

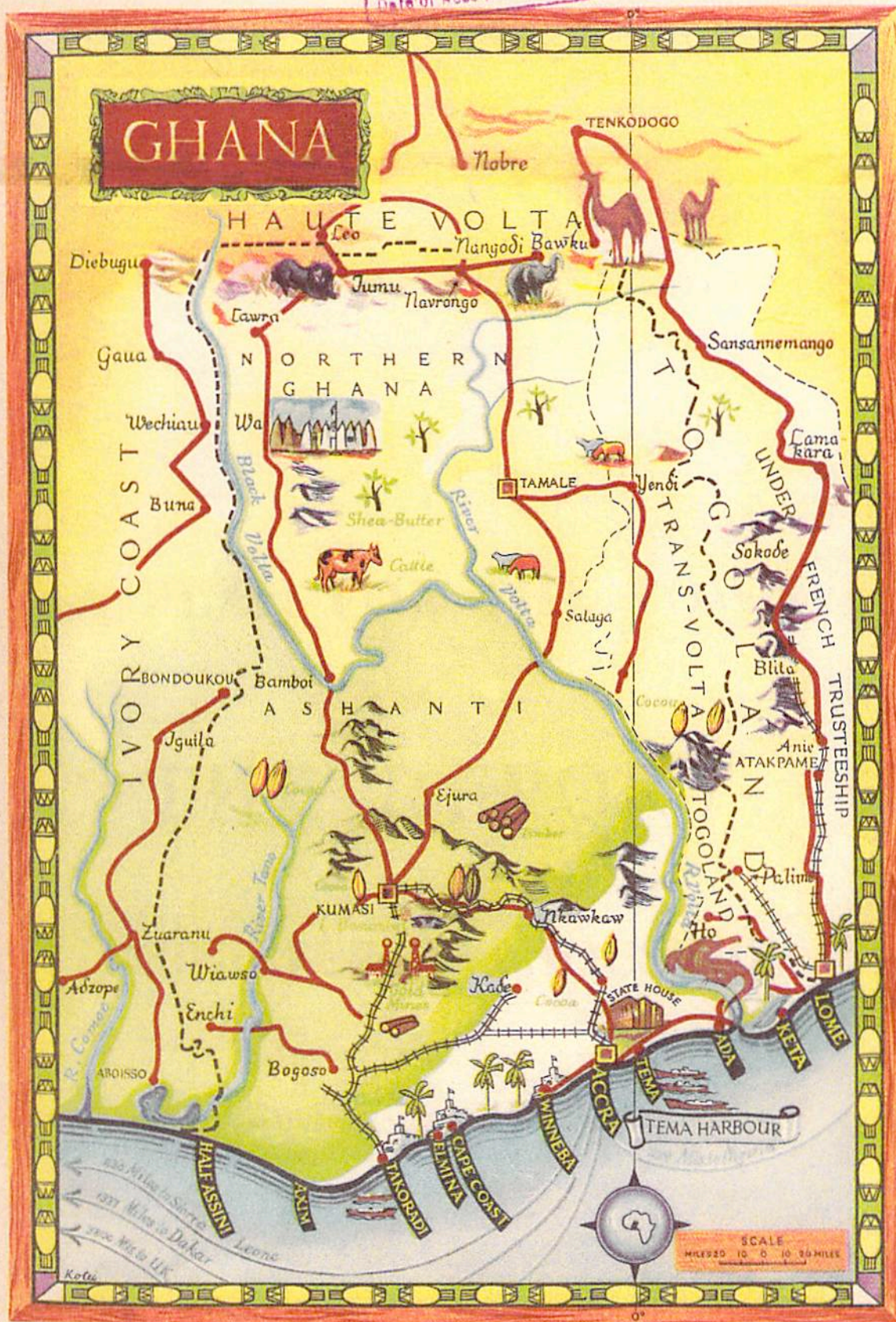
28/10/68

ACCRA

A PLAN FOR THE TOWN

The total population of Ghana is some four and three-quarter millions with a concentration in the southern and coastal areas. Of this number only about 500,000 live in towns of greater population than 10,000 whilst about 80 per cent of the total population live in small towns and villages of less than 3,000 persons.

Compared with the highly industrialised Western countries Ghana is not a rich country but it is not lacking in potential wealth both in the nature of the people and in its mineral and agricultural resources. Development is proceeding apace. The economy of the country is mainly rural and the chief agricultural products are cocoa—of which Ghana is the world's largest exporter—plantains, fruits, maize, millet, guinea corn and rice. In addition to cocoa Ghana also exports timber on a comparatively large scale and, to a lesser extent, such agricultural items as kola nuts, copra, palm kernels, bananas and coffee. Minerals also play a large part in the country's economy and gold, manganese, diamonds and bauxite are all won in large quantities. Fishing is a major occupation. The total values of exports and imports in 1957, were approximately £91,600,000 and £96,500,000 respectively. It is probable that the average *per capita* income of Ghanaians is between £50 and £100 annually.





ACCRA
A PLAN FOR THE TOWN

THE REPORT

FOR THE
MINISTER OF HOUSING

with a Foreword by
The Hon. Kwame Nkrumah, LL.D., M.P.
Prime Minister

and an Introduction by
The Hon. A. E. Inkumsah, M.P.
Minister of Housing

Prepared by the Town and Country Planning Division of the Ministry of Housing
Letterpress printing and binding by the Government Printer, Accra
Colour printing by the Survey Department



FOREWORD

Ghana became independent on the 6th of March, 1957 and from that day our efforts to improve the standard of living for all who live and work in Ghana have been intensified. Great strides have been made and there is everywhere a spirit of dedication and endeavour.

It is fitting that we should improve our main towns alongside our rural and industrial development and that our capital city should offer improved amenities and standards of living.

I therefore have great pleasure in taking this opportunity to offer a word of encouragement to all those who in the future will have in their hands the task of moulding the shape of our cities, towns and villages throughout Ghana.

Kwame Ninsin

Prime Minister.

INTRODUCTION

I am very glad indeed to have the opportunity of introducing this new plan especially since it is for the capital city of our new State and that this step forward is being introduced so soon after the Independence of Ghana.

We are fortunate in having had the benefit of a Town Planning Service during some of the time when our towns were small and under-developed, thus the first overall plan for Accra was prepared in 1944 and in consequence all development in the town since that time has been legally subject to planning control. This has meant that efforts have been continuous since 1944 to see that development has been sited in the most suitable manner. The result of this form of control of the innumerable buildings which have been erected over the years, each one insignificant in itself but gradually forming a whole town, can now begin to be appreciated. Accra already has the definite making of a fine city.

The Plan now presented is a review of the original plan. It takes into account the local knowledge acquired in the recording of day-to-day development over the last twelve years, the rise in the standard of living, the greater importance of the motor vehicle and up-to-date techniques of planning.

I would like to take this opportunity of stressing the moral as well as the physical importance of clean, well-designed and efficiently maintained towns, and to ask all our citizens to remember that our daily environment means a very great deal to us. In this age of material well-being, motor-cars and advertisements we are inclined to overlook spiritual and aesthetic factors and I ask every citizen of Ghana to consider the need for beauty in his town or village and to be insistent that everything in that town from the largest building to the smallest road sign or advertisement is designed in good taste in order that the result will be towns and villages worthy of our State and one of which posterity can be proud.

A stylized, handwritten signature in black ink, featuring a large, sweeping initial 'M' followed by a series of connected loops and a final flourish.

Minister of Housing.

B. A. W. Trevallion
A.R.I.B.A., A.M.T.P.I.

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PREFACE

The reader may remark that the following Report is more lengthy than is usual in such statements; that it contains much detail but that nevertheless the Plan it describes is a comparatively simple extension of what exists and that its authors have been at pains not to superimpose a completely new pattern.

Plans and Reports of this nature are a new departure in Ghana and whilst there is an enthusiastic public interest in the necessity for planning few people are familiar with the theory or have had opportunity to consider the implications of detailed town plans. It is hoped however that there is sufficient explanation and detail in the Report to enable the layman and the Planning Committee to understand fully the implications and proposals and, if acceptable to them, to implement the plan.

The plan itself is a modest design to improve present conditions and to give scope for future development to be carried out in a manner fitting to the dignity of a capital city and which is also practical and economically feasible. The temptation to take advantage of the present political buoyancy and enthusiasm of the public and to draw up a New Capital for the New State of Ghana and to forget that even new states have their financial problems has been resisted. The City already has the basic physical form of a good town, and no one can deny the appeal of palm trees, colourful vegetation, white sand, and the roar of the Atlantic surf.

If Central or Local Government can be persuaded to invest in some of the more profitable town development ventures and over the years to spend the income therefrom on other non-profit-making improvements then it is safe to say that there is little or nothing proposed in the plan which entails public funds and which could not be put into effect during the next twenty years or so. A review of the present proposals is recommended within that period.

W.H.B.

June, 1958

ACKNOWLEDGMENTS

We wish to thank officers in all Government Departments, particularly Col. T. D. Lewis, the Director of Public Works, and the Municipal Council, members of the Chambers of Commerce and others who assisted in the supply of information and data. Grateful acknowledgment is also made to the indulgence of the Government Printer and to the Director of Surveys who very kindly carried out the coloured reproductions in this book.

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THE RECOMMENDATIONS AND PROPOSALS CONTAINED IN THIS REPORT AND SHOWN ON THE ACCOMPANYING PLAN REPRESENT THE OPINIONS OF THE TOWN PLANNING ADVISER AND THE PROFESSIONAL STAFF OF THE TOWN AND COUNTRY PLANNING DIVISION OF THE MINISTRY OF HOUSING.

THEY ARE OFFERED TO THE MINISTER OF HOUSING, WHO IS THE AUTHORITY FOR TOWN AND COUNTRY PLANNING, FOR HIS CONSIDERATION AND ACCEPTANCE OR AMENDMENT AS THE CASE MAY BE.



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Preface

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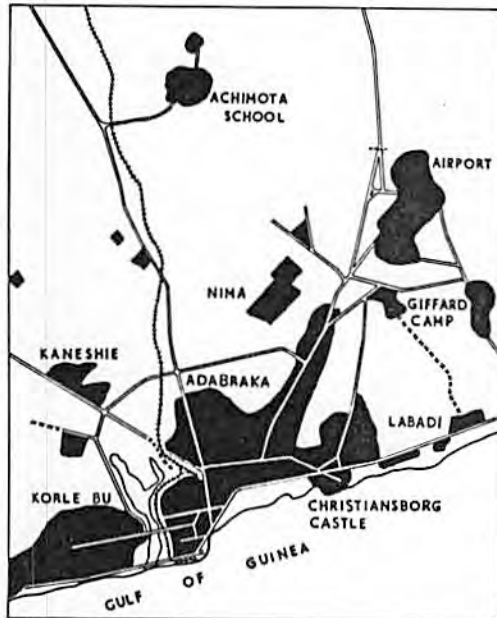
In the folder at the back cover, there are the following loose plans:—

- (i) 1/20,000 Master Plan (and cartogram overlay).
- (ii) 1/5,000 Central Area Section of the Development Plan.

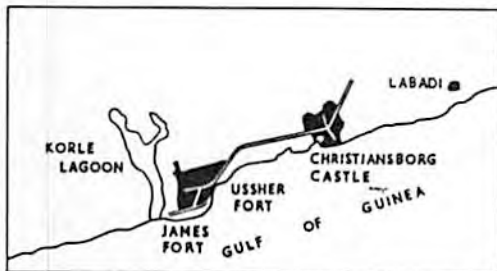
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THE GROWTH OF ACCRA

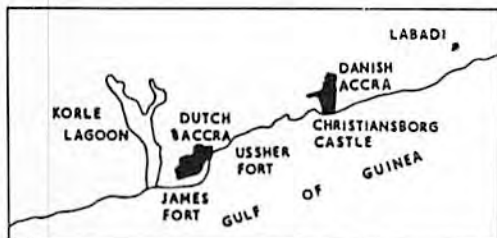
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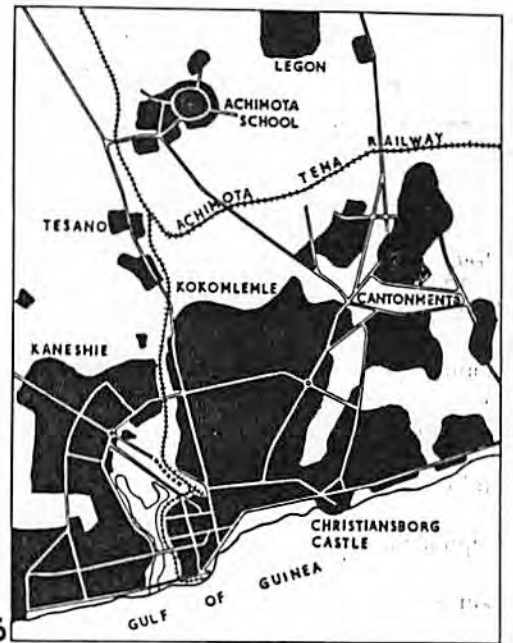
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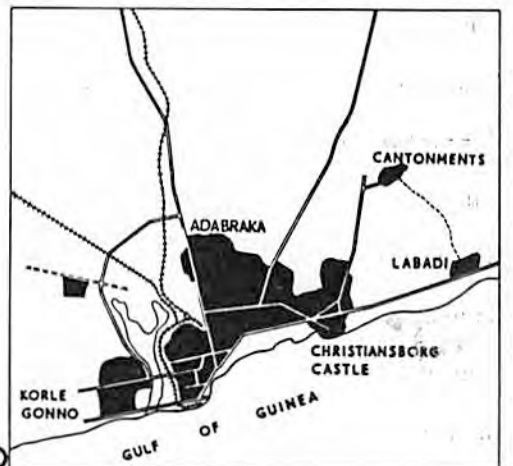
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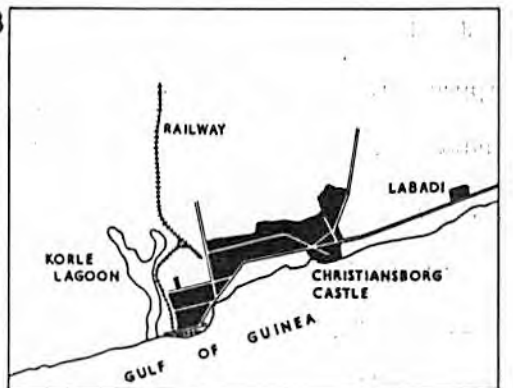
1830



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CHAPTER ONE

The first overall plan for Accra was prepared in 1944 by Maxwell Fry and T. S. Clerk. Since then there has been a very considerable amount of development, the population itself having risen from some 115,000 to about 200,000 persons at the present time and, although this earlier plan never became a statutory one, much of the subsequent development has been fixed in accordance with it. There were however many piece-meal amendments and as a consequence there has arisen a danger of the general shape becoming confused.

The proposals herein described are therefore somewhat in the nature of a review of the existing plan, a gathering together of odd ends as well as a fresh appraisal of trends in the light of development, which is still proceeding apace, since the preparation of the earlier plan and in the light of more complete statistics than were then available.

REGIONAL INFLUENCES

Accra is a coastal town lying in an Administrative District which has a density of about 100 persons to the square mile outside the Accra urban boundary and an overall density of 240 including the urban development. The average density of the whole country is under 45 persons to a square mile and densities vary from about six persons to the square mile in an impoverished area in the north to over 280 persons in a rich agricultural area of the south. Outside the large towns most of the country-side is undeveloped other than for small-holding farming with small unrelated and often temporary agricultural villages at considerable distances apart. The area around Accra is no exception to this.

By virtue of its function as the Capital City and a major trading centre, Accra exerts more influence over the country in terms of population movement and trade than any other major town. This influence is made apparent by the number of migrants to Accra who are increasing at the rate of about 3,000 persons a year; a number which is in excess of that for natural increase. Even this figure does not take into account the number of migrants staying only for a short period and who probably account for a further 5,000 a year. As a commercial centre the important role played by Accra is apparent by the scale of its distribution and the extent of its commercial activities generally. Land around Accra is potentially good agricultural land but in its present state it gives a poor yield and there is no intensive farming. Fresh foodstuffs are imported from outlying districts as far away as Kumasi and Togoland.

Accra exerts a local sphere of influence over villages in the vicinity up to a range of about eight to ten miles from the centre and the people in these settlements look to the capital for entertainment and trade. Most of these villages are dormant though some on the trunk roads, including Achimota, Teshie and Nungua appear to be growing and the activities of these latter will be the subject of further studies.

The development of Tema will certainly affect Accra's sphere of influence and will probably provide greater attraction to migrants as major industries develop. The result of this on Accra cannot be assessed with any accuracy.

HISTORY

The Ga speaking peoples probably immigrated to this particular stretch of coast in the 16th century from what is now called Nigeria. They cultivated the soil, fished and traded with foreigners who visited the coast. The first Accra settlements are generally accepted as being the fishing villages now called Ussher Town and Osu. Labadi, two miles to the east was a separate entity and more agricultural in nature. Forts and trading posts were built during the seventeenth century and still remain as Ussher Fort, James Fort and Christiansborg Castle, the latter now Government House. Labadi appears to have been less influenced by these trading posts, and even today retains a somewhat separate and village character.

Other settlements or villages sprang up and today the separate grouping, habits, ways of living and traditions of the old settlements which together form Accra are still apparent. Some of the present roads are on the old tracks connecting these villages and fishing is still a major occupation. The early Ga people monopolised the middle-man trade between the foreigners and the peoples in the interior but this monopoly appears to have dwindled when Ashanti and the Northern Territories came under the same Administration as the coast area and when in consequence the number of resident European trading agents began to grow.

Not until 1877 did Accra become the seat of administration which was previously at Cape Coast, and thus only from that date can the life of Accra as the capital be considered. Its main growth is due to this administrative shift and the tendency of trade to concentrate around Government. The construction of the small jetty and break-water in 1906 and the coming of rail to Koforidua in 1915 and on to Kumasi in 1924 cemented the commercial ascendency of Accra notwithstanding the difficulties inherent to a surf port.

CHAPTER ONE

It is a noteworthy fact that whilst the large modern harbour at Takoradi has an annual handling capacity of some three million tons the surf boats of Accra nevertheless handle more than one-third of the total imports. The continued development of Accra as the commercial centre of overseas trade owes much to the men who operate the canoes.

GEOGRAPHY

The town lies on the southern edge of the Accra Plains. These extremely pleasant, sparsely-wooded and undulating grasslands, backed by the Shai and Akwapim ranges of hills in the north and bounded by the sea in the south are the principal feature of the area. With adequate irrigation they would be suitable for cattle raising and for intensified agricultural production.

The site of the town is slightly undulating; there are no hills of any note within it and the highest points are about 180 feet above sea level. The coast line is attractive with small rocky areas between long stretches of fine sands.

The original settlement was wholly to the east of Korle Lagoon but much development has now taken place to the west of it and the town now almost completely embraces this large expanse of shallows and mud into which the Odaw River flows during the wet season.

Development has not been phased into particular areas and the town, sparsely developed except in the centre and some areas along the coast, covers about 17 square miles including Christiansborg and Labadi. There is almost continuous development for seven miles just back from the sea front.

The geographical features are illustrated on the map at the end of this chapter.

GEOLOGY

There has been much uneasiness about the effects of earth tremors and shifts, because of the clay-shale which occurs under a large part of central Accra. During the past century three major shocks have occurred—in 1862, 1900 and 1939, whilst minor shocks have been recorded ten times during the same period.

The following information, consisting of a brief description of the four main beds under both normal and earthquake conditions has been very kindly supplied by the Director of the Geological Survey Department. The map accompanying this chapter shows the areas referred to and the approximate position of faults.

Dahomeyan

Solid ancient crystalline rocks of several varieties (the "basement").

Normal Circumstances

These hard solid rocks are a very good foundation. Given suitable topography drainage is usually satisfactory.

Earthquake Conditions

These rocks have high elasticity and transmit the waves efficiently. Normally well constructed buildings are not likely to be damaged.

Sandstones

The sandstones rest uncomfortably on the Dahomeyan rocks. They dip at moderate to low angles, usually but not always towards the coast, and show block-faulting of a tensional character.

Normal Circumstances

The sandstones, where not covered by lagoon clay, form a reasonably sound foundation. The sandstone is permeable and except in low areas where it is covered by recent clays provides good drainage.

Earthquake Conditions

The sandstone areas, while not as sound as the areas of Dahomeyan rocks, are safe for buildings of first class (not "earthquake proof") design and construction, except on faults. It is believed that the main faults are shown on the map, but it is not possible to be sure that they have all been detected.

Clay-shale

This rock rests on the sandstone, and is known to be more than 340 feet thick in the centre near point "A" (see map). It is cut by several faults and dips seawards.

Date of Report: 28/10/68
 Date of Revision:

BACKGROUND AND PHYSICAL FACTORS

Normal Conditions

This material absorbs a great deal of water in wet weather and expands. In dry weather it contracts greatly. This alternate expansion and contraction can lead to creep and ill-supported foundations.

When the clay-shale is wet it is plastic and can be distorted by heavy unevenly applied loads. Where there is a sloping surface the clay-shale is inclined to creep or slide down the slope. This is particularly the case where the slope is in the same direction as the dip of the beds, i.e. seawards.

The clay-shale is impermeable and offers no drainage.

Earthquake Conditions

The elasticity of the clay-shale is very low and as a result the energy of seismic waves is absorbed by the shale with consequent amplification of the waves and a vastly increased shock to buildings founded thereon. This shock, added to the unstable conditions offered by the clay-shale even under normal conditions, can produce catastrophic results.

Buildings erected on the clay-shale should be specially designed and constructed—and such special building should be avoided if possible on grounds of expense. Under earthquake conditions damage to water mains and sewers can be expected. If the earthquake causes fires the failure of water mains is an added danger.

The clay-shale is probably at its thickest in the area between "A" and "B" (see map at the end of this chapter). It thins out towards the edges of the clay-shale area shown on the map where it rests on the sandstone. Thus a section from "A" to "C" is something like section "XX" on the map.

The exception is the small section of the boundary of the clay-shale at the south-west corner, where the boundary is a fault. There it is covered by a small patch of inter-bedded sandstone and shale, and terminates abruptly against the sandstone as in Section "YY".

Inter-bedded Sandstones and Shales

These rocks consist of alternating beds, less than one foot in thickness, of sandstone and shale, and rest on the Clay-Shale series.

The foundation conditions under normal circumstances may, at level sites, be somewhat better than those in clay-shale areas. At some sites the conditions may be worse due to the tendency of sandstone beds when unsupported to slide down the dip on wet clay-shale beds.

Lagoon Clays

These are not shown on the map, but occur in a few low-lying areas around Korle Lagoon to a sufficient depth to be more important than the solid rock for the purposes of this note.

Normal Conditions

These clays do not suffer from alternate expansion and contraction to the same extent as the clay-shales and are not as plastic and easily distorted. (They do, however, suffer somewhat in these respects.) Nor are they inclined to lateral sliding. They offer little or no drainage.

Earthquake Conditions

Where these clays are thick enough, say more than four feet and if they are wet they will react violently under earthquake waves and buildings may be thrown down.

Despite this freely available and authoritative data the erection of large buildings, mostly government, within the clay-shale area has continued and is now almost impossible to resist. The worst area, south of 28th February Road is recommended, on its own merits, as being retained as public open space but this recommendation becomes a necessity when considered in the light of geological formation.

A recommendation was put forward in 1952 to the effect that the proposed new town of Tema, which is sited on satisfactory sub-strata, might be planned so as to develop over a very long period into a new capital town. Such a proposal, whilst allowing a complete city to develop according to plan from the outset would have been unpopular and difficult to implement and it could not be accepted. In 1953 it was decided to reserve land within the area of the clay-shale formation in Accra for future Parliament buildings. The reservation remains and is shown as such on the accompanying development plan.

CHAPTER ONE

However, apart from Government buildings, the majority of the area is developed with low-density and comparatively small residential buildings or is reserved as private or public open space.

Special attention to structural design should be given to all large buildings in the areas which lie over the clay-shale formation shown on the accompanying map.

CLIMATE

Compared with Ghana as a whole, where rainfall varies between about 28 and 80 inches annually and where the mean annual relative humidity is about 85 per cent (except in the north where it is about 61 per cent), Accra is fortunate in its climate. Here the rainfall is about 28 inches and the mean annual relative humidity is about 68 per cent. Nevertheless, the mean monthly relative humidity during the night and early morning is above 90 per cent (sometimes 95 per cent to 100 per cent) and during that part of the 24 hours cycle shows little or no seasonal variation. There occurs however a gradual drop during the day towards an afternoon minimum which does reflect seasonal variation thus in January the monthly mean during the afternoon period is 60 per cent and in August is 74 per cent.

Mean yearly rainfall	...	...	...	...	28.82 inches
Mean maximum temperature	...	...	...	...	86.2° F.
Mean minimum temperature	...	...	...	...	72.9° F.
Absolute maximum temperature	...	...	...	...	97° F. (Feb. 1954)
Absolute minimum temperature	...	...	...	...	63° F. (Dec. 1942)
Mean relative humidity	...	...	...	...	68 per cent (1200 G.M.T.)

The highest temperatures are usually in March and the lowest in August. For most of the year there is a strong and refreshing sea-breeze from the south and south-west which is appreciable all over the town.

FUNCTION

Accra is a port, a distributive trading centre and the seat of Government. It was founded on its fishing industry and trade generally and wholesale distributive and retail trade in all kinds of consumer goods, fishing and service undertakings are still the chief occupations and interests of its inhabitants. The retailing of food and textiles is largely in the hands of the women and itinerant traders and the markets and shopping centres are teeming with lively vociferous petty and "not-so-petty" vendors.

There is little manufacturing industry apart from a few ventures including a large brewery, a mineral water factory, vegetable oil refinery, motor assembly and body building shops, a nail factory, soap works, a large oil storage undertaking, and innumerable wood-working and fitters workshops. The city is likely to develop mainly as the cultural and official and commercial administrative centre of the country. Its role as a main commercial distributive centre may well decline as the new port of Tema, seventeen miles to the east, comes into operation but to offset this it will most certainly continue its monopoly of high-class luxury shops and will become a true capital city.

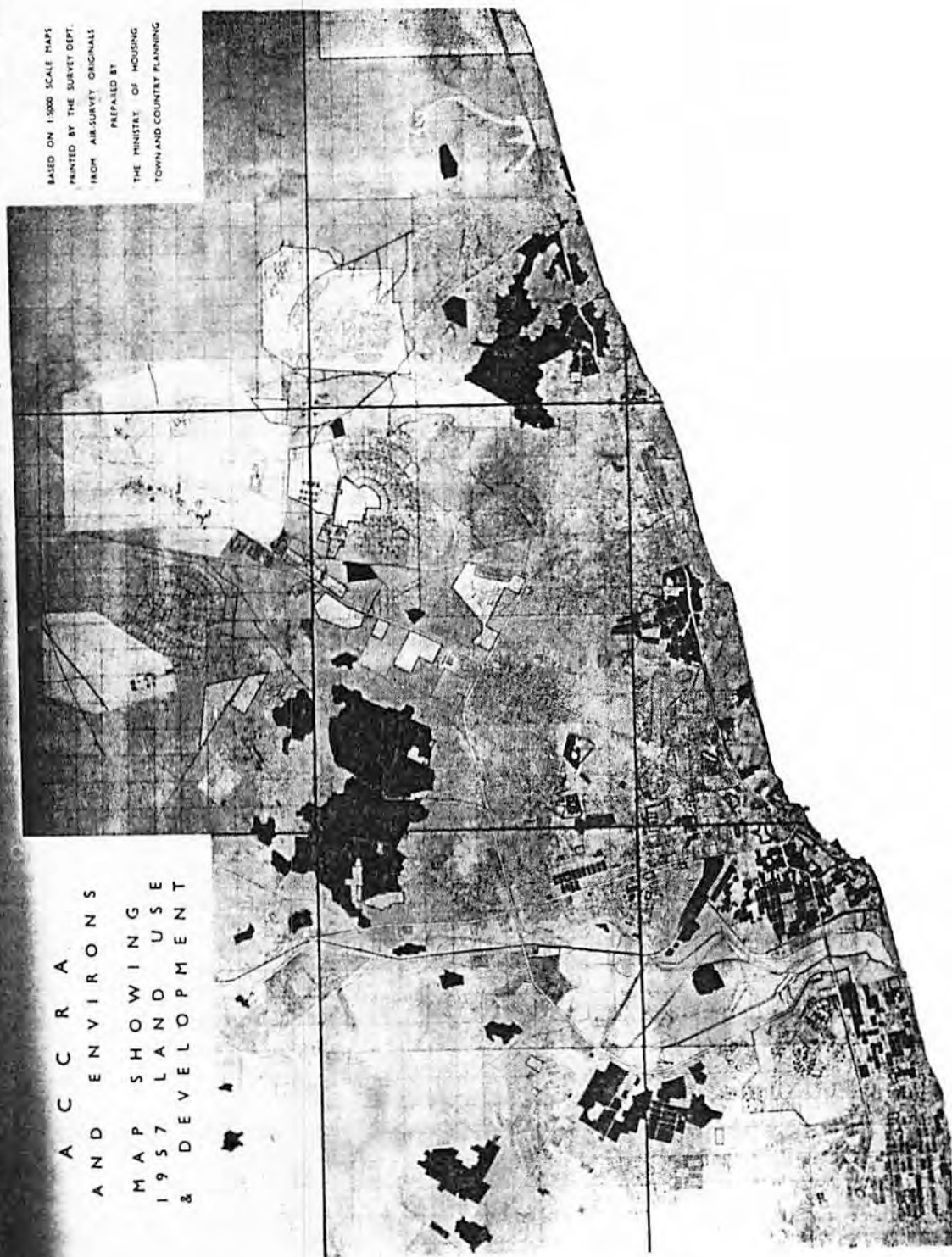
In this respect it is urged that there is a case for an official policy as to the relative roles of the two towns. They should develop in harmony, not in opposition and competition where this might be uneconomic. These roles, once agreed, should be brought into being not by compulsion but by persuasion. There is little point for example in spending money on land development in Accra to attract industry (other than light industry of such a type as is necessary to the functioning of the town and to obtain a reasonable variety of occupation), when large sums of money are also being spent in the new town to admit and attract the industrial developer.

Tema can, if it is so arranged, offer the potential developer everything he requires from a secure land title to roads, rail, water, power and ample space for workers' houses. Such a policy could better preserve Accra as a capital city and allow many people now living in poor conditions in Accra the opportunity to move to Tema and enjoy regular employment and better housing and at the same time tend to minimise a too-rapid population increase in Accra.

Government will in due course embark upon a programme of official building in Accra including new Parliament buildings, Ministerial and Departmental offices and an International Conference Hall. Already the city can boast perhaps the finest University in West Africa, a museum, a large luxury hotel, Achimota College, the Supreme Court, many other fine cultural, administrative and commercial buildings and the best retail shops in the country. It would be a pity if the obvious mantle that Accra is assuming should be marred by large industries which in themselves could enjoy better facilities in the developing port.

A C C R A A N D E N V I R O N S M A P S H O W I N G 1 9 5 7 L A N D U S E & D E V E L O P M E N T

BASED ON 1:5000 SCALE MAPS
PRINTED BY THE SURVEY DEPT.
FROM AIR SURVEY ORIGINALS
PREPARED BY
THE MINISTRY OF HOUSING
TOWN AND COUNTRY PLANNING



Photograph of the
hand-use summary
map of the portions
of Accra covered by
this report.



Photograph of a map
showing existing
buildings in Accra
and illustrating the
great contrasts in the
density of develop-
ment in the various
areas.

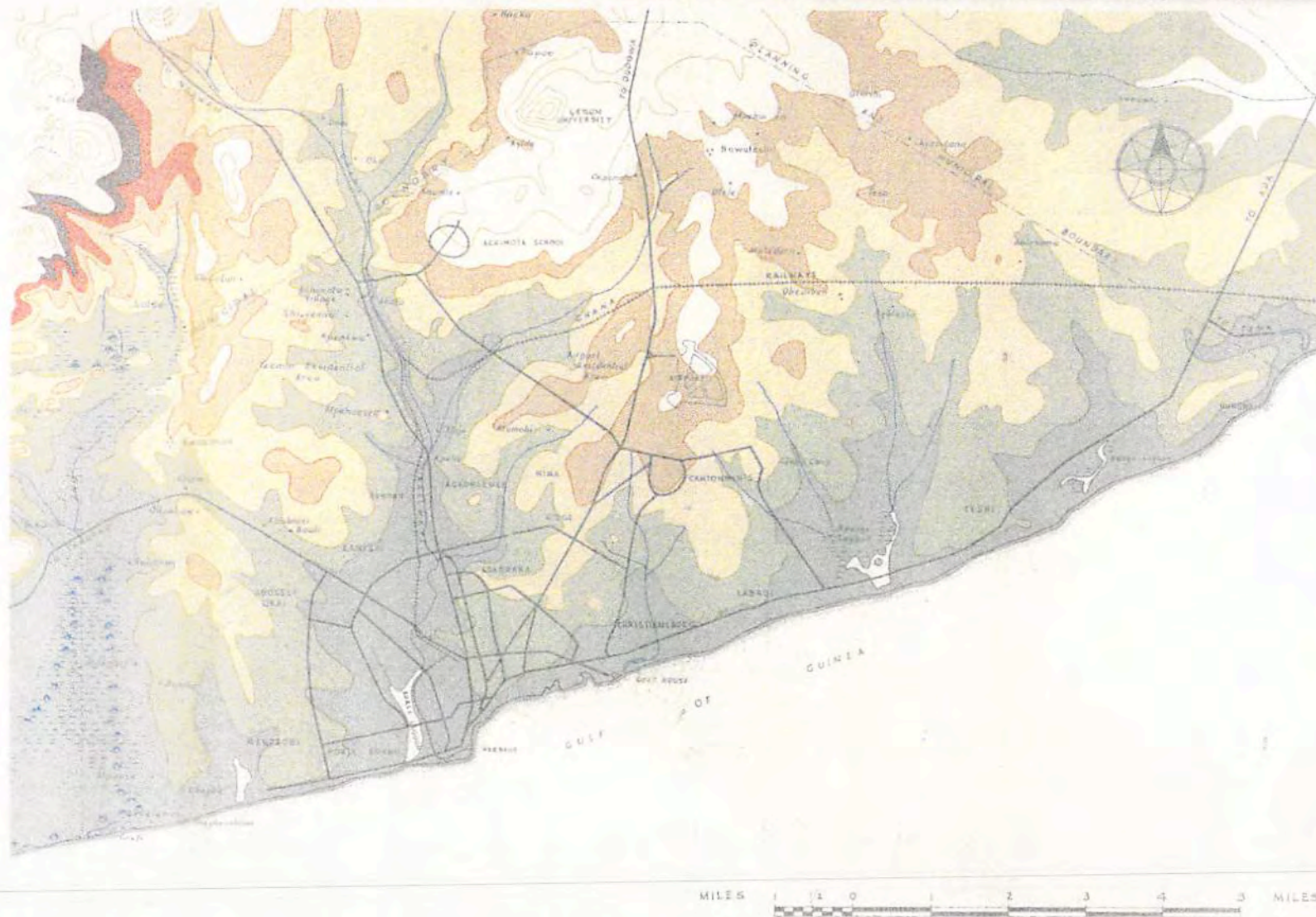


Diagram No. 3

Topographical features. Illustrating the main surface features of the area with which this report is concerned. A note on geography will be found on page 2.

(A) MAJOR ROADS

The need for improved facilities in Accra to enable traffic to travel in safety and comfort has become increasingly evident. Over the past ten years the volume of traffic has increased beyond expectation but, apart from the Independence Day road works completed in 1957 and a few minor palliative measures which have barely relieved even local pressures, this increase has not been accompanied by adequate road improvements.

Unless early action is taken to rectify the more glaring omissions, future increases in traffic will cause disruption to movement to such an extent as to become intolerable.

EXISTING MAJOR ROAD PATTERN AND SUMMARY OF MAIN FAULTS

The existing major road pattern consists of roads converging on the centre of the town and which are linked by "ring" roads. This pattern is basically sound but is incomplete. The more obvious faults are summarised below under the headings of "Direction" and "Density and Flow" both of which, whilst contributing to the same overall problem, may have different solutions.

Direction

(For proposals, see pages 14 and 15)

- (a) Lack of a route from the northern part of the Central Area to the west side of the town.
- (b) Inadequate and insufficient roads for the use of traffic using the centre of the town.
- (c) An incomplete town ring road.

Density and Flow

(For proposals, see page 14)

- (a) Inadequate traffic capacity generally.
- (b) Inadequate parking and loading facilities in the centre of the town. (See also chapter fourteen)
- (c) Lack of sidewalks and the consequent use of carriageways by pedestrians.
- (d) Too many intersections on to the main roads.
- (e) Inadequate radii of kerbs and restricted sight lines at intersections.

TRAFFIC SURVEYS

The first comprehensive investigations into traffic movement were made in 1955 in order to prepare improvement schemes at that time. In 1957 a comprehensive destination census was carried out to augment the previous figures and to enable the present situation to be analysed sufficiently for the proposals of the present Report to be formulated.

The 1957 census figures, when considered in conjunction with the present road conditions, re-emphasised the congestion in the centre of the town. It indicated that during the 15-hour period of the census, in which some 26,669 vehicles (including buses, cycles and motor cycles) entered Accra, over 20,000 of them sought a destination within the one-quarter of a square mile enclosed by High Street, Kwame Nkrumah Avenue, Rowe Road and Boundary Road. The areas of stated destinations of the drivers, in order of importance were: Tudu, General Post Office, Kwame Nkrumah Avenue (South), High Street, Selwyn Market, Pagan Road and Supreme Court.

The results also showed the importance of providing a new route from the Central Area to Weija Road and to the fact that any proposals to alleviate the problem in the centre of the town must include the provision of adequate car and lorry parks.

A separate census of parked vehicles was taken and is referred to fully in chapter fourteen dealing with Central Area problems.

Types of Traffic

Of all traffic entering Accra during the period of the 1957 survey, 67 per cent was indicated as light, and 33 per cent as heavy traffic. The highest proportion of light vehicles was 87 per cent on Barnes Road, which feeds residential areas, and the highest proportion of heavy vehicles was 83 per cent at the harbour exit. The next two highest proportions of heavy vehicles were 57 per cent on the Old Winneba Road, due to lorries collecting sand at Korle Gonno, and 47 per cent on the Weija Road by which route a considerable amount of foodstuffs enters Accra. A relatively large number of lorries was found to use Seventh Avenue which is a purely residential road. This is mainly due to the lack of any other road joining Castle and Ring Roads between Kwame Nkrumah Avenue and Independence Avenue.

CHAPTER TWO

Appendix A shows the proportions and totals of light and heavy vehicles passing the thirteen census points during the 15-hour period on the day of the 1957 survey.

Traffic Destination Inner Area

Indications of the directions in which many drivers wished to travel and the directions in which they were however forced to travel to reach their destinations have been obtained from the census and are illustrated in the following diagrams:—

- (i) *Diagram 4* showing traffic from the west and north-west.
- (ii) *Diagram 5* showing traffic from the north.
- (iii) *Diagram 6* showing traffic from the north-east.
- (iv) *Diagram 7* showing traffic from the east.
- (v) *Diagram 8* illustrating the main overall movement and resultant areas of congestion.

Proposals for overcoming the difficulties revealed by these diagrams are set out on pages 14 and 15 under the heading of "Improvements Aiding Direction" but it is appropriate also to list the four major items under the present heading, viz:—

- (a) The construction of a new route between Weija Road and the Central Area.
- (b) Additional routes within and around the Central Area.
- (c) The continuation southwards of the dual carriageway to Kwame Nkrumah Avenue.
- (d) The construction of a more direct route from 28th February Road to the central markets and commercial centre.

Outer Areas

Proposals for overcoming similar defects in the outer areas are also put forward on pages 14 and 15. These requirements are not so urgent as those for the inner area but include:—

- (a) The completion of Ring Road at both eastern and western ends.
- (b) The provision of a route to connect the west end of Castle Road with Weija Road.

By-passes

The amount of traffic wishing to by-pass the town altogether is very small and is probably as little as five per cent of the total. The opening of Tema harbour however and the development of the new town will cause an increase in traffic, particularly of heavy vehicles, between Tema and Accra, and it is probable that as industries with large scale distribution develop at Tema the amount of traffic wishing to by-pass Accra will grow.

Road Accidents involving Vehicular Traffic

During 1957 there were 456 reported accidents involving vehicular traffic in Accra. Of this total 347 occurred at road junctions with relatively slow moving traffic. Further details of road accidents are given in Appendix B.

ROAD CAPACITY

In 1951 road conditions in Accra were tolerable but figures prepared by the Director of Public Works show that, during the period from December 1951 to December 1956, the number of vehicles on all the major roads entering Accra had trebled even outside the Central Area and that on the central section of Ring Road traffic had increased tenfold. The result of these and further increases since 1956 has been to overload major roads, particularly in the centre of town, beyond their capacity for safe and comfortable driving.

The safe capacities of roads, expressed in vehicles per traffic lane per hour, vary with the conditions applicable to a particular road. Safe capacity is reduced by such factors as the number of intersections, the design of junctions, road-side parking, pedestrian behaviour and the position of uncovered road-side drains. In the centre of town the capacity of a traffic lane of 11' 0" could be 500 or 600 vehicles per hour but restriction caused by factors including those described above often reduces the practical safe capacity to 250 or 300 vehicles per hour.

Between the Central Area By-pass and Ring Road the present capacities vary between 300 and 500 vehicles per hour whilst beyond Ring Road the capacities are probably in the order of 500 vehicles per hour and upwards.

The capacity of roads generally can be increased to a considerable extent by the elimination of the restrictive factors mentioned previously but in certain cases the construction of a second carriageway or the widening of an existing road is essential. Such improvements must take into account future traffic increases and in this respect the Director of Public Works

has advised that major roads should be planned to provide for a six-fold increase in traffic in Accra generally and a ten-fold increase for Tema-Accra traffic over the next ten to fifteen years. Details of present traffic density are given in Appendix C.

TRAFFIC FLOW

Good traffic flow and circulation is as important as adequate road widths. Certain factors militating against road capacity are also applicable to flow, including road-side parking, lack of sidewalks and inadequate junctions. However, whereas capacity may be increased by improvement at the point of the impediment, traffic flow may be improved by work in another part of the town. This is particularly applicable to the Central Area where flow is disrupted at many points by crossing and converging traffic. Much of this traffic could be canalized into more suitable routes away from the congestion by the construction of new roads and the closing of some intersections.

In Accra all kinds of traffic use the same roads. Proposals for the segregation of different types of vehicles such as the provision of bicycle paths or service roads are not included in the plan although in some cases such provision could be made in the detail designs of new roads where funds permit. Provision must, however, be made for the segregation of pedestrians from vehicular traffic.

ROAD INTERSECTIONS AND JUNCTIONS

A road, irrespective of its design, can take no more traffic than can be dealt with at the point of greatest restriction. It is therefore important that main junctions and roundabouts are designed to capacity standards equivalent to those of the roads they are intended to serve.

Recent new Roundabouts in the Outer Areas

There are three recently constructed roundabouts outside the Central Area at the following junctions:—

- (a) Ring Road and Kwame Nkrumah Avenue.
- (b) Ring Road and Weija Road.
- (c) Ring Road and Independence Avenue.

All three can deal adequately with the present traffic and, with the exception of (c), will be able to deal with probable traffic increases over the next ten to fifteen years.

Recent new Roundabouts in the Central Area

In the centre of the town there are three temporary roundabouts at:—

- (a) Post Office Square.
- (b) Makola Square.
- (c) The junction of Horse Road and Kwame Nkrumah Avenue.

The limited funds for the construction of these junctions did not permit acquisition of the valuable property around them and they were therefore designed within strict limitations. All three, however, provide a considerable improvement and are able to deal satisfactorily with the present traffic volume except at peak periods. They will not be able to deal with the probable traffic increases over the next ten to fifteen years.

Proposed new Roundabouts

The judicious siting of roundabouts of adequate design facilitates flow. Roundabouts which are inadequately designed or the slavish use of roundabouts where other forms of junction are more appropriate may well have the reverse effect. The present proposals recommend six new roundabouts all of which must be carefully designed with due regard to the probable increases in traffic on the roads in question. The siting of these roundabouts is given in the "Proposals" part of this chapter on pages 14 and 15.

Existing Intersections

The multiplicity of intersections on the main roads at present, a large number of which are also crossroads, has a serious adverse effect upon the rapid flow of traffic. Some control over traffic using the intersections is exercised by the use of "Halt" signs but this does not obviate a tendency for drivers to cross the main roads without stopping. The reaction of cautious drivers using the latter is automatically to reduce their speed.

As an example of the large number of existing minor junctions, Kwame Nkrumah Avenue, in one length of under one mile, is intersected by eight minor crossroads and thirteen side

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entries in addition to direct entrances to houses and shops. Additional hazards relative to intersections are:—

- (a) Inadequate kerb radii.
- (b) Inadequate sight lines.
- (c) A general lack of traffic-light controls.

Proposals in connection with the local control of such junctions and intersections are not included in detail in the overall "Proposals" section of this Chapter but it is strongly recommended that steps should be taken quickly to tackle this problem. A systematic check should be made to enable these minor works to be put in hand. Kerb radii can easily be changed and some sight lines improved at little cost. Many intersections can be closed off with bollards and small parking areas provided as a result. There are many quite important crossings where roundabouts are not appropriate and where control lights would be of great benefit.

ROAD RESERVATIONS

Outer Areas

Adequate road reservations are essential to provide for possible future widening or provision of service roads and also to provide adequate space for pedestrians, service mains, sight lines and sometimes for tree planting. Generally speaking most major roads beyond Ring Road have a reservation of about one hundred feet. This is sufficient to accommodate a future second carriageway with an adequate central reservation and avenue planting but is not sufficient for parkway treatment.

Central Area

In the centre of the town most reservations are generally inadequate although provision has been made on some roads for proper reservations and new buildings on these roads are already required to be set well back from the carriageway.

A reservation of one hundred feet is essential for major roads in the centre. In most cases where new expensive property fronts the road a considerable time might elapse before the full reservation is attained. On most roads at the moment, what reservation does exist is used for storage, car parking, fitters' benches or for petty trading instead of allowing space for pedestrians. A Municipal Council Bye-law gives powers to control such uses on some roads but there are difficulties in enforcing it. Sidewalks within the reservations are usually not made up. The provision of paved sidewalks and the enforcement of their proper use would go a long way to easing traffic congestion.

Road-side open drains severely restrict the effective width of the carriageways and this loss is sufficient to reduce a normal three-lane width to an effective two-lane carriageway. Adequate reservations on future roads will allow these drains to be placed a few feet away from the carriageway.

Planting within Reservations

Properly planted reservations forming boulevards and parkways are an extremely important provision in tropical towns. They provide shade, cut out glare and give spaciousness and beauty. Whilst parkways are not practicable in the heart of Accra, boulevards are, and great benefit would be derived from them.

Guggisberg Avenue is a wide road with a spacious reservation planted with Nim trees along part of its length and is the only road which can at the moment claim title to a boulevard. In 1955 the reservations to several miles of major roads were planted and in a few years these trees will provide an important amenity. Those roads passing through the major open spaces in Central Accra have the appearance of parkways and careful replanting could much improve this amenity. Recommendations for adequate reservations are made in "Proposals" (pages 14 and 15) and the plan indicates which roads can be suitably designed as parkways. (See also chapter three.)

BUSES AND PASSENGER LORRIES

Municipal Council buses cater for the public on short journeys. Private bus companies and passenger lorries cater for long distance passenger and goods travel.

The Municipal Council Bus Service provides passenger transport in conventional single deck buses throughout the Municipality and also to Tema and Weija. The Central Bus Station is on Pagan Road and problems related to this are dealt with in chapter fourteen.

which deals with Central Area problems in detail. The heaviest weight of bus traffic occurs on Pagan Road between Club Road and Horse Road where about 1,400 buses pass during a working day. Another heavily used route is Kwame Nkrumah Avenue between Horse Road and Tudu Road where densities vary between about 650 and 950 buses per working day. 28th February Road is also heavily used as are Guggisberg Avenue and Boundary Road south of the Central Area By-pass. The improvement of the major road grid will enable the provision of a more satisfactory bus service.

Lay-byes

There are over 300 bus stops in Accra of which only 16 are provided with lay-byes. The provision of many more lay-byes at bus stops is essential to avoid obstruction. This provision would in itself be a considerable contribution to easier traffic movement.

Private passenger lorries ply to and from Accra and cater principally for long distance traffic. These lorries in the main have a regular route but do not follow a time-table. Municipal Council Regulations do not permit passenger lorries to stop within the Municipality other than at the Lorry Parks at Rowe Road, Fadama and at certain outer markets. This regulation, however, cannot be fully enforced and halting lorries in fact contribute considerably to the general congestion. There is a need for limited additional official lorry parking facilities and lay-byes, strategically placed for the benefit of passengers.

CAR PARKS, LORRY PARKS AND TAXI RANKS

The inadequacy of parking space and taxi stands in the busier parts of the town is a very serious problem in itself and is dealt with in detail in the section of this Report which is devoted to Central Area problems. (See chapter fourteen.)

In the outer parts of the town the difficulty is merely that of enforcing drivers not to leave their vehicles on the edges of the main roads. There are, however, one or two concentrations of a particular type of development where special facilities are required. These are normally reasonably well catered for by the developers themselves, but nevertheless revised and future detailed layouts in outer areas must provide adequate public parking space.

PROPOSALS

The proposals covered by this Section are confined to major roads which are classified in diagram 9 as Class 'A'—main radial and Ring Roads; Class 'B'—subsidiary radial and Ring Roads and Class 'C'—connecting links between roads in Classes 'A' and 'B'. Residential roads are dealt with separately in chapter five of the Report.

The main objectives sought by the following recommendations are in brief:—

- (a) Safe road conditions.
- (b) Increased road capacity.
- (c) Economy of movement of vehicles.
- (d) Avoidance of major traffic routes through existing and proposed communities.
- (e) Adequate vehicle flow.
- (f) Amenity by planting and the regulation of building lines.

In making the proposals care has been taken to retain existing routes as far as possible and proposals for completely new roads have been kept to a minimum commensurate with the provision of adequate facilities for the foreseeable future.

The total cost of all the proposals will, however, be heavy. But it must be pointed out that delays in traffic movement have a considerable effect upon the national income through loss of man-hours, waste of fuel and wear and tear on vehicles. This wastage cannot easily be estimated but it should be kept in mind when considering capital outlay for road works.

Whilst some of the improvements must be tackled as a matter of urgency many of them are relatively long-term and it is proposed that generally they should be phased over a considerable period. Appendix D gives the recommended phasing and priorities.

An outline of the proposals is given below and for clarity they are divided roughly into two categories, viz:

- (a) Those improvements aiding capacity and flow.
- (b) Those improvements aiding direction.

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Proposed Improvements aiding Capacity and Flow

- (i) Reconstruction and realignment of Market Street and Salaga Street from Horse Road to High Street as a dual carriageway.
- (ii) Reconstruction and realignment of Guggisberg Avenue as a dual carriageway eastwards from Ring Road.
- (iii) Reconstruction of the following roads as dual carriageways:—
 - Ring Road, east of Weiija Road.
 - Central Area By-pass west of Boundary Road.
 - Castle Road (part).
 - Weiija Road westwards to Odorkor.
 - Kwame Nkrumah Avenue south of Knutsford Avenue.
 - Kwame Nkrumah Avenue north of Central Area By-pass to the Police Training Depot.
 - Independence Avenue northwards to the Airport.
 - Ada Road to mile 11.
- (iv) Widening of Horse Road from Hansen Road to High Street.
- (v) Construction or reconstruction of roundabouts at the following junctions:—
 - (a) Derby Avenue and Boundary Road.
 - (b) Ring Road and Independence Avenue.
 - (c) Horse Road and Kwame Nkrumah Avenue.
 - (d) Barnes Road, Independence Avenue and Rowe Road.
 - (e) 28th February Road and Barnes Road (with Derby Avenue extension, *see also* "Improvements Aiding Direction" (ii)).
 - (f) High Street, Thorpe Road and Horse Road (*see also* "Improvements Aiding Direction" (v)).
 - (g) Castle Road and Independence Avenue.
- (vi) Construction of an improved junction at Post Office Square.
- (vii) Construction of a southern by-pass around Labadi.
- (viii) Construction of a western by-pass around Giffard Camp.
- (ix) Imposition of a minimum overall reservation of 100 feet to Class A roads in the Central Area.
- (x) Imposition of a minimum overall reservation of 150 feet to Class A roads outside the Central Area.
- (xi) Imposition of adequate sight lines to all intersections.
- (xii) Closing of superfluous intersections to Classes A and B roads.
- (xiii) Provision of traffic lights where appropriate at major road intersections in the Central Area.
- (xiv) Provision of car parks, lorry parks and taxi ranks (*see chapter fourteen*).
- (xv) Provision of long distance bus and passenger lorry termini.
- (xvi) Provision of lay-byes to all bus stops in major roads.
- (xvii) The improvement and construction of sidewalks in the Central Area.
- (xviii) The erection of pedestrian barriers at danger points on the major roads.

Proposed Improvements aiding Direction

- (i) Linking the Central Area By-pass with Weiija Road.
- (ii) Extension of Derby Avenue eastwards to Barnes Road, the latter realigned to accommodate the proposed roundabouts at Rowe Road and 28th February Road. (*See* "Improvements Aiding Capacity and Flow" (v), (d) and (e).)
- (iii) Extension of Ring Road on the east from Cantonments Road to Labadi Road and on the west from Guggisberg Avenue to Old Winneba Road.
- (iv) Extension of Castle Road to join Weiija Road extension.
- (v) Opening up Horse Road to High Street and the provision of a roundabout at High Street/Thorpe Road and Horse Road junction.

- (vi) Construction of a north-south route to the west of Kwame Nkrumah Avenue from Weija Road extension to Ring Road.
- (vii) Construction of a link from Castle Road, at the east of the Mental Hospital, to Ring Road, at the east of Nima approach road.
- (viii) Construction of links between Link Road, Abossey Okai Road and Weija Road in the Lartebiokorshie and Mamprobi area.
- (ix) Provision of a second carriageway to Thorpe Road.
- (x) Construction of a by-pass road from Odorkor on the Weija Road, through the Police Training Depot on Kwame Nkrumah Avenue to join Achimota Road by the transshipment depot.
- (xi) Construction of a by-pass road from Giffard Camp to mile 11, by-passing Teshie and Nungua.
- (xii) Provision of a reservation for an additional by-pass from mile 7 Achimota Road to mile 11 on the Ada Road, following the alignment of the Accra-Tema railway.

(B) RAILWAYS

Accra is served by a single track railway line providing direct connection with Kumasi, Takoradi and Tema. There is also a link from Accra Station to the harbour and from Tema to the Shai Hills quarry. Rail is not a very important form of communication and Accra deals with only twelve passenger and six goods trains in and out daily. About 210,000 passengers and 160,000 tons of goods are carried from Accra in a twelve-month period.

The main station layout comprises passenger and goods sidings, marshalling yards and engine repair sheds. It is poorly sited forming a barrier to the provision of good road communications to the north-west of the Central Area and has limited access on to a busy section of Kwame Nkrumah Avenue causing disruption to other traffic when passengers are entering or leaving the station in numbers. Most of the buildings are obsolete and are not in keeping with a capital city.

In 1957 commencement was made on a station at Ring Road to provide facilities for goods traffic and workers in the developing industrial estates on Ring Road.

A transshipment depot was built at Achimota in conjunction with the Accra-Tema line which is now in limited use. In addition to the depot sites for warehouses were provided for rail users. The use of these facilities is likely to decline with the provision of appropriately sited warehousing elsewhere in Accra and at Tema (see chapter six). There is no loop to the south-west of the depot enabling trains to proceed from Accra to Tema without reversing.

With the exception of the predominately oil storage area between Hansen Road and Korle Lagoon and the Public Works Department sidings no rail siding facilities are at present provided in industrial estates.

Consideration has been given to the future introduction of a diesel rail car service for persons travelling daily from Accra to Tema. Commuting on a large scale is to be deprecated, however, in view of the financial burden it places upon the commuter and should not be necessary if a sufficient number of houses are built for workers at Tema.

PROPOSALS

The following proposals are incorporated in the development plan accompanying this Report.

- (i) Resiting of Accra Station and ancillary buildings.
- (ii) Realignment of railway tracks where necessary in the Station area.
- (iii) Provision of a loop at Achimota depot to give direct access from Accra to Tema.
- (iv) Provision of sidings to industrial estates (see chapter four).

(C) AIR COMMUNICATIONS

The international airport lies north-east of Accra at mile 6 on Independence Avenue and is well sited in relation to the town. It is served by Air France, Air Liban, British Overseas Airways Corporation, Hunting Clan Airwork, Pan-American Airways, U.A.T. and

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West African Airways Corporation. There has been an increase in the use of the airport over the past years and in 1956 (the latest figures available), the following air transport movements were recorded:—

	<i>Inwards</i>	<i>Outwards</i>
Passengers	23,989	24,221
Commercial freight	392,175 kilos	138,708 kilos
Mail	136,180 kilos	102,123 kilos

Improvements were made to the terminal buildings for the Independence celebrations in 1957 but these buildings are, in the opinion of the Director of Civil Aviation, inadequate for the projected increase in air traffic. The main runway is also inadequate for the type of aircraft which will use the airport in the future.

PROPOSALS

The following proposals include those recommended by the Director of Civil Aviation.

- (i) Construction of a new and longer runway to the east of the existing main runway.
- (ii) Conversion of the existing main runway for use as a taxiing track.
- (iii) Designation of safety areas up-wind of the runways.
- (iv) Construction of new terminal buildings.
- (v) Provision of a site for new Meteorological Offices within the airport curtilage.

(D) HARBOUR

Accra Harbour is operated by surf boat lighterage, is equipped with rail sidings and has a single line connection with the main line.

During the period from February 1957 to January 1958 over 540,000 tons of imports and over 78,000 tons of exports were handled.

The General Manager of Railways states that Accra harbour will continue to operate for at least eighteen months after the completion of Tema harbour due in 1960 during which time consideration will be given as to the advisability of retaining or closing the former.





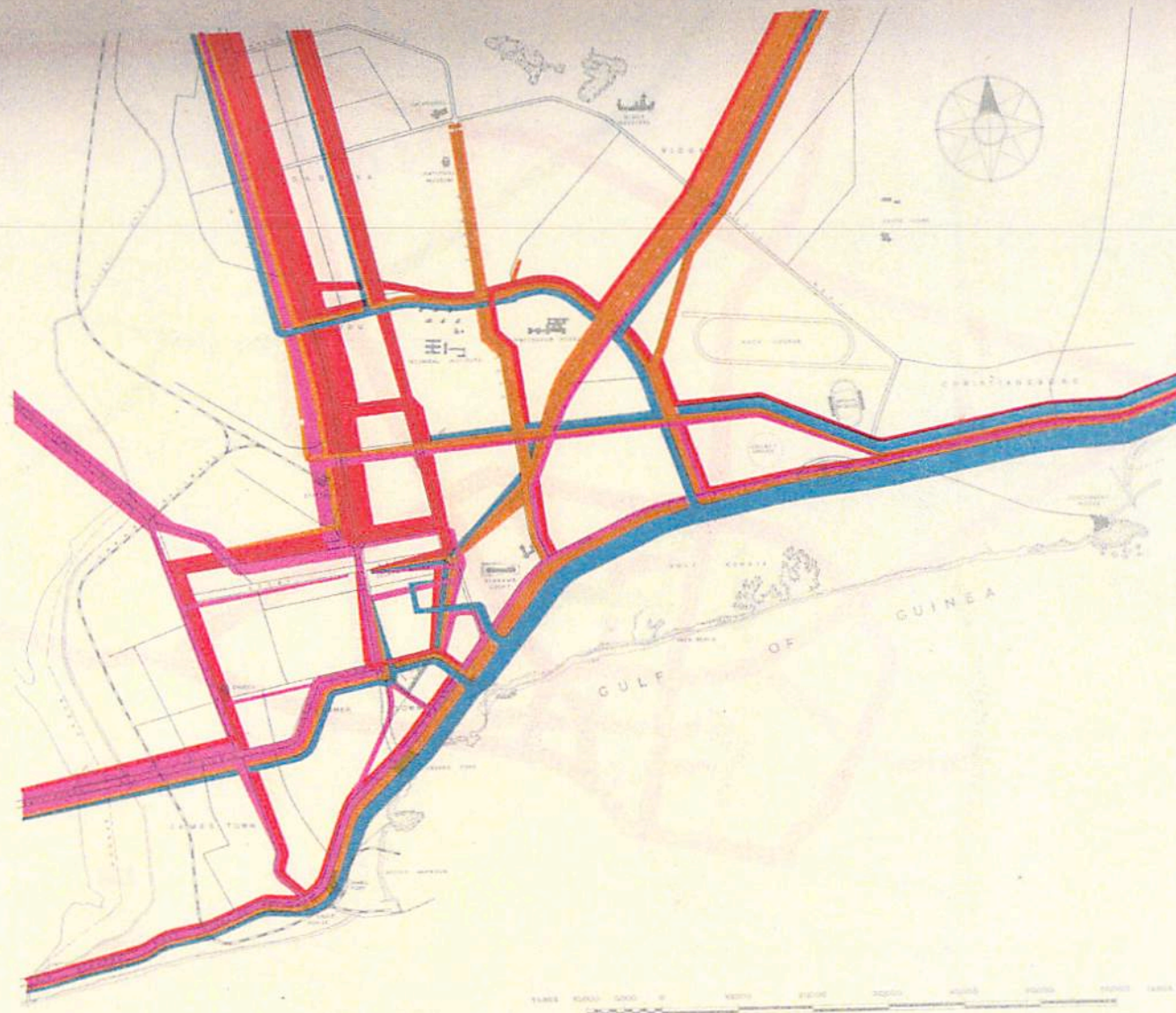
Diagram No. 6

The movement and volume of traffic entering Accra from the north-east on Independence Avenue and Maxwell Road as indicated by the fifteen hour census taken in 1957.



Diagram No. 8

The overall movement of traffic entering Accra by the main radial routes illustrating the resultant congestion and complexity of movement in the Central Area.



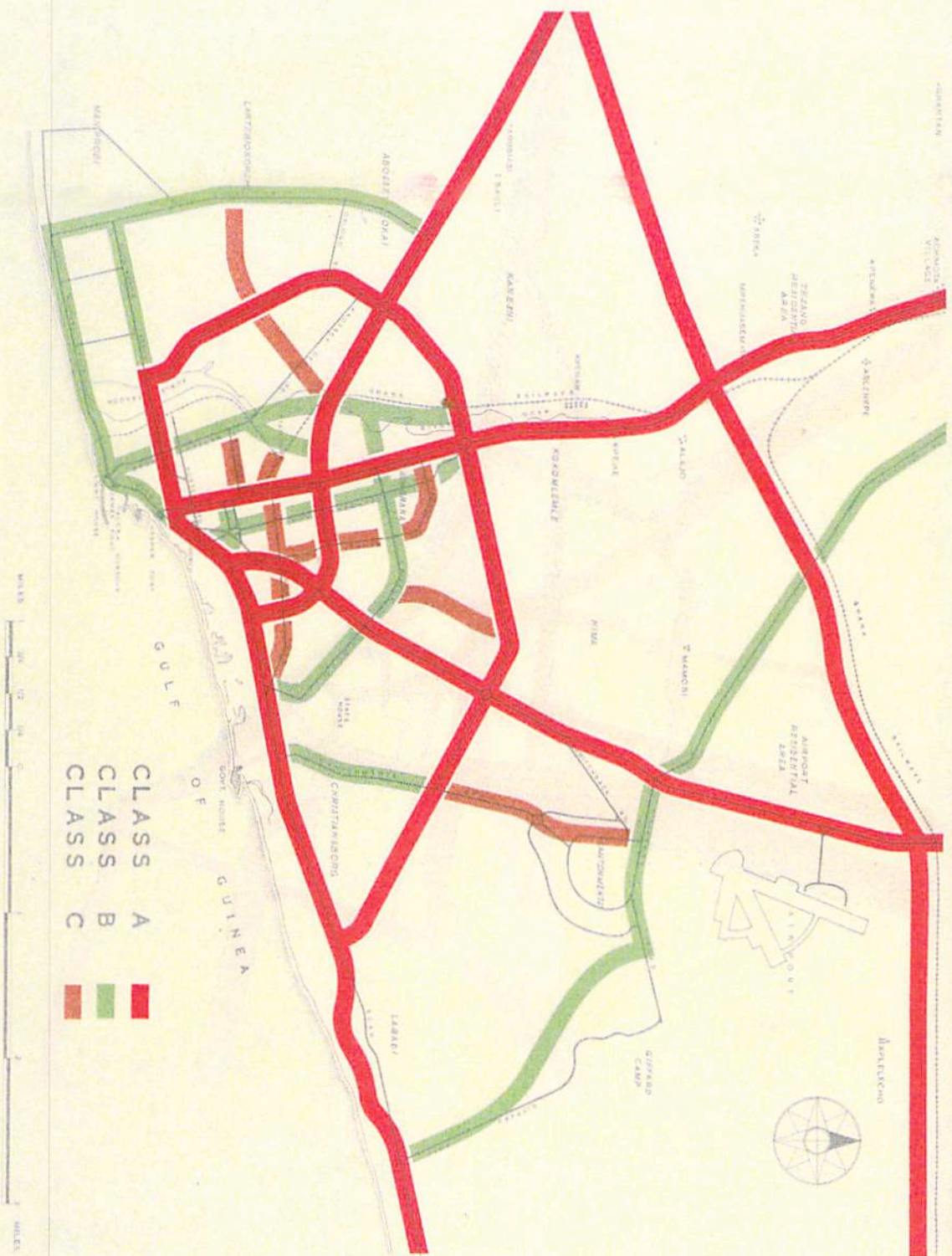


Diagram No. 9
 The classification of
 main roads as described
 in the proposals section
 of chapter two on page
 13. See also Appendix
 D for phasing and
 priorities.

EXISTING CONDITIONS

Accra is fortunate in so far as existing and potential open spaces are concerned. This satisfactory position is largely due to two factors; the ownership of considerable areas by Government which has had the foresight to retain extensive building free zones and secondly the operation of town planning control during the last decade during which development has been so rapid. If adequate care and foresight continues to be exercised there need be no shortage of open space since the basis for a very fine open space system to meet all the needs of the community already exists.

In the developed areas the general picture is good but there is shortage of local open space in some of the older residential areas such as Ussher Town and James Town. In the areas now developing the main problem is that of the responsibility for purchase and maintenance of the areas zoned for open space of one sort or another.

Major Open Spaces

Apart from the large unused areas of land into which development is spreading the main existing open spaces are the coastal strip extending from Mamprobi in the west to Labadi in the east, the large "corridors" of open space between existing residential areas which are hereafter referred to as "green wedges" because they are open areas separating sectors of the developed area, the lowlying lands in the Odaw Valley north of Korle Lagoon and the various private open spaces such as the race-course, cricket oval, stadium, etc. Perhaps the most important of these existing major open spaces so far as the community as a whole is concerned are the coastal strip and the Independence Avenue park and which extends from the sea to Castle Road.

Recreational Open Space

The main provision for open air recreation is to the east of the centre of Accra where there are facilities for football, cricket, tennis, polo, golf and athletics. In the residential areas facilities are not good and are mostly limited to "makeshift" football pitches on land which for one reason or another has not been developed. In the newer residential areas where building is now under way open land may still be reserved but in some of the older areas adequate provision will have to await redevelopment.

There are a number of attractively laid out gardens in the centre of Accra most of them being on Crown land. The most important are those surrounding the Supreme Court and the war memorial, the grounds of the Ministerial buildings on Rowe Road, and the Cathedral gardens. There are also smaller ornamental gardens on traffic islands and adjoining some of the more recent buildings such as the Ghana Bank and the Industrial Development Corporation building.

DESIRABLE FEATURES OF AN OPEN SPACE SYSTEM

The various forms of open space which are described in this chapter can be considered together as forming an open space system which serves the town by providing both amenity and opportunities for relaxation and recreation. The distribution of the open space throughout the town is important as it will only give the maximum benefit if it is conveniently situated in relation to the residential areas.

The provision of open spaces has been proved to be extremely beneficial to the micro-climate of a town. In the absence of open spaces the average air temperature can be expected to rise progressively with the growth of the town and with the accompanying restriction in movement the climate of the town would be adversely affected.

In many towns great difficulties lie in the way of the creation of an open space system. Accra is however fortunate as the elements of such a system exist in the important coastal strip and the "green wedges" which radiate through the town. The complete open space system in Accra should include all the following types of amenity, recreational and special open space.

MAJOR OPEN SPACE

Coastal Strip and "Green Wedges"

The coastal strip and the green wedges form the basis of the open space system. They are the major items of amenity open space and also accommodate some public and private recreational open space. The coastal strip is one of Accra's most precious assets and proposals for its future development are described in Appendix F.

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The "green wedges" are important for several reasons:—

- (a) They separate the residential areas from each other and thus provide them with a physical boundary which helps to give a special character to each area.
- (b) They form gaps in the building development and thus act as a foil to the development and help to avoid the monotony produced by unbroken areas of residential development.
- (c) They provide areas of open land reasonably accessible to the residential areas and so give opportunities for recreation. Some sports grounds and allotments may be accommodated in these reserves.
- (d) They are able to accommodate pedestrian ways in pleasant surroundings and away from the traffic and in some circumstances may accommodate traffic routes divorced from frontage development which are usually referred to as parkways (see chapter two).

PARKS

There are no parks in Accra although the open land along that part of Independence Avenue south of Castle Road is parkland in character if not in use.

Most capital cities have parks not only in their residential areas but in the centres too. London is a good example: Regent's Park, St. James' Park, Hyde Park and Green Park are not only well known to Londoners but are so famous that people who have never visited London or even Britain have heard of these parks as being a feature of the London scene.

A park is important not only as a place where one may walk in quiet and pleasant surroundings and where children may play but as an area providing a contrast to, and a relief from, the busy built-up centre of the town. This contrast not only provides visual relief from movement and glare but gives mental refreshment. A town which lacks open spaces near its centre may be impressive by reason of its buildings but it will almost certainly be lacking in those human qualities which can be preserved if the built-up areas can be seen in relation to land in its "natural" state.

FOREST RESERVE

The existing forest reserve between Accra and Achimota is not only a useful source of firewood but also an important landscape feature. Further plantations on land outside the areas proposed for development would improve the appearance of the approaches to Accra and would assist in the prevention of unauthorised development. (See folding master plan at back cover.)

RECREATIONAL CENTRES

Apart from the local recreational open space distributed throughout the residential areas there is a case for recreational centres where special facilities for athletics and sports could be provided. These would supplement the central facilities at the Accra Stadium and would cater for school sports days and the special activities of sports organisations in the suburban areas. (See proposals page 27.)

MINOR OPEN SPACE

Recreational Open Space

Whilst not necessarily linking up with the major elements in the open space system the local recreational open spaces in the residential areas are a vital part of the system. They provide the recreational space for children and adults within reasonable reach of their homes. In some cases this provision will be made in the "green wedges" between the residential areas, sometimes as playing fields adjoining community centres for ease of administration and maintenance and at other times within residential layouts. (See standards page 2 and proposals page 27.)

Town Gardens

Apart from the need for parks there is a very real need for town gardens in the centre of Accra where shoppers and visitors may rest for a while and where people working in the centre may spend their lunch hour. Such gardens are also valuable as a setting for special buildings and as islands of greenery and shade within the built up area. Fountains are a pleasant feature which should be introduced into some of the town gardens.

Special Facilities and Private Open Space

There are certain special facilities which need to be placed to serve the town as a whole and which may also have a regional or national importance. In Accra these are the Accra Stadium, the Race-course and the Cricket Oval.

There are relatively few private sports clubs in Accra. Provision for new clubs wishing to have their own grounds could be made in the coastal strip or green wedges.

Open Development

Several areas in or near the centre of Accra are suited to a special open form of development. In these areas (which are listed on page 30) there should be no boundary walls or fences and the various buildings should be carefully sited in the open space so as to encourage the public to travel from one building to another through the intervening gardens. The Supreme Court area is an important example where open development is already very successful.

Walls and fences are frequently unsightly and often involve unnecessary expense. It may be possible to extend the open method of development to some residential areas as has already been done in the Government residential area on Switchback Road where the "chalet" type bungalows are set in landscaped open space with no defined boundaries between the plots. This results in a far more attractive appearance than in the majority of areas of private development where most of the house plots are surrounded by block walls.

OPEN SPACE STANDARDS

One cannot be dogmatic about the standards which should be adopted in the provision of the various forms of open space. It is not easy to assess demand even for recreational open space particularly in view of the rapidly increasing interest in sports and athletics. The proposals included in the development plan cannot therefore be supported by any scientific analysis of demand. They are largely an assessment of what is thought to be desirable bearing in mind the increased interest in sports, the great value of amenity open spaces especially in a capital city and at the same time having regard to the cost of the purchase of land in private ownership, the "loss" due to the non-development of Government land and the maintenance costs.

Demand for Recreational Open Space

This demand must be considered under three heads. The special central facilities including the Stadium and Cricket Oval, private facilities generally and public facilities.

In the view of the Ghana Amateur Sports Council the special central facilities are likely to be adequate for the foreseeable future.

Private facilities are at present largely concentrated near the centre of Accra and further provision of both public and private sports grounds could be made within the Marine Drive area of the coastal strip described on page 27 and in Appendix F. Should there be development of other private sports clubs serving particular areas of Accra they could be accommodated in the major "green wedges" and in the coastal strip subject to judicious siting. It is not possible to foresee the acreage that might be required.

The greatest demand is likely to be for public recreation areas throughout Accra. The Amateur Sports Council recommends that provision should be on the following basis:—

Community of 1,000 persons	...	...	...	...	5 acres.
Over 3,000 persons	...	...	...	...	7 acres.
Over 5,000 persons	...	...	...	...	11 acres.
Over 10,000 persons	...	...	...	...	14 acres.

These recommendations are based on the assumption that there will be separate schools playing fields although some joint use is considered possible and desirable.

Proposed Standards

It will be seen that these recommendations advocate that the acreage should be provided on a sliding scale basis in order to allow adequate facilities for the small communities. The communities within the parts of Accra Municipality covered by this plan each have an existing potential population of over 5,000 persons and so it is reasonable to adopt a standard acreage per thousand persons. The Sports Council's recommendations relate to minimum standards and as the future increase in demand cannot be judged it is thought advisable to work to a slightly higher standard on the grounds that whilst unwanted open space can be utilised for other purposes it would be difficult and expensive to acquire for open space.

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purposes land which had already been developed. It has been decided therefore to adopt a standard of 3 acres of local recreational open space per thousand persons exclusive of school playing fields.

Siting of Local Recreational Open Space

This acreage of recreational open space should be so allocated within or adjoining the residential areas that the maximum distance which a child need travel from his home to a children's play ground is one of a quarter mile and the maximum distance that an adult need travel to a recreation ground is half a mile.

In the event of these standards proving to be inadequate in future years the deficit would have to be made up by the provision of additional sports grounds in the green wedges. These would not necessarily conform to the distance standards specified above.

Acreage of Open Space per thousand persons

A schedule of all the major public and private open spaces in Accra is given in Appendix E. It will be seen that the total public open space (excluding local recreational open spaces within Communities) amounts to an overall figure of about 6 acres per thousand persons. The private open space used for recreational and sports purposes amounts to rather less than half an acre per thousand persons. In each case these figures are based on the population which could be accommodated within the areas zoned for development at the standards suggested in chapter five.

On the assumption that it will prove possible to accommodate half the local recreational open space within the Communities (i.e. one and a half acres per thousand persons), the other half being sited in the major open spaces adjoining the Communities, then the total open space will amount to about 8 acres per thousand of the possible future population of the area covered by this plan.

PROBLEMS AND DANGERS

Diversion to Other Uses

One of the biggest threats to existing and proposed open spaces is the tendency to regard them as reserves of undeveloped land which can be drawn upon whenever there is difficulty in finding a site for a particular project. This tendency to "nibble" away open space must be strongly resisted especially in regard to the vitally important areas near the centre of Accra, notably the Independence Avenue parkland—where once the land is "lost" to development it cannot be replaced.

Adoption of Inadequate Standards

There is a danger, especially in a rapidly developing town such as Accra, of adopting inadequate standards for open space due to a failure to foresee the eventual needs. There is a growing interest in sports and athletics in Ghana which will inevitably lead to demand for greater facilities over the years. Added to this there will be a continued increase in population of many of the residential areas which though apparently developed contain a high proportion of vacant or partially developed plots. Under-provision of recreational open space cannot satisfactorily be compensated by reserving additional areas outside the town but over-provision could be subsequently adjusted by the disposal of the land for some other form of development.

Misuse, Lack of Maintenance

Open spaces, particularly in the centre of Accra, are inclined to attract a variety of unauthorised uses. This is particularly so where the open space is not maintained. As soon as a site is laid out as gardens and regularly tended the trespassers generally respect it and look for an alternative pitch. In the Supreme Court area the traders have not encroached on to the gardens and the carpenters and booksellers who formerly "squatted" on the site are now occupied by the Aglionby Library and its gardens have moved elsewhere. This reduction of open space by means of proper laying out and maintenance should however be accompanied by provision for the traders who will otherwise move to other unsuitable sites and create fresh problems (see chapter seven).

Local Shortages

Generally speaking there is adequate undeveloped land which could be made available for open space purposes throughout Accra. The exceptions are to the west of the town area at Ussher Town and James Town where most of the land apart from cemeteries is built upon. A lower standard of open space in this area is inevitable but improvements could be made if the redevelopment proposals for Ussher Town are carried out. (See chapter five).

OWNERSHIP AND MAINTENANCE OF OPEN SPACE

Responsibility for Purchase and Maintenance

Where land zoned for public open space purposes is in private individual or family ownership as opposed to stool or Government ownership it is unfair that the individual should suffer for the benefit of the community. This happens at present as there is no machinery for the purchase of such land by an appropriate authority. The unfortunate owner is therefore left with land which he can neither develop nor sell and he may be unable to afford to purchase another site.

Arrangements should be made for the purchase of the land by an appropriate authority. The Sports Council has no funds for this purpose and it suggests that Government should accept responsibility for the purchase of the sites and that the Municipal Council should be responsible for their subsequent maintenance.

Maintenance Costs

It has not been possible to ascertain with accuracy the existing costs of maintaining various forms of open space. Under present conditions most major open spaces are not subject to any maintenance and the only figures obtainable are those for grass cutting throughout the municipality including roadsides, limited areas of open space, compounds of Government quarters and land reserved for public purposes such as sanitary sites and routes of proposed roads. The total expenditure on this head is about £40,000 per annum or approximately 4s. per person (a large proportion of this cost is met from Government funds).

One guide towards the cost of maintenance of used recreational open space is that the upkeep of the golf course amounts to about £15 per acre annually. This should be an indication of the cost of maintenance of football, cricket and sports grounds. On this basis the recommended recreational open space throughout Accra (at three acres per thousand persons) would cost £9,000 per annum to maintain. With a 50 per cent increase in the population (which the area now zoned for development could accommodate at the recommended standards) this cost would be about £13,500.

The cost per acre of maintaining most of the coastal open space and the large parklands should not be so high as the standard of upkeep would differ and the introduction of mechanical grass cutters should reduce costs.

PROPOSALS

The proposals relating to open space are described below in some detail but reference should also be made to Appendix E in which the major open spaces are set out together with images, existing condition and proposed use (see also diagram 11) and Appendix F which deals with the detailed proposals for the coastal strip from Manprobi to Labadi.

PROPOSED MAJOR OPEN SPACES

The Coastal Strip

The almost continuous strip of open land along the coast is one of Accra's greatest assets and its protection from unsuitable forms of development is one of the most important duties of the planning authority.

It is proposed that apart from very limited sections the whole of the area on the seaward side of the coastal road comprising the Old Winneba Road, High Street, 28th February Road and Ada Road and stretching from Manprobi in the west to Labadi in the east should remain virtually as open space and that the only development which should be allowed in the area should be that connected with its use for recreation and relaxation. Subject to careful siting the type of development permissible in the area includes clubs, restaurants, and facilities for sports and athletics. (See Appendix F.)

The Director of the West African Building Research Institute has drawn attention to the important effect of open space in avoiding obstruction to air flow and he points out that dense development of the coastal strip near the centre of Accra should be avoided as it would reduce the flow of air to the city as has happened in Bombay following the building up of the Marine Drive.

The Marine Drive part of this area stretching from the Anglican Cathedral in the west to Government House (Christiansborg Castle) in the east has special importance. Plans for the landscaping of this area, the construction of a marine drive and the development of additional recreational facilities including a lido were prepared with a view to implementation as part of the Independence Day Improvements Programme but it was necessary to postpone

CHAPTER THREE

the project. The detailed scheme which was prepared for the Government by Mr. G. A. Jellicoe and Miss S. Crowe is described in Appendix F. When this project is implemented Accra will have a coastal open space of which any capital city would be proud.

The Green Wedges

The value of the "green wedges" has been described on page 24. They were originally protected from development for anti-malarial reasons and only during the last year or two have major encroachments been permitted largely in areas of low density development where the need for open space is not so great. There is a danger that this process of releasing former open spaces for development could get out of hand and it is strongly recommended that those portions of the original "green wedges" shown as open space on the development plan should be carefully safeguarded.

PARKS

Four areas near to the centre of Accra are suggested for reservation for future development as town parks. They are:—

- (a) *In the east*, the existing Independence Avenue parkland extending southwards from the Ridge Police Post to 28th February Road opposite the present Parliament House and stretching from the race-course in the east to Barnes Road in the west (50 acres). This area is vital. It is already acclaimed by all visitors as a most attractive feature of Accra and when the new Parliament site is developed between Rowe Road and 28th February Road this parkland will be of even greater importance in separating the legislative area from the commercial centre and in providing a highly suitable setting. The appearance of the area can be further improved by the ultimate removal of the vegetable gardens opposite the Government Boys' School, the removal of old fences and posts and dead or deformed trees and the continued planting of suitable specimen trees and groups of trees in an informal manner.
- (b) *In the north-east*, the area north of Castle Road between the Ridge Hospital and the Mental Hospital and including the two quarries (29 acres). This area, suitably landscaped would be extremely attractive. The steep ground near the quarries could be terraced and planted with trees and shrubs and the lake could either be drained or cleaned and made a feature of the park. This land, unsuitable for other forms of development because of its configuration is ideally sited for a park to serve the highly populated Adabraka area and the West Ridge. This is also a very suitable form of development of this land in relation to the two hospitals adjoining.
- (c) *In the north-west*, the area west of Hansen Road bounded on the north and west by the harbour railway line. This area includes an old disused Mohammedan cemetery the boundaries of which are not defined. The total area is 30 acres. Subject to the agreement of the Mohammedan authorities it is proposed that the more level south-eastern corner of this land should be used for school purposes and the steeper north and west sides as a public park overlooking the Odaw Valley. Open space has a special importance in this area in view of the very large number of people living in the old residential areas of James Town and Ussher Town.
- (d) *In the west*, the open land surrounding that portion of Kawli Lagoon south of Guggisberg Bridge (43 acres). It is proposed that this portion of the Lagoon should be dredged in due course and that after the sea outlet has been enlarged the lagoon should be kept in a clean state fit for boating and swimming. This also depends on the implementation of the long overdue measures for the drainage of the Odaw Valley and also upon the carrying out of the foul drainage scheme for Accra. The banks of the lagoon could be suitably graded and planted with palms and other trees to give shade.

ACCRA WOODS

Apart from the normal form of town park many towns and especially capital cities have open areas of a rather special character such as heaths, marshes, flats and commons. Bristol has the attractive Downs, Rome has the Borghese Gardens, and Paris the Bois de Boulogne. One cannot create a counterpart in the absence of suitable opportunities but in Accra there is an area which could quite well develop a special character which would be an asset to the

town as a whole. This is the low lying flat land over which the River Odaw floods from time to time. It extends southwards from the proposed Weiija Road extension to Guggisberg Bridge over the lagoon.

Once the works necessary to deal with drainage difficulties in the Odaw Valley have been carried out this periodic flooding will cease and the question of the future of the land will arise. It is recommended that this land, which would never be ideal building land, should be retained as open space and that it should be given a special character. Possibly it could be planted all over with palm trees to form a large palm grove or wood or it could be developed on similar lines to the parkland on Independence Avenue.

This area lies close to the centre of Accra. It is bounded on the north by the proposed extension to Weiija Road, an important trunk route, and on the south by Guggisberg Avenue, an important local radial road. It is crossed by Abossey Okai Road and may ultimately be traversed by a new road leading to Lartebiokorshi (see chapter two). The area is therefore in an important position and the suggested treatment could convert it from a rather desolate waste land into one of the most attractive features of Accra.

PROPOSED RECREATIONAL OPEN SPACE

Public Recreational Open Space

Areas of public open space to be used for sports and athletics are to be provided throughout Accra. The basis of three acres per thousand persons referred to on page 26 has been adopted as a guide. In some cases part of this acreage for a particular residential area has been provided in an adjoining "green wedge". (Labadi and Manprobi are examples.) In other cases part of the acreage is accommodated in the coastal strip (examples Christiansborg and Labadi).

The precise location and shape of each area of local recreational open space cannot be defined in areas where detailed residential layouts have not been prepared. Provision on the recommended basis will however be required.

Recreational Centres in East and West Accra

Two main recreational centres are proposed apart from that existing in central Accra. The one in the west lies between Manprobi and Lartebiokorshi and amounts to 60 acres, and the one in the east lies between Christiansborg and Labadi (66 acres). In each case part of the area may be used for schools playing fields.

Private Recreational Open Space

Most of the existing sports clubs are accommodated on Government land. The clubs own the sites from Government and are responsible for maintenance. The use of the grounds is then limited to the members of the clubs. It is hoped that the members of sports clubs will increase as interest in sports grows. There should be no difficulty in making provision for such clubs within the green wedges or in the coastal strip and for this reason no special areas have been reserved for new private recreational open space in the development plan.

SPECIAL OPEN SPACE

Race-course, Stadium and Cricket Grounds

The Accra Turf Club has a very attractive and well developed course between Rowe Road and Castle Road. The Accra Stadium occupies an adjoining site and the cricket oval nearby between Rowe Road and Christiansborg. In the development plan the sites continue to be reserved for these purposes. There is provision for an additional cricket ground south of Christiansborg Road.

Town Gardens

The main proposals for town gardens are as follows:—

- (a) Cathedral gardens to be extended to link with the proposed open space on the seaward side of the High Street between Ussher Fort and the Community Centre (see Appendix F).
- (b) Church Street gardens to be developed between Barclays Bank and the Bank of West Africa and extended back to Post Office Square and linking it with the Cathedral gardens. (A long term project to be put into operation as circumstances permit.)
- (c) The Supreme Court gardens to be retained and extended up to the proposed road north of the Court. A limited number of new buildings to be carefully placed in these gardens. (See chapter fourteen.)

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- (d) New Marine Gardens—possibly called the "Independence Gardens" to be laid on the old polo ground as part of the Marine Drive project. (See Appendix)
- (e) Cow Lane gardens to be combined with a car park and pedestrian thoroughfare as part of the Cow Lane Redevelopment Scheme. (See chapter fourteen.)
- (f) The Square incorporated in the Station Commercial Area scheme and providing an attractive foreground to the new buildings in the southern section of the area as seen from Kwame Nkrumah Avenue.
- (g) The Central Gardens incorporated in the Station Commercial Area scheme lying between the proposed new commercial area and the industrial development further west. These gardens would be ideally placed to serve the people working in the new commercial area and those visiting it. Extensive views towards the sea and the west could be obtained.
- (h) A town square opposite Ussher Fort where the proposed extensions to Kwame Nkrumah Avenue and Guggisberg Avenue would meet. (See chapters two and fourteen.)
- (i) The planting of some of the existing squares and pieces of open land in James Town and James Town and Adabraka where greenery and bright flowers would add colour to the scene.
- (j) Gardens surrounding Kwame Nkrumah Circle at the junction of Ring Road and Kwame Nkrumah Avenue. Proposals for the landscape treatment of this important site have been prepared and include a large double circle of mahogany trees.

Areas of Open Development

Special landscape treatment is proposed for the following areas which though developed should have an open character achieved by the avoidance of fences and walls and the careful arrangement of footpaths and planted areas.

- (a) The Supreme Court Area (see chapter fourteen).
- (b) The Ministerial and Departmental Area at Rowe Road (see chapter fourteen).
- (c) The proposed Parliament site between 28th February Road and Rowe Road (see chapter twelve).
- (d) The educational and cultural area west of Barnes Road and extending north from Rowe Road to Castle Road (see chapter ten).

Tree Planting

Much valuable tree planting work along main roads and on open spaces has already been carried out by the Department of Agriculture in co-operation with the Planning Department and the Arboricultural and Horticultural Committee. A great deal of street tree planting has been carried out with "Independence Day Improvements" funds and other schemes have been financed by the Town and Country Planning Board and by the Ministry of Local Government. To enable a constant programme of improvements and maintenance to be planned and carried out there should be a guarantee of funds over a period of years. It is recommended that as a matter of due course there should be an organisation within the Municipal Council for undertaking this type of work together with the development and maintenance of town parks, gardens and other public open spaces.

The value of tree planting in the streets of Accra cannot be over-emphasised. Not only is there the beauty of the trees themselves, the reduction of glare, and the improvement of the setting of buildings but there is the vitally important question of shade which makes the difference between pleasant conditions and acute discomfort. All redevelopment schemes in Accra must include provision for adequate planting of shade and ornamental trees and it can be done to improve conditions throughout the town. More care should be exercised by the service departments to ensure that established avenues of trees are not unnecessarily damaged.

PROVISION OF ALLOTMENTS

Throughout Accra areas of undeveloped land are used for growing vegetables and fruit. In most cases the use is unauthorised and no rent is paid. It appears that the cultivator frequently sells his produce and the foodstuffs grown are often those preferred by Europeans. There are however many plots of cassava and other crops which are probably for the consumption of the cultivator and his dependents. In both cases the activity should be encouraged and it is particularly desirable that land should be set aside for this purpose in areas where high density development predominates and house gardens are not large.

OPEN SPACE

The Director of Agriculture recommends that in areas where gardens are small and not generally cultivated an area of one acre of allotments should be provided for every 1,000 persons. This will not be possible within the older residential areas.

PROPOSALS SUMMARISED

- (1) The preservation of the coastal strip as open space and the laying out of the Marine Drive area (page 27 and Appendix F).
- (2) The safeguarding of the green wedges (page 28).
- (3) The development of town parks (page 28).
- (4) The creation of the "Accra Woods" in the Odaw Valley (pages 28 and 29).
- (5) The provision of public recreational open space (page 29).
- (6) The retention of existing central sports facilities (page 29).
- (7) The provision of town gardens (pages 29 and 30).
- (8) The special landscape treatment of certain areas of open development (page 30).
- (9) Tree planting throughout Accra (page 30).
- (10) The provision of allotments (page 30).
- (11) Procedure for purchase and maintenance of open spaces (page 27).
- (12) The planting of further "Forest Reserves" (page 24).



Diagram No. 10
The Marine Drive Area.

PHYSICAL PLANNING DEPARTMENT
L111477
Ref No. _____
Date of Receipt _____

EXISTING CONDITIONS

The siting of existing industry in Accra though not ideal does not give rise to any great difficulties due to the fact that there is practically no heavy or noxious industry and that the total amount of industrial development is small. (Present acreage 188 acres.)

There are at present four main concentrations of "industry" each being quite small in area—

- (a) Adjoining the harbour railway line east of Korle Lagoon: associated with the import of goods at Accra Harbour and the oil installation nearby. (34 acres.)
- (b) The Brewery Road area at Adabraka, west of Kwame Nkrumah Avenue: includes the brewery, joinery workshops, contractors' depots and motor repair workshops. (34 acres.)
- (c) The power station and Government workshops adjoining at Barnes Road together with the Municipal Council's bus repair workshops. (19 acres.)
- (d) Ring Road industrial development between the Weijsa Road roundabout and the railway level crossing. Mostly developed in the last five years on Crown land. (98 acres.)

In addition to these four areas there is a small light industrial estate adjoining the Regal Cinema at Christiansborg (3.5 acres), some contractors' workshops and a mosaic tile factory off the Nsawam Road and sawmills and a few workshops at Korle Dudor north of Knutsford Avenue.

Throughout Accra but mainly within Ring Road (and notably at Adabraka) there are many yards and sites used by carpenters and other craftsmen. These sites are frequently enclosed and usually unsightly and have a very unfortunate effect on surrounding development. In many cases the use of the site is a temporary one pending its development for building purposes. Often the craftsmen are trespassers. There is at present no provision for the accommodation of fitters and craftsmen on special sites.

PROBLEMS ARISING FROM EXISTING CONDITIONS

Power Station

Of the four areas at present in industrial use and specified above, only (c) the power station and other industrial uses in the vicinity give rise to serious difficulties. The power station operates on oil fuel and does not therefore cause much trouble due to smoke and dust. It is however unsightly and is inappropriate in its present position which adjoins the Supreme Court to the south and the commercial area to the west. There are plans for the erection of a large power station in the Tema area to serve the whole of the Accra Region and it is desirable that Government's long-term plans should make possible the removal of the existing power station in Accra or its retention as a distribution centre only.

Public Workshops

The District Engineer's and the Mechanical Engineer's workshops of the Public Works Department lie to the north-east of the power station and have frontage to Barnes Road opposite the site which is reserved for the future Parliament buildings. It is desirable that these workshops should eventually be redeveloped outside the centre of Accra possibly at Ring Road and it is understood that the Department is formulating its long-term proposals on this basis.

Municipal Bus Depot

The Municipal Council's bus repair depot occupies two and a half acres of very valuable commercial frontage on Boundary Road. It is desirable that these workshops should be removed from the commercial area (possibly to the Council's site on Ring Road) and the area thus vacated made available for extensions to the market and lorry park and for other commercial development. (See chapters seven and fourteen.)

DEMAND FOR LAND FOR INDUSTRY

The factors which need to be borne in mind in assessing future demand for land in Accra for industry are:—

- (a) The likelihood that most new industries other than local service industries established in Ghana and particularly those relying on imported materials or wishing to export their products would be attracted to either Tema or Takoradi.

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- (b) The resiting of industries from the centre of Accra such as the Public Works Department workshops, the bus repair depot, sawmills and timber yards and the water works and electricity service depots.
- (c) The likely expansion of "service" industry such as laundries, joinery workshops, motor repair plants, bakeries, contractors' depots, printing works, plant repair and servicing depots, warehousing for local distribution, food packing or processing, cold storage depot, etc.

It has proved impossible to assess with any accuracy the future land requirements for industrial development in Accra. Consultations have taken place with the Chambers of Commerce, the Ministry of Trade and the Ministry of Labour and reference has been made to a list of prospective lessees of industrial land which has been compiled by the Industrial Development Corporation. None of these authorities is prepared to forecast the rate of industrial development in Accra and with so many uncertain factors it would probably be unrealistic to make the attempt. The apparent demand at the moment is for about 100 acres to accommodate the more genuine applicants on the Industrial Development Corporation list and to provide for known Government requirements. New demands will undoubtedly arise from year to year and since there is no overall shortage of land in Accra there would be no justification for allowing land potentially suitable for industry to be used for other purposes at this stage.

SITING REQUIREMENTS

In selecting land for industrial development the main considerations to be borne in mind are:—

- (a) availability : i.e., if it is not Government land is it in the control of persons who are able to make it available to industrialists on a realistic basis?
- (b) physical characteristics of the site : It must be reasonably level and capable of drainage;
- (c) location : it must be reasonably close to the town if it is to accommodate mainly "service" industry;
- (d) access : it must have good road access on to the main road system and rail access is an advantage;
- (e) availability and cost of essential services—water, electricity, telephones and drainage.

PROPOSALS

In Accra the choice is obvious; there is a tract of land west of the railway line and extending northwards from the Weija Road extension, across Ring Road, past Musuli Village and almost as far north as the Police Headquarters on Nsawam Road. The Ring Road frontages have already been developed for industry during recent years.

This land has all the advantages mentioned above. It is controlled by Government and can be made available; it is fairly level; it is close to the town; it has good road and rail access and services can be made available without undue difficulty. There is however one drawback at present in that the lower portions of the land are in danger of being flooded in the rainy season due to the lack of proper drainage facilities in the Odaw Valley. The drainage problem is dealt with elsewhere in the Report and it is sufficient to point out here that the failure to deal with the problem is sterilising part of this very valuable industrial land apart from its other unfortunate effects on Accra. It is inconceivable that this essential question of surface water drainage will be neglected indefinitely. In view of the otherwise eminent suitability of the land for industrial development it is zoned for this purpose in the plan. In the event of industrial development in Ghana or in Accra in particular not resulting in any appreciable demand for land over the years it would be possible at a subsequent review of the plan to rezone a portion of this land for other purposes. It is strongly urged that to release it for other forms of development at this stage would be a mistake.

Development of Industrial Estates

The case for Government action to assist prospective industrial developers to obtain and develop suitable sites hardly needs elaboration. In his report on "Industrialisation and the Gold Coast" Professor Lewis mentions the difficulties of a would-be industrialist attempting to get a secure title to the land needed for his factory. He recommends that the Government should secure the title to land scheduled for industrial development, that

should develop industrial estates in a number of major centres including Accra, that it could possibly subsidize the public services and also that there is a case for Government building the factories on the industrial estates and leasing them to industrialists.

Service Industry in East Accra

To facilitate the development of "service" industry in the east of Accra between Christiansborg and Labadi an area of 35 acres near the junction of the Ring Road extension and the Ada Road is zoned for industry. This site is partly Crown land; it will have good road access but no rail access. In view of its proximity to proposed residential areas it is important that no industry which would give rise to nuisance from smell, fumes or noise should be permitted. The early development of this site is desirable and there may be a case for Government acquisition of that portion in private occupation. Past experience has shown that industrialists have experienced difficulty in securing title to land although this has been zoned for industry for several years.

Danger of haphazard siting of Industries

There may from time to time be justification for the siting of a special industry on land other than that now zoned for industrial development. Such cases need very careful consideration as it would be only too easy to spoil the appearance of Accra by the injudicious siting of such development. It is certain, however, that unless action is taken to make the main industrial areas available for development (by the provision of roads, services and by the drainage operations where necessary) there will continue to be pressure to allow industrialists to develop on unsuitable sites to the detriment of Accra.

Sites for Fitters and Carpenters

The problem of sites used by fitters and carpenters has been mentioned on page 35. It is recommended that sites be set aside in the Christiansborg and Weija Road industrial areas, at Fadama market and adjoining the suburban markets to accommodate these trades where they are carried on by individuals or small firms. The fitters' businesses established on their own sites in the residential areas near the centre of Accra offer a different problem and here it would help if the old car bodies and other impedimenta were cleared from the footpaths and the sites screened by walls or hedges. The enforcement of bye-laws relating to the tidiness of sites would be a step forward.

PROPOSALS SUMMARISED

The provisions in the plan relating to industry are as follows:—

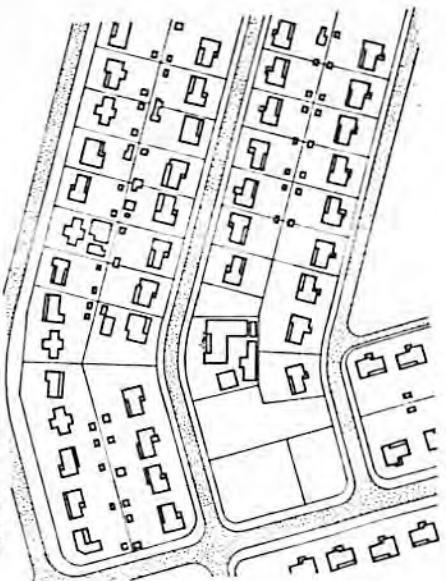
- (a) The retention of existing industrial areas at the east of the Kawli Lagoon, Brewery Road, Ring Road, adjoining the Regal Cinema and west of Kwame Nkrumah Avenue.
- (b) The zoning of additional land for industry between Weija Road and Ring Road, north of Ring Road (the Industrial Development Corporation estate) and between Christiansborg and Labadi.
- (c) The provision (by Government or the Municipal Council) of sites to accommodate fitters and carpenters at various points in Accra as suggested above.
- (d) The long-term removal from the centre of Accra of unsuitably sited "industries" including the power station, Public Works Department workshops on Barnes Road and the Accra Municipal Council Bus depot and workshops on Boundary Road. (See also chapter fourteen.)



AN AREA OF HIGH COST GOVERNMENT RESIDENTIAL DEVELOPMENT FULLY PROVIDED WITH ROADS AND SERVICES .



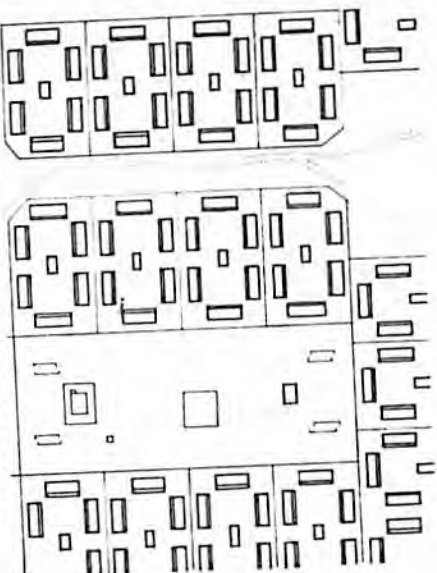
AN AREA OF HIGH COST PRIVATE DWELLINGS DEVELOPED SINCE 1945, SERVED WITH ELECTRICITY AND PIPED WATER BUT WITH A COMPLETE ABSENCE OF RESIDENTIAL ROADS .



A GOVERNMENT ESTATE FOR THE MIDDLE INCOME GROUP. AS IN MOST CASES OF GOVERNMENT DEVELOPMENT THE AREA IS FULLY PROVIDED WITH ROADS AND SERVICES. ADDITIONS HAVE BEEN MADE TO SOME OF THE HOUSES BY TENANTS .



AN OLD AREA OF MIDDLE INCOME PRIVATE HOUSING. WHEN DEVELOPMENT COMMENCED IN 1924 GOVERNMENT BUILT THE RESIDENTIAL ROADS AND PROVIDED SERVICES .



LOW COST GOVERNMENT DEVELOPED IN WHICH PROVISION IS MADE FOR ADEQUATE COMMUNAL BATH AND LATRINE FACILITIES. NO ROADS HAVE BEEN BUILT AND ACCESS IS BY FOOTPATHS .



AN OLD AREA OF LOW COST HOUSING BUILT IN THE TRADITIONAL MANNER. THE AREA IS CONGESTED WITHOUT ADEQUATE SANITARY FACILITIES OR ACCESS .

Diagram No. 13

Typical ground coverages of existing low, medium and high density development

(A) POPULATION

The absence of up-to-date statistics has caused some difficulty in estimating trends and forecasting future population growth in the various parts of the town.

POPULATION CENSUS OF ACCRA, 1957

The last official population census was carried out by the Government Statistician in 1948. In view of the time lapse between that census and the present day and the necessity of having population figures for each planning sector (which were not provided for in the 1948 census) a population count was carried out in 1957 by the authors.

This count was conducted by enumerators who had previously been employed by the Government Statistician. Numbers of men, women and children were totalled for each of the planning sectors indicated on the Master Plan overlay in the folder at the back of this Report. A 20 per cent random sample was taken where dwellings could be easily defined and in other cases a 100 per cent survey was carried out.

The method and results of the count were discussed with the Government Statistician who considered them satisfactory for the purpose of formulating the present planning proposals.

Relative Population increases in Ghana and Accra

About 4 per cent of the total population of Ghana live in Accra and for many years the population of the capital has increased at a greater rate than the national increase. This is shown by the tables below.

(a) Population

	1931	1948	1957
Ghana ...	3,163,500*	4,118,450*	4,800,000†
Accra ...	60,700*	135,900*	208,300†

*National Census †Projection from 1948 figure ‡1957 Census of Accra

(b) Increase derived from the foregoing table

	1931-1948	1948-1957
Ghana ...	1.3	1.2
Accra ...	2.2	1.5

Growth of population by natural increase equals 17 persons per thousand per year for Ghana and 12.5 for Accra. The lower figure for Accra as against the national figure is a normal demographic characteristic of large towns. The national figure is however low when compared with similarly developing countries, e.g. Singapore, 33 persons per thousand per year; British Guiana, 23; Israel and Ceylon, 22.

Whilst such a relatively small increase is in some way advantageous, continued low densities in the rural areas make agricultural development a slow process. The poor, small, scattered villages in which a large proportion of the rural population live do not attract the literate young man who looks towards the big towns, the capital in particular, for his future employment.

Gross migration into Accra is at the rate of about 8,000 persons a year of whom approximately 3,000 settle in the town and the remaining 5,000 stay for a limited period only. Migration is one of the causes of the housing problem which is discussed in part (B) of this chapter.

The consequence of this continued migration is that Accra has a relatively small indigenous population and nearly 50 per cent of the inhabitants were born in other towns and villages. Over 35 per cent came from outside southern Ghana.

Population figures relating particularly to the development of residential neighbourhoods and housing are discussed in part (B) of this chapter.

FUTURE POPULATION GROWTH

The development and growth of the new town and port of Tema will, with reasonable certainty, affect the rate of population growth in Accra. The opportunities for employment and superior living conditions which may be offered in the new town will most probably attract a number of migrants who would otherwise have gone to Accra. It is also reasonable to assume that with increased urbanization the natural increase of population in the capital will be lower than at present.

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Assuming that the present overall increase of population will continue for the next five years, until Tema is well established, and thereafter the net increase by migration will reduce to 1,500 people a year and that after 1968 the natural increase will be 12 persons per thousand then the projected population figures for 1968 and 1978 would be about 237,000 and 251,000 respectively. On the other hand assuming that overall population growth will continue as at present up to 1978 the totals would then be about 269,000 and 337,000 respectively.

Appendix H gives details of place of origin of the Accra peoples, an age/sex structure diagram, a graph showing population growth up to 1958 and projected growth up to 1978.

A breakdown of population by planning sectors is shown on the overlay plan accompanying the Master Plan at the back of this Report and on page 44.

(B) HOUSING

Urban immigration together with the diminishing ability of and opportunity for the urban population to build houses with their own hands in the traditional manner, the insecurity of urban land tenure and the constantly rising costs of materials have all contributed towards a housing problem in Accra in common with most large cities in developing countries.

The capital is formed around a pattern of villages and the old settlements are discernible by their character, poor quality of building and their congestion. In part of the town where new development has taken place alongside the old, property values show considerable variation. Throughout Accra types of house vary from those built on a lavish scale with attractive well-planted gardens to the lowly structures of corrugated metal or planks of wood devoid of a permanent floor, and in a state of dilapidation.

A large proportion of the population are accommodated in traditional swish houses which, if built with a sound floor slab and roof, provide adequate shelter at a comparatively low cost. Unfortunately the majority of these types of house are not so built. Living conditions are made worse by the lack of storm water drains, piped water, sewage and refuse disposal, tree planting and community services generally.

Notwithstanding the inadequacies of present day housing and the lack of amenities it is to their credit that most people, even in the most adverse conditions, manage to keep their rooms clean and tidy with the compounds carefully swept (the latter unfortunately stops the growth of vegetation and promotes erosion). However, personal cleanliness cannot completely combat the evils of high densities even though in a hot climate the sun provides the necessary warmth for bodily comfort and that consequently much time is spent out-of-doors by large numbers of people who often use their houses only for sleeping. This characteristic reduces the importance of shelter and alleviates some of the health dangers which would otherwise arise through overcrowding by day and night. Indeed, in the opinion of the health authorities the habit of outdoor living has been one of the main causes of the relatively low incidence of disease and the infrequency of epidemics.

EXISTING DENSITIES AND OCCUPATION RATES

In 1948 there were roughly 9,700 houses in Accra occupied by 22,260 families giving an average occupancy of 2.7 families or 13.6 persons to each house. The 1948 census indicates an average room occupancy of 2.6 and figures obtained from a survey in 1953 showed that this figure had not diminished. In the worst conditions more than 10 people, often comprising more than one household, occupy one inadequately ventilated room and in the other extreme room occupancy is less than one. Checks taken in 1952 and 1953 indicated that the proportion of households occupying one room or less were equivalent to about 55 per cent and 75 per cent respectively and the overall increase of population as against houses completed in the five years suggest that the situation is worsening. The effect on family life where more than one household live in a dwelling designed for single occupation, forcing them to share sanitary facilities is most unsatisfactory. These disagreeable circumstances are made even worse where the households are of different lineage and tribal affiliations. It is quite clear that the majority of houses in Accra were designed for a style of living unsuited to local habits and customs.

Under the present Building Regulations (revised, improved regulations have been drawn up but not yet accepted) a plot of land may be developed in certain circumstances to a density of nearly 300 rooms to the acre which at the present average occupancy rate is equivalent to some 750 persons per acre. This density is not, in fact, arrived at nowadays as the majority of building owners do not wish to live in such congestion. Nevertheless densities and occupancy rates are generally too high in much of the town particularly in the pockets of development on the sites of the original settlements.

Central Area Densities

The highest densities occur in the Central Area which houses about 60,500 people or 25 per cent of the total population of the town. Many of those living in these parts inhabit sites of early settlements around which the city has grown and the buildings in such cases are of a type and standard inappropriate to a town centre. The spread of this sub-standard housing has been limited in most cases by a fringe of commercial development on the major road frontages but on the other hand continued unauthorized building has steadily increased the congestion.

The maximum sub-sector density is over 300 persons per acre in the single storey development of Ussher Town which area has also the highest room occupancy rate. Central Area sub-sectors on the perimeter, however, are reasonably well laid out and include roads, services and some amenities. Most of these sub-sectors have densities varying between 50-100 persons per acre though where plots are fully developed there are pockets of much higher density. Government housing in the north-east sub-sectors has an inappropriately low density for central development of under 10 persons to an acre.

Outer-Urban Densities

Unfortunately there have been no provisions for the phasing of development and in the outer sectors, with the exception of old village sites and Government land, development spreads over wide areas and the present gross densities are low. In many places individual plots are completely isolated and surrounded by bush without services or roads of any kind.

Sector net residential densities vary considerably. Low density Government housing is less than 10 persons per acre, middle and high density Government development is at about 50 and the remaining private development between 50 and 100 persons per acre. These densities would be reasonable for outer neighbourhoods if they were the ultimate figures. However, plots are, however, not fully developed, often little more than an out-house or part of a main building being completed. Where plots are fully developed to the owner's requirements net densities from 200-400 persons per acre are attained.

Surprisingly the higher densities are often in areas of new high cost development (on Government land) such as Kokomlemle and Adabraka. This is probably due to the higher cost of land and the demand by the owner for a maximum return and to the fact that land owners in these areas can afford to build larger properties. Conversely, in areas of relatively low cost private housing, the densities are lower as the owner cannot afford to build other than a modest single storey dwelling, in such latter cases room occupancy is considerably higher than in the former.

Availability of land as well as the absence of phasing has affected the pattern of development and, as is described in Chapter eleven, land is often not easily accessible for purchase because of an obscure title, inflated price or because it is held by an owner who, whilst he cannot build, will not release the land because of its intrinsic value to him. From the most recent figures available for houses built during one year Kokomlemle, Adabraka and Christiansburg show the largest numbers with 408, 413 and 324 room units and average densities of 100, 140 and 90 persons to the acre respectively. Most of the plots were only partially developed. Typical ground coverages of existing low, medium and high density development are shown on diagram 13 and present densities by sectors on diagrams 14 and 15.

Details of planning sector population figures and densities are also given in Appendix I and on page 49.

SLUM AREAS

The term slum-clearance is generally used rather loosely to describe remedies for a variety of unsatisfactory social and physical conditions. In their report on housing in Ghana (1956) the United Nations Technical Assistance team used the more explicit terms "slum abatement" and "slum demolition" and these designations have been adopted for this report. Slum demolition refers to the wholesale removal of buildings in a slum area necessitated by their structural condition and where they are a danger to health or limb. Slum abatement constitutes ameliorative measures by the provision of essential services, reduction in density, room occupancy, removal of certain buildings to give a greater area of open space and general improvements to personal habits by mass-education techniques. The latter method does much to improve conditions in slum abatement areas where unsatisfactory living conditions are usually worsened by an absence of formal and civic education.

Whilst there is a serious housing shortage proposals for the wholesale demolition of slum property must only be recommended with caution unless the housing situation is to be worsened. Demolition of slums should generally be restricted to such areas where the need for

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redevelopment in the overall plan demands such drastic action. It should also occur only where the redevelopment of the area will enable money to be made available to finance the construction of new houses to replace those demolished or to assist the dispossessed to build or buy dwellings.

Those areas designated as slums are shown on diagram 17.

The worst slums fall within the Central Area for which, with the exception of Ussher Town, redevelopment proposals are indicated in chapter fourteen. Ussher Town and the remaining slums which are in old Christiansborg, old Labadi and Nima can be improved by ameliorative measures in the absence of large subsidies for their complete redevelopment.

NEIGHBOURHOOD PLANNING

The planning sectors shown on the plan at the back of this Report were defined for statistical purposes in the presentation of population and density figures and for the future presentation of development statistics.

The sectors have been formed to coincide with areas having a reasonable cross-section of population at present or planned so as to achieve an adequate cross-section in the future. Care has been taken to ensure that existing areas with some form of social unity have not been divided.

Some sectors cover a considerable acreage and these are to be planned as two or more neighbourhoods. All sectors are sufficiently large to accommodate an adequate population for the economic provision of essential services, schools and other amenities.

In a few cases sectors are divided by existing main roads. This has been necessary where otherwise the population would have been insufficient for the provision of all basic amenities or where there is already a strong social affinity in the sectors as indicated. In practically all cases, however, provision has been made for primary and middle schools enabling children to go from their houses to school without crossing a main road.

Where similar considerations apply within the central area, which is in itself a sector, this area has been further broken down in sub-sectors to which reference is made later.

The planning of land to allow for the creation of neighbourhoods allowing the economic provision of services and amenities is impossible where, as at present, dwellings are scattered over a wide compass and where in consequence the money derived from rates in such areas is insufficient.

Social Amenities

Several of the sectors have existing and well-established markets which, with the provision of other facilities for scholastic, recreational and social activities, can suitably form the heart of the neighbourhood (see chapter seven). There is at present insufficient land zoned for such uses for future requirements and proposals included in this report provide for this deficiency to be rectified and for land-use zoning to be revised accordingly.

The following acreages, for the uses shown against each are the approximate non-residential land requirements for twenty thousand people:

Use	Acre
(a) Market, shops and craft workshops	6
(b) Neighbourhood Centres	8
(c) Places of Worship	4
(d) Public Buildings	5
(e) Primary and Middle Schools	50
(f) Local Recreational Open Space	60

This proportion, together with road reservations and footways, will amount to roughly 3 per cent of a neighbourhood with a reasonable cross-section of population.

Residential Roads

The provision of a basic residential road framework is essential and in high and medium density housing areas roads should, for economic reasons, be kept to a minimum consumption with adequate access. An example of a neighbourhood plan for private development is shown on diagram 18 where the road framework has been designed to enable it to be built in stages whilst giving maximum access, in relation to cost, at each stage.

Road reservations and carriageway widths proposed are:—

	Reservations (in feet)	Carriageway (in feet)
(a) Main Approach Road (from major road to centre of neighbourhood)	80	30
(b) Main Circulation Road	60	22
(c) Residential Access Road	40	16
(d) Cul-de-sac (not exceeding 240 feet in length) ...	40	levelled and grassed
(e) Access footpaths	40	ditto

In areas where expensive buildings already exist these reservations will not be achieved in a considerable time. In most sectors the residential road framework is in need of revision and in certain cases is in need of complete replanning. Sectors bounded by main roads have, in many cases, far too many intersections onto these routes and such junctions must be reduced to a minimum in the interest of road safety and amenity (see chapter two).

Trees and shrubs are an essential provision alongside residential roads and adequate provision is included for this in the road reservations (see also chapter three).

The logical development of a neighbourhood by phases would enable all services, as well as roads, to be provided economically but problems of land ownership make this difficult at the moment.

The appearance of an area can be sadly marred by ill-sited telegraph, electricity and redi-rected poles and by the destruction of trees to avoid service lines or uprooting necessitated by cable laying.

PROPOSED DENSITIES

At present density control is exercised indirectly by site coverage and height limitations imposed under the building regulations and directly by the planning authority on a more or less *ad hoc* basis. On Government land in high cost areas control is exercised under General Orders. With the exception of the latter areas the same standards are applied throughout the town irrespective of the type of housing.

The necessity for economic provision of services, the stabilization of land values and the maintenance of amenities make it desirable to provide a variety of density standards for existing conditions and requirements.

Standards for site coverage on a sliding scale related to height are proposed in the new building regulations. Assuming a reasonably constant room occupancy rate appropriate to the type of development site coverage standards related to height give adequate control over density. Standards based on coverage have the advantage of being easy to calculate and apply. The proposed building regulation standards represent maxima and it is proposed that under the planning regulations these should apply to low cost high density housing the bulk of which will be single storey. Standards applicable to medium and low density housing have been appropriately scaled in the table below.

The following are the proposed maximum site coverages for the proposed three density standards from one to three stories. The floor space coverage is calculated by taking the aggregate of all floor space for each floor, including garages and out-houses. The site is measured within side and rear boundaries and the fence line on the road frontage.

Proposed Standards—Site Coverage

TOTAL FLOOR AREA EXPRESSED AS PER CENT OF SITE AREA

NUMBER OF STORIES	LOW DENSITY	MEDIUM DENSITY	HIGH DENSITY
One	15	20	25
Two	30	35	40
Three	35	40	60

These maximum coverages are a considerable reduction on the present maximum allowable coverage of 50 per cent (irrespective of the number of stories) which is permitted under the present building regulations. They are suggested as taking into consideration the necessity for the promotion of a sufficiently high density to permit the economic installation of services whilst preserving adequate garden space for comfortable outdoor living so necessary in tropical countries.

The density standards proposed take into consideration a desirable future reduction in room occupancy in medium and high density development (high cost low density development has a low occupancy rate at present). Sites fully developed to the proposed standards at a room occupancy rate of from 1 to 1.5 persons per room would have net densities of about 40, 75 and 110 persons per acre for low, medium and high density areas respectively. This is considered as being commensurate with the general rise in the standard of living that must be anticipated.

At present the average room occupancy densities of 2.6 persons on a site fully developed in accordance with the proposed standards would be higher than those quoted above. However, in this respect, consideration was given to the unlikelihood of all plots being fully developed and to adequate relief from high densities being afforded by the low gross density.

In variation of the standards proposed above it is recommended that in some central residential areas an equivalent number of rooms be allowed to give a density of 200 persons per acre. No increase in site coverage should, however, be permitted.

The proposed densities in each sector are indicated on diagram 16. Where a substantial area of land is to be comprehensively developed a variety of densities could be allowed to average the density for that particular zone.

A DESCRIPTION OF PLANNING SECTORS

The following tables give, for each planning sector, details of existing and future maximum population figures and densities together with the additional population which could be accommodated or the overspill which it would be advisable to accommodate elsewhere.

Present And Future Maximum Population Figures By Sectors

PLANNING SECTOR			
PRESENT POPULATION	FUTURE MAXIMUM POPULATION	ADDITIONAL POPULATION OR OVERSPILL	
Korle Gonno (No. 1)	8,300	15,700	7,400*
Mamprobi (No. 2)	7,000	19,100	12,100*
Lartebioakorshie (No. 3)	7,600	30,700	23,100*
Abossey Okai (No. 4)	5,000	20,000	15,000*
Kaneshie (No. 5)	8,800	28,400	19,600*
Kokomlemle (No. 6)	23,000	25,800	2,800*
Nima (No. 7)	24,900	40,000	15,100*
North Christiansborg (No. 8)	2,000	46,000	44,000*
Airport Estate (No. 9)	1,000	7,300	6,300*
Labadi (No. 11)	11,000	34,900	23,900*
Christiansborg (No. 12)	19,000	39,600	20,600*
West Christiansborg (No. 13)	1,100	14,600	13,500*
Adabraka (No. 14)	12,000	19,000	7,900*
Madama Area (No. 15)	4,800	1,100	3,700†
Central Area (No. 16)	60,000	31,000	29,000†

* Additional population which can be accommodated.
† Overspill to be accommodated elsewhere.

Note.—These figures exclude military and police personnel accommodated in barracks and official quarters. Sector No. 10 is populated by airport and army personnel and police in barracks.

Maximum Population Figures For Each Density Zone By Sectors

PLANNING SECTOR	HIGH DENSITY (110 PERSONS PER ACRE)	MEDIUM DENSITY (75 PERSONS PER ACRE)	LOW DENSITY (40 PERSONS PER ACRE)
Rode Gonno (No. 1)	—	14,400	1,300
Misapobi (No. 2)	—	19,100	—
Lartebiokorshie (No. 3)	10,800	17,600	2,300
Okai (No. 4)	10,800	5,800	3,400
Shie (No. 5)	7,200	12,500	8,700
Emlemle (No. 6)	—	14,400	11,400
(No. 7)	31,300	4,300	4,400
North Christiansborg (No. 8)	—	17,500	28,500
Airport Estate (No. 9)	—	—	7,300
Shodi (No. 11)	4,500	18,200	12,200
Christiansborg (No. 12)	3,800	34,400	1,400
West Christiansborg (No. 13)	—	—	14,600
Aduraka (No. 14)	4,800	13,500	1,600
Aduma Area (No. 15)	1,100	—	—
Central Area (No. 16)	25,700	1,300	4,000

— This table to be read in conjunction with diagram sixteen.

The following is a brief description of the planning sectors and sub-sectors. The folding map in the back cover of this Report shows the positions and sizes of the various sectors and sub-sectors.

Rode Gonno (Planning Sector No. 1)

Rode Gonno comprises houses built by private enterprise. Few of the plots are fully developed and most of the housing is single storey. It is bordered on the south by a spacious area of open space along the sea front. The approach along the old Winneba Road, on the corner of this open space, is most attractive. It is relatively well serviced and is one of the private residential areas with a fair proportion of made-up roads.

Misapobi (Planning Sector No. 2)

This area is devoted to middle and low cost Government housing. On the southern side are fishermen's houses and to the north houses of a superior quality both of which were built by the Housing Department. As in all Government housing areas services are good and provision of roads adequate. Site coverage is low and adequate space has been left for future extension. The area is well planted and generally attractive.

Lartebiokorshie (Planning Sector No. 3)

Lartebiokorshie has an area of first class development along Link Road. The remainder ranges between fair and poor quality, a large proportion of the latter being sub-standard. Services are provided adjacent to Link Road but there is an absence of roads and services within the area.

The road framework is of a somewhat formless character and should be revised.

Okai (Planning Sector No. 4)

There is a small proportion of first class residential building along Link and Weija Roads on the north-west perimeter. Government Estate houses for the middle income group have been built to the north-west of Link Road whilst the remainder of the area comprises low cost housing the majority of which is sub-standard, in poor condition and with the character of village development. Though there are many trees in this sector the appearance of property is depressing and "down-at-heel".

The residential road framework should be revised.

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Kaneshie (Planning Sector No. 5)

With the exception of Bauli and Abubiashi, two small villages on the north-west perimeter and some scattered development mainly to the north, Kaneshie residential area consists of Government built houses and houses built recently by the Ghana Housing Corporation. Both of the latter form an attractive estate where site coverage is low and gardens are fairly well kept. The northernmost part of Kaneshie is in private ownership and little of the land has been developed. A plan has been prepared for the extension of this area as part of the review

Kokomlemle and Accra New Town (Planning Sector No. 6)

Kokomlemle has achieved considerable popularity as a residential area over the past five years and is one of the most comprehensively developed sectors in private ownership. Property in the south is of very good quality and is nearly all occupied by the higher income groups. From the centre to the north the property shades off from fair quality to poor, the northernmost development being sub-standard and in very poor condition. The southern portion of the sector is well supplied with services but whilst a number of residential roads have been built over the past few years they are still inadequate for a predominately car owning population.

A residential road connection is required between this sector and the Achimota Road.

Nima (Planning Sector No. 7)

With the exception of the southern portion, which is composed of scattered, high cost houses, Nima has been developed in the last ten years with sub-standard houses of the poorest construction. Practically all the inhabitants are migrants and most are from Hausa territory. Living conditions are poor and there are practically no services and only one road in the sector. Parts are very congested and because of constant unauthorised development on road reservations and other designated land access to these congested parts is very difficult. There is no land available to the inhabitants of Nima for expansion and many are too poor to purchase land on the open market outside the area originally leased to their chiefs. The provision, by Government, of land suitably provided with basic services and a skeleton road system would enable sites to be made available to those householders in the north areas of the existing sector. It would also enable the latter sites to be cleared and redeveloped at a lower density. Parts of Nima are not unattractive and a strong neighbourhood feeling exists.

A residential road connection is required from Nima to the Achimota Road and between Nima and Kokomlemle.

The whole area, together with an additional area to the north is in urgent need of replanning and comprehensive redevelopment.

North Christiansborg (Planning Sector No. 8)

This sector is nearly all in Government ownership and is developed with high cost low density housing much of which is occupied by civil servants. Practically all the population are car owning and travel to Central Accra for shopping, entertainment and employment. The sector does not form a true neighbourhood in the accepted sense though the population has in fact a form of unity having certain interests in common. It is divided up by major roads and the subdivisions have insufficient population for the provision of schools and other facilities. The area is well provided with roads and services.

The land in the south-east part of this sector, for which a plan was prepared in 1955 has been partly developed by the Ghana Housing Corporation for good quality housing on sale to the public. The remaining undeveloped land, when properly drained is to be made available for low and medium density housing.

Airport Residential Area (Planning Sector No. 9)

The land is in Government ownership and is almost completely developed with good quality low density housing. Its description is similar in all respects to that for Sector No. 8 paragraph one.

Airport/Giffard Camp (Planning Sector No. 10)

This sector is inhabited almost entirely by army and airport personnel.

Labadi (Planning Sector No. 11)

Labadi is probably the earliest settlement in the Accra area being inhabited originally by Kpeshies who were pre-Ga people. It still retains its identity to a very large extent as a separate entity from the remainder of Accra and it is only in comparatively recent years that it has been joined physically to Christiansborg and North Christiansborg (Cantonment).

The site of the original settlement lies near the coast and straddles the Labadi Road. The area is congested with pockets of very high density and is without adequate services and facilities. Housing to the north and east is generally of good quality with a mixture of fair and poor in the centre. There has been considerable unauthorised development at Labadi, mostly sub-standard building, over road reservations and land designated for public purposes. The area is in drastic need of replanning and early positive action in the implementation of the plan.

Christiansborg (Planning Sector No. 12)

Christiansborg is another early settlement and the original village area retains some of its original character. This part of Christiansborg is congested and predominately of swish construction. The Government housing estates to the south and north of 28th February Road are well laid out and serviced. Planting, carried out immediately after the houses were built, has flourished, and has improved the appearance and alleviated what otherwise might have been somewhat monotonous estates.

Land on either side of Cantonments Road is in private ownership and is developed with high cost housing. This area derives a certain attractiveness from the variety of its houses.

The residential road system in old Christiansborg is unsatisfactory and is in need of replanning.

Christiansborg (Planning Sector No. 13)

The land in this sector is also in Government ownership and the development is composed entirely of high cost houses which have been built either by the Public Works Department for civil servants, by the Housing Corporation or by private companies for managerial staff and leased from the Government. With the exception of Housing Corporation development, which is quite recent, the remainder of the area is well matured. Careful and well-planned planting makes a most attractive setting. The residential road system is complete and the area is fully serviced.

Adabraka (Planning Sector No. 14)

This sector contains very mixed development. That in the north-east part is of very good quality whilst the remainder varies between medium and poor quality though the majority of the housing is of permanent construction. The westerly fringe of the area to the west of Kwame Nkrumah Avenue is liable to flood during the rains and is without adequate residential facilities. This is the area of good quality development in the north-east. The remainder of Adabraka is well serviced and provided with adequate roads.

Improvements are required to the road plan.

Planning Sector No. 15

This sector is mainly industrial with small pockets of private housing on Ring Road between Abossey Okai Road and Weija Road extension, railway staff quarters to the north-west of Weija Road extension and Fadama village on the Abossey Okai Road. The remainder of the land is low lying and used for tipping.

Central Area (Planning Sector No. 16)

Sub-sector A.)

The northern part of sub-sector A comprises well constructed houses though mainly of poor quality. The area to the south is predominately of poor quality sub-standard building from a structural aspect.

Both areas have inadequate access ways and improvements are needed to the road plan.

Sub-sector B.)

The majority of the houses are of good construction with adequate roads and services though on the western side there are sub-standard buildings without adequate access.

Sub-sector C.)

Other than a few senior railway staff houses in poor condition the small number of houses in this area are centred around the village of Agboghloshie. The 'core' of the area is composed of swish built houses but those on the south-east-side are of fair quality. There are no roads and the houses are without services. Part of this sub-sector is to be developed in conjunction with the Station Commercial Area Scheme (see chapter fourteen) and the remainder is to be held in reserve for future development.

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(Sub-sector D.)

The majority of the property is of good construction and the area is fairly well serviced though roads are inadequate. Planting would do much to relieve the drabness of the development.

(Sub-sector E.)

The northern section of sub-sector E forms parts of the Station Commercial Area Scheme and the southern section is proposed for warehousing. Residential development, other than in the form of flats above commercial premises, is not proposed for this area. Existing houses are of poor quality. (See chapter fourteen for redevelopment proposals.)

(Sub-sector F.)

The area is well serviced and provided with adequate roads. The existence of trees makes some parts quite attractive.

(Sub-sectors G and H.)

Sub-sector H is on the site of an early village settlement and in common with such areas has pockets of very high density the maximum being over 600 persons per acre. The complete redevelopment of the two sub-sectors is not a practical possibility in view of the costs involved and improvements by slum abatement methods are therefore proposed. There are adequate roads in the area and it is well serviced though most people are too poor to avail themselves of the services. Nearly all the housing is sub-standard and in a dilapidated condition.

(Sub-sector I.)

The small parts devoted to housing are proposed for private redevelopment for commercial purposes. Residential accommodation will be restricted to flats above commercial premises.

(Sub-sector J.)

Houses in this area are nearly all of sub-standard construction and the land is proposed for redevelopment for commercial purposes (see chapter fourteen for redevelopment proposals).

(Sub-sector K.)

As for sub-sector J, see chapter fourteen for redevelopment proposals.

(Sub-sector L.)

The area is mainly commercial and, with the exception of dwelling houses on back land, shops of varying sizes and types predominate. It is anticipated that residential population will, in the future, be restricted to flat dwellers only and that the houses will gradually be converted to commercial use.

(Sub-sector M.)

As for sub-sector L, see also chapter fourteen.

(Sub-sector N.)

An area of mixed residential development generally of good construction though of unattractive appearance. The area is well serviced and has an adequate road system.

(Sub-sector O.)

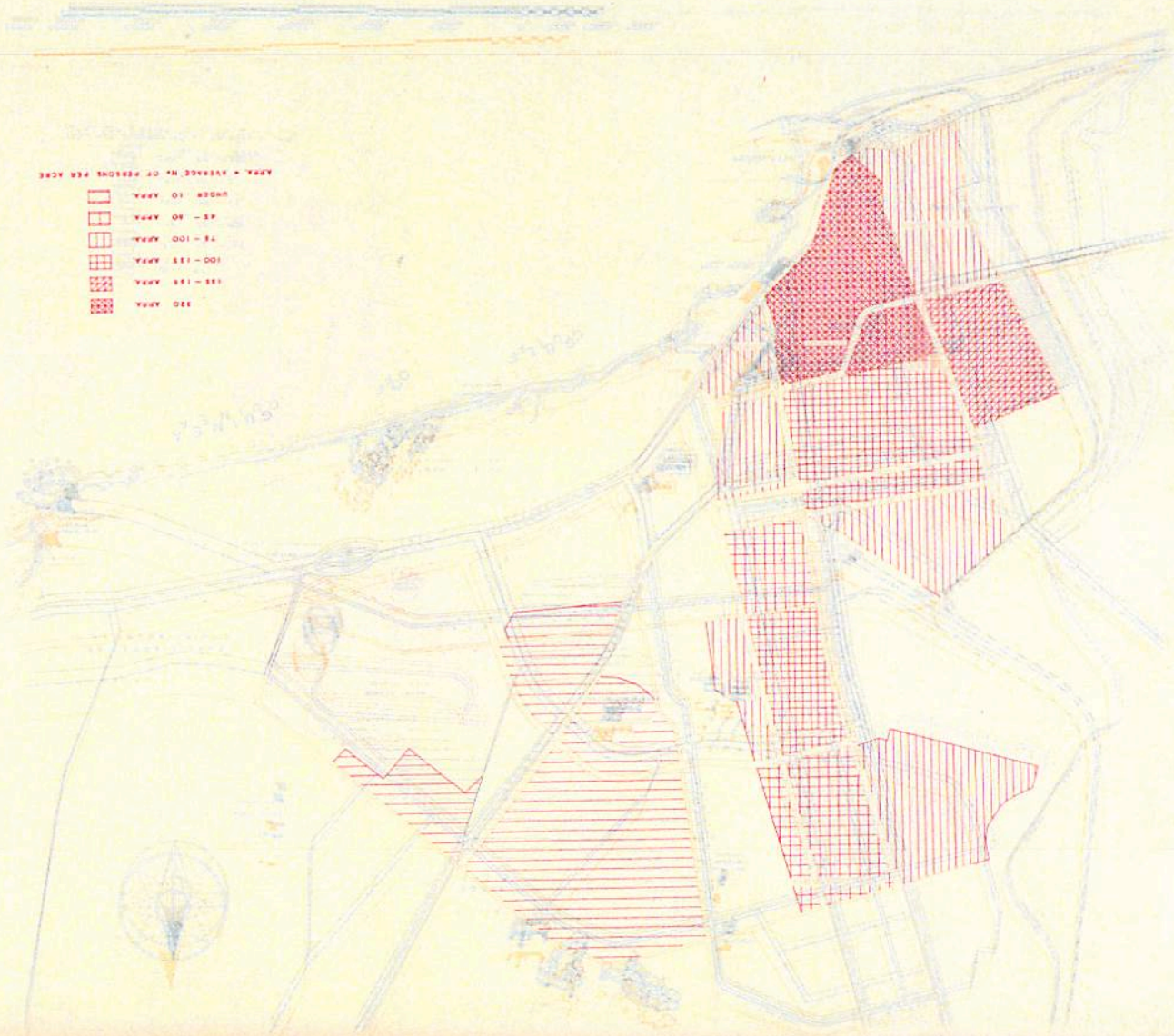
This area is bounded on the east by the Barnes Road Cultural Area and in close proximity to such an amenity could be developed most attractively. It is well serviced and has fairly good road access.

(Sub-sector P.)

This area is composed of housing of very mixed quality with a fringe of scattered commercial development on the Boundary Road frontage, on the west. The residential section to the south of the area is slum property behind a fringe of commercial development and it is proposed that this should be demolished and the land utilized partly for commercial purposes and partly educational, the latter to form part of the educational area bounding the

Diagram No. 14

Present densities in outer urban areas indicating the relatively low density of Government residential development and of high cost private housing on Government land



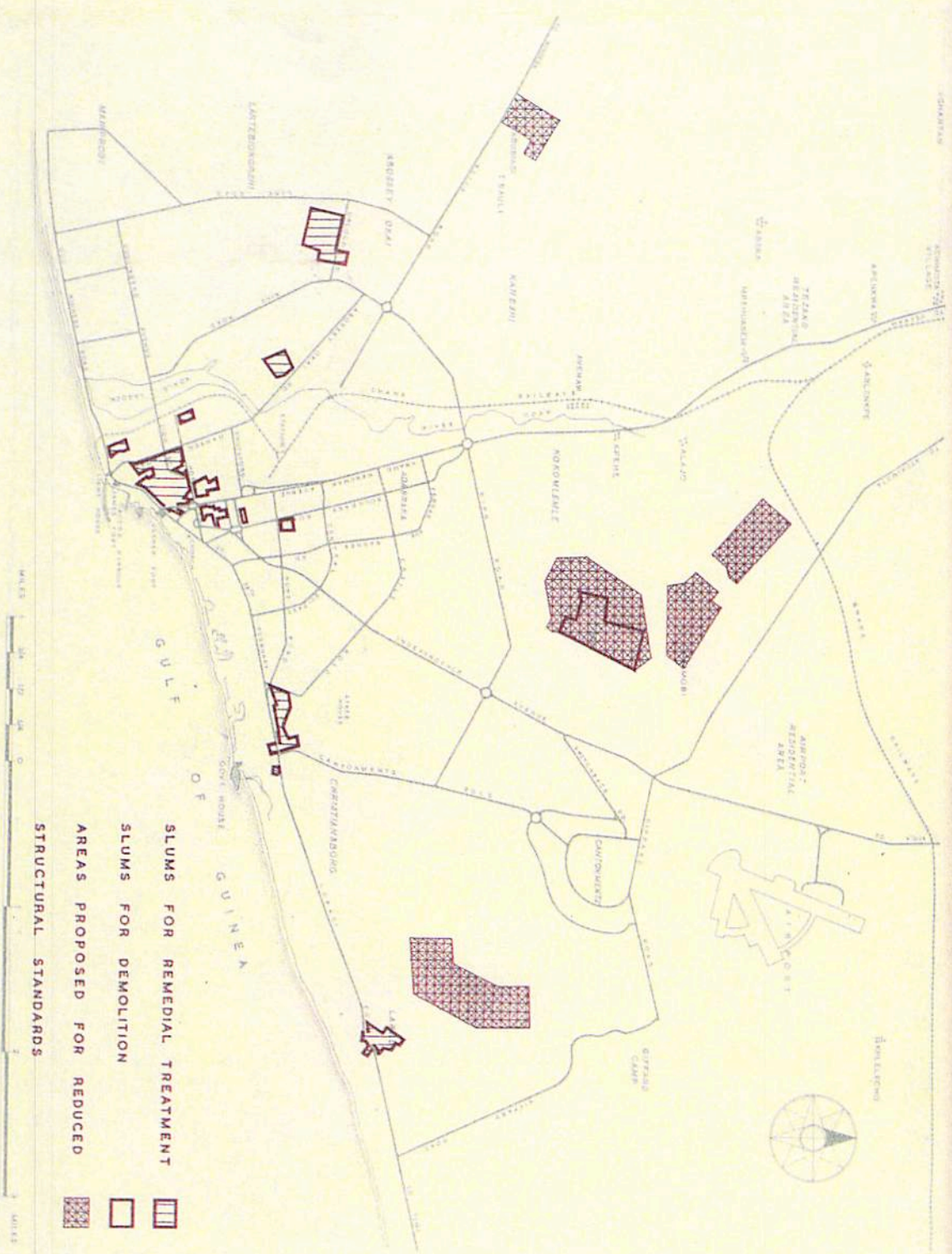


Diagram No. 17
Areas designated as
slums and areas pro-
posed as suitable for a
lowering of standards of
construction.

Sub-sector T.)

An area of good quality low density development bounded on its southern edge by the Ambassador Hotel. The whole is attractively planted.

Sub-sectors V and W.)

These areas are similar in character to sub-sector T and are composed of high cost low density housing in an attractive setting of varied trees and shrubs.

Sub-sectors S, U and X.)

These areas contain a few Government Bungalows which are planned out and the land is for other uses (*see* chapter fourteen).

HOUSING POTENTIAL

As is stated in the United Nations' Report on housing in Ghana (1956):—

"Preventing housing conditions from deteriorating is too modest a target for the housing policy of the (then) Gold Coast. The aims should be a steady improvement. There is no need to fear that the housing market of a town like Accra could be easily saturated."

Working on figures from the Accra Household Budgets Survey (1953) and other sources the United Nations' housing team estimated that 1,000 houses would be needed annually for immigrants and 291 houses would be needed annually as replacements for deteriorated houses. In addition they estimated that to achieve the desirable standard of one house per family 1,000 new houses would be required. New houses must also be built to accommodate those displaced by the major redevelopment schemes described in this report. The total number of displaced people would be about 33,000 and at an average of 5.95 persons per house (Accra Household Budgets Survey), about 5,600 new houses would be required. The total is therefore 22,100 new houses and say 1,500 houses a year for immigrants and replacements.

During 1957 only 851 private houses, 309 houses by the Ghana Housing Corporation and 1,166 by the Public Works Department were built, totalling 1,166 a shortfall of 334 excluding replacement and rehabilitation.

Of the total population of the town roughly 5 per cent can afford to purchase a house and 35 per cent could buy on hire-purchase terms and 60 per cent can do neither but in most cases build their own houses with some assistance, at a slightly lower standard than that required by building regulations, if so allowed. The first group present no problem though a Government or semi-Government agency could well provide land and offer a profitable design and building service, the profit to be used for assistance on the lowest cost basis. The second group require houses to be built for them by public or private estate developers, the latter requiring Government assistance to purchase land. A public estate development body exists in the form of the Ghana Housing Corporation but it is not yet providing sufficient houses of the right type to cope with demand. The third group of people, 60 per cent, require land, serviced and provided with a skeleton road grid, to be made available to them and, if necessary to be allowed to build in certain areas at sub-building standards.

The lowering of structural building standards in certain areas, such as part of Nima, will help the housing situation and it would allow the inhabitants to put up very cheap houses within their income. This could not be done by a Government agency without a heavy subsidy. The areas where it is recommended that a lowering of structural standards be allowed is shown on diagram 17.

HOUSE ARCHITECTURE

The majority of houses built by private persons today are designed by licensed draughtsmen and this situation will obtain for many years to come. A number of these draughtsmen have shown that with extra training they could become competent house designers.

The majority of licensed draughtsmen, however, still prepare designs based on house designs from non-tropical countries and much of their work is needlessly expensive.

A course on house design under the tutorship of a professional architect would be of great value and would help to improve private domestic building and reduce its cost. The inclusion of such a course should be made obligatory before the issue of a draughtsman's licence.

CHAPTER FIVE

PROPOSALS

1. Revision of land-use planning for each sector making provision for all public facilities and amenities to an appropriate standard, to accommodate requirements over the next ten years.
2. Provision of density standards as indicated on diagram 16 and page 43.
3. Promotion of residential estate development by public authorities and private persons.
4. Complete replanning of Sectors 7, 11 and 16H.
5. Improvements to the residential road framework by detail planning in Sectors 6, 12, 14, 16A, B and P.
6. Relaxation of structural standards in the areas indicated on diagram 17.
7. Provision of standards for residential road reservation as indicated on page 43.
8. Execution of slum abatement measures for Sector 16, G and H.
9. Execution of slum demolition measures for Sector 16, J, K and part of 16P.
10. Promotion of phased development to enable road and services to be more economically provided.

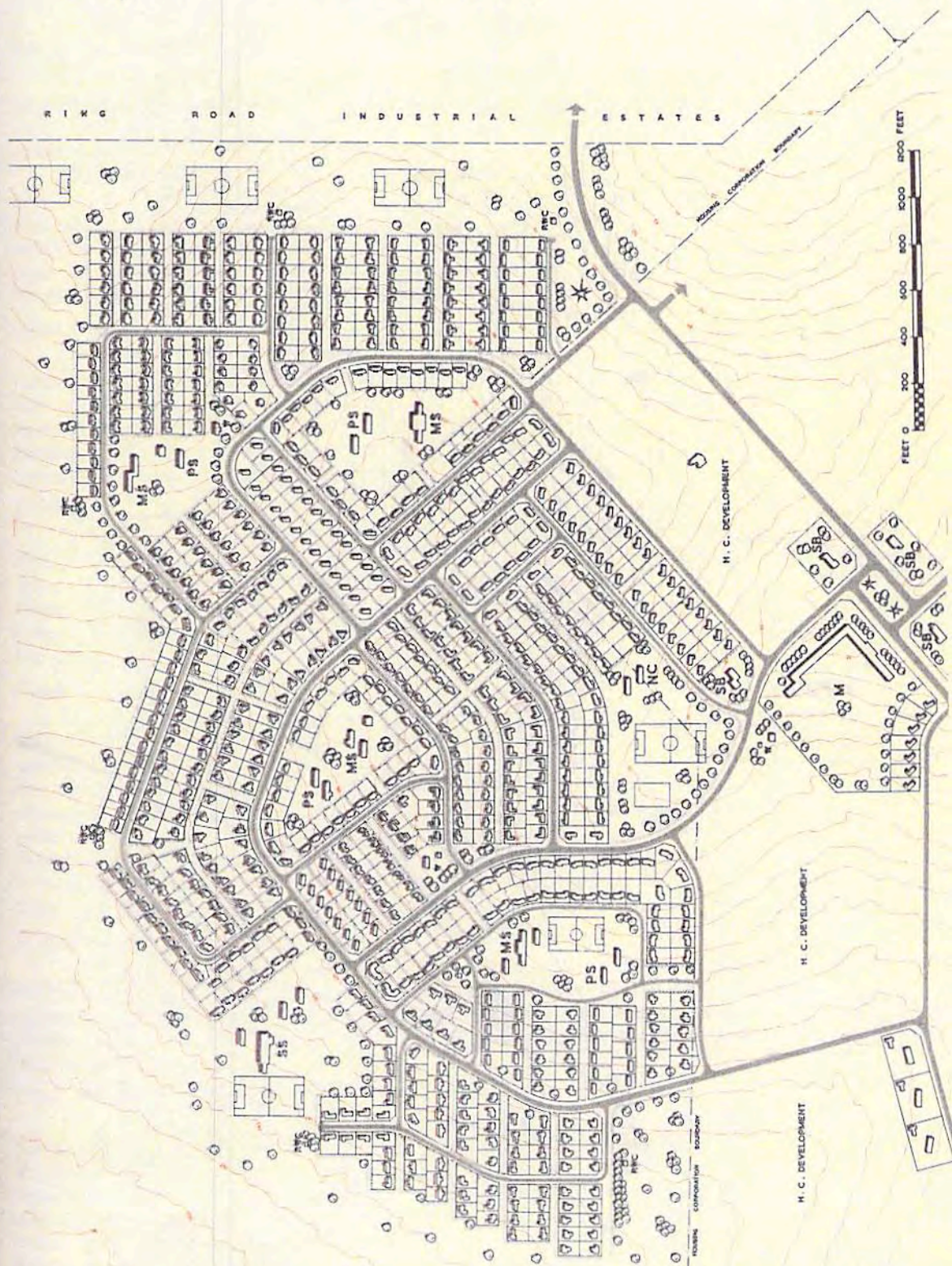


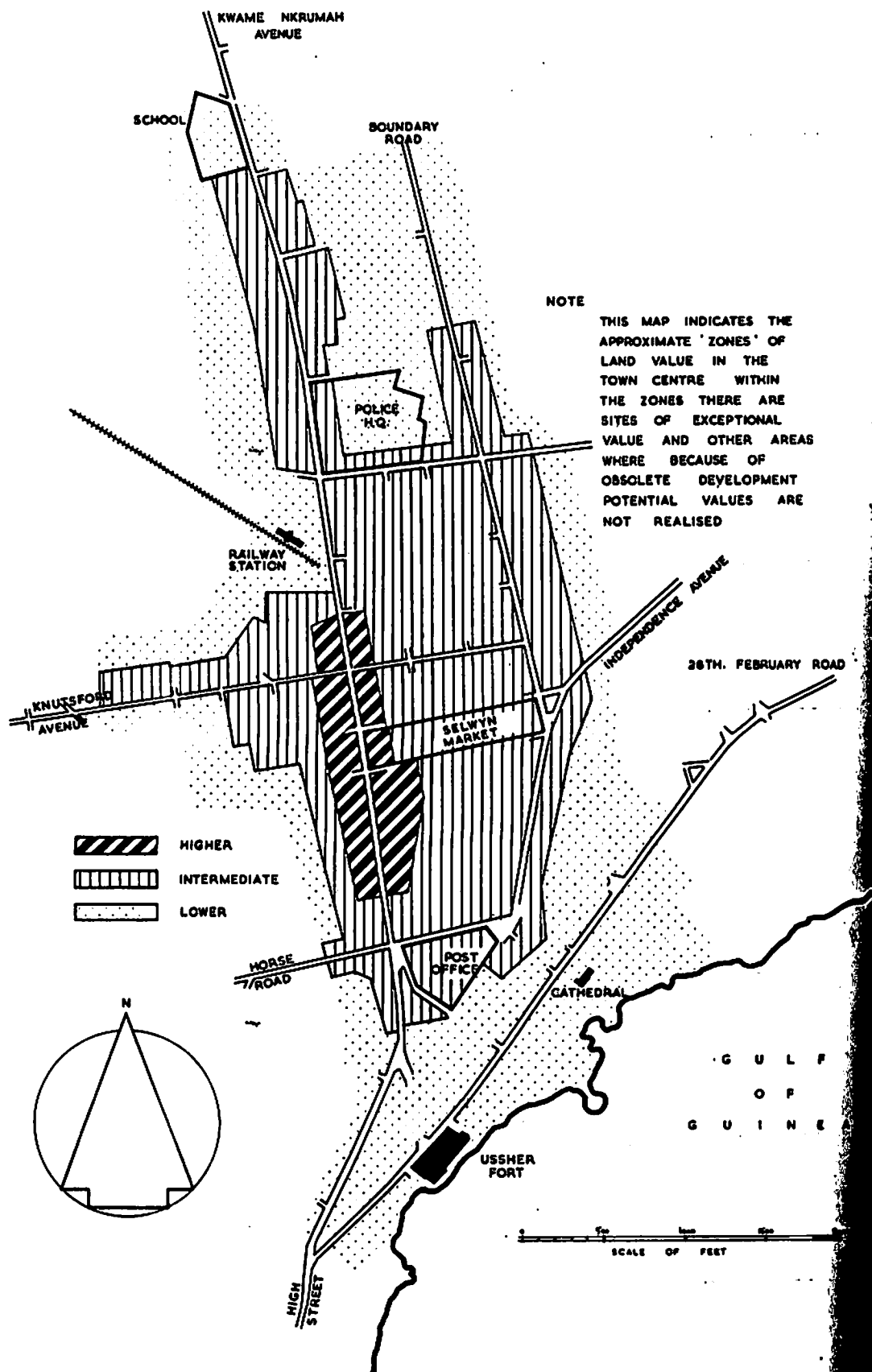
LEGEND

- HOUSING
- SS SECONDARY SCHOOL
- MS MIDDLE SCHOOL
- PS PRIMARY SCHOOL
- M MARKET SHOPS & SMALL WORKSHOPS
- W WORKSHOP
- NC NEIGHBOURHOOD CENTRE
- SB SPECIAL BUILDING
- RWC REFUSE & WASTE COLLECTION

Diagram No. 18

A typical neighbourhood layout for private development at Kane-shie showing land zoned for schools, plain fields and other ancillary uses.





In this chapter the existing conditions in the main commercial area are described and proposals made as to future development. The question of the markets and petty trading is part of the commercial problem but is in itself so important that a separate chapter is devoted to it.

Proposals for the redevelopment of the whole central area are dealt with section by section in chapter fourteen where drawings incorporating the proposals outlined in this and other chapters will be found.

EXISTING CONDITIONS

Extent of Commercial Area

The bulk of the commercial activity in Accra, apart from that carried on in markets and petty traders, is confined to the central commercial area. There are no suburban shopping centres as such though there are a number of small shops along the frontages of the main roads in some of the older residential areas.

The commercial centre extends northwards from the High Street near the coast to the Central Area By-pass Road and is largely confined between Boundary Road and Kwame Nkrumah Avenue (formerly Station Road). This commercial centre is therefore about 1,000 yards wide and 1,700 yards long and covers about 220 acres. It is bounded on its north and north-east sides by residential development and there are pockets of very poor housing within the heart of the commercial area. It covers sub-sectors I, K, L and M.

Land Values

Diagram 19 illustrates the areas of highest land value in the central area. The "concentration" of value on the Kwame Nkrumah Avenue frontage is due to the prestige value of the area for commercial development. The spread of this high value zone to the west and along the main road frontages is handicapped by the presence of the areas of poor quality housing at Zongo Lane and Cow Lane. Proposals for the redevelopment of these areas are described in chapter fourteen.

Buildings

Commercial activities are housed in a variety of buildings from the most modern to temporary structures and old single storey "swish" buildings. There are several department stores including three of most up-to-date design which have been opened in recent years. There is now a trend to erect specially designed office blocks although previously commercial offices were accommodated over shops and in converted houses scattered throughout the central area.

Congestion

There is increasing congestion in the commercial area due in part to the intermixing of different uses, the inadequate provision for car and lorry parking and the obstruction of pavements and carriageways by street traders. The spread of the commercial area due to the presence of other inappropriate development—for example large areas of single storey dwellings—is leading to increasing inconvenience to the public and in particular to the African shopper who has to walk considerable distances. As an example two of the newest department stores are about three-quarters of a mile apart whilst much of the intervening land is occupied by a type of development which is inappropriate in the commercial centre of a city (see chapter fourteen for proposals).

Warehousing

There is a tendency for storage accommodation which formerly was within the heart of the commercial area to be moved out to less expensive sites. The area north-west of the main road extending along and north of Knutsford Avenue is already changing in character from residential to commercial to accommodate wholesale trading premises, warehouses, workshops and motor repair depots.

Design

Recent development shows that the commercial centre could become both efficient for its purpose and aesthetically attractive. At present, however, a large part of the area is depressing in appearance due to the intermixture of uses, the presence of some of the poorest housing in Accra and the unsatisfactory design of many of the commercial buildings. There is a lack of character due to the haphazard nature of the development and the absence of civic features such as town squares or gardens. The recent construction of a dual carriageway road to form part of Kwame Nkrumah Avenue has gone some way towards adding a feature in that part of Accra (see chapter fourteen for new proposals).

CHAPTER SIX

Regional Influence

In addition to its function as the shopping area for Accra the commercial centre is in Ghana and draws custom from a wide field. Whilst everyday goods can be bought in towns and villages throughout the country Accra is unrivalled as the centre of special shopping and will undoubtedly continue to exercise this function as transport facilities improve. The growth of population in the region due to the development of the new town of Tema less than 20 miles away will increase this function still further.

COMMERCIAL AREA SURVEYS

To obtain data relating to existing conditions and trends in the commercial centre a number of planning surveys have been carried out including a land-use survey, a floor space survey, markets surveys, street trading surveys, street parking and floor space/car parking space ratio surveys together with a lorry parking survey. Details of the survey methods and of the information gained are given in the relevant appendices and further reference to surveys is made in chapters seven and fourteen. The primary concern of this chapter is floor space and car and lorry parking surveys.

Floor Space Survey

Although the land-use survey of the central area gave useful information as to the in which the different types of development were distributed it was necessary to know about the actual quantity of building development in the central area and the amount of floor space devoted to the main uses. A description of the floor space survey is given in Appendix J.

The main points to note are that within the proposed commercial centre the survey contains a total of about 7,000,000 square feet of building floor space, comprising gross spaces of 2,000,000 sq. ft. devoted to retail and wholesale trade, 1,200,000 sq. ft. for storage, 750,000 sq. ft. workshops, 2,500,000 sq. ft. residential and 550,000 sq. ft. for other uses. Thus within the proposed "commercial" areas there is at present more residential floor space than actual trading floor space and the residential accommodation forms about one-third of the total building space. The very low overall floor space index* of less than 0.4 is due to the presence of a large amount of single storey residential redevelopment behind the commercial frontages, the large under-developed areas and the extensive open markets.

The total "shop" frontage was found to be 50,000 feet but only a small proportion is fully used for display purposes.

Car and Lorry Parking Surveys

A number of surveys providing information as to car and lorry parking in the central area have been carried out during 1957 and 1958. These surveys are described in detail in Appendix K from which it can be seen that over 1,000 cars park on the carriageway pavements within the central area. This adds greatly to traffic problems. The redevelopment proposals described in chapter fourteen will provide accommodation for this number of cars in car parks. Commercial developers will also be required to provide one car-parking space for every 1,500 square feet of floor space in new buildings.

PROBLEMS

The main problems to be dealt with in the redevelopment of the commercial centre are car and lorry parking; the removal of slum housing from the heart of the area; the removal of major non-conforming uses of land such as large workshops and the bus repair depot; provision of adequate access for pedestrians, motorists and for goods vehicles; the provision of adequate and properly designed markets; the introduction of open spaces in the form of squares and gardens and the adoption of suitable machinery for securing comprehensive redevelopment of those areas where a multiplicity of ownerships and uses makes successful private redevelopment a practical impossibility.

The detailed proposals for the central area are described and illustrated in Chapter fourteen. The remainder of the present chapter is devoted to a description of the objectives to be sought in the commercial redevelopment of the central area and the standards which are suggested.

*Floor Space Index (F.S.I.)—the ratio of total floor space within the building to the plot area. Thus a building of 20,000 square feet of floor space on a plot of 10,000 square feet would have an F.S.I. of 2.

It is proposed that new commercial development shall be limited to the area shown on the central area section of the 1/5,000 scale development plan contained in the back of this report. This area coincides to a large extent with the existing commercial area except on the western side where additional land is included (the Station Area) and on the south where the area south of High Street is excluded (see the space proposals in chapter three). The total area of the proposed commercial centre is almost 400 acres and the sub-division of this acreage between various forms of development is set out in the schedules in Appendix N. The removal of the areas of development (notably at Cow Lane and Zongo Lane) will free large areas for redevelopment.

Wholesale Trade

In view of the methods of trading long established in Accra whereby retail and wholesale is frequently carried on at the same premises it is not proposed to allocate separate areas for these two forms of trade. In practice there will be a tendency for those businesses which are predominantly wholesale to become established on the outer edges of the commercial area and those which are primarily retail to occupy the more valuable sites on the main shopping frontages.

There is a tendency for new office blocks to be sited in particular parts of the commercial area and for the buildings themselves to be restricted to office use. This is a departure from the older pattern of development where offices occupied the upper floors of trading premises throughout the central area. The two main office areas are between Post Office Square and High Street and Thorpe Road including the head offices of the banks and on the west of Kwame Nkrumah Avenue where four new office blocks are grouped together. This tendency is likely to be maintained as the added convenience of specially designed office blocks far outweighs the loss of space away from the noisier parts of the commercial area will continue to be a strong attraction. This separating out of the two main functions of the commercial centre, namely trading and office activities will be encouraged by the design of the layouts for those parts of the central area to be redeveloped. It is not proposed, however, to prevent the erection of new buildings accommodating trading concerns on the upper floors and offices on the upper floors as this has advantages both economically and aesthetically.

Warehousing

It is proposed that new warehouses which need to be in the central area should be in the north-western portion bounded on the west by Hansen Road and on the south by Derby Avenue. This area already accommodates most of the motor and hardware trades together with woodworking and small manufacturing workshops scattered amongst poor quality residential development. It is likely that economic pressure will gradually lead to the redevelopment of this area for the purposes proposed to the exclusion of the present residential use.

Residential Development

Within the commercial centre residential development should only be allowed in conjunction with other forms of development. Some of the new office blocks have upper floors devoted to living accommodation and many of the older trading premises have flats above. This is quite unobjectionable so long as the primary use of the building is in accordance with the zoning of the area. In fact there are distinct advantages in permitting this form of development as it gives a greater flexibility in the design of buildings, helps to give added interest to the town centre especially after business hours and also enables fuller economic use to be made of sites where the main uses have, by their nature, to be confined to lower floors.

Control of Commercial Development

It is suggested that in the Cow Lane, Zongo Lane, Boundary Road Market and Station commercial areas comprehensive redevelopment is essential to produce the results described in chapter fourteen. Unless measures are taken to enable such comprehensive redevelopment to take place it is certain that the unco-ordinated efforts of the many individual owners will not produce the type of development appropriate to the most important central areas of the capital city of Ghana and the opportunities for worthwhile civic improvements will be lost for 50 years or more and possibly for ever.

CHAPTER SEVEN

There are no proper facilities for the loading and unloading of lorries at any of the three main central markets and vehicles parked in the surrounding roads add to the congestion.

PROBLEMS ARISING FROM EXISTING CONDITIONS

Overcrowding

The overcrowding of the main central markets has led to unsatisfactory conditions in the markets themselves and to the establishment of unofficial "overflow" markets such as near the Supreme Court. It has also encouraged petty traders who trade throughout the commercial area.

Congestion of Pavements

The trading in the streets outside the markets arising from the congestion referred to above has in turn produced very unsatisfactory conditions in many of the central area roads where the pedestrians are forced off the pavements and on to the roadway thereby obstructing the flow of traffic.

Movement of produce

The location of the markets in congested parts of the central area and the absence of provision for the loading, unloading and parking of lorries bringing produce to the market adds to traffic difficulties.

Sanitary Conditions

The absence of proper surfacing of the ground in the main markets, the lack of adequate water points and latrines, the absence of modern buildings and stalls combined with overcrowding and lack of control over the traders has produced conditions which are unsatisfactory from the public health aspect.

Civic Amenities

The drabness of the market buildings, the general conditions already described and the absence of trees make the markets uninteresting in appearance. These factors are slightly offset by the colourfulness of the goods, particularly the vegetables, fruits and coloured cloths but even so the markets have not the cheerful, pleasing character which should be possible and which would contribute towards the general attractiveness of Accra.

PROPOSALS

The three main central markets, Derby Avenue, Boundary Road, and Salaga require complete redevelopment to relieve overcrowding, improve sanitary conditions and improve the appearance of Accra. Redevelopment should be phased so as to maintain at least the present trading space within the markets during the reconstruction. Adequate loading and parking facilities must be provided at each market and amenities for the traders and the public should be improved.

To enable an entirely new market to be built before demolition of the existing ones takes place, it is recommended that the large area of Crown land to the east of Boundary Road (at present occupied by the Public Works Department Yards and the Municipal bus maintenance depot both of which uses are inappropriate in the commercial centre of a city) should be made available. The redevelopment proposals are described in detail and illustrated in chapter fourteen.

The main proposals for the existing new markets in the central area are as follows:—

Derby Avenue Market (Selwyn No. 1)

To be redeveloped on the new site east of Boundary Road. The new site is larger than both the existing Derby Avenue and Boundary Road markets and when built to modern designs with well laid out stalls and two storey buildings it will accommodate the existing number of traders in far greater comfort. The greatly enlarged lorry park adjoining the proposed new market will offer accommodation for 700 lorries.

A second new market is proposed north of Horse Road and west of Kwame Nkrumah Avenue. This market would also offer accommodation for traders from the Derby Avenue market together with a large number of traders at present selling at the roadsides due to lack of space in the markets. This market would also be served by a lorry park. (For details of proposals see chapter fourteen.)

The existing site of the Derby Avenue market would, after the construction of the new markets, be cleared to form a civic open space and car park which is so badly needed in the overcrowded central section of the commercial area. (See chapter fourteen.)

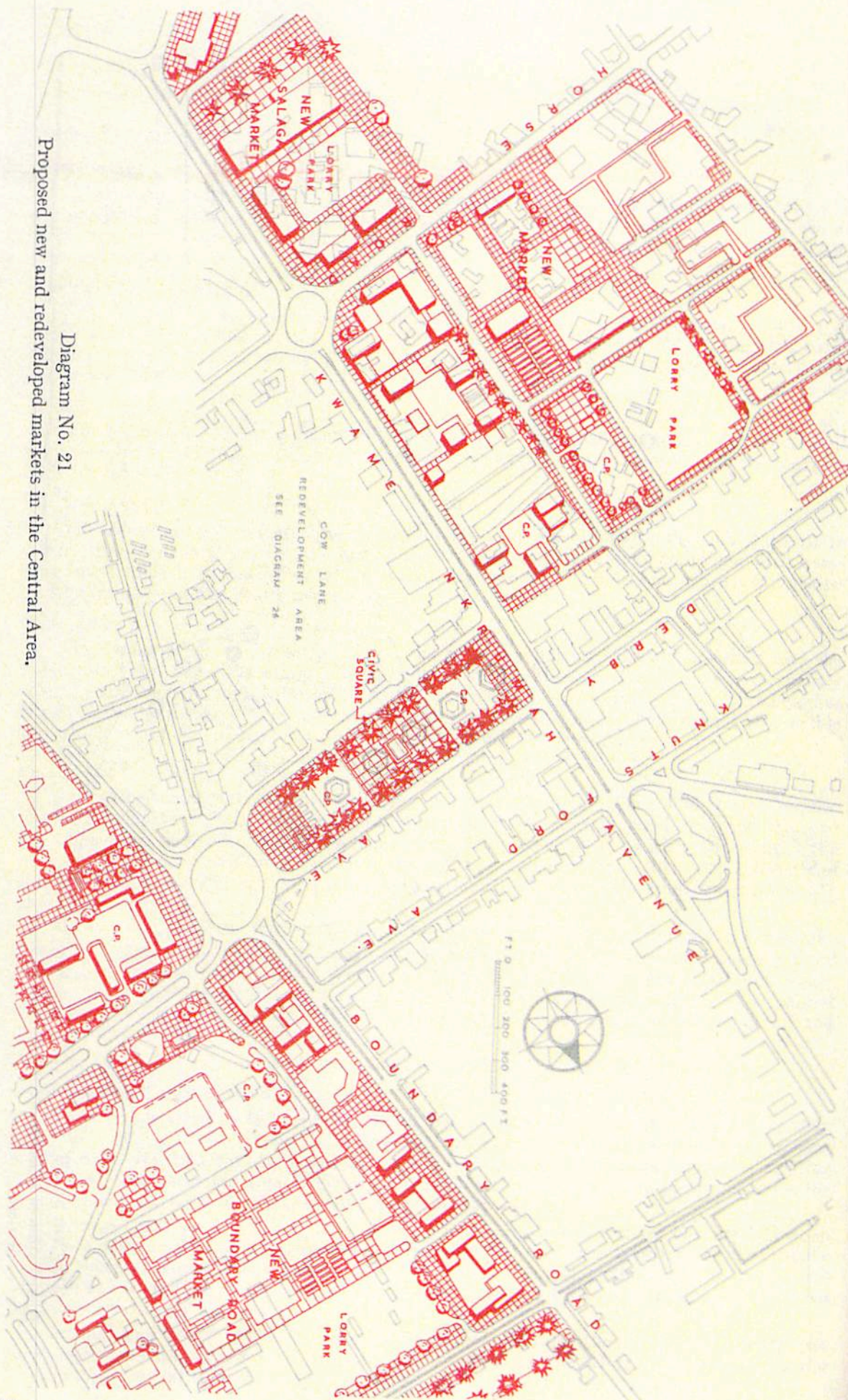


Diagram No. 21
Proposed new and redeveloped markets in the Central Area.

Boundary Road Market (Selwyn No. 2)

This market will be redeveloped on adjoining land as described above thus freeing the existing site for shops along the Boundary Road frontage and also permitting the necessary road improvement at the Boundary Road/Derby Avenue junction.

Salaga Market

It is recommended that this market should be rebuilt on or adjoining its present site and that it should have special facilities for the sale of fish and meat including cold storage accommodation.

New Central Market

The new market east of Boundary Road would, in conjunction with the new market at the Horse Road/Kwame Nkrumah Avenue junction, replace the two existing overcrowded markets on Derby Avenue and Boundary Road. (See drawings in Chapter fourteen.)

New Horse Road Market

This new market would take many of the traders at present forced to sell at the roadsides. It would also accommodate some of the traders from the Derby Avenue Market and could be used by Salaga Market traders whilst that market was rebuilt.

Okai Kwei Road Market

The timber sellers should be moved to a new timber market either at Fadama or at Ring Road so as to reduce congestion caused by timber lorries. (The previous move of the motor parts traders to Fadama appears to have been successful.) The Okai Kwei Road Market would then cease to exist except perhaps part of a "petty trading" site and the land could be used for other purposes in accordance with the plan.

Fadama Market

This is a new market built in 1956-57 in accordance with recommendations made by the Town Planning Division. The market houses the motor spare parts and hardware traders presently on Okai Kwei Road in the central area. It is suggested that this Fadama Market should be expanded to accommodate carpenters and timber sellers from Okai Kwei Road and elsewhere and that a fuel market should also be established on adjoining land.

Fuel Market

To be retained as a local market. The facilities for carpenters and the sale of fuel could be improved.

"Overflow" markets—Thorpe Road and opposite the Power Station

These traders should be accommodated in the proposed new markets and the drum makers and carpenters moved out to Fadama.

REDEVELOPMENT PROGRAMME (See diagram 21 and the drawings in chapter fourteen.)

1st Stage.—Construction of new Central Market east of Boundary Road on land occupied by P.W.D. and the Bus Depot. (See drawings in chapter fourteen.)

2nd Stage.—Demolition of old Boundary Road Market and half of Derby Avenue Market.

3rd Stage.—Construction of new market on or near Horse Road/Kwame Nkrumah Avenue junction (see drawings in chapter fourteen).

4th Stage.—Demolition of remainder of old Derby Avenue Market and its conversion into a central civic plaza with parking space and trees.

5th Stage.—Reconstruction of Salaga Market with special facilities for cold storage of fish and meat.

B. SUBURBAN MARKETS**EXISTING CONDITIONS**

The main suburban markets functioning within the area covered by this report (i.e. excluding Teshie, Nungua and Achimota) are at Kaneshie, Korle Gonno, Adabraka, Koko, Nima, Christiansborg and Labadi. There are market buildings except at Nima.

The total number of traders at these seven suburban markets is about 2,000 and details of the commodities sold are given in Appendix L, Table IX. It will be seen that most of the trade is in foodstuffs and comparatively little trade in clothing and hardware is carried on at these markets.

CHAPTER SEVEN

In most cases the market buildings are inadequate and there is also need for improved water supplies. The areas around the buildings and stalls are unsurfaced and there is trouble with dust in dry weather and with mud when it rains.

It is clear that suburban markets are very popular for the local purchase of foodstuffs. This is particularly so at Nima and Kokomlemle.

PROBLEMS

The main problem is lack of proper buildings and shelter from the sun. The absence of any surfacing to the ground is another difficulty. Water supplies are inadequate.

Generally speaking the distribution of the suburban markets is satisfactory but it is suggested that as development of Accra in accordance with the town plan progresses there will become a need for additional markets at North-East Christiansborg, Abossey Okai/Lartebiokorshi and possibly for the re-siting of the Kaneshie market nearer the centre of the large new housing area and away from the trunk road.

The positions of existing and proposed markets are shown in diagram 20.

PROPOSALS

- (a) New suburban markets at Abossey Okai/Lartebiokorshi, North-East Christiansborg and Kaneshie.
- (b) Provision of market buildings or enlargement of existing buildings at Nima, Kokomlemle, Adabraka, Korle Gonno, Christiansborg and Labadi.
- (c) Surfacing of the markets and provision of adequate water supply to improve standards of cleanliness in the interests of public health and amenity.
- (d) An improvement in the control of the markets so as to achieve more efficient operation and a more attractive appearance. This would include the orderly arrangement of stalls and the clearing of passageways, the planting of hedges and trees and the screening of areas used for the sale of charcoal and timber.
- (e) The possible establishment of an Airport Shopping Precinct near the junction of Achimota Road and Independence Avenue to provide local shopping and market facilities for the Airport, Legon, Achimota and Cantonments residential areas and to relieve congestion in the town centre.

C. PETTY TRADING

EXISTING CONDITIONS IN THE CENTRAL AREA

A survey of petty traders in the central areas of Accra was carried out by the Town Planning Division with the help of students in 1955. The results are summarised in Appendix Table X. Altogether 2,047 petty traders were enumerated. Itinerant hawkers were excluded and all the traders counted had regular pitches on footpaths and small undeveloped spaces on the sides of the streets in the central area.

It can be seen from Table X in Appendix L that the main reasons given for the selection of a particular trading site were (a) that it was a good selling site, (b) the absence of space at the nearby markets and (c) nearness to the trader's house. Of the total of over 2,000 petty traders more than 1,000 were selling foodstuffs and 600 of these were selling cooked food of one sort or another. About 600 traders were selling mixed articles such as combs, mirrors, pictures, locks, razors, beads, brooches and other small imported manufactured articles. The remainder were selling furniture, bedding, fuel, bottles, drums and a variety of local products including sandals and clothing.

A more detailed 25 per cent random sample survey of the total number of traders produced other interesting information; 85 per cent of the traders were females; 40 per cent traded every day of the week; 60 per cent traded every day except Sunday; 50 per cent of the traders were Gas, 25 per cent were other Ghanaians and 25 per cent were non-Ghanaians; one trader in every six was accompanied by babies, children or juveniles.

The majority of the traders were in the main commercial streets in the heart of the commercial area as illustrated by the following figures:—Boundary Road/Pagan Road, 28; Derby Avenue (adjoining market), 196; Kwame Nkrumah Avenue (then Station Road), 11; Salaga Street (adjoining market), 100; and on Derby Avenue near Boundary Road, Selwyn Market Street (adjoining market), 94; Knutsford Avenue, 95; Beach Avenue, Horse Road, 72; Kimberley Avenue, 65.

EXISTING CONDITIONS OUTSIDE THE CENTRAL AREA

Outside the central area the petty traders are, as could be expected, less concentrated and they are found mainly along the main roads and near centres of employment. In the suburban areas the system of petty trading operates to the best advantage as the traders follow the demand and are to be found at building sites and wherever there is the chance of business. It has not yet been possible to arrange a survey of petty traders outside the central area and any guess at their numbers may be wide of the mark. It is likely however that the number is not less than 2,000.

PROBLEMS

Most of the problems arising from the system of petty trading as now existing in Accra relate to the central area and they are as follows:—

- (a) Obstruction of footpaths, sometimes forcing pedestrians on to the carriageway and thus interfering with the flow of traffic and increasing the risk of accidents.
- (b) Obstruction of passageways, entrances to markets and offices.
- (c) Encroachment on to open spaces adjoining public buildings such as the Supreme Court where such commercial activity is inappropriate.
- (d) Danger to pedestrians due to the presence on the pavements of open fires, bowls of boiling cooking oil and containers of hot fluids.
- (e) Danger to public health arising from the contamination of foods offered for sale and from the scattering of food waste on pavements and in the open drains.
- (f) Undesirable effect on civic amenities generally.

In the suburban areas the main problems arise from the trading along main roads where the collections of boxes, tables and pots and pans used by the traders is sometimes unsightly and may spoil the effect of an important civic route as for example Independence Avenue.

PROPOSALS

The proposals relate almost entirely to the central areas. In the suburban areas it is suggested that the Municipal Council should initiate a campaign for greater tidiness and cleanliness and in the case of some of the more important civic routes roadside trading might be restricted to a limited number of points.

In the central area the present unsatisfactory position could be improved by the following means:—

- (a) The redevelopment of the central markets to accommodate more traders in greatly improved conditions (*see* section "A" of this chapter). It appears from the survey (Appendix L) that 500 or so street traders would voluntarily move into the markets in the event of suitable accommodation being offered.
- (b) The creation of special petty trading sites in the areas of greatest demand as and when opportunities occur. These sites would each accommodate about 20 or so traders. They would be surfaced, drained and provided with a water supply. Tree planting for shade and amenity would be carried out. The traders would be required to pay a small monthly charge.
- (c) Action to remove traders from the most congested pavements so as to allow the free passage of pedestrians and avoid obstruction to vehicles and the risk of accidents. (It is understood that existing regulations as to the prohibition of trading in certain streets are not enforced because of the outcry from traders who cannot find alternative sites. The proposals in (a) and (b) above would assist.)
- (d) The enforcement of regulations to lessen the dangers to the public arising from the cooking of foods on the pavements and the disposal of food waste on the pavements and in the open drains.

D. PROPOSALS SUMMARISED

Central Markets

New markets east of Boundary Road and west of Kwame Nkrumah Avenue increasing trading space by 50 per cent. Generous lorry parking and loading facilities adjoining. (*See* diagram 21.) Salaga Market reconstructed with special facilities for cold storage of fish or meat. Old Derby Avenue Market closed after new ones opened and the site converted into a civic square to bring space and additional interest into the overcrowded centre of the commercial area.

CHAPTER SEVEN

Suburban Markets

Improvements to existing suburban markets including new buildings, improved water supply, parking facilities, surfacing and improved sanitation. New suburban markets at Abossey Okai/Lartebiokorshi and at North-East Christiansborg when development in the area is further advanced.

Possible "Airport Shopping Precinct" near Achimota Road/Independence Avenue junction.

Petty Traders

Many of those in the central area streets to be accommodated in the new markets. Specify small petty trading sites to be created within all new development areas so as to concentrate the traders in appropriate places and avoid congestion on pavements.

A considerable increase in quantitative educational facilities was made following the commencement of the Accelerated Development Plan for Education in 1952. The increase in the number of places was effected by the construction of new schools, restricted in Accra to Primary, Middle, and to the issue of grants-in-aid which in Accra were devoted to approved Secondary schools. The Accra Technical Institute was also built under the accelerated programme.

In 1954 the responsibility for Primary and Middle school education was vested in the Accra Municipal Council (except in the case of Government schools which followed in 1956), the Ministry of Education fulfilling a supervisory function.

In 1956 the Town and Country Planning Division commenced work on the planning and siting of sites for a twenty-five-year educational programme in concert with the Ministry of Education and the Accra Municipal Council; this work was, however, discontinued when the new Accra plan started. About 30 sites, under that part of the 25-year programme which was completed, were accepted by the Accra Municipal Council but as yet few have been sited.

Whilst considerable effort has been made for the improvement of educational facilities the authorities concerned the situation generally in respect of schools is far from satisfactory. Not only is there a shortage of places but many schools are unsatisfactorily sited and many school buildings are too small and/or structurally unsound. This situation is particularly acute in the Central Area.

Funds for the construction or improvement of schools have come almost entirely from the Central Government and in respect of Primary and Middle schools very little has been available from local rates.

The standards adopted for calculation of numbers of schools required are those laid down by the educational authorities and are one Primary school and one Middle school per 2,000 population.

Desirable site acreage standards are two acres for a single stream Primary school and one acre for a single stream Middle school. In areas which are reasonably fully developed it may not be possible to achieve these standards.

A standard of 0.1 acre per place is proposed for secondary boarding school sites which includes the provision of adequate playing fields.

PRIMARY AND MIDDLE SCHOOLS

According to the 1957 population figures there is a deficiency of 10 Primary schools and 10 Middle schools inside the planned area of Accra town. In addition there are 37 Primary schools and 34 Middle schools which require to be rehoused owing to unsound structures, bad siting or both.

The deficiency in public schools is somewhat mitigated by the presence of privately owned schools which take a proportion of the pupils not otherwise accommodated. This is considered altogether satisfactory by the authorities as there is little or no control over private schools and in many cases the educational standard is low.

It is the policy of the Accra Municipal Council to provide places for all eligible children in public Primary and Middle schools. To achieve this standard and provide suitable accommodation it is necessary to build now 47 Primary schools and 56 Middle schools plus an additional total each year of approximately three Primary schools and three Middle schools giving a total number of 77 Primary and 86 Middle schools by 1968 and 107 Primary and 116 Middle schools by 1978, in accordance with the projected population growth. However as shown in the map the total planned area for residential accommodation would if fully developed accommodate a population of roughly 400,000 and, in the absence of phasing whereby future development areas can be held in reserve, it is necessary to acquire sites for schools commensurate with the possible total population which can be accommodated in each and every neighbourhood. Under these circumstances about 140 Primary school sites and 150 Middle school sites in addition to those now existing should be acquired. In the outer areas it will be possible to find vacant sites for schools but in the central residential areas it will be necessary to acquire buildings as well, some of which can possibly be utilized for school purposes.

In addition to the purpose of providing educational facilities, school sites provide a useful addition to the local open space system and sites should be chosen with this in mind. In all cases schools should be sited as an integral part of the neighbourhood which they serve with an ultimate view of serving only the neighbourhood in which they are built. This will eventually obviate the necessity of children having long journeys to school, which at the present time often entails the crossing of main roads. Generally, Primary and Middle schools

CHAPTER EIGHT

should be no further than half a mile from the children's home. The future disposition of Primary and Middle schools by sectors is shown on the master plan in the folder at the back of this report.

SECONDARY SCHOOLS

Secondary schools, whether boarding or day, are usually attended by pupils coming from all over the country and are not restricted to those living in the towns in which the schools are situated. It is not therefore possible to base the number of Secondary schools required in Accra on population figures. The number of such schools is dependent entirely upon the policy of the education authorities.

A recently formulated education policy on Secondary schools proposes a considerable increase in expenditure giving an overall national increase from an intake of 2,200 to an intake of 4,200 by 1964. Larger schools of 500 pupils and upwards are envisaged to make the fullest use of specialist staff.

It is anticipated that no numerical increase will be made to the number of Secondary schools in Accra but that additional places will be made available by the development and extension of existing schools.

The purpose of the increased development is to enable 10 per cent of the Middle school leavers to find places in Secondary schools instead of only six per cent as at present. The ultimate aim is to provide places for 20 per cent of the Middle school leavers.

It is Government's intention to develop 80 per cent of all Secondary schools as boarding schools and this policy enables the majority of schools to be situated on the perimeter of the town.

The plan accompanying this report suggests the re-siting of sixteen Secondary schools, three within the town and thirteen to the perimeter, all of which are at the moment in very unsuitable areas. In most cases the buildings are inadequate and poorly constructed. Achimota School is the only Secondary school in Accra suitably sited and accommodated at present.

TECHNICAL EDUCATION

Under the Accelerated Development Plan for Education in 1952 a large technical institute was built in Accra. It has a certain amount of room for expansion but the development of part of the site for staff housing has curtailed the full use of the land.

PROPOSALS

1. Provision of Primary and Middle school sites to the standard of one Primary and one Middle school per 2,000 people.
2. Provision of Primary and Middle school sites sufficient for the needs of each individual neighbourhood.
3. The siting of Primary and Middle schools no farther than half a mile from the population they are intended to serve.
4. Provision of about 2 acres of land for each single stream Primary school.
5. Provision of about 3 acres of land for each single stream Middle school.
6. Provision of sites for the redevelopment of the Secondary schools.
7. Provision of land for Secondary schools at 0.1 of an acre per place (except in central and outer-urban areas).

HOSPITALS AND CLINICS

PRESENT POSITION

The existing facilities comprise the Korle Bu General Hospital occupying a very large site in west Accra, the Ridge Hospital on Castle Road, the Princess Louise Children's Hospital on Derby Avenue, the Mental Hospital on Castle Road, the School of Hygiene on Kwame Nkrumah Avenue and the adjoining offices of the Medical Officer of Health and the vaccination centre.

REQUIREMENTS

The Ministry of Health's proposals include the establishment of a new hospital to serve east Accra, out-patient dispensaries and child welfare clinics at Nima/Adabraka, Christiansborg and Victoriaborg and a new School of Hygiene and Public Health Institute at Korle Bu. It is also proposed to develop a medical school but a decision as to whether this will be based at Korle Bu or at a new site nearer the University College at Legon has not yet been taken.

The Ghana Red Cross Society hopes to establish clinics at Mamprobi and at Teshie (outside the area covered by the present plan). At Mamprobi the clinic could be accommodated on land adjoining the Neighbourhood Centre building.

PROPOSALS

(a) The proposed Medical School, the new School of Hygiene, and the proposed Public Health Institute together with extensions to the hospital itself will be accommodated within the 440-acre grounds of the existing Korle Bu Hospital unless the Ministry of Health should decide to establish a new hospital and Medical School north of Accra.

(b) The new hospital at Labadi/Christiansborg will be accommodated on a 10-acre site north of the proposed eastern extension of Ring Road adjoining the large open space which lies between Christiansborg and Labadi. (This requirement might be reduced if a new hospital is built north of Accra.)

(c) One-acre sites are reserved at Nima, north-east Christiansborg and at Victoriaborg for out-patient dispensaries and child welfare clinics. It is suggested that any further local health services might be developed at or near the neighbourhood centres to which reference is made in Chapter five. This would apply to the proposed Red Cross clinics.

CEMETERIES

EXISTING CONDITIONS

The main existing public cemeteries are at Ring Road, Audome (70 acres), Castle Road, Christiansborg (14 acres), and Labadi (6 acres). Smaller cemeteries, many of them privately owned, are distributed throughout Accra and are shown on the 1/5,000 scale development plan. A large number of these small cemeteries are disused or are used only occasionally. In the main cemeteries only 30 acres remain unused of which 20 are at Audome. The responsibility for cemeteries rests at present with the Ministry of Health but is likely to be transferred to the Municipal Authority.

REQUIREMENTS

The responsible authorities estimate that about 5 acres of land will be used annually for burials during the foreseeable future. It has been agreed that about 150 acres of additional land should be reserved for burial purposes and this should be distributed in the manner recommended below.

PROPOSALS

It is recommended that land should be reserved for future cemeteries on the following basis as discussed with the health authorities:—

- | | | |
|----------------------|---|---|
| <i>West Accra</i> | — | 50 acres west of Abossey Okai on the south side of Weija Road. |
| <i>North Accra</i> | — | 50 acres on the south side of the Achimota Road north of Kokomlemle. |
| <i>East Accra</i> | — | 20 acres adjoining the existing cemetery at Labadi south of Giffard Camp. |
| <i>Teshie-Nungua</i> | — | (outside area of present plan) 20 acres. |

Allowing for the continued increase in population the above provision should be adequate for 20 years or more.

CHAPTER NINE

DRAINAGE AND OTHER PUBLIC SERVICES

The question of the provision of public services is dealt with in chapter thirteen. Improvement to surface water and foul drainage arrangements is very desirable in the interests of public health.

Anti-mosquito measures will be assisted when existing earth drains have been reconstructed to avoid areas of stagnant water.

CHURCHES

There are churches of many denominations throughout Accra. A large number of them are in the older parts of the city and with the rapid expansion of the suburban areas there is an increasing need for the construction of new churches to serve these areas.

Notable among existing churches are the Anglican Cathedral, south of High Street, the Roman Catholic Cathedral, occupying a commanding site on Castle Road, and the large Methodist Church on Horse Road. Several other churches have an interesting appearance and add to the architectural attractions of Accra but there is a tendency for many newer churches to be housed in temporary buildings due either to lack of funds or difficulties in securing suitable sites.

Where, as in the case of the Presbyterian Church, Post Office Square, redevelopment proposals make the resiting of a church necessary an alternative site is suggested. In the suburban area layouts, church sites are indicated and in many cases these are shown adjoining the neighbourhood centres. The churches and missions are active in the educational field. Recommendations as to schools sites will be found in chapter eight.

COMMUNITY AND NEIGHBOURHOOD CENTRES

There is a thriving Community Centre near the coast at the western end of the Marine Drive opposite the Supreme Court. Other smaller centres are at Mamprobi and Teshie.

Provision of sites for neighbourhood centres and other social facilities is on the basis described in chapter five at page 38.

From the architectural point of view the neighbourhood centre buildings can contribute much to the character of a residential area and it is intended that their design and the layout of the surrounding grounds shall receive careful attention.

CLUBS AND OTHER SOCIAL FACILITIES

Several social clubs are operating successfully including the International Club, Ghana Club, Roger Club, Accra Club and the Syrian Club. Many other organisations such as the Polo Club, Accra Lawn Tennis Club, Turf Club, Motor Club, Golf Club, Rugby Club, Table Tennis Association and others include social functions with their other activities either at their own premises or elsewhere.

Many of the sports and social organisations will require their own sites in future years. Some will be accommodated at or near the neighbourhood centres of the newly developing areas. Sites are also reserved in the Marine Drive area (see diagram 10).

CULTURAL AND EDUCATIONAL SOCIETIES

There are many organisations flourishing in Accra which cover a wide range of interests. To name but a few there are the following—Boy Scouts and Girl Guides Associations, Y.M.C.A. and Y.W.C.A., Ghana Legion, Ghana Federation of Women, British Council, Accra Photographic Club, Field Society, Ghana Society for the Blind, Child Care Society together with many well supported friendly societies, trade unions and professional associations.

Many of these organisations have their own sites and there is a very important cluster of them at the western end of the Marine Drive area where the Community Centre, British Council, Accra Club, Legion Hall, Scouts Hall and Y.M.C.A. are gathered together. A sketch showing the proposed development of this area including gardens and terraces leading to the sea can be found in chapter fourteen (diagram 25).

Additional sites may be found in the Marine Drive area, in the green wedges, and adjoining neighbourhood centres. A particularly important area for cultural and educational buildings is that west of Barnes Road between Castle Road and Rowe Road (see 1/5,000 central area map at the back cover). The Ghana Museum has been built at the north of this area and are reserved for the National Archives and the Y.W.C.A. It is suggested that further development on the portions of this area not already allocated should be for public purposes of a cultural nature. The whole area should retain an "open" character and careful landscape treatment is necessary. (see page 25).

ENTERTAINMENT

There is no theatre in Accra but theatrical performances are staged at the Community Centre, the Roger Club, Achimota School, Giffard Camp and elsewhere. A properly equipped theatre is badly needed and it is hoped that an early start on its construction will be possible. A site for a National Theatre has been reserved in the Marine Drive area (*see* diagram 10) and it is suggested that an open air amphitheatre could be constructed on this site in addition to the closed theatre.

There are about 20 cinemas in Accra at the present time and more are likely to be constructed in the suburban areas.

To improve the facilities for public enjoyment of the coastal area it is suggested that a lido and restaurant should be constructed near the Marine Drive (*see* diagram 10).

LIBRARIES

There is an excellent new central library in Accra near the Supreme Court. An extension of this building is possible. A children's library operates from the Community Centre. There are no proposals for branch libraries at present but should they be provided it would be desirable that they should be sited at or near the neighbourhood centres.

EXISTING OWNERSHIP PATTERN

Within the limits of the proposed development area a considerable acreage of land, amounting to almost one-half of the total is Crown Land which has been acquired by Government for various public purposes. Other land, mainly on the outskirts of the town is "Stool" and under the control of "Stools" (certain tribal heads) for the benefit of the subjects of the "Stools". The Municipal Council has certain statutory powers of management in relation to such lands, but the ownership remains vested in the various Stools.

Other land is in family ownership and although individuals have rights to use and develop their rights of disposal may be limited. Within the developed areas of Accra and particularly in the central portions there is much land which is in individual ownership and in which interests very much akin to freehold exist. This land is freely sold or leased.

There are instances where the ownership of land is in dispute or where, because of the many interests existing, it is difficult to secure agreement amongst the parties to the terms of a transaction. For these reasons prospective developers are often keen to secure a lease of Crown Land in order to avoid the risks of litigation which arise when the title to land is in doubt.

There is no registration of title to land in Accra but documents relating to transactions in land may be registered at the Deeds Registry and "searches" at the Registry may be conducted by would-be purchasers. Compulsory registration of title which is likely to be introduced in due course will involve a very considerable amount of work but will undoubtedly facilitate subsequent transactions and remove some of the difficulties of central area redevelopment.

LAND VALUES

On the outskirts of Accra house plots may still be obtained on "family" or "stool" land at a nominal price but within the central areas and in the popular residential areas, values are rising rapidly. Building plots of one quarter of an acre or so at Adabraka, Christiansborg and South Kokomlemle may change hands at £400 or more and within the commercial centre there are areas where the freehold value is over £20,000 per acre.

Rents are generally high because of the demand for both residential and commercial accommodation and there are cases where the capital cost of buildings is recouped in six to eight years, and sometimes sooner. There is no taxation of the unimproved value of land but property rating is in force in the municipality. It has been suggested that a system of taxation of undeveloped land within areas which are suitable for early development would help to avoid the prolonged sterilisation of plots and so encourage staged development rather than the scattered development now taking place.

The sporadic nature of development within many of the residential areas is due frequently to the plot owners inability to build and his reluctance to dispose of the plot. There is undoubtedly an attachment to land that is more than mere sentiment and which often outweighs financial considerations. Another influence operating against the freer sale of plots is the desire of many individuals to stay or settle in those parts of Accra where their families have lived for many years. This leads to the retention of undeveloped and underdeveloped plots rather than to a free system of sale or exchange.

PURCHASE OF LAND FOR PUBLIC PURPOSES

The Crown may acquire land for approved public purposes both by private treaty and by compulsory procedure subject to the provisions of the relevant Ordinances. Compensation is assessed at the prevailing market values under the provisions of the Public Lands Ordinance or the Public Lands (Leasehold) Ordinance unless otherwise provided for in a relevant Ordinance.

Government may also purchase land compulsorily at the request of local authorities. Local authorities and certain public bodies and corporations may also purchase land themselves for approved purposes but have no compulsory powers.

Whilst there is provision for the purchase of land for a variety of public purposes there is always a corresponding programme of acquisition due in many cases to inadequate provision of funds. Thus land shown on a draft town plan as required for schools or open space may not be purchased for many years and in the meantime the owner cannot develop it and it is unlikely that he will be able to dispose of it in view of the proposed future use. There is need for

a definite limit to the period during which land zoned for a public purpose may remain unpurchased by the relevant authority. At the expiry of this period the owner should be entitled to require the site to be purchased or the zoning to be modified to allow an alternative form of development.

Advantages of Early Acquisition for Public Purposes

Apart from the hardship to individuals which may arise from the delay in the purchase of land for public purposes, this delay is likely to increase the cost of acquisition due to the constant rise in land values as development progresses. This does not apply within declared "planning areas" however in view of the provision in the Town and Country Planning Ordinance basing the assessment of compensation payable under the Ordinance on the value of the land and buildings twelve months prior to the declaration of the "planning area". In order however to avoid hardship to individuals and, outside "planning areas" to save public funds, authorities requiring land for their public functions (education authorities are a typical example) should aim at the assessment of their land requirements on a long term basis and should endeavour to secure funds to enable land to be purchased well ahead of the actual date of development.

Comprehensive Redevelopment Schemes

In chapter fourteen reference is made to the areas where effective redevelopment may involve public acquisition of land. This is not a problem exclusive to Ghana but has its counterpart in the centres of many cities all over the world where redevelopment in accordance with modern standards cannot proceed whilst the land remains in a multiplicity of small ownerships. The solution normally adopted is to purchase all the land and property and to compensate those persons whose interests are affected. In many cases the redevelopment itself produces sufficient revenue to cover the compensation and in other cases some call on public funds must be made in order to achieve the progress which the greater public interest demands.

Purchase of Individual Properties

Apart from the need to acquire land and buildings in areas to be comprehensively redeveloped there arises from time to time the need to purchase an individual property the redevelopment of which is rendered impracticable or undesirable by proposals for road improvements or for the creation of squares or other open spaces. It is highly desirable that adequate funds should be available to enable the planning authority to purchase such properties in order that there should be no hardship to the owners and to avoid the possibility of the projects in question being prejudiced. This latter possibility is very real as, in the absence of funds for the early purchase of affected properties, the planning committees are naturally inclined to allow some compromise form of development which may be an improvement on existing conditions but which falls far short of the ideal solution. Several such cases have arisen in Accra during recent years.

A special procedure exists for selecting and approving sites for Government Development. In Accra there is the Accra Regional Site Board which covers the whole of the municipality with the exception of the Government Central Area and adjoining lands which fall within the jurisdiction of the Central Site Board. Whilst these Boards serve a useful function they have in the past only considered development projects on an *ad hoc* basis as and when proposals were put forward by Ministries or Departments. The position has changed recently so far as the Central Site Board is concerned and overall proposals for its area have been agreed in principle.

It is of course desirable that Government development should conform to the town planning proposals for Accra and should make a major contribution to the appearance of the city. During the preparation of this report an attempt has been made to assess Government land requirements in Accra and to put forward suggestions as to appropriate sites for the various projects. The requirements and corresponding recommendations will be found in Appendix M.

EXISTING CONDITIONS

Government Central Area

Since 1950 the area north of Rowe Road and east of the recently constructed Central Area By-pass has been developed as a Ministerial and Departmental office area. A standard type of three storey single room depth block of "semi-permanent" construction has been used. The area is quite attractive due to the trees, lawns and gardens but the buildings have not quite the character appropriate to the main administrative centre of the country.

The area south of Rowe Road which is reserved for future Ministerial and Departmental buildings is at present occupied by a variety of temporary buildings and old bungalows. This area has great potentialities if suitably developed.

To the west of the area above and nearer to the town centre lies the site reserved for the future Parliament buildings. This site is also occupied by a variety of old buildings and recent temporary ones. No new development of a permanent nature is being permitted in view of the ultimate use of the site.

Regional Offices

Regional and local offices of Government Departments are scattered throughout Accra but for some years there has been a proposal to concentrate them in the vicinity of Rowe Road west of Barnes Road. This area is at present occupied by an old building used to house the offices of the Regional Commissioner, Eastern Region (South) and other Government offices. Land adjoining this building is occupied by a collection of temporary buildings of varied nature.

Municipal Offices

The offices of the Accra Municipal Council are very inadequately housed in an old building on Horse Road. The Town Engineer's office is in an obsolete "temporary" building at James Town and the Transport Manager's office is on Boundary Road whilst the Medical Officer of Health has an office in the commercial area on Kwame Nkrumah Avenue. New enlarged accommodation is urgently required.

Public Works Department Buildings

The Public Works Department Head Office is housed in an old building within the area reserved for the new Parliament.

The District Offices of the Public Works Department together with the various local and regional workshops and maintenance depots and stores are west of Barnes Road in the centre of Accra. The Public Works Department Waterworks Yard also occupies a valuable site in the central area.

Other Government Offices

Many other Government offices are scattered about Accra often on unsuitable sites or in outmoded, temporary or inadequate buildings. A typical example is the Department of Agriculture which is sited south of 28th February Road in the Marine Drive area. More than 30 "temporary" buildings have been erected behind the main building during recent years and the result is a haphazard collection of unsightly sheds all of which will have to be demolished sooner or later.

Army Development

The Army occupies extensive areas at Giffard Camp north east of Accra and along Independence Avenue and Ring Road East. Several sites have been relinquished during recent years

and more will be released in the near future, particularly along Ring Road and east of Cantonments Road. The main areas to be retained are Giffard Camp itself; the Military Hospital Officers' Mess, Married Quarters and Flagstaff House on the west side of Independence Avenue; the Pay Office, Record Office, Ordnance Depot and various quarters on Giffard Camp Road and the training areas at Teshie.

PROBLEMS OF REDEVELOPMENT

One of the difficulties of redeveloping many of the sites now occupied by Government offices is the existence of a large number of temporary offices which often cannot be removed until the new accommodation is available. It is hoped that speedier progress in the provision of permanent offices in accordance with the town plan will obviate further wasteful expenditure in the erection of temporary buildings.

A further difficulty in connection with Government and Municipal development is the reluctance of these authorities to clear sites occupied by out-moded buildings and so aid the process of urban renewal. It is obviously tempting to use a virgin site but this approach leaves the more difficult problems for other developers who are often less well equipped to deal with matters of acquisition and the rehousing of existing occupiers. There is a need for a more positive and better co-ordinated approach to future Government development and some amendment to the present system of separate votes for financing offices of the various Ministries is called for in order to avoid the now experienced difficulties.

PROPOSALS

The detailed requirements for Government development are set out in the schedule in Appendix M where recommendations as to suitable locations can be found. It is only necessary to mention here the proposals for the main centres of Government development.

Government Central Area

This area can be divided into three major sections, namely the existing ministerial and departmental area, the proposed area for future ministerial and departmental buildings and the Parliament area. These areas can be seen on the folding 1/5,000 scale map at the back cover. It is recommended that the form of development in the existing ministerial area north of Rowe Road should be continued as shown. The layout incorporates provision for a Civil Service Canteen and for new access to the Turf Club.

South of Rowe Road the new ministerial area occupies a most commanding site with frontage to 28th February Road overlooking the Marine Drive area. The Central Site Board has recommended a form of development here which would incorporate three seven-storey office blocks of earthquake resistant construction in accordance with sketch proposals produced by the Engineer-in-Chief of the Public Works Department. These proposals could undoubtedly lead to a most attractive and dignified form of development.

The future Parliament site lies at the junction of Barnes Road and 28th February Road. It has an ideal setting as it is approached from the north by Independence Avenue and Barnes Road which are flanked by the Independence Avenue parkland and on the south it overlooks the Marine Drive area and the coastline whilst to the west lies the Supreme Court area.

A diagrammatic representation of the future Parliament buildings is shown on the 1/5,000 scale folding map superseding some of the detail on diagram 10.

Regional and local offices

It is recommended that regional and local offices of Government departments should be grouped on the north side of Rowe Road west of Barnes Road and also south of Rowe Road in the area to be released by the removal of the Public Works Department maintenance depots and stores. (See diagram 25.)

Municipal Offices

No final decision has been taken by the Municipal Council as to the siting and form of its new offices but several suitable locations are still available. It is quite possible that the Council may wish to have the Council Chamber, Town Clerk's Office and associated facilities separate from the other offices. It may be that the Town Engineer and Transport Offices will be at Ring Road where the Council already has an extensive site. Appropriate central sites are the Supreme Court Area, which is particularly suitable for the Council Chamber and associated accommodation, the Barnes Road land at present occupied by the temporary buildings of the Accountant-General's office, the high land towards the north of the Station (see diagram 24), or the office area on Barnes Road opposite the future Parliament area.

Responsibility for the provision of services is vested in various Government departments. The economic and adequate provision of these services is severely hampered by the lack of phasing and consequent scattering of development with an abnormally low gross density. Under these circumstances it is not possible for the engineers to plan and develop their services in an orderly fashion and they are forced to attempt to follow trends of development as they occur, incurring Government in wasteful expenditure.

If private development remains unphased and unco-ordinated it may well become necessary for service departments to levy full economic charges for connections and supply to isolated development or alternatively to refuse to supply such areas in view of the excessive cost per dwelling of servicing such scattered development.

WATER

Water for Accra is taken from the Densu River at Weija and piped to Accra through one 12", one 14" and one 16" main.

The present maximum output per day from the waterworks is six million gallons and average consumption *per capita* is 20 gallons. The maximum total which could be expected from this source is about 10 million gallons per day.

The relatively low *per capita* consumption is largely due to the lack of both private and public supply facilities. Only about half of the total number of houses in Accra have individual connections. There are 160 public standpipes. Many people in the sparsely developed areas rely upon purchasing cans of water from carriers as their sole means of supply.

Comprehensive and staged development (i.e. the systematic development of all the plots in an area, section by section) would encourage adequate and cheaper distribution of water and under these circumstances it is likely that *per capita* consumption would rise. In a tropical country the washing of the person and of clothes is carried out more frequently than in a more temperate climate and, allowing for a reasonable amount of industry, the optimum consumption figure might rise to 50 gallons per person per day. If this were so then even with the present population a total of 10 million gallons of water per day would be consumed. Having regard to the inevitable increase in population and the intended introduction of a water-borne sewerage system the increase in consumption is likely to be such that an additional source of supply will become necessary, and consideration is being given to the provision of supplies from the Volta River via Tema.

The routes of water mains in Accra are shown on diagram 22.

ELECTRICITY

Accra is supplied by two power houses, one in central Accra with a capacity of 9.72 megawatts and one at Legon with a capacity of 2.7 megawatts. The Legon station supplies current to University College, Achimota, the Airport Residential Area, Cantonments and Nsawam and Pokoase. It also supplies Switch-back Road area and the Ghana Housing Corporation estate on Ring Road if required. The present site of the central power station is unsuitable (see also chapter fourteen) and does not permit adequate extension. Proposals have been formulated by the Electricity Department for a new steam power station to be sited at Tema with an output of 45 megawatts. This will supply both Accra and Tema.

The routes of underground electricity cables are shown in diagram 23.

TELEPHONIC COMMUNICATION

Accra is connected to all towns and major villages in Ghana by a telephone system operated on lines and radio. The Accra telephone system is wholly automatic.

In 1957, the main telephone exchange was extended to provide for 4,000 lines practically all of which have now been allocated. In order to cope with continued expansion of the telephone system another exchange of an ultimate capacity of 10,000 lines is to be built North of Ring Road and will serve North Accra including Tessano and Achimota. A small automatic exchange operates in North Christiansborg.

SEWERAGE AND SURFACE WATER DRAINAGE

(a) Sewerage

The present methods to cope with the disposal of human waste matter are the use of septic tanks and cess-pits and by bucket collection. The first two methods require periodic emptying of the tanks and the last, daily collections. In all methods the waste is conveyed to an outfall at Korle Gonno where it is discharged, untreated, into the sea.

These methods of disposal are most unsatisfactory for a large town and besides being expensive are a constant danger to health. The latter risk is aggravated by the high water table over much of Accra resulting in the spreading of effluent from countless septic tanks over large areas.

In 1955, a firm of consultants prepared a preliminary report on a sewerage system for Accra and a further report has now been prepared by another consultant under the aegis of the Ministry of Housing. Notwithstanding its effect on water consumption, the early introduction of a water borne sewage disposal system is of the utmost importance particularly in the heavily developed areas. The cost of sewerage in the sparsely developed areas would of course be high and pending full development brought about by adequate phasing as referred to previously such areas will probably continue to utilise the present methods.

(b) Surface Water Drainage

Rainfall equivalent to 3" in 24 hours is an annual occurrence in Accra and an intensity of 4" in one hour is not unknown. Intense rainfall over a short period combined with a relatively high run-off factor in developed areas and the inadequate provision for surface water drainage create annual flooding in certain parts of the town. The two main drains in the town are the Odaw River, draining into Korle Lagoon and the drain between Christiansborg and Labadi, discharging into the Klottey Lagoon. Both are inadequate in size. Neither has free access into the sea and flow is further hampered by inadequate culverts. Floods consequently occur in Adabraka, Labadi and Christiansborg. Measures to clear and canalise these two main water courses are most urgently required both to alleviate flooding in the respective areas and to help in the suppression of mosquito breeding.

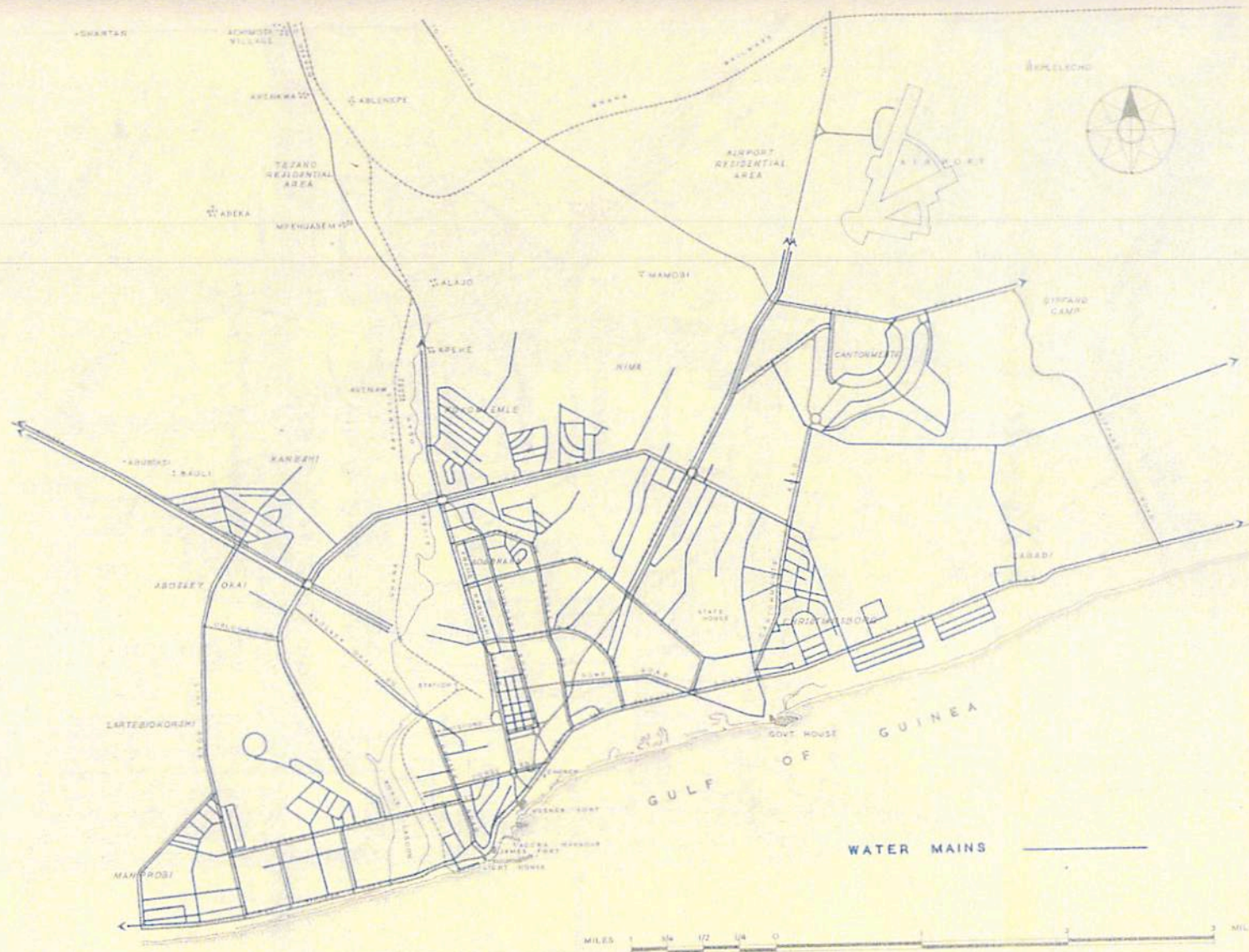
Flooding also occurs in parts of the Central Area and is particularly bad where a number of surface water drains converge at the junction of Independence Avenue and Barnes Road and discharge into the inadequate drain along Knutsford Avenue. Proposals to direct this large flow away from Knutsford Avenue and the low-lying centre of the town include a large subterranean drain running southwards under the golf course to discharge directly into the sea.

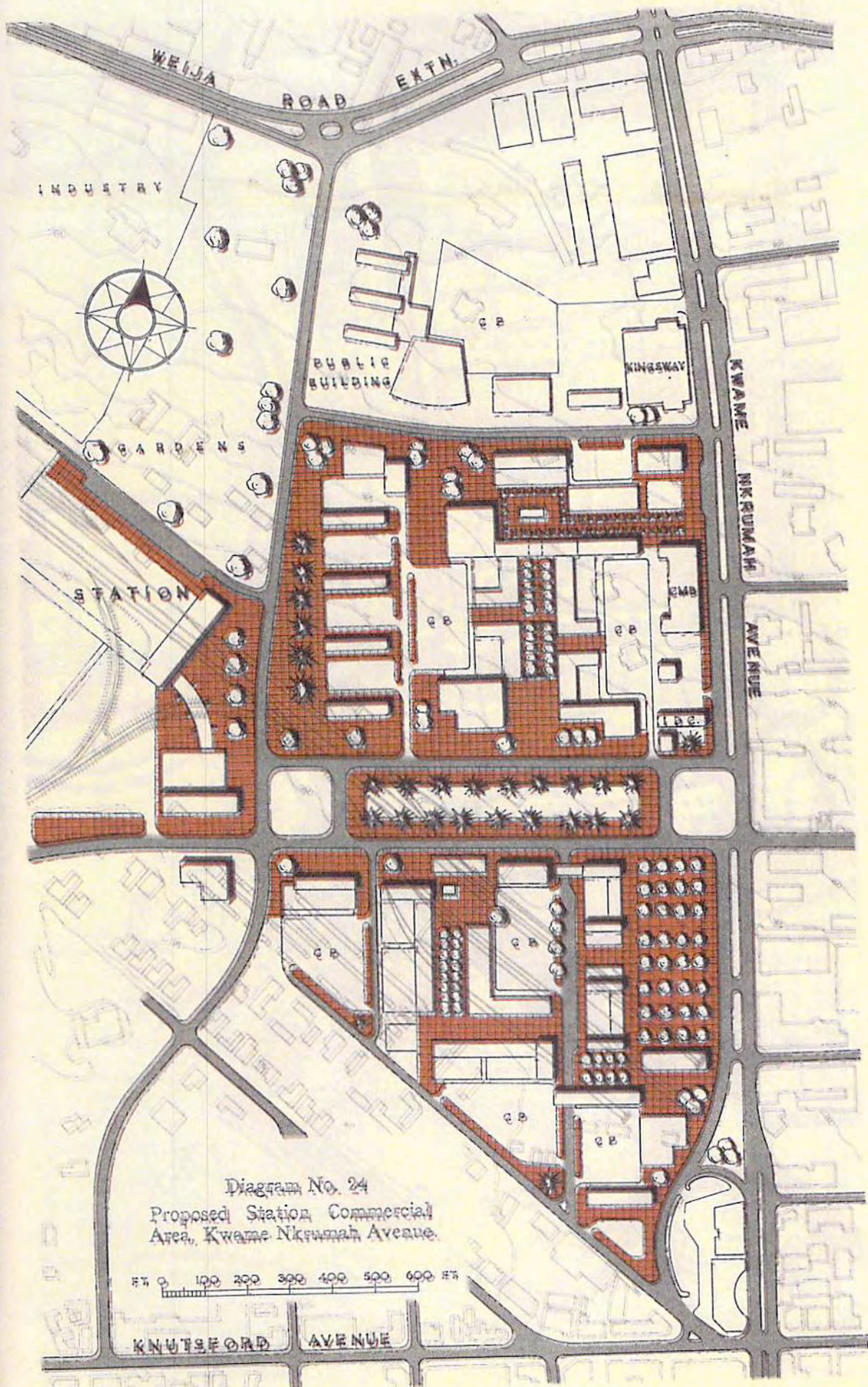
The continued growth of the town and construction of new buildings and roads increases the run-off and is continuously aggravating the problem.

Outline proposals for surface water drainage were prepared in 1955 as part of the report on sewage disposal referred to previously and a further preliminary scheme has recently been completed but a full engineering survey with firm proposals followed by the implementation of the more urgent and major improvements is as important as the investigation into the sewerage problem.

The construction of an efficient surface water drainage system would greatly reduce annual flooding of land and property and would, sometimes in conjunction with other reclamation, permit the development of land at present unsuitable for building to the economic benefit to the community.

Diagram No. 22
The alignment of existing water mains indicating extensive areas at present unserved. It is recommended that action should be taken, as indicated in the report, to concentrate development where piped water is readily available.





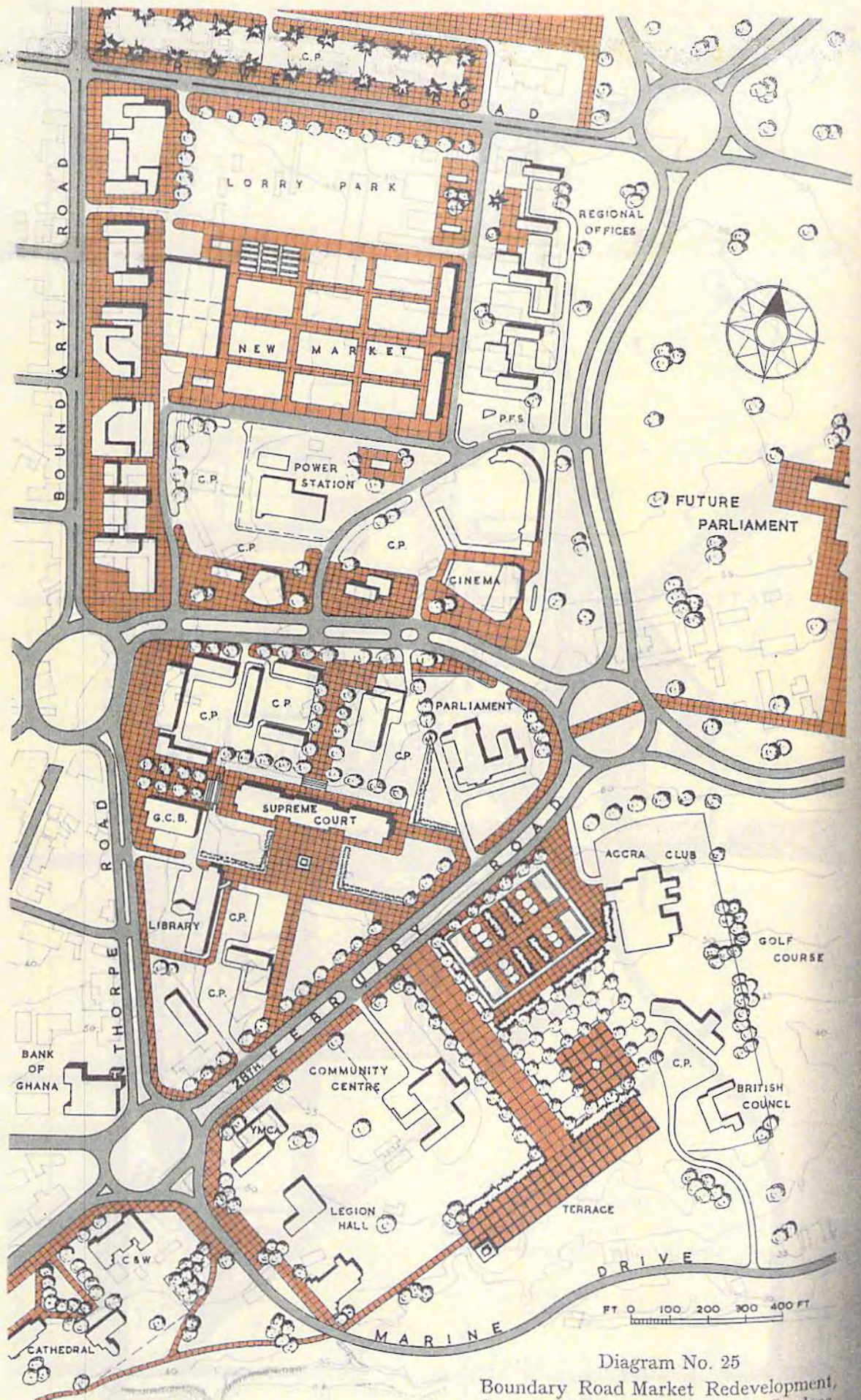


Diagram No. 25
Boundary Road Market Redevelopment,
Supreme Court Area and Marine Gardens.

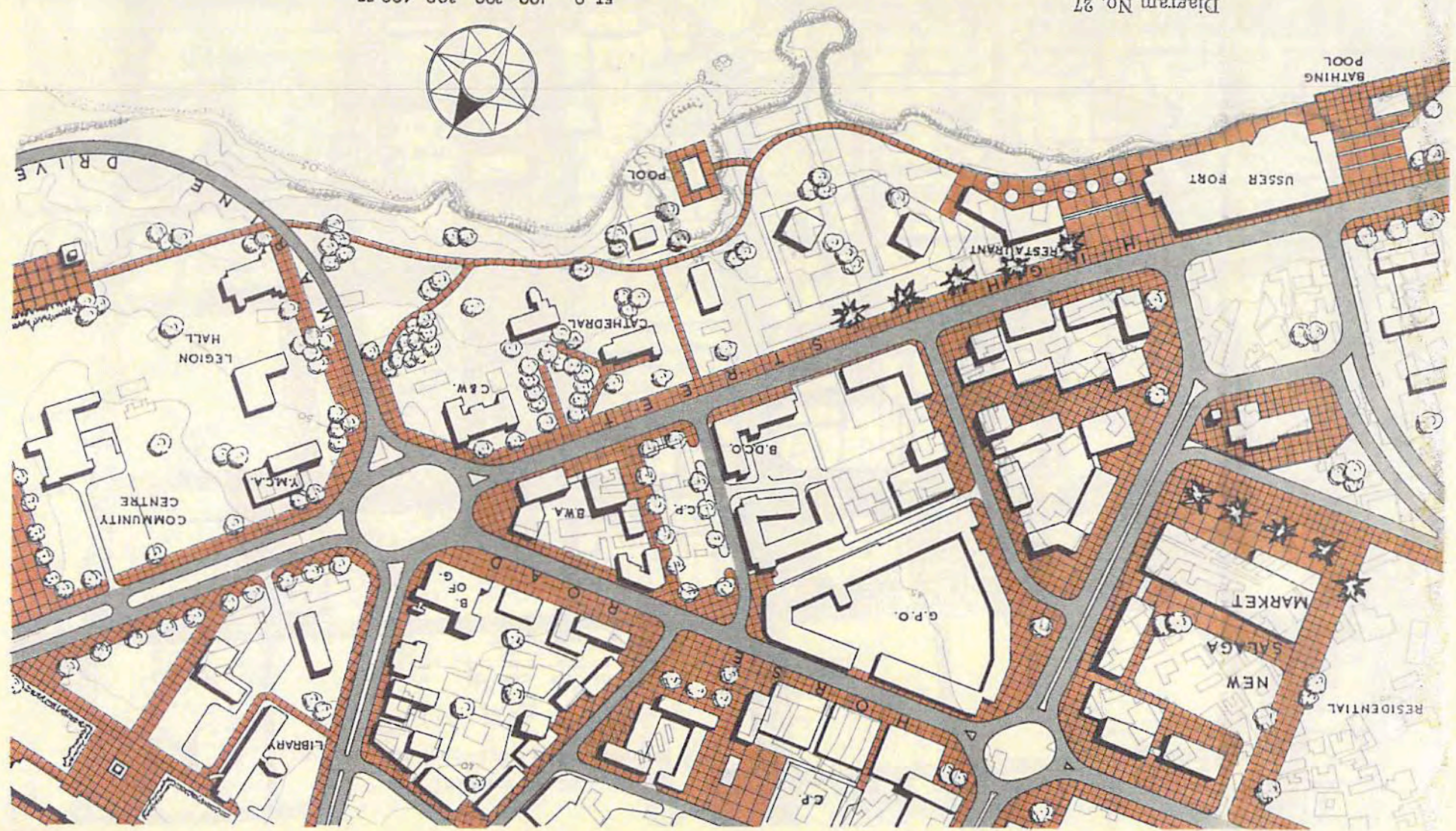
Diagram No. 26

Cow Lane and Zongo Lane Redevelopment Areas.

FT. 0 100 200 300 400 500
 FT. 0 100 200 300 400
 Feet



Diagram No. 27



FUNCTIONS OF THE CENTRAL AREA

The central area of any large town or city serves certain special functions. In a capital city these functions are particularly well defined and it is necessary that the town plan should have regard to them. Accra serves as an administrative, legislative, commercial, educational and cultural centre and in fulfilling these functions it is also inevitably a centre of communications. Most of the activities arising from these special purposes take place within a relatively small area and the change of function can be seen as one approaches the central area; the approximate boundary being Castle Road. The central area has therefore been taken to be that portion of Accra contained within Castle Road on the north and east and the lagoon on the west.

Within the central area the major activities are concentrated into their own sectors and a definite pattern can be discerned. To the west of Boundary Road and Thorpe Road lies the commercial centre which merges in the north-west with the industrial development on Brewery Road. Commercial development and particularly the motor trade, hardware businesses and warehousing is spreading westwards towards Hansen Road and is thus penetrating old residential areas. To the south the commercial area takes on a special character in the office and banking area in High Street. Moving to the east one finds between Boundary Road and Barnes Road an area in which the predominant use of land changes from commerce to administration. This "transition area" contains the present legislative area in the south and certain civic, cultural and religious buildings extending from the Anglican Cathedral on High Street to the Catholic Cathedral on Castle Road. Further east still there is the very clearly defined Government administrative area stretching from Barnes Road to Castle Road. This important area is sheltered from the commercial bustle of the city by its own green belt, the Independence Avenue parkland, and is also further encircled by open land in the form of the Turf Club to the north-east and the Marine Drive area to the south.

The central area with its main zones of activity as outlined above is also penetrated by other major uses such as the residential areas to the north-east and south-west and the development associated with the harbour. Much of the residential development will remain (see chapter five) but there are large areas requiring redevelopment to improved standards such as at Ussher Town and other areas where low standard housing must give way to new commercial development as at Cow Lane and Zongo Lane.

In this chapter it is not intended to reinvestigate the matters dealt with separately in other sections of this report but rather to describe briefly the overall conditions in the central area and to outline the proposals for future development. The proposals are considered firstly with regard to their effect on the main functions of the area, then in relation to particular portions of the central area and finally in the form of a list of the features which will be incorporated in the new city centre.

EXISTING CONDITIONS IN THE CENTRAL AREA

The present conditions in the commercial area, in the markets and the Government area have all been described at length in the relevant chapters. It is only necessary here to note the general conditions and to consider some of the major instances of inappropriate use of land within the central area.

Generally speaking the central area has about it a coherent form which offers great possibilities for development. There are already the well defined spheres of influence of the main central area functions as described above and there is a good basic pattern of open space which links the parts of the central area together and provides an aesthetically pleasing setting for the new development.

The major failings of the central area at present are the lack of imposing features in the form of civic squares and other open spaces in the commercial area; the low standard of design of the buildings; the presence of certain inappropriate uses of land and the inadequacy of the present road system and of facilities for car and lorry parking. All these matters can be overcome as the town redevelops. It can already be seen that recent office and commercial buildings are setting a much higher standard of design than that which previously obtained and will give a more attractive character to the central area.

Major non-conforming uses of land

The major cases of inappropriate or "non-conforming" use of land within the central area are:—

- (a) The Public Works Department workshops and stores on Barnes Road;
- (b) The Municipal Bus Depot on Boundary Road;
- (c) The Electricity Generating Station north of the Supreme Court;

CHAPTER FOURTEEN

- (d) The Waterworks Yard on Kwame Nkrumah Avenue;
- (e) The Government Transport Yard in the Central Government Area;
- (f) The areas of sub-standard housing within the commercial areas at Cow Lane, Zongo Lane and Tudu;
- (g) The timber yards north of Okai Kwei Road.

In each case the present development has an unfortunate effect on its surroundings and prevents the redevelopment of the sites in question. Alternative sites are suggested in the report except for (c) the power station which will almost certainly have to be retained as a distribution centre even when it is no longer used for generation.

In addition to the above non-conforming uses there are other uses admissible within the central area but which are at present inappropriately sited:—

- (h) Commercial and school development between High Street and the coast;
- (i) Primary schools adjoining the Supreme Court;
- (j) Petty trading areas adjoining the Supreme Court;
- (k) Government Offices in the coastal open space (Department of Agriculture with its large collection of out buildings).

The proper exercise of town planning control will prevent other cases of this nature arising and will thereby result in economy of public funds.

PROPOSALS

The plan envisages a redeveloped central area spaciouly laid out with well designed buildings, adequate car and lorry parks, good roads, open spaces in the form of public squares, gardens and boulevards, features such as fountains, ornamental pools and statues together with an overall pattern distinguishing the various functions of the town and giving it an attractive character. It is recommended that this character should essentially be one of spaciousness, grace and lightness combined with dignity. The rather monotonous, overbuilt and often depressing form of development such as one sees in some of the cities of Europe and America would be out of keeping with the climatic conditions and with the spirit of a "new" and rapidly developing nation.

To achieve the exhilarating and spacious character which is recommended it will be necessary to demand a high standard of architectural design of the buildings and to prevent over-development of plots. The object should be to secure buildings of a lively and graceful design set in landscaped spaces along tree lined roads. The small group of buildings including the Industrial Development Corporation Offices, the Agricultural Development Corporation and the Co-operative Bank is an example of such design but there is scope for a wide range of buildings of varying heights in the areas to be redeveloped. The essential requirement is to secure co-ordination in design so that all the buildings in a particular area contribute to the achievement of the desired effect.

Certain portions of the central area are considered in detail later in this chapter but it is necessary first to remind the reader of some of the main provisions which have to be made.

Roads

To incorporate the proposals described in chapter two and also to give emphasis to certain routes in order to introduce interesting features into the city centre (Rowe Road boulevard and the extension of Guggisberg Avenue).

Open Spaces

To provide for town gardens (see chapter three) and a number of civic squares.

Car Parks

To allow for adequate public car parks and for the provision of private parking spaces at the rate of one space for every 1,500 sq. ft. of floor space in commercial buildings. The car parks illustrated on the various diagrams in this chapter and on the folding central area map would provide for a total of 4,500 cars after the redevelopment of the whole area had taken place.

Lorry Parks

To make adequate provision for lorry parks in convenient positions near the commercial centre bearing in mind that the private lorry and bus services are the main means of transport of the bulk of the population and of the visitors to Accra. The three lorry parks shown on diagram 21 would accommodate 1,200 lorries. The maximum capacity of the present lorry park if properly used would be 300 lorries.

Markets

To provide for redeveloped markets away from the frontages of the main commercial streets but easily accessible and with adequate loading and parking facilities.

Commercial Buildings

To encourage comprehensive development schemes in order to achieve an attractive architectural effect and to provide that degree of convenience to the public and to the occupiers which can only result from a carefully planned scheme.

Public Buildings

To reserve suitable sites and to safeguard their surroundings so as to secure attractive settings to the many public and cultural buildings which will be required.

REDEVELOPMENT AREAS

The Station Commercial Area

A scheme for the development of the area of Crown land lying north of the station and west of Kwame Nkrumah Avenue was prepared by the Town Planning Division in 1957. This scheme has now been approved in principle and money has been voted for the commencement of the first stage.

The total area amounts to some 40 acres of which the northern section of about 25 acres is virtually vacant and ripe for immediate development. The southern portion is at present occupied by the station, ancillary buildings and railway tracks.

The scheme, which is illustrated in diagram 24 and on the folding map of the central area at the back cover, involves the construction of roads, pedestrian shopping ways and car parks and the erection of a variety of commercial and residential buildings. Great importance is attached to the provision of rear access to the buildings for goods delivery and there is generous car parking accommodation at the rate of one car space for every 1,000 square feet of trading or office floor space.

Buildings of varying heights are proposed ranging from one to seven storeys. The higher buildings are indicated on diagram 24 by means of dark shadows. It is thought that whilst the bulk of the development would be commercial there would be a demand for flats on the upper floors. Provision is made in the scheme for small paved squares and courtyards, gardens, fountains, taxi stands, petty trading areas, public buildings (to include a branch Post Office, etc.) and for generous planting of shade trees and ornamental trees throughout the area.

The southern section of the scheme can only be carried out after the Accra railway station has been reconstructed. The present station building is outmoded and the railway yards obstruct road communication to the west of Kwame Nkrumah Avenue. The suggested resiting of the station is shown on diagram 24 together with a spacious approach which would form a continuation of Rowe Road. Road links with the Weijsa Road extension, Knutsford Avenue and Hansen Road are illustrated.

The whole area occupies a most commanding site close to the heart of the commercial centre and adjoining the main commercial thoroughfare. It has existing or potential road connections with all parts of Accra and is known to be a very popular area for commercial development.

It is proposed that Government should carry out the whole scheme and retain control of the buildings. The total expenditure including the new station would be of the order of £G5½ million from which a very good financial return could be expected.

The advantages of the form of development envisaged in the scheme are as follows:—

- (1) A prominent site in the heart of Accra will be developed comprehensively thus adding greatly to the civic amenities of the city centre.
- (2) The removal of the station from its present site will enable a great improvement to be made in road communications.
- (3) The provision of commercial accommodation on a rental basis will assist the development of new businesses and will be of great benefit to those who now find difficulty in carrying on business in the centre of Accra due to extortionate rents or demands for advance payments of up to 20 years' rent.
- (4) The much needed increase in accommodation will have a restraining influence on the general level of rents.
- (5) The provision of generous car parking accommodation will assist in easing traffic congestion in the north-west of the central area.

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- (6) The scheme is financially sound and will provide Government with income which could be used to finance other necessary redevelopment schemes including slum clearance.
- (7) The convenience to shoppers whether pedestrians or motorists and to the occupiers of commercial buildings will be of a standard not previously experienced in Accra and comparable with the most modern schemes in other parts of the world.
- (8) The development will relieve the tendency for commercial development to spread outwards along the main roads (notably Kwame Nkrumah Avenue and Boundary Road). This tendency if unchecked would aggravate traffic difficulties and lead to inconvenience to the public.

To sum up, the development envisaged in the scheme will not only redress many of the ills at present suffered in Accra but will be a positive and financially attractive measure to provide a commercial area which will be a major feature of the new Accra.

The Supreme Court Area

The proposals as illustrated on diagram 25 provide for the extension of the existing open form of development surrounding the Supreme Court so that eventually the whole area between Thorpe Road, Christiansborg Road and the proposed new road north of the Court will be laid out as public gardens in which a restricted number of buildings will be carefully placed.

It is intended that the imposing Supreme Court building should continue to dominate the area and with this in view the heights of adjoining buildings will be limited as was done in the case of the new Aglionby Library.

There will be a system of footpaths linking the buildings and providing axial approaches to the Supreme Court. The new development north of the Court will enable it to be seen to full advantage from this direction. The western approach to the Court from Thorpe Road takes the form of a paved courtyard flanked by new buildings which are likely to be erected in the near future. A flight of steps will lead up from the courtyard to the level of the Court.

To the south of the Court the new central Magistrates' Courts will complete a pleasant grouping with the library.

A number of medium sized car parks are shown with access from the surrounding roads but it is intended to avoid any through routes for vehicles across the site in order to maintain a relatively quiet and dignified setting for the Court.

It is proposed that there should be no boundary walls or fences in the area but should any definition of boundaries be found to be necessary it should be achieved by the arrangement of the pathways and by the planting of trees and shrubs.

The buildings which will have to be removed over a number of years are all of modest construction and include the Girls' Middle School and the Government Agent's old Office.

It is proposed that there should be no trading activity in the environs of the Supreme Court and that the new buildings should be used as offices and perhaps for limited residential accommodation in the form of flats on the upper floors. The Ghana Commercial Bank is to be built at the western approach to the Court and it is suggested that some of the offices might be used as barristers' chambers and others for the headquarters of societies and organisations such as the Ghana Red Cross. It would also be a suitable situation for the Department of Information Services, local payments offices for broadcasting, water, rates, etc. and perhaps also for the local offices of certain other Government Departments. It is possible that the Law School, Law Library and the Legal Council building may also be sited to the north of the Supreme Court.

The Boundary Road Market Area

The area is bounded by Barnes Road in the east, Rowe Road in the north, Boundary Road in the west and the new road north of the Supreme Court in the south. The proposals are indicated on diagram 25 and have been described in part in chapter seven.

It is proposed that the existing outmoded Boundary Road market should be removed from the main road frontage and redeveloped on a large area of backland which will be released as and when the Public Works Department moves its yards and maintenance depot out to Ring Road. The enlarged market would still be within reach of the Commercial Centre but it would not occupy the extremely valuable frontage to Boundary Road. By considerably enlarging the market it would also accommodate a large number of the traders from the Derby Avenue market which should be demolished and the site converted into a civic open space. (See diagram 26 and the description of the markets proposals in chapters seven and later in this chapter.)

One can well imagine how attractive this area could become with well designed buildings looking out over the widened tree lined High Street to the landscaped open space along the coast. The coastline itself would be tidied up and additional pathways to the beach provided. There are suitable sites for swimming pools at the waters edge as shown on diagram 27 and the rocky shoreline offers great opportunities for imaginative treatment.

The Parliament and Ministerial Areas

The layout for the future Parliament site and for the Central Government area is shown on the folding central area development map at the back cover.

The area is ideally sited for development as the Government centre. It is bounded on the south by 28th February Road which is an important civic route and on the west by Barnes Road and Independence Avenue, the latter leads out to the Airport and is perhaps the most attractive road in Accra. The site is spacious and reasonably level and is surrounded by attractive open spaces. The Independence Avenue parkland lies to the north-west, the Race Course some distance to the north-east and the Marine Drive area extends down to the sea in the south. A further advantage is that the area is within $\frac{1}{2}$ mile from the commercial centre and is easily accessible from all parts of Accra. The only drawback is that due to the nature of the sub-strata the area is potentially vulnerable to serious effect under earthquake conditions and as a result buildings require to be specially constructed as has been pointed out in chapter one.

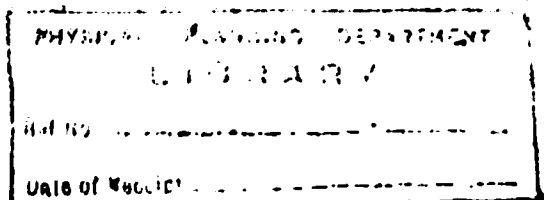
As will be seen from the central area development map the site reserved for the future Parliament buildings lies between the Supreme Court area and the site for future Ministry buildings. It extends to about 50 acres and offers a first class setting for the most important buildings in Ghana. The possible siting of the new Parliament House is shown diagrammatically on the map together with ancillary buildings. The Parliament will not only be a landmark in Accra but will be prominently visible from ships at sea. Lying to the north of the Parliament area is the site reserved for the International Conference Hall. This too will have a splendid setting and will benefit from its proximity to the Independence Avenue parkland.

The area in which it is recommended that the future Ministerial buildings should be erected lies to the east of the new Central Area By-pass Road and between 28th February Road and Rowe Road. It is suggested that three blocks of imposing buildings about seven or eight storeys in height should be erected parallel to 28th February Road thereby giving added dignity to this processional route. Certain Ministries may require special buildings and they are indicated on the south side of Rowe Road. Other special sites for quasi-Government or International organisations are shown near to the Central Area By-pass Road.

The present Ministerial area north of Rowe Road already offers attractive office accommodation which should be utilised to rehouse the many Government Departments which are scattered about in a variety of dilapidated or temporary buildings. A number of additional three-storey office blocks are shortly to be built in this area and it is intended to continue the very pleasant informal landscape treatment of these sites.

MAIN FEATURES OF THE NEW CENTRAL AREA

- (a) A spacious boulevard extending along the line of Rowe Road from Independence Avenue to the new station west of Kwame Nkrumah Avenue.
- (b) The Marine Drive area developed as a centre for recreation, entertainment and relaxation. See chapter three and appendix F.
- (c) The markets redeveloped and removed from the main road frontages. Greatly improved facilities for delivering goods to the markets and for lorry and car parking nearby. See diagram 21 and chapter seven.
- (d) A large central civic open space on the site of the Selwyn Market No. 1 extending from Boundary Road to Kwame Nkrumah Avenue. See diagram 21.
- (e) The Station Commercial area developed with attractively designed buildings and offering first class facilities to the public and to the lessees. See diagram 24.
- (f) The Government area north and south of Rowe Road including the new Parliament buildings and the International Conference Hall both set in landscaped open space. Also the new ministerial area on the north side of 28th February Road. See folding map of the central area at back cover.
- (g) The Independence Avenue park extending from Castle Road to Rowe Road where it links with the spacious grounds of the proposed new Parliament. See chapter three.
- (h) Guggisberg Avenue widened to form a boulevard and extended eastwards to a public square to be formed opposite Ussher Fort. See diagram 27.



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- (i) Cow Lane and Zongo Lane areas redeveloped in accordance with the scheme illustrated in diagram 26. For description *see* page 91.
- (j) The seaward side of the High Street redeveloped to add dignity to the area and to enable the attractive coastline to be seen to full benefit. *See* diagram 27 also page 92.
- (k) An attractive group of office buildings on the western side of Barnes Road in place of the present P.W.D. yard. *See* diagram 25 and page 92.
- (l) The Supreme Court area further improved by the removal of traders from the north side of the Court and the erection of carefully designed office blocks arranged so as to emphasize the effect of the imposing court building as seen from the proposed new road passing to the north. *See* diagram 25 and page 90.
- (m) Communications improved by the completion of the Central Area By-pass linking out to Weijsa Road; by the construction of the new road north of the Supreme Court; the extension of Guggisberg Avenue to High Street and the many other road projects described in chapter two. *See* folding central area map at rear cover.

It is stated in the preface that in the event of Central or Local Government investing in some of the more profitable development ventures with a view to devoting the income to other non-profit making improvements there is little or nothing recommended in this report entailing public funds which could not be put into effect during the next twenty years or so.

There is often a tendency for the layman to imagine that to develop in accordance with a town plan will cost more than would uncontrolled development. The reverse is the case. By foreseeing the likely future demand for land for varying forms of development and then making the appropriate reservations it is possible to avoid the vast expenditure involved in acquisition and compensation which often arise where such forethought has not been exercised.

It is relevant to consider what has happened elsewhere when redevelopment has involved acquisition of property and also to note a recent case in Accra. The first example is taken from Birmingham which has grown rapidly in this century and which has serious traffic problems. It is now faced with a need for a city inner ring road to cope with increasing traffic which could not have been anticipated when the area was developing. The estimated cost of the new road will be in the region of £G15 million of which only about £G2½ million will be for the construction of the road and the remaining £G12½ million will be required for the purchase of property which has to be cleared to enable the project to proceed.

In Accra, which has the advantage of developing at a time when the great transport revolution has already taken place, it was possible to foresee the need for the recently constructed section of Kwame Nkrumah Avenue and to require buildings erected during the last 10 years or so to be set back to a line which would permit the new wide road to be built. As a result the money spent on the project was almost all devoted to the construction work and only one building of any consequence had to be demolished.

Town planning control has already saved the Government and the Municipal Authority a great deal of money by the enforcement of building lines and the reservation of sites for public purposes and during the next decade, when Accra will most certainly grow apace, it is certain that the further enforcement of town planning control will result in a great economy in public funds.

The avoidance of wasteful expenditure is one of the important benefits of planned development but it is not of course the first object of town planning which has as its main function the creation of a pleasant and efficient environment for living. A modern city is as complex in its operation as a motor-car and, as with a car, it will not operate to best advantage if parts are missing or if it is badly put together. It is certain that under modern conditions an attractive and efficient arrangement of the various parts of a town will not come about by accident but will only be achieved as a result of a well-devised plan and the exercise of adequate control. The measures to put the town plan into effect will not increase the actual cost of the development but it will ensure that all the separate projects for roads, houses, schools, shops, offices, open spaces, hospitals, government and public buildings, sports grounds and the many other developments which together make a town will be co-ordinated and will fit into an attractive and workable overall pattern. It will prevent ill-considered development and lead to the gradual emergence of a city with character and in which life will be pleasanter due to the care which will have been taken to see that all the functions of the city are catered for and that the proper relationship between them exists.

PHASING

The advantages arising from the implementation of the planning proposals contained in this report would be increased if some measure of control could be exercised over the phasing of development in residential areas. The object would be to encourage the full development of the residential areas section by section so as to allow services to be provided in a methodical and economical manner. The present scattering of new houses over the whole of the areas zoned for development makes it both difficult and extremely expensive to supply public services. A tax on undeveloped land in the areas where early development is desired or the advance provision of roads and services on a repayment basis might secure the desired effect.

RECOMMENDATIONS FOR IMPLEMENTATION OF THE PROPOSALS INCLUDED IN THE REPORT

The following notes relate to the subjects dealt with in chapters two to fourteen. They indicate briefly the action which will be required to bring the various aspects of the plan into effect. The Ministries primarily responsible are Housing, Works, Local Government and Trade and Industry.

CHAPTER FIFTEEN

Communications

A phased programme for new construction and maintenance. Provision of the necessary funds to enable adequate and continuous progress to be made. Advance acquisition of land and buildings. (See chapter two and appendix D.)

Open Space

Acquisition of sites zoned as open space. Programme of improvement and maintenance. Municipal Parks Department to be set up. (See chapter three and appendices E and F.)

Industry

The provision of roads, services and drainage on the proposed industrial estates. Possible erection of standard factories. (See chapter four and appendix G.)

Housing

The advance provision of roads, services and drainage in housing areas. The acquisition of lands and the leasing of plots with secure title. Phasing of development. Public housing for the low income groups; self-help schemes. (See chapter five.)

Commerce

Comprehensive redevelopment schemes in central Accra producing lettable commercial accommodation. Higher standards of design for private buildings. Proper provision for car parking, goods access and pedestrian ways. (See chapters six and fourteen.)

Markets

Complete redevelopment on new sites. Improved control within markets and of street trading. (See chapter seven and appendix L.)

Education

Early acquisition of zoned school sites. Phased building programme. (See chapter eight.)

Health Services

Acquisition of sites zoned for hospitals and cemeteries. Provision of foul and surface water drainage. Raising of housing standards. (See chapter nine.)

Cultural Buildings

Special treatment of the High Street Coastal Area, Barnes Road area and part of the Marine Drive area where certain cultural and social buildings may be erected. (See chapter ten.)

Land Tenure and Compensation

Steps to provide sites with secure title for prospective developers. Early acquisition of sites required for public purposes in order to facilitate development and compensate the owners. (See chapter eleven.)

Government Development

Early action to erect suitable permanent administrative buildings and to remove temporary buildings. Careful architectural and landscape treatment of the splendid sites available. Removal of Public Works Department yard and Waterworks yard from city centre. Development as in appendix M. (See chapter twelve and appendix M.)

Services

Provision of foul drainage and surface water drainage. Phasing of development in residential areas to assist the service departments. (See chapters thirteen and five.)

Central Area

Implementation of comprehensive redevelopment schemes; redevelopment of markets; provision of civic open spaces and improvement of communications and of car and lorry parking facilities. (See chapters fourteen, two, three, six and seven.)



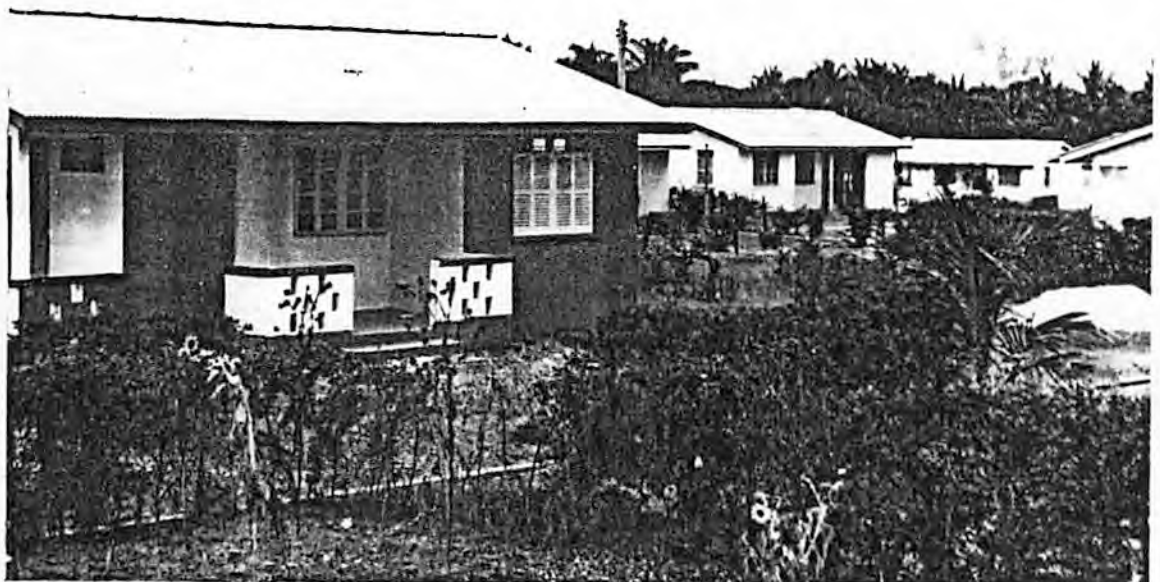
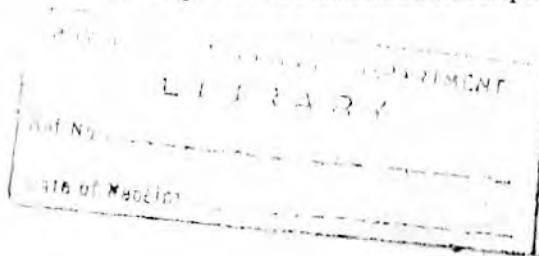
The Marine Drive area extending from the Community Centre (central foreground) to Government House with the Y.M.C.A. and 28th February Road in the foreground. See chapter three for proposals for the Marine Drive area.



The rocky coastline near the Anglican Cathedral. The ships in the background are loading and discharging cargo by surfboat. The proposals for this area are detailed in chapter fourteen (see diagram 27).



Private houses at Adabraka and Kokomlemle as seen looking northwards from the tower of the Roman Catholic Cathedral on Castle Road. Recommended standards for residential development are discussed in chapter five.



A housing estate at Mamprobi. The Government housing programme includes provision for the various income groups and a wide range of dwellings has been built by Government agencies during recent years.



Congested pavements and open drains in Derby Avenue with entrance to Selwyn Market No. 1 at right foreground.

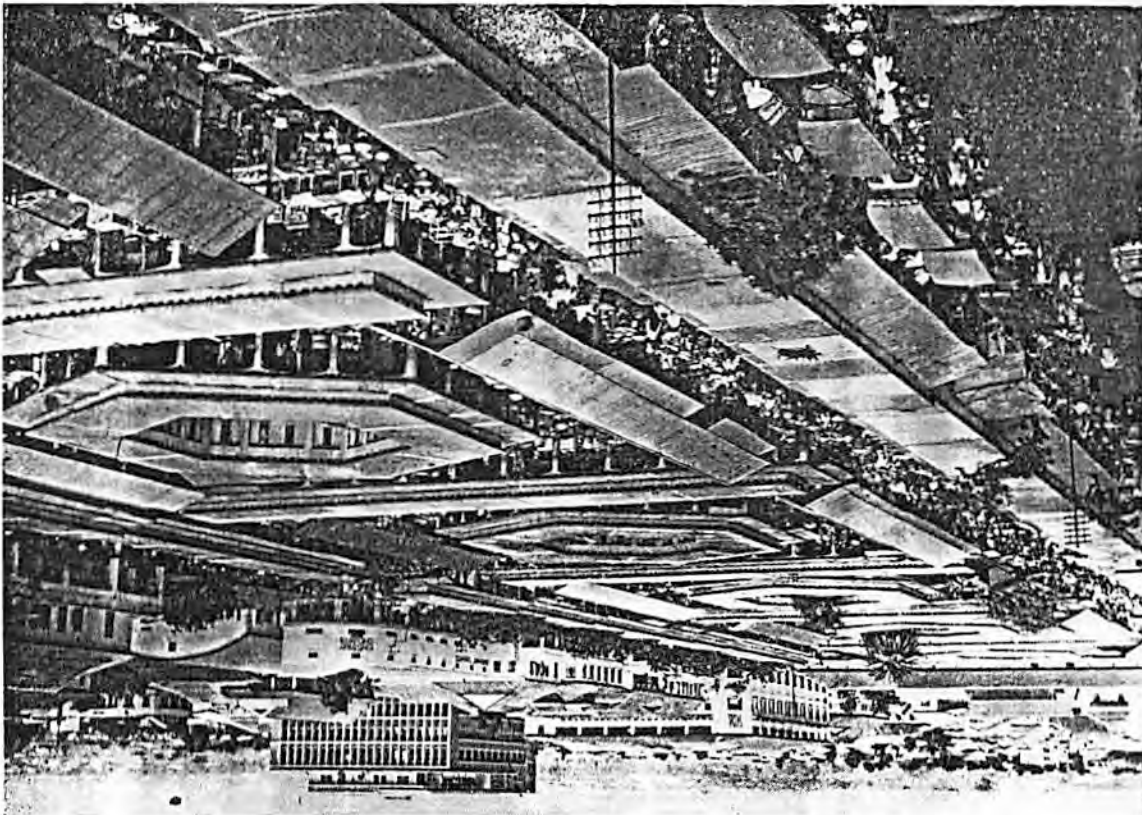


Parking problems at Post Office Square. The Presbyterian Church is to be resited (see chapter fourteen). Buildings on the right are Ghana House (department store and offices) and Barclays Bank (D.C.O.) Ltd. (under construction).

Street trading outside Salaga Market. Petty trading and market problems are discussed in chapter seven. See also diagrams 21 and 26.



Selwyn Market No. 1 looking north-west. Redevelopment proposals are described in chapters seven and fourteen. It is proposed that when the new markets recommended in chapter seven have been built this existing market should be closed.

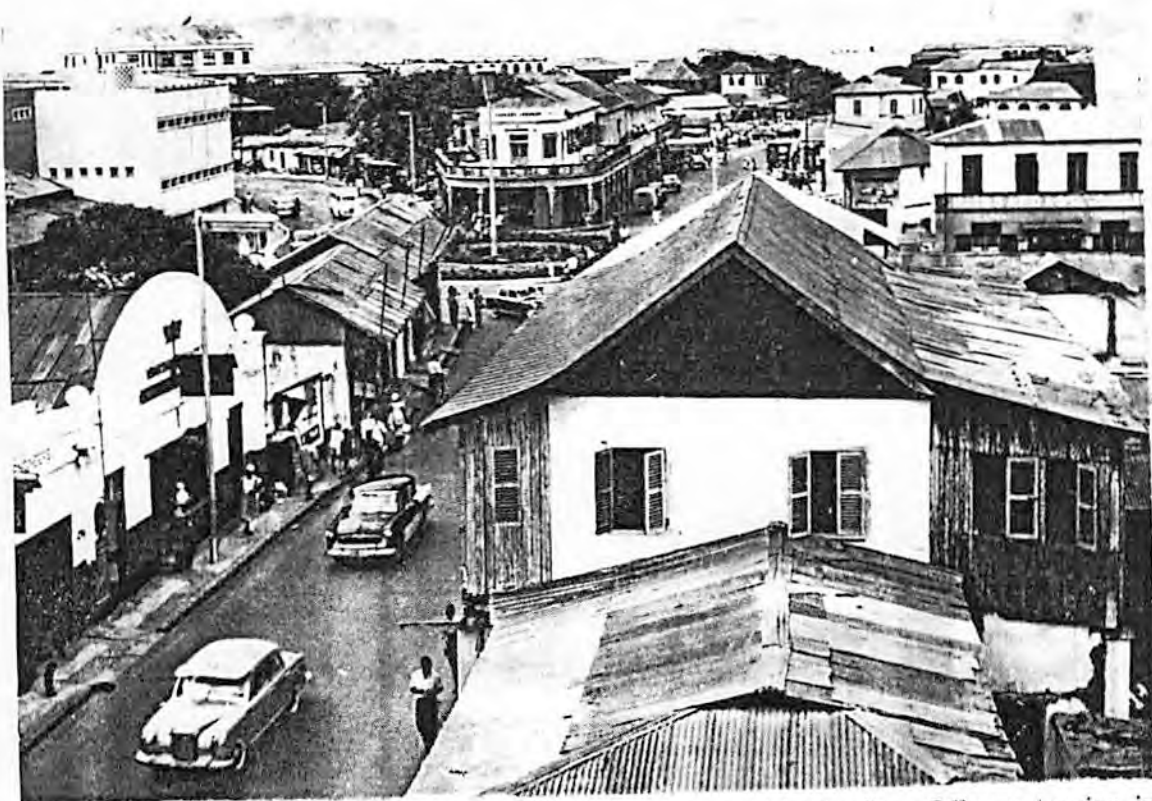




The Cow Lane Redevelopment Area described in chapters six and fourteen. Photograph taken from Swan Mill looking eastwards and showing present bus station and the Bank of Ghana (see diagram 27).



The Cow Lane Area as seen from the Bank of Ghana with Pagan Road and the bus station in the foreground. Redevelopment proposals are illustrated in diagram 26.



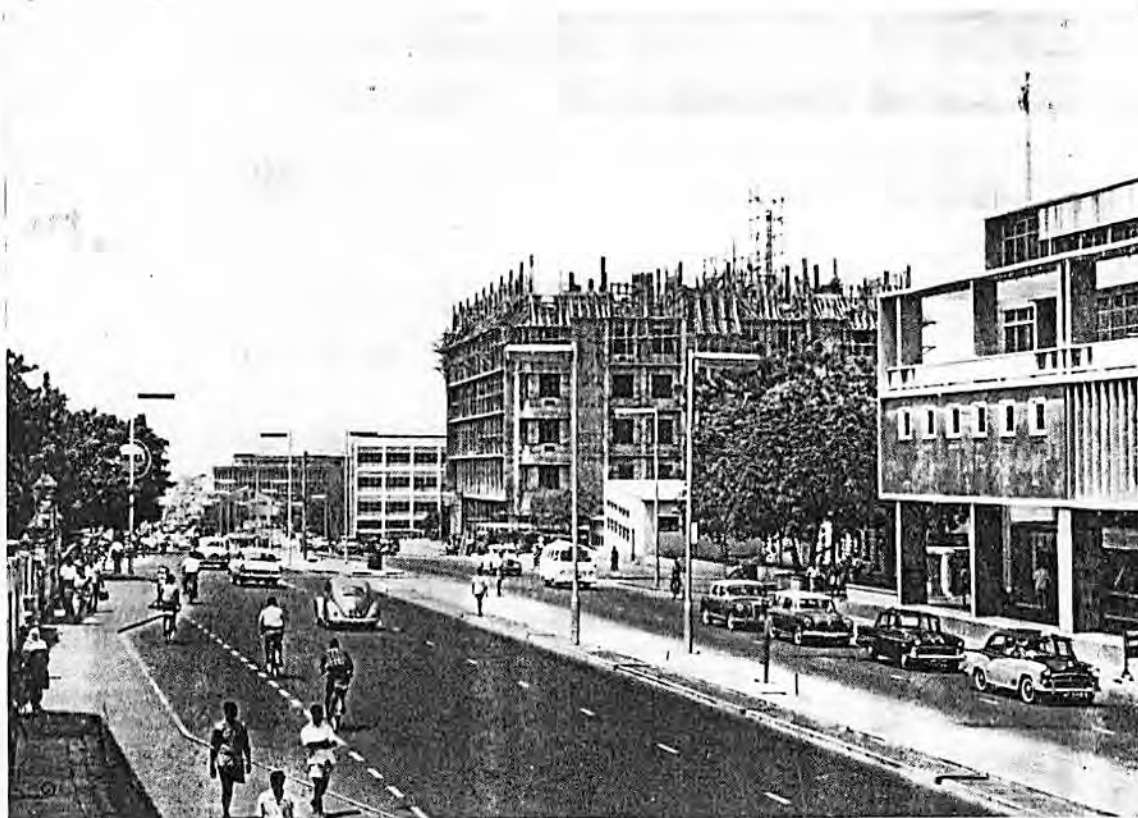
The Horse Road and Kwame Nkrumah Avenue junction with the Post Office extension in the left background. At the end of the road at the centre right, is the white wall of Ussher Fort where it is suggested that a public square should be made.



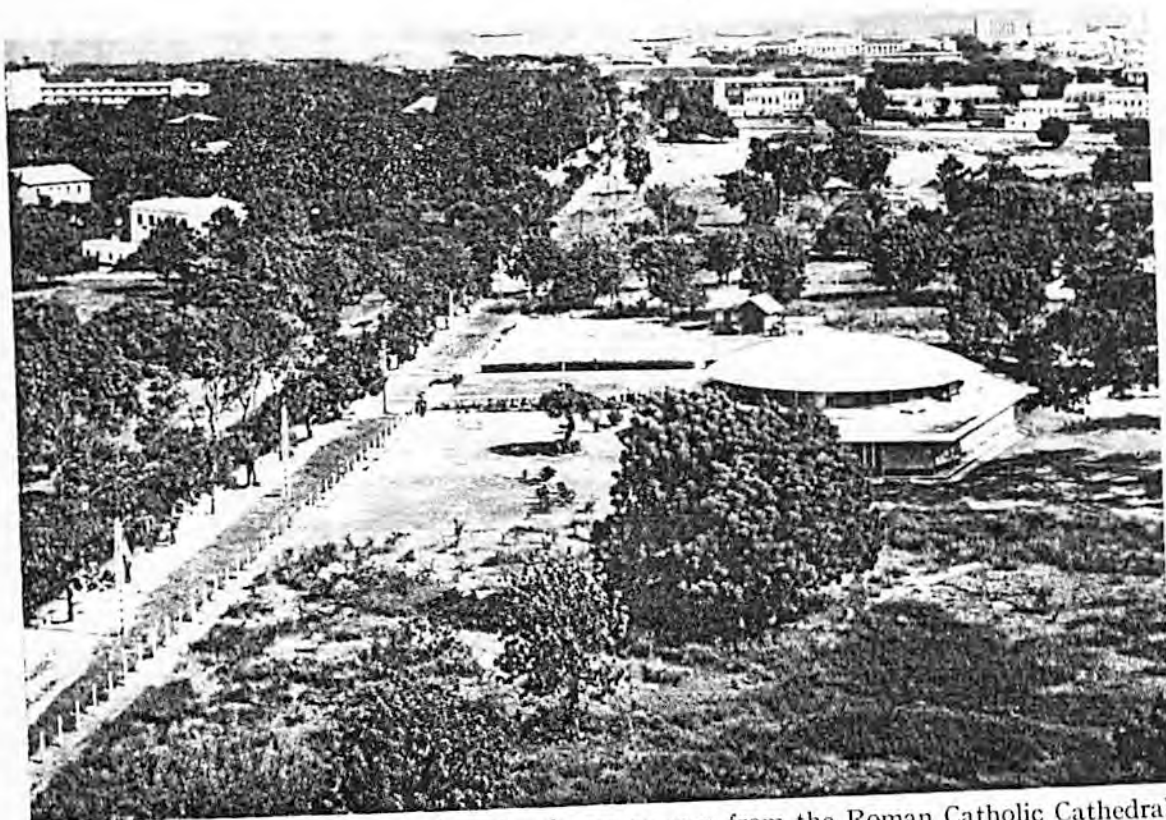
A view of the Zongo Lane Redevelopment Area west of Kwame Nkrumah Avenue. Proposals for this area including a new market are described in chapter fourteen. The Horse Road Methodist Church is in the background.



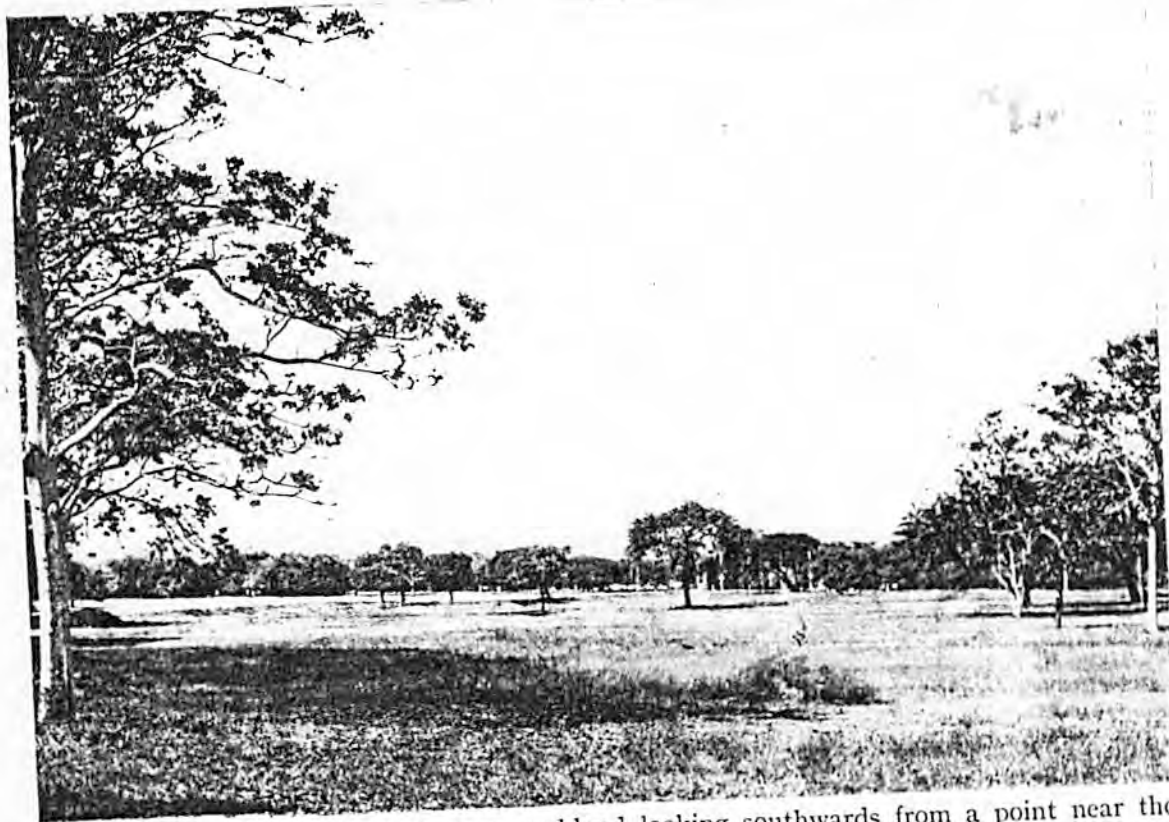
The newly completed length of Kwame Nkrumah Avenue looking southwards prior to the commencement of landscape work. Buildings on the skyline are (left to right) Bank of Ghana, Ghana House, Swan Mill and U.T.C.



Kwame Nkrumah Avenue looking southwards and showing on the right : Kingsway Stores, the Cocoa Marketing Board building (under construction), Industrial Development Corporation building and U.T.C. The Station Commercial area described in chapter fourteen (see diagram 24), occupies this frontage together with the backland.



The Barnes Road cultural and educational area as seen from the Roman Catholic Cathedral showing the museum (foreground), the Accra Technical Institute (centre), and the Supreme Court (skyline).



A view of the Independence Avenue parkland looking southwards from a point near the Ridge Police Post. The slight embankment in the middle distance carries the new Central Area By-pass Road. Independence Avenue is on the right.

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N	Central area land use	Fourteen
O	Central area redevelopment theoretical floor spaces	Fourteen

APPENDIX "A"

(See Chapter two)

The proportions and numbers of light and heavy vehicles in Accra on various roads, in the fifteen-hour census period, during the traffic survey conducted in 1957.

ROAD	PRIVATE CARS		TAXIS		LORRIES		BUSES	
	No.	%	No.	%	No.	%	No.	%
28th February Road	1,401	45	456	15	937	31	293	9
Rowe Road	767	43	522	30	383	22	76	5
Maxwell Road	1,267	75	83	6	276	19	—	—
Independence Avenue	1,427	53	189	8	898	33	142	6
Seventh Avenue	368	71	51	10	85	19	—	—
Barnes Road	1,090	64	381	23	219	13	—	—
Boundary Road	1,178	40	1,245	42	346	12	147	6
Kwame Nkrumah Avenue ...	2,012	40	1,537	30	1,359	27	147	3
Abossey Okai Road	360	35	538	20	970	37	206	8
Zion Street	903	35	726	28	536	20	446	17
Old Winneba Road	436	28	214	15	474	30	410	27
Harbour Exit	104	17	—	—	519	83	—	—
Weija Road	656	33	401	20	683	35	210	12

The total of 85 lorries, or one every ten minutes, on Seventh Avenue is excessively high for a residential road and was caused by the absence of any suitable alternative route in that area between Ring Road and Castle Road.

APPENDIX " B "

(See Chapter two)

During 1957, there was a total of 456 reported accidents in Accra involving vehicular traffic, according to Ghana Police records. Of this total 347 occurred at road junctions with relatively slow moving traffic. The inadequacy of these junctions to allow for the safe movement of traffic and the frequency with which they occur contributed to a very large extent to the cause of the accidents.

The high proportion of accidents at junctions on four very important roads is indicated below:—

ROAD	ACCIDENTS INVOLVING VEHICULAR TRAFFIC AT JUNCTIONS (1957)	ACCIDENTS INVOLVING VEHICULAR TRAFFIC OTHER THAN AT JUNCTIONS (1957)
Kwame Nkrumah Avenue ...	79	45
High Street/28th February Road	26	20
Boundary Road	47	—
Independence Avenue	35	44

The following junctions were amongst the most dangerous and recorded the greatest number of vehicular accidents during 1957:—

JUNCTIONS	ACCIDENTS INVOLVING VEHICULAR TRAFFIC AT JUNCTIONS (1957)
Ring Road/Kwame Nkrumah Avenue*	19
Independence Avenue/Barnes Road/Rowe Road triangle ...	17
Horse Road/Zion Street	15
Boundary Road/Farrar Avenue	13
Boundary Road/Rowe Road	12
Cantonments Road/Ring Road	11
28th February Cross Roads	11
28th February Road/Mketsobu Street	9
Boundary Road/Castle Road	9
Tudu Road/Boundary Road	8
Kwame Nkrumah Avenue/Selwyn Market Street	8
Pagan Road/Club Road	7
Kwame Nkrumah Avenue/Kokomlemle approach road	7
Kwame Nkrumah Avenue/Amuggi Avenue	5
Kwame Nkrumah Avenue/Knutsford Avenue	5
High Street/Thorpe Road	5
Guggisberg Road/Osborne Avenue	5

*A roundabout has now been constructed at this junction.

APPENDIX "C"

(See Chapter two)

The following figures indicate the intensity of traffic on various roads in the centre of Accra at the time of the road traffic density count in 1955. Bicycles, motor cycles, horse and hand propelled vehicles were excluded from the figures :—

ROAD	CENSUS POINT	NUMBER OF VEHICLES PER HOUR AS COUNTED ON BOTH LANES	NUMBER OF VEHICLES PER LANE PER HOUR	TIME AT WHICH PEAK HOURLY INTENSITY WAS RECORDED
Kwame Nkrumah Avenue ...	Between Knutsford and Derby Avenues ...	1,180	590	0930
Kwame Nkrumah Avenue ...	North of Tudu Road ...	1,161	580	0730
Kwame Nkrumah Avenue ...	South of Tudu Road ...	1,100	550	1630
Independence Avenue ...	Makola Square ...	1,035	517	1430
Boundary Road ...	North of Rowe Road ...	1,014	507	0830
28th February Road ...	Parliament House ...	989	494	1630
Boundary Road ...	Selwyn Market No. 2 ...	879	439	1630
Tudu Road ...	East of Kwame Nkrumah Avenue ...	877	438	0930
Kwame Nkrumah Avenue ...	Between Kimberly and Knutsford Avenues ...	863	431	0930
Pagan Road ...	North of Horse Road ...	839	419	1630
Kwame Nkrumah Avenue ...	North of Horse Road ...	807	403	1630
Horse Road ...	Between Pagan Road and Kwame Nkrumah Avenue ...	757	378	1430
Derby Avenue ...	East of Kwame Nkrumah Avenue ...	705	352	0930
Independence Avenue ...	Selwyn Market No. 2 ...	529	264	1630
Rowe Road ...	Central Lorry Park ...	564	282	0830
Derby Avenue ...	West of Boundary Road ...	517	255	0930
Independence Avenue ...	North of Rowe Road ...	471	235	0730
Rowe Road ...	West of Boundary Road ...	404	202	0730
Barnes Road ...	South of Dodowah Road ...	356	178	1230
Barnes Road ...	North of Rowe Road ...	345	172	0730
Selwyn Market Street ...	East of Kwame Nkrumah Avenue ...	269	134	1630

The following table showing intensity of traffic on various roads was compiled from the 1957 census of vehicular traffic arriving in Accra. The figures exclude bicycles, motor cycles, horse and hand propelled vehicles :—

ROAD	CENSUS POINT	MAXIMUM NUMBER OF VEHICLES PER LANE PER HOUR AS COUNTED	TIME AT WHICH PEAK HOURLY INTENSITY WAS RECORDED
Kwame Nkrumah Avenue ...	North of Central Avenue By-pass ...	553	0830
28th February Road ...	Public Service Commission Office ...	407	0700
Independence Avenue ...	At First Road ...	403	0800
Maxwell Road ...	Race Course Entrance ...	322	0800
Boundary Road ...	North of Central Area By-pass ...	319	0730
Zion Street ...	Korle Lagoon Bridge ...	289	1630
Abosey Okai Road ...	Fadama Market ...	283	0730
Rowe Road ...	Sports Stadium ...	272	0730
Barnes Road ...	Milner House ...	251	0730
Weija Road ...	North-west of Ring Road ...	233	0730
Old Winneba Road ...	Level Crossing ...	185	0730
Seventh Avenue ...	Junction of Sixth and Seventh Avenue ...	103	0730
	Harbour Exit ...	102	1130

APPENDIX " D "

(See Chapter two)

The following indicates the recommended phasing for the road proposals shown on page 14 and page 15 of the main report. The table excludes reference to minor remedial works. The phasing below should not be considered as rigid, many of the road projects are associated with development schemes the phasing of which depend to a very large extent upon Government policy:—

PHASING	ROAD PROJECT No.	PROJECT	DESCRIPTION OF WORK
First Phase	1	Linking of Central Area By-pass and Weijsa Road.	The construction of a road to dual carriageway width to the north of Leventis Motors linking the Central Area By-pass with Weijsa Road.
"	2	Extension of Kwame Nkrumah Avenue to South.	The reconstruction and realignment of parts of Market Street and Salaga Street and the construction of a new section of road to join Kwame Nkrumah Avenue, in a direct line, to High Street. Six lane width with pedestrian refuges.
"	3	Widening of Kwame Nkrumah Avenue (South).	The reconstruction of Kwame Nkrumah Avenue between Knutsford Avenue and Horse Road to six lane width with pedestrian refuges. (See also Cow Lane development project.)
"	4	Widening of Thorpe Road.	The construction of a second carriageway to Thorpe Road on the eastern side of the existing carriageway. This project to include the closing of Pagan Road at its northern end. (See also Supreme Court Precinct development project.)
"	5	Extension of Derby Avenue eastwards to Barnes Road.	The provision of a dual carriageway road from Barnes Road to Derby Avenue, south of the existing Parliament House; the construction of a roundabout at the junction of 28th February Road, Barnes Road and Derby Avenue extension. (See also Supreme Court Precinct development project.)
"	6	New junction at Barnes Road, Independence Avenue and Rowe Road.	The realignment of Barnes Road, Independence Avenue and Rowe Road at their intersection and the construction of a roundabout. The section of Barnes Road between Rowe Road and 28th February Road to be converted into an access road.
"	7	Extension of Ring Road to the East.	The construction of a road to dual carriageway width from Cantonments Road to Labadi Road; the construction of a roundabout at the junction of Ring Road.
"	8	Widening Ring Road.	The complete reconstruction of Ring Road, from Weijsa Road to Cantonments Road as a dual carriageway with service roads where necessary, the construction of a roundabout at the intersection of Cantonments Road and Ring Road.
"	9	By-pass to Labadi.	The construction of a dual carriageway road to the south of Labadi from the eastern end of the Labadi Housing Estate to Giffard Camp Road.
Second Phase	10	New junction at the intersection of High Street, Horse Road, Thorpe Road and Marine Drive.	The construction of a roundabout at the junction of High Street, Horse Road, Thorpe Road and Marine Drive together with the opening up of Horse Road at its eastern end.
"	11	New junction at Post Office Square.	The construction of "Tee" junctions at the intersections of Pagan and Church Roads with Horse Road in place of the existing rotary junction. (See also Cow Lane redevelopment project.)
"	12	Relief route to the West of Kwame Nkrumah Avenue.	The construction of a three-lane road on the western side of Kwame Nkrumah Avenue from Weijsa Road extension (Road Project No. 1) to Ring Road. (See also road project No. 13) parallel to the railway line.
"	13	Extension of Castle Road.	The extension of Castle Road to the west to join the relief route to Kwame Nkrumah Avenue (road project No. 12).
"	14	New junction at Makola Square.	The construction of a roundabout at the intersection of Boundary Road, Thorpe Road and Derby Avenue. (See also road project No. 14.)
"	15	Additional link between Ring Road and Castle Road.	The construction of a three-lane road from Castle Road, east of the Mental Hospital to Ring Road, east of Nima Approach Road.

PHASING	ROAD PROJECT No.	PROJECT	DESCRIPTION OF WORK
Second Phase	16	By-pass to Giffard Camp.	The construction of a three lane road to the west side of Giffard Camp commencing by 2nd Circular and rejoining Giffard Camp Road at the water pipe line.
"	17	Widening of Castle Road.	The construction of a second carriageway to Castle Road between Boundary Road and Eighth Avenue.
"	18	Extension of Guggisberg Avenue eastwards.	The extension of Guggisberg Avenue from Ring Road to Ussher Fort as a dual carriageway; the construction of a formal town square at the junction of the extended Guggisberg Avenue with High Street.
Third Phase	19	Widening of 28th February Road.	The construction of a second carriageway (and widening of the existing road where applicable) to 28th February Road from Thorpe Road to mile 11, Tema junction.
"	20	Widening of Weiija Road.	The construction of a second carriageway to Weiija Road from Ring Road to Odorkor.
"	21	Widening of Kwame Nkrumah Avenue (South).	The reconstruction of the existing carriageway of Kwame Nkrumah Avenue from the Central Area by-pass northwards to Ring Road to six lane width with pedestrian refuges; the construction of a second carriageway to Kwame Nkrumah Avenue from Ring Road to the Police Training Depot.
"	22	Widening of Independence Avenue.	The construction of a second carriageway to Independence Avenue from Rowe Road to Castle Road; the reconstruction of Independence Avenue to six lane width with pedestrian refuges from Castle Road to Ring Road; the construction of a second carriageway to Independence Avenue from Ring Road to the road/rail crossing at mile 6.
"	23	Widening of Horse Road.	The reconstruction of Horse Road to four lane width with pedestrian refuges from Hansen Road to High Street. (See also road project No. 10.)
"	24	Extension of Ring Road (West).	The construction of a three lane road from Old Winneba Road to Guggisberg Avenue.
"	25	New junction at the intersection of Independence Avenue and Castle Road.	The construction of a roundabout at the junction of Independence Avenue and Castle Road and the closing of Maxwell Road at its northern end.
"	26	Linking of Abossey Okai Road and Link Road.	The construction of a three lane road between Abossey Okai Road and Link Road in the Manprobi/Lartebikorshi area.
"	27	Outer By-pass from Odorkor to the Police Training Depot.	The construction of a three lane road from Odorkor to Kwame Nkrumah Avenue, through the Police Training Depot.
"	28	Outer By-pass from Kwame Nkrumah Avenue to the Ada Road.	The construction of a three lane road from Kwame Nkrumah Avenue parallel to the Accra-Tema railway terminating at the Tema Approach Road, mile 11.

The following works are not phased and they should be implemented as the need or opportunity arises. In certain cases these improvements can be effected through statutory development control :—

Imposition of a minimum overall reservation of 100 feet to Class A roads in the Central Area.

Imposition of a minimum overall reservation of 150 feet to Class A roads outside the Central Area.

Imposition of adequate sight lines to all intersections.

Closing of superfluous intersections to Classes A and B roads.

Provision of traffic lights were appropriate at major road intersections in the Central Area.

Provision of car parks, lorry parks and taxi ranks (*see* chapter fourteen).

Provision of long distance bus and passenger lorry termini.

Provision of lay-byes to all bus stops in major roads.

The improvement and construction of sidewalks in the Central Area.

The erection of pedestrian barriers at danger points on the major roads.

APPENDIX "E"

(See Chapter three)

SCHEDULE OF MAJOR OPEN SPACES

REFERENCE	ACREAGE	EXISTING CONDITIONS AND USE	PROPOSED USE
Coastal O.S. ...	750	Open space not maintained	Recreational and amenity.
Independence Avenue	50	Rough parkland	Park.
Castle Road ...	30	Quarries and wasteland	Park.
Hansen Road ...	20	Old cemetery	Park.
Kawli Lagoon (South)	43	Wasteland surrounding lagoon.	Aquatic park.
Ring Road Park ...	550	Wasteland park used for tipping.	Major park and recreational centre.
Lartebiokorshi ...	60	Unused land	Major recreational centre.
Kaneshi ...	33	Undeveloped land	Recreational and amenity.
Avenor ...	55	Unused flood-land	River side open space.
Adabraka ...	35	Unused flood-land	Recreational and amenity.
Kwame Nkrumah Circle	25	Open space	Landscape gardens.
Nima ...	60	Unused land adjoining drainage channel.	"Green wedge" amenity open space.
Nima ...	110	Unused land	"Green wedge" recreational and amenity.
X'borg, Cantonments ...	70	Unused	"Green wedge" amenity.
Giffard Camp Cantonments	75	Unused land west of Giffard Camp.	Amenity and recreational.
X'borg, Labadi ...	66	Undeveloped land in housing area.	"Green wedge" major recreational centre and amenity.
Turf Club ...	65	Racecourse	Sport and amenity.

OPEN SPACE—DETAILED PROPOSALS FOR THE COASTAL OPEN SPACE BETWEEN MANPROBI AND LABADI

Extent of Area

The coastal open space to which reference is made on pages 23 and 27 stretches from Sakumo Lagoon (west of Manprobi) in the west to Kpeshi Lagoon (east of Labadi) in the east and lies on the seaward side of Old Winneba Road, High Street, 28th February Road and Ada Road, which together form a continuous coastal road. A further length of this coastal strip extending eastwards to the boundary of the Accra Planning Area east of Nungua is also important but lies outside the area covered by the present plan.

Present Condition

The coast is potentially very attractive but has been marred by inappropriate development in several places. The tipping of refuse and the uncontrolled removal of sand detract from the natural appearance of the open areas particularly where the sand digging has caused many of the palm trees to die.

Special Importance of the Coastal Strip

The coastal open space is not merely a part of the open space system but it constitutes the forecourt or front garden of Accra. It provides a vital part of the setting for Government House, the Independence Arch, the Government Ministerial area, and the site for the future Parliament. It also provides some of the local open space for Manprobi, Korle Gonno, Central Accra, Christiansborg and Labadi. If its development is suitably guided this coastal open space will form one of the major amenity features of Accra having a special national significance in view of Accra's role as the capital city.

Division into Sections

For the purpose of this appendix the coastal strip will be dealt with in sections running from west to east.

SECTION ONE

Sakumo Lagoon to Kawli Lagoon

This section lies on the seaward side of the Old Winneba Road and provides part of the local open space for Manprobi and Korle Gonno. It extends to 130 acres and contains a number of small fishing hamlets. Much of the area is planted with palm trees but in recent years many have died due to sand excavation. The width of the strip varies from about 1,000 feet in the west to 200 feet in the east near the sewage tipping point.

Recommendations

The whole area to be zoned as public open space. No extension of the fishing hamlets to be permitted and no reconstruction of the huts in permanent materials. Further excavation of sand to be prohibited except opposite Sakumo Lagoon. Suitable areas to be levelled for football and other sports. The open land near Sakumo Lagoon would be suitable for camping and for the construction of a swimming pool.

SECTION TWO

Kawli Lagoon

This section is only 1,500 feet long and 100 feet to 200 feet wide (nine acres). It forms the seaward portion of a sand bar between the lagoon and the sea. The beach is used by fishermen and for sand extraction.

Recommendations

The whole area to be zoned as public open space. Sand extraction to be concentrated at the outlet to the lagoon. This stretch of beach will become pleasanter when the present sewage outfall is replaced by a modern one discharging in deep water or by other disposal methods. Improvements to the sea outlet of the lagoon are necessary and will affect this section.

SECTION THREE

Oil Depot to Ussher Fort

About 5,000 feet in length and varying in width from 200 feet to 500 feet, (50 acres). Includes the harbour, warehouses, harbour railway, James Fort Prison, Customs House, several commercial properties, the Town Engineer's yard and offices and some poor housing development.

Recommendations

The whole area to be zoned as public open space but implementation to be regarded as a long term project. No permits to develop to be given by the Committee except with special authority. It is proposed that as the commercial activity at Accra harbour declines with the opening of Tema harbour the existing facilities should be made available to the fishing fleets and that an association of the fishermen should be formed to take responsibility for the management of such facilities. It is suggested that provision should be made for a sailing club if practicable when commercial activity has declined.

It is recommended that as a long term policy the commercial and residential development in the Brazil Street area between the harbour and Ussher Fort should be cleared and the area made available as coastal open space to benefit the inhabitants of the densely populated Ussher Town and James Town areas. Suitable landscape treatment of the area in question will be necessary and consideration should be given to the construction of a sea-water swimming pool on the beach.

SECTION FOUR

Ussher Fort to the Y.M.C.A.

This section is about 2,000 feet in length and varies in width from 200 feet to 600 feet (17 acres). The western portion is occupied with commercial development including the old Kingsway, Cadbury and Fry, the old Union Trading Company warehouses. The eastern portion contains public and cultural buildings and the Anglican Cathedral.

Recommendations

The whole area to be zoned as public open space within which certain special buildings will remain (notably the Cathedral, the Legion Hall and Scouts Headquarters) and where ultimately further special public or cultural buildings may be permitted. The clearance of the existing commercial development will be a gradual process. No new development has been permitted for several years and most of the buildings in question are old and in poor condition.

The "opening up" of this central portion of the coastline in the very heart of Accra is a most important measure to give added amenity and dignity to the town. This area, within a short distance of the commercial centre, is at present in a very unsightly and insanitary condition. With its attractive natural features of rugged cliffs (at present almost inaccessible) and the fine coastal views, it offers an opportunity for the creation of a centre piece to the coastal strip which would be of great benefit to Accra.

It is recommended that in view of the central situation of this section the implementation of the above recommendations although long term should be given precedence over the proposals for section three. (See also Chapter Fourteen.)

SECTION FIVE

Community Centre to Government House "Marine Drive" Area

This area is about 1½ miles long between 500 feet and 1,500 feet wide (210 acres). It lies between the Government Area and the sea and is at present used for recreation (football, golf, polo and riding). The beaches on this length are popular and special facilities are offered at Area Beach (changing rooms, chairs, surf boards, etc.). Buildings in the area include three clubs (Accra, Ghana and Syrian), the Accra Community Centre and a collection of Government Offices most of which are of a temporary nature and are haphazardly sited. The area is gently undulating with low cliffs and affords pleasant conditions for coastal walks and for various forms of recreation. Most of the area is Crown land.

The area has been zoned as open space since the first draft plan was prepared and it has been generally accepted for some time that it should be developed for public recreation. A proposal for a Marine Drive was put forward several years ago and detailed proposals for the construction of this route, the landscaping of the area generally and the provision of sports and leisure facilities were prepared prior to Independence Day. (Consulting Engineers, Sir William Halcrow and Partners. Landscape Consultant, G. A. Jellicoe and Miss S. Crowe.) The proposals have not been implemented but are regarded as deferred and not abandoned. The recommendations below incorporate the proposals of the consultants.

Recommendations

The whole area to be zoned as public open space with the exception of the grounds of the existing clubs which are shown as private open space. Reservation to be made for the following recreational and leisure facilities :—

A cricket ground

Football pitches

A lido incorporating a swimming pool up to international competition standards

Additional sea bathing facilities

Polo ground

Golf course

Restaurant

New clubs

A sea-water paddling lake.

The proposed Marine Drive will extend from the Legion Hall to Government House (Christiansborg Castle). Car parks will be provided.

The whole area to be suitably landscaped with planting of trees and shrubs. The area of the old polo ground to be converted into town gardens leading from 28th February Road towards the sea.

The various single storey temporary Government offices to be removed as soon as provision is made for their accommodation in the Government centre north of 28th February Road or elsewhere.

Special attention is required to be given to the treatment of the 28th February Road frontage to ensure (a) an attractive appearance from this important trunk road (b) a suitable setting for the Independence Arch and (c) the creation of vistas through the trees to the sea.

SECTION SIX

Government House to E.C.M. School, Labadi

This section is almost two miles long and varies in width from 500 feet to 1,500 feet (175 acres). Along this length there is considerable development south of the coastal road including two new Government housing estates (the Christiansborg Estate and the Labadi South Estate). There is also the Christiansborg Police stables and parade ground, light industrial development adjoining the Regal Cinema, the Osu Fisheries Station and two schools. The area remaining undeveloped is mostly gently undulating land but includes an extensive low lying area surrounding the Klotey Lagoon at Christiansborg. There are pleasant beaches. Most of the area is Crown land.

Recommendations

It is recommended that the whole of the undeveloped portion of the area should be zoned as public open space within which provision for football pitches and possibly a cricket ground may be made. Sand excavation should be controlled to prevent erosion of the coast. Shelter belts of palm trees should be planted both as an amenity and to afford a wind break in connection with the sports grounds. The possibility of an eastern extension of the Marine Drive along this length (from north of Government House to the Labadi By-pass) should be borne in mind as a long term project to provide a coastal way of particular benefit to the inhabitants of Christiansborg and Labadi.

Reservation should be made for the provision of a sea-water swimming pool south of the Christiansborg Estate.

SECTION SEVEN

E.C.M School to Kpeshi Lagoon

This section is about two miles long and from 300 feet to 1,000 feet wide. (160 acres.) It will accommodate the Labadi By-pass. The coastline is very attractive here due largely to the numbers of trees and there is a popular bathing beach near the Kpeshi Lagoon.

Recommendations

It is recommended that the whole area south of the Labadi By-pass should be zoned as public open space and that a belt of open space between the by-pass and the residential development to the north should be maintained. There will be no vehicular access to the by-pass except at its junctions with the existing main road and in view of its traffic importance and the risk of injury to persons crossing the road it is strongly recommended that since the road crosses ground traversed by gullies these should be utilised as pedestrian ways beneath the road to give access to the beaches and the coastal open space from the residential areas of Labadi.

APPENDIX "G"

(See Chapter four)

INDUSTRY—SCHEDULE OF SITES ZONED FOR INDUSTRY

The sites included in this schedule are coloured purple on the development plan and are also indicated on Diagram 11. The reference numbers will be found on the development plan. Land now used for industrial purposes but zoned in the development plan for other purposes is not included in the schedule but is mentioned in Chapter four.

East of Korle Lagoon	34 acres	Crown land
Direct rail access		Reasonable road access

Almost completely developed by petroleum storage depots south of Guggisberg Avenue and by manufacturing premises further north.

Brewery Road S.W. Adabraka	34 acres	Crown land
Rail access to part		Poor road access

Completely developed by brewery, printing works, joinery workshops, contractor's depot, tyre moulding works and storage depots.

Between the railway and Ring Road west of Adabraka	156 acres	Crown land
Rail access possible		Excellent potential road access

Partially developed (65 acres) by Public Works Department Stores, Housing Corporation offices and depot, Construction Furniture Company Limited, and Army stores (shortly to be vacated and used by Electricity Department); 13 acres required by Transport Department; 78 acres on eastern side of site can only be satisfactorily developed after drainage operations and the raising of portions of the land to give the required fall to the drains. Safety from flooding will depend on the execution of long overdue main drainage works in the Odaw Valley. (See Chapter thirteen.)

South-West of Audome Cemetery Ring Road	36 acres	Crown land
No rail access		Good road access

Fully leased and under development by private firms as contractors' depots, workshops, etc. and by the Accra Municipal Council as Transport maintenance depot.

East of Kaneshi North-East of Audome Cemetery	250 acres	Crown land
Rail access possible to part		Good potential road access

28 acres leased and in use by private firms for printing work, concrete products manufacture, motor vehicle assembly, sawmill, plant maintenance, etc.

Main difficulty in the future development of this well-situated industrial area will be the provision for surface water drainage of the lower parts of the site. Not an insuperable problem but the increased run off will aggravate the already serious position in the Odaw Valley where improvements to the Odaw River and to the sea outlet at Korle Lagoon are long overdue.

West of Nsawam Road, Kokomlemle	36 acres	Private land
No rail access		Good road access

Partially developed by contractors' depots, tile works, etc. on Nsawam Road frontage. Some difficulties appear to be experienced by prospective developers attempting to secure sites within this area. The backland can only be developed after the realignment and canalisation of the Odaw River and other associated drainage works have been carried out.

Between Christiansborg and Labadi	35 acres	Part Crown land
No rail access		Good potential road access

Part of this area (in private ownership) has been zoned for service industry for some years but apart from the Advent Press no industrial buildings have been erected. Prospective developers have reported difficulty in securing leases on reasonable terms. The area has now been extended to include Crown land lying on the south of the proposed eastern extension of Ring Road. The construction of access roads is necessary before development can take place.

Near Regal Cinema, Christiansborg	3.5 acres	Crown land
No rail access		Good road access

Whole site developed or in course of development.

(See Chapter five)

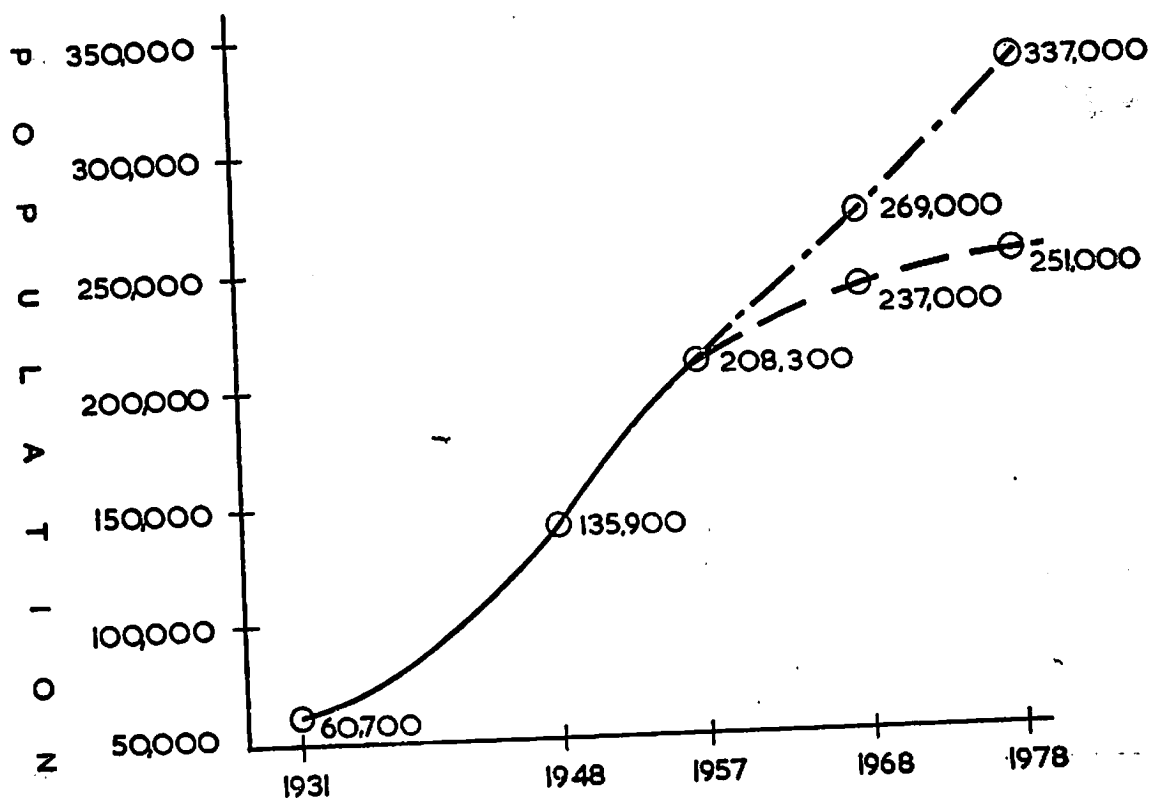
BIRTH PLACE AND DURATION OF RESIDENCE IN ACCRA OF GHANAIA POPULATION AT THE TIME OF THE 1948 POPULATION CENSUS

	MALE	FEMALE
Total Ghanaian population (1948)	71,759	61,433
Numbers born in Accra	33,207	38,480
Number born elsewhere than Accra:		
Southern Ghana	14,826	12,508
Ashanti	2,099	1,194
Northern Region	6,292	1,808
Togoland	3,758	2,771
Other territories (British)	4,314	2,355
Other territories (Non-British)	7,263	2,317
Duration of residence in Accra:		
Less than one year	12,148	6,196
1-5 years	16,604	13,058
5 years or more	43,007	42,179

AGE AND SEX STRUCTURE OF GHANAIA POPULATION IN ACCRA AT THE TIME OF THE 1948 POPULATION CENSUS:

	MALE	FEMALE
UNDER 1 YEAR	2073	2034
1 - 16 YEARS	20140	22130
16 - 45 YEARS	37427	29521
45 YEARS +	7998	7448

GROWTH AND PROJECTED GROWTH OF POPULATION IN ACCRA FROM 1931 TO 1978



--- PROJECTED POPULATION INCREASE ASSUMING
 [NATURAL INCREASE = 12 PERSONS PER 1000 PER YEAR
 MIGRATION = 1500 PERSONS PER YEAR

- - - PROJECTED POPULATION INCREASE ASSUMING
 [NATURAL INCREASE = 12.5 PERSONS PER 1000 PER YEAR
 MIGRATION = 3000 PERSONS PER YEAR

(See Chapter six)

CENTRAL AREA FLOOR SPACE SURVEY

This survey was carried out in 1957 to find out the total amount of floor space within the central areas and the purposes for which this floor space was used.

The method employed was to divide the area into street blocks (75 in all) and to sub-divide the blocks into the plots occupied by individual properties except in certain congested housing areas (such as Cow Lane) where the identification of plot boundaries was impossible.

The plots within each block were numbered and marked on 1/1,250 scale sheets. The staff engaged on the survey visited each plot and noted the use of the building on each floor, the shop frontage, car parking space within the plot and any special features. Floor spaces were scaled from the maps after checking. Floor space on upper floors was judged by eye as a proportion of the ground floor space.

Summaries were prepared for each block and from there a final summary for the whole survey area was obtained as follows:—

CATEGORY	TOTAL BLOCK AREAS Sq. Ft.	BUILDING AREA*	F.S.I.	RETAIL	OFFICES	STORAGE	WORKSHOP	RES'DL.	OTHERS	PARK- ING SPACE WITHIN PLOTS	SHOP FRONT
<i>a</i>	18,174,000	5,878,000	0·4	1,854,000	1,055,000	316,000	736,500	1,756,000	346,000	1,370	38,050
<i>b</i>	3,870,000	1,106,000	0·3	114,500	117,000	29,500	33,000	745,000	190,500	125	8,890
<i>c</i>	1,352,000	473,000	0·3	55,500	106,500	98,000	17,500	115,500	133,500	205	3,110
<i>d</i>	2,352,000	650,000	0·5	4,500	32,500	49,500	—	602,500	33,500	10	—
Total ...	25,748,000	7,829,000	0·3	2,028,500	1,311,000	493,000	787,000	3,219,000	703,500	1,710	50,050

NOTES : * The Building Area has been reduced by 10 per cent to allow for roof overhang—see description of survey.

" *a* " Within the boundaries of both the existing and proposed commercial centre.

" *b* " Outside the " existing " commercial centre but within the proposed one.

" *c* " Within the commercial survey area but outside the proposed commercial centre.

" *d* " Outside both the existing and proposed commercial areas.

APPENDIX "K"

CAR PARKING AND LORRY PARKING SURVEYS

TABLE I—STREET PARKING SURVEY 1957

This survey was confined to the commercial centre of Accra and was carried out in June 1957. The following table shows the figures for the morning and afternoon. Cars parked in private and public car parks or on undeveloped land were not included.

Type of vehicles								Morning	Afternoon
Private cars	...	...	...	...	...	...	...	734	689
Goods lorries	...	...	...	...	...	...	...	108	120
Passenger lorries	...	...	...	...	...	...	...	96	64
Taxis	...	...	...	...	...	...	...	121	139
<i>Totals</i>								1,059	1,012

Of these totals approximately 30 per cent of the vehicles were parked on the pavements and forecourts and 70 per cent on the carriageways.

A similar survey in 1955 gave a total of 650 vehicles parked on the roads and pavements in the same area indicating an increase of 50 per cent in two years. The increase appears to be continuing and is most noticeable in the southern portion of Kwame Nkrumah Avenue and near the banking and office area between the Post Office and the High Street.

TABLE II—CENTRAL AREA FLOOR SPACE SURVEY 1957

(For details see Appendix J.)

In the course of this survey note was made of the car parking space within the curtilage of properties in the commercial area irrespective of whether the space was in fact utilised for parking and it was found that potential accommodation for over 1,500 cars existed.

TABLE III—BUILDING FLOOR SPACE/CAR PARKING RATIO SURVEY 1957

To give guidance as to the likely ratio of cars parked in relation to floor space in typical buildings in the commercial area a sample survey was made covering four office blocks.

Col. 1							Col. 2	Col. 3	Col. 4	Col. 5
Building							Floor Space	Cars Parked	Floor Space per car	Ratio
A	...	...	...	...	...	...	120,000	102	1,200	1:5
B	...	...	...	...	...	...	10,000	17	600	1:2½
C	...	...	...	...	...	...	45,000	60	750	1:3
D	...	...	...	...	...	...	30,000	62	500	1:2
							205,000	241	850	1:3½

Notes.—Floor space in col. 2 is gross floor space on floors used for office purposes.

Cars parked (col. 3) includes only those regularly parked in the vicinity of the building by persons employed in the building.

The figures in col. 4 show the building floor space divided by the number of cars to give the amount of floor space in the building for each car parked.

The ratio in col. 5 is that between the amount of space required for car parking and the floor space in the building assuming that each car parked requires 250 sq. ft. for standing and access.

TABLE IV—LORRY PARK SURVEY 1957 AND 1958

A count of lorries and other vehicles using the main lorry park at Rowe Road has been made on a number of occasions during 1957 and 1958. The figures indicated a steady increase of the use of the park. There is a peak period towards midday each day. The greatest number of lorries counted at the most recent check in February 1958 was 399. From observation this appeared to be more than its maximum desirable capacity. When used to this extent congestion is very considerable as insufficient room is left for lorries to enter and leave the park.

It was found that 152 traders were selling a variety of goods in the lorry park in February 1958, half of them selling food and drink.

The unofficial lorry park at the western end of the Supreme Court accommodates up to 50 lorries on busy days.

TABLE V—CAR PARKS

Public car parks within or adjoining the commercial centre have the following capacity:

High Street	...	...	...	60
William Street	...	...	...	10
Post Office Square	...	...	...	15
Bus Station	...	...	...	30
John Holt's	...	...	...	85
Electricity Department	...	...	...	12
Market Street	...	...	...	20
<i>Total</i>				<u>232</u>

The largest commercial car park is at Kingsway Stores where there is accommodation for 130 cars plus 30 staff cars.

SURVEYS OF CENTRAL AND SUBURBAN MARKET AND OF PETTY TRADING
TABLE I—SELWYN MARKET NO. 1—DERBY AVENUE—SURVEY
AUGUST 1957

CATEGORY	SECTION A	SECTION B	SECTION C	SECTION D	SECTION E	SECTION F	TOTALS	UNDER COVER	IN OPEN
I. Cooked food	3	5	11	13	3	8	43	17	26
II. Uncooked food and provisions: (a) Meat ...	1	15	28	2	6	0	52		
(b) Fish ...	24	28	232	3	5	4	296		
(c) Fruit Veg. ...	16	53	40	161	113	206	589		
(d) Provisions ...	21	6	39	18	17	40	141		
III. Mixed articles	62	102	339	184	141	250	1078	322	756
IV. Textile and clothing	76	65	66	101	57	95	460	323	137
V. Miscellaneous	218	103	113	140	138	82	794	707	87
... ..	14	9	20	10	13	17	83	37	46
Under cover	277	193	204	242	212	279	1407	1407	
In building ...	96	91	345	207	140	175	1052		1052
TOTALS	373	281	549	449	352	454	2461		
All Traders ...									

NOTES:
'Mixed articles' includes beads, hardware, comb, mirrors, etc.
'Miscellaneous' includes a wide variety of goods not falling into any of the other categories.

TABLE II—BOUNDARY ROAD MARKET (SELWYN MARKET NO. 2)

Surveys were carried out in 1956 and in 1958 (the former in connection with the Town Planning Officer's report to the Committee which was then formed at the suggestion of the Prime Minister and charged with the duty of making recommendations for the reorganisation of the Accra markets). It is not possible for reasons of space to reproduce in full detail the information obtained in these surveys but the results are summarised in the following schedule:—

		SECTION A SHED		SECTION B SHED		SECTION C SHED		SECTION D SHED		SECTION E OPEN SPACE AROUND A, B, C & D		SECTION F SMALL SHEDS		SECTION G SMALL SHEDS		SECTION H OPEN		TOTALS	
		1956	1958	1956	1958	1956	1958	1956	1958	1956	1958	1956	1958	1956	1958	1956	1958	1956	1958
i. Cooked food	1956	6		2		2		0		21		136		108		20		295	
	1958		20		0		0		0		175		92		32		46		365
ii. Raw foodstuff	1956	62		22		58		37		405		270		61		0		915	
	1958		145		160		68		193		532		288		53		78		1,517
iii. Mixed articles	1956	3		3		2		4		112		53		21		5		203	
	1958		0		14		50		0		120		0		15		17		216
iv. Textiles and clothing	1956	0		0		0		2		60		127		1		0		190	
	1958		0		13		7		0		40		246		275		0		581
v. Minor craftsmen	1956	2		7		4		3		34		278		360		63		751	
	1958		0		0		0		0		0		0		76		0		76
vi. Charcoal and firewood	1956	0		0		0		0		0		0		0		86		86	
	1958		0		0		0		0		0		0		0		91		91
vii. Drums, tins and bottles	1956	0		0		0		1		0		0		29		36		66	
	1958		0		32		0		61		0		11		0		24		128
viii. Miscellaneous	1956	9		61		10		1		83		25		25		21		235	
	1958		24		0		0		0		142		0		16		54		236
ix. Totals	1956	82		95		76		48		715		889		605		231		2,741	
	1958		189		219		125		254		1,009		637		467		310		3,210

Total number of traders in 1956 2,741
 Total number of traders in 1958 3,210

TABLE III—SALAGA MARKET

(Ussher Town)

Accra—Survey 1958

Category	Inside Market	Outside Market	Totals
I. Foodstuffs (meat, fish, fruit, vegetables, corn, etc.) ...	492	325	817
II. Cooked foods and provisions ...	45	96	141
III. Fuel ...	—	12	12
IV. Clothing and textiles ...	38	—	38
V. Miscellaneous ...	92	36	128
Totals ...	667	469	1,136

Note.—This survey was carried out during the main fishing season and the figures illustrate conditions at the busiest time.

TABLE IV—LONDON MARKET

(James Town)

Accra—Survey 1958

Foodstuffs (meat, fish, fruit, vegetables, corn, etc.) ...	...	...	...	...	...	33
Cooked foods and provisions ...	...	...	...	...	...	20
Miscellaneous ...	...	...	...	...	...	11
Total ...	...	...	...	...	...	64

Note.—Part of this market is occupied by carpenters.

TABLE V—FADAMA MARKET

(Abossey Okai Road)

Accra—Survey 1958

Outside the "Central" Area but not a "Suburban" Market

Motor spare parts ...	...	...	...	...	...	188
Hardware (bolts, nails, locks, etc.) ...	...	...	...	...	...	41
Carpenters ...	...	...	...	...	...	40
Miscellaneous including food ...	...	...	...	...	...	12
Total ...	...	...	...	...	...	281

TABLES VI, VII, VIII, IX—OTHER "MARKETS" IN CENTRAL ACCRA

CATEGORIES	OKAI KWEI ROAD KOKOMPE	LORRY PARK ROWE ROAD	THORPE ROAD WEST OF SUPREME COURT UN- OFFICIAL MARKET AND LORRY PARK	DODOWAH ROAD OPPOSITE POWER STATION OVERFLOW FROM BOUNDARY ROAD MARKET	TOTALS
I. Foodstuffs, meat, fish, fruit, vegetables, corn etc. ...	18	—	28	120	166
II. Cooked foods, provisions ...	10	75	33	24	142
III. Timber sellers, wood cutters, etc.	330	—	—	—	330
IV. Carpenters	—	—	56	—	56
V. Drum and bottle traders ...	—	—	—	30	30
VI. Miscellaneous, combs, bru- shes, mirrors, books, etc.	4	77	60	13	154
Totals	362	152	177	187	878

NOTES :

- (i) Okai Kwei Road 'market' includes an area set aside for the storage, sawing and sale of timber.
- (ii) The traders at the Rowe Road lorry park serve passengers arriving and leaving by lorry and also passers-by.
- (iii) The Thorpe Road trading area (G) is on land which will shortly be developed for other purposes.

TABLE X—SUBURBAN MARKETS, ACCRA

Surveys Carried Out 1957-58

CATEGORIES	KANE-SHI	ADA-BRAKA	KORLE GONNO	NIMA	KOKOMLEMLE	CHRISTIANS-BORG	LABADI	TOTALS
I. Foodstuffs (raw meat & fish, fruit, vegetables, corn, etc.) ...	120	205	54	480	267	116	64	1,306
II. Cooked foods and provisions ...	25	38	12	106	59	30	15	285
III. Fuel	11	29	7	56	36	18	10	167
IV. Clothing and textiles	10	3	1	33	9	1	4	61
V. Miscellaneous (hardware, beads, mattresses, etc.)	17	34	0	40	12	17	6	126
Totals 1957-58	183	309	74	715	383	182	99	1,945
(1955 for comparison) ...	107	132	—	417	123	277	274	1,330

Notes.—At Korle Gonno and Kokomlemle new markets have been opened since 1955.

Korle Gonno market has a special day on Tuesdays when 350 or more traders are present over 200 selling fish.

Christiansborg and Labadi markets have special days on Tuesdays and Saturdays when the number of traders may reach 250 at each market. It is thought that the 1955 figures were obtained on one of these busier days.

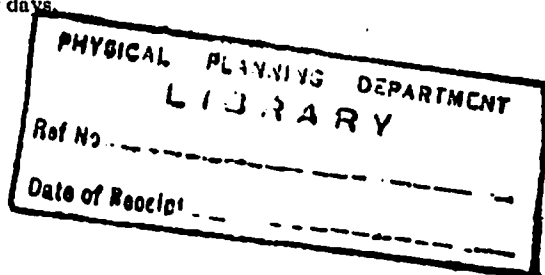


TABLE XI—SURVEY OF PETTY TRADERS IN CENTRAL ACCRA—1955

CATEGORIES OF GOODS	REASONS GIVEN BY TRADERS FOR THEIR CHOICE OF SITE					TOTALS
	<i>Good Selling Site</i>	<i>Absence of Market Space</i>	<i>Nearness to House</i>	<i>Other Reason</i>	<i>Refused to State Reason</i>	
Green vegetables and other vegetable foodstuff	91	25	26	1	2	145
Provisions and Bread	96	52	105	1	3	257
Prepared Food	283	51	238	9	9	590
Mixed Articles (Imported Assortment)	313	210	43	2	26	594
Charcoal and firewood	12	9	55	—	—	76
Furniture	17	13	16	4	—	50
Drums and Bottles	8	—	3	—	—	11
Minor craftsmen	35	13	8	2	4	62
Others	112	57	43	10	4	226
TOTAL	967	430	537	29	48	2,011

APPENDIX "M"

(See Chapter twelve)

MINISTRY OR DEPARTMENT	REFERENCES	REQUIREMENTS	SITES RECOMMENDED
Ministry of Local Government.	23-1-57 M7/1/VOL. II/41	Permanent Site for Local Government Training School.	Central Government Area north of Rowe Road.
Ministry of Health ...	29-3-57 Rz.91 ...	(a) New School of Hygiene; (b) New Public Health Institute; (c) Hospital in East Accra; (d) Dispensaries—Nima/Adabraka, Teshie, Cantonments/X'borg Victoriaborg; (e) Training Hospital.	(a) and (b) at Korle Bu or at new training hospital north of Accra (see chapter nine); (c) West of Labadi and north of Ring Road extension; (d) Adjoining neighbourhood centres at Nima, Teshie, X'borg also site in central area; (e) Korle Bu or X'borg.
Ministry of Information and Broadcasting.	23-9-57 J.K.4/3/105 ...	See Information Services.	
Ministry of Communications	7-9-57 Mc.495/317 ...	Nil	
Ministry of Works ...	3-7-57 O.A.3/176 6-7-57 RAP. COMNS/9 1-8-57 BG.58/72(B) 1-8-57 BG.58/73 ...	(a) Redev. of P.W.D. D.E's Yard; (b) Central Government Stores Area. 10 acres easy road rail access-services.	(a) Ring Road Industrial Area South; (b) Ditto—near new P.W.D. Stores.
Ministry of Labour Co-operatives and Social Welfare.		Regional Offices	Rowe Road Regional Office area.
Ministry of Trade and Industry.	21-9-57 E.9/286 ...	Diamond Market	West of Barnes Road—(See diagram 25).
Ministry of Education ...	1-8-57 ME.501/103 ...	(a) Secondary School Sites throughout Accra; (b) Additional land A.T.I. for (i) senior and junior staff housing; (ii) hostel; (iii) recreational grounds.	(a) See chapter eight and 1/20,000 folding map at cover; (b) (i) Various residential areas (ii) West of Museum; (iii) North of Central Area By-pass.
Ministry of Agriculture ...	21-1-57 PGB.21/14 19-1-57 Br.7/1/15 27-7-57 PGB.21/30 ...	No requirements for Ministry. Director, Soil and Land-Use Survey. No requirements. None.	
Ministry of Finance	1-10-57 311 ...	Agricultural Credit Board, future permanent offices. (Temporary office in Registrar-General's present office.)	Town centre—in office buildings proposed north of Station or west of Barnes Road.
Ministry of Defence	23-7-57 Ww.9 ...	(a) Coastal site five acres.	Near Fisheries Station, Osu or at Labadi or Accra Harbour after Tema Harbour fully operative.
Ministry of Interior ...	3-3-57 EN.32/3 25-7-57 Sp.7/1/133(3) ...	Military lands. Teshie None for Ministry itself.	Noted.
The Attorney-General	8-8-57 Ss/SF.18/24 ...	Law School Law Library.	Supreme Court area (see diagram 25).
Regional Commissioner	1-8-57 G.29/VOL.II/128 ...	New office for Regional Administration.	North of Rowe Road or west of Barnes Road (see diagram 25).
The Chief Conservator of Forests, Accra.		Area for timber and fire-wood market. Extension of Forest Reserve.	Adjoining Fadama market or at Ring Road Industrial Area. See 1/20,000 folding map.

DEPARTMENT	REFERENCES	REQUIREMENTS	SITES RECOMMENDED
The Secretary, Public Service Commission.	1-8-57 P.S.C./Of/1/Vol. 14/365.	New office building	Central Government Area.
The Principal Medical Officer, Accra.			
Transport Department	30-7-57 219/SF.2/10261	In addition to area of 7½ acres on Ring Road, for new Accra depot, 6 acres required nearby for expansion.	Ring Road South Industrial Area.
Survey Department	29-1-57 EP.1/20/458	(a) Map reproduction* Extension noted. May be affected by airport improvements. Extension noted.	
		(b) Provincial Surveyors Office and Survey School Extension.	
Department of Posts and Telegraphs.	4-2-57 168/485/48	(a) Accra North Automatic Exchange. New Post Office. (b) Adabraka New Post Office. (c) Post Office, Manprobi. (d) near Guggisberg Avenue/Link Road Junction. Extension possible.	(a) near Orion Cinema. (b) near Castle Road. (c) near Guggisberg Avenue/Link Road Junction. Extension possible.
	24-6-57 RAV/Govt. Dev'l.	(a) Exchange. (b) Post Office. (c) Post Office, Manprobi. (d) near Guggisberg Avenue/Link Road Junction. Extension possible.	(a) near Castle Road. (b) near Guggisberg Avenue/Link Road Junction. Extension possible.
	7-8-57 C/9/14 (12)	(a) Post Office in Station Commercial Area. (b) Post Office, Lartebi-korshi. (c) Post Office, N.E. X'borg. (d) to be agreed within new layout.	(a) near Guggisberg Avenue/Link Road Junction. Extension possible. (b) near Castle Road. (c) near Guggisberg Avenue/Link Road Junction. Extension possible. (d) to be agreed within new layout.
Department of Information Services.	10-9-57 GP.144/25	(a) H.Q. Site (central) area 1 acre. (b) Film Unit and Cinema Department. (c) Photograph Section ... (d) Ghana News Agency ... (e) Bureau of Ghana Language. New sites for District Engineering. Chief Mechanical Engineer's Office and workshop at present on Barnes Road. Ring Road Industrial Area South for all workshops; stores and local maintenance offices. Regional Office on Rowe Road or in new office development west of Barnes Road.	(a) new office blocks west of Barnes Road. (b) adjoining Broadcasting Department. (c) do. (d) Supreme Court area. (e) do.
Public Works Department	24-7-57 G.98/685 to P.S. M/Works.	New sites for District Engineering. Chief Mechanical Engineer's Office and workshop at present on Barnes Road. Ring Road Industrial Area South for all workshops; stores and local maintenance offices. Regional Office on Rowe Road or in new office development west of Barnes Road.	
Fisheries Department	6-9-57 13/703/57	Nil.	
Prisons Department	26-7-57 0349/437	Warders Quarters, Cantonments Road; Training Depot Achimota. Acquired.	Existing site extended.
Broadcasting Department	6-8-57 1071/27	(a) Payments Office for Central area—near Supreme Court. (b) Possibility of branch revenue offices in suburbs (include other Departments); (c) High power transmitting station.	Central area—near Supreme Court. Suggest joint buildings with other Departments (P. & T.). Undecided. Outside development areas up to 650 acres might be needed.
Printing Department		Nil.	Existing buildings to remain.
Government Statistician	19-3-57 G.2/1/1/22	New accommodation for main office—150 units—partly on ground floor.	Should be located in Central Government Area, south of Rowe Road or in existing buildings north of Rowe Road after new Ministry buildings erected.
Lands Department	18-1-57 44/93	None specified.	
Income Tax Department	3-8-57 C.2349	(a) Extension to Accra District Office. (b) Extension to Head-quarters Office.	Within existing site, 28th February Road. Central Government area.

DEPARTMENT	REFERENCES	REQUIREMENTS	SITES RECOMMENDED
Police	19-1-57 Ar. Hq. 21/A1/27	(a) Site for Teshie Police Station. (b) Headquarters. (c) Other suburban police stations.	(a) On south side of Accra-Ada Road, Teshie. (b) Airport site being developed. (c) Undetermined.
Meteorological Department	29-7-57 G.74/35	(a) Headquarters Offices and Research Station site about 150 yards square. (b) Forecast Section at Airport.	Beyond Preventive Barracks at Airport—access from airport approach. Within airport perimeter.
Customs and Excise Department.	10-9-57 H/BUILD/1	Not specified but stated to be included in 2nd Development Plan.	
Electricity Department	31-8-57 658/12933	Stores Buildings.	Ring Road—probably site now occupied by Army next to P.W.D. Stores. N.B.—Power Station site should be converted to distribution centre when new station developed near Tema.
Government Archivist			Site allocated for National Archives Building on Castle Road. Unless funds are available for a suitable building on this important site the land should be released for other development.
General Manager, Railway	11-9-57 R.463/5267 12-9-57 348/5039	(a) Eight acres for staff housing to replace Ring Road. (b) If Accra station resited, 400 ft. each side of track between Ring Road and Brewery;	South Ring Road between Railway and Adabraka after drainage. As requirement. May occupy site indicated on Diagram 24 and on folding central area map.
Accountant-General's Dept.	18-1-57 70/5425 21-1-57 RAP/GOVT. DEV/1.	(a) Headquarters Offices (b) Accra District Treasury (c) Sub Treasury—James Town.	(a) Central Govt. Area north of Rowe Road. (b) Supreme Court area. (c) Site of Information Services buildings.
The Chief Registrar, Supreme Court.	30-1-57 404-C./30 24-7-57 404-C./31	(a) Site for two or three Central Magistrates Courts. (b) Suburban Magistrates Courts; (i) Christiansborg (ii) Adabraka (iii) Korle Bu	Supreme Court area. (b) (i) N.E. X'borg layout (ii) undecided; (iii) new Manprobi neighbourhood centre.
Ghana Housing Corporation	6-2-57 1031/Est./29 26-7-57 1021/Est./31	Housing sites for development. (a) East 5th Avenue (b) Kaneshie (c) N.E. X'borg (d) Airport	(a) as leased. (b) as leased. (c) within layout. (d) within layout.
Director of Library Services	30-7-57 LB.13/1	No immediate requirements. Possibility of children's library in large residential areas.	See chapter ten.
W.A.B.R.I.	12-3-57 INF./01/0	None. Institute now established on adequate site at Airport Estate.	
A.D.C. Accra	22-1-57 SEC./062/2	(a) Poultry Farm (b) Staff housing—25 plots	(a) outside development area. (b) within any residential areas.
Accra Municipal Council		See chapter twelve	Transport Depot—Ring Road Municipal Offices. Barnes Road.

DEPARTMENT	REFERENCES	REQUIREMENTS	SITES RECOMMENDED
I.D.C., Accra	29-7-57 Mc/1	(a) Ring Road Industrial Estate 240 acres;	(a) See chapter four.
	3-9-57 Lb/11	(b) Site for I.D.C. metal industries 3 acres;	(b) Ring Road Industrial Area.
		(c) Site for drainage contractors 4.5 acres;	(c) ditto
		(d) Commercial sites;	(d) Station Commercial Area; (see chapter fourteen).
Department of Social Welfare and Community Development.	22-1-57 0407/34	(a) Head Office	(a) Central Government Area.
	29-1-57 RAP/GOVT. DEV/1	(b) Accra District Office	(b) Supreme Court area to Rowe Road.
		(c) 2nd Vocational Training Centre for Boys;	(c) undecided.
		(d) Vocational Training Centre for Girls;	(d) undecided.
		(e) Neighbourhood Centres	(e) sites reserved in layouts.
		(f) Voluntary Agencies	(f) see chapter ten.
Auditor-General's ment.	Depart- 4-9-57 AN.121/118	None apart from new H.Q. building in Departmental Area.	Departmental Area north of Rowe Road.
Director of Civil Aviation	16-4-57 0541/137	Land required at Airport.	Noted.

APPENDIX " N "

(See Chapters six and fourteen)

PROPOSED ALLOCATION OF LAND WITHIN THE CENTRAL AREA*

Commercial (including shops, offices banks etc.)†	...	...	...	...	...	...	...	...	...	190
Administration (regional offices, municipal possibly some private office space)	...	...	...	...	...	...	...	...	...	50
Educational	...	...	...	...	...	...	...	...	...	23
Markets	...	...	...	...	...	...	...	...	...	20
Wholesale trade and warehousing	...	...	...	...	...	...	...	...	...	30
Service industry	...	...	...	...	...	...	...	...	...	28
Car parks	...	...	...	...	...	...	...	...	...	20
Lorry parks	...	...	...	...	...	...	...	...	...	10
Gardens and other open spaces	...	...	...	...	...	...	...	...	...	26
										<u>397 acres</u>

Note.—(a) Deduction has been made for main roads but not for local access roads.

*(b) The area is that referred to on page 59. It is predominantly commercial in character. It excludes the future Parliament and Government central areas also the coastal area and the residential areas surrounding the commercial centre.

†(c) There will almost certainly be residential development combined with the commercial buildings (e.g. on the upper floors of office blocks).

APPENDIX " O "

(See Chapters six and fourteen)

THEORETICAL MAXIMUM QUANTITIES OF FLOOR SPACE POSSIBLE WITHIN THE REDEVELOPED COMMERCIAL CENTRE

Type of Development	Possible Floor Space	Present Floor Space
Retail trade, shops, showrooms, associated office accommodation and storage space	4,500,000*	2,000,000
Offices	2,750,000*	1,200,000
Residential	2,000,000	2,500,000
Wholesale trade, warehousing	1,200,000	350,000
Service industry (woodworking, car repairs, etc.)	1,100,000	750,000
Unclassified	500,000	550,000
	<u>12,050,000</u>	<u>7,350,000</u>

Note.—*(a) There is flexibility in the proposed zoning for retail trade and offices and the figures given could be varied within the total for these two uses.

(b) The only proposed reduction is in the residential floor space as considerable areas of low standard housing development need to be cleared to allow the redevelopment schemes described in Chapter Fourteen to proceed. The relatively high figure of 2,000,000 square feet of proposed residential accommodation includes provision for flats to be incorporated with trading premises and in high office blocks.

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