INTRODUCTION TO URBAN PLANNING AND DESIGN

PRESENTATION TO ARC SEMINAR

05 MAY 2018

JOBE OFETOTSE

TOWN PLANNER

BScURP (University of Botswana)

MCRP (University of Capetown)

Strategic Planning (University of Stellenbosch)

oftjob@gmail.com

STRUCTURE OF PRESENTATION

1. Introduction
2. History of Urban Planning
3. Urban Planning in Botswana
4. Alternative Planning Approach
5. Discussion Questions
6. Conclusion - Desired Local Level Design Qualities

JOBE OFETOTSE

INTRODUCTION

INTRODUCTION

PURPOSE OF PRESENTATION

- To introduce the practice of town planning
- The intention being to expose participants to some of the influences which shape our cities and towns and the responses required to manage these
- At the end of the presentation; participants should be able to do the following;
    1. Understand the origins of modern town planning
    2. Understand some of the qualities and principles which inform the making of positive urban places
    3. Be able to distinguish between good and bad planning
    4. And finally better appreciate the practice of town planning and hopefully contribute to a more integrative approach to the building of our cities

Physical Planning
Urban & Regional Planning
Urban Planning
What is it?
Town Planning
Spatial Planning
Town & Country Planning

INTRODUCTION

WHY DO WE PLAN?

The planning and design of settlements is important for a number of reasons;

- To give direction to public spending and decision making
- To ensure efficient use of resources
- To mobilize unutilized or under utilized resources
- To coordinate & integrate the public & private investments in settlements to maximize their impact
- To protect nature and prevent ecological breakdowns
- To protect the reasonable rights of individuals & to establish appropriate institutional, procedural & other mechanisms to promote positive settlement development

HISTORY OF TOWN PLANNING

HISTORY OF URBAN PLANNING

THE EMERGENCE OF MODERN TOWN PLANNING

- The industrial revolution and the post war period in the 19th and 20th century is largely recognized as an important period in terms of the debates on how settlements should be planned

- The demand for labour in the newly industrialized cities of Europe, the UK and North America led to a mass movement of people from the countryside to seek employment

- The cities however were not prepared for this unprecedented movement of people and rapid growth as most of them lacked the most basic services to deal with the influx

- The result was the formation of chaotic, overcrowded and polluted cities

HISTORY OF URBAN PLANNING

THE EMERGENCE OF MODERN TOWN PLANNING…

- Ebenezer Howard's ideas on the garden city and Robert Owen's New Lanark model settlement came to represent at the end of the century, the distillation & most complete expression of this radical utopian socialism

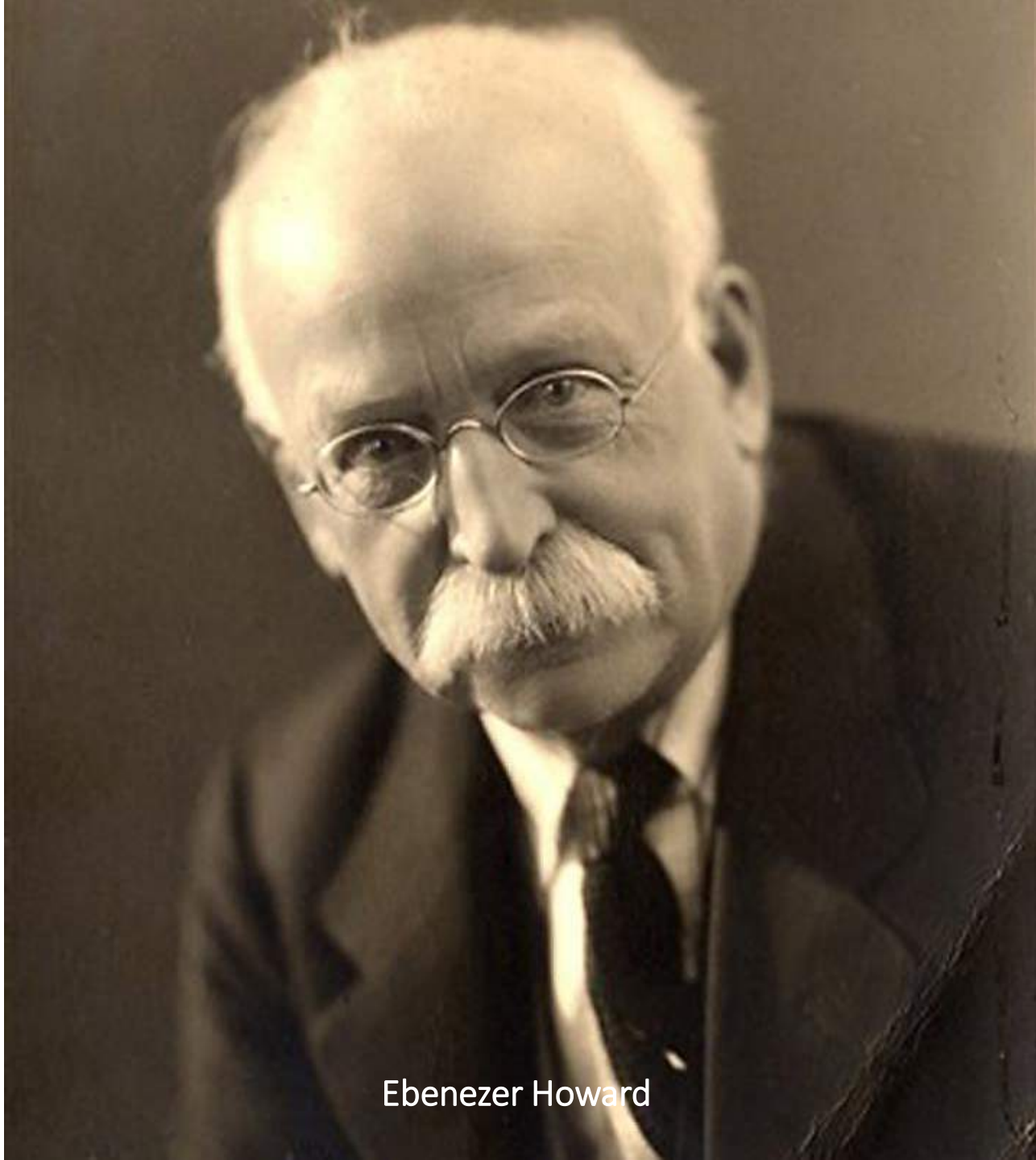
- In other countries, where this idea of planning also emerged as a response to the problems of the industrial city, other ideas which underpinned the ideal physical environment prevailed

HISTORY OF URBAN PLANNING

THE EMERGENCE OF MODERN TOWN PLANNING…

- Ebenezer Howard's ideas on the garden city and Robert Owen's New Lanark model settlement came to represent at the end of the century, the distillation & most complete expression of this radical utopian socialism

- In other countries, where this idea of planning also emerged as a response to the problems of the industrial city, other ideas which underpinned the ideal physical environment prevailed



Ebenezer Howard

HISTORY OF URBAN PLANNING

THE EMERGENCE OF MODERN TOWN PLANNING…

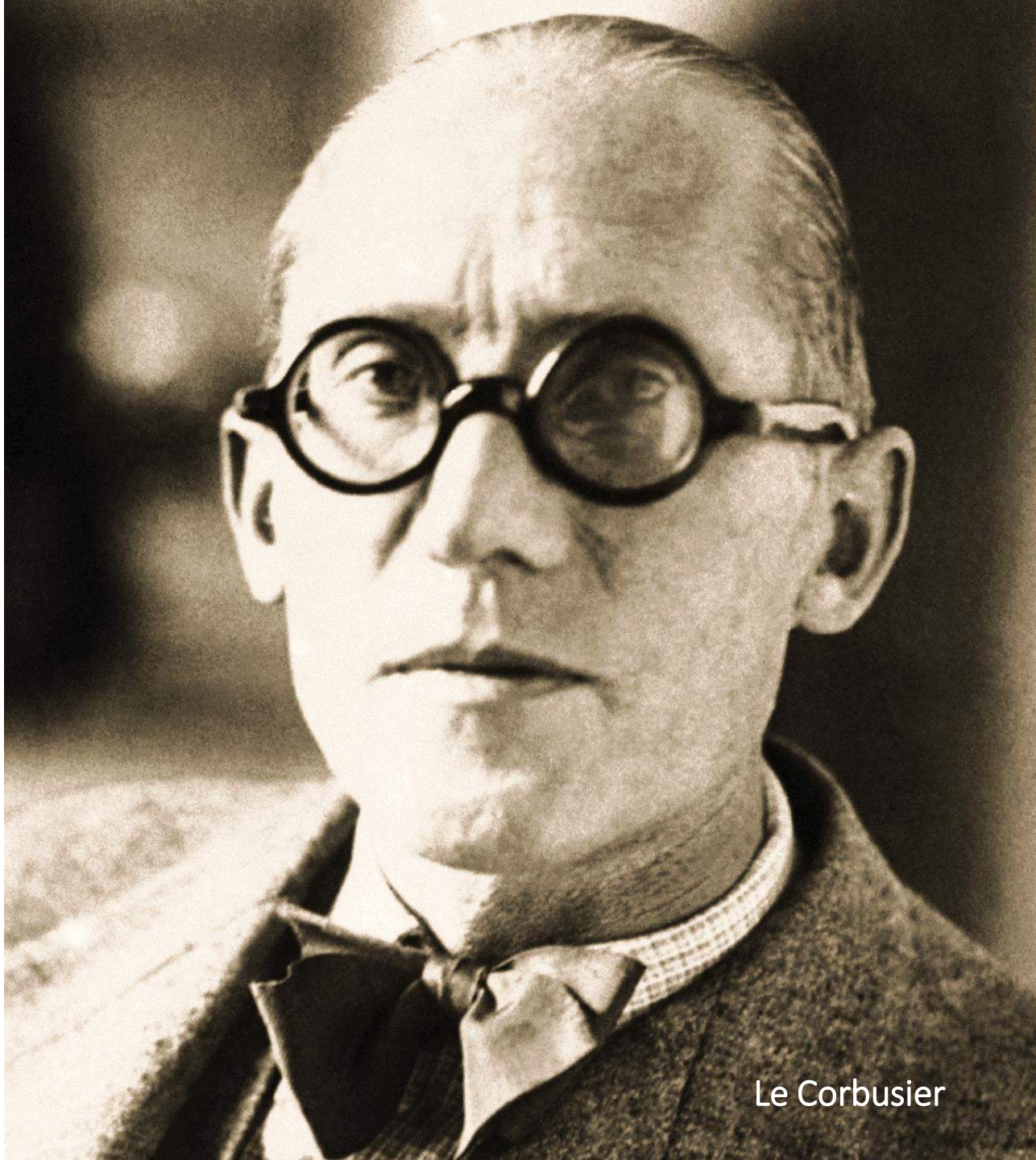
- Ebenezer Howard's ideas on the garden city and Robert Owen's New Lanark model settlement came to represent at the end of the century, the distillation & most complete expression of this radical utopian socialism

- In other countries, where this idea of planning also emerged as a response to the problems of the industrial city, other ideas which underpinned the ideal physical environment prevailed

HISTORY OF URBAN PLANNING

THE EMERGENCE OF MODERN TOWN PLANNING…

- In France, the ideas of architect-planner, Le Corbusier, in the 1920s and 1930s established the ideal of the modernist city
- Le Corbusier's argument was that instead of the city with gardens of the kind which Howard had proposed, his was to be a city in a garden
- Le Corbusier held that the ideal city was neat, ordered and highly controlled.
- Slums, narrow streets and mixed use areas should be demolished and replaced with tower blocks with open space flowing between them and land uses separated into mono functional zones



Le Corbusier

HISTORY OF URBAN PLANNING

THE EMERGENCE OF MODERN TOWN PLANNING…

- Implicit in both the proposals of Howard's garden cities and Le Corbusier's imaginary sketch of the radiant city was the utopian suggestion that town planning should create entirely new kind of urban settlement
- Although clearly there was a debate as to whether this should be Howard's garden city or Le Corbusier's radiant city
- Howard's ideas, underlay Abercrombie's 1944 plan for Greater London, with his proposal for a ring of relatively "self contained" and "socially balanced" new towns circling London's green belt
- By contrast, in the post war redevelopment schemes of many inner city areas, it was Le Corbusier's vision of the modern city of tower blocks which arose from the rubble in the late 1950s and 1960s
- This ostentatious approach to town planning comes through in Lewis Keeble's influential book, ***Principles and Practice of Town and Country Planning***
- Across the Atlantic in the United States, early 20th century visions of the ideal city were different again

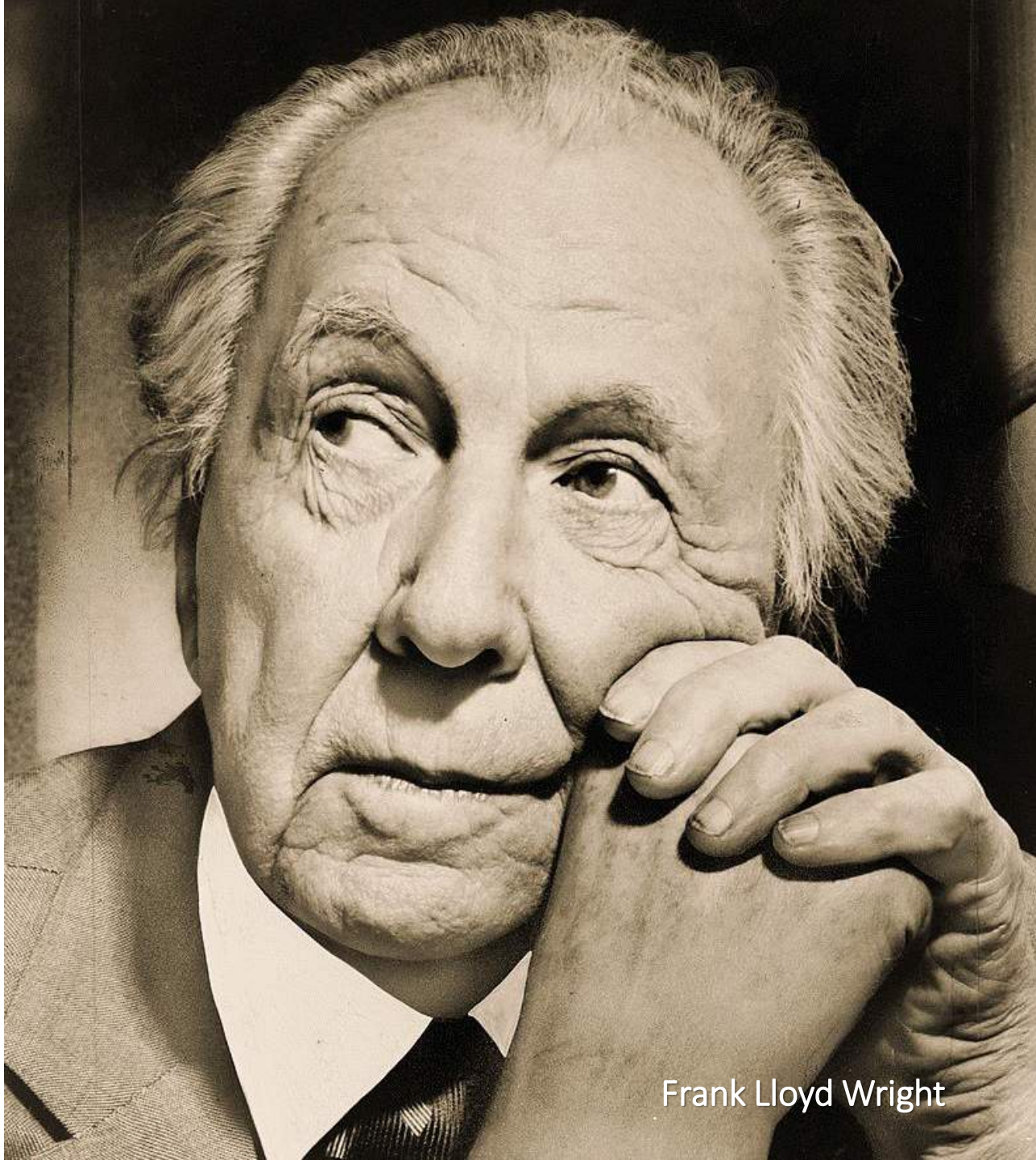
HISTORY OF URBAN PLANNING

THE EMERGENCE OF MODERN TOWN PLANNING…

- Architect Frank Lloyd Wright's counter to the problems of industrializing New York took the form of low density, dispersed cities with each family on its own small farm (car based suburban model)

- Other elements of the American urban idealism were drawn from Europe; Le Corbusier's modernist inspired skyscraper development and the City Beautiful Movement drew on the boulevards and promenades of the great European capitals

- Because many of the urban planners of this period were architects, many common architectural practices were thus incorporated into urban planning



Frank Lloyd Wright

HISTORY OF URBAN PLANNING

THE EMERGENCE OF MODERN TOWN PLANNING…

- In particular, planners adopted four principles from architecture that constituted the “design approach” which dominated planning during the first half of the twentieth century ;-

- Comprehensive design, aesthetic considerations (beautiful cities produce good citizens), hierarchy

HISTORY OF URBAN PLANNING

THE EMERGENCE OF MODERN TOWN PLANNING…

- Given that town planning was viewed as essentially an exercise in the physical design, it seemed self evident to town planners at this time that their prime task was the production of plans
- It also seemed self evident that these plans should be as detailed as possible so as to guide future development and should define as precisely as feasible, sites for particular uses
- In the UK, the first generation of development plans local authorities were required to produce under the 1947 Town and Country Planning Act also adopted this approach
- Watson (2007) summarizes the key assumptions that were common to the master plans which carried the urban visions of the time as follows;
    1. **That planners possessed particular design expertise, much like architects, but that once the design was complete it was then up to other professionals to implement it;**

HISTORY OF URBAN PLANNING

THE EMERGENCE OF MODERN TOWN PLANNING…

Key assumptions……

2. That through the design of physical space it would be possible to shape the nature of societies which occupied it (neighbourhood model)
3. That it was possible to envisage a future ideal state for each city and to achieve this through the plan, and that thereafter no further change would occur
4. That it was possible to predict both the scale and nature of population and economic growth over the long term and plan for this
5. That cities were amenable to manipulation in terms of these plans; that local governments as the implementers of plans had sufficient control over the use of each parcel of land to ensure that the plan would eventually be realized

HISTORY OF URBAN PLANNING

THE EMERGENCE OF MODERN TOWN PLANNING…

Key assumptions……

6. **That the plans should be comprehensive. The modernist assumption here is that planners can envisage new and better urban worlds and plan for them**
7. **That planners were custodians of the public good which they entrusted to promote through their plans**

- The close partner of the master plan was the development control system & zoning scheme
- If the master plan was the creative and forward looking vision of the city, then the zoning scheme was the primary legal tool through which it would be implemented
- The concept of land use zoning originated in Germany and was adopted with great enthusiasm across USA and Europe in the early part of the 20th century

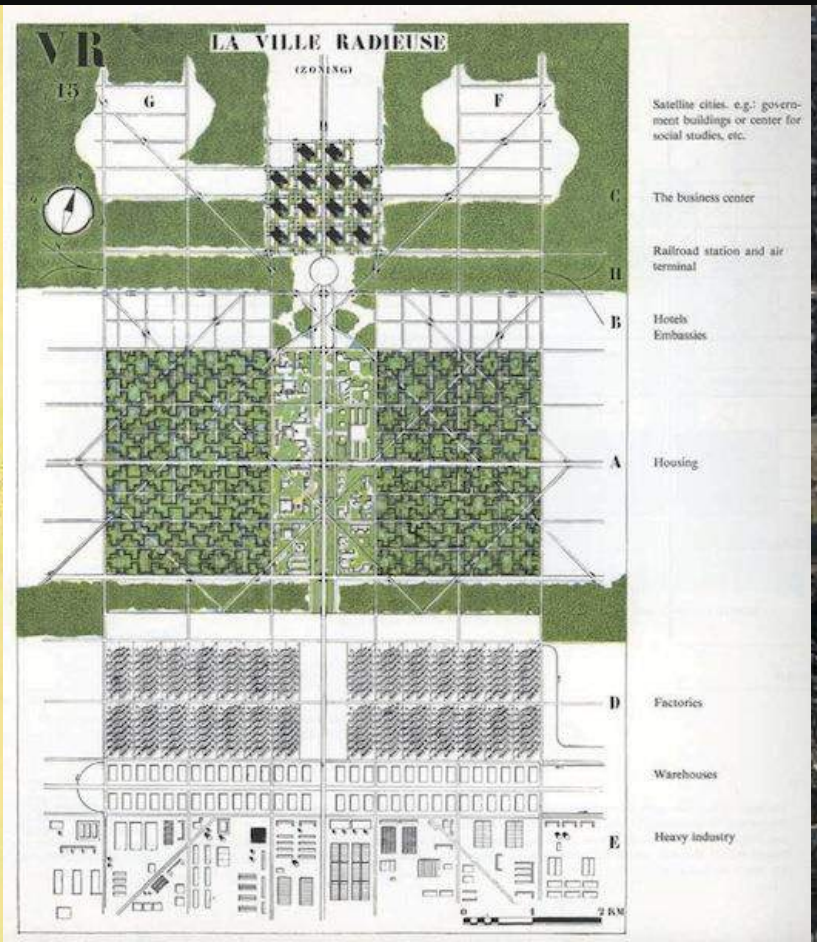
HISTORY OF URBAN PLANNING

THE EMERGENCE OF MODERN TOWN PLANNING…

- In the USA, the zoning scheme was especially welcomed as it was seen as necessary to control the influx of immigrant businesses into the city center thus helping to secure greater safety and security in investment for the local businessmen
- Land use zoning usually carried with it a particular view of urban form, in keeping with the visions of the early planners, and was enthusiastically adopted by middle and commercial classes

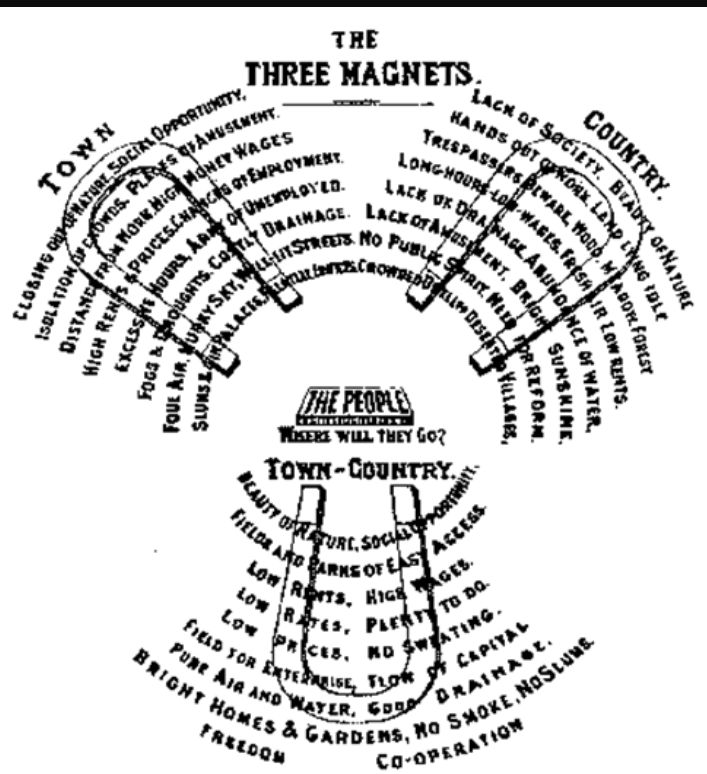
HISTORY OF URBAN PLANNING

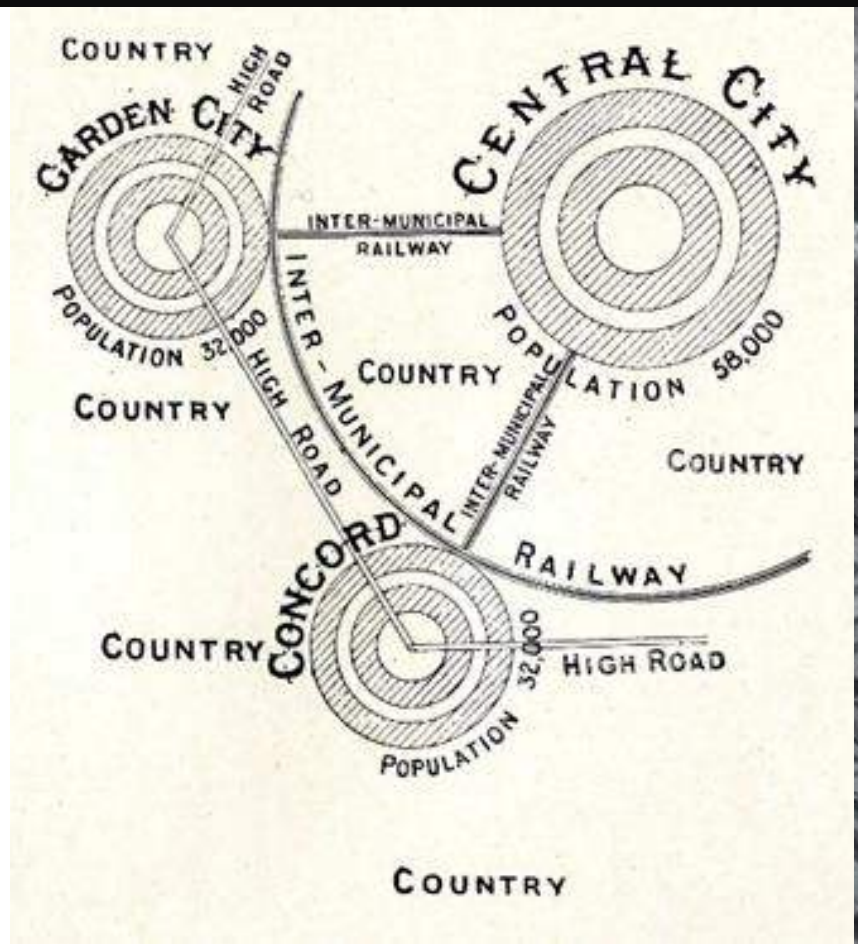
From left to right; Howard's influential diagram on the garden city concept, Le Corbusier's radiant city, Frank Lloyd Right's broad acre city

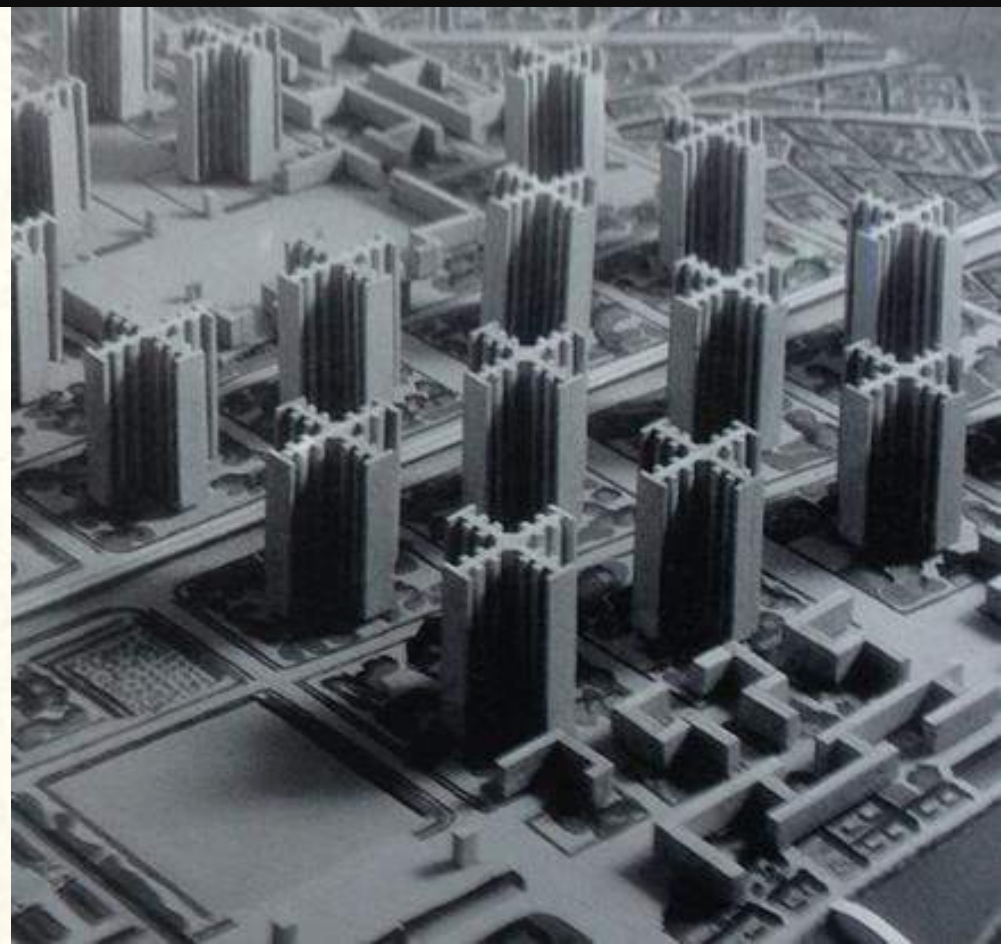


HISTORY OF URBAN PLANNING

From left to right; Howard's influential diagram on the garden city concept, Le Corbusier's radiant city, Frank Lloyd Right's broad acre city







URBAN PLANNING IN BOTSWANA

URBAN PLANNING IN BOTSWANA

FROM 1966 TO 2018

- At the time of independence in 1966, Botswana did not have clearly stated long term urban development policies and legislation partly because over 95% of the population lived in rural areas
- Urbanization in Botswana is basically a post colonial phenomenon
- As of 1960, only four settlements, Lobatse, Kasane, Ghanzi and Francistown were recognized as towns by the 1955 Township Proclamation Act
- It was only after the discovery and exploitation of diamonds, copper and nickel in the late 1960s that urbanization actually gained momentum in Botswana
- In terms of the planning and development of settlements, the government in 1972, established the Department charged with the responsibility of urban planning
- In 1977 (Revised 2013) the first planning law was enacted

URBAN PLANNING IN BOTSWANA

FROM 1966 TO 2018 …

- The Act was prepared for the government by a British based town planning consultant and is based on the 1947 British Town Planning Act
- The provisions of the Act are notably similar to the provisions of the British Town Planning Act of 1947
- The 1977 Act thus set the stage for the introduction of the classic master planning approach in Botswana that dominated planning in the cities of the global north in the post war period
- In the master plan approach plans were supposed to be as detailed as possible to guide future development and to define as precisely as feasible, sites for particular uses
- This utopian comprehensiveness can directly be related to the influences of the utopian socialists in early British planning

URBAN PLANNING IN BOTSWANA

FROM 1966 TO 2018 …

- In addition to this, comprehensive planning was seen as a means through which the allocation of land to specific uses could be achieved because in early UK planning mixed use was seen as very problematic
- The second document dealing with urban development in Botswana specifically in terms of detailed layout planning is the Urban Development Standards (UDS) of 1992
- The standards deal with the arrangement and engineering infrastructure of an area and the site details such as roads, public facilities and utilities, open spaces and the sizes of different land uses within the settlement including open spaces
- An important part of this document which relates directly to modernist planning is its adoption of the neighbourhood unit concept

URBAN PLANNING IN BOTSWANA

FROM 1966 TO 2018 …

- The neighbourhood unit concept was directly derived from Howard's idea of the Garden city. In Howard's original diagram, he divided the town into what he called wards of around 5000 people
- The second aspect of these standards with modernist roots is the adoption of the hierarchical organization of the road system
- According to the original concept, the main traffic routes, arterial routes, should be free from direct access and frontage by developments
- While secondary collector routes should specifically serve as connectors between local access routes and the main arterial routes and these should also have minimum direct access
- The main argument behind the hierarchical organization was intended to facilitate smooth traffic movement

URBAN PLANNING IN BOTSWANA

FROM 1966 TO 2018 …

- A third document necessary to aid the achievement of the desired future end state of the city is the Development Control Code
- It is a set of planning regulations devised to control the planning and development of land use activities in planning areas
- The code provides for the minimum compulsory requirements needed to accommodate infrastructure, fire fighting and rescue, parking, loading and unloading, handling, storage, collection and disposal of refuse, open space, pollution control, access, mobility and comfort
- An important part of this document that has links with modernist thinking relates to low density residential development

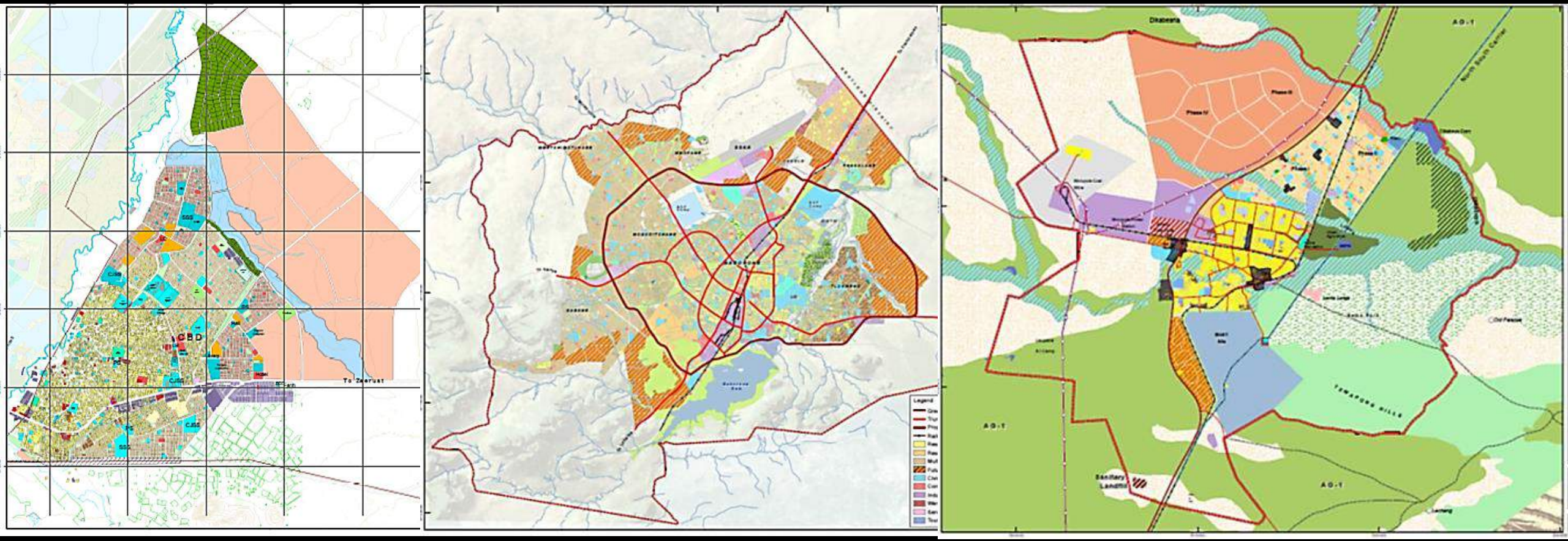
URBAN PLANNING IN BOTSWANA

FROM 1966 TO 2018 …

- The introduction of modernist ideas and spatial constructs in Botswana was not only restricted to legislation and policy documents
- At the time when settlement planning was introduced in the country, local planners were either inexperienced or had little training in the field, thus the government relied on expatriate planners and consultants for the planning of settlements
- This is evident in that some of the settlements planned both before and after the introduction of planning policies and legislation, used spatial forms similar to those that originated in the global north
- Secondly, modernist planning infiltrated urban planning in the later years through the training of local planners in the former colonial powers specifically the UK in the case of Botswana

URBAN PLANNING IN BOTSWANA

From left to right, Tlokweng, Gaborone and Palapye Master Plans



URBAN PLANNING IN BOTSWANA

Low density urban form in Gaborone resulting from DCC

URBAN PLANNING IN BOTSWANA

CRITICISMS OF MODERNIST URBAN PLANNING

- Firstly it is based on a belief that comprehensive plans, which encompass every square meter of land, are both necessary and desirable
- It is now widely recognized that this is neither possible nor desirable and that the inevitable outcome of these approaches is sterility (sameness)
- Positive settlements are complex and complexity can only result where there is considerable freedom of process: the process allows for the ingenuity and creativity of many people to inform outcomes
- It is recognized that what is required is a more partial approach: the development of spatial frameworks which give strong direction without determining all aspects of final form
- Secondly, the focus of modernist urban plans is land use. However, spatial planning has very little control over land use. It can prevent things from happening but cannot make them happen

URBAN PLANNING IN BOTSWANA

CRITICISMS OF MODERNIST URBAN PLANNING

- Thirdly, the modernist approach is essentially quantitative. Projections of growth are made and space programmes prepared on the basis of threshold and range. Planning is then more or less rational distribution of the parts or elements
- The problems with this approach are two fold;

1. Firstly, projection is a notoriously inaccurate science. When projections are wrong, the inevitable outcome is large amounts of residual or leftover space waiting for events to occur

2. Secondly, in effect, planning occurs from bottom-up: there is a great deal of planning about the parts or elements, but nothing gives direction to the whole

ALTERNATIVE PLANNING APPROACH

ALTERNATIVE PLANNING APPROACH

NORMATIVE BASED PLANNING APPROACH

- A judgment about what constitutes a worthwhile environment is a value judgment and not one of pure technical fact
- This thinking moves away from the mainly static, prescriptive planning system based on rules and regulations
- It recognizes that there is always more than one way of making places and that the creative skills brought to bear on a project are an essential dimension of its quality
- Appropriate planning should therefore be underpinned by two sets of values:
- One is people centered; the main purpose of planning is to foster positive human development and to improve the quality of life of all people; the other is based on an,
- Awareness of nature which provides the setting and basic resources for human life

ALTERNATIVE PLANNING APPROACH

NORMATIVE BASED PLANNING APPROACH…

- An appropriate balance is therefore required in order to ensure that natural and human ecosystems coexist harmoniously
- This approach has been appropriately termed normative based planning and it recognizes the value-laden nature of the urban planning profession

A FRAMEWORK FOR MAKING SETTLEMENTS

- A framework for making positive settlements is underpinned by the above two concerns (people & nature)
- There are three important components of this framework which should be taken as the starting points in any settlement making process

ALTERNATIVE PLANNING APPROACH

A Framework for Making Settlements…

- The first relates to the importance of pedestrian movement. The reality of the majority of urban dwellers is that they are restricted to two modes of movement. At the most basic level, they travel on foot, for longer trips they depend on public transport
- Thus in creating settlements which accommodate this majority, movement on foot should be taken as the starting point in the making of settlements such that additional means represented by car ownership become a bonus, increasing options for people
- The second starting point is the importance of thinking spatially. In pedestrian scaled environments the public spatial environment should be viewed as the highest level of social infrastructure
- In these environments a great deal of activity occurs in the public spaces, with the result that the quality of the public spatial environment profoundly affects the quality of life

ALTERNATIVE PLANNING APPROACH

A FRAMEWORK FOR MAKING SETTLEMENTS…

- spatially, in this context, requires that all public spaces, particularly streets, be viewed as public space
- The third component relates to the need to plan partially. It is important to seek continually to take the minimum actions necessary to create real opportunities for creative response
- These opportunities are best released when the public spatial structure is positively made
- It is the framework of public actions which gives order to the whole and provides the logic and constraint to which multiple private decision makers can respond
- Settlements made within this basic framework exhibit certain interrelated performance qualities:

  - ✓ **they generate opportunities,**
  - ✓ **they are convenient to live in,**

ALTERNATIVE PLANNING APPROACH

A FRAMEWORK FOR MAKING SETTLEMENTS…

- ✓**they provide a range of choices to their inhabitants,**
- ✓**they provide equality of access,**
- ✓**they promote the efficient use of resources,**
- ✓**they have a high sense of place,**
- ✓**they are integrated and above all,**
- ✓**they are sustainable settlements**

- The means by which these qualities are achieved lies in the way the settlement is organized or structured. The concept of structure is therefore central to settlement making

ALTERNATIVE PLANNING APPROACH

A FRAMEWORK FOR MAKING SETTLEMENTS…

- The structure of a settlement as used here refers to the making of that part of the settlement which is shared by all inhabitants as opposed to the private realms of individual households and businesses
- In investment terms, this usually equates with public investment in the spatial structure, to which private investment and decision making responds

SETTLEMENT STRUCTURE AND ITS ELEMENTS

- There are four key elements of the settlement structure which contribute to the ways in which people perceive, understand and react to the settlement
- These can be conceptualized as those qualities of a place which give it an immediate identity, one which is quickly perceived or grasped by its users

ALTERNATIVE PLANNING APPROACH

SETTLEMENT STRUCTURE AND ITS ELEMENTS

- There are four key elements of the settlement structure which contribute to the ways in which people perceive, understand and react to the settlement
- The four key elements are: space, connection, public institutions and place
- *Space* is one of the most important structuring elements of settlements. In this regard it should not be viewed as just one element of a settlement programme such as public open space but should be approached as part of thinking about the whole
- Due to the diversity of places within the settlement, some parts will be more public, others more private while others are more neutral serving broader, more diverse sets of citizens and activities
- It is apparent therefore that there is structural order in settlements. This order lies at the heart of the concept of structure

ALTERNATIVE PLANNING APPROACH

SETTLEMENT STRUCTURE AND ITS ELEMENTS

- *Connection* - the roads, rail lines, pedestrian and bicycle routes comprise the linkage system of the settlement
- It is primarily within this network of movement spaces that public life within the settlement takes place
- Thus its making should be informed not only by technocratic considerations but also by human and environmental considerations
- The ability of the movement system to define patterns of accessibility both within the settlement and between settlements makes it an important structuring element
- *Public institutions* are both movement generators and the community meeting places within the settlement

ALTERNATIVE PLANNING APPROACH

SETTLEMENT STRUCTURE AND ITS ELEMENTS

- As such they should form the central focus in making settlements with a well defined structure
- *Place* - the natural and cultural distinguishing features of a place are important elements in the structuring of settlements
- Thus the concept of place implies embracing and consciously seeking to promote uniqueness as opposed to standardization

ALTERNATIVE PLANNING APPROACH

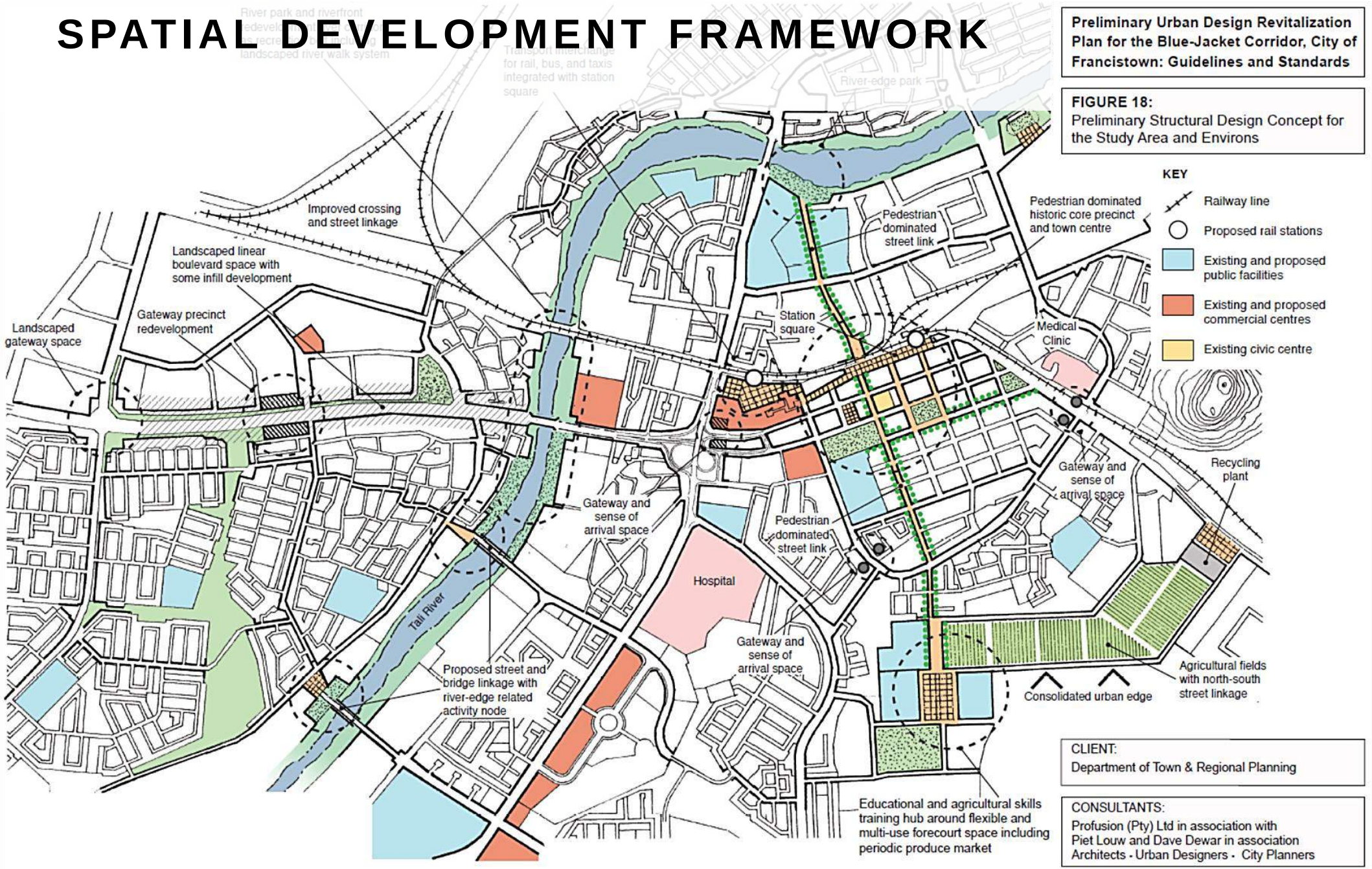
TYPES OF SPATIAL PLANS

- In pursuance of the above approach, every municipality must have four integrated types of spatial plans

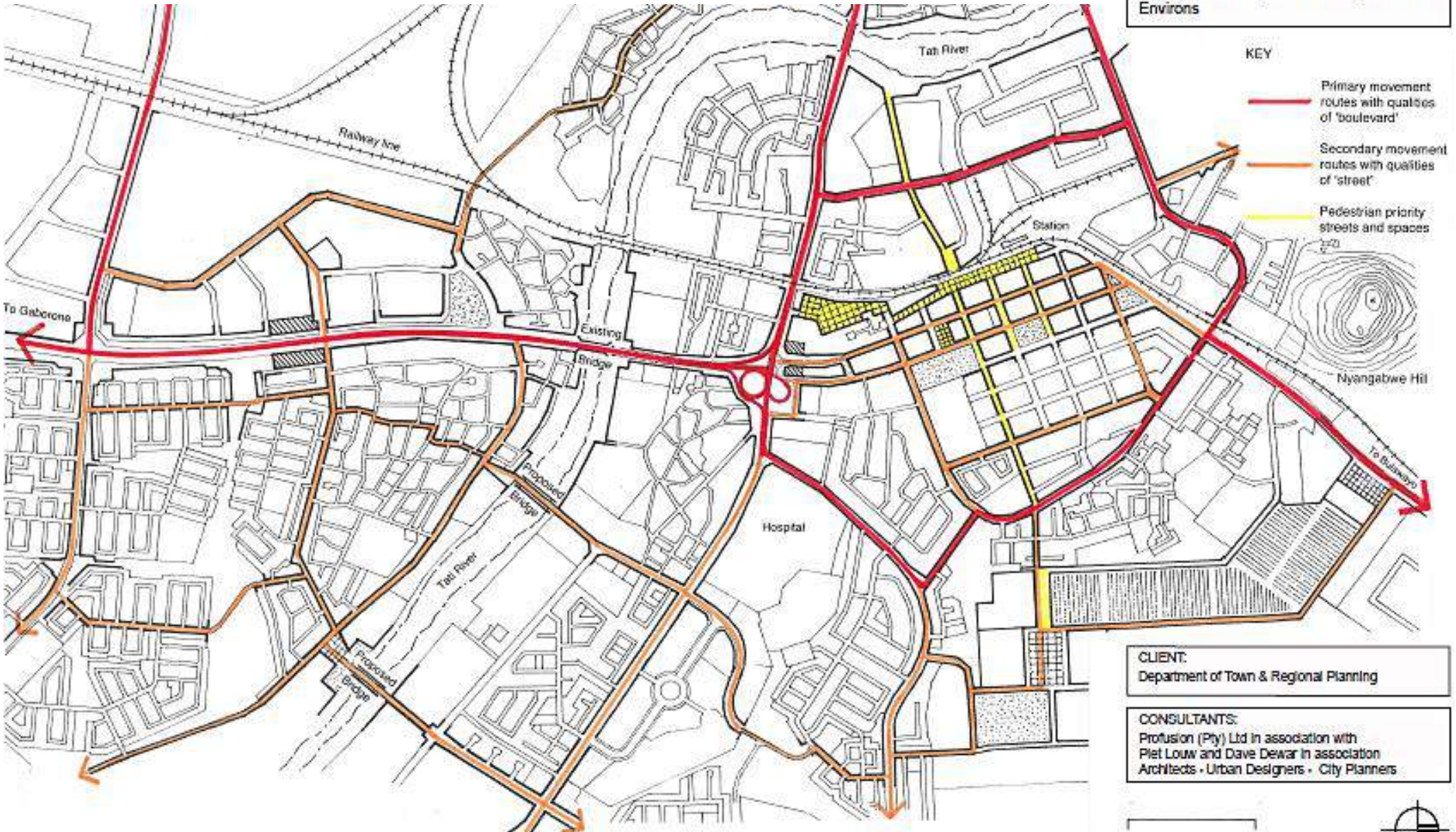
A SPATIAL DEVELOPMENT FRAMEWORK (SDF)

- An SDF constitutes the future spatial plan for the municipality.
- It maps out a desired vision and growth trajectory and it considers the main elements of public structure in relation to each other
- The focus of these frameworks should not be on land use but on the emerging capital web or capital infrastructure of the area
- While the focus of SDFs is not land use, they have profound implications on land use, since the capital web creates the logic to which private investment responds

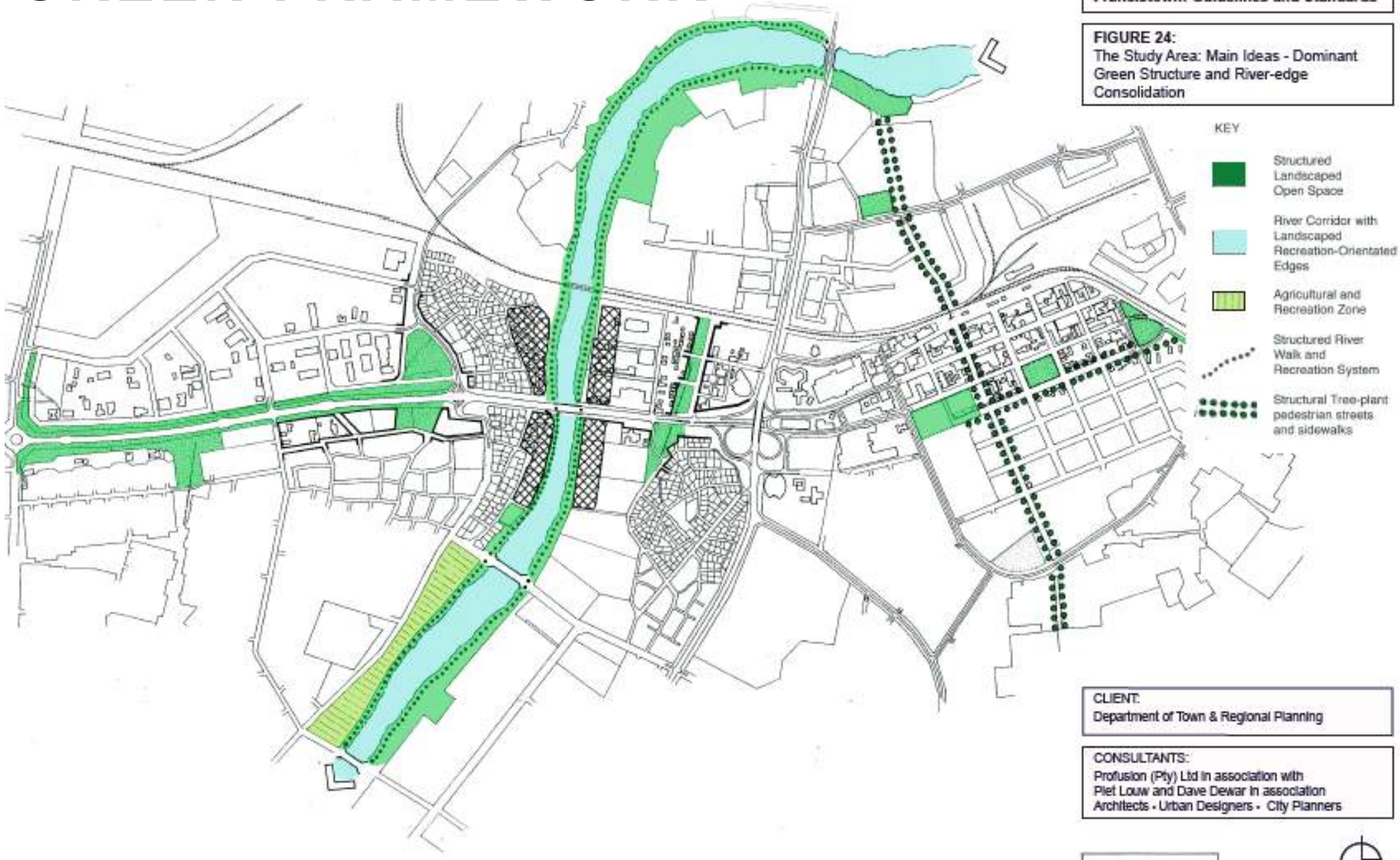
SPATIAL DEVELOPMENT FRAMEWORK



MOVEMENT FRAMEWORK



GREEN FRAMEWORK



ALTERNATIVE PLANNING APPROACH

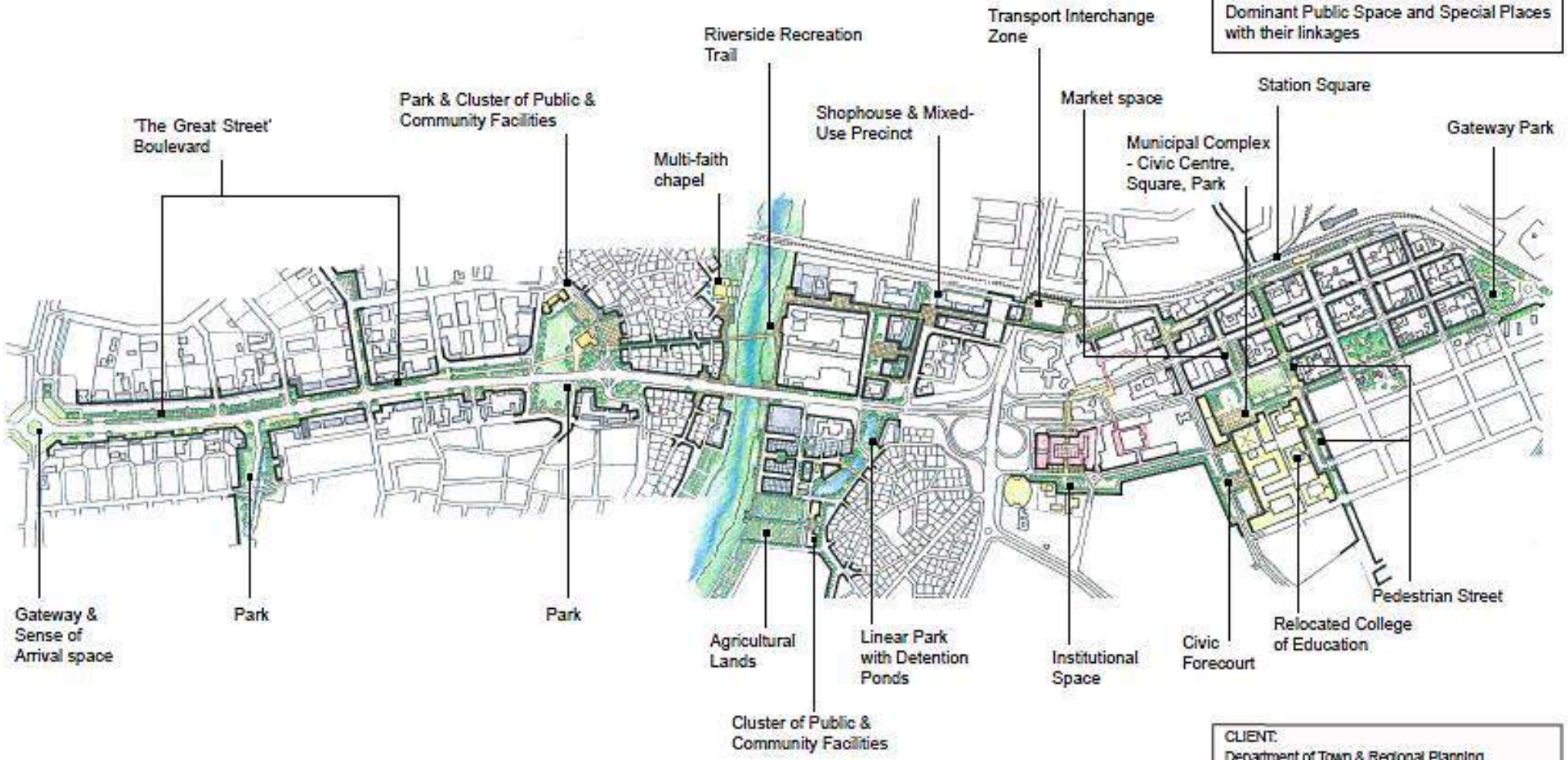
AN URBAN DESIGN FRAMEWORK

- SDFs identify desired spatial relationships between elements of the public structure. They are primarily two dimensional.
- Urban design frameworks are three dimensional: they translate the relationships into a three dimensional form
- Their focus is on the creation of positive public space
- In positive environments, all public space is seen as social space
- When these spaces are properly made, they significantly enhance the enjoyment of the activities occurring within them and they impact positively on the dignity of the entire environment

URBAN DESIGN FRAMEWORK

Draft Urban Design Revitalization Plan for the Blue-Jacket Corridor, City of Francistown: Guidelines and Standards

FIGURE 33:
Dominant Public Space and Special Places with their linkages



CLIENT:
Department of Town & Regional Planning

CONSULTANTS:
Profusion (Pty) Ltd in association with
Piet Louw and Dave Dewar in association
Architects - Urban Designers - City Planners

URBAN DESIGN FRAMEWORK

1. Design of the Southern Gateway
2. Design of the Park and New Street.
3. Planning & Design of Blue-Jacket Boulevard.
4. Design of medium density housing
5. Preparation of Precinct Plan
6. Design of medium density housing
7. River Ecological Study
8. Design of Public facility cluster
9. feasibility of the redevelopment
10. Technical Feasibility Study for integrated transportation and mixed-Use precinct.
11. Design of the Civic spine and related spaces
12. feasibility of the proposed Municipal complex
13. Design of the Station Square and related sub-precincts
14. feasibility of the College of Education
15. Design of the Civic and Institutional Avenues
16. Design of Public facility cluster

ALTERNATIVE PLANNING APPROACH

SECTOR PLANS

- These are more technical plans relating to the elements of public structure e.g. transport, social facilities, open space etc.
- They are concerned with the how of achieving the intentions and proposals of the SDF and Urban Design Framework
- These should never be pursued in isolation from the integrating frameworks
- In principle, sector plans should be seen as instruments to implement the frameworks

TOWN PLANNING SCHEMES

- Town planning schemes generally defines the cadastral boundaries as well as the zoned use of each property

CONCLUSION

CONCLUSION

DESIRED LOCAL LEVEL DESIGN QUALITIES

1. Buildings, planting, colonnades and other elements should be used to create shade and shelter from elements and to improve structural legibility
2. While a choice of modes is important, dominance should be accorded to NMT and public transport
3. Public spaces, not buildings, are the glue which holds positive settlements together. They are the public living rooms of settlements
4. Positive spaces are defined, partially protected from the elements, multi functional, humanly scaled, surveiled (human eyes over space) and landscaped
5. The street is a particularly important form of public space. It is important to achieve qualities of "street" as opposed to "road"
6. Wherever possible, informal seating should be provided in public spaces

CONCLUSION

DESIRED LOCAL LEVEL DESIGN QUALITIES

7. Buildings should be used structurally, for example corner buildings, T-junctions, where the building is used to terminate vistas, street etc.
8. Public buildings should be used as landmarks
9. Respect heritage and create a sense of place
10. Use water as a place making element
11. It is essential to have clarity about the distinction between public and private space
12. The clustering of public facilities around public space enhances convenience
13. Seek to achieve a rich mix of activities, both vertical and lateral
14. Positive urban places are fine grained

THANK YOU

JOBE OFETOTSE

TOWN PLANNER

oftjob@gmail.com

JOBE OFETOTSE