A TECHNICAL REPORT ON STUDENT INDUSTRIAL WORK EXPERIENCE SCHEME (SIWES)

HELD AT

PRIME SURVEY LIMITED

ILORIN, KWARA STATE

BY

AREMU LATIFAT ANUOLUWAPO

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CERTIFICATION

This is to certify this report was written by AREMU LATIFAT ANUOLUWAPO with Matric number ND/23/BLD/PT/0015 from the department of Building Technology, Kwara State Polytechnic, Ilorin.

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INDUSTRIAL BASED SUPERVISOR SIGN STAMP DATE

DEDICATION

This report is dedicated to Almighty Go, He who have been seeing me through all my activities during the course of this program.

ACKNOWLEDGEMENT

First and foremost my everlasting gratitude goes to almighty god for giving me the grace mercy and opportunity to be a successful partaker of the students industrial work experience scheme (SIWES).

My immeasurable thanks go to my great family for their contribution to my education and wellbeing MR and MRS. AREMU (my parents).

With all due respect my profound gratitude goes to the entire staffs members of Kwara State Polytechnic, Ilorin for their contribution toward my academic journey and for the establishment of the Student Industrial Work Experience Scheme (SIWES) which has exposed me to the industrial-base knowledge, I gained during my training (skills). May the Almighty Allah bless and be with you all.

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CHAPTER ONE

INDUSTRIAL TRAINING FUND ITF AND SIWES

1.1 INTRODUCTION

Siwes. the student industrial work Experience scheme is a skill acquisition programmed that was Installed in 1973/1974 ITF was established In 1971 by decree 1 to 47 as amended In the 2011 ITF Act. Prior to the establishment of the scheme, there was a higher learning In Nigeria lacked adequate practical background Studies In Preparation for employment in the Industries. It was against this backup that the rationale for Initiating and designing the Scheme was hinged.

The students industrial work experience scheme (SIWES) is a skill training programs that prepare student of higher Institutes for industrial work against their graduating period it is a programme Inushing the students, the polytechnic and universities and industries. it was founded by the federal Government of Nigeria and jointly

Coordinated by I.T.F and national universities

Commission NUC

1.2 OBJECTIVES OF THE STUDENTS INDUSTRIAL WORK

EXPERIENCE

1. To mate students acquire good work habit
2. prepare student for the work situation that are likely to meet after graduation
3. To increase sea student sense of responsibility
4. To Expose students to more practical work methods and techniques
5. to avoid students in adjusting from college to Full time employment

CHAPTER TWO

INTRODUCTION AND BRIEF HISTORY ESTABLISHMENT

PRIME SURVEY is an organization that has keen interest in surveying. It was established in the year 2017 which is situated along Offa road, Ilorin.

OBJECTIVES OF ESTABLISHMENT

Prime Survey is to accurately measure and record the physical features of a piece of land, collecting data to create detailed maps and plans, which are then used for construction projects, property boundary definition, and other land development activities, ultimately enabling informed decision-making about land use and development.

CHAPTER THREE

3:1 MY EXPERIENCE

During my SIWES program I was able to acquire necessary knowledge base on different aspect of buildings, materials and methods used in having a desire design of our clients dream.

3.1.1 During the program, I acquired the following knowledge

a. **MEASUREMENT**: This is the act of knowing the length and breadth of a given piece of land. Measurement is required to know how much materials will be needed to achieve our clients goals. The followings are the examples of measurement used in surveying e.g building measurement using feet or meter.
b. **COMPONENT OF BUILDING**: We have different component of building such as Structural components (foundation, walls, floors, doors, roof, etc), Exterior components (exterior walls, windows, roofing,), Interior components (interior walls, ceilings, floors, doors, windows), mechanical components (plumbing, electrical, fire suppression) and finishing components (finishes, fixtures, appliances, etc)
c. **CLASSIFICATION OF BUILDING WALLS**: Building walls are classified based on location(exterior walls and interior walls), function (load-bearing walls, non-load bearing walls, partition walls, fire walls), construction (solid walls,

cavity walls, veneered walls), and materials (masonry walls, wooden walls, metal walls, glass walls).

d. **BASIC BUILDING EQUIPMENT**: Basic building are as follows; electrical equipment (generators, transformers, lighting fixtures), plumbing equipment (water pumps, water heaters, toilet and sinks, drainage systems), Fire safety (fire alarms, smokedetectors), Security equipment (CCTV cameras, access control system, intruder alarms), etc.

3.1.2 IMPRTANCE OF SETTING OUT IN BUILDING CONSTRUCTION

a. Accuracy and precision
b. Ensure compliance with regulation
c. Prevent costly mistakes
d. Enhancing site safety
e. Improves projects efficiency

3.1.3 METHOD OF SETTING OUT

i. Grid method
ii. Profile board method
iii. String and peg method
iv. Theodolite method
v. Total station method
vi. GPS method

vii. 3D scanning method

viii. Optical square method

3.1.4 BUILDING FOUNDATION

DEFINITION

A building foundation is the lowest part of a building that transfers the weight of the building to the ground, providing a solid base for the structure to stand on.

Types of Foundations

1. **Shallow Foundation**: A foundation that is built near the surface of the ground, typically for small buildings or houses.

2. **Deep Foundation**: A foundation that is built deep into the ground, typically for large buildings or structures that require more support.

CLASSIFICATION OF FOUNDATIONS

1. **Spread Footing Foundation**: A foundation that consists of a slab of concrete that spreads out to distribute the weight of the building.

2. **Pile Foundation**: A foundation that consists of long, thin columns of concrete or steel that are driven into the ground to support the building.

3. **Raft Foundation**: A foundation that consists of a thick slab of concrete that covers the entire area of the building.

IMPORTANCE OF FOUNDATION

A building foundation is crucial because it:

1. Supports the weight of the building: Transfers the weight of the building to the ground, preventing collapse or damage.

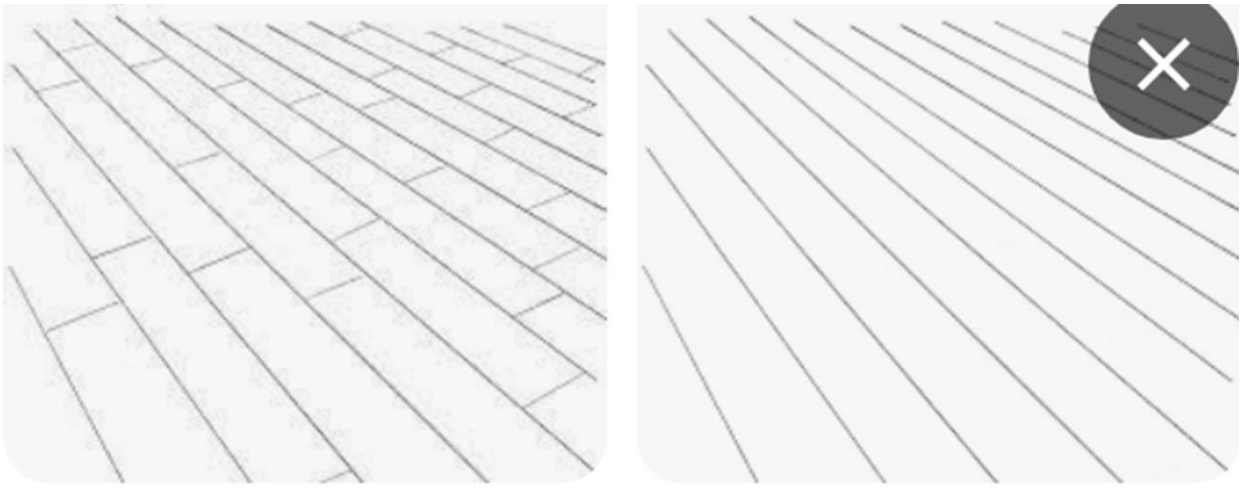
2. Prevents settlement and movement: Prevents the building from settling or moving due to soil or water conditions.

3. Provides stability: Provides a solid base for the building, ensuring stability and safety.

4. Helps to distribute loads: Helps to distribute the weight of the building evenly, preventing uneven stress on the structure.

IMAGES OF BUILDING MATERIALS

SKETCH OF A BUILDING FLOOR



CHAPTER FOUR

4.0 CHALLENGES

Working in site has been a challenging activities for me but as time progresses, I later got adapted to the training and I found it so interesting with the help of my SIWES coordinator in the organization that I have taken my SIWES training.

CHAPTER FIVE

5.1 CONCLUSION

My three months industrial attachments with PRIME SURVEY LIMITED had been one of the most interesting productive and Instructive experience in My life

MY SIWES training with PRIME SURVEY LIMITED.

I can:

1. Work effectively in site
2. Take proper measurement of land and materials needed for construction
3. Identify different building tools and materials.

Other benefits includes:

- Good working ethics
- Discipline
- Time management
- Good financial record

All these valuable experience and knowledge that have gained were not on acquired though the direct involvement in the task but also through other aspects of the training such as: work observation interaction with colleagues, superior and other people related to the Field.

REFERENCES

https://nigeriafinder.com

https://www.legit.ng

https://siwesbeginner.com

Manager, PRIME SURVEY LIMITED, Offa road, Ilorin, Kwara state, 2024.