



**A TECHNICAL REPORT**

**ON**

**STUDENT INDUSTRIAL WORK EXPERIENCE SCHEME  
(SIWES)**

**HEAD AT**

**CAPITAL PLANNING CONSULTANT ASSOCIATION.  
AVENUE, SHOP 45 OLD JEBBA ROAD BESIDE KWARA  
AGRO MALL ILORIN, KWARA STATE**

**BY**

**IDRIS ABDULRAHMAN AREMU**

**ND/23/ARC/FT/033**

**SUBMITTED TO: THE DEPARTMENT OF  
ARCHITECTURAL TECHNOLOGY  
INSTITUTE OF ENVIRONMENTAL STUDIES**

**AUGUST - NOVEMBER 2024**

## CERTIFICATION

This is to certify that **IDRIS ABDULRAHMAN AREMU** whose matric number is **ND/23/ARC/FT/033** has completed his four (4) month *SIWES* Program at **CAPITAL PLANNING CONSULTANT ASSOCIATION**. They have demonstrated a thorough understanding of the training material and have met all the requirements for completion. The work contain here is original and entirely executed by the above-named student in partial fulfillment of the requirement for the award of **NATIONAL DIPLOMA (ND)** in department of **ARCHITECTURAL TECHNOLOGY**.

-----  
SIWES CORDINATOR.

-----  
DATE

-----  
HEAD OF DEPARTMENT

-----  
DATE

## **DEDICATION**

To all the individuals who have inspired me throughout my journey, including my mentors, colleagues, and friends. Your guidance, wisdom, and encouragement have helped shape me into the person I am today, I say a big thanks. I hope this my Siwes inspires others to pursue their passions and make a positive impact in the world.

Thank you all and Allah bless you.

## **ACKNOWLEDGMENT**

Thank be to almighty Allah for his blessing, guidance, protection, the courage and the opportunity given to me to the successful completion of my SIWES program, may his protection and blessing continue to be with us (amen).

I would like to extend my deepest gratitude to the company that give me a great opportunity to do my Siwes program at their firm CAPITAL PLANNING CONSULTANT ASSOCIATION,

I would like to thank my family and friends for their emotional support and encouragement during challenging times

## **ABSTRACT**

Architecture is the art and science of designing buildings and structures that are aesthetically pleasing, functional, and sustainable. It involves the creation of physical environments that meet the needs of users, while also reflecting the cultural, social, and environmental context in which they are built.

Good architecture can enhance the human experience, promote social interaction, and contribute to the well-being of individuals and communities. It can also reflect the values and aspirations of a society, and provide a sense of identity and belonging. Furthermore, architecture can play a critical role in addressing some of the world's most pressing challenges, such as climate change, urbanization, and social inequality.

This report gives a detailed account of my industrial work experience during my SIWES program at CAPITAL PLANNING CONSULTANT ASSOCIATION, which deals with designing building and structures that are aesthetically pleasing, functional and sustainable. This report is based on practical and theory experience gained during the period of my program in the industry.

## **TABLE OF CONTENTS**

TITLE PAGE	-	-	-	-	-	-	-	-	-	-
CERTIFICATION	-	-	-	-	-	-	-	-	-	ii
DEDICATION	-	-	-	-	-	-	-	-	-	iii
ACKNOWLEDGMENT	-	-	-	-	-	-	-	-	-	iv
ABSTRACT	-	-	-	-	-	-	-	-	-	v

## **CHAPTER ONE**

1.1	INTRODUCTION TO SIWES	-	-	-	-	-	-	-	1
1.2	OBJECTIVES OF SIWES	-	-	-	-	-	-	-	2
1.3	BENEFITS TO STUDENTS	-	-	-	-	-	-	-	2

## **CHAPTER TWO**

2.1	DESCRIPTION OF THE ESTABLISHMENT OF ATTACHMENT	3
2.2	LOCATION AND BRIEF HISTORY OF THE ESTABLISHMENT	3

## CHAPTER THREE

3.1	SCOPE OF THE WORKDONE	-	-	-	-	-	5
3.2	THREE MAIN PHYSICAL WORK Which IS Divided INTO TWO	-					
		-	-	-	-	-	18

## CHAPTER FOUR

4.0	DESIGN EXPERIENCE	-	-	-	-	-	-	7
4.1	PROJECT 1	-	-	-	-	-	-	7
4.2	PROJECT 2	-	-	-	-	-	-	7
4.3	PROJECT 3	-	-	-	-	-	-	7

## CHAPTER FIVE

5.0	PROBLEM AND CHALLENGES	-	-	-	-		8
5.1.1	CHALLENGES	-	-	-	-	-	8
5.3	RECOMMENDATIONS	-	-	-	-	-	9
5.4	CONCLUSION	-	-	-	-	-	9

## **CHAPTER ONE**

### **1.1 INTRODUCTION TO SIWES**

SIWES stands for students industrial work experience scheme. It is the accepted skills training program, which forms part of the approved minimum Academic standards in the various degree program for all Nigerian tertiary Universities (N.U.C 1996). SIWES goes a long way inputting to test the level of knowledge a student has acquired during the industrial training program. It is an effort to bridge the gap existing between theory and other practice of architecture, engineering and technology, sciences, agriculture and other professional educational programs in the Nigerian tertiary institutions. It is aimed at exposing students to machines and equipment and professional work methods in industries and other organizations. The scheme is a tripartite program, involving the students, the universities and the industries (employers of labor). It affords students the opportunity to familiarize and expose themselves to the knowledge and experience needed in handling equipment that is not readily available in their various institutions. Before the establishment of this scheme, employers believed that the theoretical education in tertiary institutions were not adequate enough to meet most of the needs of employers of labor. Students Industrial Work Experience Scheme (SIWES) was established in 1971 by decree 47 with the aim of promoting and encouraging the acquisition of skills in the private and public industries. Its relevance in education system cannot be over emphasized as it develops the student to become skilled and experience professionalism in their various disciplines. It enables students to appreciate the basic concept involved in their field of study. It is also an effort to bridge the gap existing between theory and practical, in the sense that it exposes students to real industrial work experience. SIWES, which involves the University authorities and the industrial sector, runs for 24 weeks for students in the fourth academic year in universities. The scheme was organized by the Federal Government and jointly coordinated by the Industrial Training Fund (ITF) and the Nigeria Universities Commission (NUC). The importance of the training scheme is justified as it is a research field, which enables students to be totally in-depth in finding the working culture, practice and tools in their various areas of specialization.



## **1.2 OBJECTIVES OF SIWES**

1. SIWES aims to give students hands-on experience in their chosen field, allowing them to apply theoretical knowledge in a real-world setting.
2. It helps to bridge the gap between theoretical knowledge acquired in the classroom and practical skills required in the industry.
3. To develop students' skills and competencies in areas such as communication, teamwork, problem-solving, and critical thinking.
4. To provides students with an opportunity to learn about industrial practices and procedures, including safety protocols, quality control measures, and production processes.
5. To promotes collaboration between academic institutions and industries, allowing for the exchange of ideas, expertise, and resources.
6. It encourages students to think creatively and develop innovative solutions to real-world problems, promoting entr1
7. It enhances students' employability prospects by providing them with practical work experience and developing their skills and competencies.
8. To provide students with the opportunity to apply the theoretical knowledge they had gainin school to real-life work situation, thereby bridging the gap between university work and actual practice.
9. To enlist and strengthen employers involvement in the entire education process of preparing university undergraduate for employment in the industry.
10. To provide students with an opportunity to apply their theoretical knowledge in real work situation, thereby bridging the gap between University work and actual practice.
11. To serve as opportunity for self- actualization for students thus making positive and commendable contribution within the scope of his/her knowledge

## **CHAPTER TWO**

### **2.1 BRIEF INTRODUCTION OF THE FIRMS**

THE CAPITAL PLANNING CONSULTANT ASSOCIATION Is a firm with integrated, mulh disciplinary design that dedicated to create places and spaces that elevate the human spirit and inspire human endeavors. was established on the Year of 1998 and the second company was fund in 2010, the first company was located at shop 45 old jabba road beside kwara agro mall Ilorin kwara state, while the second was also located at zango ganiki area Ilorin kwara state Name of founder ENGINEER ABDUGANIYU YUSUF

## **CHAPTER THREE**

### **3.1 SCOPE OF THE WORKDONE**

#### **OFFICE EXPERIENCE**

This part is a summary of lessons learnt in the office and on different projects carried out during my SIWES training.

In the office basically, I was able to work on different projects and designs that were sketched by my Supervising Architects, before being given to me to draft on the computer, while the ones revised are already on the system which had been previously worked on by a staff of the firm.

#### **ARCHITECTURAL WORKS**

I learnt that there were regulations and laws guiding every aspect of a building design and its construction, which I summarized in the following:

- The minimum set back from the road to the building line is 6 meters; while from the center of the road to the building line is 9 meters.
- The structural stability of a design at the inception stage.

The architect must take into consideration the structural aspect of the building, which gives the structural engineer a framework to work with and at the end of the project.

Real life architectural works must be self-explanatory with all the necessary dimensions shown to precision in all the design stages which includes the following:

1. The site plan
2. The floor plans
3. The roof plan
4. The sections
5. The elevation

### **3.2    THERE MAIN PHYSICAL WORK WHICH IS DIVIDED INTO TWO**

1 PRESENTATION DRAWINGS

2 WORKING DRAWINGS

#### **PRESENTATION DRAWINGS:**

It refers to the first stage of Architecture design which carry its life future of Architectural element of design. And it's used to convince the client.

#### **WORKING DRAWINGS:**

includes the following

1 Floor plan

2 Site plan

3 Sections

4 Elevation

5 Foundation

6 Roof plan

The floor plans It displace the unit of a design such as bedroom, main lounge, dinning, eating hall, bathroom, toilet, office e.t.c

The foundation plan it displace the essential of excavation tranches.

## **CHAPTER FOUR**

### **4.0 DESIGN EXPERIENCE**

#### **4.1 PROJECT.1**

##### **A ONE BEDROOM**

I was asked to design a one bedroom building containing sixteen units in total. The features of the design are terrace, living room, kitchen, lobby, bedroom, toilet.

***Lesson Learnt:*** I was able to manage spaces due to the small portion of land, and made sure the spaces were well accessible and I made sure that the windows size was 1200x1500mm because of their orientation and ventilation.

#### **4.2 PROJECT.2**

##### **A FOUR BEDROOM FLAT**

###### **Bubble diagram, Functional relationship**

I designed a bedroom duplex as sketched by my supervisor which had four units. The following features are present: a master's bedroom, three other bedrooms, a kitchen, main lounge, yard, and a lightning lobby.

***Lesson Learnt:*** I was able to manage spaces due to the size of the land, and made sure the spaces were well accessible and ventilated. And also putting more effort to meet the client need.

#### **4.3 PROJECT.3**

##### **A FIVE BEDROOM FLAT**

###### **Floor plan, elevation, section, bubble diagram, functional relationship**

I designed a bedroom duplex as sketched by my supervisor which had four units. The following features are present: a master's bedroom, three other bedrooms, a kitchen, main Living Room, Dinning, and a lightning lobby.

## **CHAPTER FIVE**

### **5.1 PROBLEMS AND CHALLENGES**

#### **PROBLEMS ENCOUNTERED**

The problems or challenges encountered during my six (4) months' work experience which could be constraints to future students who may want to observe their SIWES in LSDPC can be stated as follows.

#### **REJECTION OF STUDENTS**

Some organizations reject students when approached for placement. This to a large extent discourages students and kills their enthusiasm towards the SIWES program. Also, the process of entering the Corporation was politicalized, as you had to know somebody working in the Corporation before you can be accepted to work, this routine of recruitment had discouraged students.

### **5.2 CHALLENGES**

#### **FINANCIAL PROBLEM**

This was a major constraint because the allowance given to trainee was not encouraging. Finance are meant to be considered as a motivating factor for any intending trainee student. Financial aid is very important to help the students cover up the expenses of feeding, transportation and wears (i.e., official wears) among others.

#### **TRANSPORTATION PROBLEM**

Though, transport services were provided for the staffs to various routes but it was amazing that I.T. Students were not liable to any seat until all the staffs had conveniently seated and most times, we were inconveniently packed and bullied when in the bus. This act of discrimination is really disgusting because it makes trainees to feel inferior.

### **5.3 RECOMMENDATIONS**

This Siwes program has being of immense benefit to me while undergoing the training. Thus to ameliorate the situation sprouting from the identified problems and makes SIWES more beneficial, the following recommendations are following

1. The Federal Government should make it compulsory for all ministries, public parastatals and companies to offer placement to interested students as stated in the NUC job specification for SIWES.
2. The payment of prompt ITF allowance in order to encourage them for efficient carriage of duties.

### **5.4 CONCLUSION**

In the past 4 months of my learning, I learnt a crucial aspect of Architecture and enlightening me to various design in building construction. The SIWES program has contributed immensely to the acquisition of practical experience and knowledge which are of paramount importance to my field of study. Its relevance therefore can never be overestimated. This training section has broadened my level of knowledge and as well paved way for diverse future opportunities.