REPUBLIC OF THE PHILIPPINES
COMMISSION ON AUDIT
REGIONAL OFFICE NO. III
STAND ALONE AGENCY
CLARK INTERNATIONAL AIRPORT CORPORATION
Corporate Office Bldg., Civil Aviation Complex, Clark Freeport Zone, Pampanga, Philippines 2023

Office of the Auditor – Audit Team No. R3-05

Ref.: **AOM No.: 2024–09(2023)–CIAC**
Date: March 15, 2024

AUDIT OBSERVATION MEMORANDUM (AOM)

FOR: **Mr. ARREY A. PEREZ**
President and CEO
Clark International Airport Corporation
Clark Freeport Zone, Philippines

OFFICE OF THE PRESIDENT AND CEO
RECEIVED BY: Ampee P. De Guzman
DATE: MAR 18 2024
TIME: 3:05pm
CIAC CLARK INTERNATIONAL AIRPORT CORPORATION

Attention: **Arch. FEDERICO G. GARCIA, JR.**
Manager – Engineering Department

Engr. ANTONIO O. PAMINTUAN III
Assistant Manager – Engineering Department

Atty. RUSTICO D. QUIZON III
BAC, Chairperson

All of this Corporation

Subject: **Infrastructure Projects**

We have audited and evaluated the ongoing projects of the Clark International Airport Corporation (CIAC) for calendar year (CY) 2023, and noted the following observations:

The ongoing infrastructure developments intended for the Clark International Airport, involving two major projects with an initial contract cost totaling ₱883,949,718.80, have encountered numerous challenges, resulting in significant delays in their completion. These delays not only jeopardize the interests of the Corporation but also pose substantial risks to the welfare of the public, who are the intended beneficiaries of the much-needed infrastructures.

1.1 One of the primary considerations of the government for entering into a contract is the timely completion of the infrastructure projects so that the intended

benefits may be achieved. As such, the contracting parties are bound to adhere faithfully to agreed terms and conditions of the contract.

1.2 Paragraph 1, Annex "A" of the Revised Implementing Rules and Regulations (RIRR) of Republic Act (RA) No. 9184 provides that, ***Detailed engineering shall proceed only on the basis of the feasibility or preliminary engineering study made which establishes the technical viability of the project*** *and conformance to land use and zoning guideline as prescribed by existing laws. The findings contained in the feasibility study, if undertaken for the project, shall be examined. If, in the course of this exercise, it is found that changes would be desirable in the design standards of principal features, as proposed, specific recommendations for such changes shall be supported by detailed justifications, including their effects on the cost, and (if necessary) the economic justification.* (Underscoring and emphasis supplied)

1.3 Paragraph 2 thereof enumerates the detailed engineering activities, which include, among others, the following: survey and site investigation; soils and foundation investigation; construction materials investigation; preparation of design plans and technical specifications; preparation of site or right-of-way acquisition plans and resettlement action plans; preparation of utility relocation plans; and value engineering studies.

1.4 Review and analysis of the submitted report by the Engineering Department of the Clark International Airport Corporation (CIAC) regarding the status of all ongoing infrastructure projects as of December 31, 2023, two major projects funded by the Bases Conversion and Development Authority (BCDA) through the General Appropriations Act (GAA) of 2020 and 2021 were identified. These projects are to be undertaken by CIAC's Special Bids and Awards Committee (SBAC). Details are summarized below:

Project Name	Contract Cost		Percentage of Completion	Total Cost Incurred as of 12/31/23
	Original	Revised (vat exclusive)		
1. Design and Build of the New Eighteen-Storey Clark Air Traffic Control Tower Building Facility at the Clark Airport	₱ 290,360,830.70	₱ 316,433,648.37	60.90%	₱ 225,443,758.91
2. Supply, Installation, Testing and Commissioning of Primary Surveillance Radar and Monopulse Secondary Radar for Clark International Airport	593,588,888.10	624,032,066.12	25.90%	160,743,785.52
Total	**₱ 883,949,718.80**	**₱ 940,465,714.49**		**₱ 386,187,544.43**

1.5 Outlined below are the relevant details concerning the contract duration for the said projects, as specified in their original contracts:

Project Name	Start Date	Completion Date	Original Contract Duration
1. Design and Build of the New Eighteen-Storey Clark Air Traffic Control Tower Building Facility at the Clark Airport	01-25-2021	01-24-2022	510 calendar days
2. Supply, Installation, Testing and Commissioning of Primary Surveillance Radar and Monopulse Secondary Radar for Clark International Airport	09-27-2021	02-18-2023	365 calendar days

1.6 As can be gleaned from the table above, the two projects were initially slated for completion on January 24, 2022, and February 18, 2023, respectively. However, as of December 31, 2023, verification of their actual progress revealed that both projects remain unfinished.

1.7 On March 7, 2024, the Audit Team conducted a site inspection (***refer to Annex A***) to assess the status and progress of the two ongoing projects. Subsequently, a meeting was held with representatives from each project's respective contractors and CIAC's Engineering Department. The purpose of these meetings was to gather information on the causes of the delayed completion of the projects. During these meetings, the Audit Team identified several factors contributing to the delays, to wit:

a. Absence of Height Clearance Permit/Exemptions and Building Permit from regulatory bodies for the project "Design and Build of the New Eighteen-Storey Air Traffic Control Tower Building Facility".

1.8 The primary objective of the "Design and Build of the New Eighteen-Storey Clark Air Traffic Control Tower Building Facility at Clark International Airport" project is to resolve the existing line of sight (LOS) issue and accommodate future developments at Clark International Airport as outlined in the *Aeroports de Paris Ingenierie* (ADPI) Master Plan. Additionally, the new control tower aims to establish an optimal operational environment for Airways to conduct its air traffic control operations, ensuring controllers have maximum visibility.

1.9 The said project was funded by the BCDA, who shall retain ownership of the infrastructure project upon its completion including all assets resulting therefrom, pursuant to the Memorandum of Agreement (MOA) executed between BCDA and CIAC on April 30, 2020 for the Clark International Airport Projects, namely: Airfield Ground Lighting System; Terminal Radar System; Control Tower; and Detailed Engineering Design of the Secondary Runway, with a total project cost of ₱1,720,000,000.00. Section 6 of the MOA on "Termination and/or Rescission" provides that:

> ***In the event that the Project is not implemented, or if the Construction of the Project or part thereof is suspended by the CIAC without legal basis, BCDA shall be automatically released from any and all its commitments*** *set forth in this Agreement. Any advances made by BCDA to the CIAC for the Project* ***shall be returned by the CIAC to BCDA within thirty (30) days upon***

receipt by the CIAC of a written demand from BCDA. (Underscoring and emphasis supplied)

1.10 Likewise, Section 3.2.5 of the aforementioned MOA states that *CIAC shall* ***ensure that the implementation of the Project*** *is in accordance with the highest professional standards,* ***within the time period required and budget allocated for the completion of the Project***. *Xxx...* (Underscoring and emphasis supplied)

1.11 The procurement for the project was carried out through Negotiated Procurement under Two Failed Biddings. Consequently, the project was awarded to a Contractor with a bid price of ₱290,360,830.7, based on the Notice of Award (NOA) dated December 29, 2020. This NOA was duly received and acknowledged by the owner and general manager of the Company on December 30, 2020.

1.12 The contract agreement for the **design and build project** between CIAC and the Contractor was executed on January 11, 2021, as evidenced by a notarized contract dated January 26, 2021. Furthermore, one day before the contract was notarized, the Audit Team noted the issuance of the Notice to Proceed (NTP), which was duly acknowledged by the Contractor on January 25, 2021. Below is an excerpt from the NTP issued by the Corporation:

> *Upon receipt of this notice,* ***you are responsible for performing the services under the terms and conditions of the Agreement and in accordance with the Implementation Schedule***. (Underscoring and emphasis supplied)

1.13 The design and build project commenced on January 25, 2021, with a scheduled completion date of January 24, 2022, spanning 365 calendar days. Discussions with representatives from both the Contractor and CIAC's Engineering Department unveiled several reasons causing the delayed completion of the project. These reasons include:

a. Pending application for Height Clearance Permit as mandated by the Civil Aviation Authority of the Philippines (CAAP);
b. Suspension of tower and tower crane erection pending issuance of the Height Clearance Permit;
c. Pending submission of the Implementation Status of the Mitigating Actions for the Construction of the New Air Traffic Control Tower by both CIAC and Luzon International Premiere Airport Development (LIPAD) Corporation, a special purpose company established to manage the operations and maintenance of Clark International Airport;
d. Awaiting CAAP approval on the Final Aeronautical Study and redesign of the 4-Instrument Flight Procedures before Height Clearance Permit issuance; and
e. Pending issuance of the project's building permit by the Clark Development Corporation (CDC) upon release of the Height Clearance Permit from CAAP.

1.14 It bears stressing that the aforementioned issues were not adequately addressed during the preliminary design stage. Furthermore, complete detailed

engineering procedures, which are essential prerequisites to ensure the feasibility and viability of the project, were not comprehensively conducted.

1.15 The CAAP, being an independent regulatory body with quasi-judicial and quasi-legislative powers, is mandated to establish comprehensive, clear, and impartial rules and regulations for the Philippine aviation industry.

1.16 In relation to this mandate, CAAP requires the conduct of an aeronautical study, which is a prerequisite for obtaining height clearance exemption or permit. The result of the study will determine whether the proposed height of the Air Traffic Control Tower, based on its approved original design, will be permitted.

1.17 An aeronautical study is conducted to assess the impact of deviations from the aerodrome standards specified in Volume I to Annex 14 of the Convention on International Civil Aviation, as well as national regulations. The study aims to present alternative means of ensuring the safety of aircraft operations, estimate the effectiveness of each alternative, and recommend procedures to compensate for the deviation.

1.18 Likewise, technical analysis provides justification for a deviation based on the premise that an equivalent level of safety can be achieved through other means. This approach is generally applicable in situations where the cost of correcting a problem that violates a standard is excessive, but where the unsafe effects of the problem can be mitigated by procedural means, offering practical and reasonable solutions.

1.19 Based on the information gathered by the Audit Team, an aeronautical study was conducted by an international company commissioned by the Contractor, over a period of approximately two to three months. The actual cost of the study amounts to €49,000.00, which is equivalent to ₱3.9 million.

1.20 Of the total cost of the aeronautical study, 80% has been paid by the Contractor in two installment payments. The initial payment was a down payment of 50%, amounting to €24,500.00 or ₱1,517,512.30, followed by an additional 30%, equivalent to €14,700.00 or ₱905,320.00. The remaining 20% will be paid upon the release of the Height Clearance Permit from CAAP. It is worth noting that the cost of the study was not included in the original contract cost and was not considered during the preliminary design stage. Furthermore, although the Contractor initially advanced the payment for the study, this cost will ultimately be billed to CIAC, resulting in a variation order and adding to the project's overall costs.

1.21 The aeronautical study concluded in 2023, and the results, contained in the report dated October 3, 2023, indicated that, *considering the existing defenses and proposed mitigation measures,* ***the risks associated with the new control tower in its final situation are deemed acceptable***. Subsequently, the study results were forwarded to CAAP, along with a new application for a Height Clearance Permit, as evidenced by a letter dated October 11, 2023, addressed to the CAAP Director General.

1.22 Annex "E" of the RIRR of RA No. 9184 states that:

> ***1.4. Any cumulative positive Variation Order beyond ten percent (10%) of the original contract price shall be subject of***

another contract to be bid out if the works are separable from the original contract. *In exceptional cases where it is urgently necessary to complete the original scope of work, the Head of the Procuring Entity may authorize a positive variation order that will make the cumulative value of the positive Variation Orders go beyond ten percent (10%) but not more than twenty percent (20%) of the original contract price, subject to the guidelines to be determined by the GPPB: Provided, however, That* ***appropriate sanctions shall be imposed on the designer, consultant or official responsible for the original detailed engineering design which failed to consider the Variation Order beyond ten percent (10%).*** (Underscoring and emphasis supplied)

1.23 Our review of the related documents concerning the approval of Variation Order No. 1, amounting to ₱26,072,817.67, revealed that the amendments pertain to the detailed architectural and engineering design based on BCDA's instructions. This variation was approved on November 23, 2021, by the CIAC Board with the concurrence of the BCDA, covering the Final Construction Drawing, and Final Financial and Technical Documents.

1.24 The total Variation Order currently stands at 8.98% as of December 31, 2023, excluding the cost of the aeronautical study. If the additional cost of the study would result in a cumulative positive Variation Order beyond 10%, a new contract would need to be bid out. Details of Variation Order No. 1 are as follows:

1. Architectural Design Changes	
a.	Building Envelope (Aesthetic) – The overall design concept of New Control Tower was changed based on the sketch of Designer Budji Layug.
b.	Additional CAAP Operational Space Requirements – CAAP Air Navigation Service (ANS) and Air Traffic Services (ATS) requires additional operational space requirements for equipment rooms and offices
2. Structural Design Changes (Based on new design and soil investigation)	
a.	From plainly Mat Footing Foundation to Combination of Bored Piling and Mat Footing
b.	From Dia-Grid Steel Framing to Structural Steel Framing
3. Mechanical, Electrical, Fire Protection, and Sanitary (MEFPS) Design Changes	
a.	Additional CAAP Operational Space Requirements

1.25 Summarized below are the approved Variation Orders, Time Extensions and Suspension Orders for the design and build project:

a) Variation Order

Original Contract Cost	Variation Order	Percentage of Variation Order	Revised Contract Cost	Remarks
₱ 290,360,830.70	₱ 26,072,817.67	8.98%	₱ 316,433,648.37	VO #1

b) Time Extension

Date Started	Time Extension Granted (calendar days)	Original/ Revised Contract Duration	Target Date of Completion	Remarks
January 25, 2021	none	365	January 24, 2022	
	90	455	April 24, 2022	TE #1
	120	575	August 22, 2022	TE #2
	60	635	October 21, 2022	TE #3
	80	715	January 9, 2023	TE #4
	215	930	August 12, 2024	TE #5
Total	**565**			

c) Suspension Order

Date of Request	No. of Suspension Order Granted	Date of Approval	Remarks
March 17, 2022 (*received by CIAC on **April 27, 2022***)	1	May 10, 2022	• Request for the temporary suspension of crane usage for the project. • On March 16, 2022, the CAAP denied the height clearance permit application for the tower and the tower crane for exceeding the allowable limits. • CAAP Maximum Allowable Top Elevation (MATE) is **192 meters**, while the Proposed Top Elevation (PTE) is **228.81 meters**, resulting in an excess of **36.81** meters.

1.26 As shown in the preceding table, the total cumulative time extensions have reached 565 calendar days, surpassing the original contract duration of 365 calendar days.

1.27 The Audit Team also discovered that the project commenced even in the absence of a building permit from CDC, the regulatory authority within the Clark Freeport Zone (CFZ). Despite the persistent efforts of both the contractor and CIAC, obtaining a building permit proved unattainable due to the absence of a Height Clearance Permit from the CAAP. Additionally, securing a conditional building permit is not permitted by CDC and may result in the imposition of penalties due to non-compliance with CDC's regulations within the CFZ.

1.28 Section 301, Rule III of the IRR of the National Building Code of the Philippines (PD No.1096) states that:

> ***No person, firm or corporation, including any agency or instrumentality of the government shall construct**, alter, repair, convert, use, occupy, move, demolish and add **any***

building/structure or any portion thereof or cause the same to be done, without first obtaining a building permit *xxx…*
(Underscoring and emphasis supplied)

1.29 Additionally, Sections 212 and 213, of Rule II, supra, provide that:

- ***SECTION 212. Administrative Fines***

1. Imposition of Administrative Fines

a. The Secretary or his duly authorized representative may prescribe and ***impose fines not exceeding ten thousand pesos (₱10, 000.00)*** *in the following cases, subject to the terms and procedures as hereunder provided:*

i. ***Erecting, constructing****, altering, repairing, moving, converting, installing or demolishing* ***a private or public building/ structure if without building/demolition permit.***
(Underscoring and emphasis supplied)

Xxx…

- ***SECTION 213. Penal Provisions***

It shall be unlawful for any person, firm or corporation, to erect, construct*, enlarge, alter, repair, move, improve, remove, convert, demolish, equip, use, occupy, or maintain* ***any building or structure or cause the same to be done contrary to or in violation of any provision of the Code****.*

Any person, firm or corporation who shall violate *any of the provisions of the Code and/or commit any act hereby declared to be unlawful* ***shall upon conviction, be punished by a fine of not more than twenty thousand pesos or by imprisonment of not more than two years or by both such fine and imprisonment****; Provided, that in the case of a corporation firm, partnership or association, the penalty shall be imposed upon its officials responsible for such violation Xxx…*(Underscoring and emphasis supplied)

1.30 If the feasibility and preliminary engineering studies had been conducted thoroughly during the initial stage of the project, the issues on the height clearance and the building permits could have been addressed properly. Meanwhile, review of the related bidding documents for the project revealed the following pertinent information:

3.0 SCOPE OF DESIGN AND BUILD CONTRACT AGREEMENT

3.1 Conduct of Architectural and Engineering (A&E) Surveys. The Design and Build Contractor DBC shall conduct the surveys and present to CIAC their results and findings which would impact on

the detailed A&E designs of the Project. *The DBC shall include the findings and recommendations and effects, if any, on the Technical and Financial Components of its Bid Proposal in its report on Conceptual Engineering Designs of the Project. Section VIII Terms of Reference (TOR) defines the detailed activities.*

3.2 Preparation of the Conceptual Engineering Designs (CED) For the Project Components. The DBC shall prepare and submit to the CIAC the draft Conceptual Engineering Designs (CEDs) for each of the Components. *The CEDs shall conform to the MPSP. The DBC shall submit a report on the CED to the CIAC.*

3.3 Preparation of the Revised Conceptual Engineering Design (RCEDs). The DBC shall prepare and submit the Revised CEDs for each Project Component following the Minutes of Discussion with CIAC. *The DBC shall submit a report on the Revised CEDs for the issuance of a "Notice of No Objection" to the CIAC and approval of the Minutes of Discussion.*

3.4 Preparation of the Detailed Engineering Design (DED) for Approval of the CIAC. After the Procuring Entity, CIAC, and DBC have agreed on the CEDs, the DBC shall prepare and submit the final DED submit to the CIAC for approval. *The DBC shall adopt a format acceptable to CIAC for its report.*
(Underscoring and emphasis supplied)

Xxx…

4.0 DESIGN STANDARDS AND SPECIFICATIONS

The DBC shall adopt the conceptual design made by the CIAC Technical Working Group (TWG) and shall observe the following design standards.

4.1 Architectural Design Parameters
4.2 Building Architectural Works
4.3 Design Parameters (Structural/Civil works)

Xxx…

1.31 Moreover, Section 2.3 of the "Project Description" under "Terms of Reference for the Design and Build of the New Eighteen-Storey Clark Air Traffic Control Tower Building Facility at Clark International Airport" provides that:

2.3 This project shall adhere to the minimum standard set by the following:

2.3.1 Civil Aviation Authority of the Philippines ***(CAAP) Manual of Standards latest edition****;*

2.3.2 International Civil Aviation Organization ***(ICAO) Annex 14 for Visual Navigational Aids latest edition****;*

2.3.3 ***National Building Code of the Philippines (PD No. 1096) and its latest amended IRR****;*

2.3.4 National Structural Code of the Philippines (NSCP);

2.3.5 Fire Code of the Philippines (RA 9514) and its latest amended IRR; and

2.3.6 Government ordinances enforced in the locality.

(Underscoring and emphasis supplied)

Xxx…

1.32 Based on the preceding discussions, it is incumbent upon the contractor to conduct the Architectural and Engineering Surveys and prepare the Conceptual and Detailed Engineering Designs for the project. Moreover, the contractor is also required to adopt the conceptual design made by the CIAC TWG and adhere to the terms of reference of the project, which are based on the minimum standards set by the CAAP and other regulatory bodies. Similarly, ICAO Annex 14, Volume I, requires the commission of an aeronautical study to evaluate the effect of deviations from specified aerodrome standards based on the Convention on International Civil Aviation (CICA) and other regulations.

1.33 The Audit Team also noted that several meetings during the pre-construction, technical, and coordination phases were conducted in relation to the project, attended by representatives from LIPAD, the Contractor, CIAC-PMO, BCDA, and CAAP. Additionally, internal meetings were conducted by CIAC's Project Management Office (PMO). However, despite the involvement of CAAP in these meetings, who has technical expertise concerning aviation matters, the conduct of an aeronautical study was never considered in determining the proposed height of the Air Traffic Control Tower. Consequently, issues with height clearance and building permits surfaced during the project's implementation or construction.

1.34 Despite the submission of the required aeronautical study to CAAP in October 2023, the Height Clearance Permit remains unissued to date. Further verification revealed that CAAP requires additional documentation to support the aeronautical study report, including the "Implementation Status of the Mitigating Actions for the Construction of the New Air Traffic Control Tower" and the 16 flight procedure designs, pending submission to CAAP for approval.

1.35 Based on the review of the Hazard Identification and Risk Analysis (HIRA) checklist provided by the Engineering Department as of March 12, 2024, out of the 19 Mitigating Actions for the Construction of the New Air Traffic Control Tower, 12 are already completed, 1 partially completed, 4 are ongoing, and 2 for compliance upon completion of the project.

1.36 Instrument Flight Procedures are utilized by aircraft operating under instrument flight rules to ensure safe and efficient aviation operations. These procedures,

including instrument departure, arrival, and approach, are vital components of the global aviation system, facilitating aircraft operations to and from airports worldwide on a daily basis.

1.37 Of the 16 flight procedure designs required by CAAP, 11 procedures were already submitted on November 13, 2023. The remaining five flight procedures, which the BCDA committed to fund, are yet to be complied.

1.38 Following the letter dated November 23, 2023, from the BCDA President and Chief Executive Officer (PCEO) to the CIAC's PCEO, regarding the funding request for the redesign of the affected Instrument Flight Procedures based on the aeronautical study, disclosed the following information:

Particulars	Amount	Remarks
1. Redesign of 4-Instrument Flight Procedures: • VOR 20 Circling • RNP 02 VNAV • RNP 20 VNAV and LNAV • FATO Study for Helicopter	 ₱ 1,148,000.00 1,148,000.00 1,148,000.00 2,697,000.00	**Approved for funding** subject to the following conditions: 1. Procurement shall be subject to Republic Act (RA) No. 9184; and 2. Disbursement of the budget shall be in accordance with government budgetary, accounting and auditing rules and regulations.
2. Flight Check and Validation	6,952,000.00	Funding shall be provided upon receipt of the CAAP approval of the redesign of the 4-Instrument Flight Procedures
3. 2-Sets CCTV System	2,000,000.00	LIPAD shall finance and procure the CCTV system
4. OCM and Contractors' Profit	2,263,950.00	Shall not be funded by BCDA since this involved consulting works
Total	**₱17,356,950.00**	

1.39 Similar to the aeronautical study, the costs associated with the Instrument Flight Procedures, particularly the Redesign of 4-Instrument Flight Procedures, do not form part of the original contract cost of the project. As a result, another variation order is necessary, which will further increase the cumulative positive Variation Order for the project.

1.40 On December 22, 2023, through Resolution No. RM-12-02, Series of 2023, during its 2nd Special Board Meeting, the CIAC Board approved the extension of the project as requested by the Contractor, for a period of 12 months, subject to the following conditions:

a. *Contractor's* ***submission of its revised notarized corporate undertaking*** *to deliver on its obligations under the contract within the periods as approved by the Board, and* ***to comply with all the necessary requirements for issuance of a Height***

***Clearance Permit from CAAP and a Building Permit from the CDC**, and that failure to do so will result in the imposition of liquidated damages by CIAC/BCDA; and*

b. Monthly review by the Board of the Project and the submission of a monthly report to the Board Project updates.

1.41 Consequently, with the Contractor's compliance with the requirements of the CIAC Board, on January 31, 2024, during its 1st Special Board Meeting, through Resolution No. SM-01-02, Series of 2024, the following agreement was reached:

> ***RESOLVED**, that the lifting of the suspension of works for the Project: "Design and Build of the New Eighteen-Storey Air Traffic Control Tower Building Facility at Clark International Airport" (Project), and the consequent continuation of Resolution No. SM-12-02, Series of 2023, approving the extension of the Project for twelve (12) months as requested by the Contractor, **BE APROVED**, as it is hereby **APPROVED**.*

1.42 Based on the Affidavit of Undertaking executed by the Contractor on January 24, 2024, the company affirms its obligations under the contract for the said project. These obligations include completing the project within three months from the issuance of the building permit. However, this timeframe shall not exceed the extension granted by CIAC or until December 22, 2024. Failure to comply with this undertaking shall entitle CIAC to take various actions, including terminating the contract, imposing liquidated damages, and/or blacklisting of the Contractor. These actions are without prejudice to any other legal remedies that CIAC may resort to.

b. The completion of the project "Supply, Installation, Testing and Commissioning of the Primary Surveillance Radar and Monopulse Secondary Surveillance Radar" is dependent upon the completion of the new Clark Air Traffic Control Tower.

1.43 The existing CIAC Radar System and Facility were installed in 2005 and have already exceeded their standard useful life of 10 years. Therefore, it is necessary to install a new Primary Surveillance Radar and Secondary Surveillance Radar System. These new systems shall have the facilities and capabilities to process, distribute, and store data. They will also serve as the basis for daily support for the Clark Air Traffic Control (ATC) requirements in maintaining tracking and movements of aircraft within Philippine airspace.

1.44 The project for the 'Supply, Installation, Testing, and Commissioning of the Primary Surveillance Radar and Monopulse Secondary Surveillance Radar' has an Approved Budget for the Contract (ABC) of ₱603,980,000.00 and was conducted through a competitive bidding modality. Subsequently, the contract was awarded to a Contractor based on the Notice of Award (NOA) dated July 26, 2021, with a total contract price of ₱593,588,888.10, which was duly received and acknowledged by its owner and president on August 4, 2021.

1.45 On August 16, 2021, the contract agreement was executed between CIAC and the Contractor. Consequently, the NTP was issued and was duly received by the latter on September 27, 2021.

1.46 The project commenced on September 27, 2021, with a scheduled completion date of February 18, 2023, spanning 510 calendar days. Discussions with representatives from both the Contractor and CIAC's Engineering Department unveiled several reasons causing the delayed completion of the project. These reasons include:

a. Site possession issues, pending the approval of CDC to use the location or property;

b. The shipment of the Radar Equipment has been put on hold to avoid the risk of equipment damage and deterioration. Installation, integration, testing, and commissioning should be done simultaneously;

c. The arrival of the Radar equipment has been delayed, as it has been in transit since the end of November 2023. However, the ship had to detour around the African continent due to continuing Houthi vessel attacks in the Red Sea. The estimated arrival date of the Radar equipment at Manila Port is February 17, 2024;

d. Installation of the remote control and monitoring console along the microwave system and fiber optic links between the new radar is delayed due to the delayed completion of the new Clark ATC Tower;

e. The existing Very-Small-Aperture Terminal (VSAT) must be relocated to the new ATC Tower to fully integrate the new radar into the existing Manila Air Traffic Management System; and

f. Other matters indirectly affected by the delay in completing the New ATC Tower include radar flight checks and local on-site training.

1.47 Our review of the related documents disclosed that Variation Order No. 1, amounting to ₱30,443,178.02, was approved/issued on May 3, 2023. The said amendments pertained to the following parameters:

a. CAAP's request for the additional operational facilities and requirements;

b. CDC's issuance of the regulations regarding the 5.0-meter setback which was not considered during the design stage; and

c. As-staked calculations and actual quantities involving extra work.

1.48 Summarized below are the approved Variation Orders, Time Extensions and Suspension Orders for the said project:

a) Variation Order

Original Contract Cost	Variation Order	Percentage of Variation Order	Revised Contract Cost	Remarks
₱593,588,888.10	₱ 30,443,178.02	4.56%	₱ 624,032,066.12	VO #1

b) Time Extension

Date Started	Time Extension Granted (calendar days)	Original/ Revised Contract Duration	Target Date of Completion	Remarks
September 27, 2021	none	510	February 18, 2023	
	90	600	May 19, 2023	TE/*SO #1
	317	917	March 31, 2024	TE #2
	180	1,097	September 27, 2024	TE #3
Total	**587**			
Note: **Refer to Suspension Order for the details.*				

c) Suspension Order

Date of Request	No. of Suspension Order Granted	Date of Approval	Remarks
October 18, 2021	1	November 8, 2021	The PMO recommends to grant the contractor, a **90 calendar days suspension** from the issuance of the NTP (September 27, 2021) subject for the site possession issues. The said suspension will be lifted once CDC issued the necessary site possession for the usage of the said location/property. Otherwise, the suspension will be extended.

1.49 As shown in the preceding table, the total cumulative time extensions have reached 587 calendar days, surpassing the original contract duration of 510 calendar days.

1.50 Although multiple factors contributed to the delayed completion of the project, the primary setback stemmed from the delayed completion of the new Clark ATC Tower. Essentially, the completion of the Radar facilities is contingent upon the Tower's completion, as the two projects are interconnected to fully realize their intended usage or purpose.

1.51 The aforementioned lapses and unresolved issues in the two ongoing projects have led to significant delays, thereby impeding the timely utilization of the much-needed infrastructure by its intended beneficiaries. These delays can be attributed to inadequate planning, supervision, and monitoring, particularly the failure to conduct comprehensive detailed engineering or feasibility studies to anticipate and address potential issues during project implementation.

1.52 It is imperative to address these challenges promptly and effectively to mitigate the potential negative impacts on both the Corporation and the community at large. Swift action and strategic intervention are necessary to ensure the successful completion and utilization of these vital projects.

1.53 **We recommend that the President and CEO of the Clark International Airport Corporation (CIAC) undertake the following courses of actions:**

a. **Ensure the timely completion of both projects according to the revised contract durations approved by the Corporation, taking into account the contractors' obligations and deliverables outlined in their respective contracts and executed Affidavit of Undertaking;**

b. **Explore all possible avenues and legal remedies without jeopardizing the interests of the Corporation and the government, particularly in the event that the contractors fail to complete the projects within the revised contract duration. This may include the imposition of liquidated damages and/or the blacklisting of contractors, as warranted;**

c. **Secure a building permit from the Clark Development Corporation (CDC) for the construction of the new Clark Air Traffic Control (ATC) Tower upon the release of the Height Clearance Permit from the Civil Aviation Authority of the Philippines (CAAP). Similarly, for all future infrastructure initiatives of the Corporation, construction shall not commence without first obtaining a building permit to avoid the imposition of fines and penalties as outlined in the Implementing Rules and Regulations (IRR) of the National Building Code of the Philippines (PD No. 1096); and**

d. **Ensure full coordination with concerned government agencies or regulatory bodies such as CAAP for aviation-related projects to achieve effective and synchronized planning and implementation of the Corporation's projects and programs related to airport developments or infrastructure facilities, and;**

e. **Henceforth, minimize or avoid further delays in project implementation by:**

    i. **Conscientiously carry out comprehensive detailed engineering or feasibility studies to ensure that potential issues are properly addressed during the preliminary or planning stage before project implementation;**

    ii. **Thoroughly review and evaluate the Program of Works to ensure that project designs and estimates are properly prepared and that all phases of the projects are covered to minimize variation orders and time extensions, which often lead to increased project costs and delayed completion.**

    iii. **Directing the Bids and Awards Committee (BAC) to properly verify and evaluate during post-qualification the operating conditions of equipment and other construction requirements, among others, to ensure adequacy, availability, and suitability of the contractor's technical capability; and**

iv. **Strictly monitor and supervise all ongoing infrastructure projects of the Corporation in a timely manner to properly address or resolve issues arising during the implementation stage of the project.**

May we have your comments on the foregoing audit observations and recommendations within five (5) days from receipt hereof.

COA Signed
2024-03-18
13:53:15

FRANCIS S. MAYLED
State Auditor III
OIC-Audit Team Leader

COA Signed
2024-03-18
13:55:41

TERESITA C. GUEVARRA
State Auditor V
Supervising Auditor

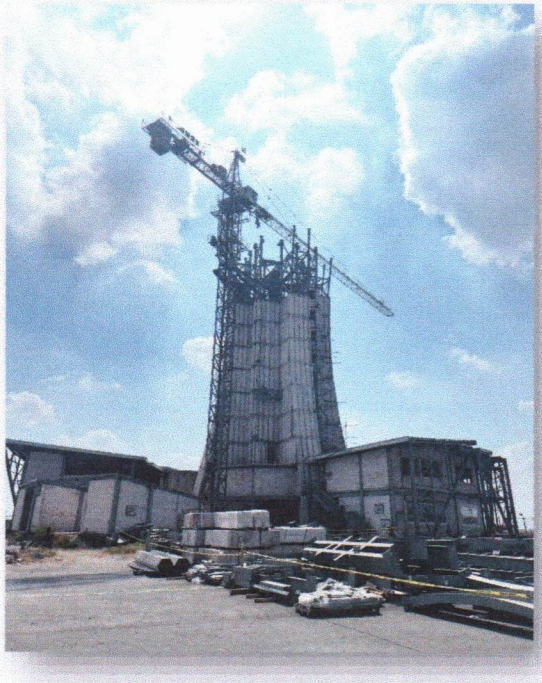
Proof of receipt of AOM No.: 2024–009(2023)–CIAC:

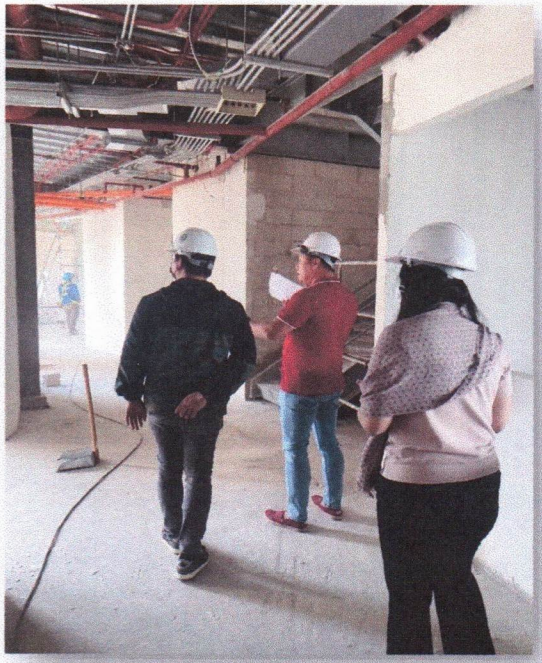
Name	Received by		Date
	Printed Name	Signature	
Mr. Arrey A. Perez President and CEO			
Arch. Federico G. Garcia, Jr. Manager – Engineering Department			
Engr. Antonio O. Pamintuan III Assistant Manager – Engineering Department			
Atty. Rustico D. Quizon III BAC, Chairperson			

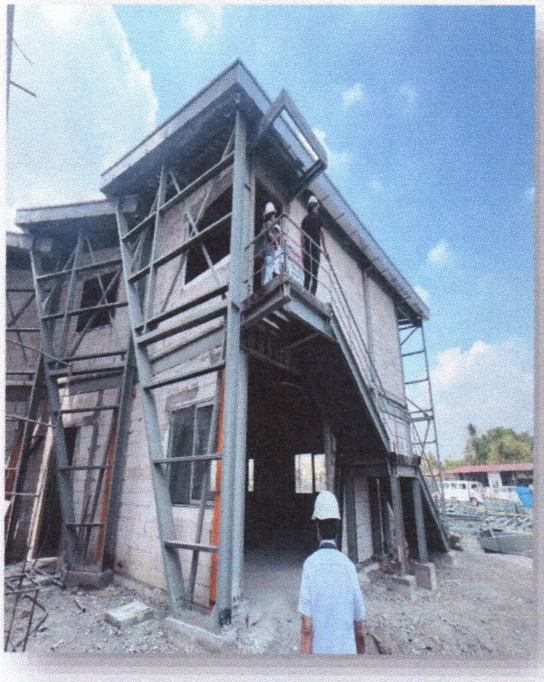
ANNEX A

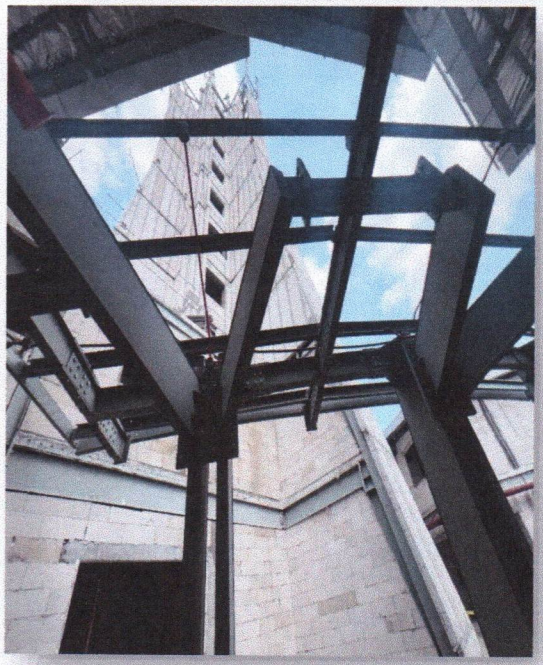
Photos taken on March 7, 2024, during the Site Inspection of Ongoing Infrastructure Projects intended for the development of Clark International Airport

I. Design and Build of the New Eighteen-Storey Clark Air Traffic Control Tower Building Facility at the Clark Airport









II. Supply, Installation, Testing and Commissioning of Primary Surveillance Radar and Monopulse Secondary Radar for Clark International Airport