Republic of the Philippines
NATIONAL IRRIGATION ADMINISTRATION
Region VII

PHILIPPINE BIDDING DOCUMENTS

(As Harmonized with Development Partners)

Procurement of
INFRASTRUCTURE PROJECTS

Government of the Republic of the Philippines

RESTORATION OF CANAL AND CANAL STRUCTURES OF BAYONGAN IS, SAN MIGUEL, BOHOL

RIO-LMC-02-2021

Sixth Edition
July 2020

Preface

These Philippine Bidding Documents (PBDs) for the procurement of Infrastructure Projects (hereinafter referred to also as the "Works") through Competitive Bidding have been prepared by the Government of the Philippines for use by all branches, agencies, departments, bureaus, offices, or instrumentalities of the government, including government-owned and/or -controlled corporations, government financial institutions, state universities and colleges, local government units, and autonomous regional government. The procedures and practices presented in this document have been developed through broad experience, and are for mandatory use in projects that are financed in whole or in part by the Government of the Philippines or any foreign government/foreign or international financing institution in accordance with the provisions of the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.

The PBDs are intended as a model for admeasurements (unit prices or unit rates in a bill of quantities) types of contract, which are the most common in Works contracting.

The Bidding Documents shall clearly and adequately define, among others: (i) the objectives, scope, and expected outputs and/or results of the proposed contract; (ii) the eligibility requirements of Bidders; (iii) the expected contract duration; and (iv)the obligations, duties, and/or functions of the winning Bidder.

Care should be taken to check the relevance of the provisions of the PBDs against the requirements of the specific Works to be procured. If duplication of a subject is inevitable in other sections of the document prepared by the Procuring Entity, care must be exercised to avoid contradictions between clauses dealing with the same matter.

Moreover, each section is prepared with notes intended only as information for the Procuring Entity or the person drafting the Bidding Documents. They shall not be included in the final documents. The following general directions should be observed when using the documents:

a. All the documents listed in the Table of Contents are normally required for the procurement of Infrastructure Projects. However, they should be adapted as necessary to the circumstances of the particular Project.

b. Specific details, such as the "*name of the Procuring Entity*" and "*address for bid submission*," should be furnished in the Instructions to Bidders, Bid Data Sheet, and Special Conditions of Contract. The final documents should contain neither blank spaces nor options.

c. This Preface and the footnotes or notes in italics included in the Invitation to Bid, BDS, General Conditions of Contract, Special Conditions of Contract, Specifications, Drawings, and Bill of Quantities are not part of the text of the final document, although they contain instructions that the Procuring Entity should strictly follow.

d. The cover should be modified as required to identify the Bidding Documents as to the names of the Project, Contract, and Procuring Entity, in addition to date of issue.

e. Modifications for specific Procurement Project details should be provided in the Special Conditions of Contract as amendments to the Conditions of Contract. For easy completion, whenever reference has to be made to specific clauses in the Bid Data Sheet or Special Conditions of Contract, these terms shall be printed in bold typeface on Sections I (Instructions to Bidders) and III (General Conditions of Contract), respectively.

f. For guidelines on the use of Bidding Forms and the procurement of Foreign-Assisted Projects, these will be covered by a separate issuance of the Government Procurement Policy Board.

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Glossary of Terms, Abbreviations, and Acronyms

ABC – Approved Budget for the Contract.

ARCC – Allowable Range of Contract Cost.

BAC – Bids and Awards Committee.

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

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

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

BIR – Bureau of Internal Revenue.

BSP – Bangko Sentral ng Pilipinas.

CDA – Cooperative Development Authority.

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

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

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

CPI – Consumer Price Index.

DOLE – Department of Labor and Employment.

DTI – Department of Trade and Industry.

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

GFI – Government Financial Institution.

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

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

GOP – Government of the Philippines.

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

LGUs – Local Government Units.

NFCC – Net Financial Contracting Capacity.

NGA – National Government Agency.

PCAB – Philippine Contractors Accreditation Board.

PhilGEPS - Philippine Government Electronic Procurement System.

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

PSA – Philippine Statistics Authority.

SEC – Securities and Exchange Commission.

SLCC – Single Largest Completed Contract.

UN – United Nations.

Section I. Invitation to Bid

Republic of the Philippines
NATIONAL IRRIGATION ADMINISTRATION
Region VII

INVITATION TO BID FOR THE RESTORATION OF CANAL AND CANAL STRUCTURES OF BAYONGAN IS, SAN MIGUEL, BOHOL

1. National Irrigation Administration (NIA), Regional Irrigation Office No.7, through its Restoration of Existing NIS Project of 2021 Fund intends to apply the sum of **Three Million Five Hundred Seventy Seven Thousand Seventy Seven Pesos and 98/100 (₱ 3,577,077.98)** being the Approved Budget for the Contract (ABC) to payment under contract for the **Restoration of Canal and Canal Structures of Bayongan IS, San Miguel, Bohol** with Contract No. **RIO-LMC-02-2021**. Bids received in excess of the ABC shall be automatically rejected at bid opening.

2. The National Irrigation Administration (NIA), Regional Irrigation Office No.7 now invites bid for the above Procurement Project. Completion of the Work is required **120 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. Instruction 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 The National Irrigation Administration (NIA), Regional Irrigation Office No.7 and inspect Bidding Documents at the address given below from 8:00 AM to 5:00 PM.

5. A complete set of Bidding Documents may be acquired by interested Bidders who were able to log-in in the Philippine Government Electronic Procurement System (PhilGEPS) wherein the name of the company will be reflected in the Documents Request List of the Bid Notice Abstract of the Procuring Entity, from **March 2, 2021 (8:00 A.M.) to March 23, 2021 (1:00 P.M.)** during office hour from the given address and website(s) below & upon presentation of the payment from NIA RO7 Cashier of nonrefundable fee of **₱ 3,600.00** only. The Procuring Entity shall allow the bidder to present its proof of payment for the fees in person, by facsimile, or through electronic means.

   Interested Bidders' representatives must also present a letter duly signed by the General Manager/Owner, if a Sole Proprietorship, or authorized Signatory if a Corporation, authorizing him/her to acquire the Bidding Documents.

6. The National Irrigation Administration (NIA), Regional Irrigation Office No.7, will hold a Pre-Bid Conference on **March 10, 2021, 2:00 PM** at **Central Visayas Training Center (CVTC), NIA Regional Office 7, Dao District, Tagbilaran City** and/or through videoconferencing/webcasting via (google meet)**,** 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 **March 23, 2021, 2:00 PM**. 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 18.

9. Bid opening shall be on **March 23, 2021, 2:00 PM** at **Central Visayas Training Center (CVTC), NIA Regional Office 7, Dao District, Tagbilaran City** and/or through video conferencing/webcasting (google meet). Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.

10. In compliance to MC 52, s.2014 issued by NIA Administrator, the BAC shall not honor Special Power of Attorney (SPA) in all stages of the procurement of NIA projects.

11. The National Irrigation Administration (NIA), 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.

12. For further information, please refer to:
National Irrigation Administration, Regional Office 7
c/o The BAC Secretariat
J.A. Clarin St., Dao District
Tagbialran City
Email Address: niaro7.bacsec@gmail.com
Telephone No. (038) 501 9421/ (038) 427 1018

13. You may visit the website (region7.nia.gov.ph) for downloading of Bidding Documents.

ORENCIO M. APALE
BAC Chairman

APPROVED:

WILSON M. LOPEZ
Regional Irrigation Manager

March 1, 2021

Section II. Instructions to Bidders

1. Scope of Bid

The Procuring Entity, *National Irrigation Administration (NIA), Regional Irrigation Office No.7* invites Bids for the *Restoration of Canal and Canal Structure of Bayongan IS, San Miguel, Bohol*, with Project Identification Number *RIO-LMC-02-2021*.

[Note: The Project Identification Number is assigned by the Procuring Entity based on its own coding scheme and is not the same as the PhilGEPS reference number, which is generated after the posting of the bid opportunity on the PhilGEPS website.]

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

2. Funding Information

2.1. The GOP through the source of funding as indicated below for *[Restoration of Existing NIS1* in the amount of *PhP 3,577,077.98.*

2.2. The source of funding is:

a. NGA, the General Appropriations Act or Special Appropriations.

3. Bidding Requirements

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

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

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

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

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

5. Eligible Bidders

5.1. Only Bids of Bidders found to be legally, technically, and financially capable will be evaluated.

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

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

5.3. For Foreign-funded Procurement, the Procuring Entity and the foreign government/foreign or international financing institution may agree on another track record requirement, as specified in the Bidding Document prepared for this purpose.

5.4. The Bidders shall comply with the eligibility criteria under Section 23.4.2 of the 2016 IRR of RA No. 9184.

6. Origin of Associated Goods

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

7. Subcontracts

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

The Procuring Entity has prescribed that:

a. Subcontracting is not allowed.

7.1. *[If Procuring Entity has determined that subcontracting is allowed during the bidding , state:]* The Bidder must submit together with its Bid the documentary requirements of the subcontractor(s) complying with the eligibility criterial stated in **ITB** Clause 5 in accordance with Section 23.4 of the 2016 revised IRR of RA No. 9184 pursuant to Section 23.1 thereof.

7.2. *[If subcontracting is allowed during the contract implementation stage, state:]* The Supplier may identify its subcontractor during the contract implementation stage. Subcontractors identified during the bidding may be changed during the implementation of this Contract. Subcontractors must submit the documentary requirements under Section 23.1 of the 2016 revised IRR of RA No. 9184 and comply with the eligibility criteria specified in **ITB** Clause 5 to the implementing or end-user unit.

7.3. 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 and/or through videoconferencing/webcasting} as indicated in paragraph 6 of the **IB.**

9. Clarification and Amendment of Bidding Documents

Prospective bidders may request for clarification on and/or interpretation of any part of the Bidding Documents. Such requests must be in writing and received by the Procuring Entity, either at its given address or through electronic mail indicated in the **IB**, at least ten (10) calendar days before the deadline set for the submission and receipt of Bids.

10. Documents Comprising the Bid: Eligibility and Technical Components

10.1. The first envelope shall contain the eligibility and technical documents of the Bid as specified in **Section IX. Checklist of Technical and Financial Documents**.

10.2. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. For Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.

10.3. 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 *120calendar days from opening of bid.* Any bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

16. Sealing and Marking of Bids

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

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

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

17. Deadline for Submission of Bids

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

18. Opening and Preliminary Examination of Bids

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

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

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

19. Detailed Evaluation and Comparison of Bids

19.1. The Procuring Entity's BAC shall immediately conduct a detailed evaluation of all Bids rated "*passed*" using non-discretionary pass/fail criteria. The BAC shall consider the conditions in the evaluation of Bids under Section 32.2 of 2016 revised IRR of RA No. 9184.

19.2. If the Project allows partial bids, all Bids and combinations of Bids as indicated in the **BDS** shall be received by the same deadline and opened and evaluated simultaneously so as to determine the Bid or combination of Bids offering the lowest calculated cost to the Procuring Entity. Bid Security as required by **ITB** Clause 16 shall be submitted for each contract (lot) separately.

19.3. In all cases, the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184 must be sufficient for the total of the ABCs for all the lots participated in by the prospective Bidder.

20. Post Qualification

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

21. Signing of the Contract

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

Section III. Bid Data Sheet

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: ***Canal and Canal Structure***
7.1	***Sub-contracting is not allowed***
10.3	*[Specify if another Contractor license or permit is required.] None*
10.4	The key personnel must meet the required minimum years of experience set below:

Key Personnel		Relevant Experience
1 – Project Manager	–	Preferably Technical individual with at least three (3) years' experience as Project Manager;
1 – Project Engineer	–	A licensed Civil Engineer with at least two (2) years' experience as Project Engineer in similar works;
1 – Materials Engineer	–	With at least two (2) years' experience as Materials Engineer duly accredited by the DPWH provided that the limits of
Materials Engineer II	-	Two (2) projects located within the same province for simultaneous assignments, with an aggregate cost of not more than
Materials Engineer I	-	Four (4) projects located within the same province for simultaneous assignments, with an aggregate cost of not more than P
1 – Safety/Health Officer	–	With Training Certificate and with at least two (2) years' experience as Safety Officer.
1 - Foreman	–	with at least two (2) years' experience as Foreman for Earthworks, concreting and/or other related works;

<table>
<tr><td>10.5</td><td>The minimum major equipment requirements are the following:

<table><tr><th colspan="2">Equipment</th><th>Capacity</th><th>Number of Units</th></tr><tr><td>1.</td><td>Dump Truck</td><td>12 cu.m.</td><td>1</td></tr><tr><td>2.</td><td>Vibratory Plate Compactor</td><td>40-600mm (8HP)</td><td>1</td></tr><tr><td>3.</td><td>Concrete Mixer</td><td>1 Bagger</td><td>3</td></tr><tr><td>4.</td><td>Concrete Vibrator</td><td></td><td>3</td></tr><tr><td>5.</td><td>Bar Cutter</td><td></td><td>3</td></tr><tr><td>6.</td><td>Bar Bender</td><td></td><td>3</td></tr><tr><td>7.</td><td>Total Station</td><td>set</td><td>1</td></tr></table></td></tr>
<tr><td>12</td><td>[Insert Value Engineering clause if allowed.]</td></tr>
<tr><td>15.1</td><td>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 2% of the ABC, 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 5% of the ABC if bid security is in Surety Bond.</td></tr>
<tr><td>19.2</td><td>Partial bids are not allowed:</td></tr>
<tr><td>20</td><td>None</td></tr>
<tr><td>21</td><td>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.</td></tr>
</table>

Section IV. General Conditions of Contract

Notes on the General Conditions of Contract

The General Conditions of Contract (GCC) in this Section, read in conjunction with the Special Conditions of Contract in Section V and other documents listed therein, should be a complete document expressing all the rights and obligations of the parties.

Matters governing performance of the Contractor, payments under the contract, or matters affecting the risks, rights, and obligations of the parties under the contract are included in the GCC and Special Conditions of Contract.

Any complementary information, which may be needed, shall be introduced only through the Special 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

4.1. 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.

4.2. 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	*[If different dates are specified for completion of the Works by section, i.e. "sectional completion," these dates should be listed here.]*
4.1	*[Specify the schedule of delivery of the possession of the site to the Contractor, whether full or in part.]*
6	The site investigation reports are: *[list here the required site investigation reports.]*
7.2	*[In case of semi-permanent structures, such as 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:]* Five (5) years.
10	a. Dayworks are applicable at the rate shown in the Contractor's original Bid.
11.1	The Contractor shall submit the Program of Work to the Procuring Entity's Representative within 7 days of delivery of the Notice to Award.
11.2	The amount to be withheld for late submission of an updated Program of Work is [*insert amount*].
13	The amount of the advance payment is 15% of the Contract Price and to be recouped every progress billing, to be made as per herein schedule: a. First (1st) Installment – 7.5% of the Contract Price – upon submission to and acceptance by NIA of an Irrevocable Standby Letter of Credit of equivalent value issued by a commercial bank, a bank guarantee or surety bond, callable upon demand, issued by a surety or insurance company duly accredited by the Insurance Commission and confirmed by NIA. b. Second (2nd) Installment – 7.5% of the Contract Price – upon submission to and acceptance by NIA of an Irrevocable Standby Letter of Credit of equivalent value issued by a commercial bank, a bank guarantee or surety bond, callable upon demand, issued by a surety or insurance company duly accredited by the Insurance Commission and confirmed by NIA (if amount is not included in the first Installment), and after Contractor has fully mobilized the initial equipment requirement and Key Personnel indicated in its Manpower Utilization Schedule.
14	Materials and equipment delivered on the site but not completely put in place shall not be included for payment.
15.1	The date by which operating and maintenance manuals are required is *[date]*. The date by which "as built" drawings are required is *[date]*.

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 *[amount in local currency]*.

Section VI. Specifications

COMMON EXCAVATION

SCOPE

The work under this Section shall consist of excavating and removal of all classes of materials in canal prism and backfilling, and trimming of side slopes inside canal prism and canal beds except on portion of the canal where concrete lining is required (trimming of the foundation bed will be considered included under Section XV "Concrete Canal Lining") all in accordance with the Drawings and these Specifications or as directed by the Engineer.

All excavations shall be true to lines, grades, slopes and profiles shown on the Drawings or as required by the Engineer.

1. **CLASSIFICATION**

All excavated materials under this Section will be classified as follows:

(a) Rock Excavation

For purpose of classification of excavation, rock is defined as sound and solid masses or formation, layers or ledges of mineral matter in place of such hardness and texture that:

1) Cannot be effectively loosened or broken down by ripping in a single pass with a latest model tractor mounted hydraulic ripper equipped one digging point of standard manufacturer's design adequately sized for use with and propelled by a crawler-type tractor above 300HP

2) In the areas where it is impracticable to classify the use of the ripper described above, rock is defined as sound and solid material of such hardness and texture which cannot be loosened or broken by a 2.72 kg (6 pound) drifting pick.

3) Can only be loosened or broken by special equipment such as jackhammer and pencil hammer attached to an excavator.

All formation of materials as defined above whose volume is one (1) cubic meter or more will be classified as rock.

(b) Common Excavation - Excavation of any materials and boulders (whose volume is less than one cubic meter) that can be ripped to be loosed by, a dozer of equal or below 180 HP capacity.

(c) Hard Excavation - Excavation of any materials and boulders (whose volume is less than one cubic meter) that can be ripped to be loosed by, a dozer of above 180 HP to 300 HP.

1) Excavation of all soil materials, which can easily be removed by ordinarily excavator or manual operation.

2. **METHOD OF CONSTRUCTION**

Canal excavation shall include all excavation works in the canal prism whether common, indurated or rock materials, except additional excavations at structure sites which is specified to be done and measured for payment under excavation for structure.

3. **BASIS OF PAYMENT**

The volume measured as provided above shall be paid per cubic meter, which price and payment shall constitute full compensation for furnishing all materials, supplies, labor, equipment, tools and all incidentals necessary for the successful completion of the work described under this Section and for all subsidiary works except for hauling of excavated materials beyond the free haul distance for disposal to waste areas which shall be paid under Section.

BACKFILL WITH COMPACTION

1. SCOPE

The work under this section shall include hauling (if necessary) and backfilling with suitable materials taken under from Canal Excavation , Side Borrow or Borrow Haul all spaces excavated and not occupied by the structure and spaces between the natural ground surface and the finish lines indicated to be filled and all other sections directed to be filled by the Engineer, all in accordance with these specifications and in conformity with the lines, grades and dimensions shown in the Drawings or as ordered by the Engineer. It shall also include the dewatering and removal of all suitable materials as ordered by the Engineer from the spaces to be backfilled or filled.

2. METHOD OF CONSTRUCTION

All spaces to be backfilled or filled shall be cleared of all rubbish and other objectionable matter. The excavation pit to be backfilled shall dewatered and all mud and loose materials shall be removed before backfilling. The filling materials, with the proper moisture content determined by the Engineer, shall be deposited loose and layers not exceeding 30 centimeters and then thoroughly compacted by ramming, rolling or by means of mechanical tampers or portable vibratory compactors to obtain at least 85% compaction behind bridge abutments, retaining walls, cut-off walls and immediately above pipes, box or barrel conduits and gradually increasing to at least 90% compaction p to the surface of the roadway in the case of approaches to bridges, road crossing or Culvert Structures. The time when to start backfilling operation shall be determined by the Engineer.

3. METHOD OF MEASUREMENT

Backfill with Compaction shall be measured by the cubic meter in its final compacted and uncompacted position within the limits of structure excavation paylines and surfaces of concrete in contact with the backfilled materials as shown on the Drawings or as directed by the Engineer. Volumes occupied by the structures and other features will not be included.

4. BASIS OF PAYMENT

Backfill with Compaction will be paid for at the contract unit price per cubic meter, which price and payments shall constitute full compensation for the side borrow, borrow haul and overhaul operations and for furnishing all labor, equipment, tools and all incidentals and subsidiary works necessary for the successful completion of the work under this Section.

CONCRETING WORKS

GENERAL

This Section covers all the materials as cement, aggregates, water, admixtures and proportioning, mixing, transporting, placing, finishing, curing and protecting of concrete, including supplies, equipment, tools and all other incidentals necessary for concrete works.

All the applicable provisions of the latest revision of the ACI Building Code (ACI-308-63) and American Society for Testing Materials (ASTM) or other equivalent standards approved by the Engineer shall govern in all cases not specifically provided for herein.

CONCRETE COMPOSITION

Concrete shall be composed of Portland cement, fine and coarse aggregates, water, and if necessary admixtures or agents approved by the Engineer. The design of concrete mixtures and consistency shall be specified in this Section.

CEMENT

(1) General

The cement shall conform to the requirements of the standard Specifications for Portland Cement (ASTM: C-150 Type 1). Special cement may be used subject to the approval of the Engineer provided it meets the requirements of Portland Cement with respect to strength, soundness and setting time.

(2) Storage

The Contractor shall, immediately upon delivery of cement to the jobsite, store the same in a dry, weather tight and properly ventilated structure with adequate provisions for the prevention of absorption of moisture. All storage facilities shall be subject to the approval of the Engineer and shall be such as to permit easy access for inspection and identification. The Contractor's method of handling and storing cement shall be subject to the approval of the Engineer. The Contractors shall not use any cement which is stored at the site for the period more than three (3) months. Not more than fourteen (14) sacks of cement shall be permitted to be piled up and this number shall be limited to seven (7) each, when the storage is expected to be longer than two (2) months; these sacks of cement shall be piled up or stored so as to permit easy access for identification, inspection and testing.

(3) Payment

Payment for cement shall be considered to be included in the unit prices for the various items for concrete in the Bill of Quantities for which cement is used.

WATER

The water used in concrete, mortar and grout shall be free from objectionable quantities of silt, organic matter, alkali, salts other impurities. The recommendation of the seventh edition of the U.S. Bureau of Reclamation Concrete Manual for mixing water shall be followed.

FINE AGGREGATES

(1) General

The term "Fine Aggregates" is used to designate aggregates in which the maximum size of particles is 3/16 of an inch (5 millimeters). Fine aggregates for concrete, mortar and grout shall be provided by the Contractor and shall consist of natural sand, manufactured sand, or a combination of both. The different components shall be batched separately, or subject to the written approval of the Engineer, or blended prior to delivery to the batching plant.

As a means of providing moisture control, the Contractor may be required to stockpile the fine aggregates over porous drain to prevent excessive water and to stabilize the moisture content.

(2) Quality

Fine aggregates shall conform to the requirements of ASTM C-33 and shall consist of hard, tough, durable, uncoated rock particles. The Contractor shall exercise every possible precaution in transporting, washing and screening operations to prevent contamination of sand particles. Fine aggregates shall conform to the following requirements:

(a) Grading

It is assumed that the sand available in natural deposits will require processing to provide a suitable gradation. Regardless of the source, the fine aggregate shall be well graded from fine to coarse and the gradation as delivered to the mixers shall conform to the following requirements unless otherwise approved:

Sieve Designation US Standard Square-Mesh		Percent by Weight Passing Individual - Sizes		
3/8"	(9.50 mm)			100
No. 4	(4.75 mm)	95	-	100
No. 8	(2.36 mm)	80	-	95
No. 16	(1.18 mm)	60	-	85
No.30	(0.600 mm)	25	-	60
No. 50	(0.300 mm)	10	-	30
No. 100	(0.150 mm)	2	-	10
No. 200	(0.074 mm)	0	-	-

In addition to the grading limits shown above, the fine aggregates as delivered to the mixer shall have the fineness modulus of not less than 2.30 or more than 3.00.

The grading of the fine aggregates shall be also controlled so that the fineness moduli of at least 9 to 10 test samples of the fine aggregates as delivered to the mixer shall not vary more than 0.10 from the average fineness modulus of all samples previously taken. The fineness modulus shall be determined by dividing by 100, the sum of the cumulative percentages retained on US Standard Sieves No. 4, 8, 16, 50 and 100. At the option of the Contractor fine aggregates may be separated into two or more sizes or classifications, but the resulting sand when combined before entering the concrete mixer shall be of uniform grading within the limits specified above.

(b) Particles Shape

The shape of the particles shall be generally spherical or cubical and reasonably free from flat or elongated particles. A flat or elongated particles is defined as a particle having a maximum dimension. Rock which breaks down into such shape, regardless of the type of processing equipment used, will not be approved for use in the production of fine aggregates.

(c) Deleterious Substance

The maximum percentages of deleterious substance in the fine aggregates as delivered to the mixer shall not exceed the following values:

Deleterious Substance	Percent by Weight	Designation*
- Materials passing No. 200 screen	3	16
- Shale	1	17
- Clay	1	13
- Total of each other deleterious substance (such as alkali, mica, soft, flaky particles and loam)	2	-

*Note: The designation refers to methods of testing described in the seventh (7^{th}) edition of the Bureau of Reclamation Concrete Manual and ASTM.

The sum of the percentage of all deleterious substances shall not exceed 5% by weight. Fine aggregates producing a color darker than the standard in the colometric test for organic impurity (USBR Designation 14 or ASTM C-40) may be rejected. The fine aggregates may be rejected if the portion retained on No. 50 (0.300 mm) screen, when subjected to five cycles of sodium sulphate test for soundness (USBR Designation 19 or ASTM C-88) shows an average loss of more than 18% by weight.

Fine aggregates delivered to the batching plant may be rejected if it contains more than 0.15% soluble sulphate for any one sample or more than 0.10% for an average of at least 9 out of 10 consecutive test samples of finished sand, when samples are taken hourly. The percent soluble sulphate in fine aggregates shall be determined in accordance with the method of test prescribed in Sub-paragraph (d) below.

(d) Sampling

Sampling of fine and coarse aggregates shall be done in accordance with the appropriate requirements of Section 12 of ASTM: C-33.

The source from which fine and coarse aggregates are to be obtained shall be selected well in advance of the time when the materials will be required in the work.

Unless otherwise specified, all test samples shall be taken under the supervision of the Engineer in sufficient time as approved to permit adequate testing and examination of results sufficient in advance at the time for use in concrete.

Routine control test and analysis of the fine and coarse aggregates at various stages in the processing operation shall be made. The approval of a source shall not be construed as containing approval of all materials from the source, and the Contractor shall be responsible for the specified quality of all such materials used in the work.

(3) Storage

Fine aggregates shall be stored in such a manner as to avoid the inclusion of any foreign materials in the concrete. The storage or stockpile shall be constructed so as to prevent segregation. Depositing of materials in storage and its removal there from shall be done in such a manner as to result in increasing the uniformity of the grading insofar as this is practicable. All fine aggregates shall remain in free drainage storage for at least seventy two (72) hours prior to use. Sufficient live storage shall be maintained at all times to permit continuous placement of concrete.

(4) Measurement and Payment

Fine aggregates will not be measured for payment. The cost of excavation, stockpiling, transporting, processing, blending, handling and other costs for providing fine aggregates shall be considered to be included in the contract unit prices bid for the various items in the Bill of Quantities for which fine aggregates are used.

COARSE AGGREGATES

(1) General

The term “Coarse Aggregates” is used to designate aggregates of such sizes as to fall within the range of 3/16 inch to 2 inches (0.5 cm to 5.1 cm) or any size or range of sizes within such limits. The coarse aggregate shall be reasonably well graded within the nominal size ranges hereinafter specified. Coarse aggregates for concrete shall be furnished by the Contractor and shall consist of natural gravel, crushed rock or mixture of natural gravel and crushed rock as provided in Paragraph 1008. Coarse aggregates as delivered to the batching plant shall have a uniform and stable moisture content. Any rewashing found necessary to provide clean aggregate shall be done prior to finish screening. Re-washing shall not be performed in finish screens.

(2) Quality

Coarse aggregates shall conform to the requirement of ASTM C-33 and shall consist of hard, dense, uncoated durable rock fragments.

(a) Grading

The coarse aggregates shall be well graded from fine to coarse. It shall be stocked separately in the following specific size groups. The grading of the aggregates within the separated size groups as delivered to the mixer shall be as follows:

Sieve Sizes US Std. Sq. mesh		Size Group (% by weight) ¾" Size (20 mm)	Size Group (% by weight) 1-½ Size (40 mm)
2"	(50.8 mm)	-	- 100
1½"	(38.1 mm)	-	90 - 100
1"	(25.4 mm)	100	20 - 55
¾"	(19.1 mm)	-	-
½"	(12.7 mm)	-	-
⅜"	(9.52 mm)	20 - 55	0 - 5
No. 4	(4.76 mm)	0 - 10	-

Coarse aggregates shall contain not more than one and one half (1-½) percent of materials passing the NO. 200 sieve by meshing, or more than 5 percent of soft fragments.

It shall have an abrasion loss of not more than 45 percent at 500 revolutions.

Unless otherwise directed, the maximum sizes of aggregates to be used in concrete for the various parts of the works shall be in accordance with the following:

	General Use	Maximum Size of Aggregates	
(a)	Concrete for thin walls, slabs, beams, less than 0.22 meters thick	¾"	(20 mm)
(b)	Concrete for reinforced concrete pipes	¾"	(20 mm)
(c)	Concrete for footings, walls, slabs, beams, more than 0.22 meters thick	1-½"	(40 mm)
(d)	Concrete for canal lining	1-½"	(40 mm)
(e)	Mass concrete for diversion conduit, and spillway wire and wall	1-½"	(40 mm)
(f)	Lean concrete and other miscellaneous use	1-½"	(40 mm)

In all cases, the size of the aggregates shall not exceed ½ the distance between the reinforcing steel bars of the members being placed.

(b) Particles Shape

The particle shape of the crushed coarse aggregate shall be generally spherical or cubical and reasonably free from flat or elongated particles. A flat or elongated particle is defined as a particle having a maximum dimension in excess of five times the minimum dimensions. Rocks which break down into such shape will not be approved for the production of aggregate.

(c) Deleterious Substances

The deleterious substances in any size of coarse aggregate, as delivered to the mixer, shall not exceed the following values:

	Deleterious Substances	Percent by Weight		Designation *
-	Materials passing No. 200 screen	1/2	16	
-	Shale	1		18
-	Clay lumps	1/2		13
-	Other deleterious substances	1		-

*Note: The designation refers to methods of Testing described in the seventh (7^{th}) edition of the U.S. Bureau of Reclamation Concrete Manual and ASTM.

The sum of the percentages of all deleterious substances in any size, as delivered to the mixer, shall not exceed three (3) % by weight. Coarse aggregates may be rejected if it fails to meet the following requirements:

(i) Petrographic Examination

If more than 10 % of poor aggregate particles can be identified in physical quality test and in case 20 % of the particles would be classified with respect to the chemical quality (USBR Designation 7 or ASTM C-295).

(ii) Sodium Sulfate Test for Soundness (USBR Designation 9 or ASTM C-88)

If the weighted average loss, after 5 cycles is more than 10 % by weight.

(iii) Specific Gravity (USBR Designation 10 or ASTM C-127

If the specific gravity (saturated surface-dry basis) is less than 2.60.

(iv) Sampling

All sampling of coarse aggregates shall be in accordance with Paragraph 1006 (2) d.

(3) Storage

Coarse aggregate storage or stockpiles shall be built in such a manner as to avoid the inclusion of any foreign materials in the concrete and to prevent segregation and excessive breakage. Water sprayers shall be installed to keep that portion of the coarse aggregate stockpiles

saturated which is intended for immediate use in the concrete. Sufficient live storage shall be maintained at all times to permit continuous placement of concrete.

(4) Measurement and Payment

Coarse aggregates will not be measured for payment. The cost of excavation, production, stockpiling processing, blending handling and other cost providing coarse aggregates shall be considered to be included in the contract unit prices bid for the various items in the Bill of Quantities for which coarse aggregates are used.

AGGREGATES SAMPLING AND TESTING

Sampling of the aggregate materials approved for use in the work shall be done by the Contractor in accordance with ASTM Sampling Method 10 days in advance of the time when placing of concrete is expected to begin. Aggregate studies and tests shall be made by the Contractor at its own expense. It shall be the responsibility of the Contractor to obtain the necessary samples and subject them to tests.

The samples of aggregates shall be obtained and tested in accordance with the following ASTM standard methods:

	Items	ASTM code No.	
-	Sampling aggregate	C	75
-	Sieve analysis	C	136
-	Amount of material finer than 200 sieve	C	117
-	Organic impurities	C	40
-	Mortar strength	C	87
-	Soundness	C	88
-	Soft particles	C	235
-	Abrasion	C	131
-	Clay lumps	C	142

No aggregate shall be used until official advice has been received that it has satisfactorily pass all tests, at which time written authority shall be given for its use. Material from source which has been previously tested and shown satisfactory compliance with all the requirements given herein may be used without further testing upon written permission of the Engineer. Test reports for previous rests shall be available before approval can be given.

During construction aggregates shall be sampled at weighing hopper to determine compliance with the provisions of the Specification. Test shall be made in accordance with the applicable ASTM Standards. Routine control test and analysis of aggregates at various stages in processing, transporting, stockpiling, redraining, and batching shall be made by the Contractor. The Contractor shall provide such facilities as may be considered necessary for the counter test and supervision to be made by the Engineer.

CLASSIFICATION AND PROPORTIONING OF CONCRETE MIXTURES

(1) Classification and Design Mixture

The mixtures for all classes of concrete shall be designed by the Contractor and approved by the Engineer to obtain the compressive strength at the age of twenty eight (28) days as specified below.

Class	Minimum Aggregate Size (inch)(mm)		Minimum Compressive Strength (psi eq.)(kg/cm^2)		Maximum Water/Cement Ratio (%)	Minimum Cement Content (kg/m^3)	Allowable Slump (cm)
A	1-1/2	40	3,000	210	60	300	7 – 9
B	¾"	20	3,000	210	60	320	10 – 12
BB	¾"	20	3,500	240	55	350	5 – 8
C	1-1/2	40	2,500	180	55	250	5 – 7
D	1-1/2	40	2,000	140	60	200	5 - 10

Class A Concrete for ordinary structural members having more than 22 cm thick with clear space between reinforcing bars not less than 10 cm.

Class B Concrete for reinforced members such as thin wall, slabs, beams etc., less than 22 cm thick and concrete block-out (secondary concrete) with clear space between reinforcing bars less than 10 cm.

Class BB Concrete for pre-cast structures such as concrete flume, concrete pipes, etc.

Class C Concrete for canal lining, plain and massive structure section.

Class D Dental works, leveling structure, backfill concrete and foundation concrete.

Design of mixture by the Contractor shall be completed and submitted for approval of the Engineer not later than 45 days prior to use of the respective class of concrete for the contract works.

The Contractor shall at his own expense adjust mix proportion by trial mix depending on the physical properties of aggregates, moisture content, brand of cement, etc. subject to the direction of the Engineer.

(2) Aggregate Content

Concrete mixture shall be designed to use the largest size and the maximum amount of coarse aggregate as practicable for the intended use of the concrete.

(3) Consistency

The amount of water to be used in the concrete shall be regulated as required to secure concrete of the proper consistency and to adjust for any variation in the moisture content or grading of the aggregates as they enter the mixer.

It shall be of such consistency that it will flow around reinforcing steel bars, but individual particles of the coarse aggregate when isolated shall have coating of mortar containing its proportionate amount of sand. The consistency shall be gauged by the ability of the equipment to properly place it and not by the difficulty in mixing or transporting. Addition of water to compensate for stiffening of the concrete before placing shall not be permitted. Uniformity in concrete consistency from batch to batch will be required.

(4) Not withstanding the approval of the Engineer of the design mixtures and minimum cement content for different classes or gradation of aggregates, the Contractor shall be responsible that all the concrete meet the designed strength.

SAMPLING AND TESTING OF CONCRETE

The Contractor shall at his expense perform sampling and testing of concrete materials in accordance with the latest Japanese Industrial Standards and the Manual of Concrete Quality Control to be prepared by NIA.

All the tests designated in the manual shall be carried out at the Project site by the Contractor under the direction of the Engineer. The Contractor shall furnish all materials and labor for testing and shall provide own laboratory, tools and equipment for testing except compression machine.

Concrete sampling shall be carried out during concrete operations at the rate of one standard sample for each 100 cubic meters of concrete or fraction thereof placed during each continuous placing operations but in no case shall there be less than one sample for each day of concreting. Each standard sample shall consist of three (3) standard cylinders 6 inch (15 cm) diameter by 12 inch (30 cm) high.

The Contractor shall keep a record of the samples and the portion of the structures and volume represented which shall be available to NIA on demand.

Superintendents, testing equipment and tools t be provided by the Contractor for quality control of the construction shall be subject to the prior approval of the Engineer.

FAILURE TO CURE

The Engineer shall have the authority to suspend the work wholly or in part, by written order, for such period as he may deem necessary for failure on the part of the Contractor to perform proper curing of the concrete work and to withhold payment for the corresponding work pending result of test, that shall subsequently be made on these concrete works. The contractor shall immediately secure core samples of such members and from parts of the structure as shall be designated by the Engineer and shall have them tested in a Testing Laboratory approved by the Engineer. If the results of test are found satisfactory, payment of the concrete in question shall be made and the work ordered be resumed, but if the results of tests are unsatisfactory to meet the structural requirements, the Contractor shall replace such parts at his own expense.

FAILURES TO MEET SPECIFIED STRENGTHS

If the specified strengths have not been met, the Contractor shall remove and replace the concrete concerned or take such other remedial measures as the Engineer order, all at his own expense.

Before proceeding with the remedy, the Contractor shall subject for approval of the Engineer details of the action proposed to ensure that the concrete and steel to be placed in the works will comply with the Specifications.

PROTECTION OF CONCRETE WORKS

The Contractor shall protect all concrete against injury until final acceptance by NIA. Final acceptance shall be considered to mean acceptance of the whole after the Contract has been completed or satisfactorily terminates.

MEASUREMENT AND PAYMENT

(1) Concrete

Measurement and payment of concreting works shall be made separately for every class specified in the Bill of Quantities. Measurement for payment of concreting works for each class shall be made by volume in cubic meter for respective items of various works in the Bill of Quantities, unless otherwise stipulated. It shall be computed to the neat lines as if these works were constructed to the details shown on the Drawings or as established by the Engineer. In measuring concrete for payment, volume of all cavities, depressions, openings, embedded wood works and metal works, except reinforcement bar, anchor bolts and bars, and dowel bars, will be deducted.

Payment for concrete works measured as provided above shall be made at the unit prices per cubic meter bid therefore in the Bill of Quantities, which price and payment shall include the cost of all labor, materials and equipment, furnishing and handling of cement, aggregates and admixtures, mixing hauling, placing and finishing concrete furnishing of forms and subsequent removal of form works and necessary false work (unless otherwise stipulated), construction of joint (excluding furnishing and placing such joint materials as waterstops, dowel bars, etc., as specified in Section XVI "Concrete Joints and Joints Materials"), dewatering and keeping dry during pouring concrete, and all necessary items incidental thereto for the successful completion of the work described in the Drawings and these Specifications, except for payments for furnishing and placing reinforcement bars and joint materials which shall be separately made at appropriate unit prices therefore in the Bill of Quantities.

STRUCTURE EXCAVATION

SCOPE

Structure excavation includes the removal of all materials within the structure lines including necessary dewatering operations not otherwise specified. It shall also include additional excavation within the vicinity of the structure in order to shape the ground shown on the Drawing or as directed by the Engineer.

LASSIFICATION

Structure excavation shall be classified in accordance with paragraph 402.

CONSTRUCTION REQUIREMENTS

All excavation requirements described 403 are applicable under this section.

METHOD OF CONSTRUCTION

All structure where practicable shall be constructed in open excavation. The method of construction or excavations shall be in accordance with the applicable provisions of paragraph 404 and the following requirements.

Foundation shall be excavated according to the outline of the footing and floors of structure as shown on the Drawings or as directed by the Engineers, and shall be of sufficient size to permit free movement of workers.

On excavation of common materials the foundation bed upon which structures are to be placed shall be finished accurately to the established lines and grades after a thorough compaction and trimming of the foundation with the use of suitable tools and equipment. As soon as the foundation excavations have been trimmed to their final level, it should be protected from degradation by weathering. Should the foundation materials soften exposure then the soft materials shall be removed and replaces at the Contractor's expense. If at any point, material is excavated beyond the lines and grades of any part of the structure, the over-excavation shall be more filled with selected materials approved by the engineer and shall be placed in the layers of not more than 20 centimeters think, moistened and thoroughly compacted by special roller mechanical tempers or by other approved methods. A density not less than 90% of the maximum dry density determines by ASTM test D-698 is required. The cost of filling over-excavation ordered by the Engineer shall be borne by the contractor.

On excavation of rock materials, the bottom and side surfaces of excavated rock excavation upon or against which concrete and weep holes are to place shall conform to the required grades and dimensions as shown on the drawings or as established by the engineer. If at any point, materials are excavated beyond the required limits the over-excavation shall be filled with concrete at the expense of the Contractor including the cost of all materials required.

When concrete is to be placed upon or against rock, the excavation shall be of sufficient dept to provide for the minimum thickness of concrete at all points and any deviation from the

required minimum thickness of concrete shall be avoid as much as possible. The surface on which concrete will be laid shall be trimmed ad thoroughly cleaned as directed by the engineer.

When excavation of rock materials reaches the surface upon or against which concrete is to placed, blasting

On excavation of rocks materials, the bottom and side surfaces of excavated rock excavation upon or against which concrete and weep holes are to be placed shall conform to the required grades and dimensions as shown on the drawings or as established by the engineers. If they filled with concrete at the expense of the contractor including the cost of all materials required.

When concrete is to be upon or against rock, the excavation shall be of sufficient dept to provide for the minimum thickness of concrete at all points and any deviation from the required minimum thickness of concrete shall be avoided as much as possible. The surface on which concrete will be laid shall be trimmed and thoroughly cleaned as directed by the Engineer.

When excavation of rock materials reaches the surface upon or against which concrete is to be placed, blasting shall be stopped and the remaining mass of rocks shall be carefully removed by means of jack-hammer or any appropriate hand tool. The point beyond which blasting will not be allowed shall be determined by the engineer. All damages to the rock foundation caused by improper blasting operation shall be repaired by the contractor at his own expense in a manner acceptance to the engineer.

All foundations for bridge pier footing shall be excavated to such depths as may be necessary to secure stable bearing for the structure. Whenever the safe bearing power of the soil as uncovered is less that that called for on the drawing, pilings or appropriate spread footings will be used. The elevations of the bottoms of footings, as shown in the drawings shall be considered as approximate, and the engineers may order, in writing, such changes in elevations and dimensions of footings as may be necessary to ensure a satisfactory foundations. Bearing test, upon written order of the engineer, shall be taken to determine the supporting power of the soil. Cost of bearing test will be paid as “Extra work”.

If, in the opinion of the engineer, the material at the base of the excavation is unsuitable for the foundation he shall instruct the contractor to either a] carry out additional excavation to a depth of 50 cm. below the proposed bottom of concrete shown on the drawings and to maximum depth of 60 cm. outside of the outermost lines of said base and replace with backfill compacted to at least 90% of the maximum dry density or b] strengthen the soft materials by ramming in gravel and cobbles until a firm foundation is obtained. Measurement and payment for the backfill shall be made under section XII, “Structure backfill”.

METHOD OF MEASUREMENT

Structure excavation shall be measured by the cubic meter in its original position before being excavated in accordance with the drawings, or as may be ordered by the engineer, no excavation beyond the pay lines shown on the drawings will be measured for payment. For canal structures, the limit of measurement along the lines perpendicular to the flow of water shall be the vertical planes at the outer edges of the inlet cut-ff walls. The upper limits of the solid, measured for payment shall be the canal bottom for canal structures of the original ground surface in case of diversion structures. The lower limits shall be the bottom of the required excavation. Excavated materials not vertically above the boundaries as specified above shall not be measures for payment. The volume measured shall not include water and other liquids removable by pumping. Such materials as mud, quagmire and other similar semi-solid not removable by ordinary pumping shall be considered pay quantities and shall be measured and paid for as "Structure Excavation".

However, in case of structure excavation for canal structures is done before canal excavation, the upper limit of the solid measured for payment shall be the original ground surface in accordance with the surface in accordance with the structure excavation pay lines.

BASIS OF PAYMENT

The volume measured as provided above will be paid per cubic meter, which price and payment shall constitute full compensation for furnishing all materials, supplies, labor, equipment, tools and accidents and subsidiary works necessary to complete the work described under this section.

For diversion works, canal siphons and bridge structure excavations, the cost of the dewatering operation unless otherwise specifies in the Bill of Quantities shall be paid under a separate item in the Bill of Quantities. For all other structure excavations, dewatering operations involved are considered subsidiary work and the cost thereof shall be considered included in the unit price of structure excavation.

The contractor shall be paid sixty percent [60%] of the pay quantities of the actual excavation acceptably accomplished in accordance with the pay lines as shown on the drawings or as directed by the engineer. The remaining forty percent [40%] will be paid upon pouring of concrete for the foundation or upon placing the riprap, gravel blanket or grouted riprap in accordance with drawing and specifications.

STRUCTURE BACKFILL

1. SCOPE

The work under this section shall include hauling (if necessary) and backfilling with suitable materials taken under from Structure Excavation , Side Borrow or Borrow Haul all spaces excavated and not occupied by the structure and spaces between the natural ground surface and the finish lines indicated to be filled and all other sections directed to be filled by the Engineer, all in accordance with these specifications and in conformity with the lines, grades and dimensions shown in the Drawings or as ordered by the Engineer. It shall also include the dewatering and removal of all suitable materials as ordered by the Engineer from the spaces to be backfilled or filled.

2. METHOD OF CONSTRUCTION

All spaces to be backfilled or filled shall be cleared of all rubbish and other objectionable matter. The excavation pit to be backfilled shall dewatered and all mud and loose materials shall be removed before backfilling. The filling materials, with the proper moisture content determined by the Engineer, shall be deposited loose and layers not exceeding 30 centimeters and then thoroughly compacted by ramming, rolling or by means of mechanical tampers or portable vibratory compactors to obtain at least 85% compaction behind bridge abutments, retaining walls, cut-off walls and immediately above pipes, box or barrel conduits and gradually increasing to at least 90% compaction p to the surface of the roadway in the case of approaches to bridges, road crossing or Culvert Structures. The time when to start backfilling operation shall be determined by the Engineer.

3. METHOD OF MEASUREMENT

Structure backfill shall be measured by the cubic meter in its final compacted and uncompacted position within the limits of structure excavation paylines and surfaces of concrete in contact with the backfilled materials as shown on the Drawings or as directed by the Engineer. Volumes occupied by the structures and other features will not be included

4. BASIS OF PAYMENT

Structure backfill will be paid for at the contract unit price per cubic meter, which price and payments shall constitute full compensation for the side borrow, borrow haul and overhaul operations and for furnishing all labor, equipment, tools and all incidentals and subsidiary works necessary for the successful completion of the work under this Section.

REINFORCED CONCRETE

1. SCOPE

This Section covers all the materials as cement, aggregates, water, admixtures and proportioning, mixing, transporting, placing, finishing, curing and protecting of concrete, including supplies, equipment, tools and all other incidentals necessary for concrete works.

All the applicable provisions of the latest revision of the ACI Building Code (ACI-308-63) and American Society for Testing Materials (ASTM) or other equivalent standards approved by the Engineer shall govern in all cases not specifically provided for herein.

2. CONCRETE COMPOSITION

Concrete shall be composed of Portland cement, reinforcing steel bars fine and coarse aggregates, water, and if necessary admixtures or agents approved by the Engineer. The design of concrete mixtures and consistency shall be specified in this Section.

3. CEMENT

(1) General

The cement shall conform to the requirements of the standard Specifications for Portland Cement (ASTM: C-150 Type 1). Special cement may be used subject to the approval of the Engineer provided it meets the requirements of Portland Cement with respect to strength, soundness and setting time.

(2) Storage

The Contractor shall, immediately upon delivery of cement to the jobsite, store the same in a dry, weather tight and properly ventilated structure with adequate provisions for the prevention of absorption of moisture. All storage facilities shall be subject to the approval of the Engineer and shall be such as to permit easy access for inspection and identification. The Contractor's method of handling and storing cement shall be subject to the approval of the Engineer. The Contractors shall not use any cement which is stored at the site for the period more than three (3) months. Not more than fourteen (14) sacks of cement shall be permitted to be piled up and this number shall be limited to seven (7) each, when the storage is expected to be longer than two (2) months; these sacks of cement shall be piled up or stored so as to permit easy access for identification, inspection and testing.

4. REINFORCING STEEL BARS

Scope

All reinforcing steel bars required for the works as detailed in the Construction Drawings or as directed by the Engineer shall be furnished by the Contractor

The work under this Section includes the hauling of all reinforcing steel bars required for the works to the project site, storing, cutting, bending and proper placing, all in accordance with the drawings and these Specifications.

The length for each size of reinforcing steel bar to be furnished by the Contractor shall be computed by taking the theoretical length of steel bars down on the drawings multiplied by 1.07 to get the approximate length required for the work. All reinforcing steel bars shall be furnished in commercial standard lengths and the Contractor shall cut and bend the reinforcing steel bars to the to the detail and dimensions shown on the Drawings.

5. Materials

All reinforcing steel bars to be furnished by the Contractor shall be Grade 40 or PS 275, deformed type and conforming to the requirements of ASTM A-615. The nominal dimensions and unit weights of bars designation shall be in accordance with the following table:

		Nominal Dimensions	
Nominal Bar Diameter	Unit Weight (kg/m.)	Cross Section Area (sq. mm)	Perimeter (mm)
6 mm.	0.222	28.27	18.85
8 mm.	0.395	50.27	25.13
10 mm.	0.616	78.54	31.42
12 mm.	0.888	113.10	37.70
16 mm.	1.579	201.10	50.27
20 mm.	2.466	314.20	62.83
25 mm.	3.854	491.90	78.54
28 mm.	4.833	615.75	87.96
32 mm.	6.313	804.25	100.53
36 mm.	7.991	1,017.90	113.10

The nominal diameter of a deformed bar is equivalent to the diameter of a plain bar having the same weight per unit length of the deformed bar.

6. WATER

The water used in concrete, mortar and grout shall be free from objectionable quantities of silt, organic matter, alkali, salts other impurities. The recommendation of the seventh edition of the U.S. Bureau of Reclamation Concrete Manual for mixing water shall be followed.

7. FINE AGGREGATES

(1) General

The term "Fine Aggregates" is used to designate aggregates in which the maximum size of particles is 3/16 of an inch (5 millimeters). Fine aggregates for concrete, mortar and grout shall be provided by the Contractor and shall consist of natural sand, manufactured sand, or a combination of both. The different components shall be batched separately, or subject to the written approval of the Engineer, or blended prior to delivery to the batching plant.

As a means of providing moisture control, the Contractor may be required to stockpile the fine aggregates over porous drain to prevent excessive water and to stabilize the moisture content.

(2) Quality

Fine aggregates shall conform to the requirements of ASTM C-33 and shall consist of hard, tough, durable, uncoated rock particles. The Contractor shall exercise every possible precaution in transporting, washing and screening operations to prevent contamination of sand particles. Fine aggregates shall conform to the following requirements:

(e) Grading

It is assumed that the sand available in natural deposits will require processing to provide a suitable gradation. Regardless of the source, the fine aggregate shall be well graded from fine to coarse and the gradation as delivered to the mixers shall conform to the following requirements unless otherwise approved:

Sieve Designation US Standard Square-Mesh		Percent by Weight Passing Individual - Sizes		
3/8"	(9.50 mm)			100
No. 4	(4.75 mm)	95	-	100
No. 8	(2.36 mm)	80	-	95
No. 16	(1.18 mm)	60	-	85
No.30	(0.600 mm)	25	-	60
No. 50	(0.300 mm)	10	-	30

No. 100	(0.150 mm)	2	-	10
No. 200	(0.074 mm)	0	-	-

8. COARSE AGGREGATES

(1) General

The term "Coarse Aggregates" is used to designate aggregates of such sizes as to fall within the range of 3/16 inch to 2 inches (0.5 cm to 5.1 cm) or any size or range of sizes within such limits. The coarse aggregate shall be reasonably well graded within the nominal size ranges hereinafter specified. Coarse aggregates for concrete shall be furnished by the Contractor and shall consist of natural gravel, crushed rock or mixture of natural gravel and crushed rock as provided in Paragraph 1008. Coarse aggregates as delivered to the batching plant shall have a uniform and stable moisture content. Any rewashing found necessary to provide clean aggregate shall be done prior to finish screening. Re-washing shall not be performed in finish screens.

(2) Quality

Coarse aggregates shall conform to the requirement of ASTM C-33 and shall consist of hard, dense, uncoated durable rock fragments.

(d) Grading

The coarse aggregates shall be well graded from fine to coarse. It shall be stocked separately in the following specific size groups. The grading of the aggregates within the separated size groups as delivered to the mixer shall be as follows:

Sieve Sizes US Std. Sq. mesh		Size Group (% by weight)	
		¾" Size (20 mm)	1-½ Size (40 mm)
2"	(50.8 mm)	-	- 100
1½"	(38.1 mm)	-	90 - 100
1"	(25.4 mm)	100	20 - 55
¾"	(19.1 mm)	-	-
½"	(12.7 mm)	-	-
⅜"	(9.52 mm)	20 - 55	0 - 5

No. 4	(4.76 mm)	0 - 10	-

Coarse aggregates shall contain not more than one and one half (1-½) percent of materials passing the NO. 200 sieve by meshing, or more than 5 percent of soft fragments.

It shall have an abrasion loss of not more than 45 percent at 500 revolutions.

Unless otherwise directed, the maximum sizes of aggregates to be used in concrete for the various parts of the works shall be in accordance with the following:

	General Use	Maximum Size of Aggregates	
(a)	Concrete for thin walls, slabs, beams, less than 0.22 meters thick	¾"	(20 mm)
(b)	Concrete for reinforced concrete pipes	¾"	(20 mm)
(c)	Concrete for footings, walls, slabs, beams, more than 0.22 meters thick	1-½"	(40 mm)
(d)	Concrete for canal lining	1-½"	(40 mm)
(e)	Mass concrete for diversion conduit, and spillway wire and wall	1-½"	(40 mm)
(f)	Lean concrete and other miscellaneous use	1-½"	(40 mm)

9. PRODUCTION OF FINE AND COARSE AGGREGATES

(1) Source of Aggregates

Fine and coarse aggregates for concrete , and fine aggregate for mortar and grout may be obtained by the Contractor from approved source. Approval of the deposit shall not be construed as constituting approval of all materials taken from the deposit, and the Contractor shall maintain the specified quality of all such materials used in concrete works. If the aggregates are to be obtained from deposits or quarry sources not previously tested and approved by NIA, Contractor shall submit, for preliminary test and approval, a representative, 90 kilograms (approximately 200 pounds) sample of the fine aggregate and of the 0.5 centimeters to 2 centi,eter size of coarse aggregate and a 45 kilograms (approximately 100 pounds) sample of each of the other sizes of coarse aggregate proposed for use in the work, at least 90 days before the materials are required for use.

CLASSIFICATION AND PROPORTIONING OF CONCRETE MIXTURES

(1) Classification and Design Mixture

The mixtures for all classes of concrete shall be designed by the Contractor and approved by the Engineer to obtain the compressive strength at the age of twenty eight (28) days as specified below.

Class	Minimum Aggregate Size (inch)(mm)	**1**	Minimum Compressive Strength (psi eq.)(kg/cm^2)		Maximum Water/Cement Ratio (%)	Minimum Cement Content (kg/m^3)	Allowable Slump (cm)
A	1-1/2	40	3,000	210	60	300	7 – 9
B	¾"	20	3,000	210	60	320	10 – 12
BB	¾"	20	3,500	240	55	350	5 – 8
C	1-1/2	40	2,500	180	55	250	5 – 7
D	1-1/2	40	2,000	140	60	200	5 - 10

Class A Concrete for ordinary structural members having more than 22 cm thick with clear space between reinforcing bars not less than 10 cm.

Class B Concrete for reinforced members such as thin wall, slabs, beams etc., less than 22 cm thick and concrete block-out (secondary concrete) with clear space between reinforcing bars less than 10 cm.

Class BB Concrete for pre-cast structures such as concrete flume, concrete pipes, etc.

Class C Concrete for canal lining, plain and massive structure section.

Class D Dental works, leveling structure, backfill concrete and foundation concrete.

(2) Aggregate Content

Concrete mixture shall be designed to use the largest size and the maximum amount of coarse aggregate as practicable for the intended use of the concrete.

(3) Consistency

The amount of water to be used in the concrete shall be regulated as required to secure concrete of the proper consistency and to adjust for any variation in the moisture content or grading of the aggregates as they enter the mixer.

It shall be of such consistency that it will flow around reinforcing steel bars, but individual particles of the coarse aggregate when isolated shall have coating of mortar containing its proportionate amount of sand. Addition of water to compensate for stiffening of the concrete before placing shall not be permitted. Uniformity in concrete consistency from batch to batch will be required.

(4) Not withstanding the approval of the Engineer of the design mixtures and minimum cement content for different classes or gradation of aggregates, the Contractor shall be responsible that all the concrete meet the designed strength.

10. MEASUREMENT OF MATERIALS

All materials from which the concrete will be manufactured shall be mechanically measured by weight, except as otherwise specified and/or authorized by the Engineer and admixture solutions which may be measured by volume.

Measuring devices shall be suitably designed and constructed for the purpose and shall be weighing separately the cement, fine and the respective group of coarse aggregates and water. The accuracy of all weighing devices shall be such that successive quantities can be measured to one percent of the desired weights. The water measuring devices shall be of such type that can measure up to one half percent of the desired quantity of water.

Whenever volumetric proportioning and measurement is permitted due to failure or malfunction of weighing devices, the equivalent volumetric proportions of weighed representative samples of the concrete ingredients shall be computed taking into consideration bulking effect of cement and variations of moisture content of the aggregates.

When sack or bag cement is used, the quantities of aggregates for each batch shall be for one or more full sack of cement. No batch requiring a fractional sack of cement will be tolerated.

11. SAMPLING AND TESTING OF CONCRETE

The Contractor shall provide the required samples of concrete to be furnished by the Contractor without cost of NIA. Concrete sampling shall be carried out during concrete operations at the rate of one standard sample for each 50 cubic meters of concrete or fraction thereof placed during each continuous placing operations but in no case shall there be less than one sample for each day of concreting. Each standard sample shall consist of three (3) standard cylinders 6 inch (15 cm) diameter by 12 inch (30 cm) high.

The Contractor shall keep a record of the samples and the portion of the structures and volume represented which shall be available to NIA on demand.

Sampling, preparation, storage and curing and testing shall conform to ASTM Designations. NIA shall have the sample tested by an approved testing laboratory at the expense of the Contractor.

12. CONVEYING AND PLACING CONCRETE

(1) General

Approval of the Engineer shall be obtained before starting any concrete pour. Concrete placement will not be permitted when, in the opinion of the Engineer, conditions prevent proper placement and consolidation. Before concrete is placed, all saw dust, chips and other construction debris and extraneous matters shall be removed from the interior of forms, strust, stays, and braces, serving temporarily to hold the forms incorrect shape and alignments, pending the placing of concrete at their location, shall be removed when the concrete placing has reached an elevation rendering their services unnecessary as the case may be. These temporary members shall be entirely removed from the forms and not to be buried in concrete. Surface of existing concrete left after partial demolition against which new concrete is to be placed, shall be cleaned thoroughly of all loose concrete coatings or concrete dust by brushing or other effective means followed by thorough washing or jetting. Such surface shall be kept moist for at least 24 hours before pouring the new concrete.

Concrete shall be placed only in the presence of the Engineer or his duly authorized representatives. Any and all concrete placed in the absence of the Engineer or his duly authorized representatives will not be considered for measurement and payment, and shall be removed at the discretion of the Engineer with the Contractor assuming all losses.

(2) Concrete on Earth Foundation

All concrete shall be placed upon clean and damp surfaces which are free from standing or running water. Prior to placing concrete, the earth foundation shall be satisfactorily compacted in accordance with these Specifications.

(3) Placing Concrete Through Reinforcement

In placing concrete through reinforcement, care shall be taken that no segregation of the coarse aggregate occurs. On the bottom of beams and slabs, where the congestion of steel near the forms makes placing difficult, a layer of mortar of the same cement sand ratio as used in the concrete shall be first deposited to cover the surface.

(4) Depositing Concrete in Water

When specifically authorized, concrete may be deposited in water. The methods and equipment used shall be subject to the approval of the Engineer.

7.2. FORMS

(1) General

Forms shall be used whenever necessary to confine the concrete during vibration and to shape it to the required lines. Forms shall have sufficient strength to withstand the pressure resulting from placement and vibration of the concrete, and shall be maintained rigidly in position. The strength and rigidity of the forms shall be such that formed surfaces will conform to specification requirements relating to surface irregularities and tolerances for concrete construction. Forms shall be tight to prevent loss of mortar from the concrete.

Chamber strips shall be placed in the corners of forms for exposed exterior corners so as to produce beveled edges. Interior corners and edges of formed joints shall not be beveled unless the requirement therefore is shown on the Drawings.

(2) Forms for Open Channel Transitions

When warped surfaces of transition are not back formed, natural or compacted earth shall be shaped to the specified surface and covered immediately with a plaster coat of cement-sand mortar at least 0.95cm.

Forms for the warped surfaces shall be tied securely to the floor slab and braces against spreading. In the upper surface, forms shall be butted and removed as specified in the Sub-paragraph (10), so as to enable ready access for placement, vibration, inspection, and repair and finishing of the concrete.

(3) Removal of Forms

Forms shall be removed as soon as possible to enable the earliest practicable repair of surface imperfections, but in no case shall they be removed before approval of the Engineer. Any needed repair or treatment shall be performed at once, and be followed immediately by the specified curing. Forms shall be removed with care so as to avoid injuring of the concrete and any concrete so damage shall be repaired by the Contractor at this own expense.

13. REPAIR OF CONCRETE

No repair of work or plaster finish of formed concrete for structures will be permitted, unless otherwise provided in these Specifications or directed by the Engineer. All defective concrete shall be removed and replaced with the Contractor assuming all expenses and looses. If directed, the Contractor shall notify the Engineer of the start of the repair work at least 24 hours in advance thereof and shall repair concrete only in the presence of the Engineer or the Engineer's representative, unless inspection of such repair work is waived.

14. CURING

(1) General

All concrete except interior surfaces shall be cured for a period of not less than 14 consecutive days.

All horizontal slabs of surfaces shall be cured by water curing in accordance with Sub-paragraph (3) and all inclined surface shall be cured with membrane curing immediately after removal of forms to prevent dehydration in accordance with Sub-paragraph (2) except that membrane curing shall not be allowed for mass concrete and for construction joints. The Contractor shall have equipment needed for adequate curing and protection of the concrete on hand and ready for use before actual placement begins. The curing medium and method of the combination of mediums and methods used shall be subject to the approval of the Engineer.

15. FAILURE TO CURE

The Engineer shall have the authority to suspend the work wholly or in part, by written order, for such period as he may deem necessary for failure on the part of the Contractor to perform proper curing of the concrete work and to withhold payment for the corresponding work pending result of test, that shall subsequently be made on these concrete works. The contractor shall immediately secure core samples of such members and from parts of the structure as shall be designated by the Engineer and shall have them tested in a Testing Laboratory approved by the Engineer. If the results of test are found satisfactory, payment of the concrete in question shall be made and the work ordered be resumed, but if the results of tests are unsatisfactory to meet the structural requirements, the Contractor shall replace such parts at his own expense.

16. FAILURES TO MEET CONCRETE REQUIREMENTS

If the specified strengths have not been met, the Contractor shall remove and replace the concrete concerned or take such other remedial measures as the Engineer order, all at his own expense.

17. MEASUREMENT AND PAYMENT

Measurement for payment of any and all classes of concrete will be made by the number of cubic meter computed to the neat lines of the structures, unless otherwise specifically shown on the drawings or specified in these Specifications. In event cavities resulting from careless excavation or from excavation performed to facilitate the Contractor's operations, as determined by the Engineer, are required to be filled with concrete. .Such refilling will be made at the expense of the Contractor. In measuring concrete payment, the volume of all openings, embedded pipes, woodwork and metal work within the concrete will be deducted.

Payment for any and all classes of concrete in various parts of work will be made at the applicable contract unit price per cubic meter which price and payment shall include cost for furnishing all materials, equipment and labor, and all operations required in the construction as specified.

If during the implementation of the project, the sources of aggregates differ from those chosen by the contractor considered in the derivation of his unit bid price for concrete, the Contractor shall not be entitled to any claim for unit price adjustment as a result of such alteration of sources.

TEMPORARY WORKS, CONSTRUCTIONS PLANT, MOBILIZATION OF CONSTRUCTION EQUIPMENT AND DEMOBILIZATION WORK

SCOPE

[a] Temporary works

The contractor shall furnish all materials, labor, equipment, tools and install such temporary works as are necessary for the successful completion of the Contract Work. The Contractor shall negotiate the site for his construction camp, office and work areas.

The temporary works shall include but will not be limited to the following:

1. Construction of temporary facilities shall have a minimum floor area of 50 (5x10) square meters.

2. Facilities such as potable water, drainage, sewage, disposal, sanitation, first aid and fire protection facilities.

3. Workshops, warehouses, site offices, stockpile areas, storage areas for materials, equipment, spare parts, fuel and oil.

Temporary works shall conform to all government standards and codes and shall meet the sanitary requirements of the Department of Health.

[b] Mobilization of Equipment

The Contractor shall mobilize and move into Project Site within 7 calendar days after receipt of Notice to Proceed the required initial equipment requirement as listed of the Bid Documents.

Notwithstanding the mobilization of the initial equipment requirements, the Contractor shall mobilize to the site the additional equipment requirement within 20 calendar days upon receipt of the approval Equipment Moving-in and Utilization Schedule.

If for the reasons or causes other than "major calamities", the Contractor fails to mobilize fully the initial equipment required with said period, and all other equipment listed in his approved Equipment Moving-in and Utilization Schedule, at the discretion of the Regional Manager, he may be given an extension of time to mobilize them fully but in no case shall it exceed 30 calendar days. Failure to fully mobilize the required construction equipment within said period will be a ground for contract rescission. During said extension period liquidated damages equivalent to the daily operated ACEL rental rate of eight hours of the undelivered equipment per day of delay shall be imposed and collectible from any subsequent payment due the Contractor. If delays are caused by "major calamities", the corresponding number of calendar days caused by such calamities will not be counted. Delays shall be reckoned starting at 12:00 O'clock noon of the succeeding day after the date scheduled for the mobilization of the programmed equipment. The Engineer shall certify to the date of actual mobilization of the programmed equipment to the site.

The Engineer shall check and verify the number, type and actual condition of the equipment moved into the Project Site. The NIA reserves the right to order the removal of such equipment that are not in good working condition from the Project Site at the Contractor's expenses and said equipment are not be counted for as mobilized.

Construction equipment once moved into the Project Site, checked and accounted for by the Engineer shall not be permitted, prior to the completion of the Contract Work, to be moved out or transferred by the Contractor to another Project Site without the written approval of the Engineer.

Periodic check-up of the Contractor's equipment moved-in for the Contract Work shall be conducted by NIA. The Contractor will pay to NIA the amount equivalent to the ACEL Rental Rate of any equipment not accounted for during said check-up for the number of calendar days the equipment have been removed [without the written consent of the Engineers] from the Project Site until said equipment have been returned. Such cases are grounds for disapproval of claims by the Contractor for time extensions.

[c] Demobilization

Demobilization shall include dismantlement and removal from the site of Contractor's Plant, materials and equipment and all Temporary Facilities with the exception of some facilities which NIA shall consider to remain and which shall be handed over to NIA at the time of demobilization in a fully operational condition. Demobilization shall also include clean-up of the site after completion of the Contract Work as approved and accepted by NIA and transportation of Contractor's employees from the site.

BASIS OF PAYMENT

Payment for furnishing of all materials, equipment and labor for the temporary works, mobilization of construction equipment including demobilization work, shall be made at the fixed lump sum price or lump sum bid price whichever is stated in the Bid of Quantities which shall not be subject to price escalation and adjustment, in accordance with the following:

1. Twenty percent [20%] of the lump sum price will be paid upon complete mobilization of the initial equipment requirement.

2. Twenty percent [30%] of the lump sum price will be paid upon the completion of the Contractor temporary works.

3. Thirty percent [30%] of the lump sum price will be paid upon the completion of moving-in of all the construction equipment approved under Equipment Moving-in and Utilization Schedule, duly certified by the Engineer, Project Auditor or their duly authorized representatives. Partial payment of this 30 % may be given on a pro-rata basis after fifty percent [50%] of the approved equipment has been moved-in to the project site.

   For the purposes of computing the percentage of equipment moved-in. corresponding number of points of each equipment listed in the Equipment Moving-in and Utilization Schedule shall be provided by NIA to serve as the basis for any partial payment.

4. The remaining twenty percent [20%] of the lump sum price will be paid to the contractor upon completion of the Contract Work.

Section VII. Drawings

[Insert here a list of Drawings. The actual Drawings, including site plans, should be attached to this section, or annexed in a separate folder.]

Section VIII. Bill of Quantities

CONTRACT NO.: RIO-LMC-02-2O21
NAME: Restoration of Canal and Canal Structure of Bayongan IS, San Miguel, Bohol

ITEM NO.	DESCRIPTION	QTY.	UNIT
A. Canalization			
1	Common Excavation	279.90	cu.m.
4	Common Backfill with Compaction	347.64	cu.m.
3	Class B (Canal Structure)	153.61	cu.m.
B. Canal Structure			
1	Structure Excavation	15.95	cu.m.
2	Structure Backfill with Compaction	29.52	cu.m.
3	Reinforced Concrete Class A	9.46	cu.m.
4	Lean Concrete	1.663	cu.m.
C. Project Facilities			
1	Temporary Work Const. Mobilization & Demobilization	1.00	l.s.
2	Const. Safety, Health & Fire Protection Program	1.00	l.s.

Section IX LOCAL CONDITION

LC-01 PROJECT LOCATION

Restoration of Canal and Canal Structure of Bayongan IS, San Miguel, Bohol at BIIS, Bayongan Area, Bohol. The project site is approximately 86 kilometers from Tagbilaran City accessible through Balilihan-Hanopol-Batuan-Carmen-Dagohoy, Bohol - San Miguel

LC-02 ACCESS TO THE SITE

The contract work is located at BIIS, Bayongan Area, Bohol. Passing through different service roads by fairly to well graveled road which may deteriorate if used during rainy days. Maintenance and repair of these service roads by the contractor is necessary if so used by them. The cost of maintenance and repair shall be included in the unit bid price of the contractor.

LC-03 FUEL AND POWER SUPPLIES

The major fuel station outlets such as Petron, Caltex and Shell are found in the nearest city of the project and other surrounding municipalities.

The main source of energy is supplied by the National Grid Corporation of the Philippines (NGCP) and locally distributed by the respective electric cooperatives and is presently available at the above-stated address of the project site.

LC-04 CLIMATE AND HYDROLOGY

Bohol belongs to the type IV climate zone of the Philippines. It has a characteristic that the rainfall distribution is fairly even throughout the year as seen in the climatic data, three months from March to May are comparatively dry. Heavy rains are always brought by typhoons. During the past twenty years two super-typhoon visited Bohol: Ining in November, 1964 (record rainfall typhoons were accompanied by big floods in Wahig River. The peak flood water level of Ining reached the hand rail of the national highway bridge over the Wahig river.

But most of the normal rainfalls are strong showers but short. Earth gets dry very quickly after rainfall. On this account considerable working days will be secured even in the wet season.

Rainfall summarized in the following table, but NIA will assume no responsibility whatsoever for the accuracy of these data. Any risk arising from the interpretation of such data is to be entirely borne by the Contractor.

CLIMATE

Month	Rainfall in BES/1 (mm)	Rainy Days BES/2
Jan.	199.40	10
Feb.	170.50	8
March	127.40	8
April	90.06	5
May	178.30	7
June	174.03	8
July	142.65	9
Aug.	163.00	10
Sept.	165.25	8
Oct.	196.00	8
Nov.	212.30	9
Dec.	164.60	9
Total	2049.6	

/1: BES is the rainfall station close to the project area

/2: Daily rainfall less than 5 mm is deemed zero and not counted as rainy day.

LC-05 BANKING FACILITIES

Most rural banks are available at nearby of the project area while major banking facilities are found in Tagbilaran City like; Development Bank of the Philippines, Land Bank of the Philippines, Philippine National Bank and other private banks.

LC-06 COMMUNITY AND FIRST AID FACILITIES

The Contractor is advised that the NIA will take no direct part in providing community facilities such as churches, shops, community center and recreation facilities for Contractor's employees. The Contractor shall make his own arrangements for such as he considers being necessary for the approval of the NIA and shall meet all codes or regulations in effect. It shall be the responsibility of the Contractor to furnish and operate first aid for his personnel. Such facilities may be integrated with the NIA facilities, if any, upon mutual agreement.

LC-07 CONTRACTOR'S WORKING AREA AND SITE OFFICE

The Contractor shall, at his own expense, be responsible for housing, feeding and accommodation of all his employees for the execution of the Contract Work. Construction equipment, materials, tools, supplies, and other incidentals, and all cost incurred for the protection and safety shall be borne by him.

LC-08 WATER SUPPLY

The Contractor shall, at his own expense, be responsible for the provision or

installation, operation and maintenance of a safe, adequate and temporary supply of drinking and domestic water, and the adequate water supply for his construction purposes.

LC-09 RIGHT OF WAY

The NIA will provide all right of way, free of charge to the contractor, which, in the opinion of the Regional Manager, necessary for carrying out the contract work.

LC-10 SITE INVESTIGATION

It is the responsibility of the Contractor to visit the work site to make their own investigation to satisfy themselves as to the existing conditions affecting the work to be done under these Specifications.

The Contractor shall assume all responsibilities for deduction and conclusions that he may obtain or arrive at from the site inspection.

INFORMATION AND DATA REFERRED TO IN THESE BID DOCUMENTS

PROJECT: Restoration of canal and Canal Structure of Bayongan IS, San Miguel, Bohol

1. Site Visit and Inspection

   Register at NIA, Regional Office No.7, Dao District, Tagbilaran City

2. Wet Season Period, Article LC-04

3. Contract Duration, Article SCC 1.16, ITB

   120 calendar days

4. List of Officers/Offices to be furnished correspondence from the Contractor

   The Deputy Administrator
   For Engineering & Operations
   National Irrigation Administration
   5th Floor, NIA Complex
   EDSA, Diliman, Quezon City

   The Regional Manager
   NIA Regional Office 7
   Dao District, Tagbilaran City

5. Minimum Equipment Requirement for the Contract:

Equipment		Capacity	Number of Units
1.	Dump Truck	12 cu.m.	1
2.	Vibratory Plate Compactor	40-600mm (8HP)	1
3.	Concrete Mixer	1 Bagger	3
4.	Concrete Vibrator		3
5.	Bar Cutter		3
6.	Bar Bender		3
7.	Total Station	set	1

6. List of Initial Equipment required to be mobilized within ten (7) calendar days after receipt of Notice to Proceed

Equipment		Capacity	Number of Units
1.	Dump Truck	12 cu.m.	1
2.	Vibratory Plate Compactor	40-600mm (8HP)	1
3.	Concrete Mixer	1 Bagger	3
4.	Concrete Vibrator		3
5.	Bar Cutter		3
6.	Bar Bender		3
7.	Total Station	set	1

Section X. Checklist of Technical and Financial Documents

Notes on the Checklist of Technical and Financial Documents

The prescribed documents in the checklist are mandatory to be submitted in the Bid, but shall be subject to the following:

a. GPPB Resolution No. 09-2020 on the efficient procurement measures during a State of Calamity or other similar issuances that shall allow the use of alternate documents in lieu of the mandated requirements; or

b. any subsequent GPPB issuances adjusting the documentary requirements after the effectivity of the adoption of the PBDs.

The BAC shall be checking the submitted documents of each Bidder against this checklist to ascertain if they are all present, using a non-discretionary "pass/fail" criterion pursuant to Section 30 of the 2016 revised IRR of RA No. 9184.

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 equipmen rentals used in coming up with the Bid; **and**

☐ (r) Cash Flow by Quarter.

Section X. BIDDING FORMS

National Irrigation Administration
Region 7

STATEMENT OF ONGOING GOVERNMENT & PRIVATE CONTRACTS INCLUDING CONTRACTS AWARDE BUT NOT YET STARTED

Business Name : _____
Business Address : _____

Name of Contract	a. Owner's Name b. Address c. Telephone Nos.	Nature of Work	Bidder's Role Description	 %	a. Date of Contract b. Contract Duration c. Date of Completion	TOTAL CONTRACT VALUE AT AWARD	TOTAL CONTRACT VALUE AT COMPLETION	% of Accomplishment Planned	 Actual	Value of Outstanding Works/ Undelivered Portion
Government										
Private										
								TOTAL COST		

Submitted by : _____
(Printed Name & Signature)

Designation : _____

Date : _____

STATEMENT OF SINGLE SIMILAR LARGEST COMPLETED GOVERNMENT & PRIVATE CONTRACTS

Business Name : _____

Business Address : _____

Name of Contract	a. Owner's Name b. Address c. Telephone Nos.	Nature of Work	Bidder's Role Description	 %	a. Date of Contract b. Contract Duration c. Date of Completion	a. Total Contract Value at Award b. Total Contract Value at Completion
Government						
Private						

Note: This statement shall be supported with:

Owner's Certificate of Final Acceptance or a final rating of at least Satisfactory in the CPES

Submitted by : _____

(Printed Name & Signature)

Designation : _____

Date : _____

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

SUBSCRIBED AND SWORN to before me this ___ day of *[month] [year]* at *[place of execution]*, Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her [insert type of government identification card used], with his/her photograph and signature appearing thereon, with no. _____ and his/her Community Tax Certificate No. _____ issued on ____ at _____.

Witness my hand and seal this ___ day of *[month] [year]*.

NAME OF NOTARY PUBLIC
Serial No. of Commission _____
Notary Public for _____ until _____
Roll of Attorneys No. _____
PTR No. _____ *[date issued], [place issued]*
IBP No. _____ *[date issued], [place issued]*

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

LIST OF CONTRACTOR'S EQUIPMENT PLEDGE TO THE CONTRACT TO BE BID.

CONTRACT No. _____

NAME OF CONTRACT: _____

Name of Equipment	Unit	Plate No./Model	Motor No./Body No./Engine No.	Proof of Ownership	Present Location	Remarks

Submitted by :

_____ Date: _____

(Name of Contractor & Signature)

_____

(Name of Firm)

Omnibus Sworn Statement

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

SUBSCRIBED AND SWORN to before me this ___ day of *[month] [year]* at *[place of execution]*, Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her [insert type of government identification card used], with his/her photograph and signature appearing thereon, with no. _____ and his/her Community Tax Certificate No. _____ issued on ____ at _____.

Witness my hand and seal this ___ day of *[month] [year]*.

NAME OF NOTARY PUBLIC
Serial No. of Commission _____
Notary Public for _____ until _____
Roll of Attorneys No. _____
PTR No. _____ *[date issued], [place issued]*
IBP No. _____ *[date issued], [place issued]*

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

BID FORM

Date : _____

Project Identification No. : _____

To: [name and address of Procuring Entity]

Having examined the Philippine Bidding Documents (PBDs) including the Supplemental or Bid Bulletin Numbers [insert 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: [insert information];

d. The discounts offered and the methodology for their application are: [insert information];

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 [insert percentage amount] 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 guidelines[12] 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 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].

l. 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: _____

BILL OF QUANTITIES AND BID PRICES

Contract No.: RIO-LMC-02-2021

Description of Contract: Restoration of Canal and Canal Structures of Bayongan IS, San Miguel Bohol

Location: San Miguel, Bohol

ITEM NO.	DESCRIPTION	QTY.	UNIT	UNIT BID PRICE IN WORDS & IN FIGURES	TOTAL
A. Canalization					
1	Common Excavation	279.90	cu.m.	P	P
4	Common Backfill with Compaction	347.64	cu.m.	P	P
3	Class B (Canal Structure)	153.61	cu.m.	P	P
B. Canal Structure					
1	Structure Excavation	15.95	cu.m.	P	P
2	Structure Backfill with Compaction	29.52	cu.m.	P	P
3	Reinforced Concrete Class A	9.46	cu.m.	P	P
4	Lean Concrete	1.663	cu.m.	P	P
C. Project Facilities					
1	Temporary Work Const. Mobilization & Demobilization	1.00	l.s.	P	P
2	Const. Safety, Health & Fire Protection Program	1.00	l.s.	P	P
	TOTAL AMOUNT OF BIDS (In words and Figures)				P

The undersigned bidder hereby certifies that he has fully informed himself of all condition, local and otherwise affecting the carrying out of the Contract works and that his bid has been prepared in strict accordance with the terms and condition.

Name of Firm: _____ _____

Name in Print & Signature of Bidder