

**APPLICATION OF MAINTENANCE STRATEGIES FOR SUSTAINABILITY IN THE
DESIGN OF A RECREATIONAL FACILITY IN EKO ATLANTIC CITY, LAGOS**

AGBOOLA Omobolanle Ore-Oluwa

(14ca017470)

SUPERVISOR: DR. IZOBO-MARTINS OLADUNNI OLUWATOYIN

AUGUST, 2021

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BY

OMOBOLANLE O. AGBOOLA

(14ca017470)

B.Sc. Architecture, Covenant University, Ota

**A DISSERTATION SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES
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TECHNOLOGY, COVENANT UNIVERSITY.**

AUGUST, 2021

ACCEPTANCE

This is to attest that this dissertation is accepted in partial fulfilment of the requirements for the award of the degree of Master of Sciences in Architecture in the Department of Architecture, College of Sciences and Technology, Covenant University, Ota, Nigeria.

Mr. John A. Phillip

(Secretary, School of Postgraduate Studies)

.....

Signature and Date

Prof. Akan B. Williams

(Dean, School of Postgraduate Studies)

.....

Signature and Date

DECLARATION

I, **AGBOOLA OMOBOLANLE ORE-OLUWA (14CA017470)** declares that this research was carried out by me under the supervision of Dr. Izobo-Martins O. O of the Department of Architecture, College of Science and Technology, Covenant University, Ota, Nigeria. I attest that the dissertation has not been presented either wholly or partially for the award of any degree elsewhere. All sources of data and scholarly information used in this dissertation are duly acknowledged.

AGBOOLA OMOBOLANLE ORE-OLUWA

.....

Signature and Date

CERTIFICATION

We certify that this dissertation titled “**APPLICATION OF MAINTENANCE STRATEGIES FOR SUSTAINABILITY IN THE DESIGN OF A RECREATIONAL FACILITY IN EKO ATLANTIC CITY, LAGOS**” is an original research work carried out by **AGBOOLA, OMOBOLANLE ORE-OLUWA (14CA017470)** in the Department of Architecture, College of Science and Technology, Covenant University, Ota, Nigeria under the supervision of Dr. Izobo-Martins O. O We have examined and found this work acceptable as part of the requirements for the award of Master of Science in Architecture.

Dr. O. O Izobo-Martins

(Supervisor)

Signature/Date

Prof. A.P. Opoko

(Head of Department)

Signature/Date

Prof. Akan B. Williams

(Dean, School of Postgraduate Studies)

Signature/Date

DEDICATION

This project is dedicated firstly to God Almighty my father, the author and finisher of this work study, for his unending favor, faithfulness, strength, grace and wisdom to undertake this task. Secondly, to my parents, Arc. Akintayo Omotayo Agboola and Dr. Moradeke Abosedo Agboola for their continuous and unwavering support both financially and spiritually.

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ABSTRACT

Sustainable development has been in the forefront of debates because of the far reaching effect of climate change on the earth. As a consequence, it has become necessary for all major consumers of resources including the design and building industry to adopt sustainable development measures as a way of prudently using our scarce resources. However, in the process of achieving sustainability, it is also important to maintain the buildings so that they stay sustainable. Building maintenance is a subject that must be approached if a building is expected to perform its function during its life span. This study aims at identifying the adopted existing maintenance strategies in recreational facilities that can be used to promote sustainability with a view to design a recreational facility that would support the SDG's and passes a green building test in Eko Atlantic city, Nigeria.. A mixed research method was employed in the course of the study which used both qualitative and quantitative research approaches to achieve the aim of the study. Five recreational facilities were selected for this study. Respondents were users of the buildings. A total of 145 copies of questionnaire were distributed. 135 copies were retrieved from the users of the selected recreational facilities, while case studies was carried on of these facilities. The findings from the study suggested that only 2 out of the 5 identified maintenance strategies were implemented in the recreational facilities. The study also identified that poor financial support for maintenance works was the prevalent factor that caused maintenance to be undertaken in the chosen recreational facilities. The proposed design therefore implements the maintenance strategies identified to promote sustainability.

Keywords: *Maintenance strategies; Sustainable development; Recreational facilities.*