

Chapter-3 Development Plan Proposals

3.0 Introduction

The Chapter starts with DMDP policies as upper level frameworks and followed by a review of the policies in the light of prevailing situations. Next planning principle, standards and strategies have been set. Lastly, sectoral development proposals have been set under the DMDP policy frameworks. The chapter also describes zoning provisions and makes some comments on some critical issues of the Structure Plan.

3.1 Abiding Policy Frameworks of Higher Level Plans

The DMDP Structure Plan and Urban Area Plan (1995-2015) are the legally approved higher level planning framework for the current DAP project. In the following sections a brief review has been carried out on the key policy guidelines of these two plans relevant to the current project area to establish a relationship between the higher level plans and the current detailed area plan.

Structure Plan

Under spatial and environment sectors the plan recommended policies under two broad headings- Rural and special area policies and Urban area policies. Under Rural and Special Area policies recommendations were made for land of high agricultural value, flood control drainage and irrigation projects, flood plains, rivers and water bodies and special areas. Under urban area policy, recommendations were made for pre-1983 established urban area, existing near urban fringe, new urban land and peripheral urban development areas. DMDP prepared sectoral plans, policies and proposals under the broad headings of socio-economic sectors and infrastructure sectors. Following are the combined Structure Plan policies for the project area.

Relevant Structure Plan Policies

- **Flood Flow Zone Policy RS/3** – land development, within the designated flood plain areas will be controlled in order to avoid obstructions to flood flow, which might otherwise result in adverse hydraulic effects, for example, the rise of flood water levels and changes in flow direction.
- **Urban Area Policy UA/7** – infrastructure Initiatives seek to promote, through the DMDP Structure Plan, an orderly sequence of new area development by means of mutually reinforcing and coordinated public sector investment programs, spearheaded by drainage, flood protection and transport development.
- **Sectoral Policy SE/4** – advocates for an integrated policy of the incremental environmental upgrading and relocation, where necessary, of Dhaka's polluting industries, in a manner commensurate with sound environmental practice and cost-effectiveness.
- **Infrastructure Policy IN/2** – promotes for incremental network development in the transport sector in order to conserve resources and being responsive to proven demand for the service being offered.

Urban Area Plan (UAP) Recommendations

The ten year spanned (1995-2005) DMDP Urban Area Plan (UAP) provides an interim mid-term strategy for the development of urban area within the RAJUK administrative boundary. The validity of UAP, though expired in 2005, it has been extended through a gazette notification. The UAP, through its explanatory report, resource maps, interim management report, interim planning rules, and urban area plan map provides guidelines for planning and development control of the entire RAJUK area.

The following sections make a short review of the Urban Area Plan proposals made for the SPZs that make up the Group-E Extension area.

a. Strategic Planning Zone and Proposals of Structure Plan and Urban Area Plan for the Project area

The DMDP grouped the entire RAJUK or DMDP area into 26 Spatial Planning Zones (SPZ) for the purpose of detailed area planning. The current project area is a part of SPZ 18: Dhaleswari/Flood Zone South located on the western part of the DMDP area. It is on the southwestern boundary of RAJUK area. It is a low-lying flood plain with

rural character. The area can be accessed by Hemayetpur of Savar through Isarpur Bridge and also through Bhakurta Road of south Savar. It is also accessible through Dhaka-Nawabganj Road. The area is subject to annual inundation by the Dhaleswari River and is termed as the main flood flow and sub-flood flow zone by the Structure plan.

The following sections make a review of the SPZ-18 that make up the project area and the development proposals.

Spatial Planning Zone-18: Dhaleswari/Flood Zone South

Table-3.1: The UAP made the following Estimates for SPZ-18: Dhaleswari/Flood Zone South

Year	Population	Density (ppa)	Urban Area (acres)
1991	275,000	45	1889
2006	360,000	191	

Source: DMDP, Vol. II: Urban Area Plan, p-78

Area Description

SPZ-18 has a total area of about 1889 acres (764.78 ha) that stands on the south western edge of RAJUK area. Urban Area Plan (UAP) views the area as having “*subject to annual flooding by Dhaleswari River and has been designated as Flood Zone South*”

Major Issues/Problems

Following were the observations of the UAP report about the Extension of Group-E part of SPZ: 18:

- The zone is low lying flood plain and any spatial development will hamper its function as a flood flow zone.
- The zone has typical rural character and there is hardly any impact of development from Dhaka-Mawa Road.
- Due to low depth investment for development will incur high cost for land filling.

Land fill by individuals and the real estate companies have already started in the area. But such development serving demand of serviced land is actually endangering natural drainage and flood flow function of the area.

Actions Committed/Required

The following actions were recommended by the UAP for SPZ 18.

- The area is a major flood zone, as such to avoid negative impacts, there should not be any development that might intervene free flow of flood water.

The consultant agrees with the actions suggested by DMDP that there should not be any development in the area. And therefore, in line with the recommendations the consultant is not going to make any development proposal and suggests continuing the existing land uses.

3.2 Planning Principles and Standards

3.2.1 Guiding Principles

The following principles have been suggested by DMDP for making various designs under the planning proposals.

- a. The area determined for development has to be made accessible to make the area livable and functional by providing efficient circulation system.
- b. Considering land constraint minimum possible land should be allocated to provide civic facilities.
- c. Location of civic facilities should be chosen carefully to serve maximum possible residents.
- d. During designing land use category emphasis should be laid on facilitating investment through enabling easy building permission.
- e. Develop to serve the surrounding hinterlands.

3.2.2 Planning Standards

The DMDP the Urban Area Plan (UAP) report in its Section 1.2.8 (Page 12) recommended some planning standards and principles. These standards and principles have been recommended in conjunction with planning rules. The planning standards however, address only the community services, while the principles and rules cover wide areas of issues. In defining planning standard the UAP report states, " *Planning standards define the target levels of publicly funded community provision needed for achieving minimum public health, education, safety, leisure and cultural levels, plus a few other essential urban services.*" Before preparing the standards the DMDP experts considered the following issues:

- national goals, targets and practice;
- cultural practice;
- climatic conditions;
- resources likely to be available;
- competing demands for use of, and cost of land;
- flexibility to allow incremental improvement;
- simplicity of application and use.

For preparation of standards and principles the DMDP reviewed such reports as 1983 UDD Upazila Plan and Lands Study 1993. The experts, however, framed standards only for those services that are usually provided by the public sector. The services offered by the private sector in response to market forces have not been included in their recommendations. However, the studies on standards do not follow recommendations in all cases.

Standards and Design Principle for Community Services

The following are the recommendations of the UAP about community services:

Table-3.2: Standards for Provisions of Community Services

Type of Service	Number of Area Inhabitants served Per Unit	Surface Area Needed per Unit	Remark
Primary School	15000	1 acre	'ideal' standard is 1 per 7000; present situation is 1 per 220000. 16% primary schools are government schools; the 1 acre surface includes playgrounds; can also be double shift / dual use.
Secondary Schools	23000	2 acres	the surface area includes playgrounds.
Colleges	-	-	Threshold number of students and area of land to be defined case by case
Playgrounds	Double usage of primary and secondary school yards.	-	-
Parks	25000	4 acres	Larger parks may serve larger number of inhabitants.
Graveyards	Ward basis	Minimum 5 acres	-
Neighbourhood Centers	Ward basis	0.30 acre	-
Health post	Ward basis	-	-
Welfare Centre	Ward basis	-	Also included in community center
Hospital	-	-	To be determined in a case by case basis
Markets	Ward basis	-	
Police/Fire Station	-	-	To be determined in a case by case basis.

Source: DMDP Urban Area Plan, 1995.

Standard for Building Construction

For building construction in usual practice following rules will be applicable:

Dhaka Metropolitan Building Construction Rules, 2008

Government formulated a new set of building construction rules in 2008. Following are the key features of the rules.

Table-3.3: Recommended New Setback for 33 m or up to 10 Storied Building

Plot size in sq meter	Minimum set back (rear) in meter	Minimum set back (Side) in meter
Up to 200	1.0	1.0
201-275	1.5	1.0
276-1300	2.0	1.25
1301 and above	2.0	1.5

Source: Building Construction Rules, 2006

Planned development ensuring community's active participation is the key to successful transformation of today's Dhaka into tomorrows adorned green Dhaka. Keeping that vision in mind, DAP Consultants developed an optimum standard for the amenities and community facilities that the city dwellers deserve (**Table- 3.4**).

Table- 3.4: Facility Standard at Neighbourhood Level

Sl.	Name of the Facility	Quantity		Area		
		Min.	Max.	Minimum for Unit Facility	Sub Class Total	Class Total
		(No.)	(No.)			(Acre)
1	Primary School(Public or private)	2	3	1 Acre		3
2	High School(Public or private)	1	2	1.5 Acre		3
3	Open space			10 Acre		12
	i)Park/children's park	1	2	0.3 Acre	1 Acre	
	ii)Water body/ Canal/Pond	As per Planner		1.5 Acre	6 Acre	
	iii)Play field	2	3	1 Acre	3 Acre	
	iv) Green/Vegetation/Water Front	As per Planner		0.5 Acre	2 Acre	
4	Mosque and Maktab/ Worship Places	2	3	0.2 Acre		0.6
5	Library(central)	1	1	0.1 Acre		0.2
6	Services			0.3 Acre		0.5
	i)Dentist/Doctor's Chamber	2	3	40 sq.m	120 sq.m	
	ii) Beauty Parlour	1	2	50 sq.m	100 sq.m	
	iii) Laundry	2	3	16 sq.m	50 sq.m	
	iv) Hair Dresser	2	3	12 sq.m	40 sq.m	
	v) Cyber Café/Internet service provider	1	2	50 sq.m	100 sq.m	
	vi) Photocopy / mobile / land phone / fax	2	2	12 sq.m	40 sq.m	
	vii) Computer based (word processing, printing etc) services	1	1	30 sq.m	30 sq.m	
	viii) Motor bike Repair, vulcanising etc.(optional)	1	1	50 sq.m	50 sq.m	
	ix) NMT repair service (Rickshaw, bicycle etc)	1	2	30 sq.m	60 sq.m	
	x) Post Office / Courier Services	1	2	20 sq.m	40 sq.m	

Sl.	Name of the Facility	Quantity		Area		
		Min.	Max.	Minimum for Unit Facility	Sub Class Total	Class Total
		(No.)	(No.)			(Acre)
	xi) Sports / Recreational facilities(games, indoor games etc)	1	2	50 sq.m	100 sq.m	
	xii) Rickshaw/Auto stand (General)	2	4	100 sq.m	400 sq.m	
	xiii) Restaurant, Tea bar, Fast food	2	4	10 sq.m	100 sq.m	
	xiv) Tailoring	1	2	20 sq.m	40 sq.m	
7	Solid waste transfer station(may also small scale processing)	1	1	0.5 Acre		1
8	Utility Facilities					1*
9	Neighborhood Co-operative Office Complex			0.33 Acre		0.5
	i) Offices	2	4	15 sq.m	60 sq.m	
	ii) Committee rooms	2	3	40 sq.m	120 sq.m	
	iv) Community Club including indoor games (male and female)	2	2	200 sq.m	400 sq.m	
	v) Cultural Facilities (Rehearsal, Music room etc)	1	2	30 sq.m	60 sq.m	
	vi) Community Police Barrack	1	1	40 sq.m	50 sq.m	
	vii) Technician Service (Electrical, Plumber, AC, Freeze etc.)	2	4	25 sq.m	100 sq.m	
10	Community Hall	1	2	0.33 Acre		0.5
11	Shops			0.33 Acre		0.5
	i) General store	3	4	25 sq.m	100 sq.m	
	ii) Grocery	4	6	25 sq.m	150 sq.m	
	iii) Stationary	2	3	25 sq.m	150 sq.m	
	iv) Confectionary / Bakery	2	3	25 sq.m	80 sq.m	
	v) Departmental Store**	1	2	100 sq.m	200 sq.m	
	vi) Medicine Shop	2	3	25 sq.m	80 sq.m	
	vii) Sweet Meat Shop	2	3	25 sq.m	80 sq.m	
	viii) Book / Newspaper Stall	2	3	10 sq.m	30 sq.m	
	ix) Fresh Corner (Vegetable, fish, meat, egg, chicken etc.)	2	3	12 sq.m	40 sq.m	
	x) Fruit Shop	2	3	10 sq.m	30 sq.m	
	xi) Flower Stall	2	2	10 sq.m	30 sq.m	
	xii) Gift shop	1	2	10 sq.m	30 sq.m	
Total Area for the Neighborhood Facilities				22.8 Acres (approx.)		

Source: Proposed by the Consultants

* May be added as per decision of the Nagar Unnayan Committee under New use category

**Area under Departmental Store shall be calculated on the basis of the spaces allocated against one of the corresponding services in this table (cumulative area)

Urban residential zone shall be developed in terms of neighborhood concept following approximate standards and the area will be free of thorough traffic.

Gross area of neighborhood : 50 acres [approx.]. It may vary depending on the population density of the planning area.

Gross density : 225 to 250 persons per acre.

Standards for Road

The minimum road standards proposed in Structure plan are as follows:

Main Road	24.0 m (78 ft.)	ROW
Arterial Road	14.5 m (47.5 ft.)	ROW
Collector Road	13.0 m (42.6 ft.)	ROW
Access Road	9.0 m (29.5 ft.)	ROW
Access Road	6.0 m (19.7 ft.)	ROW
Non Motorized Road	4.0 m (13.0 ft.)	ROW
Footpath	2.5 m (8.2 ft.)	ROW

Considering Structure Plan and other standards, consultants have proposed the following road standards for Detailed Area Plan areas:

Table - 3.5: Proposed Road Standard for DAP Area

SL No.	Road Category	Type	Built-up Area	Less Built-up Area
			ROW (Ft)	ROW (Ft)
1	Primary Road	Type-1	80 (24.39)	170 (51.83)
2	Primary Road	Type-2	80 (24.39)	130 (39.63)
3	Primary Road	Type-3	80 (24.39)	100 (30.49)
4	Secondary Road	Type-1	60 (18.29)	80 (24.39)
5	Secondary Road	Type-2	40 (12.0)	60 (18.29)
6	Tertiary Road	Type-1	40 (12.0)	40 (12.0)
7	Tertiary Road	Type-2	30 (9.19)	40 (12.0)
8	Access Road	Type-1	24 (7.32)	30 (9.19)
9	Access Road	Type-2	20 (6.10)	24 (7.32)

Source: Proposed by Consultants

3.3 Preferred Development Strategies

Hydrological issues predominated the reasoning regarding the ways to develop the planning area so near to the heart of the vibrant capital city. All the higher level plans and studies carried out at varying point of time converged to the same conclusion that the vital contribution of this low lying area bounded by rivers as main Flood Flow and Sub-Flood Flow zones allowing excess flood water to pass over it, must not be obstructed by any development. Despite this unanimous expert cautions, the area is experiencing development pressure. DAP consultants has tried to work out an effective strategy to address the problem of development with acceptably low obstruction to the flood water to pass through. The strategies adopted for current planning exercise are as follows:

3.3.1 Drainage

- Non-continuous smaller rural settlements above flood level surrounded by ample low lying areas (agriculture, sub-flood flow, main flood flow) allowing uninterrupted flow of water to pass through.
- Minimize obstruction of flood water as is practicable.
- Appropriate connectivity by roads having sufficient openings to ensure needful flow of water across them as well as uninterrupted traditional water based connectivity by keeping appropriate navigation clearance at the bridges. This would help maintain the biodiversity of the area and contribute to sustainable environment in turn.

3.3.2 Residential Development

- Subdivide Residential Landuse Zone based on the potentiality, trend and opportunity.
- Adopt Neighborhood concept for new residential developments and for need assessment of community facilities.
- Avoid thorough traffic and heavy vehicles within the neighborhoods.
- Provision of adequate footpaths should be ensured to ease movement of residents.
- Ensure community facilities and services of appropriate scale at neighborhood level.

3.3.3 Industrial Development

- Ensure provision of central effluent treatment plant in case of industrial clusters.
- Ensure own treatment plant in case of individual facilities.
- Prohibit high hazard industries within the area.
- Relocate industries from predominantly residential zones in phases.
- Provide essential support facilities for effective functioning of the industries.

3.3.4 Mixed Use Development

- Ensure adequate safety and security of the people especially of the families residing in mixed zones.
- Provide sufficient quantity of wide and safe footpaths to use in urban areas.
- Ensure adequate utility services to ensure uninterrupted production and livelihood.

3.3.5 Transport and Connectivity

- Provide safe, adequate and comfortable pedestrian paths.
- Provide appropriate and effective public transport routes with sufficient number of quality public transport to carry passenger.
- Grade separation of National and Regional Highways from the local main roads, the latter being at grade and other two above grades.

3.3.6 Flood Flow Zones

- Strictly preserve the zone area as per the higher level plans and DAP.
- Promote agricultural and passive recreational use of the area during dry season.

3.3.7 Rural-Agriculture Areas

- Strictly preserve agriculture land from conversion into non-agricultural use.
- Promote traditional waterways in the low lying areas by constructing sub-merged road for dry season connectivity.
- Promote rural characteristics in the isolated homesteads keeping mandatory buffer to make way for the flood water pass through.

3.3.8 Water Body and Open Spaces

- Strictly protect canal networks as per DAP.
- Make Provision for open spaces and water body at the settlement level.
- Strictly protect the river fronts.

3.3.9 Water Supply

- Private extraction by tube wells may continue in non-municipal areas where there is no piped water supply.
- In the long run, to make the supply sustainable projects may be undertaken to procure river water and supply after treatment.
- Ground water recharging through rain water harvesting, conserving water bodies and controlling groundwater extraction. Groundwater extraction is to be controlled through registering boreholes and recharging according to test yields. Ground water management is to be enforced by concerned agency.
- Focused planning and action will be required to be taken to prepare and implement rain water as roof water harvesting schemes both with the aim of optimizing water use and ground water recharge. For this suitable mandatory provision is to be made for planning and construction of various schemes.
- The planning should fit together watershed management, and arrest the run-off. It should ensure the conservation of natural valleys, water bodies and aquifers. The concepts of 'zero run-off drainage', with retention ponds, sediments traps and balancing lakes should be adopted, with a segregated wastewater disposal system. A green network overlapping the blue network would protect the ecology of aquifers, and also provide a pleasant environment. Simple methods of site planning, which incorporate porous/semi permeable paving, drop inlet/down pipe, sediment trap, retention ponds, etc. will contribute in maintaining ground water table.

- One of the prime objectives of development should be to improve the quality of river-water, to secure its continuous flow and to encourage the return of aquatic life. This needs improvement of drainage, waste water treatment and pollution abatement by sewerage improvement. The surplus water during the monsoons should be retained in balancing ponds along the riverbed rather than allowing it to the downstream areas.
- Where the hazard of pollution exists, the minimum charge for operating permits should cover the expenses of adequate policing and controls. Mandatory performance bonds and liability insurance should pay for all damages plus any corrective measures, which might be needed.
- The drains and waterfront can be landscaped in the form of interconnected parkways. There is no need for elaborate gardening of the greenways, but wild, simple and natural stretch by itself would be ecologically important. Such trails could be one of the cheapest forms of drainage and recreation.

3.3.10 Electricity

- Compulsory Solar Panels for public advertising, lighting in open areas, public utilities, streets, etc.
- Adoption of Load Management Technique.
- Tariff restructuring and improved metering arrangement to minimize power thefts/losses.
- Private sector participation in different stages of power generation, transmission and distribution;
- Incentivising energy savings and use of energy efficient gadgets.
- Public awareness, capacity building and training.

3.3.11 Gas Supply

- Explore possibility of use of natural gas in cylinder for domestic purposes

3.4 Major Infrastructure Proposals

Among the vital infrastructure supports required for the smooth functioning of life of the area, the foremost is the accessibility. The physical interpretation of this requirement is an effective road network having a range of roads with proper hierarchy starting with major traffic arteries, connectors, distributors and finally down to access roads. Almost always these road networks physically house other vital utilities of urban life – electricity, tap water, gas, sewerage disposal, storm water drainage and so forth so that the households and their facilities can be brought under their services. This calls for careful planning of the road sections off-setting the perennial cutting of urban roads causing tremendous misery which every citizen is aware of.

In the current section the consultant sets down the approach to providing major infrastructure and services in the project area in the light of policies expressed in the DMDP and other relevant documents. Apart from review of the Structure Plan and Urban Area Plan the plan also considers Strategic Transport Plan (STP) Project proposals and makes evaluation of the existing conditions about infrastructure and services in the project area.

3.4.1 Transport

This part of planning proposal describes the roads proposed in the planning area.

a. Primary Road Proposal

A major thoroughfare is proposed from Dhaka-Aricha Road between Boilarpur and Amin Bazar through Bhakurta and (Uttar Baherchar to Deuli mouza) Taranagar union to be connected with Dhaka –Mawa Road at the south of RHD Bypass Highway coming from Buriganga Bridge-2. This is the only primary road proposed for the area. This road would help to bypass Dhaka City from traffic of northern and western districts destined for southern districts like, Faridpur, Khulna, Barisal, Madaripur, Shariatpur and Patuakhali. It will also serve as a regional road. Please see **Map-3.1**.

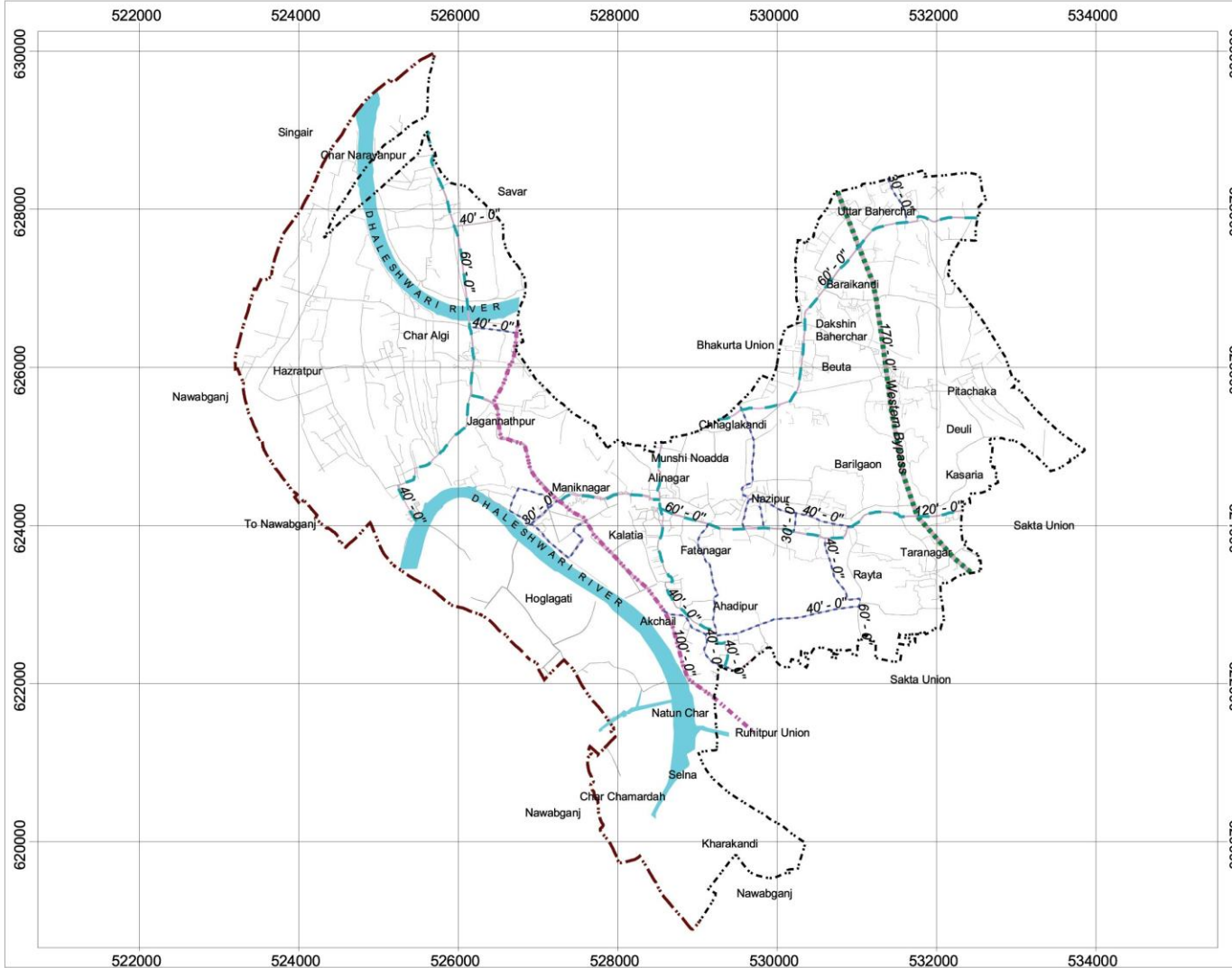
Table- 3.6: Proposed Primary Road Details

Route Description	Length	SPZ Location	Mouzas Connecting
Primary Road Type-1:	3.80 km	SPZ 17 (3) to SPZ 18	Uttar Baherchar to Deuli Mauza

MAP - 3.1

PROPOSED ROAD NETWORK OF GROUP-E EXTENSION AREA

1:75000



SCALE



LEGEND

- DMDP Boundary
- Extension Area Boundary
- Proposed Road Network
- Existing Road
- River
- sed Road (ROW)
 - 30 ft
 - 40 ft
 - 60 ft
 - 100 ft
 - 170 ft

Detailed Area Plan for DMDP Area,
Extension Work of Group-E
(Part of Group-D)



55, Bir Uttam Qazi Nuruzzaman Road
(West Panthapath)
Dhaka-1205, Bangladesh

b. Secondary/Collector Road Proposal

Some secondary roads have also been proposed within the area for east-west connectivity. The existing internal roads in the area are narrow and meandering and unpaved in many cases. So, road proposals include widening and upgrading of existing roads apart from a few new link roads. Collector Roads are proposed in Hazratpur, Taranagar and Kalatia Unions. Please see **Map-3.1**.

The purpose of collector road is to establish link between main road and access road. About 60 km of collector roads have been proposed in different parts of the planning area to link areas with arterial road as well enable internal mobility between unions. The main focus of collector road is to promote accessibility in fast growing and potential urban centers and establish links with nearby arterial road and adjoining urban centers. **Table-3.7** and **Map-3.1** shows the details of road proposal of group-E Extension area.

Table- 3.7: Proposed Secondary/ Collector Road Details

Route Description	Length	ROW in Feet
Secondary Road Type-2: From Taranagar mouza to Uttar Baherchar Mouza through Fatenagar and Chhagla kandi mouza	9.92 km	60 feet
Secondary Road Type-2: From Char Chamardah to Char algi Mouza through Akchail, Jagannathpur and Maniknagar	9.39 km	60 feet

3.4.2 Flood Control and Drainage

a. Flood Control and Drainage Development Proposals by DMDP

DMDP Structure Plan set the following policies for flood control and drainage development.

POLICY RS/2

- Flood Plain, Rivers and Water bodies
- The river and flood plains within Plan area play an important role on both the ecology and economy of the city dweller. They are the source of flood risk to urban development as well as provider of water both for rural and urban uses. As such the flood plains and the rivers require policies, which will both, limit the damage inherent in uncontrolled flooding and damage and conserve the rich resources, which they bring to areas rural and urban areas alike.

POLICY RS/3

- Food Flow Zones
- Land development within the designated flood plain areas of the DMDP Structure Plan will be controlled in order to avoid obstructions to flood flow, which might otherwise result in adverse hydraulic effects, such as, the rise of flood water levels and changes in flow direction.

b. Flood Control Planning

Flooding in Group-E Extension occurs from 3 sources,

- direct rainfall;
- direct overland spillage from the boundary major rivers like, the Jamuna and Old Brahmaputra and
- over bank spillage from the internal regional rivers, the distributaries of the Dhaleswari.

The pattern of river levels generally experienced in the region shows a 2-peaked responses, the first peak being generated by internal regional rainfall excess, normally in June and July, and the second peak resulting from high cross boundary flows in the major rivers, normally in August and September. The major floods that the project area suffered so far are recorded in 1954, 1955, 1970, 1974, 1981, 1987 & 1988, 1998 and 2004. Among them flood of 1988 is the largest so far recorded.

c. Planning Storm Water Drainage

The drainage of Group-E Extension area takes place at four levels, the boundary river system (primary), the regional river system (secondary), the natural khal system (tertiary) and depressed land system (quaternary), the mechanism by which the region drain relates directly to this hierarchical system and its interconnection.

In order to eliminate flood problems and to enhance the security of the people in the Group-E Extension area flood mitigation plan will comprise non-structural measures.

Planning of the drainage system starts with zoning of the area based on ground elevation. Zoning is important to determine area whether gravity drainage system is feasible and where pump drainage system is required. The area above the flood water level plus 0.5m to 1.0m can be drained by gravity flow. The area below flood water level and area less than 0.5m above the flood water level cannot be drained by gravity system. A pump drainage system is required.

The existing drainage system in the project area in general consists of local open khals connected to the regional rivers. From the observation of the present condition almost all the khals operate with least efficiency and ineffective during the most critical time of drainage as most of them has been silted up. All these khals are to be improved in order to serve the present as well as future drainage need. The improvement plan comprised the following works.

- i. Reclamation of Khash land and fixing of ROW
- ii. Re-sectioning of khals
- iii. Widening of Khals
- iv. Re-excavation of silted up and undersized khals
- v. Slope protection of khals by RCC blocks or Pitching etc.,

The above improvement works shall serve the following purpose:

- i. Increase the velocity of flow and thus the discharge
- ii. Check the scour of bed and erosion of bank
- iii. Retain earth or structure along the side of the drain
- iv. Reduce land acquisition problem
- v. Preserve the right of way and avoid encroachment to Government property

Map- 3.2 illustrates the drainage plan of the project area.

3.5 Amenity and Urban Facility Proposals

Urban Community/Social Services

As the DMDP Structure Plan has designated this area as flood flow and agricultural area and urban developments have been discouraged here, there is hardly any need for proposing urban amenities.

3.6 Description of the Plan

The total land under Group-E Extension area is 11191.40 acres. About 74% of the area under flood flow zone and agriculture, while about 15% goes to housing area and about 7% under water body. **Table-3.8** and **Map-3.3** shows the proposed land uses of the area

a. Flood Flow Zone

About 37.23% (4166.15 acres) of the planning area have been delineated as flood flow zone. This zone, though, used as a flood water flow path, it is used for agriculture after the flood water recedes.

b. Agricultural Zone

About 36.70% (4107.22 acres) of the planning area have been earmarked as agricultural land. Except Agriculture related activities, other landuse developments are strictly restricted in this zone.

Table- 3.8: Proposed Land Use of Group-E Extension Area

Name of Land use	Area (Acre)	Area (Hectare)	Percentage of Total Area (%)
Flood Flow Zone	4166.15	1685.99	37.23
Agricultural Zone	4107.22	1662.14	36.70
Rural Settlement Zone	1710.18	692.09	15.28
Water body	782.50	316.67	6.99
Proposed Road Network	205.25	83.06	1.83
Existing Road	136.80	55.36	1.22
Heavy Industrial Zone	82.95	33.57	0.74
Total	11191.40	4529.02	100.00

c. Rural Settlement Zone

The planning area is dominated by rural environment and it will continue to be so for long. Though within RAJUK jurisdiction, the area does not have any economic potentiality at the moment that can foster urbanization in the immediate future. So the rural homesteads in the area have been delineated as they are. An area of about 1710.18 acres land which is 15.28% of the planning area has been earmarked for rural settlement zone.

d. Water body

Existing water bodies including the rivers and khals have been delineated as they are. This land use constitutes 782.50 acres or about 6.99% of the planning area (**Table-3.8**).

e. Heavy Industrial Zone

An area of 82.95 acres has been kept reserved for future heavy industries in and around in tannery estate.

f. Road and Transportation

An area of 342.05 acres has been designated for road and transportation, which is 3.06% of the total planning area.

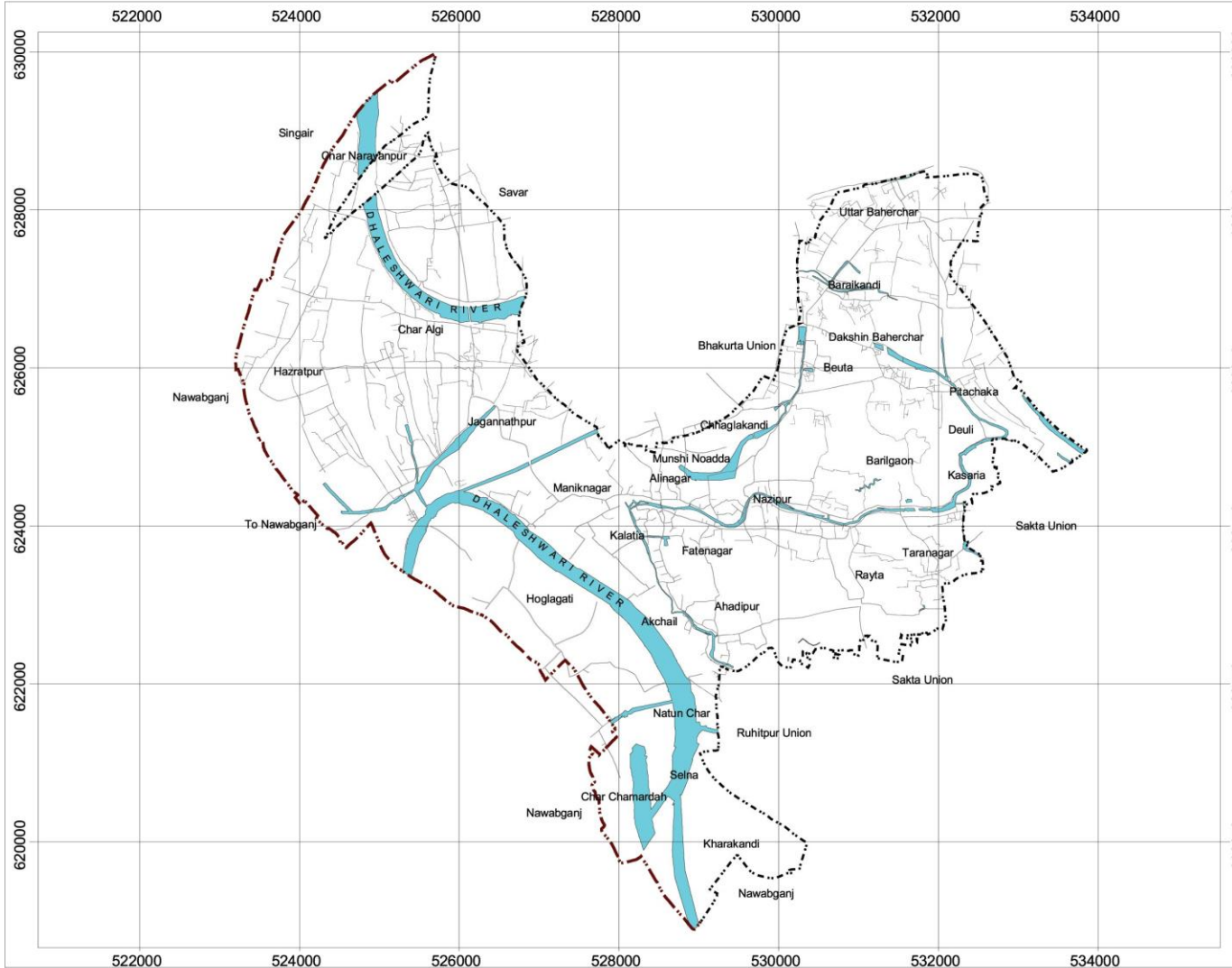
3.7 Multi-sectoral Investment Program

Coordinated public sector action program is required as a part of multi-sectoral investment planning (MSIP). MSIP is an extremely difficult task and cannot be accomplished by any single organization (like, RAJUK) in isolation. To work out any such program will require top level government decisions as it involves many ministries and departments. To make the decisions of MSIP binding on every ministry and its affiliated agencies it may even require legal provisions. Consultant can best set phased out sector wise projects against thumb rule budgets. But such projects would have very little significance to the concerned ministries except the Ministry of Housing and Public Works. The Structure Plan proposed many policies and development proposals involving many ministries, but no reaction was received on any of them from any ministry/department. However, no initiative was also taken by the custodian of DMDP to carry out MISP. For execution of the different development proposals support from quite a number of public sector agencies would be required. In the following sections a brief discussion is made on the involvement of different agencies in implementing various development proposals in the planning area. To make the DAP successful, these agencies must include in their annual program the development projects prepared under the current DAP. A Multi Sectoral Investment Plan (MSIP) has been provided in **Table-3.9** that shows the first phase projects to be implemented by various agencies including preliminary cost estimates.

MAP - 3.2

DRAINAGE NETWORK OF GROUP-E EXTENSION AREA

1:75000



SCALE



LEGEND

- DMDP Boundary
- Extension Area Boundary
- Existing Road Network
- Waterbody

Detailed Area Plan for DMDP Area,
Extension Work of Group-E
(Part of Group-D)

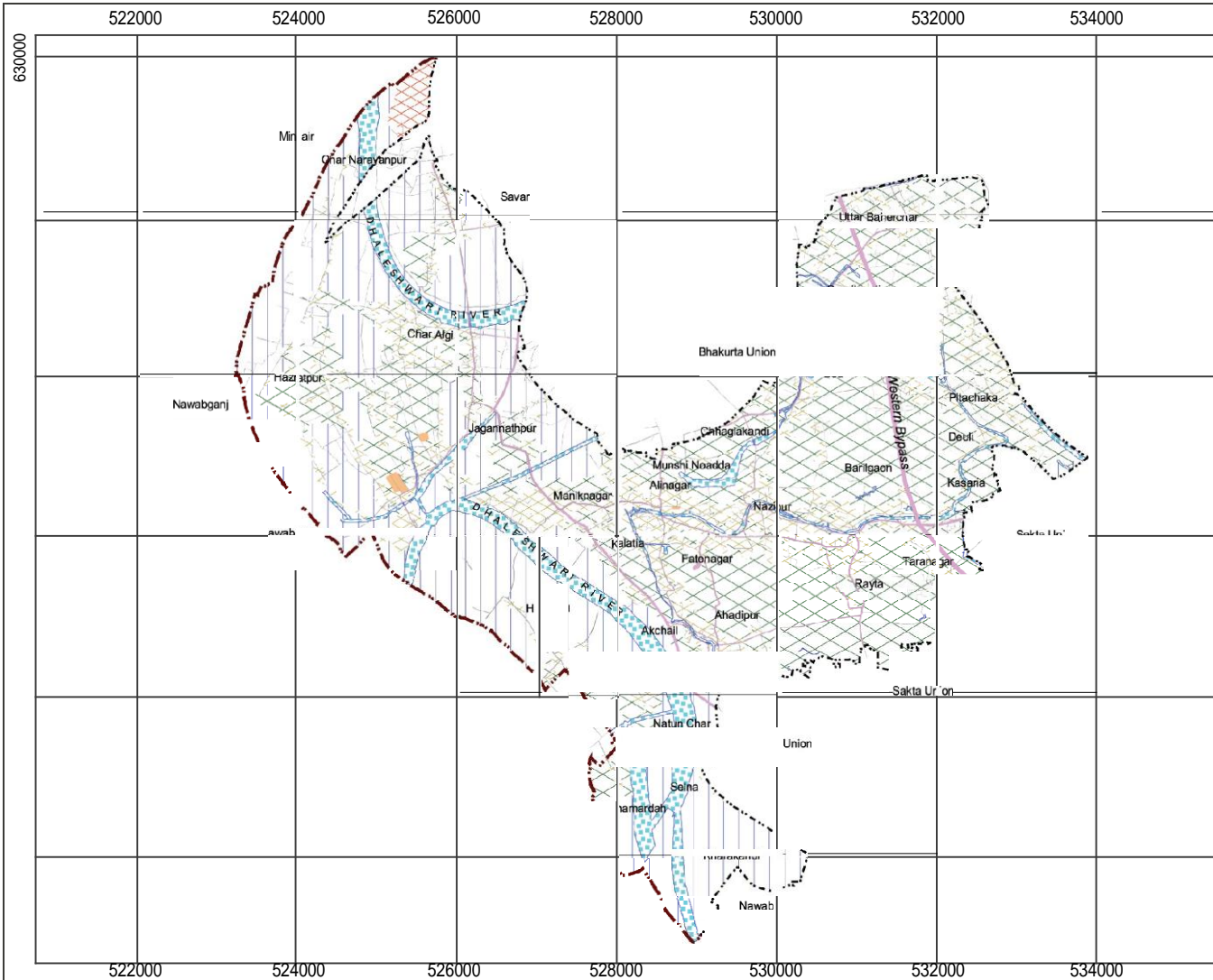


Sheltech Tower
55, Bir Uttam Qazi Nuruzzaman Road
(West Panthapath)
Dhaka-1205, Bangladesh

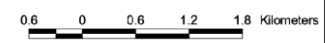
MAP - 3.3

PROPOSED LANDUSE ZONING OF GROUP-E EXTENSION AREA

1:75000



SCALE



LEGEND

- DMDP Boundary
- - - Extension Area Boundary
- Agricultural Zone
- Transportation & Communication
- Flood Flow Zone
- Heavy Industrial Zone
- Overlay Zone
- Proposed Road Network
- Rural Settlement Zone
- Urban Residential Zone
- Waterbody

Detailed Area Plan for DMDP Area,
Extension Work of Group-E
(Part of Group-D)

M SHELTECH
Sheltech Tower
55, Bir Uttam Qazi Nuruzzaman Road
(West Panthapath)
Dhaka-1205, Bangladesh

Table- 3.9: Multi-Sectoral Investment Program for 1st Phase of Development Plan Period (2010-2012)

Sector	Project Title and Description	Project Objective	Cost of Development (crore)	Implementing Agency
Transport	1. Primary Road Type-1: Uttar Baherchar to Deuli Mauza Length: 3.80 km Width: 170 ft.	a. Create new western bypass. b. Opening up local undeveloped areas and potential for development. c. Promote urban growth and new investment in areas vicinity.	Tk. 17.11	RHD
	2. Secondary Road Type-2: From Taranagar mouza to Uttar Baherchar Mouza through Fatenagar and Chhagla kandi mouza. Length:9.92 km Width: 60 ft..	a. Create opening for local undeveloped areas. b. Open up areas potential for development. c. Promote urban growth and new investment in areas around the proposed road.	Tk. 44.64	LGED/RHD
	3. Secondary Road Type-2: From Char Chamardah to Char algi Mouza through Akchail, Jagannathpur and Maniknagar Length:9.39 km Width: 60 ft.	a. Link inaccessible areas. b. Open up areas potential for development. c. Promote urban growth and new investment in areas around the proposed road.	Tk.42.26	LGED/RAJUK

3.8 Housing Area Development

In case of housing area development in the existing villages, there is little scope for any organized development. As large part of the project areas has been demarcated as flood flow zone, growth is expected to be accelerated in growth centers like Kalatia bazaar, Hazratpur, etc. when the new primary road and the proposed secondary roads will be executed. With the effective restrictions on development in agricultural/flood flow areas there will be densification in the existing settlement areas.

Following policies are proposed for housing development in the new areas.

- For housing development RAJUK should adopt a policy of facilitator and not as a provider. It should not go for acquisition of any land in the project area for the purpose of providing housing serviced plots.
- It should adopt a policy of ILD based housing development, where RAJUK shall provide physical infrastructure like, road, play field, space for education and community facilities, bazaar and the land owners shall develop their own housing taking opportunity of the infrastructure.
- It should develop necessary mechanism to recover cost of infrastructure development from the beneficiaries.

However, before adopting a policy for land development based on above techniques, RAJUK should go for a few pilot projects.

3.9 Integrated Planning Map

Part-VIII shows the integrated plan map of Group-E Extension Area which has been attached in the Folder. The map shows all the development proposals made for the area including the land use. As there is Structure Plan restriction in the area not to allow any non-farm development the consultant has refrained from making proposals like, commercial and industrial area development. It is, however, unlikely that development will not be forthcoming into the area. Opening of the area through the proposed primary road will encourage new investors into the area. Particularly the land speculators and real estate developers will rush to the area allured by its low land price. It would be extremely difficult for RAJUK to control any development contrary to the DAP proposal with its existing strength of manpower and management capability.

Chapter- 4

Plan Implementation

4.0 Introduction

In this chapter of the report measures have been proposed for implementation of the plan. It also fixes up priorities and phasing of DAP projects. A three term phasing has been made considering the time period left out for execution of Structure Plan proposals.

4.1 Implementation Strategy

Traditionally, owing to complexities, government does not involve people in the planning and development process of any project and attempt to implement it with own or procured fund through land acquisition. Such a policy has some built-in problems that sometimes strongly resist its implementation.

People rightly feel that they have the right to know about the plan which has direct bearing on their life and property. The plan regardless of its quality uproots many people from their home and community they belong to. Thus sometimes a strong and desperate group of affected people together with their friends and allies resist, with their united strength, the implementation process of a development project.

In our country, during land purchase people records land at considerably low price than the actual. This reality makes people financially looser when the land is acquired by government. Compensation all over the world is a complicated process. Brokers prop up to bridge the gap between innocent people and the government machinery. Money sticks to broker's hands. Plan Implementation through Active Community Participation Technique is the answer to offset these impossible obstacles on the way to plan implementation. The plan recommends involving beneficiaries in plan implementation.

4.2 Land Management Techniques

As the current project area has been designated by DMDP as flood flow and agricultural area, there is little or no scope to execute land development techniques. For potential settlement areas land development techniques like, land pooling, land readjustment, land sharing, site and service may be applied. Public sector is suggested to play the role of facilitator and promote private development.

4.3 Areas for Action Area Plan

There is no recommendation of action area plan for the Group-E Extension area.

4.4 Public Sector Action Program

Tannery Estate at Harindhara

The Chemical Industries Corporation of the Ministry of Industries is developing a Tannery Estate in Harindhara area of north-west of Keranigonj to rehabilitate the tanneries agglomerated at Hazaribagh of core Dhaka. The project is nearing completion.

4.5 Area Development Priorities and Phasing

4.5.1 Phasing

DMDP Structure Plan Phasing of the Plan is as follows:

Table- 4.1: Structure Plan Phasing

Structure Plan Phase	Period
Short-term	1995-2000
Medium-term	2000-2005
Long-term	2005-2015

Source: Structure Plan, DMDP

The development proposals under Detailed Area Plan for Group-E Extension area should have been implemented by 2015 being the plan period. But there are not proposals which may neither be possible to implement within this period nor does it require so. But in order to secure right of way many proposals (especially for a number of new primary roads) have been included in the plan which are not meant for implementation within the plan. Thus the consultant proposes the following phases for implementation for various proposals made in the project. The phases are

Phase-I	2010-2012
Phase-II	2012-2015
Phase-III	Beyond the plan period

4.5.2 Fixation of Priorities

All projects under the DAP will be executed during above first two time frames. The should be sequenced as short term and medium term based on priority of execution. Determinants of prioritization of projects are,

- potentiality of urban development in the area concerned;
- urgency of problems;
- the projects that can serve existing as well as new areas.

The projects that will not be possible to be executed during the above two phases will be carried over to next phases to be worked out later in the next report.

Table- 4.2: Phasing of Development Proposals

Phase	Sector	Project Description	Site Location Including SPZ	Area of Land Required in Acres (Length Km)	Implementing Agency (Land Acquisition, Compensation & Development)
Short Term (2010-2012)	Transport	Secondary Road Type-2 (60 ft wide)	From Taranagar mouza to Uttar Baherchar Mouza through Fatenagar and Chhagla kandi mouza	44.595 (9.923 Km)	RAJUK/RHD/LGED
		Secondary Road Type-2 (60 ft wide)	From Char Chamardah to Char Algi Mouza through Akchail, Jagannathpur and Maniknagar	42.479 (9.387 Km)	RAJUK/RHD/LGED
Medium Term (2012 – 2015)	Transport	Construction of Primary Road from Bhakurta mouza to Deuli mouza in Kalatia Union	Kalatia Union SPZ 18	48.81 (3.80 km)	RAJUK/RHD/LGED

The purpose of phasing is to establish development priorities. To achieve targets of Structure Plan objectives, both, sequencing and phasing of projects are important. Sequencing allows flexibilities in response to changes or fluctuations and phasing fits the projects at the right time period. The **Table-4.2** shows the preliminary phasing of development proposals in DAP project. Detailed phasing of all the DAP projects will be worked out in the draft planning report.

4.6 Development Control

Development control function consists of four distinct complementary streams of activities: Landuse Zoning, Development Permit, Field level Vigilance and Interaction with people. Following paragraphs embody the plan proposals under these activity heads.

4.6.1 Landuse Zoning

Landuse Zoning is a form of legal power which is delegated to development authorities/municipalities through enabling legislation to ensure the welfare of the community by regulating the most appropriate use of the land. Zoning is a classification of land uses that limits what activities can or cannot take place on a land parcel by establishing a range of development options.

Zoning has been defined as an action through legislation provided to a development authority/municipality to control

- a) The heights to which buildings may be erected
- b) The area of lots that must be left un-built upon, and
- c) The uses to which buildings and lots may be put.

- **Area Zoning**

Area zoning is to specify which types of landuse are considered appropriate for different areas or 'zones' and it therefore indicates the planning control objectives of the authority or municipality for its administrative area. This is therefore the primary objective of the DAP.

- **Density Zoning**

The aim of the density zoning is to provide an acceptable population density which is related to the designed facilities and amenities especially in the residential areas. This ensures a healthy community and enjoyable community life. Presently within DMDP jurisdiction there is no effective rule to control population density of different areas according to their physical and socioeconomic characteristics or trend. Floor Area Ratio (FAR) adopted in the Building Construction Rules 2008 is the only tool to control population density. It too did not consider the above factors and in many instances proved to be impractical to serve the desired end. FAR should vary from place to place due to variation of the governing factors, specially, income level of the residents. Apart from FAR, there are several standards to achieve desired population density such as number of dwelling units per acre, maximum room occupancy etc. each with their comparative effectiveness. Determining the most appropriate unit and value of standard needs fair knowledge about the likely structures, number and size of land-parcels (not the mauza-plot number since one mauza plot may contain several smaller land-parcels) in addition to socio economic condition of the residents. Determining density at this stage therefore cannot be done. Consultants recommend that FAR should be carefully determined during the preparation of Action Plans since the needful information to do so would be available and adopted in the Building Construction Rules.

- **Height Zoning**

This zoning provides height limits for structures and objects of natural growth and standards for use of an area which encourage and promote the proper and sound development of areas. It is also applicable to height restrictions for flight safety around airports or other similar purposes.

For effective development control, in addition to landuse zoning individual facility and the structures therein is to comply with certain regulations imposed to ensure desirable end. Relation between ground cover of buildings and the land parcel that house it, minimum setback of building from the adjoining plot boundaries and the maximum floor area that can be constructed in relation to the plot size and the connecting road, among many other details, are controlled by RAJUK's Building Construction Rules. Besides, Bangladesh National Building Code focuses on the appropriate materials, construction method, building safety and associated issues.

4.6.2 Landuse Zone Classification

- a. Urban Residential Zone
- b. Commercial Zone (Business)
- c. Commercial Zone (Office)
- d. General Industrial Zone
- e. Heavy Industrial Zone
- f. Mixed Use Zone (Commercial-General Industrial)
- g. Mixed Use Zone (Residential-Commercial)
- h. Mixed Use Zone (Residential-Commercial-General Industrial)
- i. Mixed Use Zone (Residential-General Industrial)
- j. Institutional Zone
- k. Administrative Zone
- l. Agricultural Zone
- m. Flood Flow Zone
- n. Open Space

- o. Overlay Zone
- p. Rural Settlement Zone
- q. Water Retention Area
- r. Water Body

The following sections deal with the general definition of the use and description of associated permitted and conditionally permitted uses under each Landuse zone one by one. The uses not listed here in any of the category shall be treated as **Restricted Use** for the corresponding landuse category and shall not be permitted only except unanimously decided otherwise by the Nagar Unnayan Committee. In such situations the use shall get permission in the category of **New Use**.

a. Urban Residential Zone

Urban Residential Zones are intended primarily for housing development but may also include a range of other uses particularly those that have the potential to foster the development of new residential communities such as schools, small shops, doctor’s chambers, open space like playing fields and so on. Limited Commercial facilities within this zone shall be planned and developed as an integral retail or business unit which, comply with the planned mixed-use concept of the Urban Area Plan.

Purpose

The prime objective of this zone is to provide the space for living as well as to meet the daily needs of the residents.

Landuse Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table- 4.3: Landuse Permitted for Urban Residential Zone

Permitted	
All Types of Residential House	High School
Apartment Housing	Household Appliance and Furniture Repair Service (No Outside Storage)
Artisan’s Shop	Housing Project
Assisted Living or Elderly Home	Housing Projects
ATM Booth	Landscape and Horticultural Services
Barber Shop	Memorial Structure (Ancillary)
Bill Payment Booth	Monument (Neighborhood Scale)
Boarding and Rooming House	Mosque, Place of Worship
Book Stall	Newspaper Stand
CBO Office	Nursery School
Child Daycare / Pre-school	Orphanage
Children’s Park (Must Have Parking)	Permitted
Cleaning / Laundry Shop	Photocopying and Duplicating Services (No Outside Storage)
Communication Service Facilities	Pipelines and Utility Lines
Communication Tower Within Permitted Height	Playing Field
Community Center	Primary School
Condominium or Apartment	Private Garages (Ancillary Use)
Confectionery Shop	Project Identification Signs
Cottage	Property Management Signs
Cultural Exhibits and Libraries	Public Transport Facility
Cyber Café	Retail Shops / Facilities
Daycare Center (Commercial or Nonprofit)	Satellite Dish Antenna
Departmental Stores	Shelter (Passers By)
Doctor / Dentist Chamber	Shoe Repair or Shoeshine Shop (Small)

Dormitory	Special Dwelling
Drug Store or Pharmacy	Specialized School: Dance, Art, Music, Physically Challenged & Others
Dwelling	Stationery Store
Eidgah	Temporary Pandle for Permitted Function
Employee Housing (Guards / Drivers) / Ancillary Use	Temporary Tent
Fast Food Establishment / Food Kiosk	Transmission Lines
Fitness Centre	Urban-Nature Reserve
Flowers, Nursery Stock and Florist Supplies	Uses in Neighborhood Center* (Where Neighborhood Center exists)
Gaming Clubs	Water Pump / Reservoir
General Store	Woodlot
Grocery Store	

Source: Compiled by the Consultants

*Permission of Neighborhood Center Facilities in absence of formal neighborhood should be subject to Landuse Permit Committee

Landuse Conditionally Permitted

The following uses may be permitted or disallowed in this zone after review and approval by the authority/committee following appropriate procedure while the application meets the criteria mentioned in the requirement.

Table- 4.4: Landuse Conditionally Permitted for Urban Residential Zone

Conditional	
Addiction Treatment Center	Graveyard / Cemetery
Amusement and Recreation (Indoors)	Guest House
Art Gallery, Art Studio / Workshop	Market (Katcha Bazaar) Place
Automobile Driving Academy	Neighborhood Co-Operative Office
Beauty and Body Service	Optical Goods Sales
Billiard Parlor / Pool Hall	Outdoor Café
Building Maintenance/Cleaning Services, No Outside Storage	Overhead Water Storage Tanks
Bus Passenger Shelter	Paints and Varnishes Store
Coffee Shop / Tea Stall	Parking Lot
Community Hall	Patio Homes
Correctional Institution	Photofinishing Laboratory
Courier Service	Plantation (Except Narcotic Plant)
Crematorium	Police Station
Electrical Sub Station	Post Office
Emergency Shelter	Postal Facilities
Energy Installation	Row House
Fire Brigade Station	Slaughter House
Flood Management Structure	Sports and Recreation Club
Fruit Markets	Static Transformer Stations
Funeral Services	Telephone Sub Station
Furniture & Variety Stores	Temporary Rescue Shed
Garages	Tennis Club
Garden Center or Retail Nursery	Tourist Home or Resort

Source: Compiled by the Consultants

Restricted Uses

All uses except permitted and conditionally permitted uses are restricted in this zone.

b. Commercial Zone (Business)

Commercial areas generally contain one or more of a wide variety of uses that includes business uses, offices, hotel, public houses, and limited forms of retailing.

Landuse Permitted

Commercial office zone is mainly intended for supporting the official works. There are several functions that are permitted in this zone.

Table-4.5: Landuse Permitted for Commercial Zone (Business)

Permitted	
Accounting, Auditing or Bookkeeping Services	Grocery Store
Agri-Business	Guest House
Agricultural Sales and Services	Hotel or Motel
Ambulance Service	Inter-City Bus Terminal
Antique Store	Jewelry and Silverware Sales
Appliance Store	Market (Bazar) Place
ATM Booth	Mosque, Place of Worship
Auction Market	Motorcycle Sales Outlet
Auditorium, Coliseum, Meeting Halls, and Conference Facilities, Convention	Multi-Storey Car Park
Auto Leasing or Rental Office	Newspaper Stand
Auto Paint Shop	Outdoor Recreation, Commercial Outdoor Recreation
Auto Parts and Accessory Sales (Indoors)	Parking Lot (Commercial)
Auto Repair Shop (With Garage)	Pet Store
Automobile Sales	Photocopying and Duplicating Services
Automobile Wash	Photofinishing Laboratory & Studio
Bakery or Confectionery Retail	Pipelines and Utility Lines
Bank & Financial Institution	Post Office
Barber Shop	Preserved Fruits and Vegetables Facility/ Cold Storage
Beauty and Body Service	Printing, Publishing and Distributing House
Bicycle Shop	Professional Office
Billboards, Advertisements & Advertising Structure	Project Identification Signs
Billiard Parlor/Pool Hall	Property Management Signs
Book or Stationery Store	Public Transport Facility
Building Material Sales or Storage (Indoors)	Refrigerator or Large Appliance Repair
Bulk Mail and Packaging	Resort
Bus Passenger Shelter	Restaurant
Cinema Hall	Retail Shops / Facilities
Commercial Office	Satellite Dish Antenna
Communication Service Facilities	Shelter (Passers By)
Communication Tower Within Permitted Height	Shopping Mall/ Plaza
Computer Maintenance and Repair Shop	Slaughter House
Computer Sales & Service Shops	Social Forestry
Confectionery Shop	Software Development Firm
Conference Center	Sporting Goods and Toys Sales Centers
Construction Company Offices	Super Store
Courier Service	Taxi Stand
Cyber Café	Telephone Exchanges
Day-care Center (Commercial or Nonprofit)	Television, Radio or Electronics Repair (No Outside Storage)
Department Stores, Furniture & Variety Stores	Theater (Indoor)
Doctor / Dentist Chamber	Transmission Lines
Drug Store or Pharmacy	Utility Lines
Electrical and Electronic Equipment & Instrument Sales	Vehicle Sales & Service, Leasing or Rental
Fast Food Establishment / Food Kiosk	Veterinarian Clinics, Animal Hospitals
Freight Handling, Storage & Distribution	Warehousing
Freight Transport Facility	Water Pump / Reservoir
Freight Yard	Wood Products
Fruit and Vegetable Markets	Woodlot
General Store	

Source: Compiled by the Consultants

Landuse Conditionally Permitted

Some functions are permitted with some condition in this zone.

Table- 4.6: Landuse Conditionally Permitted for Commercial Zone (Business)

Conditional	
Amusement and Recreation (Indoors)	Fire / Rescue Station
Bicycle Assembly, Parts and Accessories	Grain & Feed Mills
Broadcast Studio / Recording Studio (No Audience)	Household Appliance and Furniture Repair Service
Coffee Shop / Tea Stall	Incineration Facility
Concert Hall, Stage Shows	Indoor Amusement Centers, Game Arcades
Construction, Survey, Soil Testing Firms	Indoor Theatre
Container Yard	Junk / Salvage Yard
Trade Shows	Lithographic or Print Shop
Craft Workshop	Motor Vehicle Fuelling Station / Gas Station
Plantation (Except Narcotic Plant)	Musical Instrument Sales or Repair Shop
Energy Installation	Optical Goods Sales
Re-fuelling Station	Painting and Wallpaper Sales
Firm Equipment Sales & Service	Paints and Varnishes Store
Agricultural Chemicals, Pesticides or Fertilizers Shop	Parking Lot
Fitness Centre	Patio Homes
Flowers, Nursery Stock and Florist Supplies	Private Garages
Forest Products Sales	Retail Shops Ancillary To Studio / Workshop
Fuel Dealers	Stone / Cut Stone Products Sales
Garages	Salvage Processing Activities
Garden Center or Retail Nursery	Truck/Covered Van Stand
Police Box / Barrack	

Restricted Uses

All uses except permitted and conditionally permitted uses.

c. Commercial Zone (Office)

Commercial zones are designed into two types: office and business predominated. Commercial Office Zone is an office pre-dominated commercial zone that mainly supports the official works. It supports other types of commercial activities, too. Proposals for these areas involve large-scale buildings and require a high degree of accessibility and parking space for car users and delivery vehicles.

Landuse Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table- 4.7: Landuse Permitted for Commercial Zone (Office)

Permitted	
Accounting, Auditing or Bookkeeping Services	Freight Transport Facility
Ambulance Service	General Store
Antique Store	Government Office
Art Gallery, Art Studio / Workshop	Health Office
ATM Booth	Hotel
Auditorium, Meeting Halls, and Conference Facilities, Convention Center	Hotels
Auto Leasing or Rental Office	Indoor Amusement Centers, Game Arcades
Automobile Driving Academy	Mosque, Place of Worship
Automobile Wash	Multi-Storey Car Park
Bank & Financial Institution	Newspaper Stand
Billboards, Advertisements & Advertising Structure	Parking Lot (Commercial)
Boarding and Rooming House	Pathological Lab
Book Stall	Photocopying and Duplicating Services
Bulk Mail and Packaging	Photofinishing Laboratory & Studio

Bus Passenger Shelter	Post Office
Catering Service	Professional Office
Chinese Restaurant	Project Identification Signs
Cinema Hall	Project Office
Clinic	Property Management Signs
Coffee Shop / Tea Stall	Public Transport Facility
Commercial Office	Real Estate Office
Communication Service Facilities	Restaurant
Communication Tower Within Permitted Height	Retail Shops / Facilities
Computer Maintenance and Repair	Sales Office of Industries
Computer Sales & Services	Satellite Dish Antenna
Confectionery Shop	Software Development Firm
Conference Center	Stationery Store
Construction Company	Taxi Stand
Construction, Survey, Soil Testing Firms	Telephone Exchanges
Courier Service	Toys and Hobby Goods Processing and Supplies
Cyber Café	Training Centre
Day-care Center (Commercial or Nonprofit)	Utility Lines
Dental Laboratory	Utility Lines
Department Stores, Furniture & Variety Stores	Vehicle Sales & Service, Leasing or Rental
Diagnostic Center	Veterinarian Hospitals
Doctor / Dentist Chamber	Water Pump / Reservoir
Food Court	Woodlot
Freight Handling, Storage & Distribution	

Source: Compiled by the Consultants

Landuse Conditionally Permitted

The following uses may be permitted or disallowed in this zone after review and approval by the authority/committee following appropriate procedure.

Table- 4.8: Landuse Conditionally Permitted for Commercial Zone (Office)

Conditional	
Amusement and Recreation (Indoors)	Optical Goods Sales
Beauty and Body Service	Outdoor Café
Broadcast Studio / Recording Studio (No Audience)	Painting & Wallpaper Sales
Civic Administration	Paints and Varnishes Store
Concert Hall, Stage Shows	Parking Lot (Commercial)
Counseling Services	Patio Homes
Dental Clinic / Lab	Plantation (Except Narcotic Plant)
Diagnostic Center / Pathological Lab	Police Box / Barrack
Drug Store or Pharmacy	Printing, Publishing and Distributing
Fast Food Establishment / Food Kiosk	Psychiatric Hospital
Fire / Rescue Station	Radio / Television or T&T Station With Transmitter Tower
First Aid & Ambulance Service	Retail Shops Ancillary To Studio / Workshop
Fitness Centre	Super Store
Flowers, Nursery Stock and Florist Supplies	Theater (Indoor)
Fuelling Station	Transmission Lines
Garage	Vulcanizing Services
Lithographic or Print Shop	Workers' Dormitory

Source: Compiled by the Consultants

Restricted Uses

All uses except permitted and conditionally permitted uses.

d. General Industrial Zone

The purpose and intent of general industrial zone is to provide areas in appropriate locations where various light and heavy industrial operations can be conducted without creating hazards to surrounding land uses. Industrial zones

have been categorized into two zones like general industrial and heavy industrial zones.

General Industrial Zone is to accommodate Green, Orange A, Orange B types of industries of Department of Environment (DOE) prepared categories and Urban Area Plan (DMDP Urban Area Plan, Volume-II, Part-3, Page # 25-30) designated light industries and general industries along with some other new types.

Permitted Landuse

The following uses in the tables are proposed to be applicable for this zone only.

Table- 4.9: Landuse Permitted for General Industrial Zone

Permitted	
Aluminium products	Pharmaceutical Industry
Artificial Fibre Production	Photocopying and Duplicating Services
Assembling and manufacturing of clocks and watches	Photographic Film Factory
Assembling and manufacturing of electrical and Electronic home products etc.	Pipelines and Utility Lines
Assembling and manufacturing of electrical and Electronic home products etc.	Plastic & rubber goods (excluding PVC)
Assembling and manufacturing of toys (except plastic items)	Police Box / Barrack
Assembling of motor vehicles	Power Loom
Assembling of telephones	Printing and writing ink manufacturing Industry
ATM Booth	Printing Press
Automatic rice mill.	Printing, Publishing and Distributing
Bakery	Processing : fish, meat and food
Bakery.	Processing and bottling of drinking water and carbonated drinks
Bank & Financial Institution	Production of artificial leather goods
Bicycle Assembly, Parts and Accessories	Production of Artificial leather goods
Blacksmith	Production of Comb, hair band, hair clip etc.
Bus Passenger Shelter	Production of gold ornaments.
Chocolate and lozenge Factory	Production of Pin, board pin, U Pin etc.
Cinema Hall	Production of powder milk/condensed milk/dairy.
Clinic and Pathological lab	Production of shoes and leather goods
Cold storage	Production of spectacles frames.
Communication Tower Within Permitted Height	Production of utensils and souvenirs of brass and bronze.
Confectionery Shop	Public Transport Facility
Dry-cleaning	Repairing of refrigerators
Edible oil	Restaurant
Effluent Treatment Plant	Restaurant
Electric cable	Retail Shops / Facilities
Engineering works	Salt Industry
Fabric washing Plant	Salt production
Factory for production of chocolate and lozenge.	Salvage Processing
Fire / Rescue Station	Salvage Yards
Flour (large) Mill	Satellite Dish Antenna
Freight Transport Facility	Sawmill, Chipping and Pallet Mill
Furniture Manufacture of wood/iron, aluminium, etc.	Shelter (Passers By)
Galvanizing	Shoes and leather goods production
Garments and sweater Factory	Soap
Glass factory	Social Forestry
Glue (excluding animal glue)	Sodium silicate Factory
Grinding/husking wheat, rice, turmeric, chilly, pulses - machine above 0 Horse Power	Spinning mill
Grocery Store	Sports goods Production
Hotel, multi-storied commercial building.	Starch and glucose factory
Household Appliance and Furniture Repair Service	Stone grinding, cutting and polishing
Ice-cream	Tea processing
Jute mill	Television, Radio or Electronics Repair (No Outside

Lime	Storage)
Machine Sheds	Tire re-treading
	Transmission Lines

Permitted	
Manufacture of Agricultural tools, equipment and small machinery.	Truck Stop & Washing or Freight Terminal
Manufacture of Industrial tools, equipment and machinery.	Utensils made of clay and china clay/sanitary wares (ceramics)
Manufacturing of wooden vessel	Utility Lines
Match Factory	Water Pump / Reservoir
Meat and Poultry (Packing & Processing)	Water Purification Plant
Metal utensils/spoons etc	Weaving and handloom.
Mosque, Place Of Worship	Wood Products
Motor vehicles repairing works	Wood treatment
Newspaper Stand	Wood/iron/aluminium Furniture production
Packaging Industries	Woodlot
Perfumes, cosmetics	

Source: Compiled by the Consultants

Landuse Conditionally Permitted

The following uses may be permitted or denied in this zone after review and approval by the authority/committee following appropriate procedure.

Table- 4.10: Landuse Conditionally Permitted for General Industrial Zone

Conditional	
Amusement and Recreation (Indoors)	Lithographic or Print Shop
Appliance Store	Manufacturing of Artificial flower
Assembling and manufacturing of clocks and watches	Medical and surgical instrument production
Assembling and manufacturing of electrical and Electronic home products etc.	Motor Vehicle Fuelling Station / Gas Station
Assembling and manufacturing of toys (except plastic items)	Motorcycle Sales Outlet
Assembling of motorcycles, bicycles and toy cycles	Musical instruments
Assembling of scientific and mathematical instruments	Outdoor Fruit and Vegetable Markets
Assembling of telephones	Outside Bulk Storage
Bamboo and cane goods	Overhead Water Storage Tanks
Book-binding	Painting and Wallpaper Sales
Candle Production	Paints and Varnishes
Carpet and mat production	Parking Lot
Cork items Production	Parking Lot (Commercial)
Cyber Café	Pen and ball-pen Factory
Daycare Center (Commercial or Nonprofit)	Photographic Lab (except ultra violet and infra red)
Doctor / Dentist Chamber	Plantation (Except Narcotic Plant)
Electrical and Electronic Equipment and Instruments Sales	Private Garages
Employee Housing	Production of artificial leather goods
Energy Installation	Re-packing of milk powder (excluding production)
Fast Food Establishment / Food Kiosk	Retail Shops Ancillary To Studio / Workshop
Garages	Rope and coir mat production
Gold ornaments Production	Sports goods (excluding plastic made items)
Grain & Feed Mills	Super Store
Incineration Facility	Tea packing (excluding processing)
Laundry	Washing Plant

Source: Compiled by the Consultants

Restricted Uses

All uses except permitted and conditionally permitted uses.

e. Heavy Industrial Zone

The purpose and intent of Heavy Industrial Zone is to provide areas in appropriate locations where various heavy industrial operations can be conducted without creating hazards to surrounding land uses.

Areas are intended to accommodate manufacturing and fabricating establishments that are generally characterized as producing noise, vibration, heavy truck traffic, fumes, and other forms of pollution which may be objectionable to adjacent uses is characterized as Heavy Industrial Zone.

Heavy industries are those industries listed as red industries in the DOE Industry Type list and industries listed in the Urban Area Plan as noxious industries including mining/quarrying. (DMDP Urban Area Plan, Volume-II, Part-3, Page # 25-30)

Purpose

- The purpose of this type of landuse zone is to segregate the heavy, noisy and vibrating industries as they cannot harm human living of the project area.
- To encourage the design and construction of industrial and commercial buildings that are energy efficient, functional and flexible
- Ensure that development along major approach routes and major roads meets appropriate standards of urban design

Landuse Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table- 4.11: Landuse Permitted for Heavy Industrial Zone

Permitted	
Acids and their salts (organic or inorganic) Industry	Non-iron Basic Metals Industry
Animal Glue	Ordnance Factory
Artificial Rubber Industry	Other Chemicals Industry
Asbestos Factory	Outside Bulk Storage
ATM Booth	Paper and Pulp Mill
Bank & Financial Institution	Pesticides, Fungicides and Herbicides Industry
Basic Industrial Chemicals Industry	Phosphorus and its Compounds/Derivatives Industry
Battery Industry	Photo Films,
Bicycle Assembly, Parts and Accessories	Photo papers and Photo Chemicals Industry
Bitumen Industry	Pipelines and Utility Lines
Board Mills	Plastic Raw Materials (PVC, PP/Iron, Polyesterin etc.) Factory
Bus Passenger Shelter	Police Box / Barrack
Carbon rod Industry	Power plant
Cement Industry	Public Transport Facility
Chemical dyes, Polish, Varnish, Enamel Paint Factory	Raw materials of Medicines and Basic Drugs Industry
Chemical Industry	Refractory
Chlorine, Fluorine, Bromine, Iodine and their Compounds/Derivatives Industry	Refrigerator/Air-conditioner/Air-cooler manufacturing
Communication Tower Within Permitted Height	Re-rolling Mills
Detergent Factory	Re-rolling Mills
Distillery	Road Network
Effluent Treatment Plant	Rodenticide Industry
Electroplating	Satellite Dish Antenna
Explosive Industry	Saw Mills

Fabric Dyeing and Chemical Processing Industry	Scrap industry
Fibre-glass Factory	Sewage Treatment Plant
Fire / Rescue Station	Shelter (Passers By)
Flood Control Structures	Ship Manufacturing
Formaldehyde Industry	Social Forestry
Fuel Oil Refinery	Sugar Mill
Grocery Store	Tannery
Heavy Engineering Workshop	Tire and Tubes
Heavy Repairing of Motor Vehicles	Tobacco Processing, Cigarette/Bidi Factory
Hospital	Transmission Lines
Incineration Facility	Truck Stop & Washing
Industrial Estate	TSP Fertilizer Factory
Industrial Gas (Oxygen, Nitrogen & Carbon-dioxide) Industry	Urea Fertilizer Factory
Iron and Steel Mill	Utility Line
Jute Mill	Utility Lines
Life Saving Drugs Industry	Various Products made from Petroleum and Coal Industry
Lumber and building supply	Waste Incinerator
Metallic Boat Manufacturing	Water Pump / Reservoir
Mosque, Place of Worship	Water Treatment Plant
Murat of Potash Manufacturing	Wooden Boat Manufacturing
Newspaper Stand	Woodlot

Source: Compiled by the Consultants

Landuse Conditionally Permitted

The following uses may be permitted or denied in this zone after review and approval by the authority/committee following appropriate procedure.

Table- 4.12: Landuse Conditionally Permitted for Heavy Industrial Zone

Conditional	
Amusement and Recreation (Indoors)	Machine Sheds
Cyber Café	Motor Vehicle Fuelling Station / Gas Station
Daycare Center (Commercial or Nonprofit)	Nitrogen Compounds (Cyanide, Cyanamid etc.) Industry
Doctor / Dentist Chamber	Parking Lot
Employee Housing	Parking Lot (Commercial)
Energy Installation	Plantation (Except Narcotic Plant)
Freight Transport Facility	Private Garages
Garages	Retail Shops Ancillary To Studio / Workshop

Source: Compiled by the Consultants

Restricted Uses

All uses except permitted and conditionally permitted uses are restricted here.

Mixed Use Zone

There are areas where the mixture of uses is such that they can't be segregated, the areas are declared as mixed use zone. An appropriate mix of landuses will be maintained in these types of zones. There are four types of mixed use zones here. Each of them has unique characteristics.

f. Mixed Use Zone (Commercial – General Industrial)

This area will be an industrial cum commercial area where there will be prohibition of residential use of land. This zone will support the entire area by providing industrial goods and services.

Purpose

The main purposes of this zone are:

- To preserve and promote viable industries that can coexist with more commercially oriented uses,
- To meet the need for a mix of lower rent bulky goods retailing, specialized industrial, commercial and service activities alongside general industry.
- Encourage higher density residential development in locations with convenient access to transport corridors, commercial and employment Centers
- Create an efficient and sustainable urban environment and provide for a diversity of living, working and recreation opportunities
- Maintain and enhance environmental amenity and undertake development using best practice environmentally sustainable development principles
- Encourage a standard of urban design that is consistent with selected major avenues, approach routes and other strategically located areas
- Encourage activities particularly at street frontage level that contribute to an active public realm

Landuse Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table- 4.13: Landuse Permitted for Mixed Use Zone (Commercial – General Industrial)

Permitted	
Accounting, Auditing or Bookkeeping Services	General Store
Agricultural Chemicals, Pesticides or Fertilizers Shop	Grocery Store
Agricultural Sales and Services	Home Furnishings
Agro-Based Industry (Rice Mill, Saw Mill, Cold Storage)	Mosque, Place of Worship
Antique Store	Motorcycle Sales Outlet
Appliance Store	Multi-Storey Car Park
Art Gallery, Art Studio / Workshop	Musical Instrument Sales or Repair
Artisan's Shop	Newspaper Stand
ATM Booth	Photocopying and Duplicating Services
Auto Leasing or Rental Office	Pipelines and Utility Lines
Auto Paint Shop	Preserved Fruits and Vegetables Facility / Cold Storage
Auto Parts and Accessory Sales (Indoors)	Project Identification Signs
Auto Repair Shop (With Garage)	Property Management Signs
Automobile Sales	Public Transport Facility
Automobile Wash	Public Utility Stations & Substations
Bakery or Confectionery Retail	Real Estate Office
Barber Shop	Refrigerator or Large Appliance Repair
Bicycle Shop	Research organization (Agriculture / Fisheries)
Billboards, Advertisements & Advertising Structure	Restaurant
Billiard Parlor / Pool Hall	Retail Shops / Facilities
Blacksmith	Rickshaw / Auto Rickshaw Stand
Boarding and Rooming House	Satellite Dish Antenna
Book or Stationery Store or Newsstand	Shelter (Passers By)
Broadcast Studio / Recording Studio (No Audience)	Social Forestry
Building Material Sales or Storage (Indoors)	Sporting Goods and Toys Sales
Bulk Fuel Sales Depot	Stone / Cut Stone Products Sales
Bulk Mail and Packaging	Storage & Warehousing
Bus Passenger Shelter	Television, Radio or Electronics Repair (No Outside Storage)
Cinema Hall	Toys and Hobby Goods Processing and Supplies
Commercial Recreational Buildings	Training Centre
Communication Service Facilities	Transmission Lines
Communication Tower Within Permitted Height	Truck Stop & Washing or Freight Terminal
Confectionery Shop	Utility Lines
Construction, Survey, Soil Testing Firms	Vehicle Sales & Service, Leasing or Rental

Courier Service	Warehousing
Doctor / Dentist Chamber	Water Pump / Reservoir
Firm Equipment Sales & Service	Wood Products
Fuel and Ice Dealers	Woodlot
Funeral Services	

Source: Compiled by the Consultants

Landuse Conditionally Permitted

The following uses may be permitted or disallowed in this zone after review and approval by the authority/committee.

Table- 4.14: Landuse Conditionally Permitted for Mixed Use Zone (Commercial – General Industrial)

Conditional	
Assembling and manufacturing of clocks and watches	Freight Handling, Storage & Distribution
Assembling and manufacturing of electrical and Electronic home products etc.	Freight Transport Facility
Assembling and manufacturing of electrical and Electronic home products etc.	Freight Transport Facility
Assembling and manufacturing of toys (except plastic items)	Gallery / Museum
Assembling of telephones	Garages
Auction Market	Government Office
Bank & Financial Institution	Grain & Feed Mills
Beauty and Body Service	Grocery Store
Bicycle Assembly, Parts and Accessories	Hotel or Motel
Blacksmith	Household Appliance and Furniture Repair Service
Bus Passenger Shelter	Household Appliance and Furniture Repair Service
Coffee Shop / Tea Stall	Machine Sheds
Communication Tower Within Permitted Height	Meat and Poultry (Packing & Processing)
Computer Maintenance and Repair	Meat and Poultry (Packing & Processing)
Computer Sales & Services	Optical Goods Sales
Concert Hall, Stage Shows	Outdoor Fruit and Vegetable Markets
Confectionery Shop	Outside Bulk Storage
Conference Center	Painting and Wallpaper Sales
Construction Company	Paints and Varnishes
Cottage	Plantation (Except Narcotic Plant)
Counseling Services	Police Box / Barrack
Craft Workshop	Printing, Publishing and Distributing
Cyber Café	Project Office
Department Stores, Furniture & Variety Stores	Retail Shops Ancillary To Studio / Workshop
Drug Store or Pharmacy	Telephone Exchanges
Energy Installation	Television, Radio or Electronics Repair (No Outside Storage)
Fabric Store	Theater (Indoor)
Fast Food Establishment / Food Kiosk	Trade Shows
Fire / Rescue Station	Transmission Lines
Forest Products Sales	Truck Stop & Washing or Freight Terminal

Source: Compiled by the Consultants

Restricted Uses

All uses except permitted and conditionally permitted uses are restricted here.

g. Mixed use zone (Residential–Commercial)

Mixed-use development shall mean a development consisting of one or more lots developed as a cohesive project and designed with a blend of various compatible uses such as commercial, residential and industrial. These landuse areas will contain residential and limited commercial activities only such as small retail, general store, food kiosk etc.

Purpose

Industrial uses within the Mixed Use zone should be restricted to those uses that have a minimal amenity impact on adjoining uses and surrounding residential use. The main purposes of this type of landuse classification are:

- To provide for a mixed use development centre in conjunction with the development plan for the overall development, and to provide for high-density residential development, and to identify, reinforce, strengthen and promote urban design concepts and linkages with the existing town centre activity areas so that the pressure on vacant land are minimized.
- The aim is to develop a zone scale retail development in a mixed use centre by densification of appropriate commercial and residential developments ensuring a mix of commercial, recreational, community, educational, civic, cultural, leisure, residential uses, urban streets and urban open spaces, while delivering a quality urban environment which will enhance the quality of life of resident, visitor and workers alike.
- Provide for a range of commercial and service activities at a scale that will protect the planned hierarchy of commercial centres and the Territory's preferred locations for office development.

Landuse Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table- 4.15: Landuse Permitted for Mixed use zone (Residential–Commercial)

Permitted	
Accounting, Auditing or Bookkeeping Services	Employee Housing
Addiction Treatment Center	Fabric Store
Agricultural Sales and Services	Fast Food Establishment / Food Kiosk
Antique Store	Funeral Services
Apartments	General Store
Appliance Store	Grocery Store
Art Gallery, Art Studio / Workshop	Guest House
Artisan's Shop	Hospital
Assisted Living or Elderly Home	Housing Projects
ATM Booth	Individual Housing
Auditorium, Coliseum, Meeting Halls, and Conference Facilities, Convention	Jewelry and Silverware Sales
Auto Leasing or Rental Office	Landscape and Horticultural Services
Automobile Driving Academy	Mosque, Place of Worship
Automobile Wash	Newspaper Stand
Bakery or Confectionery Retail	Nursery School
Bank & Financial Institution	Photocopying and Duplicating Services
Barber Shop	Pipelines and Utility Lines
Bicycle Shop	Primary School
Billboards, Advertisements & Advertising Structure	Project Identification Signs
Billiard Parlor / Pool Hall	Property Management Signs
Blacksmith	Public Transport Facility
Boarding and Rooming House	Resort
Book or Stationery Store or Newsstand	Rickshaw / Auto Rickshaw Stand
Bus Passenger Shelter	Satellite Dish Antenna
Child Daycare / Preschool	Shelter (Passers By)
Children's Park	Shoe Repair or Shoeshine Shop (Small)
Cleaning / Laundry Shop	Slaughter House
Commercial Recreational Buildings	Social Forestry
Communication Service Facilities	Social organization
Communication Tower Within Permitted Height	Software Development
Community Center	Special Dwelling
Condominium or Apartment	Toys and Hobby Goods Processing and Supplies
Confectionery Shop	Training Centre
Correctional Institution	Transmission Lines

Courier Service	Utility Lines
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Permitted	
Cyber Café	Vehicle Sales & Service, Leasing or Rental
Daycare Center (Commercial or Nonprofit)	Warehousing
Doctor / Dentist Chamber	Water Pump / Reservoir
Dormitory	Woodlot

Source: Compiled by the Consultants

Landuse Conditionally Permitted

The following uses may be permitted or disallowed in this zone after review and approval by the authority/committee.

Table- 4.16: Landuse Conditionally Permitted for Mixed use zone (Residential–Commercial)

Conditional	
Agricultural Chemicals, Pesticides or Fertilizers Shop	Graveyard / Cemetery
Amusement and Recreation (Indoors)	Health Office, Dental Laboratory, Clinic or Lab
Beauty and Body Service	Hotel or Motel
Broadcast Studio / Recording Studio (No Audience)	Household Appliance and Furniture Repair Service
Building Maintenance / Cleaning Services, No Outside Storage	Indoor Amusement Centers, Game Arcades
Building Material Sales or Storage (Indoors)	Indoor Theatre
Coffee Shop / Tea Stall	Lithographic or Print Shop
Commercial Office	Market (Bazar)
Computer Maintenance and Repair	Musical Instrument Sales or Repair
Computer Sales & Services	Optical Goods Sales
Concert Hall, Stage Shows	Outdoor Café
Conference Center	Outdoor Fruit and Vegetable Markets
Construction Company	Painting and Wallpaper Sales
Construction, Survey, Soil Testing Firms	Paints and Varnishes
Cottage	Patio Homes
Counseling Services	Photofinishing Laboratory & Studio
Craft Workshop	Plantation
Crematorium	Poultry
Cultural Exhibits and Libraries	Printing, Publishing and Distributing
Department Stores, Furniture & Variety Stores	Project Office
Drug Store or Pharmacy	Psychiatric Hospital
Energy Installation	Radio / Television or T&T Station With Transmitter Tower
Fitness Centre	Refrigerator or Large Appliance Repair
Flowers, Nursery Stock and Florist Supplies	Restaurant
Freight Handling, Storage & Distribution	Retail Shops / Facilities
Freight Transport Facility	Retail Shops Ancillary To Studio / Workshop
Gaming Clubs	Sporting Goods and Toys Sales
Garages	Sports and Recreation Club, Firing Range: Indoor
Garden Center or Retail Nursery	Telephone Exchanges
Government Office	Television, Radio or Electronics Repair (No Outside Storage)

Source: Compiled by the Consultants

Restricted Uses

All uses except permitted and conditionally permitted uses are restricted in this zone.

h. Mixed Use Zone (Residential-Commercial–General Industrial)

The Residential- Commercial- General Industrial zone is intended to achieve cohabitation of uses, while ensuring that negative impacts on residents are minimized. The spaces created in this zone are intended to encourage a diminished need for motorized travel and shall possess characteristics of all of the three- Residential, Commercial and Industrial.

Purpose

The main purpose of this zone is to support the diversification and expansion of the area's industrial base and employment growth as well as to facilitate investment in a wide range of industrial and related activities, with efficient land utilization and provision of infrastructure. To make provision for small-scale services that support surrounding industrial activities, or which meet the needs of the local workforce is a primary aim of this type of landuse. Provide convenient access for the area and regional residents to industrial goods, services and employment opportunities, too, is an important purpose of this zone.

Landuse Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table- 4.17: Landuse Permitted for Mixed Use Zone (Residential-Commercial-General Industrial)

Permitted	
Accounting, Auditing or Bookkeeping Services	Fire / Rescue Station
Antique Store	General Store
Appliance Store	Grocery Store
ATM Booth	Guest House
Auditorium, Coliseum, Meeting Halls, and Conference Facilities, Convention	Hospital
Auto Leasing or Rental Office	Landscape and Horticultural Services
Auto Paint Shop	Mosque, Place of Worship
Auto Parts and Accessory Sales (Indoors)	Newspaper Stand
Auto Repair Shop (With Garage)	Nursery School
Automobile Driving Academy	Photocopying and Duplicating Services
Automobile Sales	Pipelines and Utility Lines
Automobile Wash	Police Box / Barrack
Bakery or Confectionery Retail	Primary School
Bank & Financial Institution	Project Identification Signs
Barber Shop	Property Management Signs
Bicycle Assembly, Parts and Accessories	Public Transport Facility
Bicycle Shop	Rickshaw / Auto Rickshaw Stand
Billboards, Advertisements & Advertising Structure	Satellite Dish Antenna
Billiard Parlor / Pool Hall	Service Garage
Blacksmith	Service Stations, Full Service (With Minor Repair)
Boarding and Rooming House	Sewage Treatment Plant
Book or Stationery Store or Newsstand	Shelter (Passers By)
Bulk Mail and Packaging	Shoe Repair or Shoeshine Shop (Small)
Bus Passenger Shelter	Social Forestry
Children's Park	Social organization
Cleaning / Laundry Shop	Solid Waste Recycling Plant
Commercial Recreational Buildings	Special Dwelling
Communication Service Facilities	Transmission Lines
Communication Tower Within Permitted Height	Utility Lines
Confectionery Shop	Water Pump / Reservoir
Construction, Survey, Soil Testing Firms	Woodlot
Courier Service	

Source: Compiled by the Consultants

Landuse Conditionally Permitted

The following uses may be permitted or denied in this zone after review and approval by the authority/committee.

Table- 4.18: Landuse Conditionally Permitted for Mixed Use Zone (Residential-Commercial-General Industrial)

Conditional	
Agricultural Chemicals, Pesticides or Fertilizers Shop	Gaming Clubs
Amusement and Recreation (Indoors)	Garages

Auction Market	Garden Center or Retail Nursery
Beauty and Body Service	Government Office
Building Maintenance / Cleaning Services, No Outside Storage	Grain & Feed Mills
Building Material Sales or Storage (Indoors)	Health Office, Dental Laboratory, Clinic or Lab
Bulk Fuel Sales Depot	Hotel or Motel
Coffee Shop / Tea Stall	Household Appliance and Furniture Repair Service
Computer Maintenance and Repair	Incineration Facility
Computer Sales & Services	Indoor Theatre
Concert Hall, Stage Shows	Jewelry and Silverware Sales
Condominium or Apartment	Lithographic or Print Shop
Conference Center	Market (Bazar)
Construction Company	Musical Instrument Sales or Repair
Correctional Institution	Outdoor Fruit and Vegetable Markets
Counseling Services	Painting and Wallpaper Sales
Craft Workshop	Paints and Varnishes
Cyber Café	Pet Store
Daycare Center (Commercial or Nonprofit)	Photofinishing Laboratory & Studio
Department Stores, Furniture & Variety Stores	Plantation
Drug Store or Pharmacy	Project Office
Employee Housing	Psychiatric Hospital
Energy Installation	Refrigerator or Large Appliance Repair
Fabric Store	Restaurant
Fast Food Establishment / Food Kiosk	Retail Shops / Facilities
Firm Equipment Sales & Service	Retail Shops Ancillary To Studio / Workshop
Fitness Centre	Sporting Goods and Toys Sales
Flowers, Nursery Stock and Florist Supplies	Sports and Recreation Club, Firing Range: Indoor
Forest Products Sales	Telephone Exchanges
Freight Transport Facility	Television, Radio or Electronics Repair (No Outside Storage)

Source: Compiled by the Consultants

Restricted Uses

All uses except permitted and conditionally permitted uses are restricted in this zone.

i. Mixed Use Zone (Residential-General Industrial)

The areas with the mix of residence and industry will make up the Residential-General Industrial zone that will create an industrial urban environment to strengthen the industrial base of the area as well as the entire country.

Purpose

The main purpose of this zone is to provide an industrial area supported by employees' housing, additional civic amenities, utilities and services. This zone will composed of some light industries that are declared as green categories of industries by Department of Environment (DoE) with some additional facilities like appliance store; bakery or confectionery shop; bank & financial institution; barber shop; book or stationery store or newsstand; caretaker dwelling; child day-care or preschool; cleaning or laundry shop; communication service facilities, cyber café; addiction treatment centre etc.

Landuse Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table- 4.19: Landuse Permitted for Mixed Use Zone (Residential-General Industrial)

Permitted	
Addiction Treatment Center	Fire / Rescue Station
Appliance Store	General Store
Art Gallery, Art Studio / Workshop	Grocery Store
Assisted Living or Elderly Home	Newspaper Stand
ATM Booth	Nursery School

Auditorium, Coliseum, Meeting Halls, and Conference Facilities, Convention	Photocopying and Duplicating Services
Auto Leasing or Rental Office	Pipelines and Utility Lines
Bank & Financial Institution	Police Box / Barrack
Barber Shop	Project Identification Signs
Bicycle Assembly, Parts and Accessories	Property Management Signs
Bicycle Shop	Public Transport Facility
Billiard Parlor / Pool Hall	Rickshaw / Auto Rickshaw Stand
Blacksmith	Satellite Dish Antenna
Book or Stationery Store or Newsstand	Service Garage
Broadcast Studio / Recording Studio (No Audience)	Service Stations, Full Service (With Minor Repair)
Bulk Fuel Sales Depot	Shelter (Passers By)
Bus Passenger Shelter	Shoe Repair or Shoeshine Shop (Small)
Child Daycare / Preschool	Social Forestry
Children's Park	Social organization
Cleaning / Laundry Shop	Special Dwelling
Commercial Recreational Buildings	Training Centre
Communication Service Facilities	Transmission Lines
Communication Tower Within Permitted Height	Utility Lines
Condominium or Apartment	Water Pump / Reservoir
Confectionery Shop	Woodlot
Cyber Café	

Source: Compiled by the Consultants

Landuse Conditionally Permitted

The following uses may be permitted or denied in this zone after review and approval by the authority/committee.

Table- 4.20: Landuse Conditionally Permitted for Mixed Use Zone (Residential-General Industrial)

Conditional	
Amusement and Recreation (Indoors)	Hotel or Motel
Beauty and Body Service	Household Appliance and Furniture Repair Service
Building Maintenance / Cleaning Services, No Outside Storage	Incineration Facility
Building Material Sales or Storage (Indoors)	Lithographic or Print Shop
Coffee Shop / Tea Stall	Market (Bazar)
Computer Maintenance and Repair	Musical Instrument Sales or Repair
Computer Sales & Services	Outdoor Fruit and Vegetable Markets
Concert Hall, Stage Shows	Overhead Water Storage Tanks
Conference Center	Painting and Wallpaper Sales
Daycare Center (Commercial or Nonprofit)	Plantation
Department Stores, Furniture & Variety Stores	Psychiatric Hospital
Drug Store or Pharmacy	Refrigerator or Large Appliance Repair
Employee Housing	Restaurant
Energy Installation	Retail Shops / Facilities
Fast Food Establishment / Food Kiosk	Retail Shops Ancillary To Studio / Workshop
Firm Equipment Sales & Service	Sporting Goods and Toys Sales
Flowers, Nursery Stock and Florist Supplies	Sports and Recreation Club, Firing Range: Indoor
Forest Products Sales	Telephone Exchanges
Freight Transport Facility	Television, Radio or Electronics Repair (No Outside Storage)
Garages	

Source: Compiled by the Consultants

Restricted Uses

All uses except permitted and conditionally permitted uses are restricted in this zone.

j. Institutional Zone

Institutional Zones are designed to provide some institutional boundaries. These will help improving the socio economic condition of the area by enhancing educational status.

Purpose

The purpose of these zones is mainly to provide locations for institutional uses such as libraries, public and private schools, colleges or Universities as well as to provide some housing opportunities for the students, teachers, employees and their families. These zones will ensure the site requirements especially for drainage and amenities, including vehicle, pedestrian, and bicycle circulation and parking, landscaping, usable open space, lighting, public areas, utilities, and other necessary and desirable elements. Finally, Institutional Zone focuses on the academic use for the advancement of education and intellectual endeavors of the area.

Landuse Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table- 4.21: Landuse Permitted for Institutional Zone

Permitted	
Addiction Treatment Center	Newspaper Stand
Art Gallery, Art Studio / Workshop	Nursery School
ATM Booth	Outdoor Religious Events
Automobile Driving Academy	Photocopying and Duplicating Services
Billboards, Advertisements & Advertising Structure	Post Office
Bus Passenger Shelter	Primary School
Child Daycare / Preschool	Professional Office
College, University, Technical Institute	Project Identification Signs
Communication Service Facilities	Property Management Signs
Communication Tower Within Permitted Height	Public Transport Facility
Confectionery Shop	Satellite Dish Antenna
Conference Center	School (Retarded)
Correctional Institution	Scientific Research Establishment
Cultural Exhibits and Libraries	Shelter (Passers by)
Cyber Café	Social Forestry
Dormitory	Specialized School: Dance, Art, Music & Others
Freight Transport Facility	Training Centre
General Store	Transmission Lines
Grocery Store	Utility Lines
High School	Veterinary School / College and Hospital
Hospital	Vocational, Business, Secretarial School
Lithographic or Print Shop	Water Pump / Reservoir
Mosque, Place of Worship	Woodlot
Multi-Storey Car Park	

Source: Compiled by the Consultants

Landuse Conditionally Permitted

The following uses may be permitted or denied in this zone after review and approval by the authority/committee.

Table- 4.22: Landuse Conditionally Permitted for Institutional Zone

Conditional	
Auditorium, Coliseum, Meeting Halls, and Conference Facilities, Convention	Gallery / Museum
Bank & Financial Institution	Garages
Barber Shop	Indoor Theatre
Boarding and Rooming House	orphanage
Coffee Shop / Tea Stall	Outdoor Café
Counseling Services	Parking Lot
Courier Service	Pipelines and Utility Lines
Daycare Center (Commercial or Nonprofit)	Plantation
Doctor / Dentist Chamber	Postal Facilities

Drug Store or Pharmacy	Psychiatric Hospital
Fast Food Establishment / Food Kiosk	Stationery Store or Newsstand
Flowers, Nursery Stock and Florist Supplies	

Source: Compiled by the Consultants

Restricted Uses

All uses except permitted and conditionally permitted uses are restricted in this zone.

k. Administrative Zone

Administrative zone will provide some space for agglomeration of administrative structures to make a convenient communication among them. Here all of the important government or non government structures will be placed.

Purpose

The main purpose of this zone is to agglomerate the administrative structures within a certain boundary for convenience of people.

Landuse Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table- 4.23: Landuse Permitted for Administrative Zone

Permitted	
Accounting, Auditing or Bookkeeping Services	Newspaper Stand
ATM Booth	Outdoor Religious Events
Bus Passenger Shelter	Photocopying and Duplicating Services
Civic Administration	Post Office
Communication Service Facilities	Professional Office
Communication Tower within Permitted Height	Project Office
Confectionery Shop	Public Transport Facility
Construction, Survey, Soil Testing Firms	Satellite Dish Antenna
Cultural Exhibits and Libraries	Scientific Research Establishment
Cyber Café	Shelter (Passers By)
Emergency Shelter	Social Forestry
Freight Transport Facility	Training Centre
General Store	Transmission Lines
Government Office	Utility Lines
Grocery Store	Water Pump / Reservoir
Guest House	Woodlot
Multi-Storey Car Park	

Source: Compiled by the Consultants

Landuse Conditionally Permitted

The following uses may be permitted or denied in this zone after review and approval by the authority/committee.

Table- 4.24: Landuse Conditionally Permitted for Administrative Zone

Conditional	
Amusement and Recreation (Indoors)	Flowers, Nursery Stock and Florist Supplies
Auditorium, Coliseum, Meeting Halls, and Conference Facilities, Convention	Freight Handling, Storage & Distribution
Bank & Financial Institution	Freight Yard
Boarding and Rooming House	Gallery / Museum
Book or Stationery Store or Newsstand	Garages
Coffee Shop / Tea Stall	Lithographic or Print Shop
Conference Center	Mosque, Place of Worship
Courier Service	Outdoor Café
Daycare Center (Commercial or Nonprofit)	Parking Lot
Detention Facilities	Parking Lot (Commercial)
Doctor / Dentist Chamber	Pipelines and Utility Lines

Energy Installation	Plantation (Except Narcotic Plant)
Fast Food Establishment / Food Kiosk	Police Box / Barrack
Fire / Rescue Station	Postal Facilities

Source: Compiled by the Consultants

Restricted Uses

All uses except permitted and conditionally permitted uses are restricted in this zone.

I. Agricultural Zone

Agricultural Zone is the zone of 'food production' where agricultural production will be encouraged predominantly. Here any type of agricultural activity such as crop production; aquaculture etc. will be predominant and will be permitted to ensure food security. The Agricultural zone is intended to prevent scattered and indiscriminate urban development.

Purpose

- To protect agricultural land from development that would restrict its use, and to provide for the development of existing established uses. To prevent the development of premature urban growth on un-serviced or unsuitable agricultural land.
- These zones intended to maintain agricultural use of those areas best suited to farming activity, and, recognizing that prime farm land is a non-renewable resource, to protect and preserve such land for agricultural usage. The intent is to provide for an environment of predominantly agricultural activity, wherein residential development is clearly an accessory and ancillary use to a farming operation.
- To conserve the agricultural lands and encourage the long term viability of agricultural operations and the supporting agricultural industry.

Landuse Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table- 4.25: Landuse Permitted for Agricultural Zone

Permitted	
Animal Shelter	Irrigation Facilities (Irrigation Canal, Culvert, Flood Wall etc)
Aquaculture	Shallow Tube Well
Aquatic Recreation Facility (Without Structure)	Social Forestry
Arboriculture	Static Transformer Stations
Cash Crop Cultivation	Temporary Structure (Agricultural)
Dairy Farming	Transmission Lines
Deep Tube Well	Tree Plantation (Except Narcotic Plant)
Duckery	Utility Lines
Food Grain Cultivation	Vegetable Cultivation
Horticulture	Woodlot

Source: Compiled by the Consultants

Landuse Conditionally Permitted

The following uses may be permitted or disallowed in this zone after review and approval by the authority/committee following appropriate procedure subject to compliance of the condition mentioned in the requirement by the applicant.

Table- 4.26: Landuse Conditionally Permitted for Agricultural Zone

Conditional	
Communication Tower Within Permitted Height	Graveyard / Cemetery
Crematorium	

Source: Compiled by the Consultants

Restricted Uses

All uses except permitted and conditionally permitted uses are restricted in this zone.

m. Flood Flow Zone

The area over which the flow of floodwater during monsoon passes through is termed here as flood flow zone.

Purpose

The intent of the Flood Flow Zone is to protect human life and health, minimize property damage, encourage appropriate construction practices, and minimize public and private losses due to overflow of water.

Additionally, this zone is intended to maintain the sound use and development of flood-prone areas and to restrict potential home buyers by notifying that property is in a flood area. The provisions of this zone is intended to minimize damage to public facilities and utilities such as water and gas mains, electric, telephone, and sewer lines, street and bridges located in the floodplain, and prolonged business interruptions; and to minimize expenditures of public money for costly flood control projects and rescue and relief efforts associated with flooding.

Landuse Permitted

In the zone, uses permitted by the Authority are:

Table- 4.27: Landuse Permitted for Flood Flow Zone

Permitted	
Aquatic Recreation Facility (Without Structure)	Plantation (Except Narcotic Plant)
Dry Season Play Field	Static Transformer Stations
Marina / Boating Facility	Transmission Lines
Pipelines and Utility Lines	Utility Lines

Source: Compiled by the Consultants

Landuse Conditionally Permitted

The following uses may be permitted or disallowed in this zone after review and approval by the authority/committee.

Table- 4.28: Landuse Conditionally Permitted for Flood Flow Zone

Conditional	
Communication Tower Within Permitted Height	Poultry

Source: Compiled by the Consultants

Restricted Uses

All uses except permitted and conditionally permitted uses are restricted in this zone.

n. Open Space

The primary uses in these areas include playgrounds, parks, and other areas for outdoor activities, sports centers, sports pitches, outdoor recreation and landscaped areas. High standards of accessibility are essential in this zone. Accessibility standard is related to the use of that particular open space. For example, local amenity areas and playgrounds may require emphasis on access for pedestrians and cyclists. Sports Centers serving a wider catchments area will require accessibility by public transport and car users.

Purpose

To provide for the active and passive recreational needs of the City and the protection of its bountiful natural resources as well as to protect the natural and aesthetic qualities of the area for the general welfare of the community. The purpose of this zone is:

- To provide for, protect and improve the provision, attractiveness, accessibility and amenity value of public open space and amenity areas.
- To provide for, protect and improve the provision, attractiveness and accessibility of public open space intended for use of recreational or amenity purposes. Only development that is incidental to, or contributes to the enjoyment of open space, amenity or recreational facilities will be permitted within this zone.
- To preserve and provide for open space and recreational amenities. The zoning objective seeks to provide recreational and amenity resources for urban and rural populations subject to strict development controls. Only community facilities and other recreational uses will be considered and encouraged by the Planning Authority.

Landuse Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table- 4.29: Landuse Permitted for Open Space

Permitted	
Botanical Garden & Arboretum	Playing Field
Bus Passenger Shelter	Social Forestry
Carnivals and Fairs	Special Function Tent
Circus	Tennis Club
Landscape and Horticultural Services	Transmission Lines
Memorial Structure	Urban-Nature Reserve
Open Theater	Utility Lines
Park and Recreation Facilities (General)	Woodlot
Pipelines and Utility Lines	Zoo
Plantation (Except Narcotic Plant)	

Source: Compiled by the Consultants

Landuse Conditionally Permitted

The following uses may be permitted or denied in this zone after review and approval by the authority/committee.

Table- 4.30: Landuse Conditionally Permitted for Open Space

Conditional	
Communication Tower Within Permitted Height	Motorized Recreation
Fitness Centre	Trade Shows
Flowers, Nursery Stock and Florist Supplies	

Source: Compiled by the Consultants

Restricted Uses

All uses except permitted and conditionally permitted uses are restricted.

o. Overlay Zone

The uses that are not compatible to the surrounding landuses but will not be removed are called overlay sites and the sites compose the Overlay Zone.

Purpose

There are some very important purposes of overlay zones. These are not zones; actually, these are sites only. The locally, regionally or nationally important things or uses that don't conform to surrounding landuses will remain unchanged that are called Overlay Zone. No other use except the use of overlay site is permitted in this zone.

There is no scope for permitting or conditionally permitting the functions or uses as the zone itself is an overlay. The present and proposed use of the zone will continue until the next zoning regulation is imposed on those specific parcels of land.

There are a variety of overlay zones within the project area. Some of the important types of overlay and their purpose are listed below:

- **Historic Preservation Overlay Site**

The places that are historically important as fort or historic building will not be demolished and these will remain as Historic Preservation Overlay Site. Recognizing the area's unique character and promoting the conservation and preservation of the area's historic resources and properties, to maintain, preserve, protect and enhance the architectural excellence, cultural significance, economic vitality, visual quality and historic importance of the area overlay zone is delineated.

Purpose

The purpose of this zone is to provide for protection against destruction or encroachment upon historic areas, buildings, monuments or other features or buildings and structures of recognized architectural significance which contribute or will contribute to the cultural, social, economic, political, artistic or architectural heritage.

The Zone is designed to protect designated landmarks and other historic or architectural features and their surroundings within a reasonable distance from destruction, damage, defacement and obviously incongruous development or uses of land. It is also designed to ensure that buildings, structures or signs shall be erected, reconstructed, altered or restored so as to be architecturally compatible with the historic landmark buildings or structures within the Zone.

- **Environmental Protection Overlay Site**

To preserve, protect and manage the area's natural resources including streams and other water bodies, wetlands, woodlands, and wildlife habitats, development in some areas will be precluded. These will be treated as Environmental Protection Overlay Site.

Purpose

The purpose of this zone is to protect the areas of environmentally sensitive, wetlands, marshes, rivers, creeks, and other natural resources critical to the ecosystems they support for the future generation.

Due to the fragile nature of these resources, development standards for this zone generally are more rigid than elsewhere in the area, requiring closer attention to the environment, and mitigation of land disturbing activity which would negatively impact on such resources.

- **Graveyard Overlay Site**

The existing graveyards have been treated as Graveyard Overlay Site where there will have restrictions to build it other way.

Purpose

To safeguard future provision; such provision will be important in maintaining viable and stable communities and it will be necessary to provide for this use in line with the pace of development, as it is required.

- **Sports and Recreation Overlay Site**

Some open spaces, water bodies etc. are demarcated as Sports and Recreation Overlay Site to safeguard the future need of the people. Here no establishment will be permitted except sports and recreation.

Purpose

To provide for, protect and improve the provision, attractiveness, accessibility and amenity value of sporting and recreational facilities, this zone is preserved. Only development that is incidental to, or contributes to the enjoyment of recreation or leisure will be permitted within this zone, and development that enhances the amenity value of such areas will be encouraged. The development of such uses will have regard to the requirements in the area and needs of changing communities, as well as the quality of landscaping, usability and accessibility of areas and facilities. The Council will encourage the provision for a variety of sporting and recreation activities as required.

- **Special Use Overlay Site**

There are some areas that will be used for special use. These are termed as Special Use Overlay Site. Special Temporary Events like Carnivals, Fairs, Hats etc. will be permitted in this zone.

Purpose

The purpose for declaring this zone is to demarcate those areas from non-conforming use as well as people can get some additional benefit from those areas for the upcoming future.

p. Rural Settlement Zone

Rural Settlement Zones are the island like isolated clusters of rural homestead that preserve country's traditional

agrarian community beside agricultural zones within DMDP jurisdiction from indiscriminate and insane conversion into urban use so as to safeguard food security; preserve appropriate opening in between mounds that are essential to allow uninterrupted flow of perennial flood water and safeguard our complex hydrological system.

The intent of this classification is to preserve, sustain, and protect rural areas and resources, particularly forest and agricultural from suburban encroachment and maintain a balanced rural-urban environment.

Purpose

The purpose of this zone is to protect the natural environment; promote appropriate compact development and to promote creative developments that provide a range of housing styles and prices that suit the needs of local people.

- Protect the natural environment,
- Making development economically viable by concentrating the activities,
- To provide for development in an orderly manner that preserves the rural character of the area by guiding higher density residential and commercial development according to compatible and supportive land uses, available infrastructure, and other facilities and services.

Rural Homestead

Rural homestead zone is the zone that contains the traditional rural character of the area. In this zone housing that are compatible to this character, mainly farmhouse, single or multifamily housing are the focus of this area. These buildings should be maximum two-storied so as to maintain the rural nature.

Purpose

Isolated Rural Homestead will preserve the rural and traditional Character of the area. Isolated Rural Homestead zone will be composed of dwelling, small shops, some special uses and pure landscaping elements. Cluster uses that are compatible with and complementary to existing facilities, particularly with regard to food processing and warehousing and the markets, including some small scale food retailing are permitted here.

Landuse Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table- 4.31: Landuse Permitted for Rural Homestead Zone

Permitted	
Agricultural Dwellings	NGO / CBO Facilities
Animal Husbandry	Nursery School
Animal Shelter	orphanage
Child Daycare / Preschool	Outdoor Religious Events (Eidgah)
Communication Tower Within Permitted Height	Plantation (Except Narcotic Plant)
Cottage	Playing Field
Crematorium	Primary School
Dairy Farming	Satellite Dish Antenna
General Store	Social Forestry
Graveyard / Cemetery	Special Dwelling (E.G. Dorm For Physically Challenged Etc.)
Grocery Store	Specialized School: Dance, Art, Music, Physically Challenged & Others
Handloom (Cottage Industry)	Static Electrical Sub Stations
Housing For Seasonal Firm Labor	Temporary Shed / Tent
Memorial Structure	Transmission Lines
Mosque, Place of Worship	Utility Lines
Newspaper Stand	Woodlot

Source: Compiled by the Consultants

Landuse Conditionally Permitted

The following uses may be permitted or disallowed in this zone after review and approval by the authority/committee following appropriate procedure while the application meets the criteria mentioned in the requirement.

Table- 4.32: Landuse Conditionally Permitted for Rural Homestead Zone

Conditional	
Artisan's workshop (Potter, Blacksmith, Goldsmith Etc.)	Garden Center or Retail Nursery
Emergency Shelter	Research organization (Agriculture / Fisheries)
Energy Installation	Sports and Recreation Club, Firing Range: Indoor
Fish Hatchery	

Source: Compiled by the Consultants

Restricted Uses

All uses except permitted and conditionally permitted uses are restricted in this zone.

Growth Center

According to the location theorists, "Such settlements which are nuclei or central to their influence area are called growth centres". In the context Bangladesh, growth Centres are rural market places that have been identified by the Planning Commission on the basis of socio-economic and administrative criteria for making development investment. There are about 8,000 rural market places throughout Bangladesh that are popularly known as 'hat' or 'bazaar'. Realizing their importance in the rural sector, the government felt the need to upgrade them with some infrastructure facilities in order to enhance their efficiency. However, due to fund constraint it was not possible to include all the 'hats' or 'bazaars' for development investment. In planning area, there are some growth centres that contain substantially the following characteristics:

- It incorporates a mix of uses that typically include or have the potential to include the following: retail, office, services, and other commercial, civic, recreational, industrial, and residential uses, within a densely developed, compact area;
- It incorporates existing or planned public spaces that promote social interaction, such as public parks, civic buildings (e.g., post office, municipal offices), community gardens, and other formal and informal places to gather.
- It is organized around one or more central places or focal points, such as prominent buildings of civic, cultural, or spiritual significance or a square.
- It results in compact concentrated areas of land development that are served by existing or planned infrastructure and are separated by rural countryside or working landscape.

Rural commercial centre in the "Growth centre" form is one of important feature for rural economic sustainability. In growth centre, people can find their necessary service activity in a easy accessible distance apart from the urban area. In this sense the permitted uses for growth centre are the following:

Table-4.33: Landuse Permitted in Growth Center

Permitted	
Accounting, Auditing or Bookkeeping Services	Garages
Addiction Treatment Center	Garden Center or Retail Nursery
Agricultural Chemicals, Pesticides or Fertilizers Shop	General Store
Agricultural Dwellings	Grain & Feed Mills
Agricultural Product Sales	Grocery Store
Agro-Based Industry (Rice Mill, Saw Mill, Cold Storage)	High School
Agro-Based Industry (Rice Mill, Saw Mill, Feed mill)	Motel
Ambulance Service	Household Appliance and Furniture Repair Service
Amusement and Recreation (Indoors)	Housing For Seasonal Firm Labor
Ancillary Dwelling	Indoor Amusement Centers

Permitted	
Animal Husbandry	Indoor Theatre
Antique Store	Jewelry and Silverware Sales
Appliance Store	Katcha Bazar
Auction Market	Loom (Cottage Industry)

Auto Repair Shop (With Garage)	Mosque, Place of Worship
Bank & Financial Office	Newspaper Stand
Barber Shop	NGO \ CBO Office
Barber Shop	Nursery School
Billboards, Advertisements & Advertising Structure	Open Theater
Blacksmith	Optical Goods Sales
Boarding and Rooming House	Orphanage
Book or Stationery Store or Newsstand	Outdoor Fruit and Vegetable Markets
Bus Passenger Shelter	Outdoor Religious Facility (Eidgah)
Cinema Hall	Paints and Varnishes Shop
Cleaning \ Laundry Shop	Photo Studio
Coffee Shop \ Tea Stall	Photocopying and Duplicating Services
Cold Storage	Postal Facilities
College\Technical Training School \ Centers \ Agro Based Trading	Primary School
Communication Service Facilities	Public Utility Stations & Substations
Communication Tower Within Permitted Height	Research organization (Agriculture \ Fisheries)
Community Center	Restaurant
Computer Maintenance and Repair	Retail Shops \ Facilities
Computer Sales & Services	Rickshaw \ Auto Rickshaw Stand
Confectionery	Satellite Dish Antenna
Courier Service	Sawmill
Craft Workshop	Shoe Repair or Shoeshine Shop (Small)
Cyber Café	Signboard \ Billboard
Dairy Farming	Slaughter House
Daycare Center (Commercial or Nonprofit)	Small Workshop
Department Stores	Social Forestry
Doctor \ Dentist Chamber	Specialized School: Dance, Art, Music & Others
Dormitory	Specialized School: Dance, Art, Music, Physically Challenged & Others
Drug Store or Pharmacy	Static Transformer Stations
Electrical and Electronic Equipment and Instruments Sales	Storage & Warehousing
Emergency Shelter	Taxi Stand
Energy Installation	Television, Radio or Electronics Repair
Fabric Store	Theater (Indoor)
Family Welfare Center	Transmission Lines
Fast Food Establishment \ Food Kiosk	Truck Stand & Freight Terminal
Firm Equipment Sales & Service	Utility Lines
Fish Hatchery	Variety Stores
Fitness Centre	Vehicle, Leasing or Rental Service
Flowers, Nursery Stock	Veterinary Centre
Freight Transport Facility	Veterinary Clinic \ Center

Permitted	
Fuel and Ice Dealers	Wood Products
Funeral Services	Woodlot
Furniture Stores	

Source: Compiled by the Consultants

Landuse Conditionally Permitted

The following uses may be permitted or disallowed in this zone after review and approval by the authority/committee following appropriate procedure while the application meets the criteria mentioned in the requirement.

Table-4.34: Landuse Conditionally Permitted in Growth Center

Conditional	
Artisan’s Shop	Library
Auto Leasing or Rental Office	Motor Vehicle Fuelling Station \ Gas Station
Beauty Parlor	Musical Instrument Sales or Repair
Building Maintenance\Cleaning Services (No Outside Storage)	Pet Store
Building Material Sales or Storage (Indoors)	Plantation (Except Narcotic Plant)
Carnivals and Fairs	Police Station
Circus	Poultry
Correctional Institution	Preserved Fruits and Vegetables Facility \ Cold Storage
Fire Brigade Station	Sports and Recreation Club
Freight Handling, Storage & Distribution	Stage Shows
Freight Yard	Temporary Rescue Shed
Guest House	Trade Shows

Source: Compiled by the Consultants

*All of the Commercial Activities shall be located at Growth Centres

Restricted Uses

All uses except permitted and conditionally permitted uses.

q. Water Retention Area

Retaining water is the main purpose of this type of Landuse.

Landuse Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table- 4.35: Landuse Permitted for Water Retention Area

Permitted	
Aquatic Recreation Facility (Without Structure)	Utility Lines
Fishing Club (non-structural)	Water Parks

Source: Compiled by the Consultants

Landuse Conditionally Permitted

The following uses may be permitted or denied in this zone after review and approval by the authority/committee.

Table- 4.36: Landuse Conditionally Permitted for Water Retention Area

Conditional	
Marina / Boating Facility	Water based Recreation

Source: Compiled by the Consultants

r. Water body

Water body serves the natural flow of water along their alignment.

Purpose

This zone tends to preserve flow and level of water across all seasons along their natural alignment. DMDP area is covered by a network of natural water body including river, canal and pond. To promote and provide environmentally safe and sound living for the people of the area and for the future generation, water body has an immense important. Water body should be preserved not only for environmental concern but also for active and passive recreation.

Landuse Permitted

The following uses in the tables are proposed to be applicable for this zone only.

Table- 4.37: Landuse Permitted for Water body

Permitted	
Aquatic Recreation Facility (Without Structure)	Utility Lines
Fishing Club (Non-structural)	Water Parks

Landuse Conditionally Permitted

The following uses may be permitted or denied in this zone after review and approval by the authority/committee.

Table- 4.38: Landuse Conditionally Permitted for Water body

Conditional	
Marina / Boating Facility	Water based Recreation

Source: Compiled by the Consultants

Restricted Uses

All uses except permitted and conditionally permitted uses are restricted.

4.6.3 Special Function Options

Besides above categories of landuse, some situations are not so infrequent in nature. These may belong to either of the followings.

New Use

Suppose a new electric substation needs to be installed in a residential neighborhood to cover the additional load. The plot in which it is to be installed is of course, earmarked as urban residential landuse, yet in consideration to the benefit the landuse may be altered to accommodate the facility in the plot.

Nonconforming Use

Some functions may have been in the area prior landuse declaration and the facility does not conform to the new landuse. In such case if the facility is harmful to the new landuse, it needs to be relocated in due course. But if the landuse does not affect the surrounding landuse, it is allowed to continue till its natural termination. In both of the cases these uses are termed as nonconforming use and stricter conditions are imposed on the facility to restrict its growth to confine its activities.

Regulations regarding Nonconforming Use

“Nonconforming use” is a use or structure that was legally or illegally established but is no longer permitted because of the zoning regulations that have been applied or changed after the use or structure was established.

In addition, a non-conforming use is any use, whether of land or of structure, or both, which does not comply with the applicable use provisions in this Regulation, where such use was lawfully in existence prior to the enactment of this Regulation or subsequent amendments.

Moreover a non-conforming structure is any structure or part of a structure manifestly not designed to comply with the applicable use provisions of this Regulation or subsequent amendment, where such structure lawfully existed prior to the enactment of this Regulation or subsequent amendments.

The continued existence of nonconformities is frequently inconsistent with the purposes for which the “zoning” of the area has been worked out and thus, the gradual elimination of such nonconformities is generally desirable.

General Provisions

The following provisions shall apply to all uses existing on the effective date of this Plan that do not conform to the requirements set forth in this Zoning Regulation, to all uses that become non-conforming by reason of any

subsequent amendment to this Zoning Regulation, and to all buildings containing such uses.

- There must be a time frame of up to 5 years within which the non-conforming uses have to be relocated to places where those specific uses are permitted or conforming according to this regulation. This time frame may vary from 2 to 5 years depending on that particular use. This time frame for relocating a particular non-conforming use will be determined by the RAJUK.
- Some mid-level provisions/ functions have to be determined by the RAJUK which functions will be allowed there until the relocation period. But no enlargement, alteration, expansion, restoration of those uses will be allowed during this time frame in that particular location where the use is declared non-conforming by this regulation.
- Regular monitoring of the non-conforming uses and their functions by RAJUK is a must. If the restrictions are not followed in any of that very uses, then immediate action have to be taken by the authority to discontinue or restrict that function or to relocate it in locations where those uses are conforming or permitted.
- The authority has to select the place where the particular use will be relocated. And for regulating this relocation some measures like tax, subsidy etc. have to be provided by that authority.

Identification and Registration of Non-conforming Uses and Structures

All uses and structures existing at the effective date of this Regulation which do not conform to the requirements set forth in this Regulation, or any amendments thereto, should identified and registered by the RAJUK. Failure or neglect of the authority to identify or register uses or structures which are non-conforming as defined in this Regulation or subsequent amendments does not exempt such use or structures from the applications of this Regulation.

Continuation of Non-Conforming Uses and Structures

Any non-conforming use or structure may be continued up to their time frame, provided such use or structure:

- (1) Shall not be moved to another location where such use or structure would be non-conforming.
- (2) Shall not be changed to another non-conforming use or structure without approval of NUC and then only to a use or structure which, in the opinion of the NUC is of the same or of a more restricted nature in accordance the Restrictions above.
- (3) Shall not be re-established if such use or structure has been discontinued for any reason for a period of twelve (12) months or more, or has been changed to, or replaced by, a conforming use or structure. Intent to resume a non-conforming use shall not confer the right to do so.
- (4) Shall not be restored for other than a conforming use after damage from any cause, unless the non-conforming use or structure is reinstated within twelve (12) months of such damage; if the restoration of such structure is not completed within the said twelve (12) month period, the non-conforming use of such structure shall be deemed to have been discontinued, unless such non-conforming use is carried on without interruption in the undamaged portion of such structure.

Maintenance

Maintenance of a building or other structure containing or used for a non-conforming use will be permitted when it includes necessary non-structural repairs and incidental alterations which do not extend or intensify the non-conforming building or use.

Reconstruction

A non-conforming use which has been damaged by fire, explosion, or an act of God, to the extent of sixty (60%) percent of its reproduction value at the time of damage shall be restored in conformity with the current regulations of the district in which it is located. When damaged by less than sixty (60%) percent of its reproduction value a non-conforming use may be repaired or reconstructed and used as before the time of damage, provided such repairs or reconstruction are started within one (1) year from the date of such damage.

Discontinuance or Abandonment

A non-conforming structure occupied by a non-conforming use may be re-occupied by a conforming use following abandonment of the nonconforming use. If a non-conforming use is abandoned for a period of two (2) years, any future use of the premises shall be in conformity with the provisions of this Resolution and shall not again be used except in conformity with the current regulations of the district in which it is located.

Unsafe Structure

Any non-conforming structure or portion thereof containing a non-conforming use, work may be done on ordinary maintenance repairs, or on repair or replacement of non-bearing walls, fixtures, wiring, or plumbing, provided the cubic content that existed when it became non-conforming shall not be increased. Nothing in this article shall be deemed to prevent the strengthening or restoring to a safe condition of any building or part thereof, declared to be unsafe by any official charged with protecting public safety, upon order of such official. Where appropriate, a Zoning Permit shall be required.

Termination and Removal of Non-Conforming Buildings, Structures or Uses

The period of time during which the non-conforming buildings, structures or uses of land listed may continue or remain until five years after the effective date of this Zoning Regulation, or of any amendments hereto, which cause the use to be non-conforming? Every such non-conforming building, structure or use shall be brought into compliance with this Zoning Regulation or completely removed from the premises on or before the expiration of the five year period.

4.6.4 Development Permit

Development Permit is the most important function of RAJUK and for that matter of any City Development Authority. DAP will have no bearing unless development can be channelized to its desirable direction through effective permit procedure. DAP has developed its plan using GIS database and other advanced computer software of world standard. The necessary planner to handle this database is quite available in the country. This combination provides RAJUK the unique opportunity to make its plan permit procedure fast, well managed and transparent. This is also in line with the idea of digital Bangladesh pronounced by the present govt.

a. Computerization of the Permit procedure

Maintaining information of all the development activities within the DMDP jurisdiction is a mammoth task and maintain them in the present manual method is neither possible nor necessary. Consultant recommends development of customize software for the purpose. Necessary software experts are available locally. The system would prove worthwhile by saving in the form of time, cost, ease of management, ease of upgrading of information, control of corruption and so forth.

b. Landuse Permit

RAJUK has the legal responsibility to develop plan for the wellbeing of the citizens within its jurisdiction and implement the same by channelizing all developments through appropriate control mechanisms. Issue Plan Permit to private plot owner/s or developers working with the consent of the owner/s that comply the set regulations constitute the most part of development control activity conducted by RAJUK. In the following paragraphs the structures of the proposed landuse control Authority has been elaborated considering that RAJUK shall be strengthened adequately and that in that situation planner's ranks would be as under [in light of the Sthapatya Adhidaptar]:

- Chief Town Planner
- Additional Chief Town Planner
- Deputy Chief Town Planner
- Assistant Chief Town Planner
- Assistant Town Planner

Structure of Landuse Permit Authority

The Landuse Permit Authority shall be comprised of three vertically linked tiers:

- At the entry level Landuse Permit Planner [LPP]
- At the mid level Landuse Permit Committee [LPC] to control LPPs, clarify legal provisions regarding land use permit decisions on a case to case basis, and
- At the top level Nagar Unnayan Committee comprised of representatives from planning departments, professional institutions, imminent scholars and citizens of the city.

Figure No. 4.1 shows the tiers along with their inter links.

Landuse Permit Planner

Landuse Permit will be issued with the sign of Landuse Permit Planner [LPP] appointed by the Chairman, RAJUK from among the Planners not below the rank of Assistant Town Planner. Landuse Permit issued by the LPP/s shall be null and void, even if signed, unless the use sought for is permitted in the landuse options of the respective zone that contains the plot.

To cover the vast DMDP area under RAJUK jurisdiction, Paurashava Planners [PP] working in the Paurashava within the DMDP area, in addition to RAJUK's main stream LPPs, may be delegated with the power to act as LPP and issue Plan Permit and control development within the provision of DAP on RAJUK's behalf. He/she must have needful Inspectors and GIS facility with logistics and knowledgeable personnel to operate so as to accomplish such responsible job. For all plan permit activities PPs shall be accountable to, controlled by and act in close communication with Landuse Permit Committee at RAJUK.

Landuse Permit Committee

At the mid-level Landuse Permit Committee [LPC] shall function for effective control of LPPs [both main stream and Paurashava] and to clarify legal provisions regarding landuse permit decisions on a case to case basis. LPC shall be a maximum seven member committee headed by RAJUK's Chief Town Planner [CTP]. LPC Members shall be not below the rank of Assistant Chief Town Planner while Deputy Chief Town Planner, Development Control shall act as the Member Secretary of this Committee. The activities of LPC will include

- Clarify the legal provisions for the LPPs as per their request.
- Make recommendations in case of New Use or Conditional Use and send it to the Nagar Unnayan Committee [NUC] for decision.
- Earmark plot numbers under non-conforming uses and notify the owners about the time span to relocate the facility, procedure and conditions that must be strictly maintained to avoid immediate eviction.

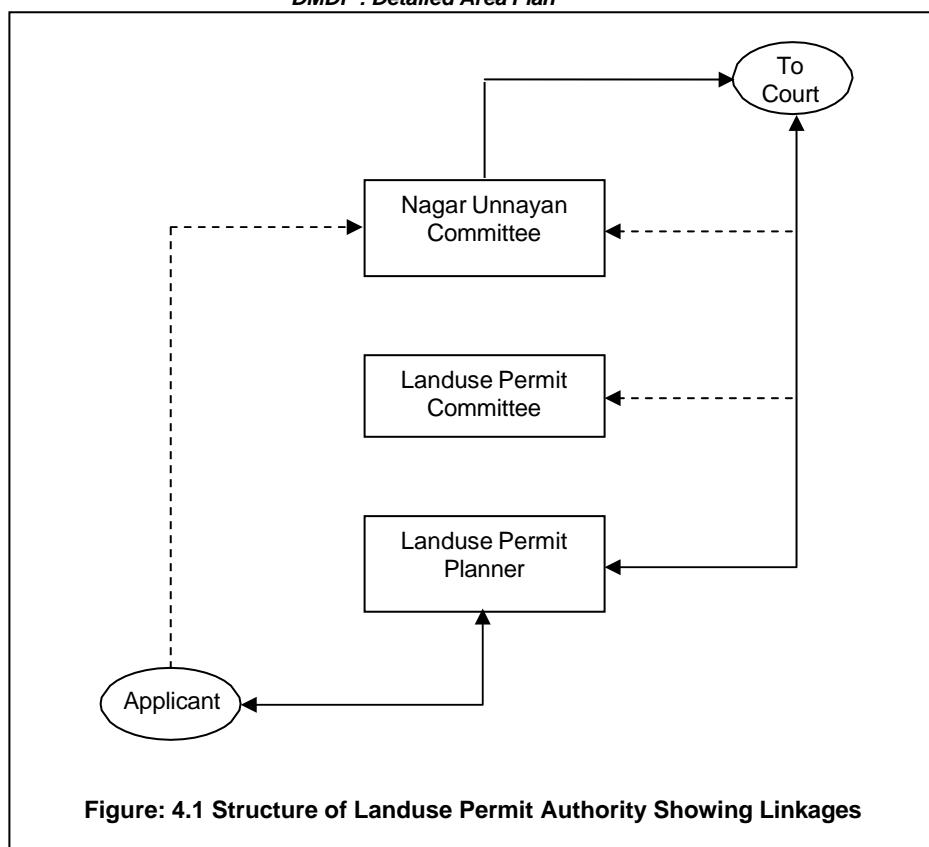
Nagar Unnayan Committee

Nagar Unnayan Committee [NUC] shall be the supreme authority regarding Landuse Permit within RAJUK jurisdiction. The Members of the Nagar Unnayan Committee are (not as per the protocol):

- Head : Secretary, Ministry of Housing and Public Works, GoB
- Member Secretary : Chief Town Planner of RAJUK
- Members : Chairman RAJUK
- : Head of the Department of URP, BUET
- : President BIP
- : President IAB
- : Chief Town Planner, Dhaka City Corporation
- : Mayor, Paurashava [within RAJUK jurisdiction]
- : Chief of Concerned Line Agencies
- : Three Eminent citizens of Dhaka

NUC shall be well supported by a secretariat and shall be empowered both authoritatively and financially to carry out study and/or survey, arrange public hearing, round table conference, seminar, or if necessary, engage experts.

NUC shall decide whether the proposed New Uses should be permitted or denied; in case of Conditional Permit impose the conditions to comply; accept variances for specific cases and so forth. Besides, NUC shall decide strict conditions to nonconforming uses and the action against its violation if so happens.



Landuse Permit Option

For a plot seeking landuse permit there can be three possible options:

- Landuse permitted
- Landuse conditionally permitted, or
- Landuse restricted

Landuse Permitted

Landuse that unconditionally permitted in the zone are listed in this category. When permission is sought for a residential landuse on a plot earmarked as urban residential zone then it falls under this category.

Landuse Permitted with Condition

Landuse that generally not incompatible or harmful for the community but whose number, location or specific use nature may pose threat to community's lifestyle, privacy, safety or security etc. then the landuse is permitted but with a condition to fulfill so that the potential threat is avoided. For example, in a Residential-General Industrial Mixed use zone a request is made seeking landuse permit for a composite textile mill with a dyeing unit. Since the use is compatible in the zone except for the release of noxious effluent to the surrounding, the permit may be issued with a pre condition to exclude the dyeing unit in order to get landuse permit. Now, following the formal agreement by the applicant to comply the condition the permit is issued against the plot. A list of such conditional uses is maintained in this category.

Landuse Restricted

Landuse that is harmful for the community are restricted by law. Such harmful landuse is listed in this category. A cinema hall in a neighborhood may be cited as an example under this category. But for convenience, any use not listed in the permitted and conditionally permitted use category is considered as restricted for the zone.

Landuse Permit Procedures

Land use permit procedure is a product of a number of interlinking activities. The whole process has been shown in a flow diagram for clearer understanding in **Figure 4.2**.

The procedure is commenced with the submission of formal application by the applicant to the Chairman of RAJUK. The applicant must submit along with other information and documents a mauza map showing his plot including plot no, mauza name etc. The concerned official designated as Landuse Permit Planner (LPP), will then check the compliance of the land use desired by the applicant with the land use zone containing his plot and the uses permitted therein.

Four situations may be possible:

- Desired Use is listed as Permitted in the zone
- Desired Use overlaid
- Desired Use is listed as Conditionally Permitted in the zone, and
- Desired is not listed under any of the categories and may be permitted as New Use

If the desired use is listed as Permitted or Overlaid then it will be permitted without any question. If the desired use is listed as Conditionally Permitted the LPP would refer it to the LPC for further action.

In case of desired use not found in the permitted or conditionally permitted lists of the zone, the LPP shall reject the desired landuse as it is not allowed in the zone. At this stage if the rejection decision taken by the LPP is not satisfactory to the applicant, he/she can appeal to the NUC. If the decision of the NUC goes in favor of the applicant, LPP shall then issue the permit. NUC may also ask the applicant to make some modifications to make his/her claim appropriate for approval. The applicant may comply accordingly and apply afresh.

If the applicant is not satisfied with the decision of the NUC he/she may go to the court for decision.

If the LPP is convinced that the desired use should be allowed for the greater interest of the people and therefore deserves to be considered under New Use category, he may recommend it to the LPC furnishing reasons in favour. The LPC if convinced by the reasoning will send the case to the NUC with recommendation to permit desired landuse in the New Use category. Following necessary study and investigation if the NUC is also convinced about permitting the use as recommended by the LPC, they may decide so and authorize the LPP to issue permit for the desired land use in the New Use category.

c. Field Level Vigilance

Development cannot be channelized as per the plan unless an effective control at the field level is achieved. Due to unhealthy concentration of political, administrative, financial and even judicial power in the capital city, almost entire in-migrant population from all over the country rush to Dhaka to try their luck. This is the root cause of all the problems Dhaka has been and will be facing in time. Land value and rent of space within the city soaring sky high exerting tremendous development pressure that tempts opportunists to fill out low lying areas completely disregarding its legality provisions set by the plan. Land classified in plan as agriculture, flood flow or retention pond is indiscriminately filled out for making plots every day. Such environmentally catastrophic activities must be guarded to save our city through effective Field level vigilance. And as a custodian of DAP the responsibility falls on to RAJUK's shoulder.

Another kind of damage to plan takes place at the implementation level in the form of illegal structures, unauthorized structures, deviation from the approved plan and so forth. These too need close vigilance from RAJUK's end.

Vigilance is very vital for identification of overlay and non-conforming structures and to ensure their compliance to plan permitted use and maintenance protocols.

Consultants recommend a large, strong, committed and effective department with appropriate personnel and logistics to guard against all such evil activities.

d. Interaction with People

Plans and Reports furnish various information that has direct bearing on the people since they need to follow the guidelines provided in these documents while developing their parcel of land/s. Presently RAJUK makes it difficult for the common people to gather information that are necessary for various development ventures on their land parcel/s. This hiding attitude makes way for unplanned developments and people feel reluctant to come to RAJUK for plan permit. But in reality availability of information has a vital role to play towards effective plan implementation.

Planning Department of RAJUK should have close interaction with the citizen of Dhaka at large in order to make people aware of the benefits of a good plan which in turn steer people's social responsibility to promote plan implementation and resist contraventions. A specific Interactive Cell is recommended to be put to operation in this respect with following objectives:

- Provide pre-application advice to residents, consultants and developers about landuse management issues and application procedures for the submission of development applications.
- Interact with communities, especially spontaneously developed ones, lacking specific needs and provide them with proper planning guidance to overcome them through collective efforts.
- Listen to people informing about contraventions, deviations to approved plans, damage to planned developments, obstruction to flow of water or filling out of retention areas for personal or group benefits and inform them about the remedial measures taken and thereby encouraging inclusion of people in guarding the implemented plan.
- Appraise the citizens about the planning and landuse management related legislation and zoning scheme regulations.
- Investigate and report to the higher authority about complaints made by the citizens about plan violation, violation of landuse of a zone and miscellaneous complaints.

Such interactive windows may be opened at convenient locations. Answers to frequently asked questions may be provided in the internet. Besides, these may be publicized in the print and electronic media time to time.

RAJUK should immediately open up in all possible ways to reach people and earn their confidence.

Chapter-5 Project Plan

5.1 Introduction

Chapter 5 of the Final Planning Report the consultant highlights the projects with preliminary cost estimates and design. The projects included in this chapter are to be executed in the first phase of implementation that is 2008-2012. The projects categories are, site and services, park and play ground, lake and road development.

5.2 Description of the Projects

In the following sections the consultant provides estimates of some selected road projects for the first phase of implementation of the Detailed Area plan for the Group-E Extension area in north-western Keraniganj.

a. Road Project from Taranagar to Uttar Baherchar via Fatehnagar and Chagla Kandi

Sixty feet. Wide Type-2 primary road will be built connecting Taranagar to Uttar Baherchar, Fatenagar and Caglakandi. This road will open up this rural area to the Dhaka core and will enable farmers of the area market their agro-products to the Dhaka market.

Location : North-West Kerani ganj
Area of Land : 44.48 acres or 109.87 ha
Length : 9.92 km

Detailed Cost Breakup

Sl.No.	Description of Item	Unit	Quantity	Rate	Total Cost
1.	Land acquisition	katha	44.48 acres	Tk. .00/katha	Tk. 40.03 crore
2.	Land Development	cft.	29063232 c ft.	Tk. 80.00/sft.	Tk. 232.51 crore
3.	Construction of Bituminous Road with Footpath on both sides	km	9.92 km	Tk. 1,20,00000.00/km.	Tk. 11.90 crore
Total					Tk. 274.44 crore

b. Road Project from Char Chamardaha to Char Algi via Akchail, Jagannathpur, and Maniknagar in North-West of Keraniganj

Sixty feet. wide Type-2 primary road will connect Char Chamardaha, Char Algi, Akchail, Jagannathpur, and Maniknagar of North-West Keraniganj. This road will also enable access to Dhaka and Kerani ganj and will provide internal mobility. Marketing of agro products by the local farmers will easier.

Location : Char Chamardaha to Char Algi, Akchail, Jagannathpur, and Maniknagar in North-West Keraniganj
Area of Land : 42.48 acres or 104.92 ha
Length : 9.39 km

Detailed Cost Breakup

Sl.No.	Description of Item	Unit	Quantity	Rate	Total Cost
1.	Land acquisition	katha	42.48 acres	Tk. 1,50,000.00/katha	Tk. 38.23 crore
2.	Land Development	cft.	27527040cft.	Tk. 120.00/sft.	Tk. 220.00 crore
3.	Construction of Bituminous Road with Footpath on both sides	km	9.39 km	Tk. 1,15,00000.00/km.	Tk. 10.80 crore
Total					Tk. 269.03 crore

5.3 Road Dimension Design

The following figure shows the sections of road dimension designs proposed for primary and secondary roads.

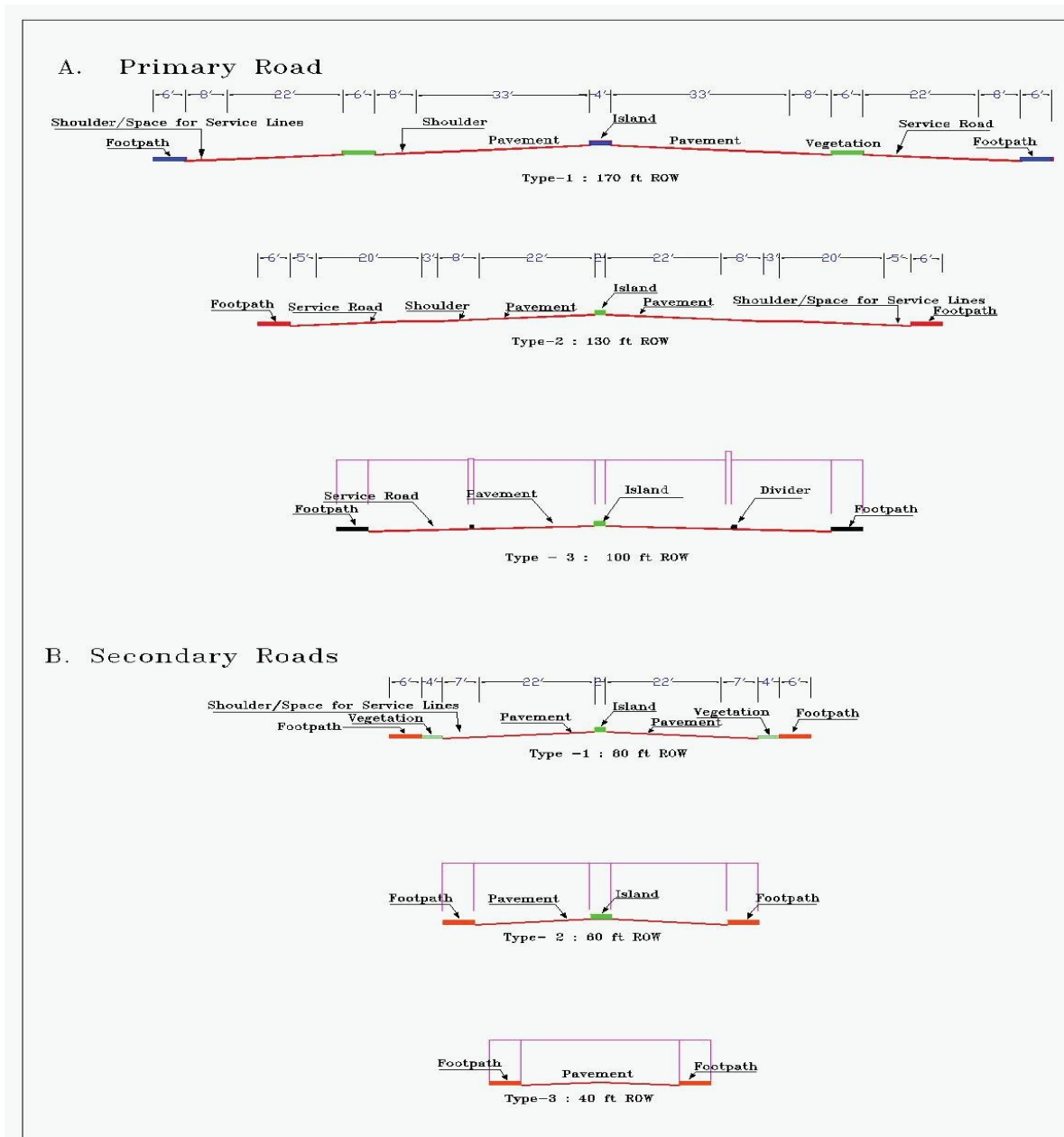


Figure-5.1: Proposed Road Dimension Design by Consultants

Chapter- 6

Follow Up Actions

6.1 Introduction

Town planning is yet to become a part of our urban development culture. Individuals love to go at will without respect to planning norms and the concerned authorities are unable to exercise full control over development. Strict measures are necessary to make stakeholders follow plans and development rules. Awareness is to be built among the people to follow the plan. Government agencies must be compelled to follow plans. Existing laws in this regard must be updated incorporating provisions plan execution. In order to accomplish the goals set forward in the plan, some follow up actions are required.

6.2 Follow up Actions

6.2.1 Awareness Building

Easy availability of plan document also enables people to go through it and become aware of the plan proposals and thereby follow the guidelines. As such RAJUK should take initiatives so that the plan document is available easily and at minimum cost.

6.2.2 Willingness of the Authorities to Implement the Plan

RAJUK, on adoption of the plan, should show its intent to implement its proposal through development and effective control measures. RAJUK need to be better equipped with necessary logistic and efficient manpower for effective implementation of the plan.

6.2.3 Revision of existing and formulation of new legal provisions relevant to DAP

There are a number acts and regulation in use for development and development control. But with the passage of time these acts and regulations have turned obsolete and need review and refurbishment in the light of present requirement. Particular mention may be made of TI Act which empowers RAJUK to prepare Master Plan. But now days Master Plan concept has become obsolete. The three tier development plans in the form of Structure Plan, Urban Area Plan and Detailed Area plans needed to be incorporated in the act 1953.

Recommendations have been made to implement DAP through Action Area Plans with people's participation. This is a new concept. Hence, it requires legal coverage and thereby it is necessary to enact new law for this purpose.

6.2.4 Identification and Preparation of Policies for Non Conforming Uses

There have been many structures constructed in various areas which do not conform to the landuse of the area. These have been identified as non-conforming use. Non-conforming use structures have to be relocated and structure use has to be changed in conformity with the landuse of the area. To implement these legal coverage have to be included in the TI Act and other relevant acts and regulations.

6.2.5 Preparation of Action Plans for Participatory Development

Mere preparation of Detailed Area Plan will not be sufficient due to ensure development due to resource constraint. Securing right of way for circulation network and utility corridors need huge funds which cannot be met by the public exchequer. To minimize the cost of development RAJUK should involve the land owners in the development process. This can be achieved by declaring some of the developing corridors as concession for development through people's participation where land-owners will become development partners and share the development cost through contribution of a portion of their land for infrastructure development. RAJUK has to prepare Action Area Plan for those areas utilizing development techniques like Guided Land Development or Land Readjustment. RAJUK has to show strong determination and willingness as this is a very difficult task to accomplish involving hundreds of people. RAJUK has to increase its efficiency and do the work at the appropriate time.

6.2.6 Resolving Duality of Power in Granting Planning Permit

It is found that local authorities like Paurashava or Union Parishad accord planning permit within RAJUK's jurisdiction area. The Local Government Ordinance provides power to the local government agencies to issue planning permits. This has given duality in the performance of development control functions resulting in chaos. This problem needs resolving.

6.2.7 Decentralization of RAJUK Function

RAJUK zonal office should be more powerful and zonal offices should be set up at Paurashava level, if not at union level. The zonal office should be given appropriate authority and are undergo regular monitoring.

6.2.8 Strengthening Planning Department of RAJUK

RAJUK's Planning Department especially plan implementation and monitoring wing should be equipped with sufficient number of qualified planners and logistic to enable them monitor the development trend within the RAJUK area. This will help them effectively guide developments in preferred areas of urban expansion.

6.2.9 Co-ordination among Related Authorities/Agencies

RAJUK should take initiative to foster better co-ordination among the stakeholders especially with line agencies. Through this, RAJUK will be able to stop unauthorized construction by public sector agencies.

2.6.10 Enforcement of Law for Restoring Plan

There are many Acts and regulation for development and development control, but there is hardly any application. In absence of enforcement, plan violation has become common. As such efforts have to be made to ensure application of the existing acts and regulation in order to strengthen development control function.

6.2.11 Provision of Penalty for Plan Violation

There should be provision of punishment for violation of the plan by individuals as well as private and public sector agencies. Violation of planning provision will make it difficult to implement planning provisions properly.

6.2.12 Plan Review

RAJUK should take initiative to review the performance and functioning of the plan during the planning period. It should also make arrangement for regular updating of the plan. Provision should also be made to prepare fresh plans on expiry of a plan period.

Chapter- 7

Conclusion

7.1 Conclusion

A physical development plan that goes unimplemented for years loses its credibility as a plan and turns obsolete overtime and one day people find it nothing but a waste paper. Since independence several physical development plans have been prepared for many town and cities in Bangladesh, but have hardly received adequate patronization as far as their implementation is concerned. Time has proved that plan execution is more cumbersome and difficult here than plan making. Crores of takas of public money have been spent in plan making, but taking an account of their execution reveals a frustrating picture as a very few of plan proposals of these plans have so far come true. This creates a naïve situation for plans themselves. Stakeholders finding the plans more rhetoric than reality at last ignore such plans. A frustrating picture of implementation is revealed after formal acceptance of DMDP in 1997. The development in flood zones goes unabated despite Structure Plan restrictions. Road infrastructures proposed have hardly been taken care of. RAJUK hardly has the capacity to prevent unwanted developments though equipped with all necessary legal powers to do so.

The current Detailed Area Plan, formulated under DMDP, opens up a new horizon of development opportunities and land use control at the very micro level. The land use areas have been marked indicating the mouza and dag numbers. Control of land use development contrary to the DAP can now be prevented more easily. This will require and exercise of power of the authority with more vigor and sincerity.

It is not possible for the government alone to go for plot to plot development as per plan with its meager resources. This calls for involving stakeholders, particularly, the land owners in the development process. Such initiative is possible at the local level infrastructure development, where the land owners will be directly benefited. In case of wider level development the development authority can take initiatives for infrastructure cost realization from land owners, in case the infrastructure is built by with public money. The DAP indicates measures for such development approaches.

RAJUK as a development authority should shun with land based housing development that allows low density use of land and also benefits the privileged classes of the society. In a land scarce country like Bangladesh housing development should aim at maximum accommodation of population. This calls for vertical accommodation with standard open space provision on the ground. No standard/rules in this regard has yet been prepared by the development authority.

The south western part of the DMDP area is rural in character and process of urbanization is negligible as in the other part of the DMDP area. New industrial development must be brought together to allow their best management with respect to service provision. Agglomeration will make it easier supplying water, managing solid waste, arranging waste water and storm water drainage and above all providing Common Effluent Treatment Plant (CETP) services for factories discharging liquid effluent.

Flood zones earmarked in the land use plan must be retained at any cost not only to save economically more valuable built up areas but also to save food crop growing low lying paddy lands.

It would not be wise to ask RAJUK as a development authority to exercise total control of the entire RAJUK area with its stringent manpower and capacity. As an authority RAJUK should serve as a regulatory body rather than a developer. It should only control, facilitate and promote development in the interest of the people. Development should go to the private sector. But it should develop mechanism to realize its costs of infrastructure development so that no one can capitalize on public money to make personal gains.

Rule of law must be established. A culture of law obedience must be created among the people in general and such practice should start with government agencies that do not follow the provision of building plan approval. It is hardly possible for the government alone to control all irregularities unless the people themselves become conscious and cooperative. If necessary stringent measures should be taken against the violators to make people abide by laws.

Regular monitoring of the plan implementation is necessary together with urban development trend in new areas. This is necessary to take up further planning and development projects as per need of the capital city which is growing as a mega city at an ever increasing rate. Monitoring would help early detection of problems and suggesting solutions for their amelioration. An early measure in tackling problems can not only save huge public money but also the miseries of the city dwellers.

