COUNTY GOVERNMENT OF BUNGOMA

THE MUNICIPALITY OF KIMILILI DEVELOPMENT APPROVAL STANDARDS AND GUIDELINES 2022

Guiding Land Use for Sustainable Development

February 2022

Table of Contents

DEFINITION OF TERMS

Building	Any structure, whether temporary or permanent, having a roof and intended for the shelter, housing, or enclosure of persons, animals or materials.
Building Line	a line drawn across a plot such that no building or permanent structure, except a boundary wall or fence of approved design enclosing the plot, may be within the area contained between that line and the regular line of the street on which the plot has frontage;
Development	Any construction, placement of material, erection of any nature grading to improved or unimproved site
Dwelling	A building or portion thereof which is designed or used as living quarters for one family and which contains equipment and related facilities for living, sleeping, cooking, and eating and with facilities for sanitation
Frontage	The required length of the front plotline measured at the street right-of-way line. Where the front plotline is an arc, required frontage may be measured along the required front yard setback line.
Floor Area Ratio	Area covered by the development.
Landscaping	Enhancement of the appearance of land, especially around buildings, by altering its contours and planting trees, shrubs, and flowers
Plot access	Entry or approach to the plot
Plot coverage	Area of the plot that is covered by a development.
Road reserve	Area on either side of the road set aside for future expansion
Setbacks	Rear distance from a plot boundary to a proposed development
Structure	Anything constructed, erected, or assembled that requires a location on or within the ground, or attachment to something having a location on the ground and has any dimensions.

CHAPTER ONE: INTRODUCTION AND BACKGROUND INTRODUCTION

1.1 Over view

Physical and land use planning refers to the active process of organizing the structure and function of places to ensure an orderly and effective development process. It is the deliberate determination of spatial patterns with an aim to achieving the optimum level of land utilization while maintaining a high degree of aesthetic quality in a sustainable manner. All spatial development activities, including industrial development, social and physical infrastructure, agriculture, conservation, and housing, are rooted on land. These activities often have different, sometimes competing demands. It is therefore imperative that an overall framework that manages these development activities is in place. Physical Planning and land use planning Act 2019 has provided this much needed framework at high level.

The foregoing therefore requires that there is need for development of this framework at lower level which will ensure that any building designed and constructed should comply with the same. These should be in form of standards and guidelines that sets out, in the simplest and shortest way possible, requirements to ensure that buildings are built in such a way that persons may live and work in a healthy, safe and convenient environment.

Therefore, it's important to note that the Physical planning standards, guild lines and regulation are developed to ensure guided and controlled land use management and urban development. They also ensure public order, safety, health and aesthetics. In general this document is intended to provide a basis for properly planned and controlled developments within the Municipality. These regulations will also limit the rampant land fragmentation that is a threat to the agricultural potential.

1.2 Problem statement

Municipality of Kimilili lacks a detailed physical and land use planning framework to guide the use of land and control development. As a result we have had uncontrolled development such as massive land subdivision, change of use, extension of use, among other developments. This has led to loss of rich agricultural land, urban sprawl, uncontrolled urban development, slum proliferation, land speculation and environmental degradation among other planning challenges. These regulations are therefore aimed at mitigating the foregoing challenges.

1.3 Purpose

The development approval Standards and Guidelines is a Municipality manual or criteria for determining the scale, location and site requirements of various land uses and facilities. The planning standards affect the

allocation of scarce land and financial resources. They should therefore, be applied with a degree of flexibility. Trade-offs may be necessary so that the community at large could benefit most from the development.

The development approval Standards and Guidelines is applicable in four aspects:-

Forward Planning	it provides an equitable basis for allocating scarce land resources and location guidelines for various types of land uses and facilities.
Development Control	it provides guidance on the scale, intensity and site requirements of developments as well as the supporting facilities required.
Plan Implementation	it provides a yardstick to measure the sufficiency of land for various uses and adequacy of facilities to serve a planning area.
Raising Quality of Life	it provides guidelines on environmental planning and conservation of our natural landscape, habitats, cultural heritage and townscape.

1.4 Scope

These development approval standards and guidelines cover provisions for national, regional and local physical and land use planning, siting, site operations, building design, building and infrastructure services, disaster risk management on construction sites and maintenance of all buildings.

1.5 Objectives

The overall aim of these development approval Standards and Guidelines is to promote and enhance physical land use planning and its enforcement at the Municipality level; to encourage optimal use of resources; enhance safety, health and convenience. In order to ensure that these Regulations will remain valid and up-to-date, they will be reviewed and published at least after 5 year.

The broad objectives of development approval standards and guidelines

a) Equitable and balanced spatial distribution of development.
b) Orderly, efficient and coordinated spatial socio-economic development.
c) To facilitate equitable distribution of services.
d) Integration of the functions of rural and urban settlements; and
e) The optimum use of land for agriculture, forestry, industry, human settlements, infrastructure and other competing land uses.

1.6 Justification

The Constitution of Kenya Article 60(1) and Vision 2030 require that land be held in manner that is equitable, efficient, productive and sustainable. These regulations will therefore serve to ensure land is used in the most efficient and sustainable manner.

The Bill of Rights in the Constitution of Kenya provides for clean and healthy environment and the right to adequate health care, housing, sanitation, food, water, education, social security under Article 42 and 43. These regulations will ensure that development is orderly and the guarantee a high quality of life.

The physical and land use planning Act 2019 provides for preparation of physical plans and formulation of Municipality laws to regulate zoning in respect of use and density of developments.

1.7 The Drivers of development approval standards and guidelines

1.7.1 Sustainability

1.7.2 Accountability

Transparency in provision of development approval standards and guidelines reduces opportunities for corruption. This can be attained by ensuring access to available development approval standards and guidelines.

1.7.3 Destruction of property

1.8 Context and Rationale

These development approval standards and guidelines are consistent with the broader context and direction provided by:-

a) The CoK 2010
b) The CoG Act 2012
c) Physical and Land Use Planning Act 2019
d) Urban Areas and Cities Act 2011
e) Building Code of 1968
f) Planning and Building Regulations, 2009
g) The Survey Act – Cap 299
h) The Roads and Roads of Access Act

i) The Public Health Act – Cap 242
j) The Electricity Act
k) The Environmental Management Coordination (Amendment)Act (2015)
l) The CIDP
m) The Municipality Service Charters
n) Principles of good corporate governance

Any building designed and constructed should comply with these development approval standards and guidelines. These development approval standards and guidelines set out, in the simplest and shortest way possible, requirements to ensure that buildings are built in such a way that persons may live and work in a healthy, safe and convenient environment.

1.9 Methodology

The preparation of these guidelines involved: literature review, field survey, brainstorming, consultations and stakeholders participation. Data were acquired from both primary and secondary sources where various documents such as published books, enacted legal statutes and policies were reviewed. Field data collection majority involved rapid appraisal, informal survey and structured observation of the development trends.

Consultations cut across various stakeholders including but not limited to Municipality Executive Committee Members; the Municipality Physical and Land Use Planning team; desk research by a technical team from the built environment departments and the general members of the public among others.

This was followed by presentation of the draft to the Executive that preceded forwarding to the Municipality Assembly for ratification.

1.9.1 Expected outputs

The final output of the exercise was presented inform of a written report with clear planning standards, guidelines for development application and approval.

CHAPTER TWO: RESIDENTIAL STANDARDS

The standards set out below refer to all types of residential developments categorized as Low density, Medium density and High density

2.1 Plot Size and Shape

The permissible range of plot sizes is from 50x100ft. The minimum plot size should be taken as a guideline for designing residential layouts to make best use of land and infrastructure.

In order to minimize infrastructure costs per plot, all plots should be rectangular in shape with the frontage shorter than the depth of the plot. In certain circumstances, the depth should be about twice the frontage width.

2.2 Building Lines

Buildings must be set back from plot boundaries for reasons of privacy, amenity, health and safety. The walls of the building must be on or behind the specified building lines detailed in table 2-1 subject to all other standards being met.

In high density areas, one of the side building lines of the plot may be reduced to 1m, provided there are no main windows on that side.

2.3 Plot Coverage

This refers to maximum percentage (%) that a building or buildings on a residential plot may cover. The permitted plot coverage in residential areas varies according to the residential zones as indicated in table 2-1.

2.4 Plot Access

Every plot must have direct vehicular access to a road. A building shall not be approved to be erected on any plot which has no proper and sufficient access to a road, such road not being a sanitary lane or passage.

In low and medium density residential areas, a private driveway leading to the house should be 3m wide. There should be sufficient turning space at the end of the drive to enable cars turn and leave the plot in forward gear.

Where the driveway crosses a storm water drain it is necessary to construct a culvert to the satisfaction of the CECM roads.

Plot accesses for corner plots should be at the extreme end of the plot away from the corner.

2.5 Design/Materials

a) All residential developments must be built of permanent materials or any other materials whose performance has been approved by the relevant authorities.

b) All roofs must be permanent and preferably non - reflective. In low and medium density areas high quality roofing materials are recommended, though this standard may be relaxed in smaller urban centers and rural areas within the Municipality.

2.6 Plot Layout and Building Design

The design for residential developments also takes into account the following:-

a) Orientation of the house should be carefully considered in relation to the sun and prevailing winds. Living rooms and canopies should preferably face the main garden. Windows of living rooms must not overlook neighboring houses or gardens.

b) The plot layouts should respect the physical configuration of the site, and placement of houses should generally follow natural contours.

c) Two or more storey developments are acceptable but care must be taken with siting, orientation and design to protect the privacy of people in adjoining plots.

d) Service areas of houses, e.g. dustbins, wood and other storage areas, drying areas, etc., should be screened from public view. This can be achieved by planting hedges or walls

e) Any detached developments such as servant quarters and guesthouses must be positioned and designed to ensure privacy to the occupants of the main house and the quarters. Windows of servant's quarters must not face onto adjoining plots.

f) All future extensions to the existing developments must match in terms of design, materials and external finish.

2.7 Car Parking

A car parking area must be provided on low and medium density residential plots. The surfaces of such parking areas must be adequately drained to the nearby drainage channel or soak pit or as advised by the relevant Municipality department. On low density plots there must be minimum parking space for two cars while on medium density plots, one car parking space is sufficient per unit respectively. It is not essential to have car parking space on high density residential plots but where possible, public car parks within the neighborhood should be provided.

2.8 Access to Utilities

2.8.1. Water.

All residential plots must be served by piped water supply, or any other suitable supply, to the approval of the appropriate water authority e.g. NOZWASCO.

2.8.2. Surface Water Drainage

Surface water run-off from buildings and hard surfaces must drain into the nearby drainage channel or soak pit to the approval of the relevant Municipality department.

2.8.3. Sanitation

In urban areas all permanent developments must have waterborne toilet facilities drained to a septic tank and within the plot or connected to a central sewer line system, to the approval of the relevant Municipality department. Septic tanks must be positioned so that they are accessible for emptying.

2.8.4. Solid Waste Disposal

Any refuse must be stored in proper containers for collection.

2.8.5. Power Supply

Permitted sources of power in urban areas include electricity from the national grid, solar, generators among others. Electricity will be supplied to all permanent developments in urban areas by the approved entity. Generators, solar and wind systems will be permitted in residences subject to conditions set by the relevant Municipality department and in consultation with the responsible electricity regulatory body.

2.9 Boundary Fencing

Plots may be enclosed by hedges, wire fences and perimeter walls. The following restrictions apply:

a) Where a metal grill is to be used, fences or solid walls must not exceed 1.2 meters in height and a metal grill shouldn't exceed 2 meters.
b) Where no metal grill is to be used, wall fences should be 2.7m or equal to the wall plate height of the development or whichever is appropriate.
c) In high density residential areas, solid walls must not exceed 1.5 m supplemented by a metal grill of not more than 2m high.
d) Wire fences must be of chain link or barbed wire supplemented by planting where possible.

e) Along the road boundaries, fences or walls must be set back 1m inside the plot to leave space for infrastructure such as water supply, landscaping.

f) The boundary walls/fencing should at all times be within the plot beacons.

2.10 Landscaping

The appearance of a residence can be greatly improved by exemplary landscaping. It also helps make the housing area look more attractive. The site plan should indicate an outline of landscaping as of the planning application. Existing mature trees should be retained wherever possible and where none exists, planting should be encouraged.

2.11 Ancillary Uses

2.11.1. Swimming Pools

Private swimming pools shall be permitted. They should be positioned within the building lines, and be fenced for safety reasons. The drainage system must be to the approval of the relevant Municipality department.

2.11.2. Guest Wing

Guest wings should not be located more than 10m from the main house connected through a walkway. They should comprise of not more than two bedrooms.

2.11.3. Temporary Structures

Small structures such as poultry runs, poultry house, charcoal store, dog kennel shall be permitted provided they are well screened from the road and located at the rear of the plot.

2.11.4. Business premises

It shall not be permitted to use a residential building or plot for any business purpose unless after preparation of a Change or Extension of use and approved by the Municipality of Kimilili.

Table 2.1 Standards for Residential Developments

	Low Density	Medium Density	High Density Detached	High Density Semi Detached
Maximum Plot coverage	20%	40%	40%	50%
Plot Ratio				
Minimum Building Lines				

Front	8	6	3	3
Side	3	2	2	2
Rear	12	8	2	2
Building materials	Permanent	Permanent	Permanent	Permanent
Roofing finish	Tiles, Iron sheets	Tiles, Iron sheets	Tiles, Iron sheets	Tiles, Iron sheets
Water supply	Piped, borehole, shallow well	Piped, borehole, shallow well	Piped, borehole, shallow well	Piped, borehole, shallow well
Sanitation	Sewer or Septic tank	Sewer or Septic tank	Sewer or Septic tank, pit latrine	Sewer or Septic tank, pit latrine
Onsite parking spaces	2 per unit	1 per unit	-	-

CHAPTER THREE: STANDARDS FOR COMMERCIAL AREAS

3.1 Categories of Commercial Activities

The types of developments permitted in commercial areas are as follows:-

Table 3.1: Developments in commercial areas

No.	Type of Development	Definition
1	Shops	Premises for the sale of goods to the public
2	Wholesale shops	Premises for the sale of goods to retailers, but excluding warehouses and distribution depots
3	Markets	Premises for sale of consumable goods including farm produce to the public
4	Services	Restaurants, banks, post offices
5	Offices	Premises for conducting official business
6	Service industry	Maize mills, wood/furniture workshops, garages
7	Accommodation	Hotels, Motels, rest houses, lodges and guest-houses, hostels
8	Entertainment	Bars, night clubs, cinemas
9	Places of worship	Churches, mosques
10	Public services	Clinics, police stations
11	Sports facilities	Football fields, playgrounds
12	Community facilities	Community halls
13	Other facilities	Petrol stations, garages

3.2 Statutory Controls

All commercial buildings must comply with the provisions of the Public Health Act. Hotels and rest–houses must conform to the standards set out in the respective Acts. Commercial activities shall require a license from the Municipality of Kimilili.

3.3 Plot Size and Shape

A standard commercial plot shall be 15m wide and 30m long and 7.5m wide and 30 m long as the minimum, to accommodate one minimum standard building of 7.5m wide. The depth of 30m is designed to accommodate a structure of between 10m and 18m long plus a front canopy and rear space for septic tank where no sewer is provided.

3.4 Building Lines

Building lines are specified to control the positioning of building(s) on the plot. This is for reasons of health, safety, maintenance and amenity.

3.4.1. Front

The main front wall of a commercial building on a standard commercial plot in urban areas shall have a frontage of 2.5m. This frontage space is for a covered walkway or canopy of 2.5m depth which then come right to the plot boundary. In the absence of a canopy this frontage space must be paved.

3.4.2. Side

Retail and service industry frontage shall be continuous. The buildings will be provided with walkways at certain points for accessibility. These walkways can also be used by the emergency vehicles in case of need. It is not essential for buildings on adjoining plots to have party walls but they must be close enough together to give the appearance of a continuous building frontage. Narrow gaps between buildings shall preferably be closed by a front wall to prevent accumulation of rubbish. Canopies should be physically linked so that customers can proceed along the canopies from one shop to the next without having to go out or to the highway. Any forms of physical separations between canopies creating an impression of “fencing off” shall not be permissible.

3.4.3. Rear

A rear building line of 6m must be observed on standard commercial plots to leave sufficient space for septic tanks, storage, car parking, loading and offloading and any rear servicing. Elsewhere on non-standard commercial plots, the minimum rear building line is 3m provided that all other conditions on development are met.

3.5 Plot Coverage

Buildings may cover up to three quarters (75%) of the plot area subject to all other standards being met.

3.6 Plot Ratio

This is the density of development in commercial areas. It is the ratio of total plot area to the total floor space of all buildings on the plot.

3.7 Plot Access

All commercial plots must have direct access by road for vehicles and public walkways for pedestrians. These can be to the front or rear, depending on the location and layout of the commercial area.

3.8 Design/Materials

Retail, office and service industry developments should normally have a canopy along the front for the convenience of customers. Along the main shopping streets of the major centers development must be at least two storey or more. Commercial buildings must be constructed of permanent materials. Good quality, well painted facing bricks are preferable to plaster or render as they are cheaper and easier to maintain in urban areas. The roofing materials must be non-reflective and in major centers, roofs must be of high quality finish such as tiles or iron sheets. Shop fronts should normally incorporate a fascia for the display of the name and type of premises in accordance with the advertisement standards and guidelines.

3.9 Car Parking/Service Area

In general, all developments should have adequate onsite parking space for traffic that is likely to be generated; including employees, customers and visitors. This requirement may be waived if there is sufficient parking space available on street or in nearby public off street car parks. It is also necessary to provide onsite space for parking and maneuvering of service and delivery vehicles, preferably located at the rear of the premises.

3.10 Access to Utilities

3.10.1. Water

All commercial plots must be served by piped water supply, or any other suitable supply, to the approval of the relevant Municipality department.

3.10.2. Surface Water Drainage

Surface water run-off from buildings and hard surfaces must drain into the nearby drainage channel or soak pit to the approval of the relevant Municipality department.

3.10.3. Sanitation

In urban areas all commercial developments must have water borne toilet facilities drained to a septic tank within the plot or connected to a central sewer line system, to the approval of the Municipality of Kimilili. Septic tanks must be positioned so that they are accessible for emptying.

3.10.4. Solid Waste Disposal

Any refuse must be stored in proper containers for collection, to the approval relevant Municipality department.

3.10.5. Power Supply

As for residential standards

3.11 Boundary Fencing

The rear yards on standard commercial plots may be enclosed by a fence or wall not exceeding 2m in height. Delivery and service vehicles must be able to get access. On the larger, non-standard plots any fences or walls along the road frontage must be set back 0.5m inside the plot and be screened by a hedge or other landscaping.

3.12 Landscaping

Landscaping is not necessary on standard commercial plots. Landscaping is required for development on the larger plots and a landscape plan must form part of the development application.

3.13 Special Requirements

Social facilities, markets and garages will be expected to locate within commercial areas on sites designated for these particular purposes. Generally these non – retail uses should be sited on secondary streets in the commercial area.

3.13.1. Markets

Most commercial areas have a site zoned for a market, and markets will only be permitted on such designated plots. Market sites must contain provisions for customer parking (if there is no public car park), servicing and deliveries. Markets must be provided with adequate piped water supply, sanitation facilities, drainage, and waste disposal, as well as covered and hygienic stalls, all to the approval of the Municipality.

3.11.2. Offices

Offices should not normally be permitted at ground floor level on main shopping streets in the major commercial centers.

3.11.3. Wholesale

Wholesale premises shall not be permitted on main shopping streets in the centers. They may occupy shop plots on secondary shopping streets provided that the premises have the appearance of a shop and comply with all other commercial standards.

3.11.4. Service Industry

Small workshops and services will be permitted only on plots designated for such purposes. Warehouses should be located in industrial areas.

3.11.5. Hotels/Restaurants/Bars

Restaurants shall be permitted on plots designated for shops. Hotels, motels, rest houses and bars must be located only on plots designated for such purposes and they must have onsite car parking, servicing areas etc, to the approval of the Municipality.

3.11.6. Social/Community Uses

Social and community uses: churches etc; will be permitted only on plots designated for such purposes.

3.11.7. Residential

Residential uses shall only be permitted above ground floor level with adequate services provision.

CHAPTER FOUR: STANDARDS FOR VEHICLE PARKING, FOOTWAYS AND CYCLE WAYS

4.1 Vehicle Parking Requirements

4.1.1 On-Street Parking

It is a common practice to park vehicles on the street. This shall be acceptable if the street is wide enough and with light traffic. Elsewhere, on-street parking shall be discouraged because it reduces the traffic flow and is a cause of accidents. Where on-street parking can be permitted, it shall take the form of parking parallel to the kerb. The space needed for parking a car parallel to the kerb is 6.1m by 2m. Parking at an angle to the kerb is often more convenient but there is a greater likelihood of accidents so it shall only be used where the pedestrian

and vehicular traffic is very light. In order to encourage the best use of the space, it is advisable that on-street parking spaces should be marked by the responsible Municipality department.

Guidelines for on–street parking

The following guidelines for on street parking are recommended for promoting safe and efficient transport system with the different user activities.

a) The priority for on-street parking should be safety, convenient and appropriate parking that supports the primary activities in the street resulting from the desired land uses.
b) Priority should be accorded to on-street parking space by ensuring sufficient space for public transport to encourage large numbers of visitors to the town to use public transport.
c) On-street parking should be time limited to provide "turnover" of parked vehicles and to encourage visitors to the city by equitably sharing the available on-street parking space.
d) "Time limit" parking should be available at a cost that reflects the convenience of on street parking as comparable to off-street parking charges and encourage greater use of long stay off-street parking.
e) There is need to cater for special parking needs of residents, their visitors and people with disabilities through schemes specifically designed for these groups of people.
f) On-street stopping and parking controls should be simple and easily understood by the general public.

4.1.2 Off- Street Parking

Public parking spaces should be provided in urban areas within residential areas, industrial zones, commercial zones, and social facilities, recreation and sports areas. In the Central Business District, commercial and business zones, multi-storey car parking should be considered as a long term prospect. In residential areas, where on-street parking is not practical, public car parks should be provided.

The principle objective is to ensure that adequate off-street parking is provided to discourage parking on-street and hence maintain existing levels of service and safety. The recommended levels of parking provision for each land use are generally based on surveys and research by the relevant department and represent the levels of parking required to meet the peak parking accumulations observed. Where a proposed development is expected to have strong seasonal characteristics, an assessment of the impact of these is desirable. Consideration of such factors as modal split and car occupancy might also be desirable.

Generally, all new developments must have adequate on-site parking space for the traffic that is likely to be generated by the development including space for cars for the workers, customers, business callers, etc. This

requirement can sometimes be waived if there is sufficient parking space available on-street or in nearby public off-street car parks. The standards set out below are a guide to the amount of parking space needed for different types of development. Where new developments incorporate more than one activity, e.g. a large office attached to a warehouse, the parking requirements of both uses must be assessed separately and then added together.

a) Residential

A minimum of two parking spaces on a low density plot and one space on a medium density plot. It is desirable to provide parking spaces on high density plots, but it is not mandatory.

b) Housing Estates Parking Requirements

The following residential estates parking standards are proposed:-

Table 4.1 Parking requirements residential areas

No.	Dwelling Units	No. of Parking Spaces Required
1	Dwellings with 5+ bedrooms	3 per unit
2	Dwellings with up to 4 bedrooms	2 per unit
3	Flats with 2+ bedrooms	2 per unit
4	Flats with 1 bedroom only	2 per unit
5	Visitor parking provision	1 space per 5 units
6	Medium Density Residential flat building	1 space for each unit plus 1 for each 5 x 2 bedroom unit plus 1 for each 2 x 3 bedroom units

c) Shops, Supermarkets, Wholesale Shops, Offices and Banks

One Parking space in commercial centers is best provided collectively, in form of off street public car parks. If there are public car parks nearby or there is a definite intention to provide them, it may be possible to waive the requirements for on-site parking space.

Table 4.1 Parking requirements Commercial areas

No.	Activity	Proposed Parking Spaces
1	Banks	1 space per 25sq.m of gross floor area plus 5 stacking spaces per drive up window
2	Commercial Premises	1 space per 40 square metres gross floor area
3	Shopping centre	4.4 spaces per 100 square metres of gross leasable floor area (i.e. 1 space per 23 square metres)
4	Motor showroom	0.75 spaces per 100sq. m site area plus 6 spaces per service bay
5	Car tyre retail outlet	3 spaces per 100 sq. m Gross Floor Area (GFA)
6	Drive in take-away	12 spaces per 100sq. m GFA plus 1 pace per 5 seats
7	Markets	2.5 spaces per stall (customers only)

8	Bulky goods retail stores	1 space per 40sq.m of GFA and/or comparisons should be drawn with similar developments
9	Video Stores	6.1 spaces per 100sq.m GFA

d) Industrial areas

For every 100 sq. m of gross floor space, provide two parking spaces plus 1 parking space for every 2 employees of the largest work shift. For Business parks, 1 space per 200sq. m of total GFA or 2 spaces per 200sq.m gross leasable office/showroom area plus 2 spaces per 100sq. m of gross leasable factory/warehouse area (where information on components development is available).

For fuel service stations and convenience stores, a minimum of 6 spaces per service bay plus 5 spaces per 100sq.m of gross floor area for the convenience store. If there is a restaurant at the station, then 15 spaces per 100sq.m or 1 space per 3 seats shall be considered before approval.

e) Warehouses

1 parking space per 30sq.m of gross floor space plus 1 space for every 2 employees on the largest work shift.

f) Hotels and Motels

1 parking space for every 2 accommodation rooms and 1 parking space for every three managerial staff shall be considered. If there are bars or restaurants open to non-residents, or the hotel is used for functions such as dances, conferences, weddings, etc the spaces required for these should be assessed separately and added on.

g) Bars

One parking space per 15sq.m of gross public floor space is required.

h) Restaurants, Cafes, Cinemas, Theatres, Religious Facilities and Assembly Halls

Minimum parking of 1 car parking space for every 10 worshippers should be considered.

For drive-in take-away food outlets of developments with no on-site seating: 12 spaces per 100sq. m GFA will be sufficient while for developments with on-site seating: 12 spaces per 100sq.m GFA or 1 space per 5 seats (internal and external), or 1 space per 2 seats (internal only) will suffice.

Developments with on-site seating and drive through facilities: 1 space per 2 seats (internal), or 1 space per 3 seats (internal and external) plus queuing area for 5 to 12 cars will be sufficient.

Restaurants will require 15 spaces per 100sq.m GFA, or 1 space per 3 seats, whichever is greater.
Other facilities such as stadiums, assembly halls, theatres and places of public worship, no specific standards of providing spaces but will be determined on merit considering: hours of operation, availability of car parking, employee numbers and ancillary activities.

i) Licensed Clubs, Dance Halls and Discos

1 parking space per 20sq.m of gross public floor space

j) Doctors Surgeries, Clinics and Health Centers

2 parking spaces per consulting room plus 1 parking space for every 4 staff members and 3 additional parking spaces (9m x 3m) for ambulances will be considered. Hospitals require 1 car parking space for every 3 to 12 beds. 2-5 parking spaces should be allocated for people with disabilities in the visitors parking yard. Hospitals with Accident and Emergency departments require 8 additional parking spaces (9m x 3m) for ambulances while hospitals without Accident and Emergency Departments, 3 additional parking spaces (9m x 3m) for ambulances will be adequate. For Child care centers, 1 space for every 4 children in attendance will be adequate.

k) Recreation and Tourist Facilities

Sports and playing fields facilities, 1 parking space for every 4 players and 1 parking space for every 30 spectators will be considered.

l) Off Street Parking Guidelines and Standards

For mixed developments the number of car parking spaces should be calculated on the basis of each separate use e.g. shops with housing above would be calculated on the basis of the number of dwellings and gross floor area.

Off street parking should be designed, constructed and maintained to provide safe, convenient vehicle parking and pedestrian movement to and from parked vehicles.

Design and construction of all required and or provided parking stalls, access aisles, driveways, paving, curbing, wheel stops, drainage and marking shall be in accordance with the relevant Municipality department and the ministry responsible for transport.

m) Landscaping

All off street parking facilities and parking lots should be landscaped in accordance with the Municipality laws or be screened within or behind buildings or be sited at the side. This leaves the front of the building open to view from the street, and gives pedestrians direct and safe access to the main entrance. Large unbroken expanse of tarmac is unattractive. It is recommended instead that, all car parks be subdivided into sections which are small in relation to the total size of the parking area. The landscaping should include lawn, shrubs, hedges, trees, or other acceptable materials that may be used as visual amenities.

However, care must be taken on the choice of species, construction of planting box, etc; to avoid cracking the car park surface through root action. Trees that tend to easily succumb to winds, drop heavy leaves or branches should also be avoided. In cases where meaningful plant material exists on a site prior to its development, such landscape material may be used if approved by the relevant Municipality department.

n) Width, location and slope of driveways

Driveways leading to parking areas should have no less than 3m of paved width. For any parking area providing 10 or more parking space, a one-way driveway should have no less than 3m of paved width and a two-way drive should have no less than 6m of paved width. All provided off street parking facilities should be paved properly with an approved material or as per the existing Municipality laws. Entrance and exit driveways leading to parking areas should be located to provide maximum length of waiting vehicles. Combined entrance and exit should be located at or near the middle of the block.

o) Vertical clearances

All provided off street parking facilities should have a minimum vertical clearance of 2.1m. Where such facility is to be used by buses and or trucks, the minimum vertical clearance should be 4.5m. Vertical clearance should be clearly marked on overhead structures having less than 4.8m.

p) Entrance vehicular control devices

Parking tickets and other vehicular entrance control devices that require a vehicle to stop prior to entering the parking facility, should be located as to provide a minimum approach driveway of 6m in length between the base

of the building line and the ticket dispenser. Additional driveway should be provided where waiting vehicles would otherwise infringe on any public street or sidewalk.

q) Drainage

Drainage should be provided to all off street parking facilities so as not to cause any nuisance or damage to adjacent property.

a) Adequate lighting should be provided if the required or provided off street parking facilities are to be used at night. All lighting should be designed and arranged so as to prevent glare and excessive light on adjacent property.

b) Each parking should be painted or marked with white or yellow lines between spaces. Signs or arrows marked by a permanent, durable, contrasting material should be used to indicate the directions of traffic movement.

4.1.2 Guidelines for the Physically Handicapped Parking Spaces

a) All such spaces reserved for the physically handicapped drivers should be clearly marked and designated with appropriate signage.
b) Spaces should be located as close as possible to ramps, walkways, entrances, and elevators.
c) Where feasible, such Spaces should be located so that the physically handicapped drivers are not compelled to walk or wheel across main traffic lanes and or behind parked cars to reach ramps, walkways, entrances and elevators.
d) Such parking spaces shall be located as close as possible to the nearest accessible ramp, walkway, and building entrance on an accessible route so that physically handicapped persons shall not be compelled to wheel or walk behind parked cars to reach the nearest accessible ramp, walkway, and building entrance.
e) Such parking space shall be not less than 2.4m wide with a crosshatched, painted access walkway not less than 2.4m wide if it is a van-accessible handicapped parking space, or no less than 3m wide with an adjacent crosshatched, painted access aisle no less than 1.5m wide if a handicapped parking space.
f) All handicapped accessible parking spaces shall be clearly designated with signs situated approximately 1.5m high

g) Such parking shall display the international symbols/ signs of access with words "Handicapped Parking" and "No Trespassing." Accessible spaces for vans shall also bear the words "Van-Accessible."

4.1.3. Guidelines for Bicycle Parking

To be able to provide ample parking space for bicycles, there is need to understand the basic bicycle dimensions. The dimensions are Length: 1.7m – 1.9m; Width: 0.65m; Height: 1.25m – 1.5m. Therefore, to offer comfortable parking, the parking space should be 2m long and 0.45m wide with a side clearance of 0.75mBicycle parking is provided in form of double rows with overlapping front wheels and Staggered, Herringbone Formation with Access in the middle. Cycle stands must give steady support, even when loading the bike. Locking the bike should be possible using any acceptable system, securing the front wheel and the frame to the stand. Generally installation design should be clear and user friendly: close to the destination, easy to find and approach. However, for long term parking, lighting, and roofing should be considered with supervision.

CHAPTER FIVE: STANDARDS FOR ADVERTISEMENTS

5.1 Definition

“Advertisement” means any word, letter, model, sign, placard, board, notice, poster, device or representation, whether illuminated or not, employed wholly or in part for the purposes of advertisement, announcement or direction (excluding any such thing employed wholly as a traffic sign or a railway signal). It includes any hoarding or similar structure used for the display of advertisements.

5.2 Statutory Controls

Permission is required for all advertisements. the application should be submitted to the Municipality of Kimilili. Only temporary (two - years) consents shall be given to enable the Municipality to review the situation. Approvals are subject to the signs being maintained in a clean, tidy and safe condition. These controls do not apply to an advertisement inside a building or on a vehicle.

5.3 Sizes of Billboards and Sign Posts

The various categories of signs and bill boards and their sizes are as below:

a) Super signs ranges from 36.1 sq. m to 72 sq. m.
b) Large signs range from 18.1 sq. m to less than 36 sq. m.
c) Small signs range from 6.1 sq. m to less than 18 sq. m.
d) Very small signs range from 1 sq. m to less than 6 sq. m.

5.4 Location

Any sign/billboard shall:-

a) Be designed and erected or constructed so as not to be detrimental to or have negative aesthetic impact on the road structures and the road environment;
b) Have a neat appearance and shall consist of durable materials;
c) Not be erected on faces of fills or cuts or within 2.0m from toe of till or edge of cut or edge of the drain;
d) Not be located in curves, islands junctions, roundabouts; and
e) Be located away from each other at a distance of at least 500m for the super signs/billboards; and
f) No signs/billboards shall be erected in the road reserve without the permission of the Ministry of roads or the Municipality including temporary signs/billboards, banners and those hanged on arches across roads.
g) Signs/billboards aimed at directing and locating social services and facilities such as schools, health facilities, markets, administrative centers, etc; shall have a high priority over signs/billboards for promotion of products and services.
h) All signs/billboards shall be maintained in good repair and safe condition according to the highest standards by the owner at no cost to the Municipality of Kimilili.

5.5 Road Safety

For purposes of emphasis, advertisement signs must not obstruct visibility at a bend, junction or other hazard: - interfere with road- users' view of traffic signs, distract road users' attention at hazardous sites.

5.6 Amenity

Advertisement signs will not be allowed where they will detract the pleasantness/attractiveness of an area. The advertisement should conform to the scale and character of a particular area where it is located.

5.7 Materials

a) Advertisement signs should be made of durable and easily cleaned materials. Plastic, wood, metal and concrete shall be acceptable. All materials used for advertising should be approved by the relevant Municipality department, taking into account the visual, environmental, technical and legal implications.
b) All signposts and bill boards design and erection should be supervised by the relevant Municipality department.

5.8 Color

Colors should be chosen to ensure ease of reading by day-light and artificial light. White lettering on a dark background or vice-versa is recommended.

5.9 Design

Lettering should generally be not less than 50mm high to ensure ease of reading from a reasonable distance, but should not be more than 300mm high to prevent the sign being visually intrusive or a distraction.

Composite signs advertising several premises/products are much preferred as this helps to avoid sign clutter. Such composite signs should not exceed 4m in height and the lettering should comply with these guidelines.

Fixed signs or lettering on buildings should generally be on the front elevation, at or just above ground floor height and below eaves level. They should be of the same general size, level and design as neighboring signs. Advertisements can sometimes be used to good effect in brightening up plain structures or hiding unsightly development such as scrap-yards, rubbish dumps, etc.

Illuminated signs will not be permitted unless it can be clearly shown that road users will not be distracted and that the sign will be well maintained. Where illumination is required it may be preferable to direct light on to a non – illuminated sign for ease of maintenance.
Signs which project from a building or structure will not be permitted for amenity and safety reasons.

5.10 Flood Lighting

Lighting on buildings, at entrance gates and within plots is generally acceptable but such lights must only shine into that plot and not into neighboring plots or highways. The illumination of a structure or building for visual effect and prominence is only acceptable in limited circumstances where the building is of particular importance and merit. In such a case, permission should be granted by the relevant Municipality department.

5.11 Content

a) No signs/billboards shall:

a. Be in conflict with any law.
b. Be a danger to any person or property.

c. Be detrimental to the amenity of the environment on the account of size, shape, color, texture and intensity of illumination materials or any other reason,
d. Unreasonably obscure, partially or wholly any sign/billboard owned by another advertiser previously erected and legally displayed and
e. Be objectionable, indecent or suggestive of indecency or prejudicial to public morals in its content.

5.12 Other Requirements

Any sign/billboard shall:

a) Bear the name or branding and address of the owner;
b) Be designed in conformity with engineering standards, and specifications of structures and materials;
c) Be constructed perpendicular to the centre line of the road;
d) Be erected for purposes of road reserve maintenance, with a minimum clearance above ground level of 3.0m for super signs/billboards, 2m for large signs and 1.2m for small signs. The overall height of the sign above ground level shall not exceed 15m;
e) Be rigidly and securely attached, supported or anchored in a safe manner so that unwanted movement in any direction is prevented;
f) Be capable of effectively securing, supporting and maintaining its mass in addition to any force to which it may be subjected, including the wind pressure;
g) Have all exposed metal work or otherwise treated to prevent corrosion and decay in case of timber structures;
h) Be constructed to prevent the entry of water into and the accumulation of water or moisture on any part of its supporting frame work, brackets or other members;
i) Be constructed or in the case of removing it, cause no damage to any property, tree, public services/installations or road. No parts of any damaged or removed sign shall remain in the road reserve;
j) Be constructed to allow adequate clearance from ground level to permit free movement of pedestrians;
k) Be designed (in case of structural elements and foundations) and constructed under the supervision of certified registered Engineer. Proof of the design having been done by a registered Engineer shall be required;
l) Be maintained in good repair and safe condition according to the highest standards as regards to quality of structures, boards and signs/billboards by the owner; and

m) Be removed by the owner at no cost to the public if the space on which the sigh is erected is required for other purposes. A notice of 90 days shall be given to the owner.

n) Approval of erection and display of sign/billboards shall be granted for a definite period of time. Depending on the size of the sign/billboard, its location and materials used the relevant Municipality department will grant approval for a limited period of time ranging from 1 – 5 years. Upon the expiry of the lease, the owner of the sign/billboard may reapply or remove the sign/billboard at his/her cost.

CHAPTER SIX: STANDARDS FOR STANDARDS SOCIAL SERVICES, UTILITIES AND GOVERNMENT

6.1 General

The utilities and social services considered refer to those facilities normally provided by both the National and County Government for the benefit of the general public. These include: primary and secondary schools, health care facilities, administrative offices, courts, produce markets, sports fields. Most social services are best located in commercial centers. With the exception of post offices and produce markets, they should be sited away from the main shopping streets. It is also advisable to keep them away from industrial areas and entertainment facilities. Schools should not be sited in commercial centers but in convenient locations within the residential areas they are to serve.

6.1.1 Plot Size and Shape

Recommended plot sizes are given in the physical planning handbook. They are sufficient to accommodate the standard range of facilities without overcrowding and with some allowance for expansion. Larger plots may be necessary where there are site problems, such as steep slopes, bad drainage, etc. Plots will normally be rectangular in shape with the narrow side fronting a public road as this helps make efficient use of infrastructure such as roads, water mains, etc.

6.1.2 Building lines

Buildings must be set back from plot boundaries for reasons of privacy, amenity, health and safety. The external walls of the building must be on or behind the building line, subject to all other standards being met. In general, the front building line shall set back 8m from the front boundary. The side and rear building lines shall be 3m inside the plot boundaries.

6.1.3 Plot Access

Every development must have direct vehicular access and cycle access onto a public road. Provision should also be made for pedestrian footpaths and cycle lanes.

6.1.4 Design/Materials

All social service buildings must be constructed of permanent materials. Roofing materials must also be permanent and non-reflective. In certain areas a high-quality roof finish such as tiles or iron sheets may be required.

6.1.5 Access for the Physically Challenged

The design of social services buildings must take into account the needs of the disabled, particularly those with a mobility handicap. The ramp should mainly be used for access in addition to other facilities such as lifts wherever available.

6.1.6 Car Parking/ Service Areas

Adequate on-site car parking spaces must be provided for both staff and visitors in accordance with the standards set out in the other section of this standard and guidelines. Access must be provided for service and delivery vehicles and there must be sufficient space to enable such vehicles enter and leave the site in forward gear. Service yards should normally be hidden behind the buildings, for amenity reasons. All car parks and service yards should be hard surfaced and clearly marked.

6.1.7 Utilities

a) Water

There should be a separate piped water supply for each user activity, or other suitable supply, to the approval of the relevant Municipality department.

b) Surface Water Drainage

Surface water run-off from buildings and hard surfaces must be properly drained to the approval of the relevant Municipality department.

c) Sanitation

Every premise must have water-borne toilet facilities drained to a septic tank within the plot, connected to a sewer system, to the approval of the relevant Municipality department. Septic tanks must be positioned so that they are accessible for emptying by tankers. Pit latrines shall also be allowed in rural areas.

d) Waste Disposal

Any refuse must be sorted and stored in proper containers for collection and appropriate disposal by the Municipality, to the approval of the relevant Municipality department. Hazardous wastes shall require special treatment.

e) Power Supply

Electricity will be supplied to all permanent premises by the KPLC, by private generator, solar system or any other approved system, to the approval of the relevant National/Municipality departments.

6.1.8 Boundary Fencing

Boundary fences must not exceed 1.2m high with a metal grill not exceeding 2m in height. A fence or wall along a road boundary should be set back 1m inside the plot so that a hedge or other landscaping can be planted to screen the developments.

6.1.9 Landscaping

Landscaping shall be done to enhance amenity of the site and provide shade, privacy, and screening.

6.1.10 Staff housing

Staff housing should be located in nearby residential areas. Sites for social services developments should be chosen with this in mind. Exceptions are made for caretakers, security officers and essential staff who have to be nearby in case of emergencies. In case members of staff are to be accommodated on site, then a zoning plan must be submitted indicating the segregation by infrastructure services.

6.2 Standards relevant to specific Social Services

6.2.1 Education

a) Pre-primary schools

These include Day Care Centres, Kindergarten and Nursery schools. Day care centers are where infants are accorded the basic child care; Kindergartens/ Nursery schools are establishments of preparatory schooling

where children are taught prior to joining primary school education. These will normally be integrated into residential neighborhoods or within existing primary schools or can be incorporated in existing religious institutions. In urban areas, walking distance will depend on the spatial distribution while in rural areas a minimum distance of 1.5km is recommended. Existing and proposed primary schools should be encouraged to incorporate day care centers/kindergarten and nursery schools where possible.

Guidelines

In urban areas standards will be affected by the scarcity of land and the high values. Therefore, developers should take advantage of vertical developments. The minimum plot area requirement for nursery schools is 2,000 sq.m.

Locational requirements

- Site must have access roads.
- Avoid busy roads.
- They should not be located near incompatible land uses such as bars, cinemas.
- In high and medium income areas, parking facilities should be provided to manage vehicular traffic and eliminate obstruction to vehicular traffic flows.

Space requirements for Day care centers and Kindergartens

The facility should accommodate in addition to classroom, sanitation and administration block, space for restrooms and play areas.

Space requirements for Nursery schools

In addition to the basic infrastructure such as administration, classrooms, restrooms and sanitation facilities all nursery schools should have outdoor playing areas.

b) Primary schools.

Recommended plot sizes for primary schools are provided in physical planning handbook. For playing fields, schools may utilize nearby facilities where these are available and can be safely accessed. In such cases authorities have to avail documented evidence of access from the owner. Vertical developments should be encouraged in urban areas to save on space provided that classrooms shall not be beyond the 3rd level from the ground.

Location Guidelines

i. They should be located within residential neighborhoods and easily accessed by road
ii. In case pupils are dropped and picked by cars or public transport, facilities for safe collection and parking should be available.
iii. It is also important that applications for educational institutions include details of all relevant information to facilitate the responsible relevant Municipality department to determine the required acreage.
iv. It is also required that after land for educational facilities has been allocated, site layout plans and other drawings be submitted to relevant Municipality department for guidance, approval, monitoring and evaluation to avoid haphazard developments.
v. All educational institutions should be integrated with major open spaces whenever possible to encourage the sharing of open spaces and play grounds with members of the public.
vi. Must not be in industrial area, wetland or forest reserve. Urban primary schools should normally be designed for double or triple streams to make efficient use of resources.

On minimum areas provided for primary schools, an addition of 0.4 - 0.8 ha is required for agricultural demonstration plots (school gardens) where applicable. It should be noted that, all schools expand even if a school will start as a single stream initially; it should be allocated a minimum of 4.7 ha to cater for future expansion. In case members of teaching staff are to be accommodated on site, an additional land of 0.8 ha should be allocated for staff housing. The houses should be flats whenever appropriate to economize on space. If it is a boarding school, then 0.4 ha should be added on to cater for every 200 students in terms of dining halls together with dormitories in a storied building.

Walking distances for rural schools should be 0.5 - 3 km while for urban areas, it should be between 0.5 - 2 km. However in urban areas, the location of education services depends on the catchment population, availability of land for development and the preference of consumers than distance travelled.
It is difficult to devise standards of provision which apply in all situations but in general a single-stream primary school is warranted if there are 2,000 people living in a rural area and 4,000 people for urban areas.

c) Secondary schools

Recommended plot areas for day and boarding secondary schools are for a single stream mixed secondary school with Senior 1 - 6, 3.5 ha for double stream mixed secondary school while 4.5 ha is sufficient for triple

stream mixed secondary school. This includes space for a senior football field encircled by running track, plus basketball, volleyball, netball pitches and demonstration gardens.

At schools where teaching of agriculture courses is to be provided, an additional land estimated at 10% of the above minimum space requirements should be set aside. Where schools by virtue of their geographical siting (are unable to meet these requirements - the stipulated minimum space requirements) sharing of sports facilities should be encouraged so long as such sharing does not adversely affect the required area and the net benefits derived by each of the sharing schools.

In case members of teaching and subordinate staff have to be accommodated at the site, then additional land of 1ha should be allocated for staff housing. Vertical developments should be encouraged to save on space.

If it is a boarding school, then 0.4 ha should be added for every 200 students to cater for dining halls together with the dormitories preferably in storied buildings. Since all schools expand, even if a school starts as a single school, it should be accorded the minimum area of 6.0 ha so as to forestall the problem of land shortage in case there is need for expansion. Each school should therefore be developed on a three stream capacity.

It is recommended that new secondary schools in large urban areas be for day pupils only. In general there needs to be a secondary school for every 50,000 people. School buildings in urban centers should preferably adopt the vertical concept of buildings most especially the boarding schools to reserve land for future expansion and save space. If there is a playground nearby and there is proof of access from the owner to the school authorities, then another one is not necessary.

In urban areas, a minimum walking distance of 1.5 km is recommended though factors such as catchment population, consumer preference and availability of land influence travel patterns.

Location Guidelines

i. (As for primary schools)

d) Tertiary Institutions

These include colleges and Universities. Their establishments, standardization, accreditation and supervision rules are contained in the relevant laws and regulations. Minimum land area required for colleges is 4 - 6 ha.

Guidelines for establishing Colleges

- Type of college determined by the regional and local factors.

- Should be well served by public transport.
- Should be free of pollution from noise, smoke, odour and dust.
- Area for workshop buildings with heavy machinery and frequent deliveries should be located separately usually in single storey buildings.
- Must not be in industrial area, wetland or forest reserve.
- Must have access to road network, physical infrastructure and quiet environment that promotes learning environment.

6.2.2 Health Facilities

These standards cover the most commonly - provided health care facilities. The basic site area will accommodate the essential medical and ancillary buildings plus car parking, service areas, landscaping, etc. Standards of provision vary but in general, there should be a health centre for every 10,000 people and an under - fives clinic for every 2,000 people.

Guidelines

- Planning for health facilities in urban areas should take into consideration the high land values and scarcity. It is therefore recommended that, developments in urban areas take advantage of vertical extension to save on land.
- Accessibility of 5 km walking distance should be applied to areas that are hard to reach (especially the rural areas).
- Area selected must be able to accommodate the various minimum functions of the health facility as per the Ministry of Health provisions (standards and guidelines) except where local circumstances require otherwise.
- Developments in the rural areas should take advantage of the large expanses on land available where possible.
- Under 5 year's clinics shall be accommodated in commercial, institutional and residential developments/structures. They should be located at the edge of the commercial centre. However, they should have no direct access from the main road.
- Hospitals should be located along main road but should not have direct access from the main road. While Rural Health Centers be located on the edge of commercial centre for convenience and ease of accessibility - due to the access roads that converge within the commercial areas.

6.2.3 Markets

Markets are usually the main focus in commercial centers and should be located accordingly. They should be close to public transport services. The market must have its own car park and service/delivery yard. The selling area should be enclosed by a wall or fence. There should also be lock-up shops for butchers, fishmongers, etc., and stalls for the sale of fresh fruit and vegetables. The market should also provide facilities for craftsmen. A wood-fuel yard is also needed either within the market fence or adjacent to it. Public toilets must be provided. Recommended plot sizes are provided for in the physical planning handbook.

6.2.4 Sanitary Landfills

Guidelines for locating a landfill site

a) Located away from; Airstrip/Airports (at least 2 - 5 km & outside of the approach and take off zones), populated areas (200m away), Wetlands and areas with precious flora and fauna, Seismic Impact Zones, Flood Prone Zones, ground and surface water sources and historical, religious and other important cultural sites or heritages.
b) Sufficient consultations must be carried out to avoid conflicts with the neighboring community members.
c) Sufficient cover material should be available nearby.
d) Existing site utilities such as underground pipes or conduits (for sewage, storm water, etc.) must be avoided unless their relocation is feasible.
e) Areas must be easily accessible by delivery vehicles.
f) EIA must be carried out.

6.2.5 Recreation Facilities

Recreation areas can be public or private. Areas of recreation may include areas of scenic beauty; areas of cultural or historical importance; unique physiographic features; parks, forests or water masses, play fields, stadium, green spaces, snake parks, museum and amusement parks, discos, cinemas and conservation areas. There is need for recreation facilities both in urban and rural areas due to:

a) Need for relaxation/economic activities
b) Income generation/economic activities
c) Social interactions
d) Tourist attractions
e) Set as carbon sinks/breathers
f) Preservation of socio-cultural and or religious values

g) Environmental conservation areas - forests, trees, flower planting, etc.

h) Competing users due to population pressure hence overcrowding in informal settlements

Recommended plot sizes for the most commonly provided sports and play facilities are given in Physical Planning handbook. Such facilities are normally located adjacent to commercial centers and near other community facilities. The recommended plot size will accommodate the playing area and enough space for spectators. With some facilities such as a senior football pitch, there may be a need for additional land for a car park.

6.2.6 Guidelines for Bus/Taxi Parking Bays along roads

a) There is need to ensure that bus and taxi parks are accessible to the elderly and the physically challenged.

b) There is need for the responsible Municipality department to designate areas for parking bays along roads.

c) There is need to provide shelters on the designated bus/taxi parking bays along the roads.

d) The minimum vertical clearance for buses should be no less than 3.6 m, with 4.4 m as the desirable clearance.

6.3 Fuel Filling Stations

Table 6.1: Summary of area requirements; Zoning and Location guidelines for Fuel Filling Stations

NO	ITEM	STANDARDS AND GUIDELINES
1	General site dimensions of new stations	Minimum size: 750 sq. meters. minimum frontage : 20m minimum width of access : 6 m
2	site dimensions of stations	minimum frontage: 40m minimum width of access : 8.5m
3	siting on Expressways	at least 2km from any intersection preferably form part of a service area
4	siting on Trunk Roads, Primary Distributor Roads and Rural Roads	minimum sight distance of 100m minimum interval of3 km
5	siting on other roads lower in the hierarchy	minimum sight distance of 50m minimum interval of 100m if located on different sides of the road minimum interval of 300m if located on the same side of the road
6	Waiting spaces	1 vehicle space adjacent to each metered filling point minimum of 4 waiting spaces between the entrance and the filling points additional 4 spaces for each service bay if general lubrication and servicing facilities are available 1 additional space between each air–pumping point
7	Other requirements and facilities at FFSs	1. All FFS to provide separate WCs for males and females and ensure their indiscriminate access by all travelers and motorists, and also keep them in good working and hygienic condition. FFSs on highways shall provide not less than two toilets for either sex.

		2. FFSs on highways shall provide at least three bins for separated waste accessible by all travelers and motorists. 3. FFSs on highways should preferably be situated at or include a service centre for emergency shopping, refreshments, restaurant, souvenir shops, etc. 4. All FFSs on highways shall provide parking space for not less than 2 buses & 5 other vehicles at any one given time available to motorists for short periods of up to 20 minutes.
8	environmental and fire safety considerations	preferably be located in relatively open areas avoidance of noise and air disturbances covering of facilities for car washing, petrol filling and maintenance activities, as well as car servicing and lubrication bays provision of adequate petrol & oil intercepting facilities provision of proper drainage facilities proper storage and disposal of chemical wastes compliance with fire safety requirements provision of fire hydrant within 100m
9	general separation distances of Liquefied Petroleum Gas (LPG) filling station/facilities	high-rise residential/education/hospital:55m commercial/recreational/industrial:15m low density residential/incidental dwelling:50 m
10	FFS within buildings	FFS (without LPG filling facilities) may be accommodated on ground floors of car parks, industrial or commercial buildings subject to : • station completely separated from other parts of building by enclosures with fire resistance period of 4 hours • site open for ventilation on one of the longest sides or two adjoining sides; • adequate headroom and ventilation; • floor area above to be used for occupancy with low fire/life risk; • openings and windows on three levels directly above should be bricked up; • Quantitative Risk Assessment and necessary planning Approval

6.4 Communication Masts

a) The operator shall provide to the Municipality a statement for each site indicating its location, the type of mast, the height of the antenna and the frequency & modulation characteristics.

b) Applications shall be accompanied by a change of Use or Extension of Use with clear information relating to proper access to the base station including driveways on property & right of ways.

c) Site area of the base station shall be a minimum of 225 square meters for self-support towers. The foremost part of each mast/tower shall be a minimum distance of 5 meters from the physical barrier around the mast.

d) Operators to consider the use of materials, colors & design that would minimize obtrusiveness. In urban areas, preference shall be for towers to be located on existing buildings.

e) Maximum height of self-support towers/masts in urban areas shall not exceed 45 meters.

f) Any change to an existing base station which increases its height and/or base, shall be subject to the normal planning process as if it were a new development.

Security & Safety

g) Readily identifiable signage, informing the public as to who are the operators of the site & their emergency numbers shall be posted at a conspicuous position at the site.

h) All towers over 30 meters shall be painted & treated as stipulated by Kenya Airports Authority (KAA).

i) All applications proposed to be located within a 3 km radius of airports/airstrip or similar facilities & flight paths shall be referred to KAA for consultation before determination.

Mast Sharing

j) Where practicable, the physical planning department shall require that the operator/applicant demonstrate that all reasonable steps have been taken:-

- To investigate mast sharing before seeking to erect new ones
- To pursue the possibility of cooperating with another operator to erect new mast for joint usage.

k) Physical planning department shall be required to maintain a register of all applications for telecommunication masts/tower site. This shall be made available to operators to allow them to consider the possibilities of mast sharing when planning the development of telecommunication networks.

The Physical planning department shall ensure that apparatus no longer required for telecommunication purposes are removed as soon as reasonably practicable from the land or building on which it is located and the land restored to its previous condition at the cost of operator.

CHAPTER SEVEN: MISCELLENEOUS STANDARDS

7.1 Guidelines for Cemeteries

a) These should be located away from environmental sensitive and commercial areas. If near wetland, an EIA should be conducted and should have a buffer distance of 200-300m.

b) In rural areas where land is available, cemeteries and morgues should be included in the area for hospitals. While in urban areas where land is scarce, the relevant Municipality department should acquire land for the same purpose outside or at the periphery of the urban area in question.

c) Suitability of soils should be the main consideration. Firm and non-porous soils are recommended for grave yards.

d) Should be located near residential areas preferably away from busy routes where funeral processions would not disturb normal traffic.

7.2 Vehicle Repair Workshops/ Garages

This includes mechanical works, welding, paint spraying and selling of tyres and automotive parts.

Minimum Site Size

- Small establishments of ≤100 sq. m to 200 sq. m
- Large establishments range from 729 sq. m. (27 m x 27 m) for high rise purposely designed buildings - 972 sq. m
- For lorry repair workshops, a minimum space of 1,575 sq. m. per floor (35 m x 45 m) - 3,150 sq. m to achieve efficiency. Location Guidelines
- Should be located away from residential areas or sensitive uses
- In urban area and new towns, they should be accommodated on the periphery of industrial areas, either in purpose-designed buildings or on the lower floors of industrial buildings
- Additional safety and fire prevention equipment are necessity; in rural areas, they should be provided for in low rise buildings of 1 - 2 story; maximum plot ratio of 0.5; provided with water supply and proper sewage disposal system and adequate paving and drainage to minimize land contamination and drainage problems as well as fenced to reduce visual impacts of unsightly developments.

7.3 Abattoirs

The following guidelines should be observed in the development of an abattoir.

Location and site

- Minimum site area of 1800 sq. m
- Distance from urban development i.e. should not be located close to residential developments, education institutions, religious institutions, public and commercial buildings
- Accessibility i.e. the site must be accessed by road
- The site must have adequate water supply
- Effluent disposal i.e. the site should be free draining and not subject to water logging and flooding

- Solid waste disposal: there should be sufficient space available for waste management by either incineration or disposal in a pit. Pit is recommended for small abattoirs and should not extend below the normal water table.

Design Requirements

Slaughter hall/floor

- Large space: should be large enough to hold the expected daily number of animals for slaughter
- Soak-away pit for drainage
- Fencing should be provided
- Amenities and office areas

7.4 Urban Agriculture

Urban Agriculture is defined as the agricultural practice within urban areas, market centers and peri-urban areas that includes; crop cultivation, horticulture, and aquaculture, tree planting, livestock rearing and poultry keeping.

Benefits of urban agriculture

- Management of solid and liquid wastes
- Provision of food supplements and generation of incomes and employment
- Cleaning of the environment through recycling
- Use of land not easily developed for any other purpose e.g. land under electricity lines and land liable to flooding
- Reduction/reservation of energy used to acquire food elsewhere by producing it within urban areas
- Compensation of agricultural land lost through urbanization
- Provision of fuel wood, fodder, fruits, timber from urban forestry
- Provision of carbon sink, greening of towns and aesthetics
- Controls urban sprawl in the peri-urban areas

Planning Standards and Guidelines for Urban Agriculture

To promote urban agriculture in a regulated manner and avoid nuisances, the following shall be considered:-

- In residential areas, 5% of total area may be reserved for urban agriculture
- Buffer zones may be used as greening zones
- Agriculture be practiced in the backyard of the plot
- Practiced on minimum land sizes of not less than 450 sq. m

- Should be practiced in single holdings and restricted number and species of animals per land holding.
- Should establish an adequate waste management system
- Should be restricted within enclosed boundaries
- Should not be practiced in ecologically fragile areas e.g. riparian areas, sewerage lines or ponds, cemeteries, dumping sites, slaughter houses unless approval by Municipality.
- Where the plan takes more of urban characteristics, then urban standards should apply.

CPA,Gabriel Kibiriti
Manager/Secretary
Kimilili Municipal Board