction workers who are working from unguarded surfaces 6 m or more above water or ground, temporary or permanent floor platform, scaffold or where they are exposed to the possibility of falls hazardous to life or limb, must be provided with safety harnesses and life lines.

B.7.8 Signages and Barricades

Construction Safety Signages and Barricades shall be provided as a precaution and to advice the workers and the general public of the hazards existing in the worksite. Signages shall be posted in prominent positions at strategic location and as far as practicable, be in the language understandable to most of the workers employed. For road projects, it shall be in accordance with the DPWH Road Works Safety Manual.

B.7.9 Facilities

The Contractor shall provide the following welfare facilities in order to ensure humane working conditions:

- 1. Adequate supply of safe drinking water;
- 2. Adequate sanitary and washing facilities;
- 3. Suitable living accommodation of workers and as may be applicable for their families; and
- 4. Separate sanitary, washing and sleeping facilities for men and women workers.

The services of a full-time registered nurse, a full-time physician, a dentist and an infirmary or emergency hospital with one (1) bed capacity when the number of employees exceed three hundred (300). In addition, there should be one (1) bed capacity for every one hundred (100) employees in excess of three hundred (300).

B.7.10 Costing

The cost for the implementation of construction safety and health shall be integrated to the overall project cost under the prescribed pay item. In consideration of the cost involved of providing the necessary safety equipment and manpower for an effective implementation of safety in the workplace, the following shall be used as a guide:

1. Personal Protective Equipment (PPE)

The PPEs shall be provided by the Contractor, and its cost shall be duly quantified and made part of the overall cost of Item B.7, Occupational Safety and Health. The use of PPEs shall conform to Section B.7.7 Personal Protective Equipment and Devices.

2. Clinical Materials and Equipment

Clinical material and equipment such as medicines, beds and linens, other related accessories shall be to the account of the Contractors implementing the project and shall be in accordance with the Rule 1960, Occupational Health Services of OSHS.

3. Signages and Barricades

The quantities and cost of signages and barricades necessary for a specific item of work shall be quantified and made part of that particular pay item of work. For general signages and barricades not included in specific pay item of work but necessary for promoting safety in and around the construction site, the quantities and cost shall be a separate pay item and included in the overall cost of Item B.7, Occupational Safety and Health.

4. Facilities

Facilities such as portable toilets, waste disposal, sanitary and washing facilities, convenient dwelling and office, adequate lighting, and other facilities related to construction safety and health shall be in accordance with OSH Standards and previously approved guidelines of the Department and shall be quantified and the cost thereof be made a separate pay item under "Facilities for the Engineers" and "Other General Requirements" as required in the DPWH Standard Specifications.

5. Salaries

Labor cost for the medical and safety personnel actually assigned in the field shall be included in the overall cost of Item B.7, Occupational Safety and Health. Manpower cost shall be established based on the cost of labor in the area. Duration of employment shall be based on project duration of the particular project.

6. Safety and Health Training

Cost associated for the provision of basic and continuing construction safety and health training to all safety and technical personnel shall be made part of the indirect/overhead cost of the project.

B.7.11 Safety on Construction during Heavy Equipment Operation

In relation to heavy equipment operation in all construction sites, the following are required in the different phases of the project.

1. Pre-Construction

The Contractor must ensure that appropriate certification is obtained from DOLE duly accredited organizations for the following:

a. All heavy equipment operators assigned at the project site must be tested and certified in accordance with a standard trade test prescribed by Technical Education and Skills Development Authority (TESDA) in coordination with its accredited organization.

b. All heavy equipment must be tested and certified in accordance with the standards prepared by DOLE or its recognized organization prior to commissioning of said equipment.

2. During Construction

The Contractor must ensure that the following conditions are met or complied with:

a. For mobilization or transport of heavy equipment, load restrictions, height and width clearances as imposed by Department for all roads and bridges to be utilized during transport. Moreover, only duly certified operators are allowed to load and unload heavy equipment to low-bed trailer.

b. During erection and set-up of heavy equipment, existing hazards must be avoided. Standard checklist of steps and procedures must be observed. List of necessary equipment, tools and materials must be available and properly utilized.

c. In the interest of accident prevention, duly certified mechanics and operators shall conduct daily routine inspection of all heavy equipment deployed at the site in accordance with standards set by TESDA in coordination with the Association of Construction Equipment Lessors (ASCEL, Inc.). During routine inspection all equipment which do not comply with the minimum safety standards for equipment certification shall be immediately removed from the work site for restoration or repair until they meet said standards or requirements. The Contractor and the equipment owner shall maintain a separate logbook for data on maintenance, repair, tests and inspections for each heavy equipment. Such logbook shall be used as a necessary reference during the conduct of equipment inspection.

3. Post Operation and Post Construction

The procedures for dismantling and demobilization of heavy equipment shall follow the same requirements as listed under provisions of mobilization or transport of heavy equipment and erection and set-up of heavy equipment.

B.7.12 Violations and Penalties

The Contractor if found violating safety rules and regulations shall be meted sanctions depending on the gravity of offense. The amount corresponding to non-compliance shall be deducted from the contractor's billing.

The following shall be the minimum requirements for the approval of a Construction Safety and Health Program (CSHP) under the Department of Labor and Employment (DOLE) Department Order No. 13, Series 1998.

1.1 Company Safety and Health Policy. The following shall apply:

A Company Safety Policy which shall serve as the general guiding principles in the implementation of safety and health on site duly signed by the highest company official or his duly authorized representative who has the over---all control of project execution and should include the contractor's general policy towards occupational safety, worker's welfare and health, and environment.

A Safety policy, which shall include the commitment that the contractor shall comply with DOLE minimum safety requirements, including reporting requirements of the Occupational Health and Safety Standards (OSHS), and other relevant DOLE issuances. These may include, but are not limited to the following:

- a. Registration (Rule 1020 and DO 18---02)
- b. Report of Safety Committee Organization (Rule 1040)
- c. Notification of Accidents and Occupational Illnesses (Rule 1050)
- d. Annual Work Accident/Illness Exposure Data Report (Rule 1050)
- e. Application for installation of mechanical/electrical equipment for construction of structure for industrial use (Rule 1070 and 1160)
- f. Annual Medical Report (Rule 1960)

1.2 Specific Construction Safety and Health Program shall contain the tendering agency's requirements in addition to the minimum requirements under the appropriate sections of D.O. No. 13 whenever deemed as applicable.

1.3 Composition of Construction Safety and Health Committee.

A structure and membership of the construction safety and health committee which shall be consistent with the minimum requirements of Section 11 of D.O. 13, series of 1998.

1.4 Safety and Health Personnel. The following shall apply:

- a. All appointed first---aiders shall be duly trained and certified by the Philippine National Red Cross and shall possess a Certificate of Basic First Aid Training Course (Standard) with a valid PNRC ID Card.
- b. All appointed Safety Officers shall have completed the 40---hour BWC prescribed safety and health course as required by Rule 1030 of the OSHS, as amended by D.O. 16. All full---time safety personnel shall be accredited by the BWC pursuant to D.O. 16.

- c. All physicians and nurses assigned at the project site shall have completed the Bureau prescribed course on occupational safety and health course, pursuant to Rule 1960 of the OSHS.
- 1.5 Specific duties and responsibilities of the Safety Officer. The following shall apply:
 - a. Specific duties and responsibilities shall comply with the outlined duties and responsibilities in Rule 1047 of the OSHS; and
 - b. Procedure on the required performance of the assigned duties and responsibilities of safety officers in the construction site.

1.6 Applicable In---plant Safety and Health Promotion and Continuing Information Dissemination. The following shall apply:

- a. Detailed information dissemination or advisories to the new employees prior to on--site assignment, e.g. conduct of safety orientation, company's health and safety policies, hazards related to the job safety measures, safe work procedures.
- b. Detailed programs on continuing education such as trainings and seminars, if any, that shall be given to employees, e.g. BOSH, refresher course, first aid training, refresher course toolbox meeting, construction safety training for site safety officers, 80---hour advance safety course prescribe.
- c. Arrangements for conveying information on safety and health IEC materials e.g. Posters/komics/flyers, safety signages, handbooks/manuals, bulletin boards
- d. Arrangements for setting up sub---committees on safety and health, where necessary.
- e. Schedule of safety related activities, e.g. toolbox meeting, health and safety committee meeting

1.7 Accident and incident investigation, recording, and reporting. The following shall apply:

- a. All accidents or incidences shall be investigated and recorded.
- b. All work related accidents resulting to disabling injuries and dangerous occurrences as defined in OSH Standards (Rule 1050) shall be reported.
- c. Responsible or duly authorized officer for accident or incident investigation recording and reporting who are either the employer/owner/project manager/safety officer
- d. Accident Report shall contain the minimum information as required in DOLE/BWC/OHSD/IP---6.
- e. Shall notify the appropriate DOLE Regional within 24 hours in case of fatal accidents. An accident investigation shall be conducted by the Regional Office within forty eight (48) hours after receipt of initial report of the employer.

1.8 Provisions for the protection of the general public within the vicinity of the company premises during construction and demolition. The following shall apply:

- a. Measures in order to ensure the safety of the general public shall be pursuant to Rule 11 of the National Building Code---Implementing Rules and Regulations: Protection of Pedestrians During Construction or Demolition
- b. Appropriate provisions and rules of OSHS
 - --- Rule 1412.09: Protection of the Public
 - --- Rule 1412.12: Protection against collapse of Structure
 - --- Rule 1412.16: Traffic Control
 - --- Rule 1413: Excavation
 - --- Rule 1417: Demolition
 - --- Rule 1060: Premises of Establishments
 - --- D.O. 13, Section 9: Construction Safety Signs
 - --- Other relevant provisions of OSHS.

1.9 General safety within construction premises. The following shall apply:

The provisions for danger signs, barricades, and safety instructions for workers, employees, public, and visitors such as, housekeeping; walkway surfaces; means of access i.e. stairs, ramps, floor openings, elevated walkways, runways and platforms; and, light.

1.10 Environmental Control (Rule 1070 of the Standards). The following shall apply:

- a. Monitoring and control of hazardous noise, vibration and air---borne contaminants such as gases, fumes, mists and vapors.
- b. Provisions to comply with minimum requirements for lighting, ventilation and air movement.

1.11 Guarding of hazardous machinery (Rule 1200 of the Standards). The following shall apply:

- a. Provisions for installation/design of built---in machine guards.
- b. Provisions for built---in safety in case of machine failure.
- c. Provisions for guarding of exposed walkways, access---ways, working platforms.

1.12 Provisions for and use of Personal Protective Equipment (PPE) --- (Rule 1080 of the Standards). The following shall apply:

- a. Appropriate types and duly tested PPEs to be issued to workers after the required training on their use.
- b. Provisions for maintenance, inspection and replacement of PPEs.
- c. In all cases the basic PPE commonly required for all types of construction projects are hard hats, safety shoes and working gloves. Other PPEs shall be required depending on the type of work and hazards.

1.13 Handling of Hazardous Substances – (Rule 1090 of the Standards). The following shall apply:

Provision for identification, safe handling, storage, transport and disposal of hazardous substances and emergency procedure in accordance with Material Safety Data Sheet (MSDS) in cases of accidents.

1.14 General materials handling and storage procedures. – (Rule 1150 of the

Standards). The following shall apply:

- --- Safe use of mechanical materials handling equipment
- --- Secured and safe storage facilities
- --- Regular housekeeping as necessary so as not to constitute and/orresent hazards
- --- Clearly marked clearance limits
- --- Proper area guarding of storage facilities

1.15 Installation, use and dismantling of hoist and elevators.---Rule 1415.10 Testing and Examination of Lifting Appliance, Rule 1220 Elevators and Related Equipment. The following shall apply:

- a. Provisions to ensure safe installation, use and dismantling of hoist and elevator;
- b. Periodic inspection of hoists and elevators.

1.16 Testing and inspection of electrical and mechanical facilities and equipment. The following Rules of the Occupational Safety and Health Standards shall apply: **Rule Coverage**

- a. Rule 1160 --- Boiler
- b. Rule 1170 ---- Unfired Pressure Vessels
- c. Rule 1210 --- Electrical Safety
- d. Rule 1220 --- Elevators and Related Equipment
- e. Rule 1410 --- Construction Safety
- f. Rule 1415.10 Training and Examination of Lifting Appliance

1.17 Workers skills and certification. The following shall apply:

- a. Provisions to ensure that workers are qualified to perform the work safely.
- b. Provisions to ensure that only qualified operators are authorized to use and operate electrical and mechanical equipment.

1.18 Provisions for emergency transportation facilities for workers. The following shall apply:

Rule 1963.02 of the Occupational Safety and Health Standards – Emergency Medical and Dental Services

1.19 Fire Protection Facilities and Equipment. The following rule shall apply:

- a. Fire protection facilities and equipment as required under Rule 1940 of the OSHS
- b. Proposed structure and membership of fire brigade
- c. Provision for training on emergency preparedness

1.20 First aid and health care medicines, equipment and facilities.

- a. Identification of the proposed first aid and health care facilities that the employer shall provide satisfying the minimum requirements of OSHS.
- b. Identification of the medical and health supplies, such as medicines and equipment to be provided.
- c. In all cases, the provision of first aid medicines and emergency treatment shall be mandatory.
- d. In the absence of the required on site health care facilities, the employer shall attach a copy of a written contract with a recognized emergency health provider as required under the OSHS.

1.21 Workers Welfare Facilities. The following shall apply:

- a. Provisions for toilet and sanitary facilities
- b. Proposed bathing, washing, facilities
- c. Proposed facilities for supplying food and eating meals
- d. Proposed facilities for supplying potable water for drinking and for washing
- e. Proposed facilities for locker rooms, storing and changing of clothes for workers.

1.22 Proposed Hours of Work and Rest and Rest Breaks. The following shall apply:

- a. Work schedules, working hours, shifting schedules
- b. Frequency and length of meals and breaks
- c. Schedule of rest periods

1.23 Waste Disposal. The following shall apply:

- a. Proposed method of clearing and disposal of waste.
- b. Provisions for permits and clearance where require in disposal of hazardous wastes.

1.24 Disaster and Emergency Preparedness Contingency

1.25 Safety Program . The Safety Programs shall contain the following:

- a. Standard work procedures.
- b. Job hazard analysis for the following activities as applicable to the project.
- c. Other hazardous work, not outline herein but will be performed during project execution must also be included.

The activities may consist of any number of the following, depending on the nature of the project, vis---à---vis exposure to hazards:

- a. Site Clearing
- b. Excavations

- c. Erection and dismantling of scaffolds and other temporary working platforms
- d. Temporary electrical connections/installations
- e. Use of scaffolds and other temporary working platforms
- f. Working at unprotected elevated working platforms or surfaces
- g. Work over water
- h. Use of power tools and equipment
- i. Gas and electric welding and cutting operations
- j. Working in confined spaces
- k. Use of internal combustion engines
- l. Handling hazardous and/or toxic chemical substances
- m. Use of hand tools
- n. Working with pressurized equipment
- o. Working in hot or cold environments
- p. Handling, storage, usage and disposal of explosives
- q. Use of mechanized lifting appliances for movement of materials
- r. Use of construction heavy equipment
- s. Demolition

The hazard analysis shall contain the following:

- a. Identification of possible hazards for a particular activity.
- b. Identification of any company permits or clearances needed prior to the performance of the activity together with the name of person/s who is authorized to issue such permit or clearance.
- c. Identification of the proposed improvement in work standard procedures that shall be followed during implementation of a particular activity.
- d. Company inspection procedures to ensure safety during the execution of a particular activity.
- e. Identification of emergency procedures in case of accidents or any untoward incident while performing a particular activity.

1.26 Company Penalties/Sanctions for Violation/s of the Provision/s of Safety and Health **Program** – The appropriate penalties or sanctions for violation of company rules and regulations or those stipulated in the CHSP and the observance of due process.

2. Personal Protective Equipment by Type of Project

2.1 General Building Construction Project (GBC). The following classifications shall apply:

Classification: Air Navigation Facilities, Power Transmission & Distribution, Building and Housing, Communication facilities, Sewerage, water treatment plants and Site/Land development.

2.2 General Engineering Construction Project. The following classifications shall apply:

Classifications: Roads and Airports (Horizontal structure), bridges, irrigation system, flood control and drainages, dams, tunneling, ports and harbor, water supply

2.3 Specialty Construction Project. The following classifications shall apply:

Classifications: Electrical work, mechanical work, plumbing and sanitary work, air conditioning or refrigeration, water proofing work, painting work, communication facilities, foundation or piling work, structural steel work, concrete pre---cast, elevator or escalator, well drilling work, navigational equipment and instrument installation, electromechanical work, metal roofing and siding installation, structural demolition and landscaping.

- **3. Safety Personnel and Skilled Worker.** The following shall apply: 3.1 **Minimum Required Safety Personnel.** The following shall apply:
- a. The General Constructor shall provide for a full time officer, who shall be assigned as the general construction safety and health officer to oversee full time the overall management of the Construction Safety and Health Program.
- b. The General Constructor shall provide for additional Construction Safety and Health Officer/s in accordance with the requirements for Safety Officer of D.O. 16, s. 2001, depending of the total number of personnel assigned to the construction project site.
- c. The General Constructor shall provide for one (1) Construction Safety and Health Officer for every ten (10) units of heavy equipment assigned to the project site.
- d. Each construction contractors/subcontractors shall provide for the required number of safety officers in accordance with the requirements of D.O. 16 series 2001.

3.2 Qualification and Training of Safety and Health Personnel and Skilled Workers. The following shall apply:

- a. Training of OSH Personnel shall be pursuant to D.O. 16 series of 2001 and its Procedural Guidelines.
- b. Worker Skills Certification for the critical operations/occupations shall be pursuant to D.O. 13 and D.O. 19 as well as the TESDA requirements on worker competency.

4. Construction Heavy Equipment. The following shall apply:

4.1 Accreditation of Organization for Testing of Construction Heavy Equipment shall be pursuant to D.O. No. 16 and its Implementing Guidelines and Procedural Guidelines on Accreditation and Performance Audit of Testing Organization for Construction Heavy Equipment.

4.2 Conduct of Inspection and Test of Construction Heavy Equipment shall be pursuant to Sec. 10 of D.O. No. 13 and its Procedural Guidelines. The following shall apply:

a. Procedural Guidelines on Accreditation and Performance Audit of Testing Organization for Construction Heavy Equipment

- b. Standard Checklist for Testing and Inspection of Construction Heavy Equipment.
- c. Inspection Procedures for DOLE Inspectors

4.3 TESDA Certification Requirements for Operators. Certification for Operators shall be in accordance with the requirements of TESDA on worker competency.

4.4 Monitoring and Evaluation of CHE Test/Inspection conducted shall be pursuant to the Procedural Guidelines on Accreditation and Performance Audit of Testing Organization for Construction Heavy Equipment.

5. Signages and Barricades. The following shall apply:

Construction Safety Signages shall be provided as a precaution and to advise the workers and the general public of the hazards existing in the worksite.

5.1 Signage Procedures: The signages shall be:

- a. Posted in prominent positions and at strategic locations.
- b. As far as practicable, be in the language understandable to most of the workers employed in the site.
- c. For non---raised floor areas, the attached yellow CAUTION sign shall be used when using yellow CAUTION tape.
- d. For non---raised floor areas, the attached red DANGER sign shall be used when using the red DANGER tape.
- e. Placed in designated areas at four (4) feet from ground level, if there are no other more practicable height placement.
- f. Regularly inspected and maintained in good condition to achieve its purpose. Signages that are damaged; illegible or that no longer apply as to purpose, site or language, shall be removed or be replaced by the safety officer when needed.
- g. Removed after the hazard is completely eliminated. If upon work completion the hazard is still present, the signage shall remain in place.
- h. Designed and constructed following the Overall Dimensions of Safety Signs Formula as required by the OSHS
- i. Specific with the type of hazard and should indicate the name of the contaminant/ substance involved (for chemical hazards), and the type of PPE or respiratory equipment to be worn.

5.2 Posting of Signages shall include, but not limited to the following places:

- a. Areas where there are risks of falling objects.
- b. Areas where there are risks of falling, slipping, tripping among workers and the public
- c. Prior to entry in project sites, locations and its perimeter.
- d. Where there is mandatory requirement on the usage of PPEs.
- e. Areas where explosives and flammable substances are used or stored

- f. Approaches to working areas where danger from toxic or irritant airborne contaminants/ substances may exist,
- g. All places where contact with or proximity to electrical facility/equipment can cause danger
- h. All places where workers may come in contact with dangerous moving parts of machinery or equipment
- i. Locations of fire alarms and fire---fighting equipment
- j. Locations for instructions on the proper usage of specific construction equipment, tools.
- 5.3 Barricading Procedures: The following shall apply:
 - a. The contractor shall provide all necessary barricades, safety tapes, safety cones or safety lines as required in isolating or protecting an unsafe work area from other workers, pedestrians or vehicular traffic.
 - b. Barricades shall completely enclose the hazardous area and effectively limit unintentional or casual entry.
 - c. Barricades shall be three (3) feet vertical height from the ground, when no other more practical height specification is available.
 - d. Barricades shall be maintained in good condition to achieve its purpose.
 - e. Barricades that are damaged; faded or that no longer apply as to purpose, site or meaning, shall be removed or shall be replaced by the safety officer.
 - f. Barricade tape shall not be used on the floor as this presents a slipping hazard of its own.
 - g. In addition to using the proper warning tape, the contractor shall use the appropriate safety signage when barricading an area.
 - h. All barricades shall be removed after the hazard is completely eliminated.
 - i. Upon work completion, if the hazard is still present, the barricade shall remain in place.

5.4 Installation of barricades shall include, but not limited to the following worksites conditions:

- a. hazardous areas
- b. trip hazard
- c. robotic movement
- d. energized electrical works
- e. overhead suspended load test
- f. critical high pressure test
- g. chemical introduction
- h. fall exposure

- i. Emergency Response Zone
- j. Unsafe condition zone
- k. Danger zone
- l. Confined and enclosed space

6. Construction Safety and Health Committee. The following shall apply:

6.1 Composition

- a. Project Manager or his representative as chairperson ex---officio
- b. General Construction Safety and Health Officer
- c. Construction Safety and Health Officers
- d. Safety representatives (SAFETY OFFICER) from each subcontractor.

If DOLE's minimum requirements based on the number of workers of the contractor requires only a part time safety officer, the safety officer need not be an accredited safety practitioner or consultant.

- e. Doctors, nurses and other health personnel pursuant to the requirements stated in Rule 1042 of the OSHS
- f. Workers' representatives

If there are no contractor's sub---contractors or the constructor is a subcontractor, the safety and health committee shall be in accordance with the requirements of Rule 1040 of the Occupational Safety and Health Standards.

6.2 Duties and responsibilities

- a. The Project Manager or his representative shall act as the Chairperson of the committee.
- b. The committee shall conduct safety meetings at least once a month.
- c. The persons constituting the Safety and Health Committee shall, as far as practicable, be at the construction site whenever construction work is being undertaken.
- d. The committee shall continually plan and develop accident prevention programs.
- e. The committee shall review reports of inspection, accident investigation and monitor implementation of the safety program.
- f. The committee shall provide necessary assistance to government authorities authorized to conduct inspection in the proper conduct of their activities
- g. The committee shall initiate and supervise safety trainings for its employees
- h. The committee shall conduct safety inspection at least once a month, and shall conduct investigation of work accidents and shall submit a regular report to DOLE.
- i. The committee shall initiate and supervise the conduct of daily brief safety meetings or toolbox meetings.
- j. The committee shall prepare and submit to DOLE, reports on said committee meetings.

- k. The committee shall develop a disaster contingency plan and organize such emergency service units as may be necessary to handle disaster situations.
- 7. Construction Safety and Health Reports. The following shall apply:

7. 1 The Construction Safety and Health Report shall include:

- a. Monthly summary of all safety and health committee meetings
- b. Summary of all accident investigations /reports
- c. Corrective/Preventive measures/action for each hazard
- d. Periodic hazards assessment with corresponding remedial measures for new hazards
- e. Safety promotions and trainings conducted/attended

7.2 Submission of Reports. The following shall apply:

- a. All general constructors shall be required to submit a monthly construction safety and health report to the BWC copy furnished the DOLE Regional Office concerned.
- b. In case of any dangerous occurrence or major accident resulting in death or permanent total disability, the concerned employer shall notify the appropriate DOLE Regional Office within twenty---four (24) hours from occurrence.
- c. After the conduct of investigation by the concerned construction safety and health officer, the employer shall report all disabling injuries to the DOLE Regional Office on or before the 20th of the month following the date of occurrence of accident using the DOLE/BWC/HSD---IP---6 form.

8. Cost of Construction Safety and Health Program. The following shall apply:

8.1 The total cost of implementing a Construction Safety and Health Program shall be mandatory and shall be made an integral part of the project's construction cost as a separate pay item, duly quantified and reflected in the Project's Tender Documents and likewise reflected in the Project's Construction Contract Documents.

8.2 The cost of the following PPEs: helmet, eye goggles, safety shoes, working gloves, rain coats, dust mask, ear muffs, rubber boots, and other similar PPE's shall be indicated/enumerated per cost, per worker, foreman, leadman, jackhammer operator, carpenter, electrician, mason, steelman, painter, mechanic, welder, plumber, heavy equipment operator, physician/inspector, and other such personnel.

8.3 The PPEs shall be sufficient in number for all workers particularly where simultaneous construction activities/operations in different areas are being undertaken.

8.4 The cost of the minimum required inventory of medicines, supplies and equipment as indicated in "Attachment C" of the OHS Standards shall be included.

8.5 The safety personnel manpower cost salaries/wages, benefits shall be included.

8.6 Cost of safety promotions/activities, training conducted and salaries of safety and health personnel, medical personnel employed or engaged by constructor

9. Safety and Health Information. The following shall apply:

9.1 Workers shall be adequately and suitably:

- a. Informed of potential safety and health hazards to which they may be exposed at their workplace.
- b. Instructed and trained on the measures available for the prevention, control and protection against those hazards.

9.2 Every worker shall receive instruction and training regarding general safety and health common to construction sites which shall include, but not limited to the following:

- a. The basic rights and duties of the workers at the construction site.
- b. The means of access and egress, both during normal work and in emergency situations.
- c. The measures for good housekeeping.
- d. The location and proper use of welfare and first---aid facilities.
- e. The proper care and use of the items or personal protective equipment and protective clothing provided the workers.
- f. The general measures for personal hygiene and health protection.
- g. The fire precautions to be taken.
- h. The action to be taken in case of any emergency.
- i. The requirements of relevant health and safety rules and regulations.

9.3 The instruction, training and information materials provided shall be given in a language or dialect understood by the worker.

Written, oral, visual and participative approaches shall be used to ensure that the worker has understood and assimilated the information.

9.4 Each supervisor or any person e.g. foreman, lead man, gangboss, and other similar personnel shall conduct daily tool box or similar meetings prior to the start of the operations for the day to discuss with the workers and to anticipate safety and health problems related.

9.5 No person shall be deployed in a construction site unless he has undergone a safety and health awareness seminar conducted by safety professionals or accredited organizations or other institutions recognized by DOLE.

9.6 Specialized instruction and training shall be provided to the following:

- a. Drivers and operators of lifting appliances, transport, earth---moving and materials--handling equipment and machinery; or any equipment of specialized or dangerous nature.
- b. Workers engaged in the erection or dismantling of scaffolds.
- c. Workers engaged in excavations at least one (1) meter deep or deep enough to cause danger, shafts, earthworks, underground works or tunnels.
- d. Workers handling explosives or engaged in blasting operations.
- e. Workers engaged in pile---driving.
- f. Workers in compressed air cofferdams and caissons.

- g. Workers engaged in the erection of prefabricated parts of steel structural frames and tall chimneys, and in concrete work, form work and other such type of work.
- h. Workers handling hazardous substances and materials.
- i. Workers as signalers and riggers.
- j. Other types of workers as may be categorized by TESDA

10. Welfare Facilities. The following shall apply:

The employer shall provide the following welfare facilities in order to ensure humane working conditions:

10.1 Adequate supply of safe drinking water:

- a. If the water is used in common drinking areas, it shall be stored in closed containers from which the water is dispensed through taps or cocks. Such containers shall be cleaned and disinfected at regular intervals but not exceeding fifteen (15) days.
- b. Notices shall be posted conspicuously in locations where there is water supply that is not for drinking purposes

10.2 Adequate sanitary and washing facilities:

- a. Adequate facilities for changing and for the storage and drying of work clothes.
- b. Adequate accommodation facilities for taking meals and for shelter.
- c. Adequate washing facilities regardless of sex for every 25 employees up to the first 100 and an additional of one (1) facility for every 40 additional workers.
- d. Suitable living accommodation for workers and as may be applicable for their families, such as separate sanitary, washing and sleeping facilities for men and women workers.

10.3 Adequate and suitable toilet and bath facilities for both male and female workers at the following ratio:

- a. Where the number of female workers exceeds 100, one (1) and bath facilities for every 20 female workers up to the first 100 and one (1) toilet and bath facilities for every 30 additional female workers.
- b. Where the number of male workers exceeds 100 and sufficient urinals have been provided, one (1) toilet and bath facilities for every 25 sales up to the first 100 and one (1) more for every 40 additional male workers.
- c. Every toilet shall be provided with enclosure, partitioned off so as to provide/ensure privacy. If feasible, shall have a proper door and fastenings, so doors shall be tight fitting and self---closing.
- d. Urinals shall be placed or screened so as not to be visible from other parts of the site, or other workers.
- e. Rest rooms shall be so arranged so as to be conveniently accessible to the workers and shall be kept clean and orderly at all times.

- f. Adequate hand---washing facilities shall be so provided within or adjacent to the toilet facilities
- g. In cases where persons of both sexes are employed, toilet and bath facilities for each sex shall be situated or partitioned so that the interior will not be visible even when the door of any facility is opened from any place where persons of the other sex have to work or pass.
- h. If toilet and bath facilities for one sex adjoin those for the other sex, the approaches shall be separate, and toilet and bath facilities for each sex shall be properly indicated.

11. Compliance to the DPWH DO 30 Series 2021 Revised Construction Safety Guidelines for the Implementation of Infrastructure projects During the COVID-19 Public Health Crisis

12. Compliance to the provisions in the PRDP Supplemental Guidelines on Community and Occupational Safety and Health (COSH) during the Implementation of PRDP subprojects amidst the COVID-19 Public Health Crisis dated June 10, 2020.

I. Background

The coronavirus disease (COVID-19) is an infectious disease caused by a new strain of coronavirus and was unknown before the outbreak began in Wuhan, China, in December 2019. On January 30, 2020, the Department of Health (DOH) reported the first case of COVID-19 in the Philippines and on March 07, the first local transmission of COVID-19 was confirmed. Proclamation No. 922, s. 2020 declaring a "State of Public Health Emergency throughout the Philippines" was issued and signed on July 7, 2020.

The World Health Organization (WHO) declared COVID-19 a pandemic on March 11, 2020 since the virus had inflicted more than 150,000 people including 6,000 deaths all over the world. Following the declaration of COVID-19 as a pandemic, President Rodrigo Duterte announced on March 12, 2020 the "community quarantine" in Metro Manila but on March 16, 2020 President Duterte declared a Luzon-wide "enhanced community quarantine" (ECQ) through Presidential Proclamation No. 929, s. 2020 "Declaring a State of calamity throughout the Philippines due to Corona Virus Disease 2019".

Pursuant to the above Presidential Declaration, the Inter-agency Task Force (IATF) for the Management of Emerging Infectious Diseases Omnibus Guidelines on the Implementation of the Community Quarantine in the Philippines, this Supplemental Guidelines on Community and Occupational Safety and Health (COSH) is issued in addition to the existing COSH standards employed in the implementation of the Project adhering to the Safeguards Policies of the World Bank as well as the new policy issuances, protocols and standards of the Philippine Government in ensuring public safety and health amidst COVID-19.

II. Objectives of the Guidelines

This guideline shall facilitate the implementation of PRDP into transitioning to the "new normal" amidst the COVID-19 Public health crisis, supplemental to the existing COSH guidelines under the PRDP Integrated Environmental and Social Safeguards Framework

(IESSF) of 25 October 2018 and the policy objectives of the RA 11058 An Act Strengthening Compliance with Occupational Safety and Health Standards and providing penalties for violations thereof of August 17, 2018. It strengthens the protection of the rights of workers to a safe and healthy working environment as well as the protection of the community especially the vulnerable population, ensuring non-discrimination and social inclusion during the time of the COVID-19 pandemic.

III. General Guidelines

The Supplemental COSH Guidelines shall primarily adopt and harmonize the following issuances of the Philippine Government in the implementation of PRDP covering the Infrastructures and Enterprises subprojects and all other PRDP activities.

1. Department of Public Works and Highways (DPWH) Revised Construction Safety Guidelines for the Implementation Infrastructure Projects during COVID-19 Public health crisis, repealing Department Order No. 35 Series of 2020 issued per Department Order No. 39 Series of 2020;

2. Joint Department of Trade and Industry (DTI) and Department of Labor and Employment (DOLE) Interim Guidelines on Workplace Prevention and Control of COVID-19 issued April 30, 2020;

3. Department of Health (DOH) Interim Guidelines on the Return-to-Work issued per Memorandum No. 2020-0220 dated May 11, 2020;

4. Department of Interior and Local Government (DILG) Amended Guide to Action Against the 2019 Novel Coronavirus Acute Respiratory Diseases issued per Memorandum Circular No. 2020-023 dated 06 February 2020;

5. Department of Agriculture (DA) Guidelines on Food Safety for the Philippine Agricultural and Fishery Sectors during COVID-19 Pandemic issued per Memorandum Circular No. 15 Series of 2020 dated May 13, 2020.

Under the "new normal", the Minimum Health Protocols and Standards set by the Department of Health (i.e. regular handwashing, observing cough etiquette, wearing of face masks, taking of body temperature, regular disinfecting, reducing contact and physical distancing) shall be applicable to all PRDP funded Infrastructure and Enterprise subprojects, and other relevant PRDP activities. Such activities are, but not limited to, consultations, trainings, technical coaching, meetings, technical reviews, procurement activities, validation s, appraisal reviews, monitoring, supervision, grievance investigation & resolution, and all other activities that involve interaction. PRDP shall adopt mixed or blended methodologies in the conduct of such activities that conform to health and safety policies, protocols and procedures stipulated in the above-mentioned issuances and guidelines.

As stakeholder engagement is important and critical in all project implementation phases, the Project has crafted a separate Consultation Guideline amidst the COVID-19 Public health crisis to ensure the continuous meaningful consultations despite the community quarantine

limitations. This will serve as reference into transitioning to the "new normal" for the implementation of PRDP subprojects (Annex A).

As measures in the prevention and control of COVID-19 incur costs, the PRDP recommends to adhere with DOLE Labor Guidelines on the cost of COVID-19 prevention and control measures issued per Labor Advisory No. 18 series of 2020.

As stipulated in Section 2 of the Labor Advisory, the costs associated to COVID-19 measures shall be charged to the employers and principals of the service contract and no direct or indirect costs shall be charged to the workers.

As these costs have not been part of the PRDP subprojects' feasibility study and business plan, the cost associated to the implementation of the required mitigation and control measures shall be shouldered by the: 1) Proponent LGU, as principal of the service contract for I-BUILD Infrastructure subprojects; and 2) Enterprise Proponent Groups, as business owner and employer of the workers in I-REAP Enterprise subprojects. However, due to funding limitations of the LGUs brought about by the pandemic and of the Proponent Groups, cost-sharing is advised. The LGUs may work out cost-sharing with the winning Contractors for the I-BUILD subprojects and with the Proponent Groups for the I-REAP subprojects to ensure that all subprojects are compliant to the health protocols and standards required for the resumption of operations of both the infrastructures and enterprise subprojects.

As we are continually learning from this unprecedented pandemic crisis, subproject proponents are reminded to regularly check recent issuances of the National government (DOH, DPWH, DOLE, DTI, DILG, etc.) and consult with/seek further advice from the concerned PRDP offices (RPCO, PSO and NPCO) for any further developments that may arise.

IV. Specific Guidelines for Construction of I-BUILD and I-REAP Infrastructure subprojects

In ensuring community, occupational safety and health during construction amidst the COVID-19 Public health crisis, supplemental guidelines on a) Prior deployment for construction; and b) During construction were harmonized in reference with the PRDP Integrated Environmental and Social Safeguards Framework (IESSF) based on the following international and local guidelines:

a. DPWH Department Order No. 39 Series of 2020 on Revised Construction Safety Guidelines for the Implementation Infrastructure Projects during COVID-19 Public health crisis, repealing Department Order No. 35 Series of 2020;

b. Joint DTI and DOLE Interim Guidelines on Workplace Prevention and Control of COVID-19 issued April 30, 2020;

c. DOH Memorandum No. 2020-0220 dated May 11, 2020 on Interim Guidelines on the Return-to-Work;

d. DILG Memorandum Circular No. 2020-023 dated 06 February 2020 on Amended Guide to Action Against the 2019 Novel Coronavirus Acute Respiratory Diseases;

e. International Labour Organization's (ILO) on Prevention and Mitigation of COVID-19 at Work: Action Checklist.

A. Prior deployment for construction

A.1. The LGU, and Contractor/Sub–Contractor/Suppliers shall:

- . Establish regular communication and coordination among each other for any relevant COVID-19 information; [1]
- . b) Strengthen the Grievance Redress Mechanism to ensure that there is an open, active, and easily accessible communication platform for workers to channel their questions and concerns especially regarding COVID-19.
- . c) Incorporate in the Environmental and Social Management Plan (ESMP) the management's commitment and responsibilities on the reduction and risk of exposure to the virus and transmission of COVID-19 at the workplace through prioritizing safety and health of workers and their surrounding communities;
- . d) Assess and review occupational safety and health hazards of all construction works and develop strategic measures and possible changes in the construction methodologies on managing the potential risks and its impacts through incorporation of DOH minimum health protocols and standards, and other relevant guidelines.

A.2. The LGU shall:

- . a) Screen and issue construction quarantine pass (QP) to the individual qualified personnel of the contractors clearly stating the identification, designation, nature of work, validity and destination, if necessary;
- . b) Advise the Barangay Council of the start/resumption of construction works with adherence to DOH and IATF guidelines; [1]
- . c) Facilitate the inclusion of necessary information on the impacts and mitigation measures of the construction in the IEC campaigns through Barangay Council.

A.3. The Barangay Council through its Barangay Health Emergency Response Team (BHERT) shall:

a) Include in the IEC campaign for the community the necessary information on the impacts and mitigation measures relevant to the construction;

b) Inform the Contractor on the existing ordinances or plans of the Barangay on containment and control and prevention measures especially in terms of public health and sanitation through its waste management, cleaning and disinfection, isolation procedures, among others;

c) Inform the community on the start/resumption of the construction with special considerations on vulnerable groups such as women, children, elderly, Indigenous Peoples/Indigenous Cultural Communities (IP/ICCs), People with Disabilities (PWD), and immuno- compromised people through several mechanisms. Refer to Annex A - Consultation Guidelines amidst COVID-19 Public Health Crisis.

A.4. The Contractor/Sub – Contractor/Suppliers shall:

a) Not allow any person below twenty-one (21) years old, those who are sixty (60) years old and above, those with immune deficiencies, comorbidities, or other health risks, and pregnant women, including those who reside with the aforementioned, to be part of the workforce for construction projects except as may be allowed under the Revised Omnibus Guidelines issued by the IATF; $\frac{1}{3}$

b) Undergo its employees fourteen (14) days quarantine prior to deployment, especially for the migrant workers coming from another barangay/municipality; or in the alternative, the employee may undergo any available Food and Drug Administration (FDA) - approved COVID-19 test, as may be prescribed by the DOH, and be retested as the need arises. In this regard, consultation with medical doctors (duly accredited by DOH, if possible) prior to the conduct of COVID-19 test shall be made. Further, COVID-19 test procedures and return-to-work policies of the contractors should comply with DOH Circular No. 2020- 0160 dated 31 March 2020, Department Memorandum No. 2020-0220 dated 11 June 6020, and other pertinent issuances of the DOH on the matter;

c) Ensure that the subproject is in compliance with DOLE DO. NO. 13 series of 1998, and the DTI and DOLE Interim Guidelines on Workplace Prevention and Control of COVID-19. Provide personnel and workers face mask and/or shield, soap, sanitizer, disinfectant, and continuous supply of vitamins particularly vitamin C, other over – the counter medicines, quarantine facilities, and oxygen tanks for emergency purposes; [J]

d) Provide for the personnel/workers the necessary welfare facilities and amenities (i.e. employees' quarters board and lodging, adequate toilet and baths for both men and women, communal kitchens, etc.) while ensuring compliance to social distancing, proper hygiene, etc.;

e) Provide disinfection facilities in the respective project sites in compliance with pertinent DOH and IATF Guidelines, to be place at strategic locations to ensure the safety and welfare of all personnel; $[I]_{SP}$

f) Conduct proper information dissemination through the Safety Officer to increase awareness and knowledge of the workforce regarding [SEP] COVID-19 construction protocols, guidelines, and management/mitigation measures on top of the existing construction safety practices through orientation, training, and installation of IEC materials and other notices for workers' safety;

g) Submit personal records of all personnel, especially for those migrant workers who would be coming from different barangay/municipalities, to proponent LGU and Barangay Council through its BHERT for necessary for contact tracing, assistance and monitoring. It shall be resubmitted and updated monthly, or as the need arises (Annex B – PRDP Worker's Log Format); [SP]

h) Prioritize engaging workers coming from the community or close proximity of the construction site. Should there be workers coming from another barangay/municipality, adhere with the proponent PLGU/MLGU and BHERT on the relevant guidelines for migrating workers;

i) Ensure non-discrimination of workers through developing and communicating a clear policy

of non-discrimination to reduce stigma so that employees feel safe reporting illness of themselves or within their families; $\frac{1}{2}$

j) Maintain and disclose rights and workers benefits, such as the following:

Access to essential health care and other basic social services; [SEP]

All workers shall be appropriately informed by the employer about all types of hazards in the workplace and be provided access to training, education, and orientation on chemical safety, electrical safety, mechanical safety, ergonomics and other [sep] hazards and risks (DOLE - DO. 198 series of 2018, Section 5); [sep]

iii. Worker has the right of refusal to work without threat or reprisal from the employer if, as determined by DOLE, an imminent danger situation exists. (DOLE - DO. 198 series of $\frac{1}{35P}$ 2018, Section 6);

iv. No cost related or incidental to COVID-19 prevention and control measures shall be charged directly or indirectly to the workers (Labor Advisory No.18 series of 2020, Section 2);

v. Health hospital benefits, sickness benefits under the SSS and employee's compensation benefits under PD 626 (EC Law). In the event that the worker is not qualified to avail of the benefits under SSS or Phil Health due to the employer, the employer will shoulder all the medical expenses until full recovery (Labor Advisory No. 04 series of 2020);

k) Incorporate COVID-19 Health and Emergency Response Protocols and COVID-19 hotlines of designated hospitals and emergency medical centers in the existing Emergency response procedures or contingency plans established and Hotlines posted.

During Construction

B.1. The LGU shall:

a) Assist to the Barangay Council and Contractors in the management of COVID-19 concerns that may arise during construction and potentially impact the community;

b) Monitor the implementation of the supplemental guidelines through the Project's regular monitoring procedures and activities with the Resident Engineer as lead for the proponent LGU. The report on monitoring of compliance to these guidelines shall be submitted monthly to the PPMIU/MPMIU Head.

B.2. The Barangay Council through its Barangay Health Emergency Response Team (BHERT) shall:

a) Inform the Contractors on the status of the daily health monitoring in the community; $\begin{bmatrix} L \\ SEP \end{bmatrix}$

b) Remind the community and workers to reduce direct contact and adhere to physical distancing during construction;

c) Encourage other modes of uptake such as text messaging, call, e-mail, and social media in lodging community concerns and feedback through Grievance Redress Mechanism.

B.3. The Contractor/Sub – Contractor/Suppliers shall:

a) Conduct an inventory of works for the construction sequencing to be followed and undertake to uphold the required physical distancing. Barangay Council shall be informed of the revised construction sequencing or daily construction works; [5]

b) Reduce direct personnel contact to adhere with physical distancing through clustered and staggered deployment of employees within the construction sites for easier contact tracing;

c) Make work breaks staggered; and during breaks, workers shall stay in the quarters or established welfare facilities rather than along the streets or nearby public space; $\frac{1}{2}$

d) Prohibit smoking in public spaces especially while construction is on- going. It shall only be allowed only to designated smoking area and after construction work;

e) House all employees in their respective quarters for the entire duration of the project covered by the Community Quarantine. In case there is a need to leave the said quarters during the project duration, "Prior to Deployment" procedures shall be conducted at every instance of reentry;

f) Ensure availability of adequate food, potable drinking water, disinfectants, and hand soaps to its in-house personnel;

g) Assist workers to manage any emerging psychosocial risks, new forms of work arrangements and in the promotion and maintenance of healthy lifestyles including diet, rest and sleep, exercise and social contacts with friends and family;

h) Designate workers in charge of the regular cleaning and disinfection of the premises and construction materials;

i) Regularly maintain good housekeeping which includes daily cleaning and disinfection of all construction facilities such as Field Office, employees' quarters, and other common area;

j) Promote culture of regular cleaning and disinfection among workers and within the premises of construction through reminders in tool box meeting and posting of relevant IEC materials;

k) Observe proper disposal of COVID-19 related PPE (e.g. face masks) by setting up a distinct bin labelled as special wastes and adhering to BHERT waste management collection protocols. Any face masks that could potentially be reused should be cut into pieces as a safety measure to avoid reuse; [1]

1) Remind workers, during the conduct of regular tool box meetings, on the relevant construction protocols and prevention measures on the specific daily or weekly work tasks;

m) Conduct daily monitoring of the pre-and post-work health conditions of workers, including, but not limited to, temperature, health, and exposure monitoring, as preventive measures. Personnel with manifestation or symptoms relative to COVID-19 shall be immediately isolated and quarantined for fourteen (14) days and if necessary, brought to the nearest DOH COVID-19 treatment facility under strict confidentiality and privacy. Proper protocols in accordance with DTI and DOLE Interim Guidelines on Work Place Prevention and Control of COVID-19 shall likewise be strictly observed. Daily health monitoring [see] report shall be endorsed to the

proponent PLGU/MLGU and BHERT (Annex C - PRDP Daily COVID -19 Surveillance Fill-Up/Checklist Form);

n) Ensure that Project Engineers and Safety Officer assigned at the site shall strictly monitor work activities. Said Safety Officer shall conduct daily monitoring in strict compliance with DOLE D.vO. No. 13, Series of 1998 and the DTI and DOLE Interim Guidelines on Workplace Prevention and Control of COVID-19 with regard to the wearing of additional Personal Protective Equipment (PPE) required such as, but not limited to, face masks, safety glasses/goggles, face shields, and long sleeve T-shirts, and other measures to contain the spread of COVID-19 in the workplace, as provided in these guidelines.

o) Discourage sharing of construction and office equipment. However, if necessary, the shared equipment must be disinfected in between transfers amongst personnel;

p) Ensure that all materials and equipment delivery and disposal shall be conducted by a specific team of personnel on an isolated loading/unloading zone while limiting contact with the delivery/disposal personnel. All materials and/or equipment entering the construction site shall be duly disinfected, as possible;

q) Restrict the entrance/visit of non-essential personnel, visitors, and the general public in the construction site, employees' quarters, and field offices. Otherwise, all personnel entering the construction site premises on a temporary basis (e.g. delivery truck drivers, inspectors, etc.) shall be properly logged and checked for symptoms; $\frac{1}{2}$

r) Strictly prohibit gatherings, liquors, and/or merry – making within the construction site premises; [1]

s) Provide transport service for off-site employees' quarters. The transport service shall be disinfected before and after use, and social distancing shall likewise be observed therein at all times in accordance with DOTr guidelines; $[\underline{s}]$

t) Regularly clean and disinfect the vehicles and materials. During construction transport and delivery services, workers' shall reduce direct contact with clients. If contact with clients are necessary, drivers should ensure minimum safety protocols. All records on transport and delivery services (i.e. location of delivery, driver in charge, and client contact information) shall be submitted to the proponent PLGU/MLGU and BHERT as reference for contract tracing and other necessary assistance;

u) Keep errands to be conducted outside the construction site premises at a minimum. Number of personnel running errands shall be limited and $\begin{bmatrix} I \\ SFP \end{bmatrix}$ shall properly be disinfected and closely monitored for symptoms within fourteen (14) days upon re-entry.

V. Specific Guidelines for I-REAP Enterprise and I-BUILD Other infrastructure Operations

This guideline primarily used as references the Joint DTI and DOLE interim guidelines on workplace prevention and control of COVID-19 issued April 30, 2020 and the Department of Health Memorandum No. 2020-0220 dated May 11, 2020 with subject Interim Guidelines on the Return-to-Work. These issuances were harmonized with PRDP's Integrated Environmental and Social Safeguards Framework (as of October 25, 2018) to come up with the COSH guidelines as follow:

A. Workplace Safety and Health

A.1. Increase physical and mental resilience

The Enterprise Management with the assistance from the proponent PLGU/MLGU shall assist workers in maintaining and increasing their physical and mental resilience such as:

1. Emphasize to workers everyday actions to stay healthy such as eating nutritious food and observing a healthy diet, drinking plenty of fluids, having adequate rest and at least eight (8) hours sleep, exercising regularly; $\frac{1}{[1]}$

2. Provide free medicine and vitamins, if feasible; [1]

3. Explore new forms of work arrangement beneficial to the health of $\frac{1}{SEP}$ the workers; and $\frac{1}{SEP}$

4. Manage emerging psychosocial risks by providing referral for *sep* workers needing counseling or presenting with mental health concerns and facilitating continued social contacts with family and friends.

A.2.Reducing transmission of COVID-19

1. The Enterprise Management shall assign a "Workplace Coordinator for COVID-19 concerns".

1.1. He/She may also be the existing Safety Officer if applicable to the Enterprise.

1.2. The Workplace Coordinator for COVID-19 shall be in-charge of ensuring the guidelines stated herein are implemented accordingly together with the supervision of the Enterprise Management. [1, 2, 2]

1.3. The proponent PLGU/MLGU shall provide assistance to ensure that the assigned Coordinator for COVID-19 receives the proper training. $[s_{PP}]$

2. Prior Entrance in buildings and workplaces

- 2.1. All employers and workers shall:
 - i. Wear face masks at all times and remove the same Eponly when eating/drinking. Employers shall provide the appropriate face masks for workers. Should cloth masks be used, the washable type shall be worn but additional filter material such as tissue papers inside the masks may be added;
 - ii. Accomplish daily the health symptoms questionnaire and submit to the guard or designated safety officer prior to entry; [1]
 - iii. Have their temperature checked and recorded in the health symptoms questionnaire. (Annex D Health Checklist) For any personnel with temperature > 37.50 C, even after a 5-minute rest, or if their response in the questionnaire needs further evaluation by the Workplace Coordinator, the person shall be isolated in an area identified by the Enterprise and not allowed

to enter the premises. The isolation area should be well ventilated and must be disinfected frequently. Workplace Coordinator assigned to assess the workers held in the isolation area shall be provided the appropriate medical grade PPE by the establishment which shall include but not limited to, face masks, goggles/face shields, and/or gloves; and [5]

iv. Spray alcohol/sanitizers to both hands; and provide disinfectant foot baths at the entrance if practicable.

2.2. Equipment or vehicle entering the hub operational area must go through a disinfection process; and $[\underline{s}]$

2.3. If there will be a long queue outside the office or store premises, roving officers should instill physical distancing of one meter. $[s_{PP}]$

3. Inside the workplace

3.1. All work areas and frequently handled objects such as door knobs and handles, shall be cleaned and disinfected regularly, at least once every two (2) hours; $\frac{1}{2}$

3.2. All washrooms and toilets shall have sufficient clean water and soap, workers are encouraged to wash their hands frequently and avoid touching their eyes, nose and mouth;

3.3. Sanitizers shall be made available in corridors, conference areas, elevators, stairways and areas where workers pass; [3]

3.4. Workers, whether in office workstations or in operations area, shall always practice physical distancing meaning at [sep] the minimum one (1) meter radius space (side, back and front) between workers;

3.5. Eating in communal areas is discouraged. It is best to eat in $\frac{1}{3EP}$ individual work area and all wastes shall be disposed properly. If eating in individual work areas is not possible, the employer shall ensure that physical distancing is maintained in dining areas with one worker per table and 1- meter distance per worker. It is discouraged that workers engage in conversation with masks off during meal times. Tables and chairs shall be cleaned or disinfected after every use of the area, and before as well as at the end of the work day; and $\frac{1}{3EP}$

3.6. Canteens and kitchens should be cleaned and disinfected regularly.

A.3. Minimize contact rate

1. Alternative work arrangements, such as working-hour shifts, work from home (WFH), where feasible and on rotation basis;

2. Prolonged face-to-face interaction between workers and with clients are discouraged and masks shall be worn at all times and not removed. Meetings needing physical presence shall be kept to a minimum number of participants and with short duration. Videoconferencing shall be utilized for lengthy discussions among workers;

3. Office tables should be arranged in order to maintain proper physical distancing. Barriers may be provided between tables; $[\underline{s}]$

4. Workstation layout should be designed to allow for unidirectional movement in aisles, corridors or walkways;

5. To maintain physical distancing, number of people inside an enclosed space such as a room, store or hall shall be limited;

6. Use of stairs should be encouraged subject to physical distancing requirements. If more than 2 stairways are accessible, one stairway may be used exclusively for going up and another for going down;

7. Online system shall be highly encouraged to be utilized for clients needing assistance from offices including the use of videoconferencing; and $\frac{1}{4}$

8. Roving officers (i.e. Manager, Supervisor, and Workplace Coordinator) shall always ensure physical distancing and observance of minimum health protocols.

A.4. On Reducing the risk of infection from COVID-19

1. In the event that a worker is suspected as having COVID-19:

1.1. The worker shall immediately proceed to the isolation area designated in the workplace and never remove his/her mask; $\frac{1}{|SP|}$

1.2. Workplace Coordinator attending to the workers should wear appropriate PPE and if needed should require the transport of the affected worker to the nearest hospital. Company protocols for transport for suspect COVID-19 cases and for PCR testing, should be in place including providing for ambulance conduction. For the micro and small enterprises, they may seek help from the Barangay or the Municipal Government. Hospitals will report to the DOH for COVID-19 suspect; and EP

1.3. Decontamination of workplace

i. Workplace shall be decontaminated with appropriate disinfectant (e.g. chlorine bleaching solution and disinfectant); disinfectant);

ii. After decontamination of the work area, work can [sep] resume after twenty-four (24) hours; and [sep]

iii. Workers present in the work area with the suspect COVID-19 worker shall go on fourteen (14) days home quarantine with specific instructions from the Workplace Coordinator on monitoring of symptoms and possible next steps. If suspect COVID-19 worker has negative result, co-workers may be allowed to Epreport back to work.

2. In the event that a worker is sick or has fever but is not suspected to have COVID-19 (ex., urinary infection, wound infection or any diseases not related to lungs or respiratory tract) the employer must advise the worker to take prudent measures to limit the spread of communicable diseases, as follows:

2.1. Stay at home and keep away from work or crowds; $\begin{bmatrix} I \\ SEP \end{bmatrix}$

2.2. Take adequate rest and take plenty of fluids; $\begin{bmatrix} I \\ SEP \end{bmatrix}$

2.3. Practice personal hygiene to prevent spread of disease; and $\begin{bmatrix} I \\ SEP \end{bmatrix}$

2.4. Seek appropriate medical care if there is persistent fever, $\frac{1}{\text{SEP}}$ when difficulty of breathing has started, or when he/she becomes weak. $\frac{1}{\text{SEP}}$

B. Duties of Employers and Workers B.1. Employer (Enterprise Management) shall:

1. Provide the necessary Enterprise policies/operating manuals to adapt to the "new normal" brought about by the COVID-19 pandemic in consultation with workers. Advocacy and IEC programs should be taken from DOH, WHO and reliable sources of information on COVID-19. Polices may be informed by the risk identification and mitigation process and can include the following (as adopted from COVID-19 Info-Sheet on Preventing and Managing related Environmental, Social, Health and Safety (ESHS) risks):

i. Prevention procedures covering basic hygiene, cleaning and SEP

ii. Policies and procedures on how to determine and manage SEP

iii. Updated working condition policies as appropriate;

iv. Stakeholder engagement procedures where operations or $\frac{1}{|SEP|}$

2. Conduct training to guide workers for the transition to the "new normal" and provide proper visual reminders/IEC materials for safety policies posted strategically around the workplace to ensure workers are well informed and improve compliance; [1]

3. Coordinate with concerned LGU and government agencies to provide the necessary capacity building activities relevant to COVID-19 health protocols, guidelines, and management/mitigation measures to prepare and equip farmers, fisherfolks, farmworkers and other units who will operate and maintain the facilities;

4. Ensure non-discrimination of workers: It is recommended to develop and communicate a clear policy of non-discrimination to reduce stigma so that employees feel safe reporting illness of themselves or within their families. All policies and procedures should be clearly communicated alongside contact information and access to a grievance mechanism should employees have questions or concerns; [sep]

5. Strengthen the Grievance Redress Mechanism to ensure that there is an open, active, and easily accessible communication platform for workers to channel their questions and concerns especially regarding COVID-19; [see]

6. Establish clear and regular communication about preventive measures and precautions to workers and, where applicable, contractors, the supply chain, customers, and the wider community;

7. Adhere to the following provisions stated in RA 11058 Sections 5 & 6; Workers' Right to Know and Workers' Right to Refuse Unsafe Work:

i. All workers shall be appropriately informed by the employer about all types of hazards in the workplace and be provided access to training, education, and orientation on chemical safety, electrical safety, mechanical safety, ergonomics and other hazards and risks;

ii. The worker has the right of refusal to work without threat or

8. Put in place policies and mechanisms in particular for the inclusion and protection of the vulnerable population such as women, older persons, those with underlying health conditions, persons with disabilities and Indigenous Peoples;

9. Provide resources and materials needed to keep the workers healthy and the workplace safe, e.g., masks, soap, sanitizer, disinfectant, PPE, including COVID-19 testing kits. For micro and small enterprises that proponent LGU shall provide assistance to the PG especially in accessing COVID-19 testing kits;

10. Observe proper disposal of COVID-19 related PPE (e.g. face masks, face shields, gloves, etc.) by setting up a distinct bin labelled as special wastes and adhering to BHERT waste management collection protocols. Any face masks that could potentially be reused should be cut into pieces as a safety measure to avoid reuse; [sip]

11.Enhance health insurance provision for workers, aside from the mandatory Philhealth, and establish appropriate sick leave policies to accommodate the COVID-19 situation;

12.Establish referral network for employees who will develop symptoms;

13.Where feasible, provide shuttle services and/or decent accommodation on near-site location to lessen travel and people movement;

14.Adhere to and regularly check recent issuances of the National government and consult with/seek further advice from the concerned PRDP offices (RPCO, PSO and NPCO) for any further developments that may arise. It is to be recognized that certain enterprises, depending on the nature of the enterprise (i.e. food processing, non-food processing, crop production, animal raising, aquaculture), may require other additional mitigation measures. For Food processing and production related enterprises, we may refer to:

i. COVID-19 and Food Safety: Guidance for food businesses: Food and Agriculture Organization (FAO) and World Health Organization (WHO) dated April 7, 2020; and Ep

ii. Department of Agriculture (DA) Guidelines on Food Safety for the Philippine Agricultural and Fishery Sectors during COVID-19 Pandemic issued per Memorandum Circular No. 15 Series of 2020 dated May 13, 2020; [J]

15.Provide the DOLE through its Regional Office and/or Barangay Council through its BERTH, copy furnished DOH, the LGU and PRDP, monthly reporting of illness, diseases and injuries utilizing the DOLE Work Accident/Illness Report Form (WAIR), attached as Annex E;

16. Incorporate COVID-19 Health and Emergency Response Protocols and COVID-19 hotlines of designated hospitals and emergency medical centers in the existing Emergency response procedures or contingency plans established and Hotlines posted;

17. Ensure that Enterprise Manager and Workplace Coordinator shall strictly monitor operation activities. Said Workplace Coordinator shall conduct daily monitoring in strict compliance with DOLE D.O. No. 13, Series of 1998 and the DTI and DOLE Interim Guidelines on Workplace Prevention and Control of COVID-19 and other supplemental measures, as provided in these guidelines.

B.2. LGU shall:

1. Extend technical and financial support to the enterprise operations in complying with the implementation of these guidelines; $\frac{1}{|SP|}$

2. Monitor the implementation of the supplemental guidelines through the Project's regular monitoring procedures and activities. The report on monitoring of compliance to these guidelines shall be submitted monthly to the PPMIU/MPMIU Head.

Mode of Measurement

Method of Measurement shall be paid for at the contract unit price for the Pay Items shown in the Bid Schedule which price and payment shall be full compensation for the provision of Personal Protective Equipment (PPE) and Devices, Medicines, Medical Supplies and other incidentals necessary to complete the item.

Basis of Payment

Payment shall be made on a proportional basis, calculated by multiplying the percentage rate of physical progress to the total lump sum amount every progress billing.

Payment will be made under:

Pay Item No.	Description	Unit of Measurement
B. 7	Occupational Health and Safety	Lump Sum

B.8 – TRAFFIC MANAGEMENT

B.8.1 Description

This work consists of traffic control devices (all signs, signals, markings, and other devices used to regulate, warn or guide traffic) which control and protect public traffic adjacent to and within the project. It shall conform to the applicable requirements of DPWH Manuals (Part 1: Road Safety Design Manual and Part 2: Road Signs and Pavement Markings Manual) and Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD).

B.8.2 Construction Requirements

B.8.2.1 Accommodating Traffic During Work

Traffic shall be accommodated in accordance with the MUTCD, contract traffic control plan, and this section. An alternate traffic control plan may be submitted for approval to the Engineer. Alternate traffic control plans shall be submitted at least 30 days before intended use.

Work should be performed in a manner that ensures the safety and convenience of the public and protects the residents and property adjacent to the project. Accommodate public traffic on roads adjacent to and within the project until the project is accepted.

B.8.2.2 Maintaining Roadways during Work

Maintain roadways as follows:

- 1. Diversion roads and bridges shall be constructed and removed as required by the traffic control plan;
- 2. Intersections with trails, roads, streets, businesses, parking lots, residences, garages, farms, and other features shall be maintained;
- 3. A dust-free carriageway shall be maintained such that visibility and air quality are not affected and a hazardous condition is not created.
- 4. Accumulations of soil and other material shall be removed from the carriageway;
- 5. Water to pond on the carriageway shall not be allowed; and
- 6. Roadway, detours, and diversions shall be maintained in a safe and acceptable condition.

B.8.2.3 Maintaining Roadways during Non-Work Periods

The Contractor shall maintain roadways and traffic control for public traffic during periods when work is not in progress.

B.8.2.4 Limitations on Construction Operations

When the roadway is open to public traffic, restrict operations as follows:

- 1. Operate equipment in the direction of traffic, where practical;
- 2. For shoulder drop-offs of 75 mm or less, "Low Shoulder" warning signs shall be provided. For shoulder drop-offs in excess of 75 mm, a 1 V:3H fillet with "Shoulder"

Drop-Off" warning signs shall be provided. The construction of shoulders adjacent to traffic lanes to the same elevation shall be completed within 14 days;

- 3. A minimum lane widths of 3 m shall be provided. Barricades, drums, or other acceptable devices shall be used to delineate traffic lanes through areas where the edge of pavement or intended path has been obliterated by construction operations;
- 4. Staging areas shall be located at least 9 m from the carriageway or behind acceptable traffic barriers. Approval of the location and access to staging areas shall be obtained. Unused traffic control devices shall be stored at staging areas;
- 5. Equipment shall be parked at least 9 m from the carriageway or behind acceptable traffic barriers;
- 6. Parking areas for employee's personal vehicles shall be provided in approved areas;
- 7. Uninterrupted two-way communications shall be provided between flaggers and pilot cars unless flaggers are able to see each other and communicate. communication devices approved by the Engineer shall be used. Citizen band radios shall be unacceptable. Communication devices shall be available to the Engineer as necessary;
- 8. Where switching traffic to a completed lane, adequate personnel and equipment shall be provided to set or relocate traffic control devices;
- 9. Construction-caused delays to public traffic shall be limited to a maximum of 30 min per passage through the project; and
- 10. Existing guardrails, barriers, and bridge railings shall be maintained until removal is necessary for construction. Temporary barrier or appropriate channelizing devices shall be used while the guardrails and bridge rails are absent. Permanent barriers, guardrails, and bridge rails shall be installed as soon as possible to minimize risk to the public.

B.8.2.5 Night time Operations

Perform construction operations during the hours of daylight (30 min after sunrise to 30 min before sunset).

Where night operations are permitted, submit a night lighting system for approval. Include the light types, locations, and the manner in which the lights will be moved. Submit the proposed system at least 14 days before use. Use an independent source other than vehicle headlights. Do not use incandescent lights. Furnish and install the approved system to illuminate the entire work

area. Position the lights so they do not shine directly at motorists traveling from any direction. If the operation is moving, move the lighting with the operation. Provide lighting at each flagger location. Equip vehicles with an exterior flashing yellow dome light.

B.8.2.6 Traffic Control Supervisor

The Contractor shall provide a traffic control supervisor. Furnish the traffic control supervisor's name, address, and 24 h telephone numbers at the preconstruction conference. During the Contract, including periods of suspensions and work stoppages, perform the following:

- 1. Traffic control plan shall be implemented.
- 2. Traffic control operations shall be coordinated, including those of subcontractors and suppliers.
- 3. Ensure the condition, position, and applicability of traffic control devices in use.

4. Traffic control deficiencies shall be corrected immediately.

- 5. Traffic control maintenance operations shall be coordinated with the Engineer.
- 6. Coordinate and ensure that traffic control devices are furnished, installed, maintained, removed, stored, replaced, relocated and cleaned. Ensure unused traffic control devices are properly handled and stored.
- 7. Weekly traffic safety meetings for construction workers shall be conducted, and invite the Engineer to these weekly meetings.
- 8. Submit a weekly certification that inspections and reviews were conducted and that the traffic control devices meet contract requirements. Include the number and types of devices in use. Report with the weekly certification, changes or corrective actions taken to ensure the safe passage of public traffic through the project.
- 9. Traffic control devices shall be inspected, including those in staging, storage, material sources, and disposal areas, as follows:
 - a. Daily during daylight hours when daylight work is being performed;
 - b. Daily during hours of darkness when nighttime work is being performed;
- 10. Weekly during:
 - a. Daylight hours and hours of darkness when work is suspended for periods of more than one (1) week.
- 11. Additional inspections, day or night, as directed by the Engineer; and
- 12. Reports of inspections shall be submitted in an acceptable format within 2 days.
- 13. Temporary flagging assistance shall be provided.

B.3 Method of Measurement

All expenses incurred in the furnishing/ installation/illumination of all traffic management plan and control devices shall be paid for in month and/or lump sum.

B.8.4 Basis of Payment

The accepted quantities, measured as provided in Section B.8.4, Method of Measurement shall be paid for at the Contract Unit Price of the Pay Item listed below that is included in the Bill of Quantities. The unit price shall cover full compensation for all related services necessary to complete the Item.

Payment shall be made under:

Pay Item	Description	Unit of
Number		Measurement
B.8(2)	Traffic Management	Lump Sum

B.9 – MOBILIZATION / DEMOBILIZATION

General

Work under this Contract shall be in accordance with the terms and conditions stipulated in the Bid Documents.

Scope of Work

This Section includes mobilization, demobilization, assembly, and disassembly of all proposed minimum equipment including incidentals necessary to complete the work. It shall be computed based on the equipment requirements of the project stipulated in the proposal and contract booklet. In no case shall mobilization and demobilization exceed 1% of the Estimated Direct Cost (EDC) of the civil works items

Mobilization

a) The Contractor shall mobilize and put into operation all equipment required to undertake the Bid Documents, which is the Bill of Quantities and all associated work items.

b) Mobilization shall include the transferring to the job-sites of all equipment necessary for the execution and completion of the work subject to the confirmation of the LGU.

c) Equipment encountering breakdowns must be repaired at the most expeditious method possible at no cost to the LGU. In the event that the equipment call for major repair works that cannot be undertaken at the site, the Contractor shall replace such equipment with equal or better performance capacity at no additional mobilization costs to the LGU, and the Contractor shall not be entitled to any time extension.

d) The Contractor will be held responsible for any damage to existing structures, works, materials, or equipment because of his operations. The Contractor shall repair or replace any damaged structures, works, materials, or equipment to the satisfaction of the LGU, and at no additional cost to the Procuring Entity.

e) The Contractor shall be responsible for all damage to streets, roads, railroads, curbs, sidewalks, highways, shoulders, ditches, embankment, culverts, bridges, or other public or private property, which may be caused by the transport of equipment to or from the Works.

f) All construction equipment provided by the Contractor shall, when brought on to the Site, be deemed to be exclusively intended for the construction and completion of the Works and the Contractor shall not remove the same or any part thereof without the approval of the LGU.

g) The LGU shall not at any time be liable for the loss or damage to any of the said construction plant and equipment provided by the Contractor.

Demobilization

Demobilization upon request of the Contractor and approval by the LGU shall include the following:

a) The dismantling, preparation and loading for removal and shipment of all Contractor's equipment at the site after completion of the works.

b) Transportation of all the above equipment from the site to the Contractor's home station or somewhere else outside the sites.

c) Removal of all supplementary markers furnished and installed by the Contractor, provided that the LGU has not taken the option to retain the markers.

d) The clean-up of the Site and the removal of materials, debris, waste, etc., and making good damages or temporary alterations, to the satisfaction of the LGU.

e) The restoration, up to a degree acceptable to the LGU, of damage to the surrounding area (including vegetation, minor structures etc.) resulting from the construction or construction-related activities

Method of Measurement

The Lump sum price shall provide for the mobilization and demobilization of all Contractor's equipment to cover all costs for mobilization and demobilization, transportation, insurance during transportation, port fees, taxes, utilities, operators and all other incidentals.

The payment shall cover the dismantling of the work site by the Contractor, with removal of all the alterations, construction equipment, so that the site is restored to the state it was in before the installations and equipment were placed there.

Basis of Payment

All costs associated with and necessary for compliance with this Specification shall be included in the Lump Sum price. No additional or separate payment will be made in this regard.

The LGU may at any time withhold payment if in the opinion of the Engineer, the requirements of this Specification section are not provided.

The Lump Sum payments will be paid following the schedule below:

 \Box 50 % of the lump sum cost will be paid for mobilization and 50% for demobilization.

 \Box The progress billing for mobilization is computed by dividing the number of equipment mobilized at the site over the total minimum number of equipment required in the bidding documents multiplied by 50% of the lump sum cost. Likewise, payment for demobilization will follow the computation process for mobilization but only after the completion of the works assigned to the equipment and site restored in good condition.

Pay Item

	Description	
B.9	Mobilization and Demobilization	lump sum

ITEM 302 – BITUMINOUS TACK COAT

302.1 Description

This Item shall consist of preparing and treating an existing bituminous or cement concrete surface with bituminous material in accordance with the Plans and Specifications, preparatory to the construction of a bituminous surface course.

302.2 Material Requirements

Bituminous material shall be either Rapid Curing (RC) Cut-back or Emulsified Asphalt, whichever is called for in the Bill of Quantities. It shall conform to the requirements of Item 702, Bituminous Materials. The type and grade will be specified in the Special Provisions.

302.3 Construction Requirements

302.3.1 Surface Condition

Tack coat shall be applied only to surfaces which are dry or slightly moist. No tack coat shall be applied when the weather is foggy or rainy.

302.3.2 Equipment

Equipment shall conform in all respects to Subsection 301.3.2..

302.3.3 Application of Bituminous Material

Immediately before applying the tack coat, the full width of the surface to be treated shall be cleaned of loose and foreign materials by means of a power broom or power blower, supplemented as necessary by hand sweeping. Where required by the Engineer, immediately prior to the application of the tack coat, the surface shall be lightly sprayed with water but not saturated. Bituminous material shall be applied by means of a pressure distributor at the temperature given in Item 702, Bituminous Materials, of the particular material being used. The rate of application of either the Rapid Curing Cut-back or the Emulsified Asphalt shall be within the range of 0.2 to 0.7 litre/m², the exact rate as determined by the Engineer.

Care shall be taken that the application of bituminous material is not in excess of the specified amount; any excess shall be blotted by sand or removed as directed by the Engineer. All areas inaccessible to the distributor shall be treated manually using the device for hand spraying. The surfaces of structures and trees adjacent to the areas being treated shall be protected in such a manner so as to prevent their being spattered or marred.

Traffic shall be kept off the tack coat at all times. The tack coat shall be sprayed only so far in advance on the surface course as will permit it to dry to a "tacky" condition. The Contractor shall maintain the tack coat until the next course has been applied. Any area that has become fouled by traffic or otherwise, shall be cleaned and resprayed at the Contractor's expense before the next course is applied.

302.4 Method of Measurement

The bituminous tack coat shall be measured by the tonne (t), completed and accepted inplace.

302.5 Basis of Payment

The accepted quantity, measured as prescribed in Section 302.4 shall be paid for at the contract unit price for Bituminous Tack Coat which price and payment shall be full compensation for furnishing and placing all materials including all labor, equipment, tools and incidentals necessary to complete this Item.

Payment will be made under:

Pay Item Number	Description	Unit of Measurement
302 (2)	Emulsified Asphalt	Tonne

ITEM 310 - BITUMINOUS CONCRETE SURFACE COURSE, HOT-LAID

310.1 Description

This Item shall consist of constructing a bituminous concrete surface course composed of aggregates, mineral filler, and bituminous material mixed in a central plant, constructed and laid hot on the prepared base in accordance with this Specification and in conformity with lines, grades, thickness and typical cross-section shown on the Plans.

310.2 Material Requirements

310.2.1 Composition and Quality of Bituminous Mixture (Job-Mix Formula)

Same as Subsection 307.2.1

310.2.2 Bituminous Material

It shall be either Medium Curing (MC) Cut-back Asphalt or Asphalt Cement, whichever is called for in the Bill of Quantities. It shall conform to the requirements of Item 702, Bituminous Materials. The penetration grade, type and grade of bituminous material shall be specified in the Special Provisions.

310.2.3 Aggregates

Aggregates shall conform to the requirements of Item 307, Bituminous Plant Mix Surface Course-General.

310.2.4 Mineral Filler

It shall conform to the requirements of Item 307, Bituminous Plant Mix Surface Course-General.

310.2.5 Hydrated Lime

It shall conform to the requirements of Item 307, Bituminous Plant-Mix Surface Course-General.

310.2.6 Proportioning of Mixtures

The proportion of bituminous material on the basis of total dry aggregate shall be from 5.0 to 8.0 mass percent. The exact percentage to be used shall be fixed by the Engineer in accordance with the job-mix formula and the other quality control requirements.

During the mixing operation, one-half to one (0.5 to 1.0) mass percent of hydrated lime, dry aggregate basis, shall be added to the mixture. The lower percentage limit is applicable to aggregates which are predominantly calcareous.

310.3 Construction Requirements

The construction requirements shall be in accordance whenever applicable, with Section

307.3.

310.4 Method of Measurement

The area to be paid for under this item shall be the number of square meters (m²) of asphalt

pavement placed, compacted and accepted based on the thickness and density of the cores

taken in accordance with subsection 307.3.10 (Acceptance, Sampling and Testing).

310.5 Basis of Payment

The accepted quantity, measured as prescribed in Section 310.4, shall be paid for at the contract unit price for Bituminous Concrete Surface Course, Hot-Laid, which price and payment shall be full compensation for furnishing all materials, handling, mixing, hauling, placing, rolling, compacting, labor, equipment, tools and incidentals necessary to complete this Item.

Payment will be made under:

Pay Item Number	Description	Unit of Measurement
310	Bituminous Concrete Surface Course, Hot-Laid	Square Meter

ITEM 605 – ROAD SIGN

605.1 Description

This Item shall consist of furnishing and installing road signs in accordance with this Specification and to the details shown on the Plans, or as required by the Engineer.

The road signs shall comply in all respects with the "Philippine International Road Signs Manual" published by the Department of Public Works and Highways, Manila. The categories of road signs are designated in the Manual, namely, danger warning signs, regulatory signs and informative signs, or guide signs. These are referred to in the Contract as warning signs and informatory signs, respectively.

Road signs shall be classified as standard or non-standard. Standard signs consist of all warning signs, regulatory signs and informatory signs with the exception of direction signs, place identification signs and the line. Non-standard signs consist of all informatory signs which are not classified as standard signs.

The size of warning and regulatory signs is the length of the side of triangular signs (measured from the points of intersection of the extension of the edges), the horizontal width of octagonal signs and the diameter of circular signs.

605.2 Material Requirements

605.2.1 Sign Panels

Sign panels for warning, regulatory, and informatory signs shall be manufactured from aluminum sheeting at least 3 mm thick.

605.2.2 Reflective Sheeting

The reflective sheeting used on the road signs shall consist of spherical lens elements embedded within a transparent plastic having a smooth, flat surface with a protected precoat adhesive which shall be pressure sensitive for manual application, or tack free heat activated for mechanical vacuum-heat application. The minimum reflective brightness values of the reflective sheeting as compared to a magnesium oxide (MgO) shall be as given in Table 605.1. The brightness of the reflective sheeting totally wet by rain, shall be not less than 90% of the given values.

Table 605.1 - Reflective Brightness of Traffic Signs Surfaces

Color	Angle of	Angle of	Minimum
	Incidence	Divergence	Reflective
			Brightness
			Value
			Compared with
			MgO
Red	-4 ⁰	0.5^{0}	15
	20^{0}	0.5^{0}	10
	50^{0}	0.5^{0}	3
White	-4 ⁰	0.5^{0}	75
	20^{0}	0.5^{0}	70
	50^{0}	0.5^{0}	70
Yellow	-40	0.5 ⁰	35
	20^{0}	0.5^{0}	35

	50^{0}	0.5^{0}	10
Blue	-40	0.5^{0}	6
	20^{0}	0.5^{0}	4.5
	50^{0}	0.5^{0}	0.5

The reflective sheeting shall be sufficiently flexible to permit application and adhesion to a moderately embossed surface. It shall show no damage when bent 90^0 over a 50 mm diameter mandrel.

The sheeting shall be solvent-resistant so as to be capable of withstanding cleaning with petrol, diesel fuel, mineral spirits, turpentine methanol.

The sheeting shall show no cracking or reduction in reflectivity after being subjected to the dropping of a 25 mm diameter steel ball from a height of 2 m into its surface.

The adhesive shall permit the reflective sheeting to adhere accurately 48 hours after application of temperatures of up to 90° .

The reflective material shall be weather-resistant and, following cleaning in accordance with manufacturer's recommendations, shall show no discoloration,

cracking, blistering, peeling or any dimensional change.

Samples of reflective sheeting shall be submitted to the Engineer for approval.

605.2.3 Posts and Frames

Wide flange posts and frames shall be fabricated from structural steel conforming to ASTM A 283 Grade D. In lieu of wide flange steel posts, the Contractor may use tubular steel posts conforming to ASTM A 501. All posts shall be thoroughly cleaned, free from grease, scale and rust and shall be given one coat of rust-inhibiting priming paint and two coats of gray paint in accordance with Item 411, Paint.

605.2.4 Nuts and Bolts

Nuts, bolts, washers and other metal parts shall be hot-dip galvanized after

fabrication in accordance with the requirements of AASHTO M 111.

605.2.5 Concrete Foundation Blocks

The concrete for the foundation blocks shall be Class A in accordance with Item

405, Structural Concrete and shall be of the size shown on the Plans.

605.3 Construction Requirements

605.3.1 Excavation and Backfilling

Holes shall be excavated to the required depth to the bottom of the concrete foundation as shown on the Plans.

Backfilling shall be carried out by using suitable material approved by the Engineer and shall be compacted in layers not exceeding 150 mm in depth. Surplus excavated material shall be disposed of by the Contractor as directed by the Engineer.

605.3.2 Erection of Posts

The posts shall be erected vertically in position inside the formwork of the foundation block prior to the placing of the concrete and shall be adequately supported by bracing to prevent movement of the post during the placing and setting of concrete. The posts shall be located at the positions shown on the Plans.

605.3.3 Sign Panel Installation

Sign panels shall be installed in accordance with the details shown on the Plans. Any chipping or bending of the sign panels shall be considered as sufficient cause to require replacement of the panels at the Contractor's expense.

The exposed portion of the fastening hardware on the face of the signs shall be painted with enamels matching the background color.

All newly erected traffic road signs shall be covered until ordered removed by the Engineer.

605.4 Method of Measurement

The quantities of standard reflective warning and regulatory road signs shall be the number of such signs of the size specified, including the necessary posts and supports erected and accepted.

The quantities for standard reflective informatory signs and non-standard reflective informatory signs shall be the number of such, including the necessary posts and supports, erected and accepted.

605.5 Basis of Payment

The quantities measured as determined in Subsection 605.4, Method of Measurement, shall be paid for at the contract unit price for the Pay Items shown in the Bid Schedule which price and payment shall be full compensation for furnishing and installing road signs, for excavation, backfilling and construction of foundation blocks, and all labor, equipment, tools and incidentals necessary to complete the Item.

Payment will be made under:

Pay Item No.	Description	Unit of Measurement
605 (1)	Warning Signs	Each

ITEM 612 - REFLECTIVE THERMOPLASTIC STRIPPING MATERIALS (SOLID FORM)

612.1 Description

This standard specifies the requirement for reflectorized thermoplastic pavement striping material conforming to AASHTO M 249 that is applied to the road surface in a molten state by mechanical means with surface application of glass beads at a rate of not less than 350 g/L of glass beads having a size range of drop-in type and will produce an adherent reflectorized stripe of specified thickness and width capable of resisting deformation by traffic.

612.2 Materials Requirements

1. Reflectorized Thermoplastic Pavement Material shall be homogeneously composed of pigment, filler, resins and glass reflectorizing spheres.

The thermoplastic material shall be available to both white and yellow.

2. Glass Beads (Pre-Mix) shall be uncoated and shall comply with the following requirements:

Refractive Index, min. - 1.50 Spheres, Percent, min. - 90

Gradation:		
Sieve	Mass Passing	Percent
mm		
0.850	100	
0.600	75-95	
0.425	-	
0.300	15-35	
0.180	-	
0.150	0-5	

612.3 General Requirements

612.3.1 Composition

The pigment, beads and filler shall be uniformly dispersed in the resin. The material shall be free from all skins, dirt and foreign objects and shall comply with the requirements as specified in Table 612.1.

Component	White	Yellow
Binder, min.	18.0	18.0
Glass Beads:		
min.	30	30
max.	40	40
Titanium		
Dioxide, min.	10.0	
Chrome Yellow,		10.0
Medium, min.		
Calcium Carbonate	42.0	42.0
And Inert Fillers,		
Max.		

Table 612.1 – Composition Requirements

612.3.2 Qualitative

The material shall conform to the qualitative requirements as specified in Table 612.2.

Table 612.2 – Qualitative Requirements

Property	Requirements

	White
	Yellow
Specific Gravity, max.	2.15
Drying Time, minutes, max.	10.0
,	1.24
Bond Strength to Portland	
Cement Concrete after	
heating for four (4) hours	No cracks
±5 min. @ 218°C, MPa, max.	
Cracking Resistance @ low	115
temp. after heating for	
four (4) hours ± 5 min. @ 218 $\pm 2^{\circ}C.$	
± 2 C.	
Impact Resistance after	$102.5 \pm 9.5^{\circ}\mathrm{C}$
heating for four (4) hours	
± 5 min. @ 218 $\pm 2^{o}C$ and	75 45
forming test specimens,	
mm/kg, min.	
Softening Point after heating	
for four (4) hours ± 5 min.	

@ 218 ±2°C.	
Daylight reflectant @ 45	
Degrees – 0 degrees, % min.	

612.4 Application Properties

The material shall readily extrude at a temperature of $211 \pm 7^{\circ}$ C, from approved equipment to produce a line 3.2 to 4.8 mm thick which shall be continuous and uniform in shape having clear and sharp dimensions.

The material shall not exude fumes which are toxic, obnoxious or injurious to persons or property when heated during applications.

The application of additional glass beads by drop-in methods shall be at a rate of not less than 350 g/L of glass beads having a size range for drop-in type. The typical size range of spheres of drop-in type paints is as follows.

Passing 850 um (#20) sieve and	
retained on 250 um (#60) sieve, %	80 - 100

a) Preparation of Road Surface – the materials should be applied only on the surface which is clean and dry. It shall not be laid into loose detritus, mud or similar extraneous matter, or over an old paint markings, or over an old thermoplastic marking which is faulty. In the case of smooth, polished surface stones such as smooth concrete, old asphalt surfacing with smooth polished surface stones and/or where the method of application of the manufacturer of the thermoplastic materials shall be recommended, and with the approval of the Engineer.

b) Preparation of Thermoplastic Materials – The materials shall be melted in accordance with the manufacturer's instruction in a heater fitted with a mechanical stirrer to give a smooth consistency to the thermoplastic and such the local overheating shall be avoided. The temperature of the mass shall be within the range specified by the manufacturer and shall on no account be allowed to exceed the maximum temperature stated by the manufacturer. The molten material shall be used as expeditiously as possible and for thermoplastics which have natural resin binders or otherwise sensitive to prolong heating the materials shall not be maintained in a molden condition for more than 4 hours.

c) Laying – Center lines, lane lines and edges lines shall be applied by approved mechanical means and shall be laid in regular alignment. Other markings may be applied by hand – screed, hand propelled machine or by self-propelled machine approved or directed by the Engineer. After transfer to the laying apparatus the materials shall be maintained within the temperature range specified by the manufacturer and stirred to maintain the right consistency for laying.

In the case of screen application, the material shall be laid to a thickness of not less than 3 mm or more than 6 mm unless authorized by the Engineer when laid over an existing markings. In the case of sprayed application the material shall be laid to thickness of not less than 1.5 mm unless authorized by the Engineer. In all cases the surface produced shall be uniform and appreciably free from bubbles and steaks. Where the Contractor Documents require or the Engineer direct that ballotini shall be applied to the surface of the markings, these shall be applied uniformly to the surface of hot thermoplastic immediately after laying such that the quality of ballotini firmly embedded and retained in the surface after completion complies with the requirements of Sub-section 606.2.2, Material Requirements.

Road markings of a repetitive nature, other center lines, lane lines, etc., shall unless otherwise directed by the Engineer be set out with stencils which comply with the size and spacing requirements shown on the Plans.

d) Re-use of Thermoplastic Materials – At the end of day's as much as possible the material remaining in the heater and/or laying apparatus shall be removed. This may be broken and used again provided that the maximum heating temperature has not been exceeded and that the total time during which it is a molden condition does not exceed the requirements of Sub-section 606.2.3, Construction Requirements.

612.4.1 Defective Materials or Workmanship

Materials which are defective or have been applied in an unsatisfactory manner or to incorrect dimensions or in a wrong location shall be removed, the road pavement shall be made good and materials replaced, reconstructed and/or properly located, all at the Contractor's expenses and to the satisfaction of the Engineer.

612.4.2 Protection of the Traffic

The Contractor shall protect pedestrians, vehicles and other traffic adjacent to the working area against damage or disfigurement by construction equipment, tools and materials or by spatters, splashes and smirches or paint or other construction materials and during the course of the work, provide and maintain adequate signs and signals for the warning and guidance of traffic.

612.5 Sampling

A minimum weight of 10 kg. of Reflectorized Thermoplastic paint shall be taken for every 100 bags or fraction thereof.

612.6 Testing

The material shall be tested in accordance with AASHTO T 250 or with the appropriate method in ASTM designation.

612.7 Packing and Marking

The material shall be packaged in a suitable containers to which it will not adhere during shipment and storage. The blocks of cast thermoplastic material shall be approximately 300 x 915 by 51 mm and shall weigh approximately 23 kg. Each container label shall designate the color, manufacturer's name, batch number and date of manufacture. Each batch manufactured shall have its own separate number. The label shall warn the user that the material shall be heated to $211 \pm 7^{\circ}$ C during application.

612.8 Method of Measurement

The quantity of pavement markings to be paid for shall be the area as shown on the Plans of painted traffic line of the stated width and the area as shown on the plans of symbols, lettering, hatching and the like, completed and accepted.

The quantity shown in the Bill of Quantities represents the approximate quantity in square meter of pavement markings, with width as shown applied at the centerline of the road pavements to which may be increased or decreased depending on the Engineer's decision whether to require additional markings or delete parts of it. Other markings representing symbols, lettering, hatching and others in locations where they maybe required by the Engineer shall, likewise, be implemented by the Contractor using reflectorized thermoplastic pavement markings as approved and directed.

612.9 Basis of Payment

The quantities measured as determined in Subsection 612.8, Method of Measurement, shall be paid for at the appropriate contract unit price for the Pay Items shown in the Bid Schedule which price and payment shall constitute full compensation for furnishing and placing all materials, sampling and packing, for the preparation of the surface, and for all labor, equipment, tools and incidentals necessary to complete the Item.

Payment will be made under:

Pay Item Number	Description	Unit of Measurement
612(1)	Reflectorized Thermoplastic	Square Meter
	Pavement Markings (White)	

ITEM 1032 - PAINTING, VARNISHING AND OTHER RELATED WORKS

1032.1 Description

This Item shall consist of furnishing all paint materials, varnish and other related products, labor, tools, equipment required and undertaking the proper application of painting, varnishing and related works in accordance with the Plans and this Specification.

1032.2 Material Requirements

1032.2.1 Paint Materials

Paint material shall conform to the requirements of the following Specifications:

Material	PNS Code	Description	Application
Flat Latex Paint	PNS 139	Specification for Flat Latex Paint (white and light tints for exterior and interior use)	Properly prepared plaster, masonry and primed wood and other architectural surfaces
Semi-gloss Latex Paint	PNS 463	Specification for Semi- Gloss Latex Paint (white and light tints for exterior and interior use)	Properly prepared plaster, masonry and primed wood and other architectural surfaces
Semi-gloss Enamel Paint	PNS 225	Specification for Alkyd- based Semi-Gloss Enamel Paint (white and light tints for exterior and interior use)	Properly prepared plaster, masonry and primed wood and other architectural surfaces
Enamel Paint	PNS 226	Specification for Alkyd based Gloss Enamel Paint (white and coloured for exterior and interior use)	Wood, metal and other architectural surfaces

Table 1032.1 Paint Material Specification Requirements

Alkyd-based Metal Primer	PNS 366	Specification for Alkyd based Metal Primer	Ferrous metal
Epoxy Metal Primer	PNS 2113	Specification of Epoxy Metal Primer	Ferrous metal
Flatwall Enamel Paint	PNS 227	Specification for Alkyd based Flat Enamel Paint (white and light tints for exterior and interior use)	Wood
Gloss Latex Paint	PNS 462	Specification for Gloss Latex Paint (white and light tints for exterior and interior use)	Masonry
Water Based Gloss Roof Paint	PNS 612	Specification for Water Based Gloss Roof Paint	Concrete, metal, wood and other paintable roofing materials
Elastomeric Wall Coating	PNS 2116	Specification for Elastomeric Wall Coating	Plaster, masonry, other architectural surfaces
Epoxy Enamel	PNS 2118	Specification for Epoxy Enamel, white and coloured	Concrete, wood, metal and other architectural surfaces
Roof paint (water based, flat)	PNS 464	Specification for Roof paint (water-based, flat)	Paintable roofing materials

Roof paint PNS (Portland Cement)	465 Specification for Roof paint (Portland Cement)	Paintable roofing materials
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1032.2.2 Tinting Colors

Tinting colors shall be first grade quality, pigment ground in alkyd resin that disperses and mixes easily with paint to produce the color desired. Same brand of paint and tinting color shall be used to effect good paint body.

1032.2.3 Acry-colors

It shall be high strength tinting colors for water-based coatings that are specially formulated from the finest blend of pigments combined with pure acrylic latex vehicle that is easy to disperse, fast drying, odorless, and gives maximum color retention.

1032.2.4 Concrete Neutralizer

Concrete neutralizer shall be first grade quality concentrate diluted with clean water and applied as surface conditioner of new interior and exterior walls thus improving paint adhesion and durability.

1032.2.5 Silicon Water Repellant

Silicon water repellant shall be transparent water shield especially formulated to repel rain and moisture on exterior masonry surfaces.

1032.2.6 Patching Compound

Patching compound shall be fine powder type material like calciumine that can be mixed into paint that will produce a putty consistency, with oil base primers and paints to fill minor surface dents and imperfections.

1032.2.7 Varnish

Varnish shall be a homogeneous solution of resin, drying oil, drier and solvent. It shall be extremely durable clear coating, highly resistant to wear and tear without cracking, peeling, whitening, spotting, etc. with minimum loss of gloss for a maximum period of time.

1032.2.8 Lacquer

Lacquer shall be any type of organic coating that dries rapidly and solely by evaporation of the solvent. Typical solvent are acetates, alcohols and ketones. Clear gloss lacquer shall be in accordance with the requirements of PNS 368, Specification for Clear Gloss Lacquer.

1032.2.9 Shellac

Shellac shall be a solution of refined lac resin in denatured alcohol. It dries up by evaporation of the alcohol. The resin is generally furnished in orange and bleached grades.

1032.2.10 Sanding Sealer

Sanding sealer shall be quick drying lacquer, formulated to provide quick dry, good holdout of succeeding coats, and containing sanding agents such as zirk stearate to allow dry sanding of sealer. It shall be in accordance with the requirements of PNS 367, Specification for Lacquer Sanding Sealer.

1032.2.11 Oil Wood Stain

Oil-based stain shall be a penetrating stain for interior doors, windows, trim and furniture. It rejuvenates and transforms interior timber. Oil-based stain penetrates deeply and adds color without raising the grain. Oil-based stain is best used to rejuvenate old or used timber.

1032.2.12 Glazing Putty

Glazing putty shall be alkyd-type product for filling minor surface unevenness.

1032.2.13 Natural Wood Paste Filler

Wood paste filler shall be quality filler for filling and sealing open grain of interior wood. It shall produce a level finish for following coats of paint varnish/lacquer and other related products.

1032.2.14 Schedule

Exterior

1. Plain cement plastered finish painted	-	Three (3) coats acrylic base masonry paint to be
2. Concrete exposed aggregate	-	One (1) coat water repellant
and/or tool finish		
3. Ferrous metal	-	One (1) coat primer and two (2) coats enamel paint
4. Galvanized metal	-	One (1) coat zinc chromate primer and
two (2) coats Portland cement paint		
5. Wood paint finish	-	Three (3) coats oil based paint
6. Wood varnished finish	-	Varnish water repellant
Interior		
1. Plain cement plastered	-	Two (2) coats acrylic base masonry paint
finish to - be painted		

2. Concrete exposed aggregate	-	Clean surface
and/		
or tool finish		
3. Ferrous metal	-	One (1) coat primer and two (2) coats
enamel paint		
4. Woodwork sea-mist	-	Three (3) coats of three (3) parts thinner
and one (1) part lacquer		
5. Woodwork varnish	-	First coat of one (1) part sanding sealer
to one (1) part solvent		
Second coat of two-third (2/3)		
sanding sealer to one-third (1/3) solv	ent	
6. Woodwork painted finish	-	Three (3) coats oil base paint
7. Ceiling boards textured finish	-	• One (1) coat oil based paint, all to dry the patch surfaces unevenness and apply textured paint coat

1032.2.15 Containers and Markings

It shall be in accordance with the requirements of PNS 140, General Requirements for Packaging, Packing and Marking of Paints and Other Protective Coatings.

All paints, varnishes, and other related products shall be shipped in strong, substantial containers marked in prints distinctive color of the label or in letters clearly visible to the naked eye with the following information:

- 1. Type of Paint
- 2. Brand or Trademark
- 3. Name and address of manufacturer
- 4. Net Volume and/or mass in metric units
- 5. Directions for use
- 6. Safety precautions
- 7. Batch or lot number

Any package or container not so marked will not be accepted for use under this Specification.

1032.3 Construction Requirements

Prior to commencement of the painting, varnishing and related work, the surfaces to be applied shall be examined in order not to jeopardize the quality and appearances of the painting, varnishing and related works.

1032.3.1 Surface Preparation

All surfaces shall be in proper condition to receive the finish. Woodworks shall be hand-sanded smooth and dusted clean. All knot-holes pitch pockets or sappy portions shall be sealed with natural wood filler. Nail holes, cracks or defects shall be carefully puttied after the first coat, matching the color of paint.

Interior woodworks shall be sandpapered between coats. Cracks, holes of imperfections in plaster shall be filled with patching compound and smoothed off to match adjoining surfaces.

Concrete and masonry surfaces shall be coated with concrete neutralizer and allowed to dry before any painting primer coat is applied. When surface is dried, apply the first coating. Hairline cracks and unevenness shall be patched and sealed with approved putty or patching compound. After all defects are corrected apply the finish coats specified on the Plans (color scheme approved).

Metal shall be clean, dry and free from mill scale and rust. Remove all grease and oil from surfaces. Wash, unprimed galvanized metal with etching solution and allow it to dry. Where required to prime coat surface with Red Lead Primer same shall be approved by the Engineer.

In addition, the following shall be undertaken prior to painting, varnishing and ther related works:

I Voids, cracks, nick, and other wood imperfections will be repaired with proper patching material and finished flushed with surrounding surfaces.

2 Marred or damaged shop coats on metal shall be spot primed with appropriate metal primer.3. Painting and varnishing works shall not be commenced when it is too hot or cold

4. Allow appropriate ventilation during application and drying period. 5. All hardware will be fitted and removed or protected prior to painting and varnishing works.

1032.3.2 Application

Paints when applied by brush shall become non-fluid, thick enough to lay down as adequate film of wet paint. Brush marks shall flawed out after application of paint.

Paints made for application by roller must be similar to brushing paint. It must be non-sticky when thinned to spraying viscosity so that it will break up easily into droplets.

Paint is atomized by high pressure pumping rather than broken up by the large volume of air mixed with it. This procedure change the required properties of the paint.

1032.3.3 Mixing and Thinning

At the time of application paint shall show no sign of deterioration. Paint shall be thoroughly stirred, strained and kept at a uniform consistency during application. Paints of different manufacture shall not be mixed together. When thinning is necessary, this may be done immediately prior to application in accordance with the manufacturer's directions, but not in excess of one (1) pint of suitable thinner per gallon of the paint.

1032.3.4 Storage

All materials to be used under this Item shall be stored in a single place to be designated by the Engineer and such place shall be kept neat and clean at a times. Necessary precaution to avoid fire must be observed by removing oily rags, waste, etc. at the end of daily work.

1032.3.5 Cleaning

All cloths and cotton waste which constitute fire hazards shall be placed in metal containers or destroyed at the end of daily works. Upon completion of the work all staging, scaffolding and paint containers shall be removed. Paint drips, o or stains on adjacent surfaces shall be removed. Paint drips, oil, or stains on adjacent surfaces shall be removed and the entire job left clean and acceptable to the Engineer.

1032.3.6 Workmanship in General

1. All paints shall be evenly applied. Coats shall be of proper consistency and well brushed out so as to show a minimum of brush marks.

2. All coats shall be thoroughly dry before the succeeding coat is applied.

3. Where surfaces are not fully covered or cannot be satisfactorily finished in the number of coats specified, such preparatory coats and subsequent coats as may be required shall be applied to attain the desired evenness of surface without extra cost to the Owner.

4. Where surface is not in proper condition to receive the coat the Engineer shall be notified immediately. Work on the questioned portion(s) shall not start until clearance be proceed is ordered by the Engineer.

5. Hardware, lighting fixture and other similar items shall be removed of protected during the painting varnishing and related work operations and re installed after completion of the work.

1032.3.7 Procedure for Sea-Mist Finish

1. Depress wood grain by steel brush and sand surface lightly.

- 2. Apply sanding sealer.
- 3. Apply two (2) coats of industrial lacquer paint.
- 4. Spray last coat of industrial lacquer paint mixed with sanding sealer.
- 5. Apply wood paste filler thinned with turpentine or paint thinner into the wood surface.
- 6. Wipe off wood paste filler immediately.

7. Spray flat or gloss lacquer whichever is specified.

1032.3.8 Procedure for Varnish Finish

- 1. Sand surface thoroughly.
- 2. Apply putty on all cracks and other wood imperfections with wood paste filler.
- 3. Apply oil stain.
- 4. Apply lacquer sanding sealer.
- 5. Sand surface along the grain.
- 6. Spray three (3) coats of clear dead flat lacquer.
- 7. Polish surface coated using cloth pad.
- 8. Spray gloss lacquer or flat lacquer whichever is desired or specified.

1032.3.9 Procedure for Ducco Finish

- 1. Sand surface thoroughly.
- 2. Apply primer surface white or gray by brush or spray.

3. Apply lacquer spot putty in thin coat. Allow each coat to become thoroughly dry before applying next coat.

4. Apply primer surfaces and then allow to dry in 2 h before applying the next coat.

5. Apply a coat of flat tone semi-gloss enamel as per color scheme submitted and approved by the Engineer.

1032.4 Method of Measurement

The areas of concrete, wood and metal surfaces applied with varnish, paint and other related coating materials shall be measured in square meters as desired and accepted to the satisfaction of the Engineer.

1032.5 Basis of Payment

The accepted work shall be paid at the unit bid price, which price and payment constitute full compensation for furnishing and proper application of all materials, labor, equipment, tools and other incidental necessary to complete this Item.

Payment shall be made under:

Pay Item Number	Description	Unit of Measurement
1032(1)a	Painting Works, Masonry/Concrete	Square Meter

Section VII. Drawings

Section VIII. Bill of Quantities

PROVINCIAL GOVERNMENT OF LA UNION

Standard Form Number: SF-INFR-55 Revised on: August 11, 2004

F

REFERENCE NUMBER: Improvement of Plaza Road, Gomez St. including Parking Space from Gen. Luna St. to F. Ortega Highway (Provincial Road), City of San Fernando, La Union

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Bill of Quantities

Imp	rovement of Plaza Road, Gomez St. includin (Provincial Road), C				<u>Prtega Highway</u>
Item No.	Description	Unit	Quantity	Unit Price	Amount (Pesos)
B.5	Project Billboard / Signboard	ea	1		
B.7 (2)	(Amount in Words) Occupational Safety & Health Program (Amount in Words)	L.S.	1		
B.8 (2)	Traffic Management	L.S.	1		
B.9	Mobilization/Demobilization	L.S.	1		
302(2)	Bituminous Tack Coat (Emulsified Asphalt) (Amount in Words)	sq.m.	4,437.80		
310(1)b	Bituminous Concrete Surface Wearing Course, Hot laid (50mm)	sq.m.	4,437.80		
605(1)ai 1	(Amount in Words) Pedestrian and School Signs Pedestrian Crossing Ahead (W6-1) (Amount in Words)	each	6		
612(1)	Reflective Thermoplastic Pavement Marking (White) (Amount in Words)	sq.m.	190.02		
807	Site Development	L.S.	1		
1032(1)	Painting Works (Masonry Painting)	sq.m.	120.50		

Submitted by:

Date: _____

Section IX. Checklist of Technical and Financial Documents

Checklist of Technical and Financial Documents

I. TECHNICAL COMPONENT ENVELOPE

Class "A" Documents

Legal Documents

(a) Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages) in accordance with Section 8.5.2 of the IRR;

Technical Documents

- (b) Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid; **and**
 -] (c) Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided under the rules; **and**
- (d) Special PCAB License in case of Joint Ventures;
 - and registration for the type and cost of the contract to be bid; and
 - (e) Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission;
 - <u>or</u>

(f)

Original copy of Notarized Bid Securing Declaration; and

Project Requirements, which shall include the following:

- a. Organizational chart for the contract to be bid;
 - b. List of contractor's key personnel (*e.g.*, Project Manager, Project Engineers, Materials Engineers, and Foremen), to be assigned to the contract to be bid, with their complete qualification and experience data;
- c. List of contractor's major equipment units, which are owned, leased, and/or under purchase agreements, supported by proof of ownership or certification of availability of equipment from the equipment lessor/vendor for the duration of the project, as the case may be; <u>and</u>

(g) Original duly signed Omnibus Sworn Statement (OSS);
 <u>and</u> if applicable, Original Notarized Secretary's Certificate in case of a corporation, partnership, or cooperative; or Original Special Power of Attorney of all members of the joint venture giving full power and authority to its officer to sign the OSS and do acts to represent the Bidder.

Financial Documents

(h) The prospective bidder's computation of Net Financial Contracting Capacity (NFCC).

Class "B" Documents

(i) If applicable, duly signed joint venture agreement (JVA) in accordance with RA No. 4566 and its IRR in case the joint venture is already in existence; <u>or</u> duly notarized statements from all the potential joint venture partners stating that they will enter into and abide by the provisions of the JVA in the instance that the bid is successful.

II. FINANCIAL COMPONENT ENVELOPE

(j) Original of duly signed and accomplished Financial Bid Form; and

Other documentary requirements under RA No. 9184

- (k) Original of duly signed Bid Prices in the Bill of Quantities; and
- (1) Duly accomplished Detailed Estimates Form, including a summary shee indicating the unit prices of construction materials, labor rates, and equipmen rentals used in coming up with the Bid; **and**
- (m) Cash Flow by Quarter.



