



# **DETAILED LAND USE PLAN** **for OBAGIE-N'EVBUOSA** **NEW TOWN**

(DRAFT FINAL OPTION II)



An aerial, isometric view of a suburban housing development. The scene is filled with numerous small, yellow, rectangular houses arranged in a grid-like pattern. Winding roads and streets cut through the development, and there are several green spaces and parks interspersed among the houses. The overall color palette is dominated by yellow, green, and grey. The text 'OBAGIE- N'EV NEW TOWN' is overlaid in large, bold, yellow letters across the center of the image.

# OBAGIE- N'EV NEW TOWN





# BUOSA

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# INTRODUCTION

This plan is prepared for the Obagie-N'evbuosa New Town in Benin City, Edo State, to guide its development as a new Government Residential Area (GRA) to achieve a functional, aesthetically pleasing, and sustainable urban area.

## SITE CHARACTERISTICS

### LOCATION

The project site is located at the southern fringe of Benin City and the existing GRA and to the east of the Ogbo Forest Reserve.

### SIZE

The project site encompasses a total land area of 1229.94 Ha.

### ACCESSIBILITY

The site is mainly accessed by the Airport Road from the north and the Benin-Sapele road from the east.

### EXISTING SITUATION

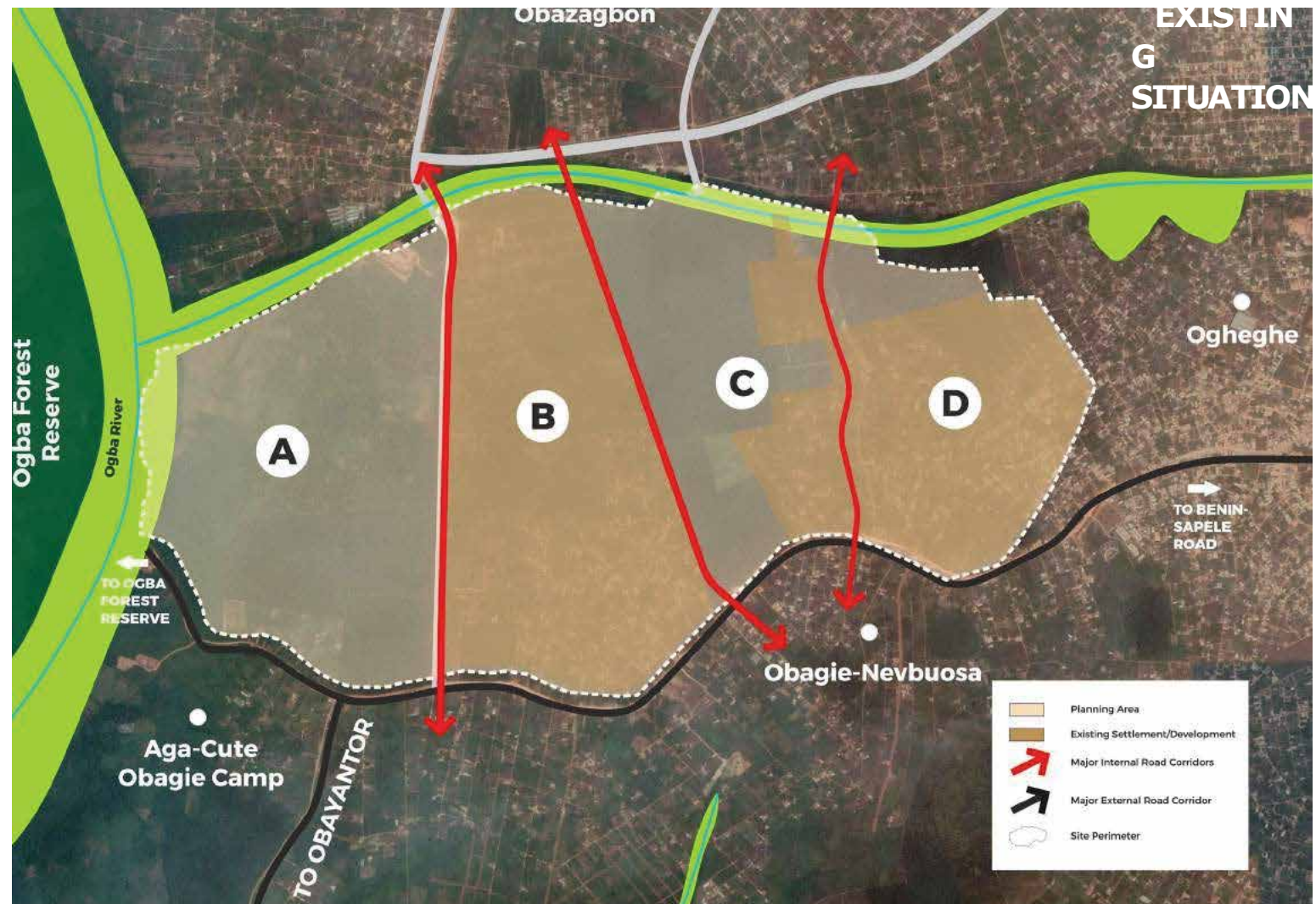
The site is made up of existing settlements, vacant land, and several cut-through streets which can be divided into four parts, ABCD. A and C are undeveloped areas while B and D are developed with existing settlements.

A - 383.38Ha

B - 351.17Ha

C - 186.09Ha

D - 309.30Ha





**LOCATIONAL  
CONTEXT**

The map displays the Benin City area with the following features:

- Benin City/GRA:** Indicated by yellow circles.
- Project Site:** A red-shaded area located south of the GRA.
- Existing Major Roads:** Shown as white lines, including the Benin-Sapele Road and Benin Bypass Road.
- Green Belts:** Shown as green-shaded areas along the roads and around the project site.
- Benin Airport:** Marked with an airplane icon.
- Other Labels:** Oba Forest Reserve, Oba-Cute Obagie Camp, Obagie-Nvbuosa, Obagie, Obasagbon, and TO OBAVANTOR.



## PLANNING REQUIREMENTS

The Obagie-N'evbuosa New Town seeks to:

1. Provide plots for the development of various land uses and necessary services in A and C, connected through B.
2. Provide services accessible by all areas (A, B, C, and D).
3. Provide a golf course with other needed facilities.

## PLANNING CONSIDERATIONS

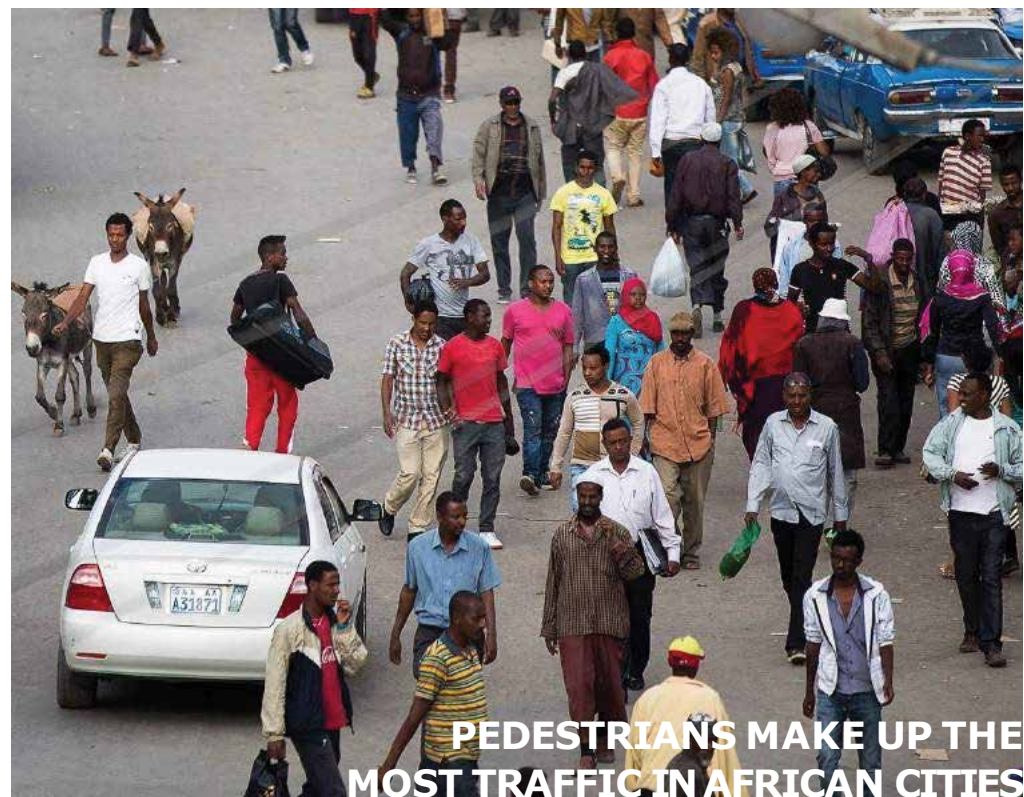
1. GRAs in Nigeria were first designed and developed as residence for colonialists and indigenous people in the colonial government.
2. As such, GRAs –and the services within them –were historically exclusive as they were used to express power by limiting to-and-through access. With colonialism long done, the lingering effects on the built environment needs to be dismantled.
3. All around the world, planners are striving to reduce private vehicle dependency because of its associated unsustainability, particularly with regards to the environment.
4. In Nigeria, the dependency is not just environmentally unfriendly but also economically strenuous as private car affordability continues to nose-dive due to current exchange rates.
5. About 60% of trips in African cities are made on foot (compared to about 20% in London and 15% in New York), making these cities walking cities<sup>1</sup>. Therefore, there is a severe need for planning and infrastructure provision to facilitate walking and protect pedestrians<sup>2</sup>.
6. Urban transformation and revitalization in Africa often lead to gentrification, the displacement of low-income citizens, and disruption of communities<sup>3</sup>.
7. While gentrification primarily affects slums, middle income citizens also fall victim especially when land tenure is not secure<sup>4</sup>.

<sup>1</sup>Halais, F. (2020). In the Walking Capitals of the World, Drivers Still Rule the Road. Retrieved from Wired: <https://www.wired.com/story/in-the-walking-capitals-of-the-world-drivers-still-rule-the-road/>

<sup>2</sup>Okyere, S., Oviedo, D., Frimpong, L., Nieto, M., & Kita, M. (2021). How to make Africa's cities more walkable, from Freetown to Nairobi. Retrieved from Quartz Africa.

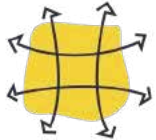
<sup>3</sup>Inguane, A. (2019). Gentrification and involuntary displacement: The nightmare for Africa's urban poor. Retrieved from Thomson Reuters Foundation: <https://news.trust.org/item/20191126133236-inxbh/>

<sup>4</sup>Nwanna, Chinwe (2015) 'Gentrification in Nigeria: The Case of Two Housing Estates in Lagos', in Loretta Lees, Hyun Bang Shin & Ernesto Lopez-Morales (eds), Global Gentrifications: Uneven Development and Displacement, Policy Press, Bristol



## DESIGN OBJECTIVES

These design considerations influenced the concept developed for the Obagie-N'evbuosa New Town with three main objectives.



### PERMEABILITY

Access should be granted to all urban residents through the GRA and to the services available within the GRA.



### PEDESTRIAN PRIORITY

Circulation priority should be given to pedestrians (and cyclists) in the GRA and environs, and private vehicle dependency should be minimized.



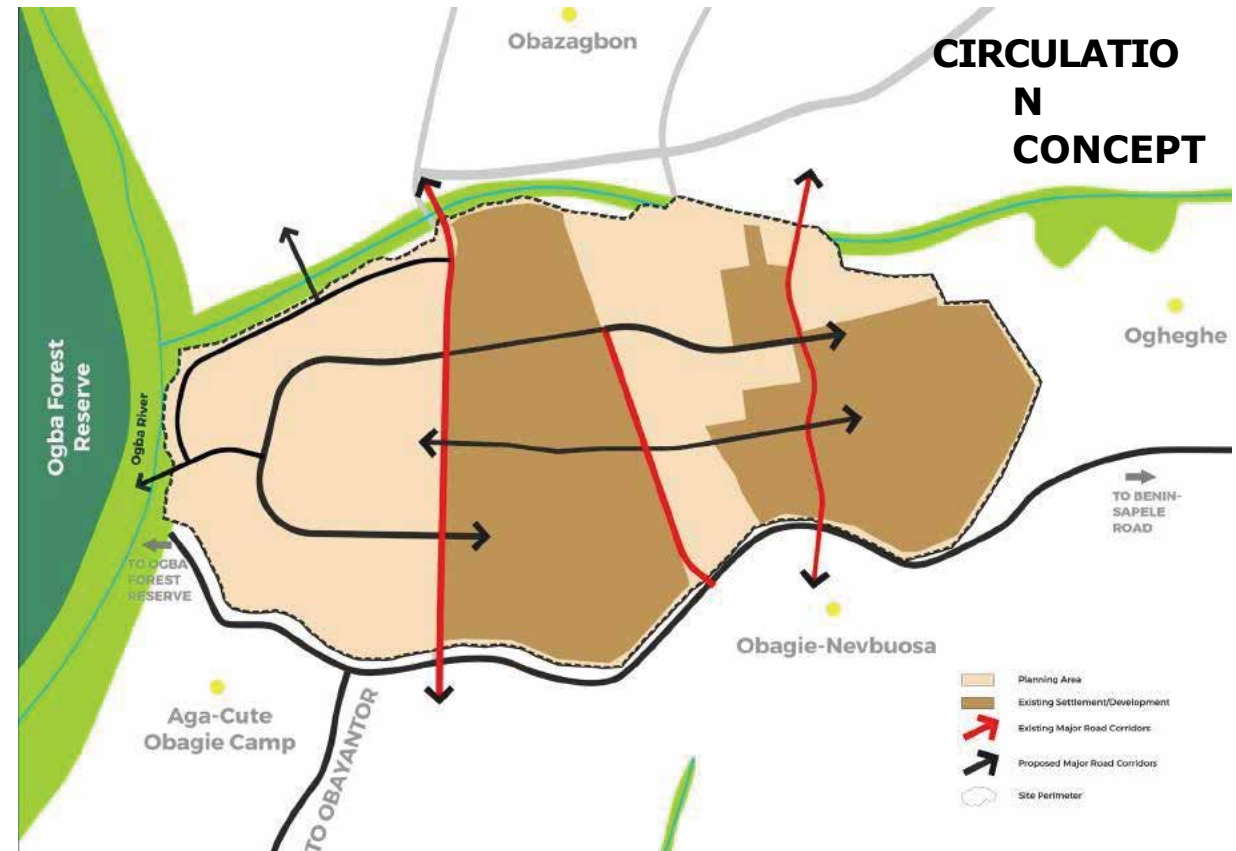
### GENTRIFICATION RESISTANCE

Existing residents within the GRA environment should be empowered to retain their homes regardless of potential rising demand and costs.

## PLANNING CONCEPT

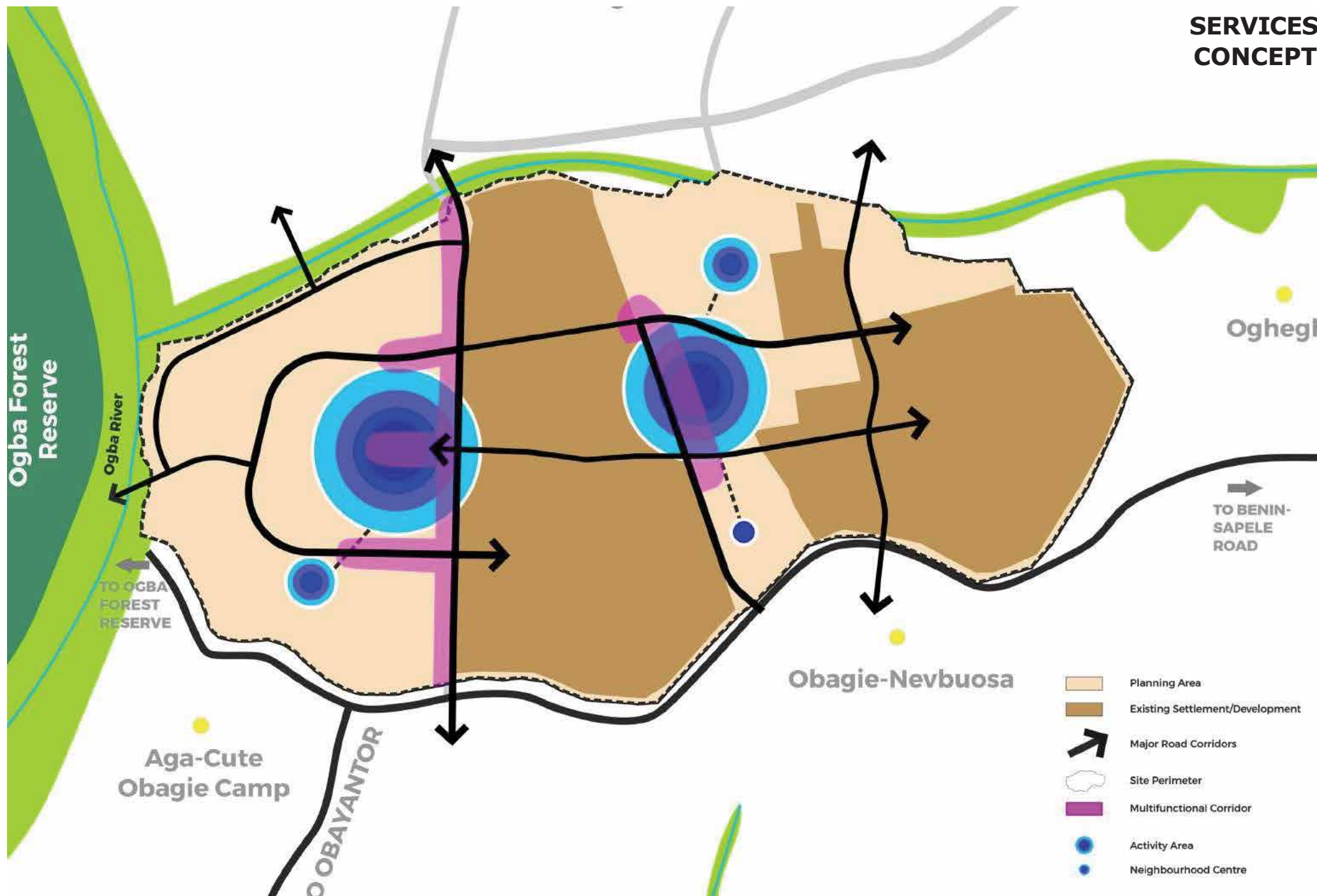
A planning concept was developed to guide the preparation of the detailed plan. The concept is capable of achieving the planning objectives having the following characteristics:

1. Multiple unrestricted access to and through the GRA.
2. Pedestrian priority routes at urban center.
3. Proposed streets through existing settlements follow paths of low resistance to prevent demolition.
4. Low, medium, and high density houses added to existing residences.
5. Multifunctional corridors along major driveways.
6. All existing settlements maintained, with access to services provided.





## SERVICES CONCEPT

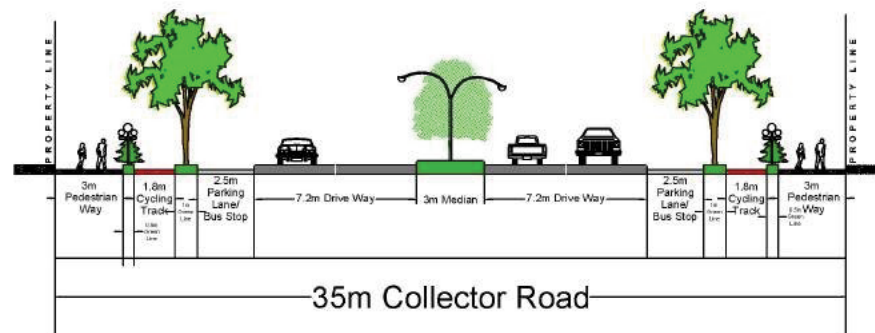
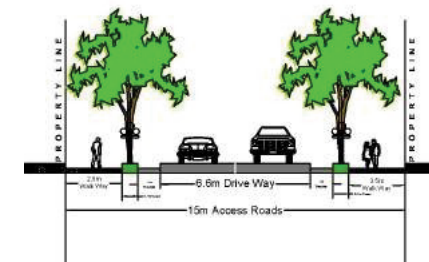
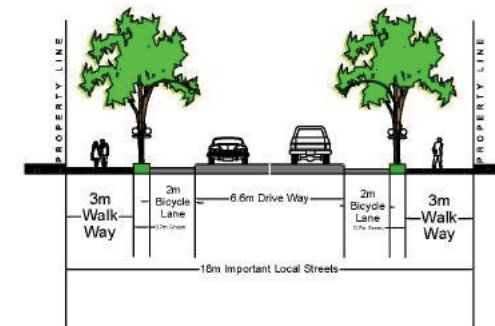




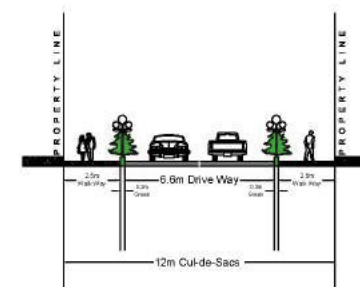
# CIRCULATION PLAN

The site is circulated with streets by order of hierarchy as follows:

Street	Description	Right of Way (m)
Cul-De-Sacs	Streets that primarily provide access to residences where the roads end.	12
Access Roads	Streets that primarily provide access to residences and empty into other access roads or important local streets.	15
Important Local Streets (ILS)	Streets that provide access to residences and services and empty into other ILSs or distributor roads.	18
Distributor Roads	Streets that provide access to higher order services and distributes traffic onto ILS and access roads within the site.	25
Collector Roads	Streets that collect through and to traffic from the site's main access roads but does not grant access to any plot within the site.	35
Pedestrian Streets	Streets that are primarily for pedestrians and cyclists with no vehicles allowed.	15
Walkways	Allowances for pedestrians and cyclists through blocks to allow for shorter commutes within the area.	3 (between residential blocks) 6 (at central areas)



## STREETS HEIRARCHY



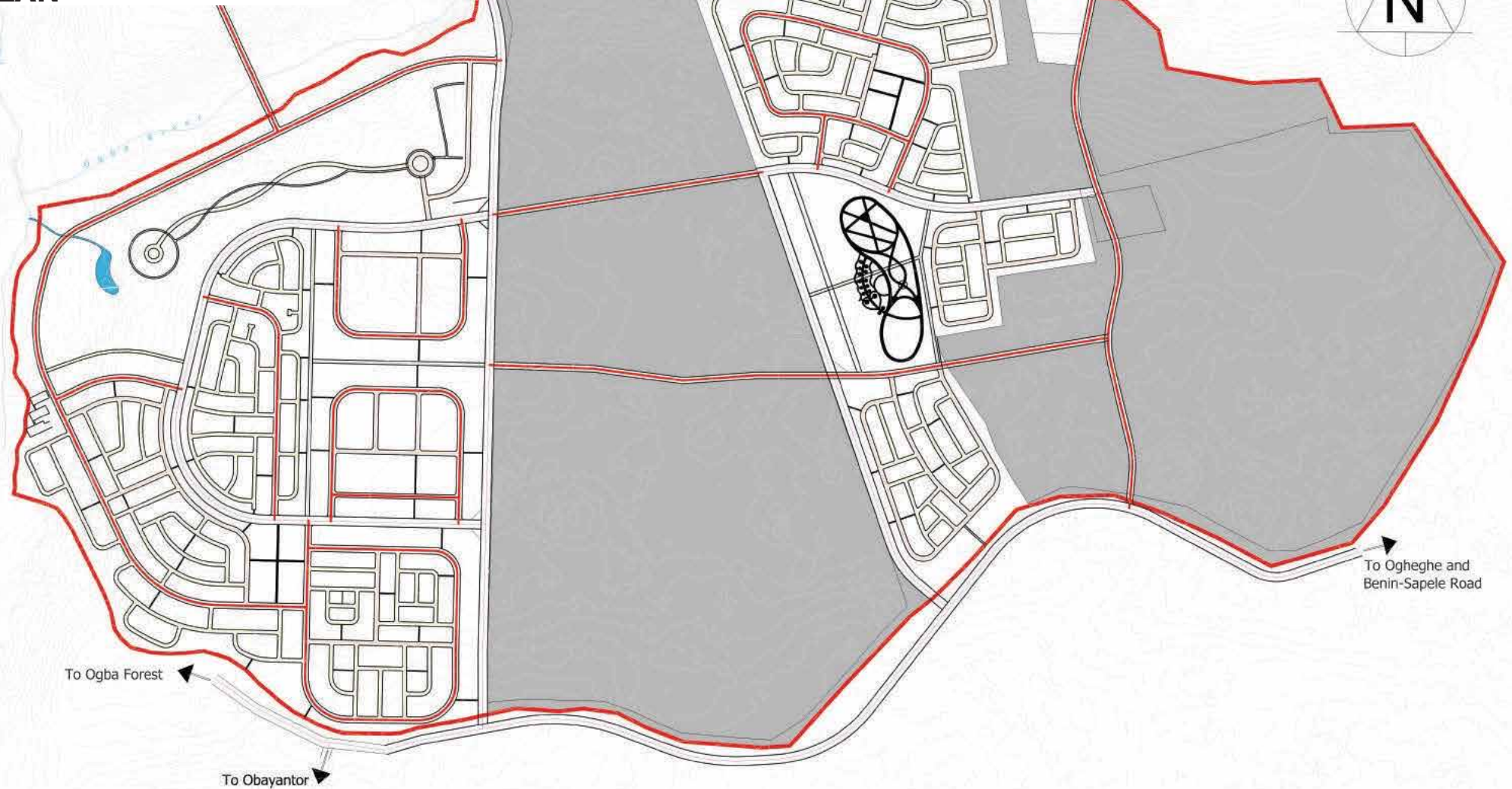


# CIRCULATION STRUCTURE





# DETAILED CIRCULATION PLAN



Map Title

## Circulation Plan for Obagie – Nevbuosa New town (Draft Final Option 2)

### Legend

<b>Residential</b> <div></div> High Density <div></div> Medium Density <div></div> Low Density <div></div> Special Residential Development <div></div> High Density Comprehensive Development <div></div> Medium Density Comprehensive Development <div></div> Low Density Comprehensive Development	<b>Commercial</b> <b>NM</b> Neighbourhood Market <b>RS</b> Retail Shop <b>M</b> Mall <b>PFSS</b> Petrol Filling and Service Station <b>SC</b> Shopping Complex <b>B</b> Bank <b>FM</b> Farmers' Market	<b>Public</b> <b>CC</b> Community Centre <b>H</b> Hospital <b>PHC</b> Primary Health Centre <b>L</b> Library <b>NS</b> Neighbourhood Squares <b>RI</b> Religious Institutions <b>FSS</b> Fire Service Stations <b>PS</b> Police Station	<b>Industrial</b> <b>PP</b> Police Post <b>ICC</b> International Conference Centre <b>EZ</b> Enterprise Zone <b>API</b> Agro-Processing Industry	<b>Educational</b> <b>SS</b> Secondary School <b>NPS</b> Nursery Primary School <b>C</b> Creche <b>RP</b> Recreational Park <b>NP</b> Neighbourhood Park <b>CPG</b> Childrens Play Ground <b>C</b> Cemetery	<b>Utility</b> <b>EPS</b> Electric Power Station <b>WBS</b> Water Board Station <b>WMF</b> Waste Management Facility <b>Others</b> <div></div> Multifunctional <div></div> Existing Development <div></div> Urban Agriculture	<b>Circulation</b> <div></div> 3 Metre Walkway <div></div> 6 Metre Walkway <div></div> 15 Metre Pedestrian walkway <div></div> 12 Metre Cul-de-sac <div></div> 15 Metre Local Street Road <div></div> 18 Metre Important Local Street Road <div></div> 25 metre Distribution Road <div></div> 35 metre Collector Road <div></div> PPS Public Parking Space

Consultants

**Siraj  
Nigeria  
Limited**

Paper Size

**A3**

Plot Scale

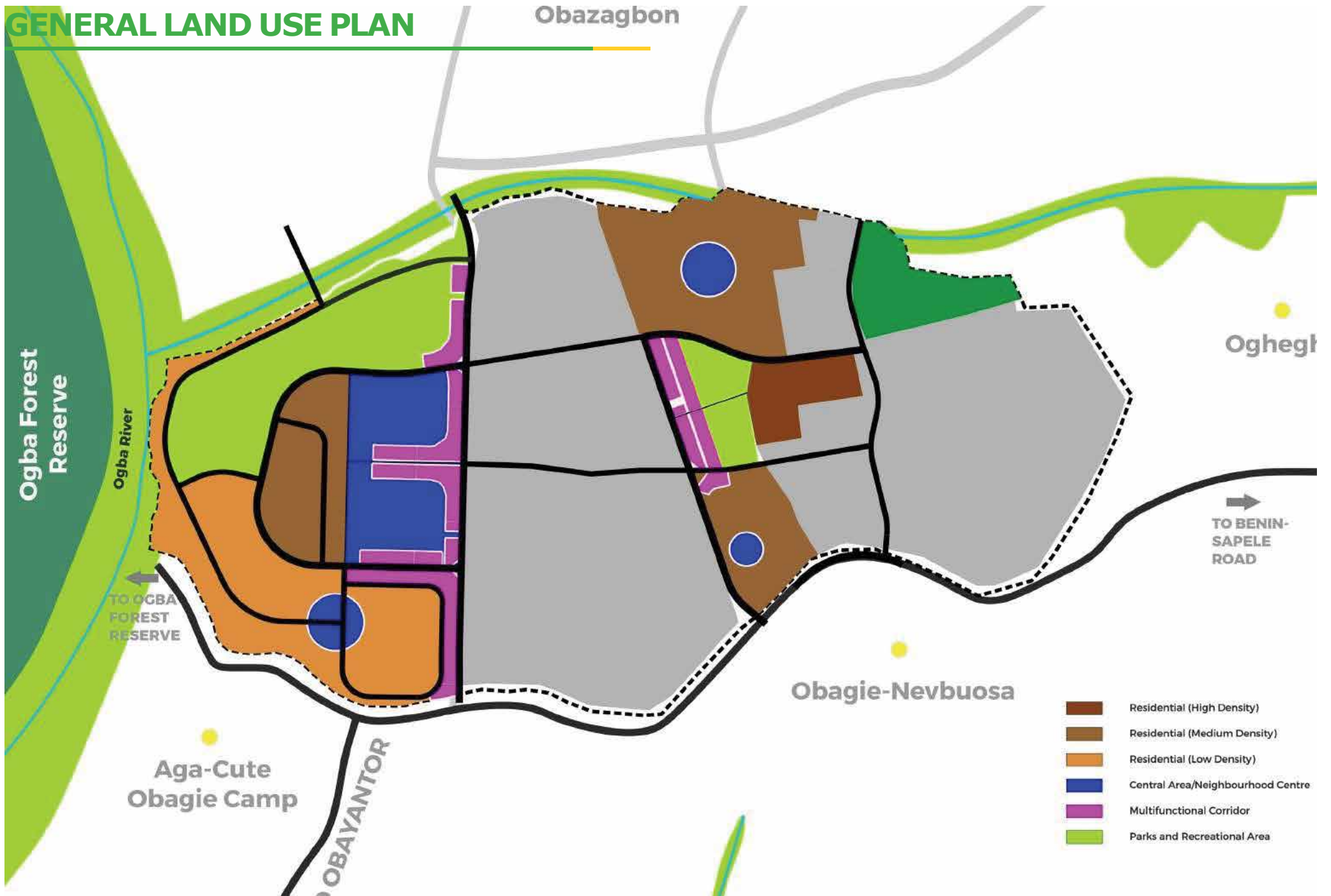
**1: 15000**

Date

**November, 2021**



# GENERAL LAND USE PLAN



## PARCELISATION PLAN



The parcelisation plan depicts the manner in which the plots were divided into parcels to be allocated to individuals, groups, or developers, and developed according to the Development Guidelines. While some areas were conceptualised to be majorly a certain residential density, as in the general land use plan, the sites have been parcelised to ensure a mix of residential densities.



# DETAILED LAND USE PLAN



Map Title						Consultants	Paper Size
<b>Detailed District Plan for Obagie – Nevbuosa New town (Draft Final Option 2)</b>						<b>Siraj Nigeria Limited</b>	<b>A3</b>
<b>Legend</b>							<b>Plot Scale</b>
							<b>1: 15000</b>
							<b>Date</b>
							<b>November, 2021</b>
<b>Residential</b>	<b>Commercial</b>	<b>Public</b>	<b>Industrial</b>	<b>Educational</b>	<b>Utility</b>	<b>Circulation</b>	
<ul style="list-style-type: none"> <li>High Density</li> <li>Medium Density</li> <li>Low Density</li> <li>Special Residential Development</li> <li>High Density Comprehensive Development</li> <li>Medium Density Comprehensive Development</li> <li>Low Density Comprehensive Development</li> </ul>	<ul style="list-style-type: none"> <li>Neighbourhood Market</li> <li>Retail Shop</li> <li>Mail</li> <li>Petrol Filling and Service Station</li> <li>Shopping Complex</li> <li>Bank</li> <li>Farmers' Market</li> </ul>	<ul style="list-style-type: none"> <li>CC Community Centre</li> <li>H Hospital</li> <li>PHC Primary Health Centre</li> <li>L Library</li> <li>NS Neighbourhood Square</li> <li>RI Religious Institutions</li> <li>FSS Fire Service Stations</li> <li>PS Police Station</li> </ul>	<ul style="list-style-type: none"> <li>PP Police Post</li> <li>ICC International Conference Centre</li> <li>EZ Enterprise Zone</li> <li>API Agro-Processing Industry</li> </ul>	<ul style="list-style-type: none"> <li>Secondary School</li> <li>Nursery Primary School</li> <li>Credde</li> <li>RP Recreational Park</li> <li>NP Neighbourhood Park</li> <li>CPG Childrens Play Ground</li> <li>C Cemetery</li> </ul>	<ul style="list-style-type: none"> <li>EPS Electric Power Station</li> <li>WBS Water Board Station</li> <li>WMF Waste Management Facility</li> <li>M Multifunctional</li> <li>ED Existing Development</li> <li>UA Urban Agriculture</li> </ul>	<ul style="list-style-type: none"> <li>3 Metre Walkway</li> <li>8 Metre Walkway</li> <li>12 Metre Pedestrian walkway</li> <li>12 Metre Cul-de-sac</li> <li>15 Metre Local Street Road</li> <li>18 Metre Important Local Street Road</li> <li>25 metre Distribution Road</li> <li>35 metre Collector Road</li> <li>PPS Public Parking Space</li> </ul>	

## LAND USE ANALYSIS

The site has been planned for a total of 2892 for different land uses. This includes residential (high-density, medium-density, low-density, comprehensive developments, and special plots), commercial, public, educational, and recreational land uses as well as multifunctional corridors and enterprise areas, including a vocational training centre.

LAND USE		NUMBER OF PLOTS	CUMMULATIVE AREA (Ha)	PERCENTAGE (%)
Residential	High Density	873	57.01	23.11 (of residential)
	Medium Density	1068	88.20	35.76 (of residential)
	Low Density	502	65.19	26.43 (of residential)
	Comprehensive Development (High Density)	9	2.31	0.94 (of residential)
	Comprehensive Development (Medium Density)	18	11.41	4.63 (of residential)
	Comprehensive Development (Low Density)	11	9.56	3.87 (of residential)
	Special Residential Plots	35	12.95	5.25 (of residential)
	Residential Total	2516	246.64	20.05
Commercial		92	39.56	3.22
Public		35	17.12	1.39
Religious Institutions		9	2.86	0.23
Educational		9	10.87	0.88
Industrial		2	2.41	0.20
Recreational		43	67.62	5.50
Utilities		8	0.75	0.06
Multifunctional Corridor		110	45.90	3.73
Existing Agricultural		1	33.27	2.71
Existing Development			609.38	49.55
Circulation			153.55	12.48
TOTAL		2892	1229.94	100.00







## RESIDENTIAL LAND USE

These are areas that are principally allocated for the development of dwelling units to serve as homes for families and individuals. The residential land uses fall into different categories according to their allowable densities which include high, medium, and low densities. Plots for comprehensive developments and special residences have also been provided.

There are a total of 2516 residential plots covering a land area of 246.64Ha.





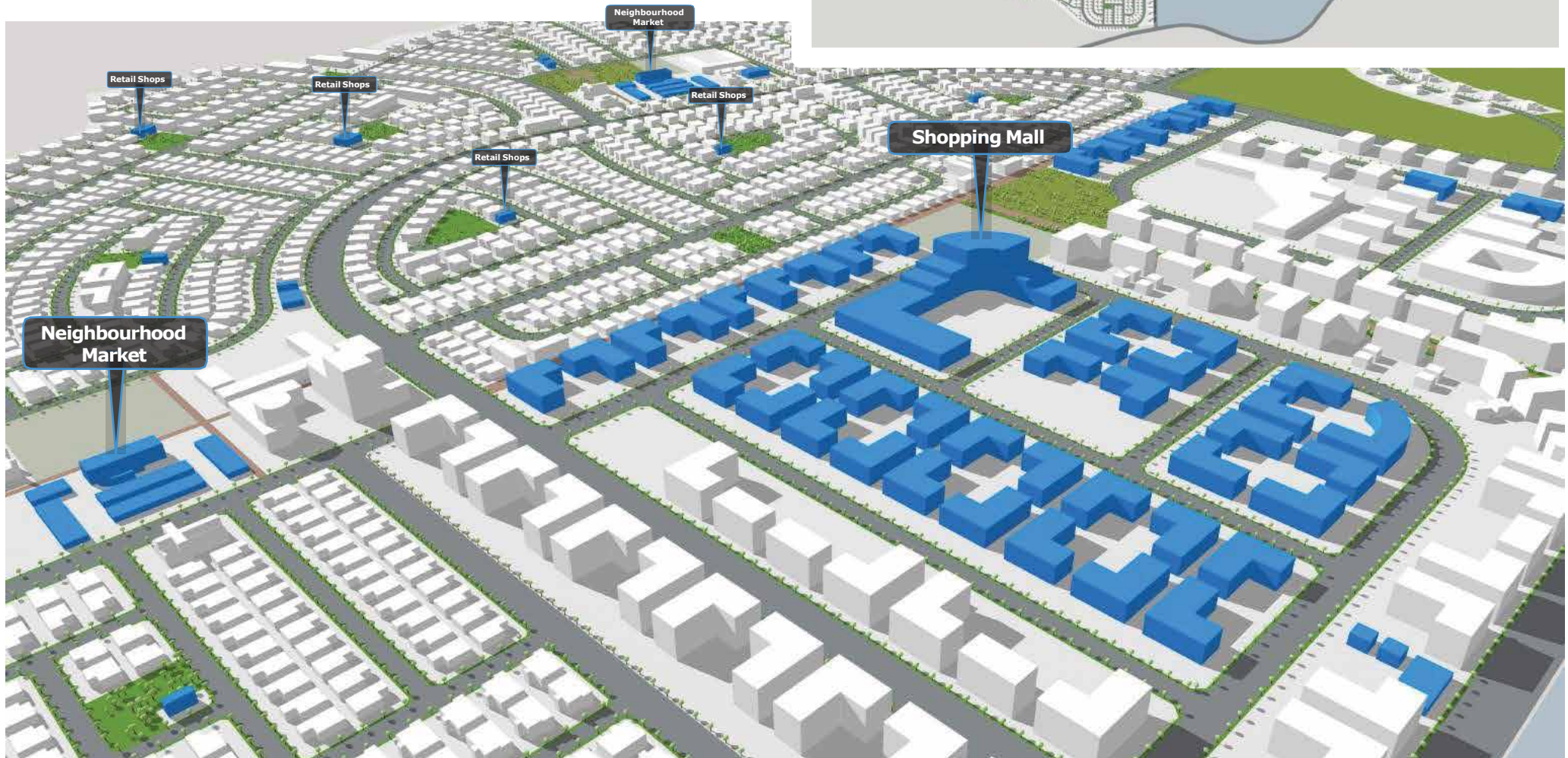




## COMMERCIAL LAND USE

Commercial land use plots have been proposed for commercial activities involving provision, buying, and selling of goods and services and use for-profit businesses. Commercial land uses include markets, shopping complexes, retail shops, hotels, banks, offices complexes and petrol filling/ service stations.

There are a total of 92 commercial plots provided in the plan which sums up to 39.56Ha.





## PUBLIC LAND USE

Public facilities are complementary communal facilities that are provided to aid satisfactory living. These includes facilities for health and socio-cultural activities, security and safety, and government offices.

There are a total of 35 public land use plots covering a land area of 17.12Ha.

9 religious institutions have also been proposed covering 2.86Ha altogether.





## EDUCATIONAL LAND USE

Educational land uses provide spaces for facilities that support multiple and diverse learning and research programmes. Educational uses provided in the plan are creche, primary school, secondary school, and a vocational training centre.

There are a total of 9 educational plots covering a total land area of 10.87Ha.





## ENTERPRISE ZONES

Enterprise zones are large plots located within or around the neighbourhood centres, they provide spaces for the establishment and operation of small and medium scale businesses, mostly technologically inclined.

One enterprise zone has been proposed in the plan for business activity and another as a vocational training centre for skills training, both with a cumulative land area of 2.41Ha.





## MULTIFUNCTIONAL CORRIDOR

Multifunctional corridors are extensive lines of high-rise buildings along major roads. They include office buildings, commercial plazas, hotels, shopping complexes, commercial banks and the likes. These uses are expected to be developed to a minimum of four suspended floors.

There are 110 of these plots provided in the plan which cumulatively amount to 45.90Ha.



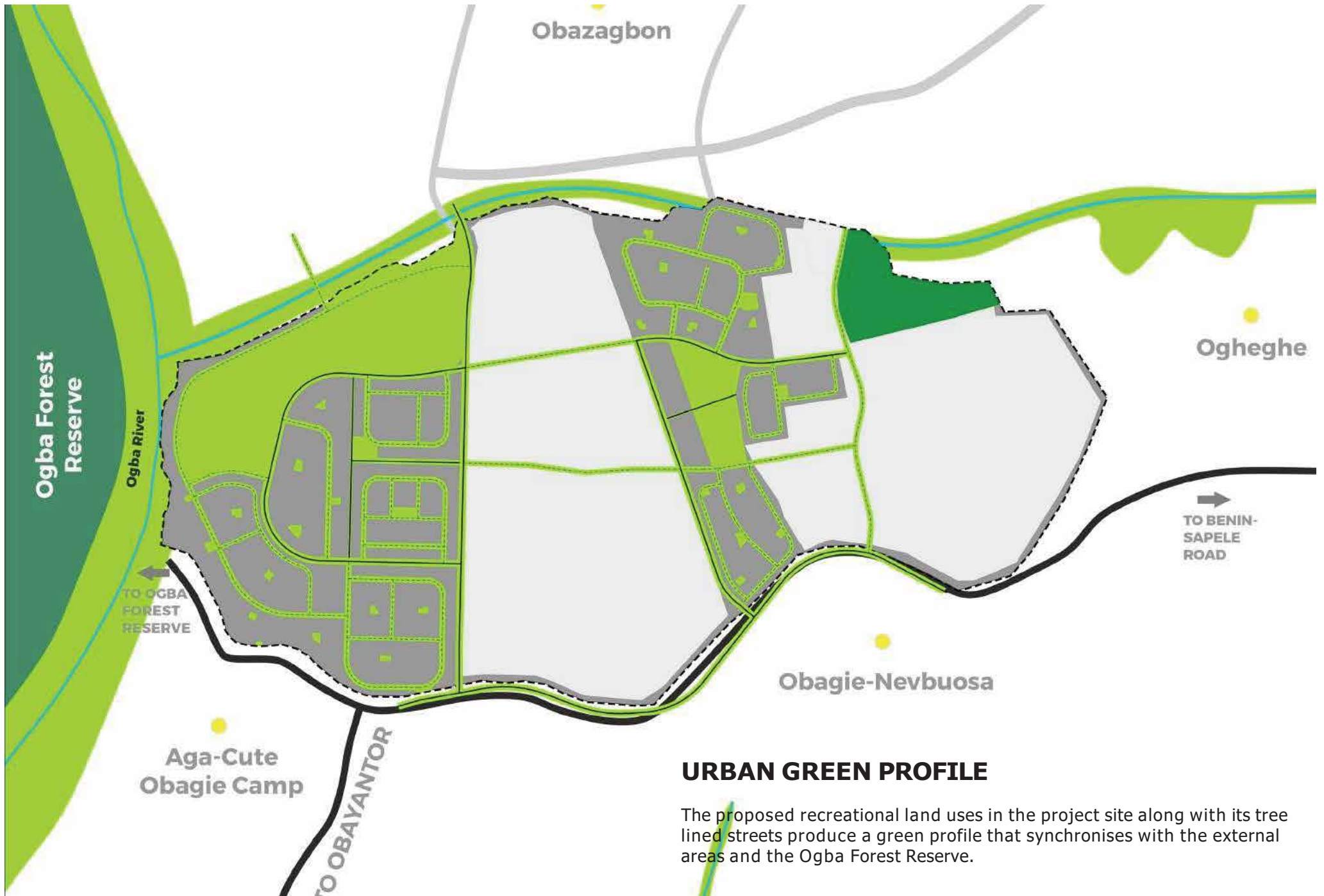


## RECREATIONAL LAND USES

Recreational plots are green areas for the enhancement of ecological conservation, physical well-being of residents and the aesthetic value of the urban area. They offer spaces for passive and active recreation such as organized sports and exercise, leisure, and relaxation. The recreational activities include a recreational parks, neighbourhood parks, children's playground, and a golf course. Proposed cemeteries, because of the nature of their green land cover, are also classified under this land use.

43 recreational plots have been proposed in the plan which cumulatively amount to 67.62Ha.





## URBAN GREEN PROFILE

The proposed recreational land uses in the project site along with its tree lined streets produce a green profile that synchronises with the external areas and the Ogba Forest Reserve.



## PROPOSED LAND USE DETAILS

LAND USE	SPECIFIC LAND USE DEVELOPMENT	NUMBER OF PLOTS
Public	Community Centre	1
	Fire Service Station	3
	Government Office	15
	Hospital	1
	International Conference Centre	1
	Library	1
	Neighbourhood Square	3
	Police Post	2
	Police Station	2
	Primary Health Centre	4
Religious Institutions		9
Comercial	Neighbourhood Market	3
	Retail Shop	28
	Mall	1
	Bank	3
	Central Commercial	50
	Petrol Filling and Service Station	4
	Farmers' Market	1
	Shopping Complex	1

LAND USE	SPECIFIC LAND USE DEVELOPMENT	NUMBER OF PLOTS
Educational	Nursery and Primary School	2
	Creche	4
	Secondary School	1
	Vocational Training Centre	1
Industrial	Agro-Processing Industry	1
	Enterprise Zone	1
Recreational	Central Recreational Park	2
	Neighbourhood Park	2
	Children's Playground	25
	Golf Course	1
	Cemetery	2
Multifunctional Use		110

## FOCUS AREAS

There were three focus areas provided in the plan which shall improve the aesthetics and physical quality of the area. These are the urban centre, golf course, and recreational park.

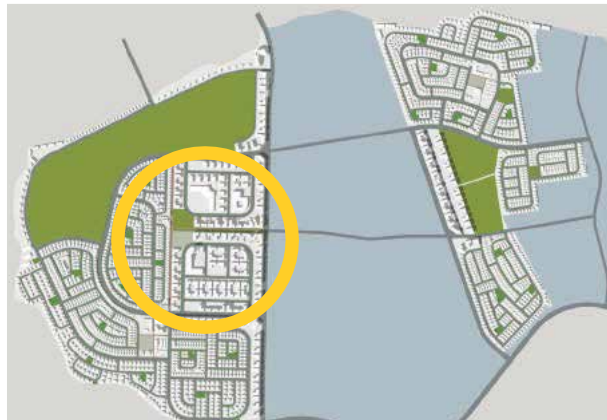
### URBAN CENTRE

The urban centre is proposed as the major activity area on the site. It comprises of pedestrian walkways which should be designed and developed to make the pedestrians' walk interesting through on-street activities like art showcasing, street trading, games, sit-outs, etc. Plots within the urban centre should also not be fenced (except with hedges) to maintain permeability.

The urban centre consists of:

- Multifunctional Uses
- Commercial Buildings
- Government Offices
- Multi-level Public Parking Facilities
- Vocational Training Centre
- Hospital
- Secondary School

It is recommended that the commercial developments within the urban centre contribute to improving the experience of the pedestrian. This can be done by having transparent ground floors with activities that can take advantage of foot traffic such as restaurants, cafes and coffee-shops, book stores, boutiques, etc. with dining and exhibitions that spill onto the pedestrian street.





## GOLF COURSE

A golf course area is proposed within the site covering a land area of 117.9Ha as follows:

- |                               |  |
|-------------------------------|--|
| 18-hole golf course (66.09Ha) | <ul style="list-style-type: none"> <li>• Practice area</li> <li>• Club house (with indoor activities e.g. Gym, Squash, Pool, etc.)</li> <li>• Children's playground</li> <li>• Tennis courts.</li> </ul> |
|-------------------------------|--|

- |                      |  |
|----------------------|--|
| Other uses (24.87Ha) | <ul style="list-style-type: none"> <li>• International Conference Centre</li> <li>• Hotel</li> <li>• Multifunctional Uses</li> <li>• Commercial Uses</li> <li>• Circulation</li> </ul> |
|----------------------|--|

86 golf course mansions (27.03Ha)







## RECREATIONAL PARK

The recreational park is proposed on a land area of 19.87Ha. It is proposed to be a space for gathering of the community for active recreation.

Access to the recreational park should be unrestricted to allow all residents enjoy its benefits and improve the health and well-being of the residents and visitors alike.

Activities within the recreational park include:

Active Recreation	Passive Recreation
<ul style="list-style-type: none"> <li>• Football</li> <li>• Volleyball</li> <li>• Badminton</li> <li>• Tennis, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Picnics</li> <li>• Relaxation</li> <li>• Walks</li> <li>• Photography, etc.</li> </ul>





# DEVELOPMENT GUIDELINES

## RESIDENTIAL LAND USE

Category	Sub-Category	Maximum Building Coverage	Minimum Setbacks (m)	Maximum Number of Floors	Number of Primary Structures	Allowable Ancillary Facilities	Maximum Number of Families
High Density	Block of Flats or Apartments	50%	F: 6. S: 3; 3. B:3	4	1	Parking, Gate/Generator House, Store.	6
	Single Family Dwelling	50%	F: 6. S: 3; 3. B: 3	1	1	Parking, Gate/Generator House, Store.	1
Medium Density	Terraces	45%	F: 6. S: 3; 3. B: 3	3	1	Parking, Gate/Generator House, Store.	4
	Single Family Dwelling	40%	F: 6. S: 3; 3. B: 3	1	1	Parking, Gate/Generator House, Store.	1
Low Density	Semi-Detached	40%	F: 6. S: 3.5; 3.5. B: 3		1	Parking, Gate/Generator House, Store.	2
	Single Family Dwelling	35%	F: 6. S: 3.5; 3.5. B: 3		1	Parking, Boys' Quarters, Swimming Pool, Gazebo, Gate House, Store.	1
Comprehensive Development	High Density	50%				Parking, Gate/Generator House, Store, Garden.	60 – 80 Families/Ha
	Medium Density	45%					40 – 60 Families/Ha
	Low Density	35%					20 – 25 Families/ Ha
Special Residences	Mansions	30%	F: 6. S: 4, 4. B: 4	3	1	Parking, Boys' Quarters, Swimming Pool, Games Court, Gazebo, Gate House, Store.	1



## OTHER LAND USES

Category	Sub-Category	Maximum Building Coverage	Minimum Setbacks (m)	Maximum Number of Floors	Number of Primary Structures	Allowable Ancillary Facilities	Maximum Number of Families
Commercial Developments	60%	F: 6. S: 4; 4. B: 3	4	6	1	1 Car / 75sqm of building floor space	Parking, Security Post, Utility (Generator, Store, Maintenance Office), ATM Stand,
Public/ Educational/ Community Facilities	50%	F: 6. S: 4; 4. B: 4	4	6	1	1 Car / 75sqm of building floor space	General: Parking, Security Post, Utility (Generator, Store, Maintenance Office), Health Centres: Pharmacy, Catering, Mortuary, and other Medical Units,
Multifunctional Corridor	70%	F: 6. S: 4.5; 4.5. B: 3	4	10	1	Refer to Specific Plot Use	Refer to Specific Plot Use
Recreational Use	Minimum of 70% soft landscape cover						Parking, Security Post, Utility (Generator, Store, Maintenance Office), Retail Shops, Catering Service,
Enterprise Zone	50%	F: 6. S: 4; 4. B: 4	4	8	1	1 Car / 75sqm of building floor space	Parking, Security Post, Utility (Generator, Store, Maintenance Office), ATM Stand,

## RECOMMENDATIONS

In order to achieve the objectives of these design concepts, it is recommended that:

1. Urban renewal should be carried out for existing settlement to improve their infrastructure and services.
2. Land tenure should be granted to existing residents to improve their capacity to resist gentrification and build trust with the government and its project.
3. Provision of roads, parks, and other infrastructure should be within the first phase of development –before the construction of houses and other buildings.

