
**A TECHNICAL REPORT**

**ON**

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

**UNDERTAKEN AT**

**ARCHALICS VENTURES**

**BY**

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**ND/23/ARC/PT/0027**

**SUBMITTED TO THE DEPARTMENT OF ARCHITECTURAL TECHNOLOGY INSTITUTE OF ENVIRONMENT STUDIES, KWARA STATE POLYTECHNIC, ILORIN KWARA STATE IN PARTIAL FULFILMENT OF AWARD OF ORDINARY NATIONAL DIPLOMA IN THE DEPARTMENT OF ARCHITECTURAL TECHNOLOGY**

## DECLERATION

I declare that this technical report of "student industrial work experience scheme (SIWES) is an original work by me under the supervision of Department of Architectural Technology Kwara State Polytechnic, Ilorin.

## DEDICATION

This report is dedicated to God for His enabling strength he bestowed on me, giving me knowledge and understanding with the grace of getting through with the two (2) months Student Industrial Work Experience Scheme (SIWES) training.

This is also dedicated to my parent Mr. and Mrs. ADEGBOYEGA, siblings, friends, and Easy Plan and Construction staffs.

## CERTIFICATION

I certify that **ADEGBOYEGA VICTORY IFEOLUWA** of Institute of Environmental Studies, Department of Architectural Technology, Kwara State Polytechnic, Ilorin. Carried out is long essay under my supervision.

## ACKNOWLEDGEMENT

I am grateful to God the sole provider of knowledge, Wisdom, Love, Mercy and Grace for his protections on embarking and completing the program.

I also appreciate space and form and their entire of the firm who offered me timely criticism and corrections that led me through the various steps and stages during the program.

I appreciate my parents, Mr. and Mrs. ADEGBOYEGA, My siblings and friends for their unquantifiable love and financial assistance during this period. May God bless us and reap the fruit of our labor.

Moreover, I express my profound gratitude and immense thanks to all my lectures, who are worthy of emulation. I hereby pray to ALMIGHTY GOD to crown their effort with is abundant blessings and continue to elevate their status to the highest position both in like ten and hereafter

# TABLE OF CONTENTS

**CHAPTER THREE**



**CHAPTER.** **PAGE**

# CHAPTER ONE

## 1.0 **INTRODUCTION:**

### BRIEF HISTORY OF SIWES

SIWES was established by Industrial Training Fund (ITF) in the year 1973 to serve the problem of lack of adequate practical skills preparatory for employment in Industries by Nigeria Tertiary Institutions graduates The scheme educates student on industrial based skill essential for a smooth transition from the classroom to the world of work. Students of tertiary institutions is given the opportunity of being familiarized and exposed to the needed experience in handling machinery and equipment which are usually not available in the educational institutions parking in SIWES industrial training has become a crucial precondition for the award of diploma and degree certificates in specific disciplines in most institutions of higher learning in Nigeria in line with government education policies.

### DEFINITION OF SIWES;

Student Industrial Work Experience scheme is a program organized by the federal government of the students to partake in two (2) months industrial training based on the course of study.

**OBJECTIVES OF SIWES**; Expose student to work methods and techniques in handling equipment and machinery that may not be available in the institution.

Provided avenues for students to acquire industrial skills for experience during their course of study.

Provided student with the opportunities to apply their educational know in real work situation, thereby bringing the gaps between theories for practice.

# CHAPTER TWO

## 2.0 **DRAWING INSTRUMENT**

This are instrument used in drawing and construction of lines in architecture. Drawing are;

Tee-square

Adjustable set square

Scale rule

Mobile board or standing board

E.T.C

## 2.1 **HOW TO SET A PAPER**

Setting a paper is a step in drawing. Where a Tee square is to be used in conjunction with Set square and so much more either horizontal or vertical, the both side of the paper must aline with the tee square and adjustable set square.

## 2.2 **SCALE READING AND LINES**

A scale is use in measuring and knowing the exact dimensions of a drawing. In which the scale is numbered according to the size of the design you want

NOTE: The higher the scale the lower the plan and the lower the scale the larger plan.

LINES are a way of communication in architecture in such a way that it would represent a particular thing which will be interpreted by architects. Types of lines are

Broken or dotted line

Zig zag line

Mold or thick line

Light or faint line E.T.C

## 2.3 **DESIGN BRIEF AND DESIGN SCOPE**

Design brief these are scope brought by the client you are designing for.

Design scope these are what the architect and the client want to be on site but mostly it is provided by the architect.

## 2.4 **ARCHITECTURAL DRAWINGS AND TYPES OF DRAWINGS**

Architectural drawing these are drawings that are designed by Architect which are to be presented or erected on site.

**TYPES OF DRAWINGS.**

presentation drawings

Working drawings

**Presentation drawing; are** drawings that shows the furniture arrangements the landscape of the land is going to be the vegetation's and so on.

**Working drawings;** are drawings that shows the exact dimensions of the building and land and shows the details where needed.

## 2.5 THINGS TO BE CONSIDERED BEFORE DESIGNING

- Building orientation
- Functionality
- Cross ventilation
- Set back
- Aesthetics.

*__Building orientation;__ building is to be well and properly oriented on site considering the climatic effect on the building.

*__Functionality;__ the building must be easily accessible in such a way that it will be easy for the occupant to moves in easily and go out

without distraction.

*__Cross ventilation;__ a building must be well cross ventilated most especially Rooms facing the north-east on a site.

# CHAPTER THREE

## 3.0 **TYPES OF BUILDING**

*Residential building

*Commercial building

*Religious building

*Education building

*Residential building are building that are built in other to live.

*Commercial building these are building that are usually used for business, health e.g. hospitals, banks, eatery, hotels etc.

Religious buildings these are built that are mainly meant for worshipping God.

*Educational building this are building meant for studying.

## 3.1 **FOUNDATION**

Foundation is the sub structure part of the building in which the load from the super structure is transferred to

### **TYPES OF FOUNDATION**

Strip foundation

Pad foundation

Mat foundation

Pile foundation

Strip foundations are used where the soil is of good bearing capacity.

Pad foundation are used to support an individual point load such as that due to a structural column.

Mat foundation is a large continuous rectangular or circular concrete slab that carries the entire load of the superstructure and spreads it over the whole area beneath the building.

Pile foundation it is a foundation use to carry load from the super structure to the sub structure it is in a poor soil.

## 3.2 **CONCRETE COLUMN**

A reinforced concrete column is a column that comprises of reinforcement, Concrete and aggregate.it has particles like stirrup or ring which is usually of 8mm and 225 by 225mm distance to each other etc.

## 3.3 **ALLOCATION OF SPACES AND CALCULATION**

Spaces are allocated through the calculation of live load and dead load in the building e g the furniture's in the bedroom. furniture's which are to be in the bedroom are to be calculated and know the overall of the

Percentage the furniture will take and the remaining left unused area. This same method will be used to calculate for all the remaining unit and even the main building and the unused area of the site.

# CHAPTER FOUR

## SUMMARY

Student industrial training experiences scheme (SIWES) provide student with appreciable skill designed to expose or equip them with real life working experience. Student knowledge increase maturely and understanding of their own career goals and for the progress of the nation.

The report contains and gives a detailed explanation of all the activities carried out at Easy Plan and Construction at Court of Appeal Geri Alimi Area, Ilorin, Kwara State.

## CONCLUSION

My industrial attachment with Kwara state polytechnic Institute has been one of the most interesting productive and instructive experience in my life.

Through this training, I have gained new insight and more comprehensive understanding about the real industrial working conditions and practice. It has also improved my soul and functional skills.

As a result of the program, I am now more confident to build my future career which I have already started with Kwara state polytechnic

## RECOMMENDATION

I recommend that SIWES should provide places for industrial attachment for student, Industrial Training Fund (ITF) should pay some allowance to student and the company should provide safety equipment to prevent further environment and health hazards.

Institution should be encouraged to create financial autonomy for institution based SIWES unit directorate.

## CONCLUSION

In conclusion as a student of Architectural Technology, I have been able to obtain the relevant and effective practical training and experience in a duration of two months (2) have been to know what presentation and working drawing are meant to be and so much more.

Finally, I would like to state that the SIWES program is a relevant and necessary program for all students that must an advantage for each student's professional prior to graduation.