8. DEVELOPMENT CONTROL REGULATIONS



CHAPTER 8. DEVELOPMENT CONTROL REGULATIONS (DCR)

1. The implementation and enforcement of the Master Plan shall be in conformity with the development control regulations prescribed hereunder. These regulations shall guide decisions on the granting or rejecting of applications for land development and buildings.

2. All future constructions and developments within the plan area shall also conform to the Kerala Municipal Building Rules in force, if not otherwise specified in these regulations, regulations and control if any enforced by the Cochin International Airport Authority, Kerala conservation of Paddy and Wet land Act 2008 or any other legislation applicable to the planning area.

In this Master Plan, the following use zones are identified for the implementation and enforcement of the proposals

I. Residential use zone
II. Sub centre I, II & III (Mixed use zone)
III. Town Centre (Mixed use zone)
IV. Dry cultivation use zone
V. Industrial use zone, M1 (Existing Industries)
VI. Industrial use zone, M2 (Preferred Industrial zone)
VII. Public and semi public use zone
VIII. Parks and open spaces use zone
IX. Parks and open spaces (Prop) use zone
X. Traffic and Transportation use zone
XI. Heritage zone
XII. Paddy and Wet land to be retained
XIII. Water bodies

Details regarding the nature of uses "permitted", uses "restricted" and uses "prohibited" in each zone are given in the accompanying sheets. These regulations shall be enforced in conjunction with other specific provisions if any mentioned elsewhere in the plan and in accordance with the other statues applicable.

Uses "permitted" in a zone cover the uses that can be normally accommodated in the relevant zone. Such uses may be permitted by the Secretary, Perumbavoor Municipality, hereinafter referred to as the Secretary.

In some cases it may be possible to permit some other uses also, which are not likely to affect the quality and environment in a zone specified for a particular use. Such cases have to be individually studied based on their performance characteristics and special locational factors. Such cases which come under this category are classified as "Uses Restricted". Uses Restricted-1 category deals with the uses that shall be restricted by the Secretary, with the concurrence of the District Town Planner. Uses Restricted-2 category deals with the uses that shall be restricted by the Secretary with the concurrence of the Chief Town Planner of the Department of Town and Country Planning, Kerala.

"Uses Prohibited" enlists the various objectionable uses in each zone which shall not be permitted under normal circumstances.

3. If any part/portion of a zone is put to a "Uses Prohibited" as stated in para 2, before the sanctioning of the Master Plan, such use shall be termed as non-conforming use. A non-conforming use except unauthorized industrial use may be allowed to continue in its existing location and essential repairs and maintenance for the structure may be permitted by the Secretary, provided that the said use create no adverse environmental influence in the zone. Addition, alternation or reconstruction, if found necessary as part of any mitigation measures may be permitted for such uses by the Secretary with the concurrence of the Chief Town Planner concerned.

4. Existing areas and structures of archeological importance, agriculture uses and religious uses shall be permitted to continue in all the zones and shall not constitute non-conforming uses.

5. Regulation of constructions and / or land development on the sides of new roads / roads proposed for widening as per the plan shall be governed by the distance from the centre line of the road, unless otherwise specified in the plan or in any detailed road alignment approved by the Chief Town Planner concerned.

6. Constructions and / or land developments, if any, in paddy lands and in wet lands, shall be in conformity with the Paddy land and Wet land Act in force in the state.

7. The Government shall have the power to issue clarifications in respect of technical interpretations, if any, required in any of the provisions of the plan in consultation with the Chief Town Planner concerned.

8. Any use not specified either in the "uses permitted" or "uses restricted" category of a particular use zone, but which is of a similar nature to any use permitted or restricted in that particular use zone, can be considered by the Secretary, with the concurrence of the Chief Town Planner concerned.

Para No.	Uses Permitted	Uses Restricted-1	Uses Restricted-2	Uses Prohibited
8	**RESIDENTIAL USE ZONE**			
8.1	Residential buildings consisting of single or multifamily dwellings, residential flats /apartments, residential quarters, night shelters, orphanages, old age homes, dharmasala, associated parks and play grounds	Asram, Mutt, Madrasa, Place of worship		Any other uses not specified
	Shops, professional offices, commercial offices, banks & other financial institutions, restaurants, canteen, hotels – floor area up to 200 Sq.m.	Solid waste management facilities		
	Cottage Industries, Service Industries of non-nuisance nature (See Annexe-I), with number of workers limited to 6 without power or 3 workers with power limited to 5 HP	Cremation ground/ Crematorium , burial ground / Common vault		
	Educational institutions essentially serving the needs of residential community such as Day care, creche, nursery schools, kindergartens and schools offering general education (up to high school level) not exceeding 500 sqm.	Vehicle fuel retailing station.		
	Health institutions essentially serving the needs of the residential community such as dispensaries, clinics, Diagnostic Centres, nursing homes etc. and having floor area upto 200 Sq.m.			
	Community facilities such as community halls, recreational clubs, Social welfare centres, gymnasium/yoga centers, swimming			

	pool, libraries, reading rooms etc. – Floor area upto 200 Sq.m.			
	Public utility areas and Public Utility buildings, Utility installations and civic amenities essentially serving the needs of residential community such as post office, police station, telephone exchange, electric substation, fire station, totlots parks play grounds, water treatment plants below 5 MLD			
	Plant nurseries, Storage of Agricultural produces and seeds, pump house, wells and irrigation ponds incidental to community needs			
	Transmission / Telecommunication towers / Wireless stations			
8.2	**Provided that the access road has a width of 5m minimum.**			
	Shops/professional offices, banking and financial institutions – floor area limited to 500 sq m., Automobile workshops for two/three wheelers - floor area upto 200 sqm			
8.3	**Provided that the access road has a width of 8 m minimum.**			
	i. Hospitals with 5 beds	LPG distribution centers, excluding bottling plants and bulk storage limiting the floor area to 50 sqm.		
	ii. Convention Centres/ Auditorium/ Wedding Halls/ Community halls/Exhibition Centers and Art Gallery - floor area upto 1000 Sq.m	Educational institutions of Higher order such as colleges/ universities/ general education institutions/ research and development institutions		
	iii. Educational institutions upto Higher secondary schools.			
9	**SUBCENTRES I, II & III (MIXED USE ZONE)**			
9.1	Zoning Regulations of Residential use zone shall be applicable. In addition following uses shall be permitted.			
9.2	All shops including shopping complexes, shopping malls, hypermarkets restaurants, hotels, markets.	Dairy & Dairy Farm, Poultry Farm, Smoke House.	Multiplex	Any uses not specified
	Professional offices, commercial offices & establishments, banking and financial institutions, IT software units, IT Hardware/electronic industries	Fuel filling stations		
	Godowns / warehouse / storage of	Saw Mills with / without		

	Non-hazardous materials, stacking yards	Timber Yards		
	Auditorium , Movie halls, Wedding Halls, Community Halls floor area limited to 500sqm	Auditorium, Movie Halls, Wedding Halls, Community Halls floor area limited to 1000sqm		
	Gymnasium/ Yoga centres, Day care, Creche, Nursery / Kintergarten, schools up to higher secondary level,expansion of existing educational institutions	Slaughter Houses.		
	Cottage industries, automobile workshops, automobile service stations, cold storage, service industries of non-nuisance nature with number of workers limited to 19 without power or 9 workers with power limited to 30HP(See Annexe-II), saw mills, weigh bridges, printing press, IT hardware / electronic industries, marble and granite storage / cutting centres.			
	Government (Local / State / Central) or Public Sector Offices, Other public utility areas & Public utility buildings.			
	Social welfare centres, library and reading rooms, exhibition centres, art gallery, museum, convention centres, swimming pools.			
	Places of worship			
9.3	**Provided that the access road has a width of 5m minimum**			
	Fair grounds, open air theatres, Indoor games stadium			
	Parking plaza, Transport terminals			
9.4	**Provided that the access road has a width of 8m minimum**			
	Clinics, diagnostic centres and hospitals with number of beds limited to 50			
	Uses prescribed here under for Sub Centre I could be changed to those under Town Centre once the proposed 45m Transit Orient Development (TOD) Corridor is fully developed.			
10	**TOWN CENTRE (MIXED USE ZONE)**			
10.1	Zoning Regulations of Sub Centres (Mixed use zone) shall be applicable. In addition following uses shall be permitted.			
10.2	Secondary/ Higher Secondary Schools, Junior Technical Institutions			Any other uses not specified
10.3	**Provided that the access road has a width of 8m minimum**			
	Educational Institutions of Higher order such as colleges/universities/general			

	education institutions/ specialised/ professional education institutions/ research and development institutions. Hospitals with no. of beds more than 50			
	Weigh Bridge			
	Automobile workshops/ Automobile Service stations - Heavy Vehicles			
	Movie Halls/ Auditorium/ Wedding Halls/ Community Halls - floor area upto 1000 sqm			
10.4	**Provided that the access road has a width of 12m minimum**			
	Movie Halls/ Auditorium/ WeddingHalls/ Community Halls - floor area above 1000 Sq.m .		Bus terminal/lorry stand	
10.4	**Provided that the access road has a width of 18m minimum**			
			Container Terminal	
11	**DRY CULTIVATION USE ZONE**			
11.1	Agriculture, horticulture and fodder cultivation, pastures, grazing ground, and other types of cultivation including social forestry	Places of worship		Any other uses not specified
	Transmission/Telecommunication towers and wireless station.	Piggery farm, smoke house		
	Dairy farms, fish farms, seed farms, poultry farms, plant nursery, pump house, pools, wells and irrigation ponds and buildings incidental to above use	Public utility areas and buildings like water supply and electrical installations, sewage treatment plant etc.		
	Indvidual Residential building floor area upto 500 Sq. m.	Saw mills with / without timber yard		
	Orphanages, old age homes, dharmasala , ashram/mutt, madrassa with floor area upto 1000 sqm	Cremation ground / crematorium, burial ground, common vault		
	Clinics (Outpatient) and diagnostic centres- floor area upto 200 Sq.m.	slaughter house		
	Shops, professional offices, commercial offices/establishments, banking and financial institutions, Gymnasiums/ Yoga Centres, restaurants/ canteens – floor area upto 200 sq.m	Fuel filling stations		
	Police Post/Police Station, Post and Telegraph office, Fire Post/ Fire station, Telephone Exchange	Gas Godowns, Dumping yard		
	Educational institutions essentially serving the needs of residential community such as Day care, creche,			

	nursery schools, kindergartens and schools offering general education (up to high school level) not exceeding 200 sqm.			
	Library and Reading Rooms			
	Storage , processing and sale of farming products and seeds, Stacking yards, Godowns/ warehouses/ Storage – non hazardous – floor area upto 200 Sq.m.			
	Cottage industries, Service industries of non-nuisance Nature (See Annex-I) engaging not more than 6 workers without power or 3 workers with power limited to 5HP			
	Automobile workshops for 2/3 wheelers			
	Tot lots/Parks/Play Grounds			
	service and repairing of farm machineries and sale of agricultural supplies			
	Botanical garden, zoological parks, bird sanctuary			
11.2	**Provided that the access road has a width of 5m minimum**			
	Residential flats / Apartments , Residential quarters, Residential building- floor area greater than 500 sqm	Stacking yards, Godowns/ Warehouses/Storage -non hazardous materials upto 500 sqm.		
	Educational institutions upto Higher secondary schools having total floor area upto 1000sqm.	Dumping yard		
11.3	**Provided that the access road has a width of 8m minimum**			
	Auditorium/Wedding Halls/Community halls floor area upto 500 Sq.m.	Higher educational institutions		
	Hospitals & Health Centers - with area upto 500 sqm	Health care facilities including diagnostic centres, clinics, hospital		
	Educational institutions up to Higher secondary schools.	Storage of explosive and fire works		
	Markets			
12	**INDUSTRIAL USE ZONE M1(EXISTING INDUSTRIES)**			
12.1	All industries which are earmarked as existing industries in the master plan shall be considered as existing industries and here modernization of equipment and existing facilities can be allowed without changing the	Ashram, Mutt, Madrasa, Place of worship		Any other uses not specified

	capacity and floor area.			
	Information Technology buildings and Information Technology Parks:- Information Technology buildings refers to building occupied by industries and other business establishments, whose functional activities are in the field of Information Technology, Information Technology Enabled Services (IT/ITES) and Communication Technology. Information Technology buildings in the Information Technology Parks would be constructed for the purpose of carrying out the activities set out in the definition given above for information technology building and the remaining buildings in the information technology park are meant to play a complementary role, supporting the activities in the information technology buildings. In the Information Technology Parks, 70% of the land area is to be set aside for the construction of Information Technology buildings and the remaining land area could be utilized for all the supporting activities. The buildings for the supporting activities could include residential buildings, recreational facilities, educational facilities, convention centers, hospitals, hotels and other social infrastructure meant to support the activities in the information technology buildings and Information Technology Parks.	Convention centres, hospitals, hotels and other social infrastructure facilities subject to a total floor area of 300 sqm		
	Transport Terminals incidental to industrial use	Fuel Filling Stations		
	Residential uses incidental to the industrial use.			
	Storage and sale of goods incidental to the manufacturing activity			
	Individual Residential buildings up to 500 sqm floor area and associated			

	parks , play grounds other recreational facilities.			
	Public utility installations Religious buildings up to 100 sqm floor area			
	Shops, Professional Offices, Commercial Offices, Banks & other financial institutions, restaurants, canteen, hotels - floor area up to 200 sqm			
	Transmission / Telecommunication towers / Wireless stations			
	Government or Public sector offices			
	Libraries and reading rooms			
	Educational institutions essentially serving the needs of residential community such as Day care, crèche, nursery schools, kindergartens and schools offering general education (up to Lower Primary School level) not exceeding 200 sqm			
	Plant nurseries, Storage of Agricultural produces and seeds, pump house, wells and irrigation ponds incidental to community needs			
12.2	**Provided that the access road has a width of 5 m minimum.**			
	Automobile workshops for 2/3 wheelers			
		Shops, Professional Offices, Commercial Offices, Banks & other financial institutions, restaurants, canteen, hotels - floor area up to 500 sqm		
12.3	**Provided that the access road has a width of 8 m minimum.**			
		LPG distribution centers, excluding bottling plants and bulk storage limiting the floor area to 50 sqm.		
13	**INDUSTRIAL USE ZONE M2 (PREFERRED INDUSTRIAL AREA)**			
13.1	Cottage industries, service industries of non-nuisance nature (See Annex -II), weigh bridge, automobile workshops & automobile service stations, spray painting workshops, saw mills with/without dumping yards, ice factory, cold storage, printing press, water treatment plants, marble and granite storage / cutting centers.	Other Public Utility Areas and Public Buildings		

	industrial estates & industrial parks of non-obnoxious and non-nuisance type industries	Cremation Ground / Crematorium, Burial Ground, Common Vault.		
	Information Technology buildings and Information Technology Parks:- Information Technology buildings refers to building occupied by industries and other business establishments, whose functional activities are in the field of Information Technology, Information Technology Enabled Services (IT/ITES) and Communication Technology. Information Technology buildings in the Information Technology Parks would be constructed for the purpose of carrying out the activities set out in the definition given above for information technology building and the remaining buildings in the information technology park are meant to play a complementary role, supporting the activities in the information technology buildings. In the Information Technology Parks, 70% of the land area is to be set aside for the construction of Information Technology buildings and the remaining land area could be utilized for all the supporting activities. The buildings for the supporting activities could include residential buildings, recreational facilities, educational facilities, convention centers, hospitals, hotels and other social infrastructure meant to support the activities in the information technology buildings and Information Technology Parks.	LPG distribution centers excluding bottling plants and bulk storage go down.		
	Godowns /Warehouses/Storage of non-hazardous material, stacking yards, weigh bridge.	Storage of Explosives and Fire Works, Gas Godowns, Crusher Unit		
	Storage and sale of goods/ commercial and business offices incidental to the manufacturing activity	Sewage Treatment Plants, Dumping Yard.		

	Plant nurseries, Storage of Agricultural produces and seeds, pump house, wells and irrigation ponds incidental to community needs	Slaughter House		
	Dairy and Dairy Farms, Dairy related Industries, Poultry Farms, Piggery Farm, Smoke House.	Following uses subject to compatibility to surrounding developments: **a.** Retail shopping, commercial buildings, banks and professional offices not exceeding a total floor area of 300 sq.m, **b.** Individual residential building not excee ding a total floor area of 500sqm. **c.** Educational facilities, convention centres, hospitals, hotels and other social infrastructure subject to a total built-up area of 300 sq.m.		
	Markets			
	Dry Cleaning Plants, Power Plants, Sub Stations			
	Government or Public Sector Offices			
	Transmission & Telecommunication Towers, Wireless Stations.			
	Parking plazas, other parking areas (incidental to industrial use)			
	Residential Uses incidental to the industrial Use. Any other activity essentially incidental to industrial use.			
	Libraries and reading rooms			
	Educational institutions essentially serving the needs of residential community such as Day care, creche, nursery schools, kindergartens and schools offering general education (up to Lower Primary School level) not exceeding 200 sqm			
	Tot lots, Parks and Play Grounds attached to incidental residential use.			
13.2	**Provided with an access width of 12 m minimum**	Transport Terminals		
13.3	**Provided with an access width of 18 m minimum**	Container Terminals		

14	**PUBLIC AND SEMI PUBLIC USE ZONE**			
	Local/State/Central-Government/Public-Sector Offices and Other Related Public Buildings	Cremation Ground, Crematorium, Burial Ground, Common Vault.		Any other use not specified
	Residential Quarters incidental to public and semi-public use, Ashram, mutts	Parking plazas/ parking areas		
	Public Utility Areas and Buildings.			
	Transmission/ Telecommunication towers / Wireless stations			
	Additions and alterations to the existing public and semi-public buildings including addition of new blocks without altering the use.			
	Buildings for incidental uses with floor area limited to 500 sqm			
	Note: Existing areas under public and semipublic use only are zoned as Public and Semi Public Use Zone. Future expansion of the existing public and semipublic uses may be permitted in adjacent plots under the same ownership even if it comes under other use zones.			
15	**PARKS AND OPEN SPACES USE ZONE**			
	Any construction/land development essential for the development/ improvement of open air recreational facilities not exceeding 5% of the total area.	Gymnasium , Aquarium, social and cultural establishments covering up to 10% of the area, restaurant with plinth area up to 100 sqm which will not affect the character of the area		Any other use not specified
	Snack bars, stalls and booths incidental to above use and catering to the public not exceeding a total floor area of 50 sqm.			
16	**PARKS AND OPEN SPACES (Prop) USE ZONE**			
	Any construction/land development essential for the development/ improvement of open air recreational facilities not exceeding 5% of the total area.	Gymnasium , Aquarium, social and cultural establishments covering up to 10% of the area, restaurant with plinth area up to 100 sqm which will not affect the character of the area		Any other use not specified
	Snack bars, stalls and booths incidental to above use and catering to the public not exceeding a total floor area of 50 sqm.			
17	**TRAFFIC AND TRANSPORTATION USE ZONE**			
	Transport terminals including	fuel filling stations		Any other

	constructions that form an integral or essential part of the terminal. ATMs, Comfort stations , Weigh bridge Shops incidental to main use not exceeding 50 sqm.			use not specified
	Automobile service stations , garage incidental to main use			
	Residential use and night shelters not exceeding 25 sqm			
18	**HERITAGE ZONE**			
	Iringol kavu shall be conserved as such as a heritage site. Any development or redevelopment in this area shall be with the concurrence of the art and heritage commission of Govt of Kerala. However any work required to be carried out for the structural safety of temple or ancillary building or any ancillary use to support the main use shall be permitted subject to the condition that total floor area shall not be increased by 10% of the present total floor area.	Any facility to facilitate the tourist/pilgrims to the site such as transportation, refreshment facilities, shops incidental to the main use.		Any other use not specified
19	**PADDY AND WETLAND TO BE RETAINED**			
	Construction or land development in conformity with the conservation of Paddy Land and Wetland act in force in lands designated as paddy land or wet land under the said act.			
20	**WATERBODIES TO BE RETAINED**			
	All existing water bodies shall be conserved. Bridges, side protection walls, bathing ghats, jetty, floating jetty and facilities related to river tourism may be permitted.			Any other use not specified

GENERAL GUIDELINES

1. Zoning regulations of the Master Plan will prevail over the provisions in Kerala Municipality Building Rules in Force.

2. The provisions of Kerala Conservation of Paddy Land Wet Land Act 2008 and Coastal Regulation Zone notifications will prevail over all the provisions in the Master Plan.

3. Subject to the zoning regulation of the respective zones, more than one uses may be combined in a building, provided that the total floor area on all floors of such a building shall not exceed the maximum floor area permitted for any of such use in that zone. Also the floor area of the individual uses shall be limited to that prescribed by the zoning regulation for the zone.

4. Irrespective of zoning regulations, Public utility areas and buildings can be implemented anywhere in the planning area except at Heritage Zone.

5. Future expansion of the existing public and semipublic uses may be permitted in adjacent plots under the same ownership even if it comes under other use zones subjects to restrictions imposed under other acts and rules.

6. For the purpose of these regulations, floor area means the total floor area of the building in all floors.

7. In the dry cultivation zone the specified zoning regulation shall be controlled with respect to the plot size as given below:

For plots upto 25 cents the permission can be given by Municipal Council. Above 25 cents and upto 0.50 hectares concurrence from Senior Town Planner, Ernakulam and above 0.50 hectares concurrence from Chief Town Planner is needed and permission shall be subject to the provision of prevailing rules and regulations.

8. Regulations of Town Centre (Mixed use zone) shall also be applicable in land to a depth of 100m on either sides of roads having an existing or proposed width of 12m & above and in land to a depth of 50m on either sides of roads having existing or proposed width of 10m & above in Residential use zone, Subcentres I, II & III (Mixed use zone) and Dry agriculture use zone.

9. For availing mixed use benefit based on the road width, if a plot lying beyond the specified distance from the road, if 50% or more of the extent of the plot falls within the specified mixed use zone, the benefit of mixed use will apply to the entire plot.

10. Silence Zone, as prescribed by the Noise Pollution (Regulation and Control) Rules, 2000 under the Environment (Protection) Act, 1986 and its subsequent amendments, shall be applicable to the area under this Master Plan.

GENERAL GUIDELINES FOR LARGE SCALE PROJECTS

Large Scale development proposals in an area not less than 2 hectares, exceeding an investment of Rs.50 crores, which provide direct employment (after commissioning of the project) to the tune of not less than 500 may be permitted in all zones other than Heritage and Park & Open space, subject to the recommendation of a committee to be constituted by the Government for this purpose, under the Chairmanship of the Secretary, Local Self Government Department, consisting of Chief Town Planner of Kerala State Town and Country Planning Department and Secretary , Perumbavoor Municipality as members and the Senior Town Planner, Regional Town Planning Office, Ernakulam being the convener and satisfying following conditions:-

1. The developer shall produce project cum feasibility report and environmental impact assessment report, if required, of the project to the convener of the committee, 15 days in advance of the committee meeting.
2. The developer shall produce before the committee, all required clearances from the State and Central Government agencies concerned.
3. Adequate provision shall be made for supporting infrastructure such as water supply, Sewerage, Solid Waste Management etc. Separate sewage treatment plant and solid waste management measures shall be provided and maintained by the developer at his /her cost.
4. Adequate Memorandum of understanding between the developer and Secretary of Local body concerned shall be undertaken to bring this into effect.
5. Maximum Floor Area Ratio shall be 2 and minimum access width 12 meter.
6. The project shall be completed within a period of 3 years if not specified otherwise.

9. PHASING



CHAPTER 9. PHASING OF DEVELOPMENT

9.1 PHASING

Master Plan is prepared for a twenty year a period. Since the plan is finalized in 2011 the phasing is worked out for 2011-2031. Phasing the action programme is essential to dovetail the same with the National Five Year Plan. Phases are as follows.

Phase-I	2012-2017
Phase-II	2017-2022
Phase-III	2022-2027
Phase-IV	2027-2031

9.1.1 PHASE I (2012-2017)

Transport and Communication

1. Construction of the following Roads

1	Hospital Jn on AM road to KSRTC station (Union Bank Road)
2	KSRTC station to MC road(Jacobite Church Road)
3	MC road to PP road(Cattle Market Road)
4	Cattle Market Road to Gandhi Square(PP road)-Part of North south linkage No.16
5	Maradu Jn on AM road to Vattaikkattupady on MC road- New alignment
6	Vattaikkattupady Jn on MC road to Saddam Road junction on AM road
7	Saddam road junction to Millumpady junction on AM road (Partf EWI)
8	Mudickal on AM road to Choondivallam on MC road via Travancore Rayons (Gandhi Nagar road & Rayon road)
9	Kuzhippilly temple to MC road(GK Pillai road)
10	Govt. Girls High School on AM road to TB Junction
11	Kalady Junction to Choondivallam (MC road)
12	AM road to KSRTC station(Thottunkal road)
13	Pushpa junction on AM road to Municipal border via KSRTC station(Old Muvattupuzha road)
14	Gandhi Square on AM road to MO junction
15	MO junction to Oushadi junction on MC road(Court road)
16	Oushadi Junction on MC road to Hospital junction on AM road
17	Kalady Junction to Vattaikkattupady junction(MC road)
18	Gandhi Square on AM road to Municipal border(PP road)
19	Palakkattuthazham to Kalady junction(AM road)
20	Kalady junction Municipal boundary - AM road
21	Old Muvttupuzha road to MC road(Marthoma Church road)

2. Development of Defunct Rayons factory.
3. Development of Sub Centre Type –I
4. Junction improvement.
5. Decentralisation programme of Solid Waste Management.
6. Improvements in water supply and Drainage System, Augmentation of existing water supply.

9.1.2 PHASE II (2017-2022)

Transport and Communication

1	AM road to Parapuram Junction (Karothu Lane)
2	Parappuram Junction to Old Vallam road (Colony road)
3	Old Vallam road -Colony road junction to Thrikkaparambu junction (Part of EW4)
4	Old Vallam road to MC road (Thrikkaparmbu road)
5	MC road-Thrikkaparmbu junction to kanjirakkad junction (part of NS6)
6	GK Pillai road junction MC road to Kanjirakkad(Temple west road & CT road)
7	Pattal junction on AM road to Municipal border (Quarry road)
8	Iringole junction to Municipal border via Iringole temple (Iringole kavu road)

1. Development of Sub centre Type II
2. Development existing KSRTC bus stand.
3. Development of goods terminal.
4. Junction improvements.
5. Proposals of water supply and sanitation.
6. Monitoring of the proposed scheme in the first phase.

9.1.3 PHASE III (2022-2027)

Transport and Communication

1	Kanjirakkad junction on MC road to Pooppanipalam Poopani road
2	Pooppani road-Pooppani Palam to Pooppanipara junction (Part of NS-7)
3	Pooppanipara on Pooppani road to Alpparakkavu junction on AM road via Alppara Temple)
4	Alpparakkavu junction to Maradu junction (AM road)Part of East-West linkage No.6)
5	AM road to Kuzhippilly temple(Library road)
6	Poopani road

7	BOC road junction on AM road to Muncipal Border(BOC road & Karattupallikara road)
8	Onnam Mile junction on AM road to Municipal Border (Konnamkudy road)
9	Pattal junction on AM road to Pankulam road(Pattal- Pankulam road)
10	Gandhi nagar junction to MO junction via Parappuram Kareri-Kollamkudy road, TB road
11	Colony road to CT road (Chenganattu road & Boradway)
12	Kaduval junction on MC road to Rayons road(Old Vallam road upto Choola road junction & Choola road)
13	Alppara temple to Konnamkudy road
14	Iringole kavu temple to KSRTC junction via pankulam, Marudu Kavala, Vrindhavan road
15	Sophia College road

1. Development of Sub Centre Type –III
2. Completion of inner ring road.
3. Development of recreational facilities at Peringalam Puncha.
4. Junction improvement.
5. Development of Stadium.
6. Solid Waste Management Programme.

9.1.4 PHASE IV (2027-2031)

1. Outer ring road completion.
2. East west and North South linkage completion.
3. Completion of transit orients corridor and transit station.
4. Preparation of DTP Scheme for transit station at TOD corridor.
5. Up gradation of educational and medical facilities to be completed.
6. Completion of recreational facilities programmed to required standards.
7. Modernization of agriculture irrigation schemes to be completed.
8. Water Supply augmentation schemes to be completed.

ANNEXE I

Type of non-obnoxious and non-nuisance type of service or light industries permissible in Residential Use Zone, Commercial Use Zone & Dry Cultivation Use Zone

1. Flour Mills
2. Embroidery and Lace manufacturing
3. Gold and silver smithy
4. Watch, pen and Spectacle repairing
5. Laundry, dry cleaning and dying
6. Photo and picture framing
7. Manufacture and repair of musical instruments
8. Automobile servicing (excluding repair)
9. Radio servicing and repairing
10. Cotton and silk printing
11. Bakeries
12. Confectioneries
13. Cold storage
14. Aerated waters and fruit beverages
15. Manufacture of tobacco products
16. Garment making/tailoring
17. Electroplating
18. Bamboo and cane products
19. Sports goods
20. Card-board box and paper products
21. Domestic electrical appliances
22. Toy making
23. Furniture without machinery
24. Wooden electrical accessories
25. Copper, brass and metal utensils
26. Small foundries
27. Padlock
28. Sanitary fittings and other similar industries

ANNEXE II

List of non-obnoxious and non-nuisance type of service or light industries

1. Aerated water and fruit beverages
2. Apparel making
3. Assembly of air coolers and conditioners
4. Assembly of bicycles, baby carriage and other small non motorized vehicles
5. Atta – chakkies
6. Ayurvedic medicinal formulations, Ayurvedic health club
7. Bakery products , biscuits, confectionaries
8. Bamboo and cane products(only dry operations)
9. Block making for printing
10. Card board or corrugated box and paper products (paper or pulp manufacturing excluded)
11. Carpet weaving
12. Cement and concrete products(where crusher is not used)
13. Chilling plants and cold storage
14. Coir(without bleaching / dyeing)
15. Concrete batching plants
16. Cotton and woollen hosiery/ Cotton and silk printing
17. Electro plating
18. Electronics and electrical goods
19. Electronics equipment(Assembly)
20. Engineering workshop and general fabrication works (without any chemical treatment)
21. Embroidery and lace manufacturing
22. Flour mills(job work only)
23. Foam bed, latex thread
24. Foot wear(Rubber and PVC)
25. Furniture making
26. Fountain pens
27. Garment stitching , tailoring
28. Gold and silver smithy

29. Gold and silver thread saree work
30. Ice cream or ice making
31. Insulation and other coated papers(paper or pulp manufacturing excluded
32. Jobbing and machining
33. Light engineering
34. Laundry, dry cleaning and dyeing
35. Manufacturing of formulated synthetic detergent products
36. Manufacture of soaps involving process without generation of trade effluents (saponification of fat and fatty acids only)
37. Mineralized water
38. Musical instruments manufacturing
39. Oil ginning /expelling
40. Optical frames
41. Paint(by mixing process only)
42. Paper pins and U-clips
43. Power looms/ handlooms(without dyeing and bleeching)
44. Photo and picture framing
45. Pressure testing units
46. Printing Press
47. Rice mullors
48. Rope(Cotton and plastic)
49. Rubber gloss other than that for surgical and medical purpose
50. Rubberized coir mattresses
51. Scientific and mathematical instruments
52. Sports goods
53. Steeping processing of grains
54. Small foundries
55. Tissue culturing
56. Toys
57. Water softening and demineralization plants
58. Watch, Pen and spectacles repairing