

Kelaniya Development Plan 2021 - 2030



Urban Development Authority
Ministry of Urban Development & Housing



Kelaniya Development Plan

2021- 2030



Ministry of Urban Development & Housing
Urban Development Authority

Kelaniya Development Plan 2021 - 2030

© Urban Development Authority (UDA)- Sri Lanka - 2021

All rights reserved. This publication is published by the Urban Development Authority. Duplication, Trade, Distribution, Copying or otherwise without the prior consent of the Authority, either entirely or partially or transmitted without written permission, or for the dissemination or commercialization of such a publication through modern techniques.

Published by

Urban Development Authority-Sri Lanka
6th, 7th & 9th Floors, "Sethsiripaya Stage I", Battaramulla, Colombo, Sri Lanka

Web Site: www.uda.gov.lk

Email: info@uda.gov.lk

Telephone: No: +94112873637

Published Date - 2021

Kelaniya Development Plan 2021-2030 mainly consists of three parts as Part I, II and III. The part I consists of the background of the development plan, background study, the need of the Plan, the planning framework, the SWOT analysis & the plan. The Part II consists of the Planning and Building Guidelines and Zoning Guidelines pertaining to the planning boundary for the period of 2021 – 2030. The Part III consist of the zoning boundaries with the coordinates and all the annexures.

Kelaniya Development Plan 2021 - 2030 has been prepared by the Gampaha District Office - Western Province Division, Urban Development Authority.

Supervision:

Arch. Ub.Ds. Harshan De Silva Chairman-UDA, Plnr N.P.K. Ranaweera, Director General-UDA, Plnr. H.A. Dayananda, Additional Director General-UDA, Plnr. M.P. Ranatunga, Deputy Director General (Planning) – UDA, Plnr. N.A.S.N. Nishanka Director (Western Province Division)-UDA, Attorney at Law C. Jayawardena, Consultant (Legal) – UDA, Plnr. Priyani Nawarathne, Director (Strategic Planning) – UDA,

Planning Team:

Plnr. W.A.R. Ranjani Deputy Director (Planning) Plnr. J. Somasiri Former Deputy Director (Planning), Plnr. M.L.M. Yehiya Former Deputy Director (Planning), Plnr. Pabasara Sathkumara Asst. Director (Planning), Plnr. J.P.U. Wimalarathne Former Asst. Director (Planning), Plnr. B.B.N.W. Kuruneru Asst. Director (Planning) Nadeepa Palliyaguru Former Asst. Director (Planning), Y.S. Senarathne Planning Officer, Samanlatha Kodithuwakku Planning Officer, A.M.C. Samanthilaka Former Town Planner, K.M.I. Pathirana Town Planner, A.J.M.S.K.A. Jayasekara Town Planner, W.M.D.A. Wasala Town Planner, D. Sauri N. Jayakodi Town Planner, of the Gampaha District Office : Western Province Division - UDA, Maneesha Kumarasinghe Town Planner of Strategic Planning Division - UDA, Chanaka Jayasinghe Environmental Planner, Environmental & Landscape Division - UDA

Supportive Team

Strategic Planning Division – UDA (Supervision, monitoring and gazetting)
Environment and Landscape Division – UDA (Preparation of the PORS, DRR & Conservation)
GIS Division – UDA (Providing Arc GIS Spatial data layer & technical assistants)
Research and Development Division – UDA (Conduct awareness programs to introduce new techniques)

Acknowledgement

Western Province Division has taken the lead to provide the supervision for the preparation of the Kelaniya Development Plan 2021 – 2030. The objective of this plan is to identifying future development trends incorporating physical, economic, social and environment sectors in the Kelaniya Pradeshiya Sabha (PS) area. The vision of the Kelaniya Development Plan 2021 – 2030 is in line with the 'Vistas of Prosperity and splendour' the government policy direction of the His Excellency the President Gotabaya Rajapaksa.

It is our proud privilege to Honourable Mahinda Rajapaksa subject Minister of Urban Development & Housing for approving the Kelaniya Development Plan 2021 – 2030 under the provision of Urban Development Authority Act No. 41 of 1978 as amended by the Act No. 04 of 1982. Further, it is our privilege to Dr. Nalaka Godahewa, State Minister of Urban Development, Coast Conservation, Waste Disposal and Community Cleanliness and Mr. Sirinimal Perera, Secretary to Ministry of Urban Development & Housing for their guidance and supports in this process.

Special gratitude offered on behalf of the planning team and the UDA, to the Chairman, Kelaniya Pradeshiya Sabha (Kelaniya PS) members of the PS and the staff. Secretary Kelaniya Divisional Secretariat and the staff for their generous support given for the successful completion of this development plan.

Also, special appreciation on behalf of the UDA offered to all institutions representors and people who live in this area for giving data and directives required for the preparation of this plan.

Appreciatively thankful to Chairman of UDA Archt. Harshan De Silva, Director General of UDA Plnr. N.P.K. Ranaweera, Additional Director General of UDA Plnr. H.A. Dayananda, Deputy Director General (Planning) of UDA Plnr. M. P. Ranatunga, Director Western Province Division of UDA Plnr. N.A.S.N. Nishsanka Consultant (Legal) of UDA Attorney at Law C. Jayawardena, Director (Strategic Planning) of UDA Plnr. Priyani Nawarathne on behalf of the planning team for their incomparable courage, guidance and welcoming support.

In the end, Director – Environment & Landscape division L. Arct. C.K.E. Kalupahana and the staff of the division and Director - Geographical Information System & ITS Plnr. J.P.S. Somasekara and the staff of the division and the staff of the division, Gampaha District office of the UDA and staff members of all divisions are gratefully appreciated on behalf of the planning team for their support to the successful completion of this task.

Hon. Minister's Foreword



The Urban Development Authority was established under the Urban Development Authority Act No. 41 of 1978, for the systematic planned urban development in the declared urban areas and continue to actively contribute towards it.

Steps have been taken to formulate comprehensive development plans for each urban development area, based on the efficient and effective use of physical space so that all areas of Sri Lanka make an equal contribution to the development process of the country. The Kelaniya Town provide services to a large population. Accordingly, Kelaniya Pradeshiya Sabha Planning Area has the potential to become a town that continues to provide residential and commercial services. This potential is further enhanced by the natural ecosystem of the surrounding area and the locations of archeological sites of value. These development plans aim to develop the Kelaniya Town by utilizing the potential of the area.

For the realization of His Excellency the president's vision "Vistas of Prosperity" the new Re-urbanization Programme has been formulated in wide consultation with Professionals, Specialists, Stakeholders & communities with strategies having an excellent technological methodology and innovative approach.

Accordingly, I commend the Chairman of the Urban Development Authority, the Director General, the planning teams and all the officers of the Urban Development Authority who assisted in making this work a success. Further, I also appreciate and believe through the support and contribution of the relevant Local Government Institutions, Public and Private Sector Institutions and the general public, Kelaniya Development plan would be successfully implemented.

Hon. Mahinda Rajapaksa (M. P)

Minister of Urban Development & Housing

Hon. State Minister's Foreward



As a pioneer in Sri Lanka in achieving modern sustainable development goals, the Urban Development Authority has a great responsibility. Accordingly, it is essential to prepare development plans for the Urban Development Areas declared by the Hon. Minister in charge of the subject in terms of the Urban Development Authority Amendment Act No. 04 of 1982 (Part II, Section 8A (1)).

The development plans thus formulated are primarily aimed at building a productive citizen, a happy family, a dignified society and a prosperous nation, which are the core aspirations of the vistas of prosperity. I also believe that these development plans will go a long way in achieving the objectives of urban development and regulation through a formal reurbanization plan that will bring economic stability to the urban population.

Therefore, I would like to express my heartfelt gratitude to the planning team and to all those who have played a very responsible role in preparing this plan and I hope that you will all contribute to the expectations of the vision of prosperity.

Dr. Nalaka Godahewa (M.P)
State Minister of Urban Development, Coast Conservation,
Waste Disposal and Community Cleanliness

Hon. Chairman's Foreword (UDA)



Throughout the last four decades, Urban Development Authority has been serving as the apex planning authority in Sri Lanka having the statutory powers to prepare and enforce urban development plans.

Urban Development Plans cover a number of fields including optimum, effective and efficient use of land and managing the quality of its environment. These development plans are prepared for the promotion and regulation of public well-being in urban areas and the people. According to the present government's manifesto, it is compulsory to prepare development plans for areas which have been declared as urban development areas by the subject minister as per section 8 A (1) under part II of Urban Development Authority Act No. 04 of 1982 (Amendment).

The Development Plan for Kelaniya PS area has been prepared for the period 2021 – 2030 considering the physical, economic, social and environmental factors, while successfully overcoming the challenges in preparing the development plan through tools and methodologies with which the Urban Development Authority is equipped.

Therefore, I extend my heartfelt gratitude to the planning teams who dedicatedly worked for ensuring successful completion of this plan and to those who contributed in numerous ways. At the same time, I also expect that all parties who contributed for the preparation of this plan will also effectively contribute in future as well for successful implementation of the plan.

Archt. Harshan De Silva
Chairman
Urban Development Authority

Hon. Chairman's Foreword (Kelaniya PS)



The UDA, which has been a pioneer in the development of Sri Lanka's urban development for four decades, joined hands with local authorities and aligned to create benevolent towns to live in all urban areas with a proper landuse pattern. More weight for quality & balance of development in the physical, economic, social and environmental sectors have been added to the UDA due to the declaration of Kelaniya PS area in 2001 as an urban development area and belongs to the Colombo Core Area from 2017. The PS also plays a significant role in this development process as administrative institution and completely accomplished their responsibilities for general welfare of the public.

Accordingly, Kelaniya Urban Development Plan for the period of 2019 - 2030, has been prepared by the Gampaha District Office of the UDA and further, development intensity of the area has been focussed into better direction under the legal framework. It targets the future residential community as well as the urban commuting population coming for their daily needs and integrates economic & social benefits through existing development potentials. Not only that this development plan will guide Kelaniya, towards the high urbanized green city with proper infrastructure facilities while protecting its sacred sense. I, and community leaders will give our fullest cooperation to achieve this vision at near future.

W.D.S. Kumudhini
Chairman,
Kelaniya PS

Preface

Kelaniya PS area declared by the UDA under the Gazette Notification No. 1771/10 in 13th February 2001 by the Minister incharge of the subject of Urban Development as an urban area and recently area belongs to “Core area of the Metro Colombo Development Region”. Accordingly, Kelaniya Development Plan has been prepared for the time period of 2021 -2030.

The basis for the preparation of development plan can be identified as the data collection in relation to the year 2012/2019 and the data collected from the field service carried out. And analysis of collected data by using the scientific methods of analysing and coming to the conclusions upon them. Accordingly, the new development plan for Kelaniya PS area has been prepared for the 2021-2030 period, by utilizing the results and the decisions have been taken at various times in the development planning process and with the practical process and mixing of the same with the practical aspects of the Kelaniya PS area.

Kelaniya development plan 2021-2030 consists 3 main parts such as part I, part II and part III. The part I consists of the background of the development plan, background study, the need of the plan, the planning framework, the SWOT analysis and the plan. Part II consists of the planning and building Guidelines and zoning Guidelines pertaining to the planning boundary for the period of 2021-2030. The part III consists of the zoning boundaries with the coordinates and all the annexures.

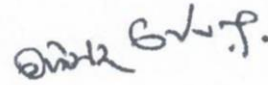
Part I – Chapter 1 of the plan detailed out the meaning of the team development plan, its legal context, the stakeholders of the plan, its context and the planning process followed. Chapter 2 and chapter 3 respectively include the Kelaniya PS area, history of the area, boundary delineation of the area and need of the plan in detail. Chapter 4 consists vision, goals and objectives and strategic plans while chapter 5 include the detailed descriptions on the baseline SWOT analysis for each goal. Further, chapter 6 of the plan describe the conceptual plan and proposed landuse development plan. Under that the main strategic plan of the Kelaniya development plan such as road and transport development strategy, sustainable environment development strategy, economic development strategy, infrastructure development strategy and implementation strategy has been detailed out as subsections.

Similarly, part II -Chapter 7 has been dedicated to describe planning and building Guidelines and in chapter 8 describe the identified zones and zoning Guidelines and chapter 9 included proposed road width, building line and reservations.

Thus, the intention of this authority and the government of Sri Lanka is to implement the Kelaniya development plan 2021-2030 in near future.

**APPROVAL OF THE DEVELOPMENT PLAN FOR THE KELANIYA PRADESHIYA
SABHA AREA**

I, Mahinda Rajapaksa, Minister of Urban Development and Housing do hereby approve the development plan for the Kelaniya Prashiya Sabha Area, having considered the recommendation made by the Board of Management of the Urban Development Authority on 24th September, 2020 by virtue of the powers vested in me under section 8 “F” of the Urban Development Authority (Amendment) Act No.4 of 1982.



Mahinda Rajapaksa (M.P)

Minister of Urban Development and Housing

Ministry of Urban Development and Housing,
17th and 18th Floors,
“Suhurupaya”,
Sri Subhuthipura Road,
Battaramulla.

Date: March, 2021.



ශ්‍රී ලංකා ප්‍රජාතාන්ත්‍රික සමාජවාදී ජනරජයේ ගැසට් පත්‍රය
අති විශේෂ
The Gazette of the Democratic Socialist Republic of Sri Lanka
EXTRAORDINARY

අංක 2236/13 - 2021 ජූලි මස 13 වැනි අඟහරුවාදා - 2021.07.13
No. 2236/13 - TUESDAY, JULY 13, 2021

(Published by Authority)

PART I : SECTION (I) — GENERAL

Government Notifications

**APPROVAL OF THE DEVELOPMENT PLAN FOR THE KELANIYA PRADESHIYA SABHA
AREA**

I, Mahinda Rajapaksa, Minister of Urban Development and Housing do hereby approve the development plan for the Kelaniya Pradeshiya Sabha Area, having considered the recommendation made by the Board of Management of the Urban Development Authority on 24th September, 2020 by virtue of the powers vested in me under Section 8 “F” of the Urban Development Authority (Amendment) Act, No. 4 of 1982.

MAHINDA RAJAPAKSA (M. P.),
Minister of Urban Development and Housing.

Ministry of Urban Development and Housing,
17th and 18th Floors,
“Suhurupaya”,
Subhuthipura Road,
Battaramulla,
30th March, 2021.

07 - 540/1



1A- G 34628—60 (07/2021)

This Gazette Extraordinary can be downloaded from www.documents.gov.lk

2A I කොටස : (I) ඡේදය - ශ්‍රී ලංකා ප්‍රජාතාන්ත්‍රික සමාජවාදී ජනරජයේ එති විශේෂ ගැසට් පත්‍රය - 2021.07.13
PART I: SEC. (I)-GAZETTE EXTRAORDINARY OF THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA-13.07.2021

**NOTICE OF APPROVAL OF THE DEVELOPMENT PLAN FOR THE PRADESHIYA SABHA
LIMIT OF KELANIYA**

NOTICE is hereby given to the General Public of the Democratic Socialist Republic of Sri Lanka under Section 8 (G) of the Urban Development Authority Law No. 41 of 1978 as amended by the Act, No. 4 of 1982 that I, Mahinda Rajapaksa, the Minister in charge of the subject of Urban Development & Housing, by virtue of the powers vested in me under Section 8 (F) of the said Act, have approved the Development Plan for the Pradeshiya Sabha Limit of Kelaniya, prepared under Section 8(A) of the said Act on the 30th day of March, 2021.

MAHINDA RAJAPAKSA (M. P.),
Minister of Urban Development & Housing.

Ministry of Urban Development & Housing,
17th and 18th Floors,
“Suhurupaya”,
Subhuthipura Road,
Battaramulla,
12th July, 2021.

07 - 540/2

**APPROVAL OF THE DEVELOPMENT PLAN FOR THE PRADESHIYA SABHA LIMIT OF
KELANIYA**

PUBLIC are hereby informed that the Development Plan prepared for the Pradeshiya Sabha Limit of Kelaniya under Section 8 (A) of the Urban Development Authority Law, No. 41 of 1978 as amended by the Act, No. 4 of 1982, has been approved on 30th March, 2021, by Hon. Mahinda Rajapaksa, Minister of Urban Development & Housing, by virtue of powers vested on him under Section 8 (F) of the said Act.

Arch. HARSHAN DE SILVA,
Chairman,
Urban Development Authority.

12th July, 2021.

07 - 540/3

Contents

Acknowledgment	III.
Hon. Minister's Foreword	IV
Hon. State Minister's Foreword	V
Hon. Chairman's Foreword (UDA)	VI
Hon. Chairman's Foreword (Kelaniya Pradeshiya Sabha)	VII
Preface	VIII
Approving the Development Plan of the Kelaniya Pradeshiya Sabha Area (2021 - 2030)	IX
Content	XII

Part I

Chapter 01

Background of the Development Plan	1
---	----------

1.1 Introduction	2
1.2 Stakeholders of the Plan	2
1.3 Scope of the Development Plan	4
1.4 The Planning Process	5

Chapter 02

Preliminary Study	7
--------------------------	----------

2.1 The Study Area	8
2.2 Planning and Situational Context	9
2.3 Delineation of the Planning Boundary	15

Chapter 03

Need of the Development Plan	17
-------------------------------------	-----------

3.1 Declining of the sense of place which created the identity of the Kelaniya due to its Religious, Cultural and Historical importance	18
3.2 Environment inconvenience emerging with "Environmental Disequilibrium" due to flash flooding and urban heat	21
3.3. Increasing Traffic Congestion	24

Chapter 04

The Planning Framework	29
-------------------------------	-----------

4.1 The Vision	30
4.2 The Vision Statement	31
4.3 Goals	32
4.4 Objectives	32

Chapter 05	
Swot Analysis	35
5.1 Summarized SWOT Analysis	36
5.2 Detailed SWOT Analysis	42
Chapter 06	
The Plan	63
6.1 Concept Plan	64
6.2. Proposed Land use plan	66
6.3. Infrastructure Development Strategies	69
6.3.1. Service Management Plan	69
6.3.2. Road & Transportation Plan	84
6.3.3. Water Supply Plan	91
6.3.4. Electricity Supply Plan	95
6.3.5. Drainage and Sewer Lines Management Plan	97
6.3.6. Solid Waste Management Plan	100
6.4. Economic Development Strategies	104
6.4.1. Proposed Economic Plan	104
6.5. Sustainable Environmental Development Strategies	109
6.5.1. Environment Conservation Plan	109
6.5.2. Landscape Management Plan	111
6.5.3. Disaster Risk Reduction Plan	113
6.5.4. Public Outdoor Recreational Space Plan	117
6.6. Culture & Heritage Management Strategies	121
6.6.1. Sacred Area Development Plan	121
6.7. Implementation Strategies	126
6.7.1 Strategic Projects and Other Projects	126
6.7.2 Responsible Agencies	153
Part II	
Chapter 07	
Development Zones and Zoning Guidelines	159
7.1 Introduction	160
7.2 Development Zones	160

7.3 Zoning Factor	163
7.4 Common Guidelines for Development Zones	167

Chapter 08

Proposed Zoning Guidelines	173
-----------------------------------	------------

8.1. High Density Commercial Zone	174
8.1.1 Zonning Guidelines and Permissible Uses for High Density Commercial Zone	174
8.2. High Density Higher Education Zone	177
8.2.1 Zonning Guidelines and Permissible Uses for High Density Higher Education Zone	177
8.3. High Density Logistic Zone	180
8.3.1 Zonning Guidelines and Permissible Uses for High Density Logistic Zone	180
8.4. High Density Residential Zone	184
8.4.1 Zonning Guidelines and Permissible Uses for High Density Residential Zone	184
8.5. Moderate Density Residential Zone	187
8.5.1 Zonning Guidelines and Permissible Uses for Moderate Density Residential Zone	187
8.6. Low Density Residential Zone	191
8.6.1 Zonning Guidelines and Permissible Uses for Low Density Residential Zone	191
8.7. Low Density Sacred Heritage Zone	194
8.7.1 Zonning Guidelines and Permissible Uses for Low Density Sacred Heritage Zone	194
8.8. Special Eco-Conservation Zone	197
8.8.1. Zonning Guidelines and Permissible Uses for Special Eco-Conservation Zone	197
8.9. Wetland Nature Conservation Zone	199
8.9.1. Zonning Guidelines and Permissible Uses for Wetland Nature Conservation Zone	199
8.10. Paddy Cultivation & Wetland Agriculture Zone	200

Chapter 09

Proposed Road Width, Building Line and Reservations	203
--	------------

9.1. Building Line and Reservation	204
9.2. Proposed Railway and Expressway Reservation	205
9.3 Reservations of Canals, Rivers & Reservoirs	206

Part III

List of Maps	208
List of Figures	209
List of Tables	211
List of Annexures	213
Definitions	327
Abbreviation	332
Reference	333



PART I

01

Chapter



Background of the Development Plan

Chapter 01

Background of the Development Plan

1.1 Introduction

It is expected to prepare a methodical Development Plan for a selected area in keeping with the identification of potentials of the area specifying future vision whereby physical, social and economic improvement of the people are achieved. Urban Development Authority (UDA) of Sri Lanka is the authorized institution for preparing Integrated Development Plans for development areas declared under UDA Law No. 41 of 1978. It is also empowered to UDA to prepare integrated development plans with the provision under Section 8 a (1) of UDA Amendment Law No. 4 of 1982.

Accordingly, Kelaniya area within the Kelaniya Divisional Secretariat part of 1987 was established as a DSD and also declared as an urban development area under Section 3 of UDA Law No. 41 of 1978, as per Extra Ordinary Gazette No. 1171/10 dated 13th February 2001. Yet there is proper Development Plan is prepared until 2018. Hence as per strategic plan for the period of 2018-2022 of the UDA, it is decided to prepare a Strategic Plan for Kelaniya PS area. Accordingly, an attention has been focused in preparing a Physical Development plan for urban development areas and also considering the complexity of urbanization and decided to prepare a Strategic Plan for Kelaniya PS Area. Accordingly, a Strategic Plan has been prepared for Kelaniya PS Area as a divisional level plan covering the period of 2021 – 2030. This Development Plan Intends to minimize urban congestion, protecting natural environment and heritage of Kelaniya Sacred Area and development of socio-economic development expedient.

The Eighth Policy discusses the “New approach in National Spatial System” under the tenfold key policies contained in the current Government National Manifesto. It will restructure the entire urban environment, introduce a C-shaped economic corridor that connects all intermediate cities and physical areas which giving the access to major ports and airports is expedited. Among the four multi-dimensional commercial cities, connecting cities, national cities & cluster cities, Kelaniya can be identified as an intermediate city with economic value centered on the Port of Colombo. Accordingly, steps have been taken to formulate plans in the Kelaniya Development Plan taking into account the new approach of spatial system through the National Manifesto.

1.2 Stakeholders of the Development Plan

All responsible officials of all state and private agencies and communities were linked for preparing Kelaniya development plan for the period of 2021 – 2030. Thus it was expected to obtain instructions and proposals from relevant organizations of the areas.

Key Stakeholders

1. Kelaniya PS

Key Instructive Organization

2. Kelaniya Temple
3. Kelaniya Divisional Secretariat Office
4. National Physical Planning Department
5. Road Development Authority
6. Sri Lanka Land Reclamation & Development Corporation
7. Wildlife Conservation Department
8. Archaeological Department
9. Central Environment Authority
10. Irrigation Department
11. National Housing Development Authority
12. National Water Supply and Drainage Board
13. Ceylon Electricity Board
14. Sri Lanka Electricity Private Company

Stakeholders Groups

15. Zonal Education Office
16. Road Passenger Transport Authority
17. Trade Union – Kiribathgoda
18. Kiribathgoda Sinhala Trade Union
19. Bus Saviya/ Three-Wheeler Association
20. Agrarian Service Center
21. Department of Export Agriculture
22. Kelaniya Police Station

1.3 Scope of the Development Plan

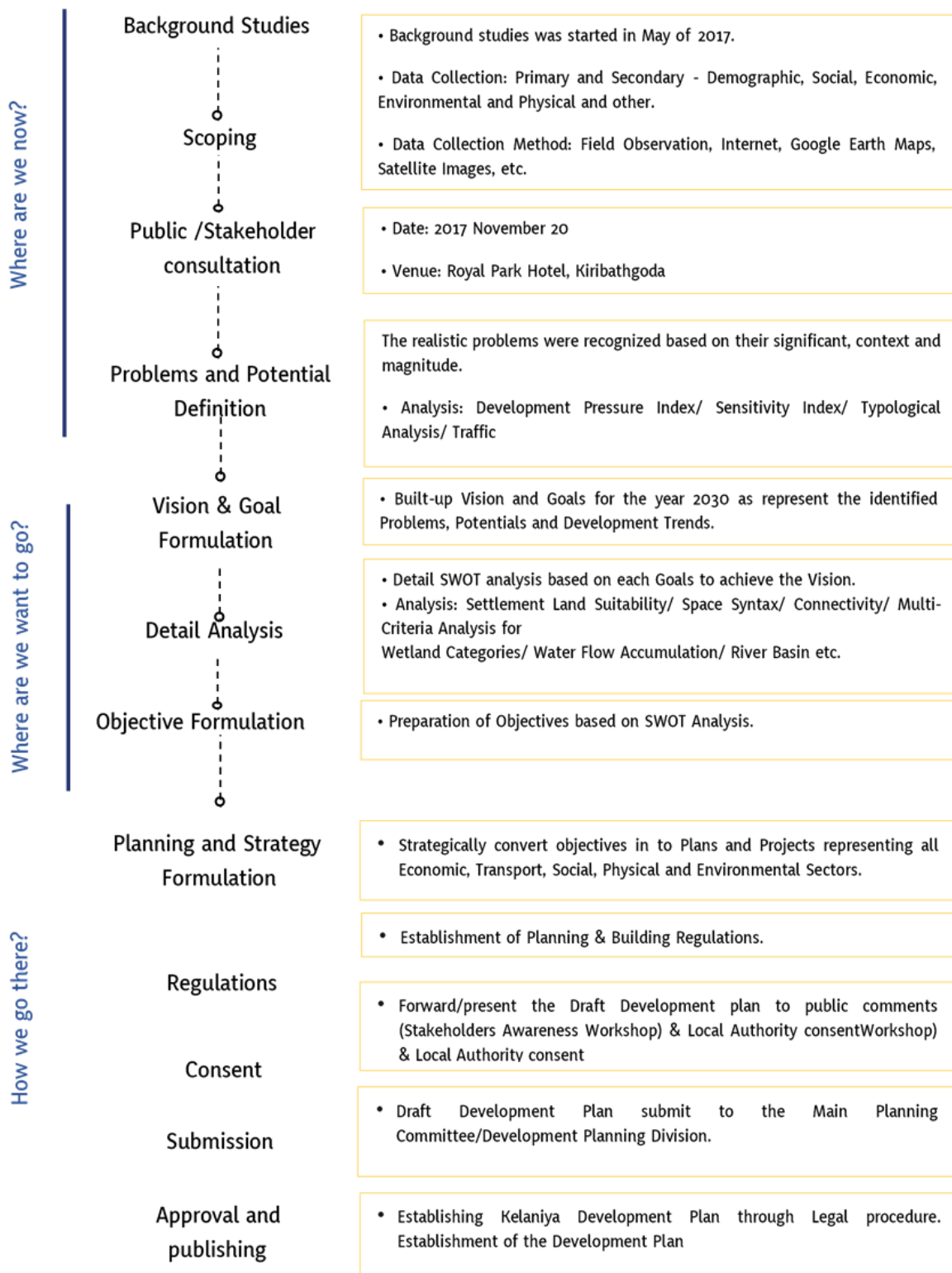
Kelaniya is located at the urban fringe of Colombo CBD from the past. Location of Historical Kelaniya Rajamaha Vihara is one of the main Buddhists Viharas in Sri Lanka and a most hereditary values to the area. Consequently, the urban problems are emerging in this area which should be address through planning intervention. However, minimizing physical and social improvement in this area is essential land as a result attention has been focused to prepare a Strategic Urban Development Plan for the Kelaniya PS Area.

As per the current government National Manifesto discussed the “New approach in National Spatial System” in eighth policy & that led to restructure the entire urban environment. This “New approach in the National Spatial System” introduced city structure as follows: Multi-dimensional commercial cities, connecting cities, national cities & cluster cities. Considering the national spatial structure guidance, Biyagama can be identified as an intermediate city with industrial economic value centered on the Port of Colombo. Accordingly, steps have been taken to formulate plans in the Biyagama Development Plan taking into account the new approach of the spatial system through the National Manifesto.

Vital attention is focused to this plan to create an urban greening city in protecting sacred and hereditary of Kelaniya Sacred Area with directing modern development with efficient transport facilities. Planning has been prepared taking accounts of cultural and heritage. This is a divisional level strategic plan prepared considering as Kelaniya DS area. Although vision was up to the year 2030 which may go beyond 12-year period though attractive development would be considered. However historical, cultural and religious specification, more attention would be taken for its genetic limitations.

1.4. The Planning Process

Figure 1.1 Planning Process



As per Figure 1.1, an entire planning process of the Kelaniya DS area is shown mainly under 3 stages. Firstly, where are we now? Secondly, where we want to go and Thirdly, how we go there?

Accordingly, within the month of May 2017 as a first stage of the planning process: existing situation and identification of development plan have been identified. Data related to historical, social, economic, environment and physical factors have been collected with the use of Google area Map, photograph etc. Especially data of Kelaniya DSD and PS are the main sources. For this, data has been stored in Geographical Information System by using GIS data and observation of spreadsheets, Google maps have been analysed in a zonal context. After such studies of stake holder's public hearing sessions held on 20th November 2017 at Royal Park Hotel, Kiribathgoda.

All stakeholder perceptions were analysed using NVIVO technique. It was fully conducted cooperating with Strategic Planning Division. The realistic problems were recognized based on their significant, context and magnitude through the NVIVO analysis, Development pressure, Space syntax, Sensitivity, Typological analysis, Traffic, NDVI and literature reviews etc.

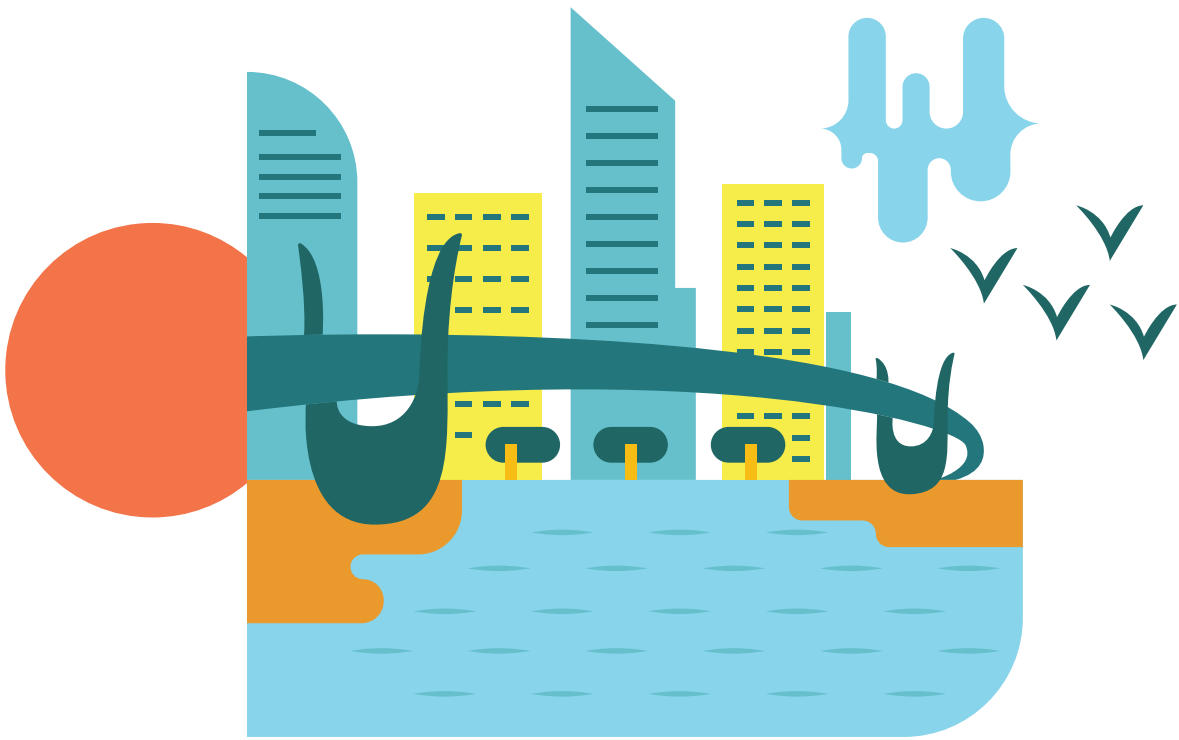
As a second stage, where we want to go and managing potentials and development trends aims at timely urban development. Accordingly, to achieve the vision, there are three purposes. As per next stage under comprehensive analysis SWOT was done. Accordingly, purposes were adjusted in order to avoid weaknesses and threats. Ascertaining of strength and opportunities in the Zone, all opportunities under this planning process are integrated with the above stages.

Under final stage, preparation of strategic planning road and transport, historical inheritance, economic, social, and physical and environment components have been transformed into strategic physical planning. Accordingly, it is expected to order of strategic priorities implemented practically. Finally, in order to implement these proposals in the real landuse planning and Guidelines suite to above planning process has been established.

Under obtaining approval for the draft development plan on local government officials and public have been submitted. Public opinion and permission of divisional authority had been obtained through a workshop held for stakeholder's awareness meetings. Obtaining ideas and proposals as above, necessary adjustments have been inserted and finally draft plan is submitted to main planning committee of development planning division. After this process, development plan for 2021-2030 Kelaniya DS area legally established and declare for implementation.

02

Chapter



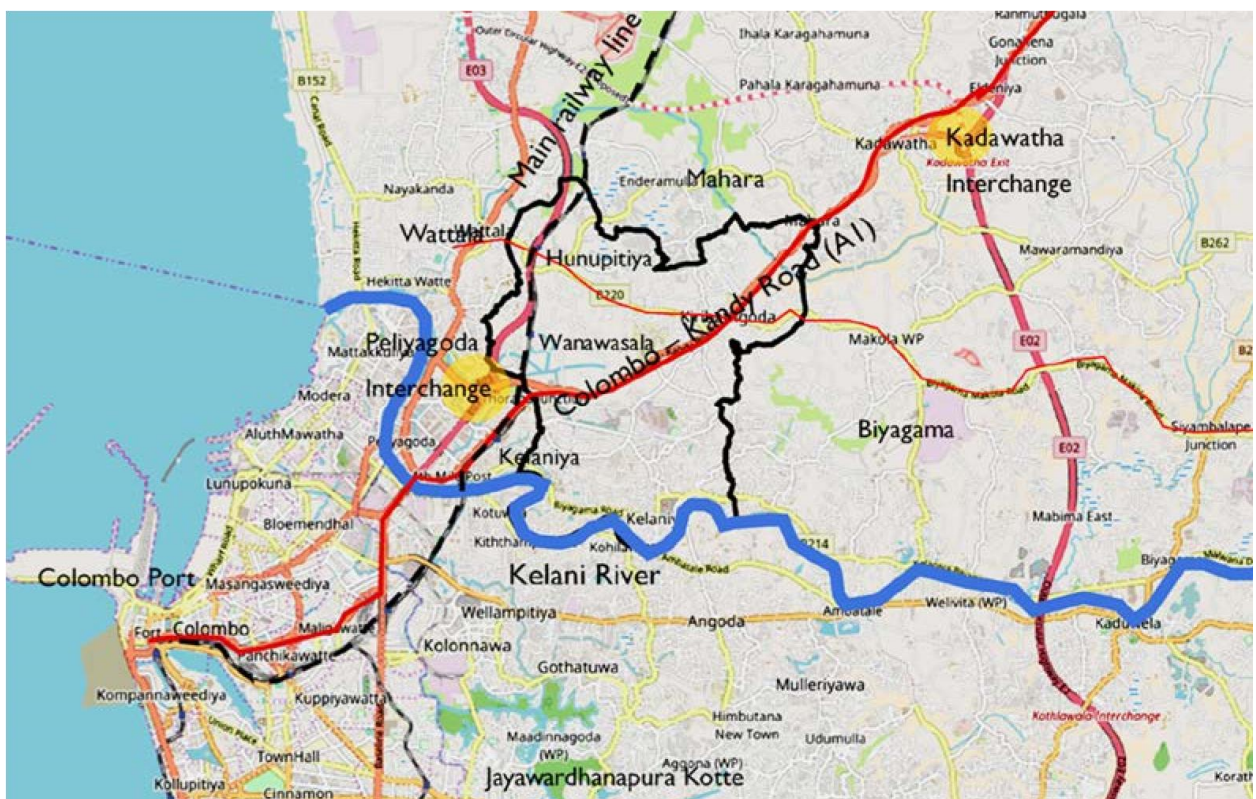
Preliminary Study

Chapter 02 Preliminary Study

2.1 The Study Area

Kelaniya PS area is located at Siyane Korale Adhikari Paththuwa in Gampaha District in the Western Province. It is 12Km from the Colombo commercial city and also 8Km from Sri Jayawardenepura Kotte, the Administrative Capital City. Kelaniya area is administratively under Kelaniya DSD and it is one of two local government authority areas in that Divisional Secretariat Division (DSD)

Figure 2.1 Study area



Source: Google Map/ Planning Team – Gampaha District Office, 2021

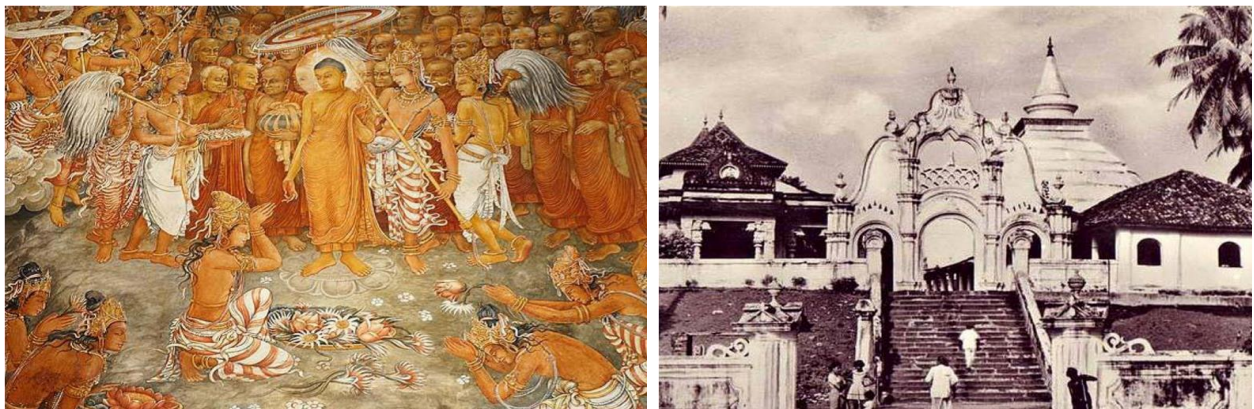
Kelaniya PS area belongs to low country wet zone in the south western plains. Mainly southern part of the Kelaniya PS area is bounded by Kelani river which flowing from Samanala Mountain. Apart from that from eastern Biyagama PS limits, from northern Mahara PS limits, the Wattala and Peliyagoda Urban Council limits are located around the Kelaniya PS area. Thus, the Kelaniya PS has consisted with 30 Grama Niladhari Divisions as mention in map 2.1.

2.2. Planning & Situational Context

Kelaniya area is a long historical inheritance which may even go above Anuradhapura and Polonnaruwa Kingdoms. It runs up to 6th Century B.C. According to Mahawansa Legend, early community in Sri Lanka lived in areas associated in Kelaniya River and Nagadeepa (Nainathiev). Naga community was there in these areas and it identified as “Kelani Nagar”

After 8 years of enlighten Gautama Lord Buddha has arrived Sri Lanka on his 3rd and Final tour. Kelani Nagar claimed highly historical and religious significant. At that time, Maniakkitha Naga King’s invitation, Lord Buddha arrived Kelaniya and settled the quarrel between Chulodara and Mahodara brothers for a Gem embossed Chair. And later, that gem embossed chair had been kept safe in a (Chethiya) Pagoda of this premises which is presently known as a Kelaniya Chethiya Nationally & Internationally thereby millions of people pay highly as respected Buddhist religious premises. Relevant photographs are shown in figure 2.2. After pressure of this historical religious background, entire Western coastal belt had been ruled by King Kelanithissa. Subsequently, this kingdom was transformed into Kotte Kingdom.

Figure 2.2 History of Kelaniya Vihara and arrival of Lord Buddha



Source: Lankapura Website, 2010

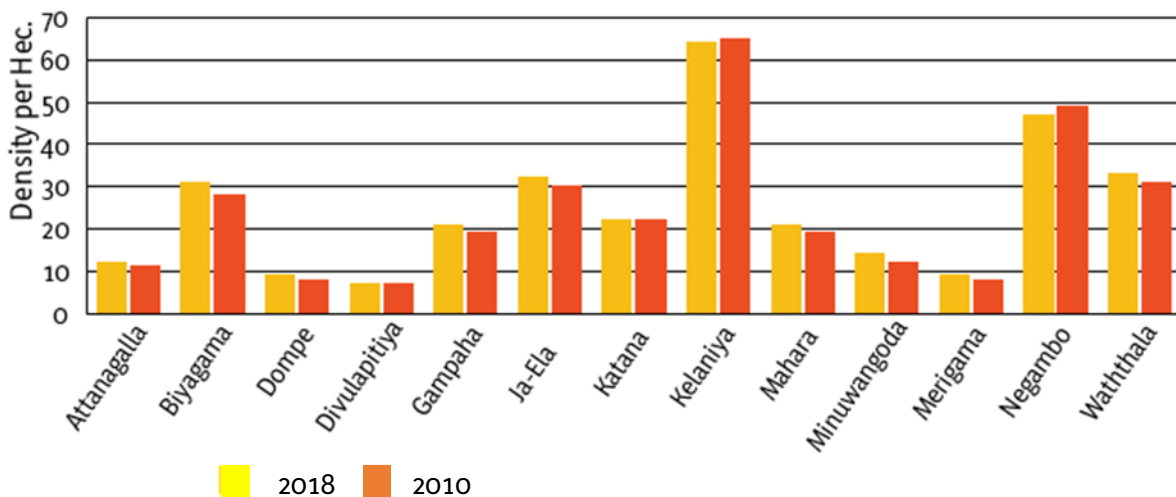
With the historical and cultural pressure in the statistics of Kelaniya Temple indicate that there are 10,000 to 20,000 people arriving to Kelaniya Temple daily and it increase up to 75,000 to 100,000 people during the full moon day. And also, Kelaniya Duruthu Maha Perahara holds annually as a cultural festival event for which more than 200,000 people gather conjointly. Thus, Kelaniya is recognized as a historical and Holy Township could be identified as a highly significant announcement.

Although this area is very much closer to Colombo city, there was a natural physical constrain of the Kelaniya River. After early 19th Century with the construction of Colombo- Kandy main road, Kelaniya Bridge and Main Railway Line Kelaniya is more interrelated to Colombo city than Gampaha town although Kelaniya is within the Gampaha Administrative District. As a result, during the year 1948 the plan prepared by Patrick Abercrombie and Greater Colombo Plan of 1978 include Gampaha and Kalutara districts are integrated in Colombo Metropolitan area in addition to Colombo District. Although this area is belonged to Gampaha District, the physical, social, economic and functional linkages are combined with the Colombo city. It further cleared that urban planning done for Colombo city is allied to Gampaha districts as well.

As mention in annexure 03, Possibilities are existed to link with National road network which runs Colombo- Kandy main Highway and main railway line linking through Hunupitiya, Wanawasala and Kelaniya closest railway stations. Apart from that the expressway interchanges of Kaduwela, Kadawata and Peliyagoda in Colombo – Katunayake and Outer Circular Expressway are located closer to the Kelaniya PS area while providing easy linkages to many regional centres in the Island. Since direct influence of various transport means, this area is highly linked with national and regional areas. In addition, Kiribathgoda, Hunupitiya and Makola 'B' class roads network has close relationship with the towns in the region. Further Sirimewan Kelaniya Bridge helps a close linkage with the administrative capital with the distance of 8Km. This bridge also backings the connections with Egoda Kelaniya and Megoda Kelaniya. Thus, this locational advantage leads for attracting and accommodating high residential population specially who employed Colombo and adjacent areas and also Peliyagoda, Biyagama & Katunayake industrial Zones.

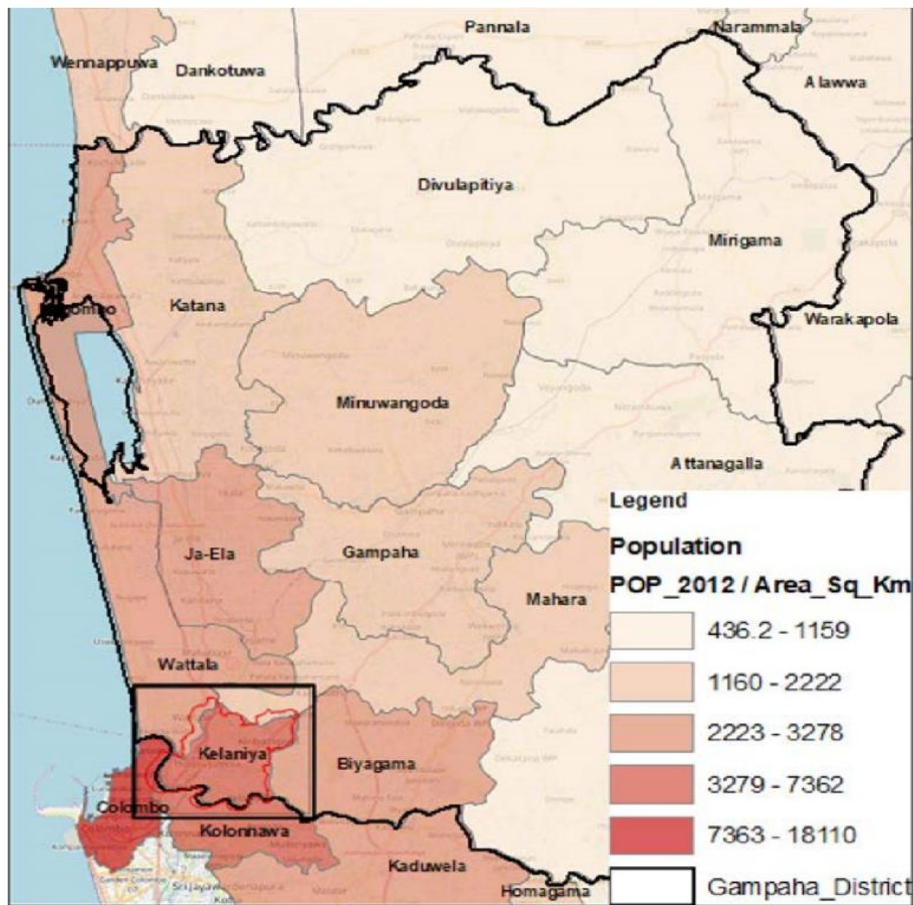
Thus, in the year 2021, Kelaniya Divisional Secretariat area counts a total population of 137,339. This represents 5 % from the total population in Gampaha District and it is spreading over 23.1 Sq.km land area. Population data revealed that high density of population exists in Kelaniya Divisional Secretariat area from whole DSDs in Gampaha district. Population density of Gampaha District is about 1,700 people per Sq.km. whereas population density in Kelaniya Secretariat Division is about 5,945 people per Sq.km. It has mention in figure 2.3 and 2.4. But Kelaniya PS area which consist with 17.9 sq.km, has recorded 6,218 persons per sq.Km.

Figure 2.3 Population Density (2010-2018) in Divisional Secretariats of Gampaha District



Source: Department of Census and Statistics, 2015/ Planning team-Gampaha District Office, 2021

Figure 2.4 Population Density of Divisional Secretariat Areas (2010-2015)



Source: Department of Census and Statistics, 2015/ Planning team-Gampaha District Office, 2021

As per Annexure 04, high density could be visible in GND of Hunupitiya, Nahena, Eriyawatiya and Wanawasala areas where there are about 80-100 person per hectare. With the expansion of commercial, industries and stores a thin population density is prevalent Kiribathgoda, Thalawathuhenpita South, Thalawathuhenpita North and Wedamulla which are somewhat closer to Colombo- Kandy main Highway. This area consists of various communities and religious groups out of whom Buddhist are the major religious group thereby Buddhist counts 75%, Catholic community counts 19% and 6% counts other religious communities.

Population Growth Rate from 2001 to 2012 was 0.75 % in Sri Lanka and Gampaha District Population Growth Rate was 1.05% as reported in Census and Statistical data overall natural growth rate is 0.45 % in Kelaniya Divisional Secretariat Area also there is a trend of increasing population growth rate from 1981 to 2016 as mention in table 2.1, considering the natural growth rate, the total population would be 117,000 during the year 2030.

Table 2.1 Population Growth Rate - Kelaniya Divisional Secretariat Areas

Year	Natural Average Growth Rate	Population
1981-2001	0.23	104544
2011	0.45	107853
2018	0.45	109603
2030	0.45	117135

Source: Dept. of Census and Statistics – 2011 and Resource Profile, 2018

These consist with high population density and also a high population increasing trends. As a result of that 58% from the land use of Kelaniya PS area is covered by residential use as shown in Annexure 05. The availability of well-connected regional and national road network, favorable living environment and availability of higher educational facilities affect to attract and accommodate more students and employers in this area. Thus, housing density in the Kelaniya PS area is 1,463 persons per sq.km.

Table 2.2 Housing units and Residential Density - Kelaniya (2018)

Kelaniya DSD	Housing Units	33404
	Housing Density-per Sq.km	1876
Kelaniya PS area	Housing Units	26339
	Housing Density-per Sq.km	1463

Source: Resource Profile Kelaniya Divisional Secretariat 2018

Although overall housing density counts 1463 units per sq. Km, as it shows in Annexure 06, it indicates that housing density in Nahena, Hunupitiya, Eriyawetiya, and Sinharamulla has increased by more than 2,000 housing units. Data reports of Divisional Secretariat revealed those temporary and semi-permanent housing units' counts 8%. Many temporary housing units are visible mostly in Pilapitiya, Nilamegewatta, Mahena, Kelaniya River north bank, and Railway reservation areas.

Attention has been focused further increase of population at national context. According to Draft National Physical Plan 2018-2050 prepared by the National Physical Planning Department, the Kelaniya PS area falls into East and West Economic Corridor out of four main economic corridors proposed under National Physical Plan, 2050. As mentioned in Annexure 07 further, it has proposed to increase the population by 20% - 25% in East- West economic corridor. Accordingly, based on this proposed population density, 6000 – 10000 of persons per sq.km is expected in east- west economic corridor and Kelaniya PS area also belongs to this economic corridor. It may give direct impact to rest of other areas in this region. Also based on other regional planning interventions, as expressed in annexure 08 Western province regional structure Plan – 2030, the area within the Outer circular expressway has identified as a high-density area.

Considering economical functional of the area, Kelaniya could be known as commercial and service-oriented centre in the region due to the location of Kiribathgoda town. According to the Colombo Metropolitan Regional Structural Plan (CMRSP) of 1998, Kelaniya area is included to Biyagama Growth Centre. And Kiribathgoda is a 4th order town in the region as mention in Annexure 09. Accordingly, it has proposed to develop Kiribathgoda as an Urban Service centre. As per Annexure 10, Kiribathgoda is branded as 2nd order town centre among the towns in the Gampaha District according to Gampaha hierarchical of town centres. In considering road correlation in the region Kiribathgoda is analyzed as 1st order towns as it revealed in Annexure 11. According to the figure 2.5, in the year 2016 Kiribathgoda town is publicized as upcoming regional and national commercial centre where large number of major readymade garments trade complexes are available during the day and night. Thus, Kiribathgoda town was noted as growing commercial centre in the Western Region. In addition, Hunupitiya, Tire Junction and surrounding area of Kelaniya Campus, Makola Road, Kelaniya Sacred area, are lengthened commercial activities and 5% from total land extent of the area is consist with commercial uses.

Figure 2.5 Commercial centres in the Western Region



Figure 10, Source: Urban Development Authority, Jones Lang LaSalle

Source: Lang LaSalle Report, 2016

Western Province Regional Metropolitan Plan (CESMA) 2004 reveals that this region known as different economic zone specifying Peliyagoda industrial, stores & warehouse development. Vital of Industries and warehouses which located based on the Colombo Port and Colombo – Katunayake Expressway interchange has become one of the major economic bases in the area. According the annexure 12, considerable number of industries is in Kelaniya DSD area. Among them 400 of metal production and equipment industries are in this area. Larger scale industries such as Tire, Kelani Cables, Akbar Brother etc. and Small industries like polyethylene, brass, food processing etc are stretched mostly in this area. It is only about 6% of land area is consisted with industrial use which represents medium scale industrial usage in the Gampaha District. These industries meet the supply towards local and international level demand in the country. Due to lack of high land area for industries, many of low-lying land areas are now converted into warehouses & stores in order to meet high demand for the spaces for such activities. This high demand adversely affects causing many land areas are developed haphazardly even close to the sacred area of Kelaniya.

Presently, the areas used for industrial activities were highly made use of clay industries in the past. Now National shilpa Sabhawa owned a Clay Factory established placing Galborella and Sinharamulla in 1925 as per information available at this Centre. It is one of 200 such shilpa Sabhas in the entire country. It should be noted that this place is the 1st Clay Factory in the country. The clay industries are vastly carried out by villagers concentrating Kelaniya Sacred area is presently weakened vastly. Today only around 35 villagers are engaging in clay industrial activities and have relationship with the Shilpa Sabhawa. This industry is purely playing a somewhat a minor role in meeting economic stability in the area.

As stated in Annexure 13, the employment ratio in this area is 94% and 58% from the total employer is in the private sector. The location close to the Colombo CBD, Industrial areas and Free Trade Zone, such as Biyagama, Sapugaskanda, Kerawalapitiya and Katunayake are the reason for accommodating this kind of employment rate within this area.

Kelaniya University holds specialty sphere under social and physical infrastructure in the area. A remarkable change in the field of national education has been shown with the establishment of Kelaniya University in this area. In addition, about 23,509 students are engaged in 10 secondary schools and in 9 primary schools within the Kelaniya DSD.

With the congregating many people seeking accommodation in the area around Kelaniya, there seems to be a threat to Buddhist religious performances even though Lord Buddha arrived Kelaniya in the past as described in the background of this chapter. At the same time, Kiribathgoda town exists as a service providing centre thereby there is a trend for reclaiming low-lying lands for the purpose of expanding industries and stores activities.

Geographically, Kelaniya is in the South Western Low Country Plain. Kelaniya River flow southern edge of the divisional secretariat area and 6km length of river front is included to Kelaniya PS area. And this whole area belongs to Kelani river basin. This area is very much closer to Western costal Area of Sri Lanka having a large area of Marshy lands. When consider the contours of the area as express in annexure 14, 20% from the entire land area is below the sea level and other lands are only 7-15 feet above the sea level.

As an area which closer to sea level, 15 % of entire land consists of wetlands. It has shown in annexure 15. In considering soil in the area, its expansion contains red, yellow, alluvial soil in the river basin. Average annual rainfall is about 2,219mm and gets rainfalls from monsoon and inter monsoon annually. Average temperature is 28oc. However, with the existing high urbanization, it may increase in the future as well. As per factor of environment indicates, this area could be considered as high & medium environment sensitive area. It has shown in Annexure 16.

Apart from that except 15 % wetlands and 2 % water areas, 83 % of the entire land could be considered as developable lands. Accordingly, this developable land of 83 % is a mixture of residential, commercial, industries, educational, religious and open lands. Annexure 05 shows that 58 % of the entire land area is mainly covered with residential use in the year 2017.

2.3. Delineation of the Planning Boundary

Attention has been fascinated in considering delineation limits of physical & geographical, administrative and nature of functions in determining the perimeter of development planning.

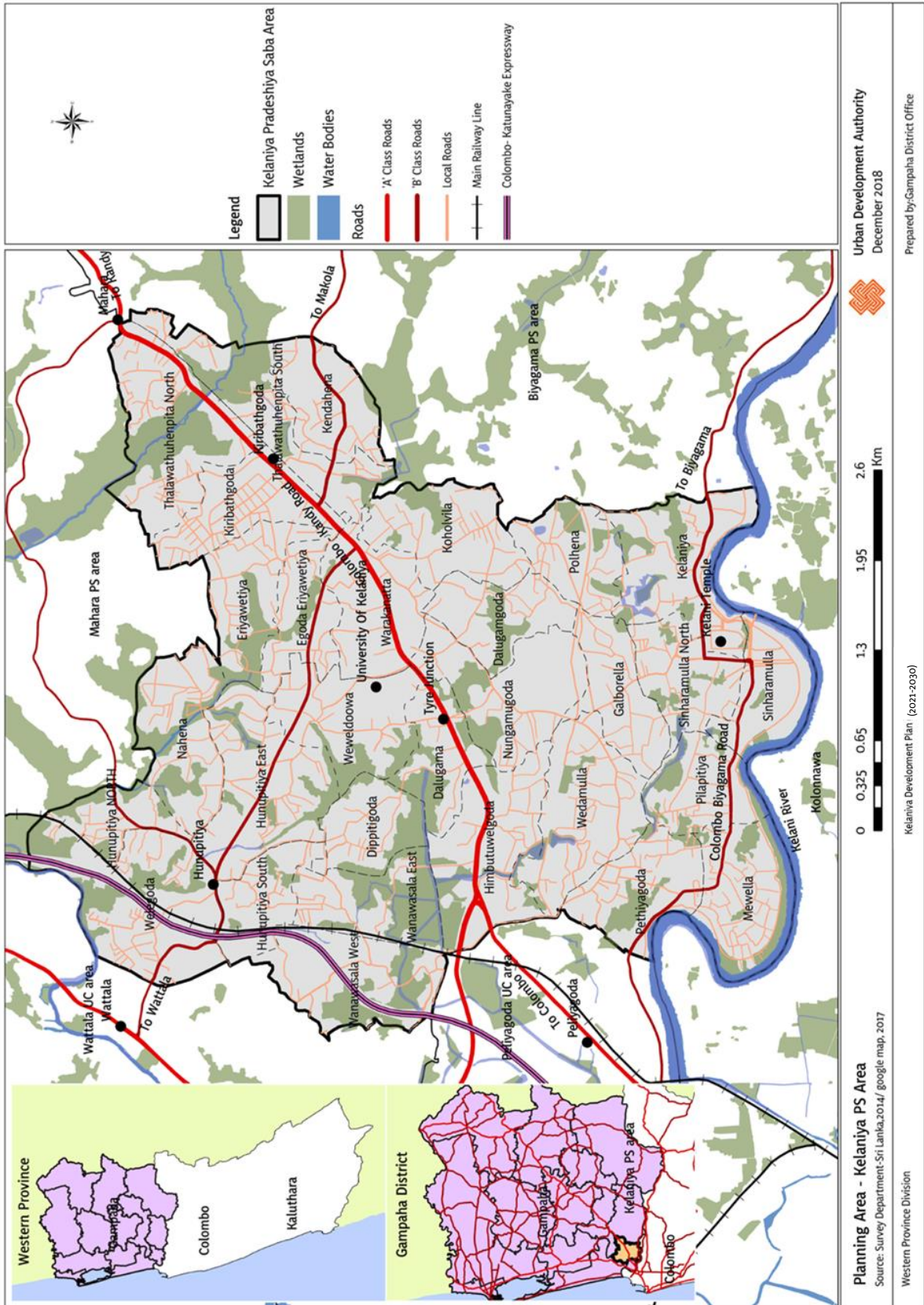
As functional character, Kiribathgoda town is functioning as a main town centre with essential services for both local and regional area. Kadawatha and Peliyagoda town also functioning as main town centres both side of Kelaniya PS area. It has mention in Annexure 18. According to the Annexure 17, when consider the development pressure of the area, it is mainly agglomerate in and around the Kiribathgoda, Peliyagoda and Kadawatha main town centres as different segments. Therefore, based on the Kiribathgoda high development pressure area which spread toward the Hunupitiya and Makola areas, Kelaniya PS area can clearly identified as the local area which functioning with the Kiribathgoda urban service centre. Due to the location of Kadawatha and Peliyagoda interchanges close to Kelaniya area, directly connected with the national road linkage with short distance.

In geographical and environmental aspect, Southern part of the area is bounded by Kelani River and north eastern side of the area is bounded by Kalu Ela as a main environmental feature.

In the administrative aspect, before 1977 Kelaniya DSD area is consisted with whole Peliyagoda, Kelaniya and Biyagama areas. But due to the spacial case regarding the establishment of Biyagama export processing zone, Biyagama was administrated as a separate DSD area. Therefore, at the present, Both Peliyagoda UC area and Kelaniya PS area is included to Kelaniya DSD area. The present, Kelaniya PS area is declared in 12.05.1987 under the extraordinary gazette No. 453/6 as a PS area.

According to that, based on all environmental, physical, functional and administrative aspects, Kelaniya PS area is identified as the Kelaniya PS area considering the administrative convenience. Because southern and north east boundaries of the PS area is naturally demarcated by the Kelani river and Kalu Ela respectively and both Peliyagoda and Biyagama area has a different character as a close connection with Colombo capital and as a specific industrial area respectively. The area is bounded by Wattala UC & Mahara PS area from north, Biyagama PS from east, Kelani River from south and Peliyagoda UC from west. The Kelaniya PS area is consisting with 17.9 km² of total land extent with 30 of GN divisions. According to the Global Positioning System Coordinates, the city is in 6 54' – 6 59' North Latitude and 79 53' – 79 57' East Longitude.

Map 2.1 Planning Area



03

Chapter



Need of the Development Plan

Chapter 03

Need of the Development Plan

Kelaniya is a highly developing area with close connectivity in and around Colombo commercial capital. Kelaniya DS area is the highest densely populated area out of all divisional secretariat areas in the Gampaha District and it counts around 5,900 persons per sq.km. This area is a large residential roaming end with the easy accessibility to main employment generating areas of Colombo, Biyagama, Peliyagoda and Katunayaka. Complexity and steadiness of Kelaniya urban area is increasing with the location of Colombo – Katunayaka Expressway and Kadawata interchanging exist of Southern Expressway linking south and central regions through Colombo Outer Circular Expressway. Because of that, whole Kelaniya PS area is included to the Core Area of the Metro Colombo Development Region which gazette under the extraordinary gazette no. 2049/11 – 11th December 2017.

Under this complexity, there are also hidden potentials for development in this area. Therefore, in order to manage these potentials, there is a need for a development plan to overcome existing and arising issues. Planning need has identified based on the stakeholder's discussion of the issues and suggestions. The list of stakeholder views has mention in Annexure 19. Subsequently, based on those ideas and basic studies, needs of the development plan can be analysed as follows.

3.1 Declining of the sense of place which created the identity of the Kelaniya due to its Religious, Cultural and Historical importance.

Kelaniya is the Aryan Settlement even overrunning the history of chronological towns such as Anuradhapura and Polonnaruwa. It was a historical religious and culturally precise valued town in the island with the arrival of Lord Buddha's 3rd visit to Sri Lanka. Sri Lanka gained values and identification to this country along with religious and cultural heritage for the entire country. Further, Kelaniya Duruthu Maha Perahera which holds annually is known as one of the major cultural events in the country that could be a national identification.

According to planning point of view, Place of Attachment, Place of identity and Sense of Place would illustrate the quality and personal relationship with the place in considering history and religion. Comparing old cities like Kandy, Anuradhapura, Kataragama, Mahiyanganaya, Nagadeepaya and Kelaniya herein mentioned as it well shows clearly & pure, but when entering to the Kelaniya Sacred area such sacred sense does not come into mind compare to other such sacred towns. Because, although Kelaniya is a major religious, religious and historical place in Sri Lanka, haphazard development with the complexity of the urbanization and inequality of the physical structure surrounding it, it hinders the sense of a sacred city.

Figure 3.1 Kelaniya Viharaya



Source: srilankaview Website,2019

Figure 3.2 Kelani Perahera

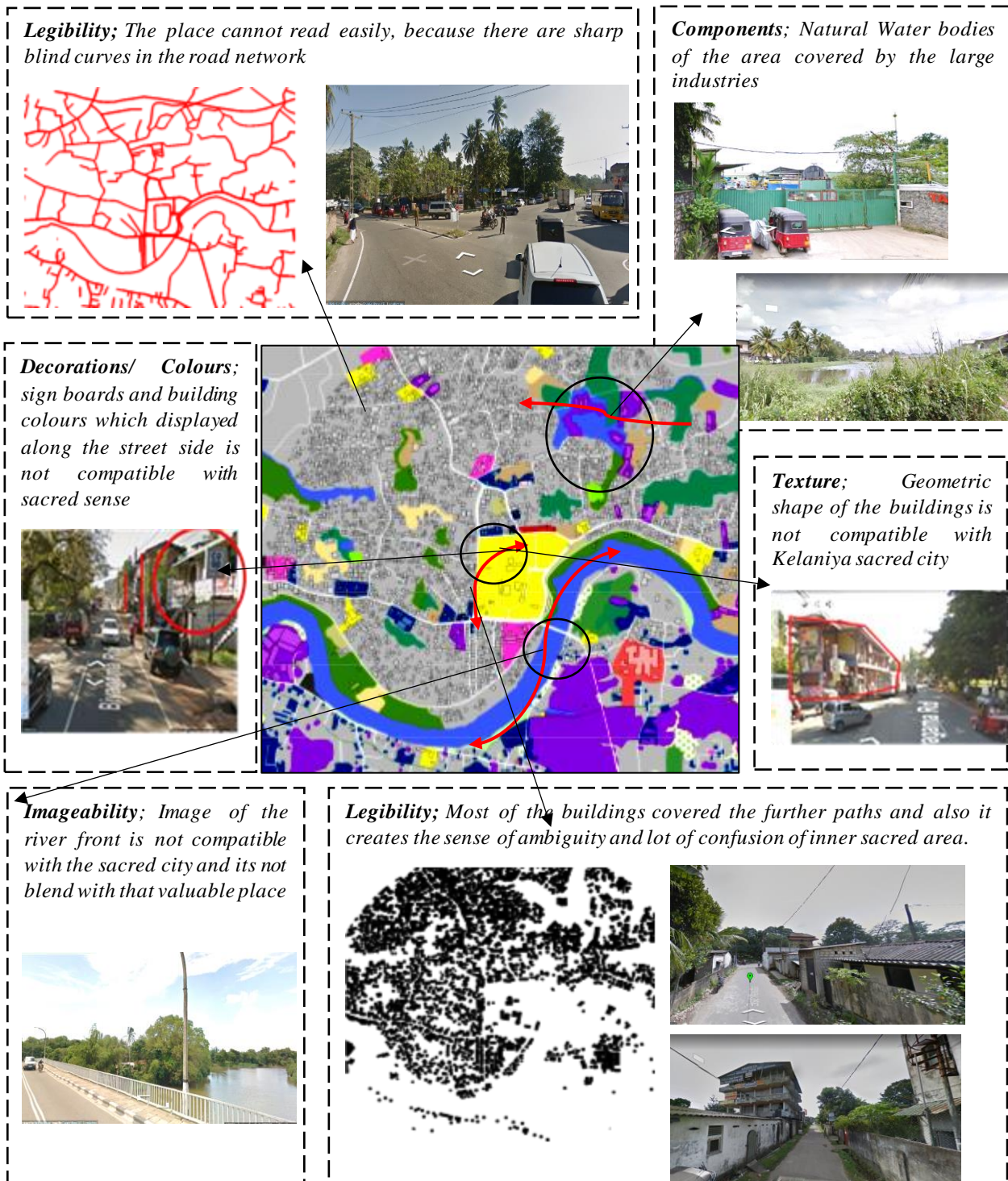


Source: srilankaview Website,2019

This historical sense which people feel about this place gives a value to it. Problem with the Sense of Kelaniya Sacred area is, though it feels the sacred sense as a historical, cultural and religious place where even visit by the load Buddha, it not felt when visit this sacred place like Kandy, Anuradhapura and etc.

Incompatibility of Visual performance, the visual performance of the area highly influences to feel the sense of place by 'Place Attachment' which physically attached with this place. But the Kelaniya area which located in the highly urbanizing area is influencing for declining the physical characteristics which helps to strengthen the sense of place in Kelaniya sacred area. It can be further elaborate by defining urban pattern and characteristics that create a unique sense of place. Physical characteristics which further analysis through a typological analysis has revealed that how the place characters have influenced to declining the sense of sacred area. Physical parameters which effect on sense of place such as Size, Scale, Components, Diversity, Texture, Decoration, Color, and Noise which can be elaborate in line with the Kelaniya sacred area.

Figure 3.3 Composite Typological Analysis



Source: Planning Team - Gampaha District Office, 2021

As express in the literature,

“In cities, factors such as rapid development and gentrification, mobility, migration, and blurred boundaries between the natural and built environment complicate sense of place”

--Source: <https://www.thenatureofcities.com> -

In view of sacred areas in Sri Lanka and in other countries, cultural relationship with water sources could be highlighted. It is evident that Katharagama is integral with the Menik Ganga (river) and similarly Kandy Sacred city is integral with Nuwara Wewa (tank) and Kalutara Sacred area is linked with Kaluganga (river). Though Kalaniya PS is located close to important water resource of Kelaniya River, it does not have interrelationship with the river culturally or emotionally indeed. Location of slums and shanties along the Kelaniya Riverbank will go away or disturb the possibility towards connecting Sacred area with the River. Hence, it is refining the essentiality of planning involvement in kind and safeguard the history by genetics approach.

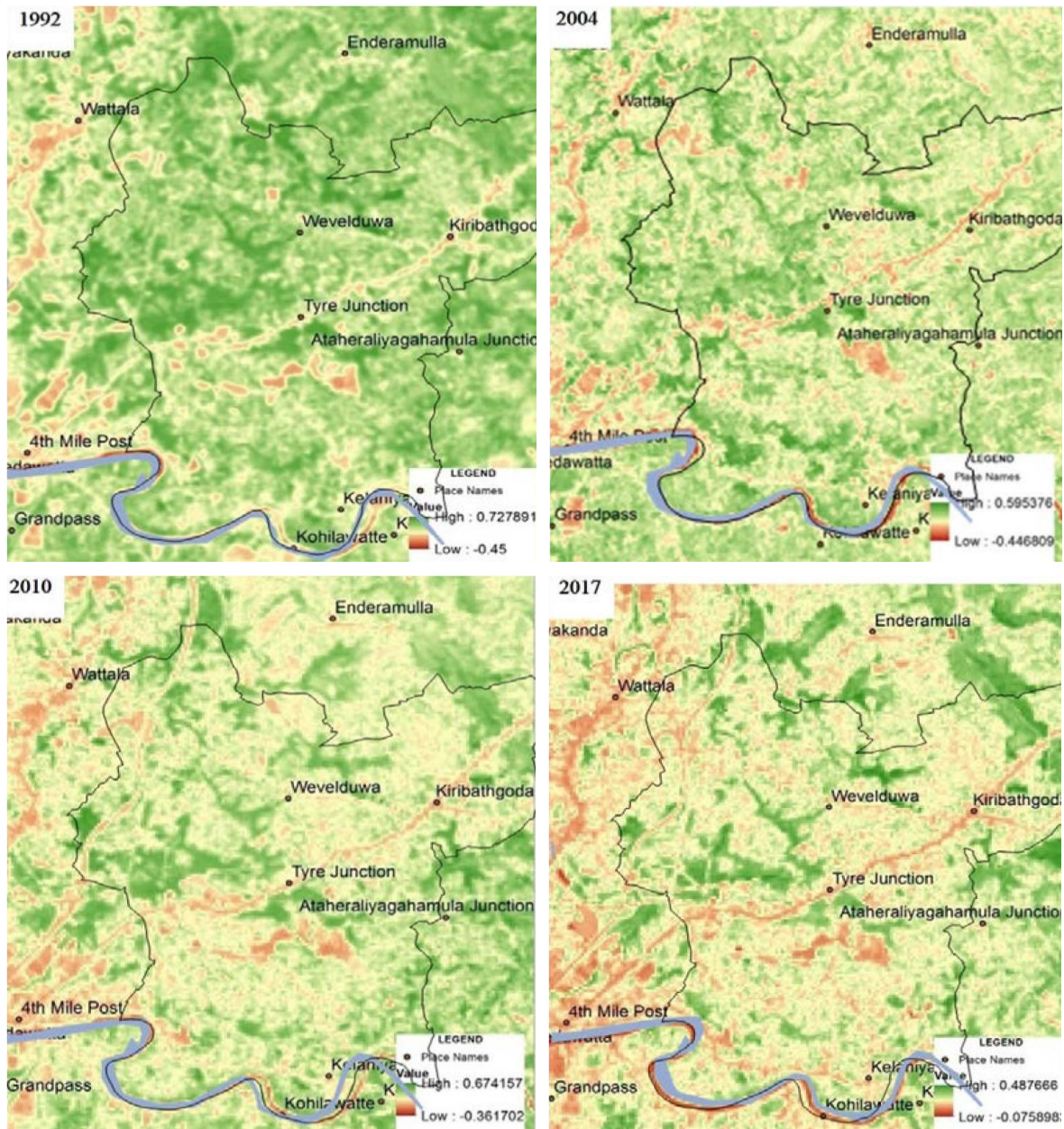
3.2 Environment inconvenience emerging with “Environmental Disequilibrium” due to flash flooding and urban heat

The present flood vulnerability and high urban heat of the area creates an inconvenience environment for both city dwellers and commuters.

Approximately 28% of land area out of total land area as per survey done in the year 2000 has been devoted as low-lying area. However, during the year 2017 this percentage has been reduced to 46% for the period of 17 years. Presently total percentage of low-lying wet land area is limited to 15% only. Analysis of NDVI techniques under Arc GIS usage will clearly indicate the truth. As mention in the figure 3.4, it shows that how is the green cover has changed with the time from 1992 to 2017, using the aerial photographs taken during the years 1992, 2004, 2010 and 2017. The green color patches show the green areas and red and yellow color shows the construction areas (brown field areas).

In deliberation of land values in the area as mention in annexure 20, land value of the low-lying lands in the area are generally low. This trend is badly affected in converting low lying area for development purposes legally or illegally. It will severely make threats to water ways related low lying lands. All these will get result of sudden flooding, enhancing of urban heat and creating discomfort to residents and commuters who make use of these urban lands. Some areas are inundated with the slight rain due to this situation.

Figure 3.4 Deterioration of Green coverage (NDVI Analysis)



Source: Planning Team - Gampaha District Office, 2021

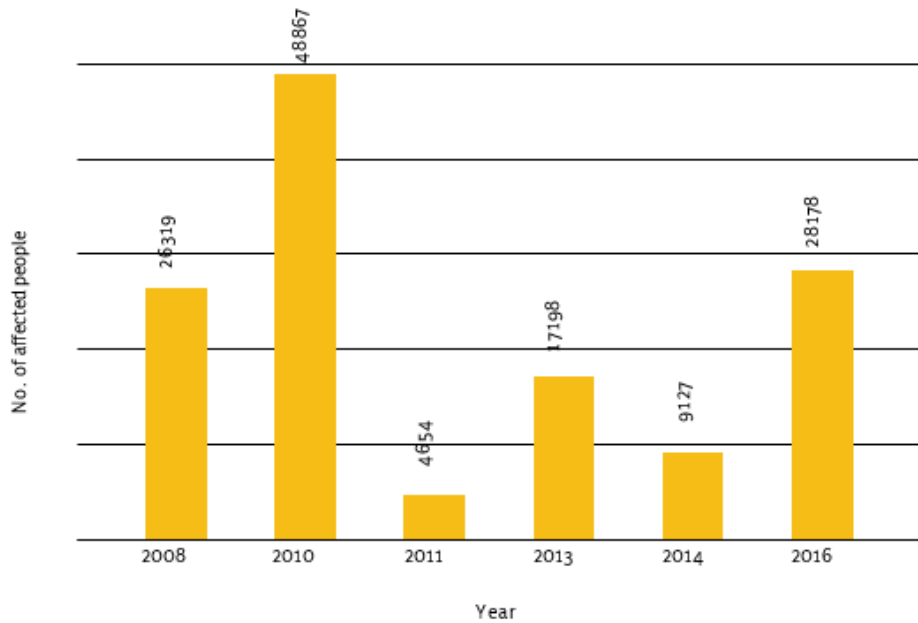
Note: The dark green area shows the green cover, and the areas indicated in yellow and red are areas of construction.

Flash Flood:

This area is inundated by flood even in the slight rain. This area included to the Kolonnawa flood zone in Kelani river basin . Therefore, Mudun Ela area which close to Peliyagoda is affected for the Kelani river flood and other areas frequently affected for the flash flood. As an area which provide the living space for the people who work in Colombo CBD and its suburb, it is a highly densified area. Therefore, flood hazard may be a disaster by affecting the people with the property damages. As mention in annexure 21, Yearly Wanawasala, MudunEla, Kholvila, Mewalla and unauthorized settlements in the Kelani River

north bund affected for the flash flood and river rain flood while displacing number of people with the property damages. According to the figure 3.5, more than 20,000 of people are affected for flood annually.

Figure 3.5 Flood affected Population in Kelaniya PS Area (2008-2017)



Source: Desinventar Website / Planning team – Gampaha District office, 2021

Urban Heat:

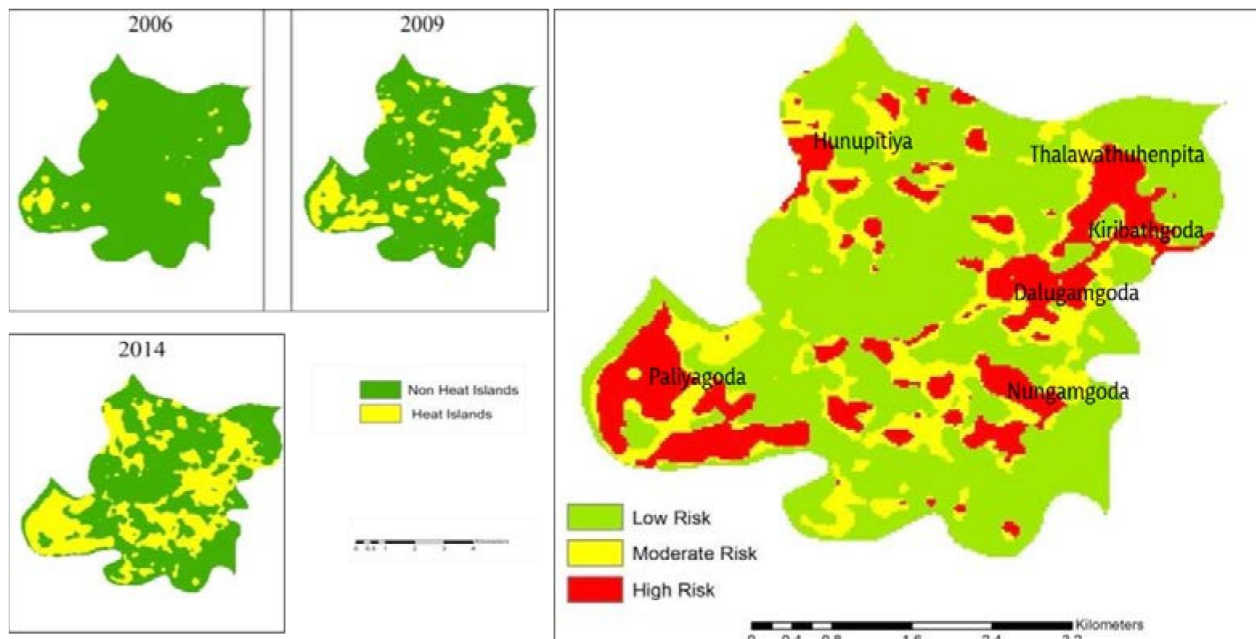
Apart from the flood, with the massive development the people who living and deal with this area is vaccinated by the high urban heat. According to the research which conducted by the University of Ruhuna, land surface temperature of the Kelaniya area is increased compared to adjacent areas due to urbanization and industrialization. Heat island areas are rapidly increased with the time and highest amount of heat generation was to be occurred during 2009 - 2014 period as mention in table 3.1.

Table 3. 1 Heat Island Expansion in Kelaniya (2006-2014)

Category	2006	2009	2014
Heat island area (Km ²)	0.76	4.61	13.69
Heat island area (%)	3.7	22.17	65.82

Source: Development of thermal risk map case study, University of Ruhuna

Figure 3.6 Thermal Risk Areas in Kelaniya DSD



Source: Development of thermal risk map case study, University of Ruhuna

Accordingly, 65% of the total land area is in the thermal zone. 13.69 Km² extent of land from the total land extent in Kelaniya DSD is included to high-risk urban heat areas. And around the high-risk areas there is a moderate risk of urban heat. As a result of this exposure to extreme heat, people in this risk areas are affected by the urban heat. Under this imbalance, in an area where the population is high, it is essential to manage a proper environmental management planning intervention to create an environmentally comfortable area for both residential and commuters.

3.3 Increasing Traffic Congestion

The Kelaniya PS area is located at the busiest transport corridor which connect the northern, Eastern and central part of the country with western region. Average vehicle movement in the Colombo Kandy main road is about 150,000 per day. Traffic congestion has been experiencing all over the day while creating uncomfortable for general public. When proximity to Colombo CBD via Colombo – Kandy main artery, it has become the main problem that waste the valuable time. Kiribathgoda town centre which functioning as the main town centre in the Kelaniya PS area highly congested by the traffic and further it is increased by the vehicle movement which come from the Makola road & Hunupitiya road.

Exceeding traffic capacity has influenced as a main factor to increase the traffic congestion. “Average daily vehicle movement is 100,000 to 150,000 at the Colombo Kandy road. It is recorded pcu value as 4400, which is second highest hourly vehicle capacity out of five main corridors to the city of Colombo” - (CMRS Master Plan, 2010). As mention in the table 3.2, the Colombo –Kandy corridor has recorded the highest peak hour traffic as 4400 pcu. And it exceeds the hourly capacity because hourly capacity is about 3300 pcu.

Table 3.2 Peak Hour Road and Vehicle Capacity in Main Corridors

Corridor name	Peak hour vehicle capacity (pcu)	Hourly road capacity (pcu)
Kandy Corridor	4400	3300
Low-level corridor	2900	2200
Malabe	5100	4400
Galle	2900	2300
Horana	2200	2300
Negombo	4000	4400

Source: Com-Trans study report, 2014/ Planning team – Gampaha district office, 2021

Comparison to the other transport corridors peak hour bus frequency and passenger flow also high in the Colombo- Kandy corridor. It has shown in annexure 22. As a result of that, it is emerged that there is a high traffic congestion in Kiribathgoda, Tire junction area in the Colombo – Kandy corridor. According to the Peliyagoda traffic police report vehicle speed is recorded as 10-15 km/h at the Kiribathgoda and Peliyagoda city centres. It has clearly mention in table 3.3.

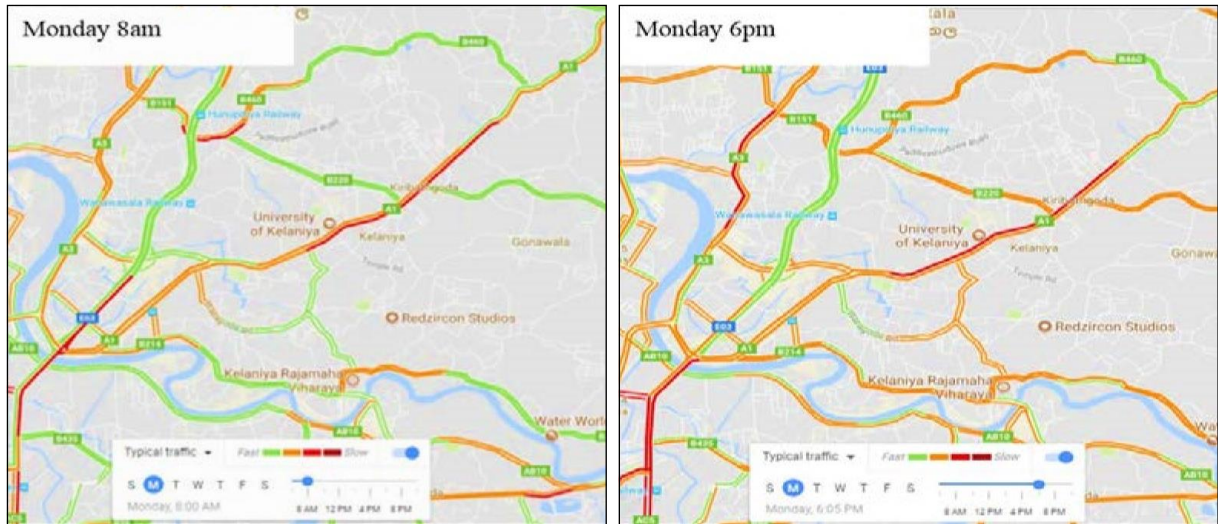
Table 3.3 Peak Hour Average Travel Time in Kelaniya

From/To	Distance	Travel speed	Average Travel time
A1 Road (from Peliyagoda to Mahara)	8 km	10-20 Km/h	40 min
Colombo-Biyagama Road (Peliyagoda to Kelani temple)	5 km	20-30 Km/h	15 min
Waragoda Road	3 km	Below 10 Km/h	30 min
Makola – Hunupitiya Road	5 km	20- 30 Km/h	15 min

Source: Google Traffic Analysis and Com-Trans study report

According to the below google traffic image analysis, it also reveals the peak hour high traffic congestion in the Colombo – Kandy main artery and it is relatively highest from Mahara to Tire junction .

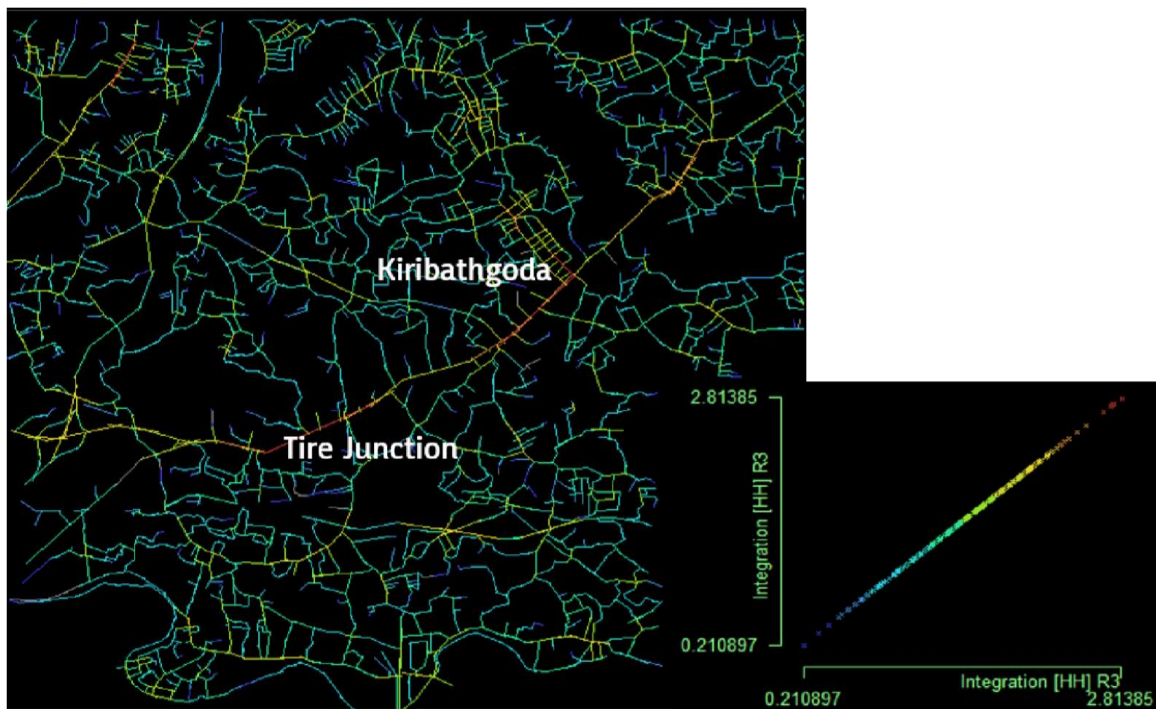
Figure 3.7 Peak Hour Traffic Congestion in Kiribathgoda (Monday 8am/ Monday 6pm)



Source; Goole map traffic analysis, 2021

Accordingly, more than 40 minutes spend in the peak hours to travel a short distance, about 8km in this area. When consider the special integration of the road network in Kelaniya PS area as mention in figure 3.8, the Space Syntax Analysis reveal th at the integration is highest at the Kiribathgoda and Tire Junction through the Colombo- Kandy Main road comparatively other roads. Waragoda road, Hunupitiya road and Biyagama road also emerged a moderate special integration.

Figure 3.8 Spatial Integration in Kelaniya PS Area



Source: Planning team - Gampaha District Office, 2021

The main transport corridor which passing through the Kelaniya PS area is connecting with huge part of the country such as Central, Eastern, North Central, and Northern provinces. And, number of existing urban centres are located with the connection of this main transport corridor such as Nittambuwa, Kadawatha and Kiribathgoda, etc. It directly affected to increase the traffic congestion in Kiribathgoda area as a main town centre in the Colombo – Kandy main artery which locate close to Colombo CBD. Though at the present this area is function as a main transit centre for the people who work in around employment centres, they are suffering from the high traffic congestion which affected to the loss of time and high cost.

In this way, based on the ideas and suggestions received from the stakeholders and scientific analysis, the need for a development plan can be analysed in detail over three major issues, and these three key questions further confirm with the comments as given in Annexure 23. Accordingly, a development plan is a necessity for the Kelaniya area to be converted into an efficient city.

04

Chapter



The Planning Framework

Chapter 04

The Planning Framework

4.1. The Vision

“The Urban Locus of Divinity”

Figure 4.1 Conceptual Development Visualization of Kelaniya in the Year 2030



Source: Planning Team – Gampaha District Office, 2021

4.2 Vision Statement

“A Cavalcade of Urban Events in the Descending intensities of congestions towards a pinnacle of Tranquilly”

The Urban locus

The locus is a kind of site which can accommodate a series of events and itself constitutes an event as well. And also, the area is mixed development area which prominent for the living space. Therefore mainly, the area is function as a transit based residential area which provide the living space for people who work in the adjacent employment centre. The existing and proposed railway and LRT stations area the centres of high dense residential area. Along the Kandy corridor functioning as a growth corridor which accommodate the logistic, Education, commercial and urban services for the people who living in this area and entire region. Protect towards a green urbanized city based with transport facilities on high urbanization protecting Kelaniya Sacred town and its holiness and inheritance. It is intended to achieve a green urbanized city based with transport facilities on high urbanization protecting Kelaniya Sacred town and its holiness and inheritance in the year 2030. It is expected to provide services to inhabitants by using existing modern integrating the proposed new railway line and proposed light railway lines. It is expected to provide transport, commercial and urban services-oriented development to all communities inhabited in the region.

Divinity

The vision of the Kelaniya Development Plan – 2030 is, to develop Kelaniya by focusing the Kelaniya Sacred area as the blessing point of the congested urban area as emerge the sense of sacred city while blending it with the Kelani River. Kelani temple and Kalaniya PS area connect together with the Kelani River which oriented from the peak of Samanala Mountain at this Kelaniya PS area. it is the uniqueness and character of the area. To protect this uniqueness and character, all the urban events of the area is arranged, as descending intensity of congestion of all the urban events toward the sacred area while upgrading infrastructure, economic and protecting environment of the area while establishing sacred sense which creates a blessing point for all pilgrims and for the entire region. It is expected to make this religious area for both local and foreign pilgrims and high dense urban site integrating the Kelaniya River as well reserving calm & quite environment in a place of highly built-up township. High urbanization including all urban activities which add inner-city density would be gradually weakened from north towards the sacred place.

4.3 Goals

Goal ⁰¹ Establish the sense of the sacred city while blending the contemporary Goals

Goal ⁰² Provide shrewd and effective network of mobility by targeting transit neighbourhoods.

Goal ⁰³ Creating an urban green city with smoothen canal system

4.4 Objectives

Goal ⁰¹ Establish the sense of the sacred city while blending the contemporary image with Kelani River

Goal
Objective

1. To positioning the Kelaniya Rajamaha Viharaya as the centre point by promoting four direct access toward the sacred area from Colombo – Kandy corridor by 2025.
2. To demarcate the 105 Hec. of land for outer sacred area covering 500m radius around the Kelani temple premises by 2025.
3. To open-up 1 km length of Kelani river face as visual beautification of the sacred city by 2025.
4. Establish visual network of historical & archaeological sites in the Kelaniya area by the year 2030.
5. To Promote domestic economic activities in relation to traditional clay industry prevailed in area linking with sacred city by the year 2030.



02 Provide shrewd and effective network of mobility by targeting transit neighbourhoods.

1. To establish efficient transport system through a hierarchical road network by the year 2030.
2. To promote six transit-oriented development clusters by linking railway and LRT stations by 2030.
3. To facilitate for 60% of population within transit-oriented development clusters by the year 2030.
4. To create mixed use commercial district in Kiribthgoda through facilitating shopping street and pedestrian oriented infrastructure developments by 2025.



03 Creating an urban green city with smoothen canal system

1. To minimize flooding distresses by using 300 Hec. of wetlands in a systematic way by the year 2030.
2. To wise use of 140 Hec. of wetland conservation area for public open recreation areas by the year 2030.
3. To manage 100% of continuous canal network by the year 2030.
4. To proceed towards a green city while collaborating with Kelaniya green university prescient by 2030.

05

Chapter



SWOT Analysis

Chapter 05

SWOT Analysis

5.1 Summarized SWOT

Goal **O1** Establish the sense of the sacred city while blending the contemporary image with Kelani River.

S

- Location of Kelaniya Temple as a prime religious centre with Historical, Religious and Culturally valuable elements.
- Place of worship for majority of local and foreign pilgrims. (100,000 pilgrims on Poya Days and 200,000 pilgrims on Kelani Perahara Day)
- 18 archaeological places including sacred Kelani temple had been identified by the Archaeological Department were situated within this area.
- Traditional Clay industries and Poison medical hospital were located closely to the Kelaniya sacred area.
- 6 km of river front in Kelani river were included to the Kelaniya PS Area.
- The North bund of the Kelani river mitigate flood in the sacred area.



W

- 10% of land around the sacred area consisted with industries and warehouses.
- Traffic congestion and creating inconvenience environment in front of sacred area due to 1/3 of containers of Biyagama EPZ is flowing on Colombo-Biyagama road.
- Approximately 1200 shanties were spread over on the bank of Kelani River



O

- Projects incorporating the Kelani River were included in the proposed sacred area plan prepared by the NPPD.
- According to the Western Region Structure Plan 2030, Kelaniya Riverbank area identified as environmental conservation area.



T

- Distribution of industries to the sacred area might be possible since the area from Peliyagoda to Ragama has been identified as Logistic Corridor.



Goal **O2** Provide shrewd and effective network of mobility by targeting transit neighbourhoods

S

Availability of TOD based Components

- Accessibility and Connectivity, Easy accessibility to the educational institutes and working places located at the city of Colombo and other suburbs.
- Location close to main Transit Corridor and Transport Interfaces.
(A1 main Road, Interchanges of OCH Kadawatha & Peliyagoda, Wanawasala, Hunupitiya and Kelaniya Railway Stations.)
- Density
Existing population density is 61 persons per hectare. and it is exceeded the normal population density for TOD concept. North part of the area will be suitable for development with higher density.
- Mixed of Uses
Exercising mixed landuses within the area such as commercial, services, educational, housing and working places etc.
(Approximate 100,000 commuters concentrate to Kiribathgoda for daily needs)
- Compact Development
Higher development pressure from Kiribathgoda to Hunupitiya



W

- Traffic congestion on the Main Road (Maximum speed in the rush hour is 10-15 kmph)
- Lack of connectivity between multi-model transport systems and lack of pedestrian oriented facilities
 - Low connectivity between train and public transport system
 - lack of space for vehicle parking, Narrow pedestrian paths



O

Interfering of National and Regional Plans

- . it is proposed to increase population at a rate of 20% to 30% according to the Draft National Physical Plan -2050 and it is demarcated as East - West economic corridor.
- Directly affected by proposed Public Transport Services. (Light railway system and new railway and railway electrification.)
- Draft Peliyagoda Development plan has proposed to develop a connectivity road linking administrative city for reducing traffic congestion.



T

- Nearly 20000 people affected to flood disaster.



Goal 03

Creating an urban green city with smoothen canal system

S

- This area belongs to Lower Kelani River sub basin with Kelani River as the main water source of the area which comprised with Canal network.
- 15% green wetlands remain from the total extent of the area.
- There are places to create a Green City (Kelaniya University, Kelani Temple, Kelani River North Bund Reservation zone)



W

- Under Served settlements are spread over reservations of Railway line and Kelani River.
- All canals are blocked more than 500 metres.
- No proper methods for solid waste management



O

- An environmental conservation zone has been identified along Kelani river by the Proposed Western Province Structure Plan-2030
- University of Kelaniya has been identified as the first Green University in Sri Lanka.
- Existing Environmental preservative Guidelines stipulated by the SLLR&DC



T

- Identified 65% of land extent as urban heat generated area.
- Threat to degenerate of wetlands, From the total land area,
 - In 2000 – 28% wetlands
 - In 2017 – 15% wetlands



5.2 Detailed SWOT Analysis

Goal 01

Establish the sense of the sacred city while blending the contemporary image with Kelani



Strength | Goal 01

1. Location of Kelaniya Temple as a prime religious centre with Historical, Religious and Culturally valuable elements

Kelaniya is an important historical specific place since it has been the holy locality by having been the 3rd and final tour of Lord Buddha to the Western Province of Sri Lanka as well. With the beginning of settlement, in this area became spiritual perception and action has been taken to declare the area as a holy site as far back as 1952 by the Parliament of Sri Lanka, an attempt has already been taken for legal sanction to establish its sacredness.

2. Place of worship for majority of local and foreign pilgrims.

Kelaniya Temple sources revealed that around 10,000 to 20,000 pilgrims arrive daily while they would increase between 75,000 and 100,000 pilgrims during full moon days. However, this will be going up to 200,000 pilgrims during the month of January Duruthu Poya Day because of the Perahara festival. Sri Lanka Tourist Board announces that Kelaniya Duruthu Maha Perahera is the opening of Sri Lanka cultural processions.

Figure 5.1 Pilgrims in Full Moon Poya Days



Source: Dailymirror Website

Figure 5.2 Pilgrims Arriving for Duruthu Perahara



Source: Dailymirror Website

Hence, it is very important that had been the existence of holy relationship with local and international pilgrims to develop this area as a sacred city.

3. Presence of 18 ancient sites that have been identified by the Dept. of Archaeology along with the Kelaniya Temple in this area.

According to the Department of Archaeology, 18 archaeological sites have been identified within the Kelaniya PS area. Locations and Photographs related to these places are given in annex 24. They represent 1% of total land area though it may be a slight percentage, but importance of such areas is much more as in the past & present.

4. Existence of traditional clay industry and Snake Poison Hospital adjacent to sacred area.

Traditional clay industries started in the year 1925 located in Galborella area gives strength historical identity as in the past. Clay industry is existed even today with relationship of the sacred site would enable to have sound links. Since poisons hospital & its College located very close to the area enabled Sacred area with domestic medicine.

Figure 5.3 Kelaniya Snake Poisonous Hospital



Source: google map images, Chathuranga Ranathunaga, 2021

5. 6 km of river front in Kelani river were included to the Kelaniya PS area.

In view of water resource areas, the annexure 25 shows that Kelaniya River seemed to be the main reserve and it locates very much closer to the Kelaniya Viharaya indeed. And also stretching the riverbank area towards 6km in the Kelaniya PS area, provision is there to develop the area as sacred spot.

Figure 5.4 Kelani River



Source: Google Street view, 2015

6. The North Bank of the Kelani River mitigate flood in the sacred area.

Risks of flood in sacred area is much lesser due to structural blockage of the north bank. As per Annexure 26 shows that this area belongs to Kolonnawa flood zone, with the structural blockage in the north bank, flood risks will not so be affecting. Hence safe environment could be created to almost all pilgrims who travelled this holy area.



Weaknesses | Goal 01

1. Expansion of 10% land area for industries and warehouse activities within Sacred area.

In bearing in mind, the land usage within the area of 1 sq.km distance, it is clear that 10% of land area is used with industries and stores. In addition, as indicated under Chapter 3 and figure 3.3 combine analyse that the structures, shapes, colours, and sign boards are not compatible with holiness.

2. Traffic congestion and creating inconvenience environment in front of sacred area due to 1/3 of containers of Biyagama EPZ is flowing on Colombo-Biyagama road.

Biyagama Export Processing Zone is connected with the Port City via Biyagama – Colombo main road. Therefore, more than 1/3 of containers of Biyagama EPZ is flowing in front of the Kelaniya temple. According to the special integration analysis shown in figure 3.8 in chapter 03 in part one, it has revealed that there is a considerable integration near the Kelani temple which may cause to traffic congestion and create an inconvenience environment with noise.

3. Location 1,200 of shanties along Kelaniya Riverbank

Presently, there are around 1,200 of shanties along Kelani river north bank and its appearance is obstacle to the integrated approach on environment of the sacred city out of which about 62 shanties are very much near to the sacred area as mention in figure 5.5 and table 5.4.

Figure 5.5 Unauthorized housing units on North Bank of Kelaniya River



Source: Google satellite image, 2017/ Planning team – Gampaha district office, 2021

Table 5.1 Shanties on Kelaniya River North Bank in GND wise

Name of GramaNiladhari Division	Raw Houses	Shanties	Total housing units
Kelaniya	6	11	831
Mewella	72	46	1064
Pilapitiya	5	1	566
Sinharamulla	85	4	721

Source: Dept. of Census & Statistic - GIS data, 2014/ Planning team – Gampaha district office, 2021



Opportunities | Goal 01

1. Projects incorporating the Kelani River were included in the proposed sacred area plan prepared by the NPPD.

The plan prepared by the National Physical Planning department proposed an unauthorized free Sacred area and linking Egoda Kelaniya & Megoda Kelaniya through flowing boats, jetties and a hanging bridge as well. It extends the possibilities enhance the value of sacred site with the river. Thus, facilities could provide for pilgrims to use new propose d vehicle parks, and recreational areas. All such proposals of NPPD are shown in Annexure 27.

2. According to the Western Region Structure Plan 2030, Kelani Riverbank area identified as environmental conservation area.

As shown in Annexure 08, proposed 100-meter(M) reservation area either side of Kelani River for environmental conservation. Thus, it will be an opportunity to integrate in creating landscape & environmental aesthetic atmosphere of Kelani river and its surroundings.

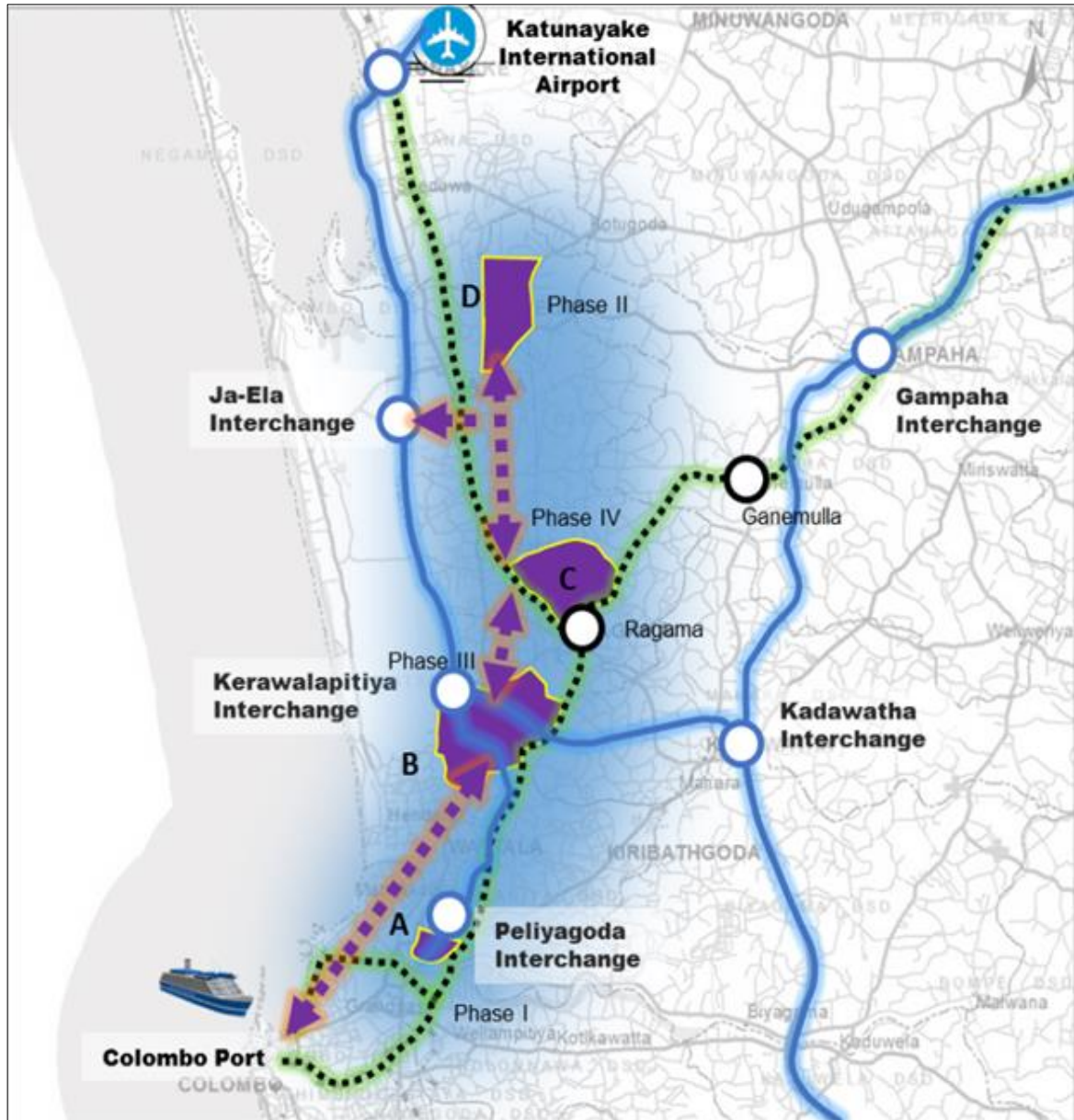


Threats | Goal 01

1. Distribution of industries to the sacred area might be possible since the area from Peliyagoda to Ragama.

It is proposed that Katunayaka, Peliyagoda and Kelaniya areas to be urbanized as areas of corridor of logistic activities as mention in figure 5.9. Accordingly, this area will be especially developing a location of stores& warehouses, container yards and middle of local level goods transportation. Hence here is a possibility or threat in converting lowland areas for stores & warehouses etc. up to Kelaniya Sacred area which will not be extended further.

Figure 5.6 Corridors of Logistic Activities



Source: Draft Peliyagoda Development Plan, 2021-UDA

Goal 02

Provide shrewd and effective network of mobility by targeting transit neighbourhoods

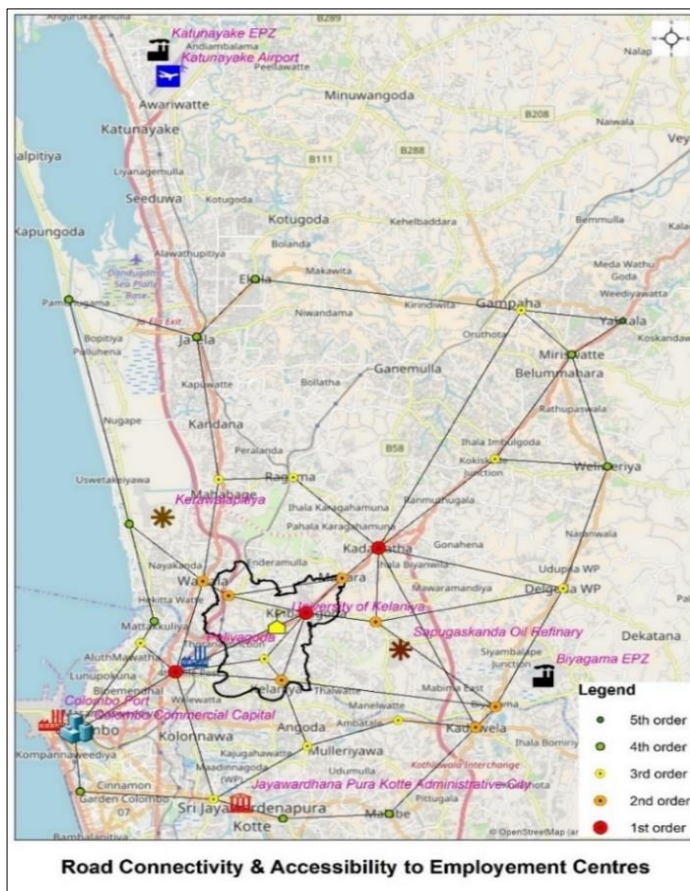
Strength | Goal 02

It is a strength in having transit-oriented development components in this area.

1. Accessibility and connectivity

Kelaniya is located in an easy accessibility & connectivity with employment generating and educational areas of Colombo and nearing fragments. Maximum time to employment & service centres would be 40 minutes. It has mention in figure 5.10. Hence this area will be accomplished as a residential location of employees in Colombo and suburbs.

Figure 5.7 Road Connectivity and Accessibility to Employment Centres



- Location to Kelaiya University in the area
- Colombo port and commercial city - 14km
- Sri Jayawardenapura Administrative Capital - 8km
- Biyagama Trade zone - 13km
- Sapugaskanda oil refinery - 5.5km
- Katunayake Industrial Zone - 10km (via Expressway - 20 minutes)
- Kerawalapitiya Industrial Zone - 10km (via Expressway - 20 minutes)

Source: Planning team – Gampaha district office,2021

Thus, based on the road connectivity Kiribathagoda town could be recognized as 1st order town in the area Hunupitiya and Kelaniya could be recognized as 2nd order towns. It has express in annexure 11. There is a possibility of enabling towards developable area as Kiribathagoda town considering its locational advantage.

2. Location close to main Transit Corridor and Transport Interfaces.

Location close to A1 main Road, Interchanges of OCH Kadawatha & Peliyagoda, Wanawasala, Hunupitiya and Kelaniya Railway Stations. This Kelaniya PS area is directly linked with the A 1 Main Highway enabling high connection with the National Road network. As shown in Annexure 03, since through Kelaniya, Hunupitiya and Wanawasala Railway stations are easy access to main railway line. And also, this area is 3 km distance to Kadawata Expressway interchange Exist and with 2 km distance to Peliyagoda Expressway interchange enabling easy connectivity to numbers of transportation network as well.

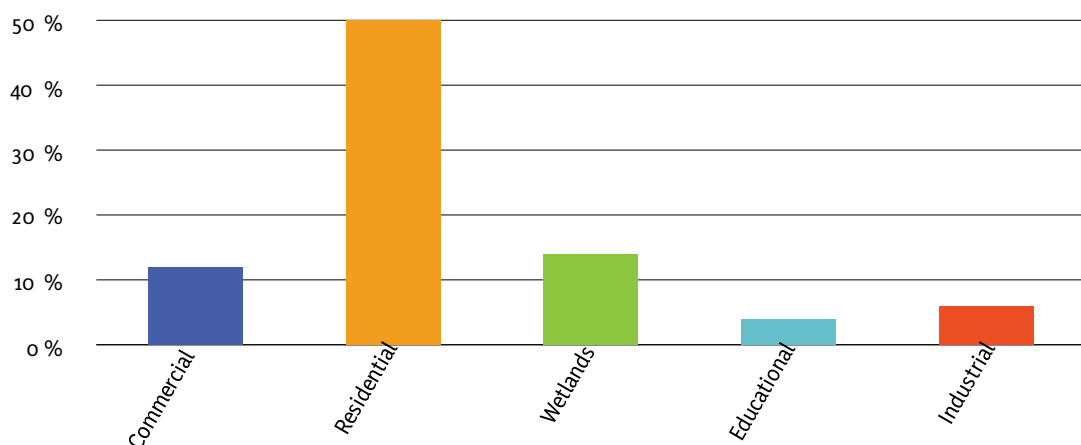
3. Density

As per TOD theory, the minimum population density in a hectare is 40 people. As described in figure 2.3 in the Chapter 2, population density of Kelaniya DSD area is 61 person per hectare. It was also highlighted in annexure 05 that 58% of land area is used for residential purposes. Accordingly, it is now over exceeding of the maximum population density for planning a Transit-Oriented Development. It reveals that this area is suitable for high dense residential uses.

4. Mixed of Uses

Use of services, shop complexes, Educational, housings and employment usages are the main uses in this Kelaniya PS area. Kiribathagoda as a main market centre, Keaniya University located in Dalugama as main educational centre, Peliyagoda adjacent area as industrial and transport activities, Kelani Viharaya as a main religious centre and this area consisting with mixed high residential uses. Landuse of 500 M of either sides of the Main Road is shown in figure 5.11.

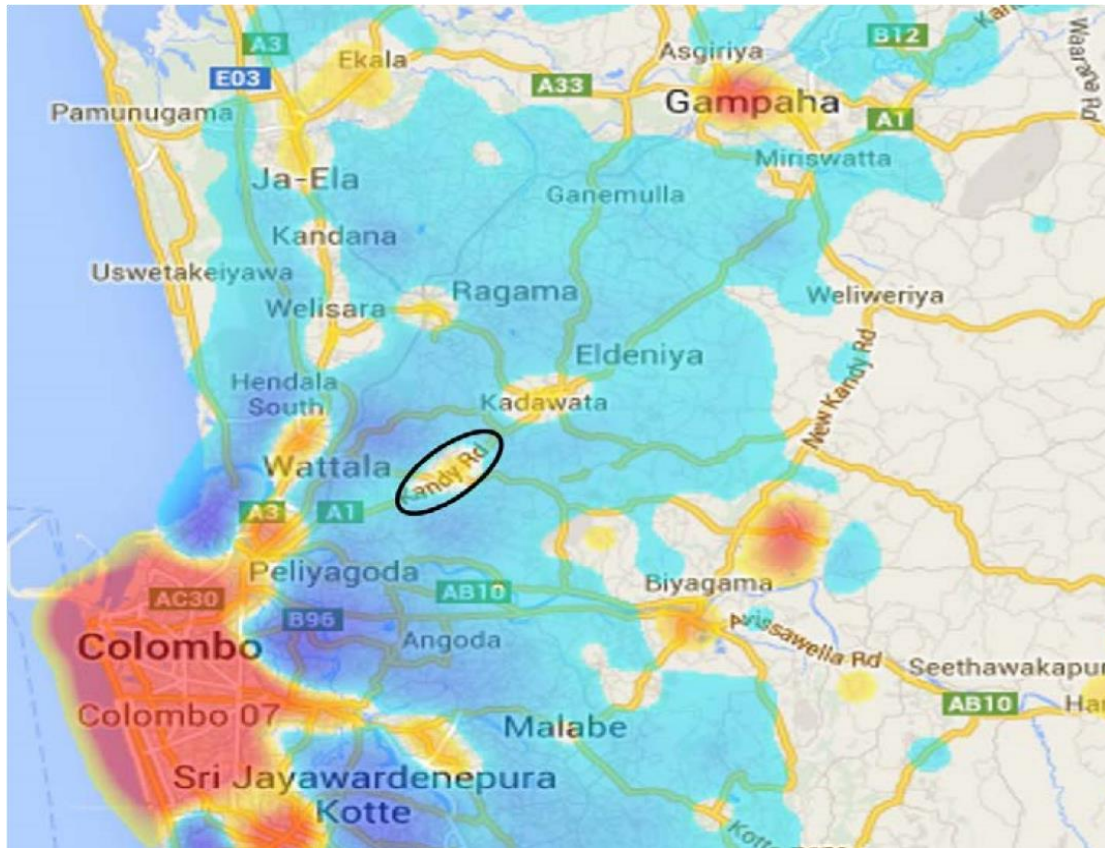
Figure 5.8 Landuse along either side of A1 Road



Source: Planning team- Gampaha District office, 2021

Day time commuter population would be 100,000 per day for various requirements due to its mixed of uses. It has shown in figure 5.12.

Figure 5.9 Day Time Population Sinking - Kiribathgoda Town



Source: Draft Peliyagoda Development Plan, 2017

There is a possibility of developing Kiribathgoda town as a transport based mixed commercial centre and efficient & fruitful midpoint.

5. Compact Development

It is essential to have compact development for TOD development. As per annexure 17, when consider the development pressure in Kelaniya area it shows that it is noticeable in Kiribathgoda town and Hunupitiya, Makola areas. This condition if favourable for developing transit-oriented development centres with compact developed nodes.



Weaknesses | Goal 02

1. Traffic congestion on the Main artery (Maximum speed in the rush hour is 10-15 kmph)

Heavy traffic congestion along the Colombo – Kandy Road near Kiribathgoda town is a much interruption to vehicles as well as to the people who travel over the town. The maximum travel time from Peliyagoda to Mahara Junction is 15 km per hour and accordingly devoting over 45 minutes for a distance of 8 km.

Table 5.2 Maximum Travel Speeds Per Hour in Kiribathgoda Town

Road	Distance	Travel Speed	Average Travel Time in Minutes
Colombo – Kandy Road (from Peliyagoda to Mahara)	Km 8	KMPH 10-20	40

Source: Com- Trans Study Report,2014 and Google Map

2. Lack of relationship with pedestrian oriented facilities and multi –model transport disturbance and unavailability of pedestrian facilities

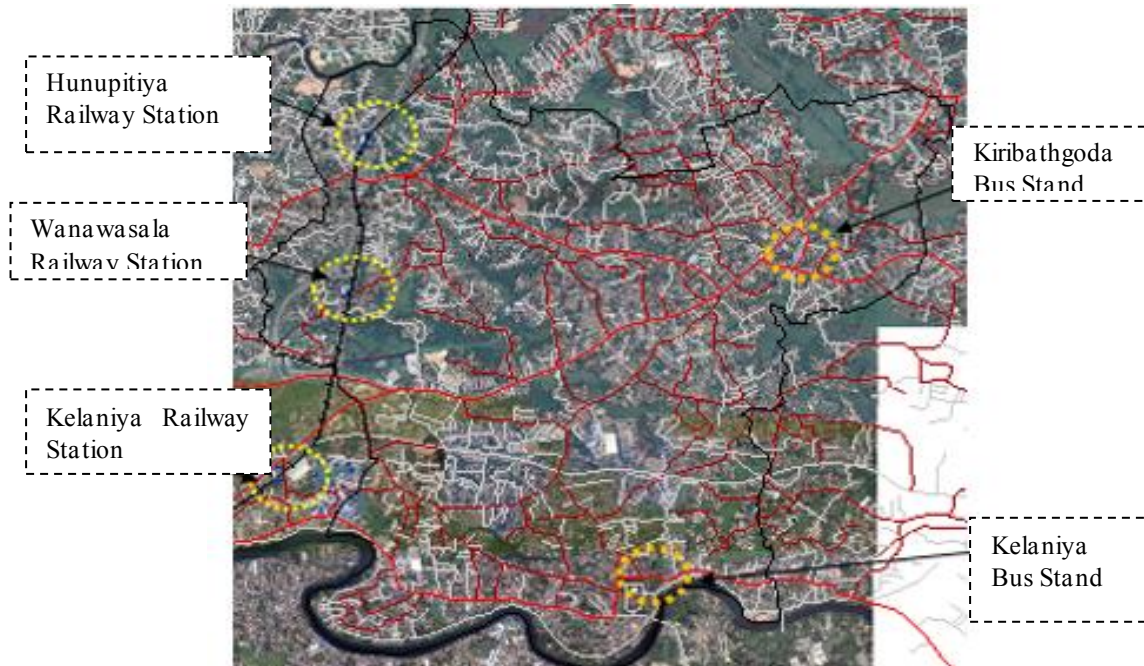
An appropriate relationship should be there for presence of multi model transport interference on transit-based development. But There is no relationship between existing railway stations and bus standards. The distances are far more than maximum travel distance (500-800 m) of a person. The existing distance among the bus stand and railway station has shown in figure 5.13 and table 5.6.

Table 5.3 Less Inter- Relationship of Multi-Model Transport Systems- Kelaniya

Transport Destinations	Hunupitiya Railway Station	Wanawasala Railway Station	Kelaniya Rail-way Station
Bus Stand – Kiribathgoda	4.6 km	5 km	4.8 km
Bus stand – Kelaniya	6 km	5 km	4 km

Source: Planning Team- Gampaha District Office, 2021

Figure 5.10 Weaknesses of Multi-model Transport interlinks in Kelaniya



Source: Planning Team- Gampaha District Office, 2021

Around 100,000 of daily commuters are gathering in Kiribathgoda town for the day to day needs under limited pedestrian facilities. Because width of pavement of Colombo – Kandy Road crossing Kiribathgoda Town is around 1 M. It is also could mention that no recreational facilities provided to these people. It is important factor to be considered.

Figure 5.11 Narrow Pedestrian Pavements of Kiribathgoda



Photograph by: KCL Jayaratne Perera,2021

Further no vehicle parks provided for people who visit this town as a result there seemed lots of roadside parking. This makes traffic congestion.

Figure 5.12 Vehicle Parking along the Main Highway



Photograph by: K.C.L. Jayaratne Perera, 2021



Opportunities | Goal 02

There are direct and indirect benefits for transit-oriented development (TOD) stimulated on local & national participation aimed at transport made-up settlements in making efficient & fruitful township.

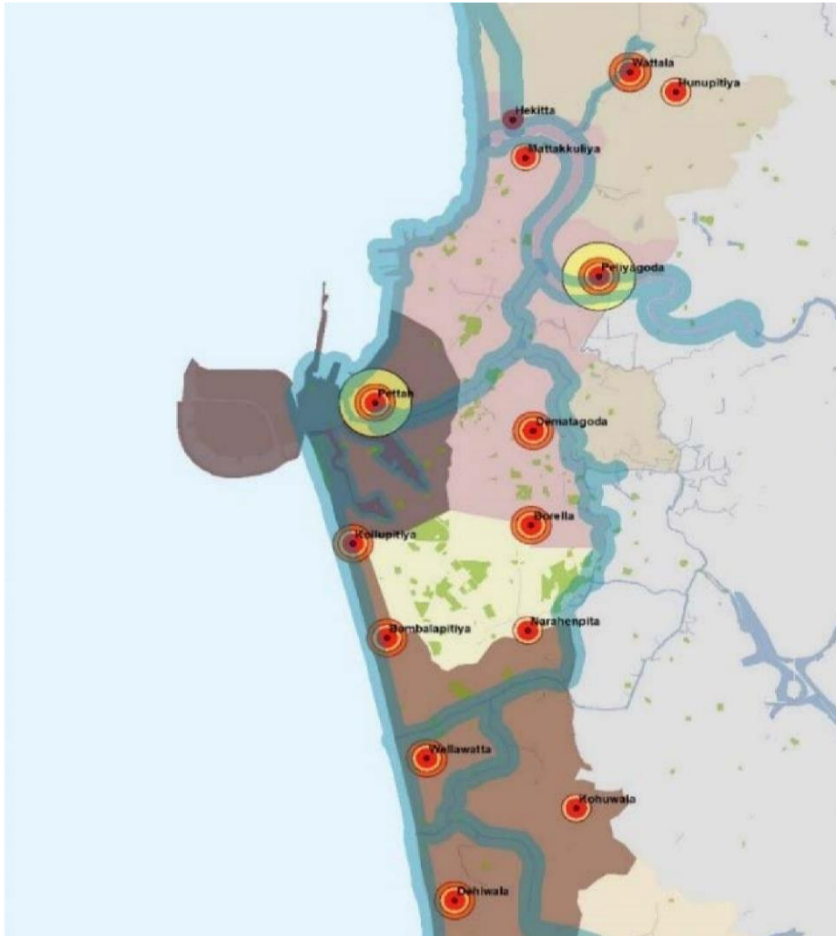
1. Kelaniya PS area belongs to east and west economic corridor under National Physical Plan 2018 – 2050

As per proposal of the National Physical Plan of 2050, Kelaniya area is belonged to the east & west economic corridor. It is expected to increase 20% - 30% population growth in this corridor. As mention in annexure 07 it has expected to promote population density of 6,000 to 10,000 persons per Sq.km in the Kelaniya DSD area. Hence this region will be an opportunity for transit-based development.

2. Directly affected by proposed Public Transport Services. (New proposals of Light Railway under the Manifestor)

Railway service from Panadura to Veyangoda is proposed to be modernized. This is a proposal to be a project of immediately commenced and will be direct impact to the area. Three railway stations including Hunupitiya and Wanawasala apart from Kelaniya Railway Station found to be the closest station give direct in put to the transport service. And also proposed new Biyagama – Kosgama Railway line would create a space as well. There is a necessary for new railway station also in this area. In addition, it is also identified as direct effected area with the recommended Light Railway Line. Accordingly, proposed Ragama – Narahenpita light railway line and Hunupitiya – Kottawa light railway line would link through this area. Thus; Hunupitiya, Manelgama, Tire Junction, Kiribathagoda and Polhena areas are planned as new light railway stations. In addition, Kelanimulla which is near southern part and Mahara Junction towards north eastern direction areas are proposed to be new light railway stations. All these new light railways, modernizations and new railway lines are indicated in annexure 29. As a result of general transport facilities, Peliyagoda is identified as multi-faceted transport centre at the Colombo Development Plan and also identify Hunupitiya as 3rd priority region. It has mention in figure 5.16.

Figure 5.13 Proposed Plan for Hierarchy of Urban Centres



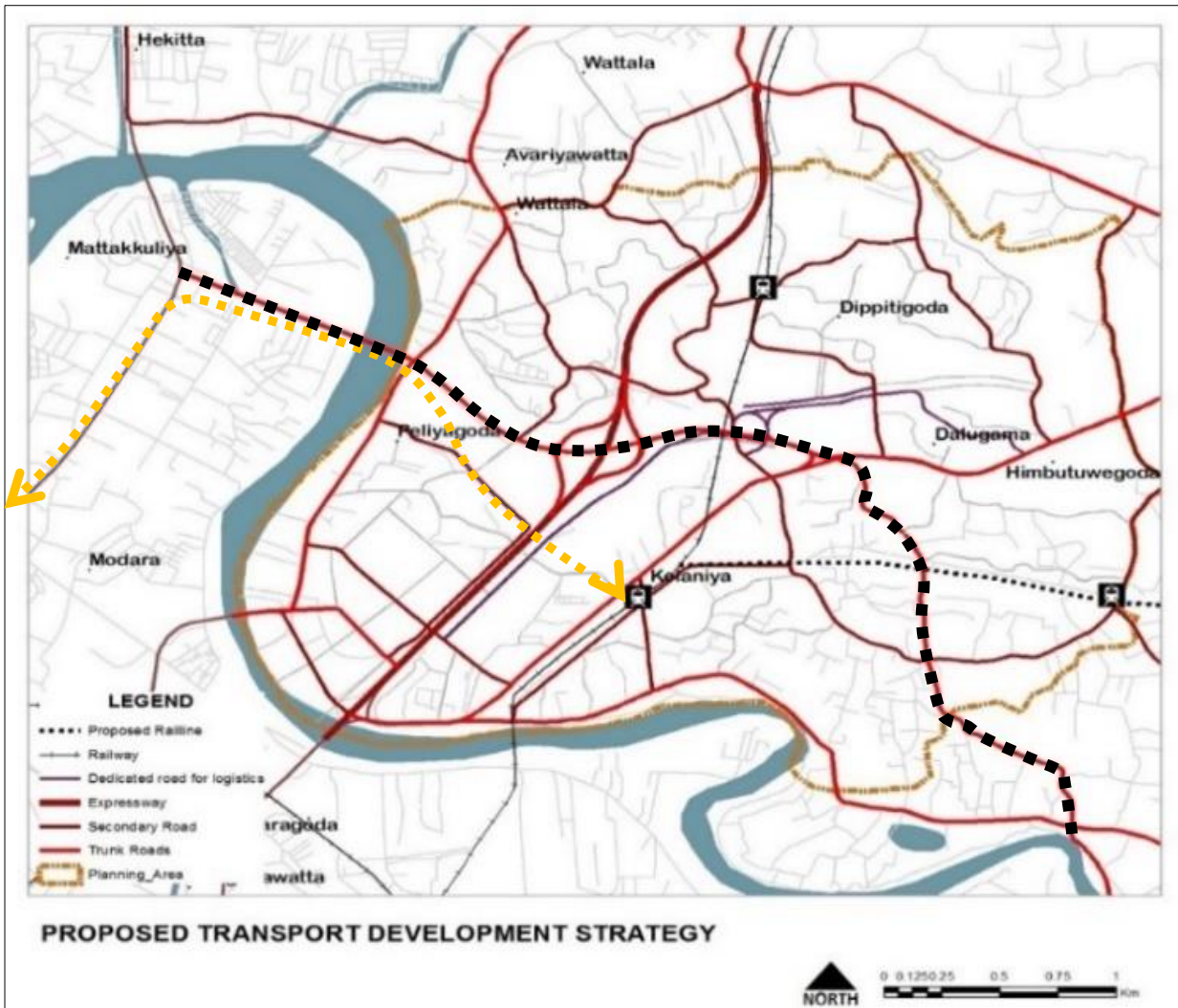
Source: Draft Colombo Development Plan - 2030

In addition to Kiribathagoda as the key urban centre, Hunupitiya and Tire Junction areas are suitable sub centres for development.

3. As per Peliyagoda Draft Development Plan 2030, a road is proposed as a link road connecting administrative capital in minimizing road traffic congestions.

Establishing hierarchy of roads under Peliyagoda Development Plan, it is proposed to minimize traffic congestions and also suggested to reserve & improve the old Keaniya Bridge for goods transportation. It is proposed to widen the Peliyagoda – Kelaniya via the bridge crossing over the Kelaniya river approaching Colombo City. New proposals include a link road under hierarchical road network from Tire Junction to Kelaniya Viharaya. It is also suggested to establish a new Railway Station at Nungamugoda as well. As such these strategies would provide solution to problem of traffic congestion prevailed at present thereby an efficient and fruitful attempt for a sound urban setting is fulfilled. All these proposals included in Draft Peliyagoda Development Plan has mention in figure 5.17

. Fire 5.14 Proposed Road Development strategies - Draft Peliyagoda Development Plan



Source: Draft Peliyagoda Development Plan – 2030



Threats | Goal 02

1. Nearly 20,000 people are affected for flood annually

Kelaniya is highly affected for both flash and river rain flooding. As described in detailed in chapter 03, nearly 20,000 people are affected due to floods. It has shown in figure 3.5. The flooding area in Kelaniya shown in annexure 21, inundated by flood even in more than 150mm of slight rain. And it would cause drowning over some areas which may affect facing difficulties by employed people as well as school children in the area.

Goal 03

Creating an urban green city with smoothen canal system



Strength | Goal 03

1. Availability of Canal system mainly with Kelani River and including to lower Kelani river sub basin.

As shown in annexure 30, Whole Kelani river basin has divided into 20 sub basins by the Survey Department. The Kelaniya PS area is belonged to low Kelaniya River sub complete area. Nearly 2% of land area is consist with water bodies. Thus, Kelaniya is the main water feature and apart from that as shown in annexure 25, there is a network of tributaries which connected with Kalu Ela as well. Accordingly KumbalOya, Natha Ela, Eri Ela, Hapugaha Wella, Mudun Ela and Mahara Mudunela are important which flow integrating through along watersheds of urban areas enabling to build up a favourable urban atmosphere .

2. Existence of 15% of wetland area out of the entire land area.

As shown in annexure 15, 15% of wetland areas from entire land area is yet available as watershed green area in the event even with the threat of reclaiming low-lying lands for residential purposes with closer to very high residential density prevailed in Colombo. It is a strength to reduce existing flood and problems of urban heat.

3. Availability of pioneer locations for forming a green city (University of Kelaniya, Kelaniya Viharaya and Kelaniya River & conservation zone of north riverbank)

Having Kelani Viharaya extending over 13 hectares of land area, Kelaniya University with a land area of 15 Hec. and Kelaniya River and its north dam conservation zone of 35 Hec. will be suitable areas for establishing a green city.



Weakness | Goal 03

1. Availability of slums & shanties along Kelani riverbank and railway reservation areas.

743 of shanties & raw houses are mostly available in Kelaniya PS area. The distribution of slums and shanties are shown in annexure 31. They are highly spread over the Kelani River reservation, railway reservation and low-lying land areas as shown in figure 5.18. As mention in annexure 32, 45% from the total slums & shanties are spread in area near by Kelani river north bund. Apart from that, 21% from the total shanties are spread in Hunupitiya North & South, Wanawasala and Welegoda railway reservation areas. All other shanties area located in low lying land areas.

Figure 5.15 Shanties of Watershed areas of Eriyawetiya and in Kelaniya River North Bank



Source: Google street view, 2021 / Photograph by A. M. C. Samanthilaka

2. All canals in the area are obstructed by more than 500 M

According to the Natural Water flow analysis of the area mention in annexure 33, Natural water ways of all canals are obstructed by more than 500 M. This is a reason for the problems of immediate floods. The block length of all canals is shown in Table 5.7 and their photographs are shown in figure 5.19.

Table 5.4 Obstructed Canal Network in Kelaniya Area

Name of Canal	Obstructed Length
Natha Canal (from Gonawala to Kalu Ela)	Km. 3
Eri Ela (from Eriyawetiya to Kalu Ela)	Km.3.4
Hapugaha Bund (from Kiribathgoda to Mahara Mudun Ela)	Km. 1.5
Mudun Ela	500 m
Kumbul Oya (from Pethiyagoda to Kelani River)	Km. 6

Source: Planning Team- Gampaha District Office, 2021/ Natural water flow analysis - GIS Analys

Figure 5.16 Nature of Canal Obstructions in the Area



Photographs by A.M.C. Samanthilaka

3. Lack of arrangements for solid waste management

The information available at the office of Kelaniya PS, the total collection of garbage is 110- 120 tons per day. If arrangements are made to collect at least 80%, yet there is further problem of a space for disposing them since the capacity of Manelgama Land Filling Station has been exceeded at this moment. It has shown in figure 5.20.

Figure 5.17 Solid Waste Land and Compost Project at Manelgama



Photographs by A.M.C. Samanthilaka



Opportunities | Goal 03

1. An environmental conservation zone has been identified along Kelani river by the Proposed Western Province Structure Plan-2030.

According to Annexure 08, under the proposed 2030 Western Region Structure Plan – 2030 has proposed to conserve 100m both side of the area as Environmental Conservation Area. Removal of unauthorized and irregular settlements will also enable them to create areas where water is being conserved as green open areas. This is ideal for creating a green city.

2. Kelaniya University is identified as the first Green University.

In 2014, the University of Kelaniya was named the first Green University of Sri Lanka. This is further confirmed by the above-mentioned newspaper articles in figure 5.21. This can also be done outside of the university premises to create a green city.

Figure 5.18 Kelaniya Green University



Source: University of Kelaniya website, 2014

3. Existing Environmental preservative Guidelines stipulated by the SLDC

As shown in Annexure 34, Gazette No 1662/17 of 14th July 2010 proposed reservation zone has been declared for open and closed canals under (Act No 35 of 2006) Land Reclamation & Development Corporation Act No. 15 of 1968, (Amendment No. 27 of 1976& No 52 of 1982) according to its width as mention in table 5.8. These are some legal enactments for the protection of watershed environmental systems.

Table 5.5 Regulation Available for Canal Reservations

Canal	Surface Width (Metre)	Allocated Reservation	
		Open Canal (Metre)	Covered Area (Metre)
Hapugaha Wella, Mahara Mudun Ela	6.1 – 9.0	4.5	1.5
Eri Ela, Natha Ela, Mudun Ela, Kumbul Oya, Kalu Ela	9.0 >	6.5	2.0

Source: Sri Lanka Land Development Corporation Act (amendment) no. 35 of 2006 / Planning team-Gampaha District Office, 2021

These will have opportunities to minimize unauthorized acquisition, reducing flood sufferings in keeping with adequate canal reservations etc.



Threats | Goal 03

1. Identified 65% of land extent as urban heat generated area.

Heat extensive areas had been increased from 3% – 65% for a period of year 2006 – 2014. It is analysed for the Kelaniya DSD as per survey carried out by the University of Ruhunu. It has clearly mention in figure 3.6 in chapter 03 of this report. Accordingly, Kiribathgoda, Nungamugoda, Dalugama, Hunupitiya and Thalawathuhenpita areas are identified as high-risk heat generating settings.

2. Threat to degenerate of wetlands

A substantial number of low-lying lands are discontinuing daily due to unauthorized fillings for various development activities. Because as given in table 5.9, there is a high demand for import export cargo services in this area. Accordingly, the survey carried by the Survey Department has revealed that, there is a 28% wetland in Kelaniya area out of the total land extent in the year 2000. But at the present in the year 2017 land use analysis total wetland areas have been reduced to 15%. The series of this green cover encroachment from 1992 to 2017 has shown in figure 3.4. This will increase the threat of floods & urban heat.

Table 5.6 Warehouse & Stores Facilities for Imports & Exports Cargo in Kelaniya Area

Import Cargo		Export Cargo	
Region	Percentage	Region	Percentage
Kelaniya	21.6	Kelaniya	24.7
Colombo	17.0	Colombo	9.5
Wattala	7.7	Wattala	11.6
Dehiwela/Mt. Lavinia	6.0	Trincomalee	14.2
Ja – Ela	5.1	Ja – Ela	7.4
Kurunegala	4.2	Kurunegala	3.2

Biyagama	3.3	Biyagama	2.8
Kaduwela	3.2	Kolonnawa	6.6

Source: Draft Peliyagoda Development Plan, 2017/ Planning team – Gampaha District Office, 2021

Industries have been immersed in adjacent area and expanded reclaiming low-lying lands with the development of industries in area of Peliyagoda. Presently Peliyagoda is known as highly facilitating areas for the provision of stores & warehouses. As a result, Industries & stores are spread-out low-lying areas due to the low land values. It has mention in Annexure 20. This will directly effective for discontinuing blue & green atmosphere.

06

Chapter



The Plan

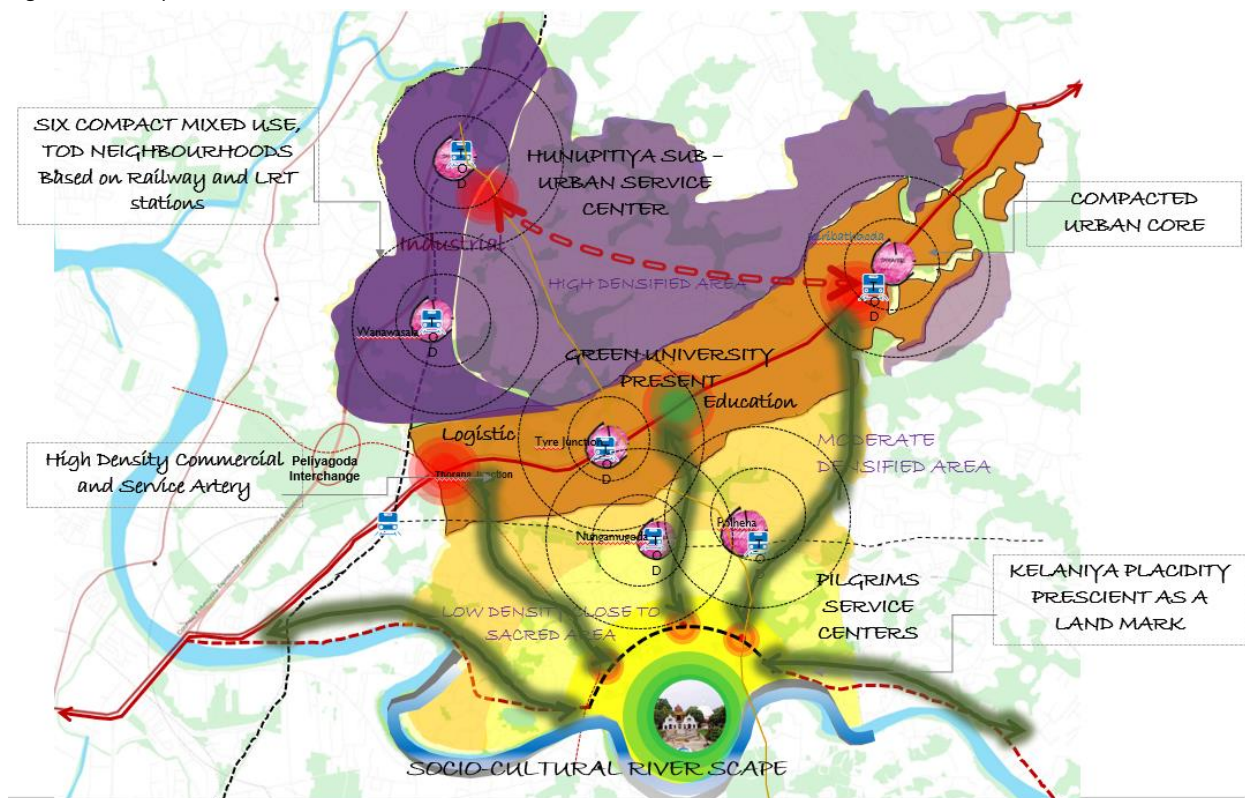
Chapter 06

The Plan

6.1 Concept Plan

Concept Plan will briefly & simply specify the Kelaniya PS area at 2030. As such Kelaniya Sacred Area as the main juncture, Kiribathagoda high dense commercial centre as main economic & service centre locate in coupling the A 1 Main Highway, Kelaniya Green University area, Industries and stores towards Peliyagoda area, Hunupitiya, sub urban centre in minimizing Kiribathgoda high congestions, also all most all area for residential facilitating area for employed communities of Colombo & adjacent areas and will be proposed this area as transit-oriented development with the Modernization of Main Railway line and proposed Light Railway system.

Figure 6.1 Concept Plan



Source: Planning team – Gampaha District Office, 2021

Although the Kelaniya is one of the main Cultural and Historical sacred areas of Sri Lanka, now its importunacy is gradually weakening with existing urbanization. Though urban spirituality in relation to culture, history and treasured importance could be developed even with the high urbanization but in the case of Kelaniya, it is a difficult task with heavy & vicious urbanization stretching towards north from the Kelaniya Temple. It is conceptualized low level densification towards high urban densification. At the present Kelaniya Sacred area directly link via the Colombo – Biyagama road. But it is aimed to create

direct linkages with the Colombo – Kandy Road in the year 2030, with a wider boulevard network relate to Kiribathgoda Commercial centre, Kelaniya higher education centre and areas of Peliyagoda industrial centre deviating Kelaniya Sacred place from such an urbanized accomplishment for the purpose of protecting cultural, historical hereditary.

With the idea of 'Urban Locus', Kiribathgoda Commercial city through the A 1 Main Highway will be further continued as a zonal commercial generating centre minimizing the development pressure and it constrains to the area of Hunupitiya since it has been a trend and a requirement in developing that centre as a sub urban centre. It is expected that Concentrating Kelaniya University, Dalugama & its environs is to be thinking higher educational institutes locate there in the idea of developing the Kelaniya University as the Green University. Facilities should be provided to locate an area for industries & stores at areas of Wanawasala & Hunupitiya.

At present this area playing a main role as a residential area while covering 58% from the total land area as residential area by facilitating for the resident's commuters who worked in Colombo and adjacent areas. With the purpose of minimizing existing traffic congestion, it is also expected to provide facilities for residential communities while incorporating with proposed railway modernization and Light Railways (LRT) centring Hunupitiya, Wanawasala, Nungamugoda, Kiribathgoda, Tire Junction, and Polhena areas.

The aim would be to minimize difficulties due to urban heat and floods in creating a green city. It is proposed to control floods by improving low-laying areas such as Mahara Mudun Ela, supplementary areas of Wanawasala MudunEla and Kelaniya riverbank conservation areas. Improving canal reservations with a green line and all roads running towards Kelaniya Temple showing appearance of a wider boulevard, according to the Conceptual Plan of Kelaniya Divisional Secretariat area, Kelaniya Sacred City would be a juncture of blessings the entire township. Apart from lining up & location of various activities such as commercial, industrial & warehouse, higher educational institutes are spread along either side of Colombo – Kandy Main Highway and sub urban centres founded on transit neighbourhood nodes.

6.2 Proposed Landuse Plan

Kelaniya could be identifies as a High dense urbanized area. At present Kelaniya Divisional Secretariat area is the heaviest dense area of Gampaha District and projected density is 7878 persons per sq.km. This area had linked with national road network as in the past and now the area is more linked with other parts of the country through Express ways towards Katuunayaka and Colombo outer circular Expressway and also the Kandy Expressway which is being constructed. Acuity of relationships with other areas in the country is daily and gradually increasing presently the area is found to be a fruitful place within the area of Colombo inner core area.

Thus, the historical, cultural and religious importance is gradually diminishing. Presently, when consider the area of 1 km radius around the sacred area 10% of the area highly congested with industrial and related activities which may affected to diminish the value of sacred city. And also, it is recovered that entire low-lying areas are reclaiming used for unauthorized activities. A Plan has been underway for regulate landuse development by the year 2030.

As such it is important to have a comprehensive development plan taking all areas in identifying existing development potentials to prepare a future comprehensive physical Development Plan while protecting Historical Kelaniya. It should be prepared in a practical way that all buildings their height, density, shape, and colour should be compatible with historic Kelaniya and cliqued or stretched towards northern parts of the Kelaniya from the Kelaniya Sacred area as shown in figure 6.2. To further gradually establish this physical arrangement, the site should allow to expand only with approved uses which may compatible with the sacred area.

Figure 6.2 Cross-section of Proposed Special Physical Structure



Source: Planning team- Gampaha District Office, 2021

Adjoining towns will be expected to be developed minimizing traffic congestion prevailed at present in Kiribathgoda town as well as along Colombo – Kandy Main Highway by properly handling and centralizing of over-all public transport services. Accordingly, further develop the Kiribathgoda town as the main commercial spot by promoting various commercial activities with the vertical development. Hunupitiya will be developed as a 2nd category of township towards a road from Kiribathgoda to Hunupitiya and Wattala towns in considering the development trend towards Hunupitiya from Kiribathgoda. It is proposed to develop Hunupitiya as a sub centre with public transportation facilities while incorporating with electrification of Main Railway Line and newly proposed Light Railway Development. In addition, Wanawasala, Tire Junction, Nungamugoda and Polhena will be developed as small townships with centring the existing and proposed railway stations. Thus, these improvements would be expected to disperse commercial activities into hinterland. And also new housing schemes would be encouraged for improving housing expansion in Polhena, Koholvila, Nahena and Eriyawatiya areas.

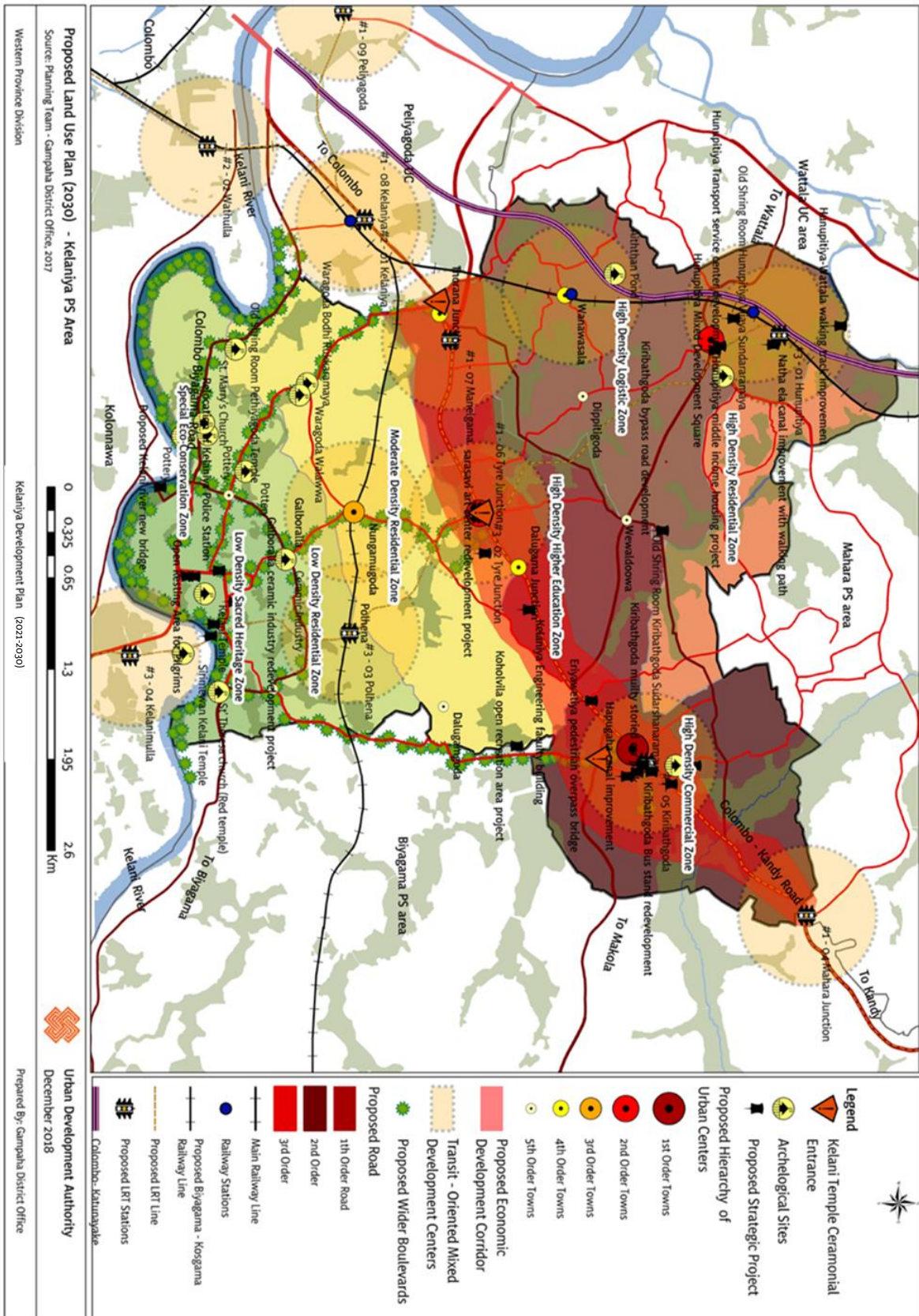
It is expected a high dense development in northern part of the area. From northern part toward the sacred area should arranged as descending intensity of congestion of the urban characters from high dense to low dense when centring to the Kelaniya sacred area. Sacred area will further be layover it should be Kelaniya Temple be visible from Galborella area restraining high rise buildings expecting low dense housing stock in & around near space. Moreover, the Kelaniya sacred area will be connect with A 1 Main Highway through direct access with four wider boulevards from Kiribathgoda, Tire Junction, Thorana junction and Peliyagoda.

The area where currently experiencing frequent flooding of unauthorized and low-income housing adjacent to Kelani river north bank could be developed as a recreational area with socio-cultural river scape improvement while incorporating with

Kelaniya Sacred Area Development Plan which prepared by National Physical Planning Department. It has proposed to link Egoda Kelaniya and Megoda Kelaniya via Kelani river. It may help to open-up the Kelani river north bank area for the purpose of attracting pilgrims and tourists while enhancing the sense of Kelaniya sacred city. Thus, it is expected to develop a Socio-Cultural River Scape Improvement at the Kelani river north bank while collaborating it with Kelaniya Raja Maha Viharaya.

An attention will be taken to conserve the green environment for the proper management of instant floods and in order to prevent the formation of high temperature zones while preserving the diminishing green shaded ecosystems in the region. It is being developed as a support to the green city concept based on the University of Kelaniya and the surrounding area, as an area for high density higher educational landuse with a green city concept.

According to the expected vision for the Kelaniya PS, by 2030 “The Urban Locus of Divinity” will be achieved through proper management of landuses and densities as gradually change the intensity of congestion toward the sacred area from the north part of Kelaniya PS area. The sacred city is expected to be established as the main historical and spiritual blessing point of the region. And also, it is expected to minimize the traffic congestion prevailed at the Town Centre towards hinterland sub urbanized town centres through behavioural landuse changes.



Map 6.1 Proposed Landuse Pla

6.3. Infrastructure Development Strategies

6.3.1. Service Management Plan

Under the Proposed Service Management Plan, an attention will be focused on residential, dormitory, urban service centres, education, health, & trade requirements. At the year 2030, to achieve heavenly urbanized situation transit based targeted residential development generating efficient and fruitful township which is the objective of service plan under infrastructure development plan. Thus, under the projected qualitative & quantitative analysis services should thrive for projected population of 141,000 residents and 500,000 migrants.

6.3.1.1 Proposed Housing Density

As per National Physical Plan, Kelaniya Divisional Secretariat area belongs to the proposed East-West Economic Corridor. It is expected a population increase by 20%- 25% by the year 2050 throughout this area. Accordingly, the population density will be 6,000 -10,000 persons per sq.km in the Kelaniya DSD. Based on this National Planning Intervention, the expected population growth is considered as 1.41% which is the Median Growth Rate of Population by counting the Grama Niladhari Divisions which present more than 1% population growth rate. Accordingly, the projected population will be 141,000 in the year 2030 and the expected population density will be 7,878 persons pre sq.km as clearly mention in the table 6.1. The existing population of 111,300 people will be increase by a total of 29,700 will be reaching a population of 141,000 in Kelaniya PS area in the year 2030. Apart from a percentage of 15% marshy lands, net density would be 9,271 per sq.km.

Table 6.1 Projected Population Density for 2030

Hypotheses Population Density	Growth Rate	Year			Expected Population Density 2030	Expected Population Density 2050 (NPP)
		2011	2017	2030		
Natural Growth Rate	0.45	107,853	111,300	117,463	6,562	6001 - 10,000
Median value of Positive Population Growth Rate among GNDs	0.71	107,853	111,300	123,519	6,900	
Median Growth Rate of Population which are more than 1% Growth Rate	1.41	107,853	111,300	141,020	7,878	
Maximum Growth Rate among all GNDs	2.22	107,853	111,300	157,522	8,800	

Source: Planning team – Gampaha District Office, 2021

As shown in table 6.2, projected population has distributed among the proposed zones based on conceptual plan, Development pressure and Potential, Sensitivity and suitability analysis.

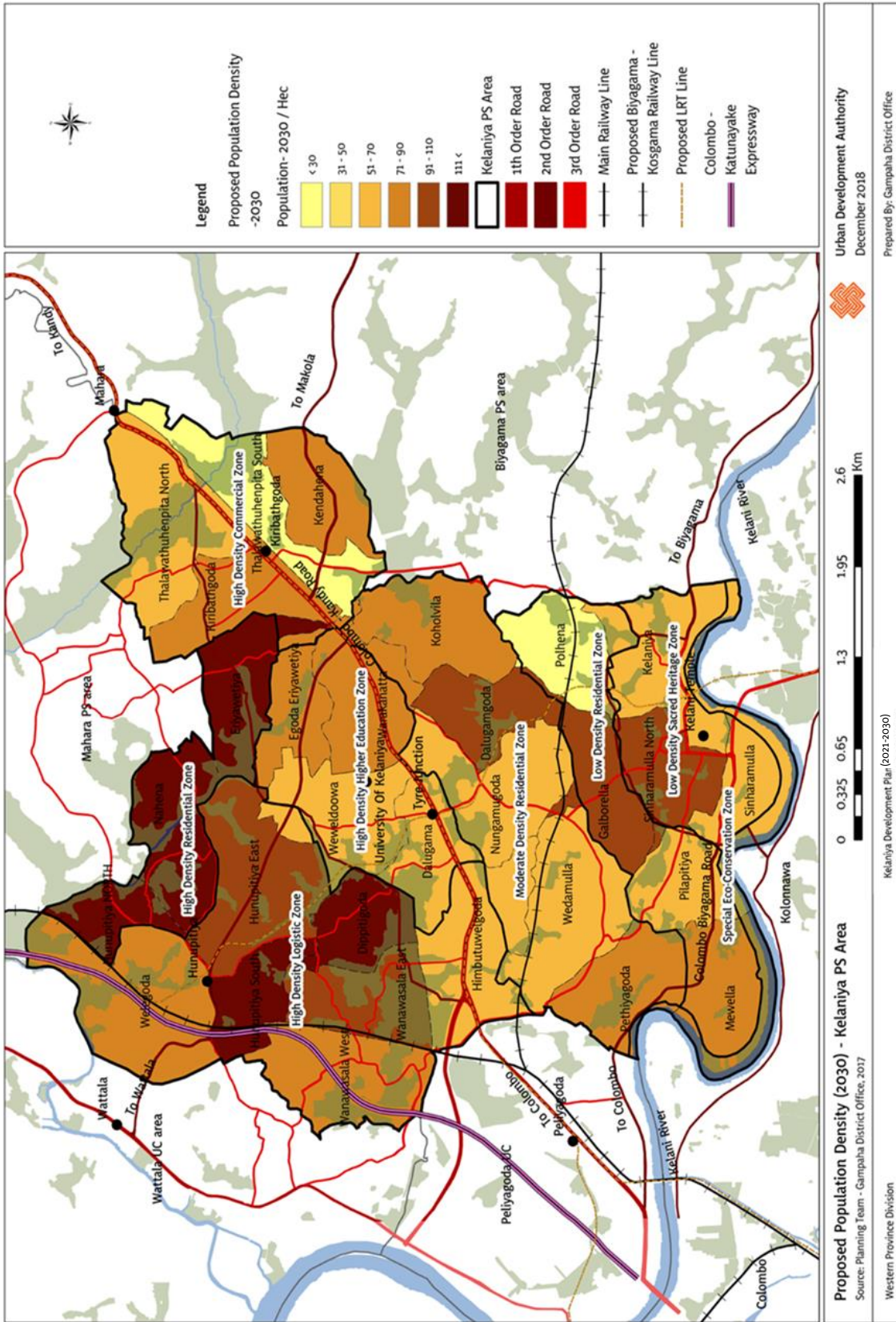
Table 6.2 Projected Population and Housing Density Distribution According to the Proposed Zones

Zones	Proposed Name	Extent (Hec.)	Proposed Population 2030	Proposed Population Density (Hec.)	Proposed Housing Units	Proposed Housing Density (Hec.)
Zone 1	High Density Commercial Zone	264.2	15,778	60	3945	15
Zone 11	High Density Higher Educational Zone	209.36	15,170	72	3793	18
Zone 111	High Density Logistic Zone	460.22	40,218	87	10,055	22
Zone 1V	High Density Residential Zone	141.02	19,633	139	4908	35
Zone V	Moderate Density Residential Zone	335.57	26,229	78	6557	20
Zone V1	Low Density Residential Zone	177.08	12,639	71	3160	18
Zone V11	Low Density Sacred Heritage Zone	148.59	11,353	76	2838	19
Zone V111	Special Eco-Conservation Zone	53.49	0	0	0	0
Total		1789.53	141,020	79	35,255	20

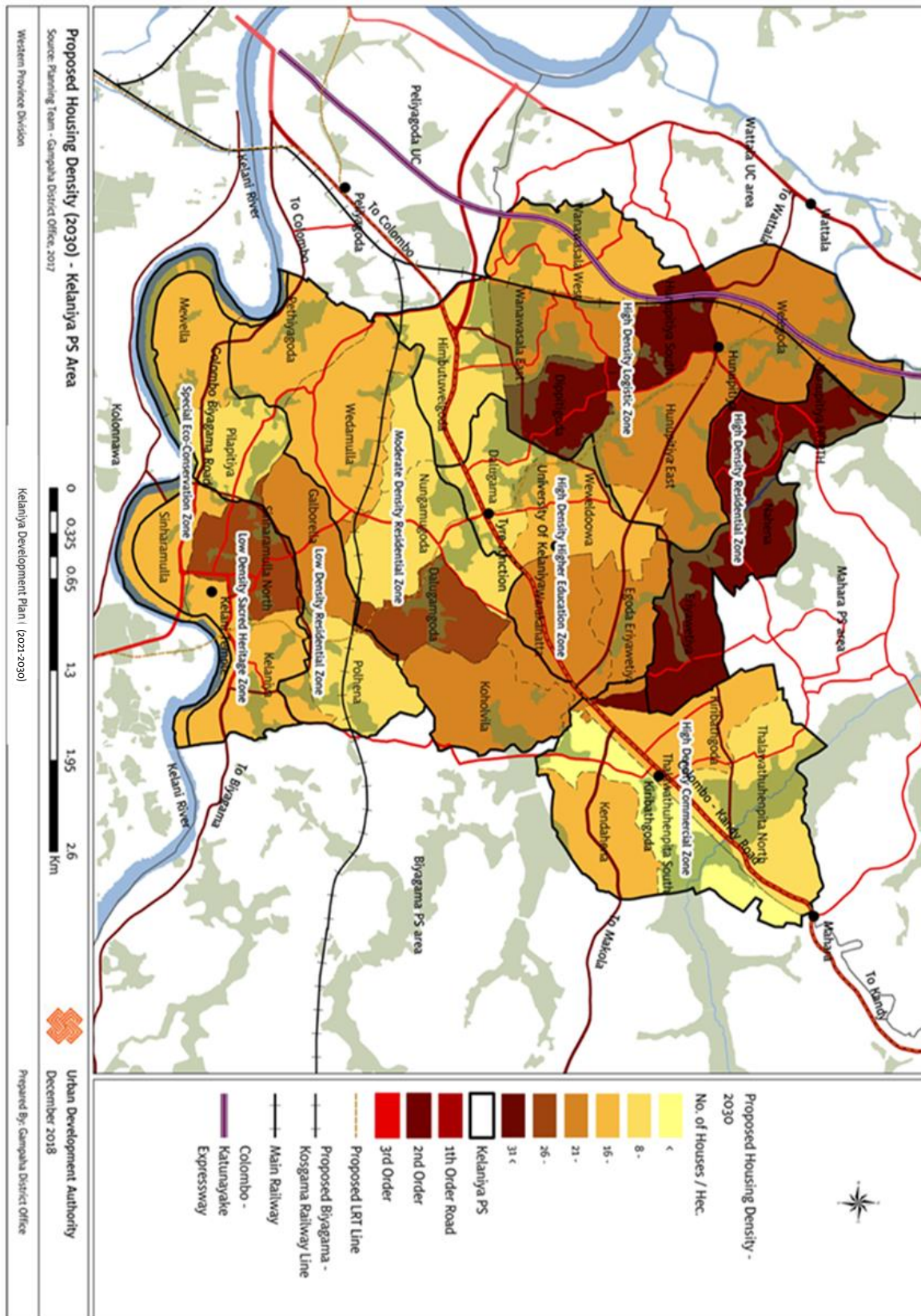
Source: Planning Team – Gampaha District Office, 2021

Present Housing Stock is 26,855 units in the area. With the increase of population, the projected housing stock would be 35,255 units in the year 2030 as shown in above table. The raw housing and shanties stock of 904 units increase should be 9,304 units. Accordingly, the propose housing stock will be determined allowing higher density distribution in high land areas accommodating healthy and free from natural hazards and low-density distribution of housing units in low lying land, canals and areas closed to archaeological areas. In achieving transit-based development, in keeping with targets of vision 2030, six (6) transit-oriented development clusters accommodating modernization of main Railways and also Light Railways will be in mind and provision is provided for 60% of population's requirement. As such railway stations as well as light railway stations adjacent areas of Polhena, Galborella, Nungamugoda, Wedamulla, Eriyawetiya, Koholwila, Welegoda and Dippidigoda will be the places of Housing development under the Plan. Thus, proposed housing and population distribution has shown in map 6.2 and 6.3.

Map 6.2 Proposed Population Density Distribution - 2030



Map 6.3 Proposed Housing Density Distribution – 2030



6.3.1.2 Proposed Urban Service Centres Priority Plan

Kiribathgoda Town can be identified as one of the main towns centres in western region which providing urban service. Since Kelaniya & Hunupitiya also identify as service centres such areas are not up to satisfactory level and thus an attention is focused on for internal towns development for the purpose of providing facilities for the convenience of residents and commuters. The existing town centers and neighborhood nodes have prioritized based on their expected levels considering Development Pressure, Sensitivity, Residential Land Suitability, Potential and proposed projects as per annexure 36. Summary of the prioritized levels of town centers have mention in table 6.3.

Table 6.3 Proposed Hierarchy of Urban Centres

Proposed Priority Level	Town Centres
1st Priority Towns	Kiribathgoda
2nd Priority Towns	Hunupitiya
	Tyre Junction
3rd Priority Towns	Nungamugoda
4th Priority Towns	Thorana Junction
	Dalugama
	Polhena
	Wanawasala
	Galboralla
5th Priority Towns	Sinharamulla
	Kelaniya
	Wewalduwa
	Dippitigoda
	Dalugamgoda

Source: Planning Team – Kelaniya Development Plan, 2021

Kiribathgoda is fourth category town in the Western region at the present. According to the existing services, most of the public services such as a based hospital, public market and a bus terminal is concentrated on Kiribathgoda city centre. Apart from that proposed Light Railway Station will be developed at Kiribathgoda town. Further based on all these potentials it is proposed to develop as the first priority city in the area which facilitate more than 220,000 commuters by 2030.

Development pressures concentrated in Kiribathgoda Town that potential trend reach towards Hunupitiya. In addition, direct impact of proposed Light Railway station, railway electrification also affects for Hunupitiya town. It helps to develop the area as transport service-based town centre. Apart from Hunupitiya, Tire junction is also expected to be developed as the second order city in the region due to the impact of proposed Light Railway station. Thus, according to the proposed density zone by 2030, such zone and its town centres which expected to accommodate 80,000-150,000 of commuter population is proposed

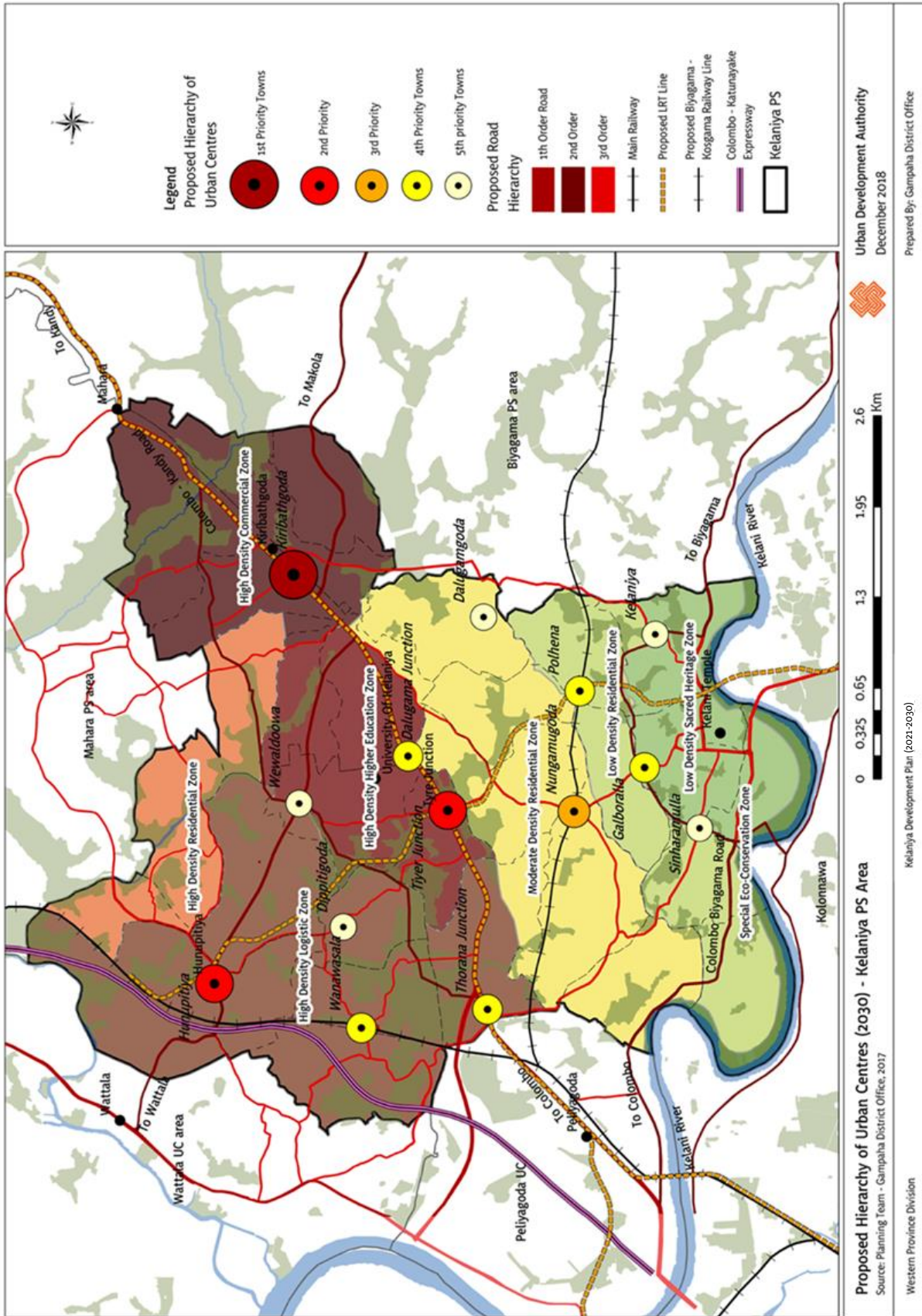
developed as a second priority town centre. This second priority town may consist with a railway station or a Light Railway station or a combination of both which facilitate for both residents and commuters.

Nungugugegoda is expected to be developed as the third priority neighbourhood centre, covering less than 50,000 of the commuter population, which facilitate low and moderate Density Zones. The area is expected to develop with the proposed Biyagama-Kosgama railway line and its station. In addition, Thorana junction, Dalugama, Polhena, Wanawasala and Galboraella junction is expected to develop as the fourth priority town centres. These towns need to be developed to facilitate for less than 20,000 of the residential and commuter population. Accordingly, it is expected to provide day-to-day services specially with the transportation facilities.

Sinharamulla and Kelaniya nodes which included in to proposed Low Density Zone and Dalugamgoda, Dippitigoda and Wewalduuwa which included to High Density Zone also proposed to develop as small-town centres where retail, health services and others will be concentrated. It expected to accommodate less than 5,000 residential inhabitants.

Thus, when developing Kiribathgoda town as the main town centre in the areas, Hunupitiya and Tire junction will become as a second priority towns. Nungamugoda is also considered as the third priority city in the transit-oriented neighbourhood development cluster. And Thorana junction, Dalugama, Polhena, Wanawasala and Galboralla will be develop as Fourth Priority Town Centres. Here Galboralla is expected to function as a main centre in the Kelaniya sacred area which provide facilities for both local and foreign pilgrims. In addition, Sinharamulla, Kelaniya, Wewalduuwa, Dippitigoda, and Dalugamgoda centres will be developed as Fifth Order Town Centres while Kelaniya and Sinharamulla function as service commercial nodes which facilitate for pilgrims. The location of all these priority nodes is mention in map 6.4.

Map 6.4 Proposed Hierarchy of Urban Center



6.3.1.3. Educational Services Plan

When consider the existing education facilities in Kelaniya area which functioning as a main residential area, whole area included to Kelaniya Educational Zone. As shown in table 6.4, there are 25 of schools in DSD including 3 of National schools. At the present, 29,169 of students are accommodate within this schools.

Table 6.4 Schools in Kelaniya DS Division

DSD Name	National Schools	1 AB schools	1C Schools	2nd Grade Schools	3rd Grade Schools	Total
Kelaniya DSD	3	2	9	5	6	25

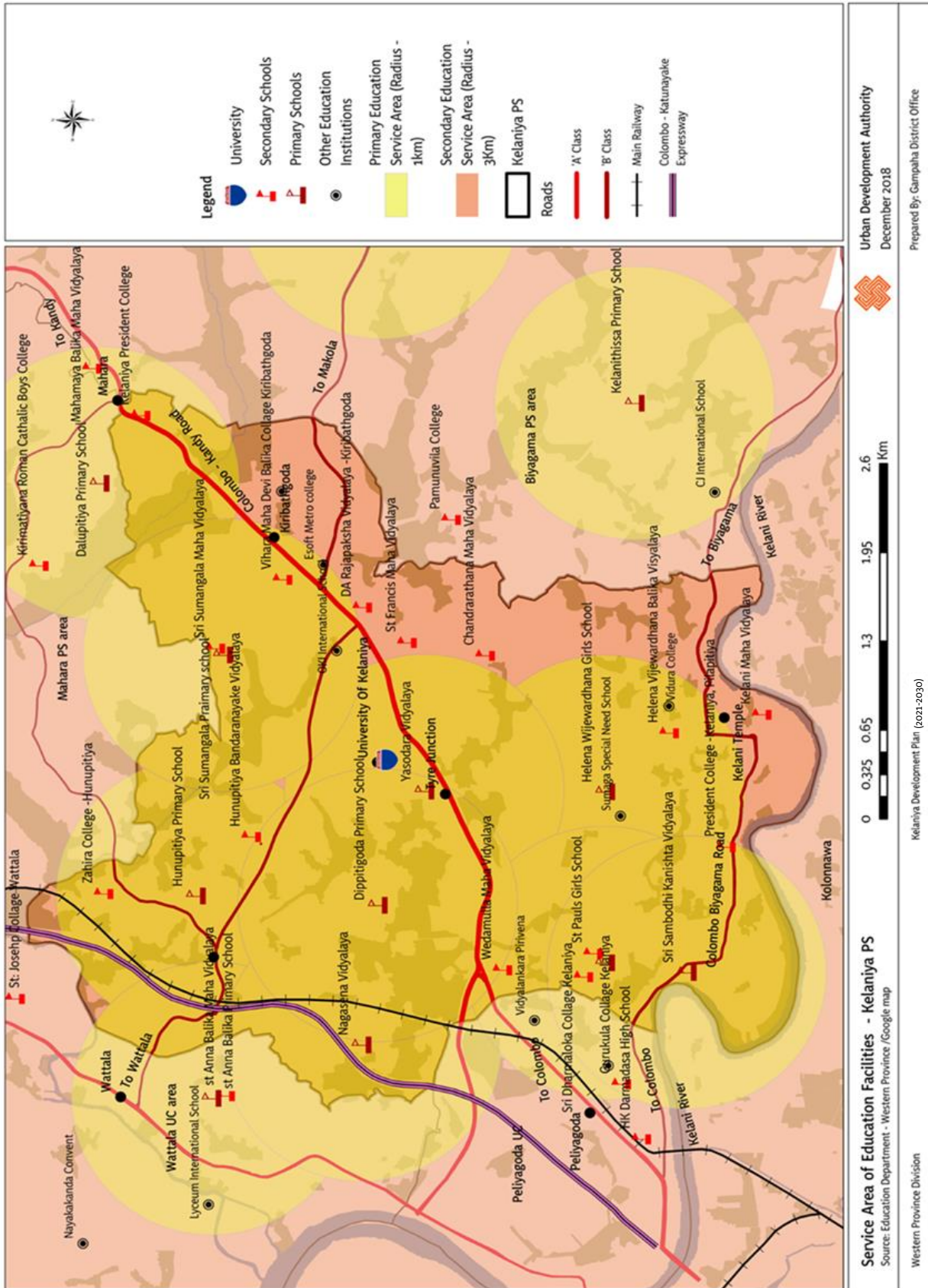
Source: Statistics Handbook – 2016, Census & Statistics Department

Out of the 25 of schools, 21 schools are located within the Kelaniya PS area including 2 Central College, 11 of Maha Vidyalaya. According to the existing population in Kelaniya DSD in the year 2016, can be identified 22% of are school age population as shown in annexure 37. Thus, 24,300 of school attending population in the Kelaniya PS area and 24,902 of students are accommodate within 21 of schools which are in this area including the students who come from the area outside of Kelaniya PS area. Based on the proposed population by 2030, the student population would be 27,192.

When consider the primary education, there are 7 primary schools spread in the Kelaniya PS area and 1 Km of their service range cover the whole area. There are also 84 preschools accommodating 1,500 children. In addition, there is a large trend for international schools in the area. In considering secondary education, 2 Central Colleges, 11 Maha Vidyalaya, are dispersed within the area and it has already covered their 3 Km radius of standard service coverage. Accordingly, as shown in map 6.5, Primary and Secondary educational institutions and their service coverage is quite enough for expected population by 2030. In addition, it is proposed to further improve the facilities in Hunupitiya Sahira College, Hunupitiya Primary School, Hunupitiya Bandaranayaka Vidyalaya, Sri Sumangala Primary School, Nagasena Vidyalaya, Dippitigoda Primary School, Yashodara Vidyalaya and Sri Sumangala Vidyalaya which included into the proposed High-Density Zone.

Considering the Higher education sector, the University of Kelaniya is located within the Kelaniya PS area and as per 2014 / 2015 annual report in the Kelaniya University it has providing the accommodation for 16,000 of students both local and foreign. And the number of external students is 41,100. Thus, this University has originated with 6 Faculties in the year 1975; yet it is now necessary to have an Engineering Faculty as well considering the projected 20,000 students in the year 2030. And it should be established in keeping with the Green University concept.

Map 6.5 Distribution of Educational Facilities



6.3.1.4. Health Facilities

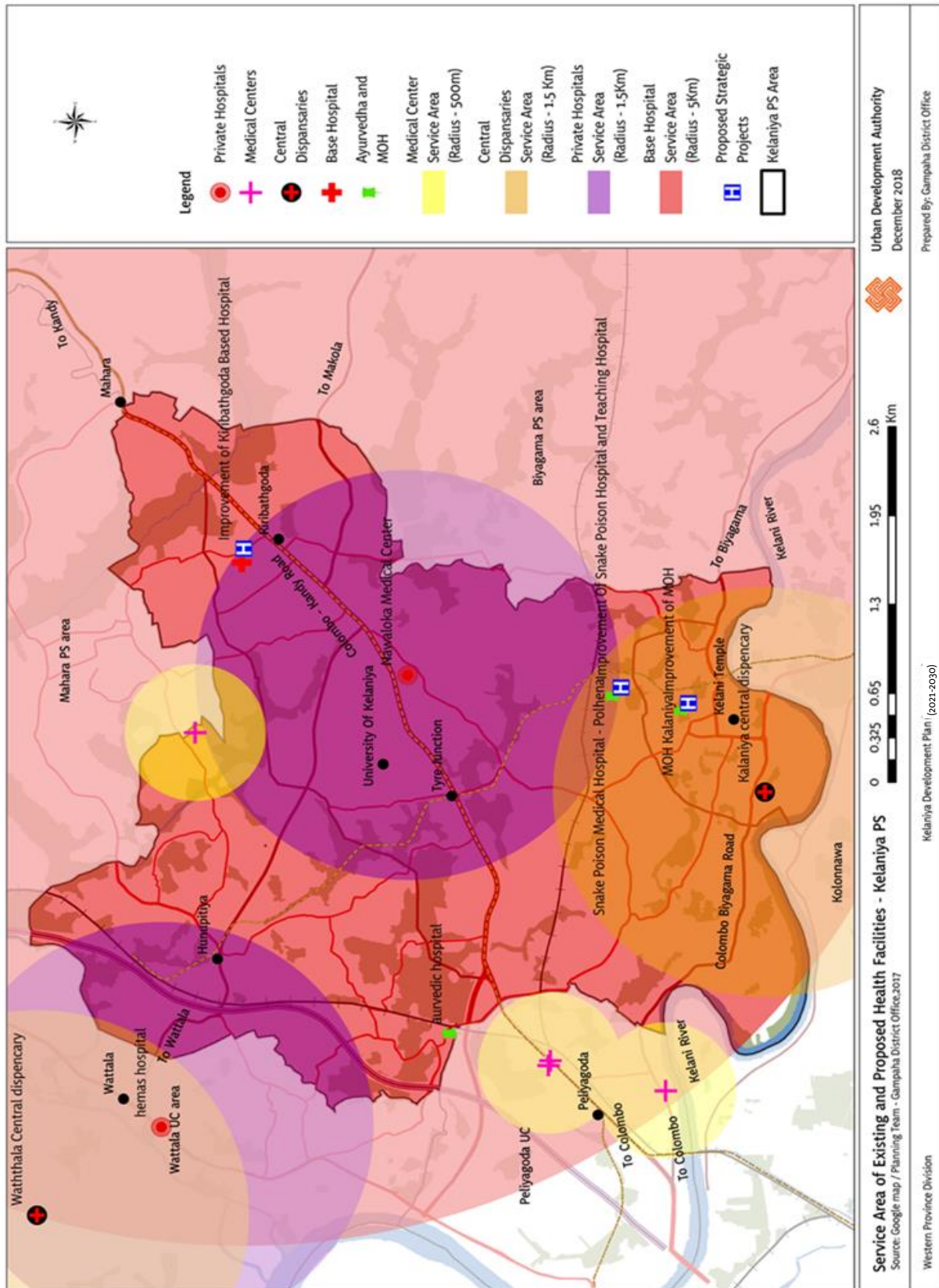
In considering the Health Facility in the land area of 17.9 sq.km with a population of 111,300 persons in the year 2017 that the Kiribathgoda Base Hospital is vital importance. Presently among 3 of based hospitals in Gampaha District such as “A” Grade Base Hospital in Wathupitiwala, “B” Grade Base Hospital in Meerigamain and “B” Grade Base Hospital in Kiribathgoda, Kiribathgoda Based Hospital is in the Kelaniya PS area. It is consisting with 5 wards and has 81 beds. As per District Report of Census 2016, the Kiribathgoda Based Hospital has accommodating 16,508 of indoor and 149,423 of outdoor patients during this year. When consider the standard service coverage area of a based hospital as 5 Km radius, it has covered the whole Kelaniya PS area. Considering the Govt. Central Dispensaries, Kelaniya & Sinharamulla Central Dispensaries and also a network of private clinics covers entire health facilities in the region.

Kelaniya Ayurveda Dispensary and Kiribatgoda Ayurveda & Panchkarma dispensary are important in considering Ayurveda health care in the area. It is also very importance that national & internationally reputed Polhena Snake Poisons Hospital & College also located in this PS area. This poisons Hospital was established in the year 1984 in order to conserve local inheritance Ayurveda Snake poisons hospital at Polhena in the Kelaniya DS Division. At the present, this is the only Poisonous Healthy Institution in Sri Lanka which consist with poisonous medical college. Entrance to this college is limited to 20 – 25 students in a year out of 200 – 250 applicants. It is proposed to improve the capacity of this traditional hospital in the future.

Subsequently, health services facilities are rather up to the absolute level with the projected population of 141,000 persons in the year 2030, and it is appropriate to upgrade Kiribathgoda Base Hospital to A Grade Base Hospital accommodating 200 beds for indoor patients covering the land extent of 2.7 hectares. At the present whole Kelaniya PS area covered by the one MOH which located in Kelaniya Grama Niladhari Division. But based on the projected population in the year 2030, it should further develop to facilitate expected population. Specially, the existing Poisonous Hospital & Medical College also upgrade and modernized to facilitate for both residents, commuters and students.

Thus, all these proposals and existing service coverages are shown in map 6.6.

Map 6.6 Distribution of Health Facilities



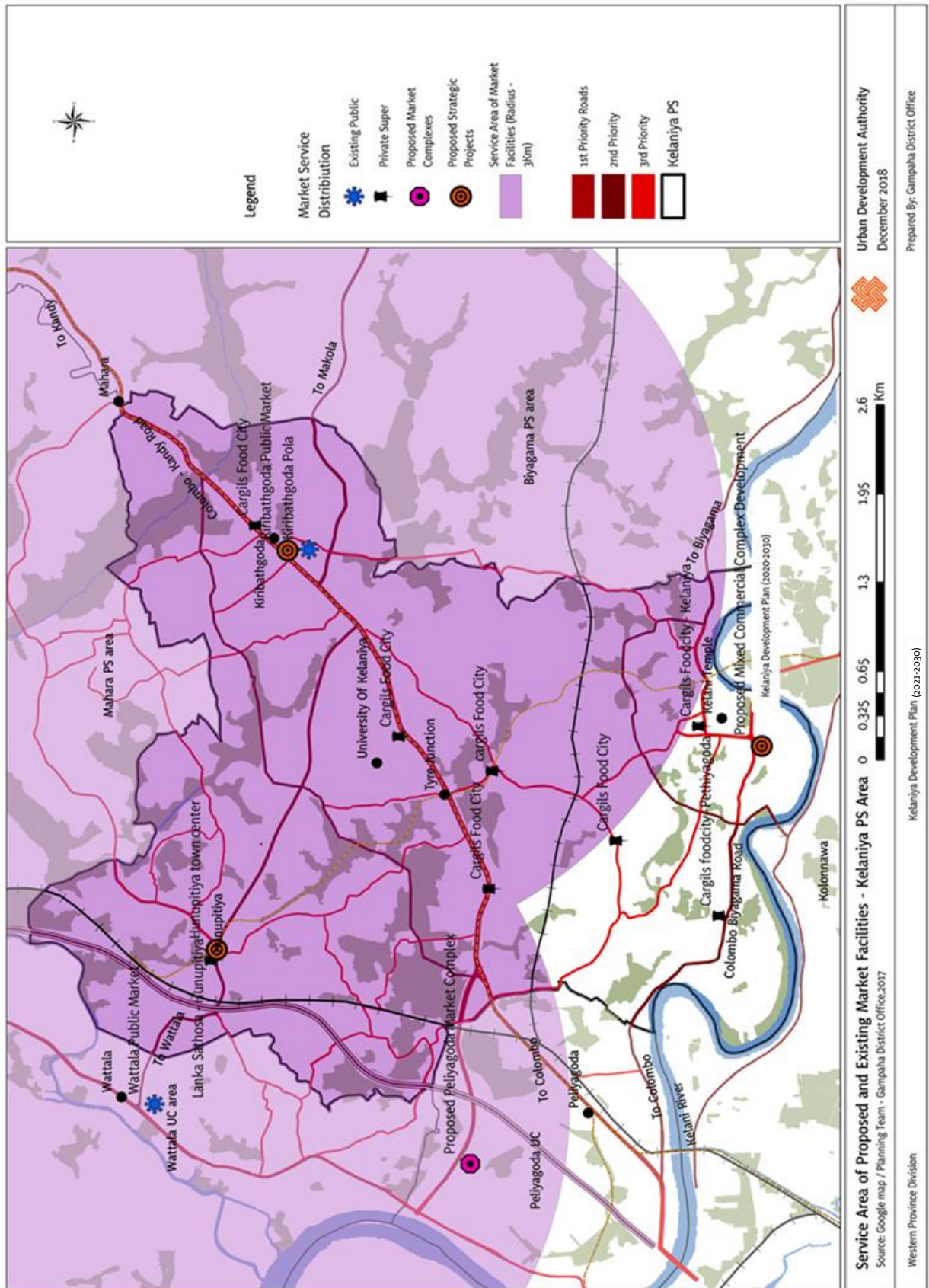
6.3.1.5. Public Market Services

It is important to consider the common trade services for large number of internal and migrants' population who visit this region regularly.

Kiribathgoda Market and Weekly fair are catering common marketing for an internal population of 111,300 persons in addition to nearly 200,000 commuters who come daily to the town. When consider the 3 Km of service coverage in Public market, it has covered more than 2/3 of area apart from Mawella, Sinharamula and Pilapitiya areas in the southern part of Kelaniya PS area. At the same time, communities in Hunupitiya area get the market service from Wattala Market and also private sector trades stretched all around the area. However, Kiribathgoda Pubic Market centre together with the weekly fair is providing services to the entire region; yet there will not be satisfactory level for facilitating for the projected population of 141,000 in the year 2030. Since the upper floors of Public Market Building is not functioning due to its dilapidated condition. But when developing this area as a High-Density Commercial Zone, it is expected to re-develop this Public Market with the modern facilities.

It is also expected to encourage a Public Market complex at the Hunupitiya town as well in order to cater the existing market trends. Market extensions along the roadsides make a necessity for proving adequate spaces for such activities by forming a public market complex in this town. In addition, all the trade facilities are to be provided to communities within the proposed Transit-oriented service nodes. All these proposals and service areas are shown in map 6.7.

Map 6.7 Distribution Public Market Services



6.3.1.6. Hostel Facilities

In the year 2017, 16,120 of students are accommodating in the University of Kelaniya. Out of these total students, accommodation facilities are providing for 3,958 of both male and female students. Others are accommodating in and around the region permanently or temporary.

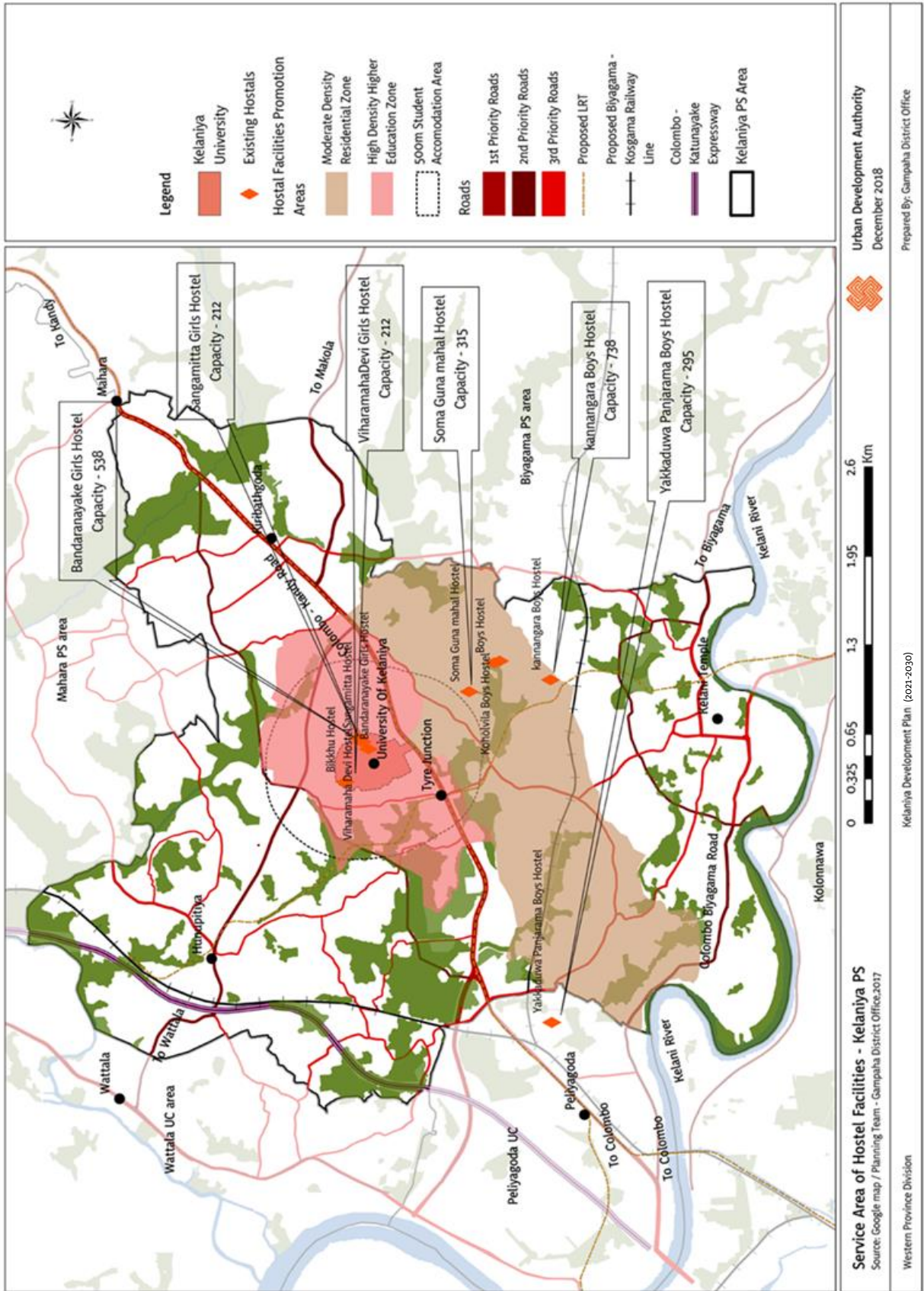
Table 6.5 Permanent Hostels – University of Kelaniya

Name	Year of Established	Capacity of Students	Male/Female
Bandaranayake	1965	538	Female
Viharamaha Devi	1997	212	Female
Hemachandra Rai	2000	200	Female
Ediriweera Sarathchandra	1993	108	Female
EW Adikaram	2000	140	Female
Sangamiththa	1997	212	Female
Gunapala Malalasekara	1996	153	Female
Sir D B Jayathilaka	2015	495	Female
Yakkaduwe Paranganarama	2009	295	Male
C W W Kannangara	2005	738	Female
Soma Gunamahala		315	Female
Bulugaha Junction		200	Female
Seevali Mawatha		100	Female
Mahara Junction		100	Female
Seevali Mawatha		80	Male
Kethage Watte		72	Male/Female
Total		3958	

Source: Annual Report 2014-2015, University of Kelaniya/ Planning Team – Gampaha District Office, 2021

Presently, if providing the accommodation facilities for 80% from the total student population it should provide 12,896 of students considering the students who come out of the western region. But prevailing capacity of dormitories is only for 3,958 students. Yet total number of students who reside outside of the university premises which counts about 8,900. In counting the total studentship with the proposed Faculty of Engineering in the year 2030 it would be 20,000 and out of which 80% internal dormitory facility is to be fulfilled. It is therefore expected to provide accommodation for around 16,000 students. Hence it proposed to facilitate around 12,000 of additional new accommodation within the Higher Education Promotional Zone. All these proposals and service areas are shown in map 6.8.

Map 6.8 Distribution of Hostel Facilities



6.3.2 Road and Transportation Plan

Kiribathgoda Town can be identified as a nearest town to the Colombo Commercial Capital among the town centres which concentrated to A1 Main Highway. A1 Main Highway which links to northern, eastern, north central and central part of the country containing with high traffic congestion all over the day. More than 150,000 vehicles a day reaching Colombo through this road. Traffic congestion is more effect in Kiribathgoda town and other nearby locations of Kelaniya University and Tire Junction of Dalugama as proximate area to the Colombo CBD.

According to the Seventh Policy of the Ten Commandments of the present Government manifesto, a circular light rail system (LRT) will be constructed for the convenience of the daily commuters to Colombo. It will also reduce traffic congestion on major intersections, create a small flyover system and add a mechanical vertical parking yard system to each major city. Accordingly, steps have been taken to formulate plans in the Kelaniya Development Plan taking into account the new approach of physical space, through the National Manifesto.

Vision and targets created by the year 2030 is determined an efficient & fruitful town founded on smoothen traffic & transportation network. Accordingly, it has proposed to achieved the objectives such as to positioning the Kelaniya Sacred area as a centre point with direct accessibility toward the sacred area by the year 2030, to establish efficient transport system through a hierarchical road network by the year 2030, and to established 6 transit-oriented development clusters based on proposed railway electrification and new Light Railway through an efficient Road and Transportation Plan. For that there are 3 specific strategies under the Transportation Plan as described below.

6.3.2.1 Promoting an alternative road hierarchy connecting Colombo – Kandy Main Highway to overcome the existing traffic congestion

It is anticipated to improve & widened alternative roads, weakening road existed areas by developing linking new road hierarchy and new alternative road to be established in further while establishing the existing A 1 Main Highway as the First Priority artery.

As such it is proposed to construct an alternative road deviating Kiribathgoda Town as an alternative way to A 1 Road. It will be a Second Priority Road which link Peliyagoda and Mahara Junction via Dippitigoda, Wewalduwa & Eriyawetiya deviating the Kiribathgoda town.

At the same time, Hunupitiya Road will be developed with four lane road along with a service line as well. With the anticipated improvement in the year 2030, in centralizing & modernizing of Main Railways and Light Railways, together a transport services the Hunupitiya town to be developed as a sub town centre. It is also identified Hunupitiya and Wanawasala area of encouraging Logistic & Industrial Promotion Zone. Thus, roads in this area proposed to be improved as 3rd priority roads by providing up to two lanes.

Table 6.6 Proposed Road Hierarchy

Road Hierarchy		Road	Existing & Proposed	Proposed Width (M)	Proposed Length (Km)
1st Priority Road		Colombo Kandy Road (Peliyagoda to Mahara 6 Km)	Existing	<ul style="list-style-type: none"> ▪ Total Width -30m (4 Lanes / Centre Line for LRT/ Service Lane) ▪ Carriage way – 14m ▪ Parking & Bicycle Lane – 5m ▪ Center Island (LRT Service Corridor)- 6m ▪ Side Walk with Landscaping & Utility Service Lines – 5 m 	-
2nd Priority Road	'A' Category	Colombo – Biyagama Road (B 214)	Existing	<ul style="list-style-type: none"> ▪ Total Width - 30 m (4 Lanes / Service Lane) ▪ Carriage way – 14m ▪ Parking & Bicycle Lane – 5 m ▪ Center Island - 3m ▪ Side Walk with Landscaping & Utility Service Lines – 8 m 	-
		Proposed New Kelani Velley Crescent Road	New		4.1 Km
		Hunupitiya – Wattala Road (B 151/B 220)	Existing		-
		Kiribathgoda – Makola Road (B 221)	Existing		-
	'B' Category	Proposed New Bypass Road from Peliyagoda to Mahara via Wewalduwa , Eriyawetiya.	New	<ul style="list-style-type: none"> ▪ Total Width - 30 m (4 Lanes / Service Lane) ▪ Carriage way – 14m ▪ Parking & Bicycle Lane – 6 m ▪ Center Island - 3m ▪ Side Walk with Landscaping & Utility Service Lines – 7 m 	4.75 Km
3rd Priority Road	'A' Category	Hunupitiya Railway Station Access Road	Existing	<ul style="list-style-type: none"> ▪ Total Width - 15 m ▪ Carriage way – 7 m ▪ Parking & Bicycle Lane – 4 m ▪ Side Walk with Landscaping & Utility Service Lines – 4 m 	-
		Kiribathgoda Hospital Access Road			
		Dalugama – Kelaniya			
		Dalugama Wewalduwa Road			
		Dipitigoda Hunupitiya Road			
		Galborella – Polhena			
		Kiribathgoda – Iriyawatiya Road			
		Kiribathgoda Housing Scheme Road			
		Lumbini Mawatha			
		Pilapitiya- Gonagampala			

		Padiliyathuduwa – Hunupitiya Road			
		Waththala thelagapatha			
		Waththala Wanawasala			
	‘B’ Category	Thorana Junction- Kelani Temple Road (Waragoda Road)		<ul style="list-style-type: none"> ▪ Total Width - 15 m ▪ Carriage way – 7 m ▪ Bicycle Lane – 3 m ▪ Center Island -Tree Corridor 2 m ▪ Side Walk with Landscaping & Utility Service Lines – 3 m 	
		Tire Junction – Kelani Temple Road (Nungamugoda Road)			
		Kiribathgoda to Kelani Temple Road via Koholvila (Koholvila Road)			
4th Priority Road	All other roads including Pradeshiya Saba (PS) Roads should be maintaining minimum 6m of road width except proposed 1st to 3rd priority roads <ul style="list-style-type: none"> ▪ Total Width - 12 m ▪ Carriage way – 6 m ▪ Side Walk with Landscaping & Utility Service Lines – 6 m 				

Source: Planning Team – Gampaha District Office, 2021

Colombo – Biyagama Road will further continue as a 2nd priority road in increasing accessibility to Kelaniya Temple from Colombo – Kandy Road. A road system will be improved from Torana Junction to Kelaniya Temple, Tire Junction to Kelaniya Temple and Kiribathgoda to Kelaniya Temple as 3rd priority roads. There are two objectives in having these improvements. They are to improve the higher accessibility with A 1 Road to Kelaniya Sacred Area and also connecting Kolonnawa allowing better linkage to Colombo and Battaramulla.

Since all these roads are concentrated & seemed congested closed to the Kelaniya Temple and more than 1/3 of vehicles which connected with Biyagama EPZ also travelling through the Colombo – Biyagama Road which laying proximity to Kelaniya Temple. Therefore, to overcome these inconvenience situations which may arise with traffic congestion and noise, it has proposed to develop new Kelani Valley Crescent Road via Pilapitiya, Galborella, Koholvila and hereafter linked to the Colombo – Biyagama Road again as a four-lane roadway.

This road hierarchy is shown in table 6.6 and map 6.9. And the Cross section of the expected situation of every road hierarchical structure is shown figure 6.3 to 6.8.

Figure 6.3 Proposed Road Section for 1st Priority Roads

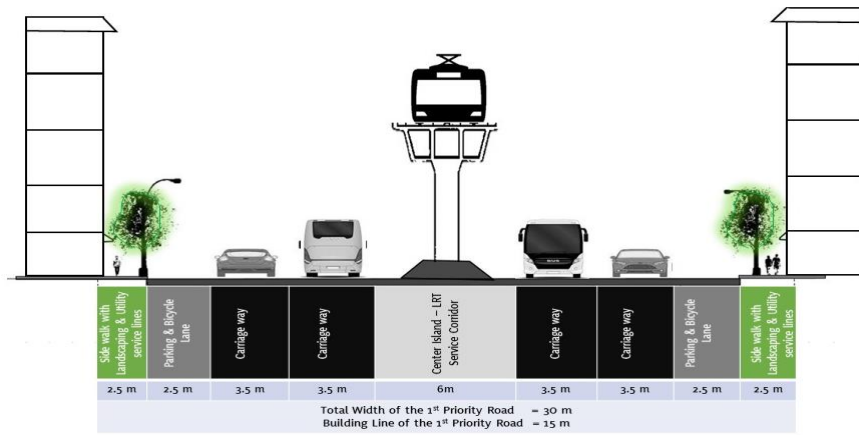


Figure 6.4 Proposed Road Section for 2nd Priority “A” Category Road

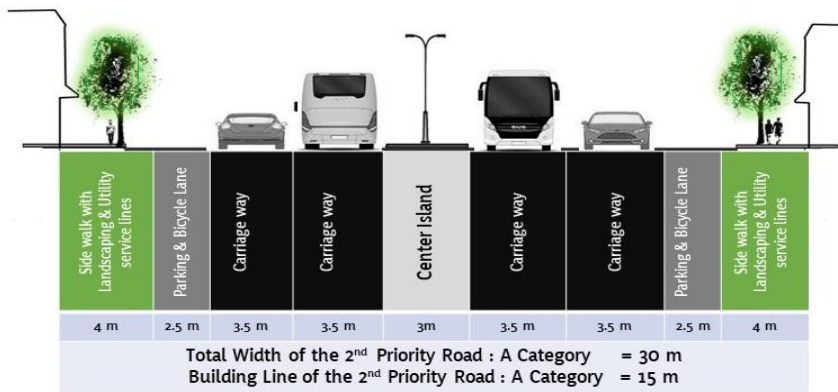


Figure 6.5 Proposed Road Section for 2nd Priority “B” Category Road

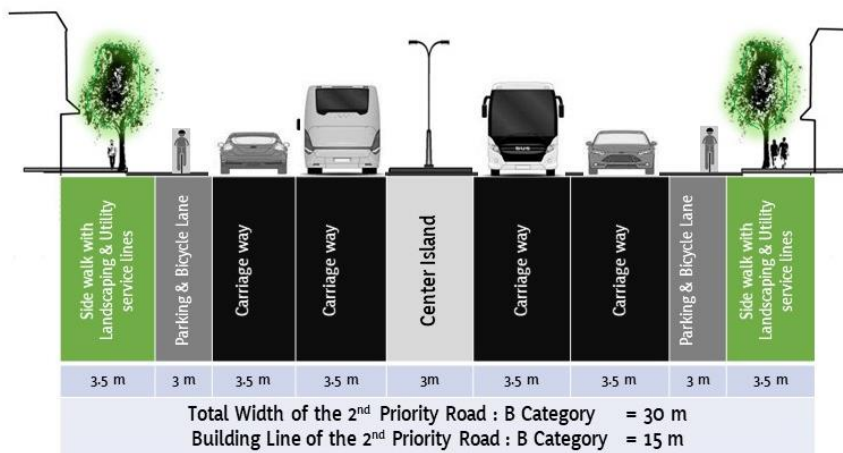


Figure 6.6 Proposed Road Section for 3rd Priority “A” Category Road

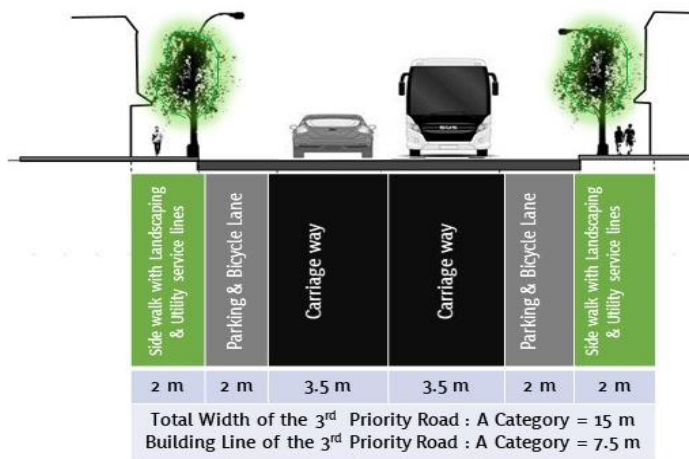


Figure 6.7 Proposed Road Section for 3rd Priority “B” Category Road

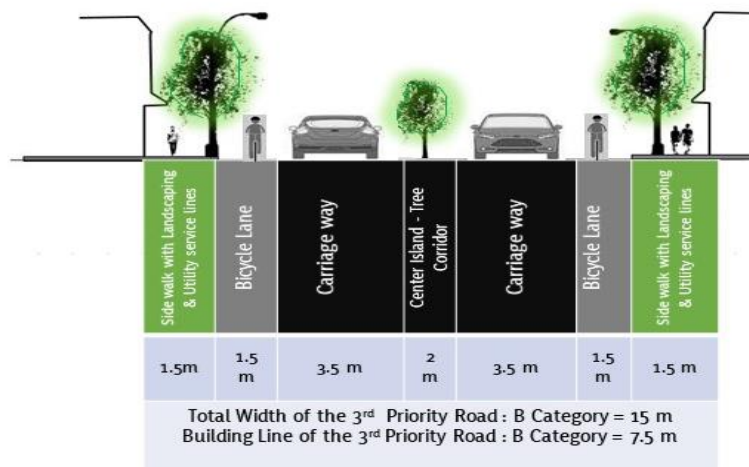
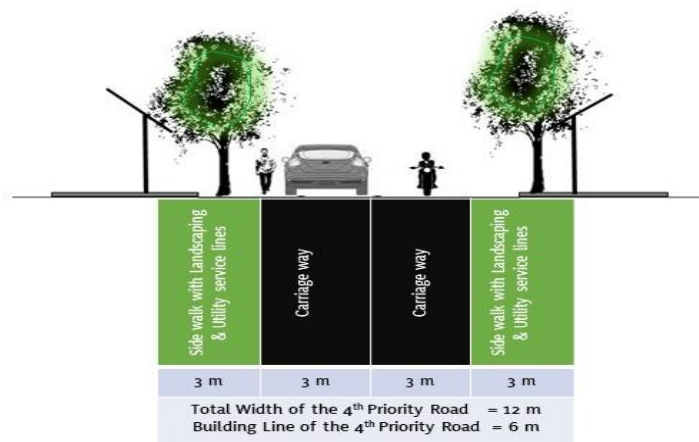


Figure 6.8 Proposed Road Section for 4th Priority Roads



Source: Planning Team – Gampaha District office, 2021

6.3.2.2 Improve the Accessibility toward Colombo – Hanwella Low Level Road through Kelani River

Presently, morning & evening in the Sirimewan Kelaniya Bridge appeared heavy traffic congestion. But it would be a solution to ease the existing traffic congestion prevailed along the Baseline Road and Colombo – Kandy Road allowing easy move of vehicles to Kotikawatta – Muleriyawa area through this bridge towards Egoda Kelaniya. A new bridge over Kelaniya River is proposed from the area of Sinharamulla and Pilapitiya in order to increase accessibility to Kolonnawa crossing the river. Accordingly, through the proposed road network which connect the Colombo – Kandy Main Highway and Kelani Temple which proposed under the strategy of establishing a hierarchical road network would lead to increase the accessibility toward the Hanwella Low Level Road.

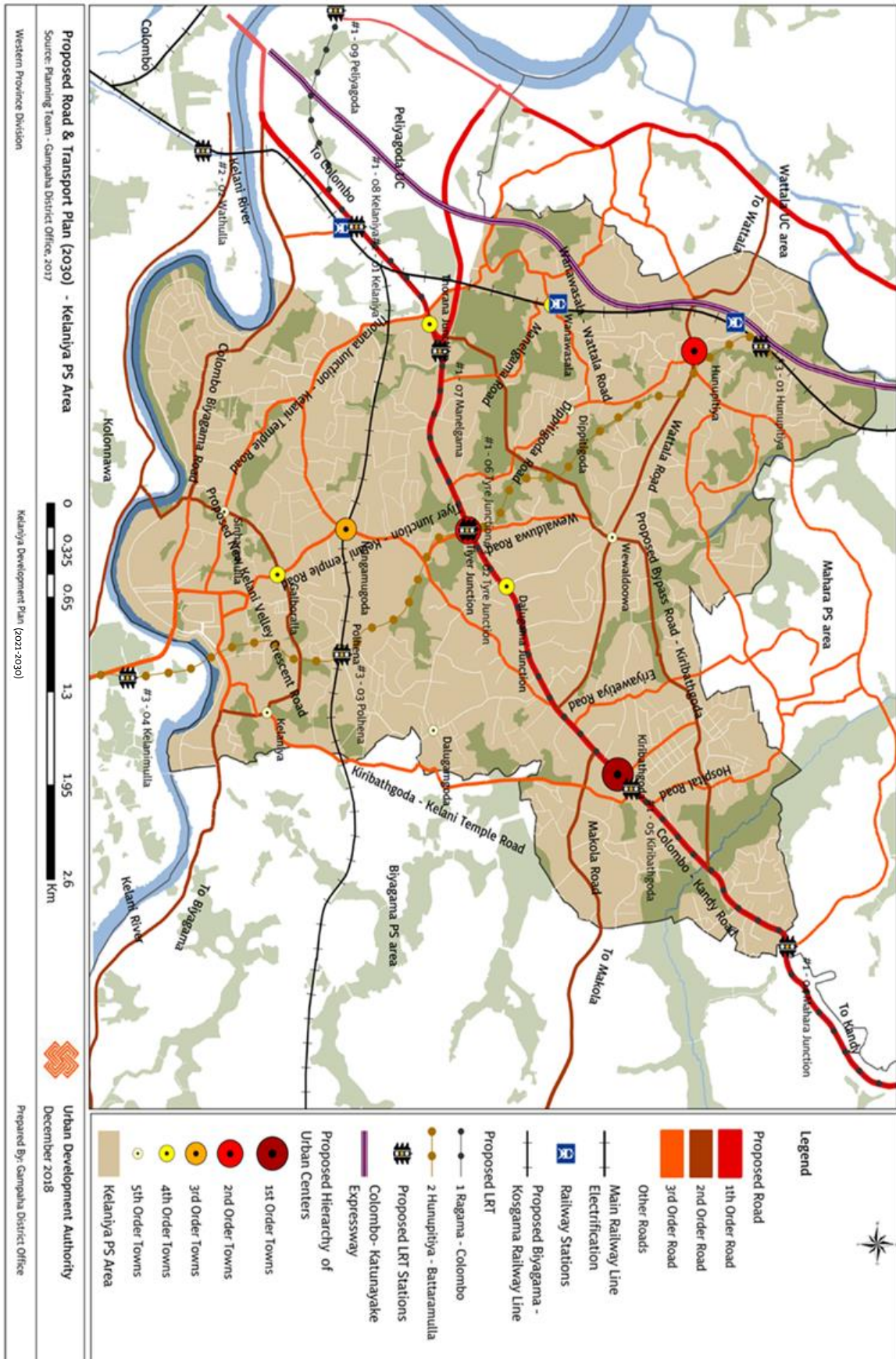
6.3.2.3 Promoting the Public Transportation Service while incorporating with Railway electrification and Proposed Light Railway Transportation service.

As a third strategy, it has proposed to encourage the Public Transportation Service incorporating with proposed Railway electrification, new Biyagama – Kosgama Railway line and proposed Light Railway system. Under the Railway electrification, it has proposed to electrify the Main Railway Line from Panadura to Veyangoda, based on that Wanawala and Hunupitiya Railway stations which include to the Kelaniya PS area to be upgraded further with modernized transport facilities. And also new Railway station at Nungamugoda will be erected under the proposed Railway line from Kelaniya to Kosgama under the Proposed New Railway Modernization Plan for year 2021.

In addition to this Railway modernization, an attention has been focused on to incorporate the proposed Light Railway system as well. Considering the proposed Ragama – Narahenpita Light Railway track, Kiribathgoda and Tire junction and also Hunupitiya, Tire junction and Polhena nodes in line with the proposed Hunupitiya – Kottawa new Light Railway track will be develop as a Transit-oriented neighbourhood node. With this improvements Hunupitiya town centre will be further developed as a Transit Node which provide Railway, LRT and Bus services.

All these proposals and their locations are shown in map 6.9. The expected changes with all these proposals have compared with the existing situation using the Spatial Integration Analysis as shown in Annexure 38.

Map 6.9 Proposed Roads & Transport Plan



6.3.3 Water Supply Plan

There seems to be various water supply sources are existed at present. As per statistical data of the Dept. of Census & Statistic in 2012, around 72% of housing units used pipe borne water as shown in below table 6.7.

Table 6.7 Drinking Water Sources – Kelaniya DSD Area

Kelaniya DSD Area	Drinking Water Sources					
	Safe well within the Area	Safe well outside of the Area	Pipe born water inside the Unit	Pipe born water sur-rounding area not in the Unit	Pipe born water usage outside of the Area	Pipe born water
	13%	1%	72%	11%	2%	1%

Source: Sampath Pathikada, Kelaniya DSD – 2019

According to the website report of the National Water Supply and Drainage Board in year 2018, 77.37% of houses were getting pipe borne water in Wattala and Kelaniya areas which included to Kelaniya water supply administrative zone.

According to the standard calculations as shown in table 6.8., there was a requirement of 17,785 m³ for the consumption of residential, commercial, industrial, hospital purposes & for the daily commuters in the year 2017.

Table 6.8 Current Water Demand in Kelaniya PS Area (2017)

Current Water Demand – Kelaniya PS (2017)				
Category	Amount	Demand for 1 unit (LPCD)	Daily Water Demand (m ³ /day)	Supply
Residential	111,300	135	15,026	Distribution capacity of water per day 71,000m ³ for Kelaniya & Wattala Area
Residential students – University of Kelaniya	3,958	135	534	
Base Hospital – Kiribathgoda	81	350	28	
Employees in Commercial & Services	44,687	20	894	
Industry Workers	11,164	50	558	
Customers	133,900	5	670	
Pilgrims at Kelani Viharaya	15,000	5	75	
Total			17,785	

Source: Planning Team Gampaha District Office, 2021

Drinking Water requirement of the Kelaniya Area is supplied by the Kelani River South Bank Water Treatment Plant. The daily capacity of this treatment plant is 180,000 m³ and it distribute drinking water for towers of Biyagama, Church Hill, Ragama, Kadawata, Welisara, JaEa, Kandana & Ekala. Among them the water requirement of Kelaniya and Wattala areas are fulfilling

by the Church Hill Ground Water Tank and it distribute 71,000 m³ of water capacity for these areas. As such adequate water supply is being carried out daily.

Considering the water demand for projected population in the year 2030, all sectors may require nearly 27,552 m³ per day of water requirement as shown in table 6.9.

Table 6.9 Water Demand for Forecasted Population in Kelaniya PS Area - 2030

Water Demand for Forecasted Population - 2030				
Category	Amount	Demand for 1 unit (LPCD)	Daily Water Demand (m ³ /day)	Supply
Residential	141,020	135	19,038	Proposed distribution capacity of water per day 108,000 m ³ for Kelaniya & Wattala Area
Residential students – University of Kelaniya	16,000	135	2,160	
Base Hospital – Kiribathgoda	200	450	90	
Employees in Commercial & Services	144,112	20	2,882	
Industry Workers	32,019	50	1,601	
Customers	336,262	5	1,681	
Pilgrims at Kelani Viharaya	20,000	5	100	
Total			27,552	

Source: Planning team – Gampaha District Office, 2021

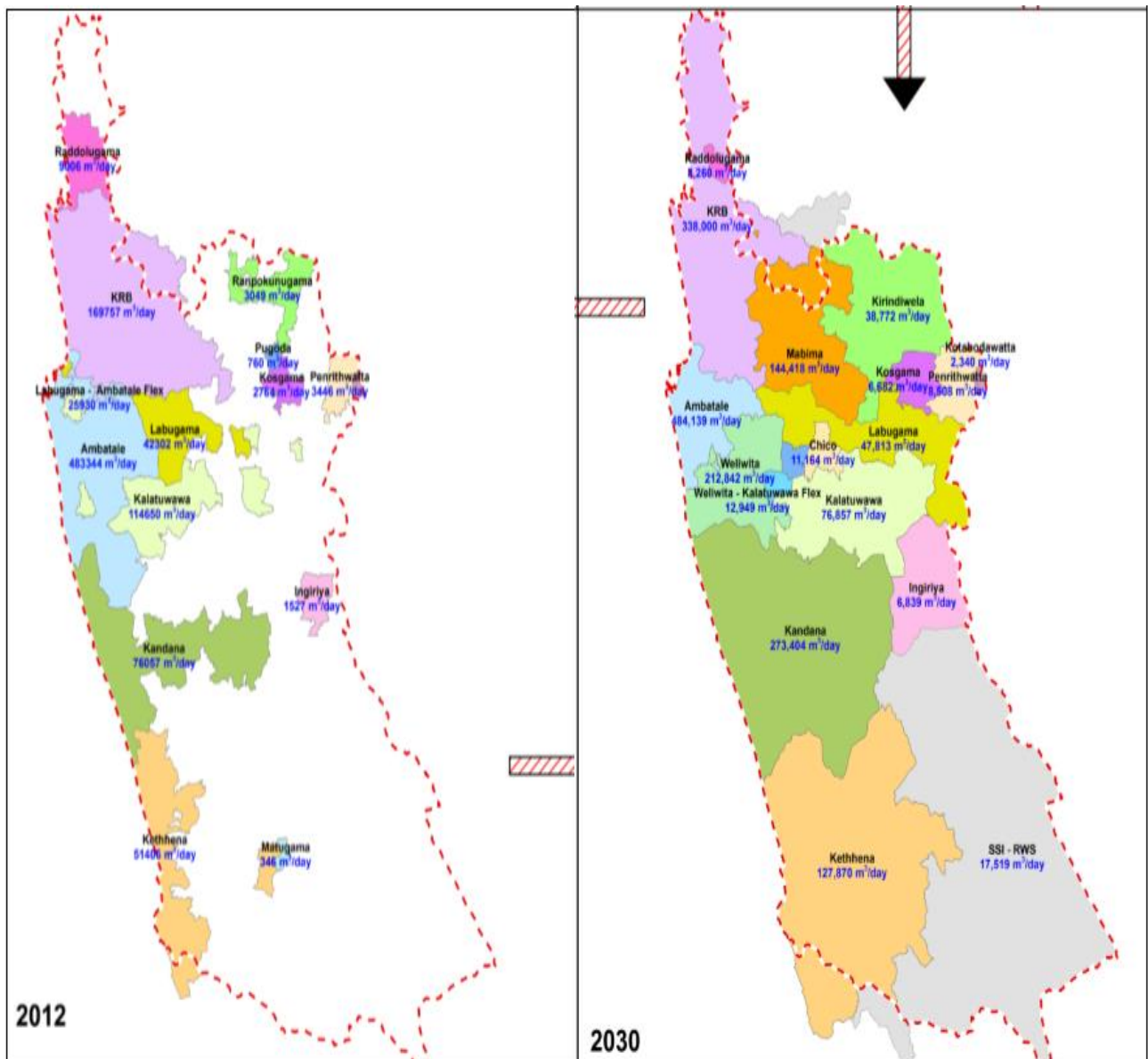
As per the table 6.10, figure 6.9 and 6.10, National Water Supply & Drainage Board will be able to fulfil the required demand in the year 2030, with the proposed Right Bank Water Treatment Plant Improvement Project – Stage II. Because it is expected to increased capacity up to 360,000m³ per day in the year 2021. With this capacity improvement, it has proposed to distribute 93,000 m³ of water per day for Kelaniya and Wattala areas in the year 2021. In addition, with the proposed Mabima water treatment project by the year 2030, the existing water distribution for the Biyagama area from the Kelani River Right Bank Water Treatment Plan will be discounted and distribution capacity for Kelaniya and Wattala areas will be up grade up to 108,000 m³.

Table 6.10 Water Capacity of Proposed Projects & the Forecasted Water Demand

Year	Water Capacity of Kelani River Right Bank Water Treatment Plant	Daily Demand in Kelaniya PS	Distribution Capacity (for Kelaniya and Wattala)
2017	180,000 m ³ /d	17,785 m ³ /d	71,000 m ³ /d
2021	360,000 m ³ /d		93,000 m ³ /d
2030	360,000 m ³ /d	27,552 m ³ /d	108,000 m ³ /d
2040	360,000 m ³ /d		129,000 m ³ /d

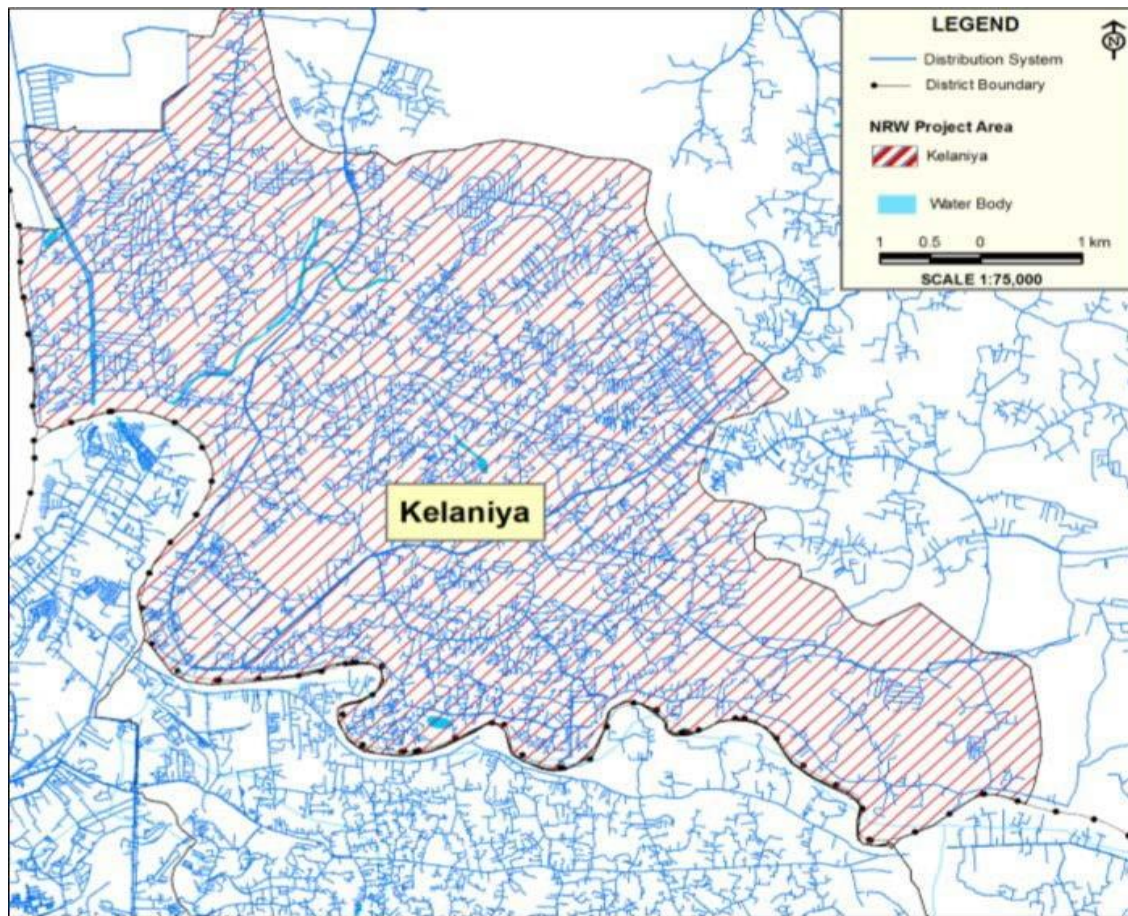
Source: Western Province Water Supply Master Plan – Volume I-2013 / Planning Team – Gampaha District Office, 2021 Strategie

Figure 6.9 Increasing Water Capacity Relation to Proposed Projects



Source: Western Province Water Supply Master Plan - Volume 1-2013

Figure 6.10 Increasing Water Capacity Relation to Proposed Projects in Kelaniya Area



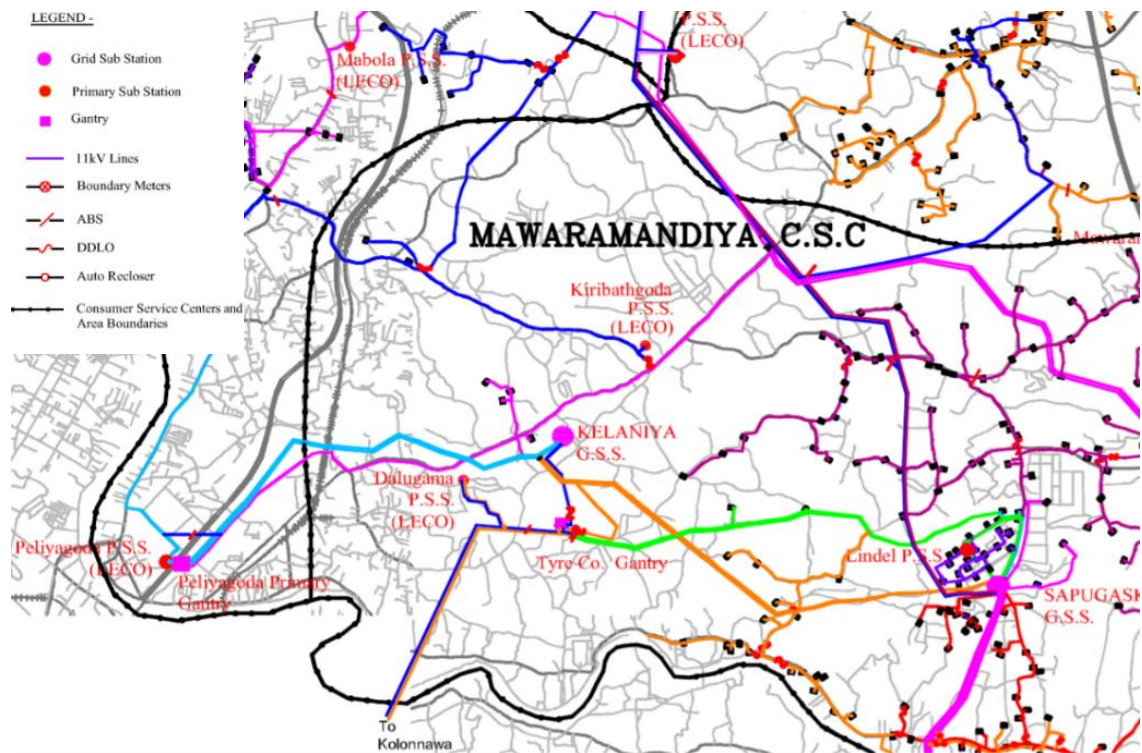
Source: Western Province Water Supply Master Plan -Volume 1-2013

Apart from increasing the capacity of Treatment Plant, this project has been proposed to evade the leakages of existing pipelines up to 100%. Accordingly, the National Water Supply and Drainage Board has already decided the arrangement for adequate water supply to meet the water requirements projected population by the year 2030.

6.3.4 Electricity Supply Plan

Discussions are carried on for the purpose of fulfilling electricity requirement under the Infrastructure Development Plan. Actions in relation to Supply of Electricity for Projected Electricity demand for residential, Services and Industries in the Kelaniya PS has discussed. It is essential to have an efficient & fruitful supply of electricity for this proposed Transit-oriented development area and all other sectors to achieve the future vision. According to the Western Province Electricity Distribution Zoning, Gampaha District including Kelaniya PS area belongs to the Western Province – Northern zone and Kelaniya PS is belonging to Kelaniya Sub-Station. 98% of the electricity demand in Kelaniya area is covered by the National Electricity Supply System. The existing electricity distribution network has shown in figure 6.11.

Figure 6.11 Existing Electricity Network in Kelaniya Sub-Station Area - 2017



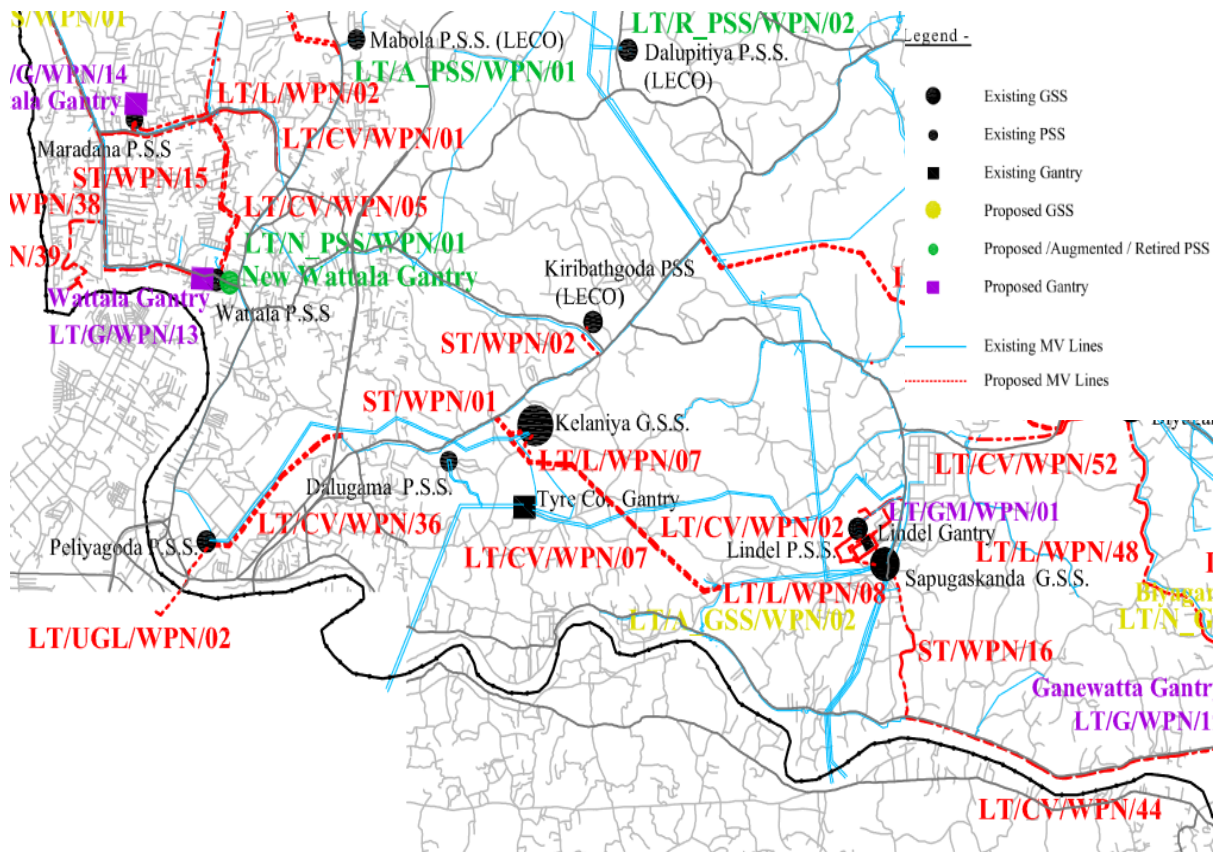
Source: Ceylon Electricity Board, 2016

Accordingly, there was Kelaniya sub-station, Kelaniya primary sub-station and a Grant near Kelaniya Tire Co Ltd within the Planning boundary of Kelaniya PS area.

Numbers of projects are designed for fulfilling the future demand of electricity supply in the year 2030. According to the Megapolis Plan, it has proposed to supply 600 MW of electricity for the National Grid system by Proposed Kerawalapitiya next Stage Project. This will generate additional electricity for the power supply in the Western Province.

In addition, steps have been taken to provide an optimum electricity supply to the area through short term and long-term projects under the proposed projects of 2016-2025 by National Electricity Board as shown in figure 6.12 and table 6.11.

Figure 6.12 Proposed Electricity Distribution Lines 2016 – 2025



Source: Ceylon Electricity Board, 2016

Table 6.11 Proposed New Electricity Network Projects 2016-2025

Project	Project No.	Description
Electricity Network	ST/WPN/01	From Kelaniya electricity substation to Kiribathgoda regional electricity substation (new 0.5km 33kV DC Lynx Tower line)
	ST/WPN/02	From Kiribathgoda regional Substation to Colombo – Kandy Road (New 0.8km 33kV SC Lynex Pole line)
	LT/L/WPN/07	From Kelaniya electricity substation to Kiribathgoda regional electricity substation (33kV SC Lynex Pole, distance km.0.2)
	LT/CV/WPN/07	From Old Kandy Road (Tyre Junction) to Gonawala (33kV DC Raccoon Pole/33kV DC Lynex Pole, Distance km. 3)

Source: Ceylon Electricity Board – 2016

Thus, Ceylon Electricity Board has already proposed to achieve the probable demand for the year 2030 through the ways of new arrangements.

6.3.5 Drainage and Sewer Lines Management Plan

It is important to consider the Drainage and Sewer Lines Management in the area as a most densely populated area of the Gampaha District.

According to the existing residential population and commuter population in the year 2017, it is generated 14,228 m³ of wastewater per day if 80% from the consumption as wastewater.

Table 6.12 Daily Wastewater Generation - Kelaniya PS Area (2017 and 2030)

Category	Amount	Demand for 1 unit (Lpcd)/(L/m ³)	Daily Water Demand (m ³ /day)	Wastewater Generation (80% from Water Consumption - m ³ /d)
2017				
Residential	111,300	135	15,026	12,020.40
Residential students – Hostel University of Kelaniya	3,958	135	534	427.46
Base Hospital – Kiribathgoda	81	350	28	22.68
Employees in Commercial & Services	44,687	20	894	714.99
Industry Workers	11,164	50	558	446.56
Customers	133,900	5	670	535.60
Pilgrims at Kelani Viharaya	15000	5	75	60.00
Total			17,785	14,227.70
2030				
Residential	141,020	135	19,038	15,230.16
Residential students – Hostel University of Kelaniya	16,000	135	2,160	1,728.00
Base Hospital – Kiribathgoda	200	450	90	72.00
Employees in Commercial & Services	144,112	20	2,882	2,305.80
Industry Workers	32,019	50	1,601	1,280.76
Customers	336,262	5	1,681	1,345.05
Pilgrims at Kelani Viharaya	20,000	5	100	80.00
Total			27,552	22,041.77

Source: Planning Team – Gampaha District Office, 2021

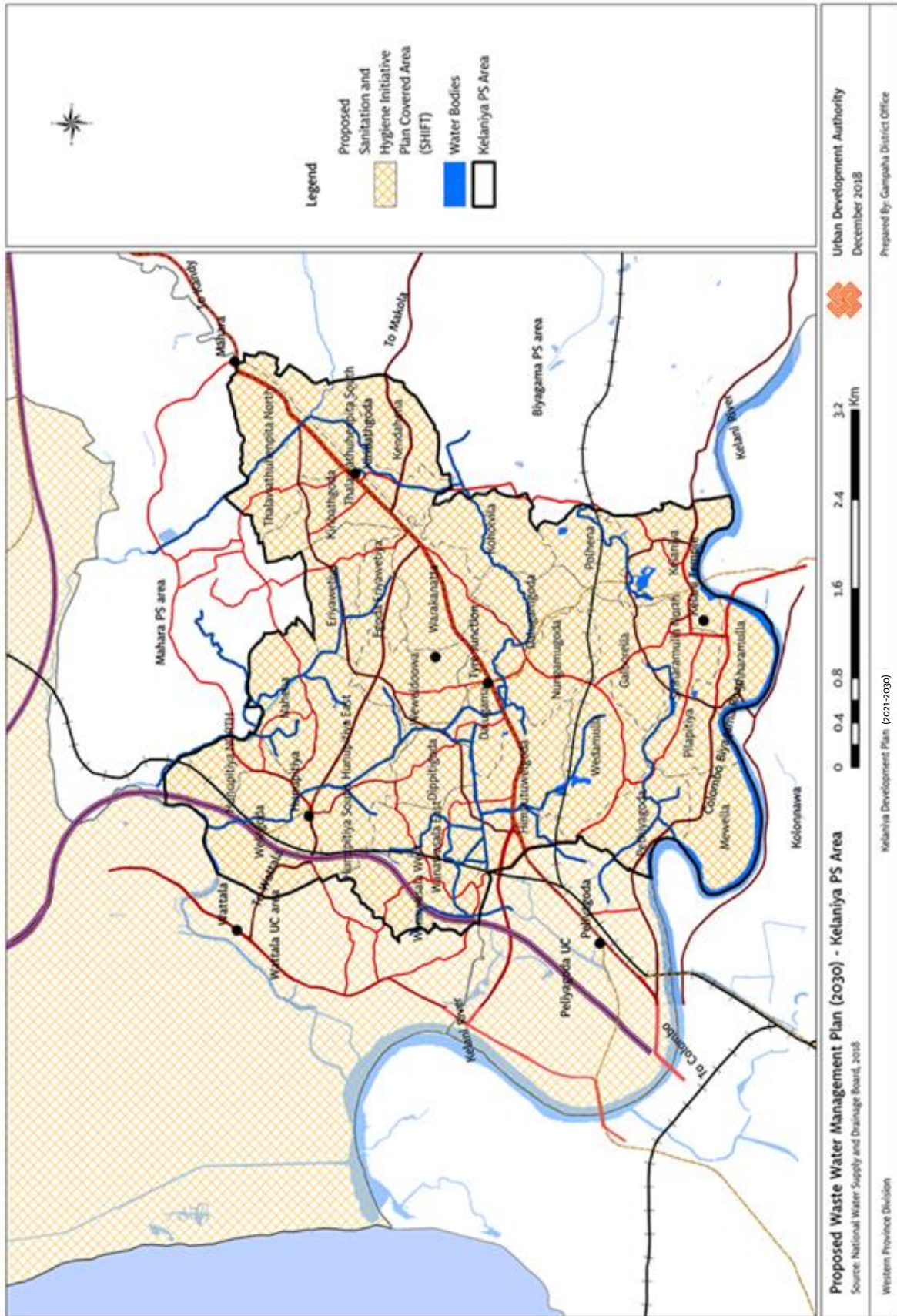
Presently, there is no proper disposal system for wastewater in the Kelaniya PS area. Under this scenario, considering the new development trends in the area, 141,000 of residential population and 532,000 of commuter population which proposed in the year 2030 will generate 22,045 m³ of wastewater per day. The below table 6.12 has summarized the estimated amount of sewage generation in the year 2017 and 2030.

Peliyagoda Urban Council owned gully bourses are to be used in Kelaniya PS since there no proper drainage disposal system is functioning there. Thus, the problem of drainage disposal has been resolved by this method. The proposed project called

Sanitation and Hygiene Initiative for Towns (SHIFT) proposed by the National Water Supply and Drainage Board (NWSDB), provides a solution for the problem of disposal of wastewater. This is a major contributor to the proposed industrial area in Peliyagoda, Kelaniya and also a technological solution can be obtained for the inefficiency of the waste disposal systems in the low altitude of the area. This project aims at collecting sewage, preventing water pollution, creating a healthier environment, improving the economic status and creating a safe environment. It has been proposed to construct 12.5 Km drainage line system, construct 7 drainage pumping stations, daily waste disposal facilities, 12000 m³ waste treatment plant, office buildings, construction of official residences and household connections during the period of 2016 - 2019. The covered area by the above mention project is shown in map 6.10.

In addition, there is a need to place an appropriate sewage system for the proposed High-Density Commercial Zone in Kiribathgoda, High Density Residential Zone and High-Density Higher Education Zone to facilitate both proposed residential and commuter population.

Map 6.10 Proposed Wastewater Management Plan



6.3.6 Solid Waste Management Plan

Solid waste disposal could be identified as one of the major components of Infrastructure Development. According to the existing residential and commuter population in the year 2017, the daily generation of solid waste is 133.36 tons. It is shown in table 6.13.

Table 6.13 Daily Generated Waste Collection in Kelaniya PS Area - 2017

Zone	Residential Population	Daily Commuters	Residential Population + Daily Commuters	Daily Solid Waste Generation per person (0.4kg/d/person)	Daily Total Solid Waste Generation (Ton)
Low Density Sacred Heritage Conservation Zone	10708	17500	28208	0.4	11.28
Low Density Residential Zone	10565	5126	15691	0.4	6.28
Moderate density Residential Zone	20528	15387	35915	0.4	14.37
High Density Commercial Zone	11838	67859	79697	0.4	31.88
High Density Higher Education Zone	12627	66152	78779	0.4	31.51
High Density Industrial & Logistic Zone	30174	46778	76952	0.4	30.78
High Density Residential Zone	14730	3019	17749	0.4	7.10
Special Eco- Conservation Zone	0	418	418	0.4	0.17
Daily Total Solid Waste Generation Quantity					133.6

Source: Planning Team – Gampaha District Office, 2021

As mention by the Kelaniya PS, around 75 – 80 tons out of daily generated of wastes have being collected per day by the Kelaniya PS. Out of which 60% are degradable and 40% are non-degradable. Three days in a week are set a part for collection of degradable and two days are for in the collection of non-degradable wastes. In addition, the garbage collection from the Kelaniya University will be added by calling for tenders. The PS has 14 tractors, 03 compactors, 06 carts and a tractor. Apart from that as the manpower of waste management, Public Health Inspector, two health administrators, two work supervisors, 18 drivers, 88 workers are available at the PS. In addition, 21 unskilled servants with 9 persons are used for the purpose of Compost Fertilizer Project which continued in the Manelgama waste dumping site. The estimated solid waste generation in the year 2030 is about 269.36 tons per day according to the proposed residential and commuter population. It has shown in table 6.14.

Table 6.14 Forecasted Daily Solid Waste Generation in Kelaniya PS Area -

Zone	Residential Population	Daily Commuters	Residential Population + Daily Commuters	Daily Solid Waste Generation per person (0.4kg/d/person)	Daily Total Solid Waste Generation (Ton)
Low Density Sacred Heritage Conservation Zone	11353	22962	34315	0.4	13.73
Low Density Residential Zone	12635	6361	18996	0.4	7.60
Moderate Density Residential Zone	26229	26718	52947	0.4	21.18
High Density Commercial Zone	15778	221126	236904	0.4	94.76
High Density Higher Education Zone	15170	148304	163474	0.4	65.39
High Density Industrial & Logistic Zone	40218	91837	132055	0.4	52.82
High Density Residential Zone	19633	14346	33979	0.4	13.59
Special Eco-Conservation Zone	0	739	739	0.4	0.30
Daily Total Solid Waste Generation Quantity					269.36

Source: Planning Team – Gampaha District office, 2021

Manelgama waste Dumping Site is being presently used for the disposal of all 75-80 tons of solid wastes per day. However, this dumping site already filled fully and no more could be added and hence Kerawalapitiya Dumping Site has been selected wastes is presently being directed to it; but the cost involved for it seemed more costly and now this practice is too currently discontinued. Thus, disposal of solid waste is a problem to the area. In addition, it has continued the production of Compost Fertilizer under the ‘Pilisar Project’ which launched by the Government and it contribute to produce around 15 tons of compost fertilizer per month at Manelgama Dumping Site.

When consider this existing situation there is a requirement for proposer solid waste disposal system to dispose daily generated solid waste by the projected residents and commuter population. Accordingly, 269.36 tons of daily generated solid waste can be categorized based on the standard percentages of the different composition of solid waste in PS area as shown in table 6.15.

Table 6.15 Composition of Waste Generated Per Day in Kelaniya PS Area (2017 and 2019)

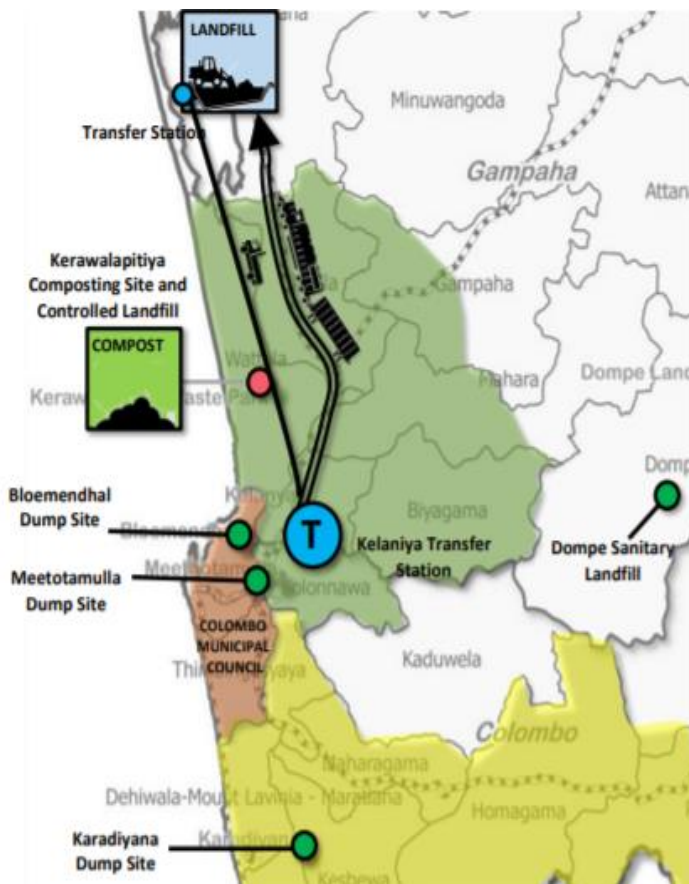
Category	Amount %	Amount 2017 (Ton)	Amount 2030 (Ton)
Solid Waste (short term)	39.53	52.72	106.48
Solid Waste (long term)	11.06	14.75	39.73
Polythene & Plastics	7.37	9.83	19.85
Waste in relation to Apparel Industries	6.45	8.60	17.37
Waste from Meat & Fish Stalls	4.77	6.36	12.85
Waste from Construction Industries	6.88	9.18	18.53
Paper	6.44	8.59	17.35
Glass	3.41	4.55	9.19
Wood	8.00	10.67	21.55
Iron	3.56	4.75	9.59
Other	2.53	3.37	6.81
Total	100	133.36	269.36

Source: Planning Team – Gampaha District office, 2021

Accordingly, under the proposed solid waste management plan for 2030, It is proposed to reconstruct the existing Compost Fertilizer Yards as a new Compost fertilizer plant with modern facilities using 106 tons of expected short term disposal solid waste in the year 2030.

In addition, it suggested that daily generating non degradable solid waste could be disposed to the Aruwakkaru Sanitary Land Filling Site. Further, 45 acres of land in Wanawasala Mudun Ela area has identified for accommodating a waste transfer station. And it is proposed to transfer the non-degradable solid waste to the Aruwakkaru Sanitary Land Filling Site via

Figure 6.13 Proposed Solid Waste Management Project



The Construction of the Solid Waste Sanitary Landfill in a bid to resolve waste management issues is set to commence in December 2017 with the Government allocation Rupees 3000 Million in the 2018 Budget for the project.

- (Steps)**
- Municipal Solid Waste will be collected
 - Collected Garbage will be transferred to Kelaniya Transfer Station
 - Compressed Waste will be loaded to a transport train
 - Waste will be transported by rail
 - Waste will arrive at the Aruwakkalu Transfer Station
 - Waste will be deposited at the site



Source: Sri Lanka Emergency Solid waste Management Project Report - 2017 December

6.4 Economic Development Strategies

6.4.1 Proposed Economic Plan

According to the vision of the Kelaniya Development Plan for the year 2030 'Urban Locus of Divinity', it is expected to strengthen the regional and national economies through the development of the commercial & retail sector and local industrial sector combined with the Sacred area.

As per future vision to upgrade the existing urban locus toward an expected serene urban area, it is expected to establish the sense of the 'Kelaniya Sacred Area' while strengthen the local industrial sector in parallel with Sacred area. And the other things are creating an efficient and productive city while developing 5 transit-oriented development clusters which promote the public transportation and it is expected to uplift the regional economy through facilitating to developed Kiribathgoda City as an arcade type commercial investment belt which promote Middle End Retail and Shopping Street. All these strategies which described below, and their proposals are shown in map 6.11.

Present government manifesto discusses about the steps to be taken to uplift the tourism industry in the country, under the 'People-centered Economy' Policy statement. Foreigners are attracted to Sri Lanka by its natural beauty. In addition, they attract to our country because of the Theme parks, religious, cultural and national heritage sites, domestic Ayurveda treatment centers, etc. In that case manifesto given priority to provide investment and other facilities to improve the Tourism industry in Sri Lanka.

6.4.1.1 Promotion of Pilgrim Tourism Based Development

The intension is to encourage the local economy of the area based on the pilgrim tourism development in association with Kelaniya Sacred Area. Number of pilgrims arrive this sacred area daily, monthly and annually for the purpose of worshipping the Kelaniya Temple. An attention has been focused to promote traditional local clay domestic industry prevailed in Kelaniya area in keeping with in achieving the vision of developing national economy in the year 2030.

This economic advancement intends to be implemented by encouraging traditional domestic clay industry which originated in the year 1925 at Gaborella local area associated in establishing or promoting related market stalls at adjacent areas of Kelaniya temple. It is proposed to open-up the outer sacred area for production and marketing of traditional goods specially in related to the Galboralla Ceramic Industry targeting the pilgrims who worshiped the Kelani Temple. The development of dedicated line for the Colombo – Biyagama road as Kelani Valley Crescent Road and the direct access road which connect the tyre junction and Kelani Temple will be provide the direct access toward the Ceramic Industry. At the present, the factory is in a dilapidated condition, accommodating around 35 families producing indigenous clay products and also provide training for 15 number of university students. Although there is a potential for marketing these traditional clay goods, only 3 or 4 trade stalls sited at Galboralla area are also in operation for selling these goods. Therefore, it is necessary to redevelop the existing Ceramic industry in Galboralla with the modern facilities while creating the employment opportunities for unemployed

youths of 450 persons in Galborella, Sinharamulla, Sinharamulla North and Pilapitiya area and promoting the trade stalls for marketing these goods in the vicinity of the Kelaniya Sacred area which may strengthen economic enhancement.

Meanwhile, it is expected to strengthen the economy through the opening the network of archaeological sites and attracting places which is spread over the area for the pilgrims and visitors which will promote the economy of the community. Further, in relation to the Kelaniya Sacred area, Pilapitiya, Galborella near Traditional Ceramic Industries and Kelaniya - Koholwila areas will be develop as three commercial service nodes adjacent to the proposed Kelani Valley Crescent based the Kelaniya Sacred Area to provide services to the pilgrims who visit the sacred area daily.

6.4.1.2 Developing Middle End Retail and Shopping Street at Kiribathgoda

Kiribathgoda, is a major trading centre in the Gampaha District and also the main commercial city located in the Kelaniya area. This is not only an important service centre in the areas of Kelaniya, Peliyagoda, Hunupitiya, Mahara and Biyagama but also it is an attracting commercial space which famous for retail and ready-made garments located along the corridor of the Colombo – Kandy Main Highway. Further, in 2016 it is identified as an up-coming commercial city in the western region, with this the area will be able to achieve maximum economic development by providing necessary facilities to improve the market opportunities.

As per the Road & Transportation Plan, the alternative road form Peliyagoda to Mahara has proposed as a result for heavy traffic congestion existed at the Colombo – Kandy Main road corridor. And it will be helped to promote the commercial investments through the development of shopping street with pedestrian facilities. By now, the city of Kiribathgoda, which has been spread over two kilometres in extent, does not have to expand further with the lowlands. Therefore, the vertical development is expected to encourage by promoting through the zoning regulation.

At this moment, 500 M either sides of Colombo – Kandy Road are consisted with 12% commercial activities of landuses. Out of which 40% is shops with textile & garment products. This potentiality stresses for developing arcade type commercial investment corridors.

Accordingly, either side of the main road starts from YMBA Junction to Hunupitiya Wattala road covering 800 m along the road with 2.5m width proposed for this shopping street development. This arrangement could be implemented through the cooperation with shop owners which may enhance the market attraction to the area concerned. Apart from main road, the road from Kiribathgoda to Makola town up to the distant of 500 M is also expected with arched road development. The conceptual view of this proposed arched type shopping street is shown below in figure 6.14.

Figure 6.14 Expected View of Proposed Shopping Street Development in Kiribathgoda



Source: Planning Team – Gampaha District,2021

These exercises predict under-developed lands & buildings into utmost usage and occupy commercial activities efficiently and enhance opportunities for commercial development. And also, it is expected to attract more commuters by creating recreational and amusement opportunities for the daily commuters while properly managing low-lying lands attracting migrants. Further, Kiribathgoda will be developed as a main commercial centre while incorporating the potential of proposed Light Railway line from Ragama – Narahenpita and its railway station at Kiribathgoda. Thus, Kiribathgoda will become as a transit-oriented service node (TOD) with mixed development accomplishments.

6.4.1.3 Developing the Small Transit-Oriented Neighbourhood Centre (TOD) based on Public Transportation

Specially, Small Transit-Oriented Neighbourhood Centre (TOD) can be known as a mixed use and compacted town centre which facilitating for commercial, industries, office spaces and residential uses with the better public transportation linkages. The various transport media can easily reach jobs, shopping, workplaces and homes, and help neighbouring areas within a short period of time with this transit-based development.

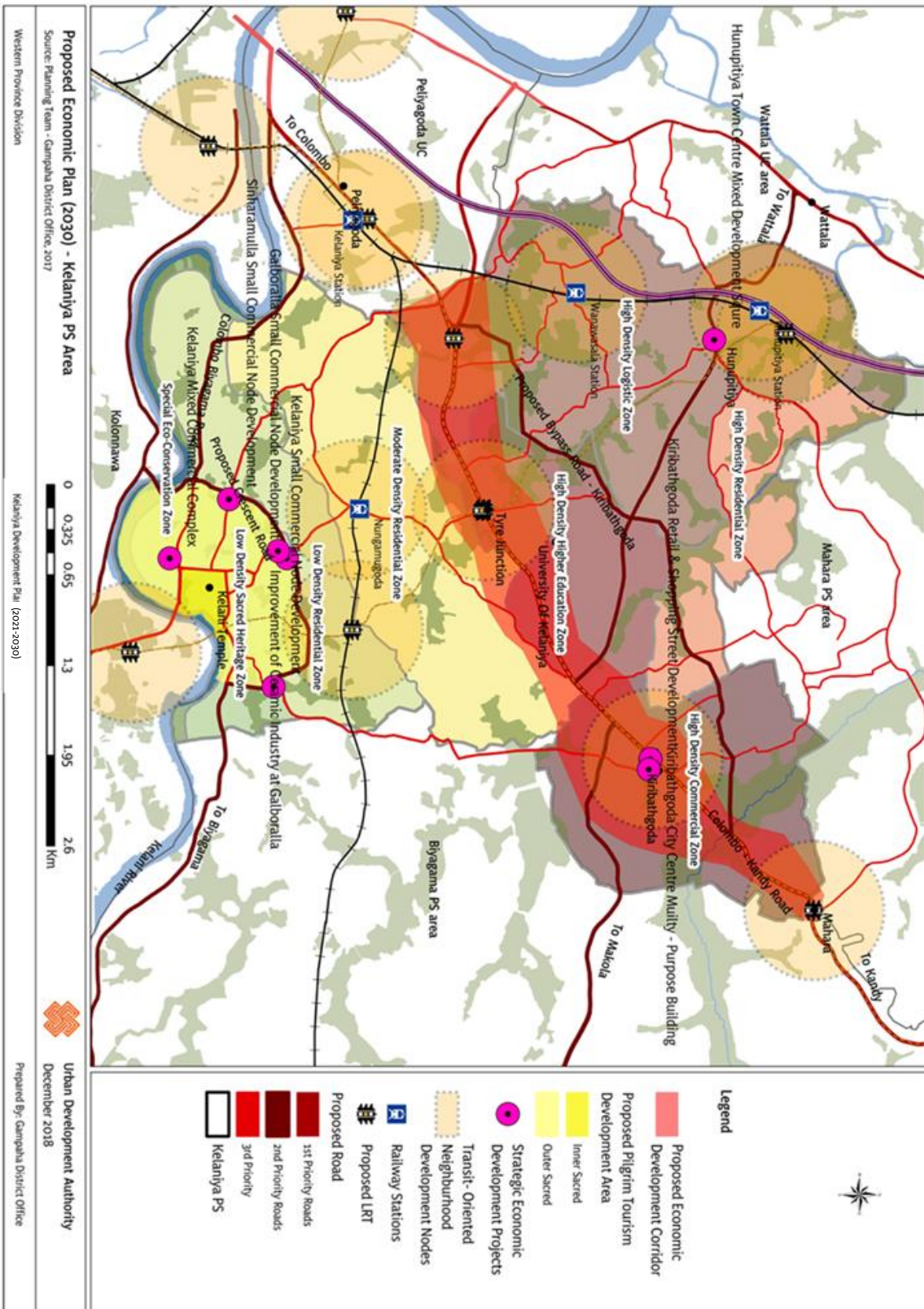
Accordingly, it is intended to enhance the opportunity to establish markets and offices along with the development of proposed Light Railway from Ragama – Narahenpita, Hunupitiya- Kottawa main modernized new railway line from Biyagama to Kosgama allowing an opportunity for investment. Thus, investment opportunities will be improved for establishment of small townships enabling commercial and mixed development usages with the proposed centring of Railway Station and

Proposed Light Railway Station connecting Wanawasala, Hunupitiya, Tire Junction, Nungamugoda and Polhena in addition to Kiribathgoda as shown in map 6.11.

Hunupitiya is proposed to develop as a sub urban centre based on the lengthy analysis of the Development Press Index, Sensitivity Index, Development Potential Index and Land Suitability Index. In this process, while incorporating the potential of spreading the development pressure towards Hunupitiya area which concentrated on Kiribathgoda, Wattala – Hunupitiya Road will be proposed to develop with four lanes intend to enhance the opportunity of developing market economic stabilization. Further, it is proposed to promote Hunupitiya and Wanawasala areas as Logistic and Industrial promotional areas avoiding expansion of haphazard industrial enlargement in low lying lands and Dippitigoda Road and Wanawasala – Wattala road will be widened to provide facilities for expanding industries and warehouses.

Kelaniya Tire Junction has identified as a proposed LRT Station and it will further be developed as a transport based urban service node, it would be helped to develop the Tire junction as a transit centre which prominent for the commercial activities while encouraging mixed development in related with the University of Kelaniya. Further Wewalduwa road which connected with Tire junction from the northern part and Tire corporation road which connected from the southern part will be widened and it helps to increase the intensity of development in this area. Thus, increasing investment opportunities may leads to improve the trade economy of the area. Furthermore, proposed Railway and LRT Stations at Nungamugoda, Polhena will be developed as small service nodes based on the transportation with the possibility of linking the Kelaniya Sacred area also.

Map 6.11 Proposed Economic Development Plan



6.5 Sustainable Environmental Development Strategies

The plan has proposed sustainable environment management strategies with purpose of mitigating flood affect and reducing urban heat through properly managing 15% of existing wetland area and water canal system as a part of achieving the vision for 2030 by creating an urban green city with smoothen canal network.

Under this, Proposed Environment Conservation Plan, Disaster Risk Reduction Plan, Landscape Management Plan and Public Outdoor Recreation Space Management Plan have been presented by incorporating 300 Hec. of wetland areas to mitigate flood and incorporating 140 Hec. of wetlands conservation areas opening only for their permissible uses. Apart from that, it is expected to manage 100% of continuous canal network by the year 2030 and to proceed towards a green city while collaborating with Kelaniya green university prescient by 2030 through this sustainable environment development strategies.

Part VIII of the current Government Policy emphasized on Sustainable Environmental Policy. It has created urban and semi-urban parks, developed tree lines on both sides of expressways. It aims to reduce the release of carbon and toxic gases into the atmosphere. Further, steps have been taken to establishing settlements in minimum environmental impact areas and no large-scale developments will be allowed in identified environmentally sensitive areas. Accordingly, steps have been taken to formulate plans in the Kelaniya Development Plan taking into account the new approach of sustainable concept and green approach through the National Manifesto.

6.5.1 Environment Conservation Plan

As per survey carried out by the Survey Department in the year 2000 at Kelaniya area, that 28 % from total land was wetlands. But it reduced up to 15% in the year 2017. Since it is located close to the Colombo port and surrounded by Biyagama and Peliyagoda industrial areas, demand for the expansion of industries, warehouses and also the residential rising expands into low-lying wetland areas. According to these considerable facts we have classified all wetlands in Kelaniya PS area into below wetland classification.

i. Wetland Nature Conservation Zone

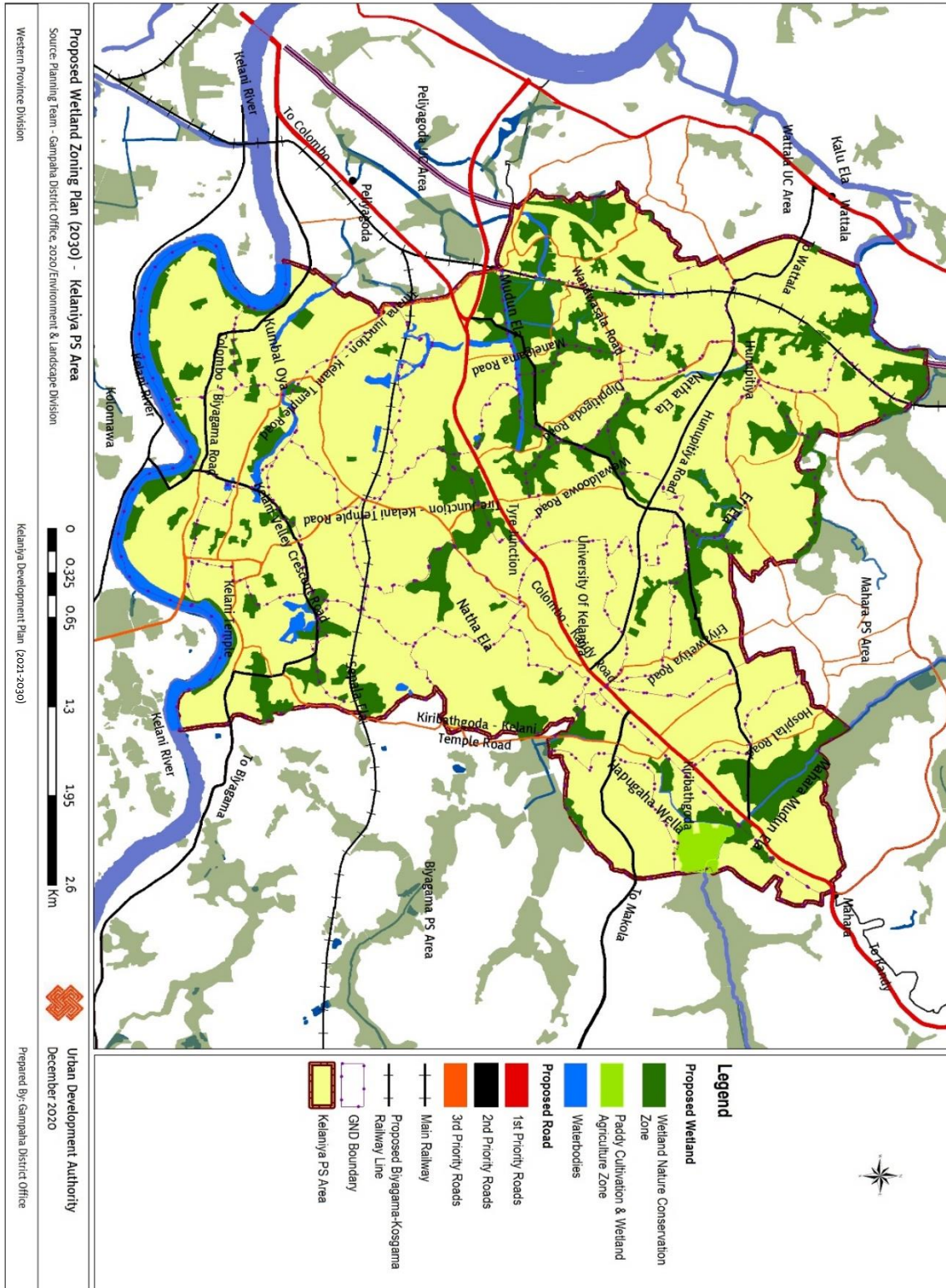
This zone includes wetlands with high biodiversity and areas that need to be classified as wetland and water retention and drainage areas for flood risk reduction and control.

ii. Paddy Cultivation & Wetland Agriculture Zone

Existing paddy cultivations, vacant paddy lands and Deniya / Ovita / etc. belong to this zone.

Significant amount of abandoned paddy lands is located in the Kelaniya PS area and those low-lying areas should be conserved considering the possibility of water retention and drainage and flood risk mitigation.

Map 6.12 Proposed Wetland Conservation Plan



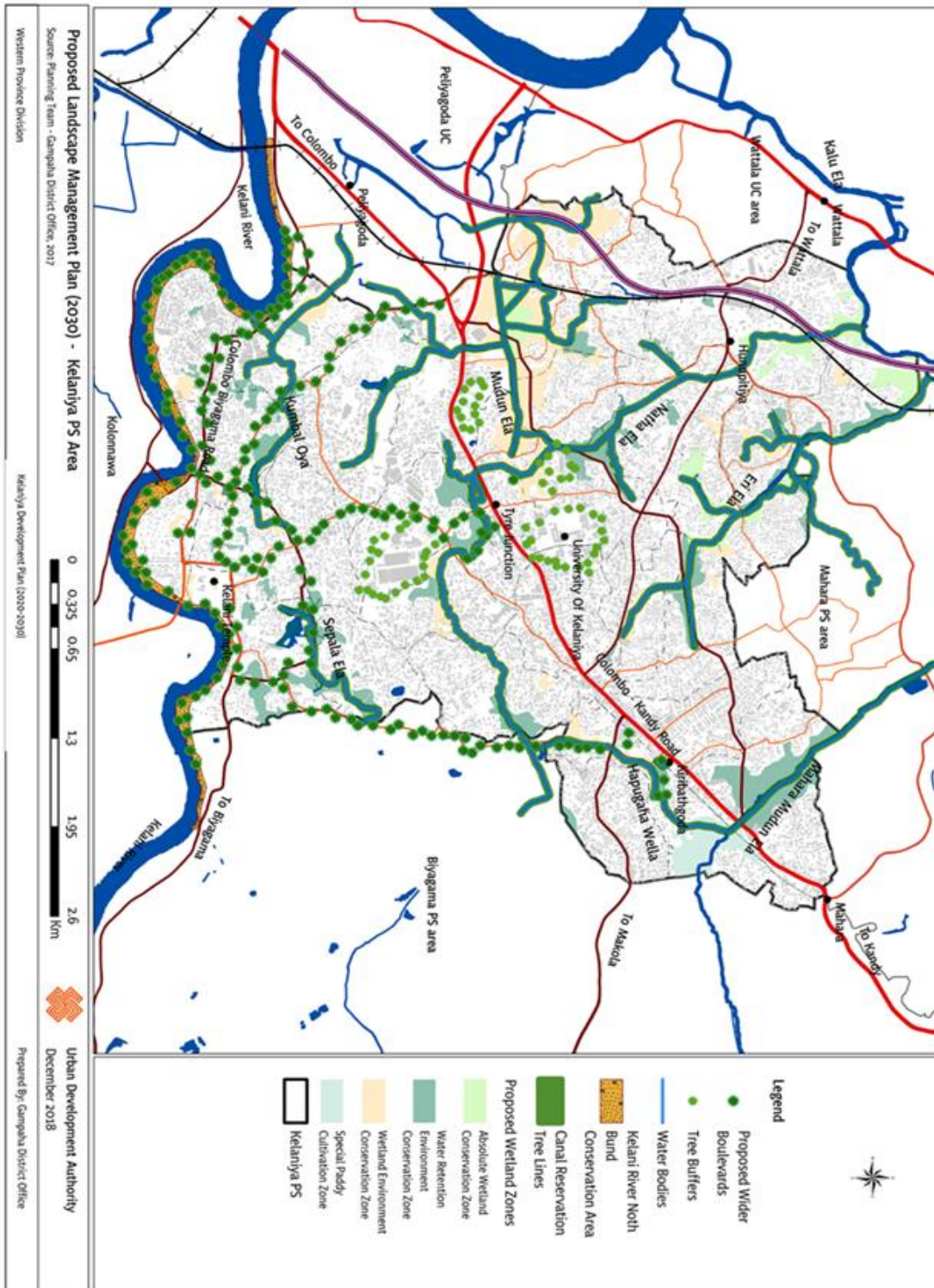
6.5.2 Landscape Management Plan

One of the factors that induce in preparing a development plan is the fact that the high dense urbanization is already in existence thereby many problems like intensifying urban heat and air pollution has been created. Hence the main target would be a landscape plan in achieving a well facilitated township integrating with blue-greenery environment. This Landscape Plan has been originated through two key strategies.

6.5.2.1 Establishing Wider Boulevards for internal road network

It is proposed to establish the selected road with Wider Boulevards as directly link the Kelaniya Sacred Area from Colombo – Kandy Road. The required space for establishing these green paths has allowed through the proposed road width by providing the space for service lane and landscaping also under the Road & Transportation Plan. Further, all internal roads and pathways in the green University area are to be developed with greenery.

6.5.2 Expansion of green paths for canal & river reservations and industrial buffer zones



Map 6.13 Proposed Landscape Management Plan

The environmental equilibrium of this area has already damaged due to expansion of haphazard industrial improvements. To overcome this situation, it is proposed to maintain a 10m buffer zone with a green belt around each industry. Kelani River North bank area which included to the proposed Eco- Conservation Zone under the proposed Zoning Plan is expected to develop as green area. Further the green line should be maintained for each canal reservation based on the width of the reservation of these canals as mention in the gazette no 1662/17 dated 14.07.2010 of Sri Lanka Land Reclamation & Development Corporation. As per the recommended reservation based on the canal width is shown in table 6.17 and it has applied for each canal in Kelaniya PS. It is expected to improve the visual quality of the area while protecting environmental equilibrium through this planning intervention. The proposed landscape Management Plan with these proposals is shown in map 6.17.

Table 6.16 Canal Reservation - Sri Lanka Land Development Corporation

Canal Name	Width of Canal (m)	Width of Canal Reservation (m)	
		Open Canal	Closed Surface Canal
Hapugahawella, Mahara Mudun Ela	6.1 – 9.0	4.5	1.5
Eri Ela, Natha Ela, Mudun Ela, Kumbul Oya, Kalu Ela	More than 9.0	6.5	2.0

Source: SLDC (Amendment) Act 2006 No 35/ Planning Team – Gamapaha District Office, 2021

6.5.3 Disaster Risk Reduction Plan

The most distressing natural disasters in the Kelaniya PS is flooded during the rainy season. Though there are canals available in the area to flow the surplus water, they are mostly impassable and not timely repaired there by canals are blocked due to unauthorized land filling. The difference between the existing water flow and the natural flow accumulation is revealed that this obstructed canal network which may cause for flood inundation as shown in Annexure 33. Hunupitiya North, Hunupitiya South, Hunupitiya East, Welegoda, Nahena, Wanawasala, Himbutuwelgoda, Wewalduwa, Dalugamgoda, Warakanatta, Dippitigoda, Pethiyagoda, and Sinharamulla are usually affecting for floods.

In order to minimize damages occurred annually due to the floods, a development plan has been prepared an existing Canal Improvement Plan and a Flood Zoning Plan.

6.5.3.1. Existing Canal Improvement

As per Annexure 33, the canal network which identified through the GIS analysis is proposed to be developed. Accordingly, the canals proposed for restoration has shown in table 6.18 with the obstructed lengths.

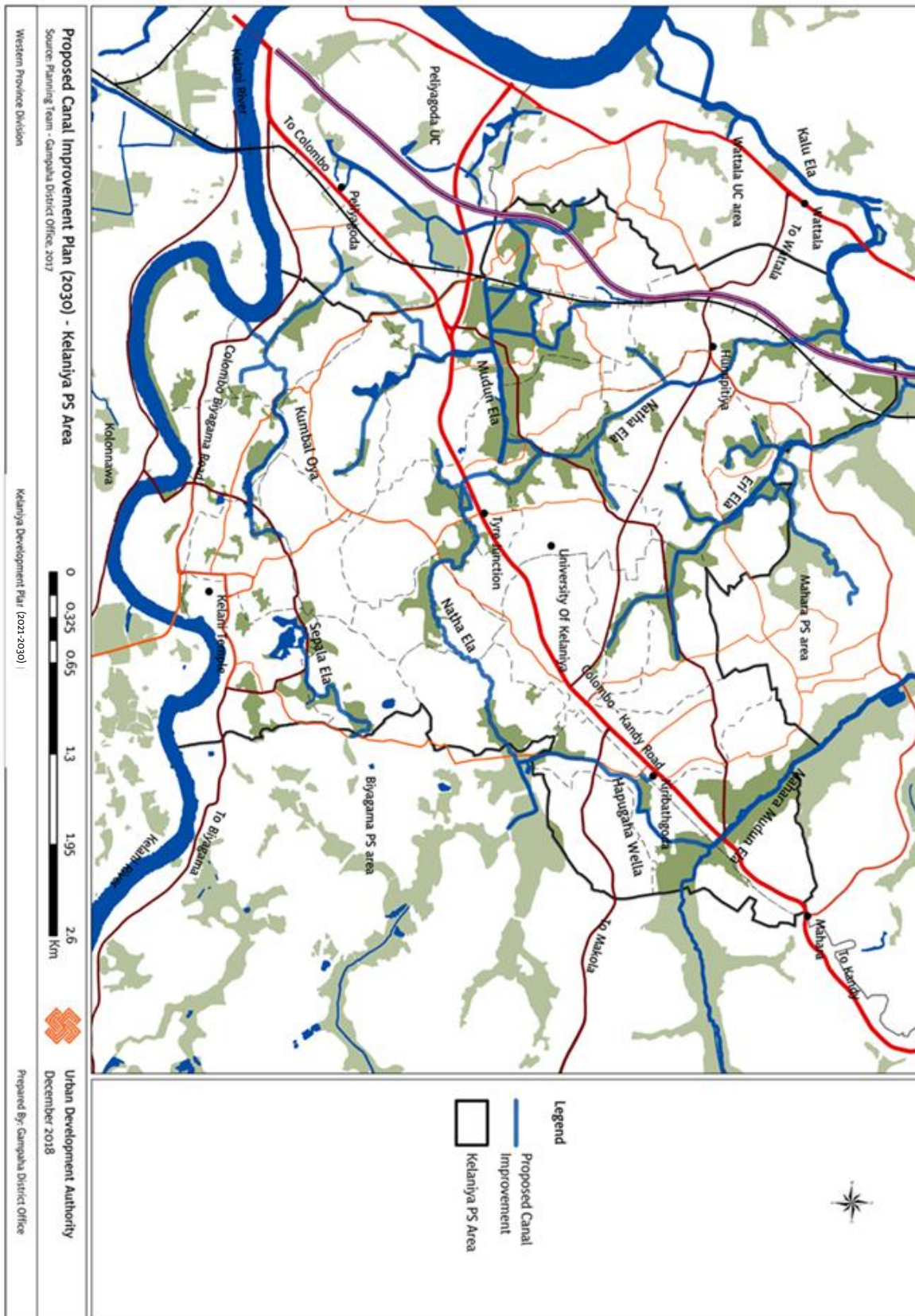
Table 6.17 Proposed Reconstruction of Canals

Canal Path	Length (km)
Restoration of Natha Ela (from Gonawala to Kalu Ela)	3
Restoration of Eri Ela (from Eriyawetiya to Kalu Ela)	3.4
Restoration of Hapugahawella (from Kiribathgoda to Mahara Mudun Ela)	7.3
Restoration of Mudun Ela	800 m
Restoration of Kumbul Oya	6

Source: Planning Team – Gamapaha District Office, 2021

In addition to canal development strategy, the unauthorised slums and shanties in Kelani River North bank which usually affected for flood will be relocated with the Proposed Climate Resilient Improvement Project (CRIP) introduced by the Irrigation Department. Therefore, incorporating this plan, it is proposed to relocate 1200 of shanty houses in Kelani Riverbank. Additionally, proposed water pumping station installed at Pethiyagoda initiated by the Department of Irrigation intense minimized flood treats in 33 Hec. of land. Further it would protect the assets of valued to Rs. 5 million annually. Thus, it is proposed to improve the existing canal system as a proper water retention area which help to minimize the flood as shown in map 6.14.

Map 6.14 Proposed Canal Improvement Plan



6.5.3.2. Flood Zoning Plan

According to the flood situation in Kelaniya PS area could be classified mainly 2 zones. (Map No: 6.15 shows Proposed Disaster Risk Reduction Zoning Map for Kelaniya PS Area)

- I. Green Belt Zone
- II. Flood detention & retention zone
- I. Green Belt Zone

Kelani Ganga river reservation (60m) should be kept as Green belt to fulfill flood retention-detention capacity and facilitate public open space recreational facilities.

- II. Flood detention & retention zone

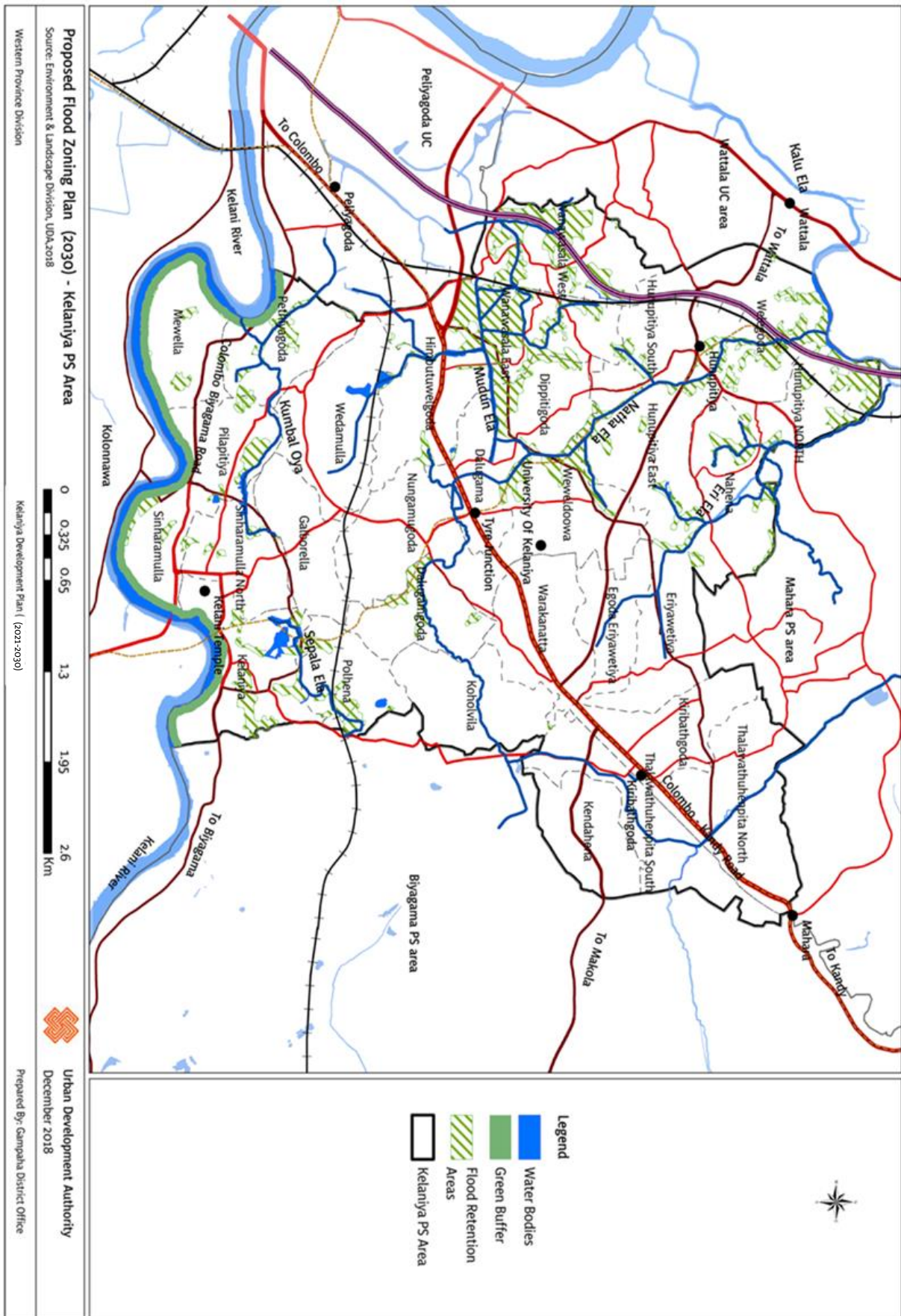
All Marshes, Paddy fields and low-lying areas should be kept as flood detention and retention zone for mitigate flood hazards.

6.5.3.3 Strategies for Flood mitigation

- I. Develop low density residential areas.
- II. Construction of flood barriers
 - (a) Rehabilitation of water gates on existing dams and canals
 - (b) Construction of new water gates identified by identified canals and preventing damage to property on both sides of the property by means of channels through the canals of the river.
 - (c) Construction of pumping stations to pump water into the river to allow for the addition of water collected in roads to the river where water is added to the water due to the construction of flood barriers.
- I. Critical areas for approved uses suitable for floods.
- II. The construction of flood detention reservoirs.
- III. Reforestation of catchment
- IV. Increase water retention characteristics to reduce flood risk.

To improve river, channel River, Cannels can be deepened, widened or cleared of obstruction to improve it conveyance capacity prevent flooding.
- V. Prohibited of filling of paddy lands

Map 6.15 Proposed Flood Zoning Plan



6.5.3.4. Floods Prevention Methods

1. Heavy construction should be minimized in low-lying areas (this area can be promoted for low density settlement) while maintaining a proper water flowing network.
2. Constructing Flood Walls
 - a. Reconstruction of existing anicuts and flood gates.
 - b. Construction of new flood gated for identified canals to reduce the surplus water in rainy season.
 - c. Construction of pumping station to maintain surplus water in the rainy season. For that it has incorporate the proposed Pethiyagoda pumping station to minimize the flood damage.
3. Allow for the permissible uses in flood inundation areas
4. Construction of water retention areas
5. Forest restoration in catchment areas

6.5.4 Public Outdoor Recreational Space Plan (PORS)

According to the accepted standards of Urban Development Authority, open spaces have to be provided at the rate of 0.8 hectares per 1000 persons. It has estimated that the population by the year 2017 is 111,000. According to the data analysis of the development plan it has forecasted that the population would be 141,000 by the year 2030. According to that it should be reserved 113 hectares as Public Outdoor Recreation in 2030.

Details of the Existing Public Parks & Playgrounds in Kelaniya Pradeshiya Sabha Area

There are 10 ha of Parks & Playgrounds of the whole Kelaniya Pradeshiya Sabha Area. They have been categorized in table 01 & Annexure 02 accordance with UDA Public Outdoor Recreational Space concepts as follows,

Table 6.18 - Existing PORS – 2018 (Kelaniya PS Area)

No	Type of Parks	Extent (ha)
1.	Pocket Parks (EPP)	0.52
2.	Mini Parks (EMP)	4.34
3.	Local Parks (ELP)	4.27
4.	Linear Park (ELiP)	0.56
	Total	9.69

Source: Environmental and Landscaping Division

According to the information given in Table No. 01, there are approximately 10 hectares of open land in the Kelaniya Pradeshiya Sabha area at present. 89 hectares should be set aside as direct and indirect recreational facilities for 111,000 of the current population. However, according to Table 01, there are not enough public open spaces in the Kelaniya Pradeshiya Sabha area for the present population and the existing locations are also inadequate.

Table 02 shows the places where passive recreational facilities can be provided in the Kelaniya Pradeshiya Sabha area.

Table 6.19 - Public Library in the Kelaniya PS area.

i. Public Library

Name of the Library	Number of books	Numbers of members
1. Kiribathgoda Public library	17,710	2,959
2. Kelaniya Public library	14,393	2,959
3. Mewella Public library	5,736	653
4. Dippitigoda Public library	3537	99
5. Hunupitiya Public library	6897	909
6. Nahena Public library	2439	355
7. Polhena Public library	3014	434
8. Wewalduwa Public library	1711	209
9. Wanawasala Public library	4748	877
10. Himbutuwelgoda Public library	1495	114
11. Dalugamgoda Public library	755	60

Source - Program Budget, Kelaniya Pradeshiya Sabha - 2017

ii. Cinema hall - 01

iii. Community hall - 07

Forecasting population for year 2030 is 141,00 and PORS land requirement for the total population for the Kelaniya Pradeshiya Sabha Area for year 2030 is approximately 113 ha (Table 03 & Annex 03) (Public Outdoor Recreation Space Plan indicated in Map No:03).

Table 6.20 - Proposed Public Outdoor Recreation Space Plan for in Kelaniya PS Area 2018 – 2030

No	Type of Parks	Extent (ha)
1.	Proposed Pocket Parks	0.66
2.	Proposed Mini Parks	10.64
3.	Proposed Local Parks	4.02
4.	Proposed Linear Parks	87.81
5.	Total	103.13
6.	Existing PORS	9.69
	Grand Total	112.87

Source: Environmental and Landscaping Division

Strategies

I. Redevelop Existing Parks & Playground

Existing Parks & Playgrounds should be redeveloped according to the proper Landscape Plan under guidance with qualified persons.

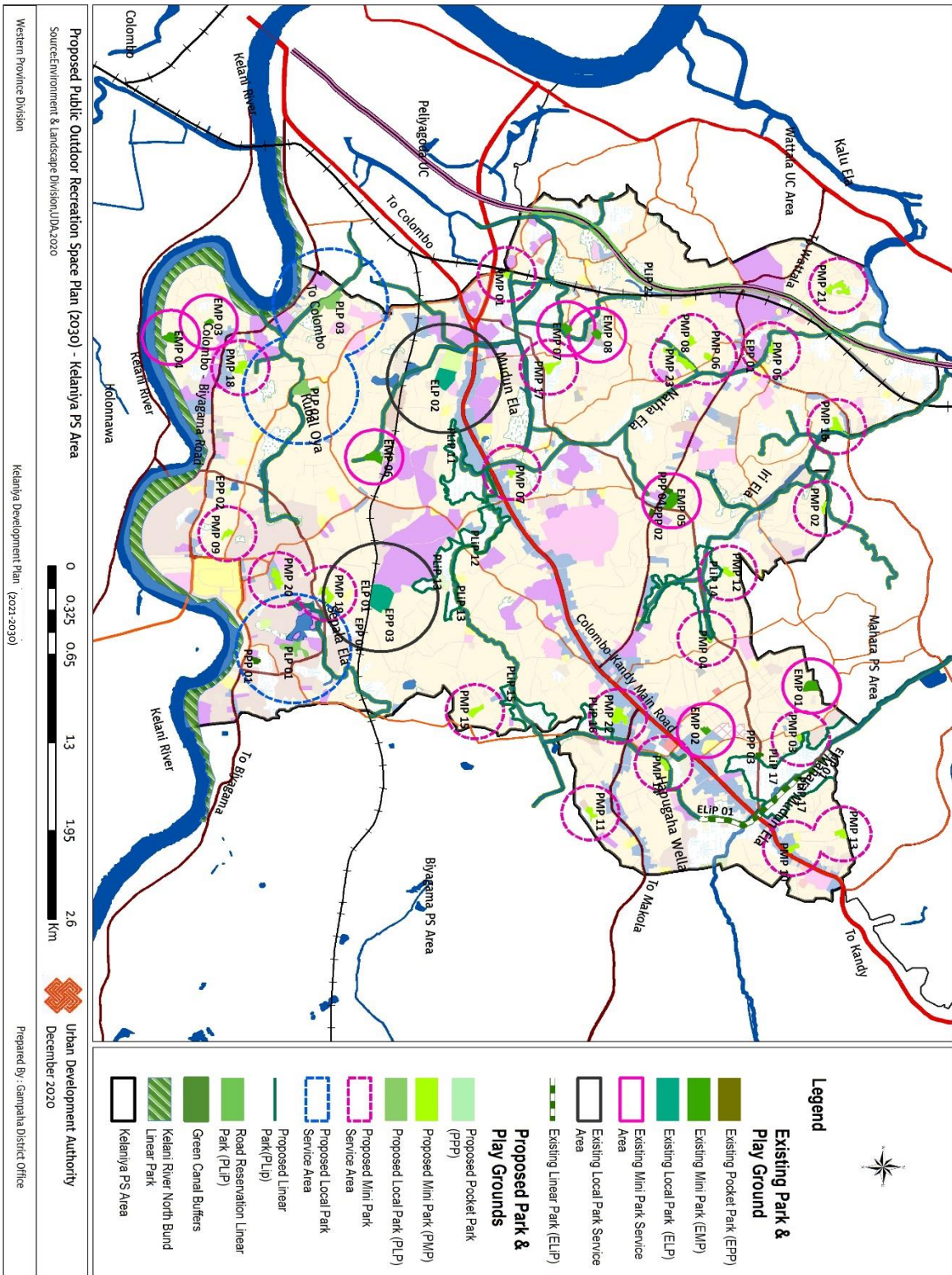
II. Develop Linear Parks Concept

Ela reservation, Ganga and Oya reservation, should be developed as Linear parks as much as possible and it helps to mitigate urban flood hazard in the area and increase recreation facilities distribution among the population and minimize the encroachments along the reservations.

3. Strategy in reducing urban heat – 2030

- 3.1. Make greenery of all government and semi-government buildings according to the Sri Lanka National Building Greenery system
- 3.2. Convert all building roof tops into greenery and encourage to use water sprinklers.
- 3.3. Make awareness about in colouring buildings
- 3.4. Introduce greenery concept for all proposed vehicle parks and conversion of all existing vehicle parks as greenery parks
- 3.5. Ground layering method should be encouraged to absorb water into the earth and aware about the colouring.
- 3.6. Maintain the current playgrounds, parks & open lands and implementing the proposed open lands grounded on greenery concept.

Map 6.16 Public Outdoor Recreation Space Plan



6.6 Culture & Heritage Management Strategies

Kelaniya is an area which having its own inheritance & traditional line. The present landuse of the sacred area is completely incompatible uses which being changed or in existence due to fast development potentiality. As a result, the idea of confidentiality is disappearing in the adjacent premises and its historical surrounding environment is limited to the Kelaniya Temple though this place consists with the surrounding water sources which suitable for the Sense of Sacred Area. Kelaniya was gazetted as sacred premises in the year 1952 and 18 of archaeological sites have been identified around this area. Accordingly, it is proposed to properly manage the Sacred area as enhance its Sense.

It is important to establishing the Sense of Kelaniya Sacred area while blending it with the image of the Kelani river as a main objective of achieving the future vision for the year 2030. And to position the Kelaniya Raja Maha Viharaya as a centre point while connecting direct access toward the sacred area, to demarcate the 105 Hec. of land for outer sacred area covering 500m radius around the Kelani temple premises by 2025, to open-up 1 km length of Kelani river face as visual beautification of the sacred city by 2025, and to establish visual network of historical & archaeological sites in the Kelaniya area by the year 2030 area the expected objectives which covered through this proposed Sacred Area Development Plan.

According to the ninth part of the ten key polices of current Government Manifesto discusses, how to protect and preserve the country's historical heritage and bequeath it to future generations. To this end, the existing legal framework has been further revised to enhance the process of preserving the heritage. It is also planned to provide the basic facilities required for tourists visiting this heritage site without compromising its archaeological value.

6.6.1 Sacred Area Development Plan

Sacred Area Development plan is developed on the two key strategies.

6.6.1.1. Kelaniya Placidity Precinct Strategy

The area around the existing Kelaniya temple around 500m radius of area has identified to promote as Outer Sacred Area to overcome the expansion of incompatible landuse around the Sacred Area because of the sense of 'Kelaniya Sacred Area' has limited only to the existing temple premise at the present context. Accordingly, the Outer Sacred Area which covered an extent of 150 Hec. of lands have been identified as Low Density Sacred & Heritage Conservation Zone under the proposed Zoning Plan. It is proposed to enhance the historical inheritance of the Kelaniya Sacred Area through the proposed zoning regulation specifically for the Sacred & Heritage Conservation Zone. According to the proposed density zoning in the Zoning Plan, the density will be increased toward the north part of the area from the Kelaniya Outer Sacred area.

As per indication made in the Roads & Transportation Plan and the Landscape Management Plan, Three Wider Boulevards have proposed as direct access way for the sacred area from Thorana Junction to Kelani temple, Tire Junction to Kelani temple, and Kiribathgoda to Kelaniya Temple. Further, the Sacred Area Plan has proposed to develop three Ceremonial Entrance in place which start the three Wider Boulevard. Accordingly, the existing ceremonial entrance at Thorana Junction should further

redeveloped and two of other new ceremonial entrance should construct at Tire Junction and Kiribathgoda. The proposed Kelani Valley Crescent Road under the Transportation plan as a dedicated line for Colombo- Biyagama Road nearby Kelani Temple which proposed to overcome the inconvenience due to the traffic congestion and noise near the Kelani Temple has laid through Pilapitiya, Galboralla and Koholvila as a demarcated boundary for the proposed Outer Sacred Area covering 500 m of radius around the Kelani Temple.

The proposed special Zoning Regulation will help to control the uneven construction and incompatible landuses of this area because of it has regularized the compatible colours for the building and building construction Guidelines.

Promoting traditional Ceramic Industry while blending the sacred area and developing the network of archaeological sites as a Religious and Cultural Trail targeting pilgrims and visitors may help to increased historical 'Sense of the Kelaniya Sacred Area' while enhancing the local economy. Because as mention by the Department of Archaeology, there are 18 number of archaeological which identified within the Kelaniya PS area. By considering this as a potential it should be further improved declined monuments and should combined with the Network of Archaeological sites to open for visitors.

Thus, the proposed Kelaniya Placidity Precinct and Religious & Cultural Trail with its proposals are shown in map 6.16.

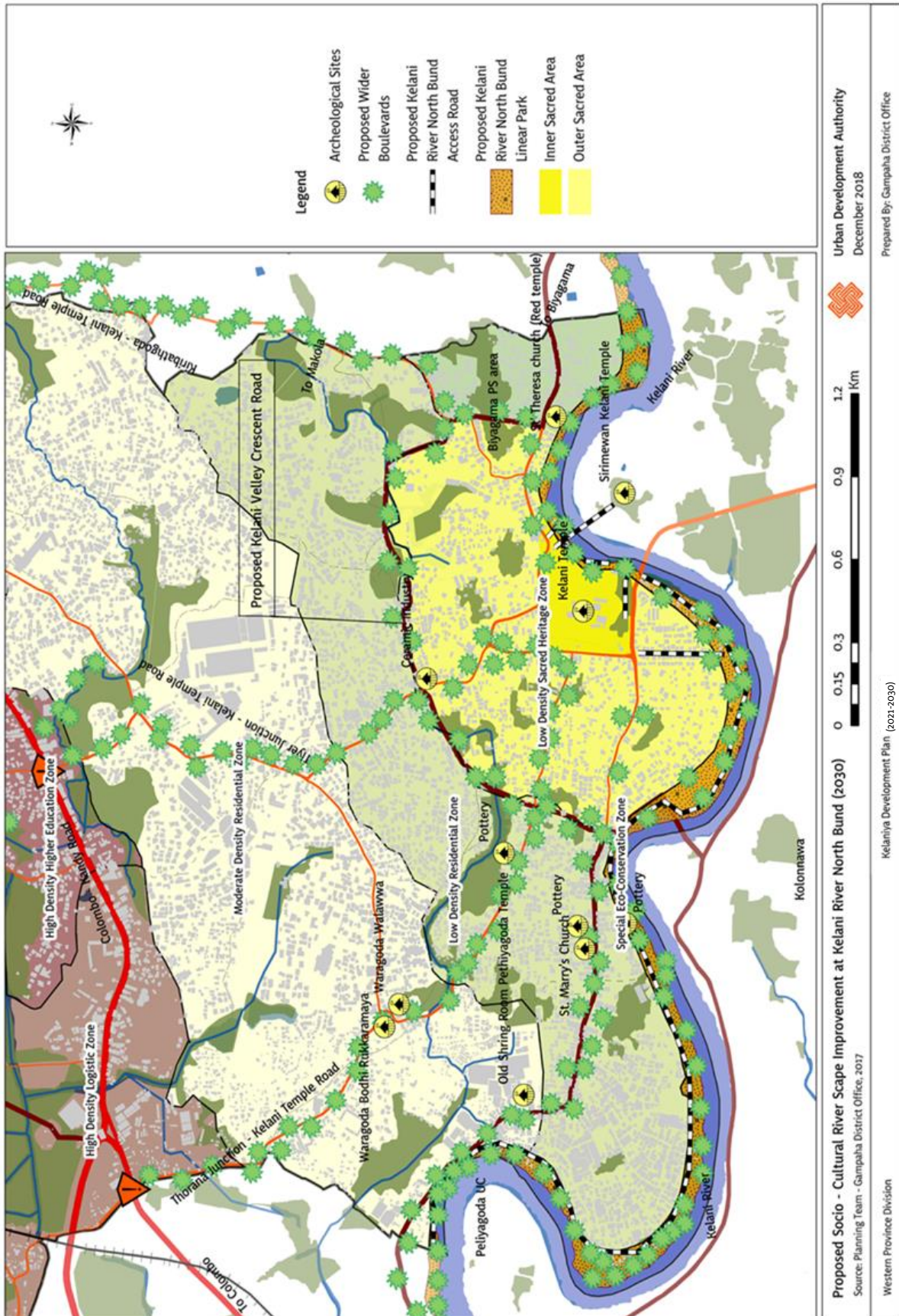
6.6.1.2 Socio – Cultural River Scape Improvement Strategy

As identified with the Need of the Development Plan, most of the Sacred Areas have established specially based on the Water Source in Sri Lanka and other countries. Kelaniya Temple also can be identified as a Sacred area which developed based on Kelani River water source. But because of its location proximity to the Colombo CBD, lot of unauthorized constructions have distributed all over the riverbank area with the increasing population. At the present Kelani riverbank which belongs to Kelaniya PS Area is consisted with 1500 of slums and shanty houses. Therefore, the combination between Kelani river the Kelaniya Sacred Area has decreased with this high intensity developments. Accordingly, to achieve the vision for the year of 2030, it is proposed to open-up 1 km length of Kelani river face as visual beautification of the sacred city by 2025 to enhance Sacred Sense of Kelaniya Sacred Area.

The Climate Resilient and Improvement project correspondingly carried out by the Irrigation Department along with the project of resettling shanties & slums located in the riverbank may allow pilgrims & tourists to feel the sacred Sense and enjoy the area surrounding. For that, it is proposed to develop the Kelani Riverbank as a Linear Park with the compatible landscaping for the sacred Area and it link with the proposed Religious -Cultural Trail by providing access paths towards the Kelani Riverbank from the Sacred Area.

At the same time the, the Kelaniya Sacred Area Development Plan which prepared by NPPD also incorporated to this plan. Accordingly, it has proposed to link the Egoda Kelaniya and Megoda Kelani through the hanging bridge and provide the boat facilities. Apart from that, boat jetty, pilgrims resting areas etc. This Sacred area Plan prepared by The National Physical Plan is shown in annexure 27. And the above proposals are shown in map 6.18.

Map 6.18 Socio – Cultural River Scene Improvement Plan



6.7 Implementation Strategies

6.7.1 Strategic Projects and Other Projects

The vision of Kelaniya Development Plan 2018 – 2030 intended the achieving 'Urban Locus of Divinity' heavenly urban stability present image of Kelaniya sacred place integrating with the Kelaniya River will be established with its holiness. It will enable an efficient & fruitful town with Transit-Oriented targets aiming greenery & comfortable township. Accordingly, proposed new strategic projects and other projects are all compatible with the conceptual plan & objectives where feasibility of socio environmental matters area fixed as per priority basis & essentially implementable. This project prioritization has mention in annexure 43.

1st Priority Projects

- Kiribathgoda Multi-Story Car Park with Over Head Pedestrian Corridor
- Multi - functional commercial centre at Kiribathgoda (Kiribathgoda City Centre)
- Recreational Park Development at Kiribathgoda town centre
- Proposed New bypass road for Kiribathgoda linking Peliyagoda-Mahara
- Transport Centre Development Project at Hunupitiya Town Centre
- Modernization of Hunupitiya Railway Station
- Widening the Station Road
- Linear park development at Kelani river north bud and improve the access ways
- Proposed Canal Improvement
- Natha Ela reconstruction
- Hapugahawella reconstruction
- Eri Ela reconstruction
- Mudun Ela reconstruction
- Kumbal Oya reconstruction
- Development of fly over pedestrian corridors at YMBA Junction and Eriyawetiya junction
- Sacred area access roads improvement projects
- Torana Junction – KelaniyaaViharaya
- Tire Junction – Kelaniya Viharaya
- Kiribathgoda – Kelaniya Viharaya
- Improvement of Green parts toward the sacred area
- Establishment of new Kelani Valley Crescent Road
- Establishment of information centre and New Pilgrims Resting Area-Kelaniya

2nd Priority Projects

- Retail & Shopping Streets Development at Kiribathgoda
- Jogging track at Tyre Junction
- Play grounds, jogging tracks and housing scheme at Kelaniya
- Ayurvedic hospital and “Danashalawa” at Kelaniya
- Improvement of Kiribathgoda Walk Trail

- New bicycle track (From Kiribathgoda Walk Trail to Suwatha Uyana)
- Hunupitiya – Wattala Road Development Project
- Internal road Development projects
- Kiribathgoda hospital road widening up to 12 M
- Eriyawetiya road widening up to 12 M
- Wewakduwa road widening up to 12 M
- Dipitigoda road widening up to 12 M
- Wanawasala-Wattala road widening up to 12 M
- Middle income housing with commercial complex development at Hunupitiya
- Sarasavi Art Centre Development at Tire Junction
- New Public Market Development at Hunupitiya
- Development of waste recycling plant and Modernization existing compost plant at Manelgama
- Redevelopment of Galborella Ceramic industry
- Development of Mixed commercial complex at Kalaniya
- Green linear development project along canal reservations
- Development of Linear Park at Hunupitiya
- Development of wetland park with walking track at Koholvila
- Sacred Area Ceremonial Entrance development at Thorana Junction, Tire junction and Kiribathgoda
- Relocation of Kelaniya Police Station

3rd Priority Projects

- Reconstruction of Kelaniya Bus Stand – (Nungamugoda TOD)
- Establishment of Polhengoda – Nungamygoda TOD link road
- Establishment of New Open Pilgrims Resting Place at Kelaniya Sacred area
- Establishment of Hunupitiya weekly Fare
- Establishment of New Engineering Faculty of Kelaniya University - at Dasa Building site
- Establishment of mixed development square at Hunupitiya Town centre
- Establishment of Kelaniya River Boat Jetty
- Establishment of hanging bridge linking viharas of Megoda Kelaniya and Egoda Kelaniya
- Reconstruction of new access bridge between Kelaniya and Hanwella low-level road
- Water Retention Area development with landscaping designs at Kelaniya
- Modernization of Kiribathgoda bus stand with Upper- floor urban park
- Development of walking track linking Hunupitiya – Wattala via Kalu Ela canal bank
- Electrification of Main Railway Line (Kelaniya, Wanawasala and Hunupitiya station)
- Establishment of Light Railway of Ragama–Narahenpita (Kiribathgoda, Tire Junction and Manelgama Railway stations)
- Establishment of Hunupitiya – Kottawa Light Railway line (Hunupitiya, Tire Junction and Polhena Railway stations)
- Development of Manelgama – Wanawasala waste transfer station and Aruwakkalu Sanitary Land Filling Station
- Establishment of Biyagama – Kosgama new Railway line (Nungamugoda station)
- Relocation of Unauthorized construction in Kelani river bank under the Climate Resilience Improvement Project
- Modernization of Kiribathgoda Hospital
- Redevelopment of Kelaniya Snake Poison’s Hospital
- Pattiwila - Kelaniya River South bank water treatment plant - Stage II


- Peliyagoda – Kelaniya wastewater Management Project
- Establishment of Mabima Water treatment plant
- Establishment of Pethiyagoda pumping station

Other Projects

- Pubic Open area Recreational Projects
- Canal reservation green line improvement
- Expressway reservation area green line improvement


Project 01

Name of the Project	Kiribathgoda Multi-Story Car Park with Over Head Pedestrian Corridor		
Division of the Project	Service Plan under the Infrastructure Development Strategy		
Project Description			
Province	District	Divisional Secretary's Division	GN Division
Western Province	Gampaha District	Kelaniya	Thalawathuhenpita South
Location			
North	Colombo – Kandy Main Road		
South	Kiribathgoda Bus Stand		
East	Wetland		
West	Kiribathgoda Public Market		
Land Extent	0.5 Acres		
Current Status / Landuse of the Surrounding -	<p>This land is situated opposite side of the public market in Jinadasa Nandasena Mawatha which located in Middle of the Kiribathgoda town and Colombo-Kandy main road.</p>		
Land Ownership	Government Lands		

Expected Status							
Type of Project	New		Improvement		Extension		Land Improvement only
	x						
Project Category	Conservation (Environment or Archeological)	Commercial	Landscape & Recreational Activities	Housing	Relocation	Infrastructure Development	Others
						x	
Rational of the Project	<p>Kiribathgoda Town is directly connected with the National Road Network through Colombo - Kandy Road and located very closer to the main highway interchanges of Kadawatha and Peliyagoda and provide a high-level connectivity. In addition, approximately 100,000 commuters daily arrive to this area, through this road network. Further, Colombo – Kandy Corridor which is presently with a high congestion will be further increased due to increment of the requirement of public infrastructure facilities along with the proposed Ragama - Narahenpita Light Railway. Therefore, there is a need to provide a multi-storeyed car park with overhead bridge, which facilitates to satisfy the requirements of the projected daily migrants of 221,000 by 2030s and thereby reduce the present traffic congestion.</p>						
Project Objectives	<ul style="list-style-type: none"> • Provide daily requirements of the future passenger community. 						
Imaginary Situation	<p>Imaginary Situation</p>  <ul style="list-style-type: none"> • Provision of Public car parks • Attraction of more passengers • Minimise the traffic congestion • Provision of public security to attract more passengers 						
Project Period	Short Period (1>Year)			Middle period (1-3 Year)		x	Long Period (3< Year)
Project Related Zone	High Density commercial Zone						

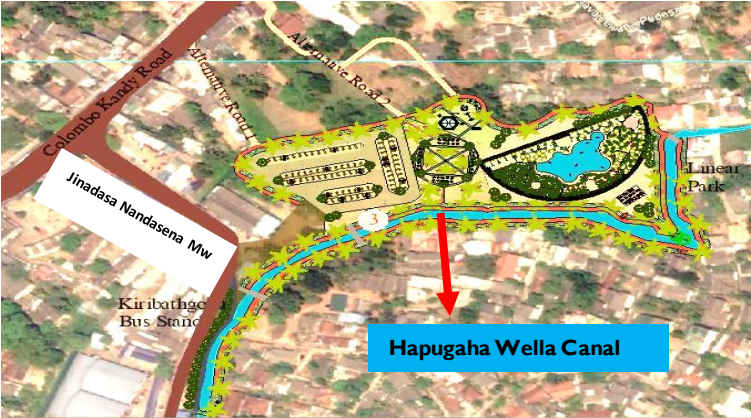
Project 02

Name of the Project	Multipurpose Commercial Complex at Kiribathgoda Town Centre		
Division of the Project	Economic Development Plan		
Project Description			
Province	District	Divisional Secretary's Division	GN Division
Western	Gampaha	Kelaniya	Thalawathuhenpita South
Location			
North	Colombo – Kandy Main Road		
South	Kiribathgoda Bus Stan		
East	Jinadasa – Nandasena Mawatha		
West	Kiribathgo-da Public Market /YMBA Hall		
Land Ex-tend	01 Ac - 2 R - 39 P		
Current Status / Landuse of the Surrounding			<p>Kiribathgoda town can be identified as one of the main commercial hubs adjacent to Co-lombo. Kiribathgoda which has inter-connections with Colombo-Kandy Road, Wattala and Makola road and located proximity to the Kadawatha, Peliyagoda and Kerawalapitiya Ex-pressway Interchanges provides easy accessibility in terms of regional context. Accordingly, Kiribathgoda presently functions as a major mixed commercial center in the Region. The area is well-known for its pre- defined ready-made clothes and related end products. The existing Public Market building in the city center is more than 20 years old and in a dilapi-dated condition. There are about 151 trade stalls functioning in this building and 41 tempo-rary outlets are located outside the building.</p>

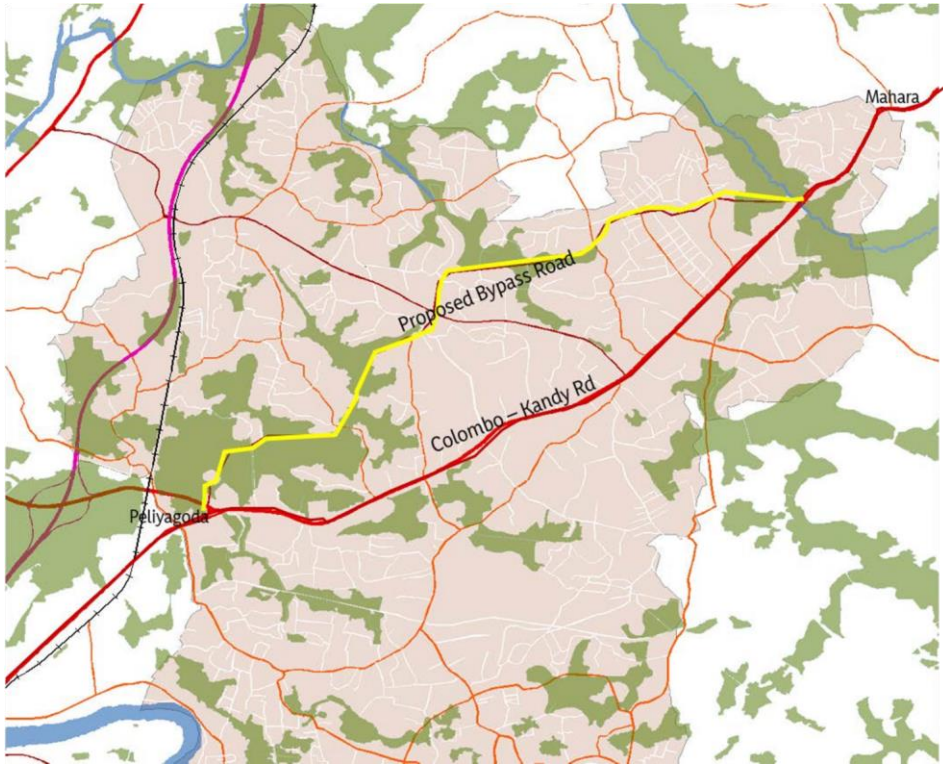
Land Ownership	Kelaniya PS						
Expected Status							
Type of Project	New	Improvement		Extension		Land Improvement only	
	x						
Project Category	Conservation (Environment or Archeological)	Commercial	Landscape & Recreational Activities	Housing	Relocation	Infrastructure Development	Other
		x					
Rational of the Project	The facilities available in Kiribathgoda area is not at a satisfactory level to cater the commuting population of around 100,000 who come to obtain their variety of requirements. Further the predictions suggested that the commuting population will exceeds 200,000 dues to the future development projects such as Development of Light Railway. Considering these facts, it is planned to develop Kiribathgoda as a High-Density Commercial City Centre in the Development Plan prepared for the year 2030. For this purpose, it is proposed to restore the public market complex with modern facilities in same location.						
Project Objectives	<ul style="list-style-type: none"> • Provision of commercial space for investors • Improving the trade economy • Optimization of under-utilized lands within the town center. • Provision of facilities for daily commuters. 						
Imaginary Situation	 <ul style="list-style-type: none"> • Relocation of existing Public Market temporarily. • Construction of a new Public Market Complex. • Connect Public Market Complex and the Proposed Multi - Storey Car Park through overhead pedestrian bridge. • Landscaping of the Area 						
Project Period	Short Period (1>Year)		Middle period (1-3 Year)	x	Long Period (> 3 Year)		
Project Related Zone	High Density Commercial Zone.						

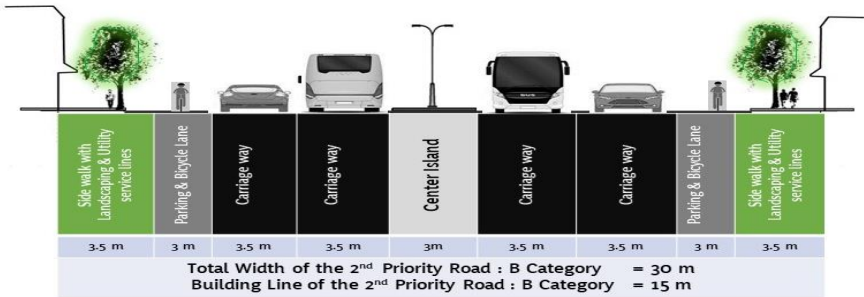
Project 03

Name of the Project	Recreational Park at Kiribathgoda Town Centre		
Division of the Project	Public Open Space under Sustainable Environmental Strategies		
Project Description			
Province	District	Divisional Secretary's Division	GN division
Western	Gampaha	Kelaniya	Thalawathuhenpita South
Location			
The land is located between the Main Road and the Hapugahawella canal adjacent to the Jinadasa Nandasena alternative Road at Kiribathgoda town has been proposed for this project. It is proposed to develop a Linear Park along the small canal located in the back yard of the Multi Storey car park up to Makola Road with 500m.			
Land Extent	Existing marshland – 5 Acres Existing Canal – 1.5 km		
Current Status / Landuse of the Surrounding	<p>At present, unauthorized shops are under construction along the canal and the canals are blocked. This is a great obstacle for the beautification of the city, and this may cause flooding.</p>		

Land ownership	Department of Irrigation						
Expected Status							
Type of Project	New	Improvement			Extension		Land Im-prove-ment only
	x						
Type of Project	Conservation (Environmental or Archeological)	Commercial	Landscape & Recreational Activities	Housing	Relocation	Infrastructure Development	Other
			x			x	
Rational of the Project	This area provides interconnection among Colombo - Kandy Road, Wattala, Makola, Kadawatha, Peliyagoda and the proposed Kerawalapitiya Road Interchange. Since the transportation facilities are provide all over the region, daily commuting population of around 100,000 come to Kiribathgoda to get services. However, the existing facilities are inadequate to provide facilities for this population.						
Project Objectives	<ul style="list-style-type: none"> Provide Entertainment facilities for the tourists and the commuters. 						
Imaginary Situation	This linear park consists of jogging tracks, food outlets, seating facilities, landscaping with tree lines.						
							
Project Period	Short Period (1>Year)		Middle period (1-3 Year)		Long Period (> 3 Year)		x
Project Related Zone	High Densitye Commercial Zon						


Project 04

Name of the Project	New bypass road for Kiribathgoda linking Peliyagoda-Mahara			
Division of the Project	Transport Plan of Infrastructure Development Strategy			
Project Description				
Province	District	Divisional Secretary's Division	GN Division	
Western Province	Gampaha District	Kelaniya	Himbutuwelgoda, Daluga-ma, Wewalduwa, Egoda Iriyawatiya, Kiribathgoda, Thalawathuhenpita North	
Location	<p>It is proposed to start from Peliyagoda up to Wanawasala, then along the boundary of Dippitigoda marshy land, across the Wewalduwa Road, from the Dingiywatta playground connecting Eeriyawetiya Road (Wetland boundary across the Vihara Maha Devi Road and Vito Mawatha connecting Eeriyawetiya Road and Hospital Road across the northern boundary of Thalawathuhenpita wetland to connect with the Colombo – Kandy Main Road.</p> 			
Land Extent	This road is proposed to develop with 4 lanes (width of 22 m) up to distance of about 4.75 km			
Current Status / Land use of the Surrounding	The new alternative road is proposed along the marshy land from Peliyagoda up to Wewalduwa, then along the existing road across the Iriyawetiya and to connect with the Kiribathgoda Hospital Road. This area is presently a residential area and the road will run through the marshy area from Kiribathgoda Hospital Road and connect to Colombo - Kandy Main Road again through the marshy area close to Thalawathuhenpita.			
Expected Status				
Type of Project	New	Improvement	Extension	Land Improvement only
	x			

Project Category	Conservation (Environment or Archaeological)	Commercial	Landscape & Recreational Activities	Housing	Relocation	Infrastructure Development	Others
						x	
Rational of the Project	<p>Nearly 150,000 vehicles passing through Colombo - Kandy road daily. Since Kiribathgoda Town is located very closer to Colombo City, it could be identified as a city which is directly affected by the traffic. Hence, heavy traffic can be seen throughout the day facing inconvenience to the passengers. Accordance to the survey conducted by the Com-trans study team in 2014, Colombo - Kandy corridor has been identified as the second - highest traffic lane out of the seven major lanes connecting the Colombo City. At present, Colombo - Kandy Main Road exceeds the average hourly capacity and the maximum hourly traffic capacity has been recorded as 4400 (pcu). However, it has a maximum hourly traffic capacity of 3300</p>						
Project Objective	<ul style="list-style-type: none"> To meet the needs of the future daily passengers and to reduce traffic congestion on the Colombo - Kandy Main Road. 						
Imaginary Situation	 <p style="text-align: center;"> Total Width of the 2nd Priority Road : B Category = 30 m Building Line of the 2nd Priority Road : B Category = 15 m </p> <ul style="list-style-type: none"> The road starting from Peliyagoda up to Wanawasala along the boundary of Dippitigoda marshy land and The road which will be constructed with 4 lanes starting from Wewalduwa Dingiyawatta Playground connecting connect to Wewalduwa road (Dalugama) with 4 lane road. Connect Iriyawetiya road and Hospital road via Vihara Maha Devi Road and Vito Mawatha. Iriyawetiya Road (Wetland boundary). Connect Hospital Road and Colombo - Kandy Main Road through Northern marshy land of Thalawathugahawela 						
Project Period	Short Period (1>Year)		Middle period (1-3 Year)	x	Long Period (> 3 Year)		
Project Related Zone	<p>High Density Industrial and Logistic Zone, High Density Higher Education Zone, High Density Residential Zone, High Density Commercial Zone</p>						


Project 05

Name of the Project	Transport Centre Development Project at Hunupitiya Town Centre.		
Division of the Project	Service Plan of Infrastructure Development Strategy		
Project Description			
Province	District	Divisional Secretary's Division	GN Division
Western	Gampaha	Kelaniya	Welegoda
Location			
North	Hunupitiya Railway Station		
South	Kiribathgoda - Hunupitiya Road		
East	Hunupitiya Community Centre		
West	Colombo – Katunayake Highway		
Land Extent	5 Ha.		
Current Status / Landuse of the Surrounding	It is proposed to use the existing Fertiliser Storage Complex land for Development of Transport Centre		
Land Ownership	Urban Development Authority		
Expected Status			

Type of Project	New		Improvement		Exten-sion		Land Improvement only	
	x							
Project Category	Conservation (Environment or Archaeological)	Commercial	Landscape & Recreational Activities	Housing	Relocation	Infrastructure Development	Others	
						x		
Rational of the Project	<p>The proposal for electrification of the main railway line and the proposed Hunupitiya - Kottawa light rail line as well as the railway station to be located at Hunupitiya town, will directly affects the Hunupitiya area. Therefore, it has been proposed to develop Hunupitiya as a Transport Center which provide public transport facilities for the transit-based neighbourhood under the Kelaniya Development Plan. Because, there is no interconnection among transport related places such as railway stations, bus stands and parking areas as a Transport Hub. The main objective is to provide facilities for the passengers of the railway transportation. Similarly, around 90,000 people are expected to migrate along with future development proposals and therefore the Hunupitiya area is proposed to be developed as a Transport Hub for transport-based neighboring areas..</p>							
Project Objectives	<ul style="list-style-type: none"> Develop Hunupitiya area as a transport hub for transit-based neighbourhoods. 							
Imaginary Situation -	 <ul style="list-style-type: none"> Development of Hunupitiya railway crossing with pedestrian walkways. Modernisation of Hunupitiya Railway Station. Small scale Bus Stand. Parking Area Commercial Complex 							
Project Period	Short Period (1>Year)		Middle period (1-3 Year)		x		Short Period (> 3 Year)	
Project Related Zone	High Density Industrial and Logistic Zone							

Project 06

Name of the Project		Development of Linear Park at North bank of Kelani River and Access Way Development		
Division of the Project		Sacred Area Plan under Cultural and Heritage Management Strategy		
Project Description				
Province	District	PS Division	GN Division	
Western	Gampaha	Kelaniya	Kelaniya, Sinharamulla, Pilapitiya, Mawalla, Pethiyagoda	
Location				
<p>The reservation area bounded by the northern boundary of Kelani river and the southern boundary of Kelaniya PS Area has been proposed for this project.</p>				
<p>The map illustrates the project area along the Kelani River. Key features include the Kelani River flowing through the center, a Low Density Residential Zone to the north, a Low Density Sacred Heritage Zone to the east, and a Special Eco-Conservation Zone to the south. Landmarks such as St. Mary's Church, Kelani Temple, Pethiyagoda Temple, and St. Theresa church are marked. Other areas shown include Waragoda Bodhi Rukkaramaya, Waragoda Walawwa, Peliyagoda UC, and the Biyagama PS area. The map also indicates pottery sites and a Coir Industry.</p>				
Land Extend	53 Hectares			
Current Status / Landuse of the Surrounding	When consider the landuse of this area, it is noticed that there is a increase trend in slums and shanties in this area. Most of these unauthorized settlements could be seen in the northern boundary of the Kelani River			
Land Ownership	Irrigation Department			
Expected Status				
Type of Project	New	Improvement	Extension	Land Improve-ment only
	x			

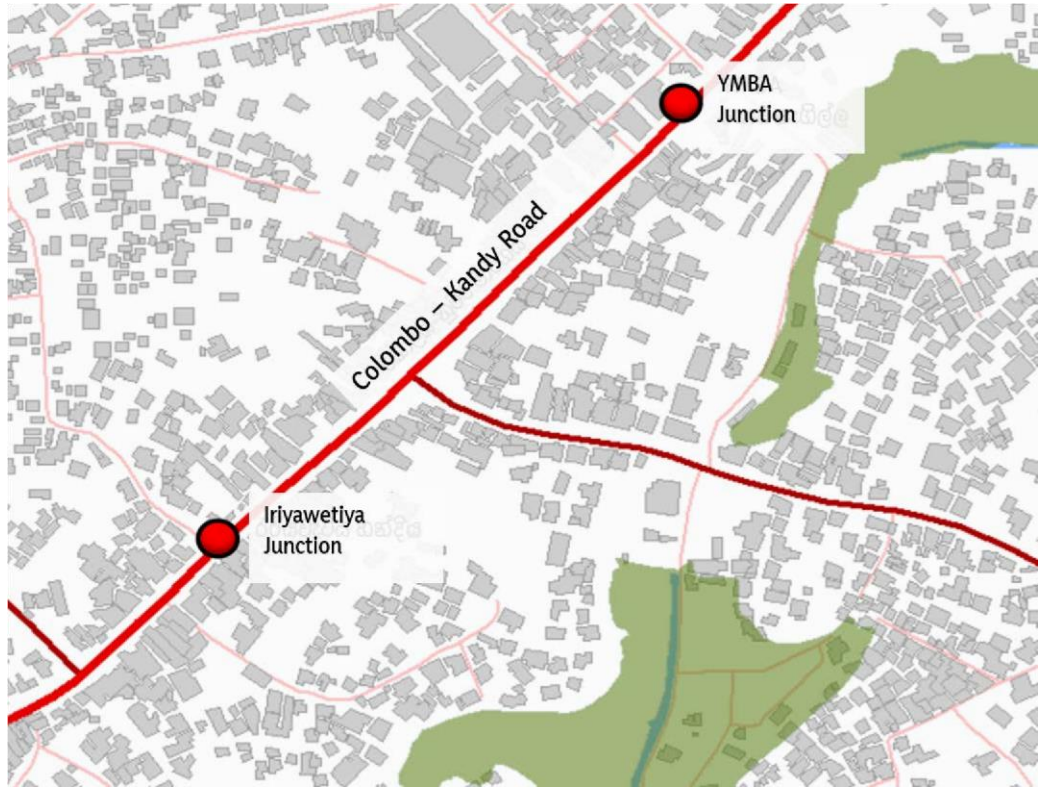
Project Category	Conservation (Environment or Archeological)	Commercial	Landscape & Recreational Activities	Housing	Relocation	Infrastructure Development	Others
Rational of the Project	Kelaniya Raja Maha Viharaya contributes greatly to the sacred feeling of Kelaniya. However, this sacred feeling is decreasing with the urbanization of the region. Moreover, temperature of the surface area is higher than the other areas. In the long run, heat waves have rapidly increased and the generation of heat has been the highest in 2009 - 2014.						
Project Objectives	<ul style="list-style-type: none"> Take action to increase the sacred feeling in the sacred area. 						
Imaginary Situation	 <ul style="list-style-type: none"> Provide recreational facilities Landscape the area to protect the green cover Improve the road network Provision of toilets and rest rooms Increase the sacred feeling of the area Development of Access Roads 						
Project Period	Short Period (1>Year)		Middle period (1-3 Year)	×	Short Period (> 3 Year)		
Project Related Zone	Special Eco Conservation Zone						

Project 07

Name of the Project	Canal Development Projects		
Division of the Project	Strategic Disaster Management Plan for Environmental Sustainability		
Project Description			
Province	District	Divisional Secretary's Division	GN Division
Western	Gampaha	Kelaniya	
Location			
<p>1.Restoration of Natha Ela (From Gonawala up to Kalu Ela – 3Km.)</p> <p>2.Restoration of Iriya Ela (From Iriyawatiya up to Kalu Ela – 3.4Km.)</p> <p>3.Restoration of Hapugahawella (From Kiribathgoda up to Mahara Mudun Ela – 7.3 Km.)</p> <p>4.Restoration of Mudun Ela - 800m</p> <p>5.Restoration of Kumbal Oya (From Gonawala up to Kelani River at Pethiyagoda – 6Km)</p>			
Land Ownership	Irrigation Department		

Expected Status							
Type of Project	New		Improvement		Extension		Land Improvement only
			x				
Project Category	Conservation (Environment or Archeological)	Commercial	Landscape & Recreational Activities	Housing	Relocation	Infrastructure Development	Others
	x						
Rational of the Project	The surface temperature in Kelaniya is relatively high when compared with the temperature of the surrounding area due to urbanization and industrialization. Heat islands are rapidly increased in relation to the time and the heat generation has been increased up to the highest in 2009-2014. Because of the above-mentioned challenges, the green colour of this area has been removed. Considering the above facts, it is proposed in the Kelaniya Development Plan to create a city integrated with green ecosystem.						
Project Objectives	<ul style="list-style-type: none"> To minimize the temperature of the area and to increase the sacred feeling of the sacred area. 						
Imaginary Situation	<ul style="list-style-type: none"> Development of Natha Ela Restoration of Eriya Ela Restoration of Hapugahawella Restoration of Mudun Ela Restoration of Kumbal Oya 						
Project Period	Short Period (1>Year)			Middle period (1-3 Year)		x	Long Period > 3
Project Related Zone	Whole Kelaniya PS area						

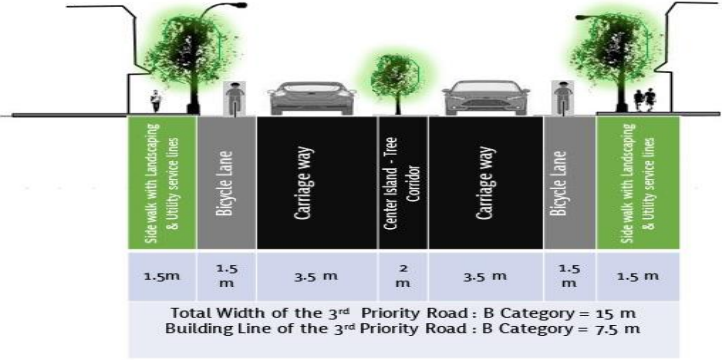
Project 08

Name of the Project	Development of Overhead Pedestrian Corridor at YMBA Junction and Eriyawetiya Junction.		
Division of the Project	Service Plan of Infrastructure Development Strategy		
Project Description			
Province	District	Divisional Secretary's Division	GN Division
Western	Gampaha	Kelaniya	Kiribathgoda
Location			
One of the overhead pedestrian bridges proposed in front of Public Market – Kiribathgoda. Other one is proposed at Eriyawetiya junction near the community hall in Colombo – Kandy Main Road	 <p>The map displays the Colombo - Kandy Road as a prominent red line. Two red circular markers indicate the proposed locations for overhead pedestrian bridges: one at Iriyawetiya Junction and another at YMBA Junction. The surrounding area is shown in a light grey tone, representing buildings and infrastructure, with green areas indicating parks or open spaces.</p>		
Current Status / Landuse of the Surrounding	These junctions are connected to the Colombo - Kandy road. About 150,000 vehicles are travelled through this area per day. Kiribathgoda Bus Stand, Kiribathgoda Public Market and YMBA Hall could be seen around YMBA Junction.		
Land Ownership	Road Development Authority		
Expected Status			

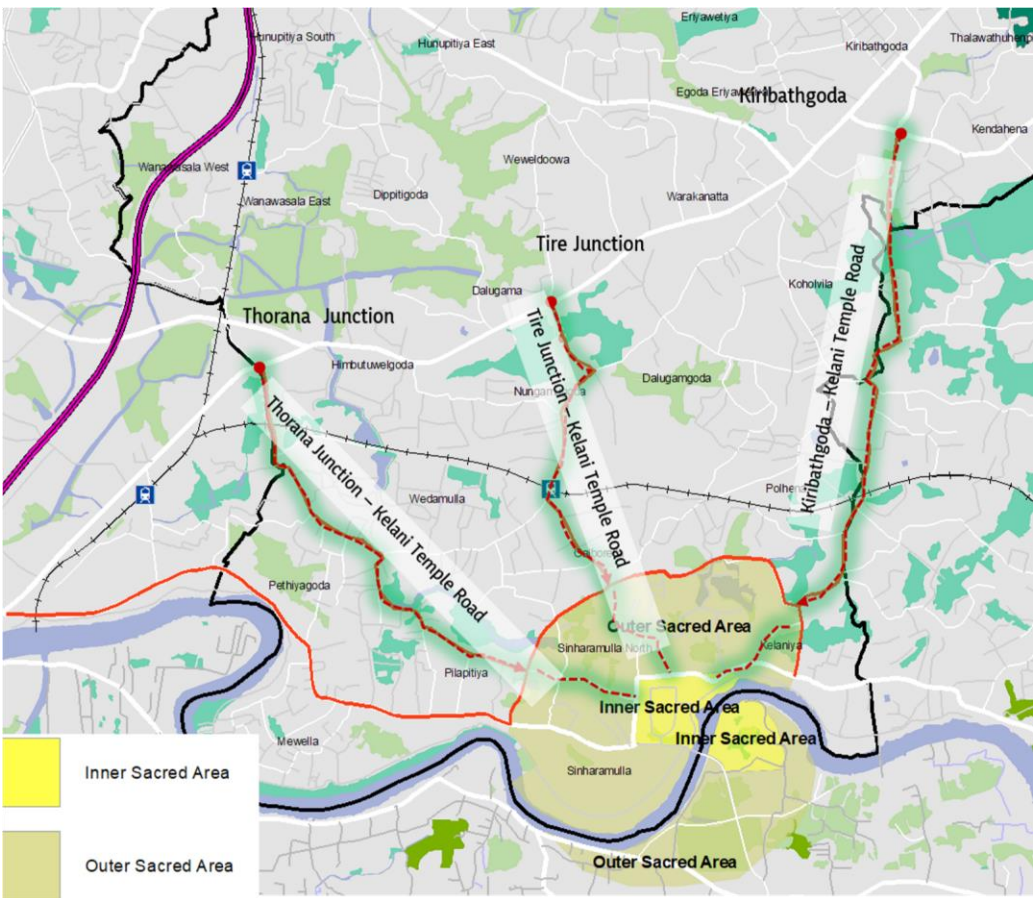
Type of Project	New		Improvement		Extension		Land Improvement only	
	x							
Project Category	Conservation (Environment or Archeological)	Commercial	Landscape & Recreational Activities	Housing	Relocation	Infrastructure Development	Other	
						x		
Rational of the Project	<p>This is considered as the second major corridor among the 5 major corridors to enter for the City of Colombo. Accordingly, there is a traffic jam of 4400 PCUs in Colombo – Kandy corridor. Normally a high PCU value is 3300 and, in this case, the PCU has been exceeded the maximum level. When compare the frequency of bus travel and passenger transportation of Colombo – Kandy Road with other transport corridors, there is an increase in this situation in Colombo – Kandy Road. This traffic congestion is mainly due to the 6 passenger lanes available from Kiribathgoda town up to Kelaniya University. Therefore, the drivers have to park their vehicles along these lanes. This delay will further increase the traffic congestion.</p>							
Project Objectives	<ul style="list-style-type: none"> Minimizing the traffic congestion and Creation of a commercial area with a conducive environment for pedestrians. 							
Imaginary Situation	<ul style="list-style-type: none"> Construction of Pedestrian Bridge at YMBA Junction. Construction of Pedestrian Bridge at Iriyawetiya Junction. 							
Project Period	Short Period (1>Year		Middle period (1-3 Year)	x	Period > 3			
Project Related Zone	High Density Commercial Zone							


Project 09

Name of the Project	Development of main access roads towards sacred area	
Division of the Project	Improvement of Roads Under Cultural and Heritage Management Strategies.	
Project Description		
Province	District	Divisional Secretary's Division
Western	Gampaha	Kelaniya
Location		
<ul style="list-style-type: none"> • It is proposed to develop Eksath Mawatha, Pilapitiya Mawatha and Shramadana Mawatha. Road will be developed from Thorana Junction to Sacred area. From Thorana Junction to Sacred area (14m width) • Tyre Junction to Sacred area (From Tyre Junction to Sacred area - 14m width) • From Kiribathgoda to Sacred area (14m width)) 		
Current Status / Landuse of the Surrounding	At present, the direct access has been provided for Kelaniya Temple through Colombo - Biyagama Road. In addition, there is a possibility of entering through Thorana junction as well as Tire Junction to the sacred area.	
Land Ownership	Road Development Authority	

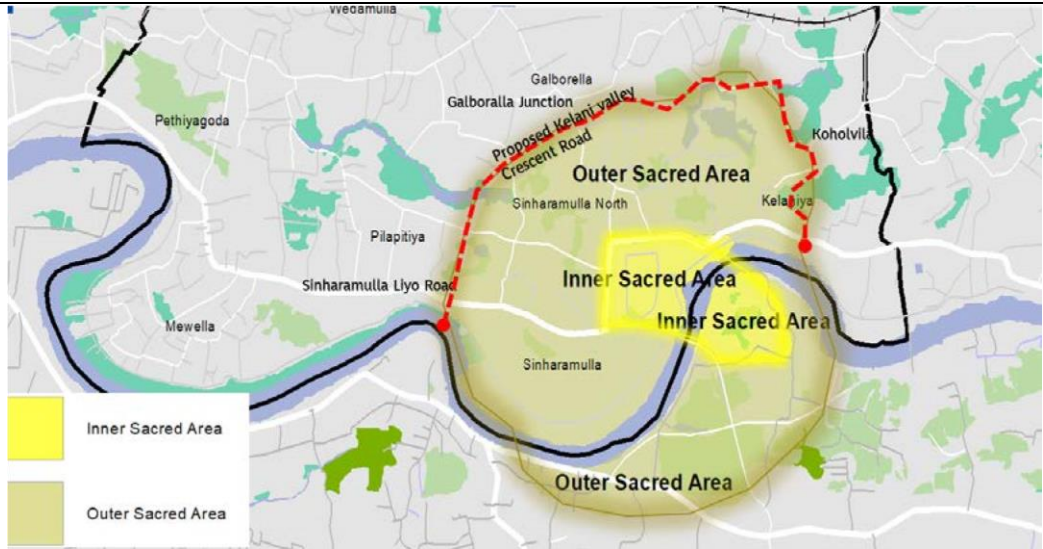
Expected Status							
Type of Project	New		Improvement		Extension		Land Im-provement only
			x				
Project Category	Conservation (Environment or Archaeological)	Commercial	Landscape & Recreational Activities	Housing	Relocation	Infrastructure Development	Other
						x	
Rational of the Project	The Kelaniya Rajamaha Viharaya contributes greatly to the sacred feeling in the Kelaniya area. But due to the urbanization of this region, the sacredness of the region is abolishing. In order to overcome this situation, it is proposed to improve the access roads. Although the access to the sacred area presently provides through Biyagama - Colombo road, possibility of improving this sacred feeling is at a low level. Considering these facts, it is proposed to develop access roads to sacred areas.						
Project Objectives	<ul style="list-style-type: none"> Improvement of the sacred feeling of the Kelaniya Sacred area. 						
Imaginary Situation	 <p style="text-align: center;"> Total Width of the 3rd Priority Road : B Category = 15 m Building Line of the 3rd Priority Road : B Category = 7.5 m </p> <ul style="list-style-type: none"> Resettlement of damaged houses Widening of Roads 						
Project Period	Short Period (1>Year)		Middle period (1-3 Year)		x		Long Period (> 3 Year)
Project Related Zone	Moderate Density Residential Zone Low Density Residential Zone Low Density Sacred and Heritage Conservation Zone						

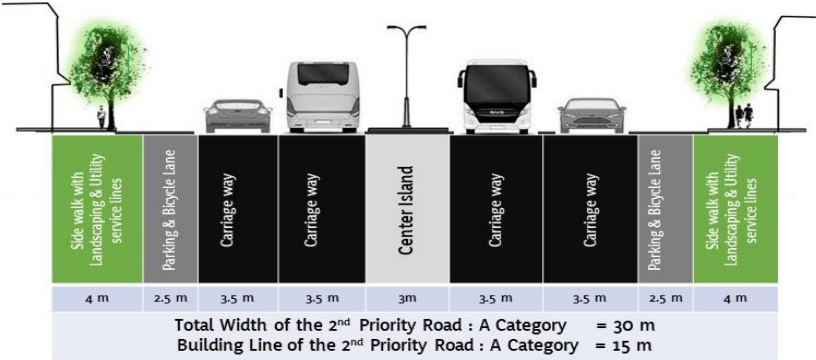
Project 10

Name of the Project	Improvement of Green parts toward the sacred area	
Division of the Project	Improvement of Roads Under Cultural and Heritage Management Strategies.	
Project Description		
Province	District	Divisional Secretary's Division
Western	Gampaha	Kelaniya
Location		
<p>It is proposed to establish green paths both side of the road from Thorana junction to sacred area, Tire junction to sacred area and Kiribathgoda to sacred area through the proposed road development.</p>	 <p>The map shows the Kelaniya region with several key locations and proposed road developments. The Kelani River is visible at the bottom. The Inner Sacred Area is highlighted in yellow, and the Outer Sacred Area is highlighted in light green. Proposed road developments are shown in red and pink, connecting Thorana Junction, Tire Junction, and Kiribathgoda to the sacred areas. A legend in the bottom left corner identifies the Inner Sacred Area (yellow) and Outer Sacred Area (light green).</p>	
Current Status / Landuse of the Surrounding	At present, the area does not feel the sacred value which blend with the Kelani temple. Access roads are very narrow and either side of the road congested with buildings.	
Land Ownership	Road Development Authority	



Expected Status							
Type of Project	New		Improvement		Extension		Land Improvement only
	x						
Project Category	Conservation (Environment or Archeological)	Commercial	Landscape & Recreational Activities	Housing	Relocation	Infrastructure Development	Other
			x				
Rational of the Project	<p>Since the surface temperature in Kelaniya is relatively high due to urbanization and industrialization when compared with the surrounding area. Heat islands has been increased rapidly with time and the highest temperature generation has been recorded in 2009 – 2014. Due to the challenges mentioned above, green color of this area has been removed. Considering the above facts, it is proposed in the Kelaniya Development Plan to create a city integrated with green ecosystem.</p>						
Project Objectives	<ul style="list-style-type: none"> To take action to minimize the temperature of the area in order to increase the sacred feeling of the sacred area. 						
Imaginary Situation	<div style="display: flex; align-items: center;">  </div> <ul style="list-style-type: none"> Resettlement of damaged houses Widening of Roads Development of green belts 						
Project Period	Short Period (1>Year)		Middle period (1-3 Year)		x	Long Period (> 3 Year)	
Project Related Zone	Low Density Sacred and Heritage Conservation Zone						


Project 11

Name of the Project		Establishment of New Kelani Valley Crescent Road					
Division of the Project		Improvement of Roads Under Cultural and Heritage Management Strategies.					
Project Description							
Province	District	Divisional Secretary's Division			GN Division		
Western	Gampaha	Kelaniya			Pilpitiya, Galboralla, Kelaniya		
Location							
<p>This road starts from Lio Road Junction and connected to Galboralla and Kohalwila area near Red Church of Kelaniya which is located along Colombo - Biyagama road</p> <p>Width of the road is 26 m (4 lanes with the service road) and length of the road is 4.1 Km.</p>							
Current Status / Landuse of the Surrounding		Kelaniya Raja Maha Viharaya is located near the proposed road and in addition there are small shops and houses					
Expected Status							
Type of Project	New		Improvement		Extension		Land Im-prove-ment only
	x						
Project Category	Conservation (Environment or Archaeological)	Commercial	Landscape & Recreational Activities	Housing	Relocation	Infrastructure Development	Other
						x	

Rational of the Project	<p>The Kelaniya Rajamaha Viharaya contributes greatly to the sacred feeling in the Kelaniya area. But due to the urbanization of this region, the sacredness of the region is abolishing. In order to overcome this situation, it is proposed to improve the access roads. Although the access to the sacred area presently provides through Biyagama - Colombo road, possibility of improving this sacred feeling is at a low level. Considering these facts, it is proposed to develop access roads to sacred area.</p>					
Project Objectives	<ul style="list-style-type: none"> Formation of environmentally friendly area to improve the sacred feeling of the Kelaniya sacred area while minimizing traffic congestion. 					
Imaginary Situation	 <p style="text-align: center;"> Total Width of the 2nd Priority Road : A Category = 30 m Building Line of the 2nd Priority Road : A Category = 15 m </p> <ul style="list-style-type: none"> Resettlement of damaged houses Widening of Roads Development of green belt 					
Project Period	Short Period (1>Year)		Middle period (1-3 Year)		Long Period (> 3 Year)	x
Project Related Zone	Low Density Sacred and Heritage Conservation Zone					

Project 12

Name of the Project		Establishment of Information Centre and New Pilgrims Resting Area - Kelaniya	
Division of the Project		Cultural and Heritage Management Strategies.	
Project Description			
Province	District	Divisional Secretary's Division	GN Division
Western	Gampaha	Kelaniya	Kelaniya
Location			
The old building adjacent to the Kelani River located behind the Kelaniya Raja MahaViharayahas been identified for this project. This is located between the Temple Road in front of the Kelaniya Temple and the northern bank of Kelani River.			
Current Status / Landuse of the Surrounding	 <p>The existing old building in this temple land is not used for any activity. It is a single storey building, which is presently used for lodging place for dogs and Beggars</p>		

Land Ownership	Kelaniya Rajamaha Viharaya						
Expected Status							
Type of Project	New	Improvement			Extension		Land Improvement only
	x						
Project Category	Conservation (Environment or Archeological)	Commercial	Landscape & Recreational Activities	Housing	Relocation	Infrastructure Development	other
	x						
Rational of the Project	More than 10,000 local and foreign pilgrims come to this area on Poya days to visit Kelaniya Raja Maha Vihara. Apart from that Over 200,000 pilgrims arrive for the Kelaniya Vihara Perahera which is the major cultural festival of the Kelaniya Temple. However, there is no adequate resting facilities for the pilgrims as well as information centres to get the details of the Kelaniya sacred place and it will become a problem.						
Project Objectives	<ul style="list-style-type: none"> Provision of lodging facilities for the pilgrims as well as information about history of Kelaniya sacred place. 						
Imaginary Situation	 <ul style="list-style-type: none"> Development of Resting Places Landscape and natural environment Provision of Toilet facilities and resting areas Development of information centers 						
Project Period	Short Period (1>Year)		Middle period (1-3 Year)		Long Period (> 3 Year)		
Project related Zone	Low Density Sacred and Heritage Conservation Zone						

6.7.2 Responsible Agencies

Table 6.21 Responsible Institutional Framework

Plan	Sub Plans & Operational Projects	Relevant Organizations	Liability of Implementing Organizations
Physical & Social Infrastructure Development Strategies	Services Supply Plan		
	1. Middle Income Housing Project and Commercial Complex at Hunupitiya	NHDA.	Prepare a Feasibility Study
		UDA.	Hand Over Land for the Project
	2. Climate Resilience Improvement Project – Relocation of Unauthorized Housing on Kelaniya River bund	Irrigation Dept.	Implementation of the Project
		NHDA	Hand Over Land for the Project
	3. Multi Storied Car Park with Fly overs for Pedestrians	UDA	Implementation of the Project
		Kelaniya PS	Hand Over Land for the Project
	4. Construction of Pedestrian Fly Overs at YMBA & Eriyawetiya Junctions	RDA	Implementation of the Project
		UDA	
	5. Modernization of Sarasavi Studio at Tyre Junction	National Films Corporation	Hand Over Land for the Project
		UDA	Implementation of the Project
	6. Transport Complex Development Project at Hunupitiya Town Center	RDA	Carry out a Feasibility Study
		UDA	Implementation of the Project
		Railway Department	
	7. Light Railway Station Development (Hunupitiya, Kiribathgoda, Tyre Junction and Polhena)	Railway Department	Hand Over Lands for the Project
		JICA	Implementation of the Project
		RDA	
		UDA	
	8. Re-habilitation of Kelaniya Bus Stand (Nungamugoda TOD)	Kelaniya PS	Hand Over Land for the Project
		UDA	Implementation of the Project
RDA			
9. New Public Commercial Complex at Hunupitiya	UDA	Implementation of the Project	
	Kelaniya PS	Implementation of the Project	
10. Establishing Weekly Fair at Hunupitiya	UDA	Prepare a Feasibility Study	
	Kelaniya PS	Implementation of the Project	
	11. Creation of Mixed Development Square at Hunupitiya Town Centre	UDA	Prepare a Feasibility Study
		Kelaniya PS	Implementation of the Project
	12. Modernization of Base Hospital at Kiribathgoda		
	13. Improvement of Snake Poisons Hospital		
	14. Establishment of New Engineering Faculty for University of Kelaniya at Dasa Building Premises		
Water Supply Plan			

Physical & Social Infrastructure Development Strategies	15. Water Purification Unit, ii Phase at South bank of Kelani River at Pattiwila	NWS&DB	Implementation of the Project
	16. Establishment of Water Purification Unit at Mabuma	NWS&DB	Implementation of the Project
	Solid Waste Management Plan		
	17. Modernization of solid Waste Recycling & Compost Yard at Manelgama	UDA	
		Kelaniya PS	Implementation of the Project
	18. Manelgama – Wanawasala Waste exchanging Project and Sanitary Land filling Project at Aruwakkulu		
	Wastewater Management Plan		
	19. Peliyagoda – Kelaniya Wastewater Management Project	NWS&DB	Implementation of the Project
	Roads & Transportation Plan		
	20. Alternative Road connecting Peliyagoda and Mahara	RDA	Implementation of the Project
		UDA	
	21. Widening of Hunupitiya – Wattala Road into 4 lanes	RDA	Implementation of the Project
		UDA	
	22. Widening of Local Road (Inner Roads) Kiribathgoda Hospital Road/ Eriyawetiya Road/ Wevalduwa/Dippitigoda/ Koholwila Roads and Wanawasala – Wattala Road	UDA	Implementation of the Project/ Carry out Feasibility Study
		RDA	
	23. Development of Hunupitiya Railway Cross Road with Pedestrian Lanes	UDA	
		RDA	Implementation of the project
		Railway Department	Consultancy services for the implementation of the project
	24. Proposed road linking Nungamugoda and Polhena proposed Railway Stations	Railway Department/ RDA/ UDA	Consultancy services for the implementation of the project/ Implementation of the project
	25. Electrification of main railway line	Railway Department	Implementation of the project
		UDA	
	26. Biyagama- Kosgama new railway line	Railway Department	Implementation of the project
		UDA	
	27. Construction of Ragama – Narahenpita Light Railway Line	JICA	Carry out Feasibility Study
		Railway Department	Implementation of the Project
	28. Hunupitya – Kottawa Light railway line	JICA	Carry out Feasibility Study
		Railway Department	Implementation of the Project

	29. Construction of New Kelani Bridge – Kelaniya – Pahala Hanwella	UDA	
Economic Development Strategies	Economic Development Plan		
	1. Regaining Clay manufacturing at Galborella	UDA	Implementation of the Project
		National Crafts Council	Consultancy services for the implementation of the project
	2.Mixed Commercial Complex at Kelaniya	UDA	Implementation of the project
		Kelaniya PS	Obtain Funds
	3. Multi- functional commercial centre at Kiribathgoda	UDA	Implementation of the project
		Kelaniya PS	Acquire lands for the project
	4. Development of Commercial corridors at Kiribathgoda	UDA	Implementation of the project
		Kelaniya PS	Acquire lands for the project
	Sustainable Environment Development Strategies	Landscape Management Plan	
5. Green Strips Development projects for sacred areas access roads		UDA	Implementation of the Project
		Kelaniya PS	Obtain Funds
6. Green Strips development projects for Canal conservation		UDA	Implementation of the Project
		Irrigation Department	Consultancy services for the implementation of the project
Disaster Risk Management Plan			
7. Canal Network development projects		Irrigation Department	Implementation of the project
		Kelaniya PS	Obtain Funds
8. Construction of water pump house at Pethiyagoda		Irrigation Department	Implementation of the project
Open Spaces Plan			
	9. Linear park at the Kiribathgoda Town Centre	Irrigation Department	Carry out Feasibility Study
		Kelaniya PS	Obtain Funds
		UDA	Implementation of the project
	10. Linear Park at Hunupitiya	Irrigation Department	Carry out Feasibility Study
		Kelaniya PS	Implementation of the project
		UDA	Implementation of the project
	11. Wetlands Park with Pedestrian Paths	Irrigation Department	Carry out Feasibility Study
		Kelaniya PS	
		UDA	Implementation of the project
	12. Pedestrian lane linking Hunupitiya – Wattala Junctions on Kalu Ela bank	Irrigation Department	Carry out Feasibility Study

		Kelaniya PS	Obtain Funds
		UDA	Implementation of the project
	Sacred Area Development Plan		
Cultural and Heritage Management Strategies	1. Sacred Area access gates development project, Thorana & tyre Junctions, Kiribathgoda	Kelaniya PS	Obtain Funds
		UDA	Implementation of the Project
	2. Reestablishment of Police station – Kelaniya	SL Police Dept.	Implementation of the Project
		NHDA	Obtain Funds
		UDA	Carry out Feasibility Study
	3. Construction of new Pilgrim’s rest places and information centre at Kelaniya	Kelaniya PS	Obtain Funds
		UDA.	Implementation of the Project
	4. Construction of New Open spaces for pilgrims in Kelaniya	UDA	Implementation of the project
		Archaeological Department	Providing Consultancy Services for implementation of projects
	5. Development of Linear parks at North bund of Kelani river	UDA	Implementation of the project
Irrigation Dept.		Providing Consultancy Services for implementation of projects	
6. Suspension Bridge linking Egoda Kelaniya and Megoda Kelaniya	NPPD	Implementation of the project	
7. Development of access road on the north bank of Kelani river	UDA	Carry out Feasibility Study	
8. Construction of piers for boats on the banks of Kelani river	NPPD	Implementation of the project	



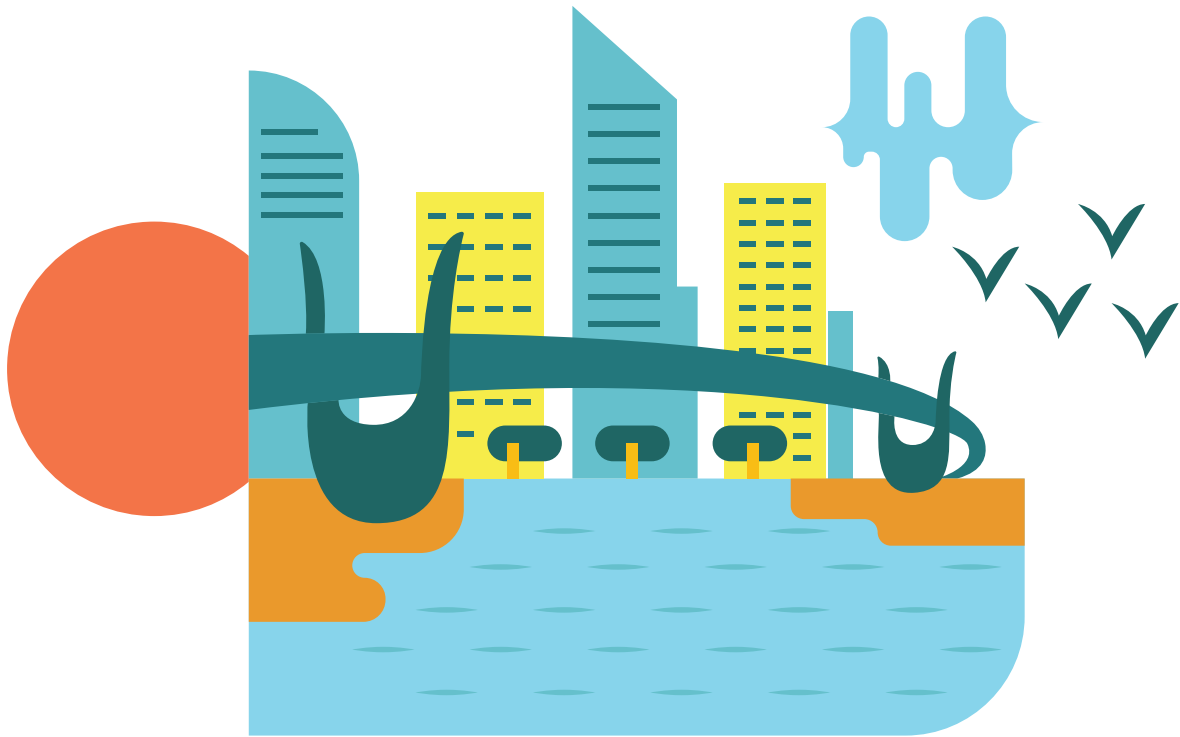
PART II



Land and Building Development Strategic Plan

07

Chapter



Development Zones and Zoning Guidelines

Chapter 07

Development Zones and Zoning Guidelines

7.1 Introduction

Kelaniya Development Plan 2021-2030 has prepared with the purpose of achieving the futuristic vision “The Urban Locus of Divinity”. To achieve this vision for the next 10 years, it has prepared goals and objectives by focusing on natural environment and its historical value, settlement and infrastructure as well as economic development. It has been proposed to concentrate on the Kelaniya sacred area and from there to the north of the area to increase the intensity of the urban characteristics. Hence to achieve this futuristic vision in the real ground situation, it has prepared Environmental Management strategies for environmental conservation and disaster risk reduction, economic development strategies for economic development, Culture and Heritage management strategies for heritage management, Infrastructure Development Strategies for all social and physical infrastructure development as clearly mention under volume I.

In addition to the proposed strategic projects under these various plans as clearly mention under the volume I, the proposed zoning and zoning Guidelines as well as Planning and building Guidelines have been introduced in accordance with the vision for the Kelaniya area as outlined in the Proposed Land Use Plan. Especially this zoning intervention goes beyond the traditional land use zoning and it aims to achieve the expected urban form with a density-based development zone. This chapter describes the development zones, zone factor, boundary coordinate, permitted uses and zoning Guidelines that have been identified to develop in a proper manner.

7.2 Development Zones

This area has been divided into eight major development zones based on the proposed densities and characteristics unique to each zone as outlined in the vision for the year 2030 for the Kelaniya PS area.

- 1) High Density Commercial Zone
- 2) High Density Higher Education Zone
- 3) High Density Logistic Zone
- 4) High Density Residential Zone
- 5) Moderate Density Residential Zone
- 6) Low Density Residential Zone
- 7) Low Density Sacred Heritage Zone
- 8) Special Eco-Conservation Zone
- 9) Wetland Nature Conservation Zone
- 10) Paddy Cultivation & Wetland Agryculture Zone

Map 7.1 shows the location of above mention ten zones. Part of the High-Density Logistic Zone and High-Density Residential Zone is included to the Colombo Commercial City Development Plan 2019-3020; accordingly, this relevant zone has subdivided to sub zones based on the Zoning plan of Colombo Commercial City Development Plan. It should be noted that the formulation and determination of this zoning plan is the result of several specific and scientific analyzes. As shown in annexure 44 the Composite analysis of Development potentials, environmental sensitivity, Livability, infrastructure availability and the quantitative analysis was based on to decide the proposed density zones.

7.3 Zone Factor

The Zone Factor is calculated to determine the density of the zones for each region in accordance with the density-based zoning plan. Basically, it is the total required space for both residential and daily commuter population with expected development in the year 2030 for achieving the futuristic vision. It is based on the current residential and commuter population in the area and calculate total developable space for the forecasted population by the year 2030.

Commercial, Residential, institutions, vacant lands and other plantation land uses are considered as Developable Space and Environmental conservation areas, water bodies, Religious and archeological sites, Roads and railway land uses consider as Un-developable Lands.

Accordingly, calculation of the Zone factor is based on the complex five steps as describe in annexures 45. The zone factor which calculates through this steps, developable area and required permissible floor area in each zone as follows.

Table 7.1 Zone Factor

Zone	Required permissible floor area for the year 2030 (m2)	Developable foot print (m2)	Zone Factor	
Special Eco-Conservation Zone	18654.38	125481.90	0.1	
Low Density Sacred Heritage Zone	643477.84	1132049.49	0.5	
Low Density Residential Zone	789473.26	1493437.37	0.5	
Moderate Density Residential Zone	2111464.80	2805801.02	0.75	
High Density Residential Zone	1620133.12	1106924.88	Sub Zone - 1	1
			Sub Zone - 2	1.46
High Density Logistic Zone	5475748.46	3021126.61	Sub Zone - 1	1.81
			Sub Zone - 2	1
			Sub Zone - 3	1.25
			Sub Zone - 4	1
High Density Higher Education Zone	4544667.36	1711917.21	2.65	
High Density Commercial Zone	5696569.35	1951867.08	2.92	

Source: Gampaha District Planning Team, 2021

A portion of the High-Density Logistic Zone and the High-Density Residential Zone will be prepared in line with the Colombo Commercial City Development Plan 2021-2030. Determination of Permissible Floor area for developments According to the Form 'A' 'B' in Schedule 6 to Part IV of the Extraordinary Gazette Notification No. 2235/54 dated Thursday 08th July 2021, the coefficients applicable to the Kelaniya Development Plan indicated by table number 7.2 and 7.3

In determining the open space of the building pertaining to the said permissible floor area, the form 'E' of the above Gazette is indicated and it is specified in the Kelaniya Development Plan in the table number 7.4.

Table 7.2 Permissible Floor Area Ratio for Zones

Form A - Permissible Floor Area Ratio																									
Land extent (Sq.M)	Zone factor = 0.50 - 0.74			Zone factor = 0.75-0.99			Zone factor = 1.00-1.24			Zone factor = 1.25-1.49			Zone factor = 1.50-1.74			Zone factor = 1.75-1.99			Zone factor = 2.00-2.24						
	Minimum Road Width			Minimum Road Width			Minimum Road Width			Minimum Road Width			Minimum Road Width			Minimum Road Width			Minimum Road Width						
	**6m	9m	12m	**6m	9m	12m	**6m	9m	12m	**6m	9m	12m	**6m	9m	12m	**6m	9m	12m	**6m	9m	12m	15m or above			
150 less than 250	0.8	0.9	0.9	1.3	1.3	1.4	1.4	1.4	1.6	1.7	1.8	1.9	2.0	2.2	2.3	2.4	2.6	2.7	2.8	3.0	3.2	3.3	3.4	3.6	3.8
250 less than 375	0.9	1.0	1.2	1.3	1.6	1.8	2.0	1.8	2.2	2.4	2.7	2.2	2.7	3.0	3.3	3.6	4.0	3.0	3.4	4.3	4.7	3.2	3.6	4.5	4.5
375 less than 500	0.9	1.0	1.2	1.4	1.3	1.6	1.9	2.1	1.9	2.2	2.5	2.8	2.3	2.8	3.2	3.4	2.7	3.3	3.8	4.2	3.2	3.5	4.0	4.8	5.2
500 less than 750	1.0	1.1	1.3	1.5	1.4	1.7	2.0	2.2	2.0	2.3	2.7	3.0	3.4	3.5	2.8	3.4	4.0	4.5	3.4	3.6	4.7	5.5	3.5	4.0	6.0
750 less than 1000	1.0	1.2	1.4	1.7	1.5	1.8	2.2	2.5	2.1	2.4	2.9	3.3	2.6	3.0	3.6	4.0	3.1	3.6	4.3	5.0	3.5	3.8	4.5	5.7	6.5
1000 less than 1500	1.1	1.3	1.5	1.8	1.6	1.9	2.3	2.7	2.2	2.5	3.0	3.6	2.7	3.1	3.8	4.5	3.2	3.8	4.6	5.5	3.6	4.0	5.4	6.1	8.0
1500 less than 2000	1.1	1.4	1.7	2.0	1.7	2.1	2.5	3.0	2.3	2.7	3.4	4.0	2.9	3.4	4.2	5.0	3.4	4.0	5.0	6.0	3.7	4.2	5.8	7.0	9.0
2000 less than 2500	1.2	1.5	1.8	2.1	1.8	2.3	2.7	3.1	2.4	2.8	3.5	4.2	3.0	3.5	4.4	5.4	3.5	4.2	5.2	6.5	3.8	4.4	6.2	7.5	39.2
2500 less than 3000	1.2	1.6	2.0	2.4	1.9	2.4	3.0	3.6	2.5	3.2	4.0	4.7	3.1	3.8	4.7	5.8	3.6	4.4	5.5	7.0	3.9	4.6	6.5	8.0	10.5
3000 less than 3500	1.3	1.7	2.1	2.5	2.0	2.5	3.1	3.7	2.6	3.4	4.2	5.0	3.2	4.0	5.0	6.2	3.7	4.6	6.0	7.5	4.0	4.8	6.9	8.5	11.1
3500 less than 4000	1.4	1.8	2.2	2.6	2.2	2.6	3.3	3.9	2.8	3.6	4.3	5.3	3.3	4.3	5.5	6.6	3.8	4.8	6.3	7.7	4.0	5.0	7.3	9.0	11.5
More than 4000	1.5	1.9	2.3	2.8	2.5	2.8	3.5	4.0	3.0	3.8	4.5	5.5	3.5	4.5	6.0	7.0	4.0	5.0	6.5	8.0	4.0	5.2	7.5	9.5	12.1

Land extent (Sq.M)	Zone factor = 2.25-2.49			Zone factor = 2.50-2.74			Zone factor = 2.75-2.99						
	Minimum Road Width			Minimum Road Width			Minimum Road Width						
	**6m	9m	12m	**6m	9m	12m	**6m	9m	12m	15m or above			
150 less than 250	3.0	3.4	3.6	4.0	3.0	3.4	3.6	4.0	3.0	3.4	3.6	4.0	
250 less than 375	3.5	3.8	4.5	5.0	3.5	4.0	5.0	5.5	3.5	4.2	5.0	5.5	
375 less than 500	3.6	4.5	4.7	5.5	3.6	4.6	5.2	6.0	3.6	4.7	5.2	6.0	
500 less than 750	3.7	5.0	5.0	6.0	3.7	5.1	5.5	6.5	3.7	5.2	5.5	6.5	
750 less than 1000	3.8	5.1	6.0	6.5	3.8	5.2	6.5	7.0	3.8	5.3	7.0	7.5	
1000 less than 1500	3.9	5.3	6.5	8.5	3.9	5.4	7.0	9.0	3.9	5.5	7.5	9.0	
1500 less than 2000	4.0	5.4	7.0	*10	4.0	5.5	7.5	*10.5	4.0	5.6	7.5	*10.5	
2000 less than 2500	4.0	5.5	7.5	*10.5	4.0	5.6	7.5	*11	4.0	5.7	8.0	*11	
2500 less than 3000	4.0	5.6	7.5	*11	4.0	5.7	8.0	*11.5	4.0	5.8	8.0	*11.5	
3000 less than 3500	4.0	5.7	8.0	*11.5	4.0	5.8	8.0	*12	4.0	5.9	8.0	*12	
3500 less than 4000	4.0	5.8	8.0	*12	4.0	5.9	8.0	*12	4.0	6.0	8.0	*12	
More than 4000	4.0	5.9	8.0	*UL	4.0	6.0	8.0	*UL	4.0	6.0	8.0	*UL	

UL- Unlimited

Floor area allocated for parking facilities are not calculated for FAR

Above Floor Area Ratio shall not be applicable for the zones where number of floors or FAR indicated under the zoning regulations

Above Permissible FAR may be restricted under the development plan based on the slope of the land from National Building

10.0 shall be permitted only

**Minimum road width of 7m shall be considered for the roads identified as 7m wide road in the particular development Plan

Source: UDA,2021

Table 7.3 Number of Floors for 03m & 4.5m Wide Roads

Form B - Number of Floors for 3.0m & 4.5m wide Roads						
Minimum Road Width	Minimum Site Frontage	* Plot Coverage	Maximum Number of Floors			
			Zone Factor 0.5 - 0.74	Zone Factor 0.75 - 1.24	Zone Factor 1.25 - 3.49	Zone Factor 3.50 - 4.00
3.0m	6m	65%	1 (G)	2 (G+1)	3 (G+2)	3 (G+2)
4.5m	6m	65%	1 (G)	2 (G+1)	3 (G+2)	4 (G+3)

Number of floors are indicated including parking areas.
Number of units allowed for each road shall not be change.
* Where no plot coverage specified under the zoning regulations.

Source: UDA,2021

Table 7.4 Setbacks and open spaces

Form E - Setbacks & Open Spaces										
Building Category	Building Height (m)	Minimum Site Frontage (m)	* Plot Coverage		Rear Space (m)		Side Space (m)		Light Well for NLV	
			Non - Residential	Residential	When no NLV is taking this end	When NLV is taking this end	When no NLV is taking this end	When NLV is taking this end	Minimum width	Minimum Area
Low Rise	less than 7	6	80%**	65%	2.3m	2.3m	-	2.3m	2.3m	5 Sq.m
	7 less than 15	6	65%	65%	3.0m	3.0m	-	3.0m	3.0m	9 Sq.m
Inter Mediate Rise	15 less than 30	12	65%	65%	4.0m	4.0m	1.0m and 3.0m	4.0m	4.0m	16 Sq.m
Middle Rise	30 less than 50	20	65%	65%	4.0m	5.0m	3.0m both side	5.0m	5.0m	25 Sq.m
High Rise	50 less than 75	30	50%***	50%***	5.0m	6.0m	4.0m both side	6.0m	6.0m	36 Sq.m
	75 and above	Above 40m	50%***	50%***	5.0m	6.0m	5.0m both side	6.0m	6.0m	****

NLV - Natural Light & Ventilation
Building Height - Height between access road level to roof top or roof level (Including parking floors).
* Where no Plot Coverage specified under the zoning regulations.
** The entire development is for non-residential activities.
*** 65% plot coverage can be allowed only for the podium level not exceeding 20% of the tower height or 12 floors which ever is less.
**** Minimum area shall be increased by 1 Sq.m for every additional 3m height.

Source: UDA,2021

7.4. Common Guidelines for Planning Area

The general guidelines applicable to all zones in addition to the rules and Guidelines introduced for each of the proposed zones as follows.

- 7.4.1. These guidelines apply to the entire area within the administrative limits of the Kelaniya Pradeshiya Sabha area which has been declared as an Urban Development Area in the Extraordinary Gazette Notification No. 1171/10 and 13.02.2001 under Section 3 of the Urban Development Authority Act No. 41 of 1978.
- 7.4.2. In addition to the provisions of this zoning plan, the Planning and Development Regulations applicable to any development work is regulated by the Gazette Notification No 2235/54 dated 08th July 2021. The said legalized Planning and Development Regulations also apply to the Kelaniya Pradeshiya Sabha planning area.
- 7.4.4. As per the zoning plan, the UDA is the final decision making authority the approval for any use not mentioned in permissible uses category.
- 7.4.5. The maximum floor area for each development activity is determined by a mathematical equation and it has described in chapter 02 under the Planning and Building Guidelines. The UDA has the power in determining the total area of the land to be approved for development. This regulation does not apply to development-controlled zones. Identified special Guidelines apply to control development based on site specificity.
- 7.4.6. Regarding the first land lots adjoining a boundary of two zones at either side, the developer can develop the land as per the permissible uses allowed in either of adjoining zones. In here, this condition is applicable considering either the first lot or the area falling within 100m buffer. The applicant has the right to decide the proposed development based on Zoning Factor. Further, this regulation is not applicable for Special Eco-conservation Zone.
- 7.4.7. All planning zones are subject to the Acts, Gazette Notifications and Circulars issued by other state agencies.
- 7.4.8. When conserving, rehabilitating or modernizing any of the buildings or places with archaeological importance, such developments should be in accordance with the recommendations given by a committee appointed by UDA with the representation of other stakeholder agencies.
- 7.4.9. Boundary walls exceeding 3 feet height are not allowed within these areas, and any construction which at as visual or physical barricade between access roads and waterfronts will not be approved.
- 7.4.10. Any building which will use solar power as energy solutions, additional 5% of either relevant FAR or of plot coverage will be granted as decided by the Authority.

- 7.4.11. Any development activity within the area which has identified by the Department of Archeology as an Archaeological Sites, clearance and recommendation should be obtain by the Department of Archeology.
- 7.4.12. All low-lying lands and paddy lands, water retention and detention areas included in proposed Wetland Management Plan should be in accordance with the planning and building Guidelines of Western Province Wetland Management Plan Accordingly when referring the Guidelines in every sub zone.
- 7.4.13. When a particular land plot is located adjacent to a certain waterfront, if the remaining open space left excluding the built-up plot coverage is open and used to provide public access to the particular waterfront, the developer will be granted with an additional 10% of relevant FAR as a development promotional provision.
- 7.4.14. The facades and backyards of all buildings should be well-maintained as it suits with particular waterfront development.
- 7.4.15. All developments adjoining waterfronts should be accompanied with waste water management plan and waste water management should be in compliance with Guidelines of Central Environmental Authority.
- 7.4.16. When constructing buildings in waterfront development projects, $\frac{1}{4}$ of land width should be arranged as the waterfront can be viewed from the access road. Where there are several land plots with the access road & waterfront areas; buildings on other lands should be designed in order to maintain $\frac{1}{4}$ of open space above the width of the land. (ground floor).
- 7.4.17. If the water from open space of any development activity is open for the public, permission for the maximum 20% of floor area will be granted with the relevant inspections.
- 7.4.16. Landscape Plans should be submitted when submitting building plans which are in association with waterfronts for approval.
- 7.4.18. Buildings coming under waterfront developments should be designed and constructed as it suits with the surrounding environment. The building colours, and materials (non-reflective materials) should be carefully selected as it suits with the surrounding environment.
- 7.4.19. Regarding a building adjoining a particular street dominated fully or partially with shopping and commercial buildings, the façade of the building should be designed with specified characteristics and should have an arcade of specified width that will be bound to the edge of the façade and shall be exceeding four stories as specified by the Authority. Regarding such development approval, the Authority has the power to release any of the other Guidelines and requirements.
- 7.4.20. The special development project areas and special development guide plans areas will have separate Guidelines as per the relevant plans and projects.

- 7.4.21. The authority has a power to release and decide the building regulation for low income settlements regarding the relevant Kelaniya PS area .
- 7.4.22. When constructing, a new religious building, approval should obtain from the relevant Ministry of Religious Affairs and the relevant Divisional Secretary. Also, religious exhibitions should be held with the approval of the Divisional Secretary. Permission will not be granted for the construction of various religious statues, crosses and other signs within the building line and reservation, junctions and road sides in the planning boundary. When constructing any new religious building, consent of the sixty six percent (66%) of people who are in within 0.5 Km radius from the relevant place should obtain by the relevant Grama Niladharies and submitted to the relevant Divisional Secretariat.
- 7.4.23. Permission will not be granted for constructing boundary wall within the building line of RDA, PRDA and Local Authority roads and approval will be considered for plans that are designed with a transparent fence or similar system to replace the boundary walls with minimal space required to widen access.
- 7.4.24. Permission will be considered to continue the existing not permissible uses in proposed zones and permission will not granted for expansion or renewal of existing not permissible uses.
- 7.4.25. The authority has a power to declared any area as a Special Project Area, Redevelopment Area, Special Housing Project Area, Central Commercial Area, Visionary Area, Conservation Area, Cultural Area or any other area where the Authority deems appropriate.
- 7.4.26. The Authority may use, restrict or prohibit the use of land areas for the purpose of constructing any particular building in the areas specified in above 22, easing the restrictions imposed by these Acts, or imposing other rules or Guidelines for the purposes of the area.
- 7.4.27. Boundary of the Zone in zoning plan has mention in Google Earth Coordinate point (WGS_1984).
- 7.4.28. Permission will not be granted for Liquor shops, clubs and Guest Houses in within the Sacred Heritage Zone and minimum 500 M from the religious places and schools will be allowed the Liquor shops, clubs and Guest Houses for other zones.
- 7.4.29. If any development activity within the low-lying lands and paddy lands, water retention and detention areas not included in proposed Wetland Management Plan or Proposed Public Outdoor Recreation Space Plan should obtain the clearance from the authority.
- 7.4.30. The identified project areas under the Proposed Public Outdoor Recreation Space Plan should be use for only that purpose.
- 7.4.31. To obtain the recommendation of the Central Environmental Authority for classification "A" and "B" in the setting up of prescribed industries for which the EPL is to be obtained under the National Environmental

Act No. 1533/16 and the Gazette Extraordinary dated 25.01.2008. Also, recommendation should be obtained from the relevant Local Authority Environmental Committee or Central Environmental Authority for category "C".

7.4.32. A cemetery shall act in accordance with the cemetery ordinance when constructing a building or developing such a building.

7.4.33. Special Guidelines for Wetlands in Kelaniya PS. This wetland zoning is valid only for the all wetlands in the Kelaniya PS Area.

7.4.33.1. Flood storage capacity shall be maintained as specified by the Sri Lanka Land Development Corporation (SLLDC) in co-ordination with the other relevant agencies of the appendix 01. Increased storm water run-off owing to increase in built-up areas and owing to expected extreme climatic events as a result of global warming and climate change shall be taken into account.

7.4.33.2. Clearance shall be obtained from the agencies of No. 01, 03, 04, 05 and 09 mentioned in appendix 01 prior to development of low-lying lands/ abandoned paddy lands and paddy lands. Where necessary clearance or approval of the other relevant agencies mentioned in appendix 01 shall also be obtained when the ownership of wetland is delegated to them by an act.

7.4.33.3. The environmental clearance or Environmental Protection License (EPL) shall be obtained for any development which effects wetland environment from no.03, 05 agencies of the appendix 01 and shall be renewed annually.

7.4.33.4. Recommendation / Approval (final clearance certificate) of No. 01 agency of appendix 01 shall be annually renewed as per the decision of planning committee.

7.4.33.5. Canal reservation of no.1662/17 published by the gazette notification dated 14.01.2010 of the agency No.01 and reservation of reservoirs of agency No.02 at the appendix 01 shall be maintained.

7.4.33.6. In general, there shall not be any construction within water bodies and waterways which disturbs the water retention and water flow. But exceptions may be made for focal features/buildings, piers, picnic shelters, cabanas on stilts, fishing decks, boardwalks, etc. in keeping with a project masterplan or design guide plan approved by the UDA, not compromising drainage or flood detention capacity. Recommendation and Approval shall be obtained from relevant agencies of No. 01 & 02-22 of the appendix 01.

7.4.33.7. Areas of special ecological interest shall be preserved and in such areas no vegetation or animals except invasive species of plants and animals shall be removed.

7.4.33.8. All permitted buildings shall be designed according to the Green Building Concept.

7.4.33.9. Alternative places shall be established for decrease flood storage capacity and the other impacts of environmental services when practicing Permitted uses in wetland where flood storage capacity is important. Approval shall be obtained from the relevant agencies of the appendix 01.

7.4.33.10 In any wetland areas permitted for filling under the no. 01 agency of appendix 01, sustainable storm water drainage systems should be used. Approval shall be obtained from the CEA for materials to be used for wetland filling.

7.4.33.11. Areas of outstanding landscape/cultural/historical value shall be conserved.

7.4.33.12. Legal public footpaths and public bathing wells shall be preserved or replaced in suitable nearby locations.

7.4.33.13. The services of relevant qualified professionals shall be obtained by developers for planning, design and supervision, as necessary.

7.4.33.14. All areas shall be preserved where fish and other aquatic animal's breed.

7.4.33.15 In general, waste dumping shall not be permitted (Residential, Institutional, Commercial, Industrial, E-waste and Clinical waste) in to wetlands.

7.4.33.16. Release of waste water to wetlands is not allowed. Treated water with the approval of CEA shall only be permitted to release to the wetland areas.

These guidelines should be included as conditions in the licenses issued by the institutions mentioned in the schedule regarding the development activities in the wetland areas and the violation of those conditions will lead to the cancellation or imposition of penalties.

Schedule no – 01

1. Sri Lanka Land Development Cooperation
2. Department of Irrigation
3. Central Environmental Authority
4. UDA
5. Kelaniya PS
6. Department of Forest Conservation
7. Department of Wildlife Conservation
8. National Building Research Organization
9. Department of Agrarian Development
10. Department of Archaeology
11. National Aquatic Resources Research and Development Agency
12. Geological Survey and Mines Bureau

13. Western Provincial Council
14. National Water Supply & Drainage Board
15. National Aquaculture Development Authority
16. Ceylon Electricity Board of Sri Lanka
17. Building Department of Sri Lanka
18. Road Development Authority
19. Department of Fisheries and Aquatic Resources
20. Sri Lanka Navy
21. Gampaha District Secretariat
22. Kelaniya Divisional Secretariat

08

Chapter



Zonning Guidelines

Chapter 08 Zoning Guidelines

8.1. High Density Commercial Zone

8.1.1. Zoning Guidelines and Permissible Uses for High Density Commercial Zone

Table 8.1 High Density Commercial Zoning Guidelines

(a.)	Zoning Definition	Priority is given to encourage further high-density vertical commercial development in the Kiribathgoda area, which currently serves as a major shopping center. Here, the subdivision is discouraged and a high density environmentally friendly urban environment is expected. The region commercial and service requirements for the daily commuters and residential population to provide a high -density zone that the will and the environment are expected to harmonize with conservation.
(b.)	Zone boundaries (Coordinates)	Refer annexure 46.1
(c.)	Zoning Factor	2.92
(d.)	Approved height limits	The approved height limit is determined by the zone factor.
(e.)	Approved plots coverage's	i. Non- Residential - 60% ii. Residential - 65%
(f.)	General Terms Related to the Zone	<p>The minimum lot size of the land sub division is 10 perches.</p> <p>The development activities with the Land Amalgamation is expected to promote within this area for the quality Commercial development.</p> <p>If any building of the commercial purpose should consist with four or more than four floors</p> <p>2.5m width of strip in front of any development which face to RDA or PRD road should allocated for arcade development within 1 km radius around the Kiribathgoda Town Centre. And additional two times of floor area as allocated land is given as a 'Fare Share'.</p> <p>A minimum area of 5% of the proposed land should be reserved for green cover.</p> <p>Any government, semi-government of private institutional development should be consisting with the 'Green Concept'.</p>

Permissible Uses

Table 8.2 Permissible uses in High Density Commercial Zone

No.	Permissible Uses	Minimum Extent of the Land (Sq.m)	Achievable Maximum Floor area
(a.) Commercial			
I.	Shops	10	According to the Schedule 1
I.	Supermarkets	20	
II.	Shopping Malls	20	
III.	Restaurants /Cafeterias	10	
IV.	Open Markets	40	
V.	Pharmacies	10	
VI.	Laboratory Services and Collection Centers	10	
VII.	Wholesale stores	10 / less than 100 m2	
VIII.	Customer Service Centers	10	
IX.	Meat and fish stalls	10	
X.	Liquor outlets	10	
XI.	Funeral halls	20 / Hospital access only	
XII.	Funeral halls with ceremony halls	40 / Hospital access only	
XIII.	Hardware	40	
XIV.	Filling stations	40	
XV.	Filling stations and vehicle service centers	60	
XVI.	Filling stations and malls	60	
XVII.	Gas stations and electric charging stations	40	
XVIII.	Communication towers on buildings	10/ Permits are issued under Development Regulation No 19.	
XIX.	Communication towers	12/ Permits are issued under Development Regulation No 19.	
XX.	Multi-storied Vehicle Park	20	
XXI.	Open Vehicle Park	40	
XXII.	Vehicle Showrooms	20	
(b.) Residential			
I.	Housing units	10	
II.	Apartment complexes	20 / ground floor – commercial	
III.	Hostels	10	
IV.	Quarters	10	
V.	Child Care Centers	20	
(c.) Health			
I.	Hospitals	80	
II.	Medical Treatment Centers	10 / less than 50 m2	
III.	Medical Consulting Service Centers	20	
IV.	Child and Maternity Clinics	20	
V.	Animal Hospital	40	
VI.	Veterinary Clinics and Treatment Centers	20	
VII.	Ayurvedic Medical Centers	20	
(d.) Institutions			

I.	Offices	20 / except ground floor	
II.	Office Complexes	20	
III.	Professional Offices	20 / except ground floor	
IV.	Banks, Insurance & Financial Institutions	20	
V.	Automated Money Transfer Centers (ATM)	As per the recommendations of the relevant institutions	
(e.) Social services and public amenities			
I.	Community Development Centers	20	
II.	Crematoriums	40	
(f.) Tourism			
I.	Resorts	40	
II.	Guest houses	10	
III.	Rooms	20	
IV.	City Hotels	20	
V.	Tourist Information Centers	10	
VI.	Ayurvedic Panchakarma Center	20	
(g.) Manufacturing industry			
I.	Homestead Industries	10 /(Permission is granted only for crafts and traditional industries that are not harmful to the environment.)	
(f.) Service Industries			
I.	Vehicle Service Centers		
II.	Vehicle Repair Centers / Spray Painting Centers		
III.	Taxi Service Centers		
IV.	Laundries		
V.	Grinding & Rice Mills		
VI.	Welding Shops/ Lathe workshops		
VII.	Electronic Equipment Repair Centers		
(g.) Utility Services			
I.	Railway and Bus Terminals	Depends on the project	
(h.) Leisure and Recreational Services			
I.	Pocket Park	Depends on the project	
II.	Mini Park		
III.	Local Park		
IV.	Community Park		
V.	Town Park		
VI.	Central Urban Park/City Park		
VII.	Regional Park		
VIII.	Linear Park		
IX.	Indoor Sports Stadiums	40	
X.	Theaters	40	
XI.	Clubs	20	
XII.	Art Galleries / Museums	20	
XIII.	Open Theaters	Depends on the project	

The definitions for all these uses are given in Annex 47

8.2. High Density Higher Education Zone

8.2.1. Zoning Guidelines and Permissible Uses for High Density Higher Education Zone

Table 8.3 High Density Higher Education Zoning Guidelines

a.)	Zoning Definition	It is expected to promote higher education related uses based on the Kelaniya University and this area should be develop with the 'green concept'.
(b.)	Zone boundaries (Coordinates)	Refer Annexure 46.2
(c.)	Zoning Factor	2.65
(d.)	Approved height limits	The approved height limit is determined by the zone factor.
(e.)	Approved plots coverage's	Non-Residential - 50% Residential - 65%
(f.)	General Terms Related to the Zone	Minimum extent of the land subdivision is 10 perches. If change the use of existing Residential or Industrial use to Educational Institution or Hostel, 50% from the fees of change of use will be released. Any development should be covered with 10% or more of green cover from the total land extent. Any development activity should be accompanied with 'Green Concept'.

Permissible uses

Table 8.4 Permissible uses in High Density Higher Educational Zone

No.	Permissible uses	Minimum Extent of the land (P)	Achievable maximum floor area
Residential			According to the shedule 1
I.	Housing Units	10	
II.	Apartment Complex (Housing)	20	
III.	Hostels	10	
IV.	Quarters	10	
V.	Child Care Centers	20	
Health			
i.	Medical Centers	10	
ii.	Medical Consulting & Channeling Service Centers	20	
iii.	Child and Maternity Clinics	20	
iv.	Veterinary Clinics and Treatment Centers	20	
v.	Ayurvedic Medical Centers	20	
Educational			

i.	Early Childhood Development Centers	20	
ii.	Primary Education Centers	198 p (0.5 he)	
iii.	Secondary Education Centers	593 p (1.5 he)	
iv.	Tertiary Education Centers	40	
v.	Technical Collages/ Vocational Training Centers.	40	
vi.	Research and Development Centers	40	
vii.	Private Tuition Classes	20	
viii.	Art Centre / Dance Academy	.20	
Institutional			
i.	Office	10	
ii.	Office Complex	40	
iii.	Professional Office	10	
iv.	Banks, Insurance & Financial Institutions	20	
v.	Automated Money Transfer Centers (ATM)	Decisions are made subject to the recommendations of the relevant institutions	
Social services and public amenities			
i.	Community Development Centers	20	
ii.	Social and Cultural Centers	20	
iii.	Religious centers	80	
iv.	Auditoriums and Conference Halls	60	
v.	Libraries	20	
Commercial			
i.	Shops	10	
ii.	Supermarkets	20	
iii.	Shopping Malls	20	
iv.	Restaurants /Cafeterias	10	
V	Open Markets	40	
vi.	Pharmacies	10	
vii.	Laboratory Services and Collection Centers	10	
Viii.	Wholesale stores	10/ less than 100m2	
ix.	Customer Service Centers	10	
x.	Meat and fish stalls	10	
xi.	Hardware Stores	40	
xii.	Filling stations	40	
xiii.	Filling stations with vehicle service centers	60	
xiv.	Filling stations with shopping complexes	60	
xv.	Gas stations & Electric Charging Stations	40	
xvi.	Communication towers on buildings	10/ Permits are issued under Development Regulation No 19.	
xvii.	Communication towers	12/ Permits are issued under Development Regulation No 19.	
xviii.	Multi-storied Vehicle Park	20	
xix.	Open Vehicle Park	40	
xx.	Vehicle Showrooms	20	

Tourism		
i.	Resorts	40
ii.	Guest Houses	10
iii.	Tourist Hotels	40
iv.	City Hotel	20
v.	Tourist Information Centers	10
vi.	Ayurvedic Panchakarma Center	20
vii.	Cabana hotels	40
Manufacturing Industries		
	Homestead Industries	10 / Permission is granted only for crafts and traditional industries that are not harmful to the environment
Service Industries		
i.	Vehicle Service Centers	20
ii.	Taxi Service Centers	20
iii.	Laundries	10
iv.	Electronic Equipment Repair Centers	10
Utility Services		
i.	Railway and Bus Terminals	Depends on the project
Public Open Spaces & Recreation Facilities		
i.	Pocket Park	Depends on the project
ii.	Mini Park	
iii.	Local Park	
iv.	Community Park	
v.	Town Park	
vi.	Central Urban Park/City Park	
vii.	Regional Park	
viii.	Linear Park	
ix.	Indoor Sports Complexes	40
x.	Theaters	40
xi.	Art Galleries / Museums	20
xii.	Open Air Theaters	Depends on the project

The definitions for all these uses are given in Annex 47

8.3 High Density Logistic Zone

8.3.1. Zoning Guidelines and Permissible Uses for High Density Logistic Zone

Table 8.5 High Density Logistic Zoning Guidelines

(a.)	Zoning Definition	It is expected to provide logistic and industry-based service facilities within this proposed zone while combining with the potential of the nearby railway stations and expressway interchange. It will prevent the uneven distribution of industries toward the Kelaniya sacred area.
(b.)	Zone boundaries (Coordinates)	Refer Annexure 46.3
(c.)	Zoning Factor	Sub-Zone 1 - 1.81 Sub-Zone 2 - 1 Sub-Zone 3 - 1.25 Sub-Zone 4 - 1
(d.)	Approved height limits	The approved height limit is determined by the zone factor.
(e.)	Approved plots coverage's	Residential – 65% Non-Residential – 65% Industry /Warehouse and related uses – 70%
(f.)	General Terms Related to the Zone	<p>Minimum lot size of land sub division should be,</p> <p>Residential - 10 perches Non-Residential - 20 perches Industry /Warehouse and related uses – 40 perches</p> <p>Redevelopment, Improvement or renewal of existing residential use is encouraged only it expected to provide industry-oriented hostel facilities. 50% for the UDA parking Regulation will be released for the Light Vehicle Parking Space of Industrial uses.</p> <p>Minimum road width for any industrial uses should be 30 feet (9m). and if any industrial or related development activity is in the case of 9m – 7m road width, permission may be given to consider the land disposal to meet the proposed road width.</p> <p>3m of tree line buffer should be maintain around any industrial or warehouse activity and relevant landscape management plan should be submitted with the application.</p> <p>Any permissible development activity should be done without encroaching the existing green cover and any industry or related development activity should maintain a 15% of green cover.</p> <p>For all constructions, within 70 M buffer of the Colombo – Katunayake expressway should be compatible with the Development Regulation Circulation no. 26 (Land Use Planning for the Katunayake Expressway Corridor (from January 2013)).</p>

		<p>If any industrial development activity which face to a Water front or a Wetland (within 100m -200m), the Waste Water Management Plan should submit with the permission given by the Central Environmental Authority.</p> <p>If any industrial-based construction which facing a water source or a wetland, boundary wall is not allowed and permission will be granted only for the transparent fence.</p>
--	--	---

Permissible uses

Table 8.6 Permissible uses in High Density Logistic Zone

No.	Permissible uses	Minimum Extent of the land (P)	Achievable maximum floor area
Residential			According to the shedule 1
i.	Housing Units	6	
ii.	Hostels	10/ relevant to Warehouse and industrial	
iii.	Quarters	6	
iv.	Child Care Centers	20	
Health			
i.	Hospitals	80	
ii.	Medical Centers	6	
iii.	Medical Consulting & Channeling Service Centers	20	
iv.	Child and Maternity Clinics	20	
v.	Animal Hospitals	40	
vi.	Veterinary Clinics and Treatment Centers	20	
vii.	Ayurvedic Medical Centers	20	
Educational			
i.	Tertiary Education Centers	40	
ii.	Technical Collages/ Vocational Training Centers.	40	
iii.	Research and Development Centers	40	
iv.	Art Centre / Dance Academy	20	
Institutional			
i.	Office	6	
ii.	Office Complex	40	
iii.	Professional Office	6	
iv.	Banks, Insurance & Financial Institutions	20	
v.	Automated Money Transfer Centers (ATM)	As per the recommendations of the relevant institutions	
Social services and public amenities			
i.	Community Development Centers	20	
ii.	Social and Cultural Centers	20	
iii.	Auditoriums and Conference Halls	60	
iv.	Libraries	20	
v.	Crematoriums	40	

Commercial		
i.	Shops	6
ii.	Supermarkets	20
iii.	Shopping Malls	20
iv.	Restaurants /Cafeterias	6
v.	Open Markets	40
vi.	Pharmacies	6
vii.	Laboratory Services and Collection Centers	6
viii.	Wholesale stores	20
ix.	Warehouses	40
x.	Customer Service Centers	6
xi.	Meat and fish stalls	6
xii.	Liquor /Wine Stores	6
xiii.	Funeral Hall	20
xiv.	Funeral Hall with Reception Halls	40
xv.	Hardware Stores	40
xvi.	Filling stations	40
xvii.	Filling stations with vehicle service centers	60
xviii.	Filling stations with shopping complexes	60
xix.	Gas stations & Electric Charging Stations	40
xx.	Communication towers on buildings	06/ Permits are issued under Development Regulation No 19.
xxi.	Communication towers	12/ Permits are issued under Development Regulation No 19.
xxii.	Multi-storied Vehicle Park	20
xxiii.	Open Vehicle Park	40
xxiii.	Vehicle Showrooms	20
Tourism		
i.	Resorts	40
ii.	Guest Houses	10
iii.	Lodges	20
iv.	Tourist Information Centers	6
v.	Ayurvedic Panchakarma Center	20
vi	Cabana hotels	40
Manufacturing Industries		
i.	Metal Products & foundries related extraction industries	20
ii.	Oil refineries, petroleum-based chemicals & distillation industries	40
iii.	Chemicals, polythene, plastics, rubber & glass-based industries	40
iv.	Cement, concrete and ceramic based products industries	40
v.	Clay products industries	20
vi.	Natural fiber-based manufacturing industries	20
vii.	Textile, Clothing & Leather Products Industries	40

viii.	Electrical & Electronics equipment related industries	40	
ix.	Heavy Machinery & Assembly industries	40	
x.	Paper Products and Printing Industries	40	
xi.	Wood / Wood Products & Furniture Manufacturing Industries	40	
xii.	Food and non-alcoholic beverage industries	40	
xiii.	Alcohol / local pharmaceuticals, spirits & extracts	40	
xiv.	Recycling activities related industries	40	
xv.	Industrial Infrastructure Facilities Centers	40	
xvi.	Permits are granted subject to the recommendations of the CEA for the above-mentioned industrial practices.		
xvii.	Homestead Industries	6	
Service Industries			
i.	Vehicle Service Centers	20	
ii.	Vehicle Repair Centers / Spray Painting Centers	40	
iii.	Taxi Service Centers	20	
iv.	Laundries	06/	Permission is granted subject to the recommendations of the CEA.
v.	Grinding & Rice Mills	10	
vi.	Welding Shops/ Lathe workshops	10	
vii.	Electronic Equipment Repair Centers	6	
Utility Services			
i.	Railway and Bus Terminals		Depends on the project
Public Open Spaces & Recreation Facilities			
	Pocket Park		Depends on the project
ii.	Mini Park		
iii.	Local Park		
iv.	Community Park		
v.	Town Park		
vi.	Central Urban Park/City Park		
vii.	Regional Park		
viii.	Linear Park		
ix.	Indoor Sports Complexes	40	
x.	Theaters	40	
xi.	Clubs	20	
xii.	Art Galleries / Museums	20	
xiii.	Open Air Theaters		Depends on the project

The definitions for all these uses are given in Annex 47.

8.4 High Density Residential Zone

8.4.1. Zonning Guidelines and Permissible Uses for High Density Residential Zone

Table 8.7 High Density Residential Zoning Guidelines

(a.)	Zoning Definition	It is expected to meet the needs of the residential population, by providing residential accommodation for permanent residences and temporary workers who working in adjoining industrial areas.
(b.)	Zone boundaries (Coordinates)	Refer Annexure 46.4
(c.)	Zoning Factor	Sub-Zone 1 - 1 Sub-Zone 2 – 1.46
(d.)	Approved height limits	The approved height limit is determined by the zone factor.
(e.)	Approved plots coverage's	Sub zone 1 Residential – 65% Non-Residential – 65% Industry /Warehouse and related uses – 70% Sub zone 2 Residential – 65% Non-Residential – 50%
(f.)	General Terms Related to the Zone	Any permissible development activity should be done without encroaching the existing green cover and any industry or related development activity should maintain a 15% of green cover. Permission will be granted for less than 100sq.m of home-based manufacturing industrial uses. Minimum road width for the industrial development activity should be 7 meters wall is not allowed and permission will be granted only for the transparent fence.

Permissible uses

Table 8.8 Permissible uses in High Density Residential Zone

No	Permissible uses	Minimum Plot Size (Perches) / Special	Achievable maximum floor area	
Residential				
i.	Housing Units	06	According to the shedule 1	
ii.	Apartment Complex (Housing)	20		
iii.	Hostel	20		
iv.	Quarters	10		
v.	Adult / Disabled Homes	20		
vi.	Children's Home	20		
vii.	Child Care Centers	20		
Health				
i.	Medical Centers	10		
ii.	Medical Consulting & Channeling Service Centers	20		
iii.	Child and Maternity Clinics	20		
iv.	Veterinary Clinics and Treatment Centers	20		
v.	Ayurvedic Medical Centers	20		
Educational				
i.	Early Childhood Development Centers	20		
ii.	Primary Education Centers	198 (0.5 he.)		
iii.	Secondary Education Centers	593 (1.5he.)		
iv.	Technical Collages/ Vocational Training Centers.	40		
v	Research and Development Centers	40		
vi.	Private Tuition Classes	20		
vii.	Art Centre / Dance Academy	20		
Institutional				
i.	Office	06		
ii.	Professional Offices	06		
iii.	Banks, Insurance & Financial Institutions	20		
iv.	Automated Money Transfer Centers (ATM)	Decisions are made subject to the recommendations of the relevant institutions		
Social services and public amenities				
i.	Community Development Centers	20		
ii.	Social and Cultural Centers	20		
iii.	Religious centers	80		
iv.	Library	20		
v.	Crematoriums	40		
Commercial				
i.	Shops	06/ less than 100 m2		
ii.	Supermarkets	20		
iii.	Shopping Malls	20		
iv.	Restaurants /Cafeterias	06		
v.	Open Markets	40		
Vi	Pharmacies	06		
vii.	Laboratory Services and Collection Centers	06		
viii.	Wholesale stores	10		
ix.	Customer Service Centers	06		
x.	Meat and fish stalls	06		
xi.	Liquor /Wine Stores	06		
xii.	Funeral Hall	20		
xiii.	Funeral Hall with Reception Halls	40		

xiv.	Hardware Stores	40	
xv.	Filling stations	40	
xvi.	Filling stations with vehicle service centers	60	
xvii.	Filling stations with shopping complexes	60	
xviii.	Gas stations & Electric Charging Stations	40	
xix.	Communication towers	12/ Permits are issued under Development Regulation No 19.	
xx.	Multi-storied Vehicle Park	20	
xxi.	Open Vehicle Park	40	
Tourism			
i.	Resorts	40	
ii.	Guest Houses	10	
iii.	Lodges	20	
iv.	City Hotel	20	
v.	Tourist Information Centers	06	
vi.	Ayurvedic Panchakarma Center	20	
vii.	Cabana hotels	40	
Manufacturing industry			
i.	Clay products industries	20	
ii.	Natural fiber-based manufacturing industries	20	
iii.	Textile, Clothing & Leather Products Industries	40	
iv.	Wood / Wood Products & Furniture Manufacturing Industries	40	
v.	Food and non-alcoholic beverage industries	15	
vi	Homestead Industries	06/ workers 5 or less	
Service Industries			
i.	Vehicle Service Centers	20	
ii.	Taxi Service Centers	20	
iii.	Laundries	06	
iv.	Grinding & Rice Mills	10	
v.	Electronic Equipment Repair Centers	06	
Utility Services			
i.	Railway and Bus Terminals	Depends on the project	
Public Open Spaces & Recreation Facilities			
i.	Pocket Park	Depends on the project	
ii.	Mini Park		
iii.	Local Park		
iv.	Community Park		
v.	Town Park		
vi.	Central Urban Park/City Park		
vii.	Regional Park		
viii.	Linear Park		
ix.	Indoor Sports Complexes	40	
x.	Theaters	40	
xi.	Art Galleries / Museums	20	
xii.	Open Air Theaters	Depends on the project	

The definitions for all these uses are given in Annex 47

8.5. Moderate Density Residential Zone

8.5.1. Zoning Guidelines and Permissible Uses for Moderate Density Residential Zone

Table 8.9 Moderate Density Residential Zoning Guidelines

(a.)	Zoning Definition	This zone which closer to the High density commercial, high density higher education and logistic zones, it expected to promote residential uses with moderate density of distribution.
(b.)	Zone boundaries (Coordinates)	Refer Annexure 46.5
(c.)	Zoning Factor	0.76
(d.)	Approved height limits	The approved height limit is determined by the zone factor.
(e.)	Approved plots coverage's	Residential – 65% Non-Residential – 60%
(f.)	General Terms Related to the Zone	<p>Minimum lot size of the land sub division is 6 perches.</p> <p>10% of additional floor area is provided for any permissible development activity which followed the concept of 'Green Building'.</p> <p>Permission will be granted for less than 100sq.m of home-based manufacturing industrial uses.</p> <p>Minimum road width for the industrial development activity should be 7 M.</p> <p>Kelani river front should be open for the public and if any development activity in an adjacent land of Kelani river north bund access roads from Colombo – Biyagama Road should be allocated minimum 10 feet for access road.</p>

Permissible uses

Table 8.10 Permissible uses in Moderate Density Residential Zone

No	Permissible Uses	Minimum Plot Size (Porches) / Special	Achievable maximum floor area
Residential			According to the shedule 1
i.	Housing Units	06	
ii.	Apartment Complex (Housing)	20	
iii.	Hostel	06	
iv.	Quarters	06	
v.	Adult / Disabled Homes	20	
vi.	Children's Home	20	
vii.	Child Care Centers	20	
Health			
i.	Medical Centers	06	
ii.	Medical Consulting & Channeling Service Centers	20	
iii.	Child and Maternity Clinics	20	
iv.	Animal Hospitals	40	
v.	Veterinary Clinics and Treatment Centers	20	
vi.	Ayurvedic Medical Centers	20	
Educational			
i.	Early Childhood Development Centers	20	
ii.	Primary Education Centers	198 (0.5 he.)	
iii.	Secondary Education Centers	593 (1.5 he.)	
iv.	Tertiary Education Centers	40	
v.	Technical Collages/ Vocational Training Centers.	40	
vi.	Research and Development Centers	40	
vii.	Private Tuition Classes	20	
viii.	Art Centre / Dance Academy	20	
Institutional			
i..	Office	06	
ii.	Office Complexes	40	
iii.	Professional Offices	06	
iv.	Banks, Insurance & Financial Institutions	20	
v.	Automated Money Transfer Centers (ATM)	Decisions are made subject to the recommendations of the relevant institutions	
Social services and public amenities			
i.	Community Development Centers	20	
ii.	Social and Cultural Centers	20	
iii.	Religious centers	80	
iv.	Auditoriums and Conference Halls	60	
v.	Library	20	
vi.	Crematoriums	40	
Commercial			
i.	Shops	06	
ii.	Supermarkets	20	

iii.	Shopping Malls	20
iv.	Restaurants /Cafeterias	06
v.	Open Markets	40
vi.	Pharmacies	06
vii.	Laboratory Services and Collection Centers	06
viii.	Wholesale stores	10
ix.	Customer Service Centers	06
x.	Meat and fish stalls	06
xi.	Liquor /Wine Stores	06
xii.	Funeral Hall	20
xiii.	Funeral Hall with Reception Halls	40
xiv.	Hardware Stores	40
xv.	Filling stations	40
xvi.	Filling stations with vehicle service centers	60
xvii.	Filling stations with shopping complexes	60
xviii.	Gas stations & Electric Charging Stations	40
xix.	Communication towers on buildings	06/ Permits are issued under Development Regulation No 19.
xx.	Communication towers	12/ Permits are issued under Development Regulation No 19.
xxi.	Multi-storied Vehicle Park	20
xxii.	Open Vehicle Park	40
xxiii.	Vehicle Showrooms	20
Tourism		
i.	Resorts	40
ii.	Guest Houses	10
iii.	Lodges	20
iv.	Tourist Hotels	40
v.	City Hotel	20
vi.	Tourist Information Centers	06
vii.	Ayurvedic Panchakarma Center	20
viii.	Cabana Hotels	40
Manufacturing industry		
i.	Clay products industries	20/ Less than 25 employees/ Permits only for industries that are not harmful to the environment
ii.	Natural fiber-based manufacturing industries	20/ Less than 25 employees/ Permits only for industries that are not harmful to the environment
iii.	Textile, Clothing & Leather Products Industries	40/ Less than 25 employees/ Permits only for industries that are not harmful to the environment
iv.	Wood / Wood Products & Furniture Manufacturing Industries	40/ Less than 25 employees/ Permits only for industries

		that are not harmful to the environment
v.	Food and non-alcoholic beverage industries	40/ Less than 25 employees/ Permits only for industries that are not harmful to the environment
vi.	Homestead Industries	10 / Less than 10 employees
Service Industries		
i.	Vehicle Service Centers	40
ii.	Vehicle Repair Centers / Spray Painting Centers	40
iii.	Taxi Service Centers	20
iv.	Laundries	06/ Permission is granted subject to the recommendations of the CEA.
v.	Grinding & Rice Mills	10
vi.	Welding Shops/ Lathe workshops	10
vii.	Electronic Equipment Repair Centers	06/ Permission is granted subject to the recommendations of the CEA.
Utility Services		
i.	Railway and Bus Terminals	Decisions are made subject to the recommendations of the relevant institutions
Public Open Spaces & Recreation Facilities		
i.	Pocket Park	Depends on the project
ii.	Mini Park	
iii.	Local Par	
iv.	Community Park	
v.	Town Park	
vi.	Central Urban Park/City Park	
vii.	Regional Park	
viii.	Linear Park	
ix.	Indoor Sports Complexes	40
x.	Theaters	40
xi.	Clubs	20
xii.	Art Galleries / Museums	20
xiii.	Open Air Theaters	Depends on the project

The definitions for all these uses are given in Annex 47.

8.6 Low Density Residential Zone

8.6.1. Zoning Guidelines and Permissible Uses for Low Density Residential Zone

Table 8.11 Low Density Residential Zoning Guidelines

Source: Planning Team – Gampaha District

(a.)	Zoning Definition	It is expected to maintain low density development of residential land use as an adjacent zone to the Sacred Heritage Zone including Kelani temple while preventing the uneven development activities which collapse its Sacred sense.
(b.)	Zone boundaries (Coordinates)	Refer Annexure 46.6
(c.)	Zoning Factor	0.53
(d.)	Approved height limits	The approved height limit is determined by the zone factor.
(e.)	Approved plots coverage's	Residential – 65% Non-Residential – 60%
(f.)	General Terms Related to the Zone	Minimum lot size of the land sub division should be as follows, Residential - 10 perches Apartment – 20 perches Kelani river front should be open for the public and if any development activity in an adjacent land of Kelani river north bund access roads from Colombo – Biyagama Road should be allocated minimum 10 feet for access road.

Permissible Uses

Table 8.12 Permissible uses in Low Density Residential Zone

No	Permissible Uses	Minimum Plot Size (Perches) / Special	Achievable maximum floor area
Residential			According to the schedule 1
i.	Housing Units	10	
ii.	Hostel	10	
iii.	Quarters	10	
iv.	Child Care Centers	20	
Health			
i.	Medical Centers	10	
ii.	Medical Consulting & Channeling Service Centers	20	
iii.	Child and Maternity Clinics	20	
iv.	Veterinary Clinics and Treatment Centers	20	
v.	Ayurvedic Medical Centers	20	
Educational			
i.	Pre- Schools	20	
ii.	Primary Schools	198 (0.5 he)	

iii.	Secondary Schools	593 (1.5 he)
iv.	Technical Collages/ Vocational Training Centers.	40
v.	Research and Development Centers	40
vi.	Private Tuition Classes	20
vii.	Art Centre / Dance Academy	20
Institutional		
i.	Office	10
ii.	Professional Offices	10
iii.	Banks, Insurance & Financial Institutions	20
iv.	Automated Money Transfer Centers (ATM)	Decisions are made subject to the recommendations of the relevant institutions
Social services and public amenities		
i.	Community Development Centers	20
ii.	Social and Cultural Centers	20
iii.	Religious centers	80
iv.	Auditoriums and Conference Halls	60
v.	Library	20
vi.	Crematoriums	40
Commercial		
i.	Shops	10
ii.	Supermarkets	20
iii.	Shopping Malls	20
iv.	Restaurants /Cafeterias	10
v.	Open Markets	40
vi.	Pharmacies	10
vii.	Laboratory Services and Collection Centers	10
viii.	Wholesale stores	Less than 50 sq.m
ix.	Customer Service Centers	10
x.	Meat and fish stalls	10
xi.	Liquor /Wine Stores	10
xii.	Funeral Hall	20
xiii.	Funeral Hall with Reception Halls	40
xiv.	Hardware Stores	40
xv.	Filling stations	40
xvi.	Filling stations with vehicle service centers	60
xvii.	Filling stations with shopping complexes	60
xviii.	Gas stations & Electric Charging Stations	40
xix.	Communication towers on buildings	10/ Permits are issued under Development Regulation No 19.
xx.	Communication towers	12/ Permits are issued under Development Regulation No 19.
xxi.	Multi-storied Vehicle Park	20
xxii.	Open Vehicle Park	40
xxiii.	Vehicle Showrooms	20
Tourism		
i.	Resorts	40

ii.	Guest Houses	10	
iii.	Lodges	20	
iv.	City Hotel	20	
v.	Tourist Information Centers	10	
vi.	Ayurvedic Panchakarma Center	20	
Manufacturing industry			
i.	Clay products industries	20	
ii.	Natural fiber-based manufacturing industries	20	
iii.	Homestead Industries	10	
Service Industries			
i.	Vehicle Service Centers	20	
ii.	Taxi Service Centers	20	
iii.	Laundries	10	
iv.	Grinding & Rice Mills	10	
v.	Electronic Equipment Repair Centers	10	
Utility Services			
i.	Railway and Bus Terminals	Depends on the project	
Public Open Spaces & Recreation Facilities			
i.	Pocket Park	Depends on the project	
ii.	Mini Park		
iii.	Local Park		
iv.	Community Park		
v.	Town Park		
vi.	Central Urban Park/City Park		
vii.	Regional Park		
viii.	Linear Park		
ix.	Indoor Sports Complexes	40	
x.	Theaters	40	
xi.	Art Galleries / Museums	20	
xii.	Open Air Theaters	Depends on the project	
Agricultural			
i.	Livestock/ Agricultural farms with construction	40	

The definitions for all these uses are given in Annex 47.

8.7. Low Density Sacred Heritage Zone

8.7.1. Zoning Guidelines and Permissible Uses for Low Density Sacred Heritage Zone

Table 8.13 Low Density Sacred Heritage Zoning Guidelines

(a.)	Zoning Definition	It is expected to established the heritage sacred sense beyond the Kelani Temple with low density development. Approximately 500m radius from the Kelani Temple is expected to develop as emerged the sacred and heritage sense with their uniqueness.
(b.)	Zone boundaries (Coordinates)	Refer Annexure 46.7
(c.)	Zoning Factor	0.57
(d.)	Approved height limits	Maximum height is 12.5m.
(e.)	Approved plots coverage's	Residential – 65% Non-Residential – 80%
(f.)	General Terms Related to the Zone	<p>Minimum height from both calculated from zone factor and 12.5m of maximum height should be consider as the maximum height of the proposed development.</p> <p>Minimum lot size of the new land sub-division is 10 perches and existing minimum lot size of residential land sub-division is 6 perches.</p> <p>Construction of boundary wall is not allowed and permission will be granted only for the transparent fence.</p> <p>Colouring of building should be white of white mixed light colours.</p> <p>Permission will not be granted for the construction of new religious buildings and adding structures for existing religious building except Kelaniya Rajamaha Viharaya.</p> <p>Kelani river front should be open for the public and if any development activity in an adjacent land of Kelani river north bund access roads from Colombo – Biyagama Road should be allocated minimum 10 feet for access road.</p> <p>Sign boards and advertisements should compatible to the sacred area and it could be done under the permission of local authorities.</p>

Permissible uses

Table 8.14 Permissible uses in Low Density Sacred Heritagel Zone

No	Permissible Uses	Minimum Plot Size (Perches) / Special	Achievable maximum floor area	
Residential				
i.	Housing Units	10	According to the shedule 1	
ii.	Hostel	Hostel for pilgrims (Rest house – less than 5 rooms / temporary Lodges)		
iii.	Adult / Disabled Homes	20		
iv.	Children’s Home	20		
v.	Child Care Centers	20		
Health				
i.	Medical Centers	10		
ii.	Medical Consulting & Channeling Service Centers	20		
iii.	Child and Maternity Clinics	20		
iv.	Veterinary Clinics and Treatment Centers	20		
v.	Ayurvedic Medical Centers	20		
Educational				
i.	Early Childhood Development Centers	20		
ii.	Primary Education Centers	198 p (0.5 he.)		
iii.	Secondary Education Centers	593 p (1.5 he.)		
iv.	Art Centre / Dance Academy	20		
Institutional				
i.	Office	10		
ii.	Office Complex	10		
iii.	Banks, Insurance & Financial Institutions	20		
iv.	Automated Money Transfer Centers (ATM)	Decisions are made subject to the recommendations of the relevant institutions		
Social services and public amenities				
i.	Community Development Centers	20		
ii.	Social and Cultural Centers	20		
iii.	Religious centers	Permission to upgrade the Kelaniya Raja Maha Viharaya and related uses.		
iv.	Auditoriums and Conference Halls	60		
v.	Library	20		
Commercial				
i.	Shops	10		
ii.	Supermarkets	20		
iii.	Restaurants /Cafeterias	10		
iv.	Open Markets	10		
v.	Pharmacies	10		
vi.	Laboratory Services and Collection Centers	20		
vii.	Customer Service Centers	10		
viii.	Funeral Hall	20		
ix.	Hardware Stores	40		
x.	Filling stations	40		
xi.	Filling stations with shopping complexes	60		

xii.	Gas stations & Electric Charging Stations	60	
xiii.	Multi-storied Vehicle Park	20	
xiv.	Open Vehicle Park	40	
Tourism			
i.	Resorts	40	
ii.	Guest Houses	10	
iii.	Tourist Hotels	40	
iv.	City Hotel	20	
v.	Tourist Information Centers	10	
vi.	Ayurvedic Panchakarma Center	20	
Manufacturing industry			
i.	Clay products industries	20	
ii.	Natural fiber-based manufacturing industries	40	
iii.	Homestead Industries	10	
Service Industries			
i.	Vehicle Service Centers	20	
ii.	Taxi Service Centers	20	
iii.	Laundries	10	
iv.	Grinding & Rice Mills	10	
v.	Electronic Equipment Repair Centers	10	
Utility Services			
i.	Railway and Bus Terminals	Depends on the project	
Public Open Spaces & Recreation Facilities			
i.	Pocket Park	Depends on the project	
ii.	Mini Park		
iii.	Local Park		
iv.	Community Park		
v.	Town Park		
vi.	Central Urban Park/City Park		
vii.	Regional Park		
viii.	Linear Park		
ix.	Art Galleries / Museums		
x.	Open Air Theaters		
Agricultural			
i.	Livestock/ Agricultural farms with construction	40	

The definitions for all these uses are given in Annex 47.

8.8 Special Eco Conservation Zone

8.8.1. Zoning Guidelines and Permissible Uses for Special Eco Conservation Zone

Table 8.15 Special Eco Conservation Zoning Guidelines

(a.)	Zoning Definition	It is expected to develop Kelani river north bund reservation area as a Socio-Cultural Riverscape that may improve the sacred sense of Kelaniya sacred area and maintaining this area as a flood mitigation measure while protecting it as a natural environment which promote outdoor recreation activities.
(b.)	Zone boundaries (Coordinates)	Refer Annexure 46.8
(c.)	Zoning Factor	0.15 (Zone factor is not applicable)
(d.)	Approved height limits	-
(e.)	Approved plots coverage's	-
(f.)	General Terms Related to the Zone	<p>Permission will not be granted for any new constructions.</p> <p>Permission will be granted only for repairing existing buildings.</p> <p>Permission will be granted for outdoor recreation activities (Walking tracks/ Linear parks/ Boat Jetties/ Boat anchoring/ safe bathing places/ Mobile food stalls)</p> <p>Permission will be granted only for the existing licensed sand mining.</p> <p>Permission will be granted for constructing river protective walls.</p> <p>Permission will be granted for construction related to water transportation.</p> <p>Construction of boundary wall is not allowed and permission will be granted only for the transparent fence which compatible to the natural environment.</p> <p>Permission will be granted to develop the public infrastructures.</p> <p>The recommendation of the relevant institutions should be obtained before the any development activity.</p> <p>Irrigation Department</p> <p>Central Environmental Authority</p>

Permissible uses

Table 8.16 Permissible uses in Special Eco Conservation Zone

No	Permissible Uses	
Tourism		
i	Cabana Hotels	According to the 198reatmen 1
Leisure and Recreational Services		
ii.	Pocket Park	
iii.	Mini Park	
iv.	Local Park	
v.	Community Park	
vi.	Town Park	
vii.	Central Urban Park/City Park	
viii.	Regional Park	
ix.	Linear Park	
x.	Open Air Theaters	
xi.	Boat Jetty / Anchoring	
xii.	Safe bathing places	
Agricultural		
i.	Permission is given for the renewal of existing inland fishing areas	According to the 198reatmen 1

Source: Planning Team – Gampaha District,2021

The definitions for all these uses are given in Annex 47.

8.9 Wetland Nature Conservation Zone

This zone includes wetlands with high biodiversity and areas that need to be classified as wetland and water retention and drainage areas for flood risk reduction and control.

8.9.1 Guidelines & Permissible Uses for Wetland Nature Conservation Zone

Table 8.17 Guidelines & Permissible Uses in Wetland Nature Conservation Zone

Zone boundaries (Coordinates)	GPS coordinates relevant to the Kelaniya PS area mentioned in Western Province Wetland Zoning Plan.
Flood storage capacity	Shall be maintained in accordance with a Master Plan approved by the SLLR & DC and where relevant, the ID as well
Minimum plot size for the purpose of any building construction.	4 ha (10 acres) <i>In smaller plots the permitted uses are the same but no buildings shall be allowed.</i>
Maximum area where filling permitted.	2% of the site area (if needed for roads, vehicle parking, toilets and sewage disposal/treatment required for site management).
Maximum plot coverage (area covered by buildings).	1% of the total project area; all buildings on stilts excepting toilets, which may be on filled land.
Maximum permitted ground floor area of an individual building.	100 sq. m.
Maximum permitted building height.	7 m from the natural ground level (except in the case of a few look-out posts/observation towers/tower hides which are compatible with the overall concept)
Building type.	All buildings except toilets shall be on stilts in wetland (not filled area). They shall be isolated or in aesthetically pleasing clusters, with visually compatible, attractive "roof-scapes". They shall not block views of the open area from adjoining public roads and other public areas and they should be environmentally friendly.
Sub-division	Not permitted
Boundary demarcation.	Boundary walls not permitted. Visually compatible boundary fencing which does not hamper storm water flow may be permitted only along the boundary with adjoining existing high land. Any other boundaries may be demarcated only by visually compatible boundary markers at minimum intervals of 10m. Both the above will be subject to approval of the UDA, on a site-specific basis.
Relaxation of above conditions in exceptional cases.	In the rare event of having to accommodate a vital public infrastructure project, the above conditions may be relaxed.

Source: Planning Team – Gampaha District, 2021

All buildings shall be on stilts in wetlands
All other activities prohibited

Table 8.18 Permissible Uses in Wetland Nature Conservation Zone

Permitted Uses	<ul style="list-style-type: none"> • Wetlands Nature Parks • Eco-friendly Restaurants- 1200 sq.ft.(on still) • Mini Conference Centers – (on still) -1500 sq.ft. Seating Capacity – 75, Stage– 30'« 50' • Outdoor fitness/exercise facilities • Wetland museums – sq.ft. 1000 (on still) • Cabanas – (on still) • Dry weather Playgrounds • Traditional Fishing • Flower collection • Water-transport • National infrastructure projects • New Irrigation constructions /flood protection structures. • Educational & Research activities.
----------------	---

Source: Planning Team – Gampaha District,2021

8.10 Paddy Cultivation & Wetland Agriculture Zone

This area includes the existing cultivated paddy fields, abandoned paddy fields and associated areas such as Deniyaya and Ovita.

Table 8.19 Permissible Uses in Paddy Cultivation & Wetland Agriculture Zone

Permitted Uses	<ul style="list-style-type: none"> • Only permitted activities in accordance with the Agrarian Development Act can be done in the Subsidiary areas such as the existing cultivated paddy fields and abandoned paddy fields and the adjoining areas such as Deniyaya and Ovita. • Wetland Agriculture industry • Arboriculture • Mining in accordance with (GS & MB) and CEA guidelines, conditions and Guidelines, including irregular site rehabilitation (Clay Pits and Soil mining) • Environment friendly aquaculture ponds <p>All other activities & any other construction are prohibited</p>
----------------	--

Source: Planning Team – Gampaha District,2021

Table 8.20 Conditions subject to the implementation of approved uses in the above zones

Zone boundaries (Coordinates)	GPS coordinates relevant to the Kelaniya PS area mentioned in Western Province Wetland Zoning Plan.
(a)	In the rare case where it is necessary to implement an important common infrastructure project, the above conditions can be relaxed. (Maximum Permitted Infrastructure Projects – Electricity, Water Supply, Telephone, Highways, Railways etc.)
(b)	Approval for the proposed development work subject to the recommendations of the organization mentioned in the schedule before obtaining clear certificates for other development activities as the pattern of land use in the wetlands may change according to the new program of re-cultivation of abandoned paddy lands under the new program of creating a people centered economy in the “Vision of Prosperity” policy statement for the year 2019.
l	Survey Plan should be considered to determine the boundaries before approving the proposed development activities in the vicinity of a wetland or in the presence of highland areas in a wetland.
(d)	According to wetland aggregation, a distance of about 20m from the boundary of a wetland zone belongs to the approximate wetland zone and must be implemented in accordance with the relevant laws, Guidelines and approved practices in that zone (to avoid existing erroneous conditions in determining location according to the geographical location system).
<p>N.B.</p> <p>(a) Additional work site special status of institutions such as the Central Environmental Authority, Sri Lanka Land Development Corporation, UDA, Agrarian Services Development Department and Department of Irrigation, for “specific projects” under the Environment Act when required.</p> <p>Violation of the above conditions in the development of any wetland may result in legal action under the powers vested in the Scheduled Castes.</p>	

Source: Planning Team – Gampaha District, 2021

09

Chapter



Proposed Road Width, Building Line and Reservations

Chapter 09

Proposed Road Width, Building Line and Reservations

9.1 Building Line and Reservation

This will focus on the building limits and reservation applicable to the Kelaniya PS area. Accordingly, proposed wetland zoning plan, river and canal reservations, and also Expressway and railway reservation, building limits which are affected by development are considered.

9.1.1. Road Width, Reservations & Building Line

According to the Kelaniya Development Plan, the proposed road width has been allocated for the identified roads based on the priority levels.

Table 9.1 Road Widths & Building Line Reservation for RDA, PRDA & Local Authority Roads

Road Hierarchy		Road	Proposed Width (M)	Building Line
1st Priority Road		Colombo Kandy Road (Peliyagoda to Mahara 6 Km)	<ul style="list-style-type: none"> Total Width -30m (Four lane road with the center island of LRT service corridor, parking & bicycle lane & side walk with landscaping & utility service lines. Total width of the road will be 30 meters.)	15 meters (50ft from the centre line)
2nd Priority Road	'A' Category	Colombo – Biyagama Road (B 214)	<ul style="list-style-type: none"> Total Width - 30 m (Four lane road with parking & bicycle lane & side walk with landscaping & utility service lines. Total width of the road will be 30 meters.)	15 meters (50 ft from the centre line)
		Proposed New Kelani Velley Crescent Road		
		Hunupitiya – Wattala Road (B 151/B 220)		
		Kiribathgoda – Makola Road (B 221)		
	'B' Category	Proposed New Bypass Road from Peliyagoda to Mahara via Wewalduwa, Eriyawetiya.		

3rd Priority Road	'A' Category	Hunupitiya Railway Station Access Road	<ul style="list-style-type: none"> Total Width - 15 m (Two lane road with parking & bicycle lane & side walk with landscaping & utility service lines. Total width of the road will be 15 meters.)	7.5 meters (25 ft from the centre line)
		Kiribathgoda Hospital Access Road		
		Dalugama – Kelaniya		
		Dalugama Wewalduwa Road		
		Dipitigoda Hunupitiya Road		
		Galborella – Polhena		
		Kiribathgoda – Iriyawatiya Road		
		Kiribathgoda Housing Scheme Road		
		Lumbini Mawatha		
		Pilapitiya- Gonagampala		
		Padiliyathuduwa – Hunupitiya Road		
		Waththala thelagapatha		
	Waththala Wanawasala			
	'B' Category	Thorana Junction- Kelani Temple Road (Waragoda Road)	<ul style="list-style-type: none"> Total Width - 15 m (Two lane road with parking & bicycle lane & side walk with landscaping & utility service lines. Total width of the road will be 15 meters.)	
Tire Junction – Kelani Temple Road (Nungamugoda Road)				
Kiribathgoda to Kelani Temple Road via Koholvila (Koholvila Road)				
4th Priority Road	All other roads including Pradeshiya Saba (PS) Roads should be maintaining minimum 6m of road width except proposed 1st to 3rd priority roads. <ul style="list-style-type: none"> Total Width - 12 m 		6 meters (20 ft from the centre line)	

Source: Planning Team-Gampaha District Office, 2021

9.2. Proposed Railway and Expressway Reservation

9.2.1 Railway Reservation

The reservation of proposed and existing railway lines and proposed light rail lines shall be in accordance with the Guidelines of the Railway Department.

Construction is not permitted in such reservations and should be maintained as landscaped areas.

9.2.2 Expressway Reservation

The CK Expressway and the, which runs through the Kelaniya PS area, have to maintain a green belt of 10m from the boundary of the RDA reservation as planned.

9.3 Reservations of Canals, River & Reservoirs

Accordance to the gazette of 1662/17 in 14th of July 2010 by Act No.15 of 1968 (Amended Act No 27 of 1976) / Sri Lanka Land Reclamation and Development Corporation (Amendment) Act No 52 of 1982, No. 35 of 2006 that displayed as per the Annexure 34, allocation of reserve area for all the open & closed canals mentioned. Under that reservations related Guidelines all the rivers, tributaries, canals, dams, anicuts & all other natural or artificially created waterways for drainage within Kelaniya PS area should be continue enforced.

Table 9.2 Reservations of Canals. River & Reservoirs

Surface width (m)	Reservation from the Canal Bank	
	For open canals (m)	For surface covered canals (m)
1.0- 1.2	1.0	0.3
1.3- 3.0	2.0	1.0
3.1- 4.5	2.75	1.0
4.6- 6.0	3.5	1.5
6.1- 9.0	4.5	1.5
More than 9	6.5	2.0

- I. 100m of buffer zone from Kelani River bank should be reserved as a Kelani River Reservation area. It consists of two sections, 40 M and 60 M, and no new construction is permitted within that 40 M buffer zone. Permission will be granted only for the constructions within 60m buffer considering environmental compatibility.
- II. Above I is not applicable for the proposed Eco-Conservation zone in the area of Kelani river north bund and its Guidelines are enforced for that zone.
- III. Recommended conservation zones should be allocated according to the width of all canals in the area and are on ly approved for vegetation extension as green reserves.

Note

- I. When approving land subdivisions, this 10-M reserve boundary should be marked on the Survey Plan.
- II. Disposal of garbage should accordance with the relevant Local Authority and permission will not granted for such waste disposal within ½ kilometres buffer from the expressway.
- III. The areas operate under the National Wildlife Conservation Department, Sri Lanka Land Reclamation and Development Corporation, Central Environmental Authority, Irrigation Department and other government agencies should accordance with the provisions and Guidelines of such organizations.
- IV. The waterways and drainage areas of the area should not be blocked. Local authorities can take legal action against such persons



PART III



List of Maps

Map 2.1 Planning Area	16
Map 6.1 Proposed Landuse Plan	68
Map 6.2 Proposed Population Density Distribution – 2030	71
Map 6.3 Proposed Housing Density Distribution – 2030	72
Map 6.4 Proposed Hierarchy of Urban Centres	75
Map 6.5 Distribution of Educational Facilities	77
Map 6.6 Distribution of Health Facilities	79
Map 6.7 Distribution Public Market Services	81
Map 6.8 Distribution of Hostel Facilities	83
Map 6.9 Proposed Roads & Transport Plan	90
Map 6.10 Proposed Wastewater Management Plan	99
Map 6.11 Proposed Economic Development Plan	108
Map 6.12 Proposed Wetland Conservation Plan	110
Map 6.13 Proposed Landscape Management Plan	112
Map 6.14 Proposed Canal Improvement Plan	114
Map 6.15 Proposed Flood Zoning Plan	116
Map 6.16 Public Outdoor Recreation Space Plan	120
Map 6.17 Proposed Cultural Heritage Management F	123
Map 6.18 Socio – Cultural River Scape Improvement	125
Map 7.1 Proposed Zonning Plan	162
Map 7.2 Proposed Zone Factor	166

List of Figures

Figure 1.1 Planning Process	5
Figure 2.1 Study area	8
Figure 2.2 History of Kelaniya Vihara and arrival of Lord Buddha	9
Figure 2.3 Population Density (2010-2015) in Divisional Secretariats of Gampaha District	10
Figure 2.4 Population Density of Divisional Secretariat Areas (2010-2015)	11
Figure 2.5 Commercial centres in the Western Region	13
Figure 3.1 Kelaniya Viharaya	19
Figure 3.2 Kelani Perahera	19
Figure 3.3 Composite Typological Analysis	20
Figure 3.4 Deterioration of Green coverage (NDVI Analysis)	22
Figure 3.5 Flood affected Population in Kelaniya PS Area (2008-2017)	23
Figure 3.6 Thermal Risk Areas in Kelaniya DSD	24
Figure 3.7 Peak Hour Traffic Congestion in Kiribathgoda (Monday 8am/ Monday 6pm)	26
Figure 3.8 Spatial Integration in Kelaniya PS Area	27
Figure 4.1 Conceptual Development Visualization of Kelaniya in the Year 2030	30
Figure 5.1 Pilgrims in Full Moon Poya Days	42
Figure 5.2 Pilgrims Arriving for Duruthu Perahara.	42
Figure 5.3 Kelaniya Snake Poisonous Hospital	43
Figure 5.4 Kelani River	44
Figure 5.5 Unauthorized housing units on North Bank of Kelaniya River	45
Figure 5.6 Corridors of Logistic Activities	47
Figure 5.7 Road Connectivity and Accessibility to Employment Centres	48
Figure 5.8 Landuse Along either side of A 1 Road	49
Figure 5.9 Day Time Population Sinking – Kiribathgoda Town	50
Figure 5.10 Weaknesses of Multi-model Transport interlinks in Kelaniya	52
Figure 5.11 Narrow Pedestrian Pavements of Kiribathgoda	52
Figure 5.12 Vehicle Parking along the Main Highway	53
Figure 5.13 Proposed Plan for Hierarchy of Urban Centres	54
Figure 5.14 Proposed Road Development strategies – Draft Peliyagoda Development Plan	55
Figure 5.15 Shanties of Watershed areas of Eriyawetiya and in Kelaniya River North Bank	57
Figure 5.16 Nature of Canal Obstructions in the Area	58
Figure 5.17 Solid Waste Land and Compost Project at Manelgama	59
Figure 5.18 Kelaniya Green University	60
Figure 6.1 Concept Plan	64
Figure 6.2 Cross-section of Proposed Special Physical Structure	66
Figure 6.3 Proposed Road Section for 1 st Priority Roads	87

Figure 6.4 Proposed Road Section for 2 nd Priority “A” Category Road	87
Figure 6.5 Proposed Road Section for 2 nd Priority “B” Category Road	87
Figure 6.6 Proposed Road Section for 3 rd Priority “A” Category Road	88
Figure 6.7 Proposed Road Section for 3 rd Priority “B” Category Road	88
Figure 6.8 Proposed Road Section for 4 th Priority Roads	88
Figure 6.9 Increasing Water Capacity Relation to Proposed Projects	93
Figure 6.10 Increasing Water Capacity Relation to Proposed Projects in Kelaniya Area	94
Figure 6.11 Existing Electricity Network in Kelaniya Sub-Station Area – 2017	95
Figure 6.12 Proposed Electricity Distribution Lines 2016 – 2025	96
Figure 6.13 Proposed Solid Waste Management Project	103
Figure 6.14 Expected View of Proposed Shopping Street Development in Kiribathgoda	106

List of Tables

Table 2.1 Population Growth Rate – Kelaniya Divisional Secretariat Areas	12
Table 2.2 Housing units and Residential Density – Kelaniya (2016)	12
Table 3. 1 Heat Island Expansion in Kelaniya (2006-2014)	23
Table 3.2 Peak Hour Road and Vehicle Capacity in Main Corridors	25
Table 3.3 Peak Hour Average Travel Time in Kelaniya	25
Table 5.1 Shanties on Kelaniya River North Bank in GND	45
Table 5.2 Maximum Travel Speeds Per Hour in Kiribathgoda Town	51
Table 5.3 Less Inter- Relationship of Multi-Model Transport Systems- Kelaniya	51
Table 5.4 Obstructed Canal Network in Kelaniya Area	58
Table 5.5 Regulation Available for Canal Reservations	60
Table 5.6 Warehouse & Stores Facilities for Imports & Exports Cargo in Kelaniya Area	61
Table 6.1 Projected Population Density for 2030	69
Table 6.2 Projected Population and Housing Density Distribution According to the Proposed Zones	70
Table 6.3 Proposed Hierarchy of Urban Centres	73
Table 6.4 Schools in Kelaniya DS Division	76
Table 6.5 Permanent Hostels – University of Kelaniya.	82
Table 6.6 Proposed Road Hierarchy	85
Table 6.7 Drinking Water Sources – Kelaniya DSD Area	91
Table 6.8 Current Water Demand in Kelaniya PS Area (2017)	91
Table 6.9 Water Demand for Forecasted Population in Kelaniya PS Area – 2030	92
Table 6.10 Water Capacity of Proposed Projects & the Forecasted Water Demand	93
Table 6.11 Proposed New Electricity Network Projects 2016-2025	96
Table 6.12 Daily Wastewater Generation – Kelaniya PS Area (2017 and 2030)	97
Table 6.13 Daily Generated Waste Collection in Kelaniya PS Area – 2017	100
Table 6.14 Forecasted Daily Solid Waste Generation in Kelaniya PS Area – 2030	101
Table 6.15 Composition of Waste Generated Per Day in Kelaniya PS Area (2017 and 2019)	102
Table 6.16 Canal Reservation – Sri Lanka Land Reclamation & Development Corporation	111
Table 6.17 Proposed Reconstruction of Canals	113
Table 6.18 Existing PORS 2018 (Kelaniya PS Area)	117
Table 6.19 Public Libraries in the Kelaniya PS Area	118
Table 6.20 Proposed Public Outdoor Recreation Space Plan for Kelaniya PS Area (2018-2030)	118
Table 6.21 Responsible Institutional Framework	153
Table 7.1 Zone Factor	163
Table 7.2 Permissible Floor Area Ratio for Zones	164
Table 7.3 Number of Floors for 0.3 m & 4.5 m Wide Roads	165
Tabel 7.4 Setbacks	165
Table 8.1 High Density Commercial Zoning Guidelines	174
Table 8.2 Permissible Uses in High Density Commercial Zone	175
Table 8.3 High-Density Higher Education Zoning Guidelines	177
Table 8.4 Permissible Uses in High-Density Higher Education Zone	177
Table 8.5 High-Density Logistic Zoning Guidelines	180
Table 8.6 Permissible Uses in High-Density Logistic Zone	181
Table 8.7 High Density Residential Zoning Guidelines	184
Table 8.8 Permissible uses in High Density Residential Zone	185

Table 8.9 Moderate Density Residential Zoning Guidelines	187
Table 8.10 Permissible uses in Moderate Density Residential Zone	188
Table 8.11 Low Density Residential Zoning Guidelines	191
Table 8.12 Permissible Uses in Low Density Residential Zone	191
Table 8.13 Low Density Sacred Heritage Zoning Guidelines	194
Table 8.14 Permissible uses in Low Density Sacred Heritage Zone	195
Table 8.15 Special Eco Conservation Zoning Guidelines	197
Table 8.16 Permissible uses in Special Eco Conservation Zone	198
Table 8.17 Guidelines & Permissible Uses in Wetland Nature Conservation Zone	199
Table 8.18 Permissible Uses in Wetland Nature Conservation Zone	200
Table 8.19 Permissible Uses in Wetland Nature Conservation Zone204	200
Table 8.20 Conditions subject to the implementation of approved uses in the above zones	201
Table 9.1 Road Widths & Building Line Reservation for RDA, PRDA & Local Authority Roads	204
Table 9.2 Reservations of Canals, River & Reservoirs	206

List of Annexures

Annexures 01. Main Consultative Institutions	216
Annexures 02. Gazette notification of Greater Colombo Development	217
Annexures 03. Road accessibility and connectivity	218
Annexures 04. Population Density in Kelaniya Pradhesiya Sabha	219
Annexures 05. Landuse-2017	220
Annexures 06. Housing Density-2011	221
Annexures 07. National Physical Plan – Proposed Population – 2050	222
Annexures 08. Western Province Structural Plan – 2030	223
Annexures 09. Hierarchy of the urban centers under the Greater Colombo Structural Plan	224
Annexures 10. Gampaha District Town Hierarchy	225
Annexures 11. Road Connectivity Analysis	226
Annexures 12. Industrial expansion in the Gampaha District – 2012	227
Annexures 13. Employment rate	228
Annexures 14. Geographical Features of the Area with Elevation	229
Annexures 15. Wetland distribution	230
Annexures 16. Environmental Sensitive areas	231
Annexures 17. Development Pressure	232
Annexures 18. Road Connectivity Based Functional Areas	234
Annexures 19. Stakeholders' views and suggestions	235
Annexures 20. Land Values	239
Annexures 21. Flash Flood and Kelani River Flood Affected Areas	240
Annexures 22. Kiribathgoda Peak Hour Bus Frequency and Passenger by Mode	241
Annexures 23. Stakeholders' views on computer-related analysis (Word Cloud Analysis)	242
Annexures 24. Archeological and Religious places in Kelaniya	247
Annexures 25. Water resources Distribution of Kelaniya	249
Annexures 26. Flood Effected Areas of Kelaniya -2016	250
Annexures 27. Proposed Kelaniya Sacred Area Plan- NPPD	251
Annexures 28. Settlements Land Suitability Analysis	252
Annexures 29. Proposed LRT Line and New Biyagama -Kosgama Railway	253
Annexures 30. Sub-basins of the Kelani River	254
Annexures 31. Distribution of shanty Dwellings and Linear Houses	255
Annexures 32. GN Division Wise Slums and Shanties Distribution,	256
Annexures 33. GIS Based Natural Water Flow Analysis and Existing Water Bodies	257
Annexures 34. Land Reclamation and Development Act	258
Annexures 35. Distribution of Export and Import Cargos	260
Annexures 36. Urban Service Centres Prioritization	260
Annexures 37. Population according to age segment – 2016	261
Annexures 38. Spatial Integration Analysis	261
Annexures 39. GIS Based Multi-Criteria Analysis for Wetland Categorization	262
Annexures 40. Places which have obtain Direct Recreational Facilities in Kelaniya	263

Annexures 41. Proposed Direct and Indirect Recreational Facilities (2019 – 2030)	264
Annexures 42. Permissible Uses for Public Outdoor Recreational Spaces	267
Annexures 43. Project Prioritization	268
Annexure 44: Basis for Zoning	272
Annexure 45: Calculation of Zone Factor	275
Annexure 46: Zoning boundary coordinates	287
Annexure 47: Permissible uses for Zones	316
Annexure 48: Definitions of Permissible uses for Zones	319



Annexures

Annexure 01. Main Consultative Institutions

Institution / Department	Designation/ Name
Kelani Temple	Chief Incumbent, Professor Kollupitiye Mahinda Sangarakkhita Thera
National Physical Planning Department	Plnr. A.O. Vijayawardhana Plnr. A.D. Chamila
Road Development Authority	Eng. A.N. Lokuge
Road Development Authority	Dept. Director (Highway Maintainance)
Sri Lanka Land Reclamation & Development Corporation	Civil Eng. D. Jayarathne
Department of Wild Life Conservation	Dept. Director Upul Indrajith
Central Environmental Authority	Environment Officer, Tiranthi Ranasinghe
Irrigation Department	Eng. T.D. Vijesuuriya
National Housing Development Authority	District Manager, K.M.G.U. Jalitha
National Water Supply and Drainage Board	Regional Engineer
Electricity Board	Eng. B.S. Madusanka Eng. R.P.G. Wikramarachchi
LECO	Chief Eng./ Branch Manager, M.R Fenando
Archaeological Department	

ශ්‍රී ලංකා ප්‍රජාතාන්ත්‍රික සමාජවාදී ජනරජයේ ගැසට් පත්‍රය
අති විශේෂ
The Gazette of the Democratic Socialist Republic of Sri Lanka
EXTRAORDINARY

අංක 2049/11 - 2017 අදාසැමිසිල් මස 11 දිනේ සඳුදා - 2017.12.11
No. 2049/11 - MONDAY, DECEMBER 11, 2017

(Published by Authority)

PART I : SECTION (I) — GENERAL

Government Notifications

URBAN DEVELOPMENT AUTHORITY ACT, No. 41 OF 1978

The Prescription under Section 3

I, Patali Champika Ranawaka, the Minister of Megapolis and Western Development, declare by this prescription by virtue of the powers vested in me by Section 3 of the Urban Development Authority Act, Number 41 of 1978 that as it is my opinion to name and develop the area comprising the 05 Municipal Councils, 07 Urban Councils, and 07 Pradeshiya Sabhas whose exclusive boundaries and borders have been marked clearly and definitely already by the Ministry of Provincial Councils and Local Government, and detailed in Columns I and II of the 1st Schedule here, as the **Core Area of the Metro Colombo Development Region**.

PATALI CHAMPIKA RANAWAKA,
Minister of Megapolis and Western Development.

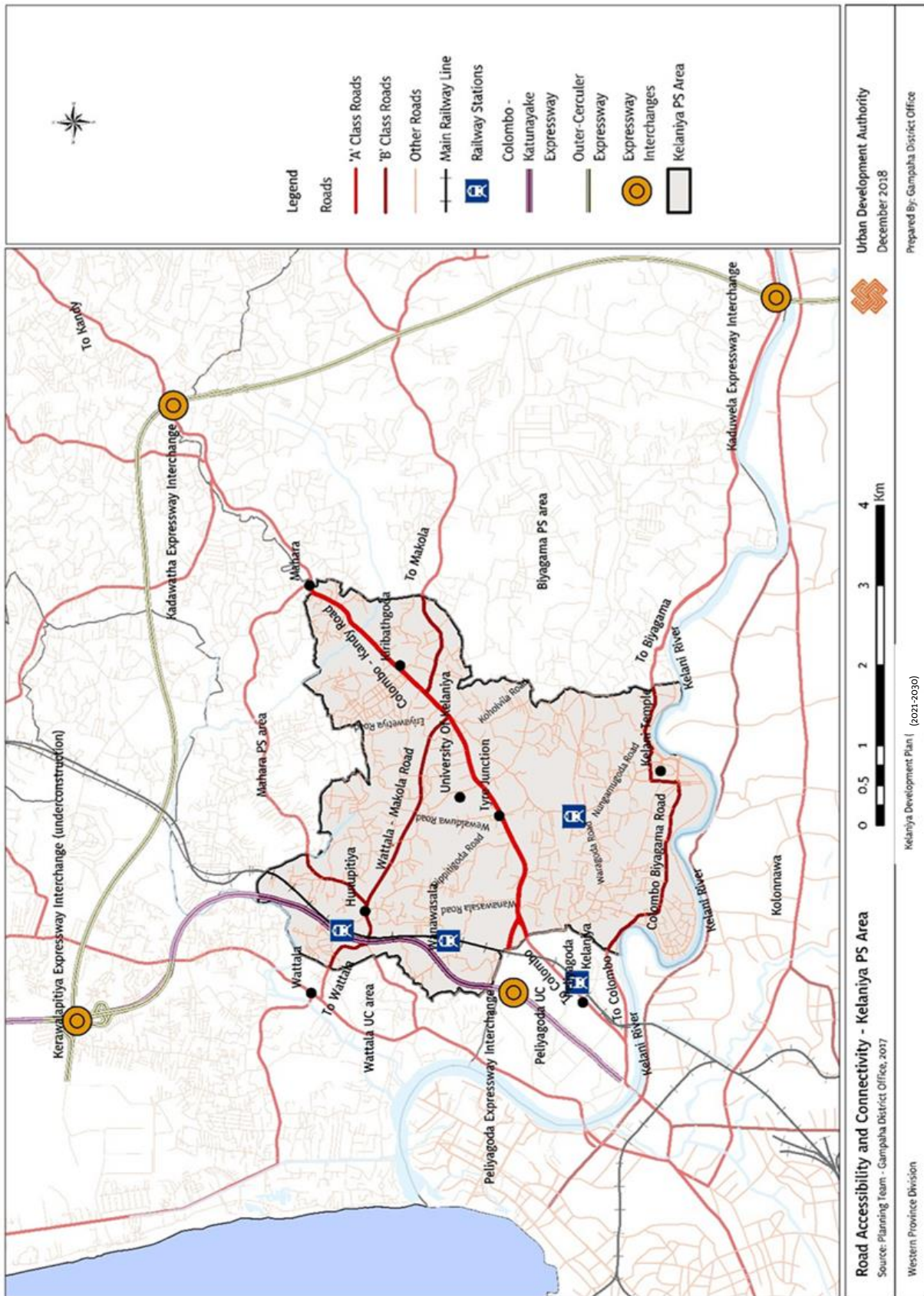
Ministry of Megapolis and Western Development,
17 and 18 Floors,
"Suhurupaya",
Sri Subuthipura Road,
Battaramulla,
08th December 2017.

IA G 26765—57 (12/2017)

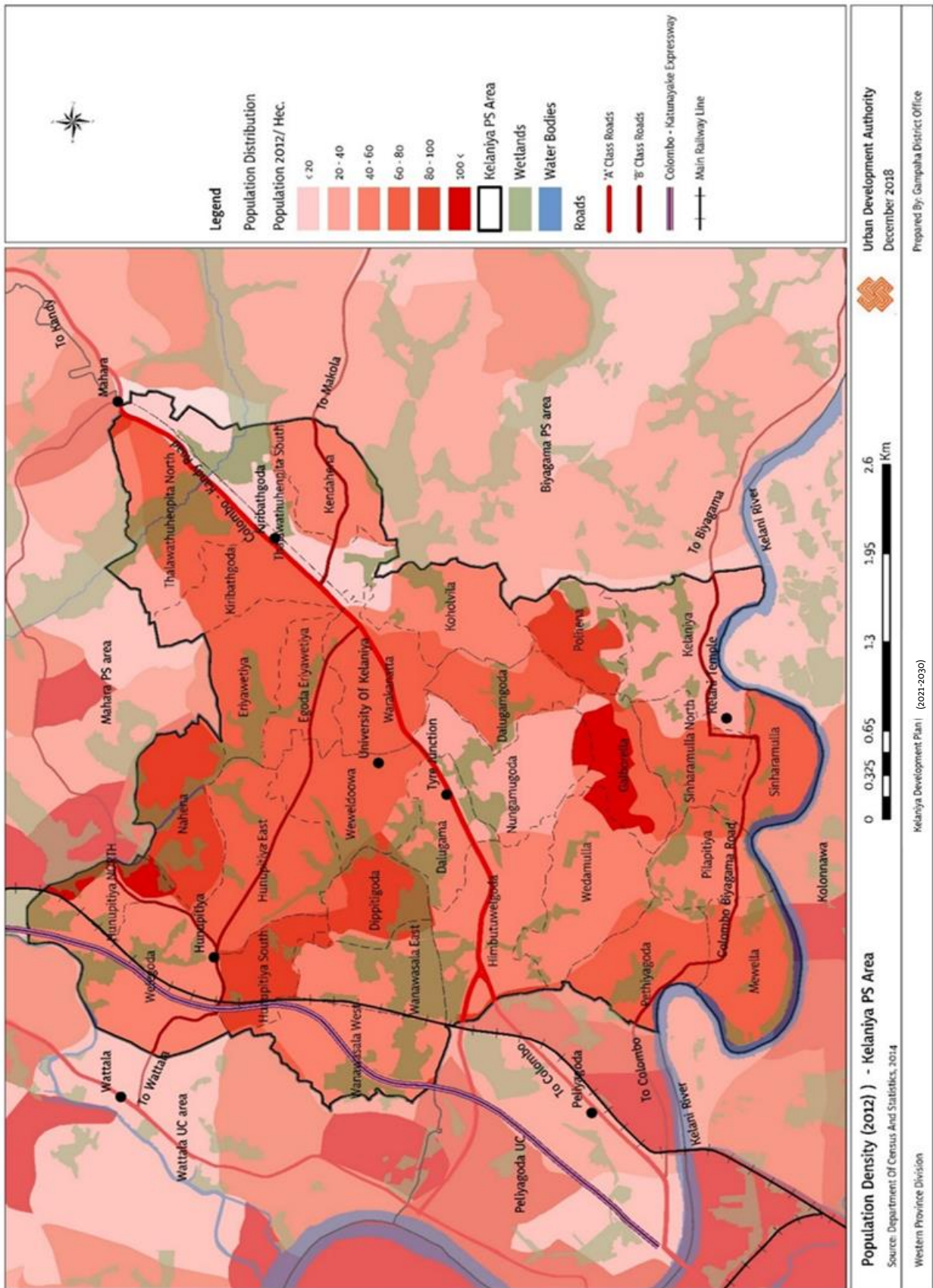
This Gazette Extraordinary can be downloaded from www.documents.gov.lk



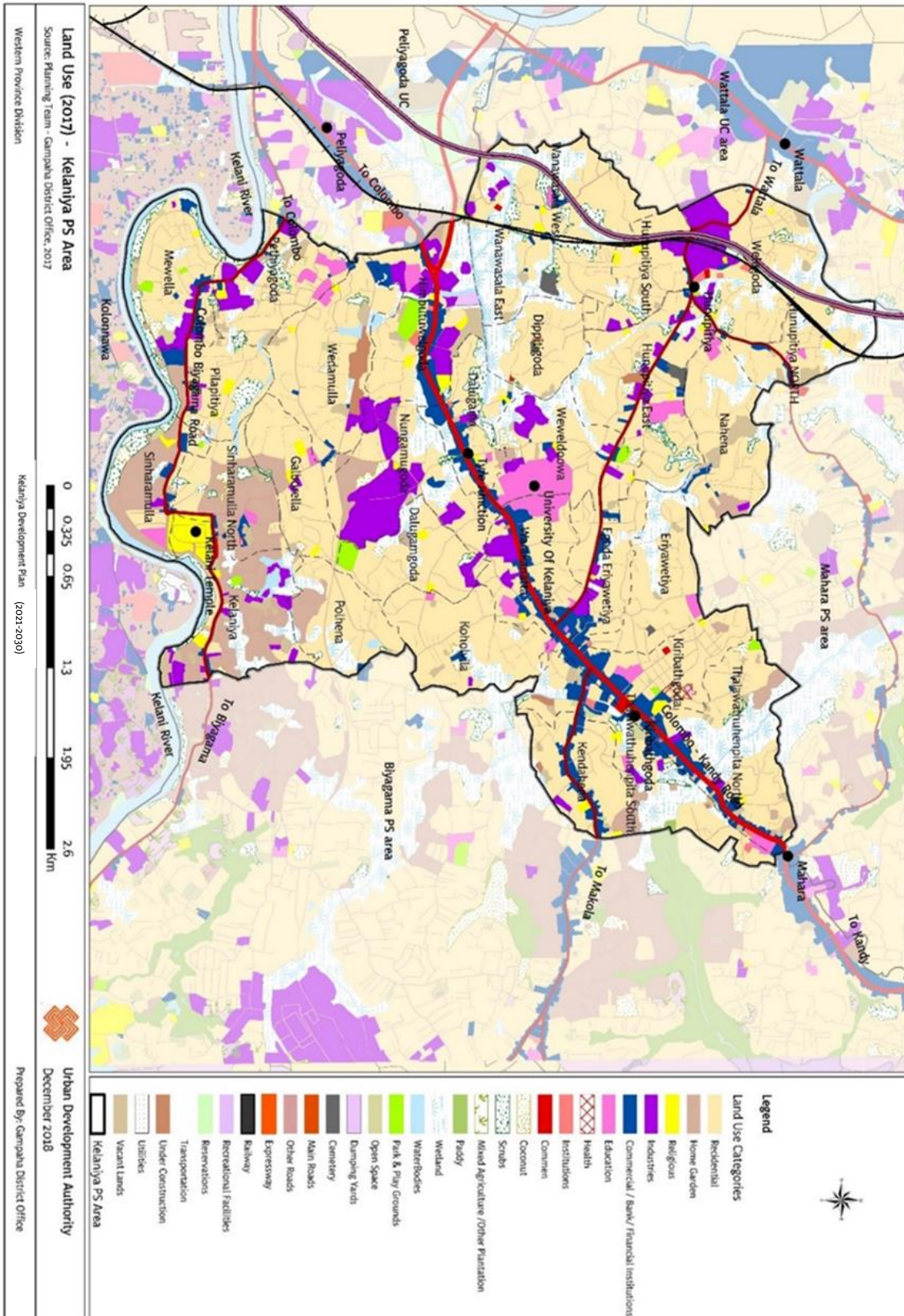
Annexure 03. Road Accessibility and Connectivity



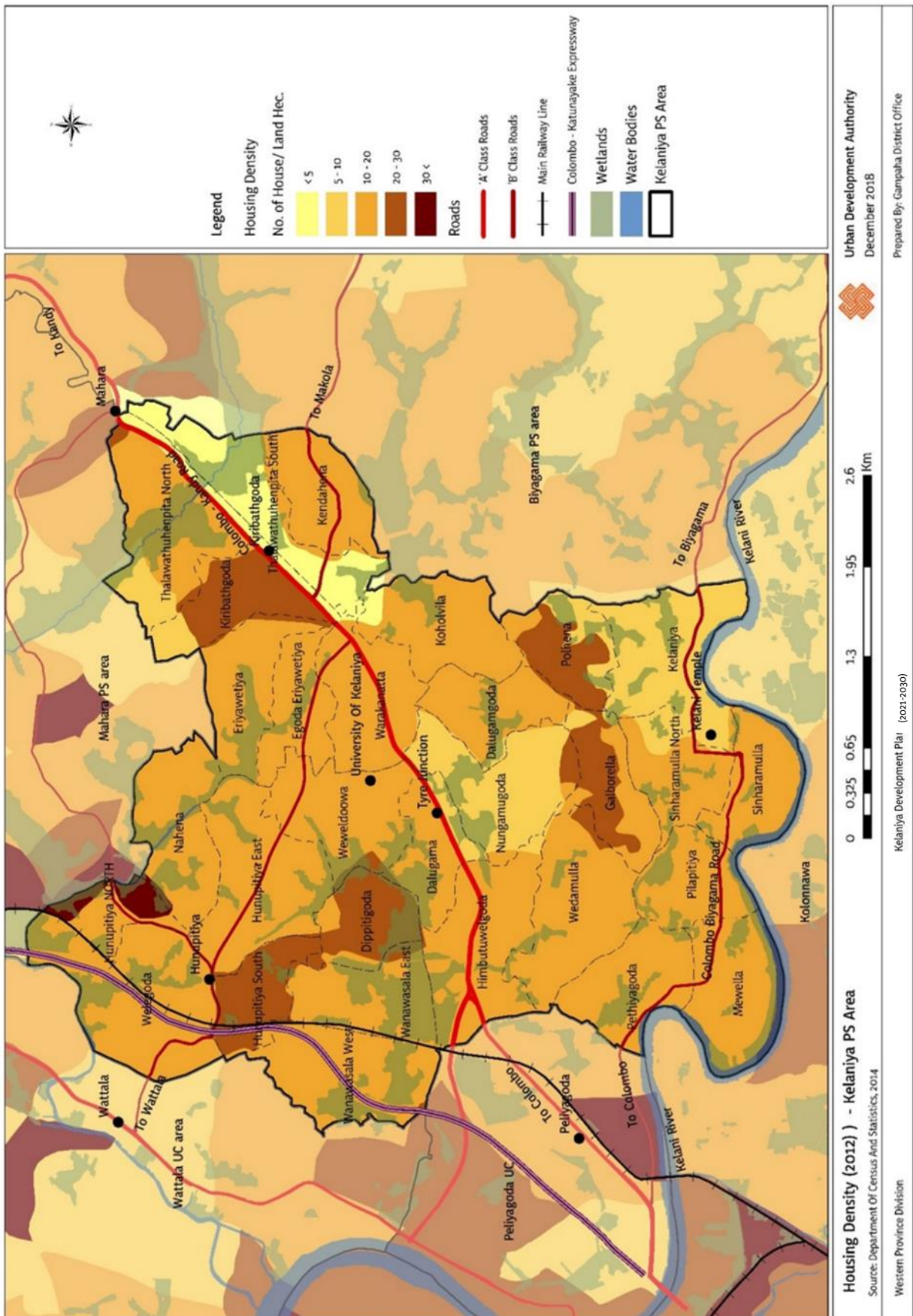
Annexure 04. Population Density in Kelaniya Pradhesiya Sabha Area



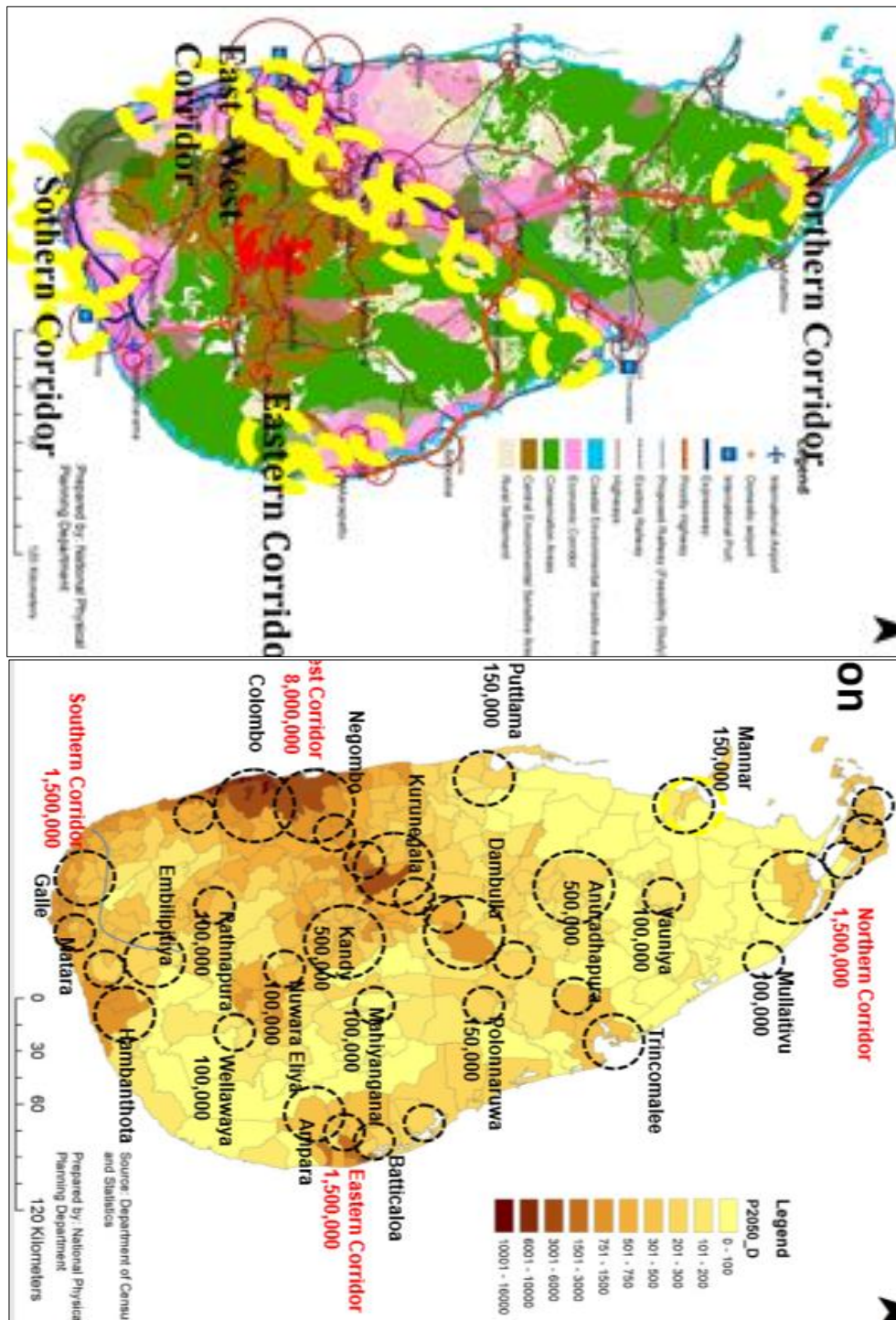
Annexure O5. Landuse-2017



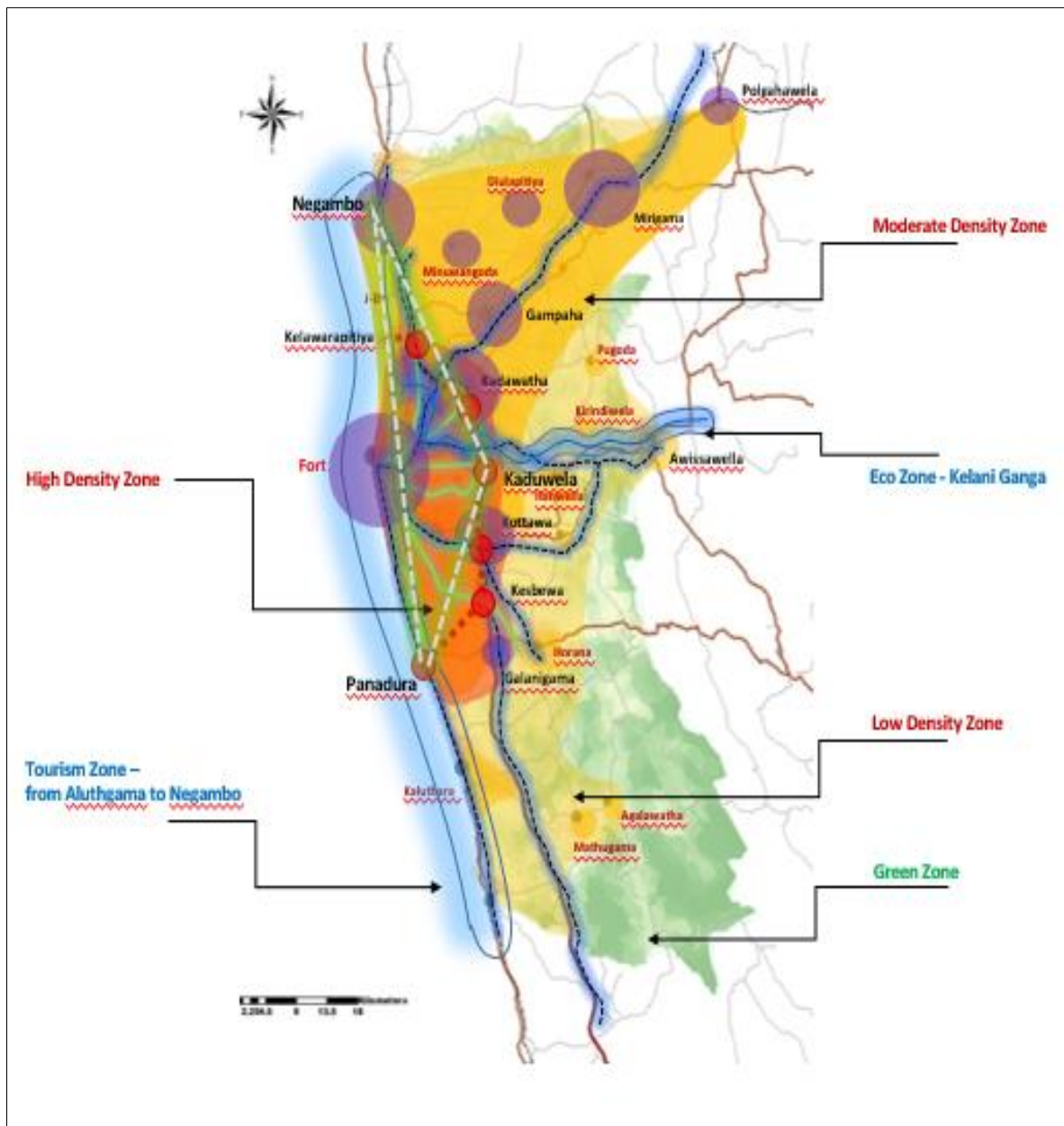
Annexure O6. Housing Density-2011



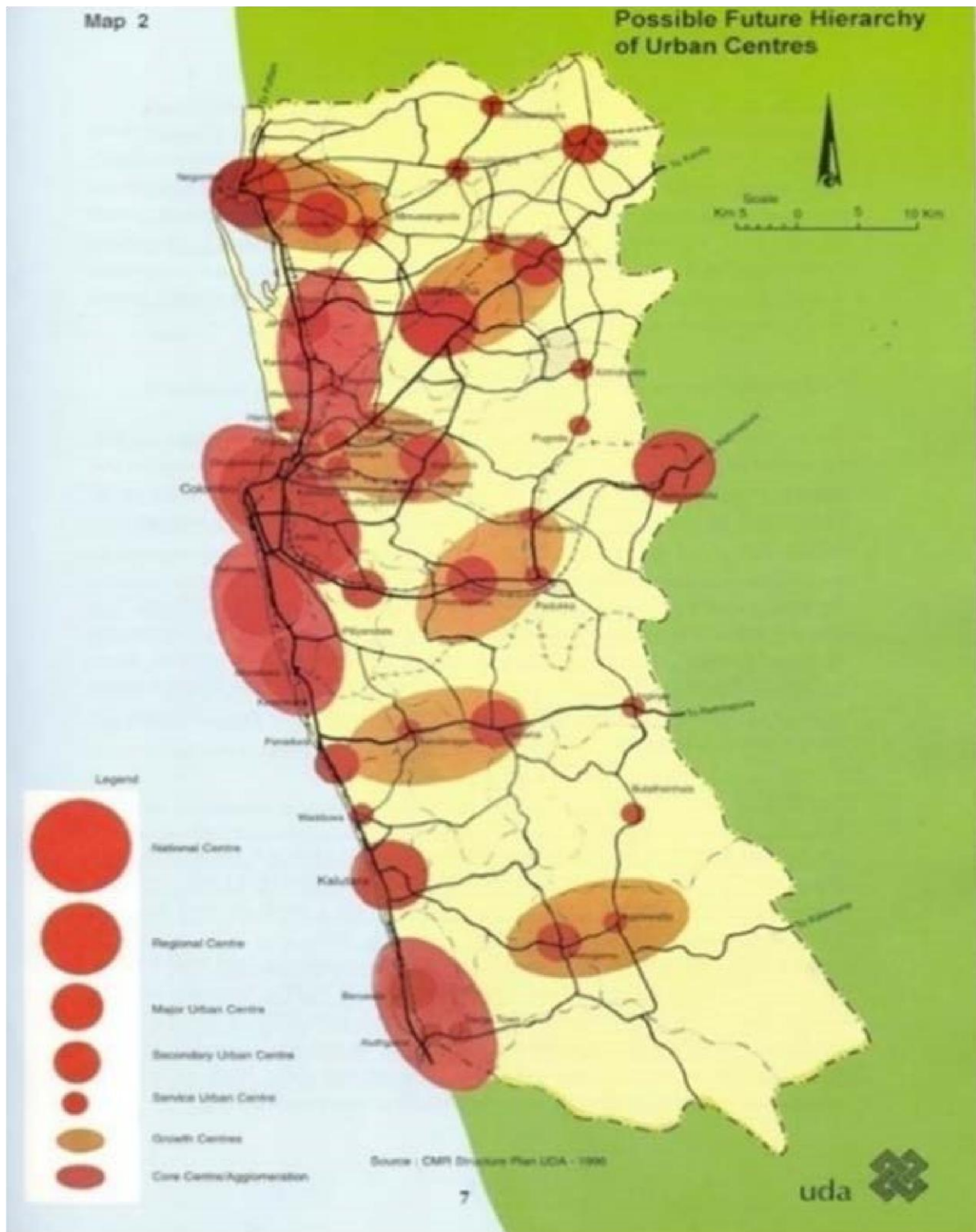
Annexure O7. National Physical Plan – Proposed Population – 2050



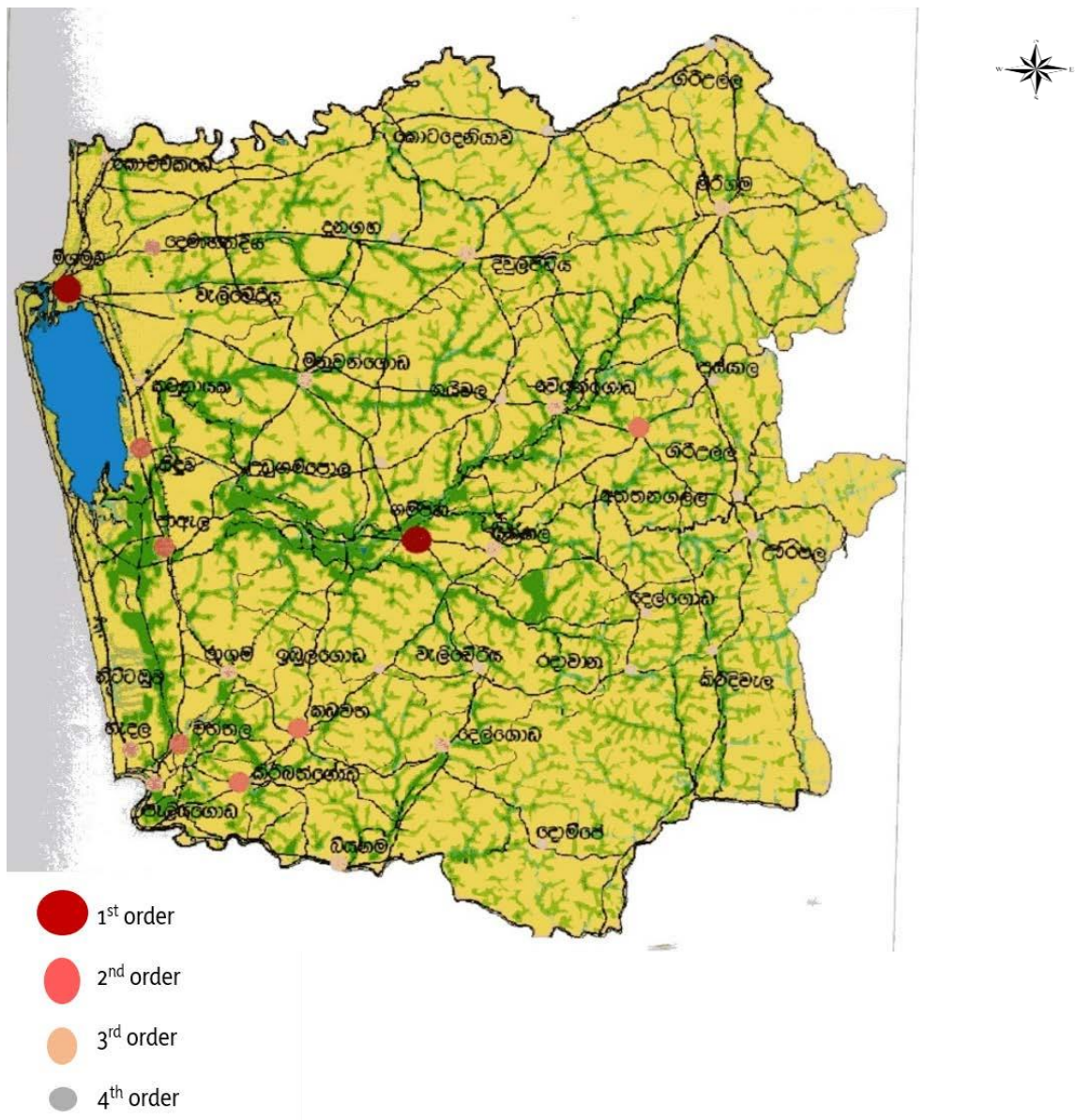
Annexure o8. Western Province Structural Plan – 2030



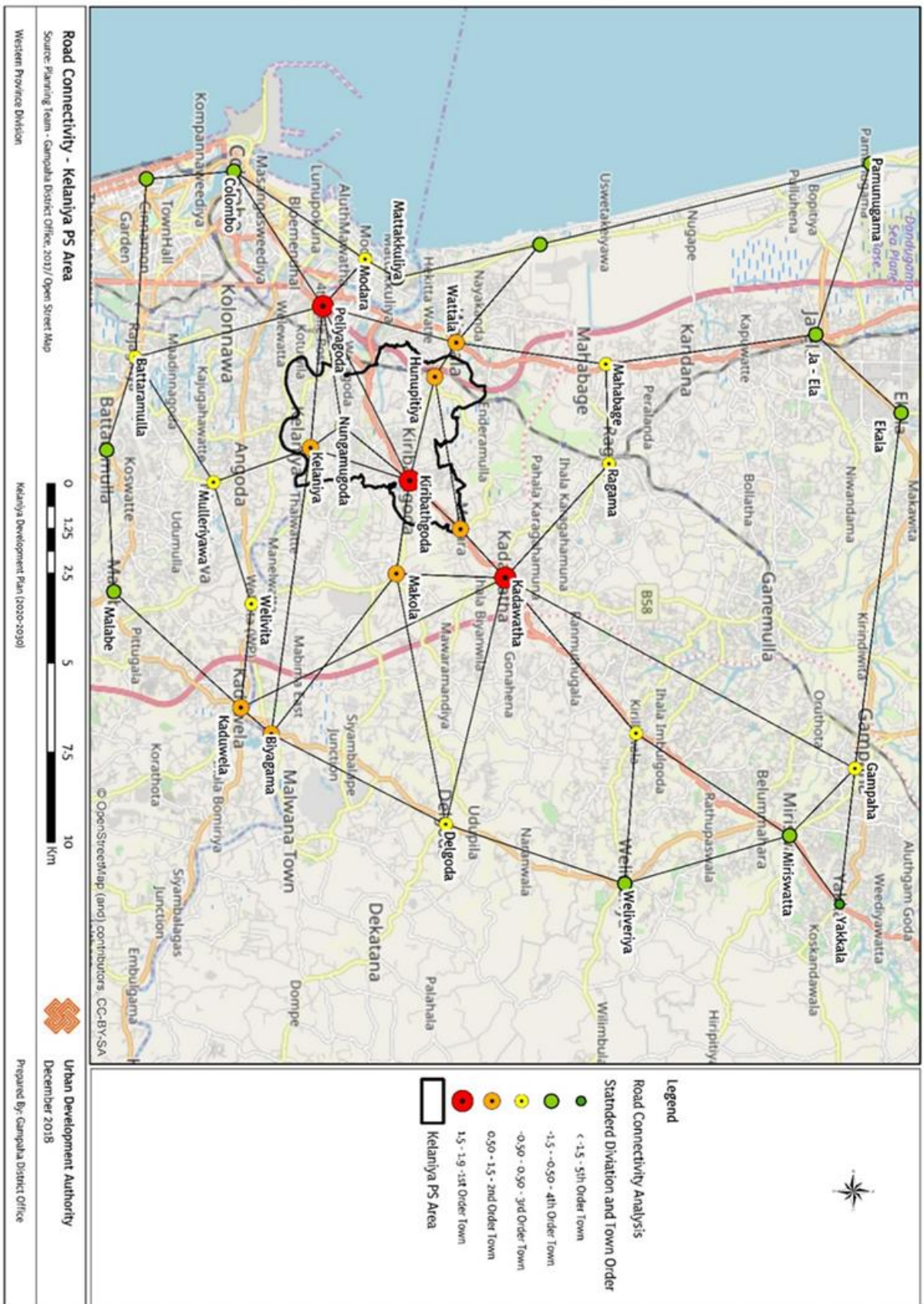
Annexure 09. Hierarchy of the urban centers under the Greater Colombo Structural Plan – 1998



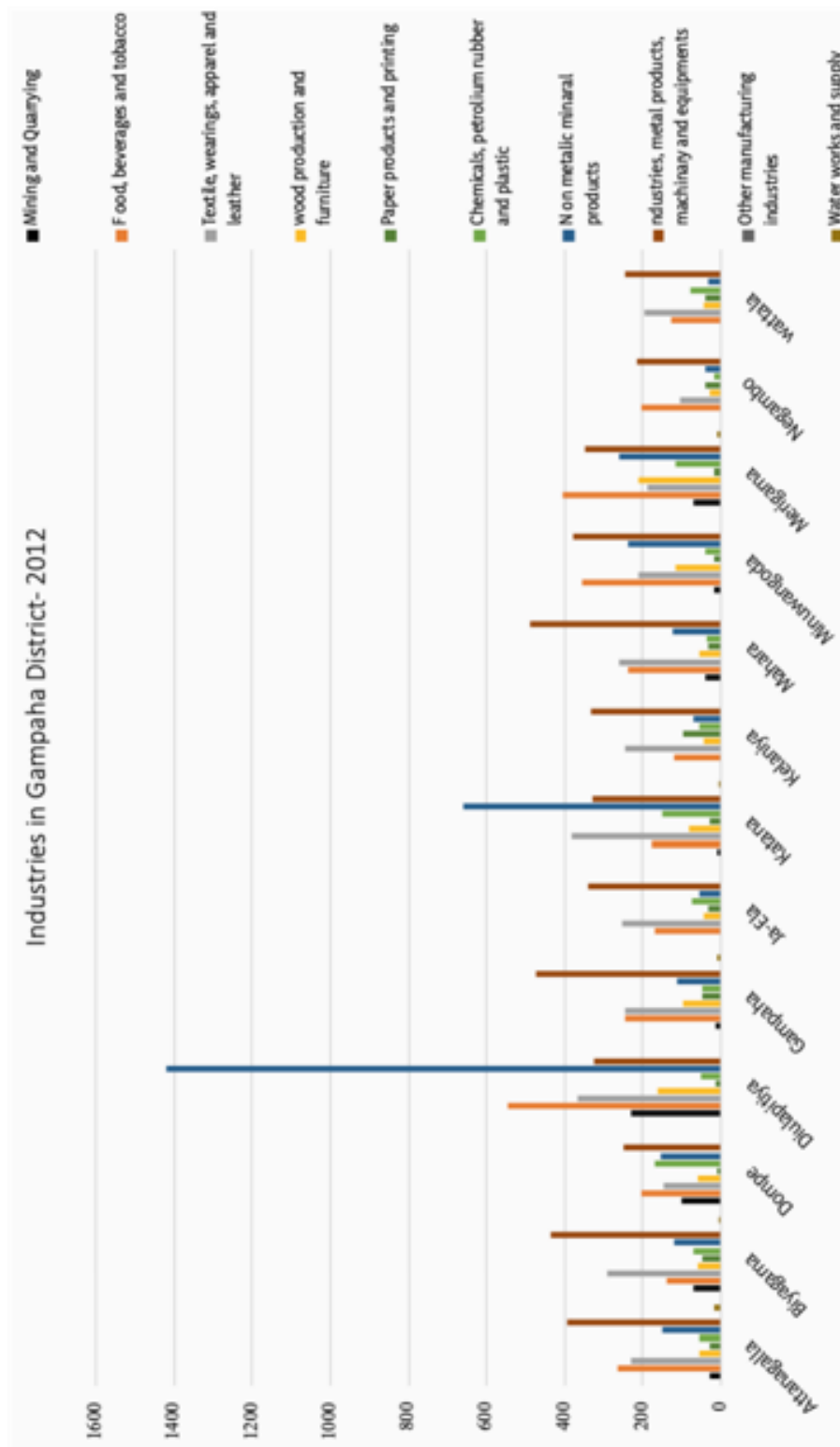
Annexure 10. Gampaha District Town Hierarchy



Annexure 11. Road Connectivity Analysis

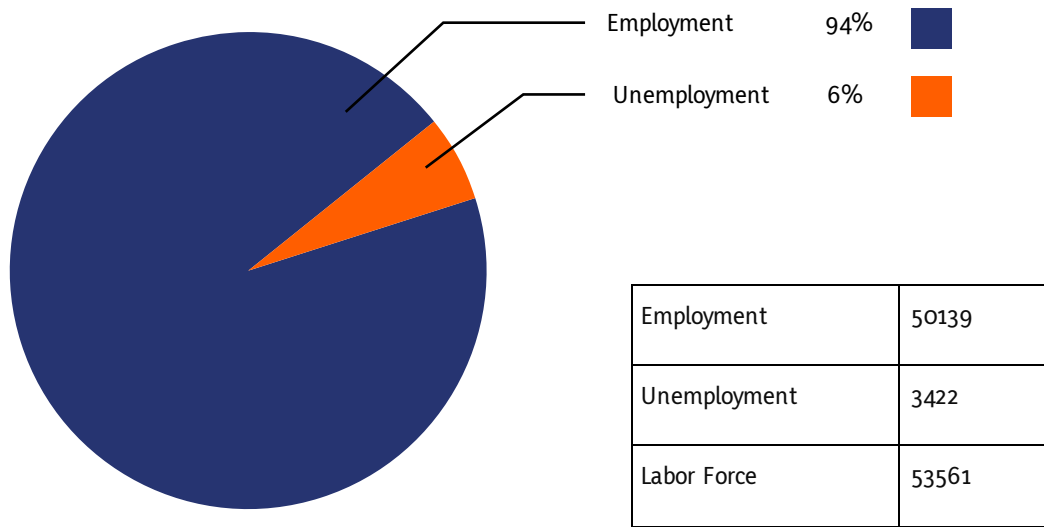


Annexure 12. Industrial expansion in the Gampaha District – 2012

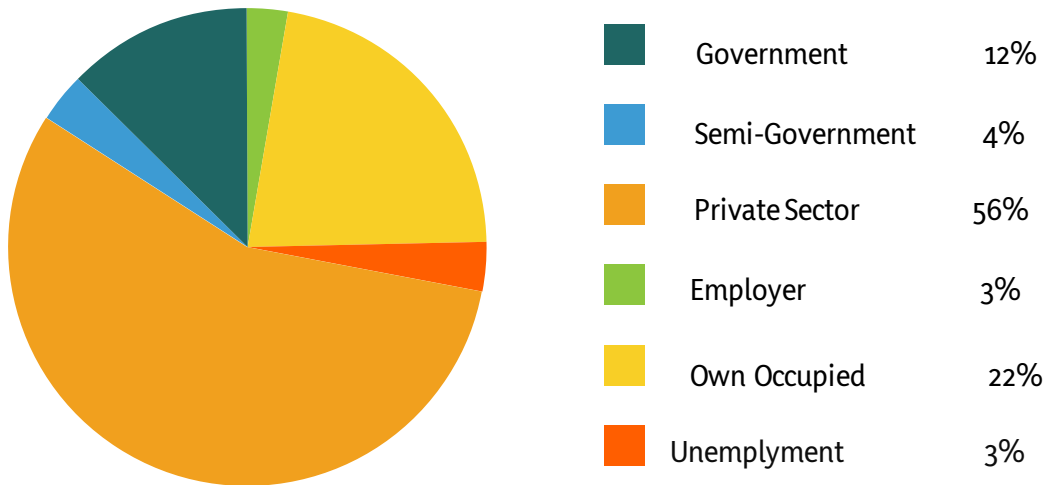


Source: Census and Statistic Departement - 2012

Annexure 13. Employment rate

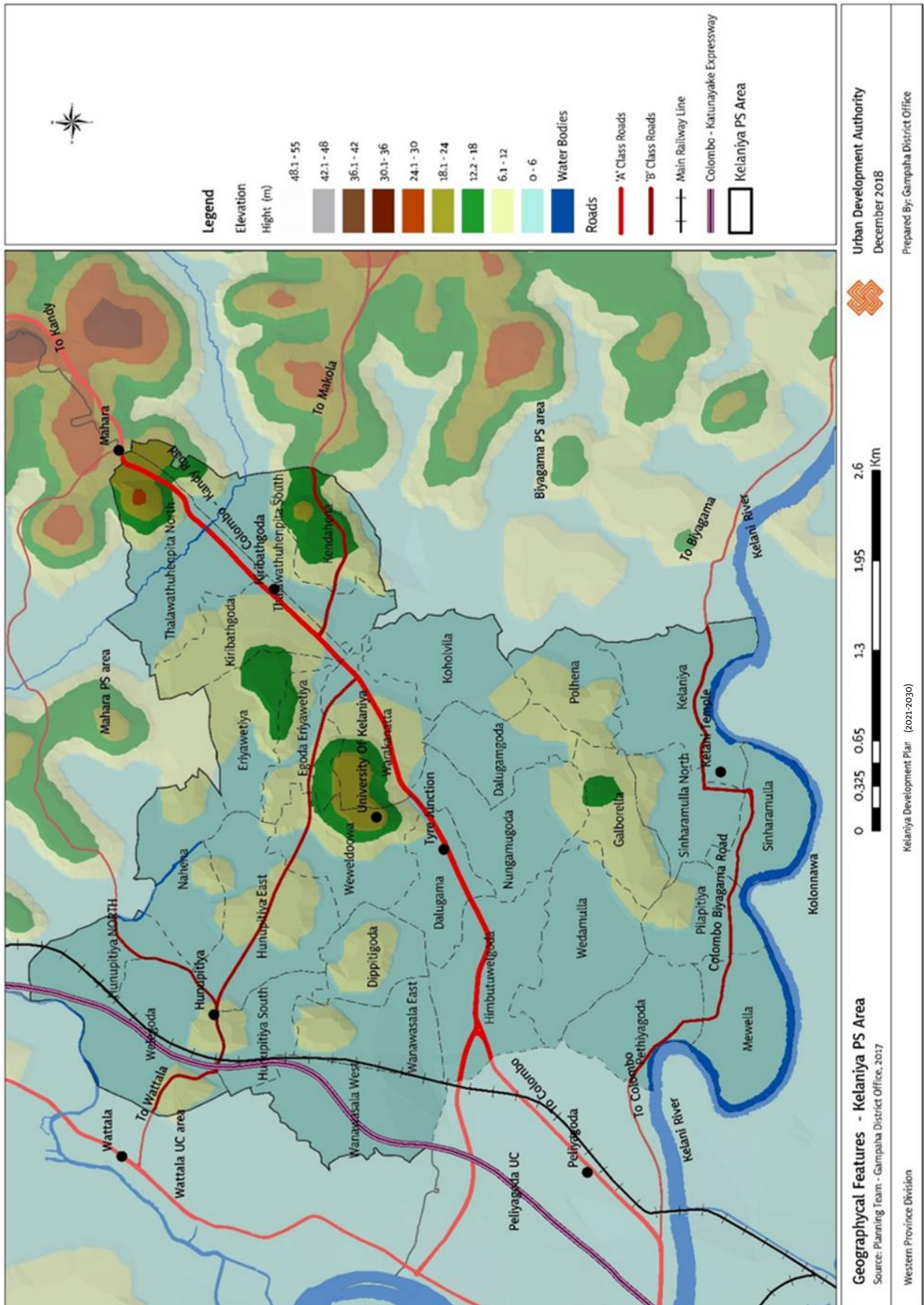


Source: Senses & Statistical Department 2012

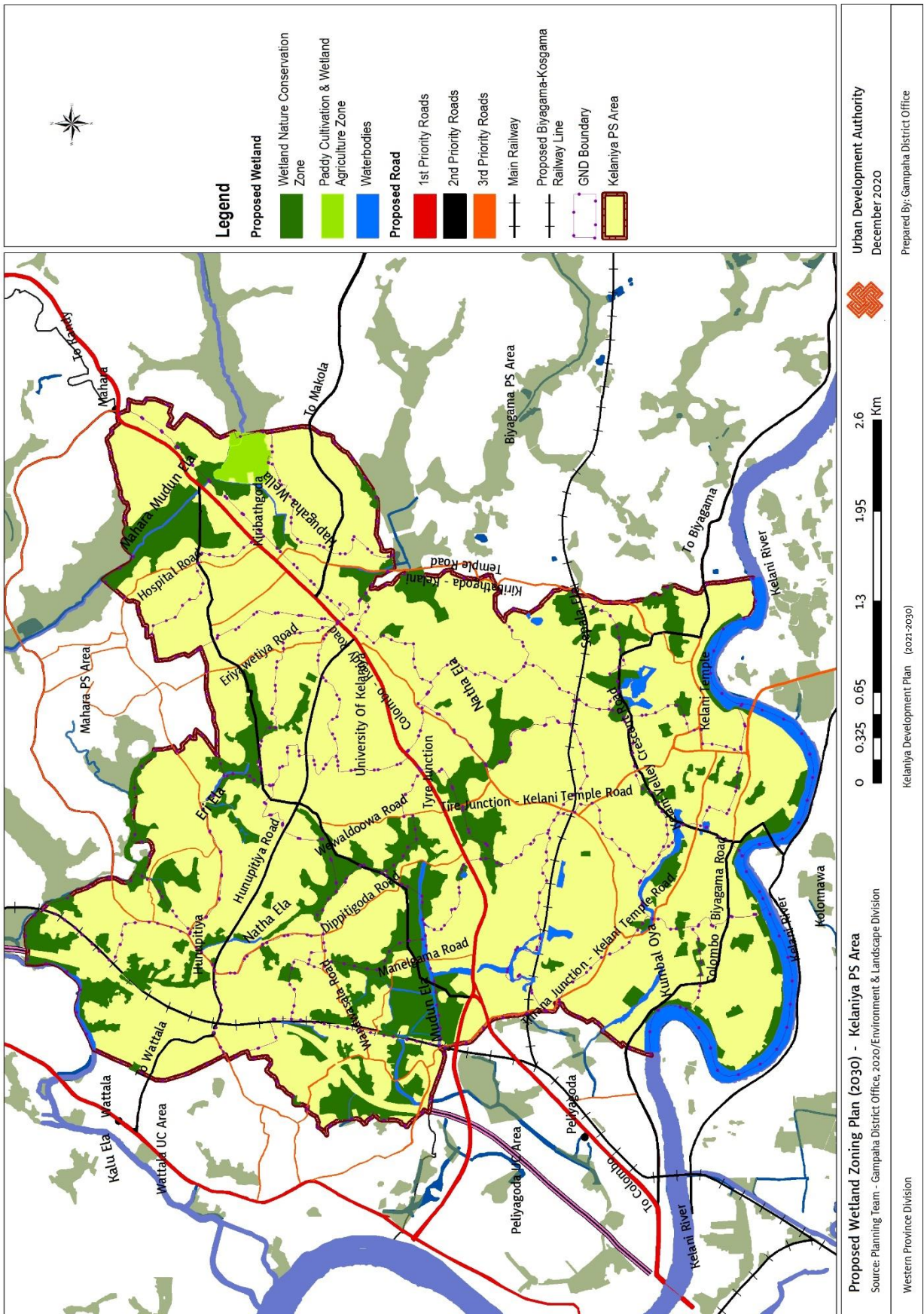


Source: Senses & Statistical Department 2012

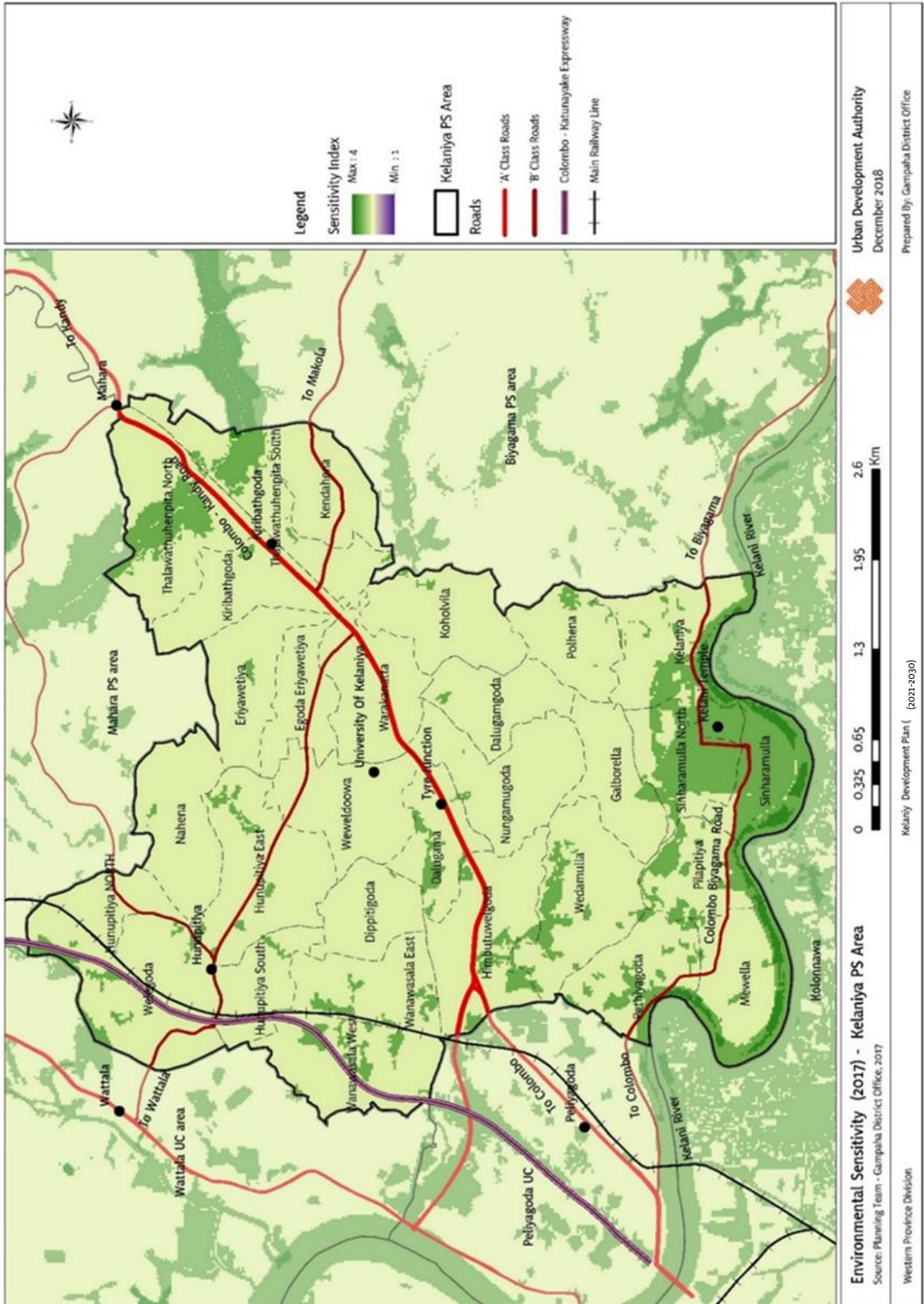
Annexure 14. Geographical Features of the Area with Elevation



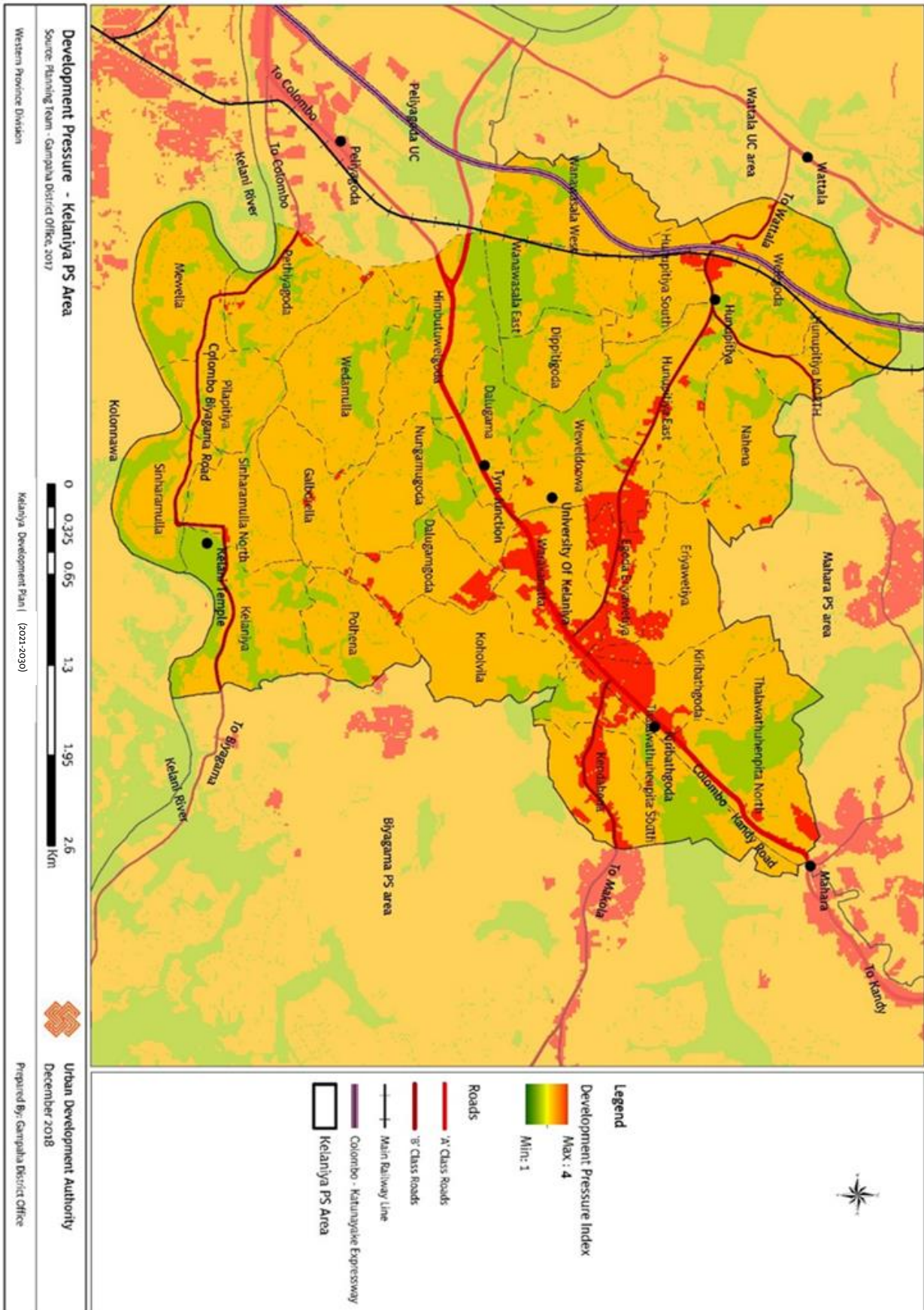
Annexure 15. Wetland Distribution – 2021



Annexure 16. Environmental Sensitive areas



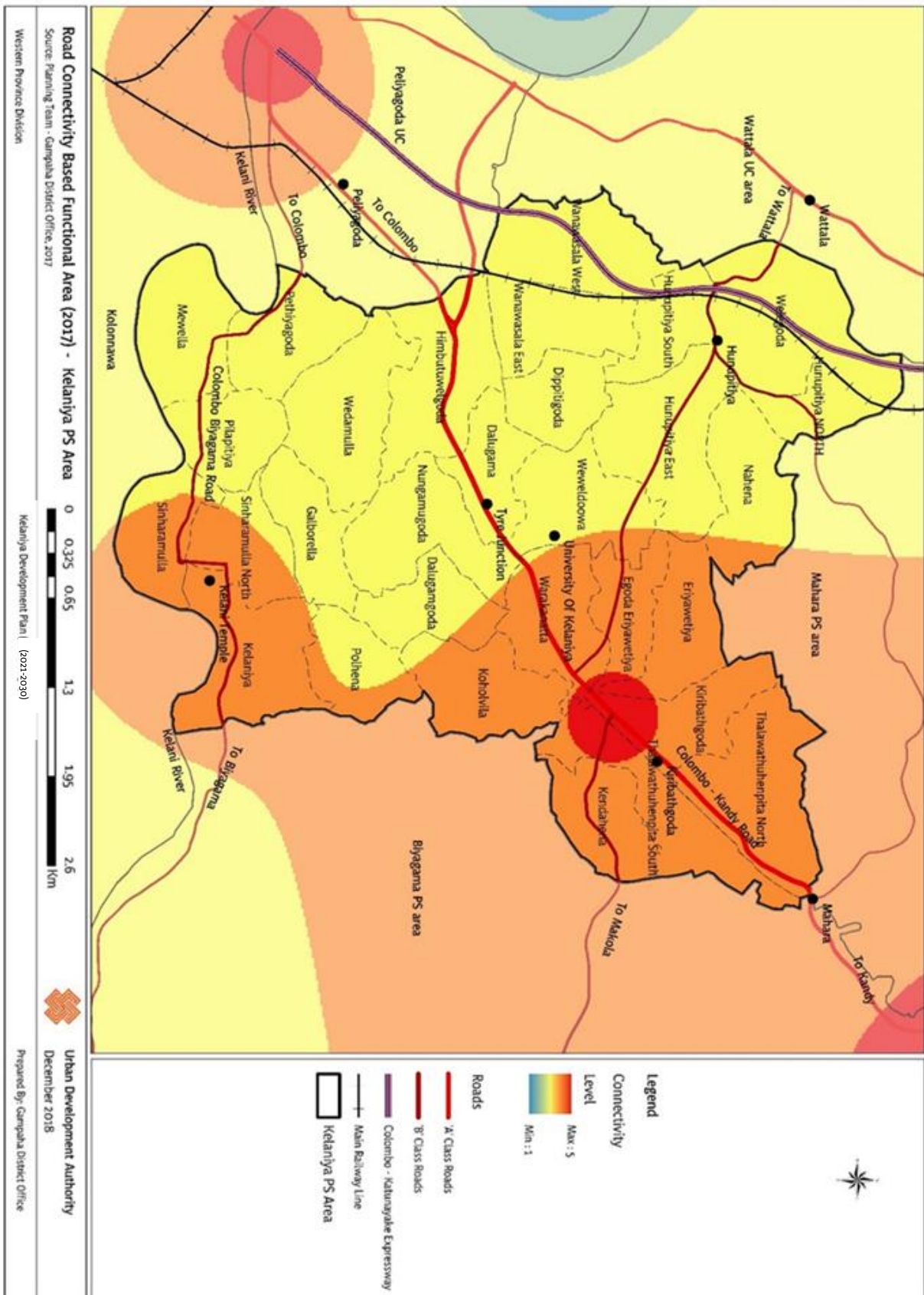
Annexture 17. Development Pressure



Development Pressure Index

Basic Factors	Weight		Value	Grade
Accessibility Index	15%			
Main Roads (A class)		A & B class roads / railway	5	
		C class roads	4	
Other roads (B & C Class)		D class roads	3	
		E class roads	2	
PS Road		F class roads	1	
Connectivity Index (IDW)	25%	(Std Dev)		5-1
Population Index	30%			
Population Density	50%	Popula tion Densit y	4.98 – 32.41	1
			32.4 – 40.206	2
			40.206 – 67.64	3
			67.64 – 164.28	4
			164.28 – 504.71	5
Population Growth	50%	Popula tion Chang e (2011- 2001)	(-15.59) – (-3.75)	1
			(-3.75) – (-2.00)	2
			(-2.00) – 0	3
			1.504 – 3.25	4
			3.25 – 6.68	5
Landuse Index	30%			
Landuse Categories	50%		Commercial	5
			Hotel and tourism	4
			Fishing	3
			Education	3
			Health	3
			Residential / Home garden	3
			Agriculture	2
			Forest/ Wetland / Water Bodies	1
Buildings	50%			5 – 1

Annexure 18. Road Connectivity Based Functional Areas



Annexure 19. Stakeholders' Views and Suggestions

Group 01 – Commercial and Industries

1. Widening the road from Eeriyawetiya junction to Nimali Film hall to minimize traffic congestion.
2. Adding additional lands to increase the town area of the Kiribathgoda
 - Paddy behind the Lanka Pharmacy
 - Paddy behind the Keels Super Market
3. Connect Pradhesiya Sabha owned dry fish shops area and space along the Ela to Makola Road.
4. Create Parallel roads to the Kandy- Colombo road
 - Close to Laksala
 - Near the Glass Frame Shop and Gama
4. Create 8 stored shopping complex with all facilities in Kiribathgoda public fair land (Car parks, post offices, state banks, cinemas, lecture halls, children's parks etc.)
5. Maintaining and developing the Existing vacant land in Kiribathgoda (Near the Kiribathgoda old bus stand).
 - Pandora Exhibition
 - Outdoor Public meetings
 - Musicales show
6. Facilitate pedestrian crossings with tunnels or flyovers in main Kandy – Colombo road.
 - Shopping complex to YMBA
 - Koswatta road to Eriyawatiya Junction
7. Construction of a complete toilet system in Kiribathgoda town center
8. To maintain and register a limited number of three wheelers (2 or 3) in suitable places and introduce sticker to identify the three-wheel owner.
9. Provide suitable places for traditional Clay industry in Kelaniya area.
10. To develop industries through modern technological knowledge and equipment.
 - Connecting to the tourism industry.
 - Improving the handicraft industry.
 - Providing industrial village and common amenities.
11. Create two Retirement Resorts closer to the Kelaniya secret area.
12. Establishing a Pedestrian bridge from bus stand to Kelaniya temple.
13. Establishment of a petrol station at Kelaniya temple premises.
14. Establishing a library with facilities.
15. Construction of a commercial building at Kelaniya PS owned land.
16. Establishment of industries on both sides of Hunupitiya New Road.
 - Packing the cement.

- Garment industry
- Construction of shopping complex in PS owned land in Thorana Junction. (About 3 stories)
- Establishing a male school inside the city.
- Establishment of private hospitals in urban areas.

Group 02 – services and Infrastructure Facilities

1. Planning the land accurately
 - To control flood level at ground level
 - Zoning the homes, industries, services and landscapes correctly
2. Education
 - Discuss with the provincial and Government Ministries about the schools which need to be develop and identify them
3. Health
 - Convert Kiribathgoda base hospital into the national hospital.
 - The need of a private hospital with the all facilities
 - Establish Wastewater treatment system
 - Development of exercise areas in suitable places to prevent non-infectious diseases
4. Housing
 - Construction of apartment complexes as a response to housing demand flood, and unauthorized residents.
5. Roads
 - Solution for existing traffic condition,
 - Mahara Junction – Dalupitiya road- New Hunupitiya road – Wewalduwa road – Tayer cooperation Junction
 - Old Kandy road development, Alternative road development
 - Allocate pedestrian service lain for tunnel road systems in Kiribathgoda, University, Thorana Junction. – Electricity, water, petroleum, telecommunication.
 - Construct Commercial complex with parking facilities.
 - Establishment of an Intercity Public Transport Service
6. Service Institutes – Develop the Electricity & Telecommunication according to the future plans
7. Waste Management
 - Informed people to separate waste
 - Adhering to a proper management system

Group 03 – Environmental and Historical

1. Preservation of religious and environmental conditions based on Kelaniya Raja Maha Viharaya.

Problems

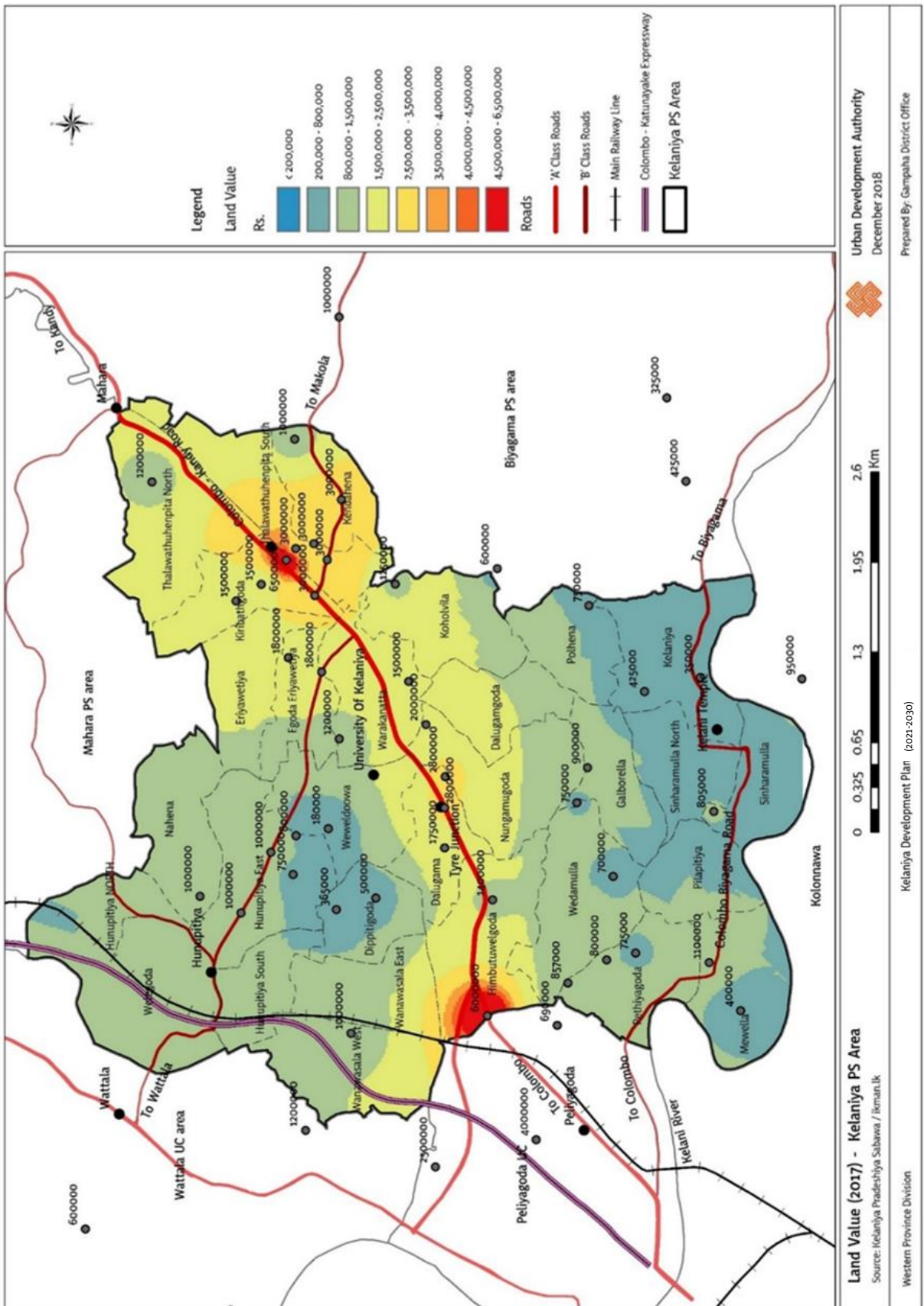
- Noise, conjunction and smoke inside the secret area.
- Unauthorized construction in the secret area – Merchandise and beggars, common place, trade stalls, bus stops
- Construction which are damage to the secret sense of the Viharaya – meat shops, fish stalls, restaurants, high buildings, lodges, clubs.
- Lack of accommodation for local and foreign devotees.
- Environmental imbalance, pollution
- Cultivation lands (paddy fields) could not be used
- Rectification of irrigation system / failure to implement
- Illegal constructions of the river reserve
- Canal reserve / low ground blocked
- Poor infrastructure in the region
- Waste, wastewater, lack of proper exclusion
- Destroy tide control methods
- Overflow
- Destruction of wildlife habitats.
- Human, wildlife and conflict.

Proposals

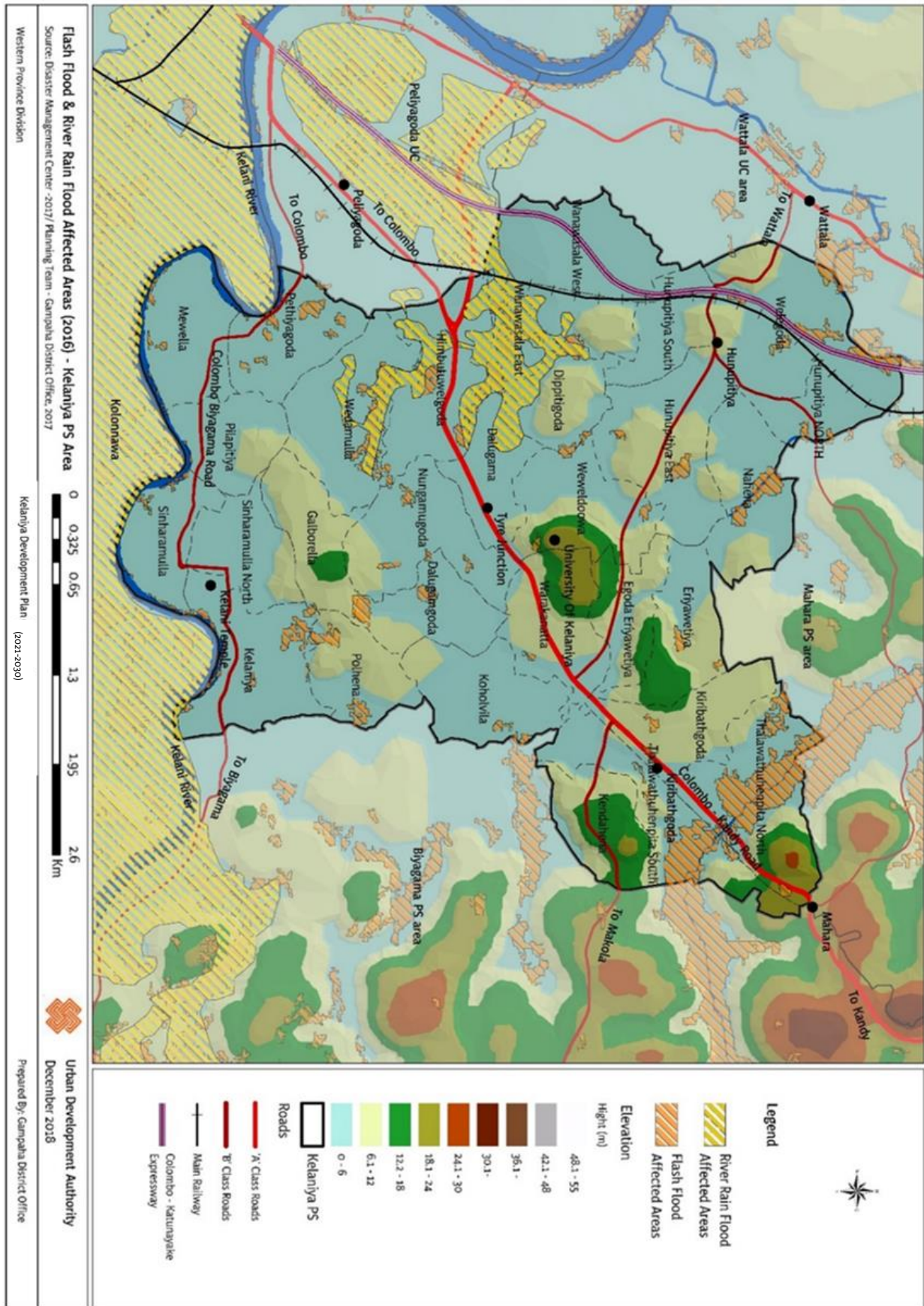
1. Established “One way” system around the roads in Kelni Viharaya.
2. Shift the activities which are disturb to the secret sense of the temple.
3. Restriction for building heights (less than the Pagoda)
4. Rehabilitation of existing buildings and construction of a new Pilgrims Rest
5. Enhance the environmental balance and reduce pollution.
6. Establishment of a crop land regeneration system in partnership
7. Reconstruction of irrigation
8. Removal of Pollutants
9. Declaration of River Reserves
10. Marking the boundaries of the river boundary
11. Removal of unauthorized constructions and Residents
12. Removal of low-level blockages and Canal reservation

13. Planning the infrastructure facilities to fit the future
14. Establishment of a common wastewater refinery interconnection station
15. Construction and renovation of tidal walls
16. Construction of side bends on Kelani River
17. Construction of protected baths
18. Management of sub care centers properly
19. Construction of invasive plants
20. Removing telephone poles and electric poles and introducing alternatives
21. Cultivation of plants and crops
22. Eco tourism promotion

Annexure 20. Land Values

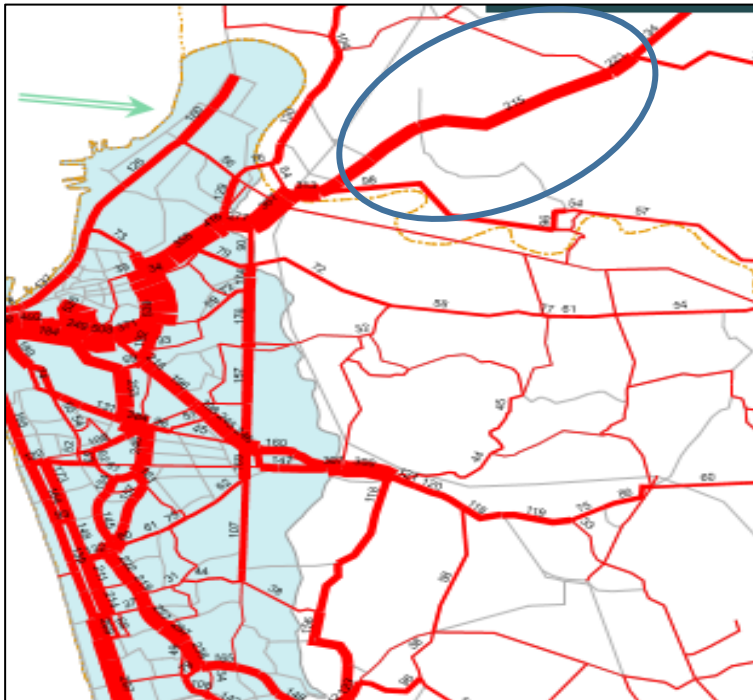


Annexure 21. Flash Flood and Kelani River Flood Affected Areas

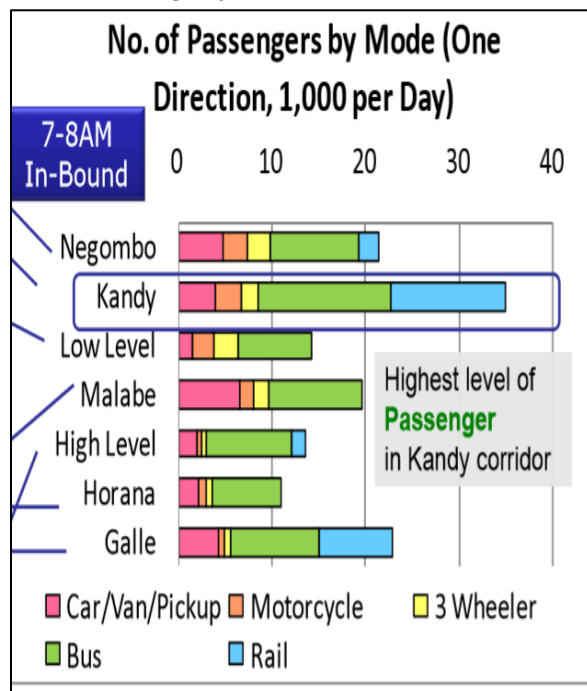


Annexure 22. Kiribathgoda Peak Hour Bus Frequency and Passenger by Mode

- Kiribathgoda Peak Hour Bus Frequency



- Number of Passenger by Mode



Source: Com-Trans study report,2014

Annexure 23. Stakeholders' Views on Computer-Related Analysis (Word Cloud Analysis)

Stakeholder meeting regarding this Kelaniya Development Plan was held on 20th November 2017 at Royal Park Hotel in Kiribathgoda. More than 60 of stake holders which was presented to the meeting were divided into three major group as Commercial and Industrial Development, Service and Infrastructure Development, and Cultural, Heritage and Environment Issues, Potentials and proposals which was discussed in those three groups separately pertaining to this area were further discussed at the meeting together with all three groups. Finally, Computer based Word Cloud Analysis were done for those discussions and analyzed the people perceptions and proposals. It has been expressed as follows.

Group 01 – Commercial and Industrial Development

This group has directly focus on the Commercial and Industrial Development of the area. And further discussion was to improve the infrastructure facilities as a magnet for developing Commercial & Industrial uses.



Group 02 – Service and Infrastructure Development

According to the group 02 they have focus on the infrastructure development, mitigation of flash flood and how-to full fill the future need of infrastructure facilities by considering lacking fragments of it and further how to manage it.



Group 03 – Cultural, Heritage and Environment

The focus area was environment protection with culture and heritage further how that should arrange with all facilities. This discussion has round up the session with targeting environment protection.



Overall word cloud emphasized most highlighted areas of the three-brain storming sessions, so this conclude the overall discussion of each groups and through this analysis, thus this stakeholder groups have focused their discussion into 3 major areas.

- 01. Environment Management
- 02. Infrastructure Development
- 03. Heritage conservation

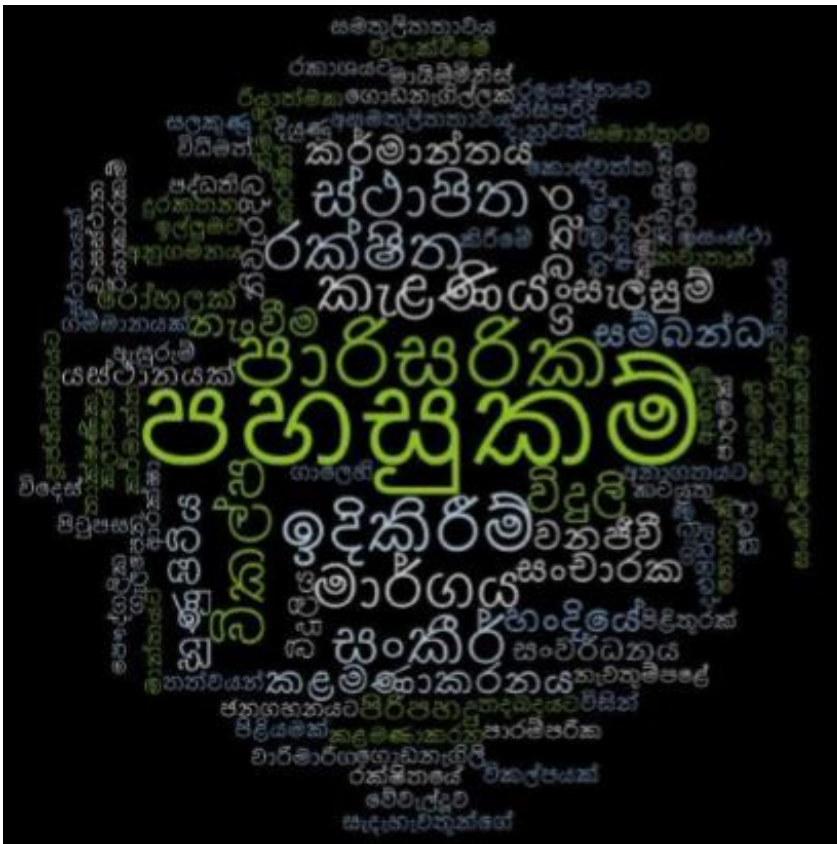


Node Analysis

The base of the Nodes was taken from overall word cloud. This word cloud emphasizes the main key sectors where whole brain storming session focused.

- Environment Management
- Infrastructure Development

Through this analysis, can identified what are the key areas where every group has addressed and what are the key points that should be highlighted in future development plan

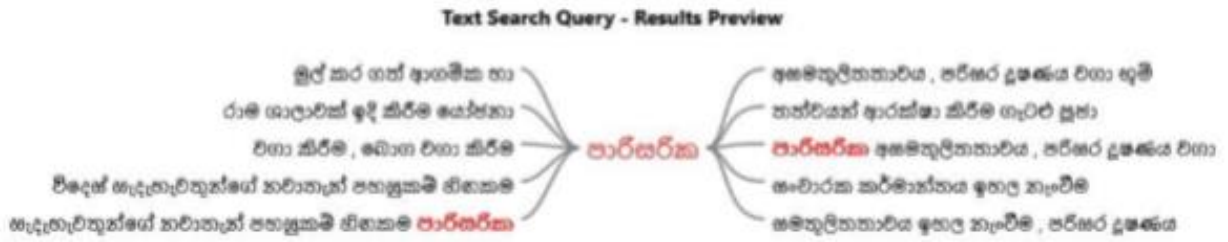


Overall Word Trees Analysis Based on Node Analysis

This word tree analysis is basically focused on the node analysis and this analysis direct where truly city development should be focused in future and issues and potentials of the Kelaniya development area

46. Environment Management

Since Kelaniya area is prominent for environment sensitive area in future also that character should be protected while having other developments. Kelaniya can be identified as a one of the highly developing area which is so close to Colombo.



Problem Identification

- Environment Disequilibrium

Kelaniya development area is prominent for environment sensitivity. But with the developments and unauthorized constructions environment equilibrium has destroyed. That cause to impact the whole eco system of the development area.

- Environment Pollution

Since industrial developments attracted to the Kelaniya, environmental pollution rate also getting high. The reason is these developments didn't develop according to the environmental standards. Most of them are locate in Kelani river reservation and waste is dumping to the river. That cause to create health issues and environmental issues as well.

02. Infrastructure Development

Current development trend of this area is focused on industrial based development and there is potential for develop industrial economy while protecting the environment in Kelaniya. Existing infrastructure developments are not facilitating the need of Kelaniya future development.



Problem Identification

- Not enough infrastructure facilities for future developments

Trend of Kelaniya development has turned into the industrial focus and existing infrastructure facilities are not supporting for future need of the area. Further existing infrastructure facilities are supporting for developed sacred area base local pilgrims and tourism. • No proper sanitary and hotel facilities for tourists and pilgrims, Because of Kelaniya sacred area this

city attracted more tourists and pilgrims. But current city is not facilitating for this commuter population with the need of them. So that has cause to reduce international acceptance of the city.

- Failures in existing waste water drainage system

Due to failures of existing drainage system this area is facing for flash flood and that is affected to the city dwellers living environment.

- Existing vehicle parks not support for the parking demand

Kelaniya area is regularly having high range of commuter population within city boundaries. But the issue is existing vehicle parks were not creating spaces for this coming trend. So that has been a cause for increase traffic congestion of the area.

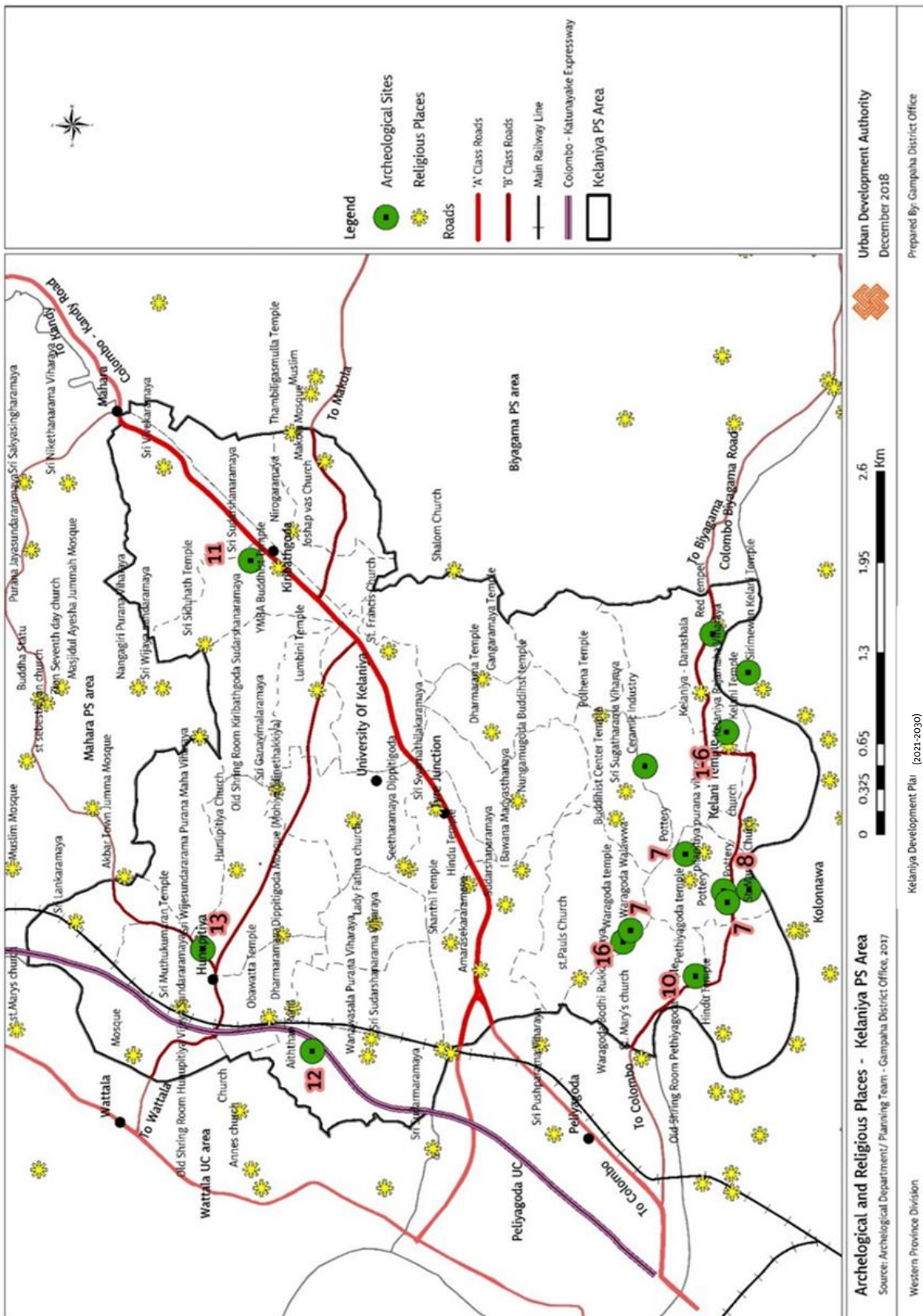
Potentials

- Strong religious culture base pilgrims and tourist attraction
- Proximity to Colombo port
- Having well connected road network
- Popular commercial and industrial centre

Conclusion of the Analysis

Stakeholder meeting results can be concluding as main two sectors according to the analysis. This whole analysis interprets the way development plan should address Kelaniya development area. Infrastructure developments for commercial and industrial developments is first sector where development plan should focus. The second sector is environment protection and preparing the landscape in Kelaniya temple area. The overall analysis can be explained as follows.

Annexure 24. Archeological and Religious places in Kelaniya



Kelani Temple – Old Pilima Geya



Old Dharma Shala



Kelaniya Stupa



Old Vibheeshana Dewalaya



Old “Seemamalakaya”



Ancient inscriptions



- Places of the ancient clay industry, 300 meter from the Pilapitiya Viharaya (north of the Kumbal Oya)
- Pilapitiya Cemetry to 100 M towards Kelani river
- Pilapitiya Cemetry to 10 M towards west.

St. Marys Church



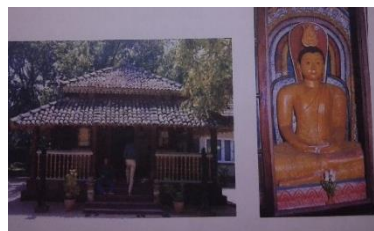
Old building which held Waragoda Dibet



Pethiyagoda Paramarth Darmakara Old Temple



Kiribathgoda Sudarshanaramaya



Aiththam Pond



Hunupitiya Vijaya Sundararamay



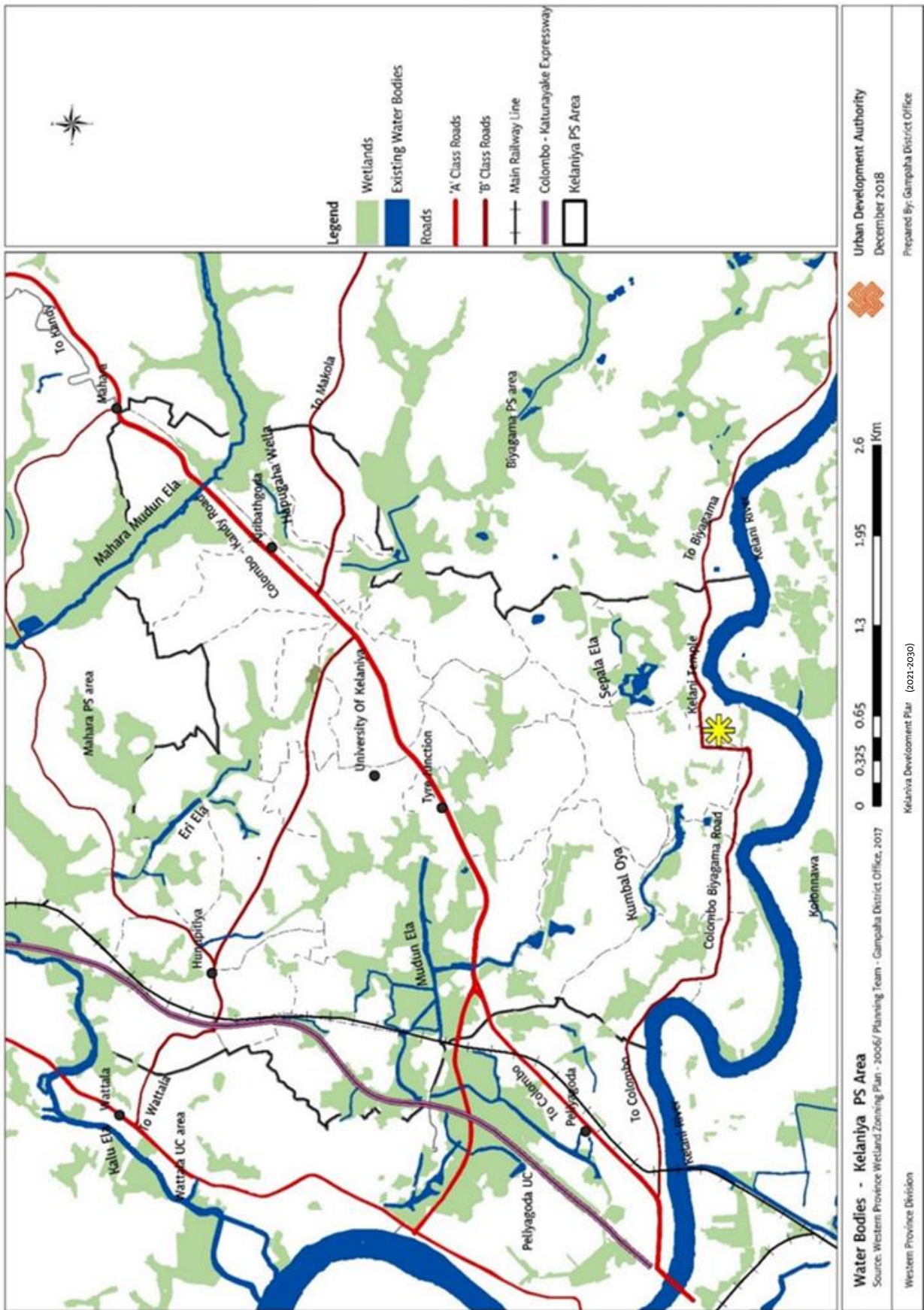
Dalugama Pond



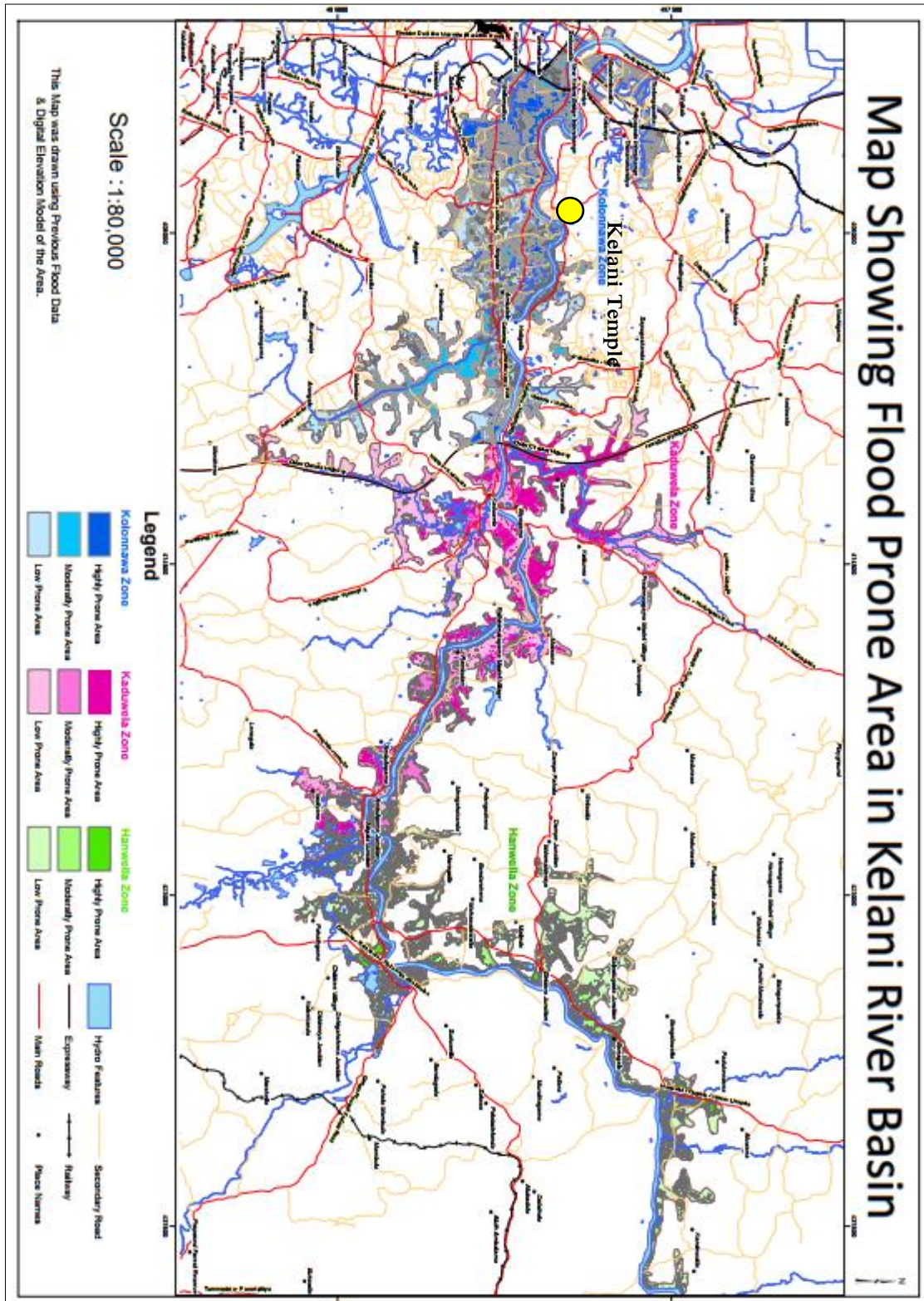
Waragoda Walawwa



Annexure 25. Water Bodies Distribution of Kelaniya

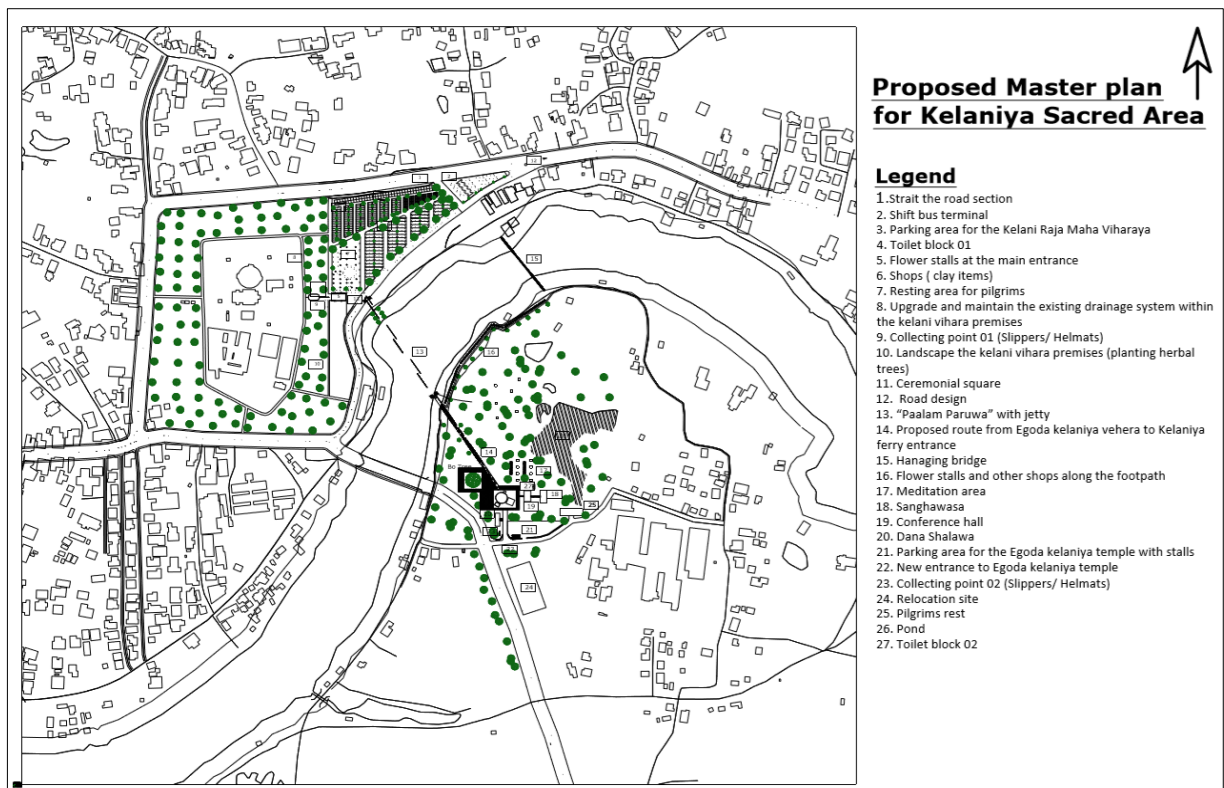
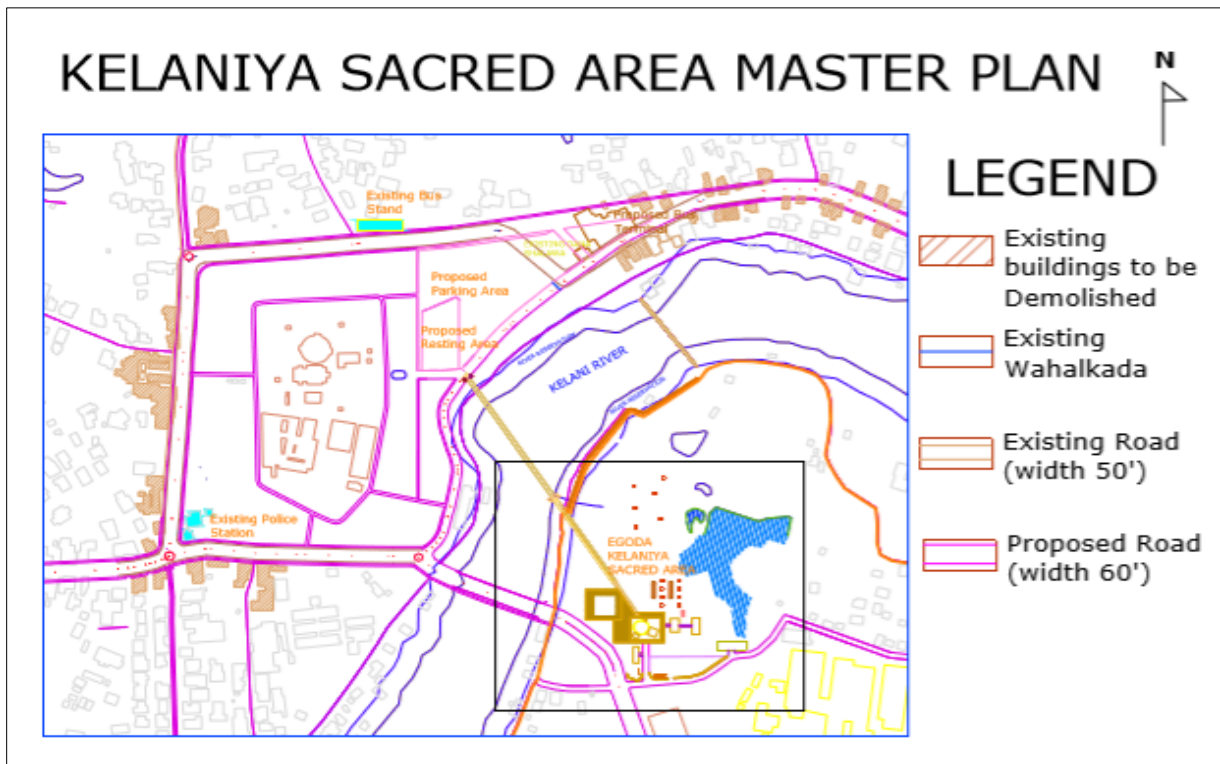


Annexure 26. Flood Effectuated Areas of Kelaniya -2016



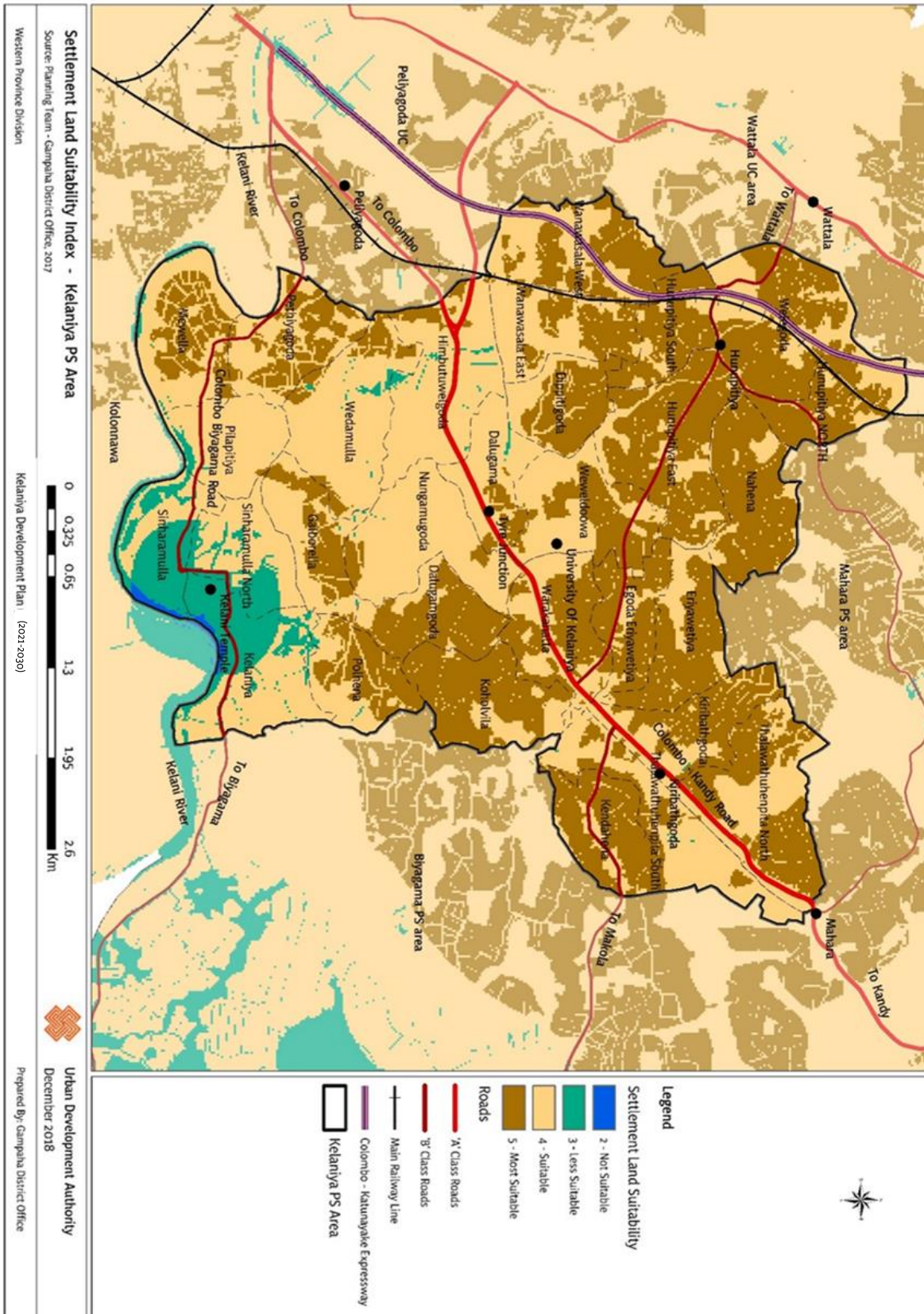
Source: <https://www.survey.gov.lk>

Annexure 27. Proposed Kelaniya Sacred Area Plan- NPPD

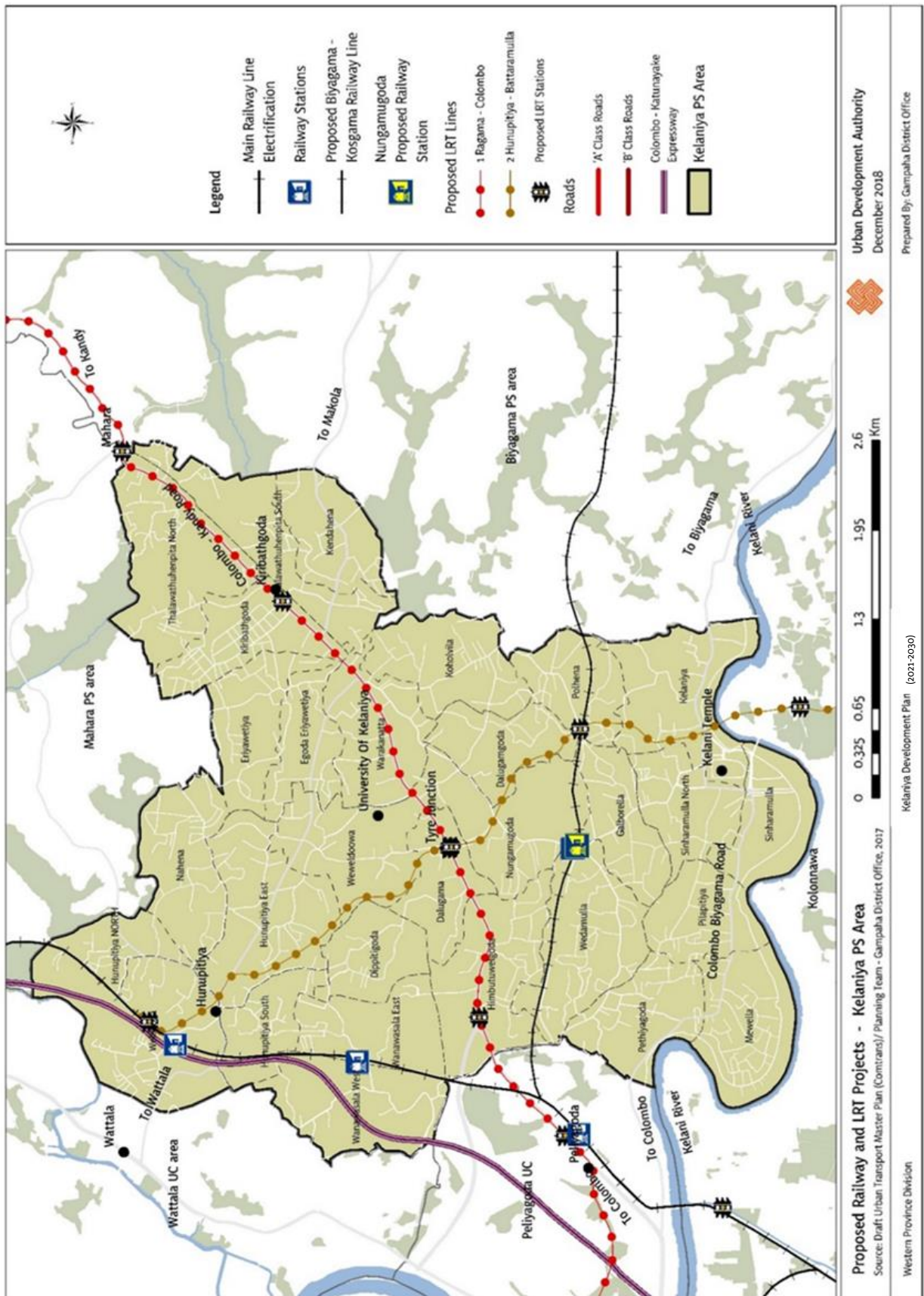


Source: National Physical Planning Department

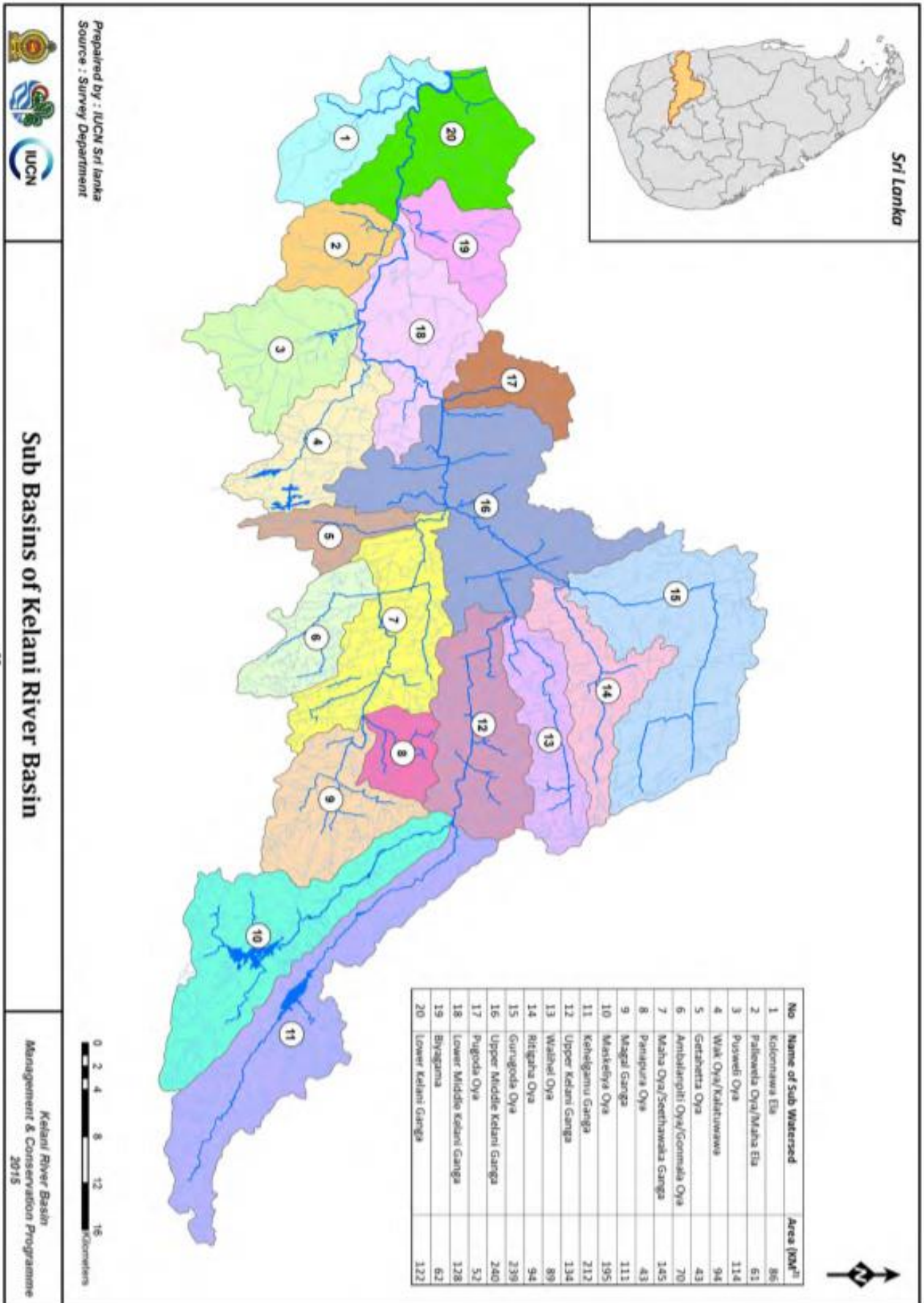
Annexure 28. Settlements Land Suitability Analysis



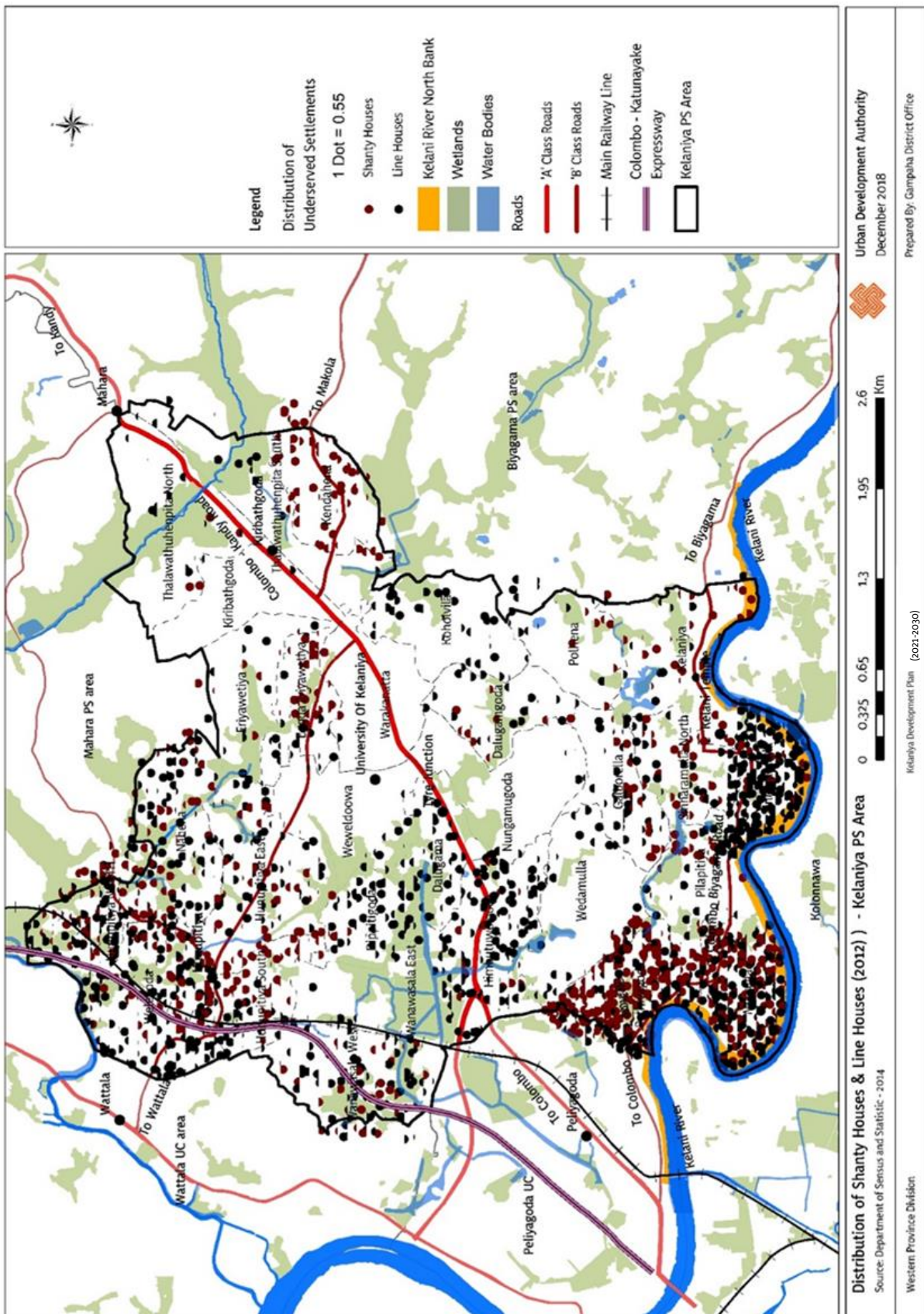
Annexure 29. Proposed LRT Line and New Biyagama -Kosgama Railway



Annexure 30. Sub-basins of the Kelani River



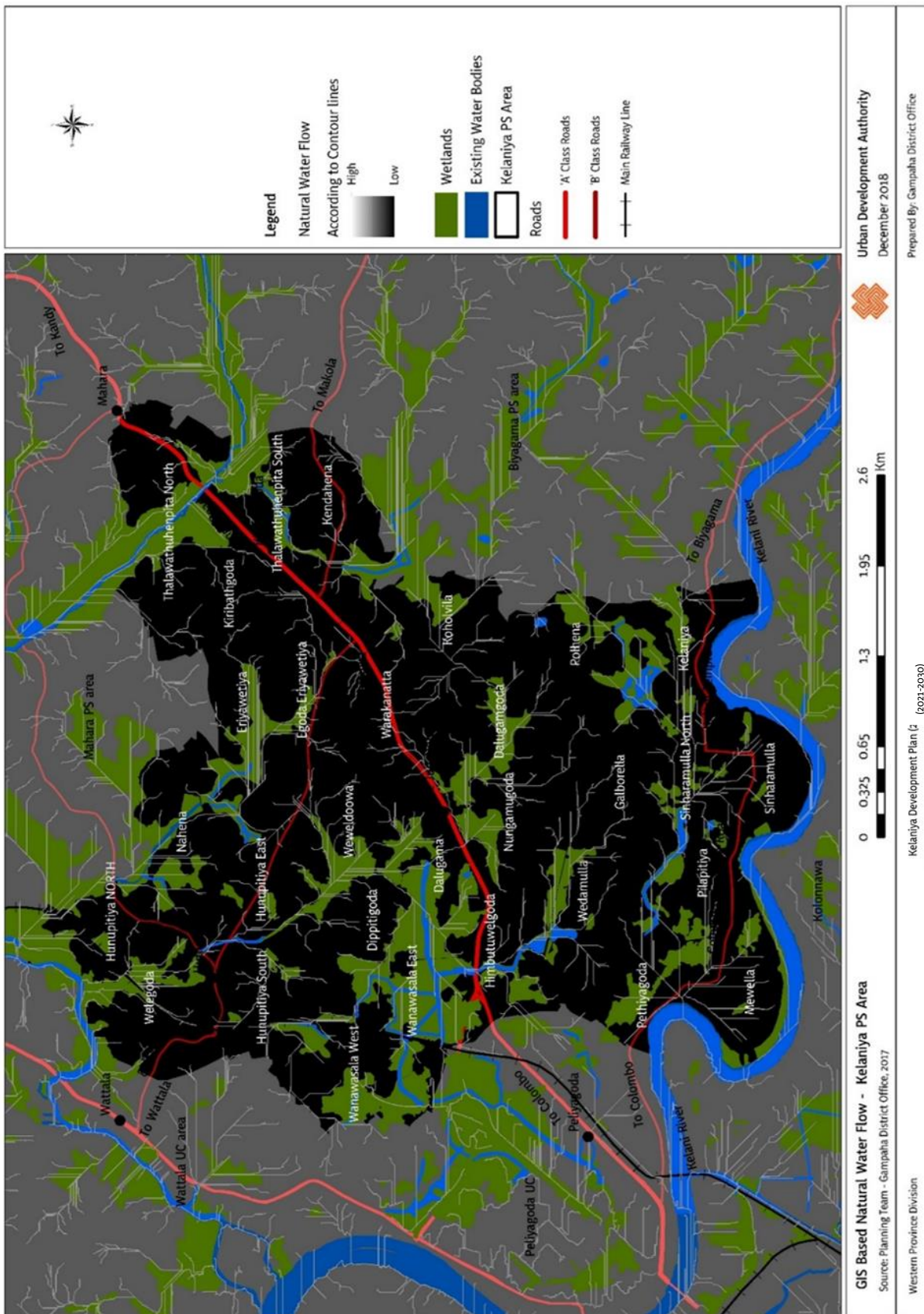
Annexure 31. Distribution of shanty Dwellings and Linear Houses



Annexure 32. GN Division Wise Slums and Shanties Distribution

GND	Twin Houses	Line Houses	Shanty Houses	Total Units
Welegoda	5	69	23	1509
Hunupitiya North	13	4	11	713
Nahena	5	18	10	1379
Thalawathuhenpita North	0	3	0	392
Thalawathuhenpita South	18	4	1	982
Kiribathgoda	3	0	0	867
Eriyawetiya	7	5	3	1202
Hunupitiya North	6	17	15	1388
Hunupitiya South	0	7	12	859
Egoda Eriyawetiya	1	9	10	663
Wanawasala West	4	25	11	1001
Kandehena	1	0	18	1001
Wewalduwa	0	0	0	765
Wanawasala East	0	1	0	859
Warakanatta	0	0	0	681
Dippitigoda	2	13	0	938
Koholvila	15	14	0	1018
Dalugama	1	10	0	481
Nungamugoda	0	0	0	699
Dalugamgoda	2	7	3	658
Himbutuwelgoda	15	43	6	849
Wedamulla	0	4	0	1150
Polhena	10	0	2	698
Kelaniya	4	6	11	831
Pethiyagoda	12	26	71	1054
Galboralla	1	6	0	789
Sinharamulla North	4	17	15	1078
Mewella	14	72	46	1064
Pilapitiya	11	5	1	566
Sinharamulla	7	85	4	721

Annexure 33. GIS Based Natural Water Flow Analysis and Existing Water Bodies



Annexure 34. Land Reclamation and Development Act

ශ්‍රී ලංකා ප්‍රජාතාන්ත්‍රික සමාජවාදී ජනරජයේ ගැසට් පත්‍රය
අති විශේෂ
The Gazette of the Democratic Socialist Republic of Sri Lanka

EXTRAORDINARY

අංක 1662/17 - 2010 ජූලි 14 වැනි බදාදා - 2010.07.14
No. 1662/17 - WEDNESDAY JULY 14, 2010

(Published by Authority)

PART I : SECTION (I) — GENERAL

Government Notifications

SRI LANKA LAND RECLAMATION AND DEVELOPMENT CORPORATION ACT, No. 15 OF 1968
AS AMENDED BY ACT, No. 27 OF 1976, No. 52 OF 1982 AND SRI LANKA LAND RECLAMATION AND
DEVELOPMENT CORPORATION (AMENDED) ACT, No. 35 OF 2006

Order under Section 4(a)1

By virtue of the powers vested in me under the Section 4(a)1 of the Sri Lanka Land Reclamation and Development Corporation Act, No. 15 of 1968 as amended by Act, No. 27 of 1976, Act, No. 52 of 1982 and Sri Lanka Land Reclamation and Development Corporation (Amended) Act, No. 35 of 2006, I, Mahinda Rajapaksa, Minister of Defence with the consultation with all the respective Local Government Institutions do by this order reservations are declared, for all main, sub canal and feeder canals where water flows, or led to flow or constructed with the objective of causing water flow, or as created naturally for the purpose, situated within the boundaries described below from the bank of the canal to the limits indicated in meters in the chart below. Any or temporary or/and other sort of buildings or structures could not be constructed in this canal reservation area and a permission should be obtained subject to the Terms and Conditions stipulated by the Sri Lanka Land Reclamation and Development Corporation in doing any sort of such activity.

MAHINDA RAJAPAKSA,
Minister of Defence.

SCHEDULE

Corresponding to the surface width of all main canals, all sub canals and all feeder canals where water flows or used to flow water or canals constructed for the purpose of flowing water or those being created naturally for the purpose situated within the Western Province of the Democratic Socialist Republic of Sri Lanka and bounded at

North by	Maha Oya ;
East by	Areas in the Administrative District of Kegalle and area in the Administrative District of Ratnapura ;
South by	Bentota Ganga and areas located in Galle District ;
West by	Sea.

and lengths from the bank depicted in the chart below of either canal banks shall be canal reservations.

1A

2A

1662/17
 I කොටස : (I) ඡේදය - ශ්‍රී ලංකා ප්‍රජාතාන්ත්‍රික සමාජවාදී ජනරජයේ අති විශේෂ ගැසට් පත්‍රය - 2010.07.14
 PART I : Sec. (I) - GAZETTE EXTRAORDINARY OF THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA - 14.07.2010

Surface width of the canal (meters)	Reservation from the canal bank	
	for open canals (meters)	For surface covered canal (meters)
1.0 — 1.2	1.0	0.3
1.3 — 3.0	2.0	1.0
3.1 — 4.5	2.75	1.0
4.6 — 6.0	3.5	1.5
6.1 — 9.0	4.5	1.5
More than 9.0	6.5	2.0

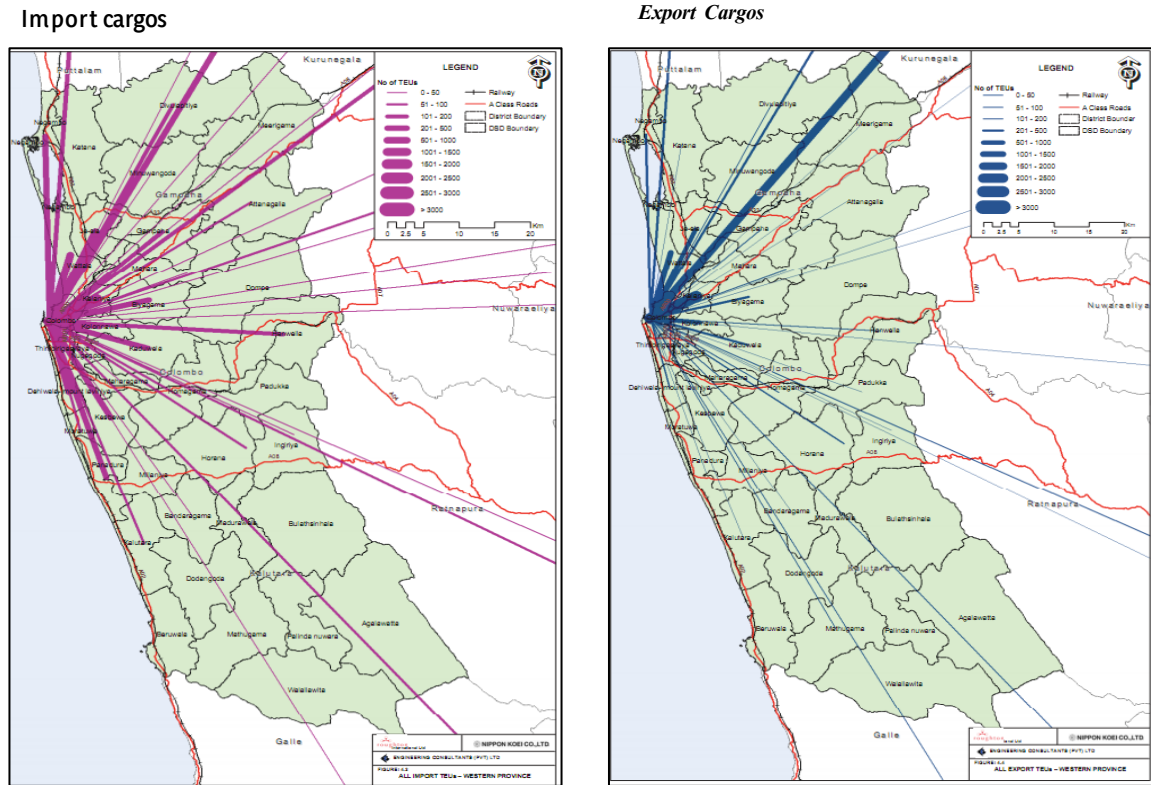
In case where lengths declared by the Urban Development Authority, Irrigation Department, Central Environment Authority, Agrarian Services Department and Local Government Institutions regarding the reservations mentioned above exceed the lengths given in this statement, the lengths declared by the said institutions shall be accepted.

TERMS AND CONDITIONS.

- (a) Construction of any sort of building or structure and (or) filling of land shall not be done within the area declared as a canal reservation without having a written approval of the chief Executive officer Sri Lanka Land Reclamation and Development Corporation.
- (b) As described in the Schedule the minimum extent of reservation shall physically be available.
- (c) Linking storm water drains, disposition of sewerage lines, industrial waste or throwing /disposition of any sort of object which cause corruption shall not be done or shall not take any attempt to do such as action.
- (d) Canal reserve could be used as an access road only in an instance where an alternative is not available, but that way shall not be covered by tar, after paving stones or concreting or any other application.
- (e) Any individual, Society Institution, or Local Authority, shall not lease the canal reservation for commercial activities or any other activity.
- (f) Lands in the canal reservation shall not used for parking vehicles, garages and cultivations.
- (g) The prior written approval of the Sri Lanka Land Reclamation and Development Corporation shall be obtained for any activity done within the declared canal reservations.
- (h) Any individual authority by the Chief Executive Officer of the Sri Lanka Land Reclamation and Development Corporation for the Activities stipulated in the Act, shall have the power to access the declared area and anyone who disturb such access could be a convicted guilty under the provisions of the Act.
- (i) Every individual who do not adhere to these terms and conditions is guilty under the Corporation Act.
- (j) The terms and conditions and also the terms and conditions impose in this connection in the future shall be adhered to.

07-864

Annexure 35. Distribution of Export and Import Cargos

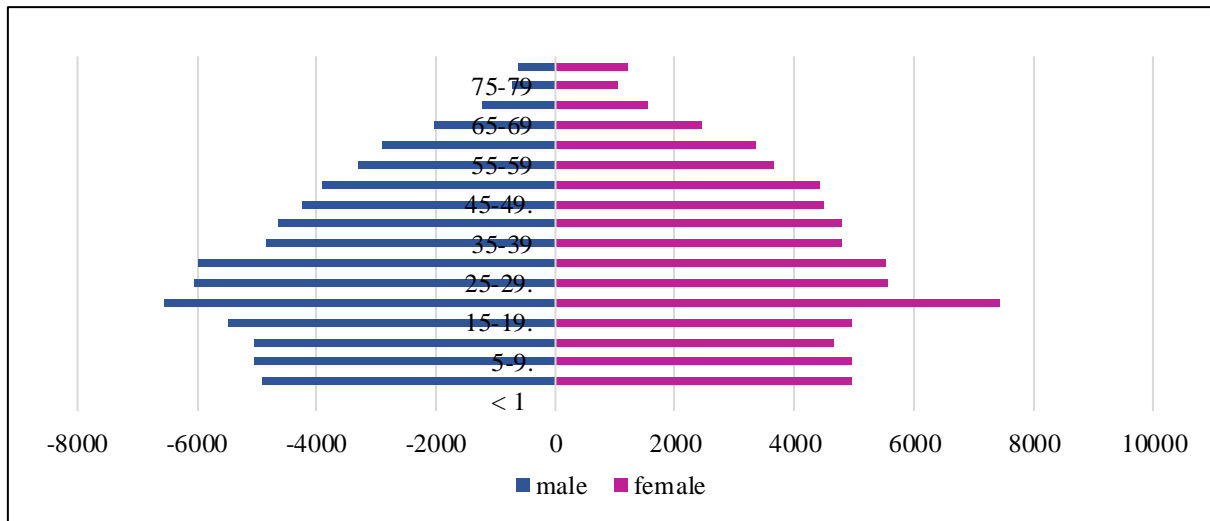


Source: Draft Peliyagoda Development Plan, 2017

Annexure 36. Urban Service Centers Prioritization

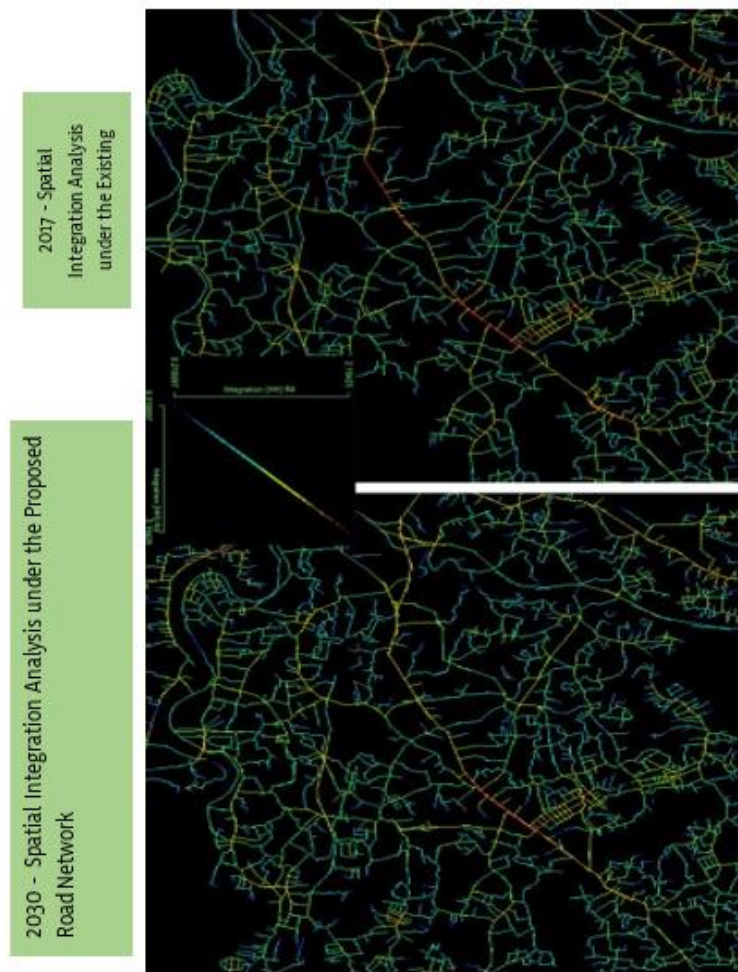
Town Centers	Development Pressure Index	Livability Index	Potential Index	Railway Stations	Proposed LRT Stations	Total	Sensitivity Index	Total Sensitivity	Priority Level
Kiribathgoda	5	5	4	0	1	15	1	14	1
Hunupitiya	4	5	4	1	1	15	2	13	2
Tire Junction	4	5	4	0	1	14	2	12	2
Nungamugoda	3	4	4	1	0	12	2	11	3
Thorana Junction	4	5	4	0	0	13	3	10	4
Dalugama	4	4	4	0	0	12	2	10	4
Polhena	3	5	4	0	1	13	2	10	4
Wanawasala	2	5	4	1	0	12	2	10	4
Galboralla	3	5	4	0	0	12	3	9	4
Sinharamulla	2	4	3	0	0	9	3	6	5
Kelaniya	3	4	3	0	0	10	3	7	5
Wewalduwa	3	4	3	0	0	11	2	9	5
Dippitigoda	2	5	3	0	0	10	2	8	5
Dalugamgoda	2	5	3	0	0	10	2	8	5

Annexure 37. Population according to age segment – 2016

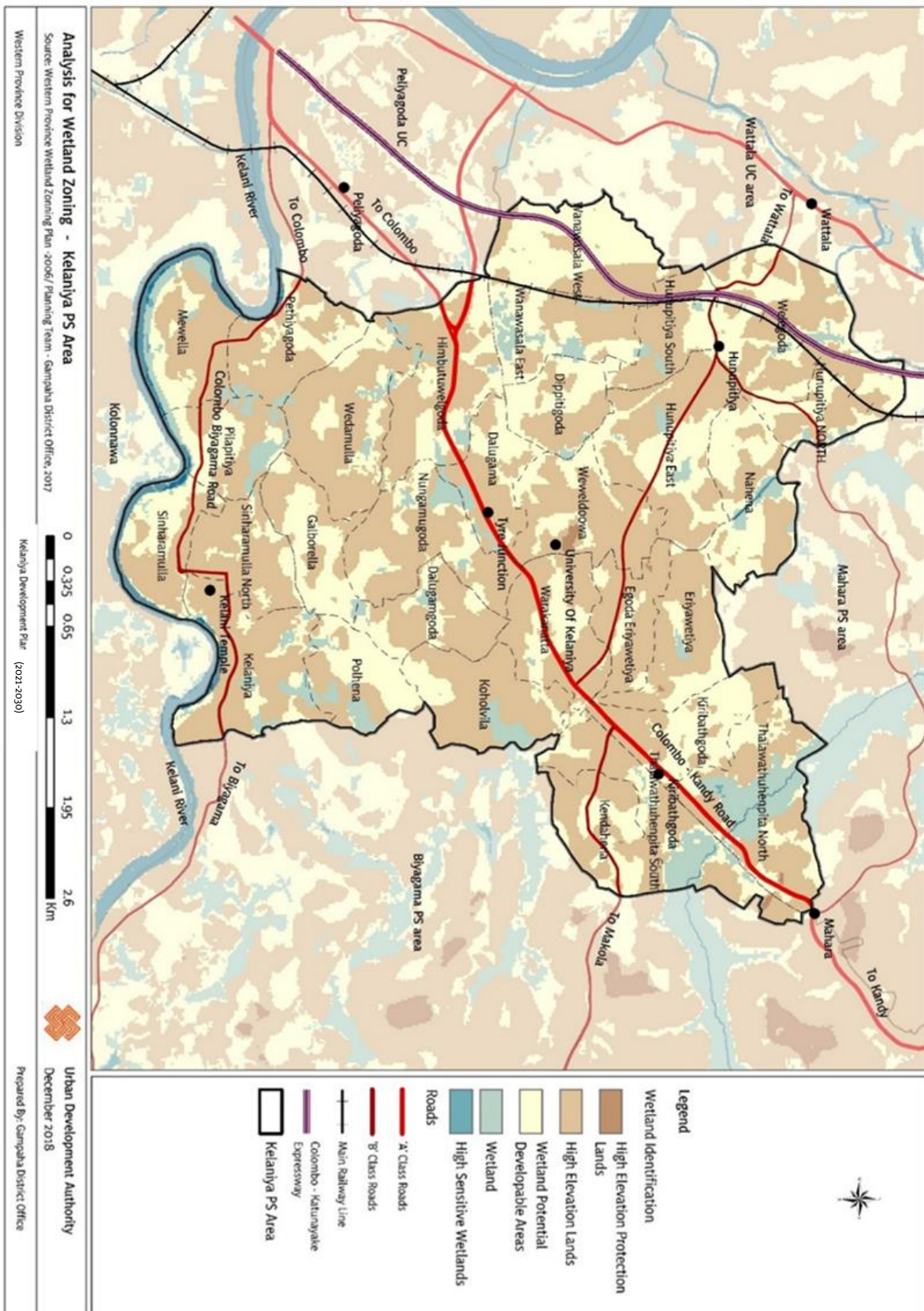


Source: Sampathpathikada Kelaniya PS- 2016

Annexure 38. Spatial Integration Analysis



Annexure 39. GIS Based Multi-Criteria Analysis for Wetland Categorization



Annexure 40. Places which have obtain Direct recreational Facilities in Kelaniya

No	Type	Type of Parks & Playground	Extent (ha)	GN Division
01.		Existing Pocket Parks (EPP)		
	EPP 01	Rabarwatta Playground	0.18	Wilgoda
	EPP 02	Uswatta Playground	0.17	Sinharamulla
	EPP 03	Children's Playground	0.09	Dalugamagoda
	EPP 04	Polhena National Housing Scheme Children's Playground	0.08	Polhena
		Total	0.52	
02.		Mini Parks (EMP)		
	EMP 01	Sinhatharu Playground	0.69	Thalawathuhenpitiya North
	EMP 02	Kiribathgoda Housing Corporation Playground	0.28	Kiribathgoda
	EMP 03	Pethiyagoda Housing Scheme Playground	0.22	Mewella
	EMP 04	Mewella Playground	0.65	Mewella
	EMP 05	Dingiriyawatta Playground	0.90	Wewalduwa
	EMP 06	Waragoda Playground	0.79	Wedamulla
	EMP 07	Wanawasala Playground	0.45	Wanawasala West
	EMP 08	Wanawasala Playground (near cemetery)	0.36	Wanawasala East
		Total	4.34	
03.		Local Parks (ELP)		
	ELP 01	Nawaloka Seewalee Kelanithissa Playground	2.58	Dalugamgoda
	ELP 02	Siril Mathiw Playground	1.69	Himbutuwelgoda
		Total	4.27	
04.		Linear Parks (ELiP)		
	ELiP 01	Mahara Jogging Track (5m)	0.56	
		Total	0.56	
		Grand Total	9.69	

Annexure 41. Proposed Direct and Indirect Recreational Facilities (2019 – 2030)

No	Type	Extent (ha)	Proposed Used	GN Division
01.	Proposed Pocket Parks (PPP)			
	PPP 01	0.19	Pocket Parks	Kelaniya
	PPP 02	0.14	Pocket Parks	Wewalduwa
	PPP 03	0.17	Pocket Parks	Thalawathuhenpitiya North
	PPP 04	0.16	Pocket Parks	Wewalduwa
	Total	0.66		
02.	Proposed Mini Parks (PMP)			
	PMP 01	0.2	Mini Parks	Himbutuwelgoda
	PMP 02	0.2	Mini Parks	Naahena
	PMP 03	0.22	Mini Parks	Thalawathuhenpitiya North
	PMP 04	0.22	Mini Parks	Eriyawatta
	PMP 05	0.24	Mini Parks	Welegoda
	PMP 06	0.25	Mini Parks	Hunupitiya North
	PMP 07	0.25	Mini Parks	Dalugama
	PMP 08	0.32	Mini Parks	Hunupitiya North
	PMP 09	0.34	Mini Parks	Sinharamulla North
	PMP 10	0.34	Mini Parks	Thalawathuhenpitiya North
	PMP 11	0.38	Mini Parks	Kendahena
	PMP 12	0.39	Mini Parks	Eriyawetiya
	PMP 13	0.39	Mini Parks	Thalawathuhenpitiya North
	PMP 14	0.41	Mini Parks	Thalawathuhenpitiya South
	PMP 15	0.47	Mini Parks	Koholvila

	PMP 16	0.61	Mini Parks	Hunupitiya North
	PMP 17	0.62	Mini Parks	Wanawasala East
	PMP 18	0.64	Mini Parks	Mewella
	PMP 19	0.72	Mini Parks	Kelaniya
	PMP 20	0.75	Mini Parks	Sinharamulla North
	PMP 21	0.83	Mini Parks	Weligoda
	PMP 22	0.92	Mini Parks	Thalawathuhenpitiya South
	PMP 23	0.93	Mini Parks	Hunupitiya South
	Total	10.64		
03.	Proposed Local Parks (PLP)			
	PLP 01	1.14	Local Parks	Kelaniya
	PLP 02	1.18	Local Parks	Wedamulla
	PLP 03	1.7	Local Parks	Pethiyagoda
	Total	4.02		
05.	Proposed Linear Parks (PLiP)			
	PLiP 01 – Sepala Ela Reservation (4.5m)	1.39	Linear Parks	
	PLiP 02 – Natha Ela Reservation (6 m)	8.64	Linear Parks	
	PLiP 03 – Mudun Ela Reservation (6 m)	2.01	Linear Parks	
	PLiP 04 - Mahara Mudun Ela Reservation (6 m)	0.97	Linear Parks	
	PLiP 05 – Kumbal Oya Reservation (7.5m)	4.43	Linear Parks	
	PLiP 06 – Hapugala Dam Ela Reservation (4.5m)	1.55	Linear Parks	
	PLiP 07 – Eri Ela Reservation (6 m)	3.54	Linear Parks	
	PLiP 08 - Ela Reservation (4.5m)	0.36	Linear Parks	
	PLiP 09 - Ela Reservation (7.5m)	0.33	Linear Parks	
	PLiP 10 - Ela Reservation (6 m)	1.28	Linear Parks	
	PLiP 11 - Ela Reservation (4.5m)	0.58	Linear Parks	
	PLiP 12 - Ela Reservation (6 m)	2.68	Linear Parks	
	PLiP 13 - Ela Reservation (6 m)	3.11	Linear Parks	
	PLiP 14 (10m)	2.24	Linear Parks	
	PLiP 15 (10m)	1.32	Linear Parks	
	PLiP 16 (10m)	1.81	Linear Parks	

	PLiP 17 (10m)	3.1	Linear Parks	
	PLiP 18 (10m)	1.2	Linear Parks	
	PLiP 19 (10m)	0.59	Linear Parks	
	PLiP 20 (10m)	2.61	Linear Parks	
	PLiP 21 (10m)	0.38	Linear Parks	
	PLiP 22 – Expressway Reservation	8.17	Linear Parks	
	PLiP 23 – Kelani River Reservation (60 m)	35.64	Linear Parks	
	Total	87.81		
	Grand Total	103.13		

Annexure 42. Permissible Uses for Public Outdoor recreational Spaces

Proposed Public Outdoor Recreational Space (PORS) Plan - Permitted activities

No.	Park Category	Extent	Permitted Uses
1	Pocket Park	Less than 0.2 ha (0.5 acre)	<ul style="list-style-type: none"> · Scattered play spaces · Rest areas · Garden patches
2	Mini Park	0.2 –1.0ha (0.5- 2.5 A)	<ul style="list-style-type: none"> · Children’s play area · Small grassed playground · Linear woodland park · Rest garden
3	Local Park	1.0-3.0 ha (2.5 –7.5 acres)	<ul style="list-style-type: none"> - Football pitch combined with Children Play area and informal relaxation space - Large informal grassed area with Children play area - Small woodland park and an informal running practice area.
7	Linear Park	Ganga Reservations/Oya Reservations/Ela Reservations/Road Reservations	<ul style="list-style-type: none"> · Walking · Jogging · Cycling · Nature trails

Annexure 43. Project Prioritization

Kelaniya Identified Project Prioritization							
projects	Value of Concept I	Social I	Environmental Benefit	Cost & Time period Variati on	Total	Priority Level	
Physical and social infrastructure development Strategies							
1	Transport Plan						
Hierarchical road improvement strategies	2 nd 268reatmen road improvement						
	Proposed New bypass road for Kiribathgoda linking Peliyagoda-Mahara	9	9	5	9	32	1
	Widening the Hunupitiya – 268reatme Road up to 4 lanes	7	9	5	9	30	2
	3 rd 268reatmen road						
	Widening Hospital Road up to 12 m.	7	9	5	9	30	2
	Widening Eriyawetiya road up to 12 m	7	9	5	9	30	2
	Widening Wewadoowa road up to 12m	7	9	5	9	30	2
	Widening Dippitigoda road up to 12m	7	9	5	9	30	2
	Widening Wanawasala – Wattala road up to 12m	7	9	5	9	30	2
	Polhena – Nungamugoda pedestrian-link road development	7	9	5	7	28	3
Public transport Improvement	Hunupitiya station Road improvement	9	9	5	9	32	1
	Main railway line Electrification	9	9	5	5	28	3
	Biyagama – Kosgama new Railway line development	9	9	5	5	28	3
	Ragama – Narahenpita LRT line	9	9	5	5	28	3
	Hunupitiya – Kottawa LRT line	9	9	5	5	28	3
Low level road access improvement	New Kelani river bridge development						
	5	7	5	3	20	3	

2	Service Plan						
Settlement Development	Hunupitiya Middle income housing project	7	9	7	7	30	2
	Climate Resilience Improvement Project – Kelani river bund shanties relocation	9	9	9	1	28	3
(TOD) Urban service improvement	Kiribathgoda multi storied car park	9	9	5	9	32	1
	Pedestrian Overpass bridge at YMBA junction and Eriyawetiya junction	9	9	5	9	32	1
	Redevelopment of Kiribathgoda bus stand with up stair urban park	5	9	5	9	28	3
	Development of Kiribathgoda LRT station	9	9	5	3	26	3
	Development of Tier junction LRT station	9	9	5	3	26	3
	Sarasavi Art Center redevelopment at Tyre junction	7	9	5	9	30	2
	Hunupitiya transport centre development project	9	9	5	9	32	1
	Development of Nungamugoda LRT station	9	9	5	3	26	3
	Relocation of Kelaniya bus stand to Nungamugoda	9	7	5	7	28	3
	Development of Polhena LRT station	7	7	5	3	22	3
	Development of Hunupitiya commercial complex	7	9	5	9	30	2
	Development of Hunupitiya sathipola	5	9	5	9	28	3
	Development of Hunupitiya mixed commercial square	5	9	5	7	26	3
Health	Improvement of Kiribathgoda based hospital	5	9	5	5	24	3
	Snake subject hospital improvement at Polhena	5	9	5	5	24	3
	Ayurvedic Hospital and “Dana Shalawa” at Kelaniya	7	9	7	7	30	2
Education	Kelaniya new Engineering faculty building – existing Dasa building	5	7	5	5	22	3
Water	Pattivila Right Bank water treatment plant stage II	7	9	5	5	26	3
	Mabima water treatment Plant	5	9	5	5	24	3
Solid waste	Redevelopment of Manelgama compost yard with waste recycling plan	7	9	7	7	30	2
	Manelgama- wanawasala waste transition station development	5	9	7	3	24	3
Waste Water	Peliyagoda – Kelaniya waste water Project	7	9	7	3	26	3

Economic Development Strategies							
	Sacred area pilgrim tourism based development						
	Galboralla Ceramic Industry redevelopment project	9	9	5	7	30	2
	Commercial complex development at Kelaniya	9	9	5	7	30	2
	Kiribathgoda Shopping colonnade						
	Multi – functional commercial centre at Kiribathgoda	9	9	5	9	32	1
	Kiribathgoda main road shopping street development	9	9	5	7	30	2
Environment Sustainable Strategies							
	Landscape Improvement						
	Tree line improvement toward the sacred area	9	9	9	7	34	1
	Canal Reservation tree line improvement	7	9	9	5	30	2
	Disaster Management Plan						
Canal improvement	Natha Ela improvement	9	9	9	5	32	1
	Hapugaha Wella improvement	9	9	9	5	32	1
	Eri Ela improvement	9	9	9	5	32	1
	Mudun Ela improvement	9	9	9	5	32	1
	Kumbal oya improvement	9	9	9	5	32	1
	Pethiyagoda Pumping station development	7	7	7	3	24	3
	Public Open Recreation						
	Hunupitiya liner park	7	9	7	7	30	2
	Urban park with walking track at Kiribathgoda – Koholvila	9	9	7	5	30	2
	Kiribathgoda town center Recreational park	9	9	7	7	32	1
	Wattala Hunupitiya walking track	7	9	7	5	28	3
	Jogging Track at Tyre Junction	7	9	7	7	30	2
	Play Grounds, Jogging Tracks and Housing Scheme at Kelaniya	7	9	7	7	30	2
	Improvement of Kiribathgoda Walk Trail	7	9	7	7	30	2
	New Bicycle Track (From Kiribathgoda Walk Trail to “Suwatha Uyana”	7	9	7	7	30	2

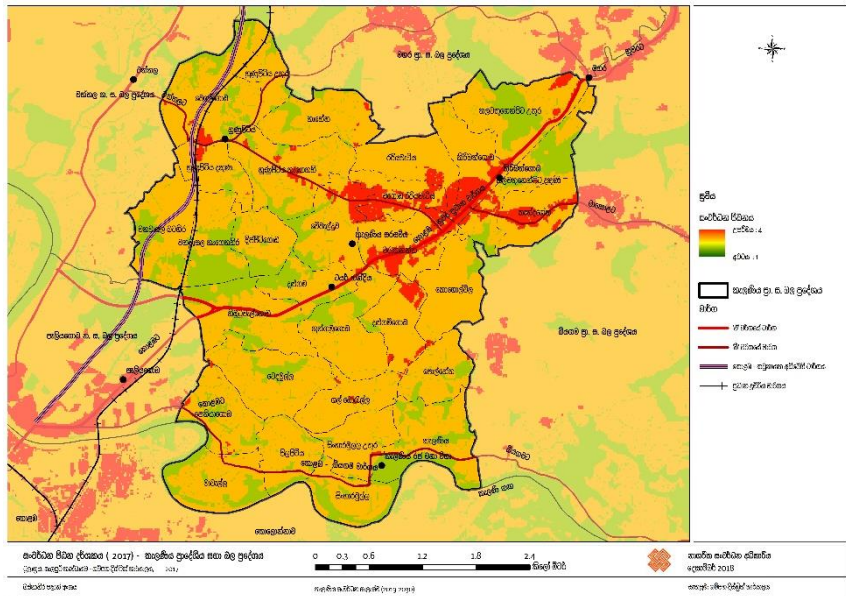
Cultural and Heritage Mangement Strategies							
	'Kelaniya Placidty precinct Strategy'						
Road Improvement	Thorana Junction to Kelani temple road improvement	9	9	5	9	32	1
	Tyre junction to Kelani temple road improvement	9	9	5	9	32	1
	Kiribathgoda to Kelani temple road improvement	9	9	5	9	32	1
	New Kelani valley crescent road improvement	9	9	5	9	32	1
	Sacred Area Ceramonial entrance improvement at thorana junction, Tire junction and Kiribathgoda	9	7	5	9	30	2
	Kelaniya Police Station Relocation	9	9	5	7	30	2
	Outdoor pilgrim resting area development at temple premises	7	9	5	5	26	3
	Development of holiday resort with information center at Kelani temple premises	7	9	7	9	32	1
	Lake with landscape improvement at Kelaniya	5	9	7	5	26	3
	Parking area with mini bushalt development at Kelaniya	9	9	5	5	28	3
	Socio – Cultural River Scape Improvement strategies						
	Linear park development at Kelani river north bud	9	9	9	5	32	1
	Kelani River access way improvement Project	9	9	9	7	34	1
	Kelani River Boat Jatty development	7	9	5	3	24	3
	Hangging bridge connecting Egoda Kelaniya and Megoda Kelaniya	9	9	5	3	26	3

Annexure 44: Basis for Zoning

The zoning plan of Kelaniya Development Plan 2019-2030 is basically based on expected density of the area, rather than just a land use-based zoning. Accordingly, scientific analysis such as development pressure of the area, environmental / cultural sensitivity, land suitability for settlement, development potential and conceptual plan.

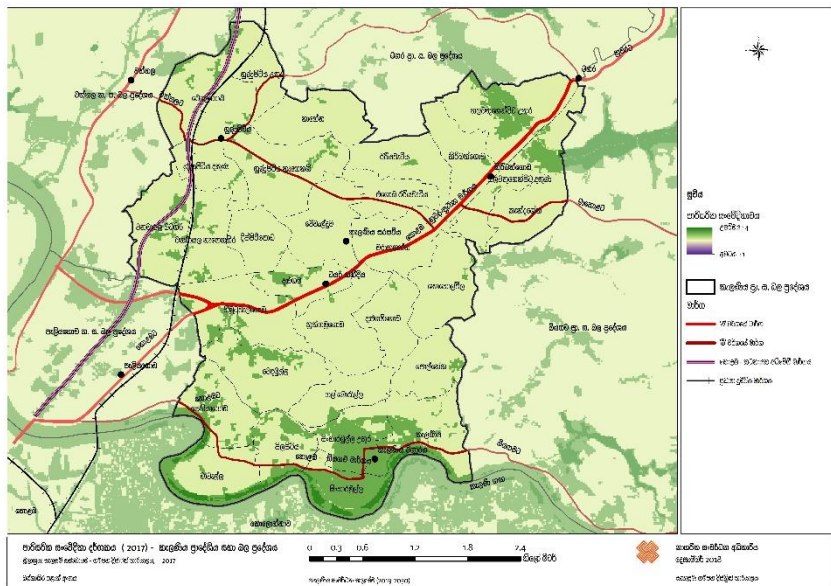
1. Development Pressure

The Development Pressure of the area was identified using existing road density, building density, population density, population growth rate and land use pattern in the area.



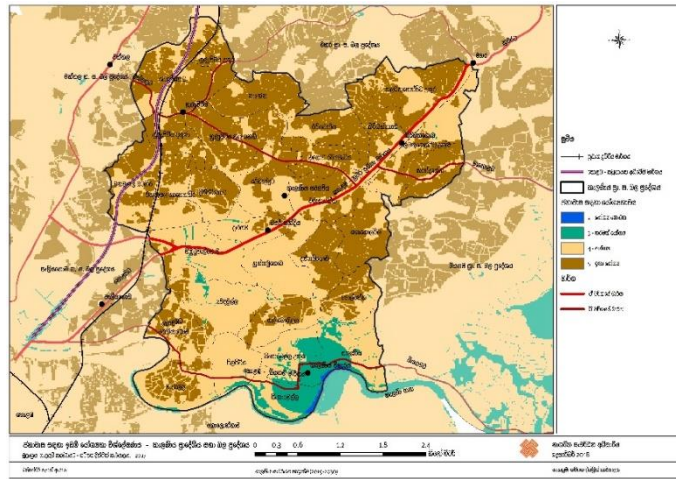
2. Sensitivity Analysis

The key is to identify sensitive areas where development throughout the region should be restricted. Environmentally sensitive areas such as water sources, sensitive green areas, paddy fields, marshes, forests, areas that are prone to disasters, religious, historical and archaeological sites. Analyzing all these factors, the end result is identifying which areas of development should be restricted within the area.



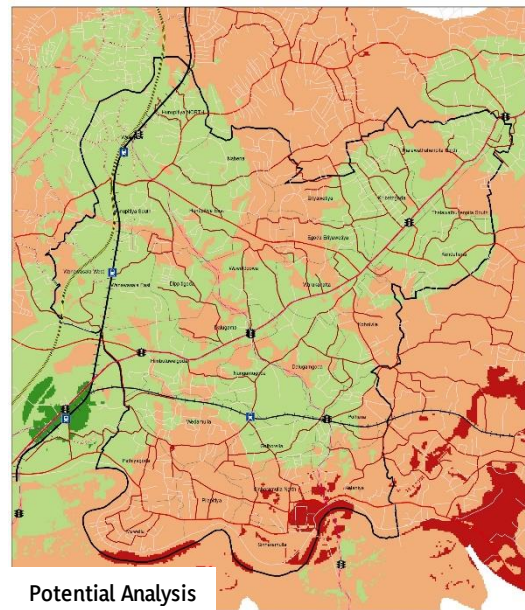
3. settlement suitability index

GIS based settlement suitability index is used to identified the area which suitable for settlement distribution by considering the existing disaster impact, natural and archeological context, and carrying capacity. Accordingly, it has identified the areas to developed from low density to high density as shown in map.



4. Potential Analysis

The proposed development projects will identify potential areas for development based on the assumption of potential impact to the area over the next 12 years. The analysis is done in view of the proposed new light rail projects and the development of railway electrification and their impacts.

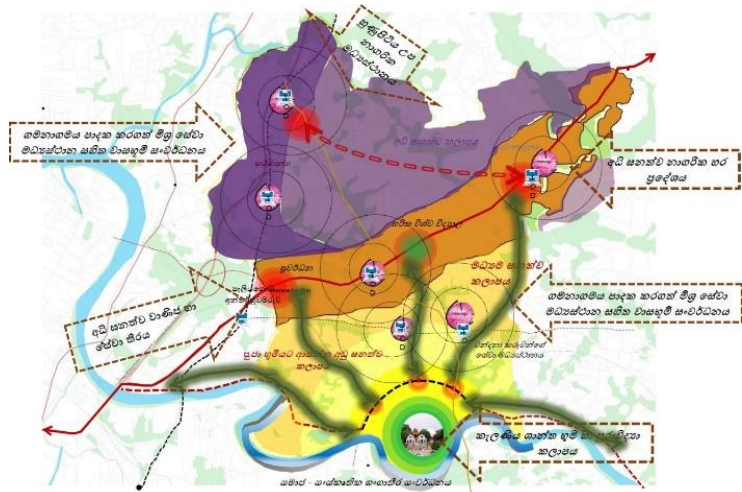


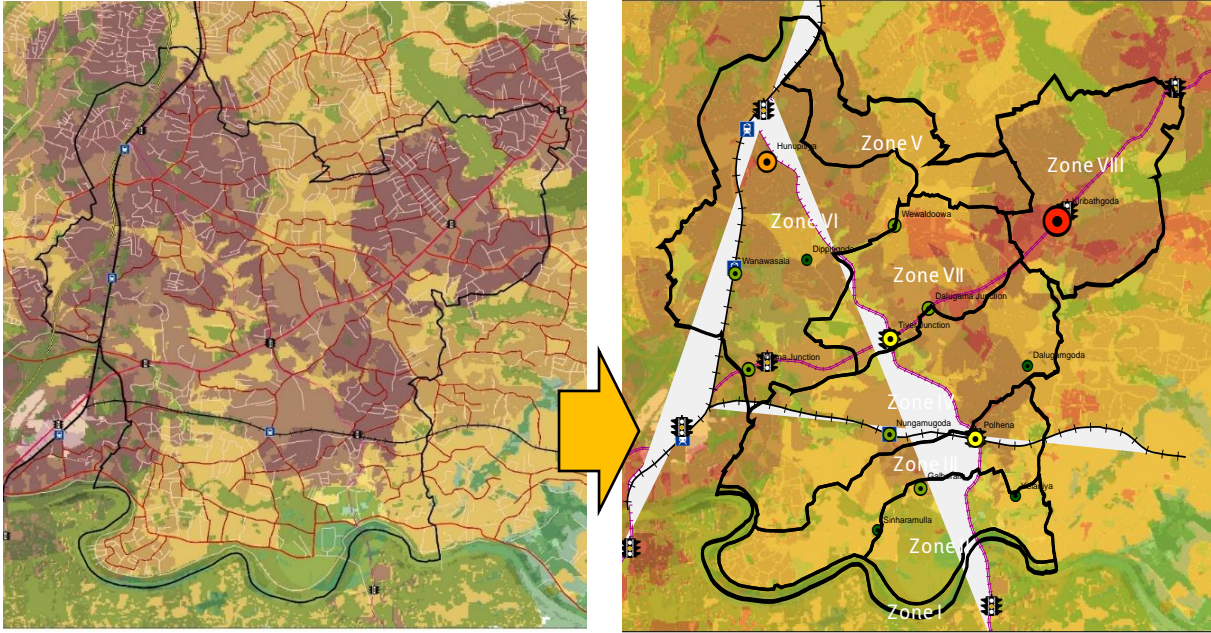
5. Expected Urban Form

The conceptual framework for achieving the vision for the year 2030 was also taken into consideration. It determined the proposed density and the dominant use of the region according to the characteristics of each zone.

* Composite Density Analysis

This area is classified into density zones as follows based the composite analysis of all analysis which previously discussed.,





Determination of density and priority use for zones with similar densities is based on a mathematical priority index based on the above analyzes. It is shown in the following table.

<i>Zone</i>	<i>Development Pressure</i>	<i>Sensitivity</i>	<i>Potential index</i>	<i>Suitability Index</i>	<i>Wetland and waterbodies</i>	<i>Impact of railway</i>	<i>Total</i>	<i>Proposed Density</i>
<i>Zone I</i>	1	1	3	3	1	1	10	<i>Low</i>
<i>Zone II</i>	1	3	3	3	1	3	14	
<i>Zone III</i>	2	2	5	3	1	2	15	
<i>Zone IV</i>	3	3	5	3	3	5	22	<i>Moderate</i>
<i>Zone V</i>	3	5	5	5	1	5	24	<i>High</i>
<i>Zone VI</i>	5	5	5	5	3	3	26	
<i>Zone VII</i>	5	5	5	5	3	5	28	
<i>Zone VIII</i>	3	5	3	5	5	5	26	

Annexure 45: Calculation of Zone Factor

The Zone Factor is calculated to determine the density of the zones for each region in accordance with the density-based zoning plan. Zoning Factor represents the total development that can be hold for the particular area for particular year. It has evaluated based on several factors such as,

- I. The environmental/ Cultural Sensitivity of the area
- II. The Infrastructure availability (Eg. Water Supply, Electricity Supply, Sewerage disposal, Access
- III. Roads, Surface drainage etc...)
- IV. The carrying capacity in terms of geographic conditions, Population density etc...
- V. Expected urban Form

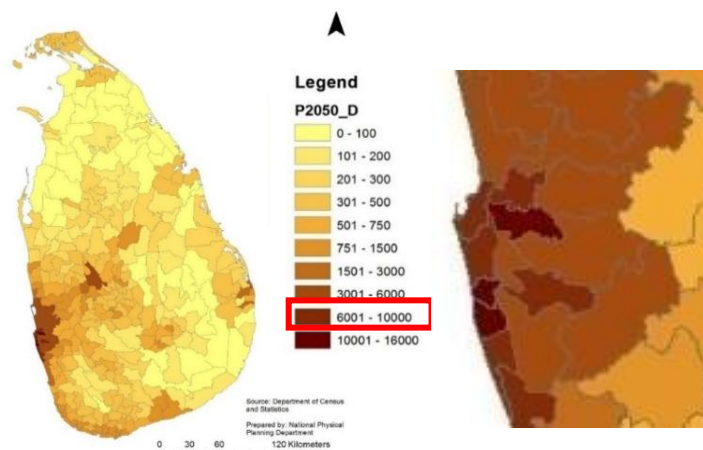
The zoning factor is calculated based on the space requirement for the future anticipated development which depends on expected Residential and Commuter population in the respective zone and it's a novel concept which used instead of FAR (Floor Area Ratio).

The zone factor is helped to determined that the developable area should develop to what extent within the given period of time to tap the expected residential and commuter population and their needs. Here, the existing commercial, residential, institutional, vacant land and other plantation areas were identified as *developable areas* and environmental sensitive areas such as water bodies, wetlands, archeological sites, roads and reservation areas consider as *Un-developable* lands. The calculation of Zone factor was mainly focus of five complex steps as describe further.

1. Identified existing population and forecasted population for the year 2030 according to the zones

The Residential Population in the year 2017 was identified based on the Grama Niladhari Divisions and the proposed zones, taking into account the natural growth rate of 0.45% based on the 2011 census. Population growth rate of more than 1% out of the 30 Grama Niladhari Divisions in the area is 1.41%, considering the Residential Population of 111,300 Residential Population by 2017 and the Population Distribution by 2050 as outlined by the National Physical Plan. The Residential Population is projected to be 141,000 by 2030, with the moderate growth rate assumed to be a growth rate.

Proposed Population according to the National Physical Plan



Thus, this 141,000 of total population predicted for whole Kelaniya PS area were distributed to each zone based on their expected densities.

Assumptions

- i. Population growth rate of Kelaniya and Sinharamulla areas which includes to the low-density sacred heritage zone and Mewalla and Pethiyagoda areas which includes low density zone is 0.45%.
- ii. Expected population growth rate within 500-800 radius from the existing and proposed railway and LRT station areas consider as 2.21% which is the maximum population growth rate in the planning area.
- iii. Expected growth rate of High-Density Higher Education Zone will be determined as 1.41% based on the growth rated of all Grama Niladhari Divisions which having more than 1%.

Based on these assumptions, the population for the year 2030 can be divided as follows.

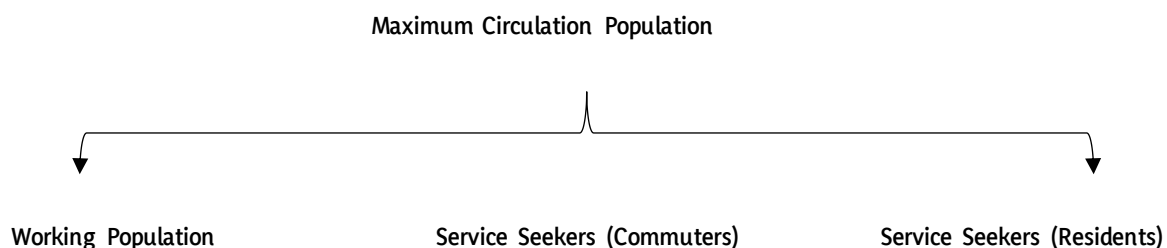
Zone wise expected Population

Zone	GND	Population 2011	Population 2017	Population in zone	Expected growth rate	Prediction for 2030	Population in zone 2030
Low Density Sacred Heritage Zone	Kelaniya	3230	3371	10708	0.0045	3574	11353
	Sinharamulla North	4151	4521		0.0045	4794	
	Sinharamulla	2834	2816		0.0045	2986	
Low Density Residential Zone	Polhena	954	1028	10565	0.0221	1370	12635
	Galboralla	3059	3203		0.0221	4270	
	Pilapitiya	2070	1985		0.0141	2385	
	Mewalle	4356	4349		0.0045	4611	
Moderate Density Residential Zone	Koholvila	4033	4201	20528	0.0221	5599	26229
	Dalugamgoda	3182	3714		0.0221	4951	
	Nungamugoda	2968	2929		0.0221	3904	
	Wedamulla	4561	3714		0.0221	4951	
	Pethiyagoda	4094	4152		0.0045	4402	
	½ of Himbutuwelgoda	1880	1818		0.0221	2423	
High Density Commercial Zone	Thalawathuhenpita North	3737	3696		0.0221	4927	15778
	Thalawathuhenpita South	1624	1480		0.0221	1973	

	Kandahena	3618	3736	11838	0.0221	4979	
	Kiribathgoda	3302	2925		0.0221	3899	
High Density Higher Education Zone	Warakanatta	3926	4341	12627	0.0141	5215	15170
	Egoda Eriyawetiya	2629	2689		0.0141	3231	
	Wewalduuwa	3643	3757		0.0141	4514	
	Dalugama	1938	1839		0.0141	2210	
High Density Logistic Zone	Welegoda	6646	6904	30174	0.0221	9202	40218
	Hunupitiya South	3507	3662		0.0221	4881	
	Hunupitiya East	5774	6296		0.0221	8392	
	Wanawasala East	3415	3780		0.0221	5038	
	Wanawasala West	3916	4005		0.0221	5338	
	Dippitigoda	3513	3707		0.0221	4941	
	½ of Himbutuwelgoda	1881	1819		0.0221	2424	
High Density Residential Zone	Hunupitiya North	2987	3165	14730	0.0221	4218	19633
	Nahena	5761	6426		0.0221	8564	
	Eriyawetiya	4664	5140		0.0221	6850	
Special Eco-Conservation Zone							0

2. Identification of existing and expected commuter population for the year 2030

Both working population and service seekers also consider as circulation population (Commuter Population).



- Calculating existing working population – 2017

I. Consider existing working population in Gampaha District – 2016

Gampaha District	Agriculture	Industry	Service
Formal sector	17330	36150	213180
Informal sector	26580	224190	327030
Total	43910	260340	540210

Source: Sri Lanka Post-Disaster Needs Assessment – 2016

II. Consider Industries and Commercial Places establishments – DSDs in Gampaha

Establishment	Kelaniya DSD	Gampaha District	%
Services- No of Commercial Places	2392	27298	8.762547
Industries No. of Industries	975	17415	5.598622

Source: <http://www.statistics.gov.lk/DistrictStatHBook.asp>

III. Based on the above percentages of services and industrial establishments in Kelaniya DSD area, working population of Kelaniya DSD area were extracted from the working population of Gampaha district.

	Industrial	Services
Formal sector (Gampaha District)	36150	213180
Informal Sector (Gampaha District)	224190	327030
Total working population	260340	540210
Assumed working population in Kelaniya DSD area	$260340 * 0.055986$	$540210 * 0.08763$
	14575	47338

To extract the working population for only Kelaniya Planning area, consider land use percentages of each land uses in both Peliyagoda UC area and Kelaniya Ps area separately and divided the working population based on land use percentages.

- i. Total Land extent (Kelaniya DSD) – 21.9 sq.km
- ii. Peliyagoda UC – 4 sq. km / Kelaniya PS – 17.9 sq.km

- Land Use – Peliyagoda UC

Land use	%
Residential	61.9%
Industrial/Ware houses	8.3%
Wetlands/Marshy/Scrubs	16.1%
Hotel & Restaurant	0.2%
Parks & Playgrounds	0.4%
Wholesale & Retail	1.1%
Religious	0.7%
Water Bodies	4.3%
Roads	6.2%
Waste dumping Area	0.2%
Open Spaces	0.6%

Industries and warehouse extent – 332,000 sq.m
Commercial – 52,000 sq.m

- Land Use – Kelaniya PS

Land use	Area (sq.m)
commercial	872867.784
Industrial	1089819.91
Institutional	480797.168
Residential	10338347.6

Accordingly, when consider the industries and service land use distribution of Kelaniya PS area it has represented 94.4% of Commercial Uses from whole DSD area and 76.6% of industrial uses from whole DSD area. Based on these assumption Number of establishments find as follows,

Establishment	Kelaniya DSD	%	Kelaniya PS
Services- (No of Commercial Places)	2392	94.4%	2248
Industries (No. of Industries)	975	76.6%	747

	Industry	Service / commercial
2017 – Working population in Kelaniya PS area	14575 * 0.766	47338*0.944
	11,164	44,687

Accordingly, total working population in Kelaniya PS area is 55,851. In order to identify the total circulation population for 2030, the total circulation count for each region was calculated using the per capita land use standard in different ways to calculate the number of service users in addition to clients.

Per-capita Space for different uses

Activity Type	Average Per Capita Space (Sq.m)
Retail / Wholesale	20
Tourism	40
Private Office	30
Industrial	60
Institutional	25
Residential	50

(Reference: Engineering ToolBox, (2001). [online] Available at: <https://www.engineeringtoolbox.com/Per-Capita-Activity-Space-Standards-for-City-of-London>

Circulation Population for Commercial Uses – 2017

Zone Name	Commercial			
	Area sq.m	allowable space	Average No. of floors	Commuter based on per capita space
Low Density Sacred Heritage Zone	38903	31122.6	1.0	1556
Low Density Residential Zone	50026	40020.5	2.0	4002
Moderate Density Residential Zone	51303	41042.1	3.0	6156
High Density Commercial Zone	322526	258020.7	4.	58055
High Density Higher Education Zone	232955	186364.2	4.0	37273
High Density Logistic Zone	144601	115680.5	3.0	17352
High Density Residential Zone	24525	19620.2	2.0	1962
Special Eco-Conservation Zone	8029	6423.2	1.0	321
Total sectoral Commuters				126677

Circulation Population for Institutional Uses – 2017

Zone Name	Institutional			
	Area sq.m	allowable space	Average No. of floors	Commuter based on per capita space
Low Density Sacred Heritage Zone	22762	18209.7	1	728
Low Density Residential Zone	14672	11737.3	2	939
Moderate Density Residential Zone	53911	43129.1	3	5175
High Density Commercial Zone	72573	58058.5	4	9289
High Density Higher Education Zone	205017	164013.4	4	26242
High Density Logistic Zone	80902	64721.2	2	5178
High Density Residential Zone	30961	24768.5	1	991
Special Eco-Conservation Zone	0	0.0		0
Total sectoral Commuters				48543

Circulation Population for Industrial Uses – 2017

Zone Name	Industries			
	Area sq.m	allowable space	Average No. of floors	Commuter based on per capita space
Low Density Sacred Heritage Zone	64723	51778.2	1	863
Low Density Residential Zone	55526	44420.6	1	740
Moderate Density Residential Zone	405470	324376.2	1	5406
High Density Commercial Zone	30885	24707.8	1	412
High Density Higher Education Zone	158246	126596.9	1	2110
High Density Logistic Zone	363720	290976.2	1	4850
High Density Residential Zone	3990	3192.2	1	53
Special Eco-Conservation Zone	7260	5808.0	1	97
Total sectoral Commuters			1	14531

Total Circulation Population – 2017

Zone Name	Total
Low Density Sacred Heritage Zone	3147
Low Density Residential Zone	5681
Moderate Density Residential Zone	16738
High Density Commercial Zone	67756
High Density Higher Education Zone	65625
High Density Logistic Zone	27379
High Density Residential Zone	3006
Special Eco-Conservation Zone	418
Total sectoral Commuters	189751

Accuracy of these per-Capita space-based commuter population calculation can be proved with following details.

- Kelaniya University

Year	Total Intake	graduated	student	Academic staff	No n-academic staff	Total
2012/2013	1810		15159	435	376	15970
2013/2014	2235		15576	439	378	16393
2014/2015	2480	1936	16120	704	732	17556

Source: 2012/2014/2015 – Annual Report – University of Kelaniya

Note 1: Compare this figure with the commuter population in the Higher Education Zone

Note 2: special cases , may be ones a week or two weeks

(2015) - Total number of registered students for all external degree programs (1st year, 2nd year, 3rd year & (4th year only B.com) are **41089**.

- Kiribathgoda Town

News

Kiribathgoda police station building to be completed in four months - Minister Amaratunga

Minister of Interior and Christian Affairs John Amaratunga laying the foundation stone for the construction of a building for a full fledged police station at Kiribathgoda recently said that he had the assurance from the I.G.P. that the building will be ready for occupation by April 2003.

The Minister said that a complete police station is a long felt need for the Kiribathgoda town which has a population of around 30,000 with a daily transit population of 50,000. At present the area is served by a Police Post which is far inadequate to tackle large volume of traffic passing through the area, as well as the incidences of crime and vices said to be prevalent in the area.

Minister Amaratunga said that they were to open the full fledged police station temporarily at the same place where the temporary police post operates at the sports club premises of the Kiribathgoda Housing Scheme till a new building is put up. However some people who were against it filed a court case preventing the opening of the

Daily commuters in Kelani Vihara is not consider for this calculation because it is an exceptional and seasonal situation.

Kelani Temple	Commuter population
Kelani Perahara, January	200,000
Special Poya days	150,000
Poya days	75000
Daily	10,000 – 20,000

- Expected Commuter population for the year – 2030*

	Zone	Commuter Population			Total	Other
		Commercial / Service	Institutional	Industrial		
i	Low Density Sacred Heritage Zone	1556	728	863	3147	Kelani temple 15000
ii	Low Density Residential Zone	4002	939	740	5681	
iii	Moderate Density Residential Zone	6156	5175	5406	16738	
iv	High Density Commercial Zone	58055	9289	412	67756	
v	High Density Higher Education Zone	37273	26242	2110	65625	University
vi	High Density Logistic Zone	17352	5178	4850	27379	
vii	High Density Residential Zone	1962	991	53	3006	
viii	Special Eco-Conservation Zone	321	0	97	418	
Total Commuter Population					189751	

The following assumptions are used for calculating expected commuter for the year 2030 based on existing population and development potentials.

- I. Commuters for commercial by 25% and commuter for institutional by 10% grown in proposed low-density sacred heritage zone. It not considers the pilgrims commuters. The existing industrial uses in the area decrease by 75%.
- II. Commercial and institutional commuters in low density residential zone is increased by 25% and industrial commuters decreased by 75%.
- III. The existing commercial and institutional commuters in moderate density residential zone is increased by twice and industrial commuters decreased by 25%.
- IV. Commercial circulation population in proposed commercial zone is increased by three times, institutional circulation population increased by five times and industrial circulation population decreased by 25%.
- V. Commercial circulation population in higher education zone increased by three times and institutional circulation population increased by two times and industrial circulation population increased by 25%.
- VI. Commercial and institutional circulation population in logistic zone increased by three times and industrial circulation population is increased by five times.
- VII. Commercial and institutional circulation population in high density residential zone increased by two times and industrial circulation population is increased by 25%.
- VIII. Commuter population not calculated for Special eco conservation zone because it is not considered for zone factor.

	Zone	Expected circulation population			Total
		Commercial / services	Institutional	Industries	
i	Low Density Sacred Heritage Zone	1945	801	216	2962
ii	Low Density Residential Zone	5003	1174	185	6361
iii	Moderate Density Residential Zone	12313	10351	4055	26718
iv	High Density Commercial Zone	174164	46447	515	221126
v	High Density Higher Education Zone	93182	52484	2637	148304
vi	High Density Logistic Zone	52056	15533	24248	91837
vii	High Density Residential Zone	3924	10355	67	14346
viii	Special Eco-Conservation Zone	642	0	97	739
Total circulation population					512394

3. Calculate expected percentage of land uses for each zone

Zone	Developable foot print (m ³)	Commercial		Residential		Institutional		Industries	
		2017 (%)	2030%	2017 (%)	2030%	2017 (%)	2030%	2017 (%)	2030%
Low Density Sacred Heritage Zone	1039056.641	3.74	5.5	87.84	90.31	2.19	2.19	6.23	2.0
Low Density Residential Zone	1456068.417	3.44	5.0	91.74	92.30	1.01	1.20	3.81	1.5
Moderate Density Residential Zone	2672718.626	1.92	6.0	80.89	90.00	2.02	2.27	15.17	1.7
High Density Commercial Zone	1892263.949	17.04	30.0	77.49	61.00	3.84	7.00	1.63	2.0
High Density Higher Education Zone	1665292.887	13.99	14.5	64.20	68.00	12.31	14.00	9.50	3.5
High Density Logistic Zone	2915816.182	4.96	7.3	79.79	65.00	2.77	3.00	12.47	24.7
High Density Residential Zone	1049564.635	2.34	2.3	94.33	94.33	2.95	2.95	0.38	0.4
Special Eco- Conservation Zone	91051.11776	8.82	8.0	83.21	0.00	0.00	0.00	7.97	0.0

4. Calculate total space requirement for the year 2030 based on expected residential and circulation population.

Zone	Developable footprint	Commercial		Residential		Institutional		Industries		Total expected space requirement for 2030
		<i>Expected population</i>	<i>Space requirement (m2)</i>	<i>Expected no. of families</i>	<i>Space requirement (m2)</i>	<i>Expected population</i>	<i>Space requirement (m2)</i>	<i>Expected population</i>	<i>Space requirement (m2)</i>	
Low Density Sacred Heritage Zone	1039056.641	1945	38903.30	2838	567600	801	24030.00	215.74	12944.54	643477.84
Low Density Residential Zone	1456068.417	5003	100051.19	3160	632000	1174	35211.78	370.17	22210.28	789473.26
Moderate Density Residential Zone	2672718.626	12313	246252.88	6557	1311400	10351	310529.77	4054.70	243282.15	2111464.80
High Density Commercial Zone	1892263.949	174164	3483280.07	3945	789000	46447	1393404.56	514.75	30884.71	5696569.35
High Density Higher Education Zone	1665292.887	93182	1863642.42	3793	948250	52484	1574528.87	2637.43	158246.07	4544667.36
High Density Logistic Zone	2915816.182	52056	1041124.77	10055	2513750	15533	465992.79	24248.01	1454880.90	5475748.46
High Density Residential Zone	1049564.635	3924	78480.99	4908	1227000	10355	310661.86	66.50	3990.27	1620133.12
Special Eco-Conservation Zone	91051.11776	642	12846.40	0	0		0.00	96.80	5807.99	18654.38

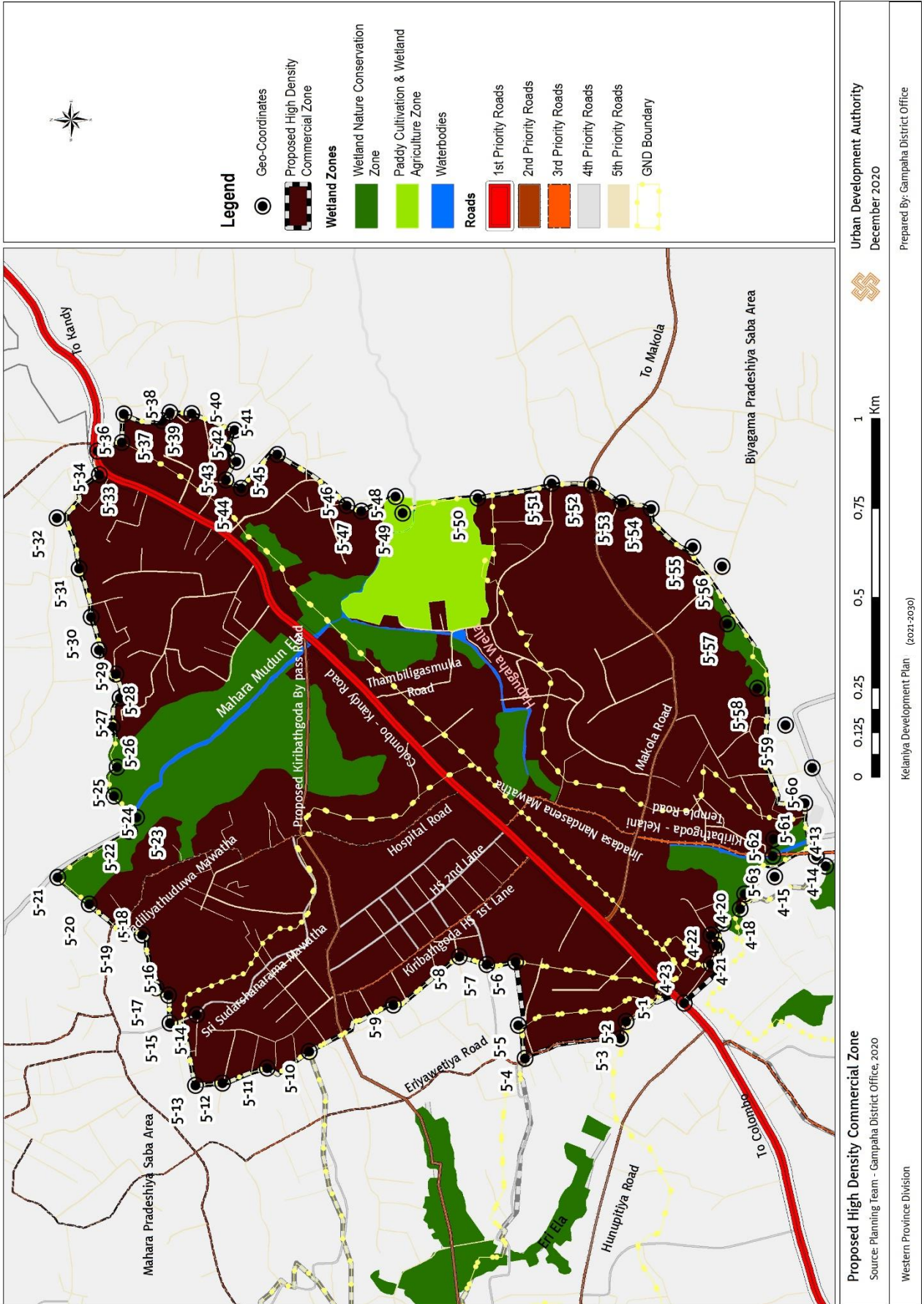
- It is based on per-capita space requirement
- 50 sq.m of space for each residential unit in high density areas were added to consider the temporary residence.

5. Calculate zone factor based on developable foot print and total space requirement which find throughout the above steps.

$$\text{Zone Factor} = \frac{\text{Total Expected Floor Area}}{\text{Available Developable Land Area}}$$

Zone	Total space requirement for 2030 (m2)	Developable land extent (m2)	Vacant lands and other plantations (m2)	Total developable lands (m2)	Zone Factor
Low Density Sacred Heritage Zone	643477.84	1039056.64	92992.85	1132049.49	0.57
Low Density Residential Zone	789473.26	1456068.42	37368.95	1493437.37	0.53
Moderate Density Residential Zone	2111464.80	2672718.63	133082.40	2805801.02	0.75
High Density Commercial Zone	5696569.35	1892263.95	59603.14	1951867.08	2.92
High Density Higher Education Zone	4544667.36	1665292.89	46624.32	1711917.21	2.65
High Density Logistic Zone	5475748.46	2915816.18	105310.43	3021126.61	1.81
High Density Residential Zone	1620133.12	1049564.64	57360.25	1106924.88	1.46
Special Eco-Conservation Zone	18654.38	91051.12	34430.78	125481.90	0.15

Annexure 46: Zoning boundary coordinates



Boundary Coordinates – High Density Commercial Zone

No.	N	E	No.	N	E	No.	N	E
5_1	6°58'36.31"N	79°55'32.43"E	5_21	6°59'31.19"N	79°55'42.33"E	5_41	6°59'15.89"N	79°56'21.32"E
5_2	6°58'39.60"N	79°55'29.31"E	5_22	6°59'24.69"N	79°55'46.52"E	5_42	6°59'15.05"N	79°56'20.14"E
5_3	6°58'40.10"N	79°55'27.78"E	5_23	6°59'24.03"N	79°55'47.78"E	5_43	6°59'16.00"N	79°56'18.46"E
5_4	6°58'48.75"N	79°55'25.96"E	5_24	6°59'26.08"N	79°55'49.75"E	5_44	6°59'14.58"N	79°56'17.71"E
5_5	6°58'49.37"N	79°55'28.98"E	5_25	6°59'25.81"N	79°55'52.35"E	5_45	6°59'11.33"N	79°56'20.78"E
5_6	6°58'49.60"N	79°55'34.73"E	5_26	6°59'26.27"N	79°55'56.04"E	5_46	6°59'5.01"N	79°56'16.15"E
5_7	6°58'52.25"N	79°55'34.49"E	5_27	6°59'25.56"N	79°55'58.64"E	5_47	6°59'3.69"N	79°56'15.64"E
5_8	6°58'54.74"N	79°55'35.19"E	5_28	6°59'25.94"N	79°56'0.81"E	5_48	6°59'0.59"N	79°56'16.98"E
5_9	6°59'0.70"N	79°55'30.80"E	5_29	6°59'27.48"N	79°56'2.99"E	5_49	6°58'59.94"N	79°56'15.48"E
5_10	6°59'8.33"N	79°55'26.53"E	5_30	6°59'28.20"N	79°56'6.00"E	5_50	6°58'53.14"N	79°56'16.85"E
5_11	6°59'12.14"N	79°55'25.03"E	5_31	6°59'29.30"N	79°56'10.40"E	5_51	6°58'46.42"N	79°56'18.21"E
5_12	6°59'16.20"N	79°55'23.67"E	5_32	6°59'31.33"N	79°56'14.98"E	5_52	6°58'42.76"N	79°56'18.09"E
5_13	6°59'18.65"N	79°55'23.45"E	5_33	6°59'27.48"N	79°56'18.93"E	5_53	6°58'40.03"N	79°56'16.43"E
5_14	6°59'18.55"N	79°55'29.87"E	5_34	6°59'27.63"N	79°56'21.05"E	5_54	6°58'37.38"N	79°56'15.91"E
5_15	6°59'20.99"N	79°55'29.10"E	5_35	6°59'25.44"N	79°56'21.84"E	5_55	6°58'33.60"N	79°56'12.43"E
5_16	6°59'21.11"N	79°55'31.65"E	5_36	6°59'25.28"N	79°56'24.43"E	5_56	6°58'30.93"N	79°56'10.70"E
5_17	6°59'22.26"N	79°55'32.32"E	5_37	6°59'21.78"N	79°56'23.82"E	5_57	6°58'30.46"N	79°56'5.47"E
5_18	6°59'23.50"N	79°55'37.12"E	5_38	6°59'21.07"N	79°56'24.58"E	5_58	6°58'27.72"N	79°55'59.61"E
5_19	6°59'25.10"N	79°55'37.25"E	5_39	6°59'19.09"N	79°56'24.49"E	5_59	6°58'25.16"N	79°55'56.30"E
5_20	6°59'28.33"N	79°55'39.91"E	5_40	6°59'15.23"N	79°56'22.99"E	5_60	6°58'22.74"N	79°55'52.39"E
5_61	6°58'23.42"N	79°55'49.20"E	4_16	6°58'28.14"N	79°55'42.33"E	4_20	6°58'31.89"N	79°55'37.19"E
5_62	6°58'26.23"N	79°55'45.91"E	4_17	6°58'28.85"N	79°55'40.95"E	4_21	6°58'31.40"N	79°55'36.25"E
5_63	6°58'26.30"N	79°55'44.39"E	4_18	6°58'29.25"N	79°55'39.57"E	4_22	6°58'31.85"N	79°55'34.56"E
			4_19	6°58'30.77"N	79°55'38.28"E	4_23	6°58'34.32"N	79°55'31.00"E

46.2. High Density Education Zone

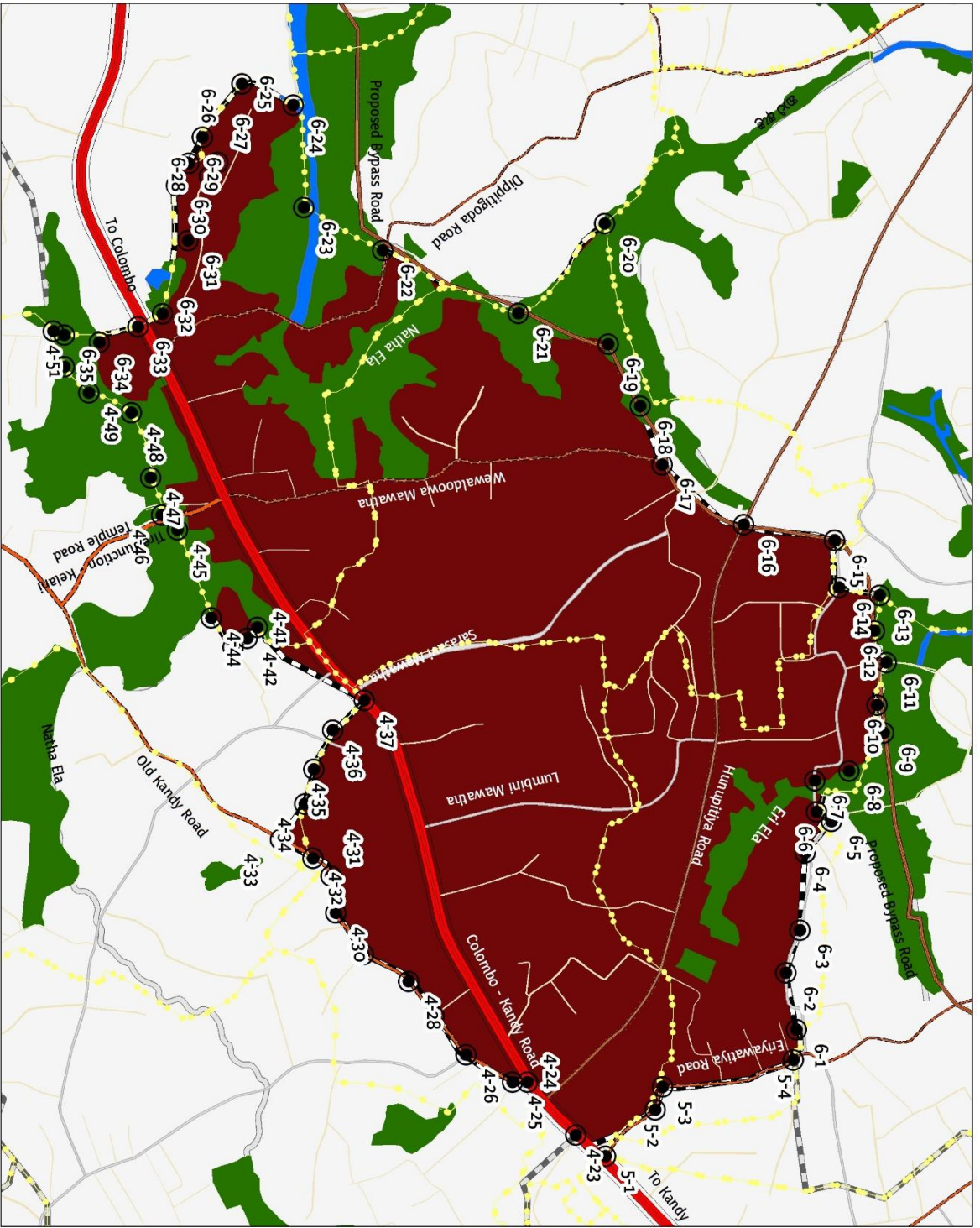
Northern, starting from 6°58'45.41"N, 79°54'50.02"E (6-16) point located in New Hunupitiya Road and connected to 6°58'51.74"N, 79°54'54.23"E (6-14) point in the ground through the center line of the road near Dinigiyawatta ground toward northern, connected to 6°58'54.43"N, 79°54'54.74"E (6-13) point in the ground and through the southern boundary of Eri Ela wetland connected to 6°58'50.14"N, 79°55'7.19"E (6-7) point in the ground. From the last mention ground coordinate on the road to 6-5 coordinate mention in the annexure connected through the center line of the road and from that point connected to 5-4 point that mention in the coordinate via the center line of the Dewasumithrarama Mawatha,

Eastern, from the above last point connected to 6°58'36.31"N, 79°55'32.43"E (5-1) point in Colombo – Kandy road via center line of the Eriyawetiya Road and from that point connected to 6°58'31.11"N, 79°55'27.45"E (4-24) point in the ground through the center line of the Colombo – Kandy Road.

Southern, from last point mention in the eastern boundary to 6°58'16.86"N, 79°55'12.45"E (4-32) point in the ground through the center line of the Old Kandy Road, and from that point to 6°58'20.25"N, 79°55'1.86"E (4-37) point in the Colombo – Kandy Road connected again through the imaginary line and from that connected to 6°57'59.57"N, 79°54'37.10"E (4 -51) point in the ground through the imaginary line drawn via adjacent wetland area.

Western, from the last point mention in the southern boundary to 6°58'15.47"N, 79°54'21.90"E (6-24) point in the ground connected through the western boundary of Dalugama Grama Niladhari Division, again starting that point connected to 6°58'36.13"N, 79°54'29.80"E (6-20) point in the ground through Mudun-Ela wetland and South-East boundary of the Dippitigoda Grama Niladhari Division. And from last point connected to 6°58'38.51"N, 79°54'42.07"E (6-18) point in the ground through the North-West boundary of the Wewaldoowa GND and from that connected to 6°58'45.41"N, 79°54'50.02"E (6-16) point in the ground through the imaginary line drawn connecting Hunupitiya Road again.

High Density High Education Zone



Proposed High Density Higher Education Zone
 Source: Planning Team - Gampaha District Office 2020

Western Province Division

Kelaniya Development Plan (2021-2030)



Urban Development Authority
 December 2020

Prepared By: Gampaha District Office

Legend

- Geo-Coordinates
- ▭ Proposed High Density Higher Education Zone
- Wetland Zones**
 - ▭ Wetland Nature Conservation Zone
 - ▭ Paddy Cultivation & Wetland Agriculture Zone
- ▭ Waterbodies
- Roads**
 - ▭ 1st Priority Roads
 - ▭ 2nd Priority Roads
 - ▭ 3rd Priority Roads
 - ▭ 4th Priority Roads
 - ▭ 5th Priority Roads
 - ▭ GND Boundary

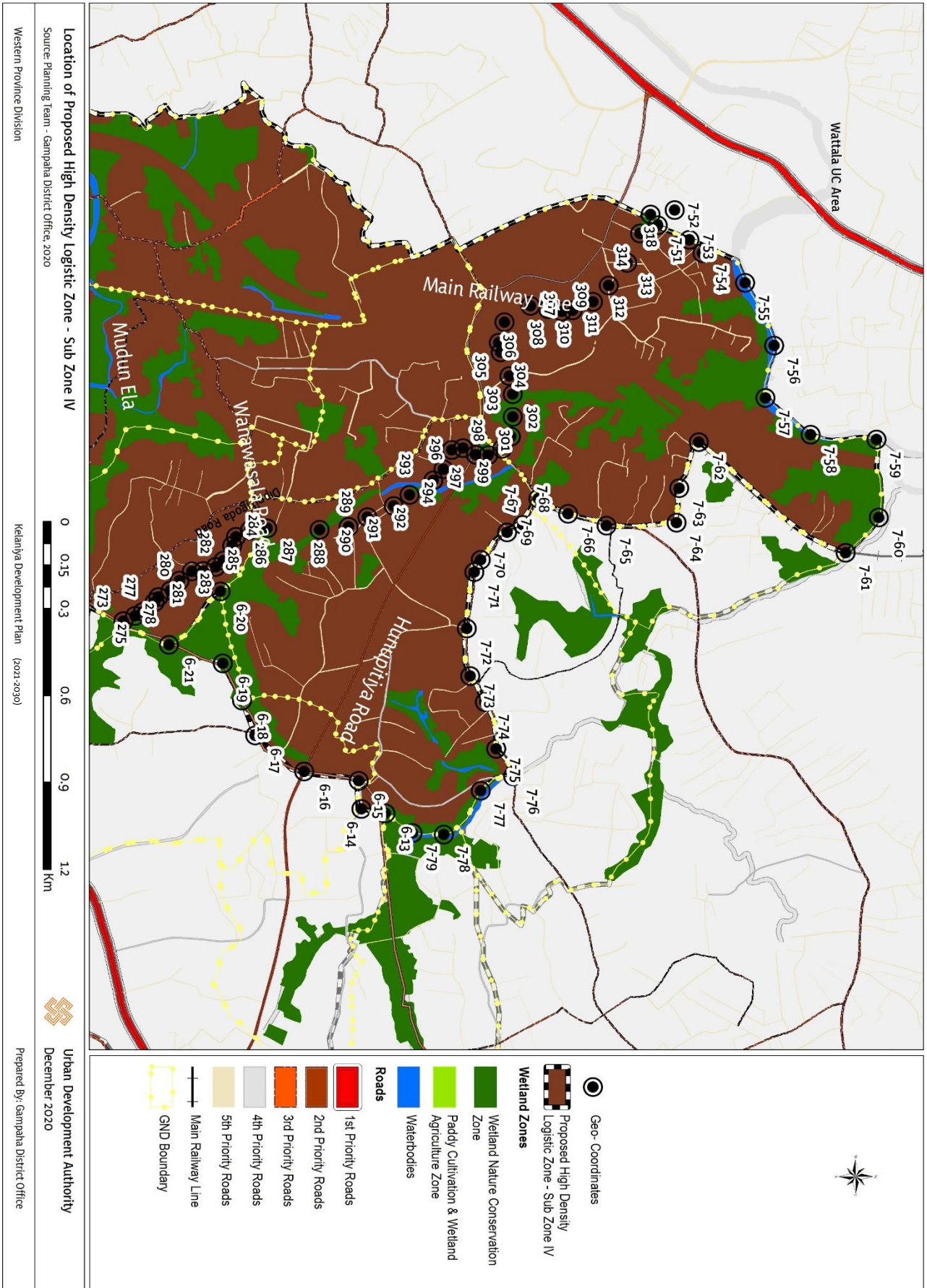
46.3. High Density Logistic Zone

Northern, from 6°59'34.24"N, 79°53'55.04"E (7-55) point in the ground to 6°59'48.71"N, 79°54'12.61"E (7-59) connected through the center line of the Kalu Ela, from that point to 6°59'45.33"N, 79°54'25.36"E (7-61) point in the ground connected through northern boundary of Welegoda Grama Niladhari Division, and up to 6°59'29.05"N, 79°54'12.92"E (7-62) point in the ground connected through the center line of the main railway line, and from that point to 6°59'11.31"N, 79°54'19.30"E (7-67) point in the ground connected through eastern boundary of the Welegoda Grama Niladhari Division, and connected to 6°58'51.44"N, 79°54'51.05"E (6-15) point in the ground through northern and eastern boundary of the Hunupitiya Grama Niladhari Division, Eastern, from the last point mention in the northern boundary connected to 6°58'45.41"N, 79°54'50.02"E (6-16) point in the ground through the center line of the road laying near Dingiyawatta ground and linked to Hunupitiya road, and from that point to 6°58'36.13"N, 79°54'29.80"E (6-20) point in the ground connected through the imaginary line laying through the Wewaldoowa wetland area, and from that to 6°58'21.43"N, 79°54'31.63"E (6-22) point in the ground connected through western boundary of the Wewaldoowa Natha Ela wetland area, and up to 6°58'16.17"N, 79°54'28.77"E (6-23) point in the ground connected through the center line of the Mudun Ela and connected to 6°58'15.47"N, 79°54'21.90"E (6-24) and from that point to 6°57'59.30"N, 79°54'36.81"E (4-52) point in the ground connected through the eastern boundary of Himbutuwelgoda Grama Niladhari Division, Southern, from the last point mention in the Eastern boundary to 6°57'53.77"N, 79°54'16.58"E (4-55) point in the ground connected through the imaginary line and from that point to 6°57'46.41"N, 79°54'1.93"E (4-61) point in the ground connected through the southern boundary of Himbutuwelgoda Grama Niladhari Division, Western, from that last point mention in the southern boundary to 6°58'11.36"N, 79°53'53.21"E (7-7) point in the ground connected through Western boundary of the Himbutuwelgoda Grama Niladhari Division, and from that point to 6°58'57.23"N, 79°53'52.24"E (7-45) point in the ground connected through Western boundary of the Wanawasala West Grama Niladhari Division,

and connected 6°59'2.31"N, 79°53'51.41"E (7-47) point in the ground through the Western boundary of the Hunupitiya South Grama Niladhari Division, from that point to 6°59'34.24"N, 79°53'55.04"E (7-55) point in the ground connected through the western boundary of Welegoda GND and connected to the starting point. This entire zone is divided to four sub-zones as described in bellow and boundary coordinates is shown in annexure 03.

- Sub-Zone 1 – the area spread both side of the Colombo Kandy road from Western boundary of Kelaniya PS to Tire junction and from the north up to Mudun Ela.
- Sub-Zone 2 – The area covered by Mudun Ela from southern, western boundary of the Kelaniya PS from the western, Wanawasala road and Dippitigoda road from the Eastern and Northern boundary and the area not included to 100 m boundary of Dippitigoda and Wanawasala Road.
- Sub-Zone 3 – The covered by 100m buffer of both side of the Dippitigoda Road from Natha Ela Canal to Hunupitiya Road, Hunupitiya Road from Hunupitiya Town to Western boundary of Kelaniya PS area and Wanawasala Road.
- Sub-Zone 4 – The area spread toward northern part of the Kelaniya PS area from Dippitigoda road and Hunupitiya Road excepting 100m buffer of both side of the road, Padiliyathuduwa road from Northern, North Western boundary of Kelaniya PS area from Western.

Location of High-Density Logistic Zone – Sub Zone I



Kelaniya Development Plan (2021 -2030)
Urban Development Authority

211	79.90120000000	6.97753000000	261	79.90720000000	6.97349000000	7_33	6°58'43.03"N	79°53'39.32"E
212	79.90060000000	6.97733000000	262	79.90730000000	6.97337000000	7_34	6°58'44.18"N	79°53'39.76"E
213	79.90030000000	6.97703000000	263	79.90730000000	6.97284000000	7_35	6°58'46.28"N	79°53'40.10"E
214	79.89980000000	6.97681000000	264	79.90740000000	6.97266000000	7_36	6°58'45.96"N	79°53'41.76"E
215	79.89940000000	6.97638000000	265	79.90740000000	6.97251000000	7_37	6°58'47.63"N	79°53'42.87"E
216	79.89900000000	6.97611000000	266	79.90750000000	6.97229000000	7_38	6°58'49.91"N	79°53'43.99"E
217	79.89870000000	6.97601000000	267	79.90770000000	6.97210000000	7_39	6°58'50.87"N	79°53'46.34"E
218	79.89820000000	6.97571000000	268	79.90780000000	6.97203000000	7_40	6°58'52.34"N	79°53'47.84"E
219	79.89740000000	6.97558000000	429	79.89810000000	6.96922000000	7_41	6°58'51.68"N	79°53'49.57"E
220	79.89710000000	6.97520000000	432	79.89800000000	6.97004000000	7_42	6°58'52.37"N	79°53'50.47"E
221	79.89670000000	6.97531000000	433	79.90220000000	6.97042000000	7_43	6°58'52.63"N	79°53'50.98"E
222	79.89650000000	6.97498000000	434	79.90370000000	6.97084000000	7_44	6°58'56.56"N	79°53'50.67"E
223	79.89650000000	6.97460000000	435	79.90490000000	6.97094000000	7_45	6°58'57.23"N	79°53'52.24"E
224	79.89660000000	6.97422000000	436	79.90780000000	6.97123000000	7_46	6°59'1.64"N	79°53'50.16"E
225	79.89680000000	6.97398000000	437	79.90820000000	6.97189000000	7_47	6°59'2.31"N	79°53'51.41"E
226	79.89700000000	6.97387000000	1724	79.90590000000	6.97115000000	7_48	6°59'6.23"N	79°53'50.84"E
227	79.89740000000	6.97377000000				7_49	6°59'14.29"N	79°53'46.00"E
228	79.89790000000	6.97380000000						
229	79.89820000000	6.97387000000						
230	79.89860000000	6.97396000000						
231	79.89910000000	6.97415000000						
232	79.89940000000	6.97432000000						
233	79.89980000000	6.97446000000						
234	79.90020000000	6.97468000000						
235	79.90050000000	6.97482000000						
236	79.90080000000	6.97508000000						

Boundary Coordinates – High Density Logistic Zone – Sub Zone III

No.	x	y	No.	x	y	No.	x	y
187	79.897700000	6.987110000	243	79.902800000	6.976100000	300	79.903400000	6.985620000
188	79.897400000	6.986440000	244	79.903200000	6.976310000	301	79.902800000	6.985680000
189	79.897500000	6.986230000	245	79.903500000	6.976680000	302	79.902100000	6.985670000
190	79.897700000	6.985540000	246	79.903900000	6.976640000	303	79.901500000	6.985570000
191	79.898000000	6.984980000	247	79.904300000	6.976650000	304	79.900800000	6.985300000
192	79.898500000	6.984260000	248	79.904800000	6.976760000	305	79.900500000	6.985240000
193	79.898800000	6.983830000	249	79.904900000	6.976370000	306	79.899900000	6.985420000
194	79.899700000	6.983560000	250	79.905200000	6.976000000	307	79.899300000	6.986220000
195	79.900500000	6.983400000	251	79.905600000	6.975670000	308	79.899500000	6.986760000
196	79.901400000	6.983560000	252	79.905800000	6.975530000	309	79.899500000	6.987180000
197	79.901900000	6.983760000	253	79.905900000	6.975340000	310	79.899500000	6.987510000
198	79.902200000	6.982720000	254	79.905900000	6.975140000	311	79.899200000	6.988140000
199	79.902900000	6.982280000	255	79.906100000	6.974900000	312	79.898700000	6.988630000
200	79.903600000	6.981940000	256	79.906300000	6.974580000	313	79.898000000	6.989190000
201	79.904500000	6.979900000	257	79.906400000	6.974390000	314	79.897100000	6.989580000
202	79.904500000	6.978550000	258	79.906600000	6.974170000	316	79.895800000	6.988570000
203	79.903900000	6.978570000	259	79.906800000	6.973960000	317	79.895800000	6.988040000
204	79.903400000	6.978580000	260	79.907000000	6.973710000	318	79.896500000	6.989910000
205	79.902700000	6.978450000	261	79.907200000	6.973490000	437	79.908200000	6.971890000
206	79.902500000	6.978300000	262	79.907300000	6.973370000	300	79.903400000	6.985620000
207	79.902500000	6.978130000	263	79.907300000	6.972840000	301	79.902800000	6.985680000
208	79.902100000	6.977880000	264	79.907400000	6.972660000	302	79.902100000	6.985670000
209	79.902100000	6.977770000	265	79.907400000	6.972510000	303	79.901500000	6.985570000
210	79.901600000	6.977530000	266	79.907500000	6.972290000	304	79.900800000	6.985300000
211	79.901200000	6.977530000	267	79.907700000	6.972100000	305	79.900500000	6.985240000
212	79.900600000	6.977330000	268	79.907900000	6.972010000	306	79.899900000	6.985420000
213	79.900300000	6.977030000	270	79.908400000	6.972300000	307	79.899300000	6.986220000
214	79.899800000	6.976810000	271	79.908800000	6.973080000	308	79.899500000	6.986760000
215	79.899400000	6.976360000	272	79.908900000	6.973270000	309	79.899500000	6.987180000

216	79.899000000	6.97609000	273	79.909200000	6.97372000	310	79.899500000	6.98751000
217	79.898700000	6.97601000	274	79.909000000	6.97407000	311	79.899200000	6.98814000
218	79.898400000	6.97585000	275	79.908900000	6.97431000	312	79.898700000	6.98863000
219	79.898000000	6.97568000	276	79.908600000	6.97467000	313	79.898000000	6.98919000
220	79.897100000	6.97555000	277	79.908500000	6.97479000	314	79.897100000	6.98958000
221	79.896700000	6.97531000	278	79.908300000	6.97516000	316	79.895800000	6.98857000
222	79.896500000	6.97498000	279	79.908000000	6.97544000	317	79.895800000	6.98804000
223	79.896500000	6.97460000	280	79.907700000	6.97582000	318	79.896500000	6.98991000
224	79.896600000	6.97422000	281	79.907600000	6.97616000	437	79.908200000	6.97189000
225	79.896800000	6.97398000	282	79.907500000	6.97654000			
226	79.896900000	6.97389000	283	79.907300000	6.97679000			
227	79.897400000	6.97377000	284	79.906900000	6.97706000			
228	79.897800000	6.97378000	285	79.906600000	6.97717000			
229	79.898100000	6.97386000	286	79.906400000	6.97760000			
230	79.898600000	6.97396000	287	79.906300000	6.97814000			
231	79.899100000	6.97415000	288	79.906400000	6.97975000			
232	79.899400000	6.97432000	289	79.906300000	6.98063000			
233	79.899800000	6.97446000	290	79.906000000	6.98121000			
234	79.900200000	6.97468000	291	79.905600000	6.98202100			
235	79.900500000	6.97482000	292	79.905300000	6.98251000			
236	79.900800000	6.97508000	293	79.904800000	6.98323000			
237	79.900900000	6.97533000	294	79.904400000	6.98355000			
238	79.901300000	6.97549000	295	79.903900000	6.98381000			
239	79.901600000	6.97572000	296	79.903800000	6.98415000			
240	79.902000000	6.97574000	297	79.904000000	6.98454000			
241	79.902300000	6.97581000	298	79.904000000	6.98493000			
242	79.902600000	6.97596000	299	79.903800000	6.98536000			

Boundary Coordinates – High Density Logistic Zone – Sub Zone IV

No.	N	E	No	X	Y	No.	X	Y
6_13	6°58'54.43"N	79°54'54.74"E	273	79.9092000000	6.9737200000	307	79.8993000000	6.9862200000
6_14	6°58'51.74"N	79°54'54.23"E	274	79.9090000000	6.9740700000	308	79.8995000000	6.9867600000
6_15	6°58'51.44"N	79°54'51.05"E	275	79.9089000000	6.9743100000	309	79.8995000000	6.9871800000
6_16	6°58'45.41"N	79°54'50.02"E	276	79.9086000000	6.9746700000	310	79.8995000000	6.9875100000
6_17	6°58'39.98"N	79°54'45.99"E	277	79.9085000000	6.9747900000	311	79.8992000000	6.9881400000
6_18	6°58'38.51"N	79°54'42.07"E	278	79.9083000000	6.9751600000	312	79.8987000000	6.9886300000
6_19	6°58'36.40"N	79°54'37.90"E	279	79.9080000000	6.9754400000	313	79.8980000000	6.9891900000
6_20	6°58'36.13"N	79°54'29.80"E	280	79.9077000000	6.9758200000	314	79.8971000000	6.9895800000
6_21	6°58'30.43"N	79°54'35.84"E	281	79.9076000000	6.9761600000	318	79.8965000000	6.9899100000
7_51	6°59'24.45"N	79°53'48.58"E	282	79.9075000000	6.9765400000	307	79.8993000000	6.9862200000
7_52	6°59'26.32"N	79°53'46.84"E	283	79.9073000000	6.9767900000	308	79.8995000000	6.9867600000
7_53	6°59'27.97"N	79°53'50.17"E	284	79.9069000000	6.9770600000			
7_54	6°59'29.41"N	79°53'51.68"E	285	79.9066000000	6.9771700000			
7_55	6°59'34.24"N	79°53'55.04"E	286	79.9064000000	6.9776000000			
7_56	6°59'37.36"N	79°54'2.06"E	287	79.9063000000	6.9781400000			
7_57	6°59'36.40"N	79°54'7.95"E	288	79.9064000000	6.9797500000			
7_58	6°59'41.41"N	79°54'12.08"E	289	79.9063000000	6.9806300000			
7_59	6°59'48.71"N	79°54'12.61"E	290	79.9060000000	6.9812100000			
7_60	6°59'48.98"N	79°54'21.37"E	291	79.9056000000	6.9820210000			
7_61	6°59'45.33"N	79°54'25.36"E	292	79.9053000000	6.9825100000			
7_62	6°59'29.05"N	79°54'12.92"E	293	79.9048000000	6.9832300000			
7_63	6°59'26.90"N	79°54'18.11"E	294	79.9044000000	6.9835500000			
7_64	6°59'26.60"N	79°54'22.01"E	295	79.9039000000	6.9838100000			
7_65	6°59'18.83"N	79°54'22.35"E	296	79.9038000000	6.9841500000			
7_66	6°59'14.61"N	79°54'21.02"E	297	79.9040000000	6.9845400000			
7_67	6°59'11.31"N	79°54'19.30"E	298	79.9040000000	6.9849300000			
7_68	6°59'9.61"N	79°54'22.28"E	299	79.9038000000	6.9853600000			
7_69	6°59'7.85"N	79°54'23.12"E	300	79.9034000000	6.9856200000			

7_70	6°59'4.92"N	79°54'26.21"E	301	79.90280000000	6.98568000000		
7_71	6°59'4.23"N	79°54'27.59"E	302	79.90210000000	6.98567000000		
7_72	6°59'3.40"N	79°54'33.92"E	303	79.90150000000	6.98557000000		
7_73	6°59'3.79"N	79°54'39.29"E	304	79.90080000000	6.98530000000		
7_74	6°59'5.41"N	79°54'42.19"E	305	79.90050000000	6.98524000000		
7_75	6°59'6.66"N	79°54'47.45"E	306	79.89990000000	6.98542000000		
7_76	6°59'8.55"N	79°54'50.55"E					
7_77	6°59'4.97"N	79°54'52.17"E					
7_78	6°59'0.89"N	79°54'57.09"E					
7_79	6°58'57.44"N	79°54'56.94"E					

46.4. High Density Residential Zone

Northern, starting from 6°59'45.33"N, 79°54'25.36"E (7-61) point in the ground at Center line of the main railway line to 6°59'22.18"N, 79°54'33.31"E (8-6) point in the ground connected through the Eastern boundary of Hunupitiya North Grama Niladhari division, and from that point to 6°59'5.68"N, 79°55'7.57"E (8-23) point in the ground connected through north and eastern boundary of the Hunupitiya North Grama Niladhari Division, from that point to 6°59'8.33"N, 79°55'26.53"E (5 -10) point in the ground connected through the northern boundary of Eriyawetiya Grama Niladhari Division,

Eastern, from the last point mention in the Northern boundary to 6°58'49.60"N, 79°55'34.73"E (5-6) point in the ground connected through eastern boundary of Eriyawetiya Grama Niladhari Division,

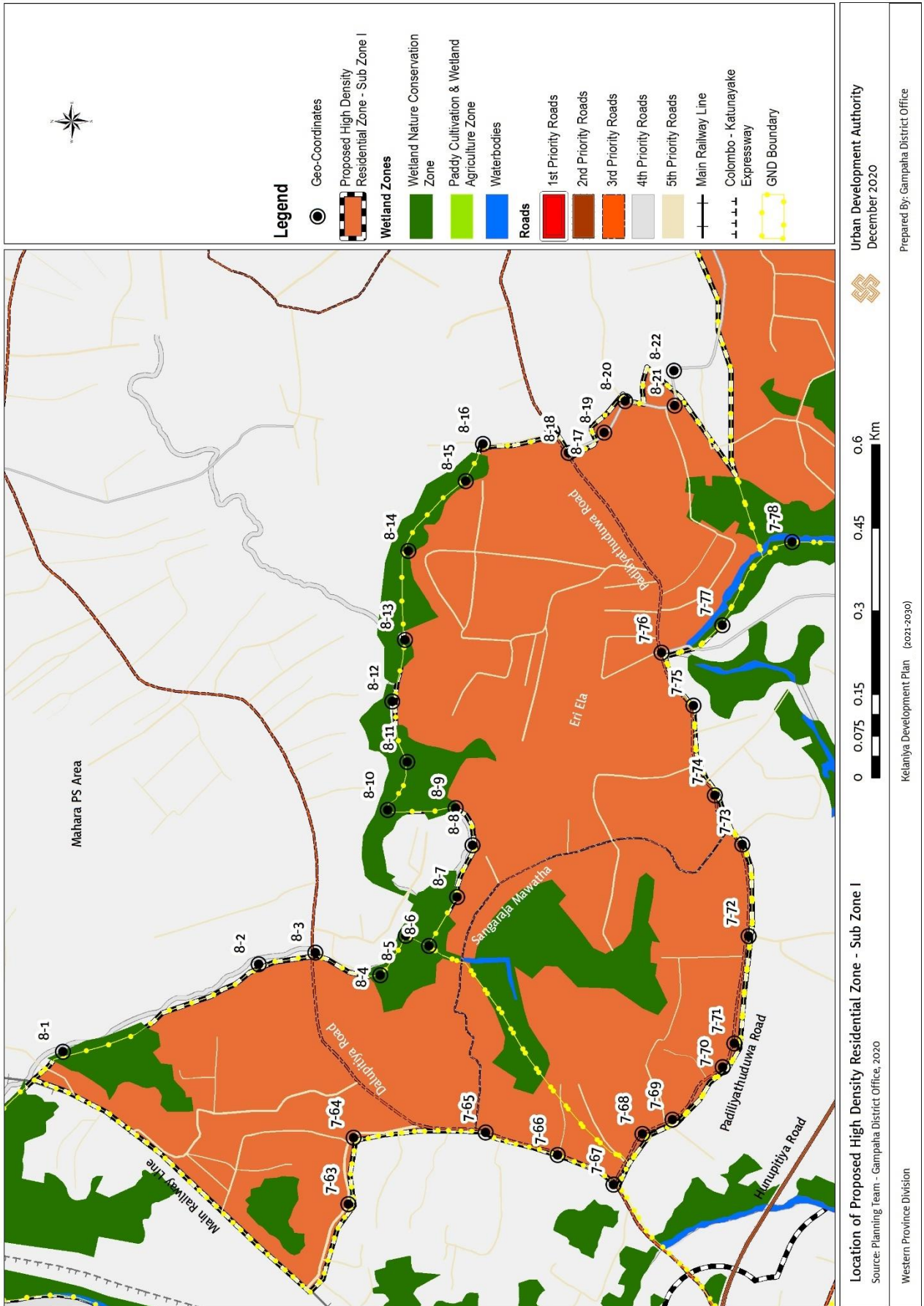
Southern, from the last point mention in the eastern boundary to 6°58'48.75"N, 79°55'25.96"E (5-4) point in the ground connected via imaginary line toward western part of the area, and from that point to 6°58'50.14"N, 79°55'7.19"E (6-7) point in the ground through center line of the Nilwalla road, from that point to 6°58'54.43"N, 79°54'54.74"E (6 -13) point in the ground through southern boundary of Eriyawetiya wetland area, and from that point to 6°59'8.55"N, 79°54'50.55"E (7-76) point in the ground connected through the center line of the Padiliyathuduwa road and after connected to 6°59'11.31"N, 79°54'19.30"E (7-67) point in the ground through the center line of the Wattala – Mahara road,

Western, from the last point mention in the Southern boundary to 6°59'29.05"N, 79°54'12.92"E (7-62) point in the ground connected through the center line of the Wattala – Mahara road and center line of the Range road, and connected starting point again through the center line of the Main railway line.

This zone is divided to two sub zones.

- Sub Zone -1- Hunupitiya North and Nahena Grama Niladhari Divisions areas
- Sub Zone -2- The area covered by North, East and Southern boundaries of Eriyawetiya GND and mention in boundary coordinate description.

Location of High-Density Residential Zone – Sub Zone I



46.5. Moderate Density Residential Zone

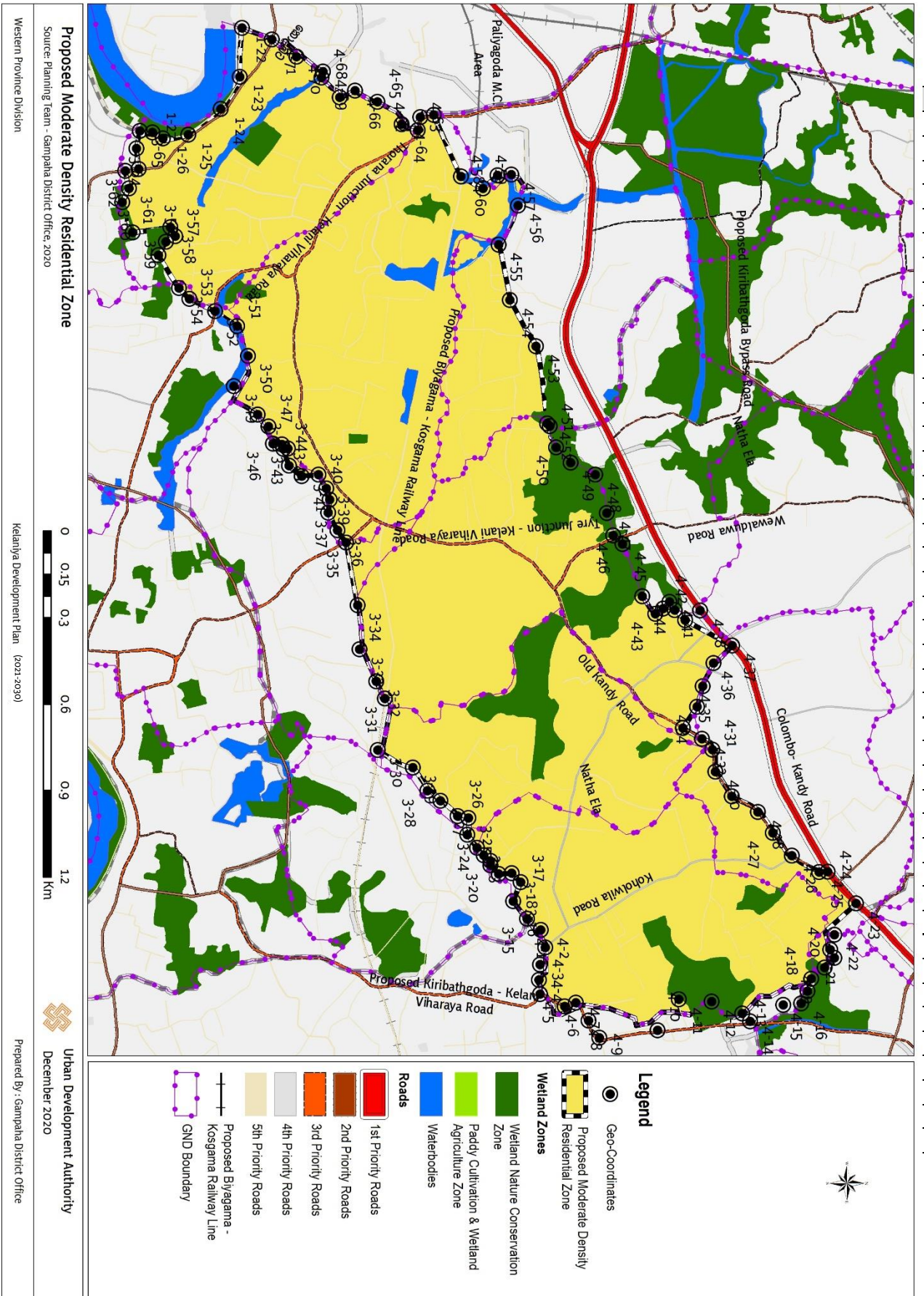
Northern, starting from the 6°57'55.95"N, 79°54'12.15"E (4-56) point in the ground at southern boundary of Himbutuwelgoda GND to 6°57'59.30"N, 79°54'36.81"E (4-52) connected through imaginary line and up to 6°58'16.64"N, 79°54'57.93"E (4-38) point in the ground connected through southern and eastern boundary of the Dalugama Grama Niladhari Division. From that last point to 6°58'16.86"N, 79°55'12.45"E (4-32) point in the ground linked via imaginary line and up to 6°58'31.11"N, 79°55'27.45"E (4-24) point in the ground connected through the center line of the Old Kandy Road and connected to 6°58'34.32"N, 79°55'31.00"E (4-23) point in the ground through the Centre line of the Colombo – Kandy Road,

Eastern, from the above last point in northern boundary to 6°58'31.89"N, 79°55'37.19"E (4-20) point in the ground connected through Centre line of the Ramasinghe Mawatha, from that point to 6°58'21.49"N, 79°55'43.49"E (4-13) point in the ground connected through western boundary of the Koholvila wetland area, and from that point 6°57'58.60"N, 79°55'41.34"E (4-5) point in the ground connected through eastern boundary of the Koholvila Grama Niladhari Division,

Southern, from the last point mention in the Eastern boundary to 6°57'59.18"N, 79°55'36.07"E (4-2) point in the ground connected through the Centre line of the Koholvila Road, and from that point to 6°57'40.23"N, 79°55'13.76"E (3-30) point near Polhena ground connected through imaginary line, after from Polhena ground to 6°57'37.90"N, 79°54'57.38"E (3-34) point in the ground is connected via southern boundary of the Dalugama and Nungamugoda GND and to 6°57'36.58"N, 79°54'50.30"E (3-35) connected through Centre line of the Pasihena Road and from that point to 6°57'23.85"N, 79°54'32.65"E (3-49) point in the ground connected through eastern boundary of the Wedamulla Grama Niladhari Division. And from this last point to 6°57'21.73"N, 79°54'24.16"E (3-52) point in the ground connected through center line of the Kumbal Oya, and up to 6°57'11.95"N, 79°54'10.28"E (3-62) point at the center of Colombo – Biyagama Road the ground linked via imaginary line, and through the center line of the Colombo – Kandy road connected to 6°57'11.56"N, 79°54'8.32"E (3-63) point and from that point to 6°57'12.82"N, 79°54'5.80"E (3-65) point at Kelani River North Bund connected through the center line of the Mewalla Mawatha,

Western, from that last point mention in the southern boundary to 6°57'24.73"N, 79°53'52.14"E (1-22) point in the ground connected through the Centre line of the road laying via the Kelani River north bund, and from that point to starting point in the northern boundary connected through the western boundary of Pethiyagoda and Wedamulla Grama Niladhari Divisions.

Location of Moderate Density Residential Zone



46.6. Low Density Residential Zone

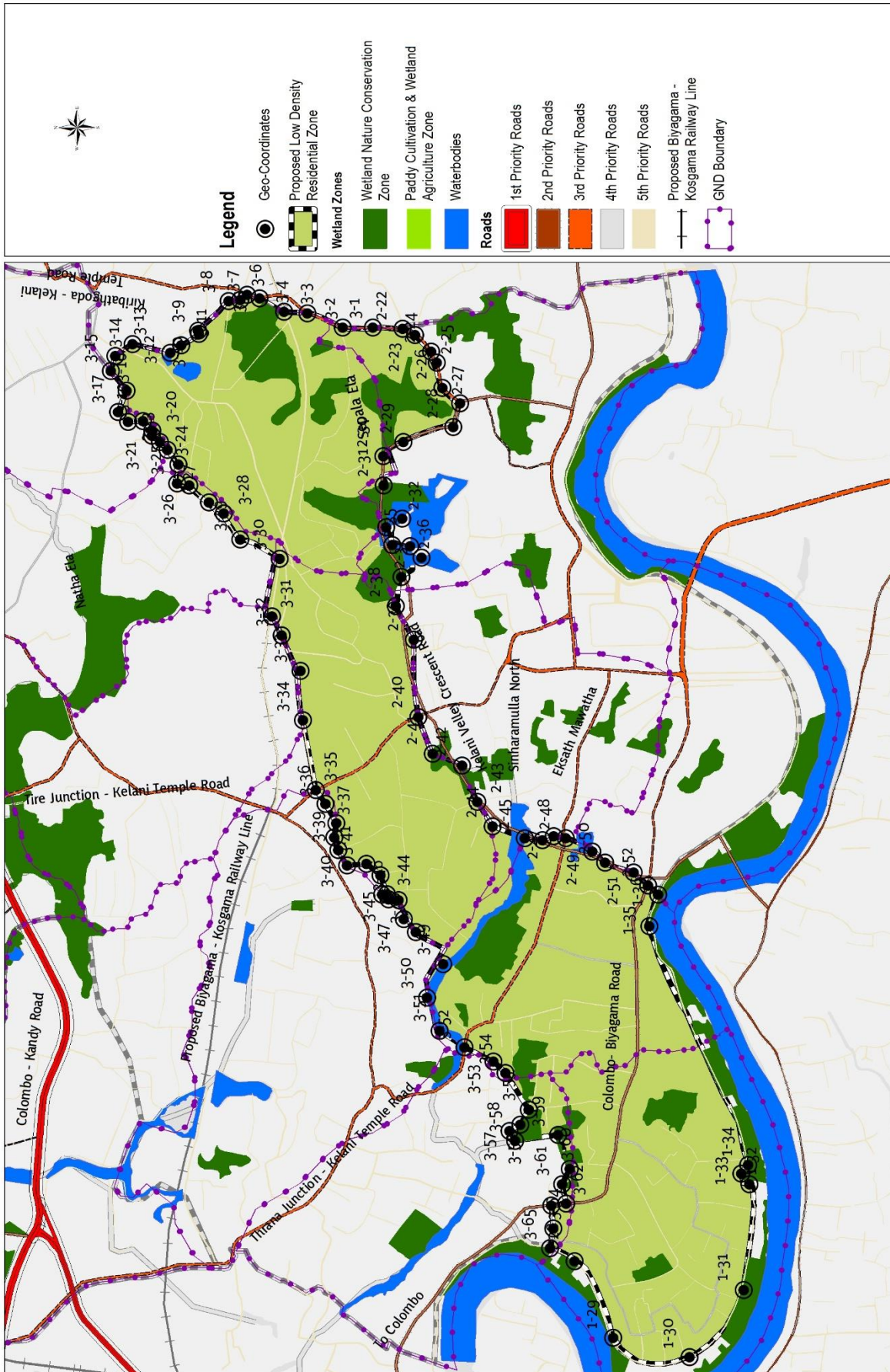
Northern, starting from the 6°57'12.82"N, 79°54'5.80"E (3-65) point in the ground in center line of the road in Kelani river north bund to 3-63 point in the ground connected through the center line of the Mewalla road, and connected to 6°57'11.95"N, 79°54'10.28"E (3-62) point in the ground through center line of the Colombo – Biyagama road, from that point to 6°57'21.73"N, 79°54'24.16"E (3-52) point in the ground connected through imaginary line laying near the southern boundary of Pethiyagoda Grama Niladhari Division. And up to 6°57'23.85"N, 79°54'32.65"E (3-49) point in the ground connected through the center line of the Kumbal Oya, and from that point to 6°57'37.90"N, 79°54'57.38"E (3-34) point in the ground connected through the South-Eastern and Eastern boundary of the Wedamulla Grama Niladhari Division, from that point to 6°57'57.10"N, 79°55'32.82"E (3-15) point in the ground connected Northern part of the Polhena GND through the imaginary line,

Eastern, from the last point mention in Northern boundary to 6°57'28.03"N, 79°55'37.16"E (2-22) point in the ground connected through the eastern boundary of Polhena and Kelaniya Grama Niladhari Division,

Southern, from the above point to 6°57'22.27"N, 79°55'29.59"E (2-27) point in the ground connected through the center line of the Koholvila road and from that point to 6°57'29.94"N, 79°55'24.23"E (2-30) point in the ground connected through the center line of Ranaviru Lasantha Sanjeewa Mawatha and up to 6°57'28.64"N, 79°55'9.00"E (2-38) point in the ground connected through the Sepala Ela Wetland area and from that point to 6°57'2.43"N, 79°54'39.74"E (1-36) point in Kelani river north bund connected through the southern boundary of Galboralla GND and Eastern boundary of Pilapitiya GND

Western, from the last point mention in Southern boundary to starting point in the Northern boundary connected through the center line of the road laying via Kelani river north bund.

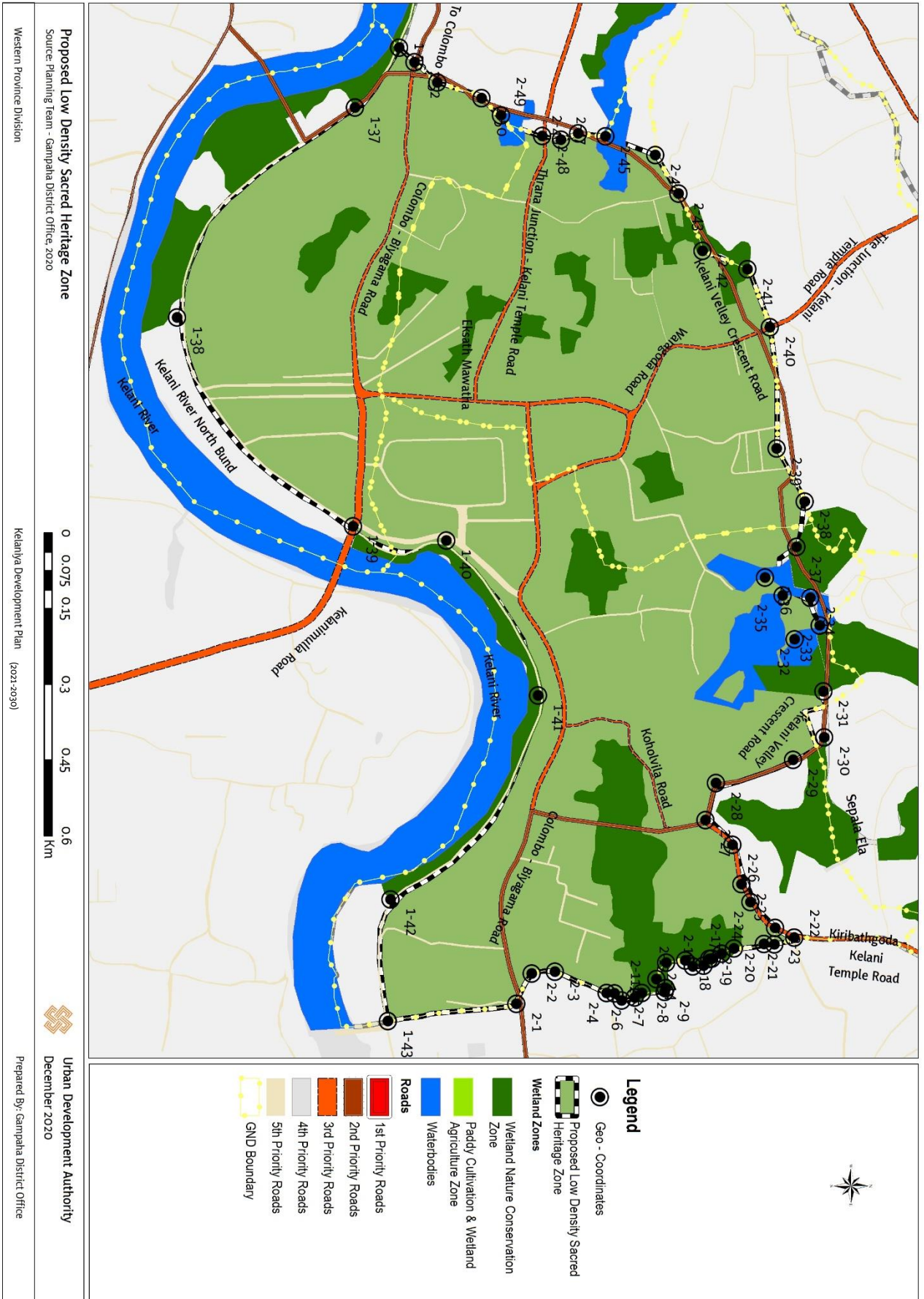
Location of Low-Density Residential Zone



Proposed Low Density Residential Zone
 Source: Planning Team - Gampaha District Office, 2020

Urban Development Authority
 December 2020

Western Province Division
 Kelaniya Development Plan (2021-2030)
 Prepared By: Gampaha District Office



Boundary Coordinates – Low Density Sacred Heritage Zone

No	N	E	No	N	E	No	N	E
2_1	6°57'10.11"N	79°55'41.48"E	2_21	6°57'26.74"N	79°55'37.61"E	2_41	6°57'24.93"N	79°54'54.01"E
2_2	6°57'11.09"N	79°55'39.52"E	2_22	6°57'28.03"N	79°55'37.16"E	2_42	6°57'22.03"N	79°54'52.82"E
2_3	6°57'12.58"N	79°55'39.40"E	2_23	6°57'26.79"N	79°55'36.54"E	2_43	6°57'20.47"N	79°54'49.13"E
2_4	6°57'15.93"N	79°55'40.77"E	2_24	6°57'25.19"N	79°55'34.87"E	2_44	6°57'18.97"N	79°54'46.65"E
2_5	6°57'16.43"N	79°55'40.80"E	2_25	6°57'24.60"N	79°55'33.73"E	2_45	6°57'15.75"N	79°54'45.44"E
2_6	6°57'16.87"N	79°55'41.23"E	2_26	6°57'24.03"N	79°55'31.18"E	2_46	6°57'13.98"N	79°54'45.25"E
2_7	6°57'17.73"N	79°55'41.05"E	2_27	6°57'22.27"N	79°55'29.59"E	2_47	6°57'12.87"N	79°54'45.65"E
2_8	6°57'18.20"N	79°55'40.76"E	2_28	6°57'22.95"N	79°55'27.19"E	2_48	6°57'11.68"N	79°54'45.43"E
2_9	6°57'19.66"N	79°55'40.69"E	2_29	6°57'27.92"N	79°55'25.68"E	2_49	6°57'9.01"N	79°54'44.10"E
2_10	6°57'19.73"N	79°55'40.44"E	2_30	6°57'29.94"N	79°55'24.23"E	2_50	6°57'7.75"N	79°54'42.98"E
2_11	6°57'19.14"N	79°55'39.86"E	2_31	6°57'29.87"N	79°55'21.26"E	2_51	6°57'4.90"N	79°54'41.98"E
2_12	6°57'19.75"N	79°55'38.80"E	2_32	6°57'28.02"N	79°55'17.90"E	2_52	6°57'3.43"N	79°54'40.67"E
2_13	6°57'20.99"N	79°55'38.67"E	2_33	6°57'29.62"N	79°55'17.01"E	1_36	6°57'2.43"N	79°54'39.74"E
2_14	6°57'21.47"N	79°55'39.04"E	2_34	6°57'29.01"N	79°55'15.21"E	1_37	6°56'59.60"N	79°54'43.60"E
2_15	6°57'22.18"N	79°55'38.99"E	2_35	6°57'27.24"N	79°55'15.07"E	1_38	6°56'48.15"N	79°54'57.19"E
2_16	6°57'22.55"N	79°55'38.55"E	2_36	6°57'26.09"N	79°55'13.91"E	1_39	6°56'59.52"N	79°55'10.65"E
2_17	6°57'22.70"N	79°55'38.54"E	2_37	6°57'28.11"N	79°55'11.94"E	1_40	6°57'5.53"N	79°55'11.57"E
2_18	6°57'23.34"N	79°55'38.23"E	2_38	6°57'28.64"N	79°55'9.00"E	1_41	6°57'11.47"N	79°55'21.55"E
2_19	6°57'24.13"N	79°55'37.89"E	2_39	6°57'26.83"N	79°55'5.57"E	1_42	6°57'1.98"N	79°55'34.74"E
2_20	6°57'26.06"N	79°55'37.58"E	2_40	6°57'26.39"N	79°54'57.74"E	1_43	6°57'1.82"N	79°55'42.61"E

46.8. Special Eco Conservation Zone

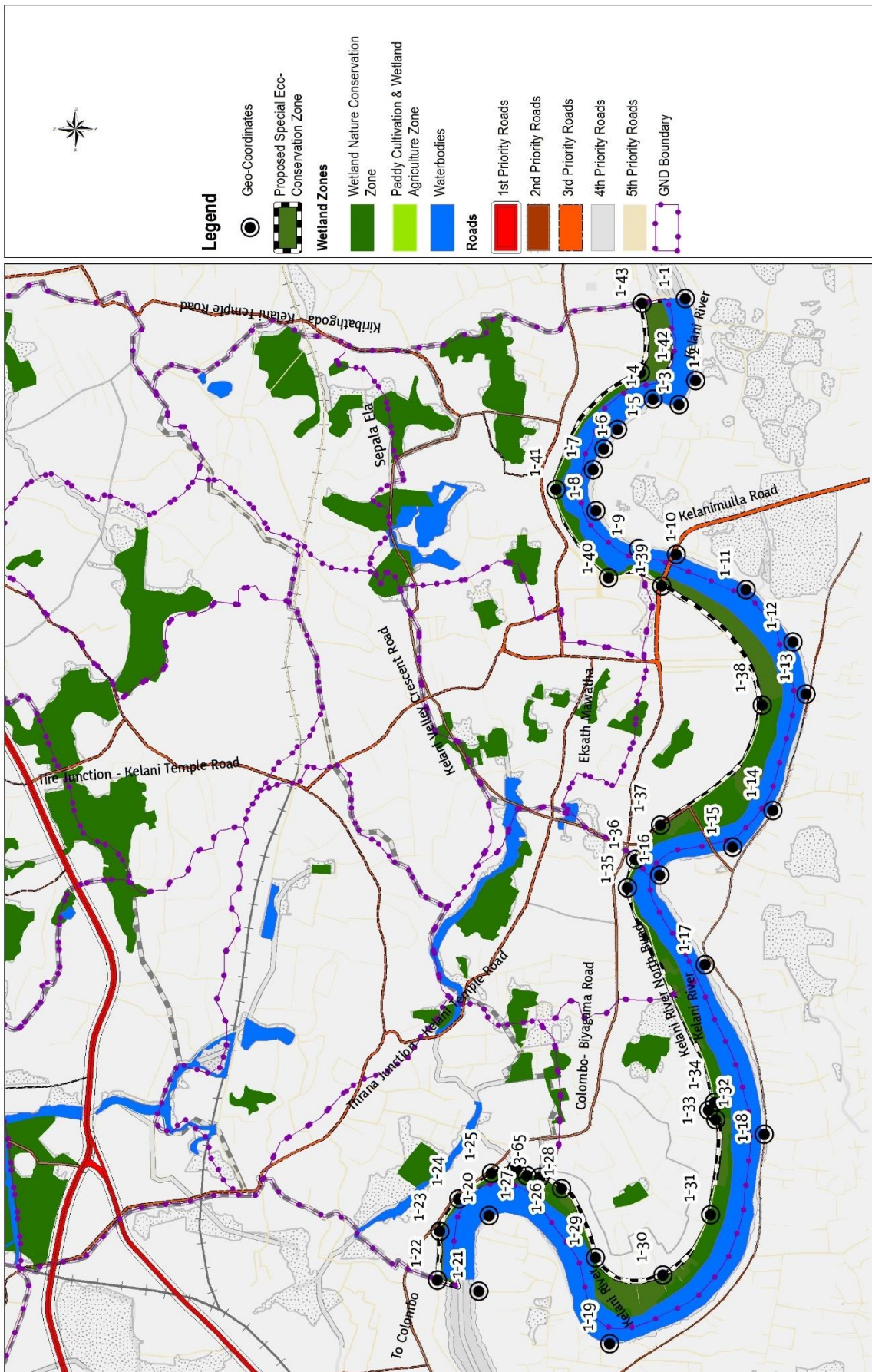
Northern, starting from the $6^{\circ}57'24.73''\text{N}$, $79^{\circ}53'52.14''\text{E}$ (1-22) point in the ground to $6^{\circ}57'1.82''\text{N}$, $79^{\circ}55'42.61''\text{E}$ (1-43) point in the ground at the end of eastern boundary of Kelaniya PS connected through the center line of the road laying via Kelani river north bund and,

Eastern, from the last point mention in the Northern boundary to $6^{\circ}56'56.89''\text{N}$, $79^{\circ}55'43.16''\text{E}$ (1-1) at the middle of the Kelani river connected through an imaginary line,

Southern, from the last point mention in the Eastern boundary to $6^{\circ}57'20.03''\text{N}$, $79^{\circ}53'50.88''\text{E}$ (1-21) point in the Kelani river connected through the center line of the Kelani river which is the southern boundary of the Kelaniya PS area,

Western, from the last point mention in the southern boundary to stating point $6^{\circ}57'24.73''\text{N}$, $79^{\circ}53'52.14''\text{E}$ (1-22) in the ground connected through the center line of the road laying via Kelani river north bund.

Location of Special Eco-Conservation Zone



Urban Development Authority
December 2020



Proposed Special Eco-Conservation Zone
Source: Planning Team - Gampaha District Office, 2020

Kelaniya Development Plan (2021-2030)

Western Province Division

Prepared By: Gampaha District Office

Annexure 47: Permissible uses for Zones

Use		High Density Commercial Zone	High Density Higher Education Zone	High Density Logistic Zone	High Density Residential Zone	Moderate Density Residential Zone	Low Density Residential Zone	Low Density Sacred Heritage Zone	Special Eco- Conservation Zone
Residential	Housing Units	✓	✓	✓	✓	✓	✓	✓	✗
	Apartment Complex (Housing)	✓	✓	✗	✓	✓	✗	✗	✗
	Hostel	✓	✓	✓	✓	✓	✓	✓	✗
	Quarters	✓	✓	✓	✓	✓	✓	✗	✗
	Adult / Disabled Homes	✗	✗	✗	✓	✓	✗	✓	✗
	Children's Home	✗	✗	✗	✓	✓	✗	✓	✗
	Child Care Centers	✓	✓	✓	✓	✓	✓	✓	✗
Health	Hospitals	✓	✗	✓	✗	✗	✗	✗	✗
	Medical Treatment Centers	✓	✓	✓	✓	✓	✓	✓	✗
	Medical Consulting Service Centers	✓	✓	✓	✓	✓	✓	✓	✗
	Child and Maternity Clinics	✓	✓	✓	✓	✓	✓	✓	✗
	Animal Hospitals	✓	✗	✓	✗	✓	✗	✗	✗
	Veterinary Clinics and Treatment Centers	✓	✓	✓	✓	✓	✓	✓	✗
	Ayurvedic Medical Centers	✓	✓	✓	✓	✓	✓	✓	✗
Educational	Pre-Schools	✗	✓	✗	✓	✓	✓	✓	✗
	Primary Schools	✗	✓	✗	✓	✓	✓	✓	✗
	Secondary Schools	✗	✓	✗	✓	✓	✓	✓	✗
	Tertiary Education Centers	✗	✓	✓	✗	✓	✗	✗	✗
	Technical Collages/ Vocational Training Centers.	✗	✓	✓	✓	✓	✓	✗	✗
	Research and Development Centers	✗	✓	✓	✓	✓	✓	✗	✗
	Private Tuition Classes	✗	✓	✗	✓	✓	✓	✗	✗
	Art Centre / Dance Academy	✗	✓	✓	✓	✓	✓	✓	✗
Institutional	Office	✓	✓	✓	✓	✓	✓	✓	✗
	Office Complex	✓	✓	✓	✗	✓	✗	✓	✗
	Professional Office	✓	✓	✓	✓	✓	✓	✗	✗
	Banks, Insurance & Financial Institutions	✓	✓	✓	✓	✓	✓	✓	✗
	Automated Money Transfer Centers (ATM)	✓	✓	✓	✓	✓	✓	✓	✗
Social services and public amenities	Community Development Centers	✓	✓	✓	✓	✓	✓	✓	✗
	Social and Cultural Centers	✗	✓	✓	✓	✓	✓	✓	✗
	Religious centers	✗	✓	✗	✓	✓	✓	✓	✗
	Auditoriums and Conference Halls	✗	✓	✓	✗	✓	✓	✓	✗

	<i>Libraries</i>	x	✓	✓	✓	✓	✓	✓	x
	<i>Rehabilitation centers</i>	x	x	x	x	x	x	x	x
	<i>Crematoriums</i>	✓	x	✓	✓	✓	✓	x	x
	<i>Cemeteries</i>	x	x	x	x	x	x	x	x
<i>Commercial</i>	<i>Shops</i>	✓	✓	✓	✓	✓	✓	✓	x
	<i>Supermarkets</i>	✓	✓	✓	✓	✓	✓	✓	x
	<i>Shopping Malls</i>	✓	✓	✓	✓	✓	✓	x	x
	<i>Restaurants /Cafeterias</i>	✓	✓	✓	✓	✓	✓	✓	x
	<i>Open Markets</i>	✓	✓	✓	✓	✓	✓	✓	x
	<i>Pharmacies</i>	✓	✓	✓	✓	✓	✓	✓	x
	<i>Laboratory Services and Collection Centers</i>	✓	✓	✓	✓	✓	✓	✓	x
	<i>Wholesale stores</i>	✓	✓	✓	✓	✓	✓	x	x
	<i>Warehouse</i>	x	x	✓	x	x	x	x	x
	<i>Customer Service Centers</i>	✓	✓	✓	✓	✓	✓	✓	x
	<i>Meat and fish stalls</i>	✓	✓	✓	✓	✓	✓	x	x
	<i>Liquor outlets</i>	✓	x	✓	✓	✓	✓	x	x
	<i>Funeral Hall</i>	✓	x	✓	✓	✓	✓	✓	x
	<i>Funeral Hall with Ceremony Halls</i>	✓	x	✓	✓	✓	✓	x	x
	<i>Hardware</i>	✓	✓	✓	✓	✓	✓	✓	x
	<i>Filling stations</i>	✓	✓	✓	✓	✓	✓	✓	x
	<i>Filling stations with vehicle service centers</i>	✓	✓	✓	✓	✓	✓	x	x
	<i>Filling stations and malls</i>	✓	✓	✓	✓	✓	✓	✓	x
	<i>Gas stations & Electric Charging Stations</i>	✓	✓	✓	✓	✓	✓	✓	x
	<i>Communication towers on buildings</i>	✓	✓	✓	x	✓	✓	x	x
<i>Communication towers</i>	✓	✓	✓	✓	✓	✓	x	x	
<i>Multi-storied Vehicle Park</i>	✓	✓	✓	✓	✓	✓	✓	x	
<i>Open Vehicle Park</i>	✓	✓	✓	✓	✓	✓	✓	x	
<i>Vehicle Showrooms</i>	✓	✓	✓	x	✓	✓	x	x	
<i>Tourism</i>	<i>Resorts</i>	✓	✓	✓	✓	✓	✓	✓	x
	<i>Guest Houses</i>	✓	✓	✓	✓	✓	✓	✓	x
	<i>Rooms</i>	✓	x	✓	✓	✓	✓	x	x
	<i>Tourist Hotels</i>	x	✓	x	x	✓	x	✓	x
	<i>City Hotel</i>	✓	✓	x	✓	✓	✓	✓	x
	<i>Tourist Information Centers</i>	✓	✓	✓	✓	✓	✓	✓	x
	<i>Ayurvedic Panchakarma Center</i>	✓	✓	✓	✓	✓	✓	✓	x
	<i>Cabana Hotels</i>	x	✓	✓	✓	✓	x	x	✓
<i>Manufacturing industries</i>	<i>Mining & Mining Extraction Industries</i>	x	x	x	x	x	x	x	x
	<i>Metal Products & foundries related extraction industries</i>	x	x	✓	x	x	x	x	x
	<i>Oil refineries, petroleum-based chemicals & distillation industries</i>	x	x	✓	x	x	x	x	x
	<i>Chemicals, polythene, plastics, rubber & glass-based industries</i>	x	x	✓	x	x	x	x	x
	<i>Cement, concrete and ceramic based products industries</i>	x	x	✓	x	x	x	x	x
	<i>Clay products industries</i>	x	x	✓	✓	✓	✓	✓	x
	<i>Natural fiber-based manufacturing industries</i>	x	x	✓	✓	✓	✓	✓	x
	<i>Textile, Clothing & Leather Products Industries</i>	x	x	✓	✓	✓	x	x	x
	<i>Electrical & Electronics equipment related industries</i>	x	x	✓	x	x	x	x	x

	<i>Heavy Machinery & Assembly industries</i>	x	x	✓	x	x	x	x	x
	<i>Paper Products and Printing Industries</i>	x	x	✓	x	x	x	x	x
	<i>Wood / Wood Products & Furniture Manufacturing Industries</i>	x	x	✓	✓	✓	x	x	x
	<i>Food and non-alcoholic beverage industries</i>	x	x	✓	✓	✓	x	x	x
	<i>Alcohol / local pharmaceuticals, spirits & extracts</i>	x	x	✓	x	x	x	x	x
	<i>Recycling activities related industries</i>	x	x	✓	x	x	x	x	x
	<i>Industrial Infrastructure Facilities Centers</i>	x	x	✓	x	x	x	x	x
	<i>Homestead Industries</i>	✓	✓	✓	✓	✓	✓	✓	x
<i>Service Industries</i>	<i>Vehicle Service Centers</i>	✓	✓	✓	✓	✓	✓	✓	x
	<i>Vehicle Repair Centers / Spray Painting Centers</i>	✓	x	✓	x	✓	x	x	x
	<i>Taxi Service Centers</i>	✓	✓	✓	✓	✓	✓	✓	x
	<i>Laundries</i>	✓	✓	✓	✓	✓	✓	✓	x
	<i>Grinding & Rice Mills</i>	✓	x	✓	✓	✓	✓	✓	x
	<i>Welding Shops/Lathe workshops</i>	✓	x	✓	x	✓	x	x	x
	<i>Electronic Equipment Repair Centers</i>	✓	✓	✓	✓	✓	✓	✓	x
<i>Utility Services</i>	<i>Railway and Bus Terminals</i>	✓	✓	✓	✓	✓	✓	✓	x
<i>Leisure and Recreational Services</i>	<i>Pocket Park</i>	✓	✓	✓	✓	✓	✓	✓	✓
	<i>Mini Park</i>	✓	✓	✓	✓	✓	✓	✓	✓
	<i>Local Park</i>	✓	✓	✓	✓	✓	✓	✓	✓
	<i>Community Park</i>	✓	✓	✓	✓	✓	✓	✓	✓
	<i>Town Park</i>	✓	✓	✓	✓	✓	✓	✓	✓
	<i>Central Urban Park/City Park</i>	✓	✓	✓	✓	✓	✓	✓	✓
	<i>Regional Park</i>	✓	✓	✓	✓	✓	✓	✓	✓
	<i>Linear Park</i>	✓	✓	✓	✓	✓	✓	✓	✓
	<i>Indoor Sports Stadiums</i>	✓	✓	✓	✓	✓	✓	x	x
	<i>Theaters</i>	✓	✓	✓	✓	✓	✓	x	x
	<i>Clubs</i>	✓	x	✓	x	✓	x	x	x
	<i>Art Galleries / Museums</i>	✓	✓	✓	✓	✓	✓	✓	x
	<i>Open Theaters</i>	✓	✓	✓	✓	✓	✓	✓	✓
	<i>Boat Jetty / Anchoring</i>	x	x	x	x	x	x	x	✓
<i>Safe bathing places</i>	x	x	x	x	x	x	x	✓	
<i>Agricultural</i>	<i>Livestock/ Agricultural farms with construction</i>	x	x	x	x	x	✓	✓	x
	<i>Permission is given for the renewal of existing inland fishing areas</i>	x	x	x	x	x	✓	✓	x

Annexure 48: Definitions of Permissible uses for Zones

Uses		Definition
Residential	Housing units	Sleeping, Cooking and Sanitary Complete Unit for Independent Residence, A building or part of a building that contains a room or room cluster.
	Apartment complexes	Buildings with a horizontal or vertical extension of a unit or unit of residence in a permanently occupied area
	Hostels	Vertical or horizontal extension buildings that provide residential facilities for a limited time
	Quarters / quarters	Vertical or horizontal extension buildings that provide residential accommodation to a particular workplace
	Adult / Disabled Homes	Horizontal or vertical extension buildings with basic residential facilities for the care of the aged and disabled.
	Children's Homes	Buildings with horizontal or vertical extension with basic residential facilities for children under 18 years
	Child Care Centers	Buildings with temporary residential care for children (less than 24 hours)
Health	Hospitals	Laboratories, pharmacies, nursing care, rehabilitation, surgical services, outpatient and internal patient care, training centers, administrative and staffing facilities, with all or several buildings providing treatment for outpatient and inpatient
	Medical Centers	At least one physician serving a pharmacist and an outpatient center
	Medical Consulting & Channeling Service Centers	Buildings to provide specialized consultancy services
	Child and Maternity Clinics	Centers that provide basic health care and counseling services for children and pregnant mothers
	Animal Hospital	Veterinary Service Centers that conduct outpatient and inpatient treatment / clinics
	Veterinary Clinics and Treatment Centers	OPD care and veterinary service centers
	Ayurvedic Medical Centers	Centers served by a registered doctor or a few doctors in the Government Ayurvedic Medical Council who treat traditional indigenous medicine.
Educational	Early Childhood Development Centers	Buildings to provide a formal education including early childhood development activities before admitting children to grade one

	Primary Education Centers	School buildings with facilities to provide a formal education from grade one to grade five
	Secondary Education Centers	School buildings with facilities to provide formal education from grade one to grade thirteenth and sixth to thirteenth
	Tertiary Education Centers	Higher Education Facilities, Any Universities, Open Universities and Higher Education Centers recognized by Government, Semi-Governmental, Private or International
	Technical Schools / Vocational Training Centers	Centers to provide vocational / technical training based on employment
	Research and Development Centers	Centers to conduct research and development work in various fields using modern techniques
	Private tuition classes	Buildings with teaching facilities for individual or group of children by one teacher or group of teachers
	Art Centre / Dance Academy	Buildings for study purposes with a view to providing aesthetics
Institutions	Offices	Centers with utilities and administrative services
	Office complex	two buildings with utility and administrative service facilities Or Buildings with allied facilities for more
	Professional Offices	Career Based Service Centers
	Banks, Insurance and Financial Institutions	Insurance and Financial Institutions
	Automated Money Transfer Centers	Centers for machine trading without a person
Social services and public amenities	Community Development Centers	Centers to facilitate community gatherings, community and development activities in general
	Social and cultural centers	Centers for public and cultural activities
	Religious centers	Places used for religious purposes
	Auditoriums and conference rooms	Buildings used for events, seminars or meetings
	Library	Buildings used for reading and related studies
	Rehabilitation centers	Centers for reintegration of persons engaged in anti-social activities

	Crematoriums	Buildings in a cemetery with a gas or electric fountain to burn dead bodies run by a local authority
	Cemeteries	Places used for burial and cremation
Commercial	Shop	Places where retail or wholesale goods are sold
	Supermarkets	A self-contained large-scale building with one roof for selling consumer goods
	Shopping malls	Large Sales Centers with a wide variety of goods and services
	Restaurants /Cafeterias	Places to buy and consume food with minimal facilities
	Open Markets	Places where consumer goods are generally sold with or without cover
	Pharmacies	Pharmacies registered under State Pharmaceutical Corporation
	Laboratory Services and Collection Centers	Centers that run chemical service facilities affiliated to a hospital
	Wholesale stores	Places where merchandise or business is in bulk storage
	Warehousing	It is a building or part of a building that is mainly used for storing raw materials, commodities or merchandise for sale locally or overseas using containers.
	Customer Service Centers	Centers for systematic acquisition of customer service needs by competent persons
	Meat and fish stalls	-
	Liquor outlets	-
	Funeral halls	Centers for funeral arrangements
	Funeral halls with ceremony halls	-
	Building Materials Sales	-
	Fuel stations	Buildings with facilities For sale in Petrol, Fuel, Lubricant and Liquid Petroleum Gas Retail
	Filling stations and vehicle service centers	Facilities for retail sale of petrol, fuel, lubricant and liquefied petroleum gas for automobiles, Buildings such as vehicle service garages etc
	Filling stations and malls	Buildings with luxury trading facilities for retail sale of petrol, fuel, lubricant and liquefied petroleum gas for automobiles
	Gas stations and electric charging stations	Gas stations for vehicles and electricity charging stations
	Communication towers on buildings	Towers erected on buildings for communication under the approval of the Telecommunications Regulatory Commission

	Communication towers	communication tower build Under the approval of the Telecommunications Regulatory Commission
	Multi-storey parking	Two floors or buildings to accommodate more parking
	Open Vehicle Park	-
	Vehicle Showrooms	Buildings for sale in vehicles
Tourism	Resorts	Locations, restaurants, sports and recreational activities for tourists to relax or enjoy as a vacation destination.
	Guest houses	A building or part of it that accommodates guests is covered under this.
	Lodgings	Rent amenities
	Tourist hotels	All-inclusive accommodation for travelers
	Urban hotels	Locations used for business services that facilitate short stay in urban areas
	Travel Information Centers	Information centers for the convenience of tourists
	Ayurvedic Panchakarma Center	Ayurvedic Councils Registered Local Ayurvedic Medical Centers
	Cabana hotels	For tourism and leisure activities for tourists temporarily or Small-sized unit with lodging room and sanitary ware using permanent materials
Manufacturing industry	Mining & Mining Extraction Industries	Buildings that support mining and mining-related industries, primarily for activated carbon powder or carbon powder / coal / block stone or fabrication industries (flooring, blasting, fragmentation, polishing) / stone grinding or processing industries.
	Metal Products and Casting Extraction Industries	Iron and steel, Foundry Foundry Industries, Secondary processes, Non-ferrous metal processing industries with melting and metal retrieval, Metal processing industries, electroplating And metal or plastic surface treatment industries, including galvanizing, or powder coating, Machinery, Machinery Parts, Buildings that facilitate the manufacture of metal products and tools
	Oil refineries and petroleum-based chemicals and distilleries	Manufacturing or combining oil refineries (petroleum or petroleum), fuel, lubricant, grease and petroleum-based chemicals (basic or intermediate products), material petroleum gas products, industrial gas production or processing or refueling industries, Asphalt processing plants, pigments and pigment intermediate products Pādanaya or combination of industry, paints (emulsion and enamel) Paints, varnishes, dyes, polish building facilities for the manufacture of, or in combination with the industry

Chemicals, polythene, plastics, rubber and glass based industries	Manufacture, synthesis or re-packaging of chemicals, soaps, detergents, softeners or other cleaning agents, industrial rubber, natural rubber manufacture or fabrication or rubber based industries, chemical fertilizer manufacturing or amalgamation Processing, processing or re-packing industries Fabrics, insecticides, fungicides and herbicides, manufacturing or combining or re-packing industries, polymeric (polymer) manufacturing or polymeric (polymer) industries, all types of fiber glass raw materials, all types of tires, Tube making or tire refueling, asbestos fiber raw materials, batteries Facilitate the manufacturing or reforming industries, the manufacture or extraction of Western pharmaceuticals or cosmetics, including the intermediate effects of the drug, the batik industry, the manufacture of combustible materials, the furnace and explosive industries. Buildings and buildings using wax Neither the industry.
Cement, concrete and ceramic based products	Cement industries (cleanser grinding or manufacturing or re-packing), cement block making industries, concrete pre-mixing plants, glass or glass based manufacturing industries, limestone, ceramic manufacturing industries, non-metallic minerals (limestone, Dolomite, apatite, rockphosphate, sandstone, peldspar, quartz, ilmenite, Uğayil, zircon, mica, graphite talatu, ceramics, etc.), grinding or processing industries, concrete tire industry, plaster of Paris production industry, ceramic building facilities for the production of industrial goods
Clay Products Industry	Buildings for tile, clay brick and clay related industries
Natural fiber based manufacturing industries	Fiber based industries using natural materials
Textile, Clothing and Leather Products	Apparel industries, textile processing (including bleaching, coloring, printing) or garment washing or sand-based textile processing, handloom textile or weaving or embroidery industries, high power toiletries and call-in processes, Leather Finishing Industries, Leather Industries, Flax Fabrics Building facilities for the industry
Electrical and Electronics related industries	Electrical or electronic goods and equipment manufacturing or assembly industries

	Heavy Machinery and Assembly Industries	Container Terminals for the Car or Bicycle Manufacturing and Assembly Industry
	Paper Products and Printing Industries	Pulp and Paper Manufacturing Industries, Corrugated Cardboard Manufacturing Industries, Lead Heat Printing or Newspaper Printing or Wastewater Generating Printing Activities or Color Processing Centers, Printing and Fabric Printing Facilities and Facilities for Industries
	Wood / Wood Products & Furniture Manufacturing Industries	Materials other than wood mills, boron treatment, chemical treatment and protection industries, multifamily carpentry industries
	Food and non-alcoholic beverage industries	Buildings for Facilities of Food manufacturing, processing and packaging industries, instant tea or coffee processing industries, including bakery and confectionery industries, non-alcoholic beverages, sugar cane industries, ice factories, tea factories, desiccated coconut processing industries or coconut processing industries.
	Alcohol / local pharmaceuticals, spirits and extracts	Engaged in the manufacture or extraction or amalgamation of alcoholic fermentation industries (breweries, breweries) or bottling industries with alcoholic beverage bottling and bottling operations, tobacco smoking, sugar production and sugar refining industries, ayurvedic, local pharmaceuticals Industry, coconut oil extraction or cinnamon oil extraction industry Cinnamon smoke (sulfur emission) legit industry, plants and animal oil / fats building facilities for the extraction industries
	Recycling activities related industries	Solid waste recycling / recycling / recycling industries, toxic and hazardous / hazardous / hazardous waste recycling / recycling / recycling industries, municipal and other solid waste manufacturing centers
	Industrial Infrastructure Facilities Centers	Electricity generating units, high-capacity water treatment plants, high-input-capacity burners, buildings with facilities for high-efficiency (industrial or dead) refineries, except those used only in hydro or solar or wind power plants and in general power outages. And construction
	Home Industries	Handicrafts and non-traditional industries
Service industries	Vehicle Service Centers	Places of service provided for vehicle maintenance
	Vehicle Repair Centers / Spray Painting Centers	Accidental / Impaired vehicles are repaired
	Taxi Service Centers	Places where the Owned or Leased Vehicles are hired for the needs of others

	Laundry / clothes cleaning places	Locations for machine washing, drying and processing
	Grinding mill / pad mill	Places where machine grinding and grinding is done
	Writing racks, welding workshops	Locations for machining iron sharpening, cutting and grafting
	Electronic Equipment Repair Centers	-
Utility Services	Railway and bus terminals	-
Leisure and recreation	Pocket Park	The areas of high density residential development, popular industrial and commercial development areas are covered by small areas, leisure areas and park areas where there is no proper maintenance or administration.
	Mini Park	It covers a small sports area, a rest area and a garden area with minimum accessibility of about 2 1/2 minutes walking distance to a residential community of 200 M.
	Local Park	These include a small sports area (senior or junior soccer pitch, irregular running training grounds, leisure areas, cricket turf, and park areas) within a 400-M area, within a five-minute walk of the residential community
	Community Park	These include a wide range of Active & Passive play areas, ie turf fields and playgrounds, with a variety of facilities, within a 10-minute walk distance to the residential community of 800m. For example, a 2 hectare soccer field with athletics and running training tracks, a small cricket field between 1.0 hectares, a handball of 0.25-0.5 hectares, a netball or a basketball court, and a special children's field of about 0.25 ha. Play areas, ornamental gardens, ha. Natural environments for leisure and study of about 0.5
	Town Park	Multiple variations accessible by public and private vehicles covering a community of over 1600 M, with a wide range of Active & Passive play areas, ie a variety of sports, combined with separate play area and playgrounds.
	Central Urban Park/City Park	These include public recreational and recreational areas spread over nearly 100 Hec. which are accessible by public and private vehicles such as international level stadiums, tournaments, swimming pools, nature parks, small zoos.
	Regional Park	These include public recreational and recreational areas with all facilities or special activities, special natural environment.

	Linear Park	Depending on the existing river / stream / canal reserves, linear parks will be decided. This includes mainly walking lanes, exercise lanes, bicycle lanes and parallel lanes.
	Indoor Sports Centers	Playing areas within a building with facilities for play
	Theaters	Buildings with auditorium facilities for watching movies for entertainment
	Clubs	Other social amenities with local and foreign liquor outlets for entertainment
	Art galleries / museums	A building where a large number of interesting and valuable objects, such as works of art or artefacts, are kept, studied and displayed to the public.
	Outdoor Theater	Seats with open platform
	Boat jetty / ferry accommodation	lease is a permanent or temporary built-in platform connected to a landfill built for landing, evacuation and other services when the boat is parked in the water
	Anchorage ports	A medium-sized boat with a fixed support (anchor) stop in the water near or near the land.
Agriculture	Livestock / farm farms with construction	Places used for cultivating crops or raising animals for human consumption within or outside buildings erected on a particular site
	Fishing ports	This is often a naturally built place and stops both traditional and small boats for landing and launching into the water.

Sources: No. 1533/16 - 2008.01.25 - Activities required to obtain licenses, National Environmental Act.1980 no. 47/ Urban PORS Hierarchy – UDA/ Department of Census & Statistics – Sri Lanka

Definitions

TOD – Transit Oriented Development

TOD, or transit-oriented development, means integrated urban places designed to bring people, activities, buildings, and public space together, with easy walking and cycling connection between them and near-excellent transit service to the rest of the city. It means inclusive access for all to local and citywide opportunities and resources by the most efficient and healthful combination of mobility modes, at the lowest financial and environmental cost, and with the highest resilience to disruptive events. Inclusive TOD is a necessary foundation for long-term sustainability, equity, shared prosperity, and civil peace in cities.

Source: www.itdp.org.

In these Guidelines, unless the content otherwise requires;

“apartment” means a building with one or more vertically connected dwelling units, consisting of a single kitchen, toilet, bathroom or toilet, which is either used for a single-family residence or more

“access” means any street used as means of access to building or a plot of land.

“air conditioning” means the processing of treating air so as to control. Simultaneously its temperature, humidity, purity, distribution and movement to meet the requirement of the air-conditioned space.

“air well” means any space within or out side the building for the purpose of obtaining natural light & ventilation.

“approved” means approved by the UDA or the relevant Local Authority, under the authority delegated the powers.

“approved plan” means a plan of a building or any building works or any land subdivision amalgamation, perimeters or resurvey approved by the UDA or the Local Authority in accordance with the Law and the Guidelines;

“relevant authority” means the Planning Committee either of the UDA; or a Local Authority, or any other Authority; or an officer, for whom the powers and the functions vested in the UDA, under the provisions of the Section 8 of the UDA Law of 1978 and the Amendments thereafter, has been delegated by the approval of the Board of Management of the UDA, generally or specially to exercise the powers, functions and duties conferred by these Guidelines;

“ancillary facilities” means the other uses inside the building which directly facilitate the main use.

“balcony” means any stage, platform, oriel window or other similar structure projecting outwards from the wall of a building beyond the outer face of any external wall of the building and supported by brackets or cantilevered;

“basement” means a story which is constructed or designed below the ground floor entirely or 2/3 of the height of such story.

“boundary wall” means any wall, enclosure or screen built on or along a boundary line of a parcel of land for the purpose of separating such land from another adjoining parcel of land;

“blind wall” means a wall in any construction work having no openings.

“building” means any construction made using permanent raw materials including walls and roof.

“building line” means the line up to which a building will be permitted to extend.

“chairman” means Chairman of the Urban Development Authority.

“code of Fire Precautions for Buildings” means the Code of Fire Precautions for Buildings that will be published by the Publication No. ICTAD/DEV/14 or any other fire regulation by the Fire Department.

“concrete” shall have the meaning given to it in the accepted code of the Sri Lanka Institute of Engineers.

“developer” means the person designating the name of the permit issued by the relevant authority for the purpose of development activity.

“development activity” has the same meaning as in the Law.

“Chartered Architect” means a person registered with the Architects Registration Board established under Sri Lanka Institute of Architects Amendment Act No 14 of 1996 under the category of Chartered Architects.

“Chartered Engineer” means a person registered in the Engineering Council of Sri Lanka.

“existing lot” means a lot sub divided before the area declared as an urban development area.

“external wall” means an outer wall or vertical enclosure of a building not being a party wall even though it may adjoin a wall of another building;

“flood level” means such flood level as may be specified for an area by the Department of Irrigation and Sri Lanka Land Reclamation & Development Corporation for the purpose of these Guidelines.

“floor” includes a horizontal platform forming the surface of a storey constructed using, timber, stone, concrete, steel or other substance.

“foot way” includes a footway or verandah way at the side of any street;

“foundation” means that part of a construction immediately below the footings of a building, which is in direct contact with and through which the weight of the building is transmitted to the ground;

“Flat roof” means a roof constructed using concrete instead of a roof.

“garage” means includes a building or part thereof, used for housing or parking of motor vehicles.

“godown” means a building or part thereof designed, adapted or used for the storage but not for the sale of goods in connection with the carrying on of any trade or business;

“ground floor” means the floor of a building most nearly on a level of access road with the ground. In a case where two or more adjacent roads, the highest floor is the floor closest to the main access to the building.

“height” means a clear distance between two points mentioned in the Guidelines.

“industrial building” includes factories, workshops and warehouses;

“law” means the Urban Development Authority Law of No 41 of 1978 and its amendments;

“licensed Surveyor” means a person who is authorized by the Surveyor General of Sri Lanka to practice;

“lot” in relation to land means the entirety of any land which has been demarcated by boundary marks or enclosed within boundary wall or fences where such land belongs to one single person or to a set of co-owners and approved as a lot by the relevant Authority;

“mechanical ventilation” means the process of supplying or removing air to or from a building or part thereof by mechanical means or devices;

“owner” means whose name is registered in the assessment registry of the Local Authority and person who provided the ownership by relevant documents;

“office” means a building or part thereof used for office purposes or for the purposes of administration, clerical work, book keeping, accounting, drawing, editorial work or banking;

“party wall” means a wall forming part of a building and used or constructed to be used along any part of its height or length for the separation of adjoining buildings, lands or part of the building that belong to different owners or are intended to be occupied by different persons;

“permissible floor area” means Maximum floor area for construction and it can be single or multi storeyed.

“persons with disability” means any person who, as a result of any deficiency in his physical or mental capabilities, whether congenital or not, is unable by himself to ensure for himself, wholly or partly, the necessities of life;

“place of public worship” means a building or a defined or enclosed place used or constructed or adapted to be used either ordinarily or occasionally as a church, chapel, mosque, temple or other place where public worship or religious ceremonies are performed.

“plot coverage” means the percentage of total plinth area of a building in relation to the total land area in the Plot where building situated

“public building” means a building or part thereof used or constructed or adapted to be used as a shop, office, hospital or place or public resort, not being a church, chapel, mosque, temple or other place where public worship is or religious ceremonies are performed;

“public street” means any street over which the public have a right of way and has become vested in any Authority under any Law or by operation of any Law and includes the drain or footway attached thereto;

“relevant qualified person” means any person who has obtained his professional qualification in Sri Lanka as: -

Chartered Architect or Registered Architect, who is registered in the Institute of Architects,

Town Planner, who is registered in the Institute of Town Planners,

Qualified Engineer of relevant subject, who is registered in the Institute of Engineers.

Licensed Surveyor, who is registered in the Survey Council,

Valuer, who is registered in the Valuation Institute,

Soil Engineer,

A Green Certificate awarded person who is a corporate member of a professional Institute Incorporated by and act of parliament and obtained certificate from the course which has minimum of 3 credits in green building.

“repair” is the making good of a defective part of a building not amounting to a reconstruction thereof.

“residential building” means a building or part thereof designed or used for human habitation such as a single storeyed or apartment complex.

“retaining wall” means a protective wall constructed to stabilize the slope or prevent deformation of the soil layer in a steep slope.

“room” means a portion of a building enclosed by walls or partitions.

“sewerage” means any sewer or liquid waste and includes water-borne sullage and trade effluent;

“street line” means a line or lines defined on one or both sides of any street, existing to show its future width or to show the width of a future street as sanctioned by the Local Authority or as defined by the Urban Development Authority.

“structural part of a building” includes the roof, column or main post, beam, foundation, wall suspended floor, or staircase of a building but not include a door, window or internal partition thereof;

“temporary building” means a building which is permitted by the relevant Authority to remain for a specified period at the expiration of which the building shall be demolished.

“terrace house” means a residential building designed as single dwelling unit and forming part of a row or terrace,

“Town planner” means a Corporate Member of the Institute of Town Planners of Sri Lanka enacted by the Parliament Act No. 23 of 1986. .

“Valuer” means a corporate member of Institute of Valuers which is incorporated under the Institute of Valuers of Sri Lanka Law No. 33 of 1975.

“verandah-way” means a covered foot-way at the side of street.

“warehouse” includes a building or a part of building mainly used for storing merchandise or articles for trade.

“wall” means a short wall constructed on a boundary, balcony or verandah.

“zone factor” is a tool introduced to guide the development to optimize the utility of the developable lands and infrastructure and to regulate the form of the physical environment and distribution of the development density as envisaged in the development plan.

Abbreviation

DSD – Divisional Secretariat Division

GIS – Geographical Information System

GND – Grama Niladhari Division Hec. – Hectares

Km – Kilo Meters

Kmh – Kilo Meter Per Hour

Km² – Squares

Lpcd – Liter Percapita Day

LRT – Light Rail Transport

M – Meter

Mm – Mili Meter

NDVI – Normalized Differences Vegetation Index

NPPD – National Physical Planning Department

SWOT – Strengths, Weakness, Opportunities, Threats

TOD – Transit Oriented Development

He – Hectare

P – Perches

UC – Urban Council

NHDA – National Housing Development Authority

References

- Information and Communication Technology Agency & Procons Infotech. (2018, December 06). Retrieved from Disaster Management Centre: <http://www.dmc.gov.lk/index.php?lang=en>
- (DMC), D. M. (2017, April 30). about. Retrieved from Disaster Management Centre: <http://www.desinventar.lk/>
- Authority, R. D. (2017, September 6). Projects. Retrieved from Road Development Authority: <http://www.rda.gov.lk/>
- Authority, W. P. (2018, January 15). Projects. Retrieved from Western Province Provincial Road Development Authority: http://prda.wv.gov.lk/projectDetails_e.php
- Board, C. E. (2018, December 6). About. Retrieved from Ceylone Electricity Board: www.ceb.lk
- Board, N. W. (2018, December 6). about. Retrieved from National Water Supply and Drainage Board: <http://www.waterboard.lk/web/index.php?lang=si>
- CIGHI, C. I. (May 2008). SENSES OF PLACE. Amherst: Department of Hospitality & Tourism Management, University of Massachusetts Amherst.
- Daily News. (2018, January 26). Retrieved from Use alternate routes to avoid traffic surrounding Kelaniya Temple: Police: <http://www.dailynews.lk/2018/01/26/local/141137/use-alternate-routes-avoid-traffic-surrounding-kelaniya-temple-police>
- Dailymirror. (2018). Retrieved from Vesak Poya day.
- Dr. Ananda Mallawatantri, Mr. Ajith Rodrigo & Ms. Kushani De Silva. (2016-2021). Medium to Long-term Multi-Stakeholder Strategy and Action Plan for Management and Conservation of the Kelani River Basin 2016-2021. Battaramulla: Natural Resource Management and Monitoring Unit.
- Hashem Hashemnezhad, 2Ali Akbar Heidari, 3Parisa Mohammad Hoseini. (2013). Sense of Place” and “Place Attachment”. International Journal of Architecture and Urban Development.
- Historic Images of Sri Lanka. (2007 -2011). Retrieved from Lankapura: <http://lankapura.com/2010/09/buddhist-temple-kelaniya-1940s/>
- Kelaniya, D. S. (2018, November 21). Retrieved from Divisional Secretariat - Kelaniya Ministry of Home affairs: <http://kelaniya.ds.gov.lk/index.php/en/downloads.html>
- Lakpura Travels (Pvt) Ltd. (2018). Kelaniya Temple in Sri Lanka. Retrieved from lanka.com: <https://lanka.com/about/attractions/kelaniya-temple/>
- Lanka, U. o. (2018, December 6). about. Retrieved from University of Kelaniya Sri Lanka: <http://www.kln.ac.lk/>
- Perera, D. (2018). Colombo Metropolitan Transport Master Plan and Areas for International Cooperation.

pooranee inspiration (PVT)ltd. (2018, december 1). about. Retrieved from Irrigation Department: <http://www.irrigation.gov.lk/>

Sri Lanka News. (2016, January). Retrieved from Kelaniya Duruthu Perahera begins today: <https://srilankanewslive.com/news/sri-lanka/item/4973-kelaniya-duruthu-perahera-begins-today>

Statistics, D. o. (2016, November 16). District Statistical HandBook. Retrieved from Department of Census and Statistics: <http://www.statistics.gov.lk/>

(n.d.). The Megapolis Western Region Master Plan - 2030 Sri Lanka. Ministry of Megapolis and Western Development.

The Nature of Cities. (n.d.). Retrieved from Many voices. Greener cities. Better cities.: <https://www.thenatureofcities.com/page/17/?cat=coasts>

U I Samarawickrama, Mkd Piyaratne & Manjula Ranagalage. (2016). Development of a Thermal Risk Map Case Study: Kelaniya City of Sri Lanka. Research Gate.

(2014). Urban Transport Development Project for Colombo Metropolitan Region and Suburb.

Draft Kelaniya Development Plan 2015 – 2035, Volume I – Urban Development Authority Gampaha District Office

Draft Kelaniya Development Plan 2015 – 2035, Volume II – Urban Development Authority Gampaha District Office

Budget Report – 2017, Kelaniya Pradeshoiya Sabawa

Sampath Pathikada – 2016 (Kelaniya DSD), Kelaniya Divisional Secretariate Office

