

**PHILIPPINE
PORTS
AUTHORITY**



**Repair of Damaged R.C. Wharf, Roro Ramp No. 2
and Back-Up Area,
Port of Puerto Princesa, Palawan
(NRP-PLW-01-2021)**

BID DOCUMENTS
September 2021

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**GLOSSARY OF
TERMS, ABBREVIATIONS, AND
ACRONYMS**

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(f))

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.



**Invitation to Bid
for the
Repair of Damaged R.C. Wharf, Roro Ramp No. 2 and Back-Up
Area, Port of Puerto Princesa, Palawan**

1. The **Philippine Ports Authority PMO Palawan**, through the **Corporate Budget of the Authority for CY 2021** intends to apply the sum of **Php 27,722,838.90** being the Approved Budget for the Contract (ABC) to payments under the contract for **Repair of Damaged R.C. Wharf, RORO Ramp No. 2 and Back-Up Area, Port of Puerto Princesa, Palawan**. Bids received in excess of the ABC shall be automatically rejected at bid opening.
2. The **Philippine Ports Authority PMO Palawan** now invites bids for the above Procurement Project. Completion of the Works is required **Two Hundred Forty (240) 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 non-discretionary *"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 **Philippine Ports Authority PMO Palawan Bids and Awards Committee** and inspect the Bidding Documents at the address given below from **8:00 A.M. to 5:00 P.M., Monday to Friday**.
5. A complete set of Bidding Documents may be acquired by interested bidders on **September 1, 2021 to September 20, 2021** from given address and websites below and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of **Php 25,000.00**. The Procuring Entity shall allow the bidder to present its proof of payment for the fees *presented in person*.
6. The **Philippine Ports Authority PMO Palawan Bids and Awards Committee** will hold a Pre-Bid Conference on **September 08, 2021, 2:00 P.M.** at Conference Room, 2nd Floor, PPA Administrative Building, Port Area, Puerto Princesa City and/or through videoconferencing/webcasting via *Zoom*, 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 on or before **9:00 A.M. of September 20, 2021**. 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 15.
9. Bid opening shall be on **September 20, 2021, 9:30 A.M.** at Conference Room, 2nd Floor, PPA PMO—Palawan Administrative Building, Port Area, Puerto Princesa City. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.

10. The **Philippine Ports Authority** 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.

- **Required PCAB Registration (Minimum): At least SMALL B- Port, Harbor or Offshore Engineering**

11. For further information, please refer to:

MARIZA O. NALLANA

Head Secretariat

PMO Palawan BAC

Port Area, Puerto Princesa City,

Telephone No.: (048) 433-0350 or (048) 716-6864

Email Address: pmopalawanbac@gmail.com

12. You may visit the following websites:

For downloading of Bidding Documents: www.ppa.com.ph

www.gppb.com.ph

September 1, 2021


JEMUEL B. APELLIDO
Chairperson
PPA PMO-Palawan BAC

1. Scope of Bid

The Procuring Entity, **Philippine Ports Authority PMO Palawan** invites Bids for the **Repair of Damaged R.C. Wharf, Roro Ramp No. 2 and Back-Up Area, Port of Puerto Princessa, Palawan.**, with Project Identification Number **NRP-PLW-01-2021**.

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 **Philippine Ports Authority** through the source of funding as indicated below for **CY 2021** in the amount of **Php 27,722,838.90**.

2.2. The source of funding is:

a. Corporate Operating Budget.

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

5.5. 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.

7.2. Subcontracting of any portion of the Project does not relieve the Contractor of any liability or obligation under the Contract. The Supplier will be responsible for the acts, defaults, and negligence of any subcontractor, its agents, servants, or workmen as fully as if these were the Contractor's own acts, defaults, or negligence, or those of its agents, servants, or workmen.

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 **Philippine Ports Authority PMA Palawan, Port Area, Puerto Princesa City, Palawan** and/or through **vide Conferencing/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. A valid PCAB License is required, and in case of joint ventures, a valid special PCAB License, and registration for the type and cost of the contract for this Project. 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:*
 - a. 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 **One Hundred Twenty (120) days from the date set for Bid Opening**. 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. 9164 shall form part of the Contract. Additional Contract documents are indicated in the BDS.

Bid Data Sheet

ITB Clause				
5.2	For this purpose, contracts similar to the Project refer to contracts which have the same major categories of work, which shall be:			
	<u>Major Operation of Work</u>	<u>Unit of Measure</u>	<u>Required Quantity(50% of BOQ)</u>	
	1. Demolition and Disposal Works	cu.m	855.00	
	2. Supply, Spread and Compact Aggregate Course Materials	cu.m	381.00	
	3. Reinforcing Steel Bars	kgs.	20,491.00	
	4. Concrete Works	cu.m.	477.00	
7.1	Subcontracting is not allowed			
10.3	For Joint Venture : Special PCAB License			
10.4	The key personnel must meet the required minimum years of experience set below:			
	<u>Key Personnel</u>	<u>General Experience</u>	<u>Relevant Experience</u>	
	1) Project Manager	Infrastructure/Civil Works	Building Construction	
	2) Project Engineer	Infrastructure/Civil Works	Building Construction	
	3) Materials Engineer	Infrastructure/Civil Works	Building Construction	
	4) Safety and Health Officer	Infrastructure/Civil Works	Building Construction	
	5) Foreman	Infrastructure/Civil Works	Building Construction	
	NOTE: Required Personnel minimum years of experiences: at least two (2) years of experience			
10.5	The minimum major equipment requirements are the following:			
	<u>Equipment</u>	<u>Capacity</u>	<u>No.</u>	<u>Ownership</u>
	Air Compressor with Jack Hammer	250 cfm	1	Owned / Leased
	Backhoe	0.40 cu.m., 94 30 HP	1	Owned / Leased
	Backhoe Breaker Attachment	3,000 ft-lb	1	Owned / Leased
	Clamshell	1.00cu.m. cap	1	Owned / Leased
	Concrete Cutter	6.50 HP	1	Owned / Leased
	Concrete Mixer	1 bagger	2	Owned / Leased
	Concrete Vibrator	3.50 HP	2	Owned / Leased
	Dump Truck	9.17 cum	1	Owned / Leased
	Electric Bar Bender	25mmØ cap	1	Owned / Leased
	Electric Bar Cutter	25mmØ cap	1	Owned / Leased
	Road Roller	12.05 T, Vibratory	1	Owned / Leased
	Plate Compactor	5.0HP, Vibratory	1	Owned / Leased
	Water Truck	1,000 gals. Cap.	1	Owned / Leased
	Truck-mounted Crane	35T	1	Owned / Leased
	Welding Machine, Diesel Driven	400amp.	1	Owned / Leased
	Concrete Bucket	0.50 cum. cap	1	Owned / Leased
	Boom Truck	5T cap.	1	Owned / Leased
	Oxy/Acetylene Cutting Outfit		1	Owned / Leased
	Thermal Scanner & Footbath		2	Owned
	Portable Sprayer	16 liter capacity	1	Owned
12	Value Engineering Clause: Not Allowed			
15.1	The bid security shall be in the form of a Bid Securing Declaration OR any of the following forms and amounts:			
	a. The amount of not less than Php 554,458.78 , if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit;			
	b. The amount of not less than Php 1,388,141.95 if bid security is in Surety Bond.			

16	Each Bidder shall submit One (1) original and Four (4) copies of their Technical and Financial Bid, properly book-bound with hard/soft cover. Screw-bound, ring-bound and combo-bound documents are not acceptable.
19.2	Partial bid is not allowed
20	Other appropriate licenses and permits required: None
21	Additional contract documents relevant to the Project that may be required by existing laws and/or the Procuring Entity, such as construction schedule and S-curve, manpower schedule, construction methods, equipment utilization schedule, construction safety and health program approved by the DOLE, and other acceptable tools of project scheduling.

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	Sectional completion: None
4.1	<i>[Specify the schedule of delivery of the possession of the site to the Contractor, whether full or in part.]</i>
6	The site investigation reports are: None
5.1	Performance bond from PPA-Accredited surety and insurance company
7.2	Semi-permanent structures: Five (5) years Buildings of types 1, 2, and 3 as classified under the National Building Code of the Philippines, concrete/asphalt roads, concrete river control, drainage, irrigation lined canals, river landing, deep wells, rock causeway, pedestrian overpass, and other similar semi-permanent structures
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 _____.
13	No advance payments or mobilization fees shall, as a rule, be extended or paid to the winning bidder per DOTr memorandum dated July 10, 2018.
14	No further instruction
15.1	The date by which operating and maintenance manuals are required is _____. The date by which "as built" drawings are required upon submission of Final Billing.
15.2	The amount to be withheld for failing to produce "as built" drawings and/or operating and maintenance manuals by the date required is _____.

**REPAIR OF R.C. WHARF, RORO RAMP NO. 2 AND BACK-UP AREA
PORT OF PUERTO PRINCESA, PALAWAN**

TECHNICAL SPECIFICATIONS

GENERAL REQUIREMENTS

1.0 MOBILIZATION & DEMOBILIZATION

1.1.1 GENERAL

Work under this Contract shall be in accordance with the terms and conditions stipulated in the Conditions of Contract and Section 1 "General Requirements" of these Specifications and shall apply to this Section whether herein referred to or not.

1.1.2 SCOPE OF WORK

This Section includes mobilization, demobilization, assembly and disassembly of equipment/plants including incidentals necessary to complete the work.

1.1.3 MOBILIZATION

a) The Contractor shall mobilize and put into operation all equipment and plants required to undertake the Contract.

b) Mobilization shall include the transferring to the job-sites of all equipment, plants, supplies and materials, personnel, and all items necessary for the execution and completion of the work, and shall also include the setting up of all equipment, instruments and all other plants until rendered operable, subject to the confirmation of the Engineer.

c) Sufficient supply of spares for the equipment and plants shall be carried on-site. Equipment/plants encountering breakdowns must be repaired on site by the most expeditious method possible at no cost to the Procuring Entity. In the event that the equipment/plants call for major repair works that cannot be undertaken at the site, the Contractor shall replace such equipment/plants with equal or better performance capacity at no additional mobilization costs to the Procuring Entity and the Contractor shall not be entitled to any time extension.

1.1.4 DEMOBILIZATION

Demobilization upon request of the Contractor and approved by the Engineer, shall include the following:

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

2.0 CONSTRUCTION PHOTOGRAPHS

Provide record progress photographs taken at a fixed point and angle as, when and where directed by the Engineer at intervals of not more than ten (10) days. The photographs shall be sufficient in number and location to record the exact progress of works. The Contractor shall provide the Engineer all the photographs stored in CDs-properly labeled. This should be submitted to ESD – PMO Palawan, after the project completion. Billing photographs shall be in 4R size with corresponding billboard indicating the name of the project and location, bill number, item number, name of the person taking the photograph, date taken and the on-going activity.

3.0 RECORDS OF DAILY ACTIVITIES / EVENTS

The Contractor shall maintain a daily log describing the important events pertaining to the Works, the working hours, the number of laborers employed, effective operation time of equipment, overtime hours, delays due to meteorological and maritime conditions, weather condition, lack of labor, materials or equipment, progress made including instructions, notifications, issues and concerns and recommendations made by the Engineer.

4.0 AS-BUILT DRAWINGS AND FINAL CONSTRUCTION REPORT

Within thirty (30) calendar days after the issuance of the Taking Over Certificate, the Contractor shall prepare and as-built drawings and a final construction report as draft. And within thirty (30) calendar days after the issuance of the Taking Over Certificate, the Contractor shall submit the Final Construction Report and Final As-Built drawings.

5.0 SAFETY

The Contractor shall be responsible for the safety of its workers. Wearing of personal protective equipments (PPEs) shall be mandatory.

At the end of each day's work, the site shall be left in safe condition, so that no part is in danger of toppling, or falling or creating hazards to personnel or equipment.

The construction site shall be properly lighted at night. Warning signs shall be properly located for the safety of the port users.

Safety guidelines as stipulated in PPA Engineering Circular 01-2020 pertaining to the implementation of PPA projects during the COVID-19 public health emergency must be observed and implemented. The contractor shall provide and use thermal scanners and footbaths as part of the safety measures.

SITE WORKS

1.0 SURVEY AND LAYOUT

1.1 GENERAL

- a) Division 1, "General Requirements" of these Specifications shall apply to this Section whether herein referred to or not.
- b) Applicable requirements under Section 2.3, "Surveys, Soundings, Soil Investigations and Installation of Markers".

1.2 SCOPE OF WORK

This Section covers survey and layout work.

1.3 SURVEY AND SETTING OUT OF WORKS

- a) The Contractor together with the PPA Representative shall carry out the survey by means of traversing and leveling connected to the approved / established reference points.
- b) The stations shall be established in accordance with Sub-section 2.3.6.
- c) The Contractor shall establish at least three (3) permanent monuments and three benchmarks in the port area on locations approved by the Engineer that can serve conveniently as reference points of future construction.

2.0 DEMOLITION, EXCAVATION AND DISPOSAL WORK

2.1 DESCRIPTION

This section shall be applied to the demolition work of existing port structures as well as disposal of debris/unusable materials and storage of usable materials.

2.2 GENERAL PROVISIONS

- a. The Contractor shall be deemed to have satisfied himself of the site conditions, and to have included in his unit prices provision for all risks that may arise during or in connection with the work.
- b) The demolition work shall be carried out by approved methods and equipment such as concrete breakers, gas-cutters, hydraulic jacks, compressed air disintegrators, etc., however, no blasting shall be used unless approved in writing by the Engineer and after obtaining the written permission of the concerned Authorities.
- c) The Contractor shall provide suitable equipment, skilled labor and appropriate temporary works such as scaffoldings to ensure safety in his demolition works as well as in the adjacent area.
- d) The Contractor shall demolish all the structural members above the level on which the subsequent and permanent works under this Contract will begin. To this end, the temporary construction works such as excavation shall be conducted by the Contractor.
- e) Materials coming from the demolition works, except general earth, shall remain the property of the Procuring Entity, the designated part of which shall be stored by the Contractor at places specified by the PPA's authorized Representative

2.3. DEMOLITION

2.3.1. R.C. Deck and Roro Ramp No. 2

The Contractor shall carry out all demolition, as much as possible, to have minimum disturbance to adjoining structural members. As such, hydraulic breakers are not permitted.

2.4. EXCAVATION

2.4.1. Back-Up Area

The Contractor shall carry out all excavation required within the back-up area as specified in the drawing. All excavation shall be carried out to lengths, widths, depths and profiles as designed or to such other dimensions as may be approved in writing by the Engineer.

Excavation shall be carried out in such a way as to avoid disturbance to the surrounding ground and other existing works.

Particular care shall be taken to maintain stability when excavating in close proximity to existing structures, and for underground utilities. The Contractor shall comply with all instructions of the Engineer regarding the supporting of the sides of excavation and shall be entirely responsible for the sufficiency of all temporary timbering and supports to the excavation. Any unsound formation areas or underground utility uncovered as a result of the excavation shall be reported to the Engineer immediately for his instructions.

Excess Excavation: If for any cause whatsoever excavations are carried out beyond their true line and level, other than at the direction of the Engineer, the Contractor shall at his own cost make good to the required line and level with appropriate grade of filling or by other approved material and in such manner as the Engineer may direct.

2.5 DISPOSAL AND STORAGE

Prior to the commencement of the demolition work, the Engineer shall submit to the Contractor a list in which all the materials to be salvaged and overhauled, as property of the Procuring Entity and the location of their storage shall be described.

The Contractor shall separate materials to be salvaged from debris. Salvaged materials shall be loaded, transported and unloaded by the Contractor at the specified locations.

The Contractor may dump debris on land areas but out of the site, which areas shall be procured and prepared at his own expense. In this case, safety measures shall be undertaken in the transporting, unloading, covering and others as requested by the Engineer.

If in the opinion of the Engineer, the excavated material is unsuitable for backfill, the Engineer will direct that the material be removed from the site and disposed of in an approved location. All excess materials shall also be disposed of where directed by the Engineer.

For concrete debris from R.C. wharf and RORO Ramp that is gone to the seabed, it shall be removed by an appropriate equipment (i.e. clamshell). This also should be disposed at the specified location.

Paving Blocks

Paving Blocks shall be carefully scarified to avoid breaking and mixing of the underlying leveling sand. Undamaged blocks shall be separated from the damaged ones and shall be manually stacked at the area designated by PPA. Damaged

blocks shall be properly disposed by the contractor after proper inspection of the PPA Appraisal Committee.

2.6 CLEARING WORKS

The Contractor shall remove all construction debris, used and unused materials, equipment, temporary structures and barricades from the project site. Splatters caused by the construction to adjoining structures shall be cleaned.

SPECIFICATIONS

1.0 R.C. WHARF AND RORO RAMP

1.1. MATERIAL REQUIREMENTS

1.1.1. Durability and Strength

For structural elements such as slabs and beams, concrete shall develop a minimum strength of 25 MPa (3,500 psi) at 14 days.

1.1.2. Cement

Except when specifically approved by the Engineer, only one (1) brand of cement shall be used for any individual structure. In determining the approved mix, only Portland cement shall be used as the cementitious material.

- a) Portland Cement: ASTM C 150

Type I (for general use in construction)

1.1.3 Admixture (if necessary)

- a) Air Entraining Admixture shall not be used in all concrete mixture.
- b) Admixture other than air entraining agent shall conform to ASTM C 494.
- c) Admixture containing chloride ions, or other ions producing deleterious effect shall not be used.

1.1.4 Aggregates:

- a) Crushed Coarse Aggregate

Conforming to ASTM C 33 and having nominal sizes passing 38.0 mm to 19.0 mm, 19.0 mm to 9.5 mm to No. 4 sieve. The material shall be well graded between the limits indicated and individually stockpiled. It shall be the Contractor's responsibility to blend the materials to meet the gradation requirements for various types of concrete as specified herein.

Nominal sizes for combined gradation shall be as follows:

ASTM Sieves	Nominal Size of Coarse Aggregates			
	40 mm	25 mm	19 mm	10 mm
50.0 mm (2")	100	-	-	-
38.0 mm (1 1/2")	95-100	-	-	-
31.8 mm (1 1/4")	-	100	-	-
25.0 mm (1")	-	90-100	100	-
19.0 mm (3/4")	35-70	-	90-100	-
16.0 mm (5/8")	-	25-90	-	100
9.5 mm (3/8")	10-30	-	20-55	85-100
No. 4	0-5	0-10	0-10	0-20

b) **Fine Aggregate**

ASTM C 33 except for gradation which has been revised to meet local conditions unless otherwise required by the Engineer, grading of fine aggregate shall be as follows:

ASTM Sieves	% by Weight Passing
9.5 mm (3/8")	100
No. 4	90 - 100
No. 8	80 - 100
No. 16	50 - 90
No. 30	25 - 60
No. 50	10 - 30
No. 100	2 - 10

- 1) Grading of fine aggregates shall be reasonably uniform and fineness modulus thereof shall not vary more than 0.2 from that of the representative sample in which mix proportions of concrete are based.
- 2) Due care shall be taken to prevent segregation.

1.1.5 **Water**

The water used in concrete, mortar and grout shall be free from objectionable quantities of silt, organic matter, alkali, salts and other impurities. Sea water shall not be used at any time.

1.1.6 **Curing Materials**

- a) **Membrane Forming Curing Compound: ASTM C 309**

1.1.7 Reinforcement:

Steel reinforcement, other than Steel for Prestressing, used in Reinforced Concrete, shall conform ASTM as follows:

- **ASTM A 305**
- **ASTM Designation A615-Deformed Billet Steel Bars for Concrete Reinforcement. Minimum yield strength of 230 MPa (33,400 psi) for diameter of 6 mm to 10 mm and 276 MPa (40,000 psi) for diameter of 12 mm to 36 mm.**
- **Welded steel wire ASTM Designation A185, Fabric for Reinforcement of Concrete.**

All bar reinforcement shall have deformed surfaces except that 6 mm bars may be plain.

1.1.8 Tie Wire

Tie wire shall be plain, cold drawn annealed steel wire 1.6 mm diameter (Ga. 16).

1.2 FORMWORK

- a) **Forms:** Designed, constructed, and maintained so as to insure that after removal of forms the finished concrete members will have true surfaces free of offset, waviness or bulges and will conform accurately to the indicated shapes, dimensions, lines, elevations and positions. Form surfaces that will be in contact with concrete shall be thoroughly cleaned before each use.
- b) **Design:** Studs and wales shall be spaced to prevent deflection of form material. Forms and joints shall be sufficiently tight to prevent leakage of grout and cement paste during placing of concrete. Juncture of formwork panels shall occur at vertical control joints, and construction joints. Forms placed on successive units for continuous surfaces shall be fitted in accurate alignment to assure smooth completed surfaces free from irregularities and signs of discontinuity. Temporary opening shall be arranged to wall and where otherwise required to facilitate cleaning and inspection. Forms shall be readily removable without impact, shock, or damage to the concrete.
- c) **Form Ties:** Factory fabricated, adjustable to permit tightening of the forms, removable or snap-off metal of design that will not allow form deflection and will not spall concrete upon removal. Bolts and rods that are to be

completely withdrawn shall be coated with a non- staining bond breaker. Ties shall be of the type which provide watertight concrete.

- d) **Coatings:** Forms for exposed surfaces shall be coated with form oil or form-release agent before reinforcement is placed. The coating shall be a commercial formulation of satisfactory and proven performance that will not bond with, stain, or adversely affect concrete surfaces, and shall not impair subsequent treatment of concrete surfaces depending upon bond or adhesion nor impede the wetting of surfaces to be cured with water or curing compounds. The coating shall be used as recommended in the manufacturer's printed or written instructions. Forms for unexposed surfaces may be wet with water in lieu of coating immediately before placing of concrete. Surplus coating on form surfaces and coating on reinforcement steel and construction joints shall be removed before placing concrete
- e) **Removal of Forms** shall be done in a manner as to prevent injury to the concrete and to insure complete safety of the structure after the following conditions have been met. Where the structure as a whole is supported on shores, forms for beam and girder sides, and similar vertical structural members may be removed before expiration of curing period. Care shall be taken to avoid spalling the concrete surface or damaging concrete edges. Wood forms shall be completely removed.

Minimum stripping and striking time shall be as follows unless otherwise approved by the ENGINEER.

Vertical sides of beams, walls, and columns, lift not exceeding 1.2 m	12 hours
Vertical sides of beams and walls, lift exceeding 1.2 m	36 hours
Soffits of main slabs and beams (props left under)	5 days
Removal of props from beams and main slabs and other work	10 days

1.3. REINFORCEMENT

- a) **Reinforcement:** Fabricated to shapes and dimensions shown and shall be placed where indicated. Reinforcement shall be free of loose or flaky rust and mill scale, or coating, and any other substance that would reduce or destroy the bond. Reinforcing steel reduced in section shall not be used. After any substantial delay in the work,

previously placed reinforcing steel for future bonding shall be inspected and cleaned. Reinforcing steel shall not be bent or straightened in a manner injurious to the steel or concrete. Bars with kinks or bends not shown in the drawings shall not be placed. The use of heat to bend or straighten reinforcing steel shall not be permitted. Bars shall be moved as necessary to avoid interference with other reinforcing steel, conduits, or embedded items. If bars are moved more than one bar diameter, the resulting arrangement of bars including additional bars necessary to meet structural requirements shall be approved before concrete is placed. In slabs, beams and girders, reinforcing steel shall not be spliced at points of maximum stress unless otherwise indicated. Unless otherwise shown in the drawings, laps or splices shall be 40 times the reinforcing bar diameter

- b) The nominal dimensions and unit weights of bars shall be in accordance with the following table:

<u>Nominal Diameter</u> (mm)	<u>Nominal Perimeter</u> (mm)	<u>Nominal Sectional Area</u> (sq mm)	<u>Unit Weight</u> (kg/m)
6	18.8	28.27	0.222
10	31.4	78.54	0.616
12	37.7	113.10	0.888
16	50.3	201.10	1.579
20	62.8	314.20	2.466
25	78.5	490.90	3.854
28	88.0	615.70	4.833
32	100.5	804.20	6.313
36	113.1	1017.60	7.991
40	125.7	1256.60	9.864
50	157.1	1963.50	15.413

- c) Welding of reinforcing bars shall only be permitted where shown; all welding shown shall be performed in accordance with AWS D 12.1.
- d) Exposed reinforcement bars, dowels and plates intended for bonding with future extensions shall be protected from corrosion.
- e) Supports shall be provided in conformance with ACI 315 and ACI 318, unless otherwise indicated or specified. f)

Concrete Protection for Reinforcement

- 1) The minimum concrete cover of reinforcement shall be as shown below unless otherwise indicated in the drawings.
- 2) Tolerance for Concrete Cover of Reinforcing Steel other than Tendons.

Minimum Cover	Maximum Variation
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7.5 cm or more (marine structures and concrete cast against and permanently exposed to earth)	9 mm
less than 7.5 cm (other structures)	6 mm

1.4. MIXING OF CONCRETE

a) General

- 1) Concrete shall be thoroughly mixed and placed in a mixer of an approved size and type that will insure a uniform distribution of the materials throughout the mass.
- 2) All concrete shall be mixed in mechanically operated mixers. Mixing plant and equipment for transporting and placing concrete shall be arranged with an ample auxiliary installation to provide a minimum supply of concrete in case of breakdown of machinery or in case the normal supply of concrete is disrupted. The auxiliary supply of concrete shall be sufficient to complete the casting of a section up to a construction joint that will meet the approval of the Engineer.
- 3) Concrete mixers shall be equipped with adequate water storage and a device for accurately measuring and automatically controlling the amount of water used.
- 4) Materials shall be measured by weighing. The apparatus provided for weighing the aggregates and cement shall be suitably designed and constructed for this purpose. The accuracy of all weighing devices except that for water shall be such that successive quantities can be measured to within one percent of the desired amounts. The water measuring device shall be accurate to plus or minus 0.5 percent. All measuring devices shall be subject to the approval of the Engineer. Scales and measuring devices shall be tested at the expense of the Contractor as frequently as the Engineer may deem necessary to insure their accuracy.
- 7) Manual mixing of concrete shall not be permitted unless approved by the Engineer.

b) Mixing Concrete at Site

- 1) Concrete mixers may be of the revolving drum or the revolving blade type and the mixing drum or blades shall be operated uniformly at the mixing speed recommended by the manufacturer. The pick-up and throw-over blades of mixers shall be restored or replaced when any part or section is worn 20 mm or more below the original height of the manufacturer's

design. Mixers and agitators which have an accumulation of hard concrete or mortar shall not be used.

- 3) When the aggregates contain more water than the quantity necessary to produce a saturated surface dry condition, representative samples shall be taken and the moisture content determined for each kind of aggregate.
- 4) The batch shall be so charged into the mixer that some water enter in advance of cement and aggregates. All water shall be in the drum by the end of the first quarter of the specified mixing time.
- 5) Cement shall be batched and charged into the mixer by such means that it will not result in loss of cement due to the effect of wind, or in accumulation of cement on surfaces of conveyors or hoppers, or in other conditions which reduce or vary the required quantity of cement in the concrete mixture.
- 6) The entire contents of a batch mixer shall be removed from the drum before materials for a succeeding batch are place therein. The materials composing a batch except water shall be deposited simultaneously into the mixer.
- 7) All concrete shall be mixed for a period of not less that 3 minutes after all materials, including water, are in the mixer. During the period of mixing, the mixer shall operate at the speed for which it has been designed.
- 8) Mixers shall be operated with an automatic timing device that can be locked by the Engineer. The time device and discharge mechanism shall be so interlocked that during normal operation no part of the batch will be discharged until the specified mixing time has elapsed.
- 9) The first batch of concrete materials placed in the mixer shall contain a sufficient excess of cement, sand, and water to coat the inside of the drum without reducing the required mortar content of the mix. When mixing is to cease for a period of one hour or more, the mixer shall be thoroughly cleaned.
- 10) Slump:

Tests shall be made in conformance with ASTM C 143, and unless otherwise specified by the Engineer, slump shall be within the following limits:

Structural Element	Slump for Vibrated Concrete	
	Minimum	Maximum
Pavement Concrete	25 mm	50 mm
Pre-cast Concrete	50 mm	70 mm
Lean Concrete	100 mm	200 mm
All other Concrete	50 mm	90 mm

11) Sampling: Provide suitable facilities and labor for obtaining representative samples of concrete for the Contractor's quality control and the Engineer's quality assurance testing. All necessary platforms, tools and equipment for obtaining samples shall be furnished by the Contractor.

c) Construction Joints: Unless otherwise specified herein, all construction joints shall be subject to approval of the Engineer. Concrete shall be placed continuously so that the unit will be monolithic in construction. Fresh concrete may be placed against adjoining units, provided the set concrete is sufficiently hard not to be injured thereby. Joints not indicated shall be made and located in a manner not to impair strength and appearance of the structure. Placement of concrete shall be at such rate that the surface of concrete not carried to joint levels will not have attained initial set before additional concrete is placed thereon. Lifts shall terminate at such levels as are indicated or as to conform with structural requirements as directed. If horizontal construction joints are required, a strip of 25 mm square-edged lumber, beveled to facilitate removal shall be tacked to the inside of the forms at the construction joint. Concrete shall be placed to a point 25 mm above the underside of the strip. The strip shall be removed one hour after the concrete has been placed. Any irregularities in the joint line shall be leveled off with a wood float, and all laitance removed.

1.5. PREPARATION FOR PLACING

Hardened concrete, debris and foreign materials shall be removed from the interior of forms and from inner surfaces of mixing and conveying equipment. Reinforcement shall be secured in position, and shall be inspected, and approved before placing concrete. Runways shall be provided for wheeled concrete-handling equipment. Such equipment shall not be wheeled over reinforcement nor shall runways be supported on reinforcement.

1.6. PLACING CONCRETE

a) Handling Concrete: Concrete shall be handled from mixers and transported to place for final deposit in a continuous manner, as rapidly as practicable, and without segregation or loss of ingredients until the approved unit of work is completed. Placing will not be permitted when the sun, heat, wind or limitations of facilities furnished by the Contractor prevent proper finishing and curing of the concrete. Concrete shall be placed in the forms, as close as possible in final position, in uniform approximately horizontal layers not over 40 cm deep. Forms splashed with concrete and reinforcement splashed with concrete or form coating shall be

cleaned in advance of placing subsequent lifts. Concrete shall not be allowed to drop freely more than 1.5 m in unexposed work nor more than 1.0 m in exposed work; where greater drops are required, tremie or other approved means shall be employed. The discharge of the tremie shall be controlled so that the concrete may be effectively compacted into horizontal layers not more than 40 cm thick, and the spacing of the tremies shall be such that segregation does not occur. Concrete to be overlaid shall be screeded to the proper level to avoid excessive shimming or grouting. Conduits and pipes shall not be embedded in concrete unless specifically indicated.

b) **Time Interval between Mixing and Placing:** Concrete mixed in stationary mixers and transported by non-agitating equipment shall be placed in the forms within 30 minutes from the time ingredients are charged into the mixing drum. Concrete transported in truck mixers or truck agitators shall be delivered to the site of work, discharged in the forms within 45 minutes from the time ingredients are discharged into the mixing drum. Concrete shall be placed in the forms within 15 minutes after discharged from the mixer at the jobsite.

1) **Cold Joints and Shrinkage:** Where cold joints tend to form or where surfaces set and dry too rapidly or plastic shrinkage cracks tend to appear, concrete shall be kept moist by fog sprays, or other approved means, applied shortly after placement, and before finishing.

2) **Supplementary Precautions:** When the aforementioned precautions are not sufficient to satisfy the requirements herein above, they shall be supplemented by restricting work during evening or night. Procedure shall conform to American Concrete Institute Standard ACI 305.

c) **Concrete Placing on Wharf Deck and RORO Ramp**

When placing concrete on wharf decks, the Contractor shall:

- Ensure that rate of placing is sufficient to complete proposed placing, finishing and curing operations within the scheduled time; that experienced finishing machine operators and concrete finishers are provided to finish the deck; that curing equipment and finishing tools and equipment are at the site of work and in satisfactory condition for use.
- Immediately prior to placing, the Contractor shall place scaffolding and wedges and make necessary adjustments. Care shall be taken to ensure that settlement and deflection due to added weight of concrete will be minimal. The Contractor shall provide suitable means to readily permit measurement of settlement deflection as it occurs.
- Should any event occur which, in opinion of the Engineer, would prevent the concrete conforming to specified requirements, the Contractor shall discontinue placing of concrete until corrective measures are provided satisfactory to the Engineer. If satisfactory measures are not provided prior to initial set of concrete in

affected areas, the Contractor shall discontinue placing concrete and install a bulkhead at a location determined by the Engineer. Concrete in place beyond bulkheads shall be removed. The Contractor shall limit the size of casting to that which can be finished before beginning of initial set.

1.7. COMPACTION

a) Immediately after placing, each layer of concrete shall be completed by internal concrete vibrators supplemented by hand-spading, rodding, and tamping. Tapping or other external vibration of forms will not be permitted unless specifically approved by the Engineer. Vibrators shall not be used to transport concrete inside the forms. Internal vibrators submerged in concrete shall maintain a speed of not less than 7,000 impulses per minute. The vibrating equipment shall at all times be adequate in number of units and power to properly consolidate all concrete.

b) Spare units shall be on hand as necessary to insure such adequacy.

The duration of vibrating equipment shall be limited to the time necessary to produce satisfactory consolidation without causing objectionable segregation. The vibrator shall not be inserted into the lower courses that have begun to set. Vibrator shall be applied vertically at uniformly spaced points not further apart than the visible effectiveness of the machine.

1.8. BONDING

Before depositing new concrete on or against concrete that has set, the surfaces of the set concrete shall be thoroughly cleaned so as to expose the coarse aggregate and be free of laitance, coatings, foreign matter and loose particles. Forms shall be re-tightened. The cleaned surfaces shall be moistened, but shall be without free water when concrete is placed.

1.9. FINISHES OF CONCRETE

Within 12 hours after the forms are removed, surface defects shall be remedied as specified herein. The Temperature of the concrete, ambient air and mortar during remedial work including curing shall be above 10

°C. Fine and loose material shall be removed. Honeycomb, aggregate pockets, voids over 13 mm in diameter, and holes left by the rods or bolts shall be cut out to solid concrete, reamed, thoroughly wetted, brush-coated with neat cement grout, and filled with mortar. Mortar shall be a stiff mix of one part portland cement to not more than 2 parts fine aggregate passing the No. 16 mesh sieve, with a minimum amount of water. The color of the mortar shall match the adjoining concrete color. Mortar shall be thoroughly compacted in place. Holes passing entirely through walls shall be completely filled from the inside face by forcing mortar through the outside face. Holes which do not pass entirely through wall shall be packed full. Patchwork shall be finished flush and in the same plane as adjacent surfaces. Exposed patchwork shall be finished to match adjoining surfaces

in texture and color. Patchwork shall be damp-cured for 72 hours. Dusting of finish surfaces with dry material or adding water to concrete surfaces will not be permitted.

1.10. CONCRETE FINISHING DETAILS

- a) Deck surface shall be broom finish. The concrete shall be screeded and floated to required finish level with no coarse aggregate visible. After the surface moisture has disappeared and laitance has been removed, surface shall be float-finished to an even, smooth finish. The broom shall be drawn from edge to edge to the edge of the pavement perpendicular to the direction of traffic flow, with adjacent strokes slightly overlapping. The brooming operation should be so executed that the corrugations produced in the surface shall be uniform in appearance and not more than 1.5 mm in depth. Brooming shall be completed before the concrete is in such condition that the surface will be unduly roughened by the operation. The surface thus finished shall be free from rough and porous areas, irregularities, and depressions resulting from improper handling of the broom.

- d) Tolerance: Smooth and broom finished surfaces shall be true to plane with no deviation in excess of 3 mm in any direction when tested with a 3 m straight edge.

1.11. CURING

- a) Concrete shall be protected against moisture loss, rapid temperature changes, mechanical injury from rain or flowing water, for a minimum period of time given below:

Type B1 (piles/retaining walls/wharf/pier deck), and Type B2 (Concrete pavement for causeways and roads, stair landings and curbs	7 days
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- b) Concrete shall be maintained in a moist condition throughout the specified curing period. Curing activities shall be started as soon as free water has disappeared from the surface of the concrete after placing and finishing. Membrane forming compound shall be used. The compound shall be applied on damp surfaces as soon as the moisture film has disappeared. The curing compound shall be applied by power spraying using a spray nozzle equipped with a wind guard. The compound shall be applied in a two-coat, continuous operation at a coverage of not more than 10 sq m per liter for each coat. When application is made by hand sprayers the second coat shall be applied in a direction approximately at right angles to the direction of the first coat. The compound shall form a uniform, continuous, adherent film that shall not check, crack, or peel and shall be free from pinholes or other imperfections. Surfaces subjected to rainfall within 3 hours after compound has been applied, or surfaces damaged by subsequent construction operations within the curing period, shall be immediately re-sprayed at the rate specified above. Surfaces coated with curing compound shall be kept free of foot and vehicular traffic,

and from other causes of abrasion and contamination during the curing period.

1.12. TEST ON CONCRETE

- a) For test purposes provide one (1) set of test specimen consisting of 3 cylinder samples taken from each day's pouring and to represent not more than 75 cu.m. of concrete or fraction thereof. Samples shall be secured in conformance with ASTM C 172. Tests specimens shall be made, cured, and packed for shipment in accordance with ASTM C 31. Cylinders will be tested by and at the expense of the Contractor in accordance with ASTM C 39. Test specimens will be evaluated separately by the Engineer, for meeting strength level requirements for each with concrete quality of ACI 318. Concrete should be tested at 14th day after sampling. When samples fail to conform to the requirements for strengths, the Engineer shall have the right to order a change in the proportions of the concrete mix for the remaining portions of the work at no additional cost to the Engineer.

- a) For proper identification, samples should be properly marked as to date of sampling and as to what part of the structure they represent. Photographs should be taken both at the time of sampling and testing.

2.0 BACK – UP AREA

2.1 SUBGRADE PREPARATION

2.1.1 Description

The subgrade preparation shall be the part of the work which is the preparation for the support of the sub-base or, if there is no sub-base, the surfacing of the pavement structure. It shall extend to the full width of the road including the shoulders as shown in the drawings or as specified herein. Unless otherwise agreed by the Engineer subgrade preparation of a section of road shall not commence unless the Contractor is able, after the completion and acceptance of the work, to commence immediately pavement construction.

2.1.2 MATERIAL REQUIREMENTS

Unless otherwise stated in the Contract and except when the subgrade is in rock cut, all materials below subgrade level to a depth of 150 mm or to such greater depth as may be specified shall meet the requirements of selected borrow for topping, e.g., soil of such gradation that all particles will pass a sieve with 75 mm (3 inches) square openings and not more than 15 percent will pass the 0.075 mm (No. 200) sieve, as determined by AASHTO T 11. The material shall have a plasticity index of not more than 6 as determined by AASHTO T 90 and liquid limit of not more than 30 as determined by AASHTO T89.

2.1.3 EXECUTION

a) Prior Works

Prior to commencing the preparation of the subgrade all culverts, ditches, drains and drainage outlets shall be completed. No work shall be started on the preparation of the subgrade before the prior works are herein approved by the Engineer.

b) Where the new pavement is to be constructed immediately over an existing gravel surfaced pavement and if so specified in the Contract the pavement shall be scarified, thoroughly loosened, reshaped and recompacted in accordance with item c) below.

c) Unless otherwise ordered by the Engineer a variable load pneumatic tired roller shall be used to proof roll the subgrade. The roller shall have a load variable within the range of at least from 15 to 45 tons, on an overall width not greater than 3.2 m and shall have tires whose pressures are variable up to not less than 620 KN/sq.m. The wheels shall be in row and shall be capable of considerable vertical movement relative to each other without appreciable variation in loading either by each supporting

a separate ballast unit, or by virtue of an efficient interconnecting suspension system. The ballast shall be in a form which permits rapid adjustment of loads. The total loaded weight and tire pressure used at any time shall be as directed by the Engineer. The pneumatic tired roller shall not be towed over completed sub-bases or surfacings without the prior approval of the Engineer on each occasion. The proof rolling shall consist of one pass of the roller along the center of each lane of the traveled way.

The subgrade shall be compacted to a depth of 150 mm to the requirements of Table 5.6.1. This work shall comply with all the specified requirements for compaction of earthwork.

Table 5.6.1 Compaction Requirements

Soil Type Classification According to AASHTO M 145	Test Method for Determining Moisture Density Relations	Minimum Relative Density Field Dry Density as % of Maximum Dry Density as Determined by the Specified Test Method
A - 1 A - 2 - 4 A - 2 - 5 A - 3	AASHTO T 180 (4.54 kg rammer) Method D	90%
A - 2 - 6 A - 2 - 7 A - 4 A - 5 A - 6 A - 7	AASHTO T 99 (4.54 kg rammer) Method D	95%

d) Protection of Completed Work

Any part of the subgrade that has been completed shall be protected and any damage resulting from default of the Contractor shall be repaired as directed by the Engineer without additional payment.

The Contractor shall be responsible for all the consequences of traffic being admitted to the subgrade. He shall repair any ruts or ridges occasioned by his own traffic or that of others by reshaping and recompacting. He shall limit the amount of subgrade preparation to an area that can be maintained with the equipment available. He shall arrange for subgrade preparation and sub-base or base placing to follow each other closely. The subgrade, when prepared too soon in relation to the laying of the sub-base, is liable to deteriorate, and in such case the Contractor shall, without additional payment, repair, reroll, or recompact the subgrade as may be necessary restore it to the state specified herein.

2.2 AGGREGATE SUB-BASE COURSE

2.2.1 Description

This Section shall consist of furnishing, placing and compacting an aggregate subbase course on a prepared subgrade in accordance with these Specifications and the lines, grades and cross sections shown on the Drawings, or as directed by the Engineer.

2.2.2 MATERIAL REQUIREMENTS

Aggregate for subbase shall consist of hard, durable particles or fragments of crushed stone, crushed slag, or crushed or natural gravel and filler of natural or crushed sand or other finely divided mineral matter. The composite material shall be free from vegetable matter and lumps or balls of clay, and shall be of such nature that it can be compacted readily to form a firm, stable subbase.

The subbase material shall conform to Table 5.7.1, Grading Requirements.

Table 5.7.1 - Grading Requirements

Sieve Designation		Mass Percent Passing
Standard (mm)	Alternate US Standard	
50	2"	100
25	1"	55-85
9.5	3/8" No.	40-75
0.075	200	0-12

The fraction passing the 0.075 mm (No. 200) sieve shall not be greater than 0.66 (two thirds) of the fraction passing the 0.425 mm (No. 40) sieve.

The fraction passing the 0.425 mm (No. 40) sieve shall have a liquid limit not greater than 35 and plasticity index not greater than 12 as determined by AASHTO T 89 and T 90, respectively.

The coarse portion, retained on a 2.00 mm (No. 10) sieve, shall have a mass percent of wear not exceeding 50 by the Los Angeles Abrasion Tests as determined by AASHTO T 96.

The material shall have a soaked CBR value of not less than 25% as determined by AASHTO T 193. The CBR value shall be obtained at the maximum dry density and determined by AASHTO T 180, Method D.

2.2.3 EXECUTION

a) Preparation of Existing Surface

The existing surface shall be graded and finished as provided under Section 5.6, "Subgrade Preparation", before placing the subbase material.

b) Placing

The subbase material shall be placed as a uniform mixture on a prepared subgrade in a quantity which will provide the required compacted thickness. When more than one layer is required, each layer shall be shaped and compacted before the succeeding layer is placed.

The placing of material shall begin at the point designated by the Engineer. Placing shall be from vehicles especially equipped to distribute the material in a continuous uniform layer or windrow. The layer or windrow shall be of such size that, when spread and compacted the finished layer be in reasonably close conformity to the nominal thickness shown on the Drawings.

When hauling is done over previously placed material, hauling equipment shall be dispersed uniformly over the entire surface of the previously constructed layer, to minimize rutting or uneven compaction.

c) Spreading and Compacting

When uniformly mixed, the mixture shall be spread to the plan thickness, for compaction.

Where the required thickness is 150 mm or less, the material may be spread and compacted in one layer. Where the required thickness is more than 150 mm, the aggregate subbase material shall be spread and compacted in two or more layers of approximately equal thickness, and the maximum compacted thickness of any one layer shall not exceed 150 mm. All subsequent layers shall be spread and compacted in a similar manner.

The moisture content of subbase material shall, if necessary, be adjusted prior to compaction by watering with approved sprinklers mounted on trucks or by drying out, as required in order to obtain the required compaction.

Immediately following final spreading and smoothing, each layer shall be compacted to the full width by means of approved compaction equipment. Rolling shall progress gradually from the sides to the center, parallel to the centerline of the road and shall continue until the whole surface has been rolled. Any irregularities or depressions that develop shall be corrected by loosening the material at these places and adding or removing material until the surface is smooth and uniform. Along curbs, headers, and walls, and at all places not accessible to the

roller, the subbase material shall be compacted thoroughly with approved tampers or compactors.

If the layers of subbase material, or part thereof, does not conform to the required finish, the Contractor shall, at his own expense, make the necessary corrections.

Compaction of each layer shall continue until a field density of at least 100 percent of the maximum dry density determined in accordance with AASHTO T 180, Method D has been achieved. In- place density determination shall be made in accordance with AASHTO T 191.

d) Trial Sections

Before subbase construction is started, the Contractor shall spread and compact trial sections as directed by the Engineer. The purpose of the trial sections is to check the suitability of the materials and the efficiency of the equipment and construction method which is proposed to be used by the Contractor. Therefore, the Contractor must use the same material, equipment and procedures that he proposes to use for the main work. One trial section of about 500 m² shall be made for every type of material and/or construction equipment/procedure proposed for use.

After final compaction of each trial section, the Contractor shall carry out such field density tests and other tests required as directed by the Engineer.

If a trial section shows that the proposed materials, equipment or procedures in the Engineer's opinion are not suitable for subbase, the material shall be removed at the Contractor's expense, and a new trial section shall be constructed.

If the basic conditions regarding the type of material or procedure change during the execution of the work, new trial sections shall be constructed.

e) Tolerances

Aggregate subbase material shall be spread with equipment that will provide a uniform layer which when compacted will conform to the designed level and transverse slopes as shown on the Drawings. The allowable tolerances shall be as specified hereunder:

Permitted variation from design thickness of layer	+20 mm
Permitted variation from design level of surface	+10 mm -20 mm
Permitted surface irregularity measured by 3-m straight-edge	20mm
Permitted variation from design crossfall or camber	+0.3%

Permitted variation from design longitudinal grade over 25 m length	+0.1%
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2.3 AGGREGATE BASE COURSE

2.3.1 DESCRIPTION

This Section shall consist of furnishing, placing and compacting aggregate base course on a prepared subgrade in accordance with this Specification and the lines, grades, thickness and typical cross-sections shown on the Plans, or as established by the Engineer.

2.3.2 MATERIAL REQUIREMENTS

Aggregate for base course shall consist of hard, durable particles or fragments of crushed slag or crushed or natural gravel and filler of natural or crushed sand or other finely divided mineral matter. The composite material shall be free from vegetable matter and lumps or balls of clay, and shall be of such nature that it can be compacted readily to form a firm, stable base.

The base course material shall conform to Table

5.8.2.1:

Table 5.8.2.1 - Grading Requirements

Sieve Designation		Mass Percent Passing	
Standard mm	Alternate US Standard	Grading A	Grading B
50	2"	100	
37.5	1 1/2"	-	100
25.0	1"	60-85	
19.0	3/4"	-	60-85
12.5	1/2"	36-65	-
4.75	No. 4	20-50	30-55
0.425	No. 40	5-20	8-25
0.075	No. 200	0-12	2-14

The fraction passing the 0.075 mm (No.200) sieve shall not be greater than 0.66 (two thirds) of the fraction passing the 0.425 mm (No. 40) sieve.

The fraction passing the 0.425 mm (No.40) sieve shall have a liquid limit not greater than 25 and plasticity index not greater than 6 as determined by AASHTO T 89 and T 90, respectively.

2.3.3 EXECUTION

2.3.3.1 PREPARATION OF EXISTING SURFACE

The existing surface shall be graded and finished as provided under Section 5.6, "Subgrade Preparation", before placing the base material.

2.3.3.2 Placing

The aggregate base material shall be placed as a uniform mixture on a prepared subgrade in a quality which will provide the required compacted thickness. When more than one layer is required, each layer shall be shaped and compacted before the succeeding layer is placed.

The placing of materials shall begin at the point designated by the Engineer. Placing shall be from vehicles especially equipped to distribute the material in a continuous uniform layer or windrow. The layer or windrow shall be of such size that when spread and compacted the finished layer shall be in reasonably close conformity to the nominal thickness shown on the Plans.

When hauling is done over previously placed material, hauling equipment shall be dispersed uniformly over the entire surface of the previously constructed layer, to minimize rutting or uneven compaction.

2.3.3.3 Spreading and Compacting

When uniformly mixed, the mixture shall be spread to the plan thickness, for compaction. Where the required thickness is 150 mm or less, the material may be spread and compacted in one layer. Where the required thickness is more than 150 mm, the aggregate base shall be spread and compacted in two or more layers of approximately equal thickness, and the maximum compacted thickness of any one layer shall not exceed 150 mm. All subsequent layers shall be spread and compacted in a similar manner.

The moisture content of base material shall, if necessary, be adjusted prior to compaction by watering with approved sprinkler mounted on trucks or by drying out, as required in order to obtain the required compaction.

Immediately following final spreading and smoothing, each layer shall be compacted to the full width by means of approved compaction equipment. Rolling shall progress gradually from the sides to the center, parallel to the centerline of the road, and shall continue until the whole surface has been rolled. Any irregularities or depressions that develop shall be corrected by loosening the material at these places and adding or removing material until the surface is smooth and uniform. Along curbs, headers, and walls, and at all places not accessible to the roller, the base material shall be compacted thoroughly with approved tampers or compactors.

If the layer of base materials, or part thereof, does not conform to the required finish, the Contractor shall, at his own expense, make the necessary corrections.

2.4. CONCRETE PAVEMENT

All applicable tests and minimum incremental frequency of testing shall be as required by PPA MC 02-2016 (Revised Schedule of Minimum Test Requirements of Construction Materials for PPA Infrastructure Projects)

2.4.1 MATERIALS

a. *Cement*

Cement used shall be Type I Portland conforming to the requirements of the latest revision of ASTM C 150 "Standard Specifications for Portland Cement".

b. *Coarse Aggregates*

Coarse Aggregates shall be washed, well graded, hard pieces of gravel, crushed gravel or rock conforming to the requirements of ASTM C 33 "Standard Specification for Concrete Aggregates".

c. *Fine Aggregates*

Fine Aggregates shall be washed sand, stone screenings or other inert materials of same characteristics, or any combination thereof composed clean, hard, strong, uncoated grains and free from injurious amount of dust, lumps of clay, shale, alkali, and organic matter. It shall conform to the requirements of ASTM C33 "Standard Specifications for Concrete Aggregates". Beach sand shall not be used unless approved by the Engineer.

e. *Tie Bars and Dowels*

Tie bars for joints shall be deformed steel bars conforming to the requirements specified in AASTHO M 31 or equivalent sizes as indicated in the drawings or as approved by the Engineer. The deformed steel bars shall be grade 40. Dowel bars shall be plain steel bars conforming to the requirements specified in AASTHO M 31 or equivalent.

f. *Joint Filler*

Poured filler for joint shall conform to the requirements of AASTHO M173. The filler for each joint shall be furnished in single piece for the depth and width required for the joint unless otherwise authorized by the Engineer.

2.4.2 METHOD OF CONSTRUCTION

2.4.2.1 Sub-grade Preparation

The sub-grade shall be well compacted and leveled to the specified elevation prior to placing of base courses.

b Protection of Completed Works

Any part of the sub-grade that has been completed shall be protected and any damaged resulting from the negligence on the part of the Contractor shall be repaired by him as directed by the Engineer without additional payment.

The sub-grade when prepared too soon in relation to the laying of the sub-base, is liable to deteriorate, and in such case, the Contractor shall, without additional payment, repair, re-roll or re-compact the sub-grade as may be necessary to restore it to the state specified herein.

2.4.2.2 Aggregate Sub-base Course and Aggregate Base Course

The aggregate sub-base and base course material shall be placed as a uniform mixture on a prepared sub-grade in a quantity which will provide the required compacted thickness.

2.4.2.3 Concrete Mix

a. Concrete Class

The concrete for pavement shall satisfy the following requirements:

Minimum Compressive strength	-	24 MPa / 3500 psi
Maximum Aggregate Size	-	38mm
Maximum Water Cement ratio	-	0.45

b. Proportioning, Consistency and Mixing of Concrete

The Engineer shall determine from laboratory tests of the materials to be used, the cement content and the proportions of aggregate and water that will produce workable concrete. The following table are the required slump

Structural Element	Slump for Vibrated Concrete	
	Minimum	Maximum
R.C. Deck and Beams	50 mm	90 mm
Concrete Pavement	25 mm	50 mm

c. Preparation

The base shall be watered and thoroughly moistened prior to the placing of the concrete to avoid premature concrete dehydration.

d. Formwork Construction

Forms shall be of steel, of an approved section and shall be straight and of a depth equal to the thickness of the pavement at the edge. The base of the forms shall be of sufficient width to provide the necessary stability in all directions. Protrusion should be provided at the midheight continuous along its length to provide side groove. These should be

properly braced in order to avoid horizontal or vertical misalignment.

e. Joints

All joints, longitudinal, transverse, etc., shall be constructed as shown on the Drawings and shall be clean and free of all foreign material.

2.4.3 STORAGE OF MATERIALS

1.3.1 Cement shall, be stockpiled as closely as possible, in weatherproof storage sheds, stacks suitably elevated above ground to prevent cement absorption of moisture.

1.3.2 Aggregates shall be placed in stockpile in a manner preventing segregation thereof and contamination with foreign materials.

1.3.3 Reinforcing steel bars shall be stored properly, covered and protected from humidity to prevent rusting and contamination with oil, dirt or other objectionable matters

2.4.4 DESIGNED STRENGTH OF CONCRETE

Concrete shall develop compressive cylinder strength of 3,500 psi (25 MPa) in seven (7) days , unless otherwise indicated in the drawings.

2.4.5 MIXING OF CONCRETE

1. Concrete mix shall be transit machine-mixed at the designated site. Each batch shall be mixed at the mixer's design speed.
2. All mixed contents of the mixer shall be thoroughly removed before any succeeding batch is placed.
3. The materials for the first batch shall contain sufficiently excess cement, sand, and water to coat the inside walls of the mixer without reducing the required mortar content of the mix. The mixer shall be provided with devices for accurately measuring and controlling the amount of water used in each batch and for automatically recording the number of revolutions of the mixer.

2.4.6 PLACING OF CONCRETE

4.8.1 Concrete shall be placed in the presence of the Engineer only after the forms, reinforcing bars and other spaces to receive the concrete have been inspected and approved by him.

4.8.2 Concrete shall be placed only when wind and weather conditions will allow proper placement and curing of the concrete. Notice of any concreting operations shall be served to the Engineer at least three (3) days ahead of each schedule.

4.8.3 Mixed concrete shall be deposited in its final position within a practicable time. Each succeeding fresh deposit for particular structural member shall be placed at a practicable rate to prevent cold joints. Each successive fresh deposit of concrete shall be vibrated vertically at uniformly spaced points and levels, of such duration and intensity to

compact the concrete thoroughly but shall be discontinued the moment segregation of materials is noticed.

4.8.4 Where concreting operations involve a fall more than 1.50 meters (4.92 feet), the fresh concrete shall be poured through approved sheet metal conduit or pipes. The pipes shall be kept full of concrete and its lower end kept below the surface of concrete throughout, the pouring operations.

4.8.5 Deposition of concrete shall be in such a way as to prevent segregation of the materials and the displacement of the reinforcement. Placing shall be done preferably with the use of buggies, buckets or wheel-borrows. Troughs, conveyors and pipes and the manner of use of each one shall be with the expressed permission of the Engineer.

4.8.6 Each layer of concrete shall be placed approximately normal as possible in uniform layers not exceeding 0.30 meter, unless otherwise ordered. The rate of placing concrete in the forms shall preferably be 0.025 meter (0.082 feet) vertical rise per minute.

2.4.7 CURING AND WATER PROOFING

All concrete shall be cured for at least 7 days after the date of placing in accordance with the approved and accepted methods.

2.4.8 FINISHING OF CONCRETE SURFACES

Surface shall be broom finish. It shall conform accurately to the form, alignment, grades and sections shown in the drawings or as prescribed by the Engineer. It shall be free from bulges, ridges, honeycombing or roughness of any kind and shall be of a reasonably smooth wood float finish. Maximum tolerance for surface imperfection is 3mm for 3m straight edge.

2.4.9 REINFORCING STEEL

It shall conform to the requirements of Item 404, Reinforcing Steel. Dowels and tie bars shall conform to the requirements of AASHTO M 31 or M 42, except that rail steel shall not be used for tie bars that are to be bent and restraightened during construction. Tie bars shall be deformed bars. Dowels shall be plain round bars.

2.4.10 JOINTS

Joints shall be constructed of the type and dimensions, and at the locations required by the Plans or Special Provisions. All joints shall be protected from the intrusion of injurious foreign material until seated.

2.4.10.1 Longitudinal Joint

Deformed steel tie bars of specified length, size, spacing and materials shall be placed perpendicular to the longitudinal joints, they shall be placed by approved mechanical equipment or rigidly secured

by chair or other approved supports to prevent displacement. Tie bars shall not be painted or coated with asphalt or other materials or enclosed in tubes or sleeves. When shown on the Plans and when adjacent lanes of pavement are constructed separately, steel side forms shall be used which will form a keyway along the construction joint. Tie bars, except those made of rail steel, may be bent at right angles against the form of the first lane constructed and straightened into final position before the concrete of the adjacent lane is placed. In lieu of bent tie bars, approved two-piece connectors may be used.

Longitudinal formed joints shall consist of a groove or cleft, extending downward from and normal to the surface of the pavement. These joints shall be effected or formed by an approved mechanically or manually operated device to the dimensions and line indicated on the Plans while the concrete is in a plastic state. The groove or cleft shall be filled with either a premolded strip or poured material as required.

The longitudinal joints shall be continuous. There shall be no gaps in either transverse or longitudinal joints at the intersection of the joints.

Longitudinal sawed joints shall be cut by means of approved concrete saws to the depth, width and line shown on the Plans. Suitable guide lines or devices shall be used to assure cutting the longitudinal joint on the true line. The longitudinal joint shall be sawed before the end of the curing period or shortly thereafter and before any equipment or vehicles are allowed on the pavement. The sawed area shall be thoroughly cleaned and, if required, the joint shall immediately be filled with sealer.

Longitudinal pavement insert type joints shall be formed by placing a continuous strip of plastic materials which will not react adversely with the chemical constituent of the concrete.

2.4.10.2 Transverse Contraction Joint/Weakened Joint

When shown on the Plans, it shall consist of planes of weakness created by forming or cutting grooves in the surface of the pavement and shall include load transfer assemblies. The depth of the weakened plane joint should at all times not be less than 50 mm, while the width should not be more than 6 mm.

Sawed Contraction Joint. It shall be created by sawing grooves in the surface of the pavement of the width not more than 6 mm, depth should at all times not be less than 50 mm, and at the spacing and lines shown on the Plans, with an approved concrete saw. After each joint is sawed, it shall be thoroughly cleaned including the adjacent concrete surface.

Sawing of the joint shall commence as soon as the concrete has hardened sufficiently to permit sawing without excessive raveling, usually 4 to 24 hours. All joints shall be sawed before uncontrolled

shrinkage cracking takes place. If necessary, the sawing operations shall be carried on during the day or night, regardless of weather conditions. The sawing of any joint shall be omitted if crack occurs at or near the joint location prior to the time of sawing. Sawing shall be discontinued when a crack develops ahead of the saw. In general, all joints should be sawed in sequence.

2.4.10.3 Transverse Construction Joint

It shall be constructed when there is an interruption of more than 30 minutes in the concreting operations. No transverse joint shall be constructed within 1.50 m of an expansion joint, contraction joint, or plane of weakness. If sufficient concrete has been mixed at the time of interruption to form a slab of at least 1.5 m long, the excess concrete from the last preceding joint shall be removed and disposed off as directed.

2.4.11 TEST ON CONCRETE

Test on concrete shall be in accordance with the following:

As work progresses, at least one (1) set consisting of three (3) concrete beam test specimens, 150 mm x 150 mm x 525 mm shall be taken from each 330 m² of pavement, 250 mm depth, or fraction thereof placed each day. Test specimens shall be made under the supervision of the Engineer, and the Contractor shall provide all concrete and other facilities necessary in making the test specimens and shall protect them from damage by construction operations. Cylinder samples shall not be used as substitute for determining the adequacy of the strength of concrete.

The beams shall be made, cured, and tested in accordance with AASHTO T 23 and T 97.

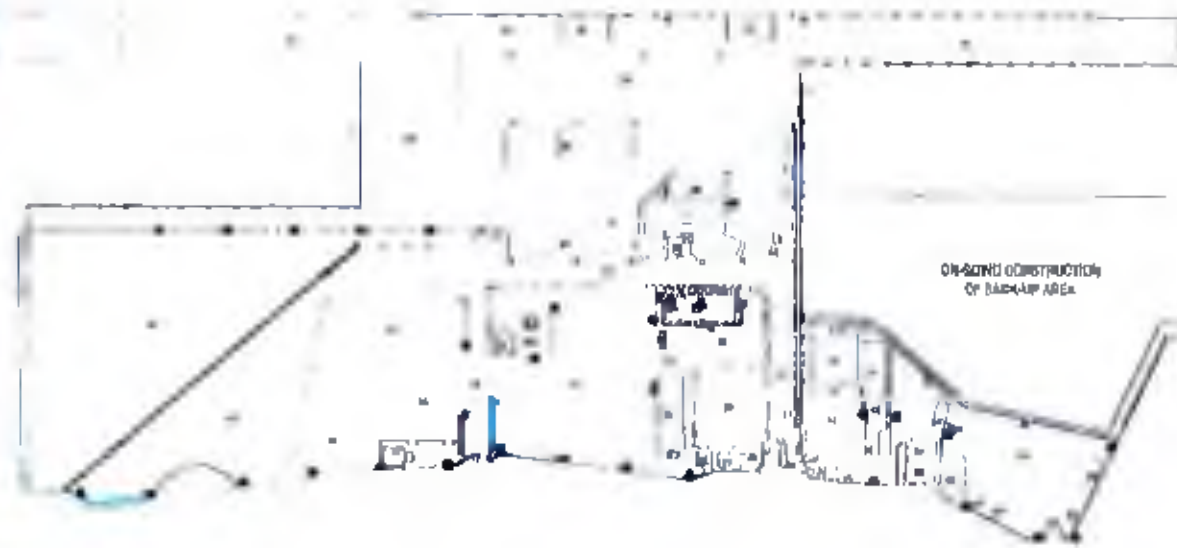
Samples shall be taken by the Contractor under the supervision of the Engineer, and shall be delivered as soon as practicable for testing, at his expense, to the designated laboratories.

The samples should be properly marked to identify the date of sampling as well as the part / location of the pavement in which they are sampled. Photographs shall also be taken both at the time of sampling and testing.

The average strength of test samples representing any definite class of concrete used as well as the average of any five (5) consecutive strength tests representing the class of concrete shall be equal to or greater than the specified strength and not more than one (1) strength test in ten (10) shall have an average value less than 90% of the specified strength. The flexural strength of concrete should not be less than 550 psi (3.80 MPa)

If the test results indicate strength values less than the required, the Project Manager shall have the right to order a change in the concrete proportion used for the remaining work, or in the procedure of curing the concrete.

PORT LAYOUT PLAN
 LOCATION MAP
 VICINITY MAP

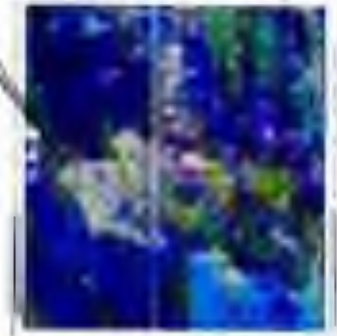


PORT LAY-OUT PLAN



LOCATION MAP

This SITE



VICINITY MAP



PROJECT TITLE AND LOCATION

REPAIR OF DAMAGED ILC WHARF, BORO RAMP NO 2
AND HACK UP AREA

FILE NO. 11111111111111111111

GRAPHIC PREPARED BY

[Signature]
 RILEY M. MADRIGAL
 ACTING PRINCIPAL ENGINEER A

PROJECT SUPERVISOR

[Signature]
 MARLON M. SANCAYDIEGO
 LEAD ENGINEER

APPROVED BY

[Signature]
 ELIZALDE M. ULSON
 LEAD PORT MANAGER

PROJECT NUMBER

PORT LAY OUT PLAN
 LOCATION MAP
 VICINITY MAP

FILE NO. 11111111111111111111

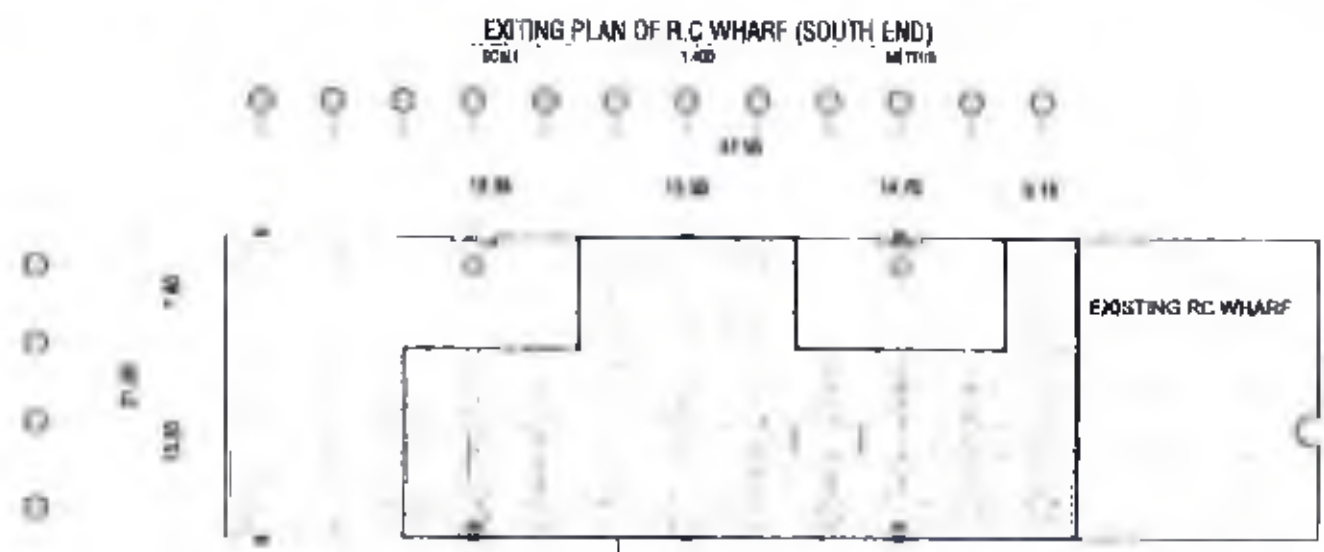
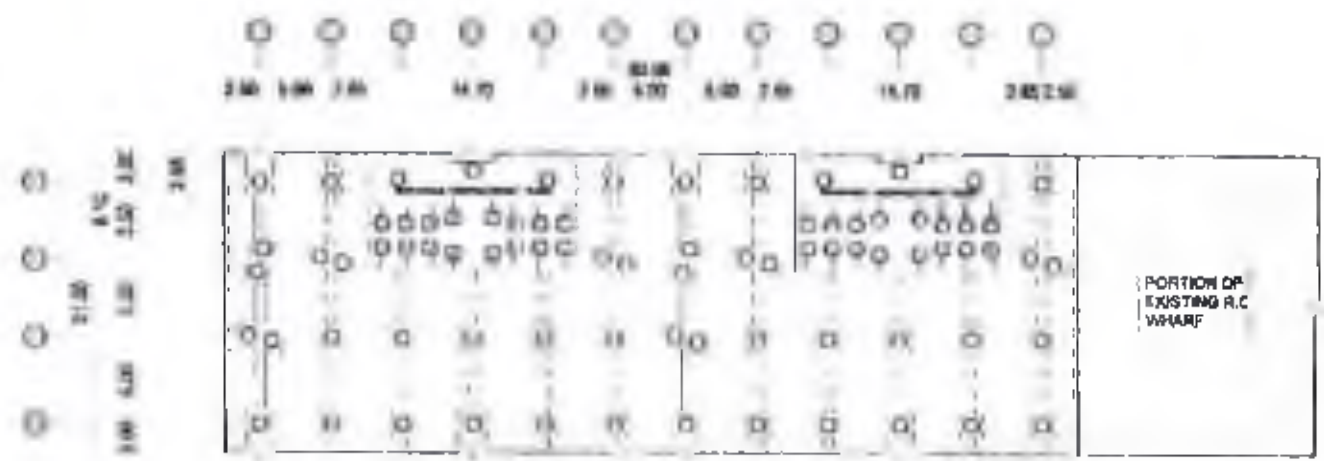
SHEET NO.

01 12



PROJECT LOCATION PLAN
 SCALE: 1:1000 METERS

	<p>PROJECT TITLE AND LOCATION</p> <p>REPAIR OF DAMAGED H.C. WHARF (KODU) KAMP NO. 2 AND BACK-UP AREA</p> <p>4300/1-100/1111, 1111/1-100/1111</p>	<p>DESIGNED BY</p> <p><i>[Signature]</i></p> <p>RELY M. MADRIGOS ACTING PRINCIPAL ENGINEER</p>	<p>CHECKED BY</p> <p><i>[Signature]</i></p> <p>JOSE LUIS GONZALEZ SENIOR ENGINEER</p>	<p>APPROVED BY</p> <p><i>[Signature]</i></p> <p>EJAZALDE M. URBON ACTING PRINCIPAL ENGINEER</p>	<p>PROJECT LOCATION PLAN</p>	<p>DATE</p> <p>02-13</p>
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- CURTAIN WALL FOR REPAIR BENTONITE GROUTING
- TRANSVERSE BEAMS FOR REPAIR
- LONGITUDINAL BEAMS FOR REPAIR

R.C. CURB THAT WILL BE AFFECTED BY REPAIR SHALL BE RESTORED

PORTION OF R.C. DECK (NO. 2) SHOWN IN THIS PLAN

PROPOSED PLAN OF REPAIR OF R.C. WHARF (SOUTH END)

SCALE: 1:400 METERS



PROJECT TITLE AND LOCATION

REPAIR OF (DAMAGED) R.C. WHARF, HOI RI RAMP NO 2 AND BACK-UP AREA

PROJECT LOCATION: RAIL CO, PALAWAN

DESIGNED BY

REILLY MANSIONO CONSULTING ENGINEERS

CHECKED BY

MARKEN M. MANSIONO

APPROVED BY

ELLENDEE M. BEASLEY

FOR THE PORT MANSION

DATE OF ISSUE

EXISTING PLAN OF R.C. WHARF (SOUTH END)

PROPOSED PLAN OF REPAIR OF R.C. WHARF (SOUTH END)

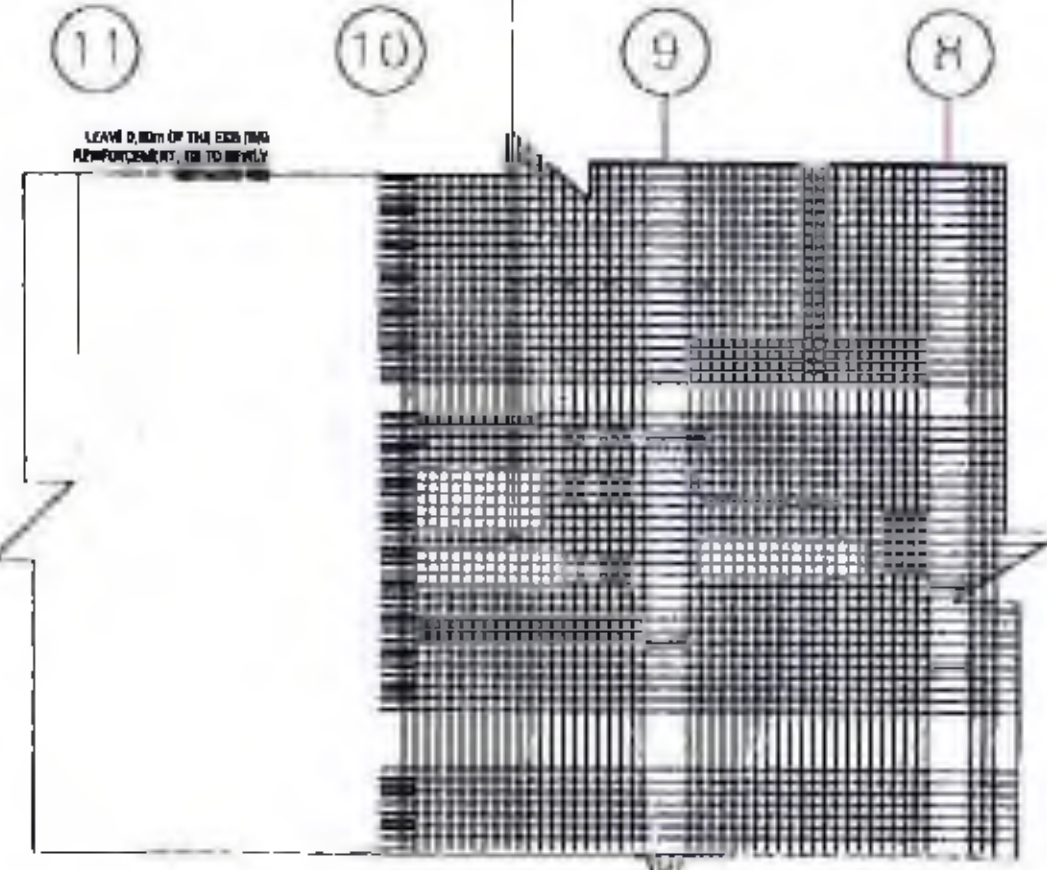
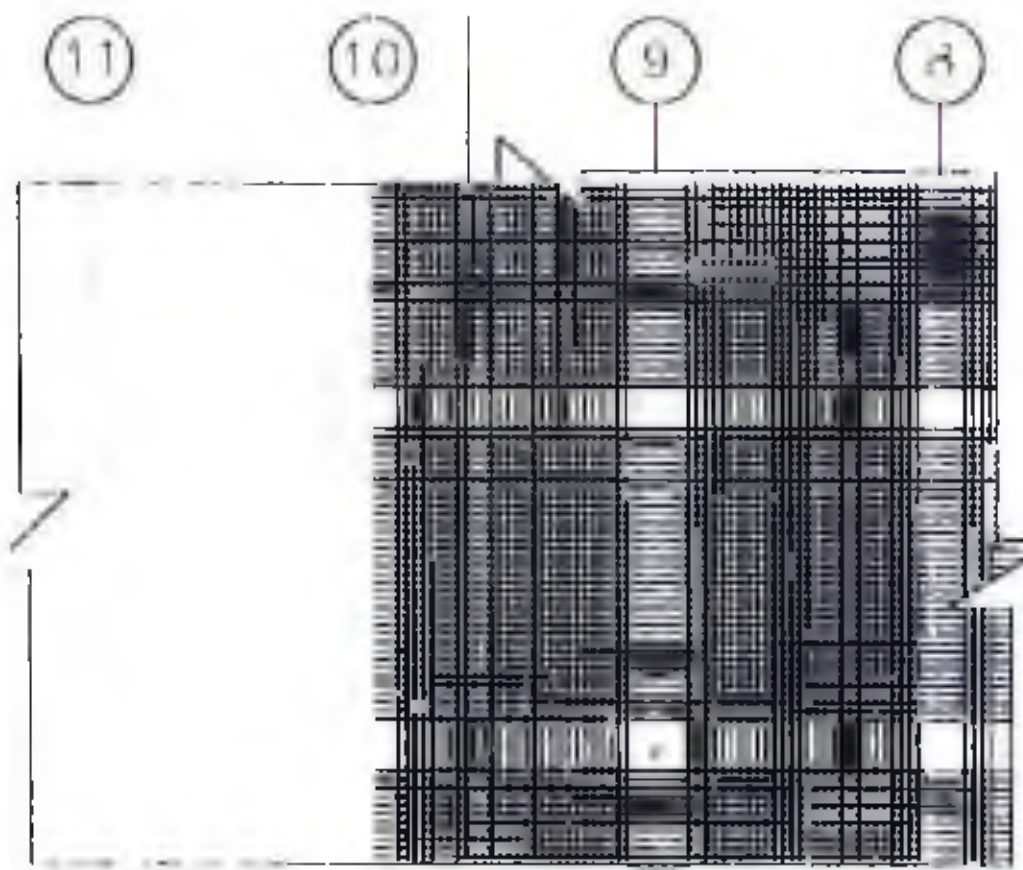
NO. 001 - RAIL CO. PALAWAN

REPAIR OF R.C. WHARF

03/12

LEAVE 0.50m OF THE EXISTING REINFORCEMENT, OR TO BE REINFORCED

LEAVE 0.50m OF THE EXISTING REINFORCEMENT, OR TO BE REINFORCED



EXISTING REINFORCEMENT DETAIL OF R.C. DECK/SLAB
SCALE: 1:100

PLAN DETAIL OF REINFORCEMENT FOR OF R.C. DECK/SLAB REPAIR
SCALE: 1:100

PROJECT TITLE AND LOCATION
 REPAIR OF THE ROAD BRIDGE AND WORK AREA FROM NINA RIVER TO BRIDGE A11 C
 WHARF ROAD BRIDGE - BRIDGES
 1501 16th STREET, SUITE 100, SAN ANTONIO, TX 78202

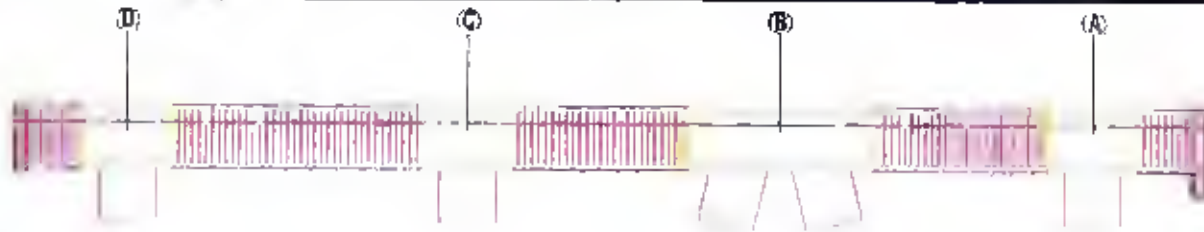
RELLY ASSOCIATES
 ARCHITECTS ENGINEERS
 1501 16th STREET, SUITE 100, SAN ANTONIO, TX 78202

DATE: 10/10/10
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]

ELLENDE M. U. DON
 PROJECT MANAGER

EXISTING REINFORCEMENT DETAIL OF R.C. DECK/SLAB
 PLAN DETAIL OF REINFORCEMENT FOR OF R.C. DECK/SLAB REPAIR
 10/10/10

10/10



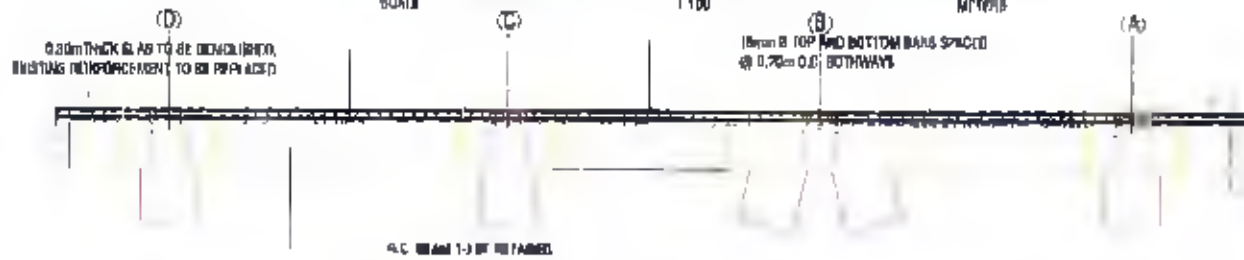
EXISTING TRANSVERSE ELEVATION OF R.C. DECK

SCALE 1:100 METERS



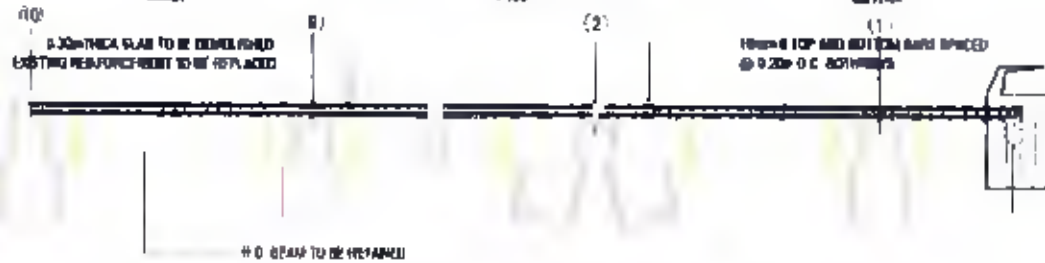
EXISTING LONGITUDINAL SECTION ELEVATION OF R.C. DECK

SCALE 1:100 METERS



TRANSVERSE SECTION ELEVATION OF PROPOSED REPAIR OF R.C. DECK

SCALE 1:100 METERS



LONGITUDINAL SECTION ELEVATION OF PROPOSED REPAIR OF R.C. DECK

SCALE 1:100 METERS



DETAIL 'A': CURTAIN WALL AND EXPANSION JOINT

SCALE 1:15 METERS

16mm TOP AND BOTT SLAB REBAR @ 200mm O.C BOTHWAYS PROVIDED 100mm MINIMUM @ BOTH ENDS
 20mm x 300mm ANCHOR BARS @ 300mm FULLY WELDED TO ANCHOR BARS AND SLAB REINFORCEMENT
 METAL: 10mm x 100mm x 100mm ANGLE BAR (NOT DIPPED GALVANIZED)
 GASK GAP

2 - 20mm TOP BARS
 EXISTING R.C. DECK
 12 - 12mm @ 100mm O.C
 10 - 12mm LONGITUDINAL BARS
 2 - 20mm BOTTOM BARS
 PROVIDE 1 CHAMFER

SEE DETAIL 'A'

EXISTING R.C. DECK

CURTAIN WALL TO BE DEMOLISHED (ENTIRE LENGTH)



PROJECT TITLE AND LOCATION
 REPAIR OF DAMAGED R.C. CURTAIN WALL (RAMP NO. 2) AND BACK UP AREA
 PROJECT NO. 100-1000-1000-1000

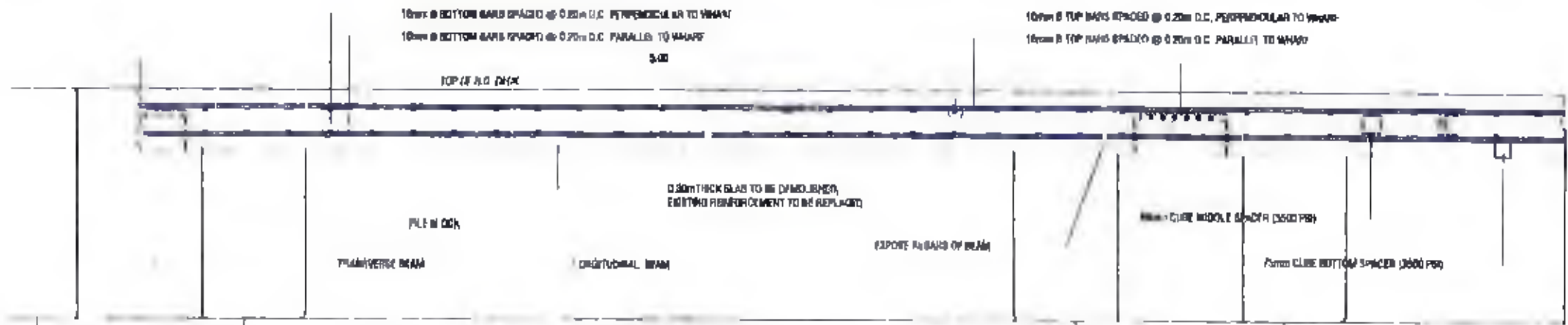
DESIGNED BY
 ROLLY M. MADARCOS
 ACTING PRINCIPAL ENGINEER

APPROVED BY
 [Signature]

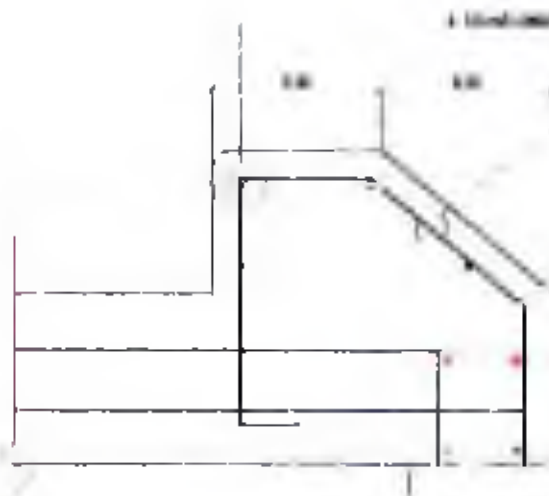
APPROVED BY
 [Signature]

DRAWN BY
 [Signature]
 EXISTING AND PROPOSED DECK ELEVATION
 DETAIL OF CURTAIN WALL AND EXPANSION JOINT

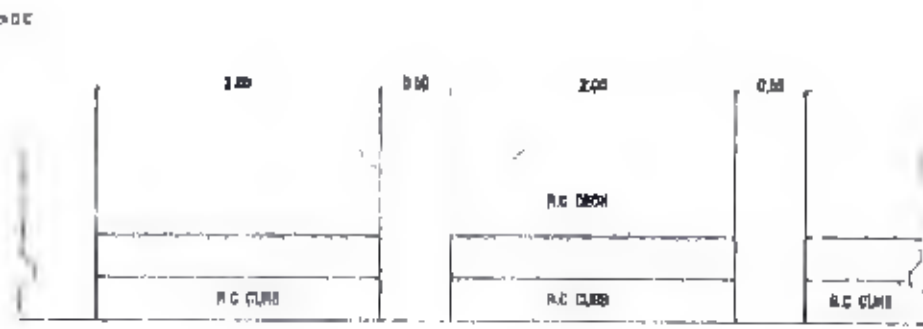
REPAIR OF R.C. CURTAIN WALL
 DATE: 05 12



TYPICAL SLAB REINFORCEMENT DETAIL
SCALE 1:25



SECTION



DETAIL OF R.C. CURB

SCALE 1:25



DEPARTMENT OF TRANSPORT, ROAD AND MARITIME INFRASTRUCTURE
 100 WATERLOO QUAY
 CANBERRA ACT 2601

PROJECT MANAGER
 [Signature]
 [Name]

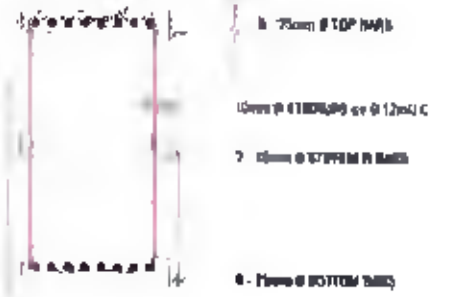
DESIGNER
 [Signature]
 [Name]

APPROVED BY
 [Signature]
 [Name]

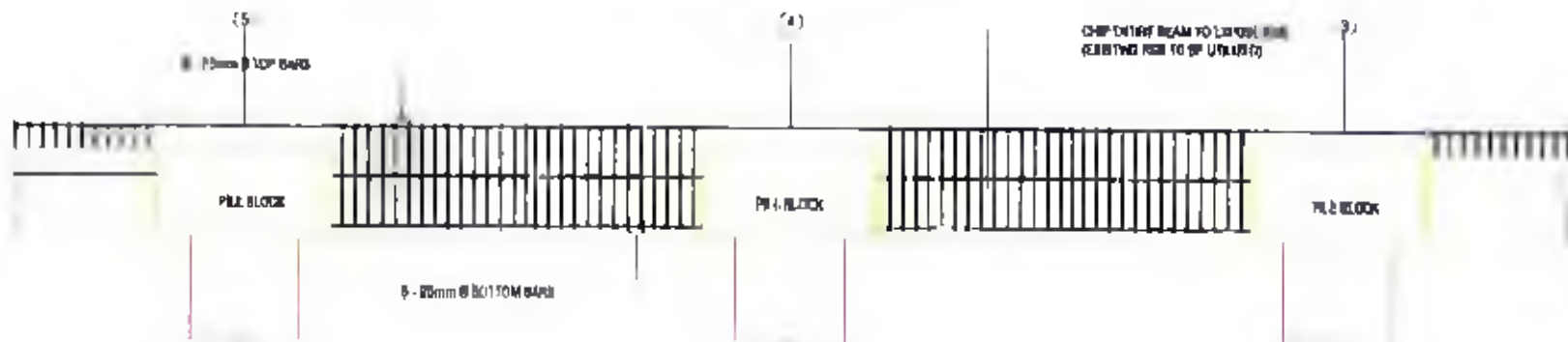
DATE OF ISSUE
 15/08/2018



DETAIL OF REPAIR OF TRANSVERSE BEAM
SCALE 1:20 METERS

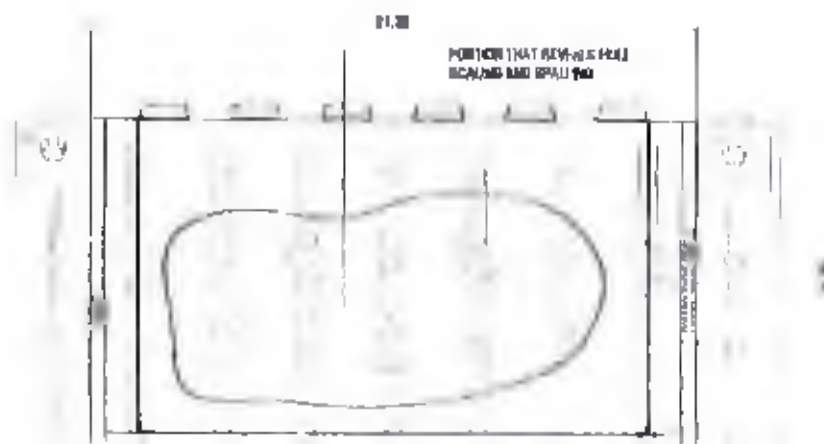


TYPICAL BEAM SECTION
SCALE 1:20 METERS

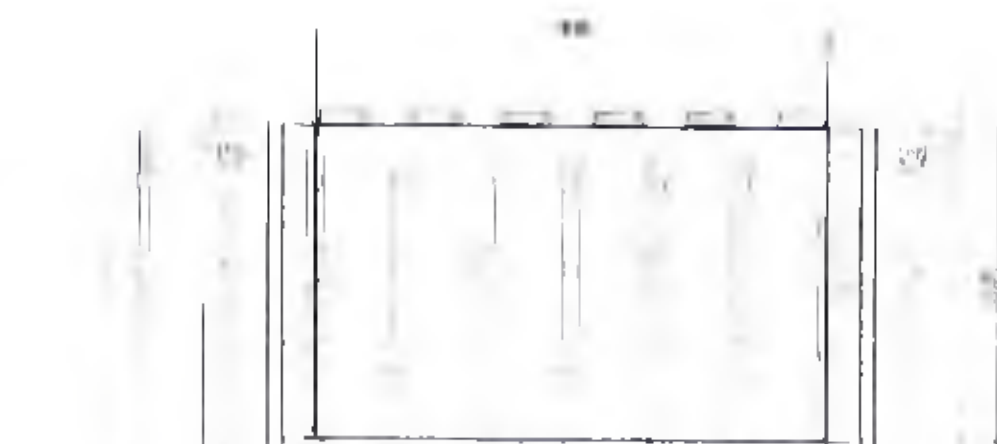


DETAIL OF REPAIR OF LONGITUDINAL BEAM
SCALE 1:20 METERS

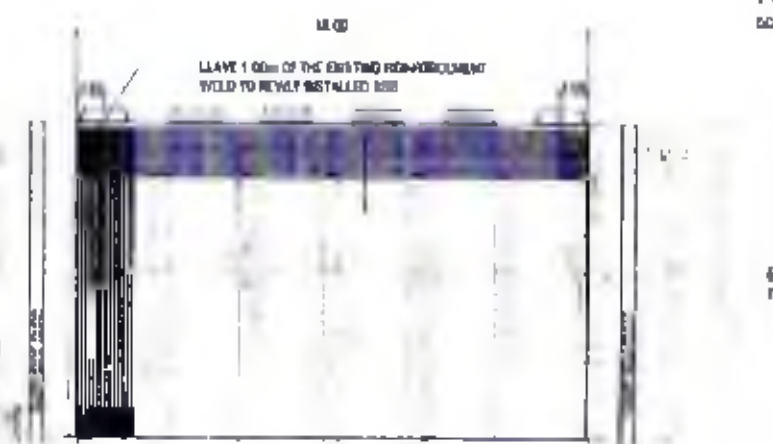
	<p>PROJECT TITLE AND LOCATION</p> <p>REPAIR OF DAMAGED REINFORCED CONCRETE BEAM NO. 2 AND BACK BAY AREA</p> <p>MANILA TRANSIT SYSTEM - PASAYEN</p>	<p>DESIGNED BY</p> <p>REMY M. SARMIENTO ACTING PROGRAM MANAGER</p>	<p>CHECKED BY</p> <p>REMY M. SARMIENTO ACTING PROGRAM MANAGER</p>	<p>APPROVED BY</p> <p>EURALDE M. ULSIN ACTING PROJECT MANAGER</p>	<p>PROJECT NO.</p> <p>REPAIR OF R.C. BEAM (TRANSVERSE AND LONGITUDINAL) TYPICAL BEAM SECTION</p> <p>1:1 SCALE - SEE DRAWING SHEET 07-11</p>	<p>REVISION OF R.C. BEAM</p> <p>07-11</p> <p>07-12</p>
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EXISTING ROAD RAMP
SCALE 1:200 METERS



PLAN OF PROPOSED REPAIR FOR ROAD RAMP
SCALE 1:200 METERS



SLAB REINFORCEMENT DETAIL
SCALE 1:200 METERS

30mm TOP AND BOTTOM BARS @ 0.15m O.C. PERPENDICULAR TO SLOPE
 30mm TOP AND BOTTOM BARS @ 0.1415m O.C. PARALLEL TO SLOPE

DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
 OFFICE OF THE PROVINCIAL ENGINEER
 MARIKINA CITY

PROJECT TITLE AND LOCATION
 REPAIR OF DAMAGED R.C. WEAR SURFACE RAMP NO. 2
 AND BACK UP AREA
 PORT OF FORT MARIKINA, MARIKINA CITY

DESIGNED BY

RELY M. MADARROS
 ACTING PRINCIPAL ENGINEER

CHECKED BY

J. REYES
 ENGINEER

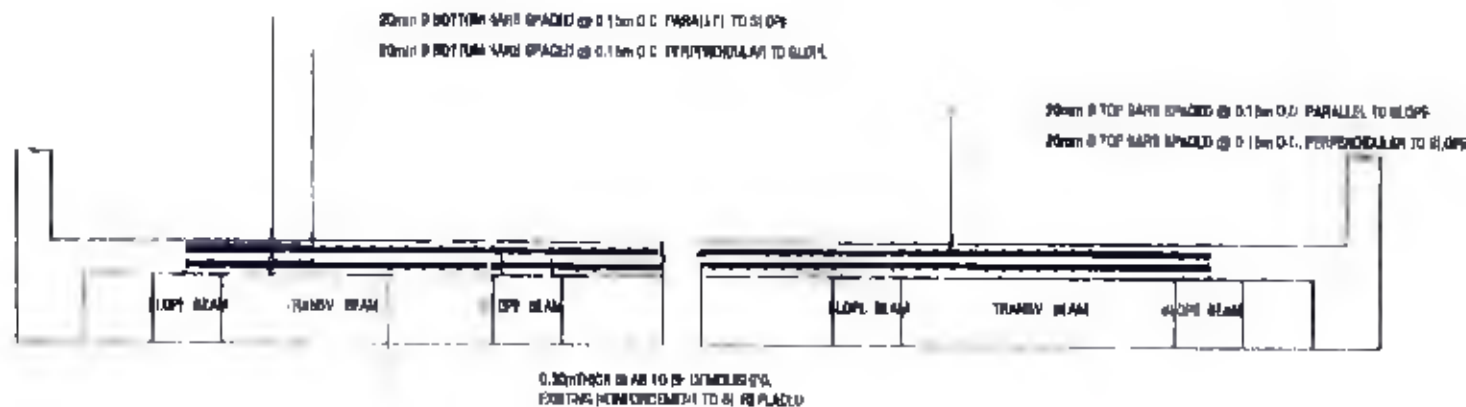
APPROVED BY

ELZALDE M. M. M.
 ACTING PORT MANAGER

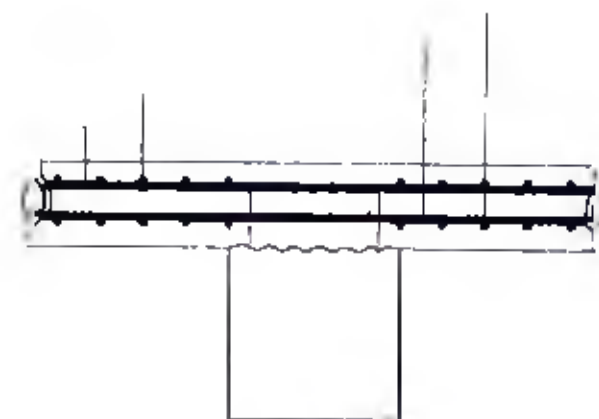
EXISTING ROAD RAMP
PROPOSED ROAD RAMP REPAIR
REINFORCEMENT OF TAIL (PLAN)
 R/L - 08 (SEE SLAB REINFORCEMENT)

REPAIR OF ROAD RAMP (SL) 2

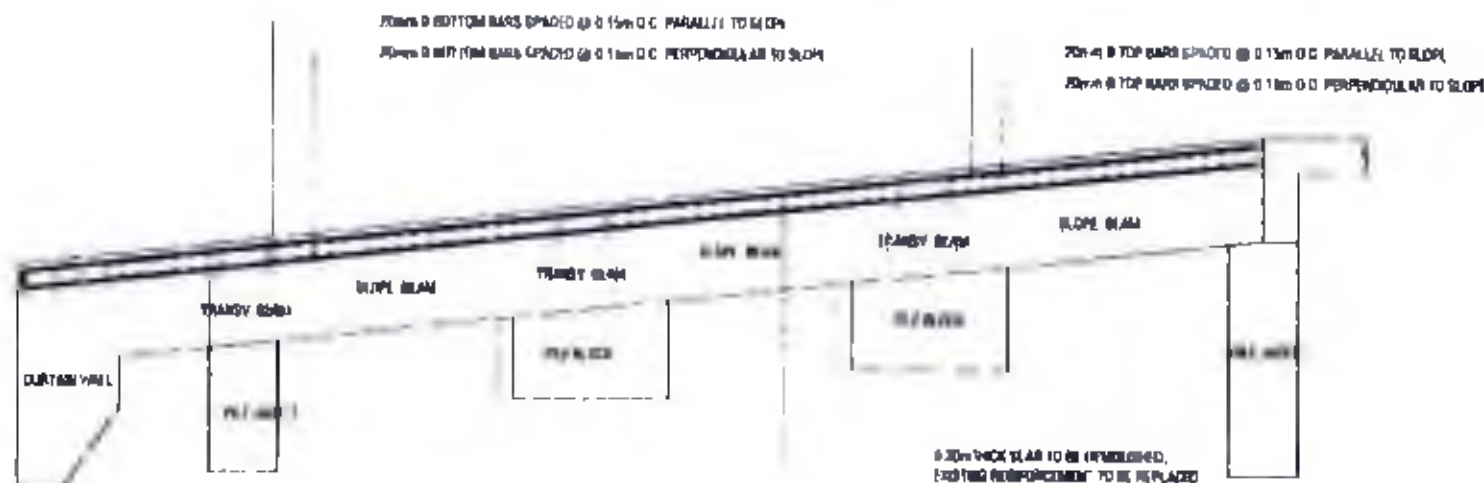
SHEET NO
08 12



SECTION OF PROPOSED REPAIR OF RORO DECK (TRANSVERSE TO SLOPE)
SCALE 1:10 METERS



TRANSVERSE SLAB SECTION DETAIL
SCALE 1:10 METERS



SECTION OF PROPOSED REPAIR OF RORO DECK (PARALLEL TO SLOPE)
SCALE 1:10 METERS



SLAB SECTION DETAIL (PARALLEL TO SLOPE)
SCALE 1:10 METERS



PROJECT TITLE AND LOCATION
REPAIR OF DAMAGED RORO BRIDGE (RORO RAMP NO. 7 AND BACK UP AREA)
PHASE 1: REPAIR OF BRIDGE

DESIGNED BY
WILLIAM SANDERSON
STRUCTURAL ENGINEER

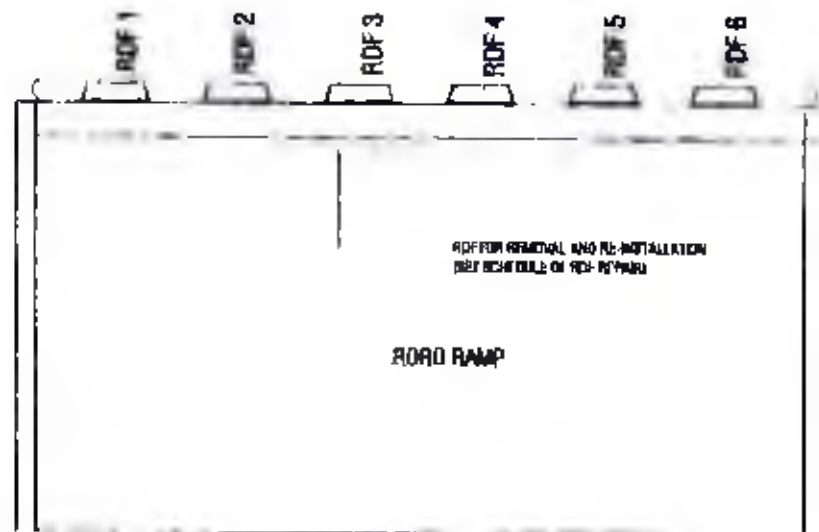
DESIGNED BY
J. Valdez
SAN DIEGO, CALIFORNIA

APPROVED BY
E. J. GILBERT
STRUCTURAL ENGINEER

DEPT. CONTROL
RORO DECK SECTION OF TALS
SLAB REINFORCEMENT

REPAIR OF RORO RAMP NO. 7

SHEET NO.



RDF REPAIR SCHEDULE

MARK	TYPE	DESCRIPTION OF REPAIR
RDF 1	1500 x 1500	REINFORCE, RE-ORIENT (UPSIDE DOWN), REPLACE 2 SS BOLTS
RDF 2	1500 x 1500	REINFORCE, RE-ORIENT (UPSIDE DOWN), REPLACE 4 SS BOLTS
RDF 3	1500 x 1500	REINFORCE, RE-ORIENT (UPSIDE DOWN), REPLACE 4 SS BOLTS
RDF 4	1500 x 1500	REINFORCE, RE-ORIENT (UPSIDE DOWN), REPLACE 2 SS BOLTS
RDF 5	1500 x 1500	REINFORCE, RE-ORIENT (UPSIDE DOWN), REPLACE 2 SS BOLTS
RDF 6	1500 x 1500	REINFORCE, RE-ORIENT (UPSIDE DOWN), REPLACE 2 SS BOLTS

R.C. DECK

PLAN FOR RDF REPAIR / RE-ORIENTATION

SCALE 1:30 14/12/2012

PARTIALLY DAMAGED ROD TO BE RE-POSITIONED AT THE BOTTOM

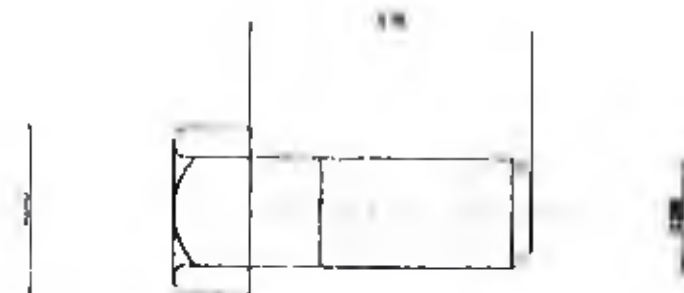


RDF BEFORE RE-ORIENTATION

NEW POSITION OF PARTIALLY DAMAGED ROD



RDF AFTER RE-ORIENTATION



RDF STAINLESS BOLT DETAIL

PROJECT TITLE AND LOCATION

REPAIR OF DAMAGED R.C. WHARF (RORO RAMP NO. 2) AND BACK UP AREA

PORT OF TRENTO (P.T.A.) S.A. - PUNTA ARENAS

DESIGNED BY

RELLY W. MADRIGOS
REGISTERED PROFESSIONAL ENGINEER

CHECKED BY

[Signature]
REGISTERED PROFESSIONAL ENGINEER

DATE

[Signature]
ELIZALDE M. ULLAN
REGISTERED PROFESSIONAL ENGINEER

DETAILED CONTENT

PLAN FOR REPAIR / RE-ORIENTATION OF THE SCHEDULE OF RDF REPAIR / RDF STAINLESS BOLT DETAIL

10 x 1000 - Issues by 14/12/2012 at 10:00 AM

REPAIR OF RORO RAMP NO. 2

SHEET NO.

10 12

EXISTING PAVING BLOCKS

PREVIOUSLY PROPOSED
(PHASE 1)

74.94

44.04

2.24

LONGITUDINAL CONSTRUCTION
JOINT AT EVERY 4.00m (SEE DETAIL)

TRANSVERSE CONSTRUCTION
JOINT (SEE DETAIL)

TRANSVERSE CONTRACTION JOINT
@ EVERY 5.00m (SEE DETAIL)

NOTE

JOINT INTERVAL

1. TRANSVERSE CONSTRUCTION
 - SEE PLAN FOR THE POSITION OF TRANSVERSE CONSTRUCTION JOINTS
2. LONGITUDINAL CONSTRUCTION JOINTS
 - AT EVERY 4.00m
3. TRANSVERSE CONTRACTION JOINT
 - SAWED @ EVERY 5.00m

**COMBINED PAVEMENT PLAN
& LAY-OUT OF JOINT CONNECTIONS**

SCALE

1:100

REPAIR OF BACK UP AREA

PROJECT TITLE AND LOCATION

REPAIR OF DAMAGED E.C. WATER RUNOFF DRAIN NO. 2
AND BACK UP AREA

CLIENT'S NAME

RELLY MADRICAL
AS THE DESIGN CONSULTANT

DESIGNER'S NAME

CARLOS N. SANCHEZ YORRGO
PRO. MEMBER

CHECKER

EL BALDE M. ALBON
AS THE PLAN MANAGER

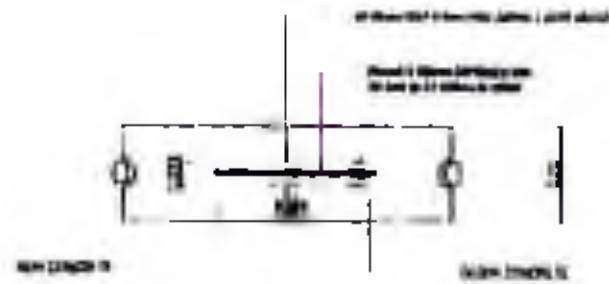
BEST COPY

PAVEMENT PLAN AND JOINT CONNECTION
LAY OUT

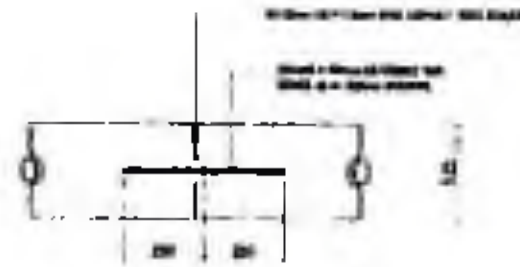
SHEET NO.

11/12

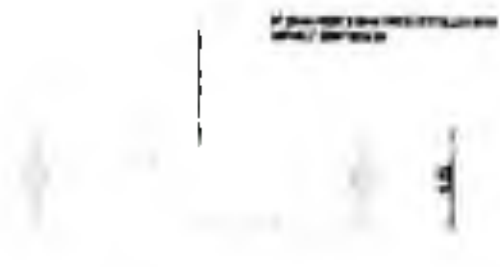
FILE NAME: 2023-08-15 10:00:00 AM



LONGITUDINAL CONSTRUCTION JOINT

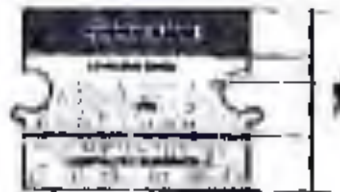


TRANSVERSE CONSTRUCTION JOINT



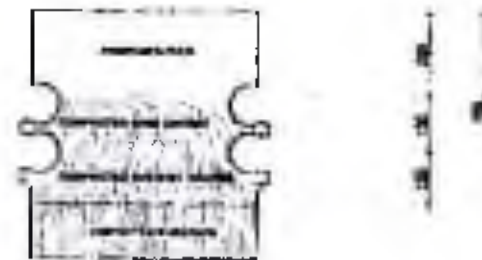
TRANSVERSE CONSTRUCTION JOINT

TYPICAL JOINT DETAILS



EXISTING PAVEMENT SECTION

SCALE 1:10 METERS



PROPOSED PCCP SECTION

SCALE 1:10 METERS



PROJECT TITLE AND NUMBER
 REPAIR OF DAMAGED WEAR SURFACE AND BACKFILL AREA
 STATE OF UTAH DEPARTMENT OF TRANSPORTATION

DESIGNED BY
 PELLERIN-BADARCO
 CIVIL ENGINEERING

APPROVED BY
 JACOBSON & ASSOCIATES
 CIVIL ENGINEERS

APPROVED BY
 CLARENCE M. GILSON
 CIVIL ENGINEER

OTHER JOINT DETAILS
 PRESENT WITHIN 500 FEET
 AS SHOWN THROUGHOUT PROJECT

DATE OF SHEET 12-12

SUMMARY OF BILL OF QUANTITIES
REPAIR OF DAMAGED R.C. WHARF, RORO RAMP NO. 2 AND BACK-UP AREA
PORT OF PUERTO PRINCESA, PALAWAN

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. I	GENERAL EXPENSES	L.S.	1.00		
BILL NO. II	REPAIR OF R. C. DECK/SLAB AND BEAM ALONG R.C WHARF	SQM	786.51		
BILL NO. III	REPAIR OF RORO RAMP	SQM	198.00		
BILL NO. IV	REPAIR OF BACK-UP AREA	SQM	2,539.64		

Bidder's Authorized Representative

BILL OF QUANTITIES
 REPAIR OF DAMAGED R.C. WHARF, RORO RAMP NO. 2 AND BACK-UP AREA
 PORT OF PUERTO PRINCESA, PALAWAN

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. 1	GENERAL EXPENSES				
1.01	Mobilization and Demobilization	lot	1.00		
1.02	Provide Safety and Health Program in the Execution of the Project	mo.	8.00		

Bidder's Authorized Representative

BILL OF QUANTITIES
REPAIR OF DAMAGED R.C. WHARF, RORO RAMP NO. 2 AND BACK-UP AREA
PORT OF PUERTO PRINCESA, PALAWAN

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. II	REPAIR OF R. C. DECK/SLAB AND BEAM ALONG R.C. WHARF				
2.01	Demolition of Damaged R.C. Deck Slab and Beams	cum	252.27		
2.02	Disposal of Concrete Debris	cum	252.27		
2.03	Supply and Install Reinforcing Bars for Item 2.04	kg	27,618.76		
2.04	Supply and Place 3,500 psi Concrete for R.C. Deck/Slab and Beams	cum	258.55		
2.05	Supply and Install Galvanized Angle Bar, 100mm x 100mm x 10mm thk.	l.m.	21.00		

Bidder's Authorized Representative

BILL OF QUANTITIES
REPAIR OF DAMAGED R.C. WHARF, RORO RAMP NO. 2 AND BACK-UP AREA
PORT OF PUERTO PRINCESA, PALAWAN

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. III	REPAIR OF RORO RAMP				
3.01	Demolition of Damaged R.C. Slab	cum	59.40		
3.02	Disposal of Concrete Debris	cum	59.40		
3.03	Supply and Install Reinforcing Bars for Item 3.04	kg	13,362.51		
3.04	Supply and Place 3,500 psi Concrete for R.C. Slab	cum	59.40		
3.05	Supply and Place 3,500 psi Concrete for R.C. Slab	unit	6.00		

Bidder's Authorized Representative

BILL OF QUANTITIES
REPAIR OF DAMAGED R.C. WHARF, RORO RAMP NO. 2 AND BACK-UP AREA
PORT OF PUERTO PRINCESA, PALAWAN

NO. (1)	DESCRIPTION OF WORK (2)	UNIT (3)	QTY. (4)	UNIT PRICE (Pesos) (5)	AMOUNT (Pesos) (4) x (5)
BILL NO. IV	REPAIR OF BACK-UP AREA				
4.01	Removal of Damaged Paving Blocks, Shear Key and Unsuitable Materials	sqm.	2,539.64		
4.02	Disposal of Concrete Debris and Unsuitable Materials	cum	1,396.80		
4.03	Supply, Spread and Compact Aggregate Sub-Base Course (150mm thk.)	cum	380.95		
4.04	Supply, Spread and Compact Aggregate Base Course (150mm thk.)	cum	380.95		
4.05	Supply and Place Ready Mixed Concrete for Pavement (3,500 psi @ 7 Days)	cum	634.91		
4.06	Concrete Cutting, Curing and Protection	sqm	2,539.64		

Bidder's Authorized Representative

BASIS OF PAYMENT FOR WORK ITEMS INCLUDED IN THE PROPOSAL

The work items included in the proposal including the basis of payment for each item are as follows:

BILL NO. 1 – GENERAL EXPENSES

Item 1.01 Mobilization and Demobilization (1.00 Lot)

The quantity to be paid for shall be the actual number of minimum equipment requirement enumerated in the bid documents mobilized and demobilized. The contract lump sum price shall be full compensation for furnishing all materials, labor, equipment, tools and incidentals necessary to mobilize and demobilize all the minimum equipment requirement enumerated in the bid documents. Fifty percent (50%) of the total amount shall be payable after the mobilization activity while the remaining (50%) payable after demobilization.

Item 1.02 Provide Safety and Health Programs in the Execution of the Project (8 mos.)

The quantity to be paid for shall be the actual implementation of safety and health program and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools and incidentals necessary to complete the implementation of the Construction Safety and Health Program, as required and approved by the Department of Labor and Employment (DOLE)

BILL NO. II – REPAIR OF R. C. DECK/SLAB AND BEAM ALONG R.C. WHARF

Item 2.01 Demolition of Damaged R.C. Deck/Slab and Beams (252.27 cu.m.)

The quantity to be paid for shall be the actual volume in cubic meters of damaged R.C. Deck/Slab and beams to be demolished in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools and incidentals expenses necessary to complete the work.

Item 2.02 Disposal of Concrete Debris (252.27 cu.m.)

The quantity to be paid for shall be the actual volume in cubic meters of concrete debris to be disposed in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools and incidentals expenses necessary to complete the work.

**Item 2.03 Supply and Install Reinforcing Bars for Item 2.04
(27,618.76 kg.)**

The quantity to be paid for shall be the actual weight in kilograms of reinforcing bars to be supplied and installed for Item 2.04 in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools and incidentals expenses necessary to complete the work.

Item 2.04 Supply and Place 3,500 psi Concrete for R.C. Deck/Slab and Beams (258.55 cu.m.)

The quantity to be paid for shall be the actual volume in cubic meters of 3,500 PSI to be supplied and placed for R.C. Deck/Slab and beams in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools and incidentals expenses necessary to complete the work.

Item 2.05 Supply and Install Galvanized Angle Bar 100mm x 100mm x 10mm thk. (21.00 l.m.)

The quantity to be paid for shall be the actual length in linear meters of galvanized angle bar 100mm x 100mm x 10mm thick to be supplied and installed in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools and incidentals expenses necessary to complete the work.

BILL NO. III – REPAIR OF RORO RAMP

Item 3.01 Demolition of Damaged R.C. Slab (59.40 cu.m.)

The quantity to be paid for shall be the actual volume in cubic meters of damaged R.C. Slab to be demolished in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools and incidentals expenses necessary to complete the work.

Item 3.02 Disposal of Concrete Debris (59.40 cu.m.)

The quantity to be paid for shall be the actual volume in cubic meters of concrete debris to be disposed in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools and incidentals expenses necessary to complete the work.

**Item 3.03 Supply and Install Reinforcing Bars for Item 3.04
(13,362.51 kg.)**

The quantity to be paid for shall be the actual weight in kilograms of reinforcing bars to be supplied and installed for Item 3.04 in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools and incidentals expenses necessary to complete the work.

Item 3.04 Supply and Place 3,500 psi Concrete for R.C. Slab (59.40 cu.m.)

The quantity to be paid for shall be the actual volume in cubic meters of 3,500 PSI to be supplied and placed for R.C Slab in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools and incidentals expenses necessary to complete the work.

Item 3.05 Re-orientation of RDF and Replacement of Missing/Damaged SS Bolts (6.00 Units)

The quantity to be paid for shall be the actual number in units of RDF to be re-oriented and replaced with missing/damaged SS bolts in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools and incidentals expenses necessary to complete the work.

BILL NO. IV – REPAIR OF BACK-UP AREA

**Item 4.01 Removal of Damaged Paving Blocks, Shear Key
and Unsuitable Materials (2,539.64 Sq.m.)**

The quantity to be paid for shall be the actual area in square meters of damaged paving blocks, shear key and unsuitable materials to be supplied in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools and incidentals expenses necessary to complete the work.

Item 4.02 Disposal of Concrete Debris and Unsuitable Materials (1,396.80 cu.m.)

The quantity to be paid for shall be the actual volume in cubic meters of concrete debris and unsuitable materials to be disposed in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools and incidentals expenses necessary to complete the work.

Item 4.03 Supply, Spread and Compact Aggregate Sub-base Course (150mm thk) (380.95Cu.m.)

The quantity to be paid for shall be the actual volume in cubic meters of aggregate sub-base course to be supplied, spread and compacted in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools and incidentals expenses necessary to complete the work.

Item 4.04 Supply, Spread and Compact Aggregate Base Course (150mm thk) (380.95Cu.m.)

The quantity to be paid for shall be the actual volume in cubic meters of aggregate base course to be supplied, spread and compacted in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools and incidentals expenses necessary to complete the work.

Item 4.05 Supply and Place Ready Mixed Concrete for Pavement (3,500 PSI @ 7 Days) (634.91 Cu.m.)

The quantity to be paid for shall be the actual volume in cubic meters of ready mixed concrete to be supplied and placed for pavement (3,500 PSI @ 7 days) in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools and incidentals expenses necessary to complete the work.

Item 4.06 Concrete Cutting, Curing & Protection (2,539.64 Sq.m.)

The quantity to be paid for shall be the actual area in square meters of concrete cutting, curing & protection works to be done in accordance with the plans and specifications and accepted by the Engineer. The contract unit price shall be full compensation for furnishing all materials, labor, equipment, tools and incidentals expenses necessary to complete the work.

MAY 15 2020



ENGINEERING CIRCULAR NO. 41 2020

**FOR THE MANAGER, PCMD
ALL PORT MANAGERS
CONCERNED CONTRACTORS**

**FROM THE ASSISTANT GENERAL MANAGER,
ENGINEERING OFFICE**

**SUBJECT SAFETY GUIDELINES FOR THE IMPLEMENTATION OF
ALL PPA (CAPEX & RMI) AND DOTr TOURISM AND
SOCIAL REFORM PROJECTS DURING THE COVID-19
PUBLIC HEALTH CRISIS**

Pursuant to the Proclamation No. 929, series of 2020 issued by President Rodrigo Roa Duterte, declaring a State of Calamity throughout the Philippines due to the Coronavirus Disease 2019 (COVID-19) and in view of the extended implementation of Enhanced Community Quarantine (ECQ) and General Community Quarantine (GCQ) in the identified areas, the following guidelines, in addition to the existing safety standards approved by the DOLE and also to the PPA Memorandum Circular No. 18-2020, are hereby directed to be implemented in all on-going PPA infrastructure projects including the DOTr Tourism and Social Reform projects:

1. Only persons from Twenty-One (21) to Fifty-Nine (59) years of age, without pre-existing health conditions, such as, but not limited to immunodeficiency, comorbidities or other health risk and who did not come in contact with someone with COVID-19 shall be allowed to be included in the workforce for areas under ECQ and GCQ.
2. The Contractor shall provide for their personnel/workers the necessary welfare facilities and amenities, such as employees' quarters for board and lodging for the project area covered by the ECQ and GCQ, otherwise, prior to deployment, prescribed procedures shall be conducted at every instance of re-entry.
3. Adequate food, potable drinking water, disinfectants shall be made available by the Contractors for their in-house personnel/worker during the period of ECQ/GCQ.
4. Compliance to social distancing, proper hygiene and mandatory wearing of face masks and other protective personal equipment shall be ensured for all on-going projects as precautionary measures to avoid and contain the spread of COVID-19 in the work place.

A. Southern Cross South Harbor Port Area, Manila 1018 Philippines
P.O. Box 435 Manila, Philippines
Tel. No. (+632) 954-8800 Fax: (+632) 521-4835

PCMD 2020051806

5. Field Offices, employees' quarters, burlinghouses and other common areas shall be maintained to ensure cleanliness and daily disinfection of said areas must be conducted accordingly.
6. Contractors shall provide disinfection facilities such as handwashing station, foot bath and others to be placed at various locations of all on-going projects.
7. Contractors shall ensure that their projects are in compliance with the DOLE D.O. No. 13 series of 1998. Personnel and workers shall be provided with the supply of vitamins particularly Vitamin C and other over the counter medicines, quarantine facilities and oxygen tanks for emergency purposes.
8. Safety Officer of the Contractor shall regularly conduct briefing on the information regarding COVID-19 construction protocols on top of other safety requirements.
9. As preventive measure, daily monitoring of the pre and post work health conditions of workers shall be undertaken by the Contractor's health/safety officer particularly the temperature, blood pressure and exposure monitoring. Personnel with symptoms relative to COVID-19 shall be immediately isolated and quarantined for fourteen (14) days and if necessary, brought to the DOH COVID-19 treatment facility under strict confidentiality/privacy.
10. Daily health monitoring report shall be prepared by the Safety Officer and to be submitted to the assigned PPA Project Engineer/Port Engineer.
11. Proper protocols in accordance with the DTI and DOLE Interim Guidelines and the Local Government Unit policy on work place prevention and control of COVID-19 shall likewise be strictly observed.
12. Daily work activities shall be under strict monitoring by the Safety Officer to ensure compliance with safety standards and quarantine protocols.
13. Sharing of construction and office equipment is discouraged. However, if it cannot be avoided, disinfection of equipment in between transfer shall be conducted.
14. All materials and equipment brought inside the project site shall be disinfected, as much as possible.
15. Non-essential personnel, visitors and general public shall be restricted to enter the project site. 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. Gatherings, liquors, and/or merry-making are strictly prohibited in the project site.

-3

16. PPA Port/Resident Engineer shall ensure strict compliance to DOLE D.O. No. 13, series of 1998 and implementation of the mentioned COVID-19 precautionary measures in the work place.
17. Clustered and staggered deployment of employees within the construction site shall be observed to minimize personnel contact.
18. Contractors shall submit to the implementing unit the inventory of work activities including the proposed sequencing of activities to be followed and undertaken to comply to the required social distancing. Break times shall be conducted in a staggered manner.

For strict compliance.


CONSTANTE T. FARIÑAS, JR.

***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);
or
- (b) Registration certificate from Securities and Exchange Commission (SEC), Department of Trade and Industry (DTI) for sole proprietorship, or Cooperative Development Authority (CDA) for cooperatives or its equivalent document;
and
- (c) Mayor's or Business permit issued by the city or municipality where the principal place of business of the prospective bidder is located, or the equivalent document for Exclusive Economic Zones or Areas;
and
- (e) Tax clearance per E.O. No. 398, s. 2005, as finally reviewed and approved by the Bureau of Internal Revenue (BIR).

Technical Documents

- (f) 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
- (g) 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
- (h) Philippine Contractors Accreditation Board (PCAB) License;
or
Special PCAB License in case of Joint Ventures;
and registration for the type and cost of the contract to be bid; and
- (i) Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission;
or
Original copy of Notarized Bid Securing Declaration; and
- (j) 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; and
- (k) Original duly signed Omnibus Sworn Statement (OSS);
and 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

- (l) The prospective bidder's audited financial statements, showing, among others, the prospective bidder's total and current assets and liabilities, stamped "received" by the BIR or its duly accredited and authorized institutions, for the preceding calendar year which should not be earlier than

- two (2) years from the date of bid submission; **and**
- (m) The prospective bidder's computation of Net Financial Contracting Capacity (NFCC).

Class "B" Documents

- (n) 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;
or
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

- (o) Original of duly signed and accomplished Financial Bid Form; **and**

Other documentary requirements under RA No. 9184

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

Bid Form for the Procurement of Infrastructure Projects
[shall be submitted with the Bid]

BID FORM

Date : _____
Project Identification No. : _____

To: Philippine Ports Authority PMO Palawan
Port Area, Bgy. Bagong Pag-asa,
Puerto Princesa City, Palawan

Having examined the Philippine Bidding Documents (PBDs) including the Supplemental or Bid Bulletin Numbers _____, the receipt of which is hereby duly acknowledged, we, the undersigned, declare that:

- a. We have no reservation to the PBDs, including the Supplemental or Bid Bulletins, for the Procurement Project: *[insert name of contract]*;
- b. We offer to execute the Works for this Contract in accordance with the PBDs;
- c. The total price of our Bid in words and figures, excluding any discounts offered below is: _____;
- d. The discounts offered and the methodology for their application are: _____;
- e. The total bid price includes the cost of all taxes, such as, but not limited to: *[specify the applicable taxes, e.g. (i) value added tax (VAT), (ii) income tax, (iii) local taxes, and (iv) other fiscal levies and duties]*, which are itemized herein and reflected in the detailed estimates;
- f. Our Bid shall be valid within the a period stated in the PBDs, and it shall remain binding upon us at any time before the expiration of that period;
- g. If our Bid is accepted, we commit to obtain a Performance Security in the amount of _____ percent of the Contract Price for the due performance of the Contract, or a Performance Securing Declaration in lieu of the the allowable forms of Performance Security, subject to the terms and conditions of issued GPPB guidelines¹ for this purpose;
- h. We are not participating, as Bidders, in more than one Bid in this bidding process, other than alternative offers in accordance with the Bidding Documents;
- i. We understand that this Bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal Contract is prepared and executed; and
- j. We understand that you are not bound to accept the Lowest Calculated Bid or any other Bid that you may receive.
- k. We likewise certify/confirm that the undersigned, is the duly authorized

¹ currently based on GPPB Resolution No. 09-2020

representative of the bidder, and granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for the [Name of Project] of the [Name of the Procuring Entity].

- I. We acknowledge that failure to sign each and every page of this Bid Form, including the Bill of Quantities, shall be a ground for the rejection of our bid.

Name: _____

Legal Capacity: _____

Signature: _____

Duly authorized to sign the Bid for and behalf of: _____

Date: _____

**STATEMENT OF ALL ON-GOING GOVERNMENT AND PRIVATE CONTRACTS
INCLUDING CONTRACTS AWARDED BUT NOT YET STARTED, WHETHER SIMILAR OR NOT SIMILAR IN NATURE**

Name of the Contract or Title of the Project [1]	Owner's Name, Address, and Telephone No.	Nature/ Scope of Work [2]	Contractor's Role (In percentage) [3]	Total Contract Value at Award			Date of Award [5]	Value of Outstanding Works	Estimated Time of Completion	AS OF		Contract Duration	
				Award	Project Completion	Escalated Value to Present Prices				% of Accomplishment [4]		Start	Completed
										Planned	Actual		
a) Government Contracts/Projects I. On-going II. Awarded but not yet started													
b) Private Contracts/Projects I. On-going II. Awarded but not yet started													

NOTE:

- 1) As appearing or defined in the contract entered/executed by the parties
- 2) With special reference to the Scope of Works as described/enumerated in the advertised invitation to Bid
- 3) Indicates whether as Sole Contractor, Sub-Contractor or Member in a Joint Venture / Consortium
- 4) Indicate the FOREX used if Contract Value is expressed in a currency other than the Philippine Peso. Specify the "Escalation Factor" used to escalate the Contract Value from Completion date to the advertisement date of the Invitation to Bid per section 23.11.2(3) of R.A. 9164
- 5) State month and Year.

This Statement shall be supported by:

- a) Notice of Award and/or Contract
- b) Notice to Proceed

Name of Firm/Applicant

Authorized Signing Official

Date

STATEMENT OF SINGLE LARGEST COMPLETED CONTRACT (SLCC) SIMILAR TO THE CONTRACT TO BE BID

Name of the Contract or Title of the Project ^{a)} [1]	Owner's Name, Address, and Telephone Numbers [2]	Nature/Scope of Work ^{b)} [3]	Contractor's Role (in percentage) ^{c)} [4]	Total Contract Value (in Pesos)		Date of Award ^{e)} [7]	Contract Duration ^{e)}	
				at Project Completion [5]	at Adjusted Value to Present Prices ^{d)} [6]		Start [8]	Completed [9]

NOTE:

1. The prospective bidder must have completed an SLCC that is similar to the contract to be bid, and whose value, adjusted to current prices using the PSA consumer price indices, must be at least fifty (50%) of the ABC to be bid.
2. The Statement shall be supported by:
 - a) Notice of Award and / or Notice to Proceed
 - b) Project Owner's Certificate of Final acceptance issued by the owner other than the Contractor or Constructor's Performance Evaluation System (CPES) Final Rating, which must be at least satisfactory

Name of Firm/Applicant

Authorized Signing Official

Date

EXPERIENCE RECORD ON SIMILARLY COMPLETED PROJECT

Name of Contract to be Bid

Repair of Damaged R.C. Wharf, Roro Ramp No. 2 and Back-Up Area, Port of Puerto Princesa, Palawan

Name of Single Largest Completed Contract with the same Major Categories

Of Work as the Contract to be Bid (To be filled-up by Prospective Bidder)

Major Categories of Work [1]	Unit of Measure [3]	Quantity [4]	Similar Completed Contract of the Prospective Bidder (To Be filled-up by the Prospective Bidder)		
			Similar Major Categories of Works	Unit of Measure	Quantity
1. DEMOLITION & DISPOSAL OF WORKS	cu.m.	888.00			
2. SUPPLY, SPREAD AND COMPACT AGGREGATE COURSE MATERIALS	cu.m.	381.00			
3. REINFORCING STEEL BARS	kg.	20,431.00			
4. CONCRETE WORKS	cu.m.	477.00			

NOTE 1) Submit the Certificate of Completion/Certificate of Acceptance by the project owner, Final Recapitulation/Bill of Quantities and/or Constructor Performance Evaluation System (CPES) ratings, 1st, 2nd, & Final visit (if applicable). Project with no Certificate of Completion and Recapitulation/Bill of Quantities shall not be considered.

2) The Owner's Certificate of Final Acceptance; or the Constructors Performance Evaluation Summary (CPES) Final Rating and/or the Certificate of Completion, must be satisfactory.

Name of Firm/Applicant

Authorized Signing Official

Date

FINANCIAL DATA AND REQUIREMENTS

- A. The prospective bidder's audited Financial Statements, showing, among others, the prospective bidder's total and current assets and liabilities, stamped "RECEIVED" by Bureau of Internal Revenue (BIR), or its duly accredited and authorized institutions, for the preceding calendar year which should not be earlier than two (2) years from the date of bid submission.

	(1)	(2)
		Year :
1.	Total Assets	
2.	Current Assets	
3.	Total Liabilities	
4.	Current Liabilities	
5.	Net Worth (1-3)	
6.	Net Working Capital (2-4)	

- B. The computation of the bidders Net Financial Contracting Capacity (NFCC) must be at least equal to the approved budget for the contract to be bid, computed based on the above data, using the following formula:

NFCC = [(current assets - current liabilities) (15)] *minus* the value of all outstanding or uncompleted portions of the project under ongoing contracts, including awarded contracts yet to be started, coinciding with the contract to be bid

NFCC = _____

Attached herewith are certified true copies of the audited financial statements stamped received by the BIR or BIR authorized collecting agent for the latest/immediately preceding calendar year.

Name of Prospective Bidder-Firm

Signature over Printed Name of Authorized Signing Official

Designation

Date: _____

NOTE : *If prospective bidder is a Partnership or Joint Venture, each member-firm of the Joint Venture shall submit separate financial statements.*

KEY PERSONNEL TO BE ASSIGNED TO THE CONTRACT TO BE BID

Following are the key personnel that I will assign to the project if awarded the contract. Attached are their qualification and experience data and certified true copies of their PRC IDs, certificates of accreditation, etc.

Name of Contract to be Bid: _____

	Project Manager [1]	Project Engineer [2]	Materials Engineer [3]	Foreman [4]	Construction Safety and Health Officer [5]
1. NAME					
2. ADDRESS					
3. DATE OF BIRTH					
4. CITIZENSHIP					
5. CIVIL STATUS					
6. EDUCATION					
ELEMENTARY Name and Location of School Year Graduated					
HIGH SCHOOL Name and Location of School Year Graduated					
COLLEGE Name and Location of School Year Graduated					
7. PRC LICENSE No.					
8. TIN (Tax Identification No.)					
9. SSN No.					

Name of Prospective Bidder-Firm

Signature over Printed Name of Authorized Signing Official

Date

Designation

NOTE: *Attach complete qualification and experience data of all Key Personnel including certified copies of their valid DPWH certificate of accreditation for Materials Engineer, PRC ID's for the Project Engineer and Certificate of Training for the Construction Safety and Health Officer issued by the DOLE Accredited Training. Failure to attach the said documents is ground for disqualification.*

BIODATA OF (Position of Key Personnel)

[Give detailed information of the Key Personnel who are assigned as full-time Project Manager, Project Engineer, Materials Engineer and Foreman for the project to be bid. Each Key Personnel must fill-up this form.]

1. Name : _____
2. Date of Birth : _____
3. Nationality : _____
4. Education and Degrees : _____
5. Specialty : _____
6. Registration : _____
7. Length of Service with the Firm : _____ Years, from _____ (month) _____ (year)
to _____ (month) _____ (year)
8. Total Years of Experience including previous employment : _____
9. If Item 7 is less than ten (10) years, give name and length of service with previous employers for a ten (10)-year period (*attached additional sheet/s if necessary*) :

Name and Address of Employer

Length of Service

	_____ year(s), from _____ to _____
	_____ year(s), from _____ to _____
	_____ year(s), from _____ to _____
	_____ year(s), from _____ to _____
	_____ year(s), from _____ to _____
	_____ year(s), from _____ to _____
	_____ year(s), from _____ to _____

10. Experience (see next page)

BIO DATA OF _____ (Continuation)

10. Experience: (This should cover the past ten (10) years of experiences. Attached as many pages as necessary to show involvement of personnel in the projects using the format below.)

Name of Company/Firm	Name and Address of Owner of Company/Firm	Indicate the features of project (particulars of the project components and any other particular interest connected with the project)	Contract Amount (In Philippine Currency)	Position	Structures for which the employee/ personnel was responsible	Assignment Period	
						From	To

(Name and Signature of Employee/Personnel)

It is hereby certified that the above personnel can be assigned to this project, if the contract is awarded to our company.

(Place and Date)

(Signature Over Printed Name of Authorized Signatory of the Bidder-Firm)

Designation

EQUIPMENT PLEDGED TO THE CONTRACT TO BE BID

I hereby declare that the following equipment listed below which are owned, leased or under purchase agreement are in good operating condition and are available for the duration of the project.

Name of Contract to be Bid : _____

DESCRIPTION (Type, Model, Make) [1]	No. of Each [2]	YEAR OF MANUFACTURE [3]	OWNED/LEASED/ UNDER PURCHASE AGREEMENT ¹ [4]	CAPACITY PERFORMANCE [5]	MOTOR NO./ BODY NO. [6]	CONDITION [7]	PRESENT LOCATION [8]

(If space is not enough, reproduce/xerox this Form.)

Name of Bidder-Firm (Signature Over Printed Name of Authorized Signatory of the Bidder-Firm) Date

Designation

NOTE:

1. Attached notarized Certificate of Availability of Equipments Units from:
 - a) Bidder - for equipment units owned by the bidder;
 - b) Lessor - for equipment units under lease;
 - c) Vendor - for equipment units under purchase agreement.

Failure to attach the aforementioned notarized certificate(s) is ground for disqualification of the bidder's bid.

(For equipment units owned by the Bidder)

CERTIFICATION OF AVAILABILITY OF EQUIPMENT

This is to certify that I have the following owned equipment units which shall be used exclusively for the duration of the project _____ *(name of contract to be bid)* _____

if awarded the contract, to wit:

<u>No. of Units</u>	<u>Name/Description of Equipment</u>	<u>Performance Capacity</u>
---------------------	--------------------------------------	-----------------------------

IN WITNESS WHEREOF, I have hereunto set my hand this _____ day of _____ 2021 at _____, Philippines.

(Signature over printed name of Bidder)

(Position/Designation in the Company)

(Name of Company of Bidder)

Affiant

ACKNOWLEDGEMENT

SUBSCRIBED AND SWORN to before me this _____ day of _____, 20____ affiant exhibiting to me his/her Community Tax Certificate No. _____ issued on _____ at _____, Philippines.

Doc. No. _____
Page No. _____
Book No. _____
Series of _____

NOTARY PUBLIC

(For equipment units under Lease)

CERTIFICATION OF AVAILABILITY OF EQUIPMENT

This is to certify that I have the following owned equipment units which are available for lease to _____
(name of bidder)
and which shall be exclusively used for the duration of the project _____ (name of
contract to be bid) _____, to wit

<u>No. of Units</u>	<u>Name/Description of Equipment</u>	<u>Performance Capacity</u>	<u>Rental/Day</u>
---------------------	--------------------------------------	-----------------------------	-------------------

The undersigned shall execute with _____ (name of bidder)
the corresponding contract of lease for the above-mentioned equipment upon award of
the contract to the latter.

IN WITNESS WHEREOF, I have hereunto set my hand this _____ day of _____
2017 at _____, Philippines

(Signature over printed name of Lessor)

(Position/Designation in the Company)

(Name of Lessor's

Affiant

CONFORME:

(Signature over printed name of Bidder)

(Position/Designation in the Company)

(Name of Bidder's Co

ACKNOWLEDGEMENT

SUBSCRIBED AND SWORN to before me this _____ day of _____, 20____, affiant
exhibiting to me his/her Community Tax Certificate No. _____ issued on
_____ at _____, Philippines.

Doc. No. _____

Page No. _____

Book No. _____

Series of _____

NOTARY PUBLIC

(For equipment units under Purchase Agreement)

CERTIFICATION OF AVAILABILITY OF EQUIPMENT

This is to certify that I have the following owned equipment units which are available for sale to/purchase by _____ (name of bidder) and which shall be exclusively used for the duration of the project _____ (name of contract to be bid) _____, to wit:

<u>No. of Units</u>	<u>Name/Description of Equipment</u>	<u>Performance Capacity</u>	<u>Amount</u>
---------------------	--------------------------------------	-----------------------------	---------------

The undersigned shall execute with _____ (name of bidder) the corresponding purchase agreement/deed of sale for the above-mentioned equipment upon award of the contract to the latter.

IN WITNESS WHEREOF, I have hereunto set my had this _____ day _____ 2021 at _____, Philippines.

(Signature over printed name of Vendor)

(Position/Designation in the Company)

(Name of Vendor)

Affiant

CONFORME:

(Signature over printed name of Bidder)

(Position /Designation in the Company)

(Name of Bidder)

A C K N O W L E D G E M E N T

SUBSCRIBED AND SWORN to before me this _____ day of _____, 20____ affiant exhibiting to me his/her Community Tax Certificate No. _____ issued on _____ at _____, Philippines.

Doc. No. _____
Page No. _____
Book No. _____
Series of _____

NOTARY PUBLIC

CONTRACT OF LEASE OF EQUIPMENT

KNOW ALL MEN BY THESE PRESENTS:

This contract made and entered into this _____ in _____ by and between:

_____, a company duly organized and existing under and by the virtue of Laws of the Republic of the Philippines, with Postal address at _____; represented in this Act by its President / General Manager, _____ hereinafter referred to as the LESSOR.

- A N D -

_____, a company duly organized and existing under and by the virtue of Laws of the Republic of the Philippines, with Postal address at _____; represented in this Act by its President / General Manager, _____ hereinafter referred to as the LESSEE.

WITNESSETH

Whereas, the Lessor represents that it is the Owner/Legal possessor of below described construction equipment hereinafter referred to as the EQUIPMENT.

Whereas, the LESSEE being engaged in the construction activities, is in need of the EQUIPMENT and has satisfied himself that the same is suitable for the proposed project:

Whereas, on offer and acceptance made by one to the other, the parties hereby agree to execute the Contract of Lease of Equipment under the terms and conditions set forth:

Whereas, the Contract of Lease of Equipment shall be executed after the award of the above-mentioned project to the LESSEE and the contract shall be in effect until such time that the contractor is authorized by the Philippine Ports Authority to pull out the said equipment.

Now, therefore, for and in consideration of the foregoing premises, the LESSOR hereby leases and the LESSEE accepts the lease of the following EQUIPMENT, to wit :

<u>DESCRIPTION</u>	<u>PERFORMANCE CAPACITY</u>	<u>RATE PER HOUR (Php) or RATE PER DAY</u>
.....
.....
.....
.....

TERMS AND CONDITIONS:

1. In case wherein the equipment is utilized below two (2) hours (or days), a minimum of one (1) hour (or day) per day shall be charged to the LESSEE.
2. Lease contract shall commence when the equipment leaves the LESSOR'S yard and shall terminate upon the return of the equipment by the LESSEE to the LESSOR'S yard.
3. LESSEE shall pick-up the equipment and its operators at LESSOR'S yard. Upon termination of works, the lessee shall demobilize all units within one week. LESSEE shall

pay for each unit an equivalent of one (1) hour (or day) rental for every day of delayed demobilization.

4. Fuel, oil and lubricants to be supplied by the LESSEE but for the account of the LESSOR.
5. The equipment and accessories contracted shall be under the supervision and responsibility for the safekeeping and scope of work of the equipment and accessories or as required by the LESSOR.
6. Equipment operator(s), mechanics and servicemen shall be provided by and for the account of the LESSOR.
7. MOBILIZATION, provided for LESSEE'S account, per equipment hour (or day) basis.
8. DEMOBILIZATION, for LESSEE'S account, per equipment hour (or day) basis.

IN WITNESS THEREFORE, both parties agreed and hereto have subscribed their names:

LESSOR:

LESSEE:

by: _____

by: _____

WITNESSED BY:

REPUBLIC OF THE PHILIPPINES)
CITY/MUNICIPALITY OF _____) S. S.

A C K N O W L E D G E M E N T

BEFORE ME, A NOTARY PUBLIC, personally appeared the following persons:

	NAME	RES.CERT. #	DATE	PLACE
1.	_____ (Lessor)	_____	_____	_____
2.	_____ (Lessee)	_____	_____	_____

are known to me to be the same persons who executed and signed the foregoing CONTRACT OF LEASE OF EQUIPMENT, acknowledged to me that the same are their true and voluntary act and deed of the company they each represent.

WITNESS MY HAND AND NOTARIAL SEAL on this _____ at _____, Philippines.

Doc. No. _____
Page No. _____
Book No. _____
Series of _____

NOTARY PUBLIC

AFFIDAVIT OF SITE INSPECTION

I, _____, of legal age, Filipino, married, and residing at _____
after having been duly sworn to in accordance with law, hereby depose and say:

1. That I am the _____ of _____ with principal address at _____
2. That I have inspected the project site for the _____ on _____
3. That I have fully determined the geographical and physical conditions of the project site and its environ, including the socio-political and peace and order condition of the barangay, municipality and province where the project is located;
4. That I am fully aware of the laws and ordinances pertaining to project implementation in the barangay, municipality and province where the project is located, as well as the rules and regulations of other government agencies concerning project implementation in the area where the project is located;
5. That I am executing this affidavit to attest to the truth of the foregoing facts and as part of the post-qualification documentary requirements for the aforementioned project.

IN WITNESS WHEREOF, I have hereunto set my hand this _____ day of _____

(Affiant's signature over printed name)

SUBSCRIBED AND SWORN TO before me this _____ affiant exhibiting to me his/her Community Tax Certificate No. _____ issued on _____ at _____, Philippines.

Doc. No. _____

Page No. _____

Book No. _____

Series of 2021

Omnibus Sworn Statement (Revised)

(shall be submitted with the Bid)

REPUBLIC OF THE PHILIPPINES)
CITY/MUNICIPALITY OF _____) S.S.

AFFIDAVIT

I, [Name of Affiant], of legal age, [Civil Status], [Nationality], and residing at [Address of Affiant], after having been duly sworn in accordance with law, do hereby depose and state that:

1. *[Select one, delete the other.]*

[If a sole proprietorship:] I am the sole proprietor or authorized representative of [Name of Bidder] with office address at [address of Bidder];

[If a partnership, corporation, cooperative, or joint venture:] I am the duly authorized and designated representative of [Name of Bidder] with office address at [address of Bidder];

2. *[Select one, delete the other.]*

[If a sole proprietorship:] As the owner and sole proprietor, or authorized representative of [Name of Bidder], I have full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for [Name of the Project] of the [Name of the Procuring Entity], as shown in the attached duly notarized Special Power of Attorney;

[If a partnership, corporation, cooperative, or joint venture:] I am granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for [Name of the Project] of the [Name of the Procuring Entity], as shown in the attached [state title of attached document showing proof of authorization (e.g., duly notarized Secretary's Certificate, Board/Partnership Resolution, or Special Power of Attorney, whichever is applicable)];

3. [Name of Bidder] is not "blacklisted" or barred from bidding by the Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units, foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the Government Procurement Policy Board, by itself or by relation, membership, association, affiliation, or controlling interest with another blacklisted person or entity as defined and provided for in the Uniform Guidelines on Blacklisting;

4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete and all statements and information provided therein are true and correct;

5. [Name of Bidder] is authorizing the Head of the Procuring Entity or its duly authorized representative(s) to verify all the documents submitted;

6. *[Select one, delete the rest.]*

[If a sole proprietorship:] The owner or sole proprietor is not related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

[If a partnership or cooperative:] None of the officers and members of [Name of Bidder] is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

[If a corporation or joint venture:] None of the officers, directors, and controlling stockholders of *[Name of Bidder]* is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

7. *[Name of Bidder]* complies with existing labor laws and standards, and
8. *[Name of Bidder]* is aware of and has undertaken the responsibilities as a Bidder in compliance with the Philippine Bidding Documents, which includes:
 - a. Carefully examining all of the Bidding Documents;
 - b. Acknowledging all conditions, local or otherwise, affecting the implementation of the Contract;
 - c. Making an estimate of the facilities available and needed for the contract to be bid, if any; and
 - d. Inquiring or securing Supplemental/Bid Bulletin(s) issued for the *[Name of the Project]*.
9. *[Name of Bidder]* did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.
10. In case advance payment was made or given, failure to perform or deliver any of the obligations and undertakings in the contract shall be sufficient grounds to constitute criminal liability for Swindling (Estafa) or the commission of fraud with unfaithfulness or abuse of confidence through misappropriating or converting any payment received by a person or entity under an obligation involving the duty to deliver certain goods or services, to the prejudice of the public and the government of the Philippines pursuant to Article 315 of Act No. 3815 s. 1930, as amended, or the Revised Penal Code.

IN WITNESS WHEREOF, I have hereunto set my hand this ___ day of ___, 20__ at _____, Philippines.

[Insert NAME OF BIDDER OR ITS AUTHORIZED REPRESENTATIVE]

[Insert signatory's legal capacity]

Affiant

[Jurat]

[Format shall be based on the latest Rules on Notarial Practice]

Bid Securing Declaration Form

[shall be submitted with the Bid if bidder opts to provide this form of bid security]

REPUBLIC OF THE PHILIPPINES)
CITY OF _____ } S.S.

BID SECURING DECLARATION **Project Identification No.: *[insert number]***

To: *[insert name and address of the Procuring Entity]*

I/We, the undersigned, declare that

1. I/We understand that, according to your conditions, bids must be supported by a Bid Security, which may be in the form of a Bid Securing Declaration.
2. I/We accept that: (a) I/we will be automatically disqualified from bidding for any procurement contract with any procuring entity for a period of two (2) years upon receipt of your Blacklisting Order; and, (b) I/we will pay the applicable fine provided under Section 6 of the Guidelines on the Use of Bid Securing Declaration, within fifteen (15) days from receipt of the written demand by the procuring entity for the commission of acts resulting to the enforcement of the bid securing declaration under Sections 23.1(b), 34.2, 40.1 and 69.1, except 69.1(f), of the IRR of RA No. 9184; without prejudice to other legal action the government may undertake.
3. I/We understand that this Bid Securing Declaration shall cease to be valid on the following circumstances:
 - a. Upon expiration of the bid validity period, or any extension thereof pursuant to your request;
 - b. I am/we are declared ineligible or post-disqualified upon receipt of your notice to such effect, and (i) I/we failed to timely file a request for reconsideration or (ii) I/we filed a waiver to avail of said right; and
 - c. I am/we are declared the bidder with the Lowest Calculated Responsive Bid, and I/we have furnished the performance security and signed the Contract.

IN WITNESS WHEREOF, I/We have hereunto set my/our hand/s this ____ day of *[month]* *[year]* at *[place of execution]*.

[insert NAME OF BIDDER OR ITS AUTHORIZED REPRESENTATIVE]

[insert signatory's legal capacity]

Affiant

[Jurat]

[Format shall be based on the latest Rules on Notarial Practice]

CONSTRUCTION METHODOLOGY

Name of Project _____
Proposed Project Description _____
Location _____

MINIMUM SCOPE OF CONSTRUCTION METHODOLOGY

1. Repainting of steel matting fence and gates along QMS Building
2. Maintenance of steel matting Fence at the back of Baseport & PASS Building
3. Repainting of cyclone wire fence with barbed wire on top at recreational area
4. Maintenance of reinforced concrete wall and steel grating cover of canal at Main exit gate
5. Maintenance of reinforced concrete wall and steel grating cover of canal fronting exit door at PTB Building
6. Maintenance of open reinforced concrete canal and provision manholes along PCG Office Building
7. Maintenance of concrete wall of reinforced concrete canal at the operational area
8. Maintenance of concrete cover of drainage canal at Southwing and provision of steel barrier
9. Maintenance of warehouse
10. Maintenance of Baseport Terminal Building
11. Maintenance of CHB Fence at Back-up Area at Northwing
12. Maintenance of comfort rooms at PICO Building
13. Maintenance of port lights

Notes:

The narrative construction method will guide and familiarize the contractor and the PPA on how the project shall be carried out in accordance with the highest standard of workmanship.

The construction method shall be consistent with the Bar Chart / S-Curve Schedule, Equipment Schedule and manpower Schedule.

Signature
(Authorized Signing Official)

MANPOWER SCHEDULE

Name of Project _____

Proposed Project Description _____

Location _____

MANPOWER (Minimum)	CONTRACT DURATION (_____ Calendar Days)																					
	MONTHLY																					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Project Manager																						
Project Engineer																						
Materials Engineer II																						
Construction Safety & Health Officer																						
Specify other applicable positions, ie.:																						
-Carpenter																						
-Steelman																						
-Mason																						
-Electrician																						
-Rigger																						
-Others																						

Signature
(Authorized Signing Official)

CASHFLOW BY QUARTER AND PAYMENT SCHEDULE

Name of Project _____

Proposed Project Description _____

Location _____

Project Duration (days of months)	Payment Schedule (Monthly, in Pesos)	Cash Flow (Quarterly, in Pesos)
TOTAL		

NOTES:

- The cash flow by quarter and payment schedule should be consistent with the Bar Chart and S-curb.
- Payment schedule shall not be more than once a month.

 Signature
 (Authorized Signing Official)

**Contract Agreement Form for the
Procurement of Infrastructure Projects (Revised)**

*[not required to be submitted with the Bid, but it shall be submitted within ten (10) days after
receiving the Notice of Award]*

CONTRACT AGREEMENT

THIS AGREEMENT, made this *[insert date]* day of *[insert month]*, *[insert year]* between *[name and address of PROCURING ENTITY]* (hereinafter called the "Entity") and *[name and address of Contractor]* (hereinafter called the "Contractor").

WHEREAS, the Entity is desirous that the Contractor execute *[name and identification number of contract]* (hereinafter called "the Works") and the Entity has accepted the Bid for *[contract price in words and figures in specified currency]* by the Contractor for the execution and completion of such Works and the remedying of any defects therein.

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement, words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to
2. The following documents as required by the 2016 revised Implementing Rules and Regulations of Republic Act No. 9184 shall be deemed to form and be read and construed as part of this Agreement, viz.:
 - a. Philippine Bidding Documents (PBDs);
 - i. Drawings/Plans;
 - ii. Specifications;
 - iii. Bill of Quantities;
 - iv. General and Special Conditions of Contract;
 - v. Supplemental or Bid Bulletins, if any;
 - b. Winning bidder's bid, including the Eligibility requirements, Technical and Financial Proposals, and all other documents or statements submitted;

Bid form, including all the documents/statements contained in the Bidder's bidding envelopes, as annexes, and all other documents submitted (e.g., Bidder's response to request for clarifications on the bid), including corrections to the bid, if any, resulting from the Procuring Entity's bid evaluation;

- c. Performance Security,
 - d. Notice of Award of Contract and the Bidder's conforme thereto; and
 - e. Other contract documents that may be required by existing laws and/or the Procuring Entity concerned in the PBDs. Winning bidder agrees that additional contract documents or information prescribed by the GPPB that are subsequently required for submission after the contract execution, such as the Notice to Proceed, Variation Orders, and Warranty Security, shall likewise form part of the Contract.
3. In consideration for the sum of *[total contract price in words and figures]* or such other sums as may be ascertained, *[Named of the bidder]* agrees to *[state the object of the contract]* in accordance with his/her/its Bid.
 4. The *[Name of the procuring entity]* agrees to pay the above-mentioned sum in accordance with the terms of the Bidding.

IN WITNESS whereof the parties thereto have caused this Agreement to be executed the day and year first before written.

[Insert Name and Signature]

[Insert Name and Signature]

[Insert Signatory's Legal Capacity]

[Insert Signatory's Legal Capacity]

for:

for:

[Insert Procuring Entity]

[Insert Name of Supplier]

Acknowledgment

[Format shall be based on the latest Rules on Notarial Practice]

JOINT VENTURE AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

That this JOINT VENTURE AGREEMENT is entered into by and between:

_____, of legal age, *(civil status)*, Owner/Proprietor/
General Manager/President of _____ *(business name of JV partner #1)*
with business address at _____

- and -

_____, of legal age, *(civil status)*, Owner/Proprietor/
General Manager/President of _____ *(business name of JV partner #2)*
with business address at _____

WITNESSETH:

1. That both parties agree to join together their capital, manpower, equipment, work experience and other resources and efforts to enable the Joint Venture to participate in the Eligibility Check, Bidding and Undertaking of the hereunder stated Contract of the *Philippine Ports Authority – PMO Palawan*:

_____ *(complete name/title of the contract to be bid)*

2. That *(business name of JV partner #1)* shall contribute _____% and *(business name of JV partner #2)* shall contribute _____% of the logistics requirements of the Contract and the Joint Venture shall share the profit or loss on a _____ ratio;
3. That *(business name of JV partner #1)* and *(business name of JV partner #2)* shall assume joint and several responsibilities for the satisfactory performance of the Contract and the parties shall be jointly and severally liable to the Philippine Ports Authority – Head Office for all the obligations arising under the Contract;
4. That in case one of the parties declares bankruptcy or becomes insolvent, the remaining Joint Venture partner shall assume full responsibilities to undertake any correction works covered by the warranty;
5. That both parties agree that *(name of Authorized Managing Officer)* shall be the Official Representative and the Authorized Managing Officer and therefore the authorized signatory of the Joint Venture and is granted full power and authority to do, execute and perform any and all acts necessary and/or to represent the Joint Venture in the Eligibility Check, Bidding and Undertaking of the said Contract, as fully and effectively as the Joint Venture may do as if personally present with full power of substitution and revocation.

6. That the Joint Venture shall be known as _____
with business address at _____
7. That this Joint Venture Agreement shall remain in effect only for the above-stated Contract until terminated by both parties.

IN WITNESS WHEREOF, we have hereunto set our hands this ____ day of _____ 20____ at _____, Philippines.

(BUSINESS NAME OF JV PARTNER #1) (BUSINESS NAME OF JV PARTNER #2)

BY: _____ BY: _____
(Proprietor/Gen. Mgr./President) (Proprietor/Gen. Mgr./President)

W I T N E S S E S

A C K N O W L E D G M E N T

REPUBLIC OF THE PHILIPPINES)
) S.S

BEFORE ME, a Notary Public, for and in _____, Philippines personally appeared:

<u>Comm. Tax Cert. No.</u>	<u>Date Issued</u>	<u>Place of Issue</u>
_____	_____	_____
_____	_____	_____

who are known to me and to me known to be the same persons who executed the foregoing JOINT VENTURE AGREEMENT and acknowledged to me that the same are their free and voluntary act and deed as well as the companies they represent. This agreement, consisting of two (2) pages including this page where the acknowledgment is written, have been signed by the parties and their instrumental witnesses in each and every page hereof.

WITNESS MY HAND AND SEAL on this ____ day of _____ 20____ at the place written above.

Doc No. _____
Page No. _____
Book No. _____
Series of _____

NOTARY PUBLIC