



DRAFT MASTER PLAN FOR GREATER NOIDA, 2041

Client: Greater Noida Industrial Development Authority
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Preface

In September 1989, the Government of Uttar Pradesh, concerned with unplanned growth in the vicinity of NOIDA, notified the entire area that was being exploited by colonizers under the U.P. Industrial Area Development Act, 1976 and, in January 1991, the Greater Noida Industrial Development Authority (GNIDA) was created.

M/S Rudrabhishek Enterprises Ltd. (REPL), has been entrusted for preparation of Master Plan 2041 for development of the entire notified region of Greater Noida vide agreement dated 15-04-2021 between GNIDA & REPL. The Master Plan will include review of the existing planning framework, land-use, transportation infrastructure, and demographic and socio-economic characteristics. The Master Plan will provide medium and long-term population projections and a Master Plan consisting of physical and social infrastructure requirements, transportation network plan, land use plan along with the proposed development control and zoning regulations in conformity with the TOR (collectively the “Consultancy”).

The assignment will include assessment of Master Plan 2021 (Phase I) and the existing development, Preparation of Master Plan 2041 and a Vision Plan for the entire notified region of Greater Noida in accordance with the guidelines of competent authorities.



Table of Content

LIST OF FIGURES

LIST OF MAPS

ABBREVIATIONS

DEFINATIONS

Table of Content	ii
1 Introduction to planning area	1
1.1 Background	1
1.2 History of Greater Noida.....	2
1.3 The NCR Context	3
1.3.1 NCR Plan-2001	3
1.3.2 NCR Plan-2021	3
1.3.3 Draft NCR Plan-2041	3
1.4 Location and Linkages.....	3
1.4.1 Road Connectivity	4
1.4.2 Rail Connectivity.....	4
1.4.3 Air Network	4
1.5 Characteristics of Planning Area	6
1.5.1 Settlement Pattern.....	6
1.5.2 Growth Pattern	6
1.6 Physical setting- Physiographic and Geology.....	7
1.6.1 Topography	7
1.6.2 Geomorphology	7
1.6.3 Soil Types	7
1.6.4 Climate	7
1.6.4.1 Temperature.....	7
1.7 Introduction to Area of Interest (Aoi).....	8
2 Demographic profile.....	10
2.1 Population in Urban & Rural Areas.....	10
2.1.1 Population Growth.....	10
2.1.2 Settlement Growth Pattern	10
2.1.3 Density of the Settlement	11
2.1.4 Population Distribution in Planning Area.....	11
2.1.5 No. of Households & Household Size in the Aoi	11
2.1.6 Sex Ratio.....	11



2.1.7	Schedule Cast (SC) and Schedule Tribe (ST) Population (%)	11
2.1.8	Workforce Participation Rate (WFPR).....	11
2.1.9	Migration.....	11
2.2	Population Projection for Master Plan 2041	11
2.2.1	Projected Population for Planning Area	14
2.3	Density of Population.....	14
2.3.1	Area requirement for Greater Noida considering various density options	15
3	Review of existing master plan	15
3.1	Greater Noida Master Plan – 2021	15
3.1.1	Major events during the implementation of Phase- I (2001-2011).....	15
3.2	Land Uses proposed as per Master Plan 2021.....	17
3.3	Analysis of Existing Land use Distribution.....	17
3.3.1	Review of developed landuses versus proposed landuses as per MP 2021.....	18
3.4	Land Suitability Analysis.....	19
4	Economic Profile of Greater Noida	21
4.1	Economy generatation in Greater Noida.....	21
4.1.1	Industries	21
4.1.2	Warehousing and Logistics	22
4.1.3	Real Estate.....	22
4.1.4	Institutional.....	22
4.2	Trend of Industrial Development in Greater Noida.....	22
5	PHYSICAL & SOCIAL Infrastructure.....	23
5.1	Transportation	23
5.1.1	Railways	23
5.1.2	Rapid Rail Transport System(RRTS).....	23
5.1.3	Metro	23
5.1.4	Road	24
5.1.4.1	<i>Hierarchy of road network in Greater Noida city as per Master Plan 2021</i>	<i>24</i>
5.1.5	Bus Routes in Greater Noida.....	24
5.1.6	Air Network.....	25
5.1.7	Transportation Projects Identified by NCRPB & other Agencies	25
5.2	Physical Infrastructure	25
5.2.1	Water supply	25
5.2.2	Water Demand Projections.....	26



5.2.3	Carrying capacity.....	26
5.2.4	Sewerage.....	26
5.2.5	Projected Sewerage generation.....	26
5.3	Drainage	27
5.4	Solid Waste Management System	27
5.4.1	Existing Generation of Solid Waste.....	27
5.4.2	Projected Generation of Solid Waste	28
5.5	Power supply.....	28
5.5.1	Solar Power Plant.....	29
5.5.2	Projected Requirement of Electricity.....	29
5.6	Strategies/ Proposals for Infrastructure	29
5.7	SOCIAL INFRASTRUCTURE.....	30
5.7.1	Health Facilities in Greater Noida	30
5.7.2	Education	31
5.7.3	Post , Telegraph & Telecommunication.....	32
5.7.4	Disaster Management.....	33
6	Environment & Disaster Management.....	34
6.1	Flora and Fauna.....	34
6.2	Reserved forest (RF).....	34
6.3	River	34
6.4	Waterbodies/Wetlands.....	34
6.5	Heritage Areas.....	36
6.6	Natural Risk Sites: Flooding:-	36
6.7	Air pollution	36
6.8	Seismic Zone of Greater Noida	37
7	Shelter	38
7.1	Introduction	38
7.1.1	Rental Housing	38
7.2	Housing Projection.....	38
7.3	Strategies for Housing and Informal Settlements.....	38
8	Gap analysis.....	40
8.1	Suggestion - Present and Future Context for Greater Noida.....	40
9	Vision for 2041	41
9.1	Vision.....	41



9.1.1	Objectives.....	41
9.2	Strategies for Development	41
9.2.1	Transit Oriented Development (TOD).....	41
9.2.2	Mixed use development for optimal space/land utilisation:.....	42
9.2.3	Smart City Technologies.....	42
9.2.4	Smart Transportation	42
10	Master Plan Proposals.....	43
10.1	Proposed Land use	43
10.1.1	Land use classification	46
10.2	Salient Features of Plan	48
10.3	Proposals.....	48
10.3.1	Mixed Use- Hospitality	48
10.3.2	Commercial Centres/Areas	49
10.3.3	Water Front Development.....	49
10.3.4	City Forest	50
10.3.5	Logistics parks	50
10.3.6	Mix Use – Industries.....	50
10.4	Transportation Proposals and Strategies.....	50
10.4.1	Major Transportation Challenges	50
10.4.2	Sustainable transportation	51
10.4.3	Proposed Road Network	52
10.4.4	Proposed Public Transport System	54
10.4.5	Proposed Transport Infrastructure	55
10.5	Infrastructure Plan and Strategies	55
10.5.1	Water Supply.....	55
10.5.2	Sewerage.....	56
10.5.3	Storm Water and Drainage	57
10.5.4	Solid Waste Generation	57
10.5.5	Power Supply	58
10.6	Environmental Proposals	58
10.6.1	Conservation of water bodies.....	58
10.6.2	Landscaping and Plantation	59
10.7	Integration of existing Village	59
10.7.1	Village Integration Strategy	59



11	Zoning regulations.....	60
11.1	Salient Features of Zoning	60
11.2	Use zones- Master Plan 2041.....	60
11.3	Defining Use Premises and Activities Permitted.....	62
11.4	Subdivision of Use Zones and Subdivision Regulation.....	78
11.4.1	Residential Use Zones	78
11.4.2	Non-Residential Use Areas.....	79



List of Map

Map 1-1 Regional Connectivity of Greater Noida	5
Map 1-2 Boundary Delineation Map for Greater Noida Master Plan-2041	9
Map 6-1 Location of Water Bodies in Greater Noida.....	35
Map 10-1 Proposed Landuse Plan 2041	45

List of Table

Table 2-1 Population of Rural & Urban Areas in Planning Area	10
Table 2-2 Population Growth in Planning Area.....	10
Table 2-3 Urban & Rural Population Growth in Planning Area.....	10
Table 2-4 Population Projection as per NCRPB Draft Regional Plan-2041.....	12
Table 2-5 Population Projection as per Draft Greater Noida Master Plan 2021	12
Table 2-6 Population projection by different methods for Aol	13
Table 2-7 Population Projection of Rural and Urban Areas for Aol	14
Table 2-8 Population Density Norms as per various Authorities	14
Table 2-9 Area requirement as per population	15
Table 3-1 Land use distribution - Draft Master Plan-2021.....	15
Table 3-2 Comparison of Existing Land use distribution of Greater Noida Phase-1 with Proposed Land use Distribution of MP 2041	17
Table 3-3 Existing Land use distribution of Greater Noida Phase-2	18
Table 4-1 Employment Status of Various Districts in Uttar Pradesh.....	21
Table 5-1 Showing proposed RRTS Routes by NCRTC	23
Table 5-2 Water Supply in Greater Noida	25
Table 5-3 Water Supply in Greater Noida.....	26
Table 5-4 Sewerage generation for the projected population for 2041	27
Table 5-5 Projected Solid waste generation in Greater Noida.....	28
Table 5-6 Electric requirement for projected population.....	29
Table 5-7 Comparative of Existing Medical Facilities with Standards Requirement	30
Table 5-8 Infrastructure Demand Chart	31
Table 5-9 Educational Facilities Demand Chart	32
Table 7-1 Number of Census Houses in Greater Noida(CT).....	38
Table 7-2 Number of Census Houses in Greater Noida(CT).....	38
Table 10-1 Proposed land uses for Master Plan 2041, Greater Noida	43
Table 10-2 Proposed land uses for Mixed use Hospitality.....	46
Table 10-3 Proposed land uses for Mixed use Industry.....	47
Table 10-4 Water supply requirement for the projected population for 2041	56
Table 10-5 Sewerage generation for the projected population for 2041	56
Table 10-6 Projected Solid waste generation in Greater Noida.....	58
Table 11-1 Definitions of Use Premises and Activities Permitted	62



List of Figures

<i>Figure 1-1 Location of Greater Noida in NCR.....</i>	<i>1</i>
<i>Figure 1-2 Location of Greater Noida with in Gautam Buddha Nagar District.....</i>	<i>2</i>
<i>Figure 1-3 Greater Noida in the context of Draft NCR Plan 2041</i>	<i>3</i>
<i>Figure 1-4 Urban Areas within Notified Greater Noida Area.....</i>	<i>6</i>
<i>Figure 6-1 Earthquake Hazard Map of Western Uttar Pradesh.....</i>	<i>37</i>



ABBREVIATIONS

AAI	Airports Authority of India
AMRUT	Atal Mission for Rejuvenation and Urban Transformation
AMSL	Above Mean Sea Level
AoI	Area of Interest
ASI	Archaeological Survey of India
CBD	Central Business District
CDP	City Development Plan
CPHEEO	Central Public Health and Environmental Engineering Organization
CSP	City Sanitation Plan
CT	Census Town
DA	Development Authority
DCHB	District Census Handbook
DCR	Development Control Regulation
DEIAA	District Level Environmental Impact Assessment Authority
DMP	Disaster Management Plan
DPR	Detailed Project Report
EIA	Environmental Impact Assessment
FFC	Fourteenth Finance Commission
FOP	Financial Operating Plan
FSI	Floor Space Index
GIS	Geographic Information System
GO	Government Order
GoI	Government of India
GNIDA	Greater Noida Industrial Development Authority
HH	Household
HPC	High Power Committee
HRIDAY	Heritage City Development and Augmentation Yojana
IAF	Indian Air Force
IP	Investment Plan
ITDC	Indian Tourist Development Corporation
JNNURM	Jawaharlal Nehru National Urban Renewal Mission
lpcd	Litres Per Capita Per Day
MLCP	Multilevel Car Parking
MLD	Millions of Liter Per Day
MoEF & CC	Ministry of Environment, Forest and Climate Change
Mt	Million Tonnes
NEERI	National Environmental Engineering Research Institute
NH	National Highway
NIIF	National Investment and Infrastructure Fund
NOC	No Objection Certificate
NRSC	National Remote Sensing Centre
PFR	Plug Flow Reactor
PPEs	Personal Protective Equipment
PPP	Public Private Partnership
RFP	Request for Proposal
RITES	Rail India Technical and Economic Service
SNA	State Nodal Agency



STP	Sewerage Treatment Plant
SWOT	Strength Weakness Opportunity Threat
TCPD	Town & Country Planning Department
TIF	Tax Increment Financing
TOR	Terms of Reference
UNESCO	United Nations Educational, Scientific and Cultural Organization
UV	Ultraviolet
VHRF	Very High-Resolution Satellite



1 INTRODUCTION TO PLANNING AREA

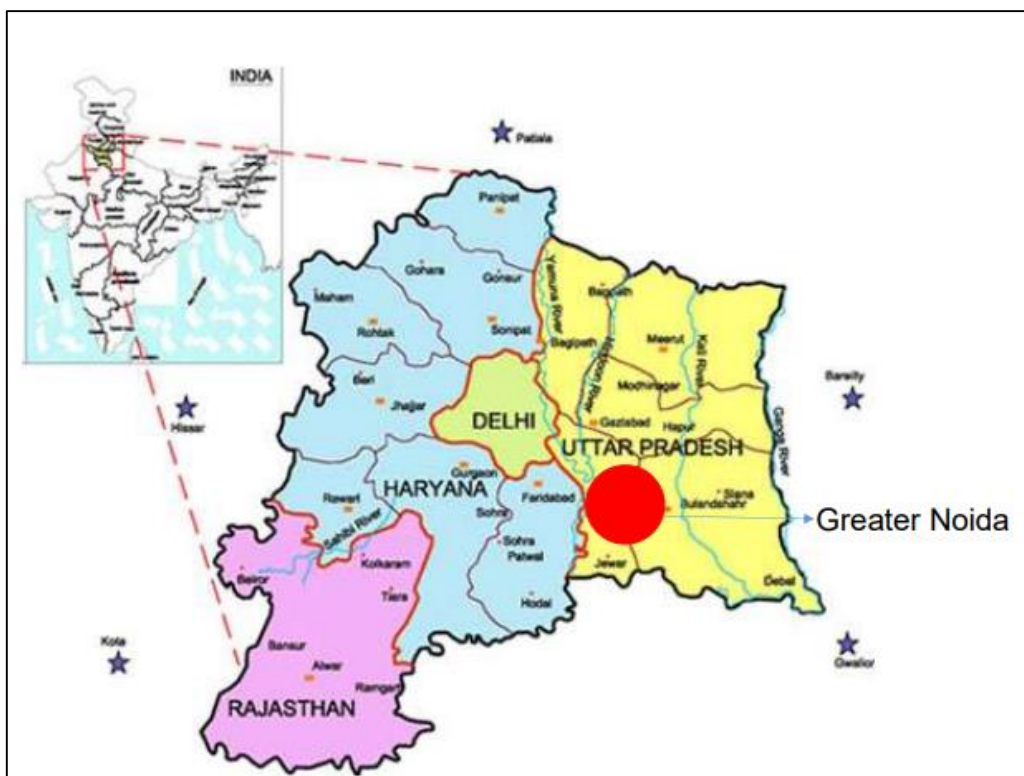
1.1 Background

Greater Noida is a Greenfield, modern, integrated city, located in the Gautam Buddha Nagar district of Uttar Pradesh geographically located at 28° 28' N and 77° 30' E. The District Gautam Buddha Nagar is spread over the area of 1442 sq.km. Consisting of 423 village and was formed by carving out the portions of Ghaziabad and Bulandshahr District. District Gautam Buddha Nagar includes Dadri and Bsrakh blocks carved out of Ghaziabad, while Dankaur and Jewar blocks have been carved out of Bulandshahr District. District is surrounded by district Ghaziabad, Hapur and borders of Delhi in North, Aligarh in south, Bulandshahr in east and Haryana State in west. The district is divided into three tehsils named as Sadar, Dadri & Jewar.

Greater Noida falls in National Capital Region (NCR) and is located at a distance of about 25 km from the border of Delhi (at Okhla Barrage) and is well connected to Delhi, Noida, Ghaziabad, Hapur Aligarh and Western Uttar Pradesh.

The Figure 1.1 and Figure 1.2 show the location of Greater Noida in NCR and Gautam Buddha Nagar District Map respectively.

Figure 1-1 Location of Greater Noida in NCR



Source: Research gate.net



Figure 1-2 Location of Greater Noida with in Gautam Buddha Nagar District



Source: Census District Handbook-Gautam Buddha Nagar

1.2 Histry of Greater Noida

to ensure planned development and growth in areas around Delhi, mainly for industrial and allied uses / activities, a new statutory body, namely, the New Okhla Industrial Development Authority (NOIDA) was constituted. As a priority, this Authority prepared a Master Plan for the area for horizon 1991. NOIDA thus began to develop in a planned manner.

NCRPB came into being through an Act of Parliament in 1985 for Planned Development of the National Capital Region (NCR) including the Uttar Pradesh (UP) Sub region.

However, in **September 1989**, the **Government of Uttar Pradesh**, concerned with unplanned growth in the vicinity of NOIDA, notified the entire area that was being exploited by colonizers under the **U.P. Industrial Area Development Act, 1976** and, Thereafter, the **Government of Uttar Pradesh** vide notification dated **28th January 1991** constituted **Greater Noida Industrial Development Authority**. The first Master Plan was got prepared by the Authority in 1992 from School of Planning &

Architecture as a consultant. The plan was for 5.00 lakhs population and was then revised in NCR Plan context in 1996 as Outline Development Plan 2001 for Surajpur-Kasna sub regional centres. Greater Noida Master Plan 2021 was notified by Uttar Pradesh government in 2013. Since then the city is developing on the guidelines of the Master Plan and city has attracted various industrial investments.

1.3 The NCR Context

1.3.1 NCR Plan-2001

Regional Plan for the National Capital Region 2001 envisaged balanced and harmonious development of the region and creation of appropriate rural – urban balance through well-conceived 4 tier hierarchy of settlements. The plan envisaged controlled and restricted development within Delhi and DMA. In the U.P. Sub-Region, Surajpur and Kasna were the two sub-regional centres identified within the Greater Noida Development Area. The city has been planned by integrating these sub-centres having the population of 1,50,000 each for a total planned area of 5075 ha, the development of which was to be done by 2001.

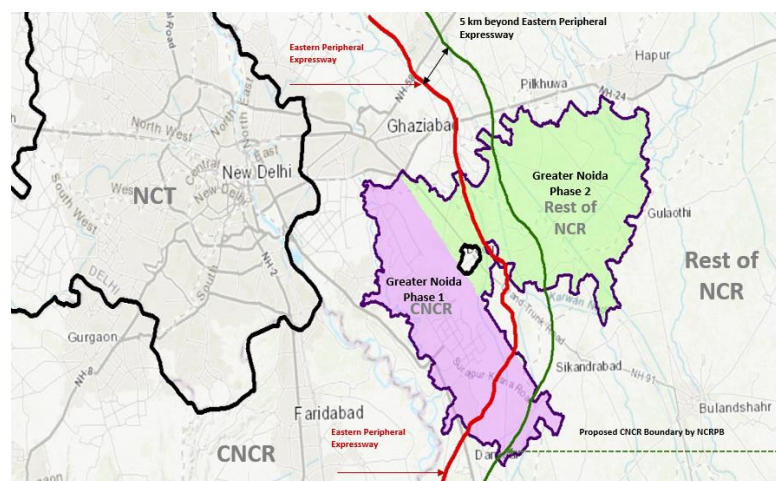
1.3.2 NCR Plan-2021

The NCR Plan-2021 has been finalised and notified on 17th September 2005. Greater Noida has been identified as a Metro Centre and lies on the Rest of NCR zone delineate in the NCR Plan-2021. As per the Plan in ‘Rest of NCR’ accelerated development of both urban and rural areas is proposed to continue. Infrastructure is proposed to be substantially upgraded at local and regional level (both by State and Central Government) in order to induce the growth in these areas, specifically in the identified settlements i.e., Metro Centres and Regional Centres. The objectives of NCR Plan-2021 for Planning Greater Noida as Metro Centre have been followed in preparation of Master Plan-2021.

1.3.3 Draft NCR Plan-2041

While Greater Noida was included in the rest of the NCR Zone as per 2021 plan, as per the NCR Plan 2041, CNCR area has been defined as area from the boundary of NCT Delhi to the Eastern Peripheral Expressway (EPE) and Kundli- Manesar- Palwal expressway (KMP) up to 5 Km beyond outer edge of the ROW of this first ring of expressways.

Figure 1-3 Greater Noida in the context of Draft NCR Plan 2041



Source: REPL Analysis and Draft NCR Plan 2041

1.4 Location and Linkages

Greater Noida occupies a geometric centre in its region which further accentuates its importance in the latter. The excellent location and proximity to Delhi connectivity and other factors have made Greater Noida an urban center that continues to attract growth and development. City is well connected to Delhi, NOIDA, Hapur, Ghaziabad, Agra, Aligarh and other cities of Uttar Pradesh.



1.4.1 Road Connectivity

- Existing Major Roads Network
 - Yamuna Expressway
 - Eastern Peripheral Expressway
 - National Highway-91
 - National Highway-34
 - National Highway-24
- Proposed Upper Ganga Canal Expressway
- National Expressway Development Programme

National Expressway Development Programme (NEDP) comprising of the Golden Quadrilateral and North-South and East-West Corridors has been brought in place to cater to the increasing traffic demands. GNIDA Planning Area lies in National Capital Region (NCR) is approachable through both the golden quadrilateral and the North-South /East-West Corridor impacting economic growth of the area.

1.4.2 Rail Connectivity

1.4.2.1 Dedicated Freight Corridors

Greater Noida has emerged as a major distributary hub of goods of national and international significance with Dadri (in GNIDA jurisdiction) as a destination of the Western Dedicated Freight Corridor extending from Jawarhar Lal Nehru Port Trust (JNPT) to Mumbai, Dadri, and Delhi. Also, the Eastern Dedicated Freight Corridor (Ludhiana to Sonnagar and then Kolkata/Haldia) is to have its major hub at nearby Khurja, thereby making Dadri- Khurja 50 km belt.

1.4.2.2 Existing Rail Connectivity – Passenger

GNIDA Notified area is skirted by three broad Gauge railway lines; Delhi-Aligarh-Kolkata/Howrah Line in the south west, Delhi-Moradabad-Varanasi line in the north and Meerut-Hapur-Khurja line in the east. The proposed railway stion at Boraki will be developed for Greater Noida. Multi Modal Transport Hub is proposed in an area of 400 acre integrated with the ISBT and truck terminal.

1.4.2.3 Rapid Rail Transport System (RRTS)

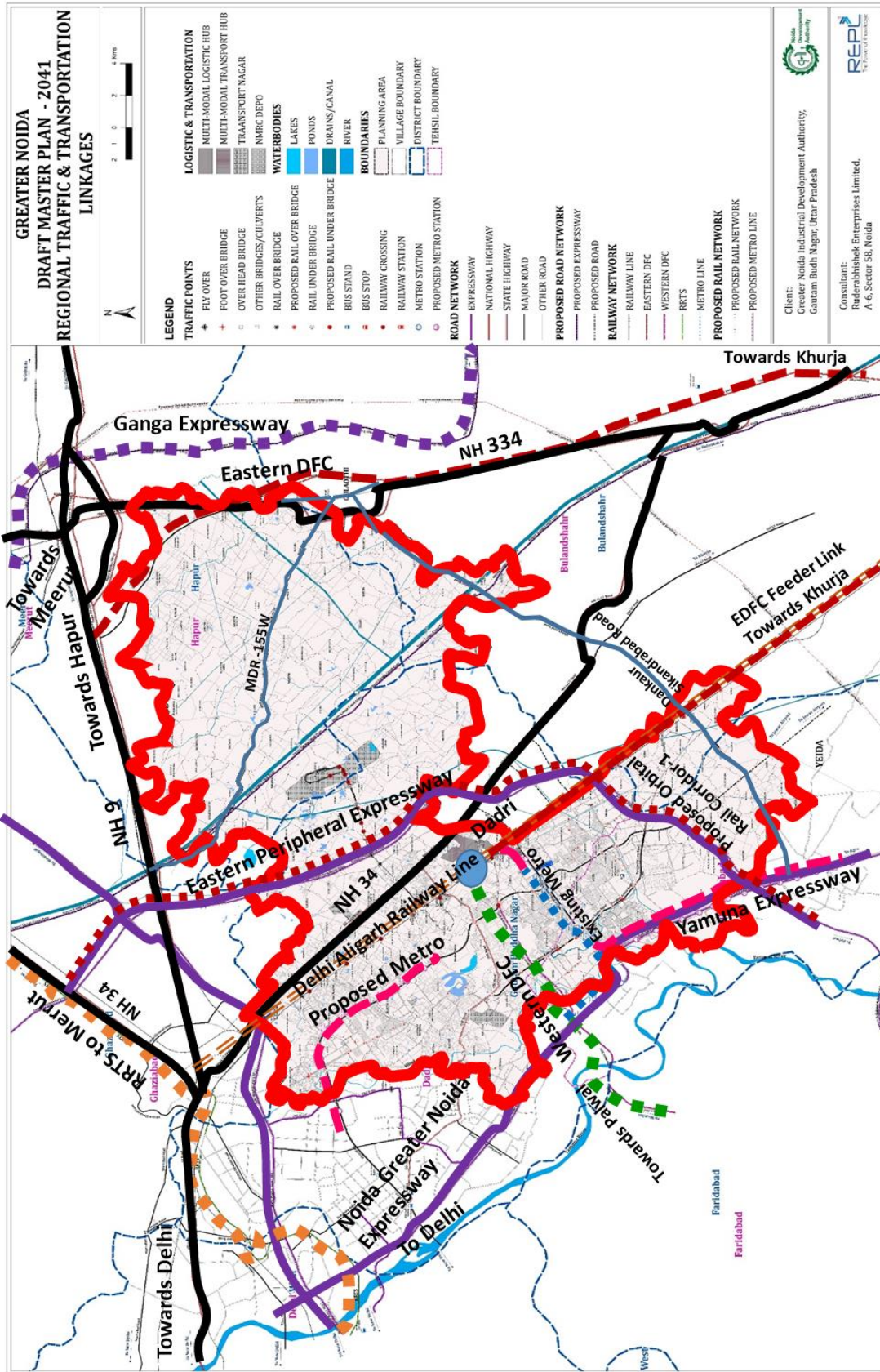
There is a proposal to connect Ghaziabad to Hapur and Khurja via RRTS which will pass through Greater Noida. In future RRTS will improve the connectivity of Greater Noida to Meerut, Khurja and Hapur.

1.4.3 Air Network

Proposed airport at Jewa will impact development of Greater Noida. **Since area around Yamuna Expressway will take few years to develop, Greater Noida will be a first top stop for the Passengers and cargos coming from the jewar airport towards Delhi and Northern India. Importance of Greater Noida from location and immediate availability of land, ready infrastructure is very strategic and incentive for investment.**



Map 1-1 Regional Connectivity of Greater Noida



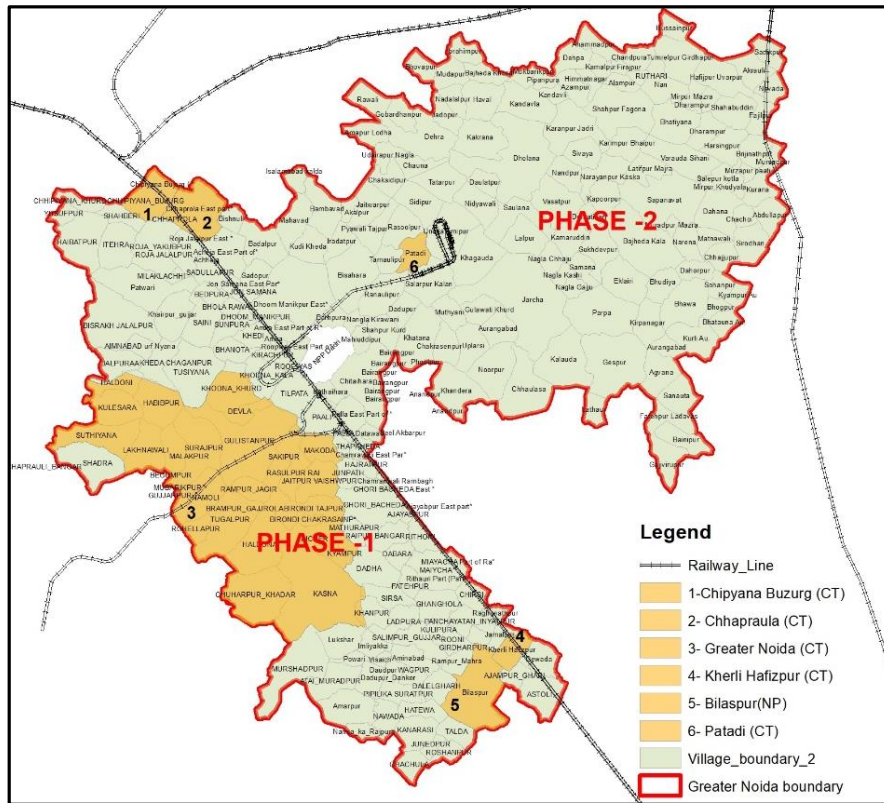


1.5 Characteristics of Planning Area

1.5.1 Settlement Pattern

There are 6 urban areas in the total proposed planning area namely Bilaspur (NP), Chhapraula (CT), Greater Noida (CT) (comprises of 26 revenue villages), Kherli Hafizpur (CT), Patadi (CT) & Chipyana Buzurg (CT) and 212 rural area. There is one urban area in expansion area named Patadi in Phase-2 area. Dadri is the main urban center located on the NH-34 in expansion area.

Figure 1-4 Urban Areas within Notified Greater Noida Area



Source: Census of India 2011

1.5.2 Growth Pattern

Phase-1

Greater Noida notified area is very diverse ranging from the high rise residential towers, low rise plotted development to rural settlements widely spread in the planning area. Greater Noida (CT) is an integrated modern city with high service and delivery standards. City has wide roads for easy flow of traffic and well maintained green areas. Greater Noida is planned on grid iron pattern along with planned amenities.

Phase-2

As the Master Plan 2021 doesn't include area beyond the railway line connecting Delhi and Kolkata, the area has developed along the two major transportation nodes i.e. Railway Line and NH-34 which connects Meerut to Aligarh. Dadri is the major node around which development came in Phase-2 area of the Greater Noida. Presently, there are large number of Industrial and commercial units has come along the NH-34 and Railway line.



There are few manufacturing units, godowns, warehouses and brick kilns have come up along Upper Ganga Canal towards Ghaziabad because of vicinity to UPSIDC Industrial Estate in this region. In existing situation most of the Phase-2 Area is agricultural in character other than the committed land parcels of NTPC and UPSIDC sites.

1.6 Physical setting- Physiographic and Geology

1.6.1 Topography

The general slope of the area is from eastern side towards river Hindon in the west. Villages in the eastern parts of the Phase-II are at the highest elevation, while villages in the west and along the hindon river in Phase-I are the low lying areas.

1.6.2 Geomorphology

Gautam Buddha Nagar district, a part of Ganga-Yamuna Doab in the vicinity of River Yamuna, forms almost a monotonous plain with occurrence of sand dunes, sandy ridges, ravenous tracts and depressions close to the river system of Yamuna. At places, close to river, ravines are developed in the form of narrow gullies on land surface due to excessive erosion by surface runoff.

The notified area of Greater Noida is divided in three zones, Depositional Terrace, Erosional Terrace and Varanasi-Ambala plain. In Phase-I area the sectors along the river Hindon lies in depositional terrace zone, sectors abutting the depositional terrace are in erosional terrace zone, rest area is in Varanasi-Ambala Plain. Phase-II area is under Varanasi- Ambala Plain. Since majority of the land available for development lies in Varanasi- Ambala plain so this area is suitable for development.

1.6.3 Soil Types

The soil ranges from sandy loam soil to loamy soil. Sandy loam soil has medium sand percentage and medium water holding capacity while loamy soil has high water holding capacity and high fertility. Since soil has major water retention capacity which will provide a good drainage.

1.6.4 Climate

1.6.4.1 Temperature:

Climatically, the planning area experiences two extreme types of climates –summer (March to June, having mean daily maximum temperature of 39.6°C and 39.30C respectively) and winter season (October to February, having mean daily minimum temperature 7.3°C). January is the coldest month of the session.

1.6.4.2 Precipitation:

The average annual rainfall is approximately 714 mm, most of which (80%) falls during the monsoon months of July and August. The maximum rainfall occurs during the monsoon period i.e., June to September having the normal value of 600 mm which is 85.7% of annual rainfall.

1.6.4.3 Wind Direction:

As per the trend of wind direction as recorded at IMD Station at Safdarjung, the prevailing wind direction of Greater Noida is North Western during most of the time. The annual mean wind speed is 9.5 km/h (2.64m/s). Maximum and minimum mean wind speeds are observed in the months of June and October-November respectively.



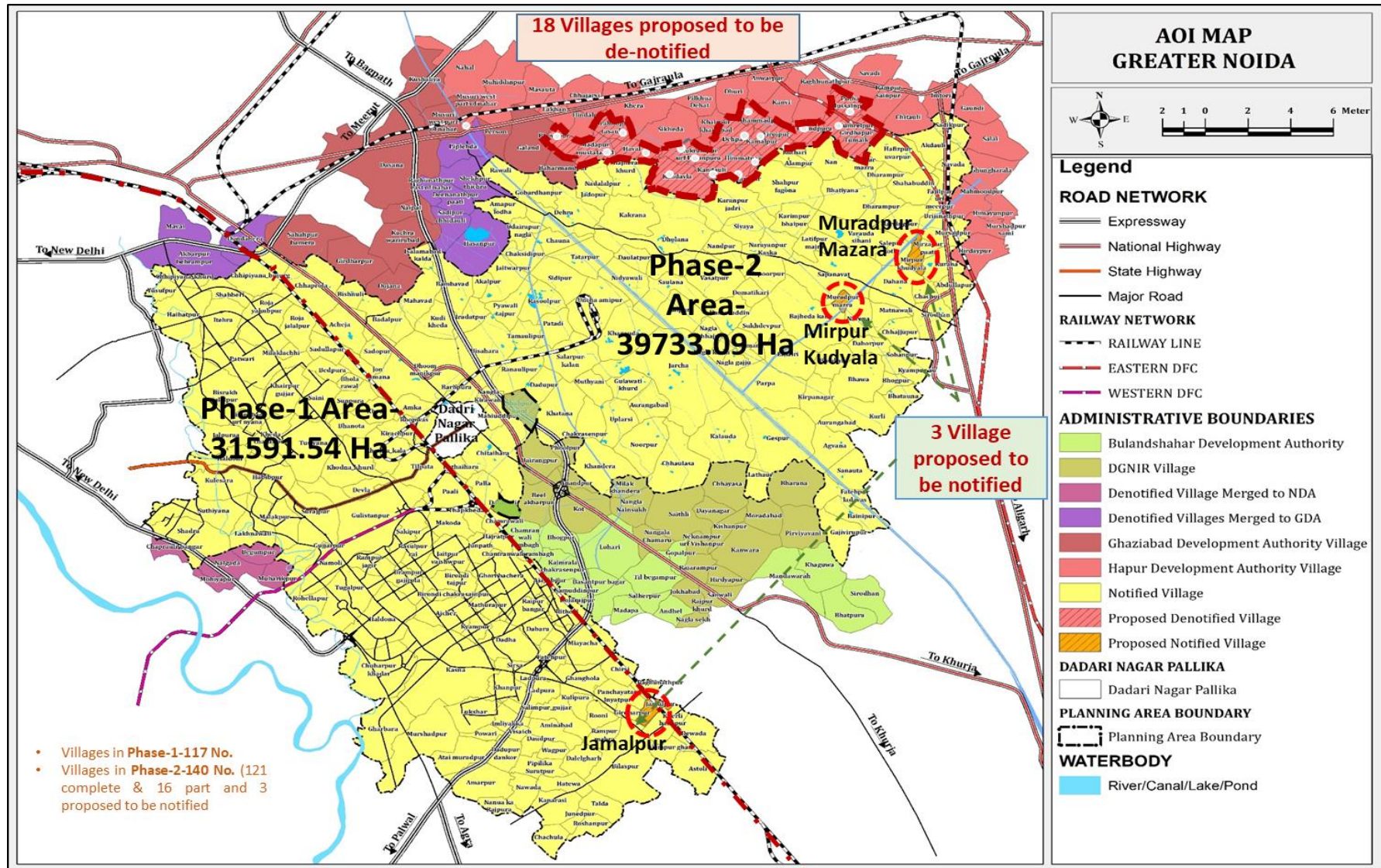
1.7 Introduction to Area of Interest (Aoi)

The Area of Interest (Aoi) is approximately 713.27 Sq Km. This include the Greater Noida Phase-1 notified area (315.91Sq Km) and Greater Noida Phase-2 notified area (397.33 Sq Km). In MP 2041, total 243 villages are falling in Planning area.

Detailed list of villages is shown in Annexure- 1



Map 1-2 Boundary Delineation Map for Greater Noida Master Plan-2041





2 DEMOGRAPHIC PROFILE

The demographic characteristics of Planning Area in terms of population growth rate, sex ratio, household size, literacy rate, SC population and ST population has been shown below.

2.1 Population in Urban & Rural Areas

The proposed area for development of Greater Noida Master Plan 2041 comprises of 243 revenue villages with a population of 3,94,494 as per census 2001 and 6,87,364 as per 2011 census.

Table 2-1 Population of Rural & Urban Areas in Planning Area

Phase	Population 2001			Population 2011		
	Rural	Urban	Total	Rural	Urban	Total
Phase-1	96,879 67.64%	46,345 32.35%	1,43,224 100%	2,25,157 60%	1,51,520 40%	3,76,677
Phase-2	2,51,270 100%	-	2,51,270 100%	3,02,208 97.27%	8479 2.72%	3,10,687
Total Area	3,48,149 89.55%	46,345 11.45%	3,94,494 100%	5,27,365 80%	1,59,999 20%	6,87,364

Source: Census of India, 2001 & 2011

As per census 2011, Phase-1 area is 40% urbanized and Phase-2 is only 2.7% urbanized.

2.1.1 Population Growth

The decadal population growth rate from 2001 to 2011 is 67.7% which is shown in Table below.

Table 2-2 Population Growth in Planning Area

S. No.	Particular	Year	
		2001	2011
1	Total Population	3,94,494	6,87,364
2	Growth Rate	-	74.23%

Source: Census of India, 2001 & 2011

2.1.2 Settlement Growth Pattern

Table 2-3 Urban & Rural Population Growth in Planning Area

S. No.	Particular	Year		Growth Rate (%)
		2001	2011	
1	Urban Population	46,345	1,59,999	245.2
2	Rural Population	3,48,149	5,27,365	51.5
	Total Population	3,94,494	6,87,364	74.2

Source: Census of India, 2001 & 2011

From the above table, it is observed that more than 200% growth is seen in the urban area. This was due to the development of Greater Noida took place from 2001- 2011. Rural areas had a growth of more than 50% due to the development in surrounding areas. This development is because of proximity to employment generating centers in Greater Noida (CT) and industrial areas in the vicinity.



2.1.3 Density of the Settlement

Density of Urban areas in the notified area of Greater Noida is more than 50 persons per hectare as per census 2011. In MP 2021, the density of Greater Noida Phase 1 was planned for 60 persons per hectare.

In phase-2 majority of village lies in density range of less than 10 persons per hectare followed by 10-20 persons per hectare. Villages near UPSIDC Industrial area, Gulawathi and Sikandrabad have density range of 30-40 persons per hectare.

2.1.4 Population Distribution in Planning Area

In terms of male and female population, there is no much difference in composition of rural & urban areas. As per census 2011 in Phase-I, 54% are male while 46% are female. In Phase-II, 53% are male population and 47% are female population.

2.1.5 No. of Households & Household Size in the Aol

Household size means the number of persons living in a house. The average household size as per census 2001 is 6.1 for phase-1 and 6.9 for phase-2 which is entirely rural. As per census 2021 the average household size in phase-2 (6.2) is higher than in phase-1 area (5.64) because of urbanization in phase-1 area. 55% of the HHs are in rural areas and 45% are in urban areas in phase-1 area and in phase-2 97% are rural and only 3% households are urban.

2.1.6 Sex Ratio

Child Sex Ratio in phase-1 area (817) is significantly less than in phase-2 area (845). This has also impacted the total sex ratio (866) in phase-1 area as compared to 885 in phase-2 area. As per census 2001 & 2011 there is no major difference in Child Sex Ratio and Sex Ratio.

2.1.7 Schedule Cast (SC) and Schedule Tribe (ST) Population (%)

As per Census 2011, the SC,ST population is more in rural areas (17% - SC, .04% -ST) as compared to urban areas (12%-SC, .02%-ST) as expected.

2.1.8 Workforce Participation Rate (WFPR)

As per census 2011, WFPR in urban areas (41%) is higher than WFPR (38%) in rural areas. **As the urbanization is expected to increase as per MP 2041, there will be increase in work force participation rate in Greater Noida. When the industrial sectors of the city will be developed, more employment will be generated, which will lead to increase in WFPR.**

2.1.9 Migration

According to the census of India in 2011 the total migrated population is **8,48,470** in Gautam Buddha Nagar District. This is 51.5 percent of total District's population. While in Greater Noida (CT) the Migrant population is 63180, which is around 62% of the total population as per census 2011.

Greater Noida is a comparatively new and developing city, with major population as migrant population. The development proposals in Greater Noida and the region nearby will attract more migrant population towards it. While projecting the population for Greater Noida Master Plan 2041, migrant population has been considered.

2.2 Population Projection for Master Plan 2041

Population projection for Greater Noida cannot be based on any one conventional projection method through past trends of growth since a new greenfield township is to be developed as industrial development which will attract a huge migrants from neighboring areas.



Thus, Four Methods are analysed for the population projection of the year 2041 which are discussed as follows:

Method-1

As per NCRPB Draft Regional Plan-2041, population projection of Gr. Noida according to Master Plan is given below:

Table 2-4 Population Projection as per NCRPB Draft Regional Plan-2041

Area	Population			
	2011	2021	2031	2041
Gr. Noida	1,02,000	12,00,000	* Govt. of UP (proposed)/NCRPB	

Source: NCRPB Draft Regional Plan-2041

The projected figures for Gr. Noida stated above are as adopted by Draft NCR Plan 2041. For this projection NCR Planning Board has referred to Population Projection Data for 2021 from Gr. Noida Master Plan 2021 and further projected up to 2041 using exponential growth rate method. The figure appears to be too high. Considering that Noida which is more than 20 years older than Greater Noida is expected to grow to only to a population of 32 lakhs as per the same study.

Method-2

Revised Draft Greater Noida Master Plan 2021 the population was projected by various methods.

According to one method, refer to as "Average Growth Rate of Neighbouring Delhi Metropolitan Area (DMA) Towns Method" the population of Greater. Noida for 2021 was projected as 12.7 lakhs.

The projection is based on study of the growth pattern of surrounding NCR towns having similar Industrial and administrative characteristics i.e. Noida, Faridabad and Gurgaon.

The study further observed that the town referred to above, their population, in relatively mature stage, grew by 93% per decade. Using this figure for projecting population for Gr. Noida for 2031 and 2041 are as stated in table below:

Table 2-5 Population Projection as per Draft Greater Noida Master Plan 2021

Area	Population			
	2011	2021	2031	2041
Planning Area	6,60,000	12,73,800	24,58,434	47,44,778

Source: Draft Greater Noida Master Plan-2021 and REPL analysis

Method-3

Industrial Workforce method:

According to a sample survey by National Industrial Development Corporation Ltd., the industrial worker density is analysed to be 26 ppha. Assuming the density may increase marginally to 30 ppha.



As per Master Plan 2021, 18% of total developed land was reserved for Industrial area. Assuming this assumption for the entire Greater Noida area (Phase I and Phase II), the total industrial area will be 13580 ha in 2041.

Assuming workers density of 30 ppha (same as in Draft Greater Noida 2021 Plan), the manufacturing employment is projected as 4,07,403 in 2041.

Assuming that industrial workforce is 40% of the total workers (as per 2021 Master Plan report). Total workers in 2041 will be 10,18,507. Assuming WFPR of 33% (as per UDPFI guidelines and also adopted in 2021 Master Plan report) the projected population by 2041 is **33,61,075**

Method-4

The population data of 1991 & 2001 is derived from Census Data and based on its growth rate different population projection methods are used which are mentioned below:

Following method is adopted for projection:

Table 2-6 Population projection by different methods for Aol

Population Projection Methods	Population						
	1991 (Census Data)	2001 (Census Data)	2011 (Census Data)	2011 (Projected)	2021 (Projected)	2031 (Projected)	2041 (Projected)
Arithmetic Increase Method	3,25,203	4,43,879	6,87,364	7,04,048	09,73,285	11,57,394	14,10,396
Geometric Increase Method	3,25,203	4,43,879	6,87,364	7,80,478	15,18,846	40,04,395	1,16,39,487
Incremental Increase Method	3,25,203	4,43,879	6,87,364	7,34,954	10,93,639	14,96,438	20,16,573
Extrapolation	3,25,203	4,43,879	6,87,364	6,19,753	8,18,451	09,06,825	11,04,739

Source: Census of India, 1991, 2001 & 2011 & REPL Analysis

In planning area population projection by Arithmetic Increase Method for 2011 is closest to Census Data of 2011.

In planning area, population projection by Arithmetic Increase Method for 2011 is closest to Census Data of 2011. Adopting this as projecting population the projected figure is 15 lakhs.



2.2.1 Projected Population for Planning Area

Table 2-7 Population Projection of Rural and Urban Areas for Aol

Population Projection for Greater Noida							
Population	2001 (as per Census)	2011 (as per Census)	2021	2026	2031	2036	2041
Urban	46,345	1,51,520	5,47,479	15,83,052	18,63,972	21,46,338	26,12,715
Rural	3,97,534	5,35,844	5,62,521	6,01,824	6,47,296	6,99,595	7,48,360
Projected Population	4,43,879	6,87,364	11,10,000	21,84,876	25,11,268	28,45,933	33,61,075
	4,43,879	6,87,364	12,00,000	25,00,000	30,00,000	35,00,000	40,00,000

Source: REPL Analysis

As per the comparative analysis it is observed that the population projection by method-4 is very low (more or less close to the present population). It is suggested that the average of method-2 & method-3 projections may be accepted as a projected design population of Greater Noida for 2041. Taking into consideration that Greater Noida is an industrial town, the work force method for population projection is appropriate (Population 33.6 lakhs), however considering the growth trend of neighbouring cities and to make sufficient provision of infrastructure, the projected population figure arrived at is 40 lakhs for Year 2041.

The projected design population by Industrial Work force method and population growth trend of neighboring cities has already considered the migration population that might come over the years, therefore separate floating population is not considered.

2.3 Density of Population

Suggested population densities norms by URDPFI Guidelines and for cities of more than 1 million population.

Table 2-8 Population Density Norms as per various Authorities

Sl. No.	Authority	Population Density norm (ppha)	Reference Population
1	URDPFI Guidelines	125-175	1 lakh to 1 crore
2	Regional Plan for NCR, 2021	125-175	More than 10 lakhs
3	Greater Noida Master Plan 2021 Ph-1	33	12 lakhs
4	Noida Master Plan 2031	164	25 lakhs
5	LIDA Master Plan 2031	74	22 lakhs
6	Delhi Master Plan	196	29.1 million

Source: Various Authorities as mentioned in Table above



2.3.1 Area requirement for Greater Noida considering various density options

Projected Population for Gr. Noida, 2041 = 40,00,000.

Table 2-9 Area requirement as per population

Sl. No.	Density in persons per ha	Area Requirement in ha
1	75	53,350
2	125	32,000
3	175	22,850

Source: REPL Analysis

Total Area under Phase 1 & Phase 2 = 71,327 ha

This would mean that even at lowest assume density of 75 ppha, there will be a separate area of 71,327 -53,350= 17,977 Ha available for future expansion.

3 REVIEW OF EXISTING MASTER PLAN

3.1 Greater Noida Master Plan – 2021

Greater Noida Master Plan 2021 was notified on 12.03.2013. Master Plan was planned for implementation in two phases i.e. first phase 2001-2011, for 7.0 lakh population and second phase 2011-2021 for 5 lakh population.

Table 3-1 Land use distribution - Draft Master Plan-2021

Land use	2001(ha)	%age	2011(ha)	%age	2021(ha)	%age
Residential	1310	25.8	3000	22.10	5000	22.36
Industrial	1596.96	31.5	3027.3	22.3	4201.23	18.88
Commercial	99.74	2	720	5.30	1200	5.39
Institutional	570.63	11.2	2502.7	18.4	3473.99	15.51
Green areas	1361.9	26.8	3000	22.10	5000	22.36
Transportation	137.32	2.7	1280	9.45	3339.78	15.01
SEZ			40	0.3	40	0.78
Total	5075	100	13570	100	22255	100

Source: Master Plan 2021

3.1.1 Major events during the implementation of Phase- I (2001-2011)

- Noida – Greater Noida Expressway constructed by 2002, enhanced the accessibility and accelerated development.
- Development of 130-meter-wide NOIDA-Greater Noida connectivity across the river Hindon in the north has opened an access from NOIDA. This link has caused spurt of development in Greater Noida
- Other important projects having impact on Master Plan proposals are :
 - Dedicated Western freight Corridor originating from Dadri
 - Eastern Dedicated freight Corridor feeder link connecting Dadri to Khurja
 - Proposed airport at Jewar



- Eastern Peripheral Expressway
- Yamuna Expressway

These are envisaged as new connecting links and are under various stages of planning & construction and have impact on the land use dynamics and existing transport network. Salient Features of Greater Noida Master Plan 2021

S. No.	Master Plan Proposal-2021
1	The proposed plan has been provided with adequate road and rail linkages for movement of commuters and freight linked with regional connectivity.
2	The existing plan is based on grid iron system, which has been continued as the basic city structure.
3	Regional level land uses i.e. Institutional uses, and the SEZ are located at the periphery of the city having, direct, uninterrupted access from the region.
6	The major work centers industrial and commercial are well distributed to avoid congestion. Industrial activities are distributed on the periphery. The commercial activities are distributed with respect to their residential catchment areas at central locations.
7	A 130.0 m. wide road has been planned as the backbone of the linear city for connecting the northern end to the southern part of the city and also to Noida and Delhi.
8	Hindon river, Lohia rivulet and lake, forest areas are major ecological resources.
10	The concept of inter-linked green spaces are acting as a continuous lung-space, but also as a multipurpose environmental feature. This forms a very predominant feature in the city.
11	Along prime frontages of arterial roads definition of urban form and color shall be stipulated for a comprehensive streetscape.
12	Grid iron pattern of road network with economic activities located on the major routes can support an efficient Mass Transportation System. The green corridor is provided on one side of the main central spine.
14	The residential areas are planned for an average population of 15000-25000 in grid of about 1.0 Km. X 1.0 Km. adjusted as per site conditions.
15	The residential sectors are planned in a manner to facilitate social cohesion by providing a mix of income groups. A mix of plotted and flatted development, low rise and high rise buildings, provides an interesting urban form. A hierarchy of open spaces and community facilities is planned to provide a conducive environment for social interaction.
16	The proposed Industrial areas are mainly located on the periphery. Non-polluting industries are permitted in the area.
18	A four-tier hierarchy of commercial areas proposed at the sector level is convenient shopping, sector shopping, sub-district center, shopping streets and city centers.
19	Predominantly Commercial, Institutional, Group Housing and Recreational uses are provided along major transportation routes.
20	Informal sector is provided as an integral part of the city providing about 5% of the land in residential sectors for this use. Informal commercial activity has also been identified as an important feature and made an integral part of planning at suitable locations on transportation routes and near planned commercial areas
21	Social infrastructure to include a hierarchy of Health facilities, educational facilities, postal and security services, the fighting services, distribution services, have been adequately planned at city level and sector level.



22	Public –private partnership is already being attempted in infrastructure development.
23	Specific plan for facilities in the rural hinterland have been prepared.

3.2 Land Uses proposed as per Master Plan 2021

Land Use	As per MP 2021 (Ha)
Residential	4992.3
Industrial	4008.59
Commercial	1096.23
Institutional	3345.9
Green Areas	3579.8
Institutional Green	1420.2
Transportation	3476.02
IIT	335.96
Total	22255

Source: - MP 2021, Greater Noida

3.3 Analysis of Existing Land use Distribution

Table 3-2 Comparison of Existing Land use distribution of Greater Noida Phase-1 with Proposed Land use Distribution of MP 2041

Existing Land use Distribution of Greater Noida Phase-1						
Land use		Area in Hectare		%	MP 2021 Area in Hectare	%
Residential	Residential	4665.57	1188.3	3.8	4992.3	22.43226241
	Village Abadi	3561				
Commercial		938.33	2.98		1096.23	4.92576949
Industrial		2399.78	7.62		4008.59	18.01208717
Institutional	Institutional	1153.7	1188.3	3.8	3345.9	15.0343743
	Government Land	34.6				
Green Areas	Recreational Green	450.36	1544.93	4.90	5000	22.46686138
	Green Areas	78				
	Reserve Forest	1016.57				
Water bodies		318		1.01		
Traffic & Transportation		2050	6.51		3476.02	15.6190519
Eco-sensitive Area		67.12		0.21		
Wasteland		165		0.52		
Vacant Land		2821.45		8.95		
Agricultural Land		11519.48		36.56		
Heritage Areas		2.49		0.01		
IITGNL					335.96	1.50959335
Others		267		0.85		
Total Area in Phase-1		31508.45	100.00		22255	100

Source: - REPL Survey & MP 2021, Greater Noida



Table 3-3 Existing Land use distribution of Greater Noida Phase-2

Existing Land use Distribution of Greater Noida Phase-2			
Land use		Area in Hectare	%
Agricultural Land		35580	79.8
Residential	Residential	387.14	0.9
	Village Abadi	3382.6	7.6
Industrial		690.94	1.5
Commercial		120.54	0.27
Institutional		1096	2.5
Vacant land		848.36	1.9
Waste land		477.84	1.1
Traffic & Transportation		447.04	1.0
Water body		1315.2	2.9
Green Areas	Reserve Forest	58.96	0.1
Recreational	Parks & Playgrounds	23.54	0.05
Others		170.68	0.38
Total area in Greater Noida Phase-2		44598.84	100

Source: - REPL Survey

3.3.1 Review of developed landuses versus proposed landuses as per MP 2021

3.3.1.1 Residential

All residential sectors along the master plan roads are developing in Greater Noida. Residential area developed in existing land use is 4665.57 ha in comparison to 4992.3 ha as proposed in MP 2021 Greater Noida. The residential land use area is achieved as proposed in MP 2021.

3.3.1.2 Commercial

In Master Plan 2021, commercial belts and sectors were proposed along the 130 mt. wide arterial road. The commercial area to be developed as per MP 2021 is 1096.23 ha while in existing situation 938.33 ha of land is developed as commercial land use. Commercial sectors (Theta-II and Lambda-I) and commercial land in Knowledge park-2 is still not developed.

3.3.1.3 Industries

The city is developing as the industrial township. As per MP 2021, 4008.59 Ha of land is proposed for industrial land use, while in existing condition only 2400 ha of the industrial land has been developed. GNIDA has developed Industrial Sectors like Ecotech-I, I EX, IEX1, Ecotech-II, III, VI, VII and VIII, Ecotech-12.

3.3.1.4 Institutions

As per MP 2021, area under institutional land use proposed to be developed was 3345.9 ha while in existing situation 1153.7 ha of land is developed. Major Institutional belt developed in Greater Noida are KP-I,II ,III & IV and Tech zone-IV. Institutional sectors like Tech Zone, Tech Zone-II are still developing.

3.3.1.5 Green:-

As per MP 2021, area under Recreational green land use proposed was 5000 ha while in existing situation only 1545 ha of land is developed. The development of the green areas is very less in comparison to proposals of MP 2021.



3.3.1.6 Transportation:-

As per MP 2021, area under Transportation land use proposed was 3476 ha while in existing situation only 2050 ha of land is developed for transportation.

Development Trends

Inference can be drawn from the above analysis of land uses that the residential land use has the highest market demand and it is developed as per area proposed for the Master Plan 2041, followed by the institutional, industrial and commercial land use. The green spaces are not developed as proposed in MP 2021 for Greater Noida. Since the land rates of Greater Noida are cheaper in comparison to neighbouring cities and has good regional connectivity which is leading to the development of the city.

3.4 Land Suitability Analysis

To prepare the most scientific and specific land it is important that the potential index analysis is carried out to study the physical aspects of the area and then arrive at the suitable location of the various land uses.

Proximity to linkage:

It has been observed all over the world that development pattern generally follows the transportation corridors because of high accessibility. Identification of these areas and including them in the urbanisable area will ensure planned and controlled development as opposed to haphazard growth, which is seen in most cities. Greater Noida Phase-1 has excellent regional linkages, because of expressways passing through the city, proximity to the upcoming Noida International Airport at Jewar, Eastern & Western DFCC corridor passing through Greater Noida and proposed Multi Modal Transport Hub at Boraki. Greater Noida Phase-2 has connectivity through NH-34, MDR155W and Hapur Bulandshahr road. For MP 2041 land uses need to be plan intelligently to harness these linkage advantages.

Proximity to existing settlements:

The areas close to the already existing settlements are also under higher development pressure. Past experiences have revealed that the pockets close to settlements are bound to witness unauthorized haphazard development if unattended. Greater Noida Township, flanked by flourishing townships of NOIDA and Ghaziabad, is likely to witness growth pattern influenced by the surrounding townships. Hence, an exercise has been carried to identify the growth pattern influenced by location of the existing townships abutting Greater Noida along with the settlements located within the notified area and was provided in Master plan 2021. In the development of Phase-2 area of Greater Noida, Dadri, NTPC Township and proximity to Gulawathi will be a guiding the land uses around the settlements.

Physiographic & Geology Study

From the Physiographic and Geological study shown in Chapter 1.6, the notified area for the MP 2041 is suitable for development as the majority of the land available for development lies in Varanasi/ Ambala plain and is older alluvial plain. The soil in the area ranges from sandy loam to loamy soil which has good water retention capacity hence will provide good drainage which makes the area suitable for development.



Greater Noida (Phase-1 & Phase-2) to be developed in an integration to the existing development of Greater Noida. Considering the development proposals envisaged for this area in the light of Eastern and Western Freight Corridors, designation of Dadri as major investment node, the surrounding area as investment zone, expressways, either passing through this area or proposed and planned to be developed to improve the connectivity of this area and the surrounding region, it is visualized that the area is slated for rapid urban growth.

The activities that will trigger development in this area are likely to comprise of services for providing transportation logistics such as loading / unloading areas, truck and wagon terminals, helipads, container depots, warehousing, wholesale trade and related services for repair and maintenance of vehicles, food plazas and hotel accommodations of various kinds, health care facilities and entertainment districts.

The industrial sector is also likely to experience a gradual shift from the traditional small and medium scale industries to Hi-tech industries like information technology, bio-technology and their ancillary R&D platform. Activities related to ITES, BPO, exposition centres for industrial products, business centres, and commercial offices of business and industrial houses are also likely to get attracted to this area.



4 ECONOMIC PROFILE OF GREATER NOIDA

Gautam Buddha Nagar District is the largest contributor to the state's GSDP-10% as compared to Lucknow (4%) the second largest contributor district.

Table 4-1 Employment Status of Various Districts in Uttar Pradesh

Districts	Total Employment (in Lakhs)	Employment in %		
		Agriculture	Manufacturing	Others
Aligarh	4.83	55.28	13.66	31.06
Budaun	4.26	55.63	12.44	31.93
Bulandshahr	5.54	64.08	09.93	25.99
G.B. Nagar	6.29	03.33	48.17	48.50
Ghaziabad & Hapur	4.65	11.18	26.02	62.80
J.P. Nagar	2.89	50.71	17.30	31.99
Meerut	4.92	34.55	21.35	44.10

Source: Census 2011

4.1 Economy generation in Greater Noida

Greater Noida has been rapidly developing as one of the most vibrant economy in the National Capital Region (NCR) and is considered to be the hub of industrial development in North India. Various industries related to Electronics, Manufacturing, Information Technology and other small and medium enterprises have already developed in Greater Noida. Further, with the proposed development of multiple projects under NSICDC (National Infrastructure Corridor Development Corporation), the area is expected to develop at a rapid pace.

4.1.1 Industries

Greater Noida is a popular destination for the large industries in Electronics, automobiles, telecom, heavy engineering, IT industry, Logistic and supply chain and pharmaceuticals. Honda, Vivo, Oppo, Yamaha, Daewoo, Varun Beverages, Falcon Autotech, New Holland are some of the major industries operating in Greater Noida. It is one of the favored locations for industrial investment especially of multinational investment because of its good infrastructure, proximity to Delhi and effective single window system of speedy decision making and clearances.

Major Industries existing in Greater Noida phase-2 lies between the Delhi- Aligarh railway line and NH-34 (Grant Trunk Road) and in Bulandshahr road Industrial Area developed by UPSIDA. Some of the major industries in Phase-2 are Grasim Cement, Gujarat Ambuja cement, KL Steels, Rathi Industries, Lotte India, Indus Tubes, KRBL Limited, CHW Forge unit, Apollo Tubes limited, Apollo Pipes Limited, Hero Motors, Pidilite, Ashtech Industries, KJS Concrete Limited.

As per Draft NCR Regional Plan 2041, majority of Greater Noida Phase-1 and part of Greater Noida Phase-2 comes under CNCR (Central National Capital region) which is defined as "Ring of Opportunity" the activities of high value manufacturing sector (electronics etc.) should be provided special emphasis. As per Draft NCR Regional Plan 2041, sector specific recommendation for industrial development has been given for CNCR and Rest of NCR which are as follows:

S. No.	Sector	Recommendations



1.	CNCR	<ul style="list-style-type: none"> • Logistic Parks, Multi-Modal Transport Hubs, ICDs, Dry Ports, Recreational Theme Parks, Specialized Townships, Service sector, High value manufacturing etc. • Re-development of industrial areas with ease of land use conversion. • Vertical development and massive re-development of urban, commercial, institutional, residential spaces and old areas.
2.	Rest of NCR	<ul style="list-style-type: none"> • Large rural investment areas, SEZs, Heavy Industries • New concept of 5-10 years land lease for economic activities including industries, agro-parks, etc. • Third party land aggregators to enable dynamic changes in land use, etc. as per global market conditions • Fast and efficient road, rail and air connectivity

4.1.2 Warehousing and Logistics

Greater Noida has large industrial setups which requires the supply chain facilities, warehousing and logistics facilities will be facilitating these industries. Greater Noida Phase-1 houses many warehouses and logistic centres in the industrial sectors. Some of the big warehouses of companies like Amazon, LG, Polycab India, Big basket and Central Warehouse Corporation are in phase-1 area.

In phase-2, major warehousing activities have developed between the railway line and NH-34 because of availability of low cost land. Development of warehousing along the MDR-155W near Dholana village is in very initial stage but because of proximity to UPSIDC industrial estate (Mussorie-Gulawathi road) and industrial areas of Hapur and Ghaziabad, the warehousing and logistic facility is expected to increase in future.

4.1.3 Real Estate

Investor and end users have invested in Greater Noida real estate market due to its better development opportunities.

4.1.4 Institutional

Greater Noida is developing as a major educational hub in Delhi-NCR and Uttar Pradesh. City has significant demand of land for integrated schools, engineering, medical, management colleges.

4.2 Trend of Industrial Development in Greater Noida

As per MSME report-2012 of Gautam Buddha Nagar district, it is observed that the maximum percentage of industries are of Hosiery & Garments, paper product & printing, rubber & plastic products, repairing & service industries and manufacturing industries. The regional connectivity shall boost warehousing and logistics centre.



5 PHYSICAL & SOCIAL INFRASTRUCTURE

5.1 Transportation

Greater Noida is well connected regionally and nationally through rail, road and air transport networks.

5.1.1 Railways

Greater Noida is bounded by three broad Gauge railway lines; Delhi-Aligarh-Kolkata/Howrah Line in the south west (Dividing Phase-I & Phase-II of Greater Noida), Delhi-Moradabad-Varanasi line in the north and Meerut-Hapur-Khurja line in the east. The proposed railway station at Boraki will be developed for Greater Noida. Multi Modal Transport Hub is proposed in an area of 400 acres integrated with the ISBT and truck terminal.

Western & Eastern Dedicated Freight Corridor

Western DFC is a 1,504 km long, under-construction broad gauge freight corridor that will connect Dadri (Greater Noida) with Jawaharlal Nehru Port in Navi Mumbai, Maharashtra. The Eastern Dedicated Freight Corridor (Eastern DFC) has a 46 km long Branch line, that connects Khurja in Bulandshahr district on Eastern DFC with Dadri in Gautam Buddha Nagar district on the Western DFC.

At present there is a proposal to construct seven Railway Over Bridges (ROBs) along the Eastern Dedicated Freight Corridor feeder link in Maycha, Rithori, Ajaybpur, Chamrawali Ramgarh, Chamrawali Bodaki, Astoli and Palla village. These ROBs are essential to connect Greater Noida Phase-I to the Phase-II area. Already existing ROBs are near Maripat railway crossing, Dadri, and near Dankaur railway station which are connecting the Phase-I & Phase-II.

5.1.2 Rapid Rail Transport System(RRTS)

NCR-Transport Corporation (NCRTC) identified and recommended eight RRTS corridors to connect the towns in NCR with high speed rail based commuter transit services. For first phase 3 routes have been selected on priority are Delhi-Meerut corridor, Delhi-Panipat corridor and Delhi-Alwar corridor.

Table 5-1 Showing proposed RRTS Routes by NCRTC

Prioritised Corridors Identified	Approx. Length	Expected Travel time
Delhi-Ghaziabad-Meerut	82km	55 min
Delhi-Gurugram-SNB-Alwar	164km	117 min
Delhi-Panipat	103km	65 min
Future Corridors		
Delhi-Faridabad-Ballabgarh-Palwal		
Ghaziabad- Khurja approx. 77 km		
Ghaziabad – Hapur approx. 34 km		
Delhi- Bahadurgarh- Rohtak		
Delhi-Shahadra-Baraut		

Source:-NCRTC

One of the future corridor of Ghaziabad-Khurja proposed by NCRTC will be passing through the planning area, which will ensure the last mile connectivity, addressing the needs of all categories of travelers on the network. The network would be planned and spatially oriented to ensure seamless integration with the Indian Railways, Inter State Bus Terminals (ISBTs), Airports and the Metros.

5.1.3 Metro

Three metro corridors are proposed through Greater Noida city namely:-



- i. Noida to Greater Noida from Sector 51 in Noida to Boraki Railway Station.
- ii. Noida Sector 51 to Knowledge Park V, further to extend upto Boraki.
- iii. Knowledge Park-II to Noida International Airport in Jewar.

5.1.4 Road

Greater Noida Phase-I is accessible from Greater Noida expressway connecting Delhi, Noida and Greater Noida. Yamuna expressway starting from Greater Noida connects Greater Noida to western parts of Uttar Pradesh. Eastern Peripheral Expressway is connected with Greater Noida to Yamuna Expressway via an interchange built at Jaganpur, Afzalpur village near Noida International University which improve connectivity with Ghaziabad, Faridabad, Gurgaon and Delhi.

Phase-II area is accessible by two National Highways – the NH-24 to the north of the site and the NH-34 (popularly known as GT Road) to the south-west. State Highway, SH-18 (Hapur-Bulandshahr) passes along the eastern boundary of planning area. Proposed Ganga Expressway (Merrut to Prayagraj) is adjoining to the eastern boundary of planning area will improve the regional connectivity of Greater Noida with eastern parts of Uttar Pradesh. Proposed Upper Ganga Canal expressway starting from Sanauta Bridge (Bulandshar District) to Purkazi (Distt. Muzaffarnagar) before UP-Uttarakhand Border is also proposed, which will also improve the regional connectivity of Greater Noida.

5.1.4.1 Hierarchy of road network in Greater Noida city as per Master Plan 2021

The city's main road network is linear in character extending from Northern end near NH 24 up to Kasna in southern side. The internal sector roads are on grid iron pattern. There are 5 main arterial roads in the city i.e. Expressway way from Noida to Greater Noida 75m wide, 'The Entry Road' or DSC Road 45.0 m wide is also one of the major roads which connects NOIDA to the city's Surajpur area and leads to Dadri and 'The Promenade' or Surajpur Kasna Road 80.0 m wide, the 105m wide road from Alpha 1 to Knowledge Park-IV to Greater Noida phase-II and NOIDA – Greater NOIDA Link Road, 130 m wide and length of 28 Km is a backbone of the linear City for connecting northern and southern parts to Noida and Delhi.

Major Road Network

- 130 m. wide main arterial road -City central spine from Northwest to South East
- 105 m. wide Meridian road.
- 80 m. wide Promenade (S.K. Road) and link road from, Kasna to Yamuna Expressway
- 75 m. wide Noida-Greater Noida Expressway
- 60 m. wide sector peripheral roads
- 45 m. wide DSC Road (existing)

5.1.5 Bus Routes in Greater Noida

5.1.5.1 Inter State Bus Service-UPSRTC

Uttar Pradesh State Road Transport Corporation (UPSRTC) operates intercity bus service where most of the routes originates from Greater Noida bus depot and provides connectivity to nearby regions of the city like Delhi, NOIDA, Bulandshahr, Ghaziabad, Dadri, Aligarh, Agra etc.

5.1.5.2 NMRC Operated Bus service

Metro Rail Corporation (NMRC) is plying low floor AC buses from metro stations to different parts of Greater Noida. This bus service acts as an intercity bus service which provides connectivity to some parts of Greater Noida. The major routes followed by these buses provides connectivity of Botanical Garden Metro station (Noida) to Depot station (Greater Noida).



5.1.6 Air Network

Proposed Noida International Airport at Jewar is located in South of Greater Noida. Project on the east of Yamuna Expressway in Jewar and is approx. 70 km from Indira Gandhi International Airport at Delhi. In future there is a proposal to connect Delhi and Jewar airport through metro corridor

5.1.7 Transportation Projects Identified by NCRPB & other Agencies

As per NCRPB Draft Regional Plan 2041, many important transport projects relating to construction of expressways, dedicated freight corridor and airport are under implementation. These projects will have far reaching implications for the development of Greater Noida Planning Area.

5.1.7.1 Multi Modal Logistic Hub (MMLH)

Multi Modal Logistics HUB (MMLH) at Dadri proposed as part of National Industrial Corridor Development Programme of Govt. of India. The site comprises of an area of about 293.8 Ha (725.6 acres) placed between NH-34 in the north-west and the Delhi-Howrah Railway line in the south-west and an additional area of about 145.1 Ha (358.56 acres) between NH-34 and Eastern Peripheral Expressway (EPE).

5.1.7.2 Multi Modal Transport Hub (MMTH)

"Multi Modal Transport Hub (MMTH) has an area of 412.7 acres, and is proposed at Boraki in Greater Noida". Under MMTH, a railway station is proposed at Boraki that shall be developed as a transport hub with a state-of-art railway terminus further supplemented by an Interstate Bus Terminus (ISBT) and a Mass Rapid Transit System (MRTS) station alongside commercial activity.

The main road network of Greater Noida is linear in character with grid iron pattern. The internal roads in the city are very wide with large ROW but due to absence of an efficient public transport system, high share of private transport is observed in the overall traffic.

5.2 Physical Infrastructure

5.2.1 Water supply

Presently Ground water is the main source of water supply in Greater Noida.

Water Supply in Phase-1:- Water is supplied through 155 tube wells, 24 Overhead tanks and 14 underground Tanks. About 58 sectors of Phase-1 Greater Noida has tapped water supply. Currently 46 villages are provided with tapped water supply through GNIDA.

Water Supply in Phase-2:- In Phase-2 According to district census handbook, only 35% of the notified villages have access to tap water and rest use hand pumps, Wells and electric pumps as the source of water supply which is leading to depletion of ground water in the area.

Table 5-2 Water Supply in Greater Noida

S No.	Area	Population (2011)	Water requirement plus losses (in MLD)				Existing Water Supply (MLD) - 2020
			Domestic Water Requirement @ 150 lpcd	Firefighting @ 100VP	Unaccounted Flow of Water (UFW @15%)	Total	
1	Phase-1	3,76,677	56.5	0.06	12.43	68.99	116.00
2	Phase-2	3,68,044	55.20	0.06	12.15	67.41	-



3	Total	7,44,721	111.7	0.12	24.58	136.4	-
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Source: GNIDA

Note: Proposed water supply scheme of Ganga jal project will provide 210 MLD of water
Ganga Water Supply Scheme

The proposed water supply scheme is based on the projected population under Master Plan 2021. 85 cusec Ganga water from Upper Ganga Canal will be supplied in Greater Noida to meet the water demand of the planning area. Raw Water Conveyance Main has been laid down from intake point at Dehra to Water Treatment Plant is proposed near village Palla, the approximate length of this pipe line is 17.90 km.

5.2.2 Water Demand Projections

The water demand of 690 MLD has been calculated for the projected population of 40, 00,000 lakhs for year 2041. By considering the current capacity of 116 MLD, and Ganga jal project will add additional 210 MLD to the existing water supply, **the additional requirement to suffice the projected population is 364 MLD** as shown in table below.

Table 5-3 Water Supply in Greater Noida

S No.	Area	Projected Population (2041)	Water requirement plus losses (in MLD)				Existing Water Supply (MLD) - 2020	Additional Water requirement for 2041(MLD)
			Domestic Water Requirement @ 150 lpcd	Firefighting @ 100VP	Unaccounted Flow of Water (UFW @15%)	Total		
1	Planning Area	40,00,000	600	0.2	90	690.2	116 +210 (Ganga Jal)=326	364.2

Source: Calculation as per standards in URDPFI guidelines

5.2.3 Carrying capacity

The dependence on ground water is high as the source of water supply in the city. As the industrial activities will increase with time, there will be enhanced requirement of water, therefore recycling/reuse of water has to be promoted.

5.2.4 Sewerage

Greater Noida Phase –I is well connected with the main sewage line of the city. GNIDA has been providing modern robotic services for cleaning sewage in urban and rural areas. Sewerage network for Phase-II and expanded development area will have to be designed and Infrastructure Master Plans for sewerage, water supply and drainage have to be prepared.

Currently there are 4 STPs working in Greater Noida Phase-I with capacity of 174 MLD and 4 STPs are proposed of capacity 176 MLD.

5.2.5 Projected Sewerage generation

The Sewerage generation of 552 MLD has been calculated for the projected population for Greater Noida i.e 40 lacs for the year 2041. The detailed sewerage plan shall be prepared separately.



Table 5-4 Sewerage generation for the projected population for 2041

Sr.no.	Projected Population (2041)	Total Water Requirement (in MLD)	Sewage generation by Projected Population (including floating population) @ 80 % of water supply (MLD)	Existing Sewage treatment (MLD)	Gap
1	40,00,000	690.2	552.16	174	378.16

Source: Calculation as per standards in URDPFI guidelines

5.3 Drainage

Greater Noida has many natural drains and manmade drainage system. In Greater Noida Phase-I, the ground is sloping from North-east to South-west, therefore the drainage network was designed from North-east to South-west direction and all drains are connected with the existing Hawalia drain which is ultimately discharging into River Hindon. Drainage is proposed to be discharged in Dasna drain and Hawalia drain through Lohiya rivulet. Lohiya rivulet transverses through the Greater Noida Township serving as natural drainage system. This rivulet is proposed to be developed and conserved as a landscape features.

Greater Noida Phase-2 area is currently well drained with a gradual slope from north-west to south-east through the natural drainage systems out falling into Kali Nadi and other tributaries of Hindon River.

5.4 Solid Waste Management System

Greater Noida Industrial Development Authority (GNIDA) has adopted an efficient solid waste management system in Greater Noida. The system addresses solid waste collection, transportation, treatment (depending on the nature of waste generated) and disposal.

Waste Generated: 300 TPD (3,00,000 Kg) per day (existing situation), as per GNIDA

5.4.1 Existing Generation of Solid Waste

The solid waste generated has been calculated for existing population considering the standard of 0.5 Kg per capita per day from URDPFI standards. The solid waste generated comes out to be 372 TPD.

Existing Dumping Site: 10.5 ha (26 acres) of dump site at Laknawali

This site at Laknawali is earmarked as Botanical and Zoological Park (BZP) as per Greater Noida Master Plan-2021. It is proposed to be discontinued as dumping site and shifted to Astauli landfill site with the capacity of 350 MLD. The existing dump will be segregated into recyclable and non-recyclable waste. The non-recyclable waste will be shifted to land fill site at Astauli.

For Solid Waste Management the focus areas are:-

- i. **Centralized & Decentralized Waste Management by GNIDA**
- ii. **Remediation of existing dumpsite**
- iii. **Operationalize the sanitary landfill**
- iv. **Construction and demolition of waste processing**
- v. **Manual Sweeping**
- vi. **Mechanical sweeping**
- vii. **Bulk waste generators compliance**

Decentralized Waste Management by GNIDA



GNIDA is responsible for Door to Door collection and transportation of Municipal Solid Waste in Phase-I. Wet waste processing is done through Bio-methanation (Cluster 1 & 3) & Composting (Cluster 2,4 & 5) technologies. GNIDA collects user charge in lieu of these facilities.

Centralized Waste Management by GNIDA

Collection of MSW from sectors and villages of Greater Noida Phase-I (apart from the areas covered in decentralized waste management building). All high rise buildings in urban areas and villages are covered in the centralized waste management. Centralized processing facility is proposed in Lakhnawali village. Citizens are responsible for segregating waste at source and paying notified user charges.

Manual Sweeping

Manual sweeping is active in all sectors and villages notified under Phase-I of GNIDA. Sweeping waste is transported to designated points.

Construction & Demolition Waste Management Project: The processing of waste is done through washing, crushing, screening and separation etc. Recycled products are produced for construction applications.

Non Bulk waste Generators: GNIDA has designated ten location/sites where Malba/Construction & Demolition Waste/Debris can be dumped by the Non-Bulk Waste Generators in Greater Noida. Detailed waste management plan shall be prepared for the city.

5.4.2 Projected Generation of Solid Waste

Solid waste generation of 2,000 TPD has been calculated for the projected population of 40 lacs for the year 2041. Gap assessment has been done by comparing the projected generation with existing facility. It has been analyzed that additional processing facility of solid waste has to be implemented for the gap 1,750 TPD by the year 2041.

Table 5-5 Projected Solid waste generation in Greater Noida

Sr.no.	Area	Projected Population (2041)	Solid waste generation @ 0.5 kg/capita/day (Tones per day , TPD)	Existing Capacity of processing plant	Gap (TPD)
1	Greater Noida	40,00,000	2000	350	1,650

Source: Calculation as per standards in URDPFI guidelines

5.5 Power supply

NPCL (Noida Power Corporation Limited) is the main power Supplier for the Greater Noida. In existing situation 51 substations are already constructed in Greater Noida and additional 53 substations are proposed by the NPCL as per Master Plan 2021.

There is a 1820 MW Power station, owned and operated by NTPC is located to the west of Upper Ganga Canal in Phase-II. It covers an area of approximately 1,000 ha. The power plant mainly serves NCR power system and has 8 outgoing transmission lines in the notified planning area. The detailed electricity Master Plan for the city shall be prepared.



5.5.1 Solar Power Plant

Greater Noida Authority along with Noida Authority has developed a solar power plant generating 1MV of Green energy. This plant is located in PHI-IV sector of Greater Noida. The solar energy shall be promoted in the city.

5.5.2 Projected Requirement of Electricity

The provision of one electric substation of 11KV for a population of 15,000 can be considered as general standard for electricity distribution.

Table 5-6 Electric requirement for projected population

Sr.no.	Area	Projected Population (2051)	Electricity consumption @ 2.74 kWh per capita per day	Number of 11 KV electric substation @ 1 for every 15,000 population
1	Greater Noida	40,00,000	1,09,60,000	266.7

Source: Calculation as per standards in URDPFI guidelines

5.6 Strategies/ Proposals for Infrastructure

The various proposals has been suggested which will be complied as Infrastructure Plans for Greater Noida Master Plan 2041.

- i. Implement measures for efficient use of available potable water like SCADA based smart water metering till consumer end, water audits, along with measures for conserving more water from rains from road run-off, separation of storm water drains from sewerage drains.
- ii. Recharging of aquifer should be taken up immediately by constructing suitable rain water harvesting structures such as recharge pits, recharge trench, recharging dug wells, recharge shaft, shaft with recharge well, trench with recharge well, check dam and percolation tanks.
- iii. Revival & rejuvenation of all water bodies/ wetlands should be undertaken on priority and ground water quality/quantity be improved.
- iv. Blue infrastructure like rivers, canals, ponds, wetlands, floodplains, water treatment facilities, etc. should be integrated with green infrastructure like trees, lawns, hedgerows, parks, fields, forests, etc. for seamless nature. Green storm water infrastructure is designed to mimic nature and capture rain water where it falls. Green infrastructure reduces and treats storm water at its source while also providing multiple community benefits such as decreasing the local flooding and its socio-economic impact, improving community aesthetics, encouraging more neighbourhood socialisation, improving economic health by increasing property values while giving other benefits like more walkable streets, traffic calming, green public spaces, shades, enhanced foot traffic in retail areas thus providing more jobs opportunities for small businesses, etc. 'Greening the Grey' is the proposed futuristic approach to storm water management.
- v. As per NCR Draft Regional Plan 2041, for water sustainability, construction of porous and permeable pavements & open public spaces in new developments and replacement of existing non-porous pavements & open public spaces should be made mandatory in NCR. Replacement of existing pavements and open public spaces be carried out in phases by 2026 in all Metros and Regional Centres.
- vi. Strengthening / Conservation of natural drains and water bodies is essential. Measures are:



- Concepts of zero run-off drainage should be adopted with retention ponds, sediment traps, balancing lakes and segregated wastewater disposal system.
- As per UP Sub-regional Plan 2021, by planting trees within a buffer of 5m Riparian zones should be preserved from each major river and canal.
- vii. Development Control Regulations to be prepared and enforced covering
 - Restricted areas for development near the natural drainage lines.
 - No construction zone within 100m of the natural river or stream
 - No permanent structure within a 50m buffer of any water body such as lakes, ponds, etc.
- viii. Further, the NGT rules and Building bye-laws need to be enforced and periodic check-up on implementation is also required in this regard.
- ix. STPs to be proposed. Treated water shall be used in horticulture, industrial water supply, irrigation, water recreation and others.
- x. It is proposed to prepare either sewerage master plan or city sanitation plan for a period similar to city master plan for efficient management and development of the network.
- xi. An integrated plan covering water supply, drainage, irrigation, sewerage and solid waste management need to be prepared in line with the city master plan and accordingly DPR can be prepared to execute them on ground.
- xii. An incentive system for utilising the sewage organic waste for organic agriculture and natural gas generation plant should be encouraged with scavengers and farmers.
- xiii. Promote use of Green Storm Water Infrastructure (GSWI) in development and redevelopment of streets and land parcels so that spaces get created for infiltration of storm-water, reduce water flows, and improve water quality. Use of GSWI to capture and cleanse rainfall runoff and incorporate green infrastructure into urban storm water management systems to reduce flooding should be promoted.
- xiv. Dumping of solid wastes and carrying of sewage in storm water drains, rivers or into water bodies should be legally prohibited.
- xv. Solid Waste treatment and disposal with 'wealth from waste' and 'energy from waste' practices should be adopted.
- xvi. Should practice 100 percent door to door collection and segregation at source of solid wastes.
- xvii. Waste prevention techniques of 4 R i.e. Reduce, Recycle, Reuse and Recover should be adopted for making the city a 'Zero Waste'.

5.7 SOCIAL INFRASTRUCTURE

Social Infrastructure in a city is a set of facilities provided by the governing authorities in their jurisdiction area. This includes the facilities like, Educational Facilities, Health Facilities, Recreational Facilities, Security Infrastructure Banquet Hall, etc. Physical quality of life and human well-being are pivotal on the enhanced availability of these social services. The quality of social infrastructure is reflection of the condition of a given city.

5.7.1 Health Facilities in Greater Noida

Greater Noida has government hospital that serve the rural and city population. The hospitals in Greater Noida are highly preferred by the local population and patients of the nearby urban areas.

Table 5-7 Comparative of Existing Medical Facilities with Standards Requirement



S No.	Area	Population (2011)	Hospital Population/unit @1 for 5lakh Population	Nursing Home @1 per 50000 Population	Yoga/Health Care/Family Welfare @1 per 50000 Population
1	Phase-I	3,76,677	1(Required) 18(Existing)	7.5(Required) 10 (Existing)	7.5 (Required) 0 (Existing)
2	Phase-II	3,68,044	1 (Required) 3 (Existing)	7.36(Required) 12 (Existing)	7.36 (Required) 6 (Existing)

5.7.1.1 Infrastructure Demand as per norms

The Table 5-8 below, indicates the number of facilities required for a projected population of 4000000 for year 2041.

Table 5-8 Infrastructure Demand Chart

Area	Projected Population			
	4000000			
Greater Noida(Phase-1 +Phase-2)				
Facilities	1/Population	Projected Nos.	Area (ha) required for each	Total Area Required (ha)
Health Care Facilities				
Dispensary	15,000	267	0.08 -0.12	26.67
Nursing home, child welfare and maternity centre	80,000	50	0.2-0.30	12.50
Polyclinic	1,00,000	40	0.2-0.30	10.00
Intermediate Hospital (Category B)	1,00,000	40	1.00	40.00
Intermediate Hospital (Category A)	1,00,000	40	3.70	148.00
Multi-Speciality Hospital(NBC)	1,00,000	40	9.00	360.00
Speciality Hospital (NBC)	1,00,000	40	3.70	148.00
General Hospital (NBC)	2,50,000	16	6	96.00
Family Welfare Centre	50,000	80	.05-.08	5.20
Diagnostic centre	50,000	80	.05-.08	5.20
Veterinary Hospital for pets and animals	5,00,000	8	0.20	1.60
Dispensary for pet animals and birds	1,00,000	40	0.03	1.20
Rehabilitation centres			As per Requirement	
				854.37

5.7.2 Education

Education entails the development pattern of any city, exhibiting the quantum of urbanization, through its literacy levels and exposure to different education facilities.

Greater Noida is developing as an important education centre for western UP. Greater Noida serves not only the higher education requirement for the city but also the entire region and the national level to some extent.



5.7.2.1 Infrastructure Demand as per norms

The Table 5-9 represents the upcoming demand generated on educational infrastructure for Greater Noida. Approximately 2064 Ha of area is required to accommodate Educational infrastructure demand. There is requirement of institutes to cater Higher Educational demand in the Greater Noida. As per present scenario colleges of different streams especially Medical & Nursing Institutes and Universities are in demand.

Table 5-9 Educational Facilities Demand Chart

Area	Projected Population			
Greater Noida(Phase-I +Phase-II)	4000000			
Facilities	1/Population	Projected Nos.	Area (ha) required for each	Total Area Required (ha)
Pre-primary to Secondary Education				
Primary school (class 1 to 5)	5,000	800	0.4	320.00
Senior secondary school (class 6 to 12)	7,500	533	1.8	960.00
Integrated School without hostel facility (Class I- XII)	1,00,000	40	3.5	140.00
Integrated School with hostel facility (Class I-XII)	1,00,000	40	3.9	156.00
School for Physically Challenged	45,000	89	0.7	62.22
School for Mentally Challenged	10,00,000	4	0.2	0.80
Higher Education				
General				
College	1,25,000	32	5	160.00
University	10,00,000	4	10.00 to 60.00	140.00
Technical Education				
Technical Education Centre (A)- To include 1 Industrial Training Institute (ITI) and 1 Polytechnic	10,00,000	4	4	16.00
Technical Education Centre (B)- To include 1 ITI and 1 Technical Centre and 1 Coaching Centre	10,00,000	4	4	16.00
Professional Education				-
Engineering College	10,00,000	4	6	24.00
Medical College	10,00,000	4	15	60.00
Other Professional College	10,00,000	4	2	8.00
Nursing and Paramedical Institute	10,00,000	4	0.2	0.80
Veterinary Institute		1		0.02
				2,063.84

Source: URDPFI Guidelines

5.7.3 Post , Telegraph & Telecommunication

The post, telegraph and telecommunication plans shall be prepared by the concerned agencies eg. Postal services and telecom companies. These plans shall be made part of implementation plans.



5.7.4 Disaster Management

Generally disaster situations are managed at State and District levels, with the centre playing a supporting role to provide assistance when the consequences of a disaster are beyond the coping capacities of the district and State administration.

The institutional mechanism for disaster management at the district level, as envisaged in the national plan and other national guidelines, is as given below -

1. District Disaster Management Authority (DDMA)
2. District Disaster Management Advisory Committee (DDMAC)
3. Local Self Government
4. District Emergency Operation Centre (EOC)

Disaster Management Plan for the Twin cities of NOIDA & Greater Noida was prepared by Disaster Management Cell, Noida in association with DDMA, Gautam Buddha Nagar, and Uttar Pradesh.



6 ENVIRONMENT & DISASTER MANAGEMENT

6.1 Flora and Fauna

The vegetation in the area is sub-tropical deciduous type. The important types of trees which are interspersed with vast agricultural fields are Shishum, Mango, Jamun, Imlu and Babul. The ornamental trees found in the area are mostly Gulmohar, Ashok, Eucalyptus and Chameli. The scrubs and bushes found in the area are Arua, Hina, Panwar, Madar, Karauda and Mako.

It is noticed that wild animals are rare in this area. The most common animals found in the area are wolf, monkey and pig. The birds which are generally seen in the area are peacock, duck, partridge and snipe.

6.2 Reserved forest (RF)

Reserved forest area is nearly 1015 ha. Protected forest area falls within the notified area of Greater Noida namely –

- i) Gulistanpur PF Block
- ii) Rampur Jagir PF Block
- iii) Murshadpur PF Block
- iv) Amarpur PF Block

6.3 River

Greater Noida is located on the banks of River Hindon. River Hindon is one of the tributaries of Yamuna. It originates from foot hills of Upper Shivalik (Lower Himalayas) in the form of a number of small streams. Hindon is a purely rain fed river. The river basin is a part of Indo-Gangetic Plain. Upstream of Saharanpur City in western Uttar Pradesh, the river remains dry in non-monsoon months and becomes perennial only downstream of the city.

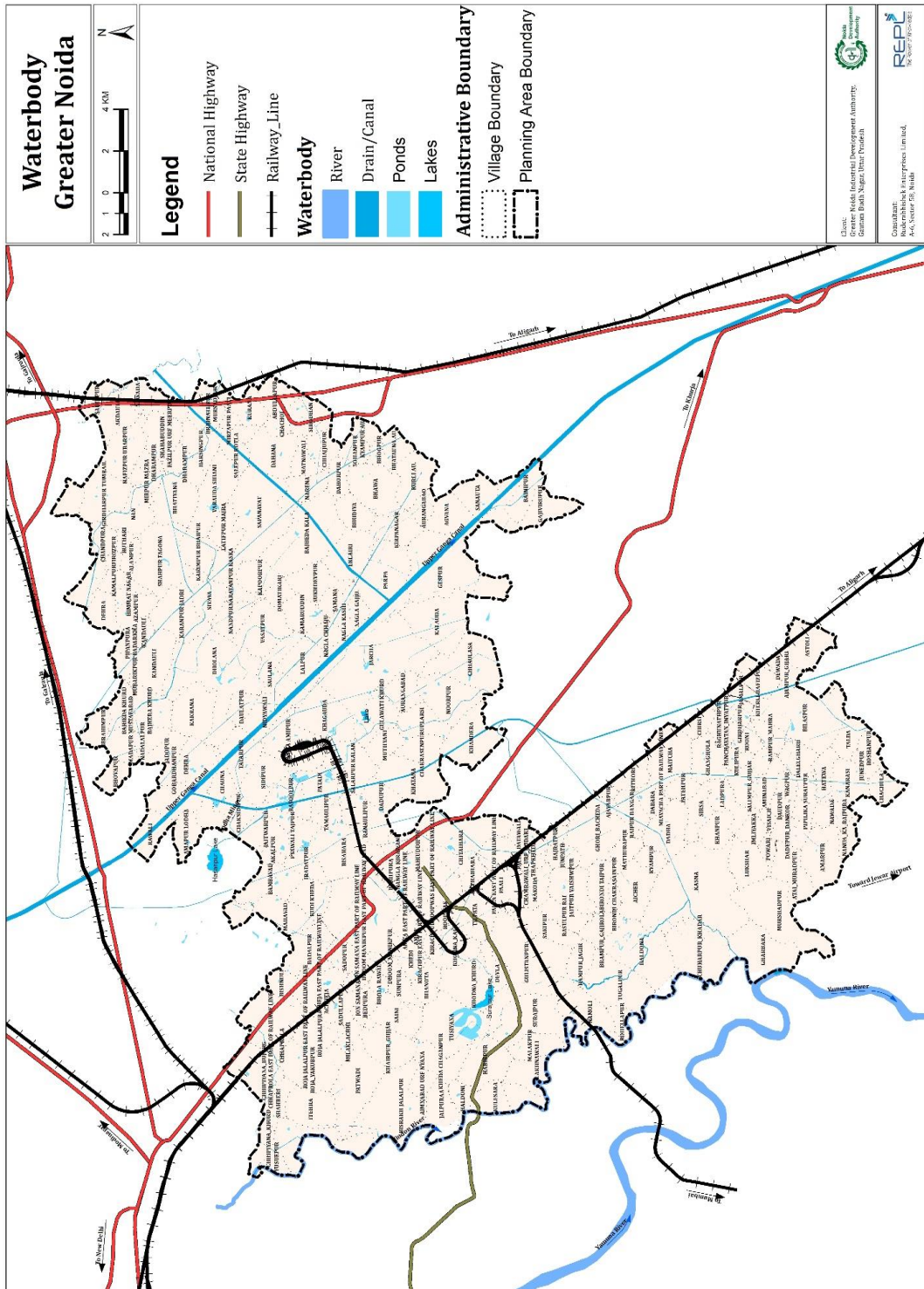
6.4 Waterbodies/Wetlands

- i) Surajpur Wetland area around Lohia Lake: Surajpur wetland is situated near Surajpur Village in Dadri Tehsil of District Gautam Buddha Nagar under Greater Noida Industrial Development Authority, Uttar Pradesh, which comes under Western Wildlife Circuit. This area is Reserve Forest (Gulistanpur Forest Block and Khodna Khurd Forest Block) spread over 308 ha. (3.08 Km²) that includes 60 ha (0.60 Km²) of natural wetland. Surajpur wetland is mainly rain - fed other sources for water recharge are casement area of Hawalia drain which is attached to Hindon River and the irrigation canal of Tilapta minor, which originates from Kulesara Bund Hindon River. Surajpur is an excellent example of the wetland needs to bepreserved and conserved.
- ii) Lohia Rivulet: This rivulet transverses through the Greater Noida Township serving as natural drainage system. As per MP 2021, this rivulet is proposed to be developed and conserved as a landscape features.
- iii) Upper Ganga Canal: The Upper Ganges canal original Ganges Canal, which starts at the Bhimgoda Barrage near Har ki Pauri at Haridwar, traverses to Nanau (near Akrabad) in Aligarh district. Canal transverse phase-II area, North to South. It can utilized as major source of water for the water supply in Phase-II area.



- iv) Ponds: There are large number of ponds with significant area which form the part of present landscape. The area of ponds need to be delineated and preserved.

Map 6-1 Location of Water Bodies in Greater Noida





6.5 Heritage Areas

Historically there are many memories of Dankaur, Bisarak, Rampur Manor and Nalgarha villages in Greater Noida. The ancient temple of Ravan's father Vishwa Shreshva Rishi in Bisarak is existing.

During the freedom struggle at Rampur Jagir village in Greater Noida, the well-known revolutionary Ram Prasad, who was absconding in the Mainpuri conspiracy in 1919, was underground for some time and translated in books.

Gulistanpur is one of the many scattered late Harappan sites present in Greater Noida. Site is listed under the Agra circle of the Archaeological Survey of India. Though the site is not maintained and no traces are found on ground.

The site of Bulandkhera (29° 00' 206" N; 77° 29' 057" E) is situated between Dadri-Surajpur on Noida road at a distance of about 1.5 km from the Gulistanpur from where Harappan and Painted Grey Ware has been reported. The ancient mound of Bulandkhera is situated on an old dried channel of water and divided in two parts. (https://asi.nic.in/wp-content/uploads/2015/12/iar_074_08.pdf)

6.6 Natural Risk Sites: Flooding:-

Greater Noida Township is located on the banks of River Hindon. Low lying/ flood prone areas the city of Greater Noida is in close proximity to river Hindon and Yamuna. The general topography of Greater Noida is flat except certain local depression in North East of Surajpur Kasna Road, susceptible to flooding in rains. Allabas bund and Atta bund has been constructed to protect the city from flooding.

Existing Embankments:- The left bank of the Hindon River in Greater Noida is protected by Kulesara Bund up to a length of 5.33 km upstream of Dadri-Noida Road but beyond that, there is no bund up to Hindon Barrage. Thus the entire northern stretch of Greater Noida is presently unprotected against floods in Hindon River. However, the UP Irrigation Department has proposed to construct bund, namely the Amana Bund which would extend from the northern tip of Kulesara Bund to Highway 24. The southern part of Greater Noida is protected by Allabas Bund which extends between the southern tip of Kulesara Bund and Kasna Village. The Hindon Marginal Bund along the river bank of Hindon and the two bunds along the left bank namely Kulesara Bund and Allabas Bund are under the control of the UP Irrigation Department. Drainage Master Plan for the Greater Noida has to be prepared.

6.7 Air pollution

Air quality standards refer to levels of air pollutants prescribed by regulations that may not be exceeded during a specified time in a defined area. When the concentration of the gases and particulate matter exceeds the standards, it results in air pollution. The Air Quality Index, AQI is an index for reporting daily air quality. An AQI value of 0-50 represents good air quality with little to no potential to affect public health, while an AQI value over 300 represents hazardous air quality.

The single largest man-made source of pollution, which remains constant throughout the year, is vehicular emission. Whilst other sources like pollution from the burning of biomass and other agricultural residues such as straw and leaves and the widespread use of fireworks occur at specific times of the year, vehicular pollution remains constant throughout the year. Greater Noida is also facing some serious pollution problems, the air quality index in Greater Noida city is moderate but at some days the value becomes high.



6.8 Seismic Zone of Greater Noida

As per Seismic Hazard assessment, the state of Uttar Pradesh falls in a region of moderate to high seismic hazard. Greater Noida falls in seismic risk Zone IV which is high damage risk zone.

As per the rapid assessment survey by NIDM, the structural quality of houses and the settlement patterns of villages in Greater Noida are likely to suffer heavy losses in view of the Vulnerability Atlas of Uttar Pradesh and the seismic activities in NCR.

Figure 6-1 Earthquake Hazard Map of Western Uttar Pradesh



Source: Disaster Management Plan for Gautam Buddha Nagar



7 SHELTER

7.1 Introduction

The section provides a detailed over view of the existing housing scenario in the city in terms of present housing stock, and quality of housing. Housing status of the city can be assessed from the available census data. Total Number of Households (HH) in Greater Noida (CT) are **20,054** as per census 2011 and no. of Census Houses are **60,460**.

Table 7-1 Number of Census Houses in Greater Noida(CT)

Year	2011
No. of Census Houses	28,995
No. of Households	20,054

Source: Census of India 2011

Table 7-2 Number of Census Houses in Greater Noida(CT)

Number of Census Houses in Greater Noida (CT)				
Area Name	Total/ Rural/Urban	Total number of census houses	Total number of vacant census houses	Total number of occupied census houses
Greater Noida (CT)	Urban	60,460	31,465	28,995
%	Urban	100	52.04	47.95

Source: Census of India 2011

The total number of census houses in urban areas in Greater Noida (GNIDA) notified area are 46,792 out of which 94.61 % are permanent houses 3.54% houses are semi-permanent in nature and only 1.1% i.e **496 houses are temporary structures. It is another Greenfield township where encroachment/development is happening since last 40 years along the main GT road (NH91), remaining area has village abadis and agricultural green.**

7.1.1 Rental Housing

Greater Noida is established as an Industrial and institutional hub. Industries and institutions attract migrant population in the city which increases the need of rental housing in Greater Noida. As per primary and secondary survey conducted by REPL for MP 2041, the inferences were drawn that there is a need for low cost rental housing in the city. With the development of more industrial sectors and education centres the need for the rental housing will subsequently increase in the city. Greater Noida Authority may formulate policies on low cost rental housing accordingly provisions be made in the zoning regulations.

7.2 Housing Projection

Preventive housing requirement: Based on previous census, population projection for the horizon year 2041 is 40, 00,000 persons and the household size is projected as 4.5 persons per households. Based on following assumptions, the total housing requirement for population growth of 32, 55,279 will be 7, 23,395 houses.

7.3 Strategies for Housing and Informal Settlements

The housing requirement for the projected population can be met through following strategies:



Affordable housing options for the migrant workers and industrial workers MoHUA has initiated Affordable Rental Housing Complexes (ARHCs), a sub-scheme under Pradhan Mantri AWAS Yojana- Urban (PMAY-U) may be considered.

The residential areas shall be developed on neighborhood concept. To preserve land resource the norms and standards prescribed for house size shall be followed. Basic services shall be provided to all the residential areas.



8 GAP ANALYSIS

8.1 Suggestion - Present and Future Context for Greater Noida

1. In view of the above paragraph and observations it is proposed to establish a hierarchical zoning regulations in terms of:-

- a. Land Use Zones
- b. Population Based Standards for Each Zone/Land Use
- c. Space standards for each Use Premises
- d. Use permissibility in each Use Premises
- e. Permissibility Table Use Zone wise

2. Public transport to be encouraged.

3. Establishment of Noida International Airport at Jewar which is about 45 km from Greater Noida will enhance the opportunities for establishment of businesses, industries and particularly hospitality Industry. All activities appurtant to the air traffic, passenger and logistic requirement in form of warehousing etc. can be developed in the Phase-2.

4. Area on South of Eastern Peripheral Expressway in Master Plan 2021, is bounded by EPE in the north and Railway Line in west and YEIDA boundary in South and East has been identified as a high potential land for the development in immediate future due to its proximity to the major road, rail and air transportation network. This area has potential to be developed as supporting infrastructure as hospitality industry, cargo handling and major business/office districts. The areas along the existing metro network and proposed metro network can be developed as a mix use high density development on the principles of Transit Oriented development (TOD).

5. The areas which are not developed in the sectors planned as per Master Plan 2021 and available vacant pockets provide an opportunity to redevelop these areas as per the requirement and market demand. It has been observed that over the period the existing villages have grown substantially in terms of area and population. A separate redevelopment option is being processed.



9 VISION FOR 2041

Greater Noida is a thriving and sustainable settlement, strategically located near Noida and within the NCR. Greater Noida is a planned city with well-established infrastructure. It attracted the eco-friendly industries and emerging as an industrial and institutional hub at national level. Greater Noida has excellent regional connectivity by road, rail and air once Jewar airport is made functional. Greater Noida has emerged as “**FIRST STOP**” for upcoming Jewar Airport with its existing infrastructure and logistic facilities required for any airport to function.

Expansion of Greater Noida towards Jewar airport and on the periphery of YEIDA makes it important destination from investment point of view and it has attracted large foreign investment.

9.1 Vision

“Making Greater Noida a Futuristic Global City, to attract investments with focus on enhancing sustainable economic development”.

9.1.1 Objectives

- Live, Work, Play and mobility
- Explore nationally/internationally recognized best practices of spatial planning/ sustainable development and public policies to attract investment
- Developing a city with facilities comparable to the international standards in terms of infrastructure, mobility, urban design and aesthetics
- Smart City solutions for the better service to the citizens
- Enhance quality of life
- Conserve and develop existing network of water canals for waterways and recreational purposes.
- To explore strategic location of Greater Noida with respect to Regional Connectivity- Road, Rail/RRTS/DFC, Metro and Air.

9.2 Strategies for Development

9.2.1 Transit Oriented Development (TOD)

Transit Oriented Development (TOD) approach for Greater Noida will help in bringing people and jobs closer to mass transit system and will create synergy between the land use and transport within the planning area. It will result in compact, walkable, mixed-use developments within influence zones of transit stations. This is a critical paradigm shift that can potentially improve public transit ridership, reduce vehicular congestion, reduction in greenhouse emissions/ pollution in the long term.

The following key outcomes shall be targeted through the TOD Policy for Greater Noida:

a) Optimise density, diversification of uses/activities:

Above will be facilitated through higher FAR norms and compact mixed-use development. Necessary augmentation of infrastructure will be taken up by respective service providing agencies. Green buildings and environmental conservation will be made applicable

b) Enhanced mobility:

Greater Noida being an industrial city, the focus shall be on pedestrian and NMT friendly environment and last mile connectivity. Pedestrians and NMT shall be provided through traffic



management plans, street improvements, creation of a fine network of pedestrian and NMT routes, restricted and high- priced public parking.

c) Improved public realm:

Generation of a vibrant and safe public realm for all age groups, with barrier-free universal access, to be achieved.

d) Multi-modal integration:

Integration of rail and road-based systems including metro, rail/ rapid rail, bus/ BRTS and Intermediate Public Transport (IPT).

TOD Development to focus on walkability, cycle friendly street designs, use of public transport, densification, mix of land uses and compact development

9.2.2 Mixed use development for optimal space/land utilisation:

The Mater Plan 2041 marks a major shift from mono-functional land use planning to mix of multifunctional land uses. Such approach facilitates built-space based approach, allowing for mixing and co-location of compatible uses, including vertical and horizontal mixing within buildings in the identified areas.

9.2.3 Smart City Technologies

a) Employing Technology for Active Travel: Detailed Infrastructure plans shall be prepared

b) Improving efficiency of water systems

To adopting 24X7 continuous water supply and smart metering, providing metered water connection to individual's households and implementing telescopic water pricing to dis-incentivise irresponsible use of water.

c) Recycle and Reuse of Treated Water

Recycled waste water and its allocation for industrial use, which can be re-allocated to other users. Water supply, sewerage, drainage and recycling of water Master Plan shall be prepared and accordingly implemented.

d) Digitally enabled and connected city

The highly equipped and digitally smart Unified Command and Control Centres shall be set up and Master Plan shall be prepared.

9.2.4 Smart Transportation

a) Freight logistics and distribution network

Freight movement will constitutes a major part of traffic originating and destined for Greater Noida. The Eastern Peripheral Expressway, proposed DFCs at Dadri and MMTH at Boraki shall increase thorough fare freight traffic using city roads. The freight movement and public movement shall be identified and planned for the city.

b) Electric-mobility

E-mobility is gaining momentum in global scenario, in the city. A infrastructure plan shall be prepared.

c) Intelligent Transport Systems (ITS) for smarter transportation

Smart solutions through ITS shall enable use of real-time data for forecasting and mitigating potential challenges, use of predictive technologies for dynamic and efficient management of public transport fleet operations, system integration, and providing real-time information to commuters, to enhance the resilience of transportation systems.

- **Smart public transportation** shall have provision of passengers count, track vehicle locations, and automatically sharing of status.
- **Smart parking** display available parking spaces, reduce searchtime for a parking spot and payment through fast-tag to save time.



- **Smart intersections** can reduce vehicle and pedestrian traffic delay by synchronizing signals
- **Smart tolling** can assess tolls on free-flowing traffic, support specific road congestion pricing, if any and collect fees electronically/by fast tag to save time.

10 MASTER PLAN PROPOSALS

10.1 Proposed Land use

The proposed land use plan caters to the projected population 40 lakhs (40,00,000) for the year 2041. The proposed density for Master Plan 2041 is 75 pph, accordingly the area requirement for the projected population is 53,350 ha. The total planning area of the GNIDA is 71327.63 ha out of which 53,350 ha of the land is proposed as urbanisable area.

The following table indicates the land use distribution for Master Plan 2041 for Greater Noida

Table 10-1 Proposed land uses for Master Plan 2041, Greater Noida

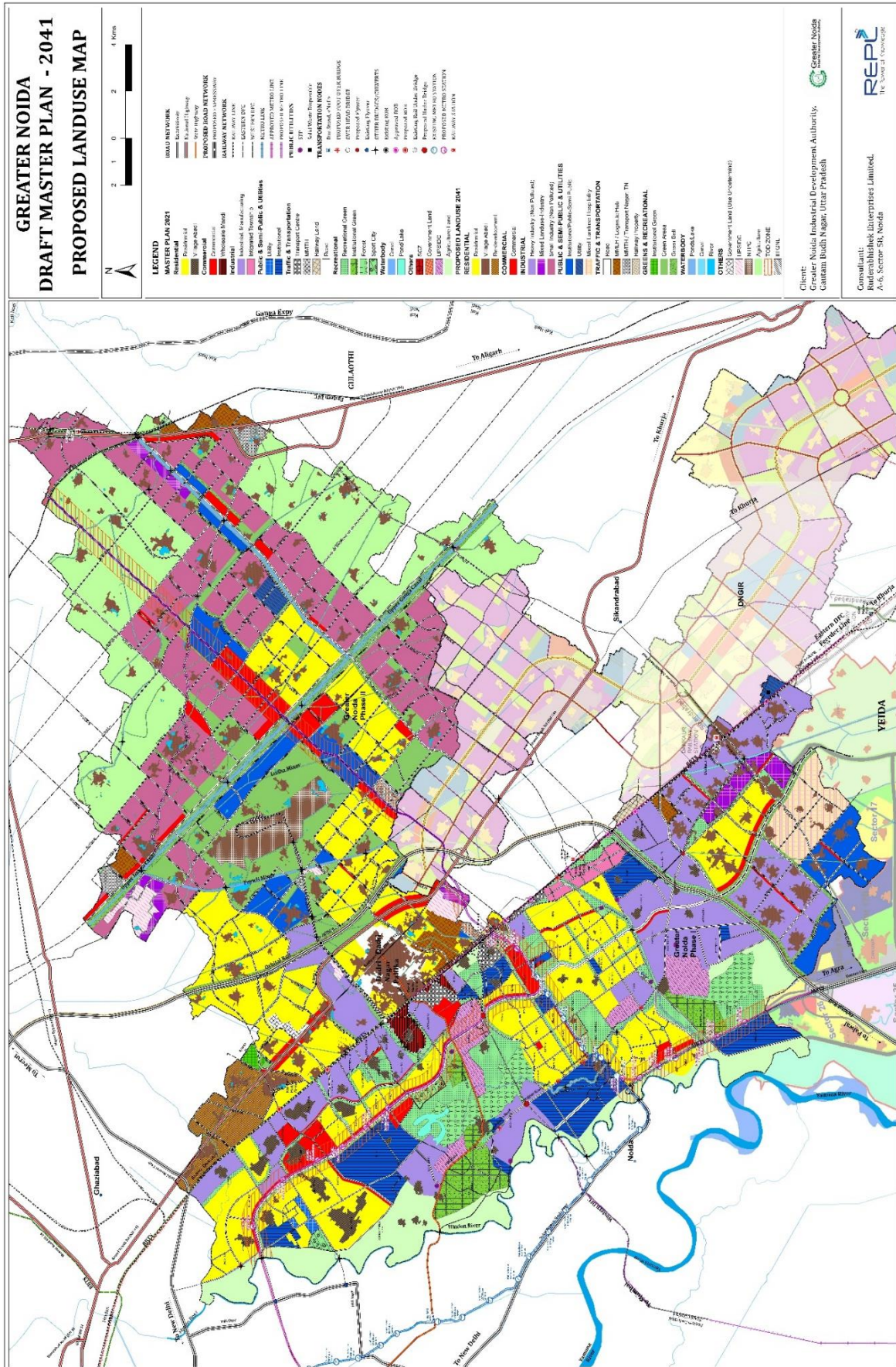
Sl. No.	Land Use	Land Use as per URDPFI Guidelines for Industrial Towns (Percent) (A)	Phase-1 Landuse as per MP 2021 (Percent)(B)	Phase-1 Area as per MP 2021 (Hectare) (C)	Phase-2 Proposed Landuse (Percent) (D)	Proposed Area for Ph-2 (below EPE) (E)	Proposed Area for Ph-2 Beyond Railway line (Hectare) (F)	Total Proposed LU for Ph-2 (Hectare) (G)= (E+F)	Proposed LU for MP 2041 (Percent) (H)	Proposed LU Area for MP 2041 (Hectare) (I)= (C+G)
1	Residential	20-25	22.4	4992.3	15	607.03	4137.41	4744.44	17.40	9736.74
2	Abadi				7	914.54	2997.79	3912.33	7.0	3912.33
3	Commercial	3-4	4.9	1096.23	5	144	1432.94	1576.94	4.8	2673.17
4	Mixed Use-Hospitality (MU-H)				2	674.373	102.59	776.963	1.4	776.963
5	Industrial	30-35	18.0	4008.6	30	1766.3	8417.2	10183.5	25.4	14192.1
6	Mixed Use-Industry (MU-I)				2	342	404.68	746.68	1.3	746.68
7	Green & Water front Development	12-15	16.1	3579.8	18	437	4965.764	5402.764	16.0	8982.564
8	Institutional Green	6-8	6.4	1420.2					2.5	1420.2
9	Institutional				15.0	3345.9	8	727.73	1739.34	2467.07



10	Transportation	10-12	15.6	3476.02	13	395.54	3509	3904.54	13.2	7380.56
11	Others Including IITGNL		1.5	335.96					0.63	335.96
Total Developed area		100	100.0	22255.01	100	6008.51	27706.71	33715.22	100.0	55970.23



Map 10-1 Proposed Landuse Plan 2041





10.1.1 Land use classification

1. Residential:-

The residential land use is proposed for 13649.07 ha of the land which is about 24.4% of the total urbanisable area. As per the Master Plan 2021, 4992.3 hectare of land is proposed for residential land use which is 22.43 % of the 22255 ha of the urbanisable land. Residential area also include village abadi of 3912.33 Ha. The buffer of 100 m is proposed while preparing the sector layout plan for village extension to ensure the future development of village abadi. Residential areas has been located strategically near employment generating land uses and well connected to Multi modal transportation. Sector level facilities like nursery school, senior secondary school, dispensaries, parks, playground, tot-lots, community halls, library, local shopping centre, rickshaw and taxi stand, etc. shall be according to population norms.

2. Commercial:-

Proposed commercial land use is 4.8% of total urbanisable area. The commercial land use is spatially distributed along the major transportation arteries.

- a. Commercial Centres along the major roads,
- b. Sector Level Commercial Centre
- c. Local Shopping Centre & Convenient Shopping Centre

3. Mixed use – Hospitality (Aerocity)

The concept of Mixed use is introduced to cater the changing need of the market. Taking into consideration, fast growing economy and flexible business models it is necessary to bring flexibility in the use models is required to cater to the evolving market conditions and technology advancements. 776.96 Ha of the land proposed under Mixed use Hospitality which is approx. 1.4% of planning area. Horizontal and vertical mixing of activities are envisaged in this zone as depicted below in the table.

Table 10-2 Proposed land uses for Mixed use Hospitality

Land Use	Percentage
Commercial(Retail, Hospitality, Offices)	Minimum 60%
Industrial(ITeS)	Maximum 10%
Residential(Studio Apartments)	Maximum 24%
Institutional /Facilities	Minimum 5%
Informal Use	Maximum 1%

4. Industrial

As per Master Plan 2021 the 18% which id 4008.59 ha of land is allocated for industrial land use of total urbanisable area of 2225 ha. The industrial land use proposed is 14192.1 ha of land is allocated which is approx. 25.4 % of the planning area.

5. Mixed Land use Industry

The concept of Mixed use industry is introduced in which is approx. 1.3% of total urbanisable area i.e. 746.68 hectare of land. Allied infrastructure is suggested for the



development of industries which are mainly - i. Warehouses, ii. Container depots, iii. Stock yard for essential materials like cement, steel, etc, iv. Quality Testing Centre, v. Exhibition Centre, vi. Weigh Bridges, vii. Related Offices of public/private organizations.

Table 10-3 Proposed land uses for Mixed use Industry

Land Use	Percentage
Industrial	Minimum 75%
Residential	Maximum 10%
Commercial	Maximum 9%
Institutional (Facilities)	Minimum 5%
Informal Use	Maximum 1%

6. Institutional

This category includes office buildings, administrative buildings, educational institutes, healthcare facilities, post office, police station, fire station, facilities etc. The area allocated for institutional land use is 5812.97 ha about 10.4% of planning area.

7. Transportation

Transportation includes all roads (expressways, arterials, sub-arterial and collectors roads) and utilities related to transport. The proposed area for transportation is approx. 7080.56 ha, about 13.2% of planning area.

8. Recreational Green, Parks and Green Belts/Institutional Green

The land use category is further divided into different activities and uses related to recreation and green spaces. These open spaces are strategically spaces evenly through the planning area while one central recreational green space is developed in the centre of the planning area which will be acting as the breathing space for the residents. Total area allocated for green is approx. 8982.56 ha i.e. 16% of the total planning area.

8.1 SPORT CITY

Development of Sports Cities is proposed in the Northern part of Greater Noida phase-1. The sites are well linked by the proposed Development Plan roads connecting to National Highway-24, Noida, Ghaziabad and other parts of the city. Greater Noida Sports cities are envisioned to be one to their kind in the country with a clear and divined focus on as integrated sports them. They will provide a strong and clearly identifiable image to Greater Noida, where sports events catalyze other activities such as tourism, community meetings, exhibitions, conventions and festivals. In order that the vision remains reevant, the following key sports and ther related recreational and institutional facilities have been proposed in the city-

A golf course, golf club house and driving ranges, integrated with the residential and commercial areas and a cricket stadium with covered grandstand. Provisions of electronic scoreboards television video screen competition lighting meeting rooms, media facilities etc. A multipurpose playing field for athletes and football with practice nets, and competition lighting synthetic turf laid hockey field indoor stadium for badminton and table tennis courts weightlifting boxing, gymnastics, karate etc. Indoor central court tennis



Centre and indoor swimming Centre with pools competition warm up and diving pool and other **related** facilities. Indoor and outdoor Stadium and playground may be added further as per the requirement.

Sports city shall include a sports academy serving as a centre of sports excellence with world class facilities and support services for a range of sports including Cricket, Tennis, Swimming, Athletics & Golf etc. Practice area could be incorporated within the sports ground and facilities for competition and training. The academy would also include office accommodation, laboratories, lecture theatres and specialist facilities. The sport city shall have sports medicine/ health facility centre to provide cutting edge sports science and sports medicine support. These should include clinical services, sport science, nutrition, athlete and career education, applied research Centre with the provisions of laboratories, offices and workshops. There shall be other facilities like Integrated Sports Hotel, Hostel dormitories and service apartments within walking distance to all venues, Sports club business and leisure facilities meeting rooms and office accommodation shall be provided within the sports venues.

A network of roads shall be planned as a functional hierarchy to serve the City. Other facilities could include a transports hub, entry and exit gates, passenger lounges, bridges and underpasses as required. Car parking facilities shall be suitably planed throughout the city. There shall be an IT Centre/ Administration/ Media blocks and a major retail hub providing shopping facilities for the City. Residential and commercial facilities would also be developed within the Sport City area.

The sports city shall be developed as an integrated Mini Township with all modern and world class sports and other related facilities. Minimum 70% of the total area would be utilized for open spaces, sports, and other related recreational and institutional facilities. Greater Noida Authority will determine the land use pattern, permissible activities, planning norms and other regulations as required from time to time for the development of each of the Sport city.

28% residential and 2% commercial landuse will be added with 70% of recreational green where sports activities shall be mandatory and 30% of area shall be left as clear contiguous green with no construction.

10.2 Salient Features of Plan

1. Tapping the potential of proximity to Jewar International Airport
2. Flexibility of Landuses to respond the ever changing market demand
3. Potentials of existing and proposed connectivity and promoting balanced regional development
4. Promoting the Transit Oriented Development
5. Development of Water Front along the Upper Ganga Canal
6. Integration of Public transport system through MRTS, buses, NMT, cycle tracks, pedestrian pathways and IPTs
7. Promoting Environment Sustainability
8. Affordable rental housing for industrial workers

10.3 Proposals

10.3.1 Mixed Use- Hospitality

An area of 674 Ha is proposed in the South of the Greater Noida along the 130 mt. wide arterial road connecting to YEIDA and the International Airport at Jewar. This area will be hub of hospitality sector, commercial, business, recreation and other supporting activities. Support facilities like logistics, warehousing is also permissible in this area. MMTH & MMLH.



The upcoming activities in Mixed Use-Hospitality area:-

- a) Hospitality- Hotels, Service Apartments, Convention parks
- b) Commercial Centres- Retails, Highend showrooms, Shopping Malls and centres, Exhibition Halls and centre
- c) Recreation & Entertainment Hub- Recreational theme parks, Fun centre
- d) Office spaces
- e) Data centre- Information & Technology offices, Innovation and tech offices, R&D Centres, Corporate offices
- f) Logistic Hub- Logistic parks and Warehousing parks

Authority can develop Aerocity provides an opportunity to involve private sector in land development. Various models of PPP can be explored.

10.3.2 Commercial Centres/Areas

The CBD is the hub of the city's economic activity and is home to the headquarters of many of the city's leading businesses and organisations. Commercial areas are well connected by the MRTS and arterial roads and centrally located in the planning area. CBD is proposed along the Upper Ganga Canal will create the avenues for high end office spaces, restaurants, hotels, Financial institutions, business suites etc. The land uses in this central commercial core would include the mix of retail, offices, hotels and other business uses along with some residential development. Focuses on bringing more business opportunities at lower cost and promoting economic development of Greater Noida. CBD is well connected to Residential and Recreational Green, focusing on the concept of Live, work and play.

The Central commercial centre spreads over an area of 1000ha which will attracts businesses and investment, creates jobs, and drives economic activity. A vibrant central business district also enhances the quality of life of a city's residents.

10.3.3 Water Front Development

Greater Noida planning area has wide network of canals, Upper Ganga Canal which is passing through the centre of the Phase-2 area is the major canal, having the potential to be developed for the Water Front Development.

The salient features of the proposed development are as follows:-

- Development of wide promenade walkways along the canal edge
- Development of public gardens with Open Air Theatre (OAT), covered seatings, Ghats area for viewing water fountains cascading from the bridges, clock towers etc.
- Development of Landscaped spaces with food plazas, toilets, Grand entrance plaza and parking facilities.
- It will act as Urban Design Marker Element for the city.

City level recreational areas for the Greater Noida

Canal front development aims to create a thriving, people centric network of parks, waterside promenades, and recreational facilities in the centre of Greater Noida phase-2 area. Parks, sports facilities shall be provided on reclaimed land if any.



10.3.4 City Forest

Greater Noida is one of the planned city with large planned area under green and recreational spaces. The already developed sectors of Greater Noida MP as per MP 2021 has Reserved Forest blocks which acts as lung space for the area, for the phase-2 of planning area a central city forest is proposed to be developed around the NTPC Power plant. Noorpur Ecosensitive zone near NTPC is proposed to be developed as reserved green.

10.3.5 Logistics parks

NSIDC has proposed Multi Modal Logistic Park (MMLP) at Greater Noida, ancillary logistic parks/activities are being provided.

With the development of industries in Greater Noida support infrastructure like Warehousing and Logistic facilities will also rise. Uttar Pradesh Warehousing and Logistics Policy 2018 aim at complementing the UP Industrial Investment & Employment Promotion Policy (UP IIEP) 2017, and strengthen the state's foothold in the logistics sector. Its basic objective is to promote private investments in setting up logistics facilities in the state with forward and backward linkages.

Greater Noida will not only caters to the intrinsic warehousing demand but also acts as a key storage and warehousing hub for the neighboring states and other distant regions in the North. This initiative will lower freight costs, reduce vehicular pollution and congestion and cut warehouse costs to promote domestic and global trade

10.3.6 Mix Use – Industries

Mixed-use industrial development shall comprise of

- Mix of Light Manufacturing, retail and offices
- Mix of Manufacturing , Warehousing & Logistics
- Mix of Manufacturing, Retail, residential, hospitality, parking & green spaces

Considering the factors like proximity to resources as well as consumer markets, easy access to transportation networks at state and national level, availability of land at optimum cost, upcoming investments in the region and suitable workforce within neighboring areas like Ghaziabad, Noida will attract large industrial units to setup in Greater Noida (Phase-2).

Most of the Greater Noida (Phase-2) lies in Rest of NCR Zone as per Draft NCR Regional Plan 2041 which promotes large Rural Investment areas, SEZs, Heavy Industries in this zone.

10.4 Transportation Proposals and Strategies

10.4.1 Major Transportation Challenges

With the increasing traffic over the recent years and the proposed developments in Greater Noida, traffic congestion is being observed in major junctions. Grand Chord Railway line is acting as a physical barrier for the integrated development of Greater Noida. It is necessary to develop the major transportation nodes connecting both phases of the Greater Noida.

With the development of Multi Modal Logistic Hub and Multi Modal Transportation hub in Greater Noida the regional importance of the city will increase, which will put extra pressure on the existing roads.

The roads in the city are wide but are designed for vehicular traffic only without any consideration of NMT traffic, which encourages more private vehicles rather than public transport.



City has no organised public transport system, the coverage of the public transport is on very limited routes. Therefore area has to be properly connected with public transport system and provisions of effective off-street parking facilities is required.

10.4.2 Sustainable transportation

Greater Noida needs to be addressed through multipronged approach as follows:

1. **Roads Width according to adjacent land use and transport demand:** The maximum road width in the city is 130 mt. Existing & proposed roads ranges from 45mt. to 130 mt. the new sections proposed to include NMT (Non motorised transport).
2. **Transit Oriented Development to be promoted:** By designating certain roads as TOD corridors to maximize passenger throughput, these corridors get priority planning for public transit systems.
3. **High Capacity public transport system:** Metro/Neo-Metro to be proposed along the major transit corridors.
4. **Restructuring of existing city bus routes and creation of new routes for improving connectivity of the intra city movement**
5. **Designated areas for the immediate public transport facilities:** The intermediate public transport (IPT) system comprising shared and private auto-rickshaws, which currently cater to a major part of overall trips in the city have to be integrated with proposed public transport system for the city.
6. **Demarcation of pedestrian and cycle tracks on the major roads.** Intersections should be designed to ensure better accessibility for pedestrian and bicycles.
7. **Foot over bridges integrated with Kiosks on ground floor at transit points:** The integrated unit of kiosks and FoBs can be developed on PPP mode and open for branding like metro stations to generate non fare revenue.
8. **Public Bike Sharing scheme:** To implement a bike-share program goals of increasing cycling, reducing congestion, improving air quality, and offering last mile connectivity to the users shall be promoted.
9. **Provision of transport terminals:** Transport terminals are proposed to support the freight movement in the city at the peripheral roads to ensure the freight does not cause congestion in the city.
10. **Provision of parking facilities and efficient parking management plan:** use of smart parking technologies to be introduced.
11. **Junction Improvements:** To improve safety and to provide orderly movement of vehicles, improvements of junction such as installation of traffic signals, geometric improvements, provision for pedestrian and NMT etc.

Though the analysis of major transportation challenges and goals of sustainable transportation system, proposals at various levels have been identified. **The proposal is to develop the robust hierarchical road network connecting both phases of development of Greater Noida, second through public transportation system in the form of metro, city bus and third proposal through IPT where Autos, E-Rickshaws, Charging stations for the e-rickshaws and fourth through transport infrastructure in the form of ISBT's and Depots followed by Transport Nagar and fuel stations.**



10.4.3 Proposed Road Network

For the efficient transportation system, the grid iron pattern of road network has been proposed as the basic structure of the urban form for the planning areas. Arterial roads have been proposed to connect planning area with adjoining cities like YEIDA and Hapur. 130 mt wide arterial road as per MP 2021 is proposed to extend to connect 130 mt. arterial road of YEIDA. The major road network comprises of Yamuna Expressway, Eastern Peripheral Expressway, National Highway-34, National Highway-334, Arterial Road, Sub Arterial Road, collector road and local roads.

Map- Proposed Road Network for Master Plan 2041



Arterial Roads

The proposed road network the width of the arterial roads vary from 75 mt. to 130 mt. Metro, city bus and NMT Infrastructure is proposed on arterial roads.

Sub-Arterial Road

These roads performs similar function as arterial roads but with lower traffic volume and road width. The right of way is proposed to vary from 45 mt. to 60 mt.

Collector Roads

Collector roads shall have right of way vary from 18 mt to 30 mt.

Sector Roads

The Local roads directly connect to local neighbourhood areas. Majority of trips originates or terminates from the local roads. Local streets may be residential, commercial or industrial streets depending upon their adjoining land use.

- The right of way of the roads proposed for MP 2041 are similar to proposed in Master Plan 2021.
- The parking lanes are proposed in non residential landuses as a part of RoW.
- Cycle tracks to be proposed with roads above sub arterial level to promote NMT.
- Service road are proposed from sub arterial road level to avoid direct traffic to/from main carriageway.
- Footpaths proposed at all road levels for safer pedestrian movement.

10.4.4 Proposed Public Transport System

As per census 2011 the population of planning area is 7.5 lakhs which is expected to reach 40 lakh by 2041. The rising transport demand can only be met with the high quality public transport system. To minimise the share of private mode of transportation and public transport system is proposed:

- **Metro:** Noida Metro Rail Corporation (NMRC) has already extended the metro till depot station at Greater Noida which will be further extended to Multi Modal Transport Hub (MMTH) proposed at Boraki. A proposal to extend metro from Knowledge park-2 to airport at Jewar is already in the planning stage. A proposal to extend Metro from Sector-51 to Knowledge Park-V. Metro from depot station can further be extended along the 130 mt. wide road towards south of Phase-1 Greater Noida which can further be connected to YEIDA. Connectivity in Phase-2, the metro is proposed from MMTH at Boraki and extended along the 105 mt. wide road in phase-2.
- **City Bus:** The buses shall run as feeder bus services to metro. Good quality buses running on clean fuels are proposed to run on various routes, for which a separate plan shall be prepared.

12. Intermediate Public Transport

The IPT system is proposed to run as feeder service to public transport. CNG/E- Rickshaws are proposed to run from Metro/Bus stations. EVs like electric buses, cars, bikes/scooty, rickshaws shall be promoted and required infrastructure to be developed in the planning area. The proposal for electric rickshwas for GNIDA is given below:

- i. Rickshaw Stands



CNG/E –Rickshaws stands are proposed at the metro/Bustands and other public transportation stops to provide last mile connectivity.

ii. **Charging Stations**

A network plan for charging stations shall be prepared for E-rickshaws.

10.4.5 Proposed Transport Infrastructure

The proposed infrastructure as given below:

1. Inter State Bus Terminal (ISBT)

Inter State Bus Terminal is proposed at two locations in an area of 5 hectare.

2. Depot

Proposed metro and city bus depot shall be provided with facilities like workshop, parking space, maintenance, cleaning, washing facilities are provided. For the parking of private buses separate space to be assigned. Depot is proposed along the 105 mt. wide road.

3. Transport Nagar

Transport Nagar is proposed at 3 locations. The purpose is to accommodate trucks passing through the city and provide facilities for distribution of goods in the city through smaller vehicles. Facilities for trucks drivers to be developed in the transport nagar.

4. Fuel Stations

Fuels stations to include CNG, Petrol, and Diesel filling stations. To promote Evs electric charging points shall also be provided at fuel stations.

10.5 Infrastructure Plan and Strategies

10.5.1 Water Supply

a. Water Supply Action Plan

Water resources are linked to environmental, economic, and social considerations, as well as to health and economic development.

Sustainable Water Supply Principles

1. **Restoration and Preservation of Water resources:** all sources of water like, ponds, rivers, wetlands and lakes networks to be restored and preserved to ensure natural water supply renewal.
2. **Regional approach in planning for augmenting water infrastructure:**
3. **Efficient use of available portable water:** The plan shall focus on ground water recharging, revival and rejuvenation of rivers and water bodies etc.
4. **Encourage Recycling of Water:** To promote and implement the rain water harvesting and recycling techniques to reduce load on fresh water sources. Adopting tree planting measures, green roofs, permeable pavements and infiltration trenches to allow ground water recharge.
5. **Use of Recycled water for Landscape and Flushing:** To optimize the usage of water, 'sullage' (i.e. waste from household sinks, showers, and baths, but not toilets) can be treated and reused for flushing, gardening and other non-potable end uses. The sullage (grey water) can be recycled and treated through a multi stage low maintenance system.
6. **Ensuring Accountability through education and enforcement**



b. Water Supply Proposals

Based on the projected population for 2041 was around **40.00** Lakhs, the total water demand of around 690 MLD will be required for the projected population. The water supply requirement for the population of **40.00** lakh population by the year 2041 is shown below:

Table 10-4 Water supply requirement for the projected population for 2041

Sr. No.	Facilities	URDPFI Standards as per section 8.3.1	Requirement 2041	Unit
	Population		40,00,000	
1	Water supply	150	690.20	MLD
2	Elevated Service Reservoir	150	88	MLD
3	Under Ground sump	150	176	MLD

The area dedicated to WTP is in the utility zone in NE and SE. The water supply for the area shall be surface and ground water. 50% of the water supply requirement would be met by surface water and the remaining 50% by groundwater. The ground water would be drawn using borewells while the surface water would be drawn majorly from Upper Ganga Canal and Ganga water supply. Water Supply master plan should be prepared by the Authority based on the DPR.

10.5.2 Sewerage

Effective sewerage is important for health and hygiene. Reuse of waste water is important for water resource planning.

- 100% Sewage Treatment:** Sewage generated by the urban areas, villages and industries shall be treated to prevent the deterioration of water quality. Low cost sanitation techniques to ensure 100% sanitation in villages areas.
- Use of treated sewerage and effluents in industry:** The water supply demand of the industries shall be managed by the treated waste water from the water treatment plants.
- Use of waste water in agriculture:** The use of treated urban waste water to be promoted in agriculture.

Strategy to achieve Sustainable Sewerage system

The goal is to achieve a zero discharge city through 100% recycling of both domestic and industrial waste water. The treated water should be used for urban irrigation and ground water recharge. Sewerage Master Plan to be prepared in light of Master Plan. Based on the projected population for 2041 was around 40.00Lakhs, total sewage demand is going to be 552 MLD.

Table 10-5 Sewerage generation for the projected population for 2041

Sr.no.	Facilities	Projected Population (2041)	Total Water Requirement (in MLD)	Sewage generation by Projected Population(including floating population) @ 80 % of water supply (MLD)
1	Sewerage	40,00,000	690.2	552.16

A sewerage Master plan shall be prepared.



10.5.3 Storm Water and Drainage

Efficient management of storm water systems is essential can be combined with sustainable and alternate systems.

Green storm water infrastructure: Employing natural methods for catching water wherever it falls and recharging ground water with the same.

Ground water recharge: Ground water to be replenished.

Strategy

1. **Reaping flow of storm water along the natural slopes:** Flow of storm water shall be channelized along the natural slope to feed surface water bodies like ponds, lakes and water tanks.
2. **Segregation of Sewage and storm water:** To ensure that the raw sewage is not howing into storm water drain or water bodies in the vicinity.
3. **Integrated system for ground water recharge:** Integration of rain water harvesting system with the storm water drainage system to tap ground water. Rainwater harvesting techniques such as percolation ponds, rechargepits/trenches could be provided in large recreational areas and green buffers along major ponds and canals. Local recharge /pits to be proposed in the low lying areas to prevent water logging.
4. **Use of Alternate technologies:** Alternate technologies like swales, infiltration tranches, landscaped planters, rain gardens and eco-roofs can reduce and filter storm water runoff.

Storm Water Proposals

1. The Storm Water Drainage Master Plan to be prepared on the basis of the city level Development Plan.
2. To capture surface runoff by Storm water trenches along with permeable spaces along roads.
3. Storm water runoff be made integral part of urban & rural development plans for recharging aquifers.
4. Prefabricated structures to be installed between the road carriage ways and footpaths to ensure groundwater recharge from storm water run-off on roads and footpaths.
5. Digital storm water management to be promoted to increae help practitioners to scale up rainwaterharvesting.

10.5.4 Solid Waste Generation

1. 100% minimization of waste through reduce/recycling/reuse of resources to be achieved.
2. Safe and sustainable solid waste management
3. Protecting health of citizens & ensuring environmental sustainability

Strategy

1. Minimizing the generation of waste.
2. Maximizing the recycling and reuse of the waste.
3. Ensure safe and environmentally sustainable disposal of waste.
4. Capacity building measures to be taken up including involvement of NGO's/Private sector to improve the efficiency and effectiveness of Solid waste management at all stages especially at collection and segregation of waste at household level.
5. Land for treatment/disposal of solid waste to be identified and earmarked for Phase-2 area.



The expected solid waste generation by the year 2041 by the projected population of 40.00 lakh is approx. 2,000 TPD. Gap assessment has been done by comparing the projected generation with existing facility. It has been analyzed that additional processing facility of solid waste has to be implemented for the gap 1,750 TPD by the year 2041.

Table 10-6 Projected Solid waste generation in Greater Noida

Sr.no.	Area	Projected Population (2041)	Solid waste generation @ 0.5 kg/capita/day (Tones per day , TPD)	Existing Capacity of processing plant	Gap (TPD)
1	Greater Noida	40,00,000	2000	350	1,650

Source: Calculation as per standards in URDPFI guidelines

Guidelines for the Solid Waste Management system are as follows,

- Door-to-door waste collection with the provision of adequate machinery, equipment and staff.
- The door-to-door collection vehicles should be high capacity, covered and should have alarm system.
- Waste bins on streets to be located at every 500 m for the community collection of waste. (Source: CPHEEO)
- Public awareness campaigns should be done for better waste management.

10.5.5 Power Supply

Adequate power supply is significant for the economic growth and development of the region. Critical Infrastructure like water supply, sanitation etc. depends on power sector. The Power Master Plan should be prepared on the basis of the Landuse Plan of the city.

Renewable energy sources such as solar energy to be promoted at settlement and household level. . Solar energy can be utilized through two different routes, as solar thermal route and solar electric (solar photovoltaic) routes. Solar energy could be a potential source of energy for the Greater Noida. Other renewable energy sources such as bio mass energy using the industrial and municipal waste, by products of wood industry and agricultural crops etc. can be explored. The Master Plan for Solid Waste Management to be prepared.

10.6 Environmental Proposals

10.6.1 Conservation of water bodies

Water scarcity is one of the serious concerns for countries across the world. A report by NITI Aayog, a government think-tank, said that if methods for water conservation in India were not adopted, major Indian cities will run out of the ground water in next few years. The only solution to avoid this grim situation is the adopt methods of conservation of water resources which could be replicated at household level.

Jal Shakti Abhiyan which is government nation wide water conservation campaign that aims at encouraging citizen participation to promote water conservation. Under this campaign, the government focusses on creation/ maintenance of water conservation and rainwater harvesting structures, renovation of various traditional water bodies tanks, and reuse of treated water, recharge of bore wells, watershed development and intensive afforestation.



The revival of the water bodies has to be encouraged and implemented. This has to be taken into consideration while planning strategies for the revival of water bodies. A separate conservation plan for waterbodies has to be prepared.

Blue and Green Corridors has been proposed in new areas along water bodies. As the planning area has some sensitive areas like NTPC Dadri, Helipad, Water bodies, Catchment area near Noorpur so, Recreational green uses has been proposed around these areas which shall act as active green spaces.

Green buffer of following width has been proposed:

Expressway- 100 m (as per U.P. Sub- Regional Plan)
National Highway- 60 m (as per U.P. Sub- Regional Plan)
State Highway- 30 m (as per U.P. Sub- Regional Plan)
Upper Ganga Canal Expressway- 100 m
Other Drains/ Canals- 15 m (as per U.P. Sub- Regional Plan)
HT Lines- 15 m
Railway Track- 30 m (as per U.P. Sub- Regional Plan)

10.6.2 Landscaping and Plantation

Considering the roads with high density of traffic, tall trees need to be proposed on road side as an urban greening initiatives. In order to mitigate the challenges faced due to increasing population and lack of space, general management practices like pruning, replacement, manure application, transplantation, seed and leaf litter collection, canopy trimming, watering and other techniques to be adopted.

10.7 Integration of existing Village

All the existing villages in the city should be integrated so that the development can be done in a regulated manner.

10.7.1 Village Integration Strategy

1. Identify vacant pockets and land parcels in village revenue boundary.
2. Propose approach roads. Propose ring road around the Abadi area for controlling Abadi expansion and widening of existing roads wherever possible.
3. Development of THEME based villages to promote local handicraft, food, culture etc.
4. Propose facilities along the ring road, sport activities, open gym, kiosks, kids play area, picnic huts etc.

Facilities in rural settlements will be provided after analyzing the existing physical and social infrastructure in the particular settlement.



11 ZONING REGULATIONS

Zoning is one of the important planning tool to manage growth, regulate densities and organize land uses within the notified area. Zoning combined with Development Control determines the supply of developable land and built-up space in various use zones. Residential, Commercial, Industrial, Public and Semi-Public Utilities, Mixed Use, Transportation, Green, Recreational and Agricultural Land Uses etc are shown in the Master Plan. The land use plan of the city contains main broad 8 categories, which covers the major activities of the city. The ancillary activities which supports the main activities are not displayed in the Land Use Plan in order to generalize the land use zones. Such ancillary activities are permitted according to the Zoning Development Control which are generally indicated while sub division of zones and preparation of sector layout plan.

11.1 Salient Features of Zoning

In the zoning regulations, the approval of various activities/ utilities under main Land Use areas has been laid down in order to simplify the procedures of planning and responding to the requirements of development. The salient features of the Zoning Regulations are as under:

Zoning regulations regulates the development and sub division of land parcel/sector plans as per Development Code. The permissible use premises and activities permitted are indicated in table format to remove any ambiguity and ensure orderly development for self-contained neighbourhoods/ sectors.

The concept of flexible and multi-utility use of land is adopted to make projects viable and to cope with fast changing business environment.

A procedure will be laid down and notified by the Authority/State Government for permitting mix use as per the zoning regulations/DCR/Feasibility report and for the same the Authority/State Government may decide appropriate charges for conversion of use.

Mix Land use activities will be permitted with in the designated zones and such plots will be identified in layout plan prior the disposal

11.2 Use zones- Master Plan 2041

1. Residential:

- R1-Residential (Plotted + Group Housing)
- R2-Rural settlement/ Abadi
- R3-6% Abadi

2. Commercial:

- C1-Retail, General Business and Commerce, Offices
- C2- Wholesale,
- C3- Logistics & Warehousing

3. Industrial:

- M1- Manufacturing
- M2- I.T and ITeS

4. Public & Semi-Public Facilities/Social Infrastructure

- P1-Institutional



(PS1-Institutional,PS2-Health,Hospital,PS3-Educational,Socio-Cultural,PS4-Police,Fire,Disaster Management Centre,PS5-Religious,Burial/Cremation Ground/Cemetery,PS6-Transmission Site/Centre)

- **P2- Utility**

(U1- WTP, U2-STP, U3-Electricity, U4-Solid Waste, U5-Drain, U6-Other Utilities /E-Waste disposal)

5. Mixed Use Zone

- MU-H- Mixed Use Hospitality
- MU-I Mixed Use-Industry

6. Recreational/Green Areas

- P1-Recreational Green,
- P2-City,District,Community Park,Multi Purpose Ground,Public parks and Playgrounds including water bodies
- P3- Green Belt including water bodies
- P4- Institutional Green
- P5- Reserve Forest

7. Transportation

- T1- Terminal / Depot - Rail / Metro/ Bus/ Truck
- T2-Integrated Freight Complex, Container Depot
- T3-Multi Modal Transport Hub

8. Agriculture/water bodies:

A1-Agricultural land



11.3 Defining Use Premises and Activities Permitted

Table 11-1 Definitions of Use Premises and Activities Permitted

Use premise		Definition	Activities permitted
RESIDENTIAL			
1.1	Single House/ Plot/ Flat	Residential House/Plot – Plotted Housing: A premise for one or more than one dwelling unit and may have on it one main building block.	Residence Support Facilities-Professional practice by the residents and as per Building Regulations
1.2	Group Housing	A premise of size not less than 5000 sq.m. comprising of residential flats with basic amenities like parking, park, convenient shops, public utilities etc.	
1.3	Staff Housing	A premise comprising of residential units which may occur as a part of group housing or independent that are dedicated to the staff of the principal land use	
COMMERCIAL			
2.1	Retail Shop	A premise for sale of commodities directly to consumer with necessary storage.	Retail Shop, Repair Shop, Personnel Service Shop.
2.2	Repair Shop	A premise equivalent of a of a retail shop for carrying out repair of household goods, electronic gadgets, automobiles, cycles etc.	Retail Shop, Repair Shop, Personnel Service Shop
2.3	Personnel Service Shop	A premise equivalent of retail shop providing personnel services like tailor barber etc.	Retail Shop, Repair Shop, Personnel Service Shop.
2.4	Vending Booth	A premise in the form of booth for sale of commodities of daily needs either through a mechanical installation or otherwise.	Vending Booth/Kiosk
2.5	Convenience Shopping Centre	A group of shops in Gross Residential area serving a population of about 5,000 persons.	Retail and Service shops, Restaurant, Repair, Showroom, Restaurant, Canteen, Food Court, Clinic and Polyclinic, Clinical Laboratory, Kiosk/ Vending booth, Bakery, Confectionary, Atta Chakki , Office, Bank, Coaching Centres/ Training Institutes, Informal Commercial units / platform,



			<p>Parking, ESS, Milk Booth, E-Waste Collection Centre.</p> <p>Support Facilities- Health club/Gym, Yoga/ Meditation centre, Dance/Music/Art centre, Exhibition Space, Public Toilets,</p>
2.6	Local Shopping Centre	A group of shops in Gross Residential area serving a population of 10,000 persons	<p>Retail, Repair, Offices, Showroom, Restaurant, Canteen, Food Court, Clinic and Polyclinic, Clinical Laboratory, Kiosks, Vending booth, Bakery, Confectionary, Atta Chakki, Bank, Coaching Centres/ Training Institutes, Informal commercial units / platform, Parking</p> <p>Support Facilities- Guest Rooms, Banquet Hall, Exhibition Hall, Health Centre/Dispensary, Nursing home, Health club/Gym, Yoga/ Meditation centre, Dance/Music/Art centre Religious centre, Convention/ Public Toilets, Milk Booth, E-Waste Collection Centre.</p>
2.7	Commercial Complex	A premise used for offices of profit making organizations.	<p>Retail, Wholesale, Repair, Commercial Offices, Showroom, Restaurant, Canteen, Food Court, Clinic and Polyclinic, Clinical Laboratory, Kiosks, Vending booth, Bakery, Confectionary, Atta Chakki, Bank, Coaching Centres/ Training Institutes, Informal commercial units / platform, Bank, Post & Telegraph Office, Multilevel Parking, Multiplexes, EV Charging stations, Fuel pumps, Milk Booth, E-Waste Collection Centre.</p> <p>Support Facilities- Guest House, Service Personnel Rooms, Banquet Hall, Exhibition Hall, Health Centre/Dispensary, Nursing home, Health club/Gym, Yoga/</p>



			Meditation centre, Dance/Music/Art centre, Convention/ Conference centre, Auditorium, Barat Ghar, Cretche /Daycare Centre, Mobile Towers, Public Toilets, ESS, Busbays, Parking for NMT etc.
2.8	Bank	A premise for offices to perform banking function and operation.	Bank, Commercial Office Support facilities: - ATM, Toilets, Pantry, Canteen, Watch & Ward Residence (upto 20sqm.)
2.9	Barat Ghar	A premise used for marriage and other social functions and run by institution, public agency and local body.	Barat Ghar will support facilities up to 15% of FAR. Guest rooms up to 10% of FAR. Kitchen, Toilets, Parking
2.10	Building material market/yard	Building Material Market: A premise for retail sale of building materials like timber, stone, bricks, cement, hardware, paints etc. directly to consumers with necessary storage.	Permissible uses- Wholesale, Retail shop, Showroom, Bank/ATM, Restaurant/Canteen/, Storage facilities for Non Hazardous items, Loading/unloading facility, Truck Parking and other logistics, Vending Booth/ Kiosk, Tempo/Taxi/Auto Rickshaw/Rickshaw stand, Fuel Station, Informal Commercial unit/Platform, Support Facilities- Guest House, Pharmacy Shop, Public Toilets
2.11	Vegetable/Fruit market	A premise for retail sale of fruits and vegetables in shops(area not more than 10 sq.m.) or platforms.	Permissible uses- Wholesale shop, Retail Shop, Repair Shop, Service Shop, Bank/ATM, Restaurant/Canteen, Storage facilities for Non- Hazardous items, Cold Storage, Gas Godown, Loading/unloading facility, Truck Parking and other logistics, Vending Booth/ Kiosk, Parking, Trucks/Tempo/Taxi/ Auto Rickshaw/ Rickshaw stand , Informal Commercial unit/Platform
2.12	Cold storage	A premise where perishable commodities are stored in covered	Permissible uses- Cold storage,



		space using mechanical and electrical devices to maintain therequired temperature etc.	Loading/unloading facility, Truck Parking and other logistics, Support Facilities- Office, Canteen, Vending Booth/Kiosk, Public Toilets
2.13	Storage godown	A premise where commodities are stored in covered space	Permissible uses- Storage, Loading/unloading facility, Truck Parking and other logistics, Support Facilities- Office, Canteen, Vending Booth/Kiosk, Public Toilets
2.14	Exhibition hall/ Exhibition center	Exhibition Hall: A hall or part of a premise with facilities for exhibition and display of paintings, photographs, sculptures, murals, ceramics, handicrafts or products of specific category/ class. Exhibition Centre: A premise with facilities for exhibition, display and storage of paintings, photographs, sculptures, murals, ceramics, handicrafts, or products of specific category/ class	Permissible uses- Exhibition Hall, Exhibition center and art gallery, Library, Store/Godown facility, Auditorium, Multilevel Parking, Support Facilities- Office, Showroom, Dance/ Music/ Art Centre, Yoga/ Meditation Centre, Museum, Restaurant/Canteen/Food court, Vending Booth/Kiosk
2.15	Fuel Station /Public Electric Charging station	Fuel station / Public Electric Charging Station: A premise for sale of petroleum products to consumers. It is also an infrastructure that supplies electric energy for the recharging of plugin electric vehicles-including electric cars, electric vehicles and plugin- hybrid to consumers. It may include servicing of automobiles.	Permissible uses- Fuel Station, public electric charging station, Automobile Repair Shop, Automobile Service station Support Facilities- Office, Retail shop/Departmental Store, Showroom.
2.16	Warehouses for non-hazardous items	Warehouse/ Godown for Non-Hazardous items: A premise for exclusive use of storage of non-hazardous goods and commodities in a manner as per requirement of respective goods/ commodities. The premises include loading and unloading facilities	Permissible uses- Store/Godown, Loading unloading facility, Truck Parking, Support Facilities- Booking Office
2.17	Automobiles showroom/ Automobile Showroom cum Service Station	Automobiles Showroom: A premise for display, sale, and repair of automobiles. Automobile Showroom cum Service Station: A premise for display, sale, repair and servicing of	Permissible uses- Automobile showroom, Licensed service centre, Parking, Retail shop(Spare Parts), Truck Parking, Support Facilities-



		automobiles.	Office, Retail shop, Kiosk/Vending Booth, Toilets
2.18	Freight complex/ Logistic Park	<p>Freight Complex: A complex having premises for booking and storage of goods that a train, truck, ship, or aircraft carries</p> <p>Logistic Park: A premise within which all activities related to transport, logistics and the distribution of goods- both of national and international Transmit, are carried out by various operators on commercial basis and includes facilities like warehouses, distribution centres, storage areas, offices, truck services etc. and relates public facilities.</p>	<p>Permissible uses- Booking Office, Warehouse, Store/ Godown, Cold Storage, Space for Container Stacking, Truck Parking, Loading /Unloading facilities, Repair shop, Weighbridge, Vending Booth/Kiosk</p> <p>Support Facilities- Office, Fuel/Charging station, Bank, Service Station, Restaurant/Canteen/ Food court, Public Toilets</p>
2.19	Motor Garage and workshop	A premise for servicing and repair of automobiles	Motor garage and Work Shop, retail shop (spare parts), Soft drinks and Snacks stall)
2.20	Weigh bridge	A premise with weighing facilities for empty or loaded trucks	<p>Permissible Use Weigh Bridge</p> <p>Support Facilities- Booking Office</p>
2.21	Resort	A place that is frequented for holidays or recreation or for a particular purpose	<p>Permissible uses- Lodging facility, Restaurant /Canteen/ Food court, Dining hall, Cafeteria, Tourist Information Centre, Convention Centre/ Conference Centre/ Auditorium, Seminar Hall, Exhibition Hall, Banquet Hall, Laundry, Recreational Club/Swimming pool, Information Centre, Health Club/Gym/Spa, Yoga/ Meditation Centre, Multilevel Parking, Office</p> <p>Support Facilities- Bank, Creche, Automobile showroom/ Showroom cum service Centre, Retail Shop, Personal service shops, Showroom, Service Apartment, Health Centre/Dispensary, Toilet for staff</p>
2.22	Cinema / Cineplex	A premise with facilities for projection of movies and stills with a covered space to seat audience	<p>Cinema, Administrative Office, Soft Drink & Snack Stall/Food Court, Retail Shop & Commercial office.</p> <p>Support Facilities-</p>



			Watch & Ward Residence (up to 20 sq.m.), Creche
2.23	Restaurant	A premise used for serving food items on commercial basis including cooking facilities. It may have covered or open space or both for sitting arrangement.	Restaurant
2.24	Hotel	A premise having minimum 10 lettable rooms for lodging of and boarding of 15 persons or more on short / long term basis.	Hotel, 2[Service Apartment,] Banquet / Conferencing facilities, Restaurant, Swimming pool, Health Club, Food court, Discotheque. Commercial offices, retail & service shops to be restricted to 20% of floor area
2.25	Banquet Hall	a special purpose room, or a building, used for hosting large social and business events	Banquet Hall Support Activities: 15% of the FAR.
2.26	Service Apartment	A premise fully furnished, serviced and self-contained with meal preparation and used for short-term / long term accommodation.	i. Guest suite, Conference facilities, Office
2.27	Office/corporate office	A premise used for office of commercial establishment, profit making organization	Permissible uses- Office/Corporate office, Conference room, Seminal Hall, Multilevel Parking Support Facilities- Auditorium, International conference centre, Cultural and information centre, Stationary shop, Book store, Chemist store, Vending booth/Kiosk, Health Club / Gym, Bank extension counter, General store, Crèche, Indoor games halls, Dispensary, Internet centre, Library, Museum, Planetarium, R&D centres, Radio and television station, Canteen, Staff Housing, Guest house, Hostel, Transit Hostel.
Informal Sector			
2.28	Weekly Market	An area used once in a week by a group of informal shop establishments in the form of a market. These markets shift	Weekly market, informal Retail trade, Soft Drink and Snack Stall (All structures will be either



		from one area to another on different days of the week.	temporary or mobile), only for one day in a week
2.29	Informal Vending Zones	Individual food retailers who generally operate outside the formal food provisioning system	Permissible uses- Informal commercial unit / Platform
2.30	Informal Sector Unit	Retail/ service unit, stationary or mobile, working without roof including small khokhas on roadside. Street vendor- A person who offers goods or services for sale to the public without having a permanent built up structure but with a temporary static structure or mobile stall (or head load).	Informal Sector Unit
Wholesale Trade			
2.31	Wholesale Market	A premise from where goods and commodities are auctioned/sold and delivered to retailers. The premises include storage and godown, loading and unloading facilities.	

Industrial			
3.1	Industrial Plot (specific industry type)	A premise for a unit within a group of such units for manufacturing of specific products like electric goods etc.	Industry permitted as per norms of the Authority and pollution control board, Staff housing up to 15% of FAR for plots 50 acres or more in area. Support Facilities:- Office, Bank, Showroom for display/sale of industrial products manufactured in the unit, Gym/ Health club, Crèche and day care Centre, Internet Centre, Dispensary, Taxi/Auto/Auto rickshaw stand,
3.2	Industrial Plot (integrated use)	A premise where industrial use is allowed along with staff housing commercial and facilities as an integrated use.	In Industrial plot having area more than 25 Acre, integrated use of Industrial, Commercial and Staff Housing shall be allowed, where industrial activity shall remain as a core activity with minimum 75% of permissible FAR. Staff Housing: - Dormitory, field hostel etc. other than Banglow shall be allowed with maximum 12% of permissible FAR. Support Facilities:- Support facilities shall be allowed as- waiting transit area, area designated for public utilities, travel services, telephone exchange, Electric sub-station, water works, Export related facilities, canteen, creche and day care center, operations and



			maintenance by specialized agencies, training center and library, health center and Gym for end users if institutions. ATM services with 5% of permissible FAR.
3.3	Information Technology Park (IT & ITeS)	A premise where computer software etc. is prepared for Information Technology and I.T. enabled services	Permissible uses -IT plots/buildings (min. 50% of FAR), Storage, Warehousing Commercial —max 15% of FAR Residential Plots/flats (max 15% of FAR) Support facilities upto 20% of FAR or as specified in lease deed.
3.4	Service industries	Any industry which is engaged in producing, servicing or repairing goods, or articles for consumption in the neighborhood/local area	Permissible uses - Service/Cottage Industry (Non Hazardous, Non-polluting) as per stipulation of Industries department, residential unit Support Facilities - Crèche/ Day-care centre, Retail shop for the product manufactured, Storage
3.5	Small/light industry	Small/light industries as per classification of the State Government	Permissible uses - Industrial units (Non-Hazardous, Non-polluting) as per stipulation of industry department, Canteen, Loading Unloading Facility, Truck parking, Vending booth/kiosk, Storage, Multilevel Parking Support Facilities - Office, Bank, Showroom for display/sale of industrial products manufactured in the unit, Gym/Health club, Crèche and day care centre, Internet centre, Dispensary, Taxi/Auto/Auto rickshaw stand
3.6	Medium & Large-scale industry	Medium and large-scale industries as per classification of the State Government.	Industrial units (Non-Hazardous, Non-polluting) as per stipulation of industry department, Showroom for display/sale of industrial products Canteen, Creche and day-cares centre, Loading Unloading Facility, Truck parking, Vending booth/kiosk, Storage, Internet centre, Multilevel Parking Support Facilities - Office, Bank, Showroom for display/sale of industrial products manufactured in the unit, Gym/Health club, Crèche and day-care centre, Internet centre, Dispensary, Taxi/Auto/Auto rickshaw stand
3.7	Film centre/ TV radio programme production centre	A premise with facilities for shooting, recording, broadcasting and transmission of news and other programs through the respective	Permissible uses - Film Centre/TV Centre, Radio Programme Production Centre, Auditorium, Media Centre, Canteen,



		medium. It may include some hostel accommodation for guest artists, and transmission facilities like tower	Library, Vending booth/ Kiosk Support Facilities- Office, Bank, counter Gym/ Health club, Creche and day-care centre, Taxi/Auto/Auto rickshaw stand.
3.8	Milk Chilling Centre		Milk Chilling Centre Support facilities upto 5% of FAR.
3.9	Gas Godown		Gas Godown
3.10	Oil Depot and LPG Refilling Plant	Oil Depot: A premise for storage of petroleum products with all related facilities LPG Refilling Plant: A premise for refilling facilities of LPG on bulk basis	Permissible uses- Oil and Gas Depot, LPG refilling plant, Truck Parking Support Facilities- Booking Office
3.11	Warehouses for hazardous items	Warehouse/ Godown for Hazardous items: A premise for exclusive use of storage of hazardous goods and commodities in a manner as per requirement of respective goods/ commodities. The premises include loading and unloading facilities	Permissible uses- Store/Godown, Loading unloading facility, Control/Inspection room, Truck Parking, Support Facilities- Booking Office

Institutional			
4.1	Creche and day care centre	A premise having nursery facilities for infants during daytime. The centre may be managed by an individual or institution on commercial or non-commercial basis.	Creche and Day Care Centre. Support facilities up to 15% of FAR.
4.2	Crematorium/ Burial ground/ cremation	Cremation ground would mean a premise with facilities for performing last rites of dead bodies by burning. Burial ground would mean a premise with facilities for burying of dead bodies. Crematorium would mean a premise with facilities for disposing off dead bodies in an electrical/ electronic furnace	Permissible uses- Cremation/Burial ground/Crematorium, Support Facilities- Retail shop of wood, flowers and related material, Maintenance staff residence
4.3	Dispensary	A premise having facilities for medical advice and provision of medicines by a public or charitable institutions	Dispensary by public or charitable institutions Support facilities upto 15% of FAR.
4.4	Disaster management centre	Premise having facilities for carrying out studies and identify the potential risks related to any disasters	Permissible uses- Disaster Management Centre Support Facilities Office, Canteen, Training Centre,
4.5	Educational institution and training centre		Educational institutions and training centres , staff housing up to 15% of FAR,



			Hostel, Support facilities up to 35% of FAR.
4.6	Fairground	A premise used for installation of a tower for communication purpose.	Fair Ground, Exhibition Centre (Temporary in nature), and Restaurant Support facilities up to 15% of FAR.
4.7	Higher secondary school	A premise having educational and playing facilities for students from VI to X standard. It shall include existing middle schools, which are up to VIII standard for the purpose of this code.	Higher Secondary School, Book and Stationery and Chemist Shop, Canteen, Bank Extension Counter, Auditorium, Indoor Games Hall, Swimming Pool, Post Office Counter Facility, Staff Housing in plots of 5 acres and above (up to 15% of FAR). Hostel and support facilities up to 35% of FAR
4.8	Hospital	A premise providing medical facilities of general or specialized nature for treatment of indoor and outdoor patients.	Hospital, Support facilities upto 15% FAR
4.9	Hostel/Working Women & Men Hostels	A premise in which rooms attached to "Institutions" or otherwise, are let out for staying Accommodation for working women/mrn, with day care facility for their children, wherever possible, in urban, semi urban, or even rural areas where employment opportunity for women/men exist.	Permissible uses- Rooms/suites, dining facilities Support Facilities- Office, Canteen, Personal service shops, retail store for daily needs, Indoor/ outdoor games facilities, Bank extension counter, Creche, Health Centre/Dispensary, Caretaker/ warden residence
4.10	Museum, exhibition, centre and art gallery, auditorium, library	Auditorium: A premise having an enclosed space to seat audience and stage for various performances like concerts, play, dance, drama, music, recitals, functions etc.	Museum, exhibition center and art gallery, library, auditorium Support facilities up to 15% of FAR.
4.11	Night shelter	Premise with facilities for accommodation usually given without fees or a minimal fee for resting during night	Night Shelter.
4.12	Nursery and Kindergarden School		Nursery and Kindergarten School. Support facilities up to 15% of FAR.
4.13	Nursing Home	A premise having medical facilities for indoor and outdoor patients having up to 30 beds. It shall be managed by a doctor on commercial basis.	Nursing Home, Chemist Shop Support facilities up to 10% of FAR.
4.14	Orphanage	Orphanage would mean a premise with facilities for boarding of children who are bereaved of parents. It may or may not have educational	Orphanage, staff housing Support facilities up to 15% FAR.



		facilities.	
4.15	Police line/Civil Defence and Home Guard/Fire station		District Police Office and Civil Defence & Home Guard, Fire station, Hostel, Play Ground. Support facilities upto 25% of FAR, staff housing 15% of FAR
4.16	Public utilities and facilities/services		Overhead Tank, Underground Tank, Oxidation Pond, Septic Tank, Pumping Stations, Electric Sub-Station, Fire post, fire station, police post, police station, post office, post and telegraph office, telephone exchange, transmission tower, satellite/telecommunication centre, observatory/weather office, radio and television centers, waste disposal and treatment site and such other utilities and services. Support facilities up to 5% of FAR.
4.17	Religious Premises/Building	A premise dedicated to accommodations and service of God and other objects of religious nature. It may have different nomenclature in different religions like temple for all faiths, mosque, church, gurudwara, synagogue, ashram, bathing ghats, gaushala etc.	Religious buildings, Ashram, Bathing Ghat, Gaushala, Charitable Dispensary, Library, flower shops, sweet shops and other shops and facilities related to religious activities up to 15% of FAR.
4.18	Research and Development Centre		Research and Development Centre, Staff housing up to 15% FAR. Hostel and Support facilities up to 35% of FAR.
4.19	Social and Cultural Centre	A premise with facilities for activities of socio-cultural nature runs by a public, voluntary or individual on primarily non-commercial basis	Social and Cultural Centre, Restaurant, guest rooms, Auditorium, Library, Music, Dance and Drama Training Centre, Museum, Exhibition Centre and Art Gallery, Information Centre, Yoga and Naturopathy Centre, Meditation, Spiritual and Religious Discourse Centre Support facilities up to 25% of FAR.
4.20	Vending Booth		Vending Booth, Kiosk
4.21	Medical college/hospital	Medical College: A premise where teaching, treatment, operation, and research & development related to human bodies is carried out. Hospital: A premise providing medical facilities of general or specialized nature for treatment of indoor and outdoor patients.	Permissible uses- Hospital Support Facilities- Auditorium, Bank extension counter, Cultural and Information Centre, Chemist shop, Canteen, Books/Stationery /Flower Shop, Indoor Games Hall, Internationalconference center, Internet Centre, Library, Museum, Planetarium, R&D center, Radio and



			Television Centre, General Departmental store, Personal service Shop, Office, Staff Housing, Patient attendant accommodation, Health club/Gym, Guest House, Hostel, Transit Hostel, Vending booth/kiosk
4.22	Old Age home	A premise with commercial or non-commercial arrangement for long or short term stay of old people. It may include arrangement for recreation, healthcare, catering etc. which may be managed by an individual or an institution/organisation.	Old age home Support facilities upto 25% of FAR
4.23	Guest house/lodging/boarding	Guest House is a premise for housing the staff of Government, Semi- Government, Public Undertaking and Private Limited Company for short duration. Boarding house is a premise in which rooms are let out on a long-term basis as compared to hotels. Lodging House is a premise used for lodging of less than 50 persons.	Permissible uses Guest house/lodging/boarding house Guest room/Suite, Conference Facilities, Banquet Hall, Support Facilities- Office, Canteen, Retail Shop, Personal Service Shop, Bank, Crèche, Health Centre/Dispensary
4.24	University	An institution for higher learning with teaching and research facilities. A university may exist without having any college connected with it but have assemblage of colleges affiliated to it.	Permissible uses- University, Educational Colleges, Canteen, Swimming pool, Indoorgames Hall, Convention Centre, Exhibition Hall, Support Facilities- Auditorium, Indoor games Hall, Hostel, Guest house, Canteen, Retailshop for Books and Stationary, Chemist, Flowers, Fruits and vegetables, general store; Personal service shop, Repair shop, Vending booth/Kiosk, Bank extension counter, Staff housing, Cultural and information center, International conference center, internet café, Library, Museum, Planetarium, R&D Centre, Radio and Television station, Gym/ Health club, Guest House, Transit Hostel
4.25	Community Hall	A premise having an enclosed space for various social and cultural activities of a neighbourhood of 15000 population.	Permissible uses Community Hall/ Barat Ghar Support Facilities Indoor games, Library, Restaurant, Vending booth/kiosk, Guest rooms
4.26	Milk Booth	A premise for retail sale of milk directly to consumers by manual or other means	Kiosks for sale of milk and related products



4.27	Convention center/ conference center/ Auditorium	A premise having all facilities for meeting, symposium, seminar etc. where a number of people from different organizations will be participating.	Permissible uses Convention center/Conference Centre/Auditorium, Exhibition Hall, Art Gallery, Internet/ information center, Multilevel parking Support Facilities Restaurant, Hostel, Canteen, Library, Guest room, Bank extension counter, Caretaker and Maintenance Staff Housing
4.28	Satellite/wireless/Tele-communication centre	A premise used for installation of a tower for communication purpose.	Permissible uses- Satellite/Wireless/Telecommunication Centre, residential flat (for maintenance staff), Support Facilities- Research laboratory, Canteen
4.29	Courts		Courts, Library, Administrative Office, Bank, Post & Telegraph Office, Police Post, Lawyer's Chamber Support facilities up to 15% of FAR.
4.30	Jail	A place of confinement for persons held in lawful custody	Jail Support Facilities up to 15% of FAR.
Transportation			
5.1	Bus Depot	A premise used by a public transport agency or any other such agency for parking, maintenance, and repair of buses. This may or may not include a workshop	Bus terminal, Office Restaurant, Retails Shops and support facilities upto 25% of FAR.
5.2	Bus Stand	A Bus Stand or Bus Shelter is a designated location on a road away from carriageway to park buses for short time periods for embarkation and disembarkation of passengers	Permissible uses Bus stand/ Shelter
5.3	Bus Terminal/Metro station and Terminal	A premise used by a public transport agency to park the buses/Metro	Permissible uses- Bus /Metro Terminal, Support Facilities- Office, Canteen, Parking
5.4	Covered/Multi level Parking	A covered premise of one or more levels for parking of vehicles. It may be run on commercial or non-commercial basis	Permissible uses- Multi-level parking, Support Facilities- Office, Maintenance staff quarter
5.5	Open Parking	A premise open to sky used for parking of vehicles. The public parking lots may be run on commercial or non-commercial basis	Parking, kiosks, public convenience
5.6	Railway Freight Godown		Railway Freight Godown, Care Taker's Office,



			Support facilities up to 5% of FAR.
5.7	Transport Nagar	A premise for parking of trucks on short term or long-term basis. It may include agency offices, workshops, Dhaba's, spare part shops, god owns, Fuel stations and such other operational facilities	Permissible uses- Truck parking, Service Garage, Spare parts shops, Repair shop, Transport Agencies offices and other related offices, Showroom, Weighbridge/Dharamkanta, Storage Godowns, Multi-level parking, Support Facilities- Retail shop, showroom, Office, Restaurant, Hotel, Bank, Vending booth/kiosk
5.8	Booking Office (Rail, Road and Air Transport)	Office for booking railway, road and air transport.	Railway, Road and Air Transport Booking Office, Storage. Support facilities up to 5% of FAR.
5.9	Freight Complex	Includes all large-scale logistics (freight handling) and trading Activities (wholesale or retail) with ancillary activities such as office complexes	Includes all large-scale logistics (freight handling) and trading activities (wholesale or retail) with ancillary activities such as office complexes
5.10	Container Depot	Open storage area for shipping containers	Permissible uses- Storage of Containers, Weighbridge, Truck parking, Warehousing/Storage Godown, Office Support Facilities- Vending booth/kiosk, Canteen
5.11	Traffic Park/ children traffic park/ training centre	A premise in the form of park with facilities for introducing and Educating public/ children about traffic and signals. The training centre shall have facilities for training of driving automobiles.	Permissible uses- Traffic Park/Children Traffic Park/Training Centre Support Facilities- Restaurant, Vending Booth/kiosk
5.12	Toll plaza	A premise/facility for collection of tolls for use of toll road. It may include office building for management of toll collection process.	Permissible uses- Toll plaza, Maintenance office Support Facilities- Office, Public toilets, Canteen, First Aid
5.13	Railway station	A place on a railway line where trains stop to pick up or let off passengers or goods. It generally consists of at least one platform, one track, and a station building providing such ancillary services as ticket sales, waiting rooms, and baggage/freight service.	Permissible uses- Railway depot, Railway station Facilities- Office, Public toilets, Canteen, First Aid, Restaurants, Vending Booth/Kiosk
5.14	Multilevel Transit Station	Busstops, stations to be developed as multifunctional activities with foot over corridors at upper level as part of RoW. This can be developed on PPP mode	



Recreational Facilities			
6.1	Amusement and Entertainment Park	Amusement Park and Theme Park are terms for a group of rides and other entertainment attractions assembled for the purpose of entertaining a large group of people. An Amusement Park is more elaborate than a simple park or playground, usually providing attractions meant to cater to children, teenagers, and adults.	Permissible uses- Amusement/ Specialised/ Theme Park, Playground Support Facilities- up to 15% of FAR Restaurant/ Food court/Canteen, Vending booth/ Kiosk, Bank extension counter, Indoor games, Retail shop, Caretaker Residence
6.2	Golf Course	Area earmarked for playing golf sport which is essentially open along with minimal built space which supports the sports.	Permissible uses- Golf Course, Racecourse, Swimming Pool, Indoor/ Outdoor games facilities, Restaurants, Hotel, Villas, Club, Shopping mall, Condominiums Support Facilities- Up to 20% of FAR Pro shop/ Sports goods shop, Bar/ Restaurants, Vending booth/ Kiosk, Conference facilities, Bank extension counter, Caretaker Residence, Guest house, Golfers' temporary accommodation
6.3	Plant Nursery	Plant nursery would mean a premise with facilities for rearing and sale of young plants	Permissible uses- Plant nursery Support Facilities- Shop selling seeds, Plants, gardening equipment, Vending booth/ Kiosk, Caretaker residence (all structures shall be temporary in nature) Support facilities up to 20% of FAR.
6.4	Park	A premise used for recreational leisure activities. It may have on it related landscaping, parking facilities, public toilet, fencing etc. It will include synonyms like lawn, open space, green etc.	Permissible uses- Park Support Facilities- Vending Booth/ Kiosk, Park, Kiosks, Parking (up to 10% area) in parks larger than 10000 sqm.
6.5	Playground	A premise used for outdoor games. It may have on it landscaping, parking facilities, public toilet etc.	Permissible uses- Play Ground, Parking (upto 10% area), indoor games hall if required.
6.6	Shooting Range		Shooting range Support facilities up to 15% of FAR
6.7	Specialised Park, Theme Parks and Gardens	Amusement Park and Theme Park are terms for a group of rides and other entertainment attractions assembled for the purpose of entertaining a large	Specialized Parks/Theme Parks and Gardens, kiosks, restaurant, indoor outdoor games facilities and rides, Support facilities up to 15% of permitted FAR.



		group of people. An Amusement Park is more elaborate than a simple park or playground, usually providing attractions meant to cater to Children, teenagers, and adults.	
6.8	Sports City	Sport city having 30% mandatory contiguous green	Sports facilities and related activities.
6.9	Zoo		Zoo : Support facilities upto 10% of FAR
6.10	Stadium/ Sports training centre/Sports complex	<p>Stadium: A premise for outdoor games with pavilion building and stadium structure to seat spectators including related facilities for players</p> <p>Sports training centre: A premise having facilities for training and coaching for different indoor and outdoor games including swimming. It shall also include centre for physical education</p> <p>Sports Complex: A premise for outdoor and indoor games with pavilion building, stadium, and related facilities.</p>	<p>Permissible uses- Stadium/ Sports Training Centre/ Sports Complex, Indoor/ Outdoor games facilities, Hostel, Swimming pool, Multilevel parking</p> <p>Support Facilities- Staff housing, Grocery shop, Sports goods shop, Personal service shop, Canteen, Vending booth/ Kiosk, Conference facilities, Bank extension counter, Caretaker Residence, Guest house, Players' temporary accommodation</p>
6.11	Recreational club/ Swimming pool	A premise for outdoor and indoor games with pavilion building	<p>Permissible uses- Recreational Club, Swimming Pool, Indoor/Outdoor games facilities, Park, playground</p> <p>Support Facilities- Up to 25% of FAR Restaurant/ Food court/ Canteen, Vending booth/ Kiosk, Caretaker residence, Library, Bank extension counter,</p>
6.12	Open air theatre	A premise having facilities for audience seating and a stage for performance open to sky.	<p>Permissible uses- Open Air Theatre,</p> <p>Support Facilities- Canteen, Office, Vending booth/ Kiosk, Caretaker residence,</p>
6.13	Biodiversity Park	Premise having facility for conservation of flora and fauna	
Agricultural			
7.1	Farm House	A dwelling house on a farm.	<p>Permissible uses- Farmhouse</p> <p>Support Facilities- up to 5% of FAR Caretaker residence</p>
7.2	Orchard	Orchard would mean a premise with a thick growth of fruit trees. It may also include garden with fruit trees	Orchard. All structures shall be temporary in nature.



7.3	Rural Centre (Within 1 km of village abadi)		Rural Centre, Retail Shop, Repair Service Shop, Bank, Commercial Office, Cinema, Restaurant, Offices, Dispensary, Clinic, Hospital, Senior Secondary School Library, Community Hall, Police Post, Fire Post, Post Office, Educational institutions and such other activities.
7.4	Apiary/ Pisci Culture	A premise with facilities for rearing and processing of bee/ fisheries products. It may have temporary structures for sheds of birds/ fish	Permissible uses- Fish Farm, Bee Farm Support Facilities- up to 5% of FAR Caretaker residence
7.5	Dairy Farm, Poultry Farm	A premise with facilities for rearing and processing of dairy/ poultry products. It may have temporary structures for sheds of cows/ birds	Dairy Farm, Poultry Farm. Support facilities up to 15% of FAR

11.4 Subdivision of Use Zones and Subdivision Regulation

The objective of subdivision of use zone is to guide the preparation of layout plans for various land use zones already specified earlier as per Master Plan. These regulations help in preparation of service plans corresponding to these layout plans for provision of physical infrastructure like water supply, sewerage, drainage, solid waste management, power, telecom and gas etc. shall conform to the prescribed norms framed by the Authority.

11.4.1 Residential Use Zones

This use zone shall be governed by the following provisions:

- This Use Zone will have plotted or flatted development or group housing or a mix of both as per the scheme by the Authority.
- Green and open Spaces
- The minimum area requirement under parks, playgrounds and tot-lots shall be 15%.
- Area under green and open spaces of the scheme or sector shall be in addition to the area under Master Plan green areas.
- The minimum width of the green and open space shall be 7.5m. The green and open spaces can be varied shapes provided they full fill the recreational need of the community.
- Certain open spaces shall be designated as playgrounds while preparation the sector layout plan.
- Landscape plan shall be prepared and submitted in accordance with the provisions of building regulations.
- The provisions for rainwater harvesting shall be in accordance with the provisions of Building Regulations or as per policies of the State Government issued from time to time.
- The maximum area under commercial use shall be as per population norms
- The minimum area under facilities shall be as per population norms.
- Provision of Social and Physical Infrastructure



Roads

- Minimum Right of Way (RoW) of a vehicular road shall be 12 mt. However in case where the road adjoins a park or any open space with building only one side, the minimum road width can be 9 mt.
- For Group Housing development, the minimum Right of Way (RoW) of vehicular road shall be 18 mt.
- For Farm House development, the minimum Right of Way (RoW) of vehicular road shall be 12 mt with plot size minimum 1 ha.
- The roads shall have minimum width depending on the length of the road as follows
 - Up to 400.0 mt. - 12.0 mt.
 - 401-600mt. - 18.0 mt.
 - 601-1000 mt. - 24.0 mt.
 - Above 1000.0 mt.- 30.0 mt.
- The minimum width of Loop Street shall be 12 mt. and maximum length of 400 mt.
- Maximum length of a 12.0 m wide dead-end road shall be 100.0mt. The road shall be provided with a cul-de-sac of 7.5 mt. radius at the dead end. Roads of less than 25 mt. length, cul-de-sac will not be required.

11.4.2 Non-Residential Use Areas

The sub-division of these use zones shall be governed by the provisions stated below:

- These use zones will have plotted development or flatted development or both as per the scheme
- Green and Open Spaces
 - 13. 10% of the total area of non-residential sector/area shall be green.
 - 14. Area under green and open spaces of the scheme or sector shall be in addition to the area under Master Plan green areas.
 - 15. The landscape plan shall be prepared and submitted in accordance with the provisions of building regulations.
- The provisions for rainwater harvesting shall be in accordance with the provisions of BuildingRegulations or as per policies of state Government issued from time to time.
- The maximum area under commercial use shall be 2% (For areas other than commercial use zones)except for Mixed Use for which the decision is to be taken by the authority.
 - Note: Above mentioned 2% shall not be binding if area/sector is identified for Warehousing/Logistics in Industrial Use. The Additional area (in excess of 2%) shall be used only for warehousing/Logistics.
- The minimum area under facilities shall be 5%.

Roads

- I. The minimum area under roads shall be 10%
- II. The roads shall have minimum width depending on the length of the road as follows
 - a. Up to 400.0 m. - 18.0 m



- b. 401-1000.0 m. - 24.0 m
- c. Above 1000.0 m. - 30.0 m.

III. The width of other roads shall be in accordance with the width specified in Master Plan.



Permissibility of Various Activities/ Uses in Major Land Use Areas																		
R1- Residential	C1- Retail, General Business and Commerce, Offices			M1-Manufacturing			MU-H-MixedUse-Hospitality			P1-Recreational Green								
R2-Rural Abadi	C2- Wholesale			M2-IT & ITeS			MU-I-Mixed Use- Industry			P2-Public, Parks and Playground								
R3-6% Abadi	C3-Logistic Warehousing &			PS1-Institutional					P3-Green Belt									
				PS2-Facilities and Utilities					P4- Institutional Green									
Landuse	Residential			Commercial			Industrial		Institutional		Mixed Use Zones		Green				Agriculture/Water bodies	
	R1	R2	R3	C1	C2	C3	M1	M2	PS1	PS2	MU-I	MU-H	P1	P2	P3	P4		
Premises/Activities																		
(A)	Residential																	
1	Plotted	P	P	P	P6	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP	NP	P1
2	Group Housing	P	NP	NP	P6	NP	NP	NP	NP	P7	NP	P	P	NP	NP	NP	NP	
3	Staff /Institutional Housing	P	NP	NP	NP	P	P	NP	NP	P7	NP	P7	P	NP	NP	NP	NP	NP
4	Rental Housing	P	NP	P	P	P	P	P	P	P	P	P	P	NP	NP	NP	NP	NP
(B)	Commercial																	
1	Retail shops	P(1)	P	P1	P	P	P	P1	P1	P1	P1	P	P	NP	NP	NP	NP	NP
2	Repair shops	P(1)	P	P1	P	P	P	P1	P1	NP	NP	P1	P	NP	NP	NP	NP	NP
3	Service shops	P(1)	P	P1	P	P	P	P	P	NP	P1	P	P	NP	NP	NP	NP	NP
4	Vending booth	P(1)	P	P1	P	P	P	P1	P1	P	P	P	P	P	P	P	P	P
5	Showroom	P1	NP	NP	P	P	P	P2	P2	NP	NP	P	P	NP	NP	NP	NP	NP
6	Weekly market	P3	P3	P3	P3	P3	P1	P3	P3	NP	NP	P3	P	NP	NP	P*	NP	P
7	Convenient shopping centre	P1	NP	P1	P	P	P	P1	P1	P1	NP	P	P	NP	NP	NP	P	NP
8	Local/sector level shopping centre	P1	NP	P1	P	P	P	NP	NP	P1	NP	P	P	NP	NP	NP	P	NP



9	Shopping centre/ commercial centre/	P1	NP	P1	P	P	P	P1	P1	NP	NP	P	P	NP	NP	NP	P	NP
10	Informal commercial unit/platform	P1	P	P1	P	P	P	P	P	P	P	P	P	P	P	P	NP	P
11	Wholesale market/Mandi	NP	NP	NP	P	P	P	NP	NP	NP	NP	NP	P	NP	NP	NP	NP	P
13	Coal/wood/ Building material market	NP	NP	NP	P	NP	NP	P	NP	NP	NP	P	P	NP	NP	NP	NP	NP
14	Vegetable/ Fruit market	P1	P	P1	P	NP	NP	P*	P*	NP	NP	P	P	NP	NP	NP	NP	P
15	Cold storage	NP	NP	NP	P	P4	P	P*	P*	NP	NP	P	P	NP	NP	NP	NP	P*
16	Hotels	P1	NP	P1	P	P*	P*	P1	P1	P1	P1	P1	P	NP	NP	NP	NP	NP
17	Service Apartment	P	P*	P	P	P	P	NP	NP	P1	P1	P	P	NP	NP	NP	NP	NP
18	Restaurant/ Canteen/ Food Court	P1	P	1	P	P	P	P	P	P	P	P	P	NP	NP	NP	P	P*
19	Cinema/Multiplex	P1	NP	NP	P	P*	P*	P1	P1	P1	NP	P	P	P1	NP	NP	NP	NP
20	Drive-in cinema	NP	NP	NP	P	P*	P*	NP	NP	P	NP	P	P	P1	NP	NP	NP	NP
21	Exhibition hall/ Exhibition centre	P1	NP	NP	P	P*	P*	P	P	P	NP	P	P	P1	NP	NP	NP	NP
22	Banquet hall/ Barat Ghar	P1	P*	P1	P	P	P	NP	NP	P1	P1	P	P	NP	NP	NP	NP	NP
23	Fuel Station/Charging Stations	P1	NP	P1	P	P	P	P	P	P1	P1	P	P	NP	NP	NP	P	NP
25	Gas godown	NP	NP	NP	P*	P*	P*	P	P	NP	P	P	P	NP	NP	NP	NP	NP
28	Automobiles showroom/Automobile, Showroom	NP	NP	NP	P	P	P	P*	P*	P	P	P	P	NP	NP	NP	NP	NP



	cum Service Station																	
30	Weigh bridge/ DharmKanta	NP	P	NP	P	P	P	P	P	P	P	NP	P	NP	NP	P	NP	NP
31	Motar garage and workshops	NP	NP	NP	P	P	P4	P	P	NP	P	NP	P	NP	NP		NP	NP
32	Storage Godown for Inflammable Items (LPG, Petrol, Diesel, Kerosene, Lubricants, Aviation Fuel etc)	NP	NP	NP	NP	P	P*	P	P	NP	P	NP	NP	NP	NP	P*	P*	NP
33	Wayside Amenities	NP	NP	NP	P	P	3	P	P	NP	P*	NP	P*	NP	NP	9	NP	NP
34	Agriculture Produce Selling Market/ Grain Market	NP	NP	NP	P*	P*	P	P	P	NP	P	NP	P*	NP	NP	9	NP	NP
35	Junkyard/ Kabadkhana	NP	NP	NP	P*	P*	P	P	P	NP	P	NP	P*	NP	NP	P*	NP	NP
36	Steel/ Cement/ Building Material Yard	NP	NP	NP	P*	P	P*	P	P	P	P	NP	P*	NP	NP	NP	NP	NP
37	Office/corporate office	P5	NP	P5	P	P	P5	P	P	P	P	P	P	NP	NP	NP		NP
38	Professional/personal office	P	NP	P	P	P	P	P	P	P	P	P	P	NP	NP	NP		NP
39	Project development/management/maintenance office	P5	NP	P	P	P	P5	P	P	P	P	P	P	NP	NP	NP		NP
(c)	Industrial																	



1	Service industries	NP	NP	NP	NP	NP	NP	P	P	NP	NP	P	P	NP	NP	NP	NP	NP
4	Information/ software technology industry(IT & ITeS)	NP	NP	NP	NP	NP	NP	P	P	NP	NP	P	P	NP	NP	NP	P	NP
5	Small/light industry	NP	NP	NP	NP	NP	NP	P	P	NP	NP	P	P	NP	NP	NP	NP	NP
6	Industrial plot (specific industry type)	NP	NP	NP	NP	NP	NP	P	P	NP	NP	P	P	NP	NP	NP	NP	NP
7	Medium & large- scale industry	NP	NP	NP	NP	NP	NP	P	P	NP	NP	P	P	NP	NP	NP	NP	NP
8	Film centre/ TV radio programme production centre	NP	NP	NP	NP	NP	NP	P	P	NP	NP	P	P	NP	NP	NP	NP	NP
9	Biotechnology/ Biotech Park	NP	NP	NP	NP	NP	NP	P	P	NP	NP	P	P	NP	NP	NP	NP	NP
12	Agrobased & food processing units	NP	NP	NP	NP	NP	P	P	P	NP	P	P	NP	NP	NP	NP	NP	P
13	Non-Polluting Agro based Industries	NP	NP	NP	NP	NP	P	P	P	NP	P	P	NP	NP	NP	NP	NP	P
15	Pasturing Plant/ Milk Collection Centre	NP	NP	NP	NP	NP	P	P	P	NP	P	P*	NP	NP	NP	NP	NP	P
16	Solar Power Production Plant/ Centre	NP	NP	NP	NP	NP	P	P	P	NP	NP	P*	NP	NP	NP	NP	NP	P
17	Household industries	NP	NP	NP	NP	NP	NP	P	P	NP	NP	P	P	NP	NP	NP	NP	NP
18	Warehouses for hazardous items	NP	NP	NP	NP	NP	NP	P	P	NP	NP	NP	NP	NP	NP	NP	NP	NP
(E)	Institutional																	



1	Guesthouse/lodging/boarding house	P4	NP	P4	P	P	P	P	P	P	P	P	P	NP	NP	NP	NP	NP
2	Hostel	P4	NP	P4	P	P	P*	NP	NP	P	P	P	P	NP	NP	NP	NP	NP
3	Reformatory & Orphanage	P5	P	P4	P*	NP	NP	NP	NP	P	P	P	P	NP	NP	NP	NP	NP
4	Old age home	P	P	P	NP	NP	NP	NP	NP	P	P	P	P	NP	NP	NP	NP	NP
5	School for mentally challenged persons	P4	NP	NP	NP	NP	NP	NP	NP	P	P	P	P	NP	NP	NP	NP	NP
6	Creche & day care centre/ play & nursery school	P	P	P	P	NP	P	P	P	P	P	P	P	NP	NP	NP	NP	NP
7	Primary school	P4	P	P4	NP	NP	NP	NP	NP	P	P	P	P	NP	NP	NP	NP NP	NP
8	Secondary school/ integrated residential school	P4	P	P4	NP	NP	NP	NP	NP	P	P	P	P	NP	NP	NP	NP	NP
9	Vocational Institute / training Institute / ITI	P4	P*	P4	NP	NP	NP	P*	P*	P	P	P	P	NP	NP	NP	NP	NP
10	Degree / PG college/ Professional College	P4	P	P4	NP	NP	NP	NP	NP	P	P	P	P	NP	NP	NP	NP	NP
11	University	NP	NP	NP	NP	NP	NP	NP	NP	P	P	P	P	NP	NP	NP	NP	NP
12	Post office	P4	P	P4	NP		P	P	P	P	P	P	P	NP	NP	NP	NP	NP
13	Telephone exchange	P4	P	P4	P	P	P4	P	P	P	P	P	P	NP	NP	NP	NP	NP
14	Police station	P4	NP	P4	P	P	P4	P	P	P	P	P	P	NP	NP	NP	NP	NP
15	Fire station	P4	NP	P4	P	P	P4	P	P	P	P	P	P	NP	NP	NP	NP	NP
16	Police post	P	P	P	P	P	P	P	P	P	P	P	P	NP	NP	NP	NP	P
17	Library	P	P	P	P	P	P	P	P	P	P	P	P	NP	NP	NP	NP	NP
18	R & D centre	P4	NP	NP	P	NP	P	P	P	P	P	P	P	NP	NP	NP	NP	NP



19	Health centre/ family welfare centre	P4	P	P4	P	P	P4	P	P	P	P	P	P	NP	NP	NP	NP	NP
20	Trauma centre	P4	NP	NP	P	P*	P	P	P	P	P	P	P	NP	NP	NP	NP	NP
21	Medical college/ hospital	NP	NP	NP	NP	NP	NP	NP	NP	P	NP	P	P	NP	NP	NP	NP	NP
22	Clinic	P	P	P	P	P	P	P	P	P	P	P	P	NP	NP	NP	NP	NP
23	Nursing home	P4	P	P	P	P	P4	P	P	P	P	P	P	NP	NP	NP	NP	NP
24	Clinical laboratory / Diagnostic centre	P1	NP	P	P	P	P	P	P	P	P	P	P	NP	NP	NP	P	NP
25	Veterinary hospital/ Dispensary	NP	P	NP	P	NP	NP	NP	NP	P	P	P	P	NP	NP	NP	NP	P
26	Health club/ Gym	P4	P	P	P	P	P	P	P	P	P	P	P	NP	NP	NP	NP	NP
27	Dance/ Music/Art centre	P4	P	P4	P	P	P1	P	P	P	P	P	P	NP	NP	NP	NP	NP
28	Yoga/ Meditation centre	P	P	P	P	P	P	P	P	P	P	P	P	NP	NP	NP	NP	NP
29	Religious building/centre	P4	P	P	P	P	P4	P	P	P	P	P	P	NP	NP	NP	P	NP
30	Community centre / Barat Ghar	P4	P	P4	P	P	P4	P	P	P	P	P	P	NP	NP	NP	NP	NP
31	Convention centre/ conference centre/ Auditorium	P4	NP	NP	P	P	P4	P	P	P	P	P	P	NP	NP	NP	NP	NP
32	Socio-Cultural centre	P4	P	P4	NP	NP	NP	P	P	P	P	P	P	NP	NP	NP	NP	NP
33	PCO Public call office	P	P	P	P	P	P	P	P	P	P	P	P	NP	P	P	NP	NP
34	Internet/Informati on centre	P1	P	P1	P	P	P1	P	P	P	P	P	P	NP	NP	NP	NP	NP



35	Social welfare centre	P1	P	P1	P	P	P	P	P	P	P	P	P	NP	NP	P*	P	NP
36	Crematorium/ Burial ground/ cremation	NP	NP	NP	NP	NP	NP	NP	NP	P4	NP	NP	NP	NP	NP	P*	NP	P*
37	Night shelter (rein basera)	NP	P	NP	NP	NP	NP	P4	P4	P	P	P	P	NP	NP	NP	NP	NP
38	Disaster management centre	NP	NP	NP	P	P	NP	P	P	P	P	P	P	NP	NP	NP	NP	NP
39	Metrological station	NP	NP	NP	P	P	NP	P	P	P	P	P	P	NP	NP	NP	NP	NP
40	Banks	P5	P*	P5	P	P	P	P	P	P	P	P	P	NP	NP	NP	NP	NP
41	ATM	P	P	P	P	P	P	P	P	P	P	P	P	NP	NP	NP	NP	NP
42	Jail	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	P
43	Milk Booth	P	P	P	P	P	P	P	P	P	P	P	P	NP	NP	P	NP	NP
44	PAC/ Police Line	NP	NP	NP	NP	NP	NP	NP	NP	P	P	P	P	NP	NP	NP	NP	NP
45	Satellite/wireless/ Telecommunicatio n centre	P5	NP	P5	P	P	P	P	P	P	P	P	P	NP	NP	P*	NP	NP
46	Educational institution and training centre	NP	NP	NP	P	P	P	NP	NP	P	P	NP	NP	NP	NP	NP	P	NP
(F)	Transportation																	
1	Open Parking	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2	Covered/ multi- level parking	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P*	P	NP
3	Taxi/Auto stand	P1	P	P1	P	P	P	P	P	P	P	P	P	NP	NP	NP	NP	NP
4	Truck terminal/ transport nagar	NP	NP	NP	NP	P	P4	P4	P4	NP	P	P	P	NP	NP	NP	NP	NP



5	Bus depot/ Bus terminal	NP	NP	NP	NP	NP	P	P	P	NP	P	P	P	NP	NP	NP	NP	NP
6	Bus stand/ Shelter	P4	NP	NP	P	P	P	P	P	P	P	P	P	P	NP	P	NP	NP
7	Traffic park/ children traffic park/ training centre	P4	NP	NP	NP	NP	P4	P4		P	P	P	P	P	NP	NP	NP	NP
8	Loading/ Unloading facilities	NP	NP	NP	NP	P	P	P	P	P	P	P	P	NP	NP	NP	NP	NP
9	Transport/ cargo booking centre	P1	P	P	P	P	P	P	P	P	P	P	P	NP	NP	NP	NP	NP
10	Container depot	NP	NP	NP	NP	P	P	P	P	NP	P	P	P	NP	NP	NP	NP	NP
11	Toll plaza	NP	NP	NP	P	P	P	P	P	P	P	P	P	P	NP	P	NP	NP
12	Heli pad	P*	NP	NP	P*	P*	P*	P	P	P	P	P	P	P	NP	P	NP	NP
13	Railway/ Godown/ Railway Yard/ Siding Terminal/	NP	NP	NP	P*	P*	P	P*	P*	NP	P*	P	P	NP	NP	P*	NP	NP
14	Airport Strip	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	P*	NP	NP
15	Roads	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	NP	P
16	Freight complex/ Logistic Park	NP	NP	NP	P	P	P	P*	P*	NP	P*	P	P	NP	NP	NP	NP	NP
(G)	Recreational Green																	
1	Park/Play ground	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2	Multipurpose open spaces	P4	P	P	P	P	P	P	P	P	P	P	P	P	P	NP	NP	P
3	Golf course/ Race course	P4	NP	NP	NP	NP	NP	NP	P	P	NP	NP	P	P	P	NP	NP	NP
4	Stadium/ Sports training centre/Sports complex	P4	NP	NP	NP	NP	NP	NP	NP	NP	P	P	P	P	P	NP	NP	NP
5	Picnic spot	NP	NP	NP	P	P	P	P	P	P	P	P	P	P	P	P	NP	NP



6	Indoor stadium/ games hall	P4	P*	P4	P	P	P	P	P	P	P	P	P	P	P*	NP	NP	NP
7	Planetarium	NP	NP	NP	P	NP	NP	NP	NP	P	P	P	P	P	P	NP	NP	NP
8	Aquarium	NP	NP	NP	P	NP	NP	NP	NP	P	P	P	P	P	P	NP	NP	NP
9	Amusement/ theme park	NP	NP	NP	P	NP	NP	NP	NP	P	P	P	P	P	P	P*	P	NP
10	Recreational club/ Swimming pool	P4	NP	P4	P	P	P	P4	P	P	P	P	P	P	P	NP	P	NP
11	Museum cum Auditorium/ Conference Hall/ Art/ Exhibition Gallery	P*	NP	P*	P	P	P	P	P	P	P	P	P	P	NP	NP	P	NP
12	Open air theater	P4	NP	P4	NP	NP	NP	P4	P4	P	P	P	P	P	NP	NP	NP	NP
13	National Memorials	NP	NP	NP	NP	NP	NP	NP	NP	P	P	P	P	P	P	P*	NP	NP
14	Bio diversity park	NP	NP	NP	NP	NP	NP	P*	P*	P*	P*	P	P	P	P	NP	NP	NP
15	Shooting Range	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	P*	P*	P*	NP	NP	NP	P*
16	Zoo, Aquarium, Wildlife/ Bird Sanctuary	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	P*	P*	P	NP	NP	NP	P*
17	Tourist Facility centre	NP	NP	NP	P	P	P	P*	P	P	P	P	P	P	P*	NP	NP	NP
18	Sports City	P	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	P	NP	NP	P	NP
(H)	Agriculture																	
1	Orchard/ Plant nursery/ Social forestry	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2	Farm house	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP
3	Dairy/ Poultry Farm	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP



4	Agriculture Equipment workshop/ Service Centre	NP	NP	NP	P	P	P	P	NP	NP	NP	P	NP	NP	NP	NP	NP	NP	P	
5	Agriculture/ Horticulture/ Cash Crops	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	P
6	Apiary/ Pisci Culture	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	P

Conditions	
1. In planned designated commercial plot area	
2. Only for the products of industry factory	
3. Only for 30m or more wide roads earmarked by GNIDA	
4. Planned and designated plot	
5. Planned facility or institutional plot	
6. The Authority may allow maximum 30% of permissible FAR for residential activities in the commercial plots of 4 hectare and above size, but the rate applicable in the total plot shall be that of the commercial land	
7. Authority may allow a maximum of 20% permissible FAR in industrial plots of 4 hectares and above size. Rates applicable in the plot would be that of primary Land Use	
8. Allowed only in dedicated Vending Zones decided by the authority	
9. Within 500 m of existing Abadi	
10. State Highways/National Highways/MDR/Major Roads (excluding green belt)	
11. Within 200 m of existing Abadi	
Notes:	
1. These zoning regulations shall be applicable for planning of land uses at Master Planning/ Sector level	
2. The Authority may decide the activities to be permitted in Special Projects	



3. The authority may decide the activities to be permitted within Abadi Settlements.
4. Activities already permitted in the various schemes shall continue as per the terms & conditions specified in the scheme
5. Commercial activities in other land uses shall be permitted on the basis of impact fee or additional reserve price as decided from time to time by the authority
6. Non-residential activities in the Village Abadi/ Abadi extension shall be permitted only on 12.0 m or wider roads
7. No activity other than incidental to waterfront development land use (to be decided by the authority) shall be permissible in canal front development land use



Mixed Use - Industry

Table: PERMITTED USE / ACTIVITIES		VARIOUS CORE ACTIVITIES						Residential Zone	Commercial Zone	Transportation Zone	Agriculture
S. No.	Use/Activities	Industrial	IT	EMZ	Institutional	Recreational	Service Industry				
1	Auditorium/Open Air Theatre					P	P		P		P
2	Bank	P	P	P	P	P	P	P	P	P	
3	EMZ parks				P						P
4	Bird Sanctuary				P						P
5	Botanical Garden				P		P				P
6	Bus Depot And Workshop	P				P	P		P	P	
7	Bus Terminal	P	P		P	P	P		P	P	
8	Cargo & Booking Office	P	P		P	P	P		P	P	
9	Children Traffic Park										
10	Cinema/Multiplex					P		P	P		
11	Clinic	P	P		P	P	P	P	P		
12	Clinic Laboratory	P	P	P	P	P	P	P	P		
13	Cold Storage & Ice Factory	P					P			P	
14	College/Institutes		P		P			P	P		
15	Commercial & Secretarial Training Centre	P	P		P	P	P		P		
16	Commercial Office	P	P	P	P	P		P	P	P	
17	Community Hall	P					P	P	P		
18	Conference Hall	P	P	P	P	P	P		P		
19	Convenient Shopping Centre	P	P	P	P	P	P	P		P	
20	Creche And Day Care Centre	P	P	P	P	P	P	P	P	P	
21	Cultural And Information Centre				P	P				P	
22	Data Centre	P	P	P	P	P	P			P	
23	Dharamshala	P				P	P	P	P	P	
24	Dairy Farm					P				P	P
25	Dispensary	P	P	P	P	P	P	P	P	P	P
Table: PERMITTED USE / ACTIVITIES		VARIOUS CORE ACTIVITIES						Residential Zone	Commercial Zone	Transportation Zone	Agriculture
S. No.	Use/Activities	Industrial	IT	EMZ	Institutional	Recreational	Service Industry				
26	District Park	P	P	P	P	P	P				P
27	Drive In Cinema					P			P		
28	Exhibition Centre & Art Gallery/Pavilions	P	P	P	P	P	P				
29	Fair Ground/Public Meeting Ground	P					P			P	P
30	Farmhouse					P					P
31	Fire Post	P	P	P	P	P	P	P	P	P	
32	Fire Station	P	P	P	P	P	P	P	P	P	
33	Flatted Group Industry	P					P				
34	Flying Club					P					
35	Forensic Science Laboratory			P							
36	Forest			P		P					P
37	Gas Godown	P	P	P	P	P	P		P		
38	Guest House	P	P	P	P	P	P	P	P	P	
39	Gym/spa				P	P		P			
40	Health Care & Social Assistance Services	P*	P	P	P	P	P	P	P	P	P
41	Health centre for players and staff					P					
42	Health Club	P			P	P	P	P	P		P
43	Resorts					P					P
44	Hospital	P	P	P	P	P	P	P		P	
45	Hostel		P	P	P	P	P	P	P	P	
46	Hotel	P	P	P	P	P	P	P	P	P	
47	Indoor Games Hall					P					
48	Indoor Games Stadium					P					
49	Industrial Plot- Industry Specific Type	P					P				
50	Informal Sector Unit	P					P				
51	Information Services	P	P	P	P	P	P		P	P	
52	Integrated Residential School				P			P			
Table: PERMITTED USE / ACTIVITIES		VARIOUS CORE ACTIVITIES						Residential Zone	Commercial Zone	Transportation Zone	Agriculture
S. No.	Use/Activities	Industrial	IT	EMZ	Institutional	Recreational	Service Industry				
53	International Conference Centre		P	P	P						
54	Internet Centre	P	P	P	P	P	P	P	P	P	
55	IT & ITES Building		P	P					P		
56	Junk Yard	P					P				
57	Library		P	P	P			P		P	
58	Light Industry	P					P				



59	Loading & unloading space	p						P				
60	Meditation Centre					P		P		P	P	
61	Milk Chilling Centre	p						P				
62	Motor Driving Centre	p*								P		
63	Motor Garage & Workshop	p*								P	P	
64	Museum / Art Galleries							P		P	P	
65	Music, Dance and Drama Training Centre					P		P				
66	Night shelter	p								P	P	P
67	Nursery And Kinder Garden	p				P				P		
68	Nursing Home/Health Centre	p	P	P	P	P	P	P	P	P	P	
69	Observatory And Weather Office				P			P				P
70	Open Air Theatre					P		P		P	P	
	Orchard									P		P
72	Outdoor Games Stadium							P				
73	Park	p	P	P	P	P	P	P	P	P	P	P
74	Parking	p	P	P	P	P	P	P	P	P	P	P
75	Playground					P		P		P	P	
76	Pet Care Services				P			P		P	P	
77	Fuel station with garage & service stations	p	P	P	P	P	P	P	P	P	P	P
78	Picnic Hut/Camping Site				P			P				
79	Planetarium	p	P	P	P	P	P	P	P	P	P	71

Table: PERMITTED USE / ACTIVITIES		VARIOUS CORE ACTIVITIES						Residenti al Zone	Commerci al Zone	Transportati on Zone	Agricultu re
S. No .	Use/Activiti es	Industri al	I T	EM Z	Institution al	Recreation al	Servic e Industr y				
80	Plant Nursery	p	P	P	P	P	P	P	P	P	
81	Police Post	P	P	P	P	P	P	P	P	P	
82	Police Station	p			P*			P	P		
83	Post Office	p	p	p	P			P			P
84	Primary School	p	P	P	P	P		P	P	P	
85	Professional, Scientific & Tech Services	p	P	P	P	P				P	
86	Public Utility Premises	p						P			P
87	Railway Booking Office		P	P	P	P		P	P		P
88	Railway Freight Godowns					P					P
89	Recreational Club	p	P	P	P	P		P		P	P
90	Religious Premises	p	P	P	P			P			P
91	Rental and Leasing Services	p	P	P	P			P			P
92	Repair Shop	p	P	P	P			P			
93	Research & Development Centre		P	P	P	P		P	P	P	
94	Research Laboratories		P	P	P	P		P		P	P
95	Residential Building for Essential Staff					P					
96	Residential Flat / Service Apartment	p	P	P	P	P		P	P	P	
97	Restaurant	p						P			P

Table: PERMITTED USE / ACTIVITIES		VARIOUS CORE ACTIVITIES						Residenti al Zone	Commerci al Zone	Transportati on Zone	Agricultu re
S. No .	Use/Activiti es	Industri al	I T	EM Z	Institution al	Recreation al	Servic e Industr y-				
98	Retail Shop	p	P	P	P	P	P			P	P
99	Road Transport Booking Office					P			P		
100	Satellite And Tele Communication Centre					P			P		
101	Secondary School	p						P			P
102	Senior Secondary School										
103	Service Centre and Service Industry		P	P	P	P		P	P		
104	Shooting Range	p				P		P	P		
105	Shopping Mall	p	P	P				P			P
106	Showrooms					P		P			



107	Social Welfare Centre							P				
108	Special Recreation Area											
109	Specialized Park											
110	Sports Persons Apartments / Villas							P				
111	Sports Workshop	P							P		P	
112	Stadium with visitor gallery											
113	Storage Godown and Warehousing											
Table: PERMITTED USE / ACTIVITIES		VARIOUS CORE ACTIVITIES							Residential Zone	Commercial Zone	Transportation Zone	Agriculture
S. No.	Use/Activities	Industrial	IT	EMZ	Institutional	Recreational	Service Industry					
114	Swimming Pool		P	P	P	P	P		P			
115	Taxi Stand	P	P	P	P	P	P	P	P			
116	Telephone Exchange	P	P	P	P	P	P	P	P			
117	Traffic And Police Control Room	P	P	P	P	P	P	P	P			
118	Training Institute	P	P	P	P	P		P				
119	Transportation and Warehousing Services							P				
120	University and Specialized Institutes				P							
121	Vending Booth	P	P	P	P	P	P	P	P			
122	Vocational Institute		P	P	P		P					
123	Voluntary Health Services	P						P				
124	Warehousing	P						P				
125	Weekly Market	P						P	P			
126	Wholesale Business establishments	P						P				
127	Yoga And Meditation Centre	P	P	P	P	P	P	P	P			
128	Zoological Garden & Aquarium					P	P					
129	Buildings specifically required for Core Activity	P	P	P	P	P	P	P				

Mixed Use - Hospitality

Table: PERMITTED USE / ACTIVITIES		VARIOUS CORE ACTIVITIES						Residential Zone	Commercial Zone	Transportation Zone	Agriculture
S. No.	Use/Activities	Commercial	IT	Aerocity	Institutional	Recreational	Service Industry				
1	Auditorium/Open Air Theatre			P		P	P		P	P	
2	Bank	P		P	P	P	P	P	P	P	
3	Aerocity			P	P					P	
4	Bird Sanctuary				P					P	
5	Botanical Garden				P		P			P	
6	Bus Depot And Workshop	P				P	P		P	P	
7	Bus Terminal	P			P	P	P		P	P	
8	Cargo & Booking Office	P			P	P	P		P	P	
9	Children Traffic Park										
10	Cinema/Multiplex			P		P		P	P		
11	Clinic	P	P		P	P	P	P	P		
12	Clinic Laboratory	P	P	P	P	P	P	P	P		
13	Cold Storage & Ice Factory	P					P			P	
14	College/Institutes		P		P			P	P		
15	Commercial & Secretarial Training Centre	P	P		P	P	P		P		
16	Commercial Office	P	P	P	P	P		P	P	P	
17	Community Hall	P					P	P	P		
18	Conference Hall	P	P	P	P	P	P		P		
19	Convenient Shopping Centre	P	P	P	P	P	P	P		P	



20	Creche And Day Care Centre	P	P	P	P	P	P	P	P	P	P
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Table: PERMITTED USE / ACTIVITIES		VARIOUS CORE ACTIVITIES						Residential Zone	Commercial Zone	Transportation Zone	Agriculture
S. No.	Use/Activities	Industrial	IT	Aerocity	Institutional	Recreational	Service Industry				
21	Cultural And Information Centre			P	P	P				P	
22	Data Centre	P	P	P	P	P	P			P	
23	Dharamshala	P				P	P	P	P	P	
24	Dairy Farm					P				P	P
25	Dispensary	P	P	P	P	P	P	P	P	P	P
26	District Park	P	P	P	P	P	P				P
27	Drive In Cinema			P		P			P		
28	Exhibition Centre & Art Gallery/Pavilions	P	P	P	P	P	P				
29	Fair Ground/Public Meeting Ground	P					P			P	P
30	Farmhouse					P					P
31	Fire Post	P	P	P	P	P	P	P	P	P	
32	Fire Station	P	P	P	P	P	P	P	P	P	
33	Flatted Group Industry	P					P				
34	Flying Club			P		P					
35	Forensic Science Laboratory			P							
36	Forest			P		P					P
37	Gas Godown	P	P	P	P	P	P		P		
38	Guest House	P	P	P	P	P	P	P	P	P	
39	Gym/spa			P	P	P		P			
40	Health Care & Social Assistance Services	P*	P	P	P	P	P	P	P	P	P
41	Health centre for players and staff,			P		P					
42	Health Club	P		P	P	P	P	P	P		P
43	Resorts			P		P					P*
44	Hospital	P	P	P	P	P	P	P		P	
Table: PERMITTED USE / ACTIVITIES		VARIOUS CORE ACTIVITIES						Residential Zone	Commercial Zone	Transportation Zone	Agriculture
S. No.	Use/Activities	Industrial	IT	Aerocity	Institutional	Recreational	Service Industry				
45	Hostel		P	P	P	P	P	P	P	P	
46	Hotel	P	P	P	P	P	P	P	P	P	
47	Indoor Games Hall					P					
48	Indoor Games Stadium					P					
49	Industrial Plot- Industry Specific Type	P					P				
50	Informal Sector Unit	P					P				
51	Information Services	P	P	P	P	P	P		P	P	
52	Integrated Residential School				P			P			
53	International Conference Centre		P	P	P						
54	Internet Centre	P	P	P	P	P	P	P	P	P	
55	IT & ITES Building		P	P					P		
56	Junk Yard	P					P				
57	Library		P	P	P			P		P	
58	Light Industry	P					P			P	
59	Loading & unloading space	P					P			P	
60	Meditation Centre			P	P	P		P	P		P
61	Milk Chilling Centre	P				P	P				P
62	Motor Driving Centre	P*					P			P	
63	Motor Garage & Workshop	P*					P		P	P	
64	Museum / Art Galleries			P		P		P	P		
65	Music, Dance and Drama Training Centre				P	P		P			
66	Night shelter	P					P	P	P		P
67	Nursery And Kinder Garden	P			P		P	P			
68	Nursing Home/Health Centre	P	P	P	P	P	P	P	P		
69	Observatory And Weather Office			P		P					P
Table: PERMITTED USE / ACTIVITIES		VARIOUS CORE ACTIVITIES						Residential Zone	Commercial Zone	Transportation Zone	Agriculture
S. No.	Use/Activities	Industrial	IT	Aerocity	Institutional	Recreational	Service Industry				
70	Open Air Theatre				P	P		P	P		
71	Orchard					P		P			P
72	Outdoor Games Stadium					P					
73	Park	P	P	P	P	P	P	P	P	P	P
74	Parking	P	P	P	P	P	P	P	P	P	
75	Playground				P	P		P	P		
76	Pet Care Services			P		P	P	P	P		P



77	Fuel station withgarage & service stations	P	P	p	P	P	P	p	P	P		
78	Picnic Hut/Camping Site			p		P					p	
79	Planetarium	P	P	p	P	P	P	p	P	P		
80	Plant Nursery	P	P	p	P	P	P	p	P	P		
81	Police Post	P	P	p	P	P	P	p	P	P		
82	Police Station	P			p*		P	p				
83	Post Office	P	P	p	P		P			P		
84	Primary School	P	P	p	P	P	P	p	P	P	p	
85	Professional, Scientific & Tech Services	P	P	p	P	P	P			P		
86	Public Utility Premises	P					P			P		
87	Railway Booking Office		P	p	P	P	P	p	P		p	
88	Railway Freight Godowns					P					p	
89	Recreational Club	P	P	p	P	P	P	p		P	p	
90	Religious Premises	P	P	p	P		P			P		
91	Rental and Leasing Services	P	P	p	P		P			P	p	
92	Repair Shop	P	P	p	P		P					
93	Research & Development Centre		P	p	P	P	P	p	P	P		
94	Research Laboratories		P	p	P	P	P	p		P	p	
95	Residential Building for Essential Staff			p		P						
Table: PERMITTED USE / ACTIVITIES		VARIOUS CORE ACTIVITIES							Residential Zone	Commercial Zone	Transportation Zone	Agriculture
S. No.	Use/Activities	Industrial	IT	Aerocity	Institutional	Recreational	Service Industry					
96	Residential Flat / Service Apartment	P	P	p	P	P	P	p	P	P		
97	Restaurant	P		p			P			P		
98	Retail Shop	P	P	p	P	P	P			P	p	
99	Road Transport Booking Office				P			p				
100	Satellite And Tele Communication Centre				P			p				
101	Secondary School	P					P			P		
102	Senior Secondary School										p	
103	Service Centre and Service Industry		P	p	P	P	P	p	P			
104	Shooting Range	P				P	P	p	P			
105	Shopping Mall	P	P	p			P			P	p	
106	Showrooms			p								
107	Social Welfare Centre						P			P	p	
108	Special Recreation Area			p								
109	Specialized Park			p								
110	Service Apartments / Villas			p		P						
111	Sports Workshop	P					P		P	P	p	
112	Stadium with visitor gallery											
113	Storage Godown and Warehousing	p	p						p	p		
114	Swimming Pool		P	p	P	P		p				
115	Taxi Stand	P	P	p	P	P	P	p	P	P		
116	Telephone Exchange	P	P	p	P	P	P	p	P	P		
117	Traffic And Police Control Room	P	P	p	P	P	P	p	P	P		
118	Training Institute	P	P	p	P		P			P		
119	Transportation and Warehousing Services						P		P	P		
118	Training Institute	P	P	p	P		P			P		
119	Transportation and Warehousing Services						P		P	P		
120	University and Specialized Institutes				P							
121	Vending Booth	P	P	p	P	P	P	p	P	P	p	
122	Vocational Institute		P	p	P	P						
123	Voluntary Health Services	P					P			P		
124	Warehousing	P					P			P	p	
125	Weekly Market	P					P	p	P		p	
126	Wholesale Business establishments	P					P		P			
127	Yoga And Meditation Centre	P	P	p	P	P	P	p	P		p	
128	Zoological Garden & Aquarium					P					p	
129	Buildings specifically required for Core Activity	P	P	p	P	P	P					

*Permitted with special permission from the Authority along 24 mt. wide road