NIGERIAN INSTITUTE OF INTERNATIONAL AFFAIRS COMPLEX ABUJA
AN ATTEMPT TOWARDS EXPRESSING REGIONAL ARCHITECTURE

BY

EGAMANA, EMMANUEL, MAJIYEBO

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DECLARATION

EGAMANA EMMANUEL MAJIYEBO, hereby declare that this dissertation is the result of an honest research undertaken by me and that no part of it had been accepted for publication in any journal or magazine.

All sources of information have been dully acknowledged by way of reference or otherwise.

Egamana 16/11/98

Student's Signature Date.

CERTIFICATION

This thesis entitled Nigerian institute of international Affairs Abuja, by Egamana Emmanuel Majiyebo meets the regulations governing the award of the degree of Master of Science in Architecture (M.Sc. Arch) of Ahmadu Bello University and is approved for its contribution to knowledge and Literary presentation.

Supervisor	Date 17/11/98
Chairman Supervisory Committee	Date
Member, Supervisory Committee	Date 16-11-98
Head of Department	Date
Dean, Post-Graduate School	Date 07/12/04
External Examiner	Date

HEAD, DEPT. OF ARCHITECTURE
Faculty of Enviromental Design
A. B. U. Zaria - Nigeria.

DEDICATION

To God Almighty for his Grace, Guidance and provision.

To Him alone Be the Glory. In Jesus Name. Amen.

EGAMANA, EMMANUEL

SEPT. 1998.

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In the research and compilation of this thesis, there have been moments of doubts and out right confusion. It would be un-fair not to acknowledge those who have helped reduce apprehension by their relevant contribution at one stage or another.

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.....Men who try to create a new Architecture, A free Architecture, for a free people anticipate the creation of a new social order.....

--- K. Teige 1928.

ABSTRACT

Preamble

Nigerian cultural heritage in the field of architecture is becoming too difficult to preserve due to the arrival of modern technology and international style. Corporate building in Nigerian urban centre have embraced today's broader AESTHETICS with little or no regional expression. With the rent drive towards nationalism, I attempted as my own little contribution architecturally, the task of carrying out an exploration into our rich architectural history of some selected traditional architecture in the country in the search for common features or design elements with the aims of synthesis and fusing them together to give us a regiona1 identity.

Although I must make it clear that in order not to end up with an architecture that is too primitive and unpleasant within the current 1eve1 internationa1y, tradition will on1y be used here as a catalyst, the principle of modern architecture still remains the moderator. It is believed that this is within the architect sphere of influence would mean identifying ,with the average user of the designed space.

To achieve the task, the Nigerian institute of International Affairs Office complex Abuja has been chosen to praticalise the attempted proposal, and at the same time sell's OUR architectural potential to the international community.

Aim and Objectives

The exercise is aimed at using the institute to express or sell to the International Community the Country Architectural Potential through the combination of traditional vernacular architecture and the modern design principles.

Other objectives include:-

1. To create a design that will meet the technical and functional requirements of modern information institute and also be "At Home" in its environmental setting.
2. To create an effective planning system thus considering simplicity and flexibility in the total organisation of the complex.
3. To generate the much needed awareness an the possibility of producing design that is suitable to its local setting and harmonizing it with the users tradition and modern culture.
4. To provide and Architectural space consistent and conducive atmosphere for the eventual users.

Research Methodology

This research is a scientific one, and its ramifications shall really on relevant Literature review, and oral interviews Dialogues dusted. Case studies of already existing similar complexes with photographs would make a great impact in the documentation.

In search for Nigerian identity. For this corporate building, documentation of traditional Nigerian architecture would be made and digested for utilization. Focus will be on functions as against forms in the traditional sense.

The thesis broken down into three parts the Research , A selective Synthesis and the proposal itself.

Scope and Limitations

This thesis is within the context of the research and with emphasis on the expression of regionalism on office design. The design scope would involve the general planning consideration of the entire complex. This would be realized in two stages:- It would involve a study and analysis of the problem and a detailed study of the institute and the synthesis of a functional brief and space requirement for proper analysis to reinforced the over ali final design solution.

Design is seen as a creative and problem solving process. Information must be gathered on the objectives for the space and the nature of the activities to be performed in it. The creative process of generating a number of solutions-alternative potentials is next.

Finally, some problem solving or decision making steps must be gone through to select a viable & best solution. Within the limits of practical constraints and the design philosophy in mind, a proper synthesis of ideas and design analysis should produce a befitting architectural space conducive and consistent with the institute in mind.

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CHAPTER ONE

INTRODUCTION:

1.0 The Historical Perspective of Nigeria Institute of International Affairs.

As Nigeria progressed towards her independence, in October 1996, there was a great deal of interest, in informed circles, about the momentous role the new country was destined to play in African and world affairs by ulrtue of her size and the potential of her vast human and material resources. This optimism was also sheared by and large in diplomatic circles in Lagos especially among representatives of friendly countries who expected her to play a positive role in African International Affairs, it was however, believed generally that the country was adequately prepared for this new role and that an authoritative body within the country was needed to collate and disseminate information on contemporary world affairs.

The existence of this concern among informed Nigerian was evident at the All Nigerian people's Conference held in Lagos from August 19th to 21st 1961. The objective of the conference was "to ascertation and assemble views of all shades of opinion in Nigeria in respect of ways and means whereby Nigeria can play an effective role in Africa affairs,

significantly a "Research institute committee" was first in the list of eight working committees set up by the conference quite significantly also, one of the recommendations of the committee was the need for the setting up of an "institute of African and international studies".

Moves to establish the Institute however, predated that conference even though it is not inconceivable that its resolutions may have helped to propel the late Prime Minister Sir, Abubakar Tafawa Balewa, to whom they were sent, in the direction in which a number of eminent and far-thinking Nigerian had been prodding him for same two years before then. One of such eminent Nigerians was the late Dr. Kenneth Onwuka Dike who was then the Principal of the University College Ibadan (Now University of Ibadan). In his capacity as the Principal of the only. University at that time, he had the privilege prior to Independence of playing host to some distinguished people from all over the world. Kwane Nkrumah, Sekou Taure, Patrice Lumumba, Martin luther King, Kenneth Kaunda e.t.c, who honorably had long discussions with him at his official residence. These visits impacted on him the need to began to realise the important role Nigeria was expected to play in African and world affairs once it was a free and independent nation, and the need for preparing her adequately for such a role.

This led him to conceive of the idea of establishing an institute similar to those existing in other commonwealth countries for the same purpose after discussing this idea with a number of his colleagues and highly placed Nigerians outside academic who could assist in translating this dream into reality. Some of such people were Sir, Lovis Mbanefo, the Chief Justice of Eastern Nigeria, and Sir, Adetokunbo Ademola (late) the Chief Justice of Nigeria. In the course of that discussion and subsequent consultations the group noted examples of similar institutions in the commonwealth and the United States of America. Such as the Royal Institute of International Affairs. (Chatham House) London and the Council on Foreign Relations. New York. Nationally the possibility of securing assistance for establishing a Nigeria institute was therefore discussed with representatives of such countries in Nigeria, particularly Sir, Ralph Corary who was then the Acting Governor General of Nigeria and Mr. John K. Emmer son the American Consul-General.

The first meeting of the Board was convened in the chambers of the Chief Justice of Nigeria Sir, Adetokunbo Ademola (late) on 13th December, 1961, The Board formally resolved to establish an institute whose objectives, it was decided would draw inspiration from that of the Royal institute of International Affairs. Chatham House,

London with suitable modifications to take care of the additional services,which it was envisaged, the institute would be required to perform.

Secondly, it was decided that, like Chatham House the institute should be completely independent of government, thirdly, a decision was taken to adopt the name Nigerian Institute of International Affairs out of three names that were proposed and considered, the others being Nigerian institute of World Affairs and Nigerian Institute of International Studies.

Finally, among other important matters discussed at the meeting were plans for the establishment of an office in Lagos, the need for staff housing, arrangement to procure a permanent site and plans to obtain information about similar institute abroad for use in producing a draft charter, Bye-laws and legislation for the Nigerian institute.

Subsequent meetings sought to implement the decisions reached on these subjects. Among these were the consideration and approval of the institute's draft, aims and objectives and the destructive device of common seal which was designed by a firm of Architects-Design Group, Nigeria.

1.1 Relations with The Ministry of External Affairs

This period in the history of the institute was pre-shaped, as we have seen by the setting up of a new Governing Council following the changes in the institute, statute and the redestination of the Governing council's term of reference. One important implication of the change was that

the Ministery of External Affairs now had Ministerial responsibility for the Institute including the appointment of its Director General and Governing Council. Between 1972 and February 1976 serving officers of the External Affairs Ministry were also seconded to the institute as Administrative secretaries. These increase in the influence of the Ministry over the institute led to some tension in the early part of this period when some members of council expressed concern at what they regarded as some evidence of the Ministry's interference in the running of the institute. Furthermore, it was also pointed out that the institute. Draft 1973/74 estimates were in fact included in the Ministry's Estimates for the same year and that the latter sent its internal auditor to audit the institute's accounts. Whereas it had always been the wish of the institute to appoint its own Administrative Secretary the Ministry was actively canvassing the view that it would be much better if it was allowed to second expert officers from the Ministry to that post.

The Governing Council's clear and unequivocal stand early in this crucial period of its history help to ensure the future course of relations between the two bodies that is the institute of international Affairs and the External Affairs Ministry and in particular the maintenance of the institute's identity as an independent and credible research body. On the whole, this relationship had been respected by both sides in spite of the occasional tensions created especially over the institute's plans to establish state branches in 1979 when, as a result of the Ministry's hostility, Decree No 43 of 3rd August 1979 was promulgated.

The principle of the Nigerian Institute of international Affairs functioning in total subservience to the Ministry of External Affairs was upheld by the then Government. This was clearly the motive behind the 1981 change in the institute's supervising Ministry from the Ministry of External Affairs to the Executive office of the president during the last civilian regime and the more recent change in 1984, from the cabinet office to the supreme Headquarters under General Buhari's Military administration. These changes underline the importance attached to the role of the institute among other things, as an important think tank for government.

1.2 INTRODUCTION TO INTERNATIONAL RELATIONS

1.2.1 Historical Background

Before the second World War what was called "International Relation" was essentially the relations among the countries of Europe-Britain, France, Germany and the Soviet Union- where the nation state had developed. The main reason for this was the fact that large areas of the world were colonies of the few nation states that existed then

Several developments in the nineteenth and twentieth centuries have cause fundamental changes in the structure and processes of international relations. The first was the rise of Nationalism- the development of strong emotional attachments to the central state and the involvement of the nationalist movements in areas of Europe where the states did not correspond to ethnic distinctions, and subsequent collapse of such multi-national states as Russia, Austria, Hungary, and Sweden under the pressure of War and nationalist insurrection.

Another development in the nineteenth century with major consequences on the structure and processes of the European state system was the rise of ideological principles and political doctrines as a major motive or guide to foreign as a major motive or guide to foreign policy behaviour. a development with equally great consequences on the structure of international politics occurred in the later part of the century.

This was the extension of the European state system into the rest of the World, and subsequent rise of 80 new political units, mostly former political territories, as important actors in the modern international system. The European continent was the primary arena for international politics during the nineteenth century. Today there are over 130 independence levels of trade, diplomatic communication, travel, and occasionally subversion and warfare.

Contentious issues no longer arise predominantly in Europe, but appear most frequently in Asia, the middle East, African and latin America. They no longer involve the major powers of the nineteenth century Great Britain, France, Russia, Germany, Austria- Hungary and Turkey, but attract instead the involvement of Extra European powers primarily the United States the soviet Union and communist China.

The second World War greatly accelerated the internationalization of the system of relations among countries. The war brought a surge of independence due to the weakening effect it had on the European powers which in turn coupled with the nationalist movement hitherto evolved in most of their colonies transformed the system international relations in a evolutionary way. By 1960 the system was completely different though resembling the old system. In which all states were equal economically, technologically and politically.

1.2.2 The Contemporary International System

The contemporary international system is in same the similar to its nineteenth century predecessor. Most main issues and characteristic forms of interaction are not significantly different from those in the European state system. Contemporary ldeological issues trace their origin to 19th century Europe. The question of nationhood and national independence still rises serious international problems, and the search for economic modernization that took place in Europe during 19th century is only beginning in the underdeveloped countries. The main rules governing international transactions, diplomatic forms and procedures are also an extension, development and refinement of those which arose during both the eighteenth and nineteenth centuries in Europe.

It is not difficult to understand why these characteristics of European international politics are still predominant in a world wide system. In 1875 less than one tenth of Africa was colonized by the Europeans. 25 years later only one-tenth of the area remained free of colonial administration. The process of establishing colonial rule different in various areas, but in each case the administering powers unwillingly arrested aspirations among indigenous populations for all of the values that they themselves cherished independence in political life, industrialization of the economy, and international prestige.

1.3 The Nature of the States

A major characteristic of the political units comprising the contemporary international system is their territorial basis, state today maintain systematic administrative control over people living in a well defined territory. Some territorial divisions are artificial in the sense that they don,t correspond to ethnic, linguistic or geographic distinctions, but in most cases the territorial boundaries of modern states arts closely related to such distinctions. The unique territorial bases of each state thus gives the state its economic, technological, and military problems.

The states in many international systems derived their identity strengths, and weaknesses from the territories they occupied, while some even developed a concept of a frontier or boundary, setting them off from other political units until recently when state boundaries became so carefully defined and immuned from encroachment by outsiders.

Today despite common characteristics of territoriality and national independence, diversity among political state is great. One could classify states according to size and population. Population variations are even more extreme in some countries. For example in Nigeria, the current estimated population is about 100 Million which constitutes a mere 2.5% of the total world population. Nigeria cover a very small land areas of the earths surface. Nevertheless, it is but a

country that occupies about one fifth of the total land area in African continent.

In terms of economics, even by the most favourable method of counting, we produce a very negligible share of the gross national product of the world.

The same holds for our production of knowledge, which is a common problem facing all other developing nations. The point being advanced here is that no matter how small or large a nation is, every other nations must take into account what it is doing and if it wishes to accomplish more that it can with it's own limited resources, it must gain their co-operation. the importance of international relations cannot be over estimated.

Political, social, and economic variations among contemporary nation states are equally dramatic, there is a group of highly industrialized states, with relatively stable political systems in which major conflicts over constitutional arrangements, the place of minorities, civil liberties, and fundamental economic arrangement have been resolved. These states are also typical by high literacy rates, high per capital income, broad public participation in political life, social mobility between classes, law death rates, and high density of communication media.

Another group for states is rapidly achieving the industrial and technological level found in most of western Europe and North America, but still faces problems of literacy, poor health and, in some cases over population, as well as low agricultural productivity and political instability.

A third group for states incorporating a large segment of the world's population displays characteristics of high illteracy, poor communication, low agricultural productivity, rapidly growing populations, unimaginable poverty, and little social mobility. though these states normally maintain administrative mechanisms providing a variety of government functions for the citizary, their influence may barely reach the grass roots level, where life is conducted according to ribal, village, or other traditional patterns. Political instabolity is rite few of these states have resolved their major constitutional issues or developed political "rules of the game" which command widespread support.

Political stability depends mdre on the influence of key personalities or groups-often the armed forces than on widely personalities change, or ruling groups become politically weak, corrupt, or demoralized, rebellion and civil war are often the result. Moreover, many of these state are mere geographic expressions, corresponding neither to ethnic, linguistic, or religions distinctions.

Most of the frontiers of the present African states were dicfted by colonial administration in term of their own political interest rather than in accordance with the natural divisions of the continent.

1.4 An Outline Of Nigeria;s Foreign Policy.

Nigeria's foreign policy towards the great powers was based on a doctrine of non-alignment, according to Sir, Abubakar Tafawa Balewa- the first Prime Minister of Nigeria. The essence of this doctrine as seen by him as "freedom of judgement" of important international issues "on the basis of Nigeria's national interest and that of the world".

Nigeria was one of seventeen African countries that became independent in 1960, the year which was generally been know as ANNUS MIRABIUS. After independence she joined the commonwealth and United Nations. The logic of events and the colonial legacy have both largely fore-ordained her initial foreign policy options. Thus during the first few years of independence Nigeria maintained close relation with the commonwealth countries, and Britain in particular. During the early 1960s she played a relatively hesitant, and minimal role in international affairs, not only because she was new to the international system but also because she was relatively poor and weak in almost every sense, but since the late 1960s she has assumed a more vigorous posture in world affairs,

largely as a result of the great political and economic changes that have taken place in the country. Since the oil boom that started in her diplomatic missions which rose from six in December 1960 to eighty-two in January 1980- a large number and perhaps more than any other third world country has ever maintained abroad.

In line with this development Nigeria has been playing a significant role in West Africa, in the rest of African and in the larger international system. She has now become what Professor Joseph Franked has aptly called a regional power in black Africa. Her opinions are sought by many of the great powers on matters that are of concerns to Africa. While it is true that she is heavily dependent on the great powers, especially the Western countries for her trade, investments and technology, she has been able to use her large internal market opportunities and foreign investments especially in the oil industry to influence their conduct on African issues.

Foreign policy is not just a day-to-day enterprise. The headlines provide a daily drama, but effective policy required a vision of the future, a sense of strategy consistency, and perseverance, and the results can only be judged over time. Our well-being as a country depends not on this or that episode or meeting or agreement.

It depends rather on the structural conditions of the international system that help determined whether we are fundamentally secure, where the world economy is sound.

Nigeria is foreign policy consists of the activities assigned to the Ministry of External Affairs by the Federal Government in relation with the Nigerians institute of International Affairs. These include the conduct of government business relating to foreign and communication affairs, the collection and collation of information about their countries, consular matters, the establishment and administration of Nigeria's diplomatic and consular posts and the maintenance of relations with diplomatic corps in Nigeria. The institute of International Affair relates with the External Affairs Ministry on various reactions of the government to extend affairs within the broad policy guideline, already laid down by the government.

In actual fact the foreign policy of the first republic untill its unseating in January 1966 remained extremely partial to the Western powers. The most illustrative example is the Anglo-Nigerian defence pact of 1960 when the fact was proposed in 1968 it was to serve as an anti-communist measure. The pact was to serve as an insurance against new communist pressure that both the British and Nigerian leader agreed that the country would be subjected to after independence. However, since the late sixties, there have been some changes in the foreign in policy. Greater emphasis in the conduct of its relations is now stressed.

CHAPTER TWO

REGIONAL ARCHITECTURAL; A RETROSPECT

2.1 Modern Architecture; A Critical Review

The occurance of industrial revolution of the West and the subsequent development of modern movement in Arts and Architecture gave rise to 20th century Architecture -modern Architecture, which eventually became the international style. While the industries were mass-producing construction materials (concrete, steel and glass), the proprietors of modern movement were busy devising new ways of utilizing these products and at the same time preaching the universality of their usage. They had the belief that with these materials, style of Architecture could be internationalized while machine could provide the comfort requirements irrespective of where and who are going to perceive the Architecture.

Despite the inspiring achievements of modern Architecture, there was an upsurge of mounting criticisms against the way it uses steel, concrete and glass indiscriminately. this appears true if one considers that the achievements are minimal and are limited to some specific parts of the world. While in as much as different people of different regions of the world differs in their ways of life and traditional methods of construction, modern Architecture tries to impose it's obstrue values on people who had different aspirations and cultural background.

Because of it's so much trust on technology, modern Architecture ignored the potency of traditional symbols, different natural settings and their influence on an architecturally designed environment. Moreso, even in few cases where sophisticated technology was affordable, the energy required to supplement the use of glass, steel and thin concrete panels was enormous.

Modern Architecture tried to break regional boundaries by preaching the internationalization of architectural ideas and standardized means and methods of construction. this, by implication, endanger architectural qualities that evolved as a result of historical transformations, and as such destroy various idegenous architectural expressions.

Principally, the paradox in modern architecture has ever been in the way it ignored expressionistic concession of the immediate natural environment and the way it relegated socio-historical and geographical buildings setting of different places to the background in the design process. Although modern Architecture has only been partially successfully, it gives a lot of room for reappraisal of the application of technology in Architecture. It also gave Architects the opportunity, especially in developing countries like Nigeria, to reaccess the way natural settings could be exploited in order to replace imported materials and technology where possible.

2.2 THE STATE OF NIGERIA ARCHITECTURE

2.2.1 ARCHITECTURE IN PRE-COLONIAL NIGERIA

Before external influence, the basic forms existing in pre-colonial Africa were the bee-hive and the cone-upon cylinder. This circular form is partly attributed to primitiveness, since man is believed to have evolved from the spherical and elliptical houses to the rectilinear form. However the more readily agree reason was put forward by Richard Hull, who contend that the static nature of the form was due to the structural limitations of the most commonly available roofing material, thatch, which can easily span between walls if woven into a cone or bee-hive structure.

The materials on which the construction industry had to rely in Nigeria were stone, literitte or clay, timber and vegetables. Clay and literati were made into a paste which can either be used, for walls, constructions or as finishes later they resorted to making pear shaped blocks out of the paste, sun-dried and laid in courses to react a wall. Wood was widely used as support elements. they however, featured prominently in roof construction. In some parts of the country, (rain forest zone), they were used in the construction of floors and walls. Very often they were held together by latches or sculpted to receive other members.

Doors, windows and all casement work were made of wood construction, very often they were sculptured with local designs.

The use of stone was generally more limited and restricted to areas of abundance.

2.2.2 PRESENT SITUATION/CRITICAL APPRAISAL

There exist today two tyres of Architecture in Nigeria:- the traditional methods and the modern/imported construction methods and materials. These distinct forms of architecture have been prevailing since the colonial era. The survival of vernacular architecture has been in terms of materials, technology, spital organisation, forms, mythical influence, simplicity and so on.

All these combine to give it the uniqueness contemporary Nigeria architecture glaringly lacks. The depth to which factors like climate, culture, materials and myths are considered before structures are erected all combine to give the various kinds of traditional shelter created, a definite character borne out of a high degree of consciousness for self expression and comfort. However, due to the use of a few locally known building materials and the low level of technology they lacks variety and is basic in form. It is also static and lack dynamism.

Modern/universal architecture, a product of universal technology, in contrast, is dynamic and exhibits flexibility. It is this relative advantage that has led to its imposition - in absolute form on the architecture of the country. However, since its development is based on cultures and climates alien to ours, serious social - cultural and often times functional problems has arisen as a result e.g The issue of visual privacy among the various tribes of Nigeria is a fundamental one. Our traditional architecture recognised this and created an inward looking compound with the courtyards as the hub. Few external windows at reasonable heights to make sure that no unwanted eyes peep into the building. In some cases, Fence were erected to enhance security and privacy. Most especially in the female section of the compounds.

Our concept of privacy has been greatly abused by modern (western) architecture. Same goes to that of cross-ventilation. But these are basic problem stems from the fact that there exists a disjointed relationship between the present and the past from the technological point of view. this lag has tended to make the future indeterminate.

On the other hand, the sudden stoppage of the development trends in Nigerian technology and the rude imposition of technologies developed in other cultures on our rural and urban centres created a state of flux forcing our great builders, to unlearn their skills if only to continue to earn a living.

Consequently an architecture was created that bore no relationship to the immediate past and has no lessons to teach about the societies in which they are implanted. Today a big gap exists between what was the trend of our architecture before the colonial era and what became of it after independence.

Architecture must be seen as a constant renewal, from this view- point, the consideration of ancient Nigerian Architecture is particularly important and has special significance for the architecture now emerging. Will young architects in Nigeria- be able to establish a link with their old tradition? if so what will the results look like? Are there new models that could champion the emergence of a truly Nigerian Architecture? or will the building techniques which are adopted only superficially to the local conditions of our urban centres and state capital prevail? Tradition here must become the indispensable corrective; but first, tradition must be accepted as the natural heritage rather than a thing of the past.

2.3 Regional Architecture, An Evolutionary Appraisal.

After the mounting upsurge of the criticisms of Modern Architecture and the International style in the early 60s, the new generation of Architects of the late 20th century see the better future for Architecture only if regional architectural demands of different parts of the world are treated independently.

It is therefore in this context that the various approaches to architectural design that evolved in the 70's were geared towards the provision of regional Architecture, which is a concept of Architectural design disposition in which the re-attainment of architectural identity is rooted in the specifics of regional differences, and the belief that Architecture should, and the belief that Architecture should be different in it's style, form and structure depending on which region it should inhabit as the model criteria in the design execution.

Nevertheless the fundamental question on which regionalism was established on, is what should be the relationship between such ideal requirements as function, form, economy and local situation. The answers turned out to be a matter of degree than definite. The two general opinions was how ever that a work should answer a specific need or work should be historic or pronouncial, using the first answer as a basis to under line the point about national identity, some countries were able to have a breák-through. Examples are:- In Germany their architecture is characterized with toughness and efficiency, Italy; Vigour, sophistication and slickness, India is strong and impervenish, Israel:- hexagonal and full of six pointed stars, Japan is constructivist, black on white, full of slight curves and so on.

The central principle in the language of regionalism as pointed out by charles jencks is that an architect would as inevitably use a traditional sets of forms as he would speak a local language with rational inflexious and certain built up assumptions. Critics of regionalism said the regionalist did not consider the relationship between the fundamental requirements and local forms i.e can every functions agree with each local condition or do we accept every solution just because it is traditional. However, the view of Kenzo Tange through more light on the subject matter saying the "so called regionalism is always nothing more than the decorative use of traditional elements, this kind of regionalism is always looking wards. In my own thinking tradition can be developed through challenging its own short comings and pushing the meaning of continue within it".

In the author thinking, as related to our situation, Nigerian traditional reality must be evaluated correctly and a study of basic Nigerian needs and forms can yet produce a new methodology and true visual forms comparable to the most advanced architectural innovations of the Western Nations. This evolutionary approach involves the integration of certain aspects of traditional architecture with the modern solutions. It is a kind of marriage between the good aspects of traditional architecture and those of modern architecture to produce an off spring that will be new; efficient and unique.

It's Nigerian identity will draw from one of its parents Nigerian traditional architecture- and it will have the advantage of responding to international (modern) technology and at the same time satisfying Nigerian needs and aspiration.

2.4 Foreign Examples

> "Architecture as a reflection of man's longing for order and for adjustment to his natural surroundings, has always been regional in it's essence and character. In the past it has been mostly a communal art"-----
> -Pietro Belluschi
> (Architectural Record, 1955)

JAPAN

Modern Japanese architecture originated in a sound philosophy of building which has its roots in the traditions of the past. It includes the regard for nature, the elegant detail and the understanding of material. One quality, possible more subtle but equally important is the element of surprise. It was in Japan that Frank L. Wright learned the impact of surprise which he used masterfully in his buildings.

In their quest for an architectural regional identity, the Japanese Architects were divided into two camps. Those that are liberal in their approach believe that architectural style and language of expression survive only when they are recreated afresh at every moment in history. While having the technology available at the back of their mind, they look at the human body for inspirations.

They compared the human anatomy with parts of a building while at the same time abstracting from their tradition, architectural elements that grow and mature through historical processes. They came up with an Architecture that is unique and peculiar and that which can stand the test of modern civilization. Unlike the proprietors of modern Architecture the Metabolists, as the Japanese Liberals are called, utilize the machine in a different way. the machine work,s in their type of Architecture only as a complimenting part of a building but not as a whole part.

The second Japanese group who are more conservative in their approach believe in the tradition. They postulated and experimented architectural parameters according to the dictates of the Japanese tradition. They explore their traditional architectural styles, building materials and construction methods and develop them according to their modern needs. As a result their architecture became distinct as an actual interpretation of the Japanese traditional architectural language.

CUBA

In Cuba, following the "castro revolution" the wind of revolutionary change gave impetus to architects and other professionals a like towards natural consciousness and cultural revival- a search for an architectural expression. In the wake of this truly traditional concepts started being used in design. e.g.

- Pircardo Poros plastic arts school and modern dance school, Havana
- Vittorio Garattis Ballet and Music school in Hvanna
- The cuban pavilion at Expo 67, Montreal where the interior was worked out in relation to direct political and social propaganda.

In the above examples, the concave, circular shapes used establish linguistic coherence. The subtletity of round breast life forms are alluded to the spirit of free expression.

INDIA

The story of regionalism in India is a classic example of why not to allow foreigners 'achieve' it for a country. They almost fail to grab the real design issues and concentrate on the visual elements in a building -forms, Facades, e.t.c Thus what has come to be known as the `Indian style' was imposed by the gifted British architect, lutyens, who early in this century attempted to graft moslem externals onto a thoroughly monumental western style loaded with all the large scale and beauty of a kind, it had little to do with Indian climate or tradition.

Thus the modern architect in India is desperately trying to find a vocabulary within to day's materials which will permit him to approach the spiritual qualities of the architecture of his past e.g the emphasis of detail in

temples, petro bekuschi, dean, school of Architecture and Planning, M.I.I., sums it all, after a trip to india:-

> "I met with many architects and with the students of the school in Delhi--- they are anxious to find native expressions but modern influences were too strong and too disruption, and few had the wisdom or the maturity to break through with work which would reflect their new status as an independent nation, and of all they had so far learned of new ways and techniques".

It took an architect/artist like L. Stone, an American architect, in his plans for the American Embassy in India to show how a great modern artist can use his fifth towards a sensitive version of a regional architecture which is both creative and appropriate. In the design, he incorporated things which really belong to the region details and features developed through the centuries, through the demands of a hot climate, the habits and love of a people e.t.c Finely perforated grills, root overhangs, water pools, serene proportions, exquisite materials upon which the shades and shadows could play are features of this response to the peculiarities of the region or setting.

As excellent example of the emphasis of detail in Indian temples is the TajMahal. In the realm of proportion and the symphony of beautiful detail to perfect concept, it is almost without peer. The Taj is a monument in a completely controlled environment with the walls, the buildings and the river which surrounds it shutting out all view of the city which is around it. The detail in Indian buildings, particularly in the Taj, is subtle and beautiful.

The elegant in lays so enrich the walls and yet do nothing to obscure, the simple strong form of the architecture.

2.5 The case for Indigenisation.

> "Is it not possible to achieve an architecture reflective of our culture taking into consideration advantages of modern technology?

From the fore-going analysis, modern architecture in its absolute form has failed to meet the needs of the Nigerian society, making it imperative for Nigerian to look in wards for a link. The argument is that since other aspect of Nigerian way of life have a distinct character, them architecture, being a response to a people's needs ought to have a character of it's have successfully evolved architectural styles unique to them, Nigeria should, as a matter of pride and of course convenience do the same. It should not remain a country whose various facets are dependent on foreign whims. Moreover, its populace should be able to identify with it's structures, with the attendant ego-boost associated with familiarity. It is gratifying to acknowledge the growing awareness especially amongst architects on the need for Nigeria to idigenise her architecture and give it identity.

CHAPTER THREE

REGIONAL ARCHITECTURE FOR THE NIGERIA DOMAIN; A SYNTHESIS

3.1 Inventory Studies of Nigerian Indigenous Architecture

3.1.1 Traditional Hausa Architecture

The term Hausa is a linguistic designation referring to the people of Northern Nigerian and Southern Niger who speak Hausa language by birth or as a first language.

In the Northern part of Hausaland we have the sahel savannah with its semi-arid conditions. Rainfall is for about 4 months, and a high durinal range in temperature is noticed during the dry season. In the central region, and running East to West, is the Sudan Savannah Zone. the rainfall is higher and vegetation consist to scattered trees and tall grasses. Further south, we enter the Guinea savannah and the rainfall is still higher. This variability in climate and vegetation, as well as in naturally available building materials have some effect on the regional architecture, of Hausaland; yet the architecture of Hausa cities has a uniformity in form, character and technics, thus supporting the thesis that the influence of culture on architecture in the Western Sudan far outweighs that of climate and availability of materials.

Urban Form

19th century cities in Hausaland possessed a distinctiveness of its own, such as town wall with several gates roads from the gates converge at the city centre - at the palace, the mosque and the market- being the major facilities and institutions of the city. these broad roads not only cope with market traffic but also facilitated the easy passage of troops to the walls in time of attack, and the enormous political processions which accompanied the main religions festivals.

A typical layout of the city centres includes the palace in the centre, flaked on one side by the Alkali court and the Mosque and on the other by the compounds of kingmakers and other important aides. As with the Yorubas, Hausa towns are divided into wards under warheads, with no distinct physical barrier separating them. However residential location is based on such factors as myth of common origin, ethnicity, and trade or craft.

One striking feature of Hausa town architecture is its physical distinctiveness from that of the surrounding country-side. Houses and boundary walls and roots in the towns, were built of mud, whereas in the villages, the roots were almost always of grass and boundary walls were of matting or corn stalk. The basic house walls were often made of mud.

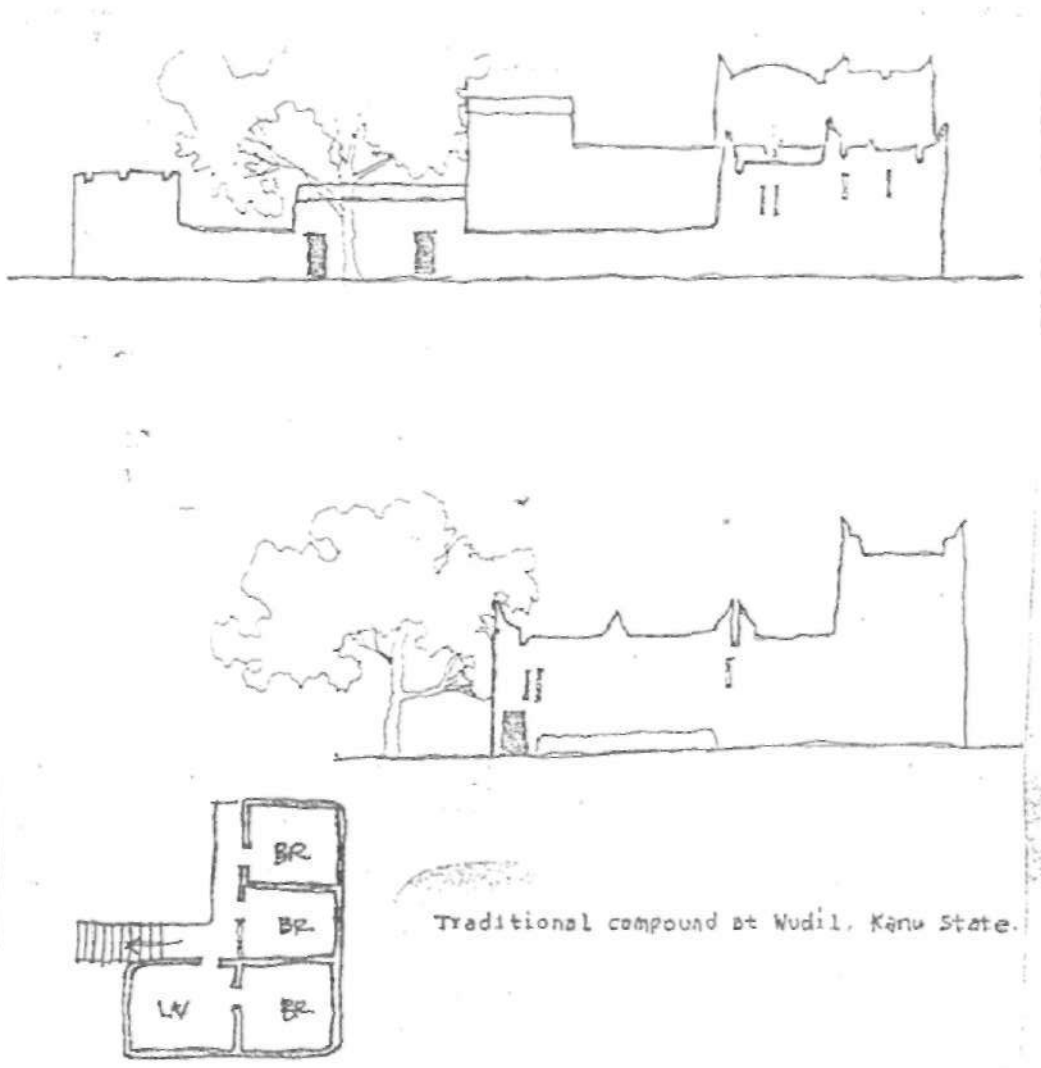
The Compound

Amongst the Hausa, the compounds consist of court-yards completely enclosed by a wall 3-4 meters high, approached through the Zaure (entrance and reception hall). Most Hausa compounds have two distinct court-yards within the enclosure, the first after the Zaure, marks the limit to which male visitors are allowed to go; the second is strictly private and serves the quarters for the wives sons and their wives, older relatives e.t.c The internal spaces are manipulated to create desired privacy for the individual.

The Zaure is important in Hausa architecture. It is the domain of the compound head, where he entertains his visitors and friends, takes his meals and if possible, pursues his occupation such as weaving, tailoring, emboridry or teaching the Koran. Architectural, its importance is expressed through its height, the decoration of the facade (Fuska) and the intricately pattern ceilings. Most compounds have an open space in front of the Zaure, large enough to accommodate Guests for ceremonies such as marriage, naming ceremonies, funerals e.t.c.

However, the most important element in the architecture of the compound is the strict heirachy of privacy obeyed from the outside to the inner most domain of kulle women.





Traditional compound at Wudil, Kano State.

3.1.2 Traditional Yoruba Architecture

The Yoruba land covers the area between Lagos Lagoon in the south, the river Nigeria in the North, and between the frontier of the republic of Benin to the West and Bendel to the East.

Topographically, two-third of Yorubaland consists of plains and ranges with altitude varying from about 1,00ft - 300ft. Southward, the cultitude decreases, through a zone of sedimentary rocks, to the coastline which is generally below 100ft above se level. Temperatures and humidity are consistently high through out the year and rainfall decreases in amount and distribution from the coast to the hinterland. The vegetation reflects the rainfall patten, ranging from swamp forest through high forest to derived savannah as one moves northwards from the coast.

Urban Form

City layouts consist of a centrally located Oba's palace, with series of roads radiating outward towards the city walls enclosing it. The socio-political structure of Yoruba kingdoms show that their towns and villages were visible expressions of Lineage and extended family patterns. This imposes on Yoruba towns a more or less identical morphology. Usually in front of the palace is the most important market of the town. Along the walls of most towns are at least 4 gates. Beyond the town walls is the farm land which adjoins the

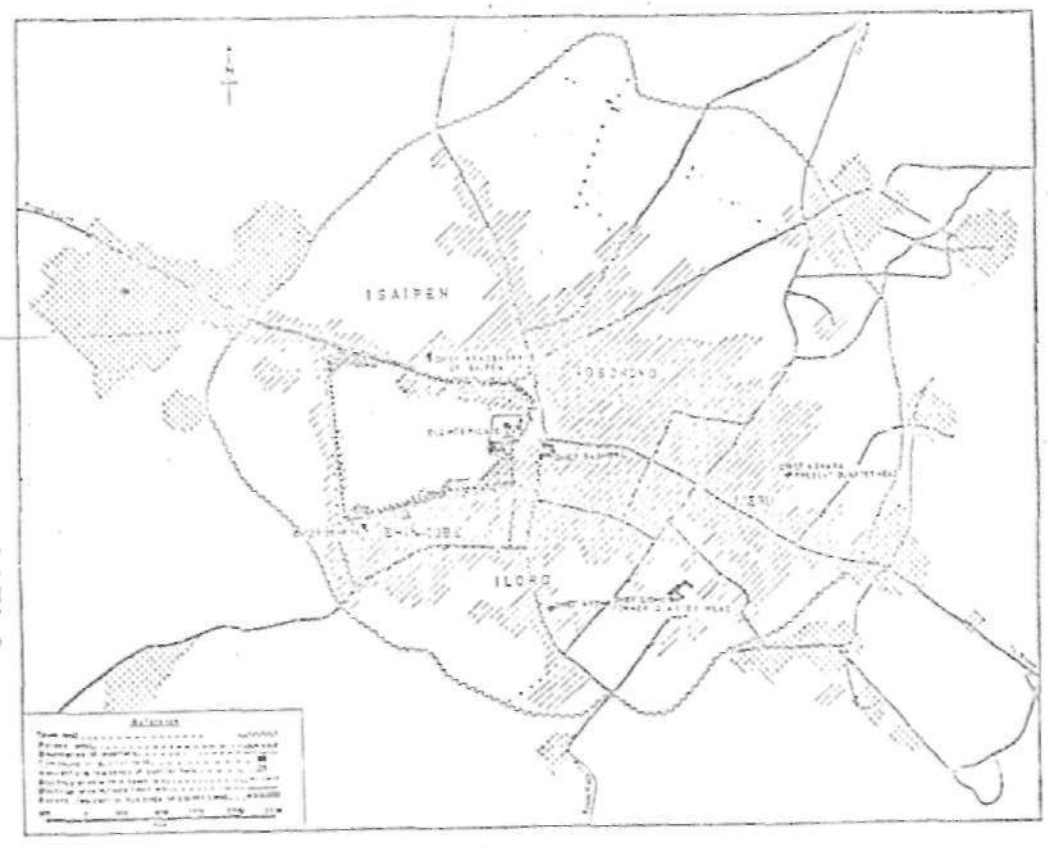


Fig. 22. Plan of Oyo town showing the position of quarters and inner Council Chiefs' compounds in relation to the Olowo's Palace

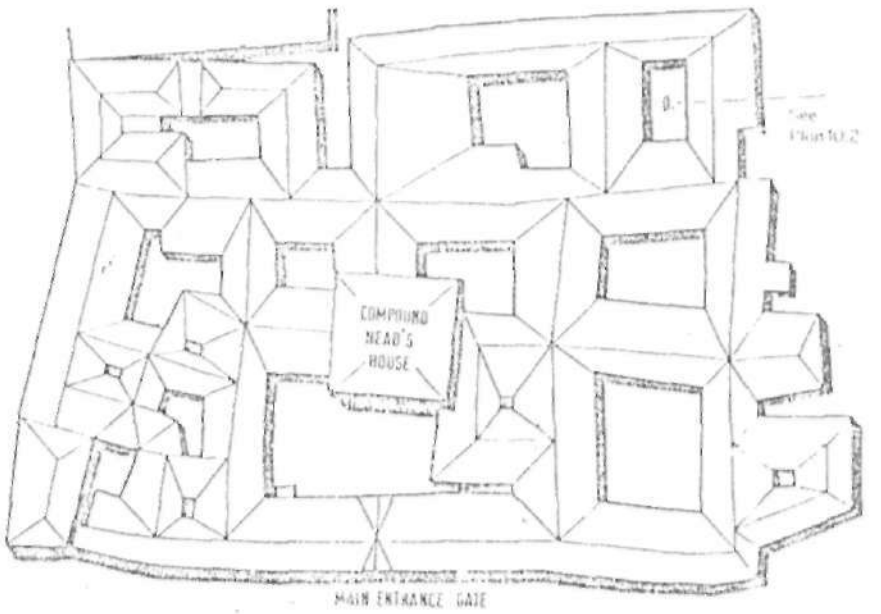
farmlands of neighboring towns.

In keeping with the political organisation of the society, towns are divided into wards with warheads. Compound were built around the compounds of heads (or chiefs) while all the quarters were designed to look towards the Obas place (afin).

The Compound

The idea expressed by the Yoruba house form is the intention or desired for active participation in socially, family and personal activities. Yoruba houses or compounds can be broken down to a basic template or module, called the bush house or farm house which is made up of 2-rooms i.e a kitchen and parlour, and the sleeping area.

A typical Yoruba compound consist of rectangular mud buildings enclosing a courtyard or series of courtyards. These courtyards, often bordered by vernadals serves social, communal as well as utilitarian function and they permit such functional change as the organic growth of the family size (with corresponding decrease in courtyard space or size). The compound is often bounded by a mud wall, There is usually a single entrance to it, but inside, it is divided into numerous rooms housing a number of related families. The compound head usually has rooms facing the main entrance where he receives visitors.



Plan 10.1
Traditional compound in Ibadan

passage. The central hall is of great importance for the running of the house and serves not only as a common place for working, sitting, and storage, but also as an additional sleeping area for overnight guests from the village. (See Plan 10.3.) In more recently built houses, the spacious central hall has been replaced by a central corridor or passage which leads onto a backyard which usually contains a common kitchen, bathroom, pit-latrine, and one or two storage rooms. (See Plan 10.4.) This latter type, which has on average between six and eight rooms, is by far the most frequently built house-type in the city today. In predominantly immigrant areas such as Ekotedo, Inalende, Mokola, and Molete, this type of house may have many more rooms, and even a second floor which is sometimes occupied by the owner and his family, while all other rooms are rented out to immigrant families. (See Plan 10.5.)

Another clearly recognizable house-type is the modern, self-contained dwelling built with permanent building materials and including all the necessary sanitary and other installations such as water and electricity. These houses are normally designed by architects for the government, housing corporations, housing societies, and wealthy individuals; they are described in various publications and have not been included in my survey.[2]

3.1.3 Traditional Ibo Architecture

The Ibo people occupy the Eastern and parts of Mid-Western and delta regions of Nigeria. The land area falls within 5- vegetational belts- Mangrove forest, derived savannah and Guinea Savannah. Culturally, the Ibos are egalitarian in nature and society was derived into groups, Kingship and leadership was based on achievements- wealth, age, performance in battle e.t.c- rater than heredity.

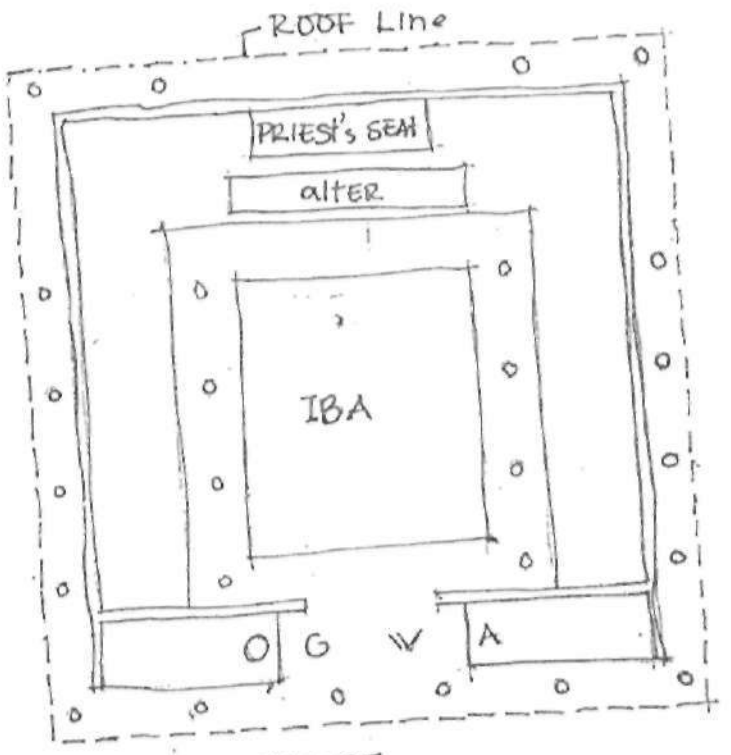
Village Set-Up And Organisation

The Ibos were urbanized non-city dwellers. They live in loose clusters of home steady irregularly scattered along paths which radiated from central meeting places. This was due to lack of bureaucratic authority to command mass labour force.

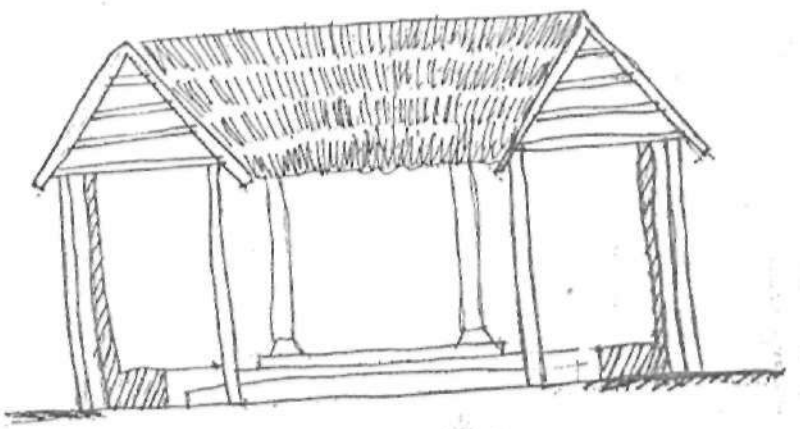
The Iba House

The Iba house in principally a place of religions worship but later developed a complex design as it became adapted to serve the occupier's domestic needs as well.

The phylophical foundation on which the design is based states that man should build in the likeness of the house of God so that God is represented on the religions alter by the "Okpulukpo".(see sleetch). It is the endeavour to interpret this in the family house that has resulted in the character and style of the Iba haouse. Hence, in the likeness of the okpulukpo, the Iba house is built on a rectangular base with



PLAN OF IBA SHRINE.



CROSS-SECTION OF THE IBA.

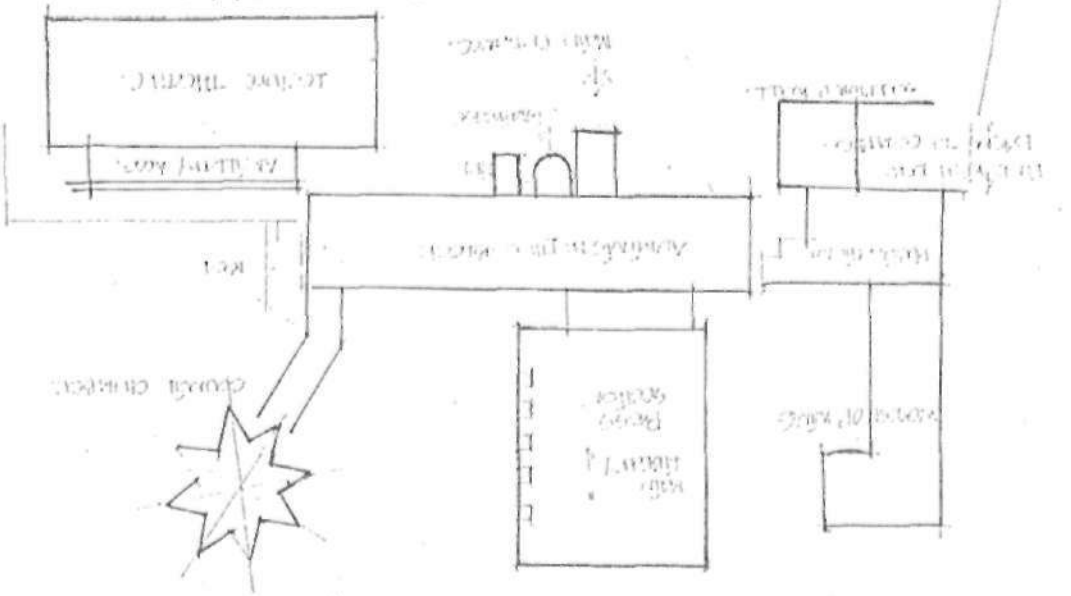
a pitched roof and an open central court.

The planning of the Iba is based on the concept of the essential unity between God and man, extended into family life. In construction, the Iba is principally a framed structure with panel in filing walls. The walls are semi structural, to gather with mud columns some 600mm in diameter, they support the fire-resistant ceiling reinforced by a timber or bamboo framework. The roof is usually pitched.

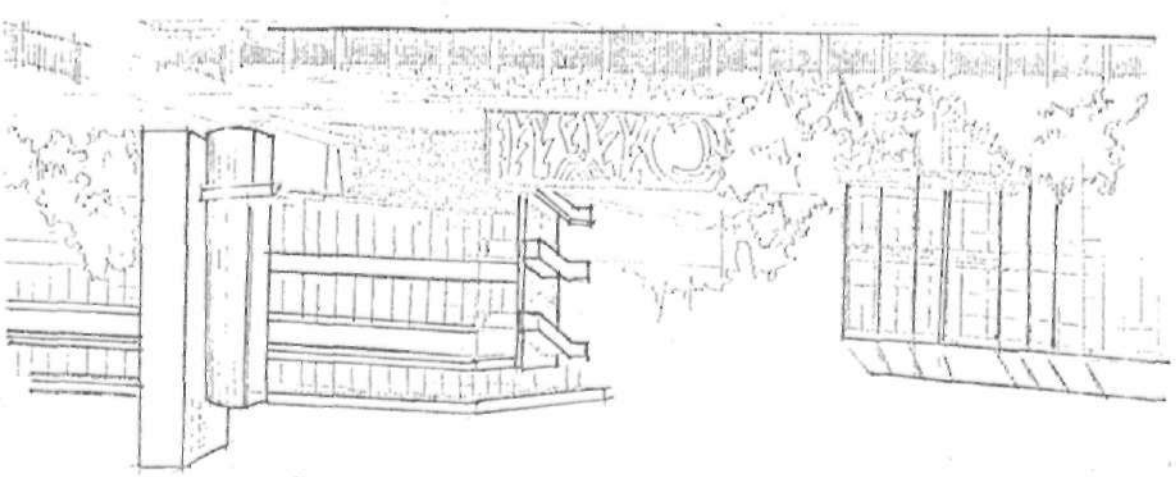
Externally, the Iba has the appearance of an enclosed fort with only one entrance door which is firmly locked at night. In the Iba, decoration is mainly concentrated on the doors and walls, the smooth walls are ornamented with murals of abstract forms and patterns sculpted on or painted flat. The walls are of red mud and are constructed in courses 600mm high at a time.

3.1.4 Traditional Tiv Architecture

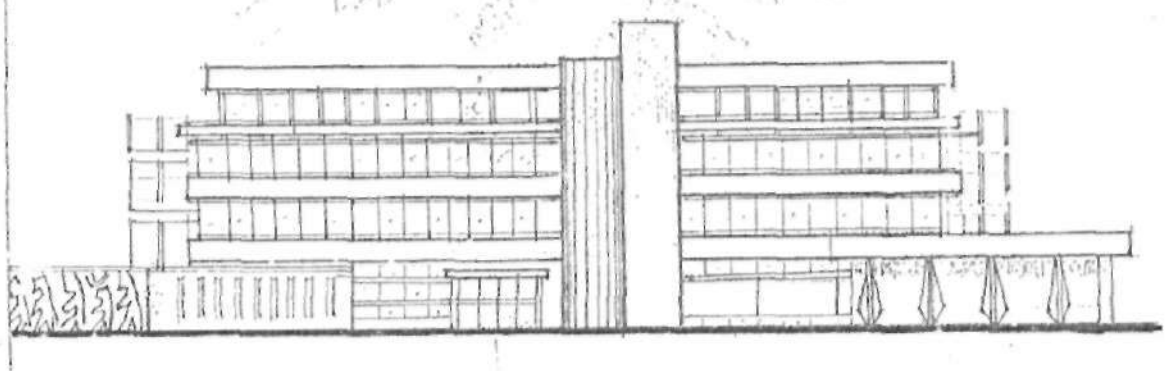
The Tiv people occupy what is generally refereed to as the "middle belt region". Tivland extends from the foothills of the cameroon mountains to the sonkwala hills in the south, down the undulating palins to the river Benue. It lies within the southern extreme of the guinea savannah belt and the vegetation is savannah woodland with deciduous trees and a generally tall bush cover. Rainfall comes between April and October while the dry season sets in from November.



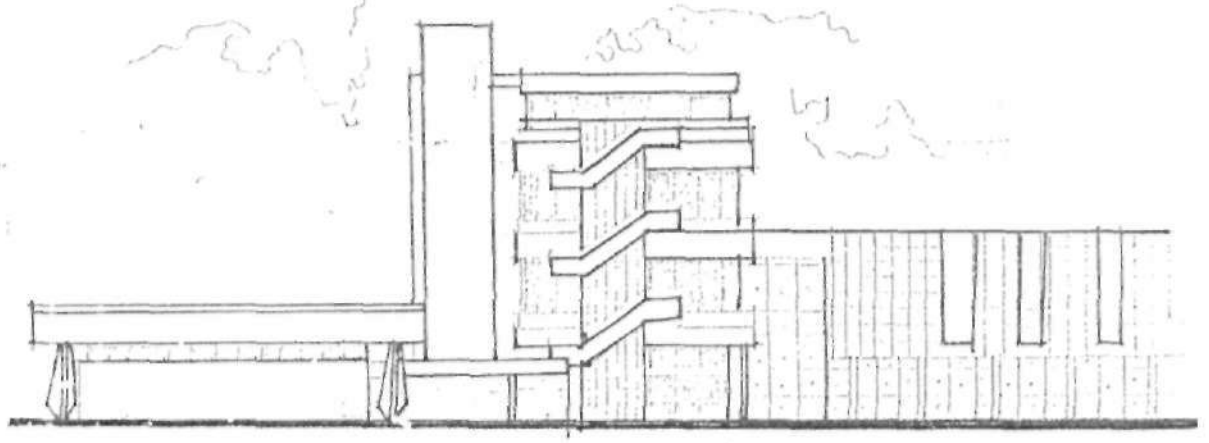
View of Hotel Del Lagos.



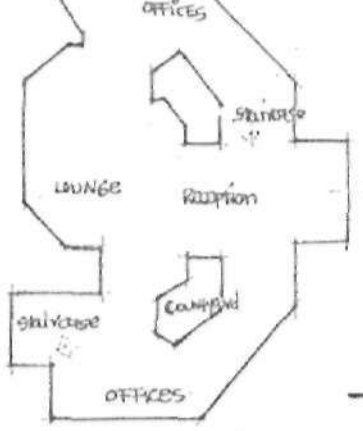
Second Floor Plan

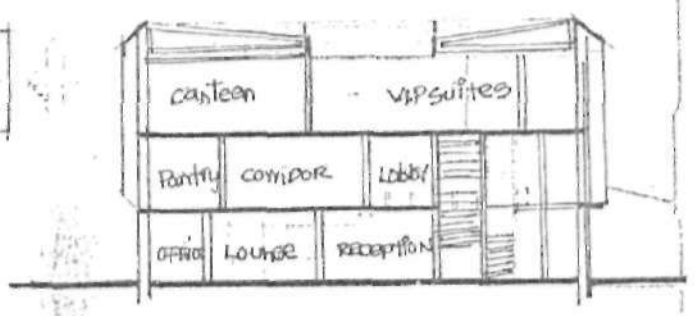


APPROACH VIEW.

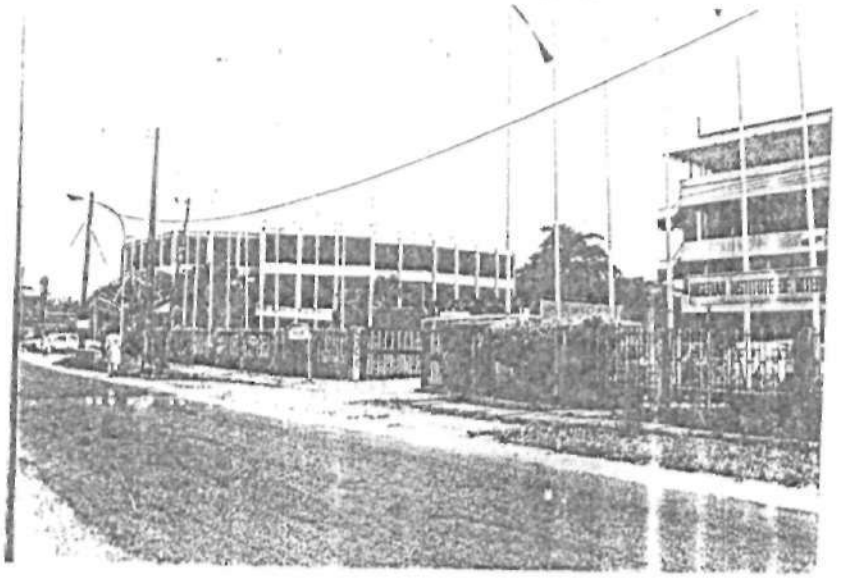


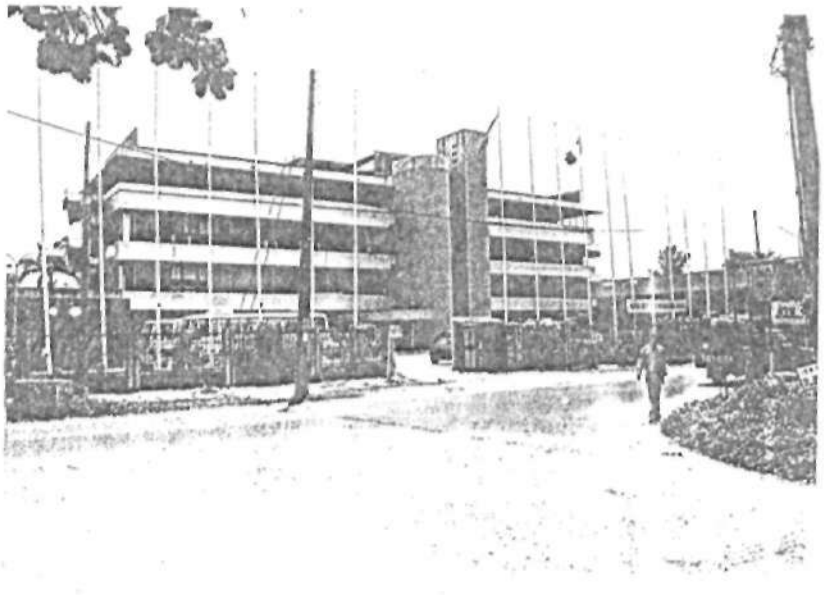
SIDE VIEW.

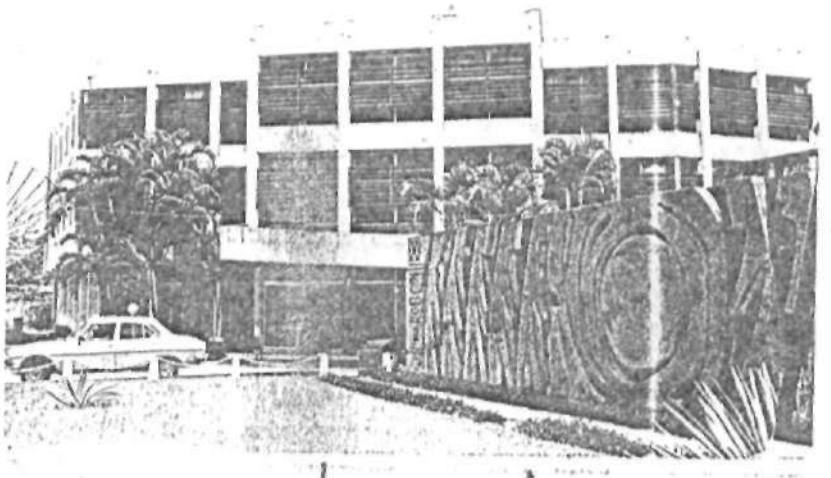




Plan and section of extension







LAGOS SITUATIONS.

The entire complex comprises of two section. The four-storey building complex-comprising of administrative offices, research and conference rooms; and two residential flats which were later converted to offices, a two-storey library wing has a main residing room, a stack area; a press section and adjoining workshops for binding and repairs. The library has a book capacity of 100,00 volumes and offer seating for 120 readers. A lecture theater with too capacity and a conference hall with simultaneous translation equipment seat 80 participants.

The complex also incorporates some fine examples of Nigerian art, there is a large sculptured moral in tooled grande concrete set against a predominantly blue coloured music background representing the "art of understanding".

The other section of the complex is the new extension comprising of a three store-building designed in 1981. The ground floor consists of the Directorate Affairs, the reception lobby, offices, committee rooms, and the courtyard layout, on the first floor the same units of offices, the chairman and Director-General's offices.

with the executive committee rooms and drinking. The second floor comprises of a nine bedroom residential suites with a large canteen and the staff room.

4.1.1 Critique

This is generally based on the following considerations:- The site, accessibility, design form, parking and the general utilization of the complex. At the moment, the N.I.I.A. has a near monopoly on international conferences that take place in Lagos. This is because they have facilities for simultaneous interpretation and speech recording.

Site limitations is one of the major problems facing the existing complex and the traffic access is one-way. Circulation path on the whole complex are not properly defined, and not in comformating with the site. Due to the site limitations, landscaping is not emphasized except for some few greenery areas, and courtyards. Parking is also a general problem. In most cases delegates do parks outside the premises during conferences or seminars which consequently affects the smooth flow of traffic in the area.

4.2 National Institute for Policy And Strategic Studies Kuru:

a critical appraisal.

> "If the institute is meant to effect total national revolution (intellectual, social, economic, cultural, industrial, educational and technological), then the architecture and environment of such an institution must not only be a natural inducement for such revolution, but must also be a motivating infrastructure, used as the vehicle for national revolution through the users, as well as the tourist observers and visitors to the institute. The don't have to like the architecture but they should listen to its message".
>
> - Fola Alade (OFR)
> project Architect

The institute was established in 1979, to conduct courses for top level policy makers and executors drawn from different sectors of the Nigerian Populace with a view of expanding their outlook -- and thereby helping to improve their over all performance in different fields of action. It was also expected to identifies, encourage, stimulate, assemble, organize and help deploy to the best national advantage, the country's intellectual talents and experienced policy analysts who will make positive contributions to the treatment of complex policy problems.

4.2.1 The Site Layout

The site is located some 21m to the south of Jos in a village called Kuru. There are two entrances to the institute, both from the Jos-Kuru road but separated by afforest of need trees.

The main entrance leads to the central administration and teaching blocks, while the secondary entrance leads to the staff residential area.

The administration/teaching complex, library workshop/filling station, the clubs and restaurant are placed nearest to the main entrance. There is a definite link between them as they sheared a common green area. The residential buildings are behind the rocks which are behind the central facitilities. The residential area made up of the students/visitors accommodation, and the staff accommodation are linked by a road in such a way that the former are closer to the club/restaurant.

The V.I.P chalets are laid out in a linear kind of arrangement that seems to carve with the lake, though individual units are approximately loom away from it. the students/guest accommodation are arranged in a culde-sac form of layout; with each circle serving ten units. The staff housing are laid out along two loop streets separated by a children's play area (reserved for ancillary buildings e.g shopping). see site layout.

4.2.2 The Design- A critique

This project was chosen for careful study and appraisal because the design is historic in itself being the first project in which a Nigerian architect has made a conscious attempt at incorporating local design features in an institutional building.

4. Banquette Services

1. Main Kitchen and stores
2. Banquette Lounge
3. Restaurant/Bar
4. Staff Service
5. Service Entrance
6. Toilet

6.2 FUNCTIONAL ANALYSIS

In preparing a functional diagram for the facility a certain criteria were used in judging flow and articulation of spaces. This include:

a) Separation of Service and Office traffic

b) Separation of vehicular and pedestrian traffic

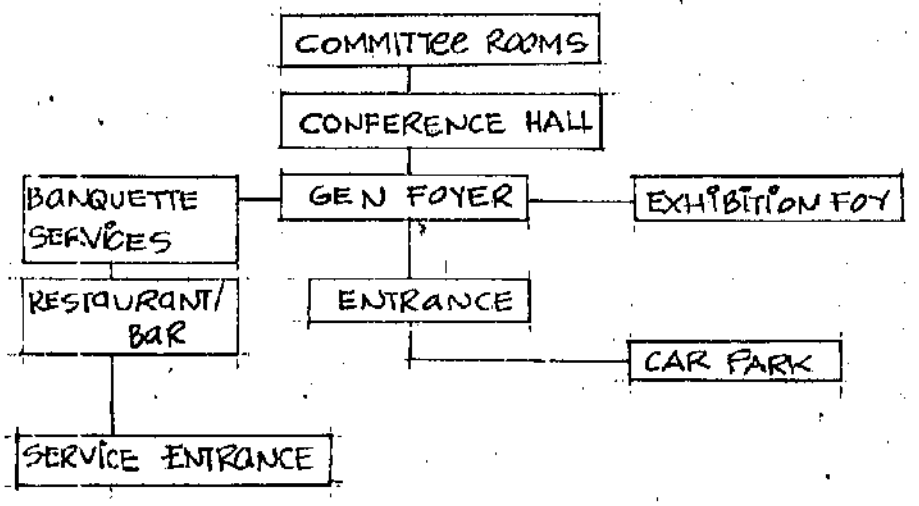
c) Integration of functions by linking spaces.

The functional framework of a facility is based on the client goals and operational objectives. When programming a facility that is unique to a client's experience. line relation to the design of the N.I.I.A complex the most relevant factor is determining the relationship among individual functions. The complex consist of the Administration, conference Hall, Press and Publication units with correlated social functions such as the Banquet, kitchen, restaurant and Bar and probably some outdoor scenery.

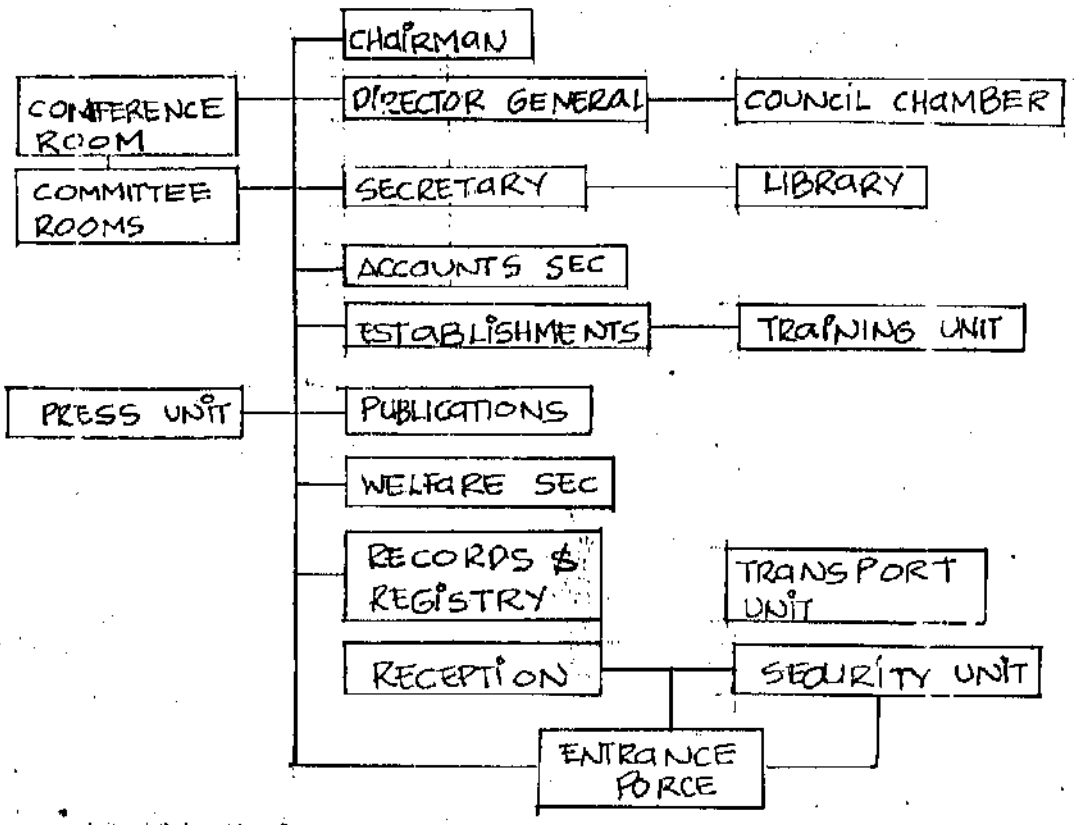
The analysis of primary function may involve a variety of aspects, depending on the level of detail of the intended programme. This information is useful for determining physical dimensions like adjacency and proximity, hierarchy of location, space use scheduling and circulation.

UNIT FUNCTIONAL CHART

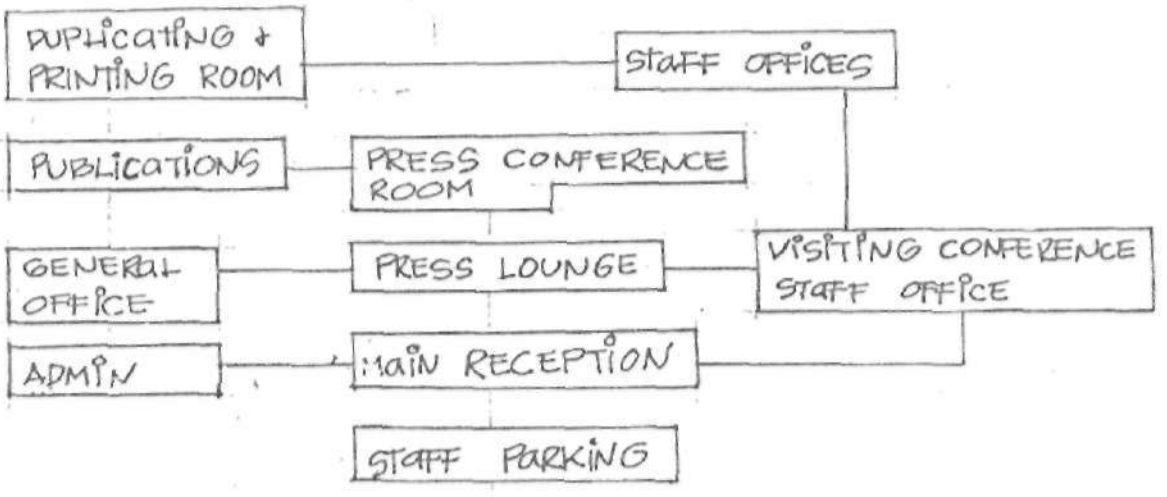
CONFERENCE COMPLEX:

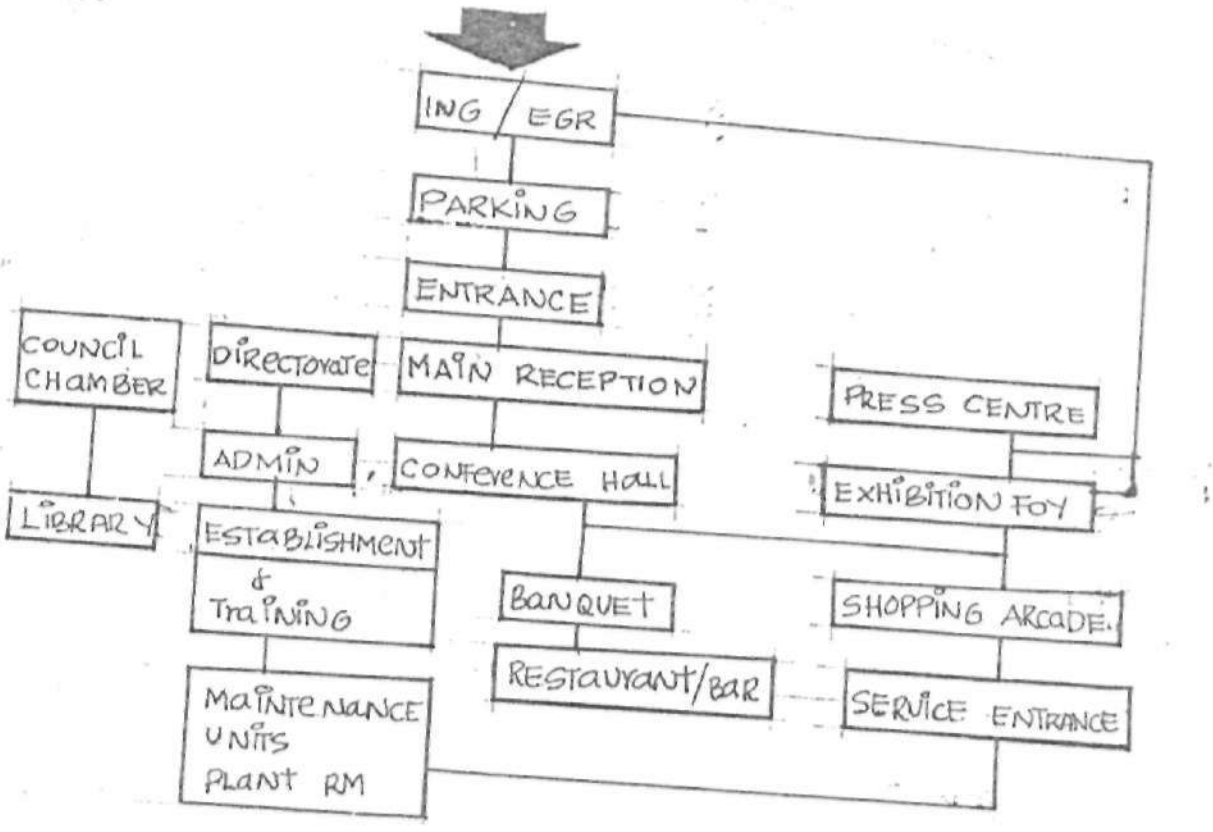


ADMINISTRATIVE COMPLEX:



PRESS CENTRE :





COMPOSITE FUNCTIONAL DIAGRAM

6.3 PLANNING STUDIES

6.3.1 The Site:- Maximum utilization of the site is highly required although the design scheme could be in phases. Considering he parking and landscape situations, requirements varies, however a provision of at most 500 parking spaces would be provided. Car parks may be concentrated or dispressed over the site. A concentrated system is highly favoured as it minimizes noise and disturbance. A part from functional needs, space is generally needed for landscaping to improve the appearance of the building. Access point of entry is clearly defined conveniently, free hazards and appropriate for the purposes the provision is being made for.

6.3.2 Structural consideration:- Within the enclosure of the complex, it would be necessary to accommodate a variety of functions each requiring different provision for space. The structural frame-work is a series of circular and axial/radial form with a central core around the administrative block frow where the main reception unit is located.

Choice structural system is affected by height and dimensions of the spaces required mainly the building form involves a skeletal structures which may also provide a platform support for load bearing walls. Skeletal structures

involving beams or slabs supported by a framework of columns are generally used for large spaces.

6.3.3 Conference Hall:- The hall is essentially a rated one designed as an auditorium. Due to its capacity it could be used for other functions e.g drama, music, filmshows, although it is being designed basically for speech and to the use of the institute.

Design of the stage area should be flexible for different arrangements. The seating arrangement should include a writing areas for microphones etc. Rise of seating tiers should take cognisance of sight lines.

As delegates would be making use of electro - acoustic appliance, strong reflectors are not required. Reverberation time should be between 0.5 and 1.5 seconds. The volume of the hall is $9.5m^3$ - $14m^3$ pr audience seat. The seating arrangement should include a writing area for notes and microphones.

6.3.4 Restaurant and Banquet Services

Access into the restaurant could be through a reception lounge or foyer. This area will be used as an assembly point before entering or leaving, and as a lounge for cocktails and other drinks. Conveniences should be well positioned. The layout in restaurant design should take account of the features of the room, external visitors and internal displays and entertainment circulation pattern of customer and staff, method of food services, set grouping and type of furniture.

Rooms for Banquet purposes are usually signed to be multifunctional. The hall must be capable of being converted into exhibition space or smaller conference rooms by using partitions.

6.4 INTERNAL ENVIRONMENT:- The interior design and decor has to meet a number of specific requirements:-

- Mechanidising i.e must be attractive, create awareness and interest.
- Operational:- It must be easy to clean and maintained good standard of appearance, resist damage and facilitates repair, replacement and rehabilitation with minimum disturbance of or difficult.

6.4.1 Lighting:- This is an important element in architectural design. Externally it is used to display the characters and features of the building. Internally lighting serves to emphasize features of the decor and draw attention to signs, directions and hazards. Light sources include incandescent types which are used in lounges, an restaurants, and the florescent type which are used in work areas.

6.4.1 Noise:- The transmission of noise within the complex and the high levels of noise which can be generated and reverberated within large lobbies, foyers and public rooms and work areas are problems associated with design and economics of construction. External noise from traffic is also a potential noise source. The increasing use of mechanical plants and concentration of multiple services such as plumbing, air conditioning, radio and telephone has added to the difficulties of noise control. Methods of reducing noise falls into three basic categories. Planning, Insulation and absorption.

6.4.3 Engineering Services and Equipment

Most activities within the complex are dependent on engineering services. Facilities such as airconditioning, elevators, are regarded as standard cost of engineering services, other services include water supply, sanitation and drainage, disposal of waste and garbage, ventilation, air cooling and air-condition, refrigeration, electrical distribution and equipment, communication and transmission facilities, and other operational services, and facilities for control, security and efficient management.

6.4.4 Electrical Engineering Services

Electricity main supplies are generally in 3-phase. A.C main supply are often conditional on the provision of a main transformer which may be located externally in a fenced off part of the site. The minimum capacity of the primary transformer should be 150% of the peak road requirements. emergency power systems must be well located in view of noise, fuel, space ventilation and maintenance requirements. An emergency auxiliary power supply capable of serving the institute for at least 48 hours power failure.

6.4.5 Fire Protection:- The designer must considered the fire hazards which may affect the project. This is based on the general and particular factors. The general factors are

i) The purpose of the building

ii) The nature of its constructions.

Particular factors are:-

i) Locations and siting of the building

ii) The manner in which the building is equipped, and use to its purpose good building design. Lessons fire hazards, to users through site planning and circulation, good fire resisting construction. Good exit and escape route provision and good warning and fire defence system must be in place.

CHAPTER SEVEN

DESIGN SYNTHESIS

After considering the various problems on the site and analysing the proposed building from a functional point of view, the nect thing is the evolusion of the site and building concept. It is at this point that the various analysis carried out earlier on have to be incorporated in the design.

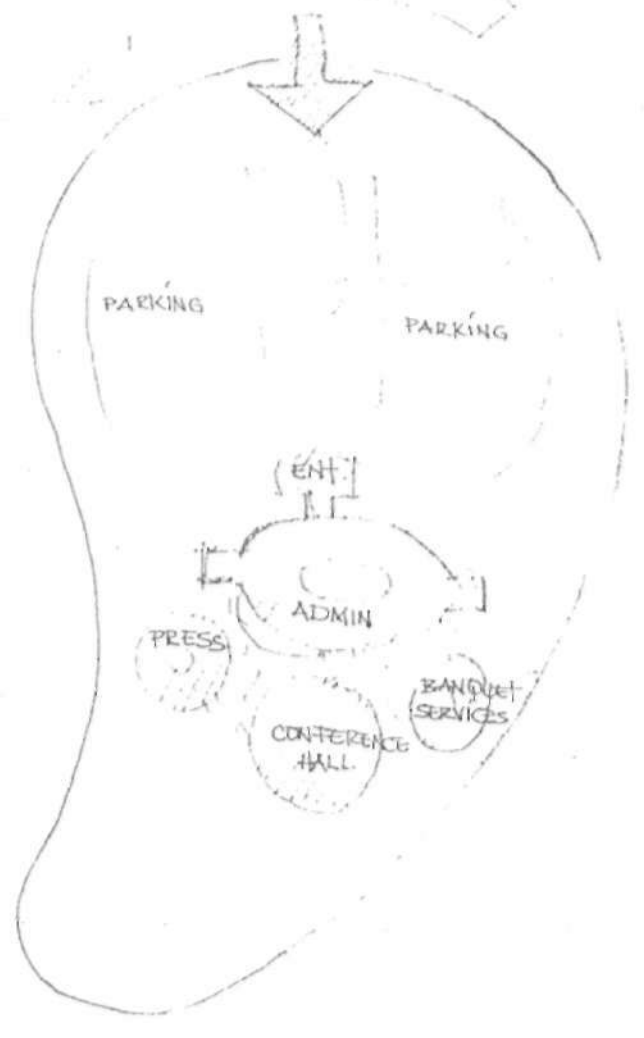
7.1 Site Concept

The combination of natural characterisistics of the site and the intended objectives suggest the use of certain physical design elements in the combination for forming the site concept for the complex.

The targetted objectives are:-

- To organise the natural built/elements of the site with the entire complex.
- To take advantage of the special views, vistas and axes inherent in the proposed site.
- To produce a harmonious and sequantial flow of spaces on the site thus enhancing the experience of the eventual user and the neighourhood.

SITE CONCEPT



OBJECTIVES

:- TO ORGANISE THE NATURAL BUILT ELEMENT OF THE SITE WITH THE ENTIRE COMPLEX

:- TO TAKE ADVANTAGE OF SPECIAL VIEWS, VISTAL & AXES INHERENT.

:- TO PRODUCED A HARMONIOUS & SEQUENTIAL FLOW OF SPACES ON THE SITE ENHANCING THE EXPERIENCE OF THE EVENTUAL USER AND THE NEIGHBOURHOOD.

To effect an objective appraisal of the project, it is necessary to assess the design in relation to the client/architects set-out objectives. These include:-

"To achieve dynamism in concept design, simplicity in form, speedy and low cost in construction, revolution by evolution of our traditional cultural values, utility in functions, and above all, humility in national way of life for our leaders".

- "The use the humble, domesticated style of the traditional Nigerian building design of the Kuru environment, and the design disciple of the architectural character and natural village environment, to sensitize the users and others who come in contact with the buildings, to think, act and live Nigerian, numerous national problems."

-"To re-establish faith in our basic style of living and aim at arriving at a purely Nigerian identity and high Nigerian standard in all areas (of the economy)."

Whether these objectives were met or largely met is open to architectural debate. This author, by virtue of inexperience may not be competent to take part in this debate. However, in my humble opinion, the following shortcomings are discernable:-

General Layout

A look at the layout shows that the central facilities (admin/teaching block, library Hall, club and restaurant) stand out as being highly dispersed in layout. According, they are linked by long, straight routes and paths which negate the informal movement pattern of Nigerians.

"Careful observation of Nigerians reveals that they are not used to walking along straight in houses, paths or roads. Rather they are used to taking winding paths, roads and detours passing by huts, trees, hills streams e.t.c to their destinations. the reason for this is that a straight course seems to be unending and monotonous and his destination much farther away that usual" e.g. roads to farms.

- T.T. Okin (The Urbanized Nigerian)

In the design, the most obvious consideration is maximum expansion possibilities, but this can be achieved through a more compact design with an organic structure.(Urban form in ancient Nigerian readily comes to mind).

While the students quarter and guest chalets are imaginatively clustered around courtyards, in keeping with our traditional planning system, the staff quarters are in rows of straight lines, giving them a "barrack" look. In fact the staff houses look like an unimaginative addition by a different architect. Obviously the continuation of the cluster would have been a wiser decision, especially since the house forms are the same (or similar).

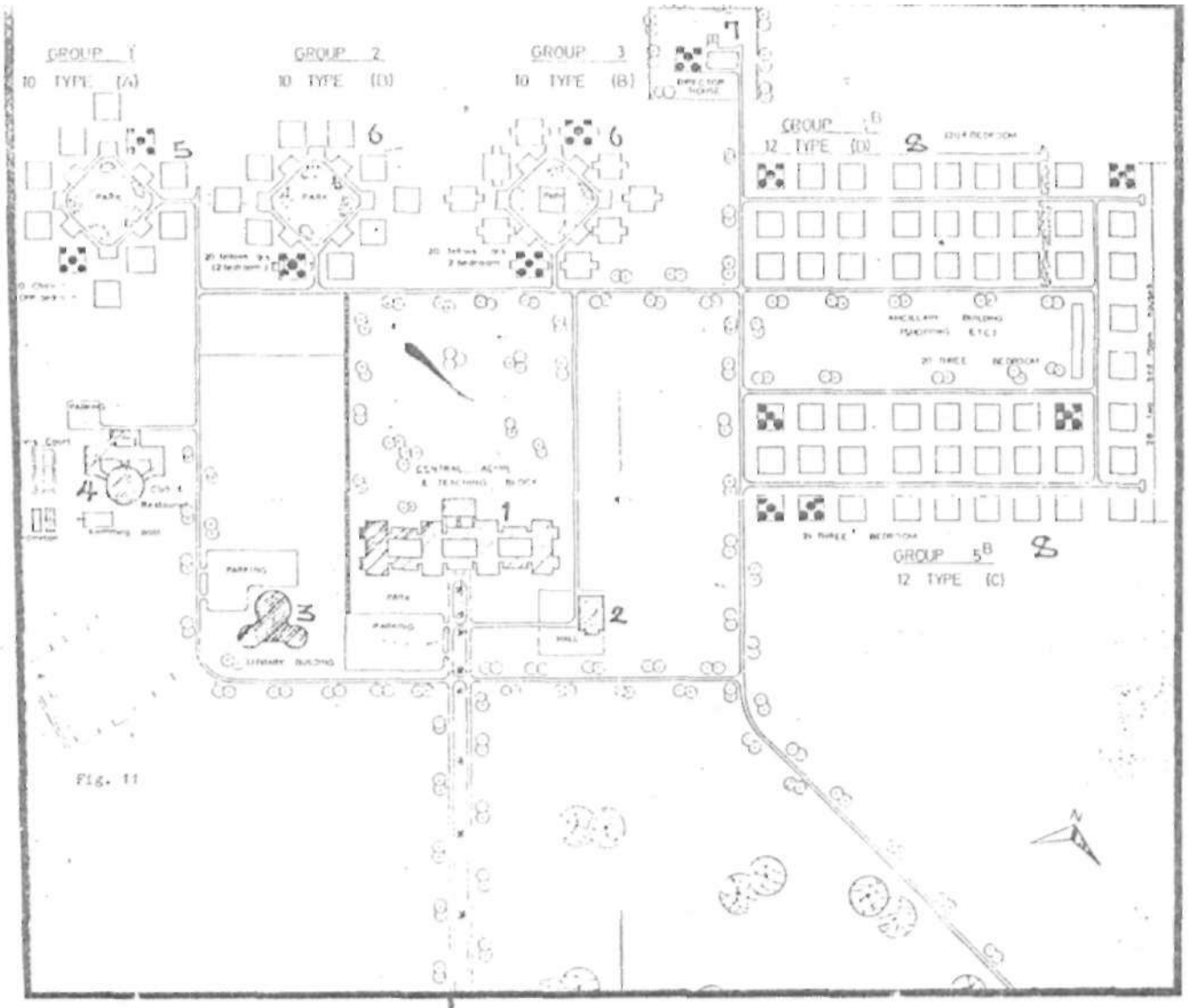
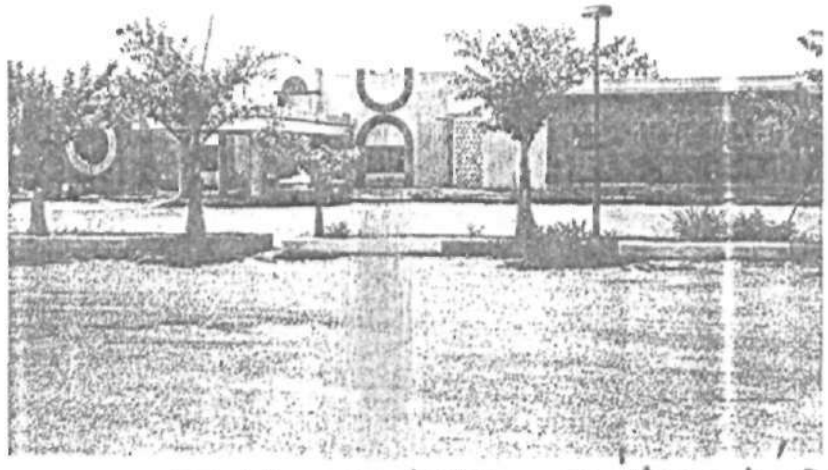


Fig. 11

SITE LAYOUT.



ENTRANCE SITUATION
ADMIN)

Form

The plan shapes of the residential units and the library were based on the traditional circular forms of typical compounds in the neighboring Kuru village. But the administrative complex is rectangular while the restaurant is a hexagonal shape structure, a serious conflict of forms exist here, since no attempt unity is notice able.

Construction

In terms of materials, mud block and grass thatch were the major medium of architectural expression. The roofs were in timber frames, covered with galvanize iron shets for rain proofing, and then covered with local Zanna grass for insulation and to complete the traditional look. When due to heavy downpours it became impossible to build with mud blocks, burnt bricks produced by the Naraguta burnt bricks factory in zos were used in the remaining parts.

However, there are complaints of cracks in several places especially in the residential units, leaking roofs and poor bonding of finishing materials e.t.c. These are pointers to poor construction by the local hands (villagers) used and raises questions as to the effectiveness of using a relatively undeveloped mud as a principal materials in the erection of per-structures.

Landscaping:-

As already mentioned, the site offers great opportunities for organic architecture with its natural rocks, lake, changing levels e.t.c However optimum utilization in the design is questionable e.g. the nearest building to the lake and the VIP chalets is between 80 ioom away. One would have though that the club/restaurant could've been placed nearer to the take or oriented in such away as to have a view of it. The natural features, though left on the site were not utilized to advantage. The impression is that they were seen as obstacles to be avoided in the setting out of the buildings.

ACOUSTICS:

Sound re-echo in the library building (especially the ground floor) was the main complaint put forward by many users. A simple solution could have been to place a suspended ceiling with some sound damping material between the ceiling and the R.C. slab above, and a thick carpet floor finish.

4.3 Kenyatta Conference Centre-Nairobi Kenya Architect:- Karl Henrik Nostvik Client:-The Government of the Republic of Kenya.

A Design Appraisal

The Kenyatta conference centre (K.C.C.) Nairobi has been described as one of the most practical centres for conferences through out the World. The conference centre is set on an open area of nearly a quarter of a square mile in the very heart of Nairobi. The complex itself comprises of an extremely large plenary hall to the east, a strikingly beautiful amphitheater to the west which is useful mounted by the twenty-six-storey administrative tower. The 26th floors is a revolving restaurant from which the panoramic views of Nairobi is appreciated.

The (K.C.C.) became operational in July 1973 and since then over 216 International Congresses have been held there. It has meeting room facilities which range from a large plenary session hall with a seating capacity of 4,00 to meeting rooms which are designed to later for groups of as few as 50 delegates. Most of the meeting rooms are equipped with simultaneous interpretation public address and recording systems. Other facilities available within the conference centre include banking facilities post office and flight reservation facilities.

The major Design components are:

- The plenary Hall, The Mushroom shaped Amphiteatre, The revolving Restaurant The Administrative tower, Meeting Rooms, Front entrance Representation and Back Room efficiency.

4.3.1 The Plenary Hall

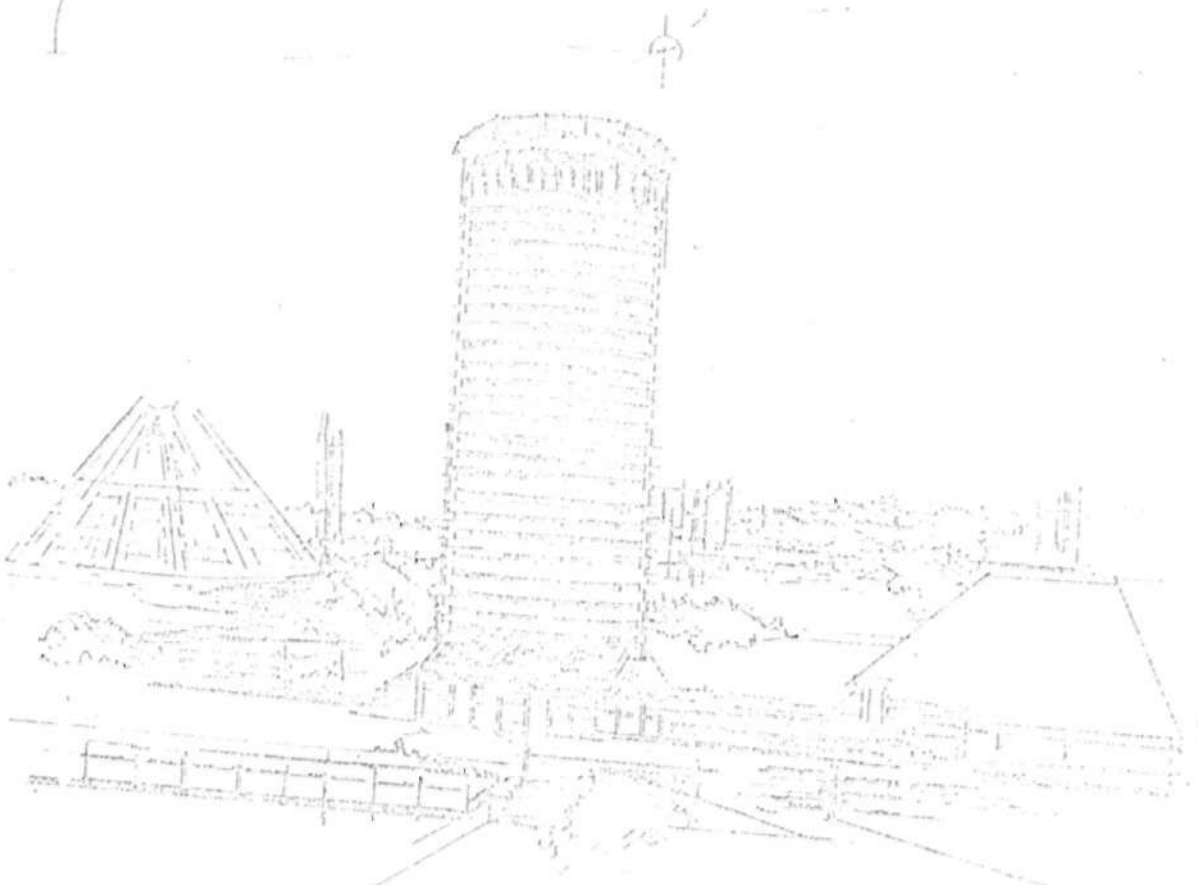
This Hall is one of the largest conference chambers of its kind in the world. It caters for the giants in any field for meetings and exhibitions. It has a complete sound amplification and recording systems, interpretation by wireless boo=-this with simultaneous language systems in up to seven languages and two magnificent observer galleries. A tasteful sound proofed setting and a lofty ceiling compartments.

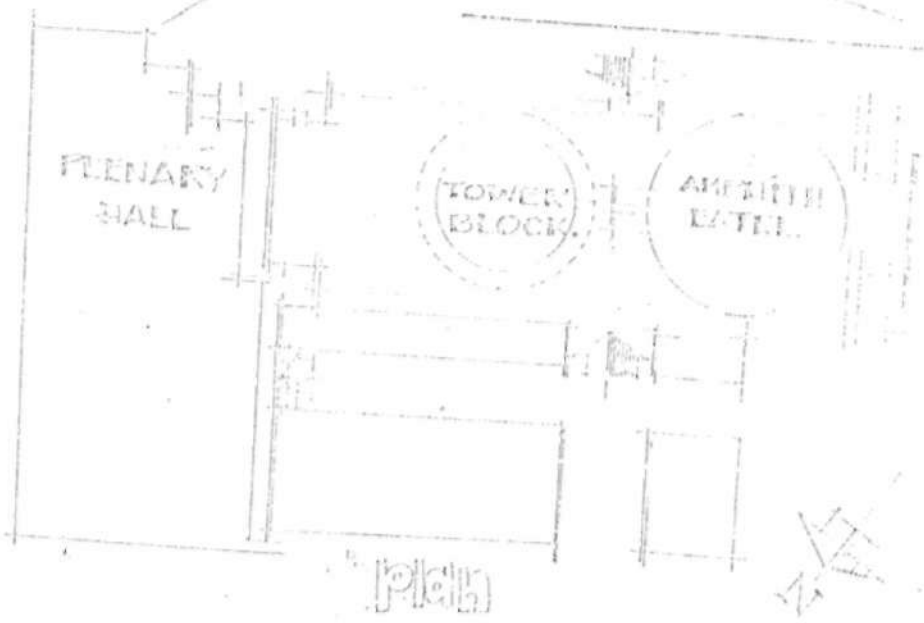
Accordingly the conference orgniser requiring seating alone may accommodate up to 4000 delegates or up to 3, 200 with tables, the banquette organizer can serve 2500 in luxurious comfort. Whilst the cocktail party host may invite up to 500 guests.

4.3.2 The Mushroom Shaped Amphitheater

The amphiteatre seats 800 at tables on three balconies arching the main auditorium. The Podium is on the centre balcony immediately above the entrance from the covered walkway leading at roof level across the main entrances to the complex on the middle balcony opposite the podium use eix simultaneous interpretation wireless operated booths in

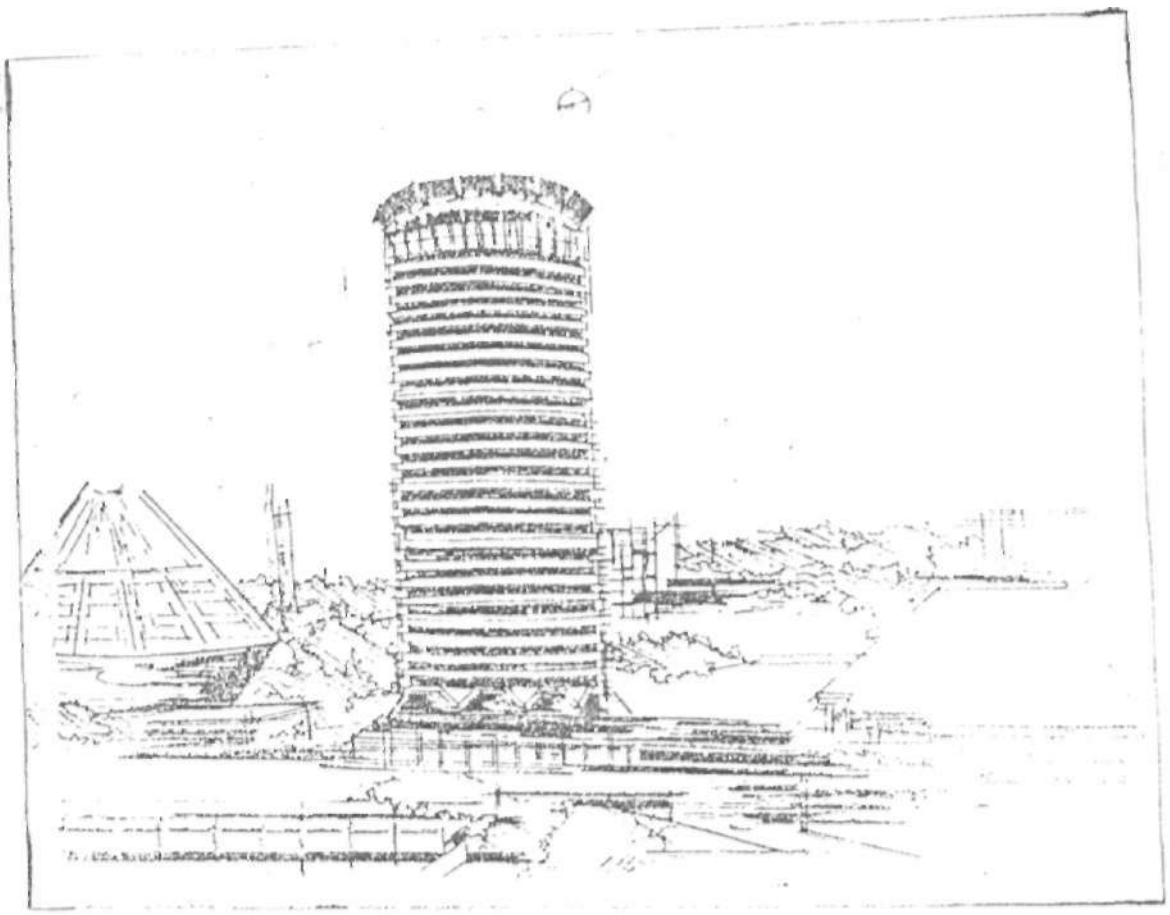
CASE STUDY 3

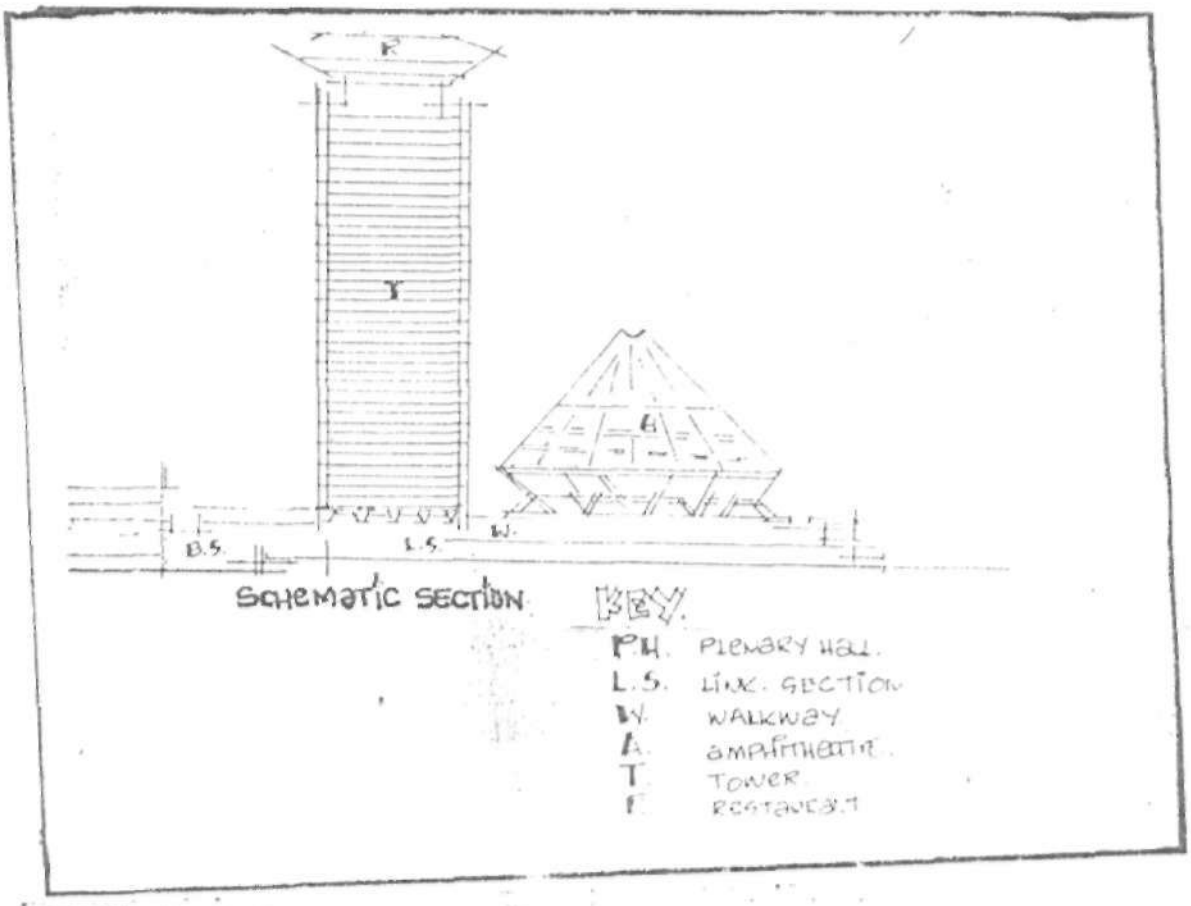




Plan

Bonyata conference centre
Harare Zimbabwe





SCHEMATIC SECTION

KEY.

P.H. PLENARY HALL.
L.S. LINK. SECTION
W. WALKWAY
A. AMPHITHEATRE.
T. TOWER
R. RESTAURANT

addition to the full recording and public address systems are available. The whole auditorium is sound proofed by the use of dark grey felt on walls and floors and the tall sleepy pitched ceiling with its patterned lourvres provided both reflected light and a sense of spacing proportion.

4.3.3 Meeting Rooms And Front Entrance Representation

The flexibility of the centre is portrayed in the number of the smaller rooms available for medium. Sized conferences, special purposes and sub-committee work. Thus, the large scale orgniser can rely on adequate space for the smaller groups working behind the scenes.

4.3.4 Critique

- Plenary Hall extremely large and under utilized.
- Location is excellent. At city centre and very close to hotels and catering facilities.
- Conical African style roof of amplitheatre is an interesting feature but encloses a of of wasted spaces.
- The conceptual feature of traditional African shape for a meeting hall is well utilized in the design.
- The Revolving Restaurant on top floor of tower is a very interesting feature of the design.

4.4 International Organisations Headquarters And Conference Centre, Vienna, Austria.

Architects:- Building Design Partnership

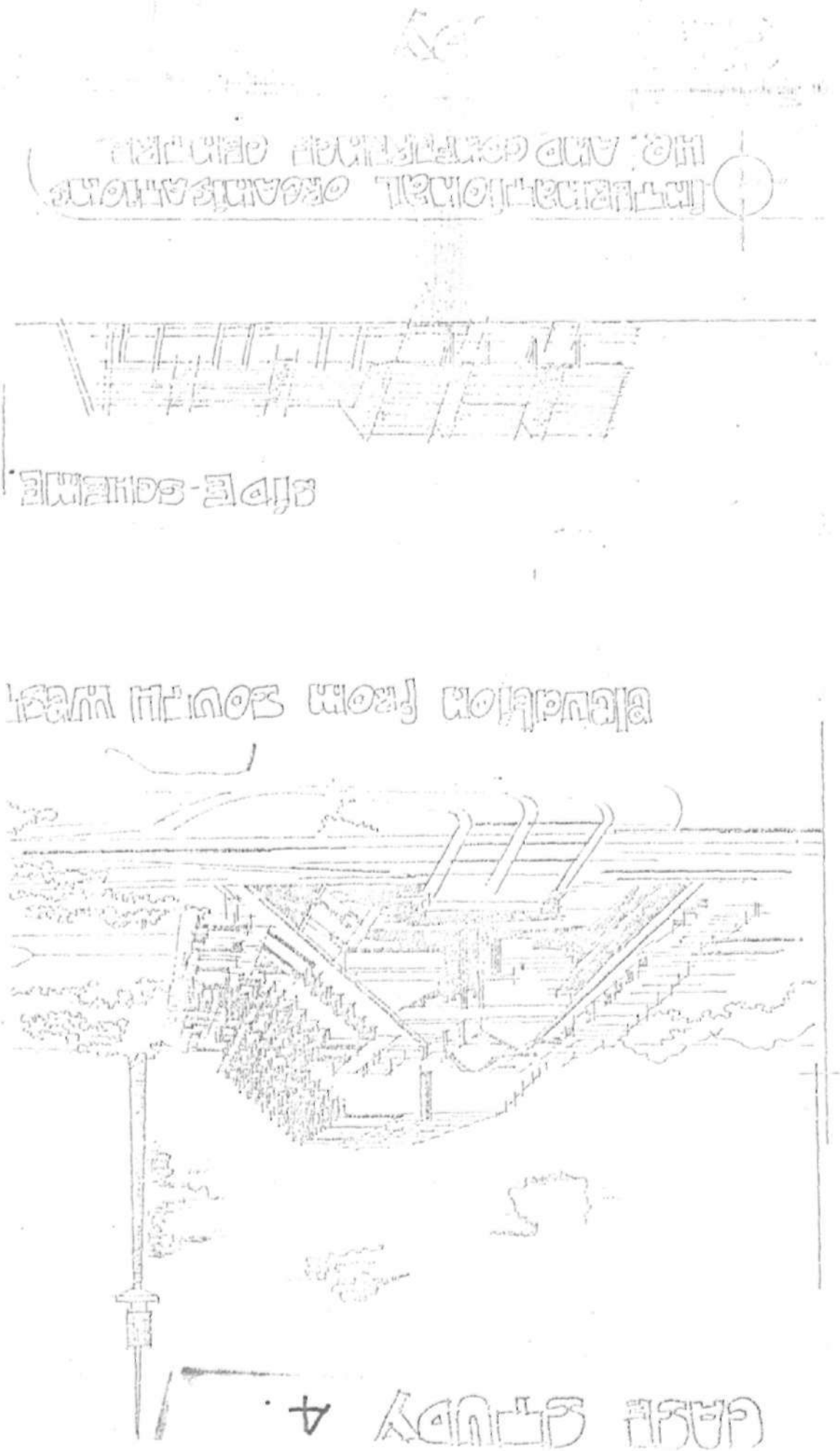
Clients:- United Nations Industrial Development Organisation (UNIDO) and International Adomic energy Agency (IAEA).

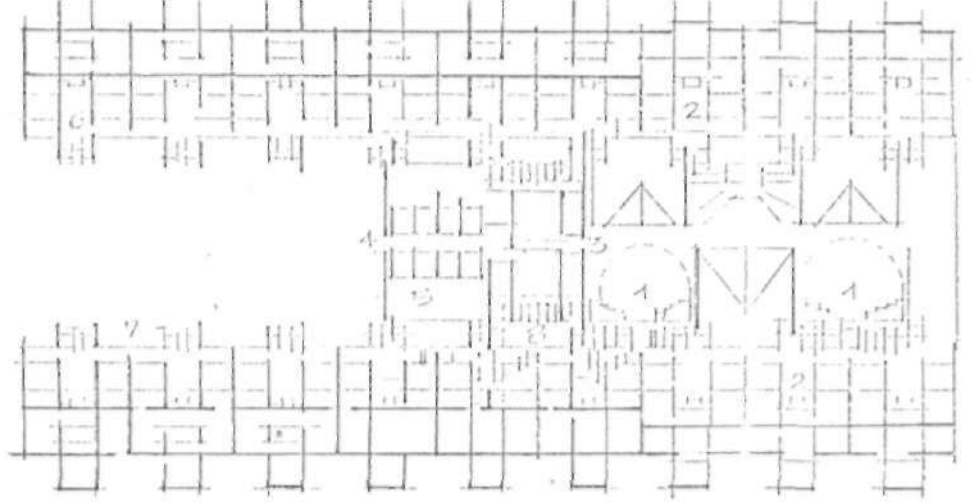
Building design partnership was placed second out of 283 entrants from 36 countries in the competition for an international Organisation Headquarters and Conference centre in vienna.

4.4.1 The Design

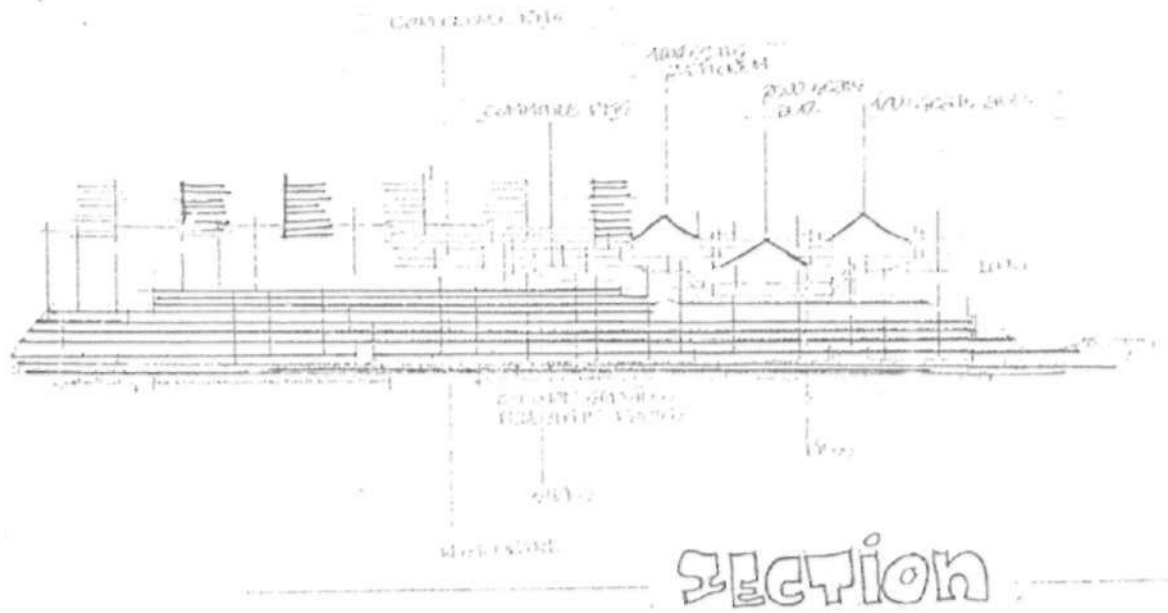
Accommodation modules a 22, 150m^2 Headquarters for the industrial development Organisation consisting mainly of offices and 20,4oom^2 Headquarters for the Internation atomic energy agency consisting mainly of offices and Laboratory. Shared services includes;- social, clerical, shopping, libraries and maintenance area totalling 36,840m^2 and a further 7,700m^2 consisting of conference rooms for UNIDO and IAEA. The 57, 700m^2 conference Hall have a range of large and small Halls with restaurant and ancillaries, while administration building extensions will account for a further 75,000m^2. In addition parking is provided for 5.000 cars.

The project or design shows a summary of the entire programme in a powerfully interlined building of simple basic lines which has the outward appearance of an extended office building with relatively low rise and discreet slhovettee and skillfully blended into the general back-ground of the surrounding area by parallel positioning in relation to floor to floor and terracing.





Plan



SECTION

1. AUDITORIUM.
2. CONFERENCE CENTRE OFFICES.
3. DELEGATES.
4. FOYER.
5. COMMITTEE ROOMS.
6. ADMINISTRATIVE BLOCK.
7. SPACE FOR COMMON SERVICES.
8. COUNCIL HALL.

A plat-form raised above garage levels forms the central communication level in the cove of the building. Above this platform the entire office complex is arranged in the form of a roof comprised of office units. Thus creating a spacious Hall with large opening from the surrounding area. As the Hall is concerned, not only is a pronounced architectural effect anticipated which expresses the design concept. It also in practical respect forms an efficient central communication area which interlines the functional groups of the overall structure.

The problem of blending into the overall traffic system has been resolved efficiently in the interior layout the design provide for short and relatively clear routs.

4.2.2 Conclusion

The weakness of the design is shown in the torso characteristic in which the public Halls rising over an extended pedestal produce an unmotivated monumental form.

Particularly from the project organisation point of view, expansion of the structure above these public Hall is not realistic.

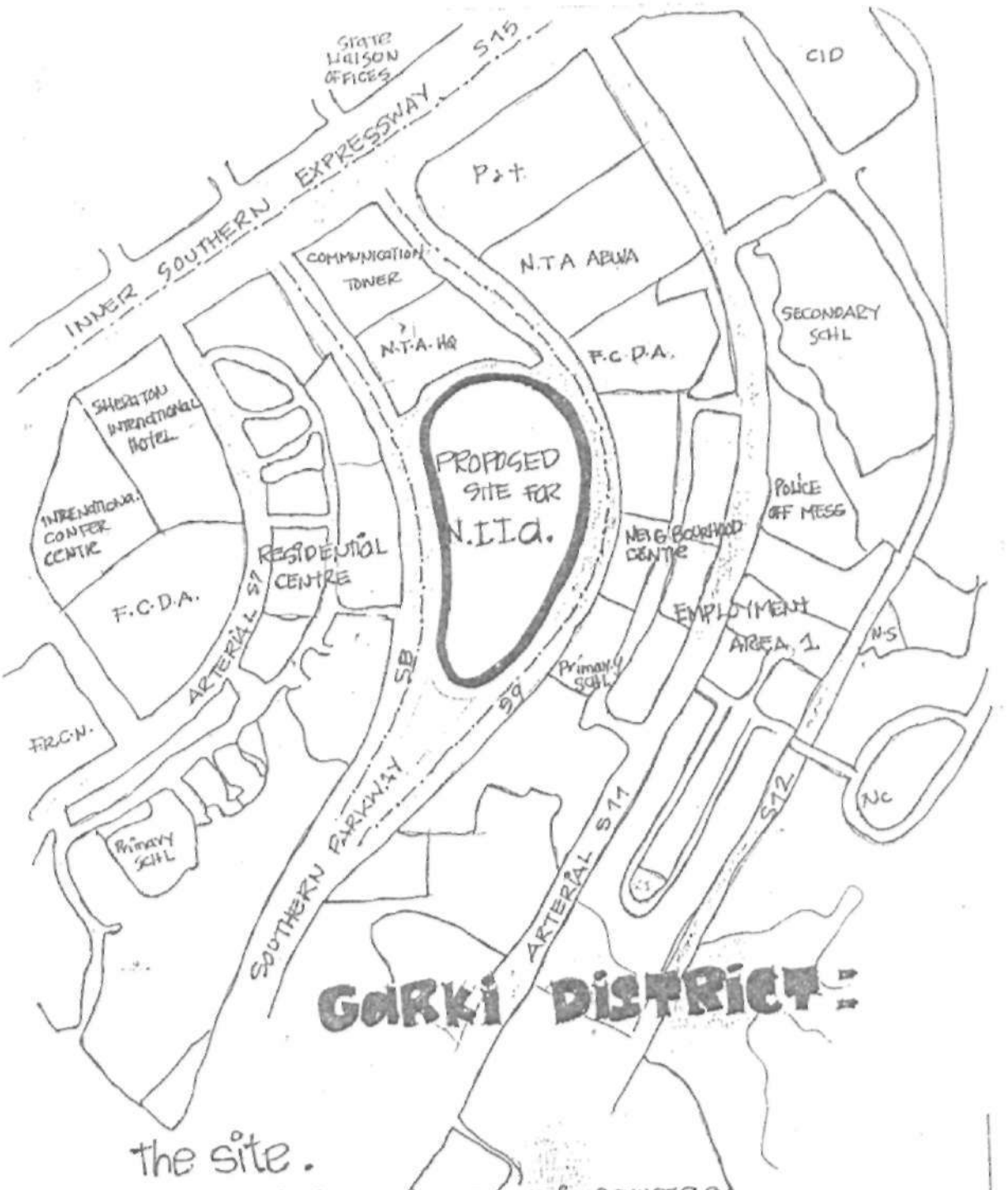
CHAPTER FIVE

THE SITE INVENTORY AND RESOURCE ANALYSIS

5.1 THE SITE LOCATION

Due to the fact that the N.I.I.A is a building of cultural significance the Federal capital development Authority designated a site for this project at the southern and of the cultural spine' which is a north south axis that crosses the central civil assets of the capital city plan, as proposed in the master plan for Abuja.

The site is oval in shape and is bounded by major roads to its perimeter and transit ways S-8 and S-9. a gentle slopped hill formation (rising from level 495.00 to approximately 510.00) at its highest point defines the epicentre of the land which is approximately 18.9 Hectares in area. The site is generally surrounded with a road network, two dual carriage-ways in both the west and eastern end, also notable building as shown on the land use map surrounded the site, The FCDA secretariat which faces the proposed site entry point to the site, the neighbourhood centre and a primary school all fall along side the eastern aim of the site, on the western aim are the federal Government Housing Estate which links towards the SSherraff International Hotel and the International Conference Centre. The communications tower and the proposed site for the National Television authority Headquarters fall on the northern arm which is the cultural



the site.

THE SITE IS OVAL IN SHAPE AND IS BOUNDED BY MAJOR ROADS TO ITS PERIMETER AND TYANSIT WAYS SB + SG A GENTLY SLOPED HILL FORMATION (RISING FROM LEVEL 495.00 TO APPROXIMATELY 510.00) AT ITS HIGHEST POINT DEFINES THE EPICENTRE OF THE LAND WHICH IS APPROXIMATELY 18.9 HECTARES IN AREA.

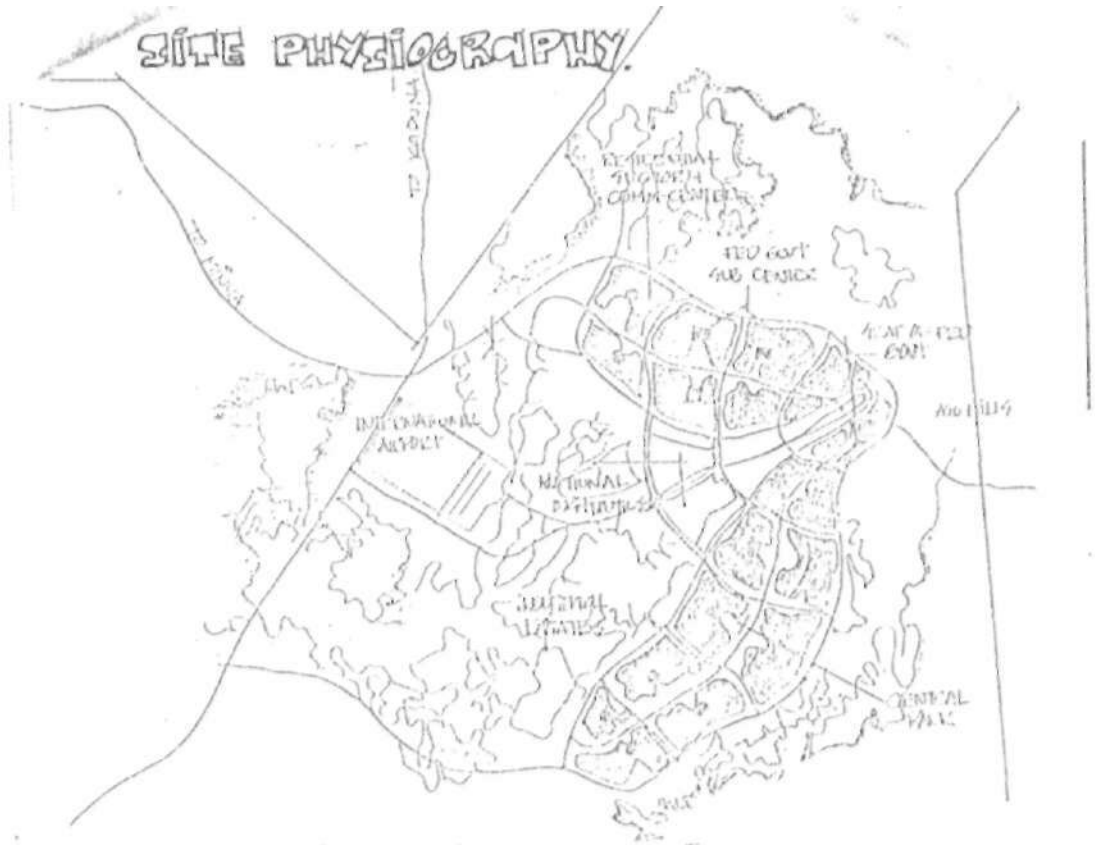
spine of the phase one zoning of the district, The Gwagwa plains can be seen on the fore ground of the southern arm of the site.

5.2 THE SITE FEATURES

The bulk of the city is concentrated in land with elevations from 360.00m to 518.50m to capitalize on climatic advantages on higher altitudes. Topographically the area is typified by gently undulating terrain interlaced by riverine depressions with height variations of around 30 metres. This produces short views which are made even shorter by the typical park savanna vegetation of the site. The central area consists of uplands and plains with numerous inselbergs, whaves backs and other rock out crops of various sizes.

5.2.2 GEOLOGY

Migmatite, grant gneiss and biotite granite underlying the majority of the gite are rocks of medium to high strength and are expected to present a minimum of engineering problems.



FEDERAL CAPITAL TERRITORY == ABUJA.
SKETCH PLAN OF PHASE 1-6

SITE PHYSIOGRAPHY.

TOPOGRAPHY. THE AREA IS TYPIFIED BY GENTLY UNDULATING TERRAIN INTERRUPTED BY RIVERINE DEPRESSIONS. THE CENTRAL AND SOUTHERN AREAS, INCLUDING THE CITY SITE, CONSIST OF UPLANDS AND PLAINS WITH NUMEROUS INSELBERGS, WHALEBACKS AND OTHER ROCK OUTCROPS. HEIGHT VARIATION IS AROUND 300M.

GEOLOGY. MIGMATITE, GRANITE, GNEISS, AND BIOTITE, GRANITE UNDERLIES THE MAJORITY OF THE SITE. ARE ROCKS OF MEDIUM TO HIGH STRENGTH.

SOIL. THE SOILS ARE TYPICALLY DEEP AND WELL DRAINED. THEY ARE GROUPED INTO TEN COMPLEXES ON THE BASIS OF PARENT MATERIAL AND TEXTURE.

VEGETATION IS CHARACTERISED BY PARK SAVANNA. RIVERINE DEPRESSIONS ARE TYPICALLY SKIRTED BY THICKETS AND HIGH TREES. THERE ARE OCCASIONAL PATCHES OF FOREST + HEAVILY WOODED AREAS.

DRAINAGE DENSITY. SITE CAN MAINLY BE DIVIDED INTO SMALL CONTRIBUTORY WATER SHEDS ALL CONVERGING ON ONE POINT.

5.2.3 SURFACE WATER

The site can more or less neatly be divided into small contiguous watersides, all conveying on one point. Construction will cause increase in stream -channel changes and will increase flows that could lead to local flooding and erosion problems if adequate design solutions are not provided.

5.2.4 SOILS

. The soils underlying the site are divided from migmatite granitic gneiss and are generally suitable for most development land uses. They are typically deep an well drained,, having only local constrains where they are high in day or stones, shallow of poorly drained, where soils have a high runoff potential, special design or construction techniques may be required to eliminate potential flooding and sedimentation problems, successful landscaping of public places and tree planting is reasonably assumed.

5.2.5 VEGETATION

Site vegetation is generally characterized by park savanna. This is typically a stratified community with a discontinuous canopy, shrub and grass layer structurally they may include a thick tall grass layer consisting of hyparrhenia and andopogon species and canopy species dominated by Albizia and parkia. Efforts should be taken to preserve woodland

areas for their valley as an aesthetic and recreation resource, and for their ameliorating effects on climate.

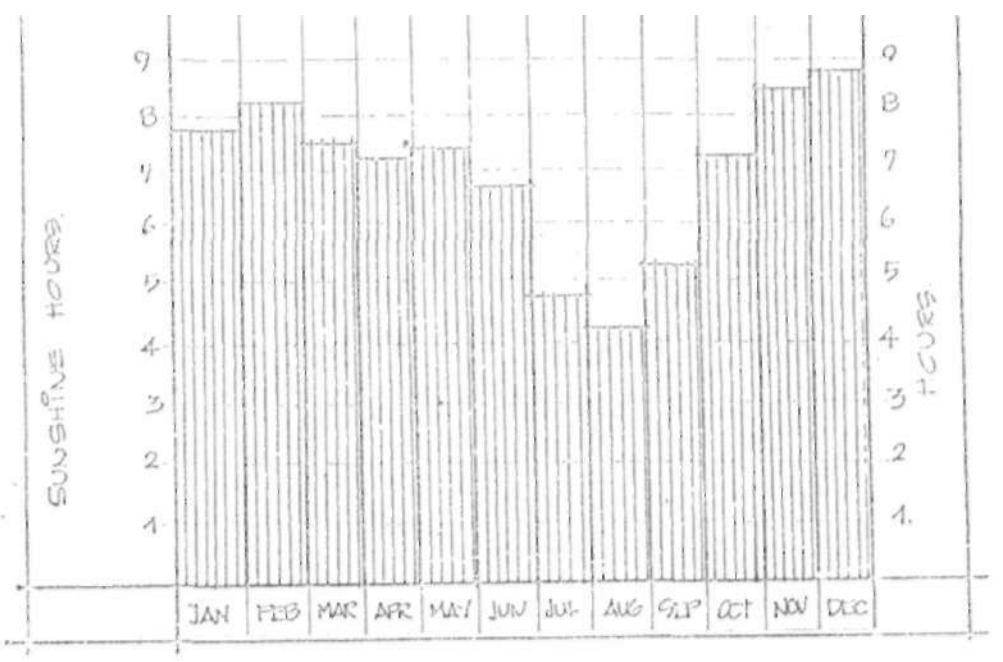
5.2.6 CLIMATE

A comfortable living environment will depend on maximising the aspect of the environment which reduce heat and the effect of humidity, and protection from rain and dust. Planning with climate should take place at all scales, while detailed climatic information is not yet available, extrapolations from existing air-port meterological stations have been used develop the basic description of climatic parameters presented in the site selection report.

5.2.7 TEMPERATURE - HUMIDITY

The response to net - radiation is greatly influenced by the humidity conditions in the air. The F.C.T records its highest temperature during dry season changes in temperature of as much as 17^{0}C have been recorded between the highest and lowest temperatures in a single day.

Maximum temperature is lower during the raining season due to a dense cloud cover. Human sensibility to temperature is greatly affected by relative humidity during the dry season, relative humidity falls in the afternoon to as low as 20 percent and this low relative humidity coupled with high afternoon temperatures account for the drying effects of the dry season.



MEAN MONTHLY SUNSHINE DURATION.

RADIATION :: IN HUMAN TERMS, NET RADIATION IS FELT AS AIR TEMPERATURE. THE RESPONSE TO WHICH IS GREATLY INFLUENCED BY HUMIDITY CONDITIONS IN THE AIR. F.C.T. RECORDS TEMPS AS HIGH AS 17°C AS DIFFERENCE BETWEEN HIGHEST AND LOWEST TEMP DURING DRY SEASON / OR FEW CLOUDS.

SITE CONDITIONS

WIND ABATEMENT.



PLANTING SCREEN WOULD BE USED TO DIFFUSE THE EFFECTS OF THE NORTH-EAST TRADE WINDS bringing dust & dryness from SAHARA DESERT

SOLAR ABATEMENT.



THE IMPACT OF SOLAR RADIATION ON BUILDINGS IN HOT CLIMATES ARE GREAT & SHOULD BE REDUCED BY THE SHADING OF WALLS.

NOISE ABATEMENT. — EFFECT OF VEGETATION & LANDSCAPE

5.2.8 RAINFALL

The raining season starts at about the middle of April and tapers off very rapidly towards the end of October. Thus the duration of the raining season is between 180 days to 190 days.

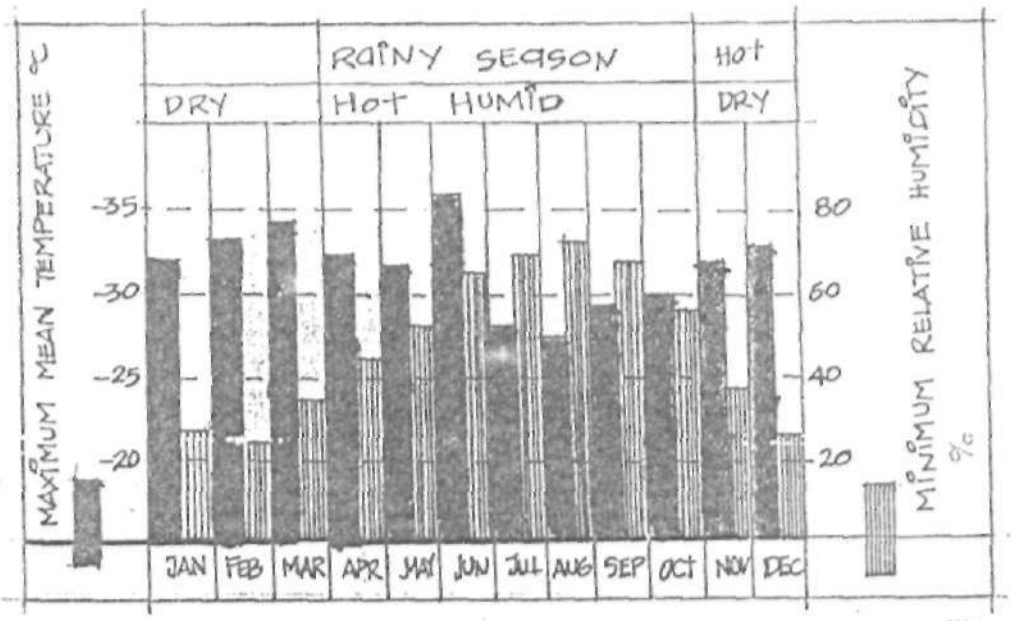
In Abuja area 60 percent of the annual rainfall is in the months of July, august and September. This concentration shows the need for drainage systems that can handle large volumes of water very quickly.

5.2.9 WIND - DUST

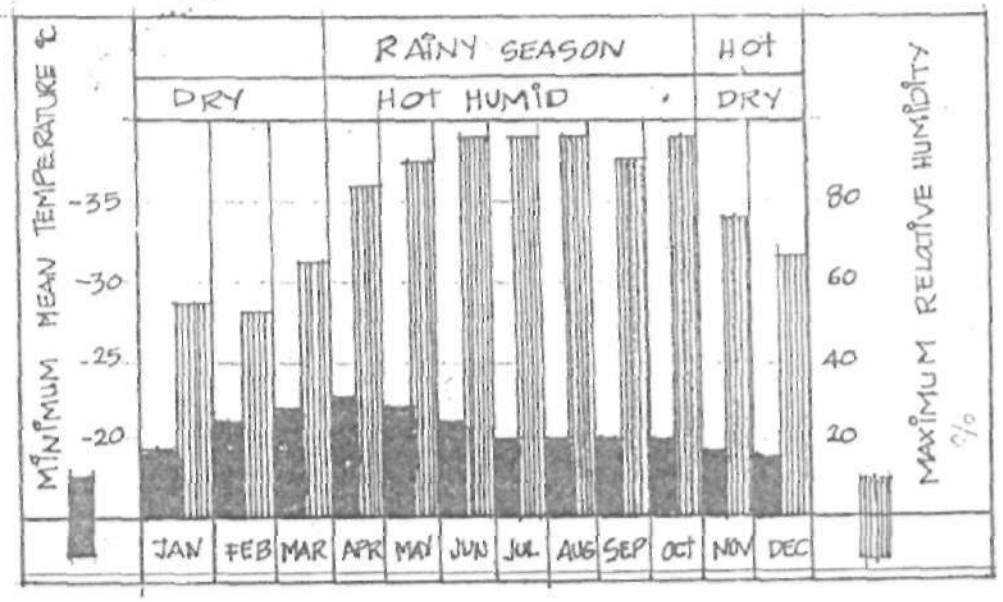
Two major air masses dominate the climate of the F.C.T. These are the Maritime Air Mass and the Tropical continental Air Mass. The forma is formed over the atlantic Ocean to the south of the country and is therefore warm and most. It moves inland generally in a south-west to north-east direction. this later is developed over the sahara desert and therefore is warm and dry and blows in the opposite direction, North-East to south-West.

The Oscillation between these two air masses produces the highly seasonal characteristics of weather conditions in the country. The Tropical continental air Mass is associated with the dry season and the tropical Maritime Air Means creates the net season see diagram.

In June the northerly flow of air component weakens and only the southerly flow predominates. Being moisture laden,

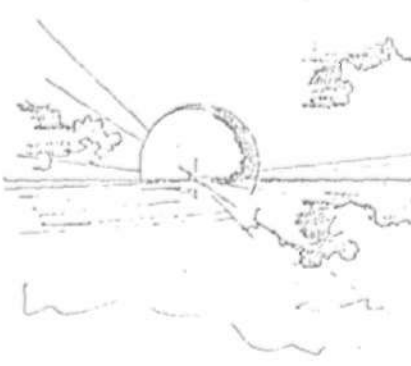


FEDERAL CAPITAL TERRITORY RECORDS HIGHEST TEMPERATURE DURING DRY SEASON - LOW RELATIVE HUMIDITY



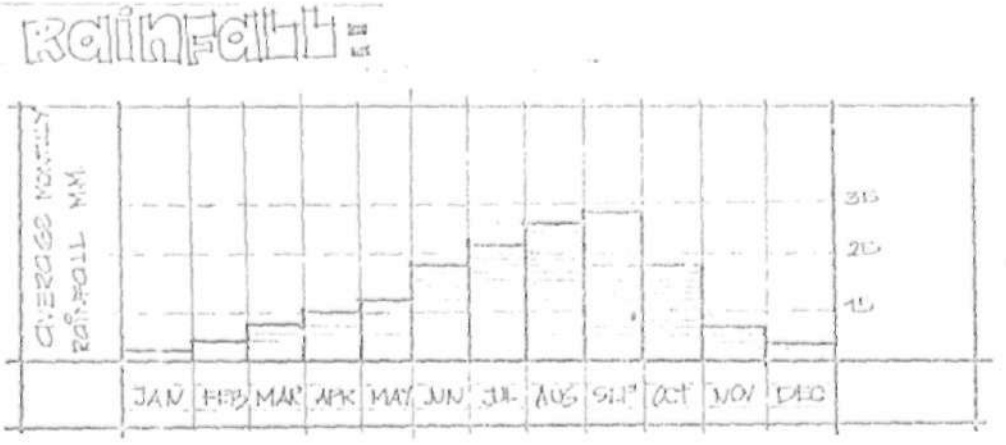
HIGH TEMP-DRY SEASON - HIGH RELATIVE HUMIDITY - JUN - AUG
LOW TEMP- DEC. APR

MEAN MONTLY TEMPERATURE AND HUMIDITY:



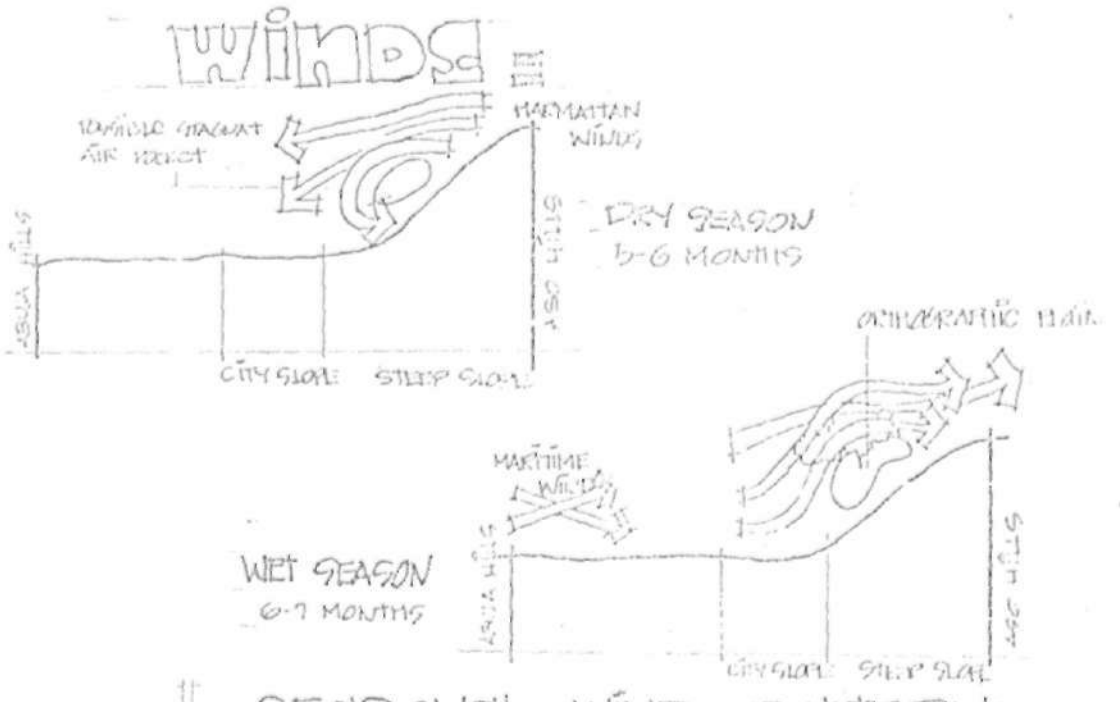
A COMFORTABLE LIVING ENVIRONMENT WILL DEPEND ON MAXIMISING THE EFFECTS OF THE ENVIRONMENT WHICH REDUCE HEAT AND THE EFFECT OF HUMIDITY, AND PROTECT FROM RAIN AND DUST.
PLANNING WITH CLIMATE SHOULD TAKE PLACE AT ALL SCALES. WHILE DETAILED CLIMATIC INFORMATION IS NOT YET AVAILABLE, EXTRAPOLATIONS FROM EXISTING AIRPORT METEREOLOGICAL STATIONS HAVE BEEN USED TO DEVELOP THE BASIC DESCRIPTION OF CLIMATIC PARAMETERS PRESENTED IN THE SITE SELECTION.

RAINFALL



MEAN MONTHLY RAINFALL

WINDS



SEASONAL WIND PATTERN:

ABUJA CLIMATIC DATA

it brings a lot of rain. In September the tropical continental begins to intensify over the territory and the North-East trades become the dominant wind from October to March bringing with it dry, couldless but dust-laden conditions associated with the harmattan.

The days are very hot but the cloudlessness mens that at night there is a considerable loss of heat by radiation from the earth. The temperature drops sharply often to dew point, giving rise to early morning temperature inversions and to early mist or fog. This if further complicated by settling dust particles which have the effect of reducing visibility to a few hundred metres.

5.2.10 SUN AND CLOUD COVER

The F.C.T site is exposed to 2,500 sunshine hours annually (Mobogunje 1977). During the dry months, the variation in the amount of sunshine follows the general trend of an increase form over 275 hours on the city site.

With approach of raining season, there is a trend towards increased cloudiness. The decline in sunshine hours with progress of the rainy season reaching its 10 west values in the month of august. Diagrams are shown for monthly sunshine variation.

5.3 THE SITE APPRAISAL

A) Site Merits:

i. Good Proximity to the seat of Federal Ministries and

other parastatal bodies and equally close and other parastatal bodies and equally close to the international conference centre. This makes movements between the complex and other places within the central official district very much shorter and easier.

ii. Accessibility: The two arterial roads that bounded the site on the northern and western - B14 and S9 respectively provide better opportunities for the choice of ingress and egress points to the site.

iii. The regularity of the terrain and almost flat nature create advantage towards the choice of structural system.

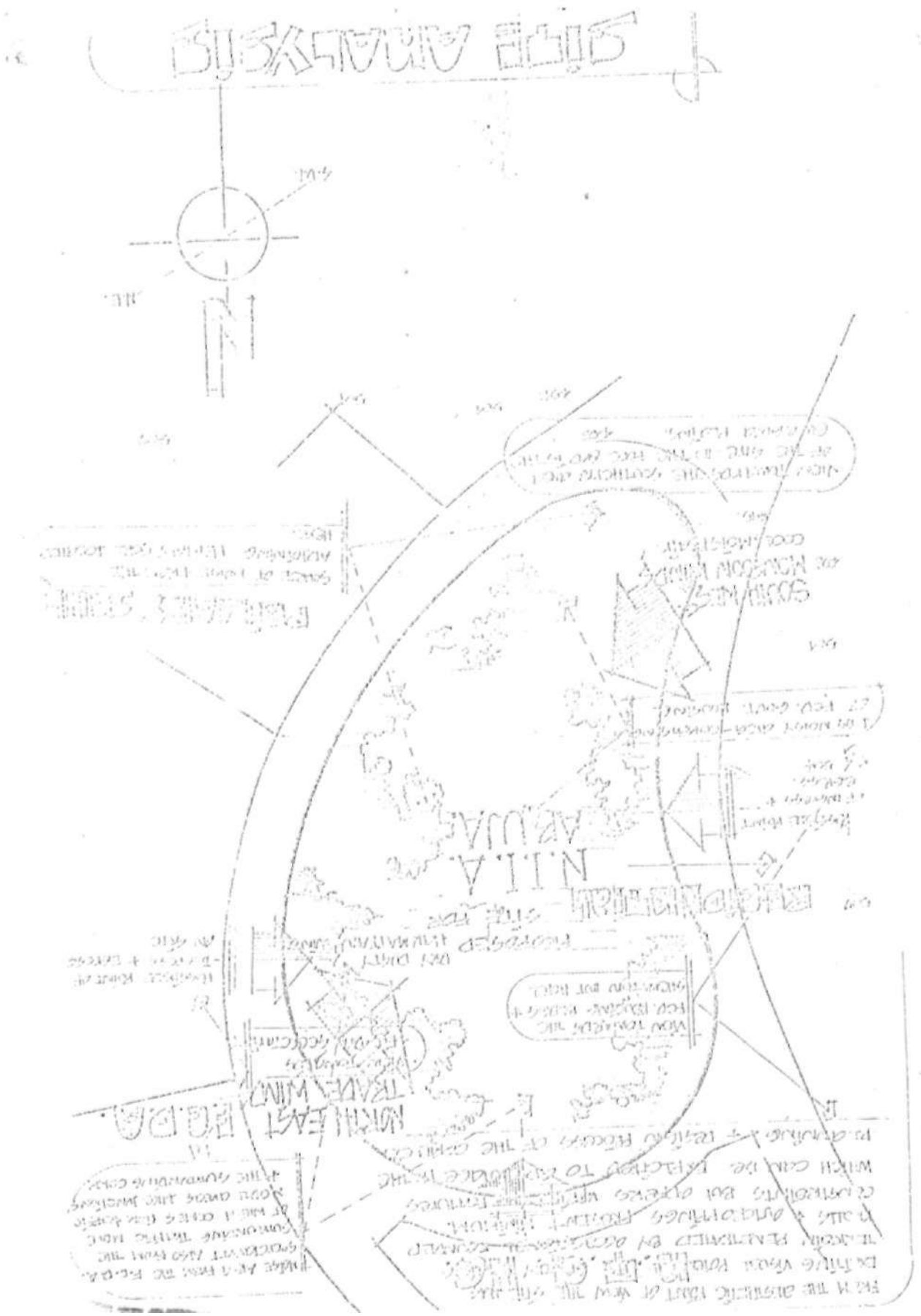
iv. The absence of any physical obstacles on the site makes the placement of units easier without any hinderance.

B) SITE DEMERITS:

i. The presence of roads round about the site create a major noise source on the site as such making noise a determinant in the placement of functional areas.

ii. The characteristic of the soil of high erodability potential makes erosion a menace as such requires a complex drainage system.

iii. The flat terrain as exhibited especially towards the northern and of the site do not provide the opportunity for differential horizontal planning and do not enhances drainage.



CHAPTER SIX

DESIGN REQUIREMENTS

6.1 Brief Proposal and User's Requirements.

6.1.1 The F.C.D.A has issued to the N.I.I.A a briefing document dated February 4th 1981 and under the title "preliminary Brief, Nigerian Institute of International Affairs, Abuja". This contained a comprehensive outline description of the requirements for the proposed complex, associated with accommodation and other infrastructures. The N.I.I.A then developed this Brief into a form of schedules of accommodations.

The proposal here have been based on the appraisal of the brief and an adaptation of the structure of the; Institute at present but making provision for the maximum expected staff strength. The complex would consist essentially of main conference hall, meeting rooms, exhibition, relaxation and circulation space and an administrative wing to take care of its operations. The main hall is mainly for speeches, and as such all theoretical appurtenance e.g flytower, dressing rooms and rehearsed rooms are omitted. However other activities such as music and film shows could be accommodated. Their correlated social facilities would be provided such as the main kitchen, restaurant and Bar units and Baguette hall. Provision for the press centre and the publication unit is also required.

6.1.2 User's Requirements

1. Conference Hall

1. Main conference Hall (1000 seat) 2) Committee room

3. Booths for Interpreters 4) Management Offices

5. Press Room 6) V.I.P lounge

7. Exhibition space 8) General Foyer

9. Service Entrance 10) Car Park

11. Circulation/Toilets 12) Back stage

2. Administrative Unit

1. Administrative Officers 2. Directorate section

3. General Adminstration 4. Head of Sections of

i) Account ii) Transportation iii) Establishment

iv) Recruitment and Training v) Maintenance

vi) Welfare vii) Security

5. Main reception 6. Registry and Records

7. Administration Library 8. Committee Rooms

9. Council Chamber/Conference room 11. General Office.

3. Press Centre

1. Head of Section 2) Printing and Publication

3. Storage Section 4) Visiting staff lounge

5. press Conference hall 6) Toilets

Orientation and Form

These have been dictated by two main climatic forces:- sunshine and prevailing winds. a compromise is found in orienting the buildings in a north-south direction with the form elongated on the east west axis. As such, most openings faces the noth and south direction. This arrangement reduces the effects of the prevailing winds since they now occur at an angle. This orientation also takes advantage of the breezes coming in from the tapex-end and the beautiful view towards the back in the distant horizon.

7.2 Design consideration

- Symbolic form - identification
- High Accessibility
- Accommodation growth in terms of expansion.
- Functional criteria - as shown on the site concept diagram.

7.2.1 Traffic Access and Circulation

The proposed main access will be centrally located from the direction of the cultural spine, from where the service routes would be taped from along the side boundaries of the site. The two entry cores of the site seervice routes would serve the press centre for the conference unit and the Banquette Hall respectively. The service route for the Banquette unit circumvents the site and terminates at the

service bay. The main car park is to the sides of the main entry route to the site. Driveways will be provided to meet the above access requirements and should be surfaced with an appropriate all - weather materials to minimize dust and debris an provide safe access.

7.2.2 Parking Areas

The parking formation required is the surface parking due to the following guidelines:-

- 'Parking lots should not be built immediately adjacent to the public right-of-way. Lots should be set back sufficient distance to allow landscaping of the parking lot perimetre, and provide safe entrances and exits.
- Large expenses of parking should be avoided. Carparks should be broken into smaller lots and landscape to establish the overall visual quality of the centre.
- On - street parking contributes traffic congestion and should not be allowed, except on designated streets designed for that purpose.
- Proposed number of parking lots should between 350-500 cars at a time.

Trees are planted on all external circular routes to reinfoce the approach situation and at the car parks to provide shade from the sun. Access to all park of the site is possible. This is most favourable to the fire fighting equipment incase of fire out breaks. Pedestrain routes follow

adjacent to all roads and Zebre crossings are provided at all pedestrain - vehicular nodes.

7.2.3 Views

The best view on the site is towards the North-west end of the site in the distant horizon because it showns in foreground the Gwagwa plains which is a good scenic value. although since it might not be possible to make 100% use of this view, the site should be well landscaped to give a befitting view to other parts of the complex.

'Another interesting view is that which shows the communication tower with the Sheraton International Hotel in the foreground which lies on the North-East location of the site.

7.2.4 Landscaping and External Works

Effort will be aimed at maintaining and improving the aesthetic quality of the environment, taking into consideration the selective grading and shaping of lthe site. Minimum number of existing tree 'should be cut and other planted at convinent locations. Other than driveways, site in front should be formally grassed with palm-trees following line of exit and entrance drives, shade trees should be planted between roads and buildings.

- Provision of informal footpaths surfaced with loose pebbles through grassed area will be considered. Also flowering plants will adorn the entire complex.
- A judicious provision of a sculptures, fountains and water bodies, morals and paintings etc will further enhance the aesthic qualiting of the environment.

Contemporary Landscape Elements

i) Greenery:- Assorted types of plants and gresses offer welcome relief from the predominant visual impact of hard solid concrete structures of our built up environment. They also possess pleasant aesthetic qualities, the trees in addition offer shade to th building, absorb distressing urban noises and may also be used to screen off undersirable vies such as cars and vehicular parks.

ii) Water Pools and Fountains:-
Used to give imprission of coolness and pleasant reflections of surrounding facades. Skillfully designed fountains and water fets are established landscape features of tremendous beauty.

iii) Sculptures and Statues
These are symbolic expression of our art and culture. They enrich spaces and could be used to define lines of movement.

7.3 Operational Synthesis

Seen from the programming point of view, the functions inherent in the N.I.I.A all revolve around the notion of relationship, the relationship is between the information and research object on one hand and the eventual users or the people on the other hand. these elationship determine the essential aim of the complex and hence the nature of the functions to be fulfilled if that aim is to be achieved. The functions will be more or less numerous and complex according to the type, kind and size of the various components. They may, however be divided into four classes.

i. Reception Activities

This activities pave the way for the relationship with the general public. They take account of factors involved in psychological and practical conditioning of the people.

ii) Basic Activities

This activities are inchargé of framework for possible direct relationship between th various components, function and people.

iii) Co-ordination Activities:-

Organises the relationship physically and intellectually. chiefly concerned with administrative and management core of the complex.

iv) Logistic Activities:-

Focuses on informtion research and dissemination of the same through conferences, symposium and publications.

7.3.1 Space Organisation and Zoning

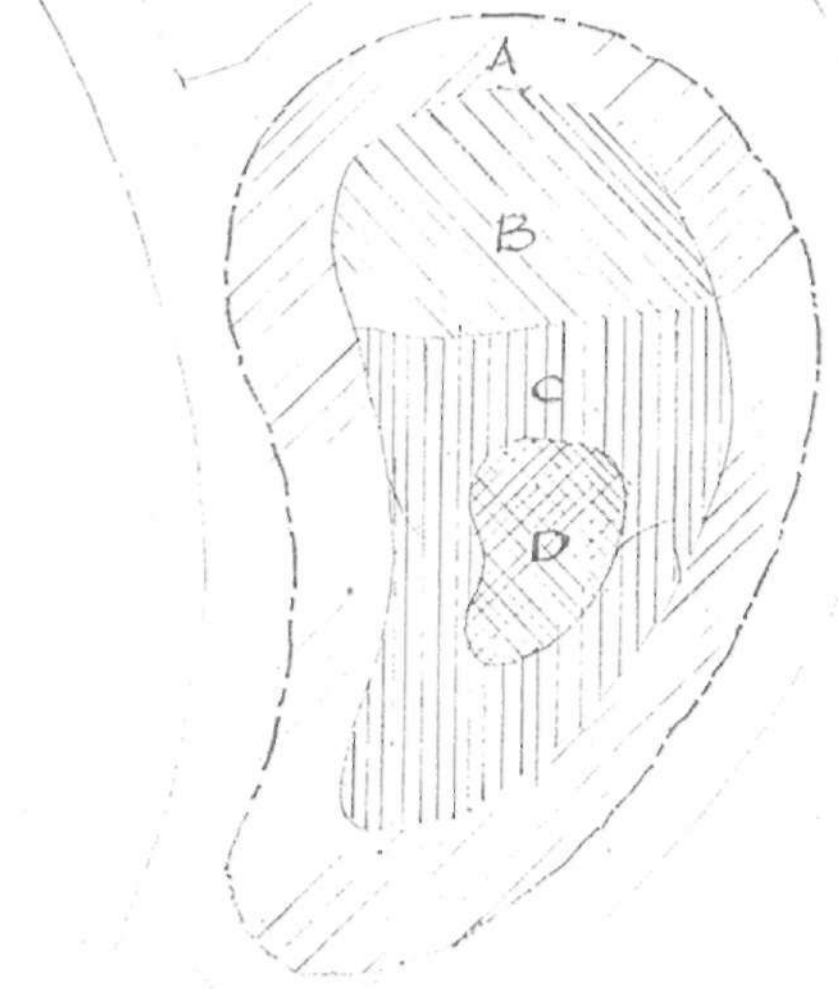
This mainly involves the hierarchy of architectural spaces, which involves the distribution of functional components and the zoning of the complex core with considerations be given to circulation, grouping and the design programme.

This major grouping will informed my planning of the complex. However, to effect the proper. functioning of the complex taking into consideration, various criteria like functional and activity relationships, need for zoning, noise level and hierarch of privacy, the fumnctional space relationships have been broken down into a core system.

A) Outer Core:- Basically comprises of the receptional activities, the parking area, the national identity or the symbolic form. This core is relatively noisy and public in nature.

B) The Central Core:- This is the main administrative complex which is made up of two parts the Directorate which is strictly private and the anxillary support services which comprises of the administration, information services,

SITE ZONING



A NOISY ZONE

B PUBLIC ZONE :- PARKING & ADMIN

C SEMI PRIVATE

D PRIVATE ZONE

Library, establishment, training, sections, the council chamber and lounge, accounts security and walfare section.

C) The Inner Core:- The conference House, the exhibitions area, press centre, lodging suites with related service units. It will also comprises of the workshop and maintenane sections.

CHAPTER EIGHT

DESIGN CONCEPT AND REPORT

Having synthesised the various units of the design it is now necessary to formulate concepts that with guide the planning and the form of the building.

8.1 Site Planning And Zoning

The axis into the site from the nothern end has been analysed to be the strongest point from which the compex can be visually appreciated. This axis would lead to the main entrance canopy from where the composite units will be zonned in order of hierarchy. The only access is to be tapped from the less busy route between the N.T.A and the site, from where two sets of parking spaces are accessible.

To enhance functional efficiency, the layout of the institute has been approached from the core system of zoning. "Thus public areas" like Administration and receptional activities which form the outer core are nearest to the main entrance. Behnind this is the central core which houses facilities whose services are required by the whole institute. They include the Resturant, Banquet services and the press centre. Further inwards into the site is the inner core which is the conference hall.

The criterial used for the zoning include:- activity relationship, noise levels, progressive heirachy of a privacy from the visitors (main entrace, and service requirements. The institute is further zoned into sections based on functional compatibility and the need for sharing common facilities, and services by units having closely related activities.

Entrance as early said is restricted to one point. this is due to the high distribution of traffic network around the site, the entrance leads directly to the drop off at the main entrance of the administrative block. the main entrance is connected to the service area on both the right and left arteries to the site. Parking for a maximun of about 400 cars is provided with the inclusion of the service bay for trucks and buses. Staff parking and the V.I.P parking spaces are provided at the front of the administrative building. A lawn flanked the main approach to the complex with side landscaped areas along the parking artery while an open air terrace opens out from the conference Hall.

6.2 IDENTITY CONCEPT

The main theme expressed in the Hybrid concept is to explore ways of in corporating local design features in modern architectural solutions. thus at the end of the survey on Traditional Nigerian Architecture, some form of synthesis became necessary to sought out the common elements that could be intergrated in the Design.

Studies on Nigerian Urban form reveals that towns were didvided into sectors or wards while the major facilities and institutions of the city (palace, market, mosque e.t.c) were located in the centre of the twon. Roads then radiate from the city centre through the various sectors (wards) to the citywall gates. To reflect this unique structure, the institute was zoned into sections or divisions while the common facilities (those whose services are required by the whole institute) like resturants and publications were located in the centre of the complex. Cover footpaths then link these core to the various sections. To further symbolise this emphasis on the centre, the concept of the `Ate' was barrowed from Tiv architecture. the `Ate' is a multi-parpose structure ususally oval or circular inform, located in the centre of a Tiv compound, around which other huts are arranged in concentric circles. thus a oval form was chose since this will easily linked other units together.

One re-occuring element in the planning of Nigerian compounds consist of either rectangular mud buildings enclosing a courtyard or series of courtyards. As a reflection of this, the various sections of the institute consist of circular buildings with a central court-yard which apart from aiding natural lighting and ventilation creats room for easy flow in the various unit.

Another element of traditional compounds is the strict heirachy of privacy obeyed from the entrance to the sleeping

quarters. A similar heirachy of privacy is obeyed in the institute from the entrance to the conference Hall.

In terms of facades, traditional entrances are empahsised and are often sculpured. In the institute, the aims is a strong'and `imposting' architecture since Nigeria is a regional power in African and complimentary identities for the two main institutional functions of information research and displomacy. Attention was given to the main entrance, being the link with the outside world, and projecting staircases from'the central `core' adds beauty to give the impression of prinacles which symbolises power. In Hausa tradition architecure.

8.3 General Planning

The planning of the institute is based on the basic criteria of zoning the public functions away from the non-public sections. The administrative core take four floors, the ground floor is basically the main reception, informations and protocool services, it also has among its functions the transport maintenance and technical units. Basically the first and second floors of the administrative block is the general administration unit of the complex whole the third floor is the directorate section. All faciliities located on the ground floor level are public in nature.

8.4 Circulation

8.4 Horizontal Circulation Concept.

The basic shape for the design is circular which controls the concepts adopted for circulation. The main circulation routes with its point from the main reception unit from the administration building is integrated concentrically with the other componets while the other three circulation routes are radial on the other three levels of the administration building. A lobby where all the radial circulation routes lead to is located centrtally.

8.4.2 Vertical Circulation Concept

For going up within the administration building and the conference hall system of stairs and lifts are provided within the complex. The major vertifcal circulation point is centrally located and contains of two lifts and a main stair case. Excape stairs are located at the east and west side of the building.

8.5 Materials And Finishes

The main material used for the building is reinforced concrete. All column and beams are of reinforced concrete. The exterior of the buioding is made up of concrete panels. Marble and patterned cement sand screed are the main materials used in finishing the building interior. Accoustic panels are used on ceilings and on the walls in the conference hall.

Carpets are to be laid over the cement sand scoreed floors in areas where marble or ceremic tiles are not applicable. Black marble is used on the walls of the entrance hall while marble is laid on the floor together with strips of red carpeting placed to form definite paths.

8.6 Services

As much as possible toilets were restricted to fixed areas of the building so that piping can run continuosly in a straight route. Ducts pass vertically through the four main points in the administration building and are distributed horizontally on each level. While the toilets services for the other components are distributed in fall to the ground which invarably goes into the inspection chambers. a major plant room is located at the service bay while the lift motor is located on top of the left shaft structure.

8.8 Conclusion

In an attempt to provide a suitable building to house the Nigerian institute of International Affairs Abuja, Nigeria regional Architectural identity has been chosen as the main area of focus. This was born out of the nature of things, which varies from place to place if not for any reason but for climate, cultural left style and level of technology. Even the creation of nature agree with the first two reasons. And since with God Mistake is impossible, Architecture being a response

to the people desire should follow suite.

In the course of research for a national Architectural character, tradition was used as a catalyst and technology as a moderator to achieve this. In the opinion of the researcher, Nigerian Architecture can best be identified in plan due to two main reasons: high sense of privacy and strong desire to be closed to nature. In other word National Architecture (Nigeria) is mainly related to the interior and functional flow as well as design for privacy where as the elevation is of secondary importance.

Thus, this scheme is a hypothetical attempt to make a double contribution, first to what the researcher opinion should be the Nigerian approach to the architecture of the institute facilities, and secondly, the provision of a facility whose programmes and activities are tailored to effect the evolution and development of an indigenous architecture for Nigeria. thus an architecture that deeply consideraed, the cultural life style of the locality, the climatic conditions and level of technology available can be termed a regional architecture.

If this scheme could spur other Nigerian to think in this direction, an act positively for the advancement of Nigerian Architecture, An Architecture that can be truly called Nigerian Architecture can be come a reality.

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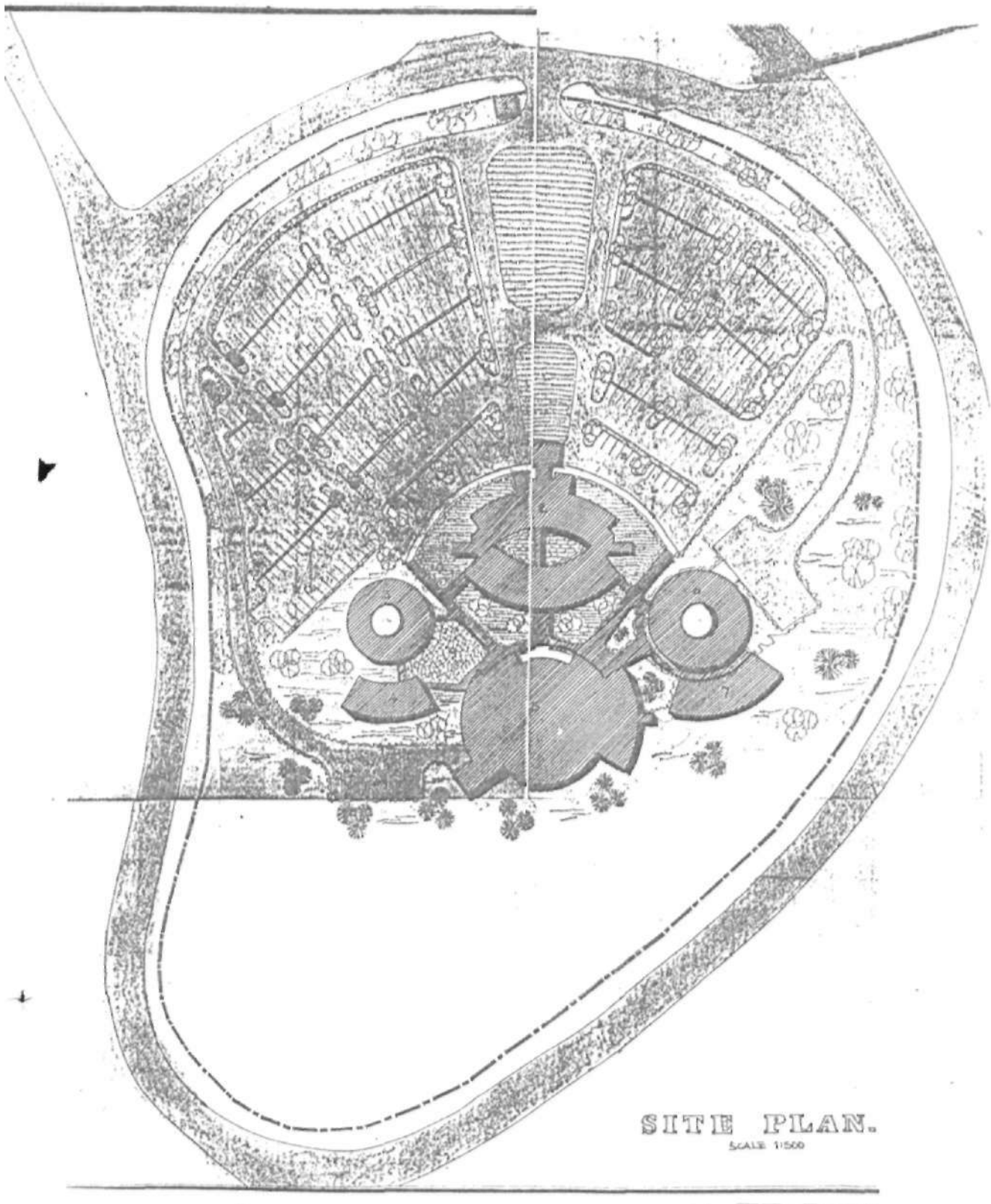
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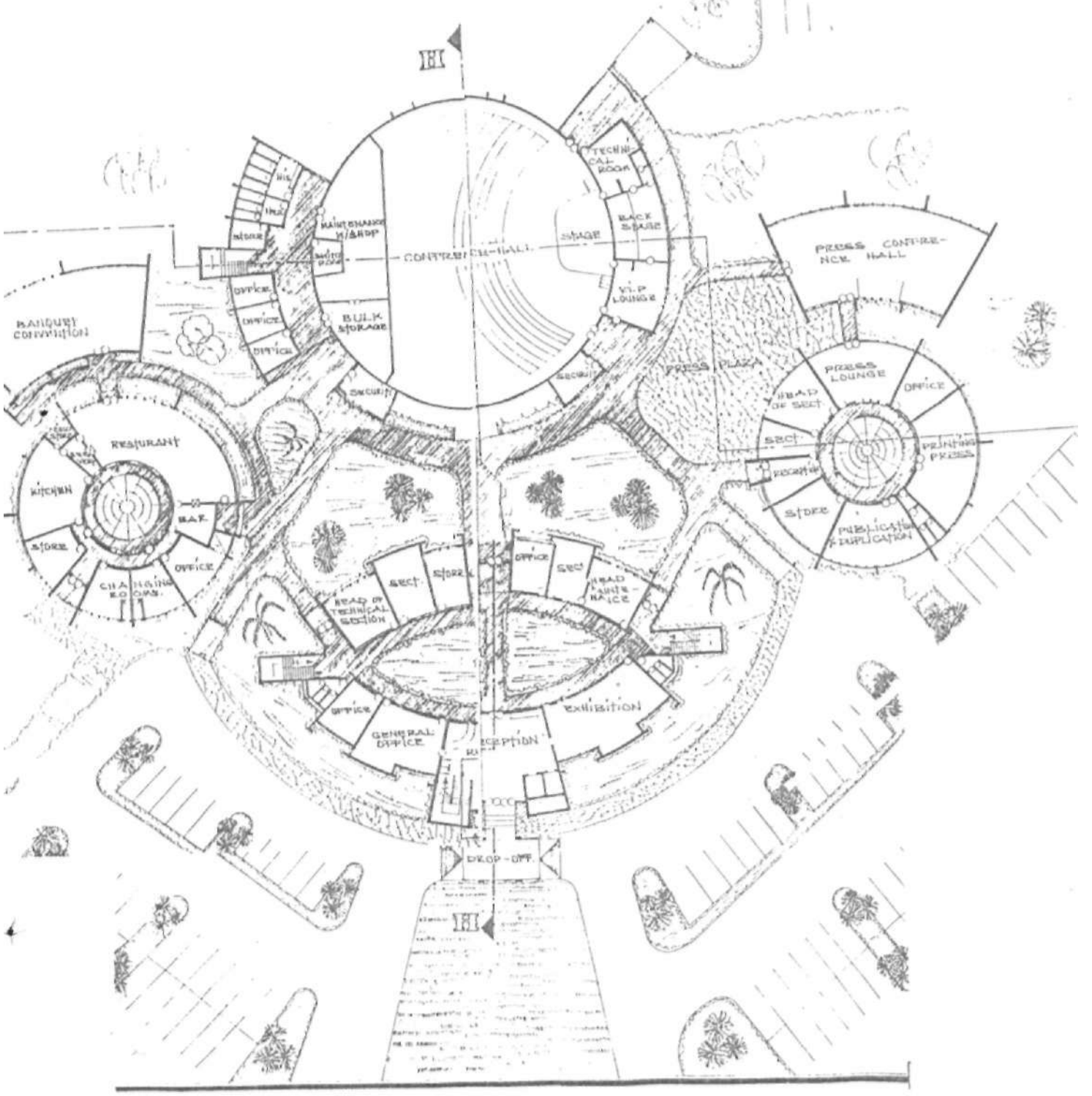
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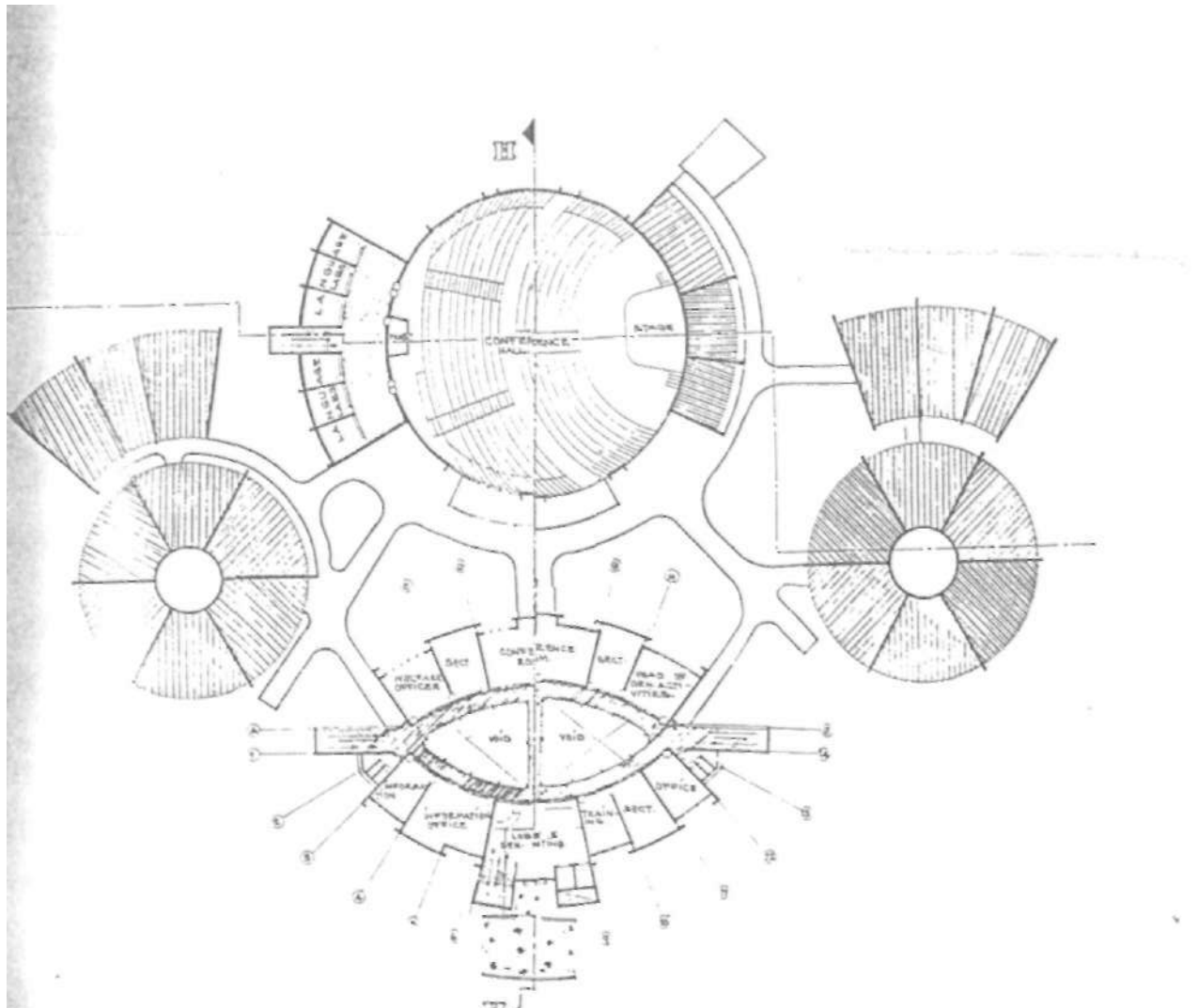


SITE PLAN.

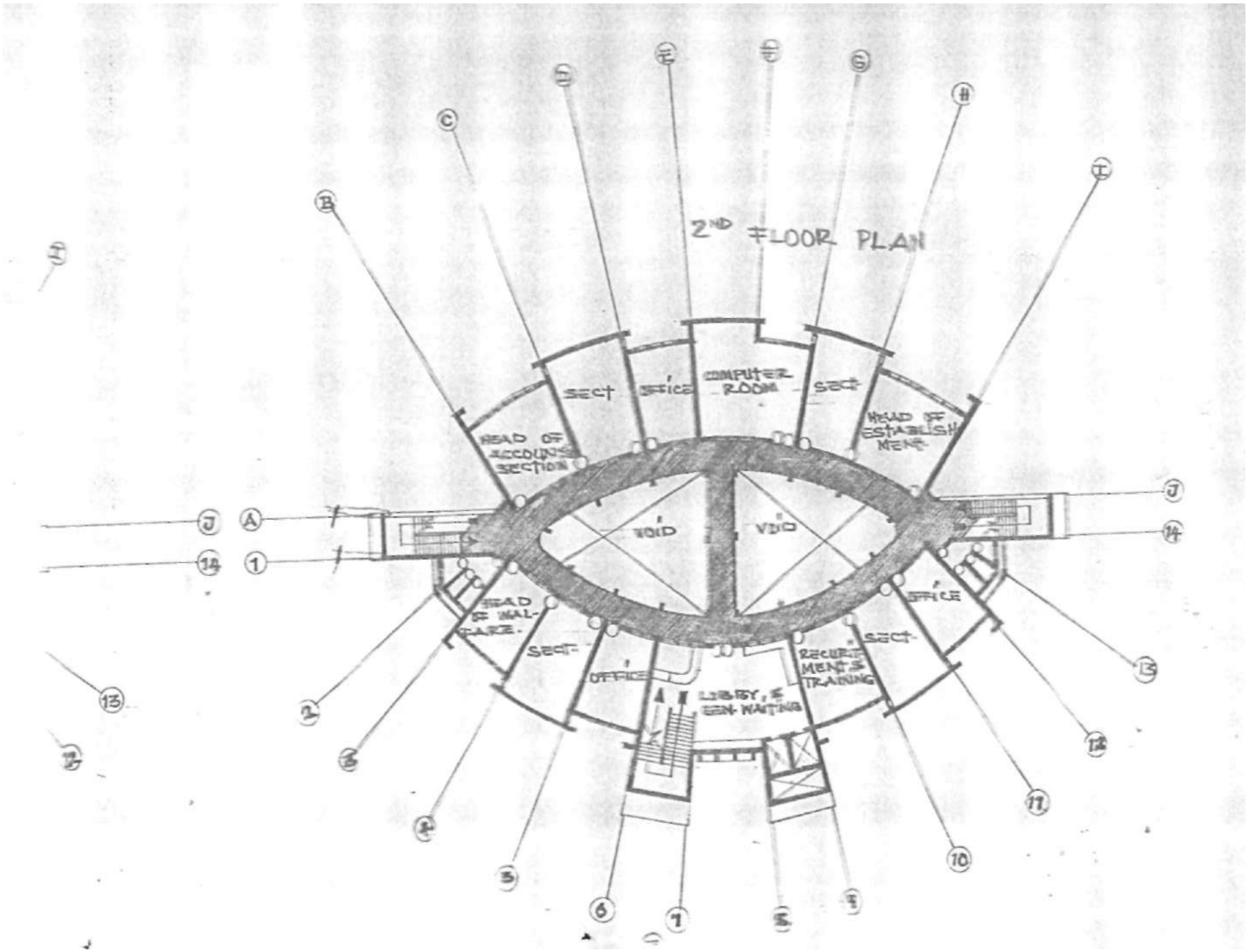
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PLAN.

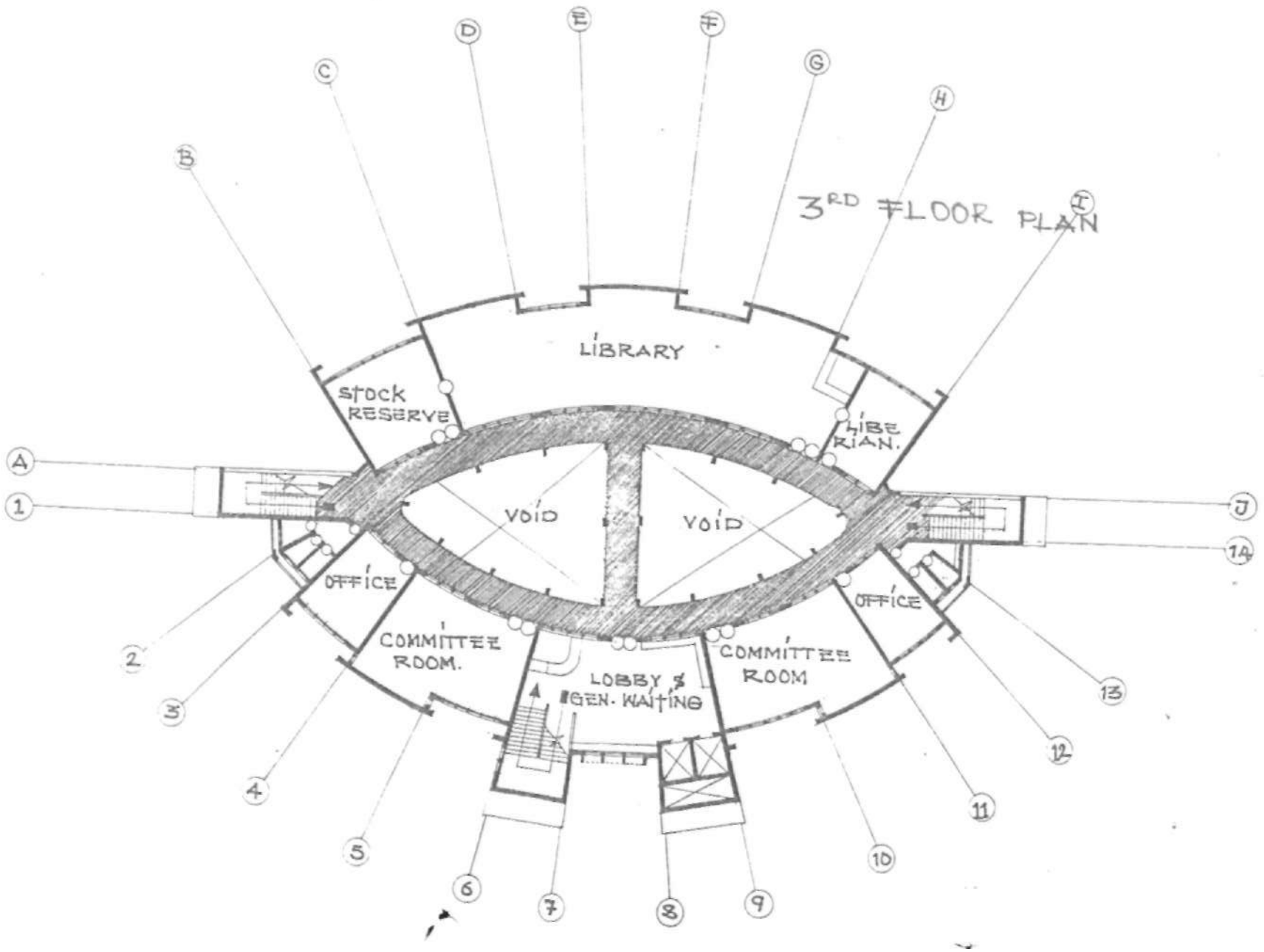

CONFERENCE HALL
STAGE
TECHNICAL ROOM
BACK STAGE
V.I.P LOUNGE
PRESS CONFERENCE HALL
PRESS PLAZA
PRESS LOUNGE
OFFICE
HEAD OF SECT
SECT
PRINTING PRESS
STORE
PUBLICATION & PUBLICATION
BANQUET CONVENTION
RESTAURANT
KITCHEN
BAR
STORE
CHANGING ROOMS
OFFICE
MAINTENANCE W/SHOP
BULK STORAGE
SECURITY
HEAD OF TECHNICAL SECTION
SECT
STORE
OFFICE
SECT
HEAD MAINTENANCE
EXHIBITION
GENERAL OFFICE
RECEPTION
DROP-OFF

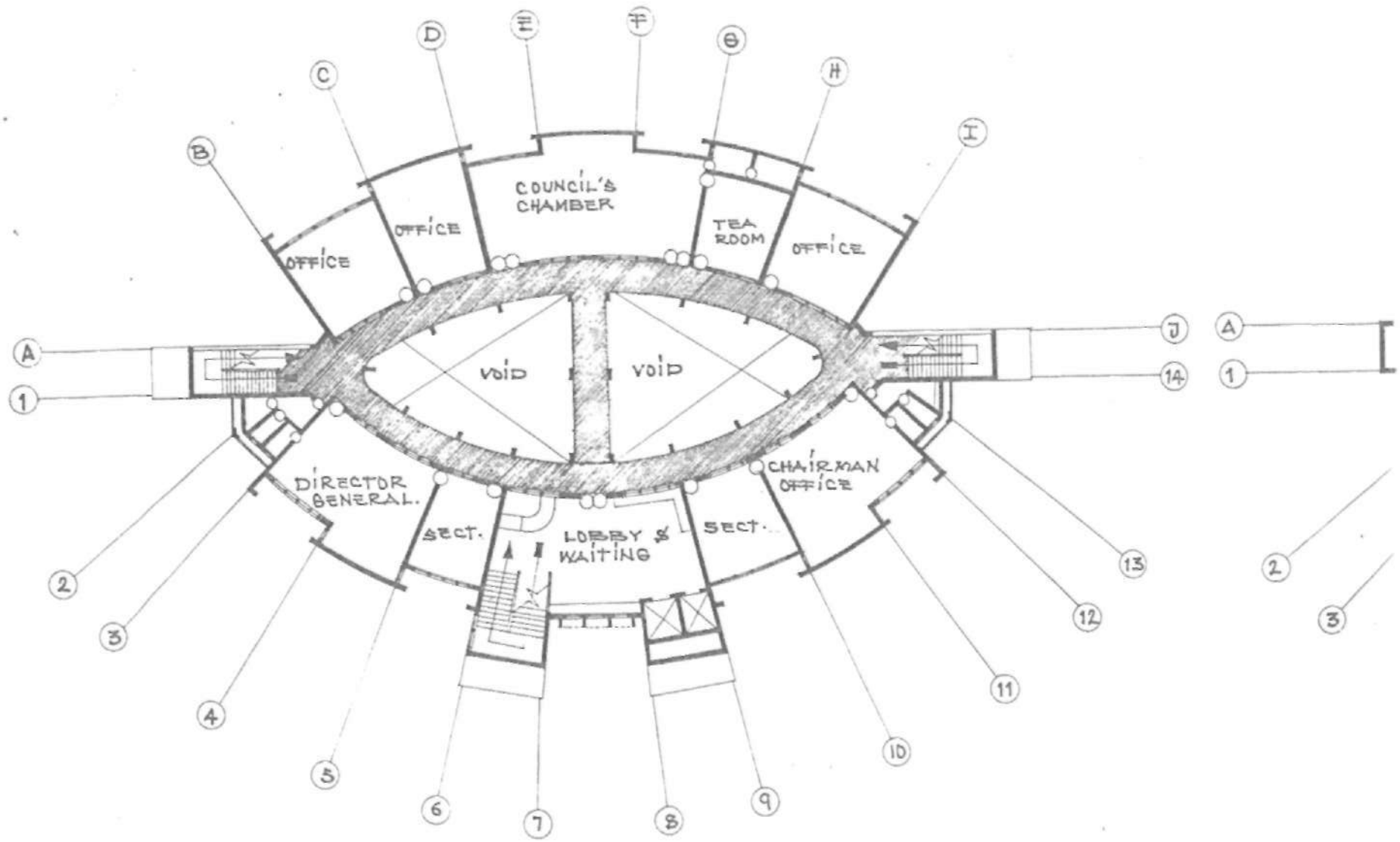


FIRST FLOOR PLAN.

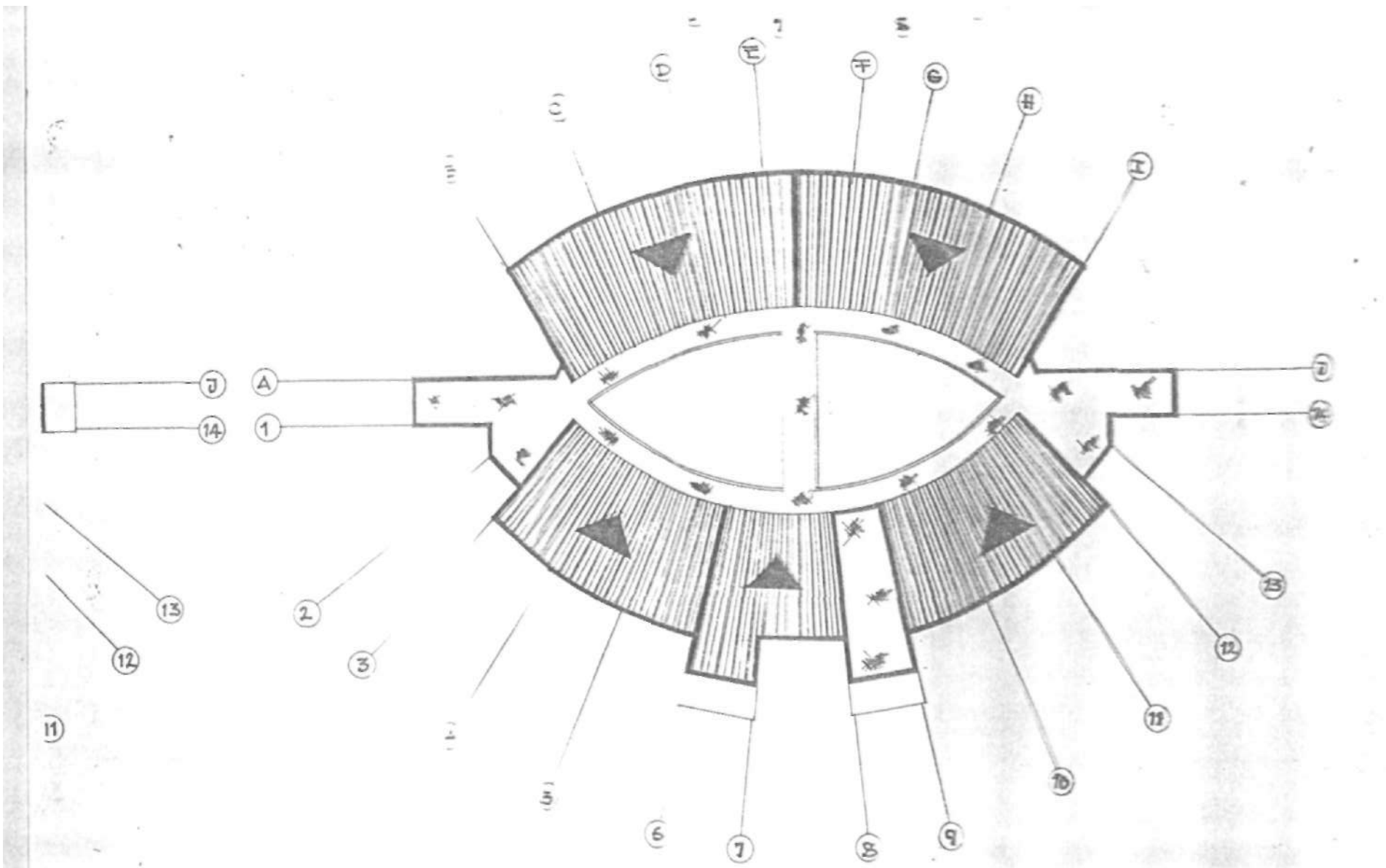

2ND FLOOR PLAN
SECT
OFFICE
COMPUTER ROOM
SECT
HEAD OF ESTABLISH MENT
HEAD OF ACCOUNTS SECTION
VOID
VOID
HEAD OF MAL-PRACTICE
SECT
OFFICE
LIBRARY & GEN. WAITING
REQUIRE MENTS TRAINING
SECT
OFFICE

3RD FLOOR PLAN

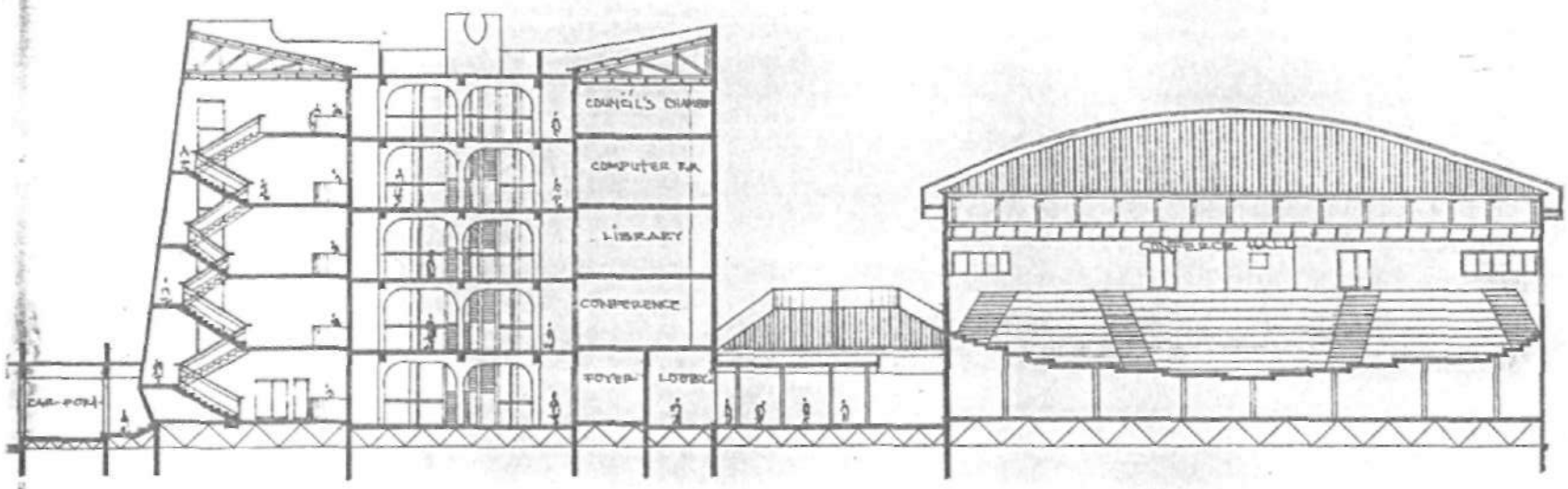




FOURTH FLOOR PLAN.

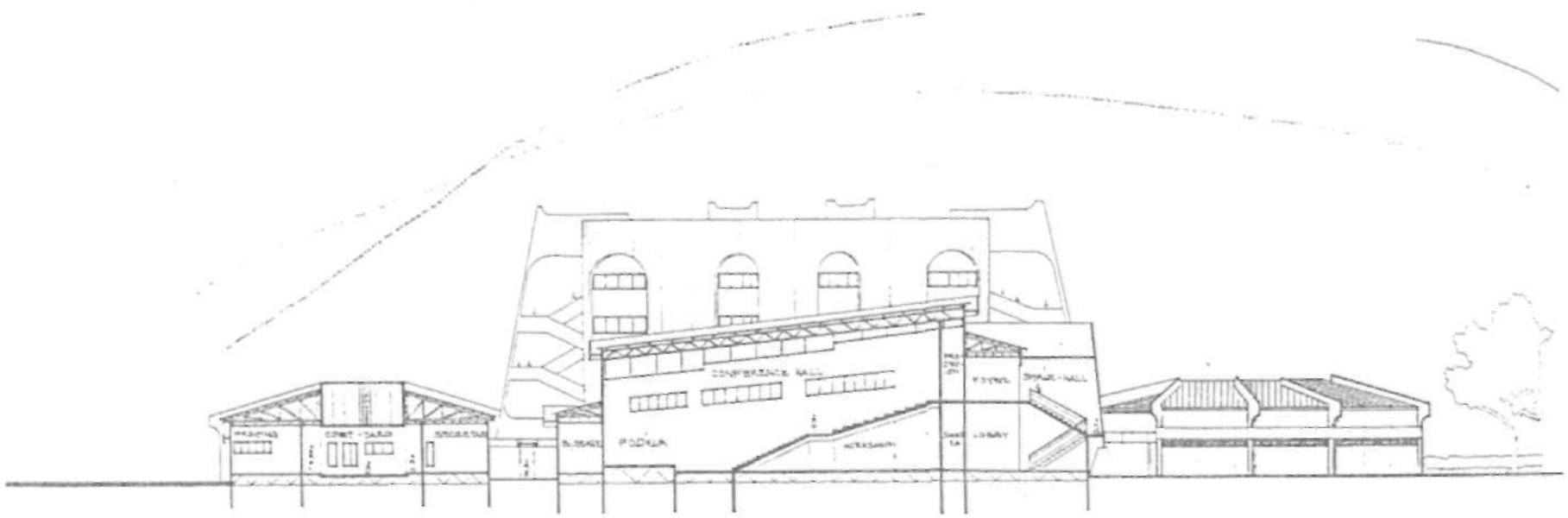


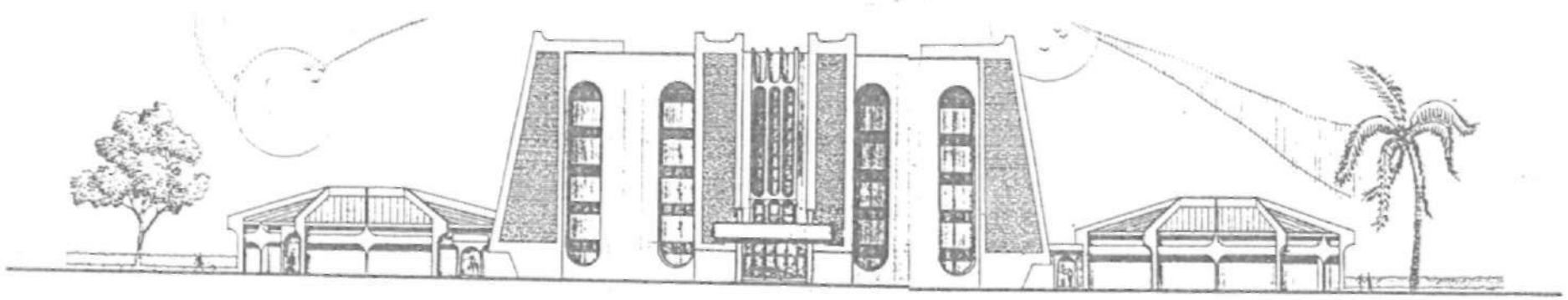
ROOF PLAN.



SECTION H-H

RIAN INSTITUTE OF INTERNATIONAL
AFFAIRS OFFICE COMPLEX ABUJA.


CONFERENCE HALL
FOYER
SECTION L-L

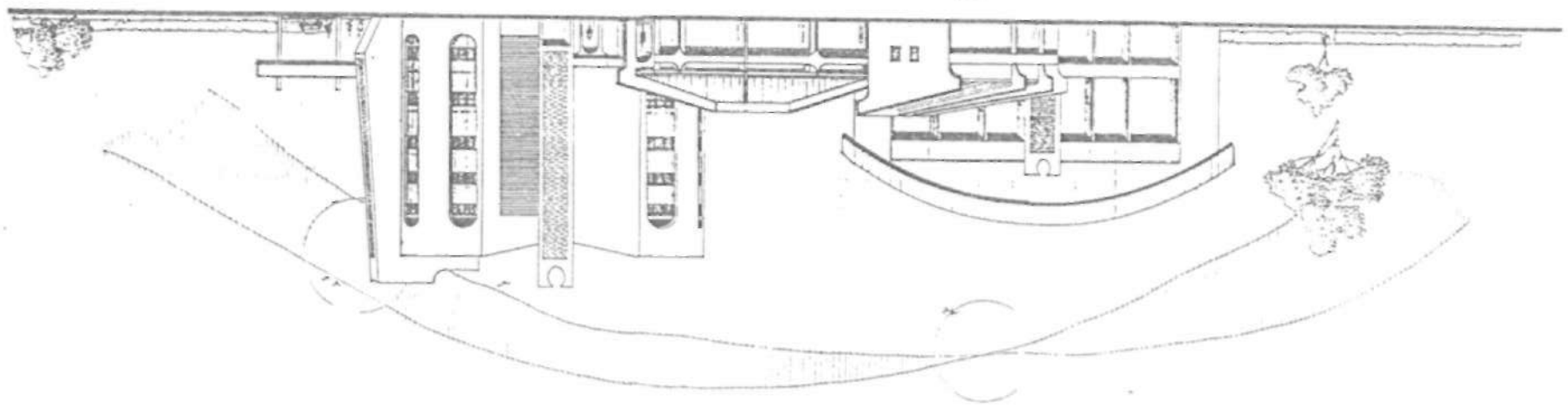


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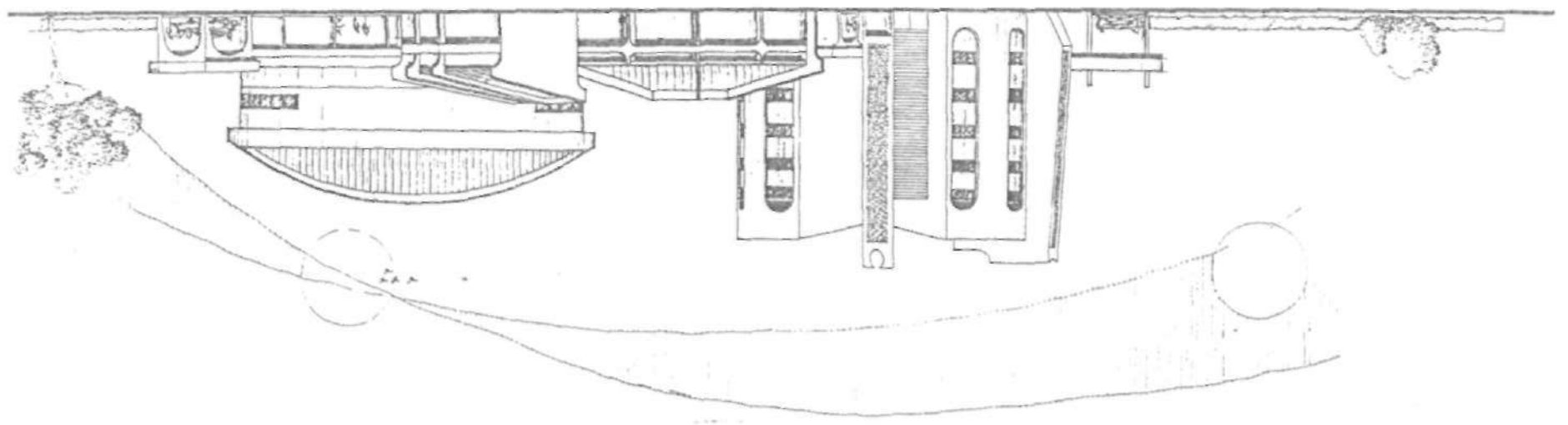
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M.Sc THESIS '98

EASTERN ELEVATION.



WESTERN ELEVATION.



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SOUTHERN ELEVATION.

