

**DHAKA METROPOLITAN
DEVELOPMENT PLAN (DMDP)
1995-2015**

DETAILED AREA PLAN (DAP)

PART-XIV

JUNE 2010



**RAJDHANI UNNAYAN KARTRIPAKKHA (RAJUK)
DHAKA**

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Dhaka Metropolitan Development Plan (DMDP) 1995-2015: Detailed Area Plan (DAP)

Index

Related Areas

Part-I (Group – A)	: Tongi, Gazipur, Kaliganj Paurashava and surrounding rural settlement and flood plain areas of Balu, Sitalakhya and Brahmaputro River
Part-II (Group – B)	: Narayanganj Paurashava, Kadam Rasul Paurashava and its surrounding areas, Dhaka-Narayanganj-Demra (DND) Triangle flood protected areas including Siddhirganj Paurashava.
Part-III (Group – C)	: Areas under Dhaka City Corporation (DCC) jurisdiction and surrounded by the river Buriganga, Sitalakhya, Balu, Turag and Tongi Khal
Part-IV (Group – E)	: Entire Savar Paurashava and Part of Gazipur
Part-V (Group-A)	: Keraniganj (Part)
Extension : Part-D)	
Part-VI (Group-B)	: Keraniganj (Part)
Extension : Part-D)	
Part-VII (Group-C)	: Keraniganj (Part)
Extension : Part-D)	
Part-VIII (Group-E)	: Keraniganj (Part)
Extension : Part-D)	
Part-IX (Location-1)	: Mirpur North to Uttara
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Part-XV : (Location-9)	: Eastern Fringe (Part)
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**DHAKA METROPOLITAN DEVELOPMENT PLAN (DMDP) 1995-2015:
DETAILED AREA PLAN (DAP)**

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ABBREVIATION AND ACRONYMS

BBS	Bangladesh Bureau of Statistics
BIP	Bangladesh Institute of Planners
BNBC	Bangladesh National Building Code
BRTC	Bangladesh Road Transport Corporation
BUET	Bangladesh University of Engineering & Technology
DAP	Detailed Area Plan
DCC	Dhaka City Corporation
DESA	Dhaka Electric Supply Authority
DND	Dhaka- Narayanganj & Demra
DMDP	Dhaka Metropolitan Development Plan
DPZ	Detailed Planning Zone
FAP	Flood Action Plan
GPS	Global Positioning System
GLD	Guided Land Development
GOB	Government of Bangladesh
JICA	Japan International Co-operation Agency
LPC	Land use Permit Committee
LPP	Land use Permit Planner
MLSS	Member of Lower Subordinate Services
NGO	Non Government Organization
NUC	Nagar Unnayan Committee
ROW	Right of Way
SP	Structure Plan
SPT	Standard Penetration Test
SPZ	Strategic Planning Zone
TBM	Temporary Bench Mark
TOR	Terms of Reference
UAP	Urban Area Plan
UNDP	United Nations Development Program
UNCHS	United Nations Center for Housing & Settlement
URP	Urban & Regional Planning
WASA	Water Supply & Sewerage Authority

PREFACE

Detailed Area Plan (DAP) is the third and final tier of DMDP (Dhaka Metropolitan Development Plan) 1995-2015. DMDP is a three tier plan package, viz. the Structure Plan, the Urban Area Plan and the Detailed Area Plan. The first two tiers of DMDP i.e. the Structure Plan (1995-2015) and the Urban Area Plan (1995-2009) were prepared in 1995 under the Project 'Preparation of Structure Plan (SP), Master Plan and Detailed Area Plan (DAP) - Metropolitan Development Plan Preparation and Management in Dhaka' under UNDP project No. BGD/88/052 and TAPP No. TA/ BGD/ 88 /052 with the technical assistance of UNCHS. The third tier of DMDP i.e. the Detailed Area Plan was prepared by RAJUK under a separate project named "Preparation of Detailed Area Plan (DAP) for Dhaka Metropolitan Development Plan" following the strategies and guidelines mentioned in the Structure Plan and the Urban Area Plan. This is almost a six and a half year project launched in August, 2004 and completed in December, 2010. The total project cost is BDT 2494.66 lac. The project was financed by RAJUK's own source.

The project was managed by a Inter-Ministerial Steering committee, a Technical Management Committee and a Technical Management Sub-Committee. One project director, four project managers, five assistant town planners, one GIS expert, one survey expert and other supporting staffs were the project personnel.

The DAP is prepared for RAJUK jurisdiction or DMDP area of 590 sq.mile (1528 sq. km.). In order to complete the task efficiently, RAJUK divided its control area into five groups and eleven locations and awarded five local consulting firms with the work. The contract was awarded to DDC Ltd. for Group A, Group A Ext. (Part D), Location 3,4 and 15; EPC Ltd. for Group B and Group B Ext. (Part-D); Gani Bangla Ltd. for Group C, Group C Ext. (Part-D), Location 9,11,16; Sheltech (Pvt.) Ltd. for Group E, Group E Ext. (Part-D), Location 1,2,10; BETS Ltd. for Location 5,6. For ease of work, the task of Group D was awarded to DDC Ltd., EPC Ltd., Gani Bangla Ltd. and Sheltech (pvt.) Ltd.

Group A (North East Part) covers three paurashavas including Tongi, Gazipur and Kaliganj together with surrounding rural settlement and flood Plain areas of Balu, Sitalakkhya and Brahmaputra river. Group B (South East Part) covers Narayanganj, Kadam Rasul Paurashava and its surrounding areas including Dhaka- Narayanganj- Demra (DND) flood protected areas. Group C (Central Part) is surrounded by the river Buriganga, Sitalakkhya, Balu, Turag and Tongi Khal. Dhaka City Corporation (DCC) jurisdiction area is within Group C. Group C covers important establishments of capital Dhaka like Bangladesh Secretariat, Motijheel, Kawran Bazar commercial areas, International Airport, Old Dhaka etc. Group D (South West Part) covers Keraniganj and Zinjira. Rest of the area of this Group is mainly Dhaleswari flood plain. Group E (North-West Part) covers Savar Paurashava, Export Processing Zone (EPZ), Turag flood plain. Location 9,11,16 covers the eastern fringe areas of Dhaka. Other locations are in the different parts of Dhaka.

DAP projects population for the year 2015 as 18.43 Million on the basis of data generated from the population census 2001, which was 10.24 Million. The overall Annual Growth Rate is considered as 4.29%. The stages of DAP preparation included geo-referencing of mouza maps, different types of surveys, consultation with stakeholders, draft plan preparation, public hearing and final plan preparation. Socio-economic survey, physical feature survey, topographic survey and land use survey were done during the period of 2005-2006. The high tech digital GIS (Geographic Information System) data base was prepared for the very first time for Dhaka under the project. Quality checking of survey activities was done by Survey of Bangladesh (SOB). A series of consultation meeting was held with local government authorities (Wards & Paurashavas), Honorable Members of the Parliament of the RAJUK jurisdiction, concerned development agencies (RHD, LGED, WASA, WDB etc.), academics, professionals, socially concerned groups, study groups, business groups, etc.

Following this, draft final plan was prepared. As per section 74 of Town Improvement (TI) Act 1953, RAJUK carried out a two month long Public Hearing on the draft plan from October 3, 2008 to December 4, 2008. The Public Hearing was carried out through media coverage, press conference, web based publication and displaying of maps in RAJUK auditorium, PD (DAP) office and three other zonal offices of RAJUK. The comments given by general people and different

organizations were documented in the prescribed format and these were addressed. A national seminar was held with academics, different professionals, BAPA, BELA, REHAB. Round Table Conferences were held in three daily newspaper offices.

A Review Committee to review the Draft Final Plan submitted by the Consultants was formed by the Ministry of Housing & Public Works (MoHPW) with Prof. Dr. Jamilur Reza Chowdhury, Vice Chancellor, BRAC University as convener. In order to assist the Review Committee in the task, a 16 member Technical Working Group (TWG) was formed with members from Urban and Regional Planning Department of BUET, Urban and Regional Planning Department of JU, Bangladesh Institute of Planners (BIP), Institute of Architects, Bangladesh (IAB), Urban Study Group and RAJUK.

A series of consultation meetings was held with the Honorable Members of the Parliament of RAJUK jurisdiction area to apprise them of the draft final DAP and obtain their valuable suggestions and recommendations. Almost whole of August and half of September, 2009 were spent on this consultation.

Ministry of Housing and Public Works constituted a DAP Review Committee with Prof. Dr. Jamilur Reza Chowdhury, former Vice Chancellor, BRAC University as convener to verify the compliance status of the recommendations made by the previous Review Committee. The committee reviewed the status of the Draft DAP in view of the recommendations of the previous Review Committee in four separate meetings held on 16-03-2010, 25-03-2010, 01-04-2010 and 11-04-2010 in RAJUK Board Room. The committee ultimately made 36 point recommendations to be followed by the consultants. Following the recommendations, consultants prepared final plans (maps and reports) and submitted to RAJUK. After approval in the Technical Management Sub-Committee, Technical Management Committee, Steering Committee of DAP and RAJUK'S board, the final plan was submitted to Ministry of Housing and Public Works for final approval. Ministry of Housing and Public Works sent the final plan to Ministry of Law for vetting and placed it in the Cabinet. The cabinet approved final DAP. Finally, Ministry of Housing and Public Works notified gazette of DAP under the SRO No. 232-law/2010 on 22 June 2010. The Reports and the Maps of DAP has been published on the website of RAJUK (www.rajukdhaka.gov.bd).

Eng. Md. Nurul Huda
Chairman, RAJUK.

EXECUTIVE SUMMARY

The Final Report is the last of the series of the reports to be submitted under the Detailed Area Plan (DAP) for Location-6 area. The Final Report is the most important and comprehensive of all the reports to be submitted as per TOR. The report describes about the development strategies, critical planning issues, development plan proposals and implementation of the plans. It incorporates the survey results, findings of stakeholders' consultations, formulation of planning principles and standards, development activities and proposals of other development agencies, private sectors and NGOs. It also includes the broad land use plans and policies for existing and new urban areas.

The Airport-Demra Bypass Area (Location 6) lies to the east of the Uttara Model Town of RAJUK. It encompasses parts of six Mauzas and entire area of only one Mauza. The Planning Area falls partly under Uttara Thana and partly under Cantonment Thana. As per Structure Plan the area lies within SPZ 13.2.

With the growth in core city Dhaka, the development trends will increase as well with the influx of population. Thus, little availability of buildable land in the Dhaka city the growth will occur especially eastern side of Airport road (Uttar Khan, Dakshin Khan, Fayedabad, Mausair, Abdullahpur, Joarshahara and Purakar) However, overall population will reach to 589420 in 2015.

Based on the projected patterns of development in the area, existing situation as observed from the socio-economic, physical features and land use surveys, DMDP Structure Plan proposals, and the proposals of the Urban Area Plan; nine DPZs have been designated as Proposed Road Network, Open space, Commercial zones (Business), General Industrial Zone, Institutional zone, Mixed Use (Residential & Commercial), Urban Residential zone and Water body. Besides, on the basis of Principles and Standards (including road standard), Preferred Development, Proposed Land Use Classification and Major Infrastructural Proposal have been made.

Land use proposals have been made assuming a gross density of 200 persons per acre at full development. It is expected that after the implementation of the plan the residential use would increase at full development while Industrial use is expected to increase of the total area at full development and the area under agricultural use would significantly decline. Major water bodies in the area should also be protected for environmental reasons.

There are 1566.55 hectares (3869.93 Acres) of land within the boundary of the planning area as designated. The population target for the area assuming a gross density of 200 persons per acre (494 person/ hectare) has been proposed as 258610 in 2015. Development, however, will continue in phases. Strict development control measures will also have to be enforced to realize the proposed distribution of land uses in the area.

It is extremely difficult to say exactly when the target population would be achieved since the physical build-up of the area is subject to many outside influences which are not always amenable to control. It is, however, possible to develop necessary facilities such as roads, utilities, community facilities for the implementation of the plan. Such development activities are proposed to be completed in three phases.

The basic object of land development controls should be to promote land development in a planned manner. Land use controls for the Airport-Demra Bypass Area will follow the pattern of overall controls for Dhaka Metropolitan Area as proposed under the Urban Area Plan.

Lastly the comments made by the review committee of Ministry of Housing & Public Works headed by Prof. Dr. Jamilur Reza Chowdhuri have been properly incorporated.

Chapter- 1

BACKGROUND

1.1 Introduction

The Detailed Area Plan which is the outcome of the last several years of extensive activities related to the preparation of physical plan of Dhaka, marks the completion of the process undertaken by the Rajdhani Unnayan Karttripakkha with the assistance of UNDP and UNCHS to prepare Dhaka Metropolitan Development Plan (DMDP) under the project 'Preparation of Structure Plan (SP), Urban Area Plan (UAP) and Detailed Area Plan (DAP)- Metropolitan Development Plan Preparation and Management in Dhaka' (UNDP No. BGD/88/052 and TAPP No. TA/BGD/88-052). DMDP is a three tier plan package of which 1st two tiers, viz. Structure Plan and Urban Area Plan were prepared during 1992-1995 period by the joint team of Consultants from home and abroad and counterpart experts employed by RAJUK. After a long gap RAJUK initiated the task of preparation of Detailed Area Plan for the entire RAJUK area.

In order to complete the task efficiently, RAJUK divided its control area into five groups and several locations and awarded five local consultancy firms with the work. The work was designed to be accomplished in six reports based stages spread over two years. Due to the problems of mauza map collection and very complicated and time consuming physical feature survey process based on Global Positioning and Geographical Information System, time over run was unavoidable. As such, it took almost four years to complete the task. This is the final output of the process of preparation of the Detailed Area Plan to guide Dhaka's development in a planned manner befitting standard urban living of 21st century.

1.2 Background

Being the capital city of Bangladesh, Dhaka has emerged as a metropolitan center during the last two decades and has been facing rapid urbanization and urban sprawl. The Dhaka Metropolitan Development Plan (DMDP) of RAJUK has prepared a Structure Plan (1995-2015) and an Urban Area Plan (1995-2005), which stressed the need for the preparation of a more detailed level planning of smaller units of Dhaka metropolitan area called Detailed Area Plans or DAPs. The two main policy issues were focused on:

- Rapid urbanization and its diffusion, and
- Effective management of the metropolitan area.
- The DMDP of the Rajdhani Unnayan Karttripakkha (RAJUK) was initiated in February 1992 with funding from the United Nations Development Program (UNDP) and the
- Government of Bangladesh (GOB) in order to prepare multi-sectoral development plans comprising of Structure Plan, Urban Area Plan and the Detailed Area Plans (DAPs). The United Nations Center for Human Settlements (UNCHS) was the executing agency of the project.

The outcome of the project was the preparation of the Dhaka Structure Plan (1995-2015) and the Urban Area Plan (1995-2005). The Structure Plan (SP) provides long-term strategies for the next 20 years for the development of the greater Dhaka sub-region(1528 sq. km) with population target 15 million. The DMDP Structure Plan (1995-2015) incorporates urban strategies, policies and programs. It provides planning guidelines, techniques, standard, development control procedures and provisions of physical and social services.

The Structure Plan identified 26 Strategic Planning or Spatial Planning Zones, which need detailed area plans providing more detailed planning proposals for specific sub-areas of Dhaka Metropolitan Area. The SPZs were originally identified by the Dhaka Integrated Transport Study (DITS) and later on modified by the DMDP. Some of the SPZs are substantially small compared to the approximate areas that need to be covered under each DAP. Therefore some of the DAPs tend to cover more than one SPZ. A DAP may cover one or more SPZ or parts of one or more SPZs depending on circumstances.

The Urban Area Plan (UAP) provides an interim mid-term strategy for the 10 years and covers for the development of urban areas within Metro Dhaka management Areas.

In the absence of DAPs, the Structure Plan and the Urban Area Plan are presently taken as the basis for all development activities. Since these plans project a broader outlook of any specific area and mainly represent implementation policies, they are not very effective for detailed level planning concept. Hence, the preparation of the DAP will replace the Urban Area Plan.

1.3 Purpose of the Detailed Area Plan (DAP)

Detailed Area Plan provides guidance for development where action is expected in short term and covers individual parts of a city within a variable time frame. It is concerned with whole range of planning matters for part of the area covered by a Structure Plan setting out in detail the changes the authority intend should take place and giving guidance on the form of new development. It shows location of roads, infrastructure, community facilities and acceptable land use zones. Therefore it can serve as an effective tool for development control.

The specific purposes of Detailed Area Plan are:

- Set out the planning policies of the selected area.
- Amplify the long-term planning intentions of the Structure Plan in the local context.
- Provide a detailed analysis of the area and an urban design of good quality.
- To serve as a reference document of for land clearance and building permission.
- To serve as a document for land use and development control.
- To provide guidelines for public and private investment priorities.
- To offer clarity and accuracy with regard to future development to inhabitants and investors.
- To make recommendations on land development techniques
- Describe and make map specific proposals.

1.4 Objective of the Project

1.4.1 General Objectives

The general objectives of the consultancy services for the preparation of Detailed Area Plans for RAJUK Structure Plan area envisages:

- Implement Structure Plan and Urban Area Plan policies
- Guide and control urban development in an orderly manner in preferred areas of urban expansion
- Create an urban environment enabling citizens enjoy the services that suits urban living.

1.4.2 Specific Project Objectives

- Implementation of Dhaka Metropolitan Development Plan 1995-20 15
- Data Management and Dissemination
- Preparation of Multi-sector Investment Plan
- Ensuring Clarity and Security of Investment
- Providing Guideline for Development
- Ensuring Sustainable Environment

1.5 Custodian of the Detailed Area Plan

Section 73 (1) of the Town Improvement Act 1953 empowers RAJUK to 'Prepare a Master Plan for the Area within its jurisdiction indicating the manner in which it proposes that land should be used and (whether by carrying out thereon of development or otherwise) and the stages by which any such development should be carried out. At present three tier development plan in the form of Structure Plan, Urban Area Plan and Detailed Area Plans are prepared. DMDP has been published in the Official Gazette on August 4, 1997 (SRO N. I 834-law/97) and has become legal document for the guidance of Dhaka's development. Rajdhani Unnayan Kartripakkha is the custodian of DMDP, as such RAJUK is the

custodian of the Detailed Area Plan prepared under it as well. As the custodian of all the three tier of plans including the Detailed Area Plan prepared under the present project, RAJUK has the responsibility of development control of its jurisdiction area either by itself or with the cooperation of other agencies of the government responsible carrying out development activities within RAJUK's jurisdiction.

1.6 Duration of the Detailed Area Plan (DAP) and Amendment Options

Usually a plan is prepared for a period of 20 to 25 years. DMDP has been prepared for 20 years carrying 1995-2015 period. As such the Detailed Area Plan prepared under this project extends to 2015. However every plan requires periodic review and updating which is usually done every five years. The consultants propose that the plan should be reviewed at the end of 2015. At the same time initiative should be taken for review and updating of the plan accordingly at the end of 2015, so that it can be extended for a further period of 10 years, i.e. 2025. Section 74 (2) of the Town Improvement Act empowers RAJUK to amend its plan from time to time. If development trend during this period 2015 to 2025 calls for the preparation of a fresh three tier development plan, RAJUK by dint of the authority conferred to it by Section 73 (1) of Town Improvement Act shall take initiative to prepare a new plan for its jurisdiction.

1.7 Format of Detailed Area Plan

The DAP formulates in detail, as appropriate, the proposals of the Structure Plan and the Urban Area Plan for the development and other use of land for the improvement of the physical environment and the management of traffic. The DAP indicates, defines and provides:

- zoning regulation, building regulations and restrictions including plot-size, number of stories and usage
- major roads, street network and traffic circulation pattern for present and future requirements
- comprehensive allocation of areas or zones for residential, commercial, industrial, educational, health, recreational, utilities and services, religious and other purposes - and their phase-wise development
- areas reserved for agriculture or natural reserves and the like
- designated areas for acquisition of land for public purposes.

The format of Detailed Area Plan consists of:

- a) Explanatory Report
- b) Integrated Planning Map

a) Explanatory Report

The Explanatory Report provides an account of the design process, demographic and socio-economic data, sector wise and thematic maps, information on higher level planning context and a description of the Integrated Planning Map. The report contains maps on a scale that is appropriate to the information they carry and convenient for inclusion in a report (A4 and A3 size).

b) Integrated Planning Map

The Integrated Planning Map shows different layers of information like the cadastral base, administrative boundaries, geo-physical features (contour line, water bodies), infrastructures and existing/proposed land use.

Types of Maps according to TOR, DAP are as follows:

- | | |
|--|--------------|
| 1. Base Map of Study Area on - R.S. Mauza background | Scale 1:1980 |
| 2. Physical Feature Survey (Floor Heights, Structure Type, Structure Use): | Scale 1:1980 |
| 3. Land Use Map | Scale 1:1980 |
| 4. Field Survey (Original Survey Marking) | Scale 1:990 |
| 6. Integrated Planning Map | Scale 1:3960 |
| 7. Integrated Planning Map | Scale 1:1980 |
| 8. Project Maps | Scale 1:990 |

Source: TOR of Detailed Area Plan

1.8 Description of the Planning Area

As visible from **Map 1.1**: the location of Project Area in the context of DMDP area, the geographic location of the planning area lies between Latitudes 23°53'35" - 23°49'33" North and Longitudes 90°24'31" - 90°26'53" East.

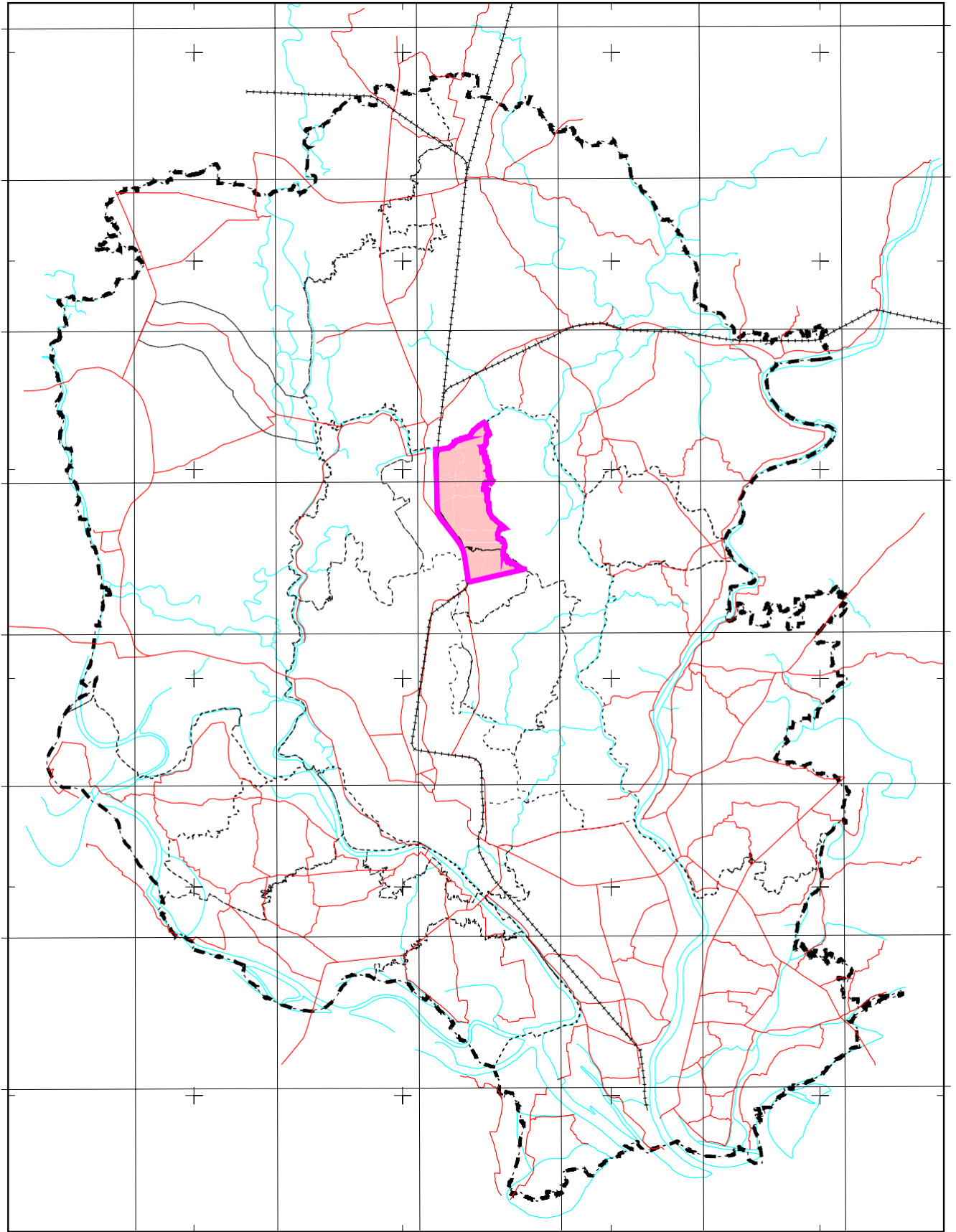
It lies east of the Uttara Model Town of RAJUK. The railway track is the western boundary of the planning area. The northern and southern limits are the Tongi khal and the proposed 300 ft. wide Purbachal road, respectively. The eastern boundary runs somewhat midway through Uttar khan, Dakshin khan and Joarshahara mauzas.

1.8.1 Administrative and Cadastral Boundaries

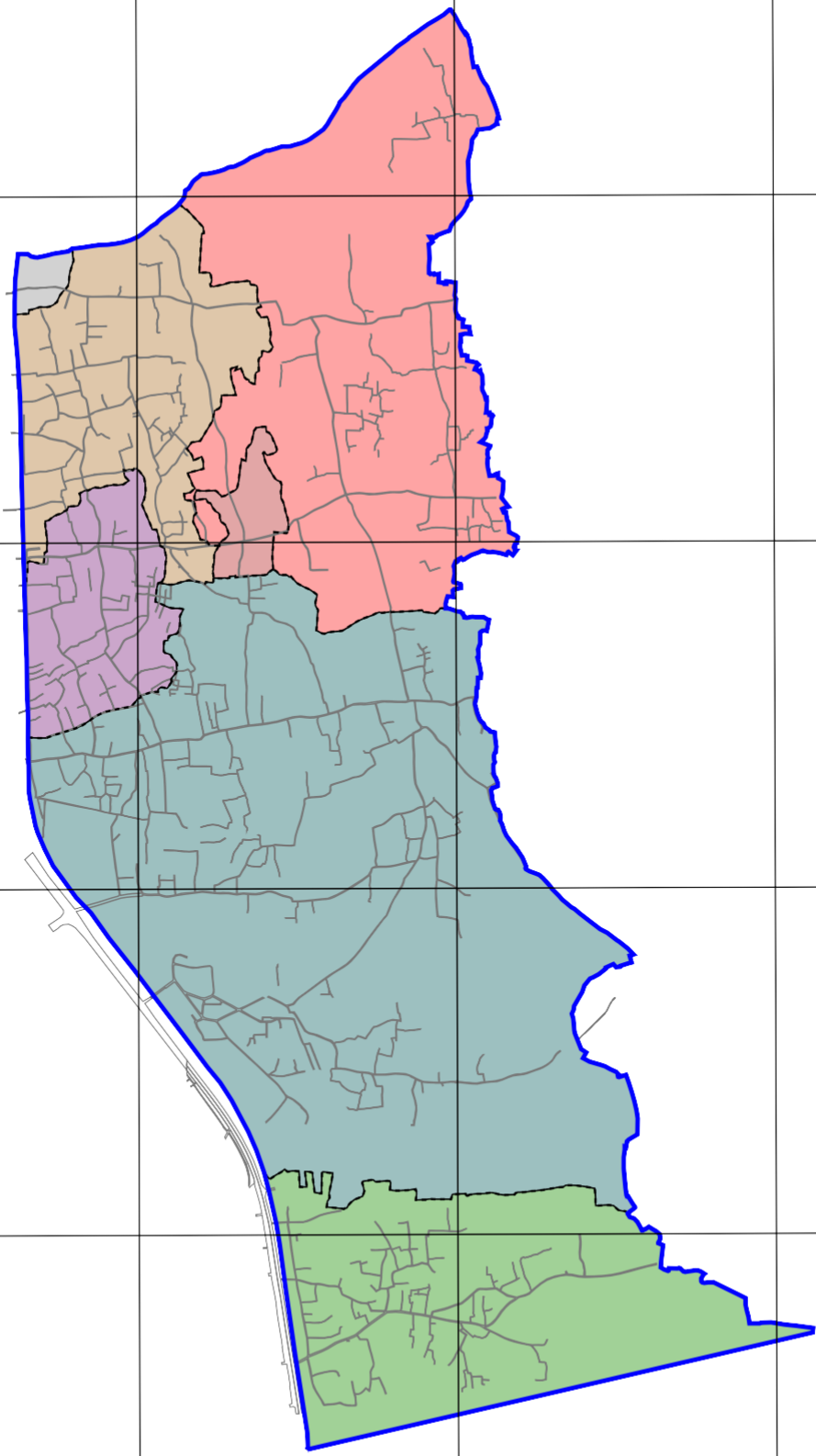
Administratively speaking, the area encompasses parts of six mauzas and the entire area of only one small mauza (**Map 1.2**). The areal distribution is given in Table 1.1. The planning area falls partly under Uttara Thana and partly under Cantonment Thana. As per the Structure Plan, the planning area lies within SPZ 13.2 - the Uttara-Airport SPZ.




Table 1.1: Area of the mauzas under the project

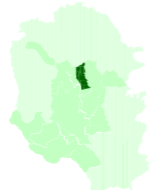
Name of Mauza	J.I. No.	Thana	Area (in Acres)	Area in Hectares	Percent
Abdullahpur	01	Cantonment	19.722	7.981	0.51
Fayedabad	02	Gulshan	393.840	159.382	10.17
Uttarkhan	14	Gulshan	865.615	350.304	22.36
Mausair	15	Cantonment	50.080	20.267	5.34
Purakar	03	Cantonment	206.821	83.698	5.39
Dakshinkhan	17	Gulshan	1718.330	695.386	44.39
Joarshahara	06	Cantonment	616.593	249.527	15.93
Total			3869.93	1566.545	100



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1.8.2 Geo-Physical Profile (Geology, Soils and Hydrology)

a. Geology

In geological terms, Dhaka lies in the extreme south of the Madhupur Tract, which is situated, in the central-eastern part of Bangladesh. The planning area is covered mainly by the Pleistocene Madhupur Clay and Holocene sediments (**Map 1.3 - Geological Map**). The Madhupur Clay consists of yellowish brown to the highly oxidized reddish brown silty clay (please refer to the Geotechnical Survey Report for details on soils).

The main natural drainage channel of the planning area is the Tongi khal, which flows in an easterly direction. It continues eastward and meets the Balu River flowing south. The natural drainage khals, which drain out the waters of the area, lie mostly in the south and east of the planning. The direction of flow is towards the south where the land comprises mainly of depressions. Those in the south have been filled up for development purposes. The eastern khals lie outside the planning area and retention ponds have been earmarked in the Structure Plan.

b. Topography

In general, the land slopes gradually towards the south and east where it merges into the Ganges- Meghna floodplain. According to the Geological Survey of Bangladesh (Atlas of Urban Geology — Volume 11, ESCAP, UN, New York 1999), the project area is characterized by the following types of geomorphic units based on surface morphology and elevation (**Map 1.4 - Geomorphological Map**).

- High land (AH)
- Mixed high and low lands (AM)
- Low land (AL)
- Depression

The contour map that has been prepared as a part of the plan preparation work also reveals the topography of the area (**Map 1.5 - Contour Map**). Contours are shown at intervals of 0.25 m (For details, please refer to the Physical Features and Land use Survey Report).

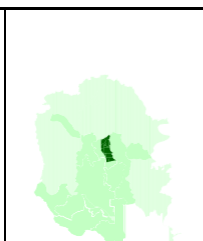
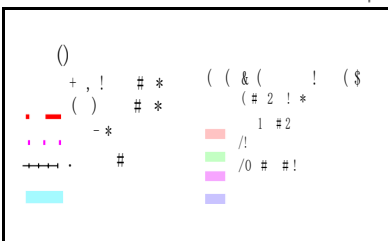
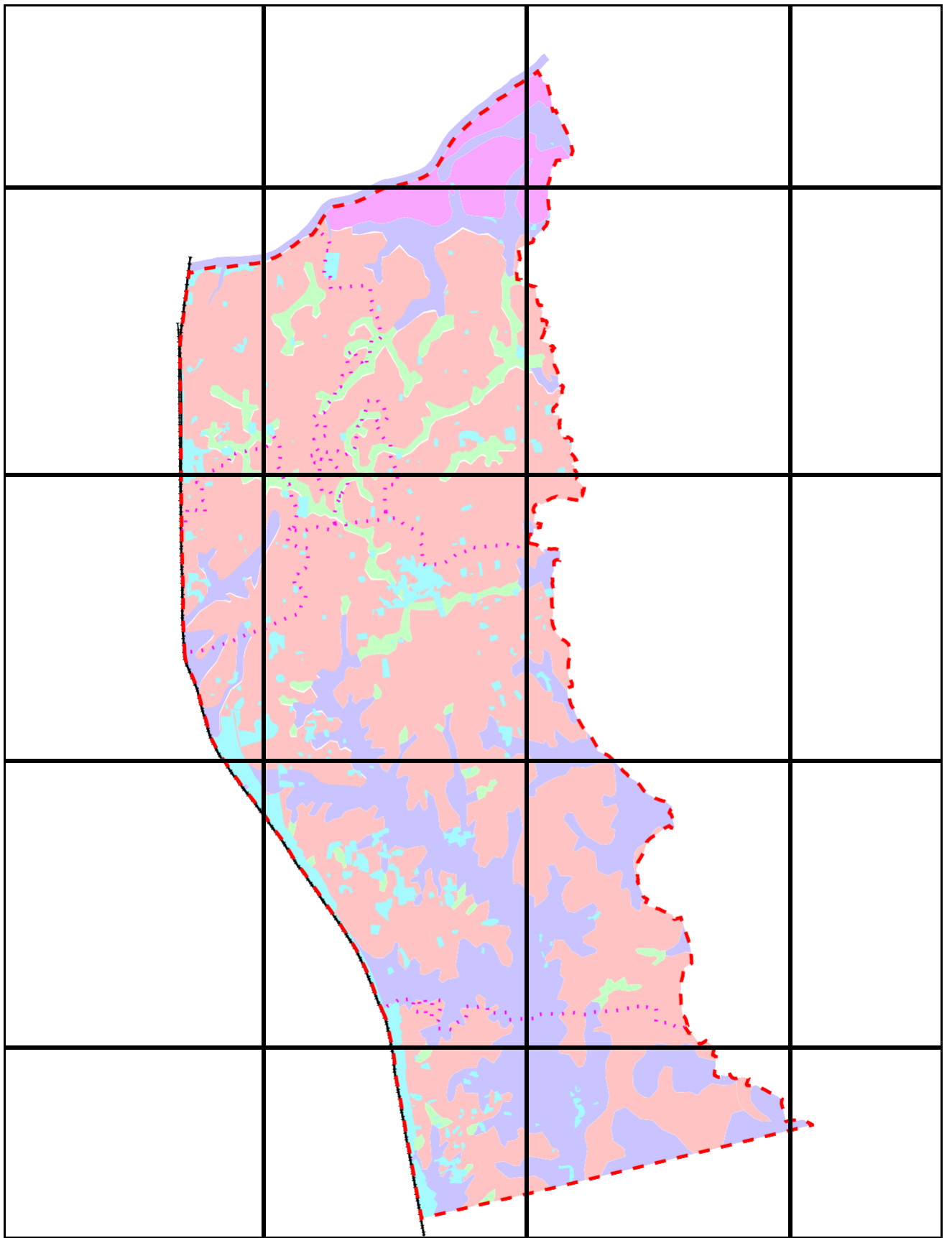
Most of the northern half of the planning area falls under medium to high level land and has a low risk of inundation during floods. High land occurs in the north and along the west-central part of the planning area and not prone to the normal floods. In contrast, the southern half of the planning area is subjected to annual flooding and belongs to the high-risk zone of flooding (**Map 1.6 - Flood Hazard Map**).

c. Climate

As described earlier that the project area is the part of Dhaka Metropolitan City. Dhaka experiences a hot, wet and humid tropical climate. The city is within the monsoon climate zone, with an annual average temperature of 25 °C (77 °F) and monthly means varying between 18 °C (64 °F) in January and 29 °C (84 °F) in August. Nearly 80% of the annual average rainfall of 1,854 millimeters (73 in) occurs between May and September. Increasing air and water pollution emanating from traffic congestion and industrial waste are serious problems affecting public health and the quality of life in the city. Water bodies and wetlands around Dhaka are facing extinction as these are being filled up to construct multi- storied buildings and other real estate developments. Coupled with pollution, such erosion of natural habitats threatens to destroy much of the regional biodiversity.

d. Geological Fault

Faults and lineaments that have occurred due to tectonic movements appear at two places - one along the edge of depression in the southern part of Dakshinkhan, trending south-west and the other along the Tongi Khal in Tongi-Uttara-Uttar Khan area, trending east-west.



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