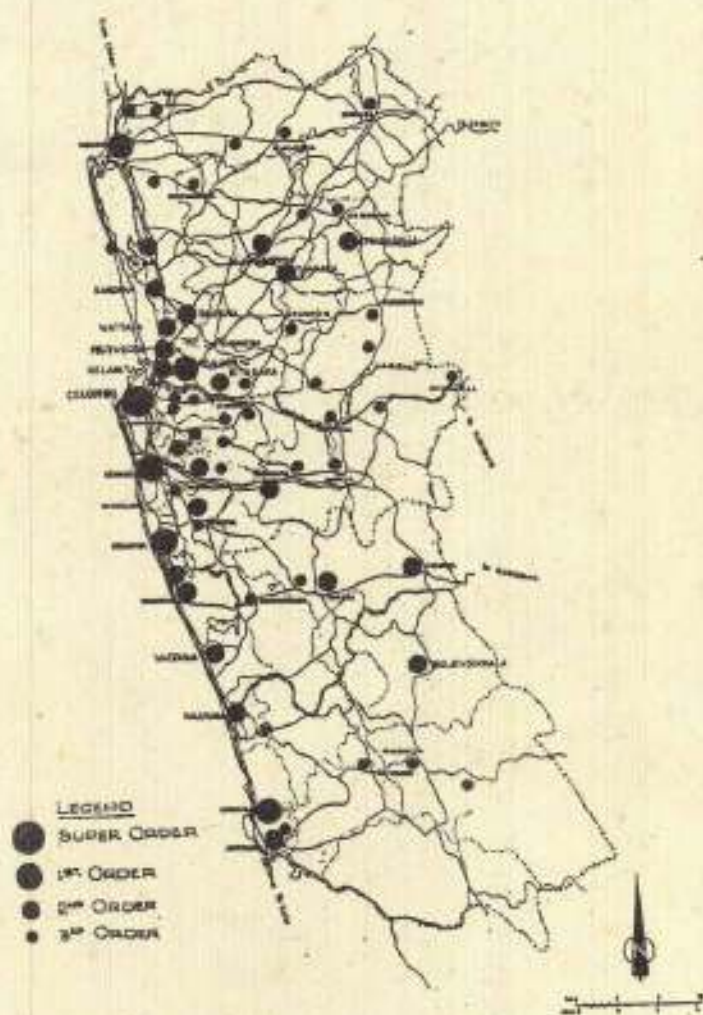


COLOMBO METROPOLITAN REGIONAL STRUCTURE PLAN

DRAFT I



URBAN DEVELOPMENT AUTHORITY

1995 NOVEMBER

6.3.7/50/11

CONTENTS

	Page No.
Introduction	1
Characteristics of the Colombo Metropolitan Region	1
Development Strategy	2
Three possible scenarios	3
i. Concentration Strategy	
ii. Dispersed Strategy	
iii. Mixed Strategy	
Strategy III : proposed Colombo Metropolitan Structure Plan (1995 to 2000 & 2005)	6
Sectors	
1. Proposed Road Network	8
2. Proposed Rail Networks	10
3. Proposed Water Transport Network	-
4. Proposed Settlement Plan	11
5. Environmental Plan	14
6. Proposed Industrial Towns	16
7. Proposed Educational & Health Centres	20
8. Proposed Urban Renewal Project Areas	22
9. Proposed Tourism and Recreation Plan	23
10. Proposed Solid Waste Management Plan	25
11. Proposed Utility Network	26
12. Town Development Proposals	32
List of Projects and estimates	

City of Colombo Plan

Page No.

1.	Need for revision	33
2.	National Priorities	"
3.	Physiographic Context	"
4.	Importance of the Port	34
5.	Zoning Plan	35
6.	Density	
7.	Urban Renewal	35
8.	Traffic & Transport	36
9.	Port Expansion	37
10.	Open Space	37
11.	Future Development	38
12.	Defence	39
	List of Projects	41

MAPS

PAGE NO.

Map No. 1	-	Map of Sri Lanka	1a
Map No. 2	-	Development Strategy	5a
Map No. 3	-	Proposed Road Network	8a
Map No. 4	-	Proposed Rail Network	10a
Map No. 5	-	Proposed Settlement Plan	13c
Map No. 5 A	-	Proposed Satellite Towns	13 g
Map No. 6	-	Environment Plan	15a
Map No. 7	-	Proposed Industrial Towns	19a
Map No. 8	-	Proposed Educational Centres	20c
Map No. 9	-	Proposed Health Centres	21a
Map No. 10	-	Proposed Urban Renewal Project Areas	22a
Map No. 11	-	Proposed Tourism and Recreational Plan	24a
Map No. 12	-	Proposed Electricity Network	26a
Map No. 13	-	Proposed Water Supply	29a
Map No. 14	-	Proposals for Sewerage	31a
Map No. 15	-	Draft Proposed Zoning Plan- City of Colombo	37a
Map No. 16	-	Potential land for development	37b
Map No. 17	-	Urban Renewal Projects - City of Colombo	37c
Map No. 18	-	Proposed Roads - Colombo Urban Area	37 e
Map No. 19	-	Existing and Estimated Floor Areas CMC -1986-2010 Residential	37 f
Map No. 20	-	Floor Area Density (Per Hectare) CMC 1995	37 g
Map No. 21	-	Estimated Floor Area Density (Per Hectare) CMC -2010	37h

TEAM MEMBERS

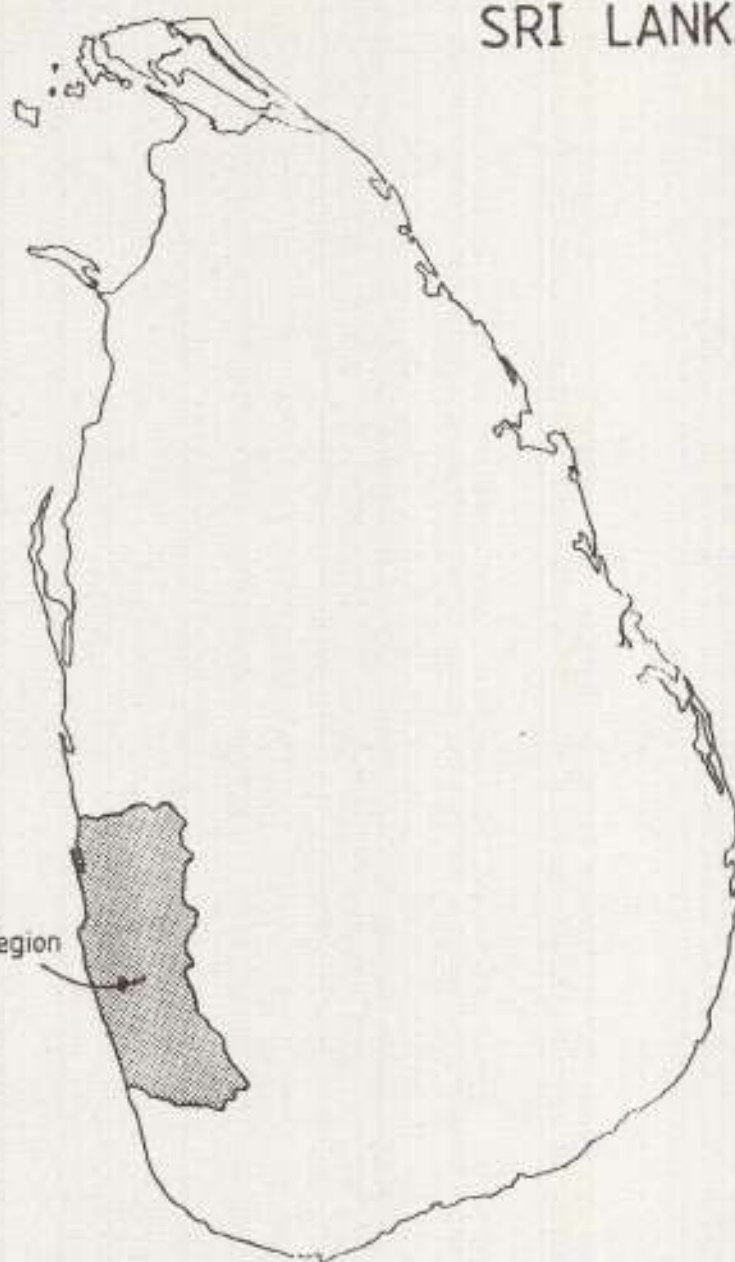
01. MR. J.M.L. JAYASEKERA, DEPUTY DIRECTOR GENERAL (PLANNING & OPERATIONS), URBAN DEVELOPMENT AUTHORITY - ADVISOR
02. MR. E.H. PEMARATNE, ACTG. DIRECTOR (PLANNING), U.D.A.
03. MRS. P.N. FERNANDO, DY. DIRECTOR (PLANNING), U.D.A.
04. MR. M. BANDUSEELA, DIRECTOR (INFORMATION SYSTEM), U.D.A.
05. MRS. HESTER BASNAYAKE, HEAD/ENV. PL. & LANDSCAPE UNIT, U.D.A.
06. MR. DENZIL SENANAYAKE, CONSULTANT, U.D.A.

CITY OF COLOMBO DEVELOPMENT PLAN

07. MR. NIHAL FERNANDO, DY. DIRECTOR (DEVELOPMENT REGULATIONS UNIT), U.D.A.
08. MRS. D. JAYASUNDERA, TOWN PLANNER (DEV. REG. UNIT), U.D.A.
09. MRS. W.D.S. INDRASIRI, TOWN PLANNER (DEV. REG. UNIT), U.D.A.
10. MR. T.A. PERERA, TOWN PLANNER (DEV. REG. UNIT), U.D.A.
11. MR. SOMAPALA DE SILVA, CONSULTANT, U.D.A.
12. MR. H.W. SUMANASENA, D.O.A., U.D.A.

MAP OF SRI LANKA

Colombo
Metropolitan Region



COLOMBO METROPOLITAN REGION
(WESTERN PROVINCE)

URBAN DEVELOPMENT AUTHORITY
Planning Division, 27, D. R. WIJEWANNA MATHA, COLOMBO 9

FIG. NO.	DRAWN BY: H. D. S. PETHANAH
DATE: 18.11.1995	CHECKED BY:
COORDINATOR (Planning)	DIVISION ESTABLISHMENT



Draft

Colombo Metropolitan Regional Structure Plan

Introduction

Sri Lanka with a population of 18 million (estimated 1994) covers an area of 65,609 sq.kms and has been divided into 9 provinces of which two - namely the Eastern & the Northern are temporarily merged. Of all the provinces Western Province is the most developed and the densely populated province.

Characteristics of the Colombo Metropolitan Region

The Colombo Metropolitan Region which is essentially the Western Province of Sri Lanka covers an area of 3657.8 sq.kms ^{*1} accounting for 5.5% of the total land area of Sri Lanka and is an amalgamation of the Districts of Colombo, Kalutara & Gampaha.

The Colombo Metropolitan Region is comparatively the most developed region of Sri Lanka with an estimated population of 4.46 Million ^{*2} for the year 1994 and with an urban population of 2.24 Million which accounts for 60% (approx.) of the total urban population of Sri Lanka.

The CMR provides services for the rest of the country and all the provincial centres that depend on Colombo are located within short distances from the City of Colombo where the Metropolitan influence is experienced to some degree.

The Ports of Galle and Trincomalee (being the Ports next in order of importance to Colombo) account for less than 9% of total external trade. The main export commodities tea, rubber, coconut and garments which account for 90% of the total exports and all imports are transacted through Colombo and the CMR becomes the main service centre.

Thus in the field of centralized services, Colombo is unrivalled by other Cities being the centre where the principle economic and commercial functions are located.

The settlement pattern within the CMR forms a unique agglomeration in Sri Lanka which is comparable with the biggest agglomerations of other countries. The Unique position of the CMR in the settlement pattern is shown by the population of the associated urban complexes where the City of Colombo itself contains 28.3% of the urban population of the region.

* 1 Source
Statistical abstract of the Democratic Socialist Republic of Sri Lanka 1982.

* 2 CMR (outline) Structure Plan

The population distribution within major cities located within the CMR are as shown below :

District		Urban Complex	Population 1981	Population 1994	Annual Growth Rate % (81-94)
Colombo	1.	Colombo MC	587647	635459	0.62
	2.	Dehiwala Mt. Lavinia MC	173527	209719	1.60
	3.	Moratuwa UC	134826	186321	2.93
	4.	Kotte UC	101039	109517	0.64
Gampaha Kalutara	5.	Negombo MC	60762	98354	4.75
	6.	Kalutara UC	31503	35259	0.91

SOURCE * Estimated - CMR study

Towns within the region are distributed primarily according to the over riding influence of the Colombo City. Its influence stretches along the sea-shore & the communication corridors, converting small settlements into towns providing accommodation for people unable to find houses within the city itself. Pressure for urbanisation at the periphery and in the immediate vicinity of Colombo City have led to excessive reclamation of environmentally vulnerable low-lying lands and constructions on natural flood plains.

Development Strategy

The above analysis shows the positive impact of the City of Colombo on the region and the necessity of control and direction in the future development as, over the past years it has grown haphazardly putting pressure on the urban system. Strong guidance and controlling parameters are therefore required for the future growth to be sustainable.

Three possible scenarios for development are looked into which are outlined as follows :

- I. CONCENTRATION STRATEGY
- II. DISPERSED STRATEGY.
- III. MIXED STRATEGY.

The advantages & disadvantages of each of the optional strategies are considered as follows :

- I. CONCENTRATION STRATEGY- (Intense Development of the City of Colombo & dispersed limited development of peripheral centres)

Advantages

- (a) Within a limited area the enhancement of the infrastructure can be undertaken ; which could be less costly and implementation is easy.
- (b) Interaction between the various sectors for promotion and co-ordination, could be more effective.
- (c) The potential of the City could be exploited to be brought in line with the status of more developed cities such as Singapore Bangkok , Hongkong etc.

Disadvantages

- (a) Added stress created on the existing infrastructure relating to sewerage, water supply, road network etc.
- (b) Further aggravation of the problems relating to environment which have reached intolerable limits & high cost on mitigatory measures, especially drainage schemes for reclaimed low-lying land.
- (c) Increase of pressure on land availability accompanied by escalating land-values, creating a prohibitive effect on major development and the life in the city made expensive to lower and middle income groups of the population.
- (d) Additional cost of construction incurred in the process of development within the coastal flats and wetland belt with its large proportion of bog & half-bog soils.

II. **DISPERSED STRATEGY** - (Slowing down of the City & faster Development of the peripheral centres and the region).

Advantages

- (a) Infrastructure could be developed on a planned basis with regional linkages and more lands where people could benefit.
- (b) Pressure on land could be less and land values could be made affordable.
- (c) Provision of more employment opportunities within the region.
- (d) Environmental qualities will be improved.

Disadvantages

- (a) Cost of providing regional infrastructure could be high.
- (b) The benefits would be accrued only on a long term basis.
- (c) Reduction of extent of agriculture lands which would be taken up for development within the region.
- (d) Potential of City of Colombo could be inappropriately restricted without exploiting it to the full.

III. **MIXED STRATEGY** - (Development of selected activity within the City of Colombo i.e. activities related to commerce, trade and enhancement of the port related activities while administrative, institutional functions and industries are to be shifted outside the city of Colombo).

Advantages

- (a) Shifting of wholesale trade & financial activities out of the city could reduce congestion within the city.
- (b) Selected activities within the city could enable the city to develop an International Trade & Commercial Centre.
- (c) Location of industries and urban centres in ecologically appropriate locations within the region could help to minimize related hazardous environmental problems.
- (d) Development of regional growth centres would be encouraged and inter and intra regional disparities could be reduced.
- (e) Both the region and the city to have more open spaces and conservation of ecologically important areas.

Disadvantages

- (a) High cost on Infrastructure
- (b) Detail planning and constant monitoring of a phased out programme needed.

Strategy	Advantages	Disadvantages
Concentration strategy	<p>I. Infrastructure could be more efficiently used and thereby bring down per capita cost.</p> <p>II. Create externalities that would give more agglomeration benefits for trade and industry.</p> <p>III. City will be in line with international scenario, as a large city.</p>	<p>I. Lead to the requirement of high efficiency maintenance of infrastructure systems.</p> <p>II. Environmental degradation and the growth of informal sector and the accompanied insanitary living conditions.</p> <p>III. High land values will discourage investment and reduce potentiality of employment creation.</p> <p>IV. Limit the opportunities of introducing required changes in land use and this will affect the growth of port and adjoining areas such as Eotse.</p> <p>V. The infrastructure costs will be prohibitive and lead to further traffic congestion.</p>

Strategy	Advantages	Disadvantages
Strategy II	<p>I. Regional urban infrastructure development will increase and their population growth will lay the foundation for greater urban activity.</p> <p>II. Land values would reduce.</p> <p>III. Increased investment close to rural labour markets will have spread effects on rural agricultural areas by attracting excess labour into the Regional Centres.</p> <p>IV. They would act as buffers against unnecessary commuting to the city.</p> <p>V. Less pressure on environmentally sensitive areas such as wetlands.</p>	<p>I. The neglect of the city will bring down its development potential and would have a great impact on employment creation.</p> <p>II. Shanty and slum areas in the city will expand.</p> <p>III. Infrastructure network development in isolated dispersed centres could be prohibitive.</p> <p>IV. The sub-regional centres will have small thresholds of labour and goods markets unless their development is integrated to the development of the city as the main distribution centre.</p>

Strategy	Advantages	Disadvantages
Strategy III Mixed Strategy	<p>I. The city will offer its land to more appropriate high income core area activities shifting retail activities to Regional Centres.</p> <p>II. Pave the way for modernization programme of the city thereby enhancing the quality of life of the people.</p> <p>III. Investment in the city specially in port related activities, tertiary sector activities and trade and commerce will help to expand the services sector in the national economy.</p> <p>IV. The allied investment in modernization of the transport system will reduce congestion.</p> <p>V. Simultaneous development of Regional Centres will bring down land values and attract investment in industries in such areas also reducing travelling to City of Colombo for employment.</p>	<p>I. Need strong political commitment and change in the institutional system owing to prioritisation needs.</p> <p>II. At early stages greater investment in infrastructure is required and the cost recovery could be only in the long run.</p>

An assessment of the above options shows that the most advantageous option is the development of the Colombo Metropolitan Region on a MIXED STRATEGY whereby the commercial, financial and port related activities are encouraged within the City of Colombo with simultaneous growth of Urban Centres within the region.

The locations of industries would be predominant in the Northern sub region exploring the potential of the Katunayake Air Port and the Colombo Port with decentralisation of the industrialisation in the Southern sub region to overcome the disparities prevalent in the settlement pattern.

The innumerable agricultural resources and the natural forest resources within the Southern subregion are to be conserved in the development process.

Consequently one of the main activities burdening the City of Colombo namely administrative, institutional and defence activities could be easily shifted towards east of the region to and beyond Kotte. It will create a healthier environment and spacious state capital in the Eastern Cluster with defence establishment around it while release of lands in the City of Colombo will trigger off a tremendous commercial development.

In fact money so earned will be more than sufficient to build the new administrative capital.

One of the main features and a condition in this exercise is to build an extensive network of infrastructure such as Circular Road (Mid circular & Outer circular). Improvement to Radial Roads (High Level Road, Kotte road, Duplication Road, an Marine Drive) extension railway lines and the efficiency by electrification (Colombo Regional Circular Roads, Galle Road, and Marine road Mono rail system etc) and improving a network suburban cities, satellite towns, urban neighbourhood locations supported by new water, sewerage and telecommunication, drainage, open spaces and landscape network.

Consequently Colombo Region will be divided into 3 main zones.

1. Commercial, financial centre with Port related activities with mainly high and low income category housing schemes within the City of Colombo.
2. Administrative, institutional and defence establishments. within the Kotte, Battaramulla, East of Battaramulla (Malabe, Pannipitiya, Kottawa etc)
3. Residential settlements, industrial towns and service towns centres. North of Colombo upto Negombo, East of Kotte upto Awissawlla and South of Colombo upto Kalutara.

This will over the period shift the centre of the region from Colombo to Kotte, Battaramulla which will become axis of the region giving more access to the people living in the peripheral region to the centre of activities.

ESSENTIAL FEATURES IN STRATEGY III OF CMR

- (01) Leaving City of Colombo for Port related activities
- (02) Developing extra infrastructure in the region, intra-regional links.
- (03) Conservation of all wetland, marshy and water bodies.

TO DO THE ABOVE, FOLLOWING ACTION WILL BE NEEDED

- (a) Acquire all wetland and paddy lands.
- (b) Develop them as natural environmental, recreation, conservation or tourist areas.
- (c) Generate funds for the above by increased land transfer tax.
- (d) Employ all homesteads (32%) and highland crops (38%) to provide residential administrative, satellites and commercial centres.
- (e) Accordingly, new land use pattern will be as follows :-

i.	Developable for (residential, commercial, administrative and town Centres)	-	70%
ii.	Non developable (marshy, paddy, water)	-	20%
iii.	Forest Reserve	-	06%
iv.	Barren Land and differed	-	04%
TOTAL			100%

Extensive road rail network to be included to increase the mobility between Kotte and Colombo. Kotte and the Region and Region and Colombo.

- (4) In the Metropolitan Region as far as possible residential activity to be high density in order to save environmentally sensitive areas and to put the land to maximum use.
- (5) Population 4.46 (say 5 Million) in 1994
This population to be increased as follows :-

1995	=	05 Million
2000	=	7.5 Million
2005	=	09 Million
2010	=	10 Million

The reason is highest growth in the CMR will occur (in terms of economic expansion) infrastructure development and employment opportunities and residential and social facilities and market expansion during 1995 to 2000.

This development will continue up to 2005 and thereafter decline due to :

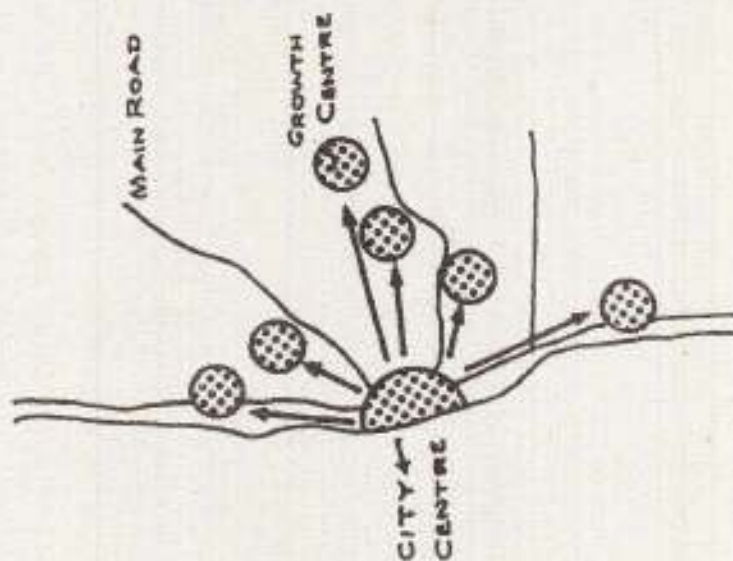
- (a) Place being full
- (b) Other development magnets such as Eastern, Southern and Northern Regions will attract population.
- (6) Other social, transport, residential and community facilities have to be planned to cater to the above population increase and distribution.
- (7) Formation of wetland and water bodies, conservation authority in place of SLLR & DC and amalgamate SLLR & DC with Irrigation Department. Wetland authority conservation will get its funds from increased land sale tax.

DEVELOPMENT STRATEGY

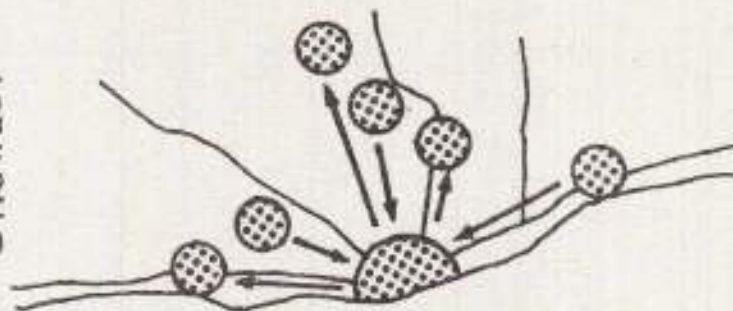
I. CONCENTRATION
STRATEGY



II. DISPERSED
STRATEGY



III. MIXED
STRATEGY



**Strategy III : proposed Colombo Metropolitan Structure Plan
(1995 To 2000 & 2005)**

The analysis of the proceeding section on optional strategies clearly indicate that the strategy III is the most acceptable in terms of economic and social viability environmental sustainability, planned urban physical structure, transport and mobility etc.

It is therefore, important to outline proposed metropolitan features in its physical and structural form . These features are listed as follows :

1. Proposed Road Network
2. Proposed rail networks
3. Proposed water transport network.
4. Proposed settlement plan
 - (a) Suburban centres
 - (b) 2nd order suburban centres
 - (c) Satellite towns
 - (d) Urban neighbourhood locations
5. Environmental Plan.
6. Proposed Industrial Towns
7. Proposed Educational Centres.
8. Proposed Urban Renewal Project Areas.
9. Proposed Tourism and recreation Plan
10. Proposed Solid waste plan
11. Proposed Service Network
 - (a) Electricity
 - (b) Telecommunication
 - (c) Water Supply
 - (d) Drainage
 - (e) Sewerage
12. Town Development Proposals

13. City of Colombo Plan

(a) Public Transport System

(i) Marine Drive, Baseline Rail etc.

(ii) Rapid Transport System (RTS) (Mono rail, tram cars underground rail etc.)

(iii) Public Motor Transport

(b) Port expansion and port related backup activity
(Light Industrial area, container depot, transshipment centres, entrepot trade and free trade zones)

(c) Rehabilitation of depressed housing area.

(d) Urban renewal programme

(e) Public Open space and Landscape plan.

(f) Internal Infrastructure plan

(i) Sewerage plan

(ii) Water Supply Plans

(iii) telecommunication

(iv) surface drainage

(g) Density plan

(h) Zoning plan

(14) List of projects

(15) cost of projects

(16) funding source

(17) implementation programme

(18) Proposed administrative, institutional and legal setup.

Proposed Road Network

The total road length in Kms for Sri Lanka rose from 25,112 in 1986 to 25,752 in 1989 out of which the Western Province had a total road length of 3198 km (12.73%) representing 0.98 km per sq.km. of land area while the national situation is 0.38 km per sq.km. The transport policy in the country is to ensure efficient & economic passenger & goods transport system in terms of speed, frequency, safety, comfort & reliability. The transport operations are controlled by the Dept. of the Commissioner of Motor Traffic (CMT) acting under the Motor Traffic Act. The highway code is enforced by the Traffic Division of the Police Department.

The focal point of transport in the country in the City of Colombo from where all National roads & rail route radiate. The present road network is such that most of the North-South traffic is compelled to pass through the City and this is a major contributor to the heavy traffic load in the city.

Of the 86.4 mn passengers in 1986 the Western Province share was 29.4 mn or 34%. The number of vehicles entering the CMR from all directions rose from 18,934 in 1979 to 22,425 in 1985 & 28,481 in 1992 representing a growth of 21% & 24.4% respectively. While the total vehicle load at the CMC cordon increased from 130,965 in 1979 to 162,309 in 1985 & 242,915 in 1993 growing by a 23.9% & 49.6% respectively.

Further the total vehicles entering the CMC and originated within the CMR amount to 112,031 in 1979, 139,384 in 1985 & 214,429 in 1993 (85.7%, 85.8% & 88.3%).

New Highway Proposals

New Highway proposals which have an impact to the Colombo Metropolitan Region to ease traffic congestion in an around Colombo and to provide faster and efficient movement from Colombo to several of the important administrative and commercial centres of the country and to centres of strategic importance have been identified for implementation. The New Highway proposals constitute the following:

- (a) Improvements to the Base-line road extension southwards (also referred to as the Inner circular Highway).
- (b) Colombo-Katunayake Expressway (CKE)
An alternative trace with better socio-political acceptability is under consideration.
- (c) Outer Circular Highway (OCH) to Colombo.
- (d) Southern Highway from Colombo to Galle and Matara.
- (e) Highway to Ratnapura from Colombo.
- (f) Highway to Habarana (Trincomalee) from Colombo.
- (g) Marine Drive, South of Colombo.

Proposed Rail Network

Sri Lanka Railway with 1350 km in 9 lines all radiating from Colombo contributes very insignificantly to the National Transport needs Sri Lanka Railway carried only 9.2% of the city commuters in 1985 while the contribution to the total CMR is 16.1%. In the national scale total SLR share is only 7% mainly due to the fact that only limited no. of areas are linked.

Within the CMR the railway has links to North (Negombo), South (Aluthgama), North-East (Mirigama) & East upto Padukka by broad gauge railway. The old narrow gauge Kelani-Valley line is being broadened upto Avissawella gradually.

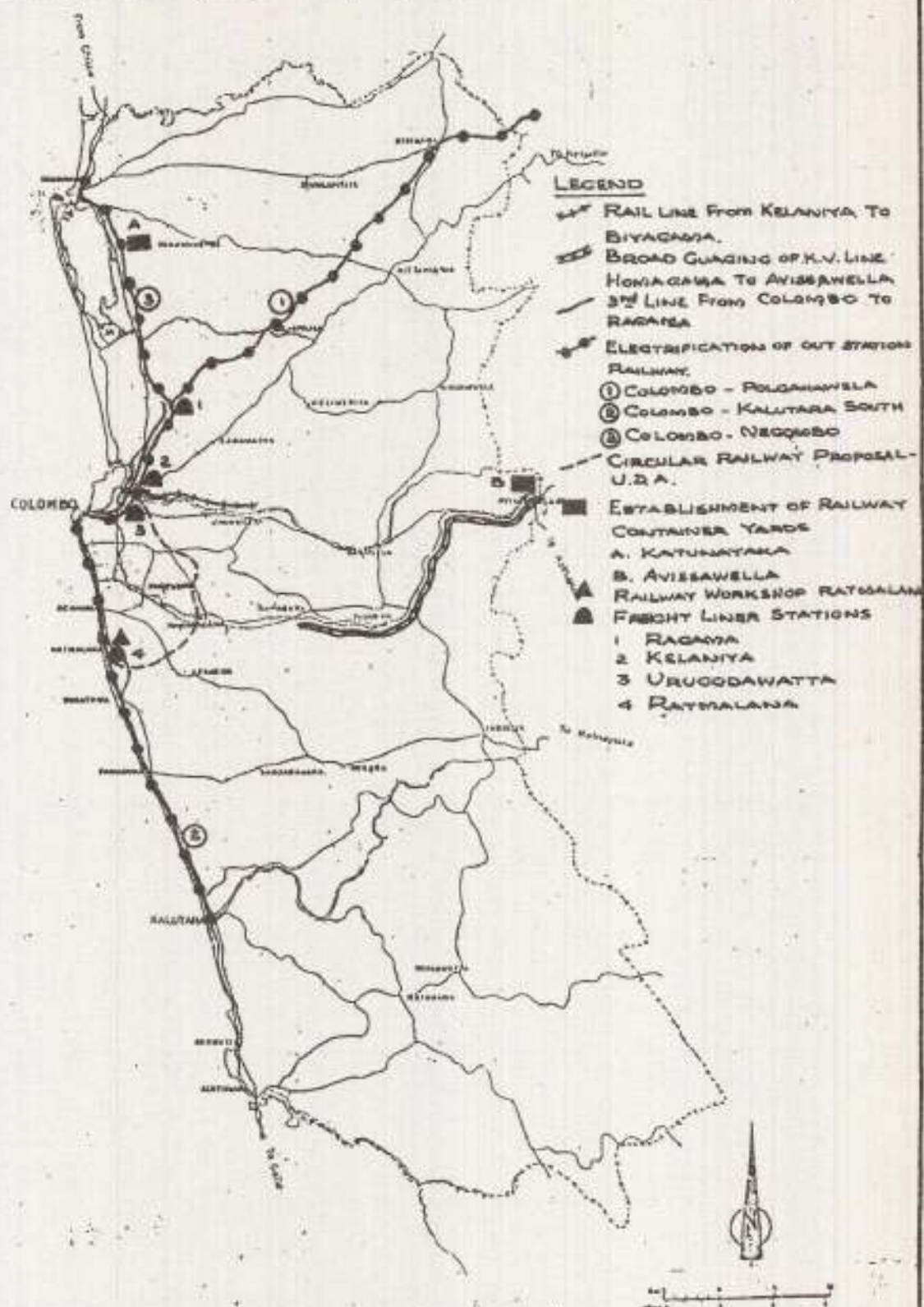
The SLR has kept to the original objective of transporting goods, mail & other utility requirements in intercity train services but passenger transport is becoming more important at present.

A Large No. of people are commuting daily to the region and particularly to Colombo for purposes of employment, education and other economic and social activities. The Colombo Harbour which is adjacent to the main commercial area with its high international standing is the centre of activity for large scale movement of containerised cargo and other goods. The International Air Port situated in the Northern Sector of the Region caters for a considerable movement of passengers and goods in and out of the country.

The ever increasing demand for transport in the CMR which is being experienced intra-regionally and inter regionally has not been adequately addressed and the significant reason for this situation is due to the over-dependence on the road transport and the lack of consideration given to the improvement of the railway and other modes of transport.

The proposals for the improvement of the rail network and the railway development proposals proposed by the Sri Lanka Rail Way Department are as follows :

- (1) Rail Access to Biyagama Investment Production Zone
The construction of a rail track from Kelaniya to Biyagama, a distance of 14.2 km for passenger and freight transport. (Preliminary Estimate = Rs. 392 ML)
- (2) Broad guaging of KV line
Kelani Valley rail track to be widened to a gauge of 1676 mm in 3 stages.
 - (a) Colombo to Nugegoda - Completed in 1991
 - (b) Nugegoda to Homagama - Completed in 1992
 - (c) Homagama to Padukka to be completed
- (3) Construction of 3 rd line from Ragama to Colombo
- (4) Electrification of the sub-urban railway network
- (5) Establishment of railway container yard at Katunayeke
- (6) Re-habilitation of the railway work shop in Ratmalana.
- (7) Establishment of railway container facilities at Avissawella and Katunayake



COLOMBO METROPOLITAN REGION

(WESTERN PROVINCE)

RAILWAY NETWORK - PROJECT PROPOSALS

URBAN DEVELOPMENT AUTHORITY
Planning Division, 11, 2 & 3, WILKINSON ROAD, COLOMBO 05

DPS. NO.

DRAWN BY

DATE 10.11.1995

CHECKED BY

DIRECTOR (Planning)

DIRECTOR (Planning)



Proposed Settlement Plan

The objectives of the proposed settlement plan identified for the CMR are as follows:

1. To create a more rational settlement pattern with higher densities in urban areas so as to minimize the cost of infrastructure facilities & by linking them with rapid transit rail services to the City.
2. To identify the changing role of the City of Colombo with special reference to enhancing the position of the Port and accommodating Port related activities resulting from containerisation of cargo handling transshipment & entreport trade and improving the transport facilities both sub-urban & intercity to make the City of Colombo a specialized National Centre and also an International Trade Centre.
3. To reduce intra-regional disparities in the distribution of services & facilities with special references to the Eastern, South-Eastern & Southern parts of the region, while encouraging development of centres located on terrain naturally suited for urbanisation as shown from ecological zoning and agro ecology considerations.
4. To proceed with the shifting of administrative functions to Kotte Capital City and the zoning of land for mixed uses so as to make available the land at the core of the city for tertiary level activities.
5. To utilize the centrality of Borella for the location of activities with a regional threshold thus reducing the pressure of retail activities in Fort & Pettah.

The regional spatial structure created by industrial development concentrated in the North of Colombo to be facilitated by improved accesses over the Kelani River.

Based on the objectives stated above the settlement plan envisages the hierarchy of Urban Centres as described below.

Hierarchy of Urban Centres in terms of population density/year 2014

			Urban Centre		Population Density for the year 2014
1.	Super order	-	Colombo M.C.	-	> 150 P/Ha.
2.	Sub Urban Centres	-	Dehiwela M.C. Moratuwa U.C. Maharagama P.S. Dalugama P.S. Negombo M.C. Beruwela U.C.	-	101-150 P/Ha.
3.	2nd Order Sub Urban Centres	-	Kotte U.C. Wattala Mabile Peliyagoda U.C. Kelaniya P.S. Gampaha Ja-ela Biyagama Kandana Yakkala Ragama Homagama Panadura Piliyandala Wadduwa Keselwatta Attanagalla Horana Bulathsinhala Ingiriya Kalutara	-	51-100 P/Ha.

Hierarchy of Urban Centres Contd.

4.	Urban Neighbourhood	Kolonnawa U.C.	0-50 P/Ha.
	Location & Satellite Towns.	Battaramulla P.S.	
		Boralesgamuwa	
		Kesbewa P.S.	
		Mulleriyawa	
		Kotikawatta	
		Kaduwela	
		Weliweriya	
		Pamunugama	
		Delgoda	
		Pugoda	
		Dompe	
		Padukka	
		Athurugiriya	
		Kahatuduwa	
		Godagama	
		Malabe	
		Pannipitiya	
		Bandaragama	
		Seeduwa, Katunayake	
		Minuwangoda	
		Kochchikade, Katana	
		Maradagahamulla	
		Mirigama	
		Veyangoda	
		Divulapitiya	
		Nittambuwa	
		Avissawella	
		Hanwella, Kosgama	
		Kirindiwela	
		Kahatuduwa	
		Dodangoda	
		Dharga Town/Agalawatta	

PROPOSED HIERARCHY OF URBAN SETTLEMENT (ACCORDING TO POPULATION DENSITY - YEAR 2014)

PLANNING AREA	Super Order 151-200 P/Ha	Suburban Centres 101-150 P/Ha	2nd Order Suburban Centre 51-100 P/Ha	Urban Neighbourhood Locations and Satellite Towns 0-50 P/Ha
Colombo Urban Area	Colombo M.C.	Dehiwala M.C. Moratuwa U.C. Maharagama P.S. Delugama P.S.	Kotte U.C. Wattala Mahole Peliyagoda U.C. Kelaniya P.S.	Kolonnawa U.C. Batemulla P.S. Boralesgamuwa Kesbewa P.S. Mulleriyawa Kotikawatta Kaduwela
North Eastern Cluster			Gampaha Ja - Ela Biyagama Kandana Yakkala Ragama	Wellawella Pamunugama Delgoda Pugoda Oompe
Eastern Cluster			Homagama	Padukka Atunigiriya Kahatuduwa Godagama Malabe Pennipitiya
Southern Cluster			Panadura Piliyandala Wadduwa Kesekawatta	Bandaragama
Northern Sub Region		Negombo		Seeduwa, Katunayake Minuwangoda Kochchikade, Katana Maradagahamulla
North Eastern Subregion			Altenagalla	Minigama Veyangoda Divulapitiya Nittambuwa
Eastern Sub region				Avasawella, Hunwella, Kosgama, Kirindiwela
South Eastern Sub Region			Horana, Butathsinhala, Ingiriya	Kahatuduwa
Southern Sub region		Benuwala	Kalutara Aluthgama	Dodangoda Dhanga Town
South, South Eastern Region.				Matugama Agalawatta Baduraliya

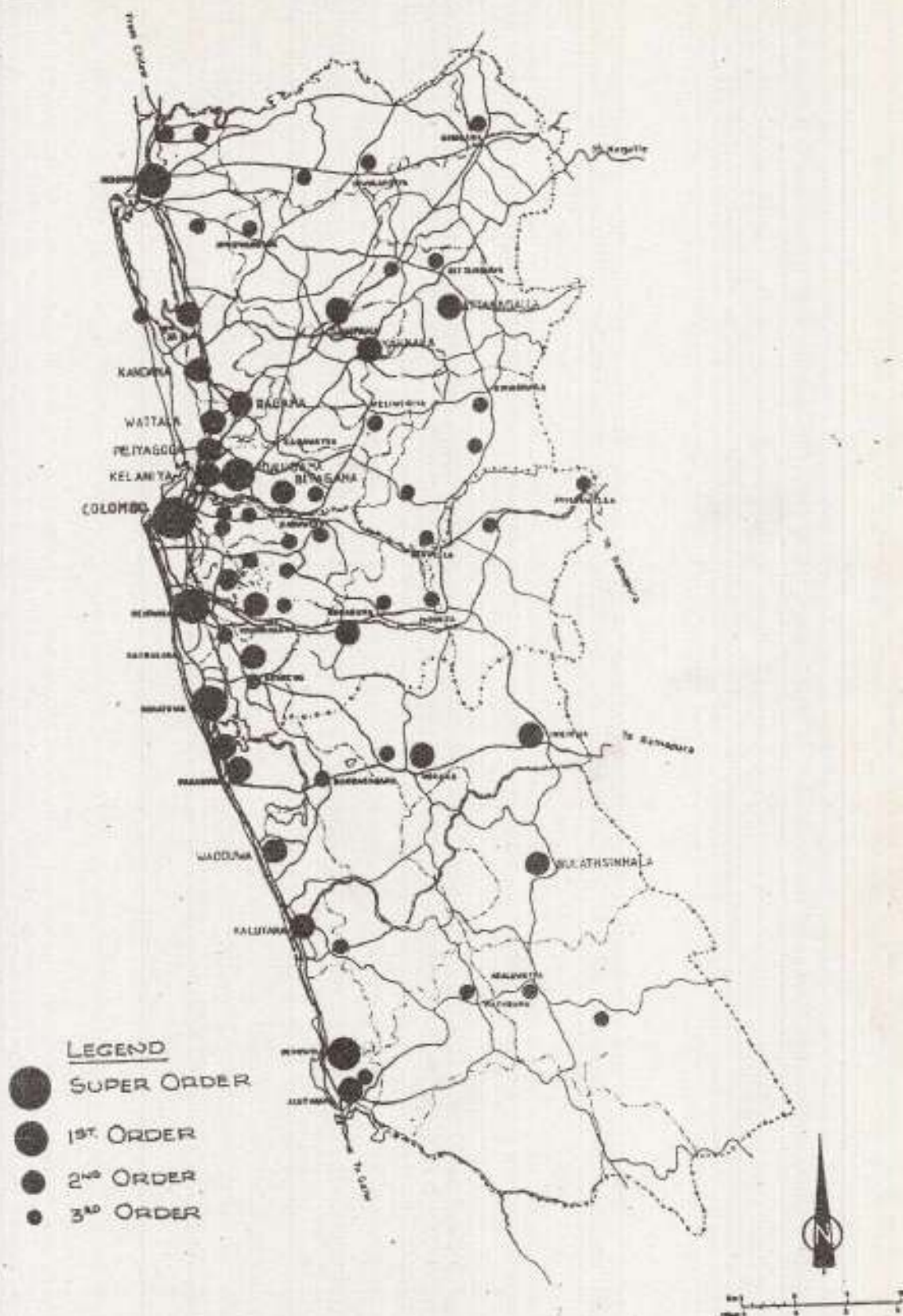
PROJECTED POPULATION DENSITY (P/HA) FOR THE YEAR 2014 BY PLANNING AREA & URBAN CENTRES - C.M.R.

PLANNING AREA	URBAN CENTRE	EXTENT (Sq. km.)	POPULATION 1994	DENSITY 1994 (P/Ha.)	TOTAL POPULATION 1994 P/Ha.	PROJECTED POPULATION 2014	POP. DENSITY P/Ha. 2014	TOTAL POP. 2014 P/Ha.	AVERAGE DENSITY P/Ha. 2014	% ANNUAL GROWTH RATE 94-2014
Colombo Urban Area	01. Colombo M.C.	37.3	635,459	170		654,062	175			0.14
	02. Dehiwala M.C.	21.0	200,719	100		228,322	109			0.44
	03. Kotte U.C.	10.9	106,517	65		128,120	76			0.84
	04. Moratuwa U.C.	18.3	186,321	97		204,924	106			0.49
	05. Maharagama P.S.	8.7	167,601	134		158,597	155			1.30
	06. Kolonnawa U.C.	16.9	57,123	34		75,728	45			1.52
	07. Wattala Matelle U.C.	4.4	15,164	44		37,778	86			4.81
	08. Peliyagoda U.C.	3.6	15,058	42		33,681	94			6.17
	09. Bellanigolla P.S.	20.7	82,258	40		100,861	49			1.13
	10. Kettles P.S.	8.0	5,380	5		14,681	18			8.44
	11. Dakshina P.S.	7.7	61,754	80		80,337	104			1.50
	12. Borelegamwewa P.S.	8.7	21,868	25		40,471	47			4.25
	13. Koskela P.S.	7.7	13,067	18		32,270	42			6.80
	14. Muliyanawa P.S.	11.4	25,828	23		44,431	39			3.60
	15. Kotikawatta P.S.	9.09	40,371	51		68,574	77			1.86
	16. Hendala P.S.	7.7	50,262	65		68,855	90			1.85
	17. Kelaniya P.S.	7.7	47,524	62		66,127	77			1.95
					1,698,368			2,014,807	75	
North Eastern Cluster	18. Ja - Ella	7.7	27,967	36		57,967	62			5.36
	19. Gampaha	9.5	14,963	66		27,500	110			5.00
	20. Eragama	5.0	12,568	25		32,568	65			7.90
	21. Kadawatha	6.0	10,504	21		35,504	71			11.90
	22. Kaddana	7.7	26,022	36		48,022	68			3.56
	23. Welwerye	5.0	9,373	18		15,373	30			3.20
	24. Yakkalam	5.0	9,373	18		26,366	53			7.00
	25. Pannugama	5.0	4,138	8		9,138	18			6.00
	26. Deegoda	5.0	9,373	18		14,373	28			2.60
	27. Ragama	7.36	33,915	46		63,915	86			4.40
	28. Ragoda	5.0	4,732	9		9,732	19			5.20
	29. Damp	5.0	4,732	9		9,732	19			5.20
					169,680			350,390	54	
Eastern Cluster	30. Homagama	7.7	28,244	36.0		56,244	75			5.30
	31. Padukka	8.0	9,464	12.0		34,464	43			13.20
	32. Aluthiywa	13.0	9,259	7.0		34,259	26			13.60
	33. Kaharutawa	5.0	9,462	19.0		14,462	28			2.64
	34. Gaddigama	8.0	11,194	14.0		25,194	32			6.70
	35. Marabe	8.0	7,913	10.0		27,913	34			12.00
	36. Pinnipitiya	11.0	9,462	9.0		24,462	22			7.90
					84,998			219,898	37	

PLANNING AREA	URBAN CENTRE	EXTENT (Sq. km.)	POPULATION 1994	DENSITY 1994 (P/Ha.)	TOTAL POPULA. 1994 Pig. Area	PROJECTED POPULATION 2014	POP. DENSITY P/Ha. 2014	TOTAL POP. 2014 Pig. Area	AVERAGE DENSITY P/Ha. Pig. Area	% ANNUAL GROWTH RATE 94-2014
Southern Cluster	37. Paradura	7.7	55,256	50.0		85,256	93			4.25
	38. Piliyandala	7.7	10,239	15.0		40,239	52			14.65
	39. Bandaranagama	7.7	6,722	9.0		36,722	47			27.30
	40. Wadduwa	8.0	15,855	20.0		45,855	57			9.45
	41. Karalawatta	7.7	43,806	56.0		53,806	95	251,368	68	3.42
					111,898					
Northern Sub Region	42. Negombo	10.4	98,354	54.0		118,354	113.8			1.02
	43. Seeduwa Katunayake	21.6	38,559	16.0		71,559	32.8			4.45
	44. Maruwigoda	3.1	5,820	16.0		12,820	41.0			6.01
	45. Kochchikade	7.7	13,806	17.0		23,806	30.0			3.3
	46. Kalana	5.0	4,801	10.0		12,801	25.0			8.3
	47. Mandapagamulla	5.0	4,801	10.0		12,801	25.0	252,141	44	5.3
					154,141					
North Eastern Sub - Region	48. Marigama	7.7	5,884	8.0		21,288	27			13.16
	49. Veeragoda	7.7	4,110	5.3		9,110	11			6.08
	50. Chulapitiya	5.0	2,647	5.0		7,547	15			9.82
	51. Alaragoda	5.0	3,963	8.0		29,299	58	100,000	30	31.53
	52. Nimbura	8.0	6,344	8.0		32,646	41			25.73
					22,830					

PROJECTED POPULATION DENSITY (P/HA) FOR THE YEAR 2014 BY PLANNING AREA & URBAN CENTRES - C.M.R.

PLANNING AREA	URBAN CENTRE	EXTENT (Sq. km.)	POPULATION 1994	DENSITY 1994 (P/ha.)	TOTAL POPULA. 1994 Pig. Area	PROJECTED POPULATION 2014	POP. DENSITY P/ha 2014	TOTAL POP. 2014 Pig. Area	AVERAGE DENSITY P/ha Pig. Area	% ANNUAL GROWTH RATE 94-2014
Eastern Sub - Region	53. Aucaswella	19.7	18,524	9.4		49,002	25.0			9.22
	54. Hurwella	10.0	2,074	4.15		32,552	33.0			73.47
	55. Kooqana	5.0	1,244	2.48		21,722	43.4			82.30
	56. Kinnawella	5.0	1,244	2.48		21,722	43.4			82.30
					23,086			124,356	36	
Southern Eastern sub - Region	57. Horana	4.1	7,853	19.3		36,826	95.0			195.00
	58. Bulatantenna	5.0	1,233	2.4		36,223	72.4			141.80
	59. Engillya	5.0	5,219	10.4		42,092	84.1			35.50
	60. Kalladuwewa	5.0	3,100	6.2		10,949	22.0			12.65
					17,505			128,090	68	
Southern Sub Region	61. Kalutara	6.5	28,705	34.00		51,046	60.0			5.89
	62. Beluwela	4.4	26,649	60.00		48,090	111.3			4.19
	63. Aulthigama	7.7	43,806	57.00		85,167	86.0			2.59
	64. Dabangoda	5.0	2,017	4.03		24,358	49.0			55.00
	65. Chingga Town	7.7	12,096	15.00		34,437	45.0			9.23
					111,293			224,908	70	
South, South Eastern Region	66. Mahugama	7.7	15,485	20.0		34,084	44.2			6.0
	67. Agalawata	2.7	2,676	3.4		21,275	26.0			34.0
	68. Bedunakys	5.0	1,201	3.4		19,800	40.0			77.0
					18,362			75,159	37	



COLOMBO METROPOLITAN REGION

(WESTERN PROVINCE)

PROPOSED SETTLEMENT PLAN

(Hierarchy Of Settlement According To Population Density - Year 2016)

URBAN DEVELOPMENT AUTHORITY

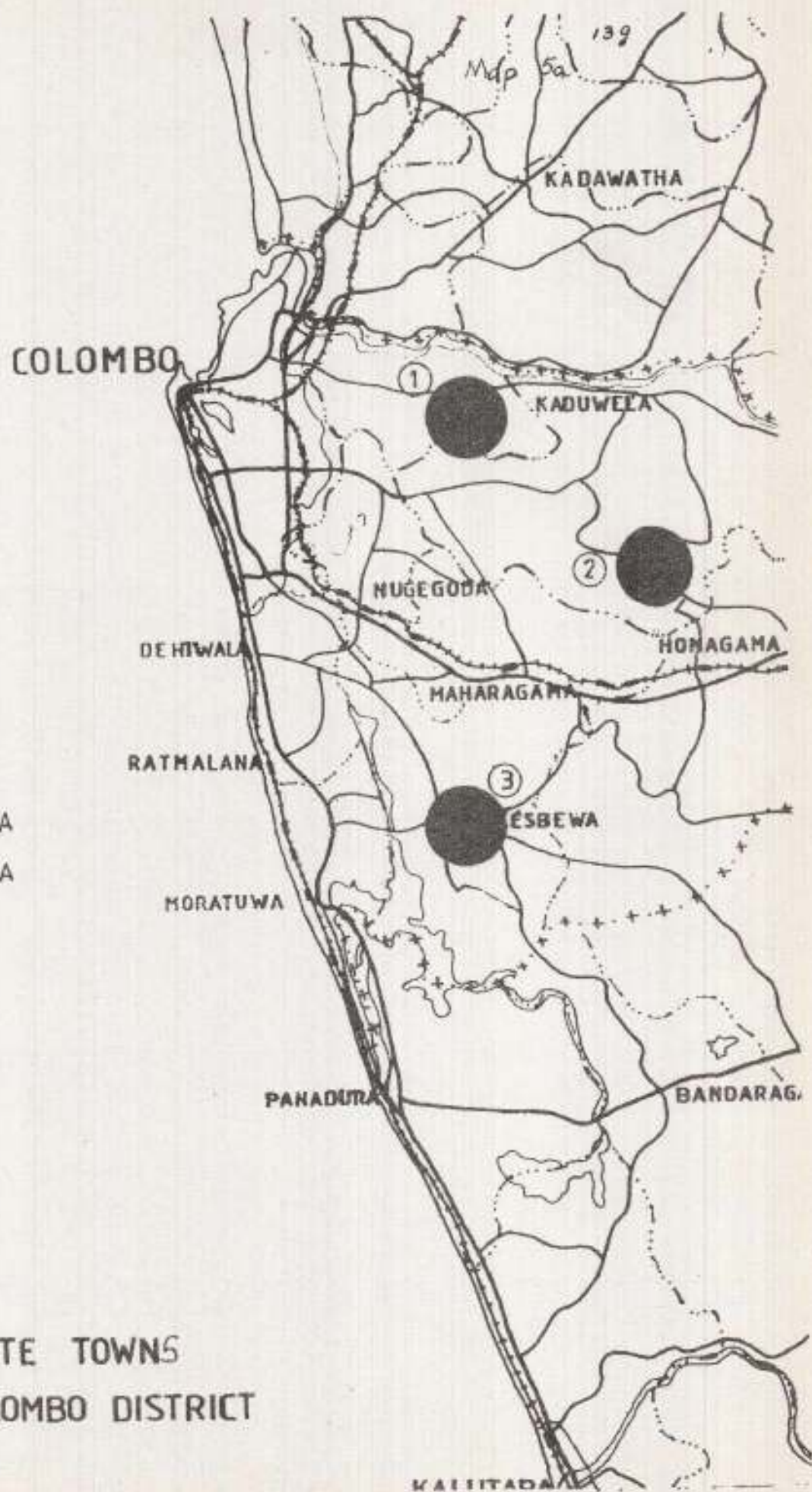
Planning Division - 27, D. R. WICKRAMARATNE, KOTTEL, COLOMBO 05

DIS. NO. - 5/51/2016/5/5/5/5	DEVELOPED BY - <i>Handwritten</i>
DATE - 10.05.2016	CHECKED BY -
DIRECTOR (Planning)	DIRECTOR (Planning)



Satellite Towns in Western Province

No.	Name of the Town	Type of Local Authority	Extent of special	Proposed Used	Details Plans prepared	Electricity Requirements	Remarks
01.	Athurugiriya	Part of Kaduwela P.S.	125 A	Residential Industrial	Development Plan prepared and details Plan related to project has not prepared.	33/LV - 400 KVA 33/LV - 630 KVA 33/LV - 160 KVA 33/LV - 100 KVA 33/LV - 280 KVA 11/LV - 100 KVA - 160 KVA - 250 KVA LV New Construction 3 ph. 2 ph. 1 ph.	Tentative estimate prepared by Planning Division
02	Kesbawa	Kesbawa	75 A	Industrial Residential	Site identified detail plans not prepared.	Tentative estimate has not prepared due to non availability of detail plans.	Detail Plans to be prepared.
03.	Mulleriyawa	Kotikawatta Mulleriyawa P.S.	257 Acres	Commercial Residential & Institutions	Details Plan not prepared	- do -	- do -



SATELLITE TOWNS
IN COLOMBO DISTRICT

Environmental Plan

The Western Province is the most urbanized region of the country accommodating 68% of the urban population living in 39 cities & towns of Sri Lanka. The high degree of urbanization accompanied by high population density, rapid industrialization and traffic congestion have led to uncontrolled interference in the natural environment i.e. waterways, low-lying areas, the beach & the ground water.

To cope with this situation the government has formulated an environmental policy and the enactment by parliament of the National Environment Act (NEA) of 1980, the establishment of the Central Environment Authority (CEA) in 1981 under this Act and the creation of a Ministry to be in charge of the subject of environment in 1990 are major initiatives taken by the government for the purpose of improving the quality of the environment and preventing further miused.

Programmes for conservation and management of Environmentally Sensitive Areas within CMR are undertaken by the CEA, the SLLR & DC, UDA & other related agencies.

1. **The conservation areas so far identified within the CMR for strict environmental management are as follows.**
 - (a) The Negombo lagoon and the Muthurajawela marsh.
 - (b) The Greater Colombo Flood retention area and the Attidiya, Bellanwila marsh (The Bellanwila Marsh has already been declared a sanctuary by the Department of Wild Life Conservation and is included in the Metropo-litan and urban nature reserves and parks proposal of the Ministry of Environment.
 - (c) The Sri Jayawardenapura "Green Belt" (around the lake) cum Bird Sanctuary selected for inclusion in the above programme.
 - (d) The Beira Lake restoration study (implementation in the near future).
 - (e) The environs of the Kelani Ganga especially near the Ambatale Water intake area.

2. **Areas /Fields where special future environmental planning have to be done are**

- (a) Weras Ganga
- (b) Bolgoda Lake and its environs
- (c) Lunawa Lagoon to Kalutara Lagoon and to Bentota estuary.
- (d) River Valleys
- (e) Assessment of Rock Outcrops for scenic value/quarrying potential
- (f) Establishment of a Mines and Quarries re-habilitation monitoring Unit" under the Geological Survey and Mines Bureau.
- (g) Ground Water Assessment
- (h) Control of gemming
- (i) Fast-yield forestry for building
- (j) Planned exploitation of Graphite, feldspar and Kaolin.

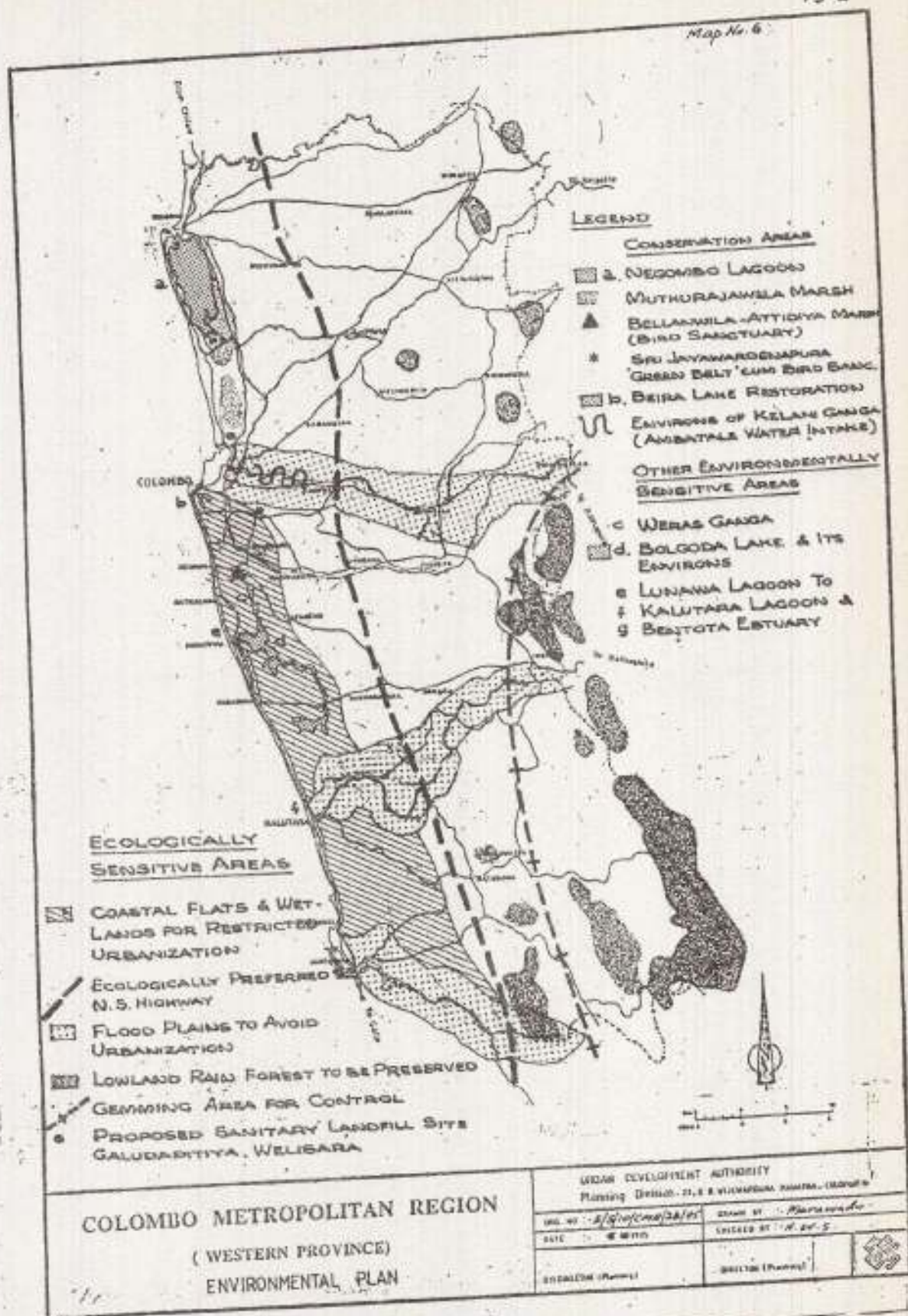
3. **Areas to be reserved for environmental protection**

- (a) Maximum possible paddy lands within C.M.R.
- (b) All wetlands within C.M.R.
- (c) A major part of agricultural land, especially rubber and coconut plantations.
- (d) Remaining patches of lowland rain forest.

The funds required for the implementation of the above programme is to be found through taxation of land transaction.

The following projects are at various stages of formulation & implementation for the purpose of improving the quality of environment.

- 1. Greater Colombo Canal & Drainage System Rehabilitation Project.
- 2. Greater Colombo Flood Control & Environmental Improvement.
- 3. Greater Colombo Water Supply Master Plan (up date).
- 4. Greater Colombo Waste Water & Sanitation Master Plan Project.
- 5. National Environment Action Plan 1991.
- 6. Kelani Ganga Flood Protection Study 1992.
- 7. Beira Lake Restoration Plan 1992.
- 8. Master Plan Muthurajawela Marsh & Negombo Lagoon.
- 9. Strategy for Industrialization 1989.
- 10. Clean Settlement Programme.
- 11. Solid Waste Management in Colombo Region
- 12. Coastal Zone Management Plan.



Proposed Industrial Towns

The serious problems of unemployment and the inherent defects of an "import substitution" policy implemented by the government upto the late 1970's resulted in major policy changes with a rapid swing towards an Export oriented industrialization strategy. The objectives of this policy was to make Sri Lanka enter the status of Newly Industrialized Country (NIC) by the year 2001, with the provision of employment in the manufacturing sector and to meet the balance of payment issues through the entry of foreign investment accompanied by advanced technology & development of skills.

According to the Annual Survey of Industries in 1989 the total No. of reported units in the country were 2895 employing 219,279 persons with an output value of Rs. 61,532 mn.

Industrial Sector in the Western Province

The total No. of industrial units (employing 3 persons) in the Western Province in 1993 was 2634 employing 386,286 persons. These units come under the purview of 3 major agencies namely B.O.I. 293 units (11%) with an employment capacity of 139, 552 (36.1%) persons. The Ministry of Industries 1889 units (72%) with an employment capacity of 245,373 (63.5%) & the I.D.B. with 462 units (17%) with 1311 (0.4%) employees respectively.

Distribution of Industries

District wise distribution shows that Colombo has the largest No. of units 1639 (62%) followed by Gampaha 835 units (32%) & Kalutara 160 units (6%).

By the scale of industries Gampaha comes first with 214 employees/unit while Colombo had only 116 employees/unit followed by Kalutara with 98 employees/unit while the national scale is 102 employees/unit.

A further break-down into the investment promotion zones in Gampaha District indicate that Biyagama is larger in scale than that in Katunayake. Other industrial concentrations in a complex form are the industrial estates at Horana, Ekala (IDB), and industrial estates at Katuwana, Ratmalana, Peliyagoda & Moderawila.

Of the industries, the largest growth is in the textile wearing apparel. From a value point of view it accounted for 42.08% while food beverages & tobacco & chemicals etc jointly accounted for 41.2%. However, from a point of view of value added 35.7% is from Food Beverages sector while the contribution from the garments is 31.2%.

The land-use policy (from 1977 to date) in industrial location had been to develop more industries out of the City of Colombo regardless of their linkages mainly to Port and the availability of large extents of best serviced lands in the City of Colombo close to the Port.

It is proposed to make use of the under-utilised land North of Port for the development of Port related activities & industries such as container repair, & manufacture activities of the entreport industries.

A grave problem of industrialization is the impact on the environment. Major thrust is on the water-bodies in high density areas of Colombo City, Dehiwela-Mt. Lavinia & Moratuwa where effluent from tanneries, food processing factories asbestos & chemical industries is disposed untreated causing pollution of water bodies such as the Lunawa Lagoon, the Bolgoda Lake and the canal net-work in the city.

A new government initiative relates to the location of high & medium polluting industries only in designated Export Processing Zones (EPZ) or industrial Estates/Parks. New strategies are being worked out in respect of least cost pollution abatement & control and establishing an organizational frame work at the National, Provincial & Local levels for industrial pollution

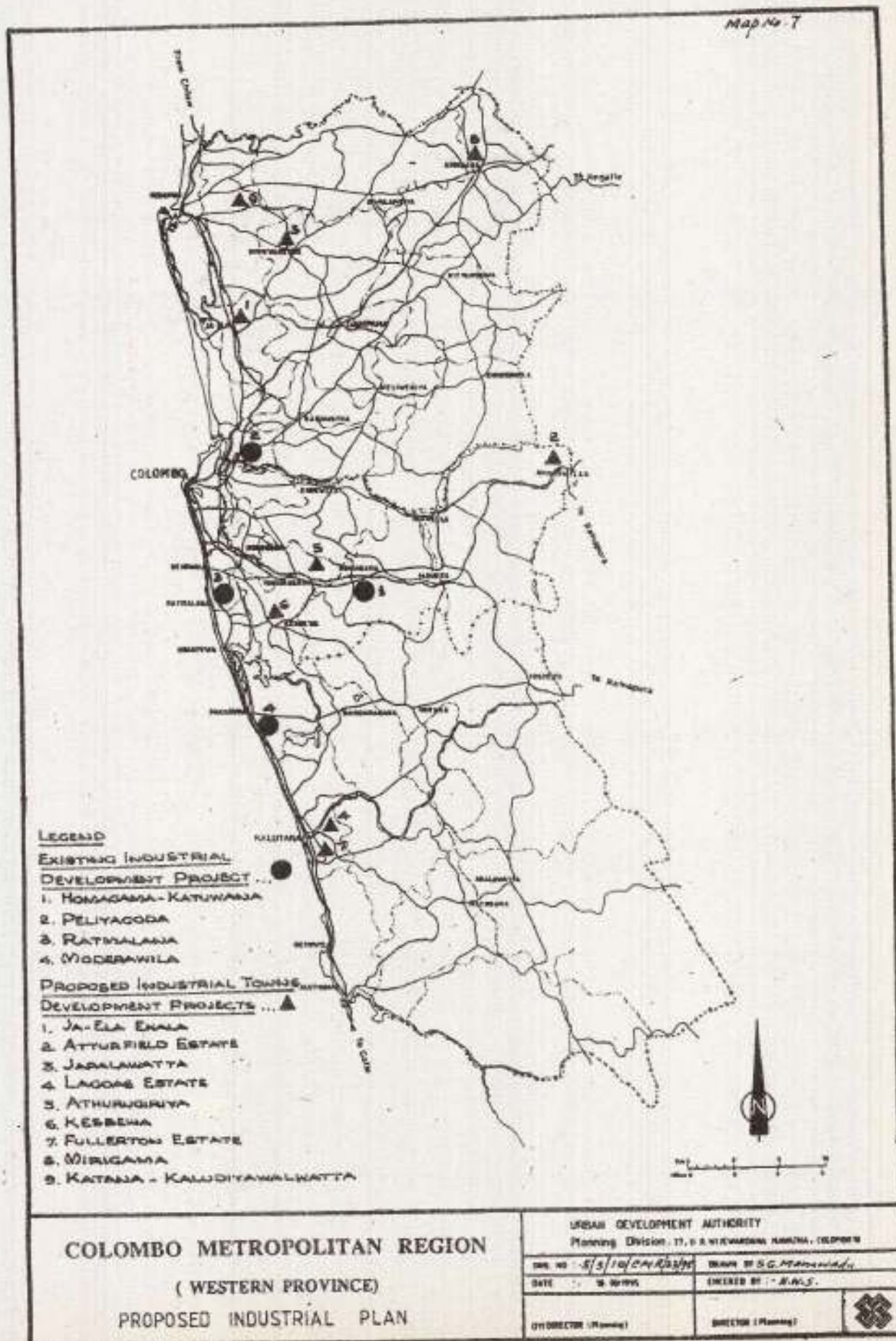
In addition to the on going industrial and warehousing projects undertaken by the UDA such as Peliyagoda Integrated Urban Development Project, Moderawila Industrial Estate and Homagama Katuwana Industrial Development Project 06 Nos. of new Industrial Towns have been identified within the Colombo Metropolitan Region.

The status of existing and proposed Industrial Development projects are as follow as:

Existing Industrial Project	Location	Total Extent	Agency Involved
1. Homagama-Katuwana Industrial Development Project.	East suburb of Colombo	60 Acres	UDA
2. Peliyagoda Integrated Urban Development Project Stage II.	North suburb of Colombo	120 Acres	UDA
3. Ratmalana Industrial Project-Stage II	End of the Air Port Road	18 Acres	UDA
4. Moderawila Integrated urban devp. Project	Moderawila Panadura	72 Acres	UDA
Proposed Industrial Towns Development Project	Location	Total Extent	Agency Involved
1. Ja-ela, Ekala Telecom land	North East suburb of Colombo	250 Acres	UDA
2. Attur field Estate High Technical Indus-	Avissawella (Hanwella AGA	415 Acres (68 Ha)	Ministry of Indus-

Proposed Industrial Towns Development Project	Location	Total Extent	Agency Involved
3. Japalawatta Industrial Estate	Minuwangoda within Gampola Districts	15A	Ministry of Indus- tries.
4. Lagos Estate	Kalutara District	60A	-do-
5. Athurugiriya Industrial Town	Part of Kadu- wela Pradehsi- ya Sabha	50A	UDA
6. Kesbewa Industrial	Kesbewa Pra- deshiya Sabha	200	UDA
7. Fullerton Estate	Kalutara	35A	Private/ My. of Industry.
8. Merigama	Gampaha		-do-
9. Katana Kaludiyawala Watta	-do-	75A	-do-

Map No. 7



Education & Employment

There are marked differences in out-put & productivity across the Districts & Provinces of Sri Lanka. These differences are the result of the availability of infrastructure and the levels of private investment & amount of capital per worker.

Western Province has the highest out-put & has grown the fastest. The Gross Regional produced per capita for the W.P. 1981-1990 is as shown below.

Gross Regional Product per Capita 1981-1990 (Constant 1993 Rs.)

	1981	1990	% change
Sri Lanka	20,661	25,617	24.0%
Western Province	28,823	44,710	55.1%
Central Province	14,124	20,039	41.9%
Southern "	13,001	16,551	27.3%

The Employment Indicators for the period 1985-1992 are as follows:

Employment Indicators

	1992 Jobs (000)	Share	Change 1985-1992 (%)
Sri Lanka	4924	1.000	8.2%
Western Province	1456	0.296	11.6%
Colombo District	624	0.127	6.9%
Gampaha "	523	0.108	20.3%
Kalutara "	299	0.061	7.4%

The Teacher, Student Ratio within the Districts are as follows:

Population 1994	No. of students	No. of student against Total Pop. (%)	No. of Teachers/	Teachers/ student ratio
Colombo District 19,73,580	335,388	18%	13,515	1:25
Gampaha District 15,82,667	355,308	22%	14,342	1:25
Kalutara District 9,01,488	2,13,725	24%	9,047	1:23

Proposals

Create cluster schools in selected rural areas preferably at Meerigama, Veyangoda, Kirindiwela, Avissawella, Horana & Matugama with one school having A'Level grades only. 5-6 Junior M.V. schools and 30-40 primary schools to feed the Junior schools in each cluster.

Proposals

Create cluster schools in selected rural areas preferably at Meerigama, Veyangoda, Kirindiwela, Avissawella, Horana & Matugama with one school having A Level grades only. 5 -6 Junior M.V. schools and 30 -40 primary schools to feed the Junior schools in each cluster.

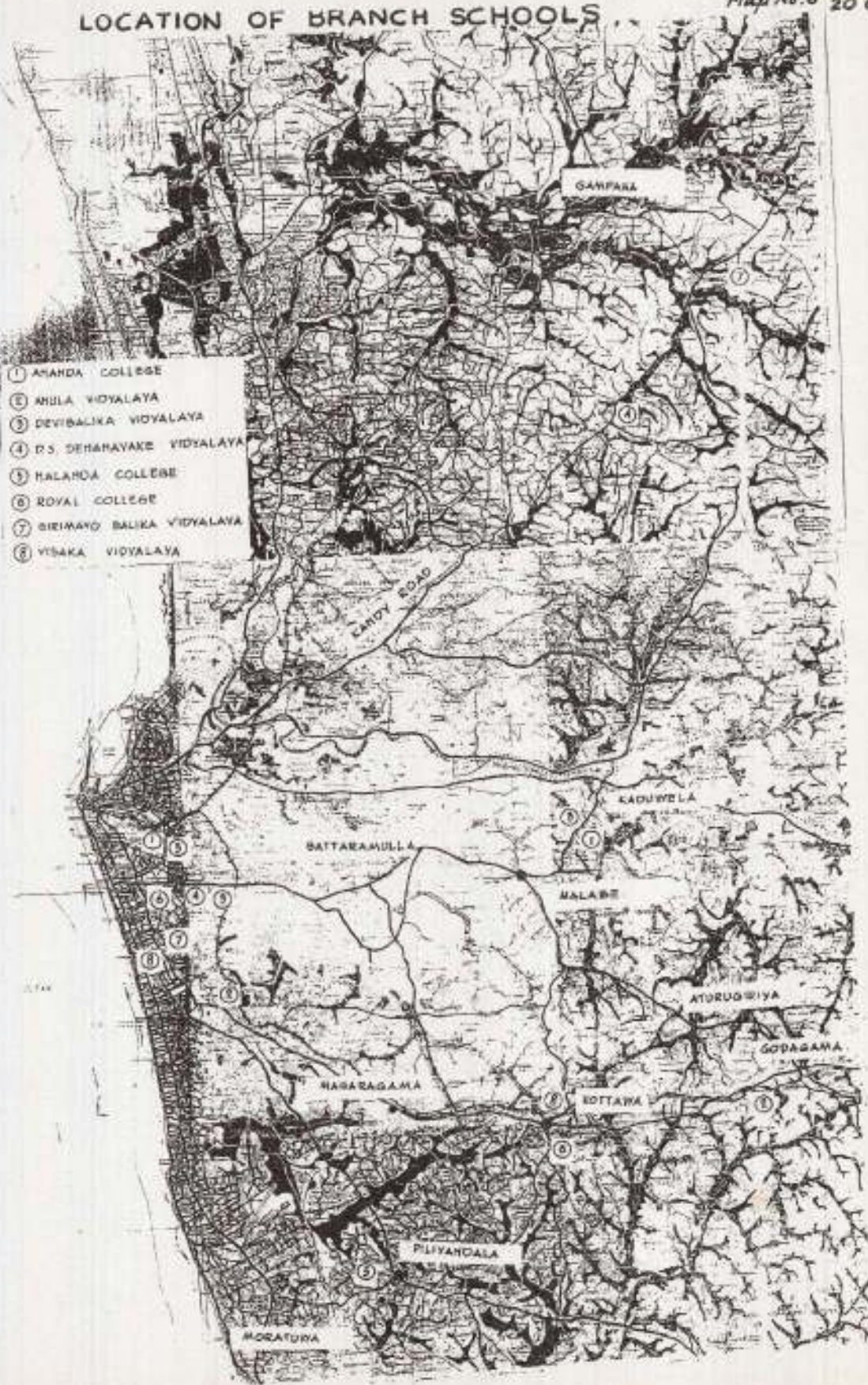
The programme to establish branches of some major schools presently located within the city to locations outside the city as Branch Schools has been undertaken. The proposed locations are as follows.

Main School /College	Location of Branch School	Extent	Ownership
1. Ananda College	Malabe Pittugala	25 Acres	State Land Trade Ministry
2. Anula Vidyalaya	Homagama	15 Acres	Agrarian Services Department
3. Deyi Balika Vidyalaya	Malabe Pittugala	12 Acres	Private Land
4. D. S. Senanayake	Kadawatha Kirillawella	12 Acres	Private Land
5. Nalanda Vidyalaya	Piliyandala	12 Acres	Crown Land
6. Royal College	Kottawa	15 Acres	Private Land.
7. Sirimavo Bandaranaike Balika Vidyalaya.	Gampaha Miriswatta	12 Acres	Private Land
8. Visaka Vidyalaya	Kottawa	15 Acres	Private Land.

LOCATION OF BRANCH SCHOOLS

Map No. 8 20 C

- ① AMANDA COLLEGE
- ② ANULA VIDYALAYA
- ③ DEVIBALIKA VIDYALAYA
- ④ D.S. DEHARAYAKE VIDYALAYA
- ⑤ KALANDA COLLEGE
- ⑥ ROYAL COLLEGE
- ⑦ SIRMAYO BALIKA VIDYALAYA
- ⑧ VISAKA VIDYALAYA



Health

Health sector in the Western Province includes preventive & curative facilities. Investment in the Western Province health sector has been by the Ministry of Health & Western Provincial Council facilities in the Western Provinces are provided through 4 Teaching hospitals, five base hospitals, 12 District hospitals & 13 peripheral units, 66 central dispensaries & rural hospitals.

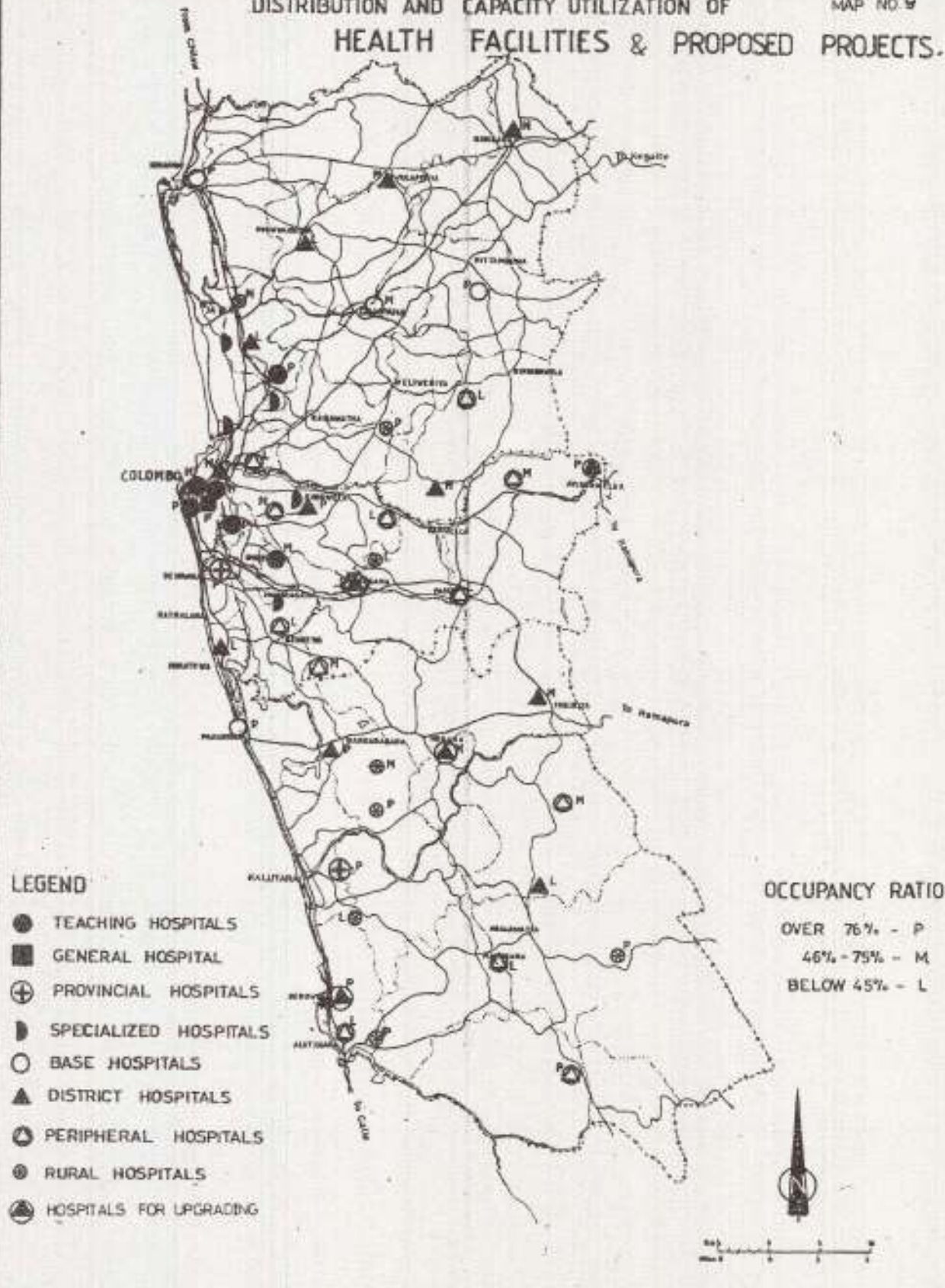
Proposals

Upgrading the District Hospitals. Eg: Horana, Homagama, Avissawella & Beruwela to that of base hospitals.

- * Upgrading Meegahatenna to that of District hospitals
- * Continuation of under utilised hospitals such as Dodangoda, Moratuwa, Athurugiriya, Colombo Central to be reviewed.

DISTRIBUTION AND CAPACITY UTILIZATION OF HEALTH FACILITIES & PROPOSED PROJECTS.

MAP NO. 9



COLOMBO METROPOLITAN REGION
(WESTERN PROVINCE)

URBAN DEVELOPMENT AUTHORITY
Planning Division - 27, D. R. MICHARDAM, HANDESA, COLOMBO 10

MAP NO. 9	PREPARED BY:-
DATE - 10.01.1995	CHECKED BY:-
DIRECTOR (Planning)	DIRECTOR (Planning)



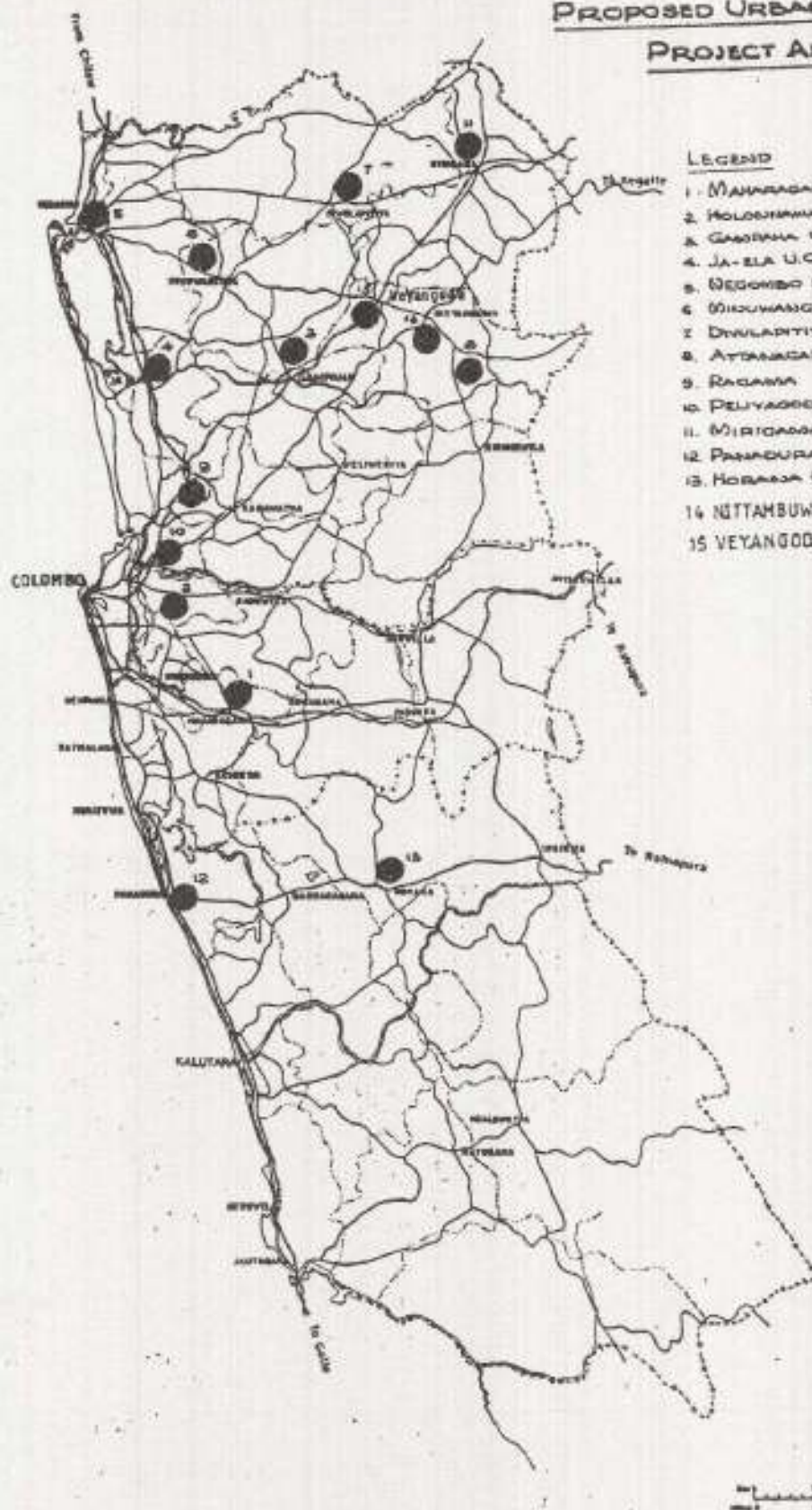
Proposed Urban Renewal Project Areas

Major suburban towns within the regions have been identified for urban renewal and areas especially the town centres of such suburban towns have been earmarked as urban renewal project areas.

The proposed urban renewal project areas in suburban towns are as follows :

District	Name of town	Population 1994	Density of Population (P/Ha)	Urban Renewal Project
Colombo	Maharagama P.S.	107,693	39	Town centre re-development
	Kolonnawa UC	57,123	35	Town centre re-development
Gampaha	Gampaha UC	14,693	66	Town centre re-development
	Ja-ela UC	27,967	36	Town area re-development
	Negombo MC	98,354	94	Town area re-development
	Minuwangoda UC	5820	18	Town Centre Development
	Divulapitiya PS	2547	05	Town Centre re-development
	Attanagalla PS	3965	08	-do-
	Nittabuwa PS	6344	7.9	-do-
	Veyangoda UC	4110	7.7	-do-
	Ragama PS	33915	46	-do-
	Peliyagoda UC	5058	41.8	-do-
Kalutara	Merigama PS	5864	7.6	-do-
	Panadura UC	35,256	50	Town re-development
	Horana UC	7,953		Town re-development

PROPOSED URBAN RENEWAL PROJECT AREAS



COLOMBO METROPOLITAN REGION
(WESTERN PROVINCE)

URBAN DEVELOPMENT AUTHORITY

Planning Division - 27, D. S. MICKELANDRA MURTHY, COLOMBO 10

DRG. NO : 5/5/10/000/22/95

DRAWN BY : H. S. S.

DATE : 18.05.1995

CHECKED BY : H. S. S.

DIRECTOR (Planning)

DIRECTOR (Planning)



Proposed Tourism & Recreation Plan

Sri Lanka's diverse eco-systems, geological & cultural richness and pleasant climatic conditions have attracted tourists from almost every part of the World since the pre-independent period.

Sri Lanka experienced fifteen years of rapid expansion of the tourism sector from the inception of organized tourism trade in 1967 upto 1982.

In the Western Province 4 zones can be identified considering the varying tourism activities & characteristics.

Colombo City : Colombo being the capital holds major business activities, conferences & major sports events. It is also a gateway & stop-over point for international tourists.

Colombo Region : The major tourism centres & attractions includes the Colombo-Katunayake International Air Port (32 km from City Centre) the Dehiwela zoological gardens, the Bandaranaike Memorial International Conference Hall, Museums etc. The other attractions are the Henarathgoda Botanical gardens at Gampaha, the Bolgoda Lake for water sports.

West Coast : North of Colombo

The International beach tourism facilities are located in this area with major concentration in the Negombo resort.

West Coast : South of Colombo

The interesting coastline with long beaches & marine activities are the major attractions in this region. Among the other attractions are the pilgrimage sites such as Kalutara Buddhist Temple and the planned resort of Bentota.

The development of natural resources for the tourism industry have to be undertaken in an organized manner as the success of environmental dependent

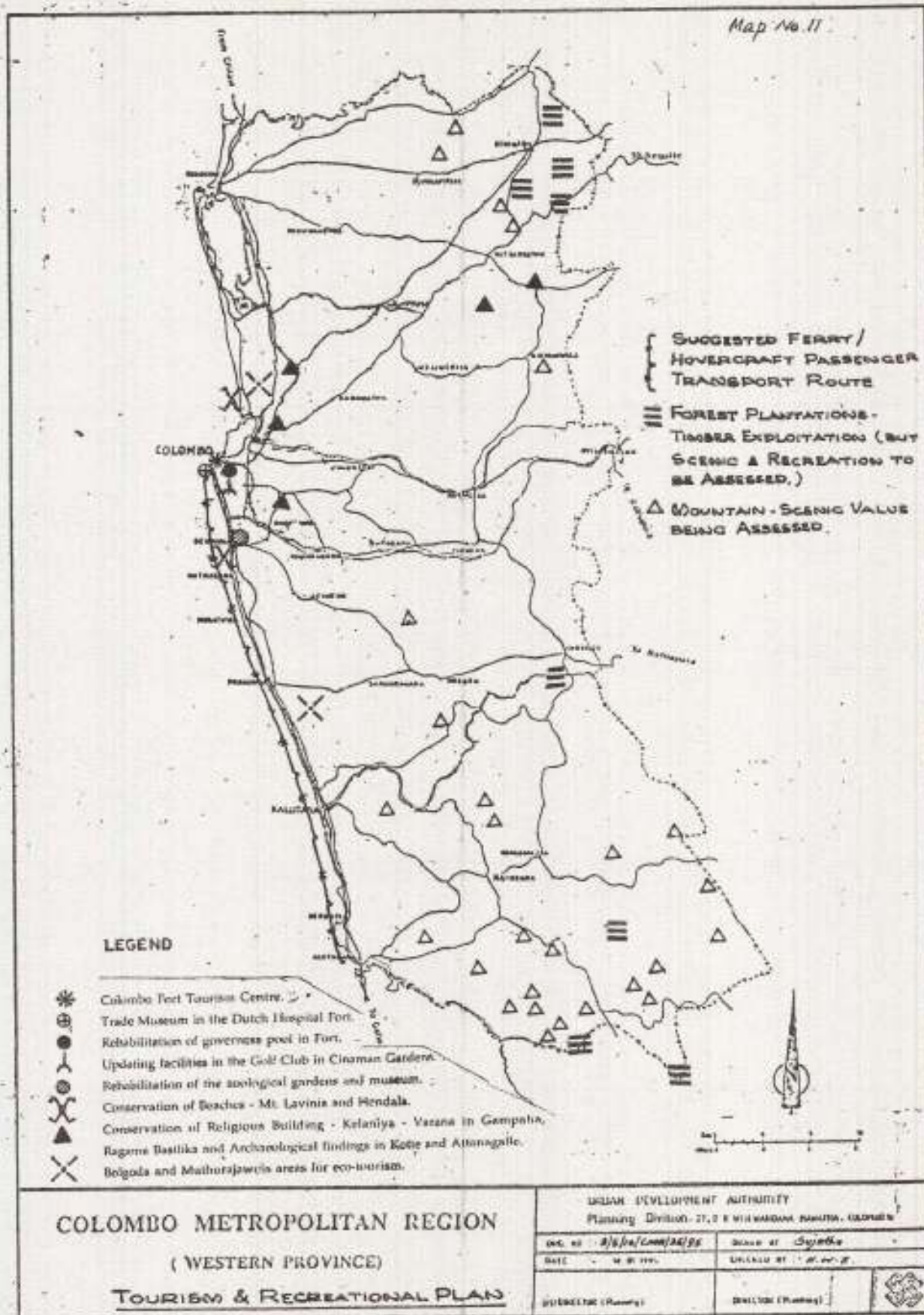
The proposed Tourism and Recreation Plan proposes to exploit the potential of the city to accommodate new trends such as eco-tourism and Golfing.

Aquatic sports in the South of the city i.e. in the Bolgoda Lake and eco-tourism in the Muthurajawela area in the North are proposed.

The other projects within the tourism plan are as follows:

- (1) Colombo Fort Tourism Centre.
- (2) Trade Museum in the Dutch Hospital Fort.
- (3) Rehabilitation of governor's pool in Fort.
- (4) Updating facilities in the Golf Club in Cinaman Gardens.
- (5) Rehabilitation of the zoological gardens and museum.
- (6) Conservation of Beaches - Mt. Lavinia and Hendala.
- (7) Conservation of Religious Building - Kelaniya - Varana in Gampaha, Ragama Basilika and Archaeological findings in Kotte and Attanagalle.
- (8) Bolgoda and Muthurajawela areas for eco-tourism.

Map No. 11



Proposed Solid-Waste Management Plan

The amount of solid waste collected within the CMC (550 m.tons) & other major Local Authority areas within CMR (DMMC = 60, Moratuwa U.C. 51, Kotte U.C. 35, Negombo M.C. = 17, Seeduwa - Katunayake U.C. = 15, Kolonnawa U.C. = 11, Peliyagoda U.C. = 6, Wattala Mabile = 6.6, Maharagama = 6.7, and Piliyandala = 5.1, m. tons) amount to 763 m. tons/day.

The waste is currently disposed of in several open dumps, the largest in Wellampitiya catering to the waste of the City of Colombo which has reached capacity by end of July 1995. The Local Authorities surrounding the city dispose of garbage in a series of adhoc sites operated as 'open dumps'.

One of the most pressing problems in Metropolitan Colombo is the lack of adequate capacity for final disposition of solid waste.

A potential land fill site in Welisara has been identified for development as a sanitary land fill. This site would also have a large scale compost plan in view of the fact that approximately 85 percent of the waste is considered to be organic waste. It will be ready by end 1997 at the earliest. Short-term sanitary land fill sites are therefore being sought with the help of the UDA in view of the crisis situation now prevailing (Aug 1995)

The solid waste management plan should address the following components.

1. Definition of management & organization structure.
2. Environment Impact Assessment of potential land-fill sites.
3. Geotechnical & hydrogeological investigations & conceptual engineering designs of a sanitary land fill & a transfer station.
4. Development of solid-waste management strategy for Katunayake & Biyagama Free Trade Zones.
5. Survey & disposal plan for hospital wastes.
6. Promotion of combination of landfill with parks projects using 'high' land (including disused quarries)
7. Programme for move towards greater reliance on compositng , essentially including separation of solid waste types at source and organised re-cycling.

Proposed Utility Network

Telecommunication

Sri Lanka Telecommunication Department has emerged from the days of manual telephones & open-wire communications to integrated digital systems incorporating digital switching, & digital radio relay systems.

The capacity of the telephone exchange has recorded an increase from 78,514 in 1983 to 164,129 for the year 1993. The relative demand has increased from 72,075 to 199,297 for the same period. Accordingly the capacity has registered a 52% increase & the demand has registered a 63.84% increase for the same period.

Electricity

Colombo District accounts for 30% of National consumption and Western Province accounts for 60% of the total.

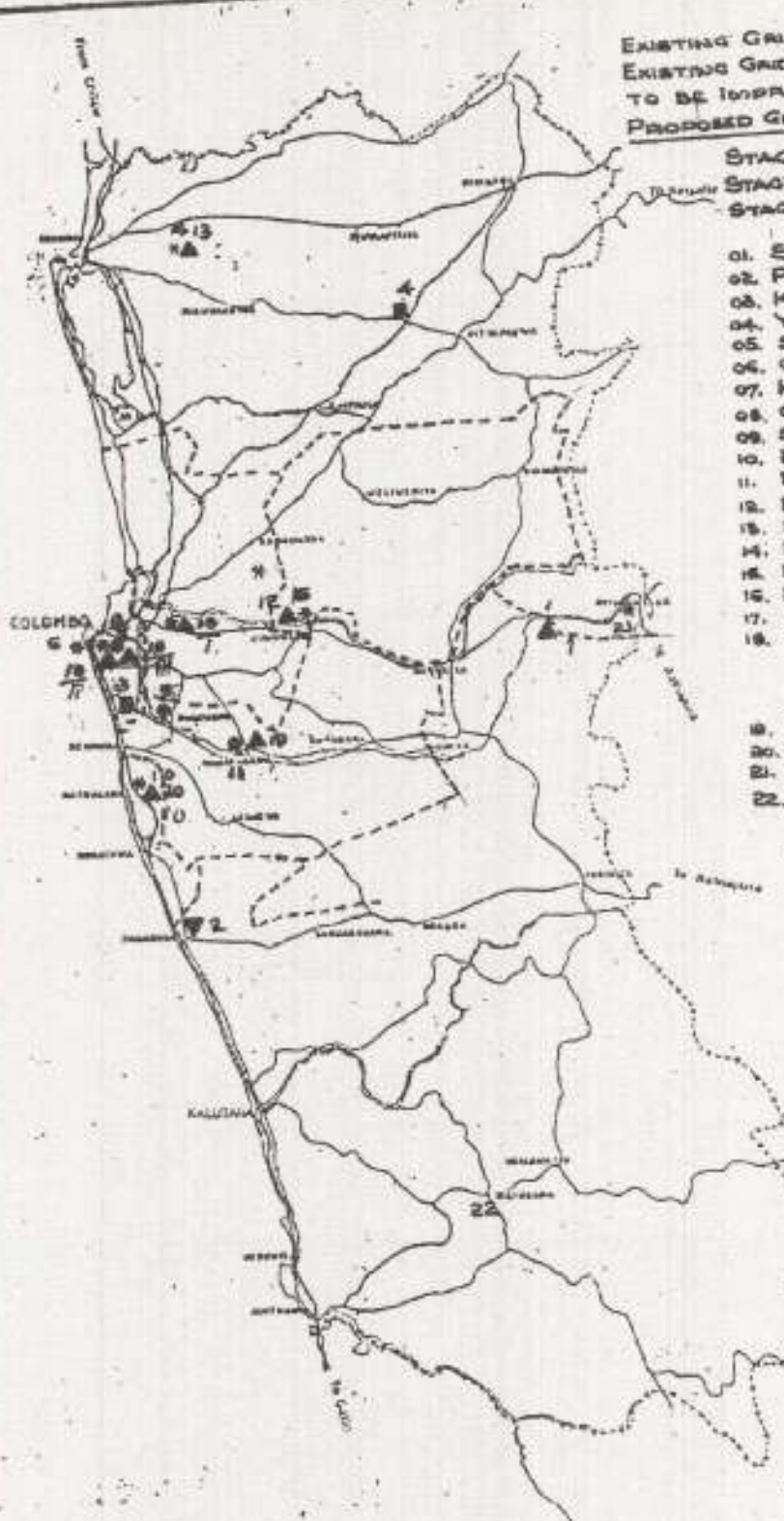
On a per capita basis the consumption is highest in Colombo and Gampaha and is 10 times higher than most deficient districts of Hambantota, Kurunegala and Anuradhapura.

The Greater Colombo Industrial Infrastructure assessment showed that only one half of firms in the city rely solely on the CEB for power. The other half uses generators for stand by or supplementary power.

Infrastructure indices by Districts.

District	Paved Roads Km/sqm Index	Telephone (lines /000) Index	Electricity GWh/000 Index
Colombo	3.672	5.637	3.072
Gampaha	3.145	0.793	2.250
Kalutara	1.455	0.404	1.851

(Note for all indices Sri Lanka = 1.000
Aggregate Index = sum of individual indices.



- EXISTING GRID SUBSTATIONS
EXISTING GRID SUBSTATION TO BE IMPROVED
PROPOSED GRID SUBSTATION
- STAGE I 1994 - 1996
STAGE II 1997 - 1999
STAGE III 2000 - 2003
01. SALAMA
 02. PANADURA
 03. KIRULAPONE
 04. YETANGODA
 05. SRI JAYAWARDENE PURA
 06. COLOMBO
 07. KOLONNAWA
 08. COLOMBO FORT
 09. SLAVE ISLAND
 10. RATONALASSA
 11. PANDURITTA
 12. BITAGASSA
 13. BOLAWITTA
 14. BOLAWITTA
 15. KATUGODA
 16. BITAGASSA
 17. SAMPAGASANDA
 18. COLOMBO
 19. KOLONNAWA
 20. FORT
 21. SLAVE ISLAND
 22. PANDURITTA
 23. RATONALASSA
 24. AVISSAWELLA
 25. MATUGAMA

COLOMBO METROPOLITAN REGION
(WESTERN PROVINCE)
PROPOSED ELECTRICITY NETWORK

URBAN DEVELOPMENT AUTHORITY	
Planning Division - 27, 0 & 1, WILKINSON ROAD, COLOMBO 05	
MAP NO.	Drawn by S. G. Manojkumar
DATE 14.08.1994	ENTERED BY
DIRECTOR (Planning)	DISCUSSION (Planning)

Water Supply

The existing water supply sources depend upon it impounding reservoirs at Kalatuwawa Labugama and the river intake at Ambatale on the Kelani Ganga and a miner pumped supply from the Kalu Ganga providing a total supply capacity of 136 mgd (618,800 m³/ per day)

The extend of the service area of the Greater Colombo Water supply system is 73,900 ha and it covers a major part of Colombo, Gampaha and Kalutara Districts.

The on-going and planned water supply projects:

(1) Ambatale Water Treatment Plan Improvement Project

The objectives of this scheme is to replace and rehabilitate all the deteriorated equipment and facilities of the Ambatale Water Treatment works.

(2) Towns East of Colombo Water Supply Project - OECF Project

The proposed scheme consists of three separate distribution systems for Battaramulla , Kaduwela and Pannipitiya.

- * The Plan Project is from December 1993 to December 1995
- * The first phase of the scheme is being implemented on the basis of design horizon of 2010 and the demand will be met by the supply from the Kalu Ganga new water supply scheme.

(3) Towns South of Colombo Water Supply Projects (OECF Project)

The project aims at extending piped water supply services to Kesbewa PS, Homagama PS and Keselwatte Area (Panadura PS) and will meet the demand of the year 2010.

The construction period to be commissioned on June 1995 and completed by May 1997.

- (4) Ambatale/Jubilee Water conveyance and Maharagama Water Supply Scheme (Work Bank IDA Project)
 - * The Project aims for the establishment of new water supply scheme between Ambatale water treatment works and Maharagama through Jubilee Post.
 - * The Project commenced in June 1991 and is planned to be completed on June 1994.
- (5) Scraping and Cement Motor Lining of Greater Colombo Area Transmission Mains and Distribution System (IDA Project)
 - * Commenced in January 1994 to be completed by 1996.
- (6) World Bank assisted Water Supply and Sanitation Project IV.
 - * An on-going effort of government of Sri Lanka and IDA to improve environmental conditions within Greater Colombo.
- (7) Third Sri Lanka Water Supply and Sanitation Rehabilitation Project.

The contents of the project are

- a. Rehabilitation works at Elie House Reservoir (Capacity 36, 300 m³)
 - b. Laying of pipes for infilling of unserved areas of Maharagama Water Supply Scheme.
- (8) Reduction of unaccounted for water in greater Colombo (ADB Project)
- The principal actions are
- a. Metering of all stand pipes and meter installations
 - b. Repair of leaks and registration of all connections.

(9) Ambatale Treatment Plant facilities Project

The objective is to provide the necessary water for distribution in the new areas in Greater Colombo.

Future Water Demand

Future Water Demand defined as the connected demand is calculated from the full development demand multiplied by the % progress from the year assumed for commissioning and special demand added.

The following projects are considered in the water demand projections as special demand.

	Industrial Zone	Present Consumption	Projected Consumption	Supply
1.	Biyagama EPZ	1.2 mgd (5,000 m ³ /d)	3mgd (13,650 m ³ /d)	from church hill reservoir
2.	Katunayaka IPZ	1.3 mgd(5,900 m ³ /d)	2mdg (9,100 m ³ /d)	from deep wells and Negombo water supply

The following tables shows the projected water consumptions (Daily Average)

District	Projected water consumptions daily average (m ³ /d)			
Colombo	1995	2000	2010	2020
	242,137	334,475	381,991	472,764
Gampaha	32,985	81,746	102,874	222,077
Kalutara	109,035	117,453	131,654	244,996
Total	281,283	349,517	499,066	645,698

Source. NWS &DB feasibility study on the Kalu Ganga Water Supply Project for Greater Colombo (Vol. 2 main report)

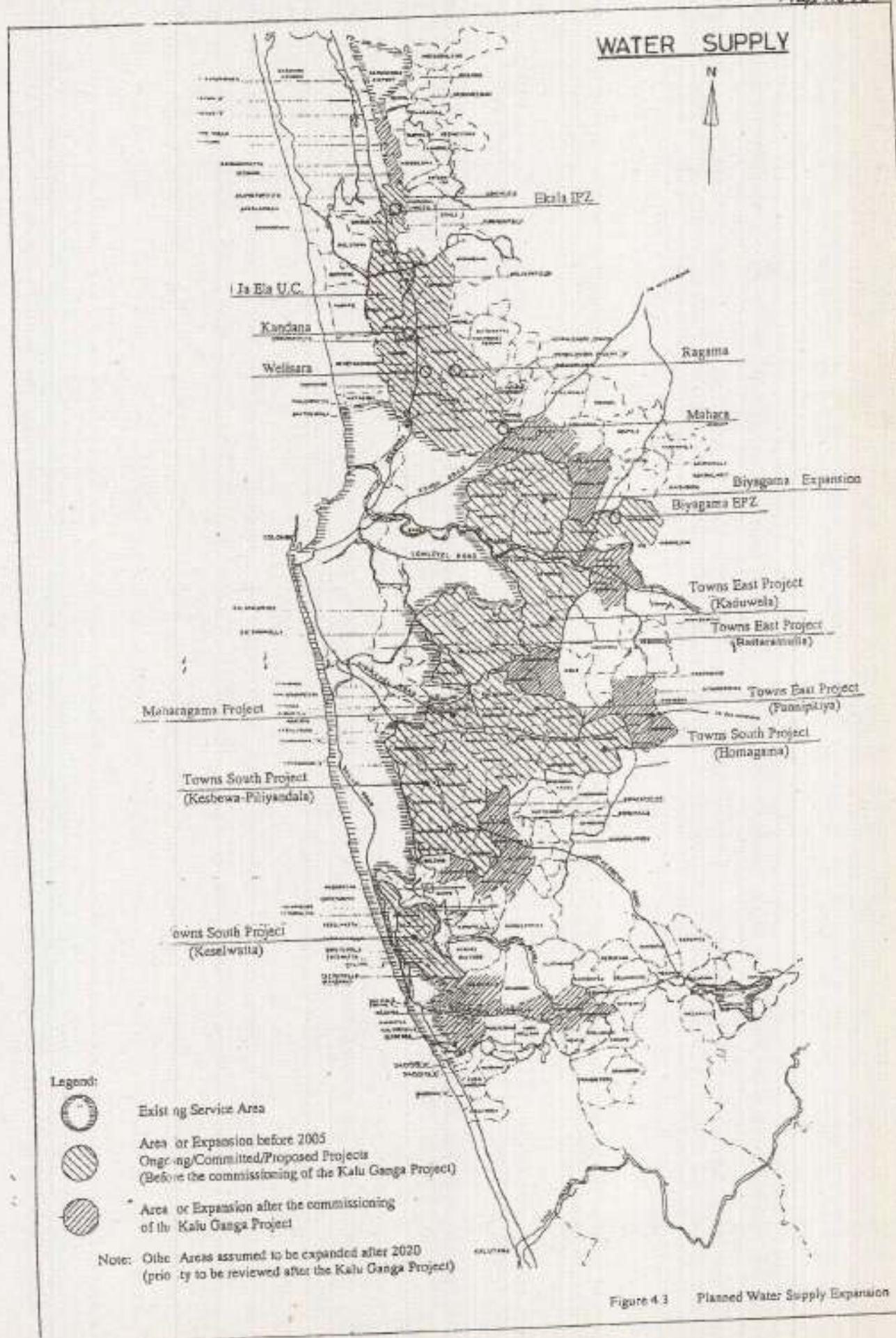


Figure 4.3 Planned Water Supply Expansion

Drainage

The Colombo Metropolitan Region falls within the wet-zone of Sri Lanka receiving rain from both monsoons where the average rainfall is in the order of 2400 mm. The highest monthly rain-fall is approx. 3500 mm. The highest recorded daily rain-falls are in the range of 250-300 mm.

The natural drainage system within CMR consists of the Kelani Ganga & the Kalu Ganga a network of major sub systems. The natural system is supplemented by man-made canals such as the Bolgoda canal, Beira lake, Marine Drive etc.

The following projects are at various stages of implementation for the purpose of improving the drainage condition.

1. **Greater Colombo Canal & Drainage System Rehabilitation Project**
 - a. A proposal to upgrade the drainages & flood control system in Colombo Urban Area, i.e. Colombo M.C., Kolonnawa U.C. & Kotte U.C.
 - b. The executing agency is SLLR & DC.
 - c. The estimated cost is 4,500 million.
2. **National Environment Action Plan 1991**
 - a. Preparation of a Water Resources Master Plan.
 - b. Programme for monitoring the level of pollution in Kelani Ganga.
 - c. Preparation of a programme for the rehabilitation of Colombo Natural Drainage System - focussing on Beira Lake - MEIP.
 - d. Preparation of a National wetlands Master Plan, incorporating the coastal marine & inland fresh wetlands.
3. Beira Lake Restoration Plan - 1992.
4. Master Plan for Muthurajawela Marsh & Negombo Lagoon.
5. Wetlands Conservation Project.
6. Kelani Ganga Flood Protection Study - 1992.
7. National Sand Study 1992 - for the effect of sand mining in major rivers.

Sewerage

The only large conventional sewerage system within the CMR is that serving part of the Colombo M.C. area with main sewer extension to parts of Kolonnawa U.C. & Dehiwela M.C.

Centralized facilities are available in Bujagama, Katunayake & Ekala Industrial Zone.

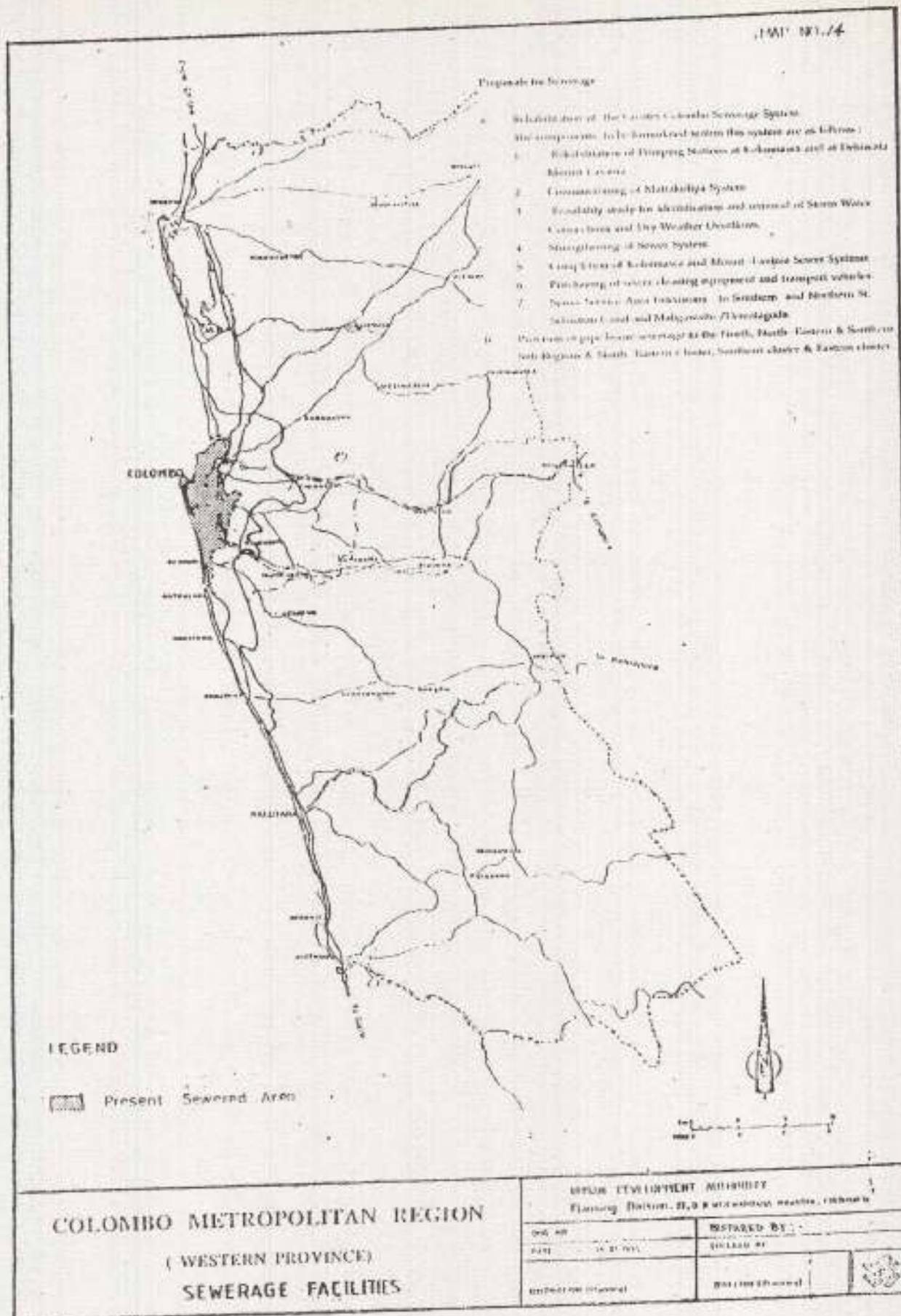
The DMMC & Kolonnawa U.C. network are not functional due to high operational costs.

The treatment plants are inoperative at present & untreated sewer is discharged through a short-fall (80m long) at Mutwal & at Wellawatta into the sea.

Proposals for Sewerage

- a. Rehabilitation of the Greater Colombo Sewerage System.
The components to be formulated within this system are as follows :
 1. Rehabilitation of Pumping Stations at Kolonnawa and at Dehiwala Mount-Lavinia
 2. Commissioning of Mattakuliya System
 3. Feasibility study for identification and removal of Storm Water Connections and Dry Weather Overflows.
 4. Strengthening of Sewer System
 5. Completion of Kolonnawa and Mount -Lavinia Sewer Systems
 6. Purchasing of sewer cleaning equipment and transport vehicles.
 7. Sewer Service Area Extensions to Southern and Northern St. Sebastian Canal and Maligawatte /Dematagoda.
- b. Provison of pipe-borne sewerage to the North, North -Eastern & Southern Sub Regions & North -Eastern Cluster, Southern cluster & Eastern cluster.

1961/1974



TOWN DEVELOPMENT PROPOSALS

- * Shifting of wholesale food stores from Pettah to Orugodawatta
- * Shifting of Manning Market to Prison site in Borella.
- * Shifting of Borella Prison to Handala on reclaimed Muthurajawela land.
- * Construction of a open prison camp at Muthurajawela
- * Construction of a large urban park at Muthurajawela
- * Re-locating the Government press and food stores bakery at Athurugiriya.
- * Shifting of a Administrative Institutions from Colombo to Kotte capital city.

- * Complete the remaining work of Kotte capital city project
- * R-locating of low income housing activities from Mattakkuliya area out side Colombo.

COLOMBO PORT DEVELOPMENT

- * J C T - 4 Berths
- * Shifting of oil pipeline
- * Main channel dredging
- * Expansion of the Port into fisheries harbour area
- * Opening of a Port related industrial zone at Mattakkuliya.

CITY OF COLOMBO DEVELOPMENT PLAN

1. Need for revision

City of Colombo Development Plan prepared in 1982 was approved by the Minister and Published in 1986. Since then this has been the guiding document for all development control and development promotion activities. However due to the rapid economic development and the expansion of Port activities within the City it become necessary to review and revise the City Plan. The high demand for conversion of residential premises to other uses clearly indicate that the city needs a revised plan.

The administrative area of Colombo Municipal Council extends over 3733 hectares (9220 acres) with a population of 615,000 in 1995. City consists of 47 Municipal wards. These wards have been grouped into Planning Units taking into account the main character of the area and the activities therein.

2. National priorities

The Development Plan of Colombo is geared towards the National priorities of Economic Development. Therefore, Colombo City is identified as the main commercial centre of the island due to its strategic location and presently developing as a gateway into the sub-continent for capital as well as goods and services. The objective of the present revision is to implement an integrated plan to make Colombo evolve as the regional centre for international banking, foreign exchange trading and asset management.

3. Physiographic context

Considering the physiographic context, the city has developed in the wider part of the stable "Beaches and Dunes Zone" of the Colombo Metropolitan Region but already encroaches extensively into the adjoining "Coastal Flats and Wetlands Zone" characterised by its large proportion of low-lying areas with soils

unsuitable for building and needing expensive drainage measures wherein reclaimed for development. The remaining belt is a restriction on further eastward expansion of Colombo, while providing natural flood retention areas for no-cost flood control, as well as potential for sorely lacking public open spaces.

4. Importance of the Port

The port of Colombo lies at the confluence of the sea routes. Sri Lanka Ports Authority (SLPA) forecast on demand for container handling capacity in Sri Lanka would be in the region of 1,360,000 TEUS in 1995 and will increase to 1,730,000 TEUS by 2001. 75% of this is expected to be for transshipment. However, if the adequate back up areas are provided in close proximity to present Port this figure could be as high as 3 to 5 million.

Modernisation of Port of Colombo is closely linked to the changing role of the City of Colombo, as an International Centre of finance. A policy decision has been taken to shift the administrative functions to the new capital city of Sri Jayawardenepura Kotte. There is a consensus that the City of Colombo should develop as a financial centre and a Port City. The existing zoning pattern has to be modified to accommodate this trend.

5. Zonning Plan

The new zoning plan has been prepared taking into account the needs of the city up to year 2010. Due consideration was given to the projections made for population, Floor Area and an assessment of existing land use characteristics. Demand for commercial activities such as National & International Financial institutions and port related activities were also considered in depth.

Under the new zoning plan the city will be broadly divided into the following zones.

- a. Port related activity zone
- b. Commercial zone
- c. Mixed Residential Zone
- d. Mixed Commercial Zone
- e. Primary residential zone

6. Density

Existing distribution pattern of non-residential activities show a low distribution in the Mattakkuliya, Kotahena, Grandpass, Dematagoda and Borella while Fort has the highest amount of floor area.

The residential floor area reveals a high distribution pattern in Cinnamon Gardens, Wellawatte and Narahenpita Planning Units while Fort has a very low level of Residential activities.

Taking into consideration the demand for non residential activities and port related activities, the future densities have been worked out for high growth in Identified Areas. Colombo North has been identified specially for port related activities.

According to the plan the floor area of the non-residential activities will increase by seven times by year 2010, while the increase of total floor area is only 10 times.

7. Urban Renewal

The Urban Development Authority (UDA) has identified several areas suitable for Urban Renewal in the City of Colombo, wherein overcrowding and obsolescence dominate the landscape in spite of its prime value of the land. Under this project programme UDA has identified number of Urban Renewal Projects within ten larger catchment areas.

Each of the project areas extend to about 10 acres except in few cases where it is slightly less. The approach adopted is based on new zoning criteria and the need to improve the built environment on a feasible financial basis. However any historical buildings within these renewal projects will be architecturally conserved.

The objectives of this program is to ensure efficient utilisation of the land within the project areas and also to provide suitable areas for port related activities. There by these urban renewal projects will meet the demand for residential and commercial developments within the city. The renewal program also undertakes the development of cleared lands maintaining proper open spaces in the area, while fulfilling social and cultural obligations.

Strategy and Methodology adopted in Urban Renewal Project will be the preparation of a amended set of regulations to encourage high density commercial and residential apartments discouraging the individual housing. Studies have been carried out to calculate the demand for commercial and residential space for year 2010, which will be met through the urban renewal program. Investors will be assisted to select suitable sites for their investments through proper guidelines and procedures.

8. Traffic & Transport

Traffic and Transport problems of the city cannot be dissociated from the traffic issues in the Colombo Metropolitan Area. However, number of proposals have been identified for the city of Colombo for the improvement of traffic and transport situation.

These proposals include the Marine Drive, which will ultimately be connected to New Galle Road at Moratuwa and Duplication Road, extension which will be extended up to Aththidiya Road. It is also proposed to establish a Monorail System & construct a third bridge connecting Mattakkuliya and Bopitiya. It is also proposed to increase the parking requirements for future buildings.

9. Port expansion

The port of Colombo which lies at the confluence of the sea routes has a great potential for development which will increase the Economic development of the country as a whole. Although the Port has been playing a major role in the development of Colombo, future demand for Port related activities was not taken into consideration in the prevailing plan. The Ports Authority has embarked on several expansion projects and Colombo is being recognised as a high potential Port in the South East Asia.

Therefore it is necessary to take immediate action to make maximum use of this opportunity for the Port to embark on an aggressive marketing drive. It is therefore most opportune to figure out proper planning of the Port as well as the adjacent lands.

There is a necessity to create a new zone viz. Port related zone which will accommodate warehousing and other port related activities in close proximity to the Port. This zone will accommodate, light industries, and container Depots. Warehousing, etc. Transhipment facilities will also be provided in this area.

10. Open Space

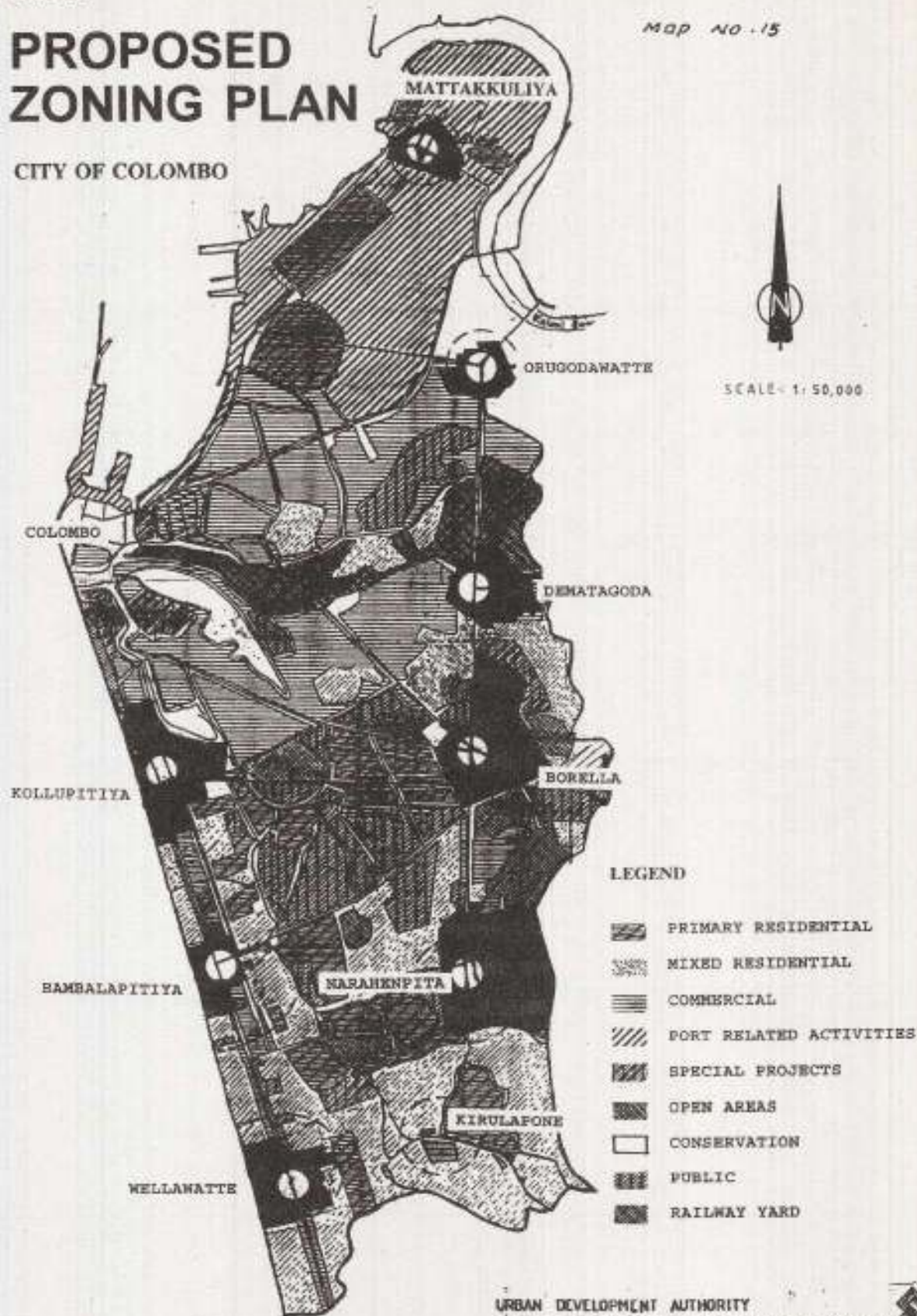
Existing outdoor recreation spaces in Colombo are inadequate for its population even by minimum accepted standards. There are 171.15 Ha of such space in the Colombo Municipal Council (CMC) area, almost half of which belong to private clubs and other organisations. It is therefore, proposed to designate river and canal reservations as linear parks. Full potential of the beach strip will be realised in the new plan. Number of new open spaces will be created under the urban renewal programme. A large part of the Beira Lake could be opened up as linear parks and certain cemeteries could be enhanced as 'rest parks'.

DRAFT

PROPOSED ZONING PLAN

CITY OF COLOMBO

Map No. 15



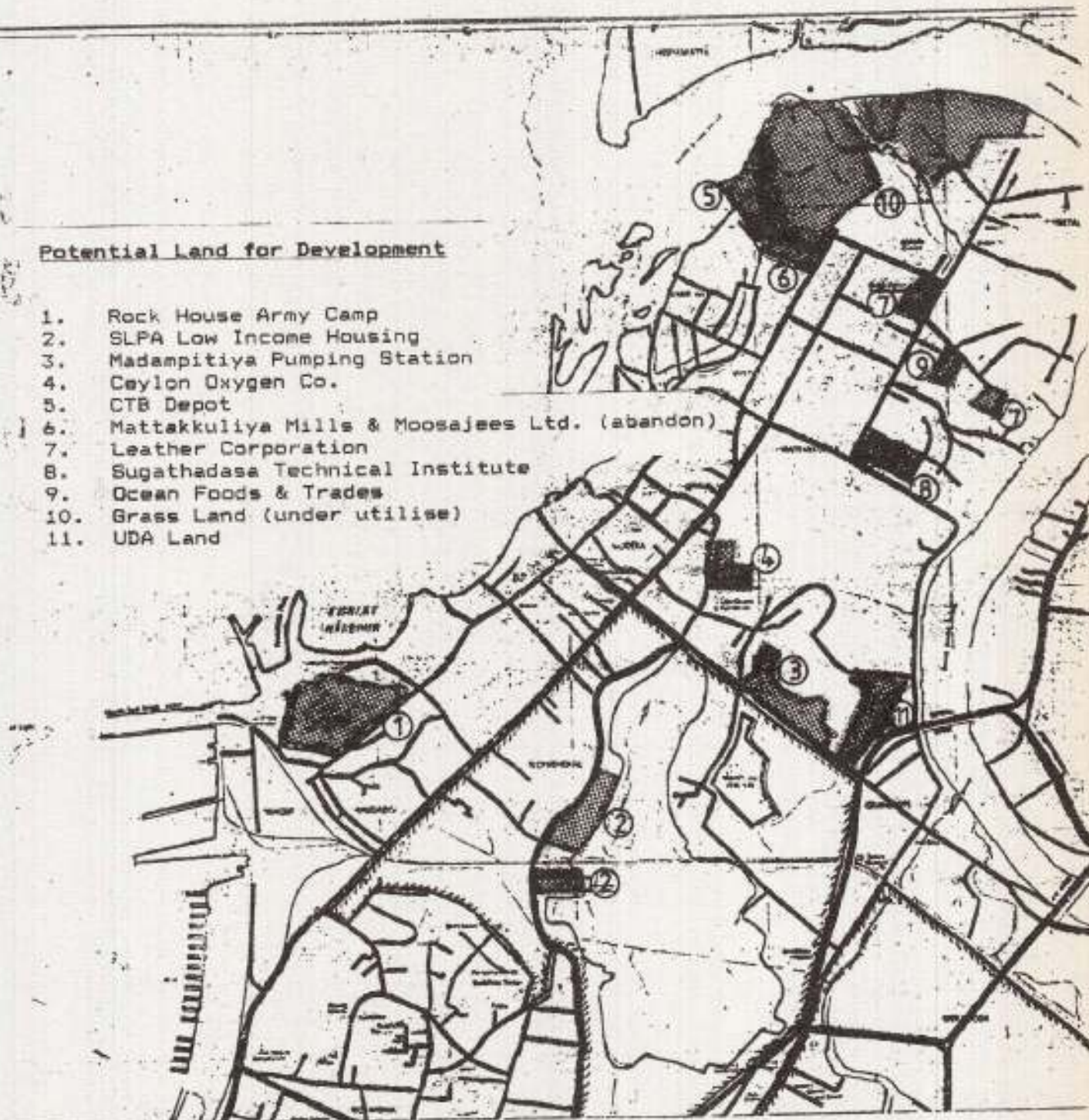
URBAN DEVELOPMENT AUTHORITY
Planning Division, 27, G. R. M. WARDANA MAWATHA, COLOMBO 03



MAP NO. 16

Potential Land for Development

1. Rock House Army Camp
2. SLPA Low Income Housing
3. Madampitiya Pumping Station
4. Ceylon Oxygen Co.
5. CTB Depot
6. Mattakkuliya Mills & Moosajees Ltd. (abandon)
7. Leather Corporation
8. Sugathadasa Technical Institute
9. Ocean Foods & Trades
10. Grass Land (under utilise)
11. UDA Land



Map No. 17

CITY OF COLOMBO URBAN RENEWAL PROJECT

1. LOTUS CENTRE
2. ECHELDON SQUARE
3. MALAY STREET TRIANGLE
4. SLAVE ISLAND DEVELOPMENT
5. GYMOND ROAD
6. DARLEY CENTRE
7. VINAYALANKARA MAHATHA
8. BORELLA JUNCTION
9. PIMMI BORELLA
10. PANCHIKAWATTE TRIANGLE
11. KOLLUPITIYA
12. BAMBALAPITIYA
13. HAYURA PLACE
14. WELLAWATTE JUNCTION
15. WELLAWATTE HILLS SITE
16. NARAHENPITA JUNCTION
17. SALT CORPORATION SITE, NARAHENI
18. EDHONTON ROAD, KIRULAPONE
19. KIRULAPONE MARKET SQUARE
20. KIRULAPONE CANAL BANK SITE

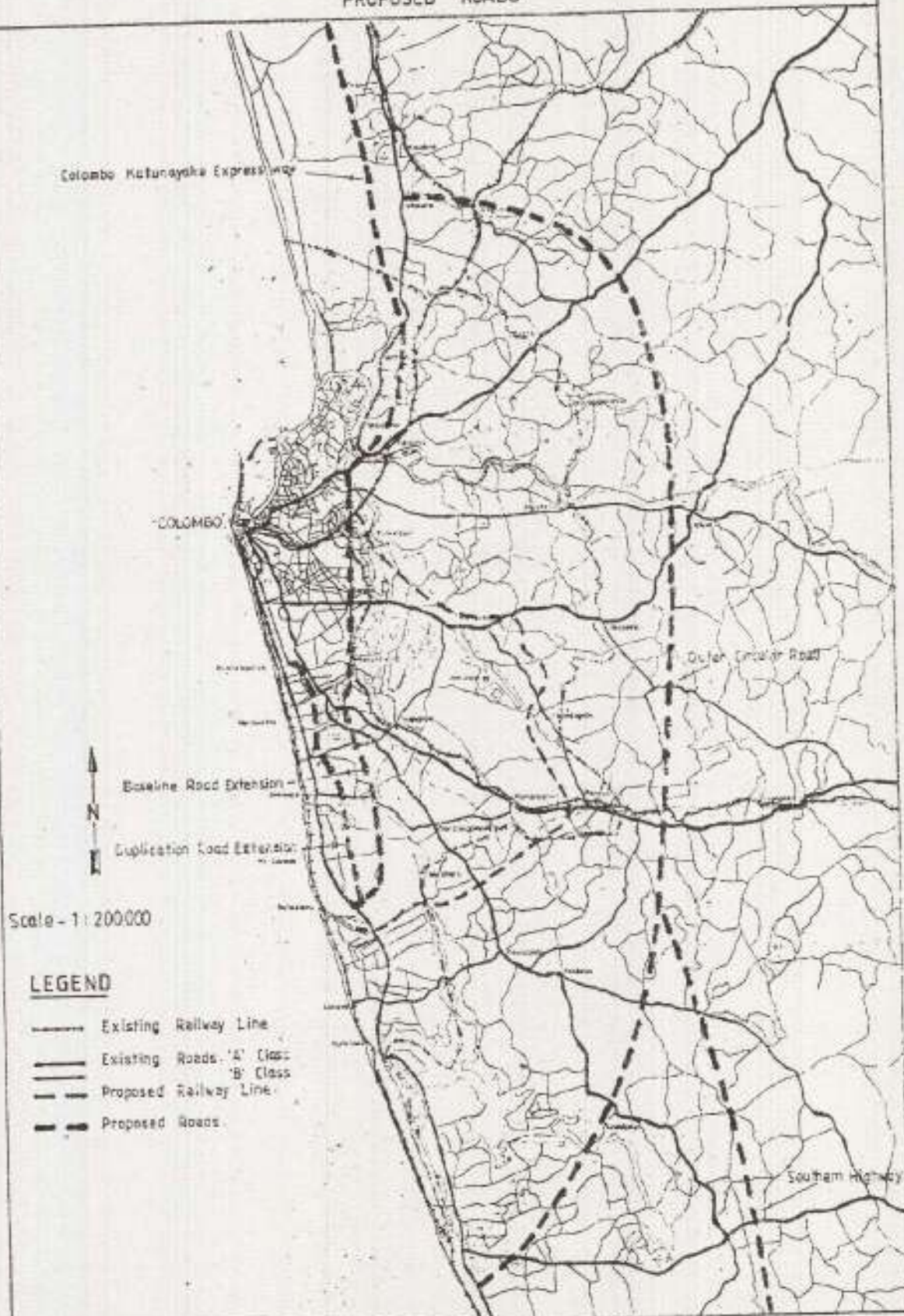


PROPOSED URBAN RENAISSANCE PROJECTS IN THE CITY OF COLOMBO

No	Name of the Renewal Project	Extent of the site A B F	Present use	Proposed use	Detail plan prepared or not	Site identified
1	Lotus Centre	14 0 0	Housing/Commercial	Commercial & Office	No	Site identified
2	Etchelon Square	12 0 0	Commercial/Office	Commercial & Office	Yes	Weekly Completion
3	Malay Street Triangle	25 0 0	Housing commercial & Other	Commercial & Office	No	Site identified
4	Slave Island Development	25 0 0	do	Mixed Development	No	do
5	Synod Road	12 0 0	do	Mixed	No	do
6	Barley Centre Maradana	15 0 0	do	Mixed	No	do
7	Vijayalakshmi Mawatha	22 0 0	do	Mixed	No	do
8	Boralla Junction	16 0 0	do	Mixed	No	do
9	Punchi Boralla	20 0 0	do	Mixed	No	do
10	Pachikawatte Triangle	18 0 0	do	Mixed	No	do
11	Kollupitiya	38 0 0	do	Mixed	Yes	Details plan prepared
12	Bambalapitiya	5 0 0	do	Mixed	No	Site identified
13	Mayura Place	3 0 0	do	Mixed	No	do
14	Wellawatta Junction	10 0 0	do	Mixed	No	do
15	Wellawatta Mills Site	16 0 0	do	Mixed	No	do
16	Harabepita Junction	16 0 0	do	Mixed	No	do
17	Salt Corporation Site Harabepita	0 0 33	do	Mixed	No	do
18	Edmonton Rd, Kirilapona	7 0 0	do	Mixed	No	do
19	Kirilapona Market Square	15 0 0	do	Mixed	No	do
20	Kirilapona Canal Bank Site	26 0 0	do	Mixed	No	do

COLOMBO URBAN AREA PROPOSED ROADS

Map No: 18

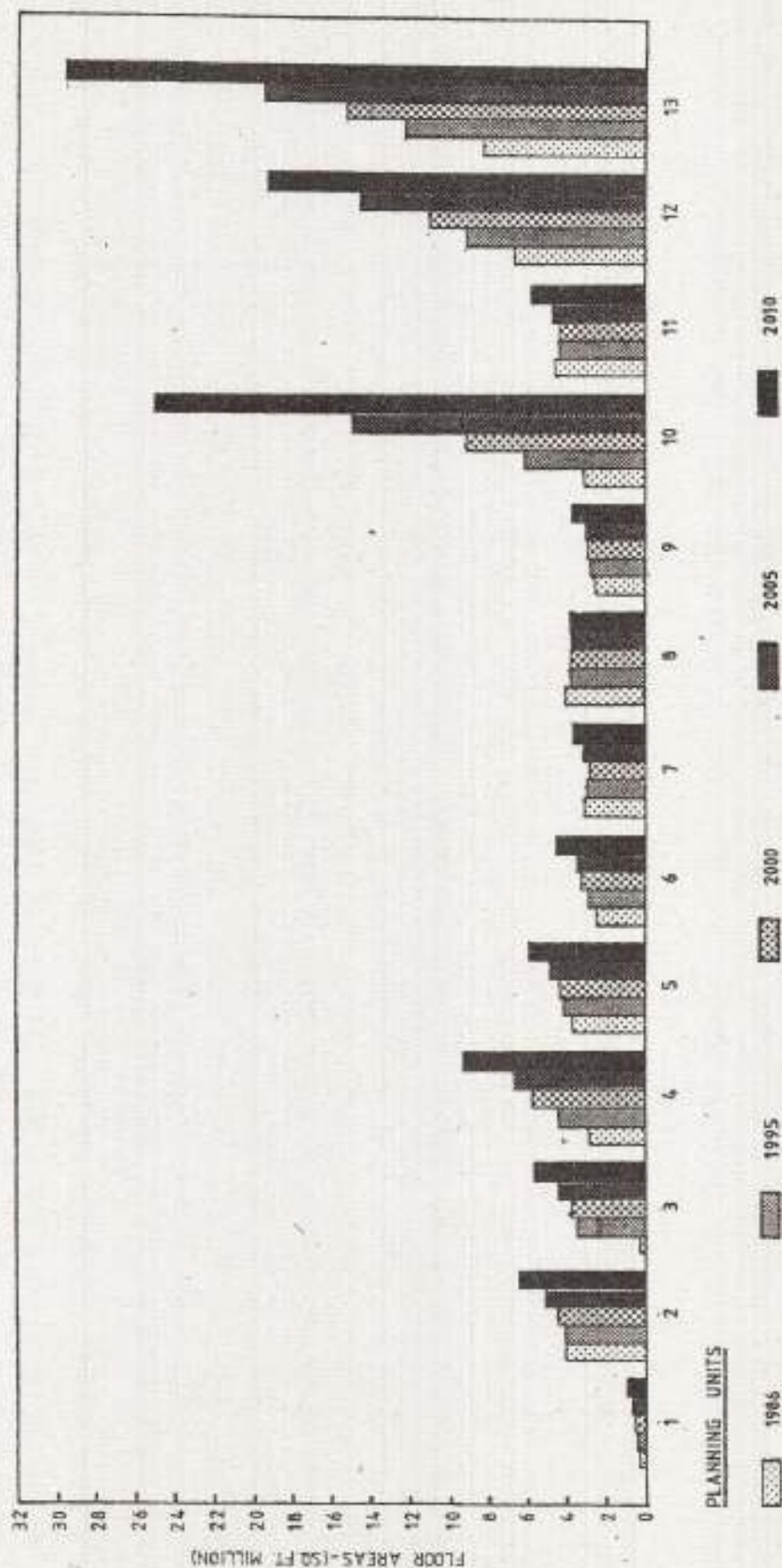


URBAN DEVELOPMENT AUTHORITY
27, D.R. Wijewardene Mawatha Colombo 10

Org. No.: S/5/70/C MR/28/95
Date: 13.11.95

EXISTING AND ESTIMATED FLOOR AREAS

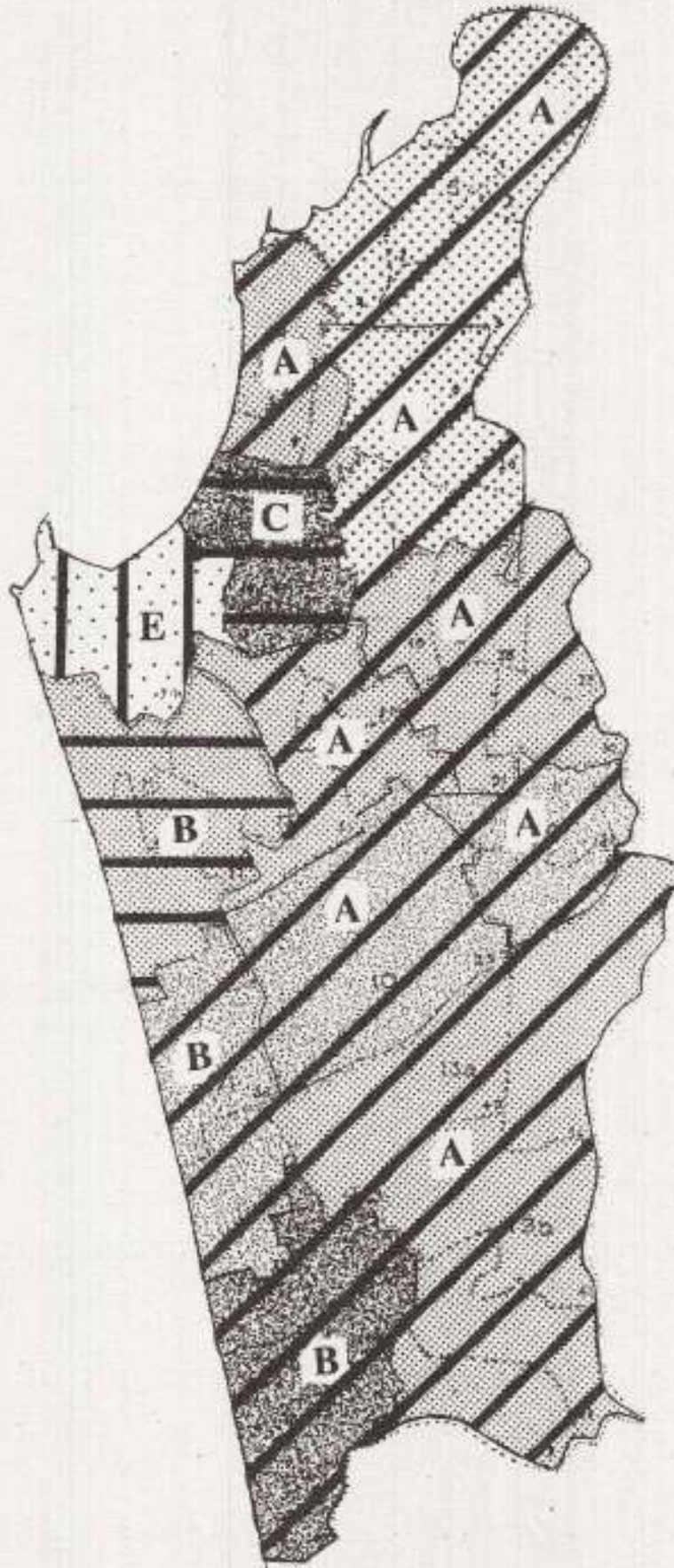
C.M.C. AREA - 1986 TO 2010 - RES



FLOOR AREA DENSITY - C.M.C - 1995
(Per Hectare)

37 g

Map No 20



LEGEND

Residential

	2400 - 7500	Sq. m.
	7500 - 12600	" "
	12600 - 17700	" "
	17700 - 22800	" "
	22800 - 27900	" "

Non - Residential

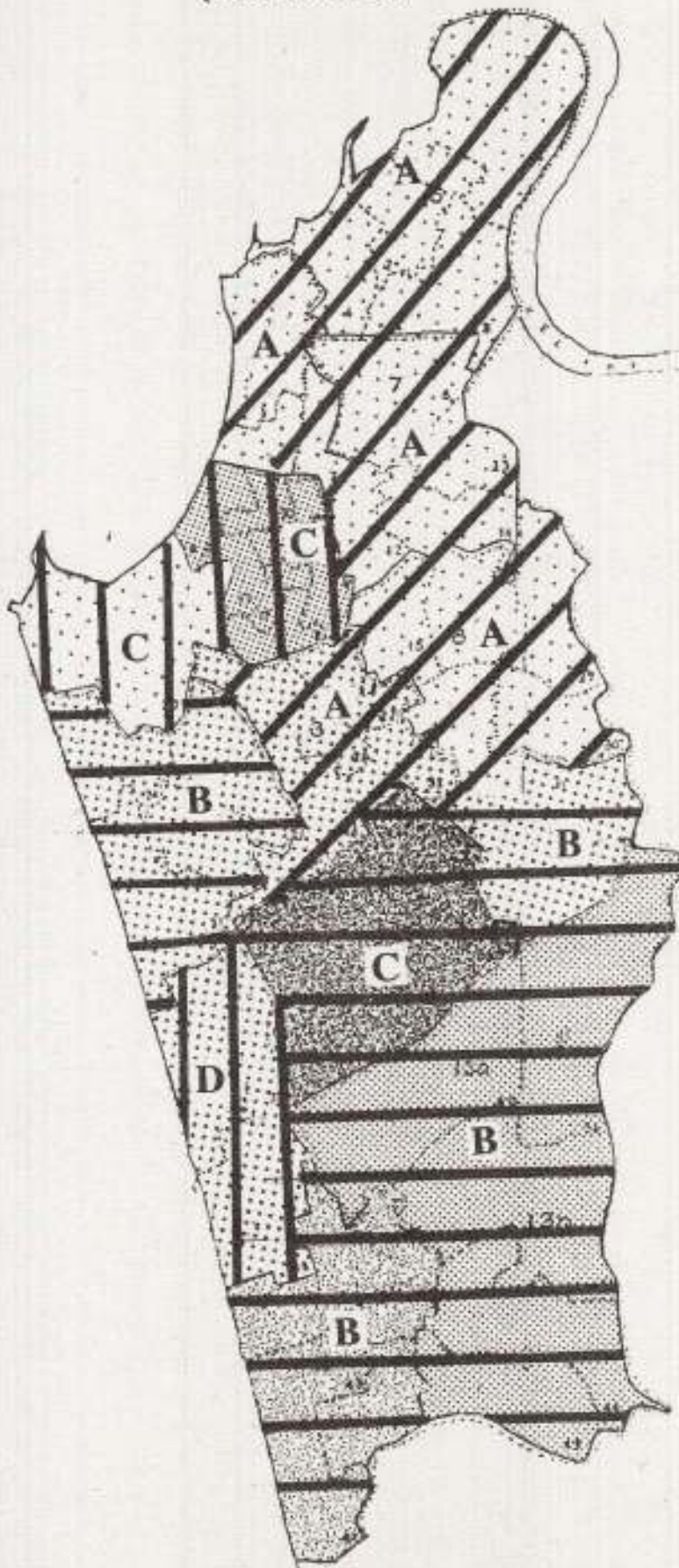
	3900 - 18800	Sq. m.
	18800 - 33700	" "
	63500 - 78400	" "

Total

A	11100 - 21150	Sq. m.
B	21150 - 31200	" "
C	31200 - 41250	" "
D	41250 - 51300	" "
E	51300 - 61350	" "

ESTIMATED FLOOR AREA DENSITY - C.M.C - 2010 (Per Hectare)

Map No : 21



LEGEND

Residential

	5500 - 18900	Sq. m.
	18900 - 32300	" "
	32300 - 45700	" "
	45700 - 59100	" "
	59100 - 72500	" "

Non-Residential

	7400 - 46675	Sq. m.
	46675 - 85950	" "
	164500 - 203785	" "

Total

A	23100 - 64300	Sq. m.
B	64300 - 105500	" "
C	105500 - 146700	" "
D	146700 - 187900	" "
E	187900 - 229100	" "

Already designated Kolonnawa North and Heen Ela Marsh and the Colombo Flood Retention Areas immediately adjoining the eastern boundary of Colombo could serve as 'Nature Parks' for the City. Action will be taken to reserve a chain of low-lying areas along the eastern periphery of the city as parks arrest the filling of low lying lands in and around Colombo.

11. Future Development

Studies carried out for the Colombo Metropolitan Region clearly indicate that Colombo is the most important urban centre in the Country. A new approach is needed to the future development of Colombo. The development plan is being prepared to accommodate these concerns and to promote the Colombo city as a financial and commercial centre and a port city. In future the emphasis will be on promoting development and investment as against the development control.

Existing & Estimated Floor Area -CMC (1986 - 2010)
Non- residential (Sq.ft - Million)

	Planning Unit	1986 N.R.	1995 N.R.	2000 N.R.	2005 N.R.	2010 N.R.
1	Fort	10.67	13.95	16.19	17.25	18.64
2	Kochchikade	2.07	4.14	6.1	8.28	11.93
3	Maradana	3.04	3.25	3.39	3.35	3.59
4	Kollupitiya	4.32	6.25	7.68	9.63	12.61
5	Mattakkuliya	0.75	1.49	1.79	2.2	2.82
6	Kotahena	0.89	1.15	1.37	1.66	2.1
7	Grandpass	1.96	2.88	3.75	5.1	7.13
8	Dematagoda	0.74	1.7	2.7	3.56	4.95
9	Borella	0.54	1.37	2.32	4.17	8.35
10	Cinnamon Gardens	0.64	2.38	5.15	8.42	10.93
11	Bambalapitiya	0.72	3.02	6.95	16.16	28.5
12	Wellawatta	0.96	1.61	2.14	2.93	14.26
13	Narahenpita/Kirullapon	1.14	3.29	5.93	11.28	14.34
	Total	28.44	46.48	65.46	96.71	130.15

Source: Existing Floor Area - Colombo Dev. Plan - 1986

Note: N./R = Non-Residential

(filename : NONRES)

Existing & Estimated Floor Area - CMC (1986 - 2010)
Non- residential (Sq.ft - Million)

	Planning Unit	1986 N.R.	1995 N.R.	2000 N.R.	2005 N.R.	2010 N.R.
1	Fort	10.67	13.95	16.19	17.25	18.64
2	Kochchikade	2.07	4.14	6.1	8.28	11.93
3	Maradana	3.04	3.25	3.39	3.35	3.59
4	Kollupitiya	4.32	6.25	7.68	9.63	12.61
5	Mattakkuliya	0.75	1.49	1.79	2.2	2.82
6	Kotahena	0.89	1.15	1.37	1.66	2.1
7	Grandpass	1.96	2.88	3.75	5.1	7.13
8	Dematagoda	0.74	1.7	2.7	3.56	4.95
9	Borella	0.54	1.37	2.32	4.17	8.35
10	Cinnamon Gardens	0.64	2.38	5.15	8.42	10.93
11	Bambalapitiya	0.72	3.02	6.95	16.16	28.5
12	Wellawatta	0.96	1.61	2.14	2.93	14.26
13	Narahenpita/Kirullapon	1.14	3.29	5.93	11.28	14.34
	Total	28.44	46.48	65.46	96.71	130.15

Source: Existing Floor Area - Colombo Dev. Plan - 1986

Note: N./R = Non-Residential

(filename : NONRES)

* Existing & Estimated Floor Area -CMC (1986 - 2010)
Residential (Sqft - million)

		1986	1995	2000	2005	2010
	Planning Unit	R	R	R	R	R
1	Fort	0.31	0.43	0.52	0.69	0.99
2	Kochchikade	4.23	4.27	4.47	5.14	6.48
3	Maradana	0.29	3.45	3.74	4.44	5.78
4	Kollupitiya	2.99	4.55	5.73	6.66	9.25
5	Mattakkuliya	3.64	4.13	4.42	4.94	5.97
6	Kotahena	2.47	2.97	3.28	3.69	4.52
7	Grandpass	3.08	2.98	2.93	3.17	3.74
8	Dematagoda	4.17	3.87	3.83	3.71	3.91
9	Borella	2.62	2.87	3.03	3.06	3.87
10	Cinnamon Gardens	3.18	6.24	9.08	14.93	25.12
11	Bambalapitiya	4.62	4.53	4.54	4.93	5.93
12	Wellawatta	6.73	9.3	11.14	14.68	19.33
13	Narahrenpita/Kirullap	8.29	12.33	15.37	19.58	29.46
	Total	46.64	61.96	72.08	89.62	124.35

Source: Existing Floor Area - Colombo Dev. Plan - 1986
Assesment Dept. C.M.C. - 1995

Note: R = Residential
(filename : RES)

GROSS DENSITY IN C.M.C AREA

	1986			1995			2010					
	Fl.Area Sq.ft.Mi	Fl.Area Sq.m	Ext.of Density P.U. ha.	Density Sq.m/ha	Fl.Area Sq.ft.Mi	Fl.Area Sq.m	Ext.of Density P.U. ha.	Density Sq.m/ha	Fl.Area Sq.ft.Mi	Fl.Area Sq.m	Ext.of Density P.U. ha.	Density Sq.m/ha
1 Fort	10.98	1026168	179	5733	14.38	1343925	179	7508	19.63	1834579	179	10249
2 Kochchikade	6.3	588785	159	3703	8.41	785981	159	4943	18.41	1720561	159	10821
3 Maradana	3.33	311215	214	1454	6.7	626168	214	2926	9.37	875701	214	4092
4 Kollupitiya	7.31	683178	291	2348	10.8	1009346	291	3469	21.86	2042990	291	7021
5 Mattakkuliya	4.39	410280	380	1080	5.62	525234	380	1382	8.79	821495	380	2162
6 Kotahena	3.36	314019	170	1847	4.12	385047	170	2265	6.62	618692	170	3639
7 Grandpass	5.04	471028	248	1899	5.86	547664	248	2208	10.87	1015888	248	4096
8 Dematagoda	4.91	458878	285	1610	5.57	520561	285	1827	8.86	520561	285	1827
9 Borella	3.16	295327	156	1893	4.24	396262	156	2540	12.22	1142056	156	7321
10 Cinn.Gardens	3.82	357009	343	1041	8.62	8056507	343	2349	53.54	5003738	343	14588
11 Bambalapitiya	5.34	499065	238	2097	7.59	709346	238	2980	54.4	5083981	238	21367
12 Wellawatte	7.69	718692	335	2145	10.91	1019626	335	3044	23.59	2204673	335	6581
13 Narahen/Kirullapona	9.43	881308	735	1199	15.62	1459813	735	1986	53.8	5028037	735	6841
TOTAL	75.06	7014952			108.44	17385480			301.9	27912952		

(filename : GROSS)

Existing & Estimated Floor Area -CMC (1986 - 2010)
(Sq.ft - Million)

	Planning Unit	1986			1995			2000			2005			2010		
		R	N.R.	T	R	N.R.	T	R	N.R.	T	R	N.R.	T	R	N.R.	T
1	Fort	0.31	10.67	10.98	0.43	13.95	14.38	0.52	16.19	16.71	0.69	17.25	17.94	0.99	18.64	19.63
2	Kochchikade	4.23	2.07	6.3	4.27	4.14	8.41	4.47	6.1	10.57	5.14	8.28	13.42	6.48	11.93	18.41
3	Maradana	0.29	3.04	3.33	3.45	3.25	6.7	3.74	3.39	7.13	4.44	3.55	7.99	5.78	3.59	9.37
4	Kollupitiya	2.99	4.32	7.31	4.55	6.25	10.8	5.73	7.68	13.41	6.66	9.63	16.29	9.25	12.61	21.86
5	Mattakkuliya	3.64	0.75	4.39	4.13	1.49	5.62	4.42	1.79	6.21	4.94	2.2	7.14	5.97	2.82	8.79
6	Kotahena	2.47	0.89	3.36	2.97	1.15	4.12	3.28	1.37	4.65	3.69	1.66	5.35	4.52	2.1	6.62
7	Grandpass	3.08	1.96	5.04	2.98	2.88	5.86	2.93	3.75	6.68	3.17	5.1	8.27	3.74	7.13	10.87
8	Dematagoda	4.17	0.74	4.91	3.87	1.7	5.57	3.83	2.7	6.53	3.71	3.56	7.27	3.91	4.95	8.86
9	Borella	2.62	0.54	3.16	2.87	1.37	4.24	3.03	2.32	5.35	3.06	4.17	7.23	3.87	8.35	12.22
10	Cinnamon Gardens	3.18	0.64	3.82	6.24	2.38	8.62	9.08	5.15	14.23	14.93	10.93	25.86	25.12	28.42	53.54
11	Bambalapitiya	4.62	0.72	5.34	4.57	3.02	7.59	4.54	6.95	11.49	4.93	16.16	21.09	5.93	48.5	54.43
12	Wellawatta	6.73	0.96	7.69	9.3	1.61	10.91	11.14	2.14	13.28	14.68	2.94	17.62	19.33	4.26	23.59
13	Narahren/Kirulapone	8.29	1.14	9.43	12.33	3.29	15.62	15.37	5.93	21.3	19.58	11.28	30.86	29.46	24.34	53.8
Total		46.6	28.44	75.06	61.96	46.48	108.4	72.08	65.46	137.5	189.62	96.71	186.3	1124.35	177.6	301.99

Source: Existing Floor Area - Colombo Dev.Plan - 1986
Assessment Dept. C.M.C. - 1995

Note: R = Residential, N./R = Non-Residential, T= Total.

(filename : ESTFL)

Defence

The Sri Lankan forces comprising the Army, Navy and Air force have their headquarters located within the city of Colombo. It is strongly felt that these establishments which are occupying large extents of land should be re-located the outside the city limits allowing the use of such land for more viable commercial activities.

The present locations of the Army, Navy and Air Force Headquarters are depicted on a Map. The suitable alternative sites identified for re-location are as follows:

Alternative sites.

Site I

Location	-	Hokandara South 10 miles away from Colombo
Extent	-	30 Acres
Present use	-	Coconut land called "Wellangiriya Estate"
Ownership	-	Private

Site II

Location	-	Oruwala 13.5 miles from Colombo 2.5 miles from Panagoda Army Camp.
Extent	-	75 Acres
Preset Use	-	Coconut and Rubber lands called "Galwarusawatte"
Ownership	-	Private

Site III

Location	-	Panagoda East - adjoining Lanka Ashlik Leyland Ltd, site, 6.5 miles from Colombo.
Extent	-	60 Acres
Present Use	-	Coconut and bare land.
Ownership	-	Privately owned by Lanka Ashok Leyland Ltd.

Site IV

- Location - Pitipana 18.5 miles away from Colombo and 2 miles from Panagoda Army Camp.
- Extent - 100 Acres
- Present Use - Coconut land, partly used as farm.
- Ownership - Janawasama

Site V

- Location - Moragahahena 20 miles from Colombo 4.5 miles from Panagoda Army Camp.
- Extent - 258 Acres
- Present Use - Coconut, Rubber bare lands called "Yahalakelle Estate"
- Ownership - Privately owned by the Yahalakelle Estate Co. Ltd.

Site VI

- Location - Diyagame opposite Radio transmitting station. 16 miles from Colombo and 3.5 miles from Panagoda Army Camp.
- Extent - 20 Acres
- Present Use - Bare Land
- Ownership - Sri Lanka Broad Casting Corporation (to be verified)

LIST OF PROJECTS(TENTATIVE WITH COST ESTIMATES) FOR THE C.M.R

1. PROPOSED ROAD NET WORK (RDA)

Item	Name of highway	Length Km	Row M	Type of facility	Cost of Construction (including Land Acquisition) Per Km Rs. M Us. M Rs. M. Us. M	Total
1	Outer Circular Highway (OCH) to Colombo	38	32-40	4 Lane with provision for widening to 6 lane Grade separated Intersection	100 2.0 3800 76.0	
2.	Colombo -Katunayake Expressway (CKE) New Trace	30	32-40	Same as above	100 2.0 3000 60.0	
3.	Highway to Ratnapura from OCH	57	25-40	2 Lane with provision for widening to 4 lane later At grade intersections with cycle lanes walkways.	50 1.0 2850.0 57.0	
4.	Southern Highway to Galle & Matara from O.C.H.	130	60-65	4 lane with provision for widening to 6 lanes later. At grade intersections. with Cycle lanes, walkways & green belt.	75 1.5 9750.0 195.0	
5.	Highways to Trincomalee & Anuradhapura	70 40	60-65	Same as above	70 1.4 7700 154.0	

(a) New Section to Padeniya
(b) New Section to Padeniya
off Katunayake Highway.

ROAD DEVELOPMENT PLAN -RDA

Item	Name of Project	Funding Agency	Estimated Project Cost (Rs.M)	Duration
6	ADB (III) Road/Bridge Rehabilitation Project (a) Katunayaka-Bangadeniya 63.58 Km (b) Ja-ela Kotadeniyawa 30.50Km. (c) Narammala-giriulla 16.01 Km	ADB		4 years (1994-1997)
7	Repair to New Kelani-Bridge	CF	170	
8	Widening & Improving Kotte-Bope Road Widening Battaramulla to Matale	CF	55.2	
9	" Malabe -Kaduwela Road		87.6	1993-1995
10	" Waskaduwa -Bandaragama Road	CF	262	1992-1995
11	" Battaramulla -Pannipitiya Road	CF	64	1993-1995

ROAD PROJECTS IN COLOMBO (CMC) AREA

Name of Project	Type	Description with (Length)	Method of Funding	Cost Rs	Programmes Commence	Implementing Organization	Date of completion
Road Projects							
a) 1st Division Maradana (including part of St. Sebastian)	Rehabilitation	0.76 Km.	Local - C.M.C	28,000,000	Work already started	C.M.C	1994 - Dec.
b) Borella Maradana Road	- do -	1.83 Km	Local - Min	80,000,000	- do -	RDA (Design)	1994 - Dec
General Roads							
1) Justice Akbar Mawatha	- do -	0.50 Km.	Local C.M.C	5,000,000	1994 - Jan	C.M.C	1994 - Dec
2) Macan Macar Mawatha	- do -	0.30 Km	Local C.M.C	2,800,000	1994 - Jan	C.M.C	1994 - Dec
3) 3rd Cross Street	- do -	0.216 Km	Local C.M.C	2,000,000	1994 - Jan	C.M.C	1994 - Dec
4) 4th Cross Street	- do -	0.402 Km	Local C.M.C	3,800,000	1994 - Jan	C.M.C	1994 - Dec
5) Grandpass Road	- do -	0.900 Km	Local C.M.C	9,500,000	1994 - Jan	C.M.C	1994 - Dec
6) Isipathana Mawatha	- do -	0.700 Km	Local C.M.C	10,000,000	1994 - Jan	C.M.C	1994 - Dec
7) Wijaya Kumazathunga Mawatha	- do -	1.85 Km	Local C.M.C	6,000,000	1994 - Jan	C.M.C	1994 - Dec
8) Have-lock Road	- do -	1.05 Km	Local C.M.C	6,600,000	1994 - Jan	C.M.C	1994 - Dec
9) Bullers Road (Thammulla to Jawatta Road)	- do -	1.26 Km	Local C.M.C	9,000,000	1994 - Jan	C.M.C	1994 - Dec
Road Extension							
1) Duplication Road	- do -	0.8 Km	Local Ministry of Transport & Highways	2.67 Million	not decided	R.D.A. C.M.C	

2

Name of Project	Type	Description with (Length)	Method of Funding	Cost Rs	Programmes Commence	Implementing Organization	Date of Completion
<u>New Construction</u>							
1) Marine Drive	New Cons - traction	2.8 Km of 30' width	Local	3.5 Million	not decided	C.M.C R.D.A	
<u>Project Funded by Foreign Organization</u>							
1) Olcott Mawatha (including part of Sri Sanjaya Mawatha)	Rehabilitation	1) From Lotus Road Junction to Parachikawatta Rd, roundabout. 2) Foot bridge in front of Fort will be demolished and new overhead foot bridge connecting the pedestrian over way of the railway station will be constructed.	World Bank		Work already Started	C.M.C W/S Atkins International	End of 1998
2) Maradana Junction Improvement	Improvement	1) Gyatory Traffic movement system coordinated with the traffic signals	World Bank	U.S.D 12.5 million to these two projects	1994 April	C.M.C W/S Atkins International	1995 September

Name of Project	Type	Description with (length)	Method of Funding	Cost	Programmes Commence	Implementing Organization	Date of Completion
3) Baseline Road Improvement Project	Improvement	2) New bridge connecting & Panchikawatta road Junction & 1st division Maradana will be constructed over the railway lines.	World Bank				
	Improvement	From Orugodawatta roundabout upto high level road.	Japanese Govt.		1995 - Jan	R.D.A	

**PROPOSED RAIL NETWORK
RAILWAY PROJECT PROPOSALS (WESTERN PROVINCE)**

Name of Project	Type & Description	Method of Funding (Local or Foreign)	Cost Rs	Implementing Organization
1) Rail access to Biyagama Investment Production Zone.	The construction of a Rail track from Kelaniya to Biyagama, distance of 14.2 kilometers for passenger and freight - transport as an important infrastructure development in the BEPZ area.	Source not identified	Rs. 392 M. Preliminary Estimate	SLR
2) Broadguaging of K V Line.	Under the project the Kelani Valley rail track will be widened to a gauge of 1676 mm. in 3 stages.	Funds	Rs. 275 Mill	SLR
	1) Colombo to Nugegoda - Completed in 1991 2) Nugegoda to Homagama - Completed in 1992 3) Homagama to Avissawella to be in 1994	Rs. 50 M		
3) Construction of 3rd line from Ragama to Colombo.	The laying of the permanent way between Maradana - Ragama.			
4) Electrification of sub urban Railway Network.	This project envisages the electrification of the sub-urban railway network defined by the sections. Colombo - Polgahawela Colombo - Kalutara South Colombo - Negombo (including Airport branch line)	Foreign assistance needed Director, External Resources to identify to foreign funds.	Rs.	SLR
5) Mass Rapid Transit (MRT) System	Circuitous / Circular path from Dematagoda to Ratmalana via Batarumulla.	-	RS. Mil, 3500/=	UDA / SLR

PROPOSED RAIL NET WORK
RAILWAY PROJECT PROPOSALS (WESTERN PROVINCE)

Name of Project	Type & Description	Method of Funding (Local or Foreign)	Cost Rs	Implementing Organization
6) Establishment of Railway Container Yard at Katunayake	The container movement from and to the port and the K.E.P.Z. would be smooth and uninterrupted.	Local funds with participation of BOI and private sector.	Rs. 14 M.	SLR
7) Rehabilitation of Railway Workshops in Ratmalana.	Complete rehabilitation of the Ratmalana Chief Maradaya Engineer Workshop.	OECE Loan Japan 3089 M	Total Cost Rs. 1382 Local Rs. 1060	
8) Establishment of Railway container facilities at Avisawella.	To handle traffic generated from attarified Industrial Estates also for all rail road front requirements of NECD.	-	To be determined	SLR
9) Freight Liner Stations.	Freight Liner Station at Kelaniya Ragama, Orugodawatta & Ratmalana.	-	To be determined	SLR
10) Replacement of two bridges at Kalutara and Panadura.	The complete replacement of the steel superstructure of the 8, 150 ft. spans of two bridges at Kalutara.	German Loan 14.26 M (EDM)	Rs. 546 M.	
11) Rehabilitation of Nos. 10 to class locomotives	Replacement of 10-60 ft. spans of the bridge at Panadura. Complete rehabilitation of Nos. 10 locomotive not in service at present.	OECE - Loans Japan Y 3093 M.	Total Rs. 1074 M Local - 823	
12) Rehabilitation of Rail truck.	A comprehensive project for up grading the truck standard has been drawn up and this is now in the process of being implemented Truck improvement - The sector from Colombo - Bambalapitiya Truck rehabilitation Beruwala, Bambalapitiya to Galle via Panadura.	OECE of Japan Loan	Rs. 1672 M.	SLR

PROPOSED ELECTRICITY NETWORK
Grid Substation Development in Western Province
1994 - 2003 Ceylon Electricity Board

Grid Substation	Year of Commission 1994 - 1996 1997 - 1999 2000 - 2003	Funds availability	Nature of Development New Improvement	Other Matters
Saluwa	End 94	under TSADP		Replace existing Padukka & Avissawella grid substations
Kalonnawa	End 94	- do -		Additional transformers
Fort	- do -	- do -		
Slave island	- do -	- do -		
Panadura	- do -	- do -		
Ratmalana	- do -	- do -		Additional transformers
Pannipitiya	- do -	- do -		- do -
Biyaigama	- do -	- do -		Small Scale Improvement
Bulawatta	1995	- do -		
Kurupone	end 1997	Not available		
Veyangoda Sri Jayewardanapura	end 1998	- do - - do -		
Colombo new	end 2000 end 2003	- do -		
Pannipitiya	end 2003	- do -		

**GRID SUBSTATION DEVELOPMENT IN
WESTERN PROVINCE 1994 -2003**

Year of Commission	Grid Substation	Capacity		New 33 kv Bays	Funds Availability
		From (MVA)	To (MVA)		
END 1994	AVISSAWELLA	2x6 + 4x3 (66 kv)	2 x30 (132 kv)	06	under TSADP
END 1994	KOLONNAWA	1x30 (66 kv)	2x 30(132 kv)	06	under TSADP
END 1994	PANADURA	---	2 x 30 (132 kv)	06	under TSADP
END 1994	RATMALANA	2x 30	3x30	03	under PDPT
END 1994	PANNIPITIYA	2 x 30	3x30	02	under PDTP
END 1994	BIYAGAMA	---	---	02	under TSADP
1995	BOLAWATTA	---	---	03	---
END 1997	KIRULAPONE	---	2 x 60	04	not available
END 1998	VEYANGODA	---	3 x 30	09	not available
END 2000	SRI J'PURA	---	2 x 60	06	not available
END 2002	COLOMBO (NEW)	---	2 x 60	06	not available
END 2003	PANNIPITIYA	---	2 x 250 (220/132/33)	02	not available

PROPOSED TELECOMMUNICATION NETWORK

Sri Lanka Telecom - Proposed World Bank Project (WBIDA) Switching

Exchange area	Subscriber Capacities		Nature of the Development			Funding Authority	Year of Commission 1994 - 1996	Cost
	RSU	Initial	Final					
MSU								
Katunayaka						World Bank	1995	
	Ja-ela	2000	15,000	Restructured				
	Minuwangoda	3000	10,000	New				
	Raddolugama	800	2,000	New				
		1000	2,000	New				
Total Katunayaka		9800	29,000					
Wattala								
	Ragama	8000	20,000	New				
		2800	5,000	Restructured				
Total Wattala		10,800	25,000					
Kelaniya								
	Kadawata	5000	15,000	Restructured				
		2500	7,500	- do -				
Total Kelaniya		7,500	22,500					
Kollupitiya								
		8500	20,000	New				
Total Greater Colombo		36,600	96,000					
Panadura								
	Bandaragana	6500	16,500	Existing				
	Kelhelwatta	2000	2,000	New				
	Wackharwa	300	1,000	New				
		1500	2,000	New				
Total Panadura		10,300	21,500					

Sri Lanka Telecom
Supplies Credit Project (To be completed end of 1997)

M.S.U = Main Switching Unit
R.S.U = Remote Subscriber Unit

Telephone Exchange Area		Switching Capacity	Total No of Working lines	150K Proposed Capacity	150K Initials Expansion	Revised Capacity	Nature of the Development	
M.S.U	R.S.U						New	Improvements
Aussawella	Kosgama	500	478	600	1500 / 1000	1000	New	Improvement
		364	362	300		2500		- do -
Gampaha	Kalaetiya			250		250	New	
	Kotadeniyaya			250		250	New	
	Ganemulla			250		250	New	
	Kirindiwella			250		250	New	
	Ranpokunagama			250		250	New	Improvement
	Udatturipitiya			250		250	New	- do -
Kalinara	Veliveriya			500		500	New	- do -
	Veyangoda			2500		4000	New	- do -
	Bulathsinghala	1120	1048	500		300	New	- do -
	Naboda	96	87	500		300	New	- do -
	Ingriya	256	107	500		500	New	- do -
	Doddingoda	392	384	500		1250	New	- do -
Maradana	Matugama	12560	12400	10000		10000	New	- do -
							New	- do -
Maharagama	Homagama	1800	1454	10000		10000	New	- do -
	Padukka	500	461	2000		2500	New	- do -
	Mattegoda	500	146	2000		1500	New	- do -
	Rokmalgama			2000		3000	New	- do -
Mtlavinia						1000	New	- do -
						10000	New	- do -
Rathmalana							New	- do -
	Moratuwa	12000	9336	8000			New	- do -

Sri Lanka Telecom

M.S.U = Main Switching Unit
R.S.U = Remote Subscriber Unit Supplies Credit Project (To be completed end of 1997)

Telephone Exchange Area M.S.U	R.S.U	Switching Capacity	Total No of Working lines	150K Proposed Capacity	150K Initials Expansion	Revised Capacity	Nature of the Development	
							New	Improvements
Negombo C/BA NEAX NEAX		1600	1713	7500		6500		Improvement
		184 0						
Colombo Central	Kochchikade Katana		456	463	500	1750 / 1294 500	New - do -	
								Improvement - do - - do -
Havelock Town	Hokandara							- do -
	Boralesgamuwa							- do -
	Pitiyandala							- do -
	Malwana							- do -
	Mattakkuliya							- do -

National Water Supply and Drainage Board
On going and Proposed Projects

On Going Projects Project Name	Duration		Financial Allocation	
	1994 - 1996	1997 - 1999	TEC (Rs M)	TEC (Rs M)
1. Greater Colombo Water	Govt. C Rs	F.A. Rs	F.A.	
i. IDA assisted schemes	million	million		2224
ii. Antibattle head works	506.2	627.3	-	2408
	340.2	471.6	-	
2. Greater Colombo Sewerage	38.0	25.1	-	1980
<u>Other Urban</u>				
3. Ja - Ela Gr. of towns Ragama Stage 2	27.0	-	-	60.3
<u>Rural</u>				
4. Mirigama WSS phase 1 to III	22.0	-	-	22.0
5. Water Supply to towns East of Colombo	130.0	720.0	-	975.0
6. Bisyagama WSS	175.9	-	-	245.9
7. Homagama Town WSS	10.0	-	-	40.0
8. Minuwangoda WSS stage I	21.0	-	-	21.0
9. Bandaragama WSS	1.0	-	-	16.13
10. Matugama WSS	5.0	-	-	6.4
<u>PROPOSED PROJECTS</u>				
<u>OTHER URBAN</u>				
1. Kalutara pumping main	60.0	-	-	60.0
2. Greater Colombo Water Supply System Coverage of the Southern Urban area	66.4	300.7	108.0	2037.0
3. Rehabilitation of the Greater Colombo Sewerage	225.1	-	397.2	1113.0
4. Greater Colombo Water Supply System coverage of the Southern Urban Area	66.4	300.7	108.0	2037.0
5. Malwana WSS	15.0	-	-	15.0

SUMMARY OF PROJECT PROFILE OF U.D.A.
INDUSTRIAL PROJECTS / U.D.A

Name of the Project	Total Project Cost Rs. Million	Funding Source
1) Peliyagoda Integrated Urban Development Project Stage I	95.0	U.D.A
2) Peliyagoda Integrated Urban Development Stage II	800.0	Private Sector
3) Modarawila Integrated Urban Development Project Panadura.	172.0	U.D.A
4) Implementation of Industrial Estates.	10,000.0	Private Sector

Environment Projects.

Name of the Project	Total Project Cost Rs. Million	Agency	Funding Sources.
(1) Greater Colombo flood control and Environment Project Phase-I	3992	SLUR&DC	Foreign Funded Project.
(2) Greater Colombo flood control and Environment Improvement Project-Phase II	2330	SLUR&DC	
(3) Colombo Environment Project a) Industrial waste Abolishment at Ja-Ela /Ekala and moratuwa/ Ratmalana area b) Restoration of Beira Lake		NUS&DB	
(4) Solid waste disposal and sanitary land fill		U.D.A	
(5) Central waste water treatment facilities for Ja-Ela, Ratmalana, /Moratuwa Industrial area		CE/P	
(6) Restoration of Beira Lake.		CE/P	
(7) Clean Settlement Project		CE/P	
(8) Public Awareness Programme.		CE/P	

Urban Renewal Projects-colombo Area -U.D.A

Name of the project	Total Project Cost Rs-Million	Funding Sources.
(3) Urban Renewal Project at Orugodawatta.	134.0	Private Sector
(4) Urban Renewal Project at Kallupitiya	2000.0	Private Sector
(5) Urban Renewal Project at Panchikawatta.	5000.0	ADB/ Commr-Bank.
(6) Urban renewal Project at Mayura Place	125.0	Private Sector

Housing Projects - Greater Colombo Area - (U.D.R)

(1) Construction of housing schemes for low income and middle income group family within the Colombo urban area -	6000.0	Private Sector
(2) Ragama middle income housing Dev. Project	400.0	Private Sector
(3) Ja-Ela middle income housing Dev. Project	400.0	Private Sector
(4) Ja-Ela middle income housing Dev. Project	400.0	Private Sector
(5) Construction of housing Schemes for low income and middle income group families within the Colombo Urban area	600000	Private Sector
(6) Ragama middle income housing development	200.00	Private Sector
(7) Ja-ela middle income housing development project	400.00	Private Sector
(8) Housing Dev. Pro. at Maduvela stage II	165.00	UDA / Private Sector.
(9) Construction of Flats at Fairline road, Dehiwala	10.1	Funded by clients
(10) Housing development Project at Kallupitiya	10.0	U.D.A.
(11) Housing Development-32 Apartments	42.3	U.D.A.

Colombo City - Housing Projects

PUBLIC OUTDOOR RECREATION SPACES PLAN
FOR
COLOMBO MUNICIPAL AREA

1.0 Application of Public Outdoor Recreation Space Standards

Colombo, the commercial capital of Sri Lanka, is 3733 ha. (9220.5 acres) in extent and the present (1995) population in the Colombo Municipal area is 635,500. Taking a public outdoor recreation space standard of 1 ha. per 1000 population, we should therefore have 635 ha of such spaces in the City of Colombo.

2.0 Existing Public Parks and Playgrounds in the CMC Area (See Fig. 1)

There are 95.242 ha of parks and playgrounds i.e. 2.5% of the whole municipal area. As the following table indicates these have been categorised in accordance with UDA public outdoor recreation space policies and concepts.

TABLE 1

<u>P.O.R.S. Category</u>	<u>Extent (ha)</u>
(i) Localised facilities	
Mini Parks	10.23
Local Parks	19.18
Community Parks	8.0
Linear Parks	
(approx. half of the actual area of the beach strip)	6.0
(ii) Centralised facilities	
(Viharamahadevi Park, Galle Face Green, Khetarama & Sugathadasa Stadia, Reid Avenue Sports Complex)	51.58
Total	95.242

- 2 -

There are also 75.91 ha of other private and semi-public outdoor recreation spaces in the CMC area, (amounting to 2% of the total area) as shown in Table 2. There are thus **171.15 ha of outdoor recreation spaces in the CMC area, almost half of which belong to private clubs and other organisations.**

Of the centralised public outdoor recreation spaces most are of a specialised nature or cater to the regional or even national public, while on the whole all the parks and play- grounds are haphazardly distributed throughout the munici-pality, some areas being "over-served" and others deprived, while canal and river reservations and other opportunities for linear parks like the Beira Lake verge are not made use of properly. The potential of the beach strip (approx. 12 ha in extent) is not fully realised owing to poor planning, misuse and mis-management.

TABLE 2

<u>O.R.S. Category</u>	<u>Extent (ha)</u>
Club playgrounds (incl. the golf course)	56.25
School playgrounds	7.1
University playgrounds	3.6
Police/Army/Airforce grounds	8.96

Total	75.91
	=====

3.0 **Public Outdoor Recreation Space Proposals (See Figure 2)**

It is proposed to **designate river and canal reservations as linear parks, to improve and realise the full potential of the beach strip as a linear park, and to open up at least a minimum of new spaces where necessary** (in keeping with the localised facilities heirarchy and nesting concepts, based on walking distance criteria as far as possible) in the process of **urban renewal/redevelopment** as there is hardly any vacant land available. It is imperative that these recommendations for new parks should be integrated into the revision of the Colombo City Development Plan.

Furthermore, the Kolonnawa North and Heen Marsh Colombo Flood Detention Areas immediately adjoining the Eastern boundary of the CMC area could serve as "Nature Parks" while the Beira Lake could be used for water-based recreation and a large part of its verge could be opened for linear parks and a few nodal parks.

It has been decided to consider the private/semi-public play- grounds also as Public because for the most part they are used by people living in Colombo itself - therefore they are also included in the PORS calculations.

It is also proposed that the rest park character of **certain cemeteries** should be enhanced to enable them to play a greater role in the day-to-day life of the city, in view of prevalent high land values and lack of vacant land.

TABLE 3

Additional (Proposed) PORS in CMC Area

<u>Category of Space</u>	<u>Number or Description</u>	<u>Extent (Ha)</u>
Pocket Parks (av. 0.1 ha)	37	3.7
Mini Parks (0.2 - 0.8 ha)	20	16.0
Local Parks (0.8 - 2.0 ha)	20	40.0
Community Parks (2.0-4.0 ha)	1	4.0
Town Parks (4.0 - 8.0 ha)	1	8.0
SUB-TOTAL		71.7
Linear Parks :		
Beach Strip	From Colombo light house to Wellawatte canal outlet	12.0
Canal & River Reservations	S Bank of Kelani Ganga (3200m long, 20m wide)	6.4
	St. Sebastian Canal (2600m long, 6m + 6m wide)	3.12
	Dematagoda Ela (8000m long, 6m wide)	4.8
	Wellawatte Canal (3200m long, 5m + 5m wide)	3.2
	Beira Lake/Canal reservation	7.125
Public Cemeteries	Borella, Madampitiya, Mahawatte	25.0
Flood Detention Areas	Kolonnawa N Marsh	82.9
	Heen Marsh	50.25

- 5 -

Therefore total Public Outdoor Recreation Space that could be provided, including both existing and proposed

$$= 171.15 + 266.5$$

$$= \underline{437.65 \text{ Ha}}$$

Existing and predictable population densities and types in different parts of the city as well as variation in land values and the imminent special zoning of the North of Colombo for predominantly port-related activities have been taken into account when identifying locations for various categories of proposed parks. The "Crow Island" area and the Mattakkuliya beach area near the present fisheries harbour have intentionally been left out of PORS calculations as there are proposals to expand the Colombo Port in this direction: it should be noted that if the port expansion is deemed not feasible (technically or otherwise) these open spaces should be incorporated into the PORS plan.

The proposed 437.65 hectares falls short of the needed amount of 635 ha for the present population. (The situation is depicted graphically at Figure 4). Furthermore, as shown in table 4 the circumstances have not facilitated a distribution of proposed parks which would truly achieve a satisfaction of requirements within all planning units although at least a better distribution than now existing could be achieved.

To take up the deficit of PORS approximately 200 ha of low-lying lands immediately adjoining the eastern periphery of Colombo should be reserved as a chain of parks - this would also partially compensate for the inadequate localised facilities in the Planning Units 5, 7, 8, 9, 13A & 13B. Preliminary studies of relevant maps suggest the existence of only about 150 ha of such land and even this has to be verified since large extents of low-lying lands have been reclaimed and built on.

In view of this situation and the fast-developing suburbs of Colombo which also warrant timely reservation of land for public outdoor recreation space, it is advisable to arrest filling of low-lying lands in the coastal flats and wetlands zone east of Colombo, Dehiwela-Mt. Lavinia, Moratuwa and Panadura.

If population growth is to be encouraged more and larger localised level parks would have to be opened up in the process of urban renewal/redevelopment and more green belt area declared adjoining the eastern boundary of the city. The other alternative is to have a development plan that would engender lower population growth.

Environmental Planning & Landscape Unit, UDA.

5th October 1995

EXISTING PARKS & OPENSPACES

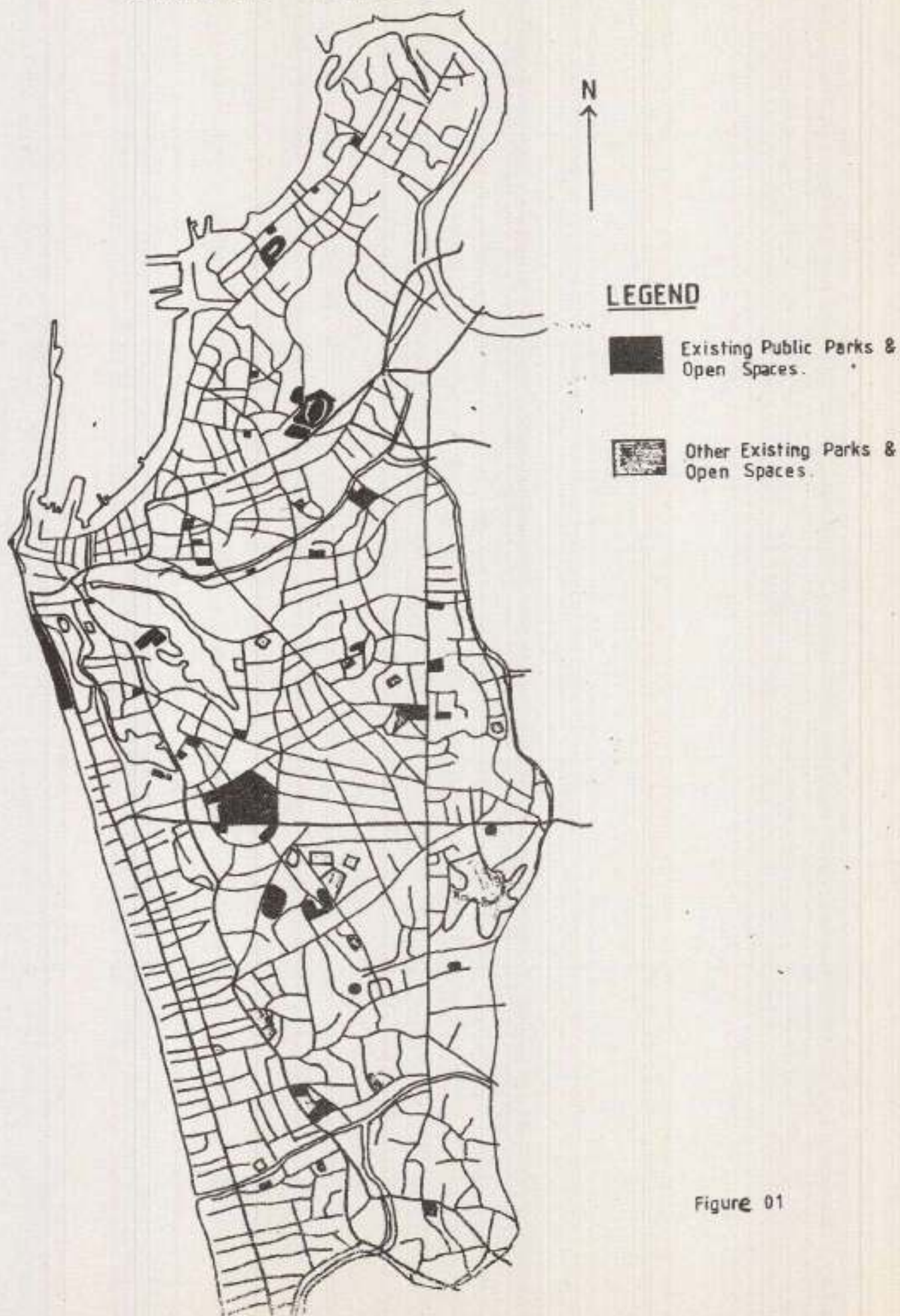
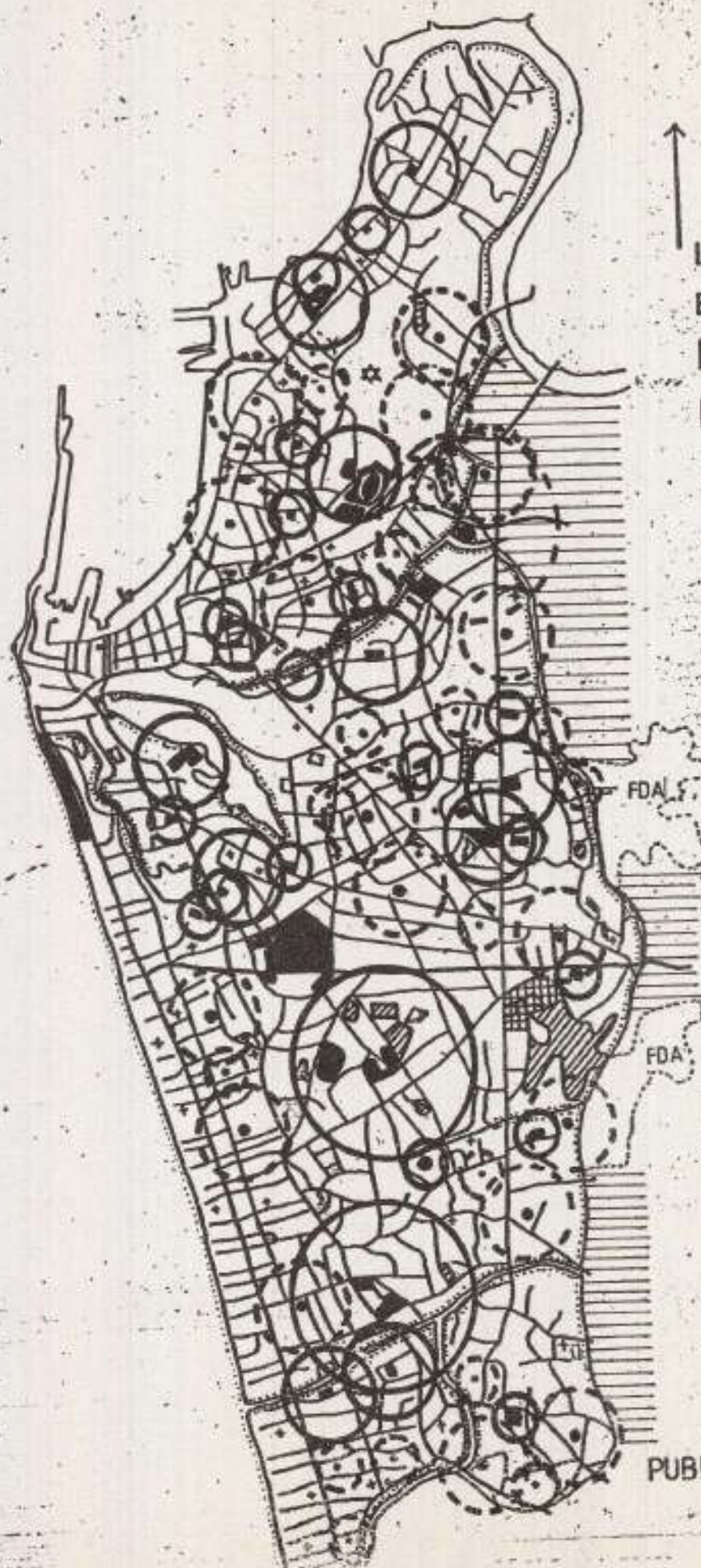





Figure 01



LEGEND

Existing Facilities

-  Existing Parks & Playgrounds (Public)
-  School/University/Forces Sportsgrounds
-  Club/Other Private Sportsgrounds

Potential Locations


-  Potential For Parks Using Vacant Lands / FDAS / Linear Reservation
-  Relocations / Beach Strip / Pocket Park Needed
-  Mini Park Needed
-  Local Park Needed
-  Community Park Needed
-  Town Park Possible Nature Park 8 Ha FDA
-  Cemeteries With Potential For Informal Relaxation
-  Belt Where 200 Ha. Should Be Reserved For PORS


Figure: 02

PUBLIC OUTDOOR RECREATION
SPACE PROPOSALS



LEGEND

 Existing Public Parks & Open Spaces

 Other Existing Parks & Open Spaces

Potential Locations

- Pocket Parks.
- Mini Parks.
- Local Parks.
- Community Parks.
- ▲ Nature Parks.
-  Beach Strip
Potential Only
Half Realised
At Present

Figure 03

**PROPOSALS - ACCORDING TO
PLANNING UNITS**

TABLE 4
COLOMBO MUNICIPAL COUNCIL
EXISTING & PROPOSED P.O.R.S. IN RELATION TO POPULATION OF
PLANNING UNITS

Planning Unit	Estimated Population 2001	Existing Parks (Ha.)		Proposed (Localised) Parks (Ha.)	Proposed Linear Parks & Water Bodies
		Public	Other		
1. Fort	17,000	0.6	2.20	2.47	* 1.72
2. Kochohikade	76,000	3.25	-	4.3	-
3. Maradana	47,000	-	4.31	4	.9
4. Kollupitiya	46,000	*11.611	2.20	.3	* 1.98
5. Mattakkuliya	55,000	5.54	-	12.9	7.65
6. Kotahena	33,000	0.3	-	2.3	-
7. Grand Pass	51,000	*10.61	-	10.9	2.4
8. Dematagoda	60,000	*10.0	.7	5.3	2
9. Borella	32,000	5.1	3.1	2.9	.464
10. Cinnamon Garden	34,000	*36.721	14.4	2.1	-
11. Bambalapitiya	41,000	3.0	.20	7.4	3
12. Wellawatta	64,000	5.51	5.4	4.9	11.81
13. Narahenpita	104,000	1.0	1.70	10.6	2
14. Kirulapona		2.0	41.4	2.2	5
Total	660,000	95.242	75.91	70.1	37.924

* - Includes some centralised facilities.

TABLE - 5

PROPOSALS ACCORDING TO PLANNING UNITS

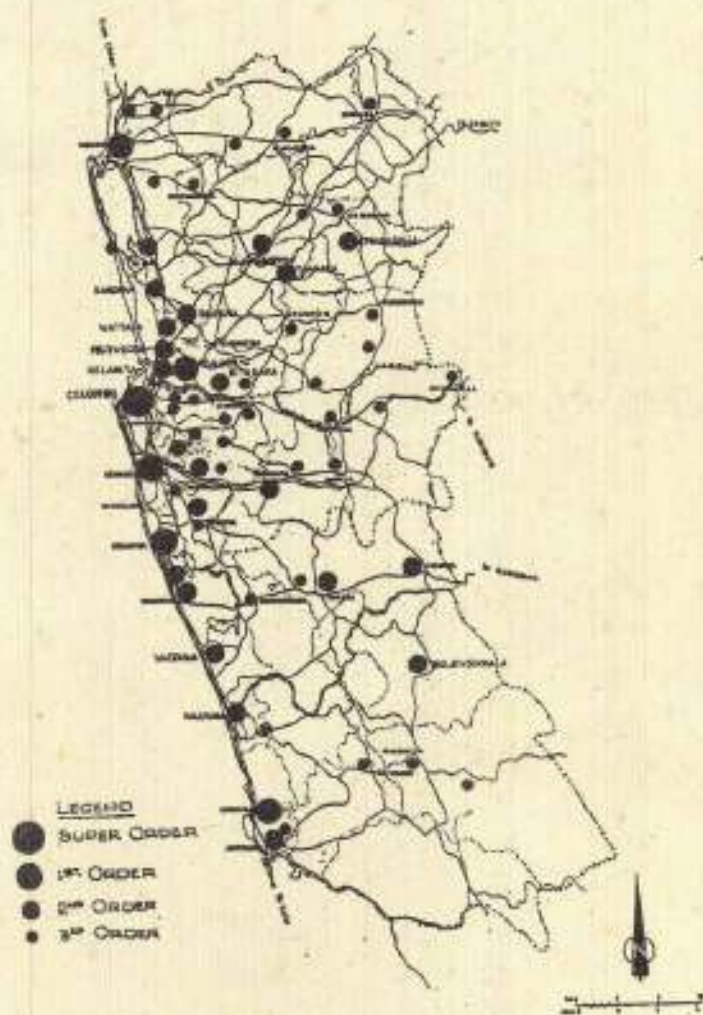
PROPOSALS FOR EACH PLANNING UNIT	APPROXIMATE LOCATION OF PROPOSED PARKS	EXTENT (HA)
Unit 1	Gordon Gardens(Fort) Fort Buddhist Temple Near S.L.S.T.C. (Fort)	0.2 - 0.8 0.2 - 0.8 0.2 - 0.8
Unit 2		
Pocket Park	Near Fort Police Station	0.1
Pocket Park	Between M.J.M. Lafe Mawatha & Old Moor Street.	0.1
Pocket Park	Near the Central Road	0.1
Local Park	Aluthkade	0.8 - 2
Local park	North East of Santha Basthiyana	0.8 - 2
Unit 3		
Pocket Park	West of Kovil Veediya	0.1
Pocket Park	East of Kovil Veediya	0.1
Pocket Park	Near the Eye Hospital	0.1
Pocket Park	Maradana	0.1
Mini Park	Near Maradana Station	0.2 - 0.8
Mini Park	South of Zahira College	0.2 - 0.8
Local Park	Between Stock Place and De Saram Place.	0.8 - 2
Unit 4		
Pocket Park	Near Sri Lanka Standards Institution.	0.1
Pocket Park	Between Union Place and Baybrooke Place.	0.1
Pocket Park	North of Nawaloka Hospital.	0.1

Unit 5		
Pocket Park	C.M.C. Maternity Home	0.1
Mini Park	East of Sri Wickrama Malwatta Lane.	0.2 - 0.8
Local Park	Mattakkuliya	0.8 - 2
Local Park	Madampitiya	0.8 - 2
Nature Park	Bloemendhal Marsh (Flood Detention Area)	8
Unit 6		
Pocket Park	West of Sugathadasa Stadium	0.1
Pocket Park	Near Kotahena Police Station	0.1
Pocket Park	Near the Girls' School	0.1
Local Park	Near Bulk Coconut Oil Installation.	0.8 - 2
Unit 7		
Pocket Park	South of Kelanitissa Power Station	0.1
Pocket Park	Maligawatta (South of Bloemendal Marsh)	0.1
Pocket Park	Maligawatta	0.1
Pocket Park	Near Sugathadasa Stadium	0.1
Pocket Park	Near Kelanitissa Power Station	0.1
Mini Park	Near Punchi Arakwatta Road, Grand Pass.	0.2 - 0.8
Mini Park	Maligawatta	0.2 - 0.8
Mini Park	Near the Girls' School-Kotahena.	0.2 - 0.8
Local Park	Sedawatta (Near Railway Rd)	0.8 - 2
Local Park	Maligawatta	0.8 - 2
Community Park	Orugodawatta	2 - 4

Unit 8		
Pocket Park	Dematagoda	0.1
Mini Park	Near Kuppiyawatta Temple	0.2 - 0.8
Mini Park	Near Dematagoda Flats	0.2 - 0.8
Mini Park	Colombo M.C. Limit	0.2 - 0.8
Mini Park	Colombo M.C. Limit	0.2 - 0.8
Local Park	Near Dematagoda Station	0.8 - 2
Unit 9		
Pocket Park	Borella	0.1
Mini Park	Near Borella All Saints Church	0.2 - 0.8
Local Park	Near N.M. Perera Mawatha	0.8 - 2
Unit 10		
Pocket Park	North East of General Hospital	0.1
Local Park	Near the Borella Dental Institution.	0.8 - 2
Unit 11		
Pocket Park	West of Kollupitiya	0.1
Pocket Park	West of Kollupitiya	0.1
Pocket Park	Near the University	0.1
Pocket Park	South of Mumtaz Mahal	0.1
Pocket Park	Thimbirigasyaya	0.1
Pocket Park	Thimbirigasyaya	0.1
Mini Park	West of Royal College	0.2 - 0.8
Local Park	Near the Kollupitiya Temple	0.8 - 2
Local Park	Near the British Council	0.8 - 2
Local Park	Near Thimbirigasyaya Church (North of Visaka Vidyalyaya)	0.8 - 2

COLOMBO METROPOLITAN REGIONAL STRUCTURE PLAN

DRAFT I



URBAN DEVELOPMENT AUTHORITY

1995 NOVEMBER

6.3.7
50/11