TECHNICAL REPORT ON STUDENT INDUSTRIAL WORK EXPERIENCE SCHEME (SIWES)

AT

ADAMAWA STATE URBAN PLANNING AND DEVELOPMENT AUTHORITY, YOLA, ADAMAWA STATE

FROM: 4TH JANUARY, 2023

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BY

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(SE/ARC/ND/21/020)

SUBMITTED TO THE DEPARTMENT OF ARCHITECTURAL TECHNOLOGY, FEDERAL POLYTECHNIC MUBI, IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF NATIONAL DIPLOMA (ND) IN ARCHITECTURAL TECHNOLOGY

JUNE, 2023

DECLARATION

This is to declare that I, **ALIYU UMAR** with registration number **SE/ARC/ND/21/020** undertook my four months SIWES at **ADAMAWA STATE URBAN PLANNING AND DEVELOPMENT AUTHORITY, YOLA, ADAMAWA STATE** and have acquired all the experience compiled in this report in the course of my SIWES.

…….. ……

ALIYU UMAR Sign/Date

CERTIFICATION

This is to certify that this report compiled by **ALIYU UMAR** (**SE/ARC/ND/21/020**) meets the regulations of governing the award of National Diploma (ND) of the Federal Polytechnic Mubi, and is approved by:

……. ……

Name of Supervisor Date

Departmental Supervisor

……. ……

Arc. Dangana T. Halla Date

Departmental SIWES Coordinator

……. ……

Arc. Hussaini Haruna Date

Head of Department

DEDICATION

I dedicate this project to Almighty Allah and to my beloved parents Mr. and Mrs. Alhaji Umar Abubakar and Hasiya Umar and my guidance Hamidu Imamu Umar and Aisha Hamidu Umar for their parental, moral du'a and financial support.

ACKNOWLEDGEMENTS

My appreciation goes to the entire staff of Architectural Technology, Federal Polytechnic, Mubi.

Equally, my special thanks go to my beloved family especially, Imamu, Ummulkulchumi, Salihu, Hassanu, Murtala, Maryam, Jafar and sister Zee (Zainab) to mention a few and to all my well-wishers who are too numerous to mention in this report, may Almighty Allah reward you all. Ameen.

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ABSTRACT

The report summarises the result of work done during my SIWES experience, the technical report consists of four chapters, which comprises of introduction, history and criteria's of SIWES in chapter one followed by their aims and objectives, historical background, organizational structure of the organization in chapter two, while chapter three consist of the work actually carried out during the SIWES programme and lastly chapter four consist of the summary, conclusions and recommendation.

CHAPTER ONE

1.0 INTRODUCTION

The acronym (SIWES) meaning "Student Industrial Work Experience Scheme" is a skill training designed to expose and prepare student in institution of higher for industrial working situation they may likely meet after graduation. The scheme is meant to train student on the method of work and the experience needed in handling the equipment and machines may not to be available in their institution. The scheme is financed by the Federal Government and operators through Industrial Training Fund (ITF), Ogwo, (2001) and operates with National University Commission (NUC), National Board of Technical Education (NABTEC), and National Commission for College of Education (NCCE) and industries. However, SIWES also expose the student to many practical works which the institution did not treat in details without plastering what the institution taught theoretically into practical. A point from academic obtained. SIWES assist the student to understand the nature of his/her work in future.

1.1 Aim and objective of SIWES

ITF initiates SIWES with the sole aim of: Exposing student with the practical experience related to the theoretical knowledge acquired in school. Bridging the gap between theoretical learning and practical work situation.

i. To make industries/organization to have confidence in the abilities and capacities of the graduates. SIWES helps the industries to evaluate the prospective employees and give feedback to the institution.

ii. It helps the student to gain work and also have experience and confidence as a result if successful completion of a given job assigned to them.

iii. To enlist and strengthen the employers' involvement in the institution activities and in the entire educational process of preparing the student for meaningful and productive employment into industries.

iv. It provides an avenue for student in the Nigerian University and Polytechnics to acquire industrial skill and experience in their course of study.

v. Development for greater understanding in other people and proffers skills in human relations.

1.2 Brief history of SIWES and ITF in Nigeria

It was said by Dr. Azikiwe Nnamdi, the one president of Nigeria that the practice of work but they all have the same goal that they all want to achieve in countries like china. They established within the premises of institution to provide real life situation, lack of practical skill of locally trained engineers and technologies. the chine way and condition of SIWES is that all institution must give student real life working experience in industrial works. Lecturers are involved in the industrial activities rendering constant services. So, all these countries have their own way of conducting the scheme but all lye on the same goal. And in Nigeria, the history of SIWES can be

traced by the history of IITF which is the backbone of SIWES. ITF was established in 1974 under degree of 47 of 1971. It was a body established by the Federal Government of Nigeria and was given responsibility of training indigenous Nigerians. The establishment of the body became necessary due to high demand of Nigeria to take up the vacant positions created in various sector of the economy after the colonial masters have departed. Therefore, the Federal Government discovered that it is easier to train students that are skilled in school to be trained and meet up with gaps in the Nigerian economy and a scheme was established to care for such training and it was named Student Industrial Work Experience Scheme (SIWES). In 1973, the national board of technical education (NBTE) made it compulsory for all the polytechnic students, be it federal or state.

1.3 Significance of SIWES to students

Principles taught in the classroom are vein forced given concrete applications on the industrial assignment and students is able to see the relevance of their students which increase their motivation. It helps in given students the knowledge on the types of work to do after his/her graduation. SIWES given students opportunity for a change of environment as they move their institution to the place of attachment which changes the routine types of environment to a word of work. It helps in connecting the institution and the industrial their relationship the introduction of SIWES.

CHAPTER TWO

2.1 BRIEF HISTORY OF ADAMAWA STATE URBAN PLANNING AND DEVELOPMENT AUTHORITY

The Adamawa State Urban Planning and Development Authority (ASUPDA), a parastatal of the Federal Government of Nigeria was established in January, 2001 to embark on among many other functions. The Development of Health Education, Agriculture Water Resources, Environment, Power Energy, Service and supplies, Personal, Personal Development, Tourism.

OUR VISION

To ensure effective implementation of the Federal Government's Development policies, through optimal exploration, conservation and overall development of the nation's abundant natural resources potentials, with a view to improving the quality of life of every Nigerian particularly those within rural areas.

OUR MISSION

To serve as a viable and veritable implementing Agency of Government in the effective utilization of all the resources potentials with a view to improving the quality of lives of the people in the areas through development projects.

OUR MANDATE

To ensure prompt efficient and effective service delivery to our end users. To remain responsive the demands and aspirations of the beneficiaries of our service.

2.2 COMPANY ORGANOGRAM

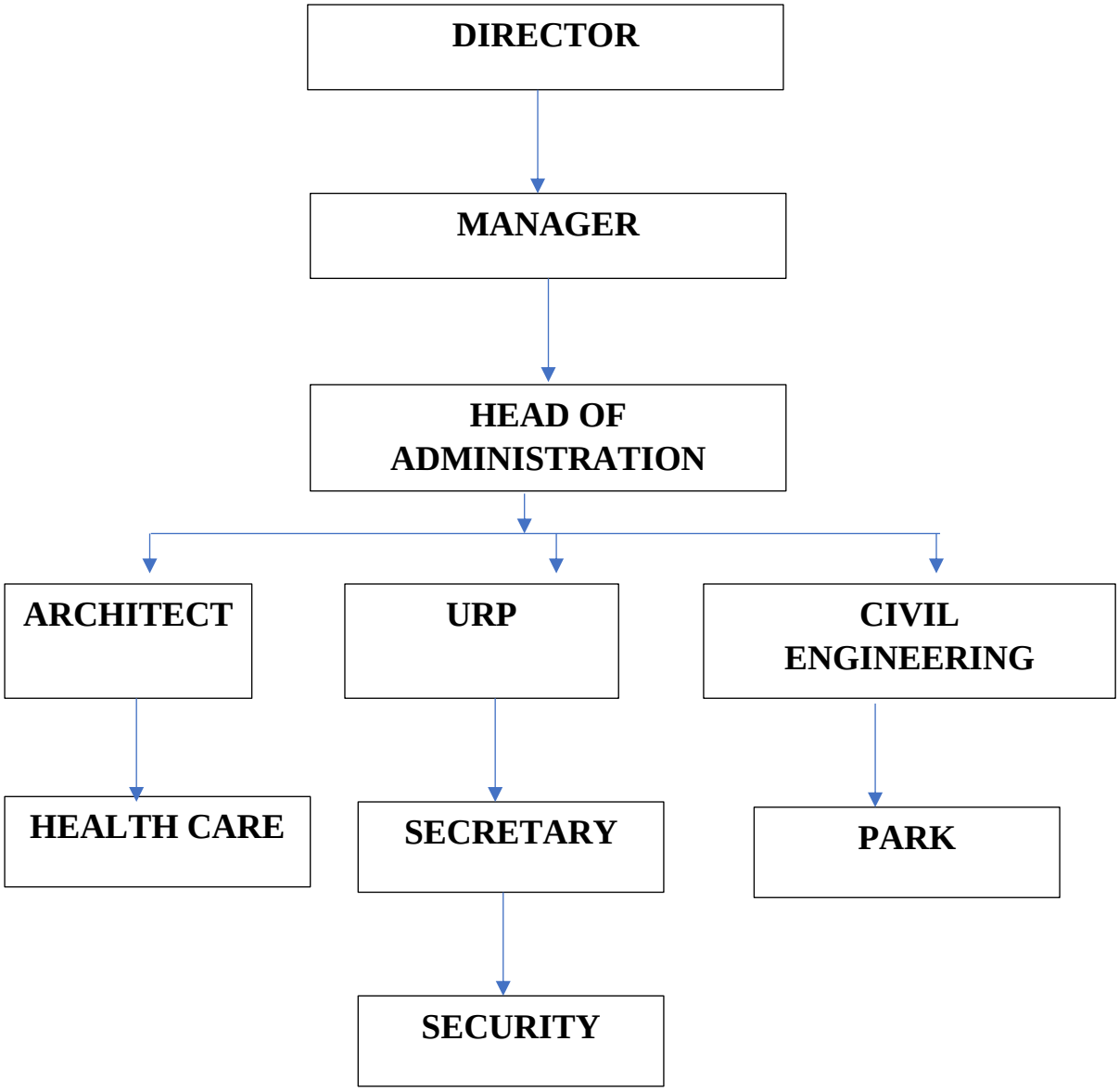

Figure 2.1: Organogram

CHAPTER THREE

3.0 DESCRIPTION OF WORK EXPERIENCE

3.1 SITE LAYOUT

Any site that is being considered for construction has to be arranged in such a manner as to facilitate easy circulation materials machines and workers. The information obtained during site investigation together within preliminary assessment requirement are essential for good site layout. The following were taking in consideration when preparing for site layout on construction site during my (IT) period.

Accessibility: Access route to and from the site were checked ad considered to ensure easy transportation of materials and plant to the proposed site. On site access for delivery and general circulation also be considered.

Storage: The materials on site were stored for security and against weather protection is an important consideration for good site layout. A location of adequate areas for storage and working space around the storage is required to reduce double handling of materials to the beeriest.

Accommodation: The staff of the company were denied the right to accommodation due to the problem of theft on the site. The appropriate accommodation provision made a reasonable mesh room, toilet and bathroom inside the site in other to reduce the working time minimum.

Plant: The number of plant expected or required were anlysed, if plant is expected a hard standing is necessary while circulation route for mobile plant were checked for maximum efficiency.

Security: The need for fencing or hording was considered in other to in carry local vandalism and theft on site.

The site layout is one of the most important initial site preparations before any setting out will commence.

3.2 SITE CLEARING

i. All grasses were cleared at site.
ii. All unwanted stones were removed
iii. All hazardous objects noticed at site were removed
iv. The site was ensured save before work commenced.

3.3 SETTING OUT

345 method are used for the setting out, as observed after 90 from all angles using the pages ropes string and also from the plan.

Setting out is done with high degree of accuracy or else the building will not last as the engineer answered to my question “why are some calculations made during setting out”.

Plate 3.1: Setting out using profile board

Source: Author's work, 2023

3.4 EXCAVATION ON FOUNDATION

Excavation can be defined as the process of digging a soil surface or trench for foundation lay into trench.

It is also the process of removing top soil for foundation trenches. Excavation work is an important part of building operation that commences immediately after setting

out the width of excavation for foundation trenches is marked out on the profile and then transferred to the ground. Excavation must be carried out carefully to ensure safety of workers.

Excavation can be done using two methods mechanical and manual. In small construction we normally use manual method while in large construction we use mechanical e.g. like road construction.

Excavation work were carried out manually where unskilled labourer where involved with digger, shovels, head pan and wheel barrow. The following factors must be considered when carrying out any excavation work.

i. Nature of the soil
ii. The width and depth of foundation
iii. Climatic condition at the time of excavation
iv. The water table of the soil
v. The period excavation work is expected to be left open.
vi. The effect of excavation on existing adjacent structure.

As the engineer and the former goes to set basket, I was keeping an eye on how the beams were set. When digging the basket some places were 1.2 while some other places were 1.4 by 1.4 because of the type of soil on the site. When putting the basket in a poor soil, cement and sharp sand is mixed out before putting the basket to avoid rusting.

Plate 3.2: Excavation

Source: Author’s work, 2023

3.5 BLOCK WORK

Blocks were moulded in number of sizes various composition, strength and shapes as 9 inches and 6 inches. Where the 9 inches were use for external walls, 6 inches for internal walls.

After foundation work is finished the block work was build to cover the spacesa s well. All the block work is not carrying any load, they were erected to cover spaces and also partition wall.

Plate 3.3: Block work

Source: Author's work, 2023

3.6 ARCHITECTURAL DESIGNS

During my SIWES, I was able to design a floor plan, lining room, dining area with section and elevation. Fine attached.

CHAPTER FOUR

4.0 SUMMARY, RECOMMENDATION AND CONCLUTION

4.1 PROBLEMS OBSERVED DURING MY PROGRAM

i The time frame set for the program is too short as some of the aspects of the program where not completed.

ii Lack of Financial support from the company to aid transportation to and from training.

iii Attentions are not given to the IT students by the workers it is learn if you want to learn or ask if you want to know.

4.2 SUMMARY

One would state that the discipline is the training of the mind and body towards effective performance. The Students Industrial Work Experience Scheme (SIWES) is more or less achieving this fit. As it further builds on the theoretical classrooms leaving a practical approach of the industry and commerce to supply of finished goods and services. This program has enabled the participating students to be practically involved in the day-by-day activities of the industries and commerce.

Emphasis in the observation of industrial safety rules and regulations, time critical operation and proper man-hand management, quality cortices, etc. are daily activity objective. All those aimed at the production of marketable goods and services in the world of work.

However, to consolidate on the gains of this Industrial Training Fund (ITF) higher institution coordinator on SIWES program should be allowed making some suggestion and recommendation.

4.3 CONCLUSION

SIWES programme is very vital student especially undergraduates, because I come to see the SIWES programme provide an application of the theoretical knowledge learned by student in school to practical or real work situation. Also it is a medium where student from different higher institutions and department come together sharing idea there, by promoting an avenue for learning and them work.

4.4 RECOMMENDATIONS

Having being exposed to a bit of what entail working in an individual related to my course of study under SIWES programme I wish to make this recommendation

i. Higher instruction of learning especially either institution and universities should establish link with comprise and establishment so as to provide space for student on industrial attachment, with the option of gaining employment in future, by doing so, it will go a long way in alleviating suffering and difficulties encountered by student in securing place for individual attachment.
ii. Student should put money as the primary aim of going SIWES programme, there is more to learn than Bain allowance.

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