

YEIDA Phase-I

[Notified area of Districts of Gautam Buddh Nagar and Bulandshahr]



Draft Master Plan - 2041

YEIDA PHASE - I

Yamuna Expressway Industrial Development Authority



MaRS Planning & Engineering
Services Pvt. Ltd.

Yamuna Expressway
Industrial Development
Authority



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LIST OF ACRONYMS

ATM	Air Traffic Movements
BRTS	Bus Rapid Transit System
CBD	Central Business District
CGWB	Central Ground Water Board
CNCR	Central National Capital Region
CPCB	Central Pollution Control Board
CWC	Central Water Commission
DFC	Dedicated Freight Corridor
DMIC	Delhi Mumbai Industrial Corridor
DNGIR	Dadri Noida Ghaziabad Investment Region
FAR	Floor Area Ratio
GIS	Geographical Information System
HCZ	Highway Corridor Zone
HSR	High Speed Rail
LPCD	Litres Per Capita Per Day
LPG	Liquified Petroleum Gas
MDR	Major District Road
MPPA	Million Passengers per Annum
MRTS	Mass Rapid Transit System
MSW	Municipal Solid Waste
NCR	National Capital Region
NCT	National Capital Territory
NH	National Highway
NOIDA	New Okhla Industrial Development Authority
ODR	Other District Road
ORC	Orbital Rail Corridor
PAL	Planning Activity Level
PRT	Personalised Rapid Transit
RORC	Regional Orbital Rail Corridor
ROW	Right of Way
RRTS	Regional Rapid Transit System
SC	Scheduled Caste
SH	State Highway
ST	Scheduled Tribe
STP	Sewage Treatment Plant
TOD	Transit Oriented Development
URDPFI	Urban and Regional Plans Development Formulation and Implementation
WPR	Work Participation Rate
WTP	Water Treatment Plant
YEIDA	Yamuna Expressway Industrial Development Authority

SECTION – 1: DATA ANALYSIS

1 BACKGROUND

Urbanization is a multifaceted process that transforms the built environment, converting parts of rural areas to urban settlements, while also impacting spatial distribution of population to urban areas. Urbanization essentially attracts enhanced investments and increased infrastructure provisions. With a vision to cater to the rapid urbanization of Delhi and surrounding regions, the National Capital Region was conceived and created under the NCRPB Act, 1985 of Government of India. The National Capital Region comprises of the National Capital Territory (NCT) of Delhi, parts of Haryana (fourteen districts), Uttar Pradesh (eight districts) and Rajasthan (two districts). In order to warrant planned development of industrial and allied activities in the state, Government of Uttar Pradesh enacted the UP Industrial Development Act, 1976. NOIDA, Greater NOIDA and Yamuna Expressway Industrial Development Authority (YEIDA) have been created under the provisions of this Act for systematic development of their respective notified areas adjoining Delhi.

The Yamuna Expressway Project was conceived with the idea to open up avenues for Industrial and Urban development of the region, to reduce travel time between New Delhi and Agra and for convergence of tourism and other allied activities. The Yamuna Expressway Industrial Development Authority has been constituted with the objective to ensure planned development of the area through enhanced infrastructure provision, investment climate and economic development. The YEIDA area is spread around the Yamuna expressway, a 165 km long expressway on the eastern bank of Yamuna River.

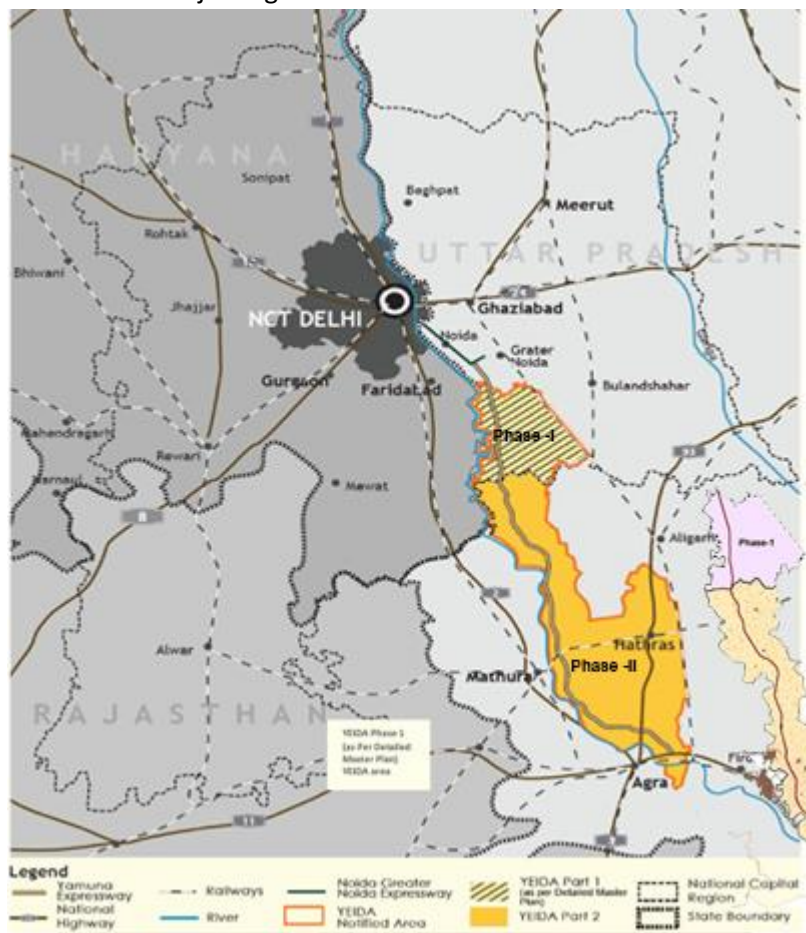


Figure 1-2: YEIDA Phase I and Phase II areas

Therefore, with an expected large-scale development and intended industrialisation along Yamuna Expressway the Authority intended to prepare the Master Plan for their notified area. Due to the development pressure from the close by areas viz., NOIDA, Greater NOIDA, Faridabad, Dadri and Khurja etc., Yamuna Expressway Industrial Development Authority decided to plan the YEIDA Region

in two phases designated as YEIDA Phase-I and YEIDA Phase-II and appointed the consultants to prepare the YEIDA Phase-I (comprise of parts of Gautam Budh Nagar and Bulandshahr district) Master Plan on priority.

1.1 Legal Framework for Plan preparation

The Perspective Plan and Master Plan (Phase 1) - 2031 for Yamuna Expressway Industrial Development Area is being prepared within the overall policy framework laid down in the following-

- The UP Industrial Area Development Act 1976
- The State Government policy for Development of Yamuna Expressway Industrial Development Authority 2007 issued vides G.O. (Government Order) no. 4636/77-4-07-486 N/07 dated 29/12/2007. The relevant extracts of the policy regarding preparation of Plan are as follows-

“2.1 ताज एक्सप्रेस-वे के दोनों तरफ स्थित क्षेत्रों के सुनियोजित विकास हेतु निम्न बातों का होना आवश्यक है :-

- अ. ताज एक्सप्रेस-वे प्राधिकरण के रेग्युलेटेड एरिया को बढ़ाया जाना।
- ब. बढ़ी हुयी एरिया में विभिन्न सम्भावित विकास कार्यक्रमों की पहचान किया जाना।
- स. बढ़े हुये क्षेत्र के लिये मास्टर प्लान का तैयार किया जाना।
- ड. विकास हेतु धन की व्यवस्था किया जाना।

2.2 नोयडा और ग्रेटर नोयडा के बीच में एक्सप्रेस-वे पूर्व में संचालित है और यह नयी एक्सप्रेस वे नोयडा इंड (जीरो प्वाइंट) जो एक्सप्रेस-वे से 20 किलोमीटर दूर से शुरू होकर लगभग 165 किलोमीटर दूर स्थित आगरा तक है।

2.3 टी.ई.ए. उस क्षेत्र का निर्धारण करेगा जो इस सुनियोजित विकास प्लान में शामिल होंगे और उनके लिये मास्टर प्लान बनायेगा और यह प्रक्रिया विभिन्न चरणों में तैयार की जायेगी।

2.4 टी.ई.ए. के द्वारा जो मास्टर प्लान बनाया जायेगा वह राज्य की विकास नीति के ढांचे के अनुकूल होगी और निम्नलिखित उद्देश्यों की पूर्ति करेगा।

- अ. क्षेत्र के एवं इसके अन्तर्गत आने वाले पर्यावरण का सुगठित विकास किया जाना।
- ब. जो स्थल जिस कार्य के लिये अनुकूल है उनको प्रोत्साहित किया जाना और लोगों में अच्छा कार्य करने तथा अच्छा जीवन बिताने का वातावरण पैदा करना।

2.5 मास्टर प्लान में विभिन्न क्षेत्रों की पहचान की जायेगी। जहां पर विभिन्न उद्देश्यों जैसे औद्योगिक, आवासीय, वाणिज्यिक, संस्थागत, सरकारी अर्द्धसरकारी क्रिया कलापों जैसे भौतिक मूलभूत सुविधाओं के साथ-साथ यातायात, विद्युत, जलापूर्ति, जलनिकासी, कूड़ाकरकट के निस्तारण आदि का विकास किया जाना हो। मास्टर प्लान में मनोरंजन की सुविधाओं व दूरभाष बाजार, नीति संरक्षण, अग्नि, सुरक्षा, दुग्ध वितरण, पेट्रोल स्टेशन व अन्य सम्बद्ध सेवाओं के विकास चरणबद्ध तरीके से किये जाने का प्राविधान भी होगा।

2.6 उच्च गुणवत्ता एवं त्वरित विकास की विकास गतिविधियां सुनिश्चित करने हेतु ताज औद्योगिक विकास प्राधिकरण, समन्वयक संस्था (नोडल एजेंसी) होगी। विकास गतिविधियों को मोटे तौर पर निम्नलिखित श्रेणी में विभाजित किया जायेगा।

- (अ) भूमि का विकास— 1000 हेक्टेयर से कम
 (ब) भूमि का विकास— 1000 हेक्टेयर अथवा इससे अधिक
 उपर्युक्त (ब) में पड़ने वाला क्षेत्र विशिष्ट विकास परिक्षेत्र (Special Development Zone) की श्रेणी में वर्गीकृत किया जायेगा।

2.7 मास्टर प्लान तैयार करने के अतिरिक्त अन्य कार्यों के साथ-साथ ताज औद्योगिक विकास प्राधिकरण निम्नलिखित के लिये भी जिम्मेदार होगा—

(द) मांग एवं स्थानीय आवश्यकता को देखते हुए 1000 हेक्टेयर से कम के भूखण्डों का विकास (आन्तरिक विकास सहित) किया जाना। उक्त विकास छोटे साइज के व्यक्तिगत आवास/सामूहिक आवास/अन्य उद्देश्यों व आवासीय या अनावासीय उद्देश्यों के लिये पूर्व निर्धारित दरों पर या बोली के आधार पर जैसा कि ताज औद्योगिक विकास प्राधिकरण उचित समझे, ताज औद्योगिक विकास प्राधिकरण द्वारा समय-समय पर निर्धारित/आवृत्त किया जायेगा।

- Yamuna Expressway Industrial Development Area (Plan preparation and finalization) Regulation 2011. The relevant extracts for preparation of the Plan are as follows –

- 3 (1)– प्राधिकरण यथासंभव शीघ्र नगर योजना एवं नागरिक सर्वेक्षण करेगा और औद्योगिक विकास क्षेत्र के लिए योजना का प्रारूप तैयार करेगा।
- (2) योजना के प्रारूप में —
- (क) विद्यमान विभिन्न सेक्टरों का उल्लेख एवं वर्णन किया जायेगा जिसमें विकास क्षेत्र अथवा इसके भाग को विकास के उद्देश्य से विभाजित किया जाना हो तथा प्रत्येक सेक्टर में भूमि का उपयोग किये जाने की शक्ति का उल्लेख किया जायेगा।
- (ख) विभिन्न भू-उपयोग के अधीन भूमि के क्षेत्रफल का उल्लेख किया जायेगा।
- (ग) निम्नलिखित का वर्णन एवं उल्लेख होगा।

(एक) विद्यमान सड़के।

(दो) परिवहन एवं संचार की, जिसमें रेल और हवाई-अड्डा भी सम्मिलित है, विद्यमान रूप-रेखाएं।

- (3) योजना के प्रारूप में निम्नलिखित का उल्लेख हो सकता है—
- (क) विद्यमान सार्वजनिक सुविधाएं और भौतिक विशिष्टताएं यथा नदियां एवं जल निकाय आदि।
- (ख) विनियम 4 में विनिर्दिष्ट सभी विषय, उनमें से कोई विषय।
- (4) योजना के प्रारूप में ऐसे मानचित्र, डाईग्राम, चार्ट-रिपोर्ट और किसी व्याख्यात्मक या वर्णनात्मक प्रकृति के ऐसे अन्य लिखित विषय होंगे जो औद्योगिक विकास क्षेत्र के सम्पूर्ण या किसी भाग के विकास से संबन्धित हों,
- (5) योजना के प्रारूप के भाग को सृष्ट करने वाले लिखित मामलों में मुख्य विकास संबंधी विशिष्टताओं का ऐसा सारांश और ऐसा वर्णनात्मक मामला भी सम्मिलित होगा, जैसाकि प्राधिकरण मानचित्रों, चार्टों, डाईग्रामों द्वारा और अन्य दस्तावेजों द्वारा संसूचित प्रस्तावों को समझाने या स्पष्ट करने के लिए आवश्यक समझे।
- (6) विद्यमान भू-उपयोग की कोई योजना, में विभिन्न प्रयोजनों के लिए भूमि के वांछित उपयोग को प्रस्तावित करने की योजना प्रारूप का भाग भी होगी।”

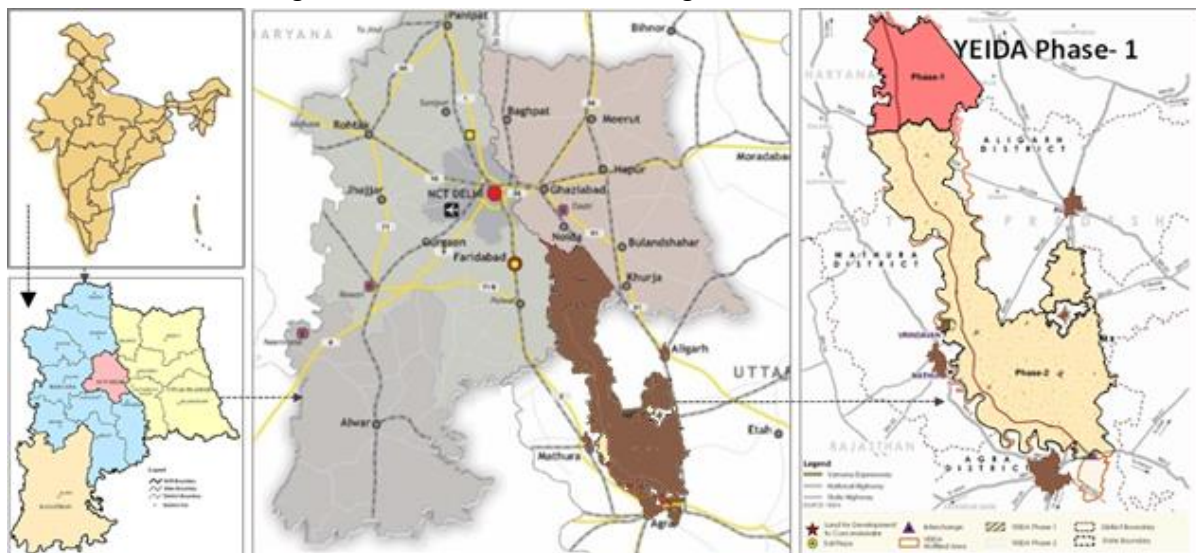
2 INTRODUCTION TO THE SITE AREA

The concept of Yamuna Expressway (erstwhile Taj Expressway) was conceived by the Govt. in the year 2001 with an aim to reduce travel time between Noida and Agra through a 100 m wide and a 165 km long Expressway on the eastern bank of Yamuna River. It would reduce the travel time considerably to just 100 minutes. The new 6 Lane (extendable to 8 lanes) access-controlled Expressway with brand name of Yamuna Expressway also envisaged to open a vast area on the eastern bank of Yamuna River for Urban Development.

2.1 Location

With a vision to implement the Yamuna Expressway Project and allied development in the region, Government of UP constituted Yamuna Expressway Industrial Development Authority (YIEDA) (erstwhile Taj Expressway Industrial Development Authority) vide its Notification No. 697/77-4-2001-3(N)/2001 dated 24th April 2001, under UP Industrial Area Development Act, 1976 (UP Act No. 6 of 1976). 1149 villages of Gautambudh Nagar, Bulandshahar, Aligarh, Hathras, Mathura and Agra districts have been notified under YIEDA vide various Notifications of Govt. of UP. YEIDA notified area covers approx. 3429 sq. kms. falling in six districts to be developed in two phases.

Figure 2-1: Location of YEIDA Planning area and NCR in India



Source: YEIDA Authority, 2019, computer generated graphics

The area of YEIDA is divided into two parts for the purpose of planning and development, i.e. Phase 1 consisting of 226 villages of the districts of GautamBudh nagar and Bulandshahar. Rest of the YEIDA area comes under phase-2. The notified area of Yamuna Expressway Industrial Development Authority is outlined in the following exhibit.

Table 2-1: Notified Planning areas post Amendment

	Phase 1			Phase 2				
Districts	GB' Nagar	Bulandshahar	Total	Aligarh	Mathura	Hathras	Agra	Total
Tehsils	Sadar, Jewar	Sikandrabad, Khurja		Khair	Sadar and Math	Sadabad, Hathras	Sadar, Etmadpur	
Notified Villages	131	95	226	92	415	358	58	923

Source: Notification of YEIDA

2.2 Connectivity

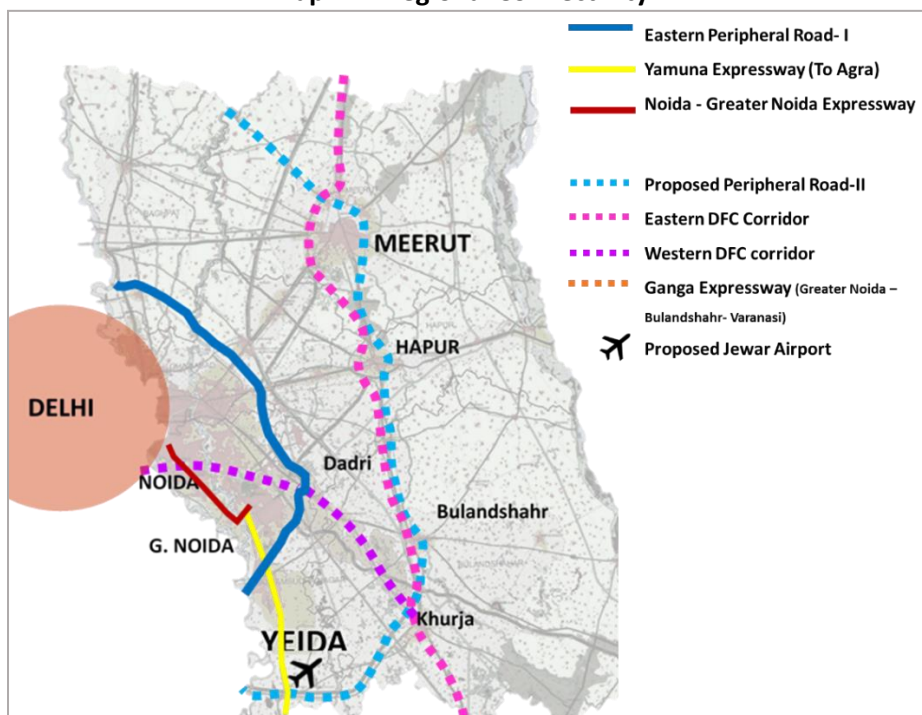
YEIDA Phase 1 is influenced by the growth dynamics of Noida and Greater Noida which are to the North of the area. The area is bounded by Greater Noida Area in the North, Bulandshahar and Khurja Development Area in the East, and Aligarh District in the South.

2.2.1 Road Connectivity

YEIDA is strategically surrounded by major cities such as Noida, Greater Noida, Faridabad, Khurja, Dadri, Aligarh, Mathura, Agra etc. This provides YEIDA strong road Connectivity with the surrounding areas. YEIDA phase-1 is at a distance of around 50 km from Delhi and it is connected with NH-9 and Mahatma Gandhi Marg. In addition to Yamuna Expressway, Dankaur-Sikandrabad Road, Jewar-Khurja Road and Jewar -Bulandshahar Road are the major roads passing through the area.

a) Existing Road Connectivity:

Map 2-1: Regional Connectivity



b)

Yamuna expressway and Eastern peripheral expressway are two major existing roads and provide good regional connectivity to the National Capital Region. It is directly connected to the ring road of Delhi through Yamuna expressway on the northern side. Eastern peripheral express pass through

YIEDA region and connect to Palwal and Manesar in the west and Ghaziabad in the north. The expressway is 135 m long, and it connects NH-1 at Kundli to NH-2 at South of Faridabad at Sikri through Ghaziabad and Noida on the Eastern side of NCT Delhi. In addition, the city is adjacent to Yamuna expressway which is directly connected with major district road and other district roads. The stretch of Yamuna Expressway has 100 m ROW with 50m wide. Two interchange points (At the intersection of Eastern Peripheral Expressway and Yamuna Expressway in the north and at the intersection of 120 m wide peripheral ring road and Yamuna Expressway in the South near Jewar) along the stretch of Yamuna Expressway falls within YEIDA.

c) Proposed Connectivity:

Proposal of Extension of Delhi Metro network up to the upcoming Noida International airport, Orbital rail corridor, Regional Rapid transit system, Dedicated Freight Corridors, High-Speed Rail and RRTS to khurja and Palwal will be conducive in intercity movement through public transport mode as both the towns are close to YIEDA phase 1 region. RRTS will significantly reduce travel time and will provide fast connectivity to other centres of NCR. To attract the traffic to the proposed airport at Jewar, 8 rail corridors are identified by NCRTC i.e., Rapid Rail Transit System. Ganga Expressway will connect surroundings of Delhi NCT such as: Palwal, Ghaziabad and Noida. North South Corridor will directly connect Phase – 2 of YEIDA Region to Delhi NCT. Eastern DFC will directly connect Phase -2 of YEIDA region with Aligarh, Khurja, Bulandshahr, Hapur and Meerut. Western DFC will be helpful to connect Rewari, Faridabad and Ghaziabad.

The regional expressways which are in close vicinity to YIEDA region and will be conducive in enhancing the connectivity to the NCR region.

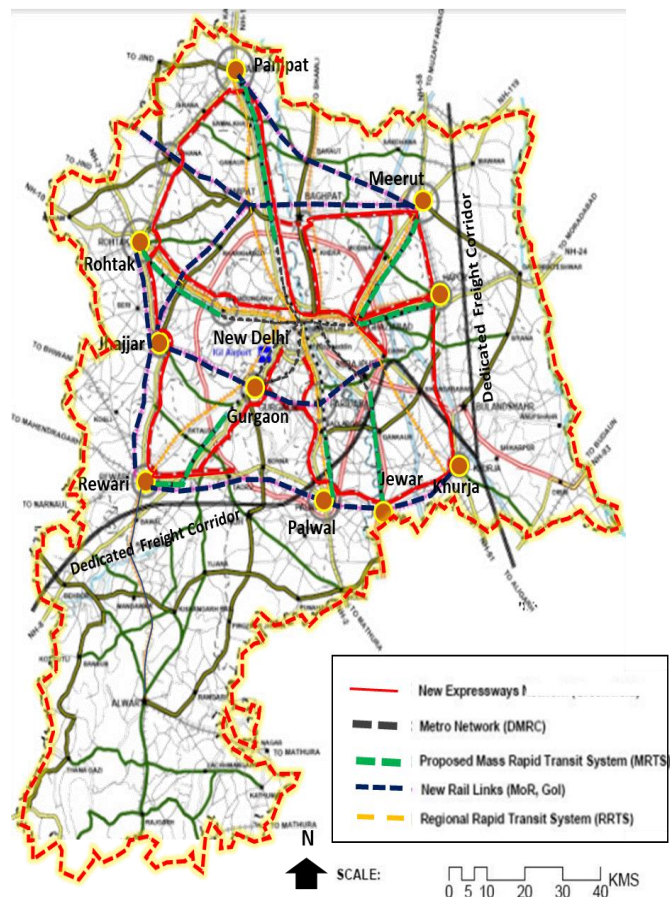
- **Meerut – Bulandshahr – Varanasi (Ganga Expressway):** Ganga expressway is 594 km long six lane road with a route alignment connecting NH-334 in Meerut with Prayagraj. The proposed right of way is 120 m with service road on one side of the expressway for the movement of local village traffic. The expressway will pass through 12 districts of Meerut, Amroha, Bulandshahr, Badaun, Shahjahanpur, Farrukhabad, Hardoi, Kannauj, Unnao, Rae Bareli, Pratapgarh and Prayagraj.
- **Rewari-Palwal Khurja Expressway:** This expressway proposed between Rewari and Khurja will provide East West connectivity across NCR.
- **Kundli – Manesar – Palwal Expressway:** The expressway is under construction and runs west of Delhi. As Palwal is in a close proximity to YIEDA region this will directly help YIEDA phase 1 in connecting to the west part.
- **Ghaziabad – Bulandshahr – Khurja Expressway:** Ghaziabad-Khurja Expressway provides a direct link to Khurja where the proposed Eastern Dedicated Freight Corridor (Rail) passes. Khurja has great potential for development as a major transportation hub for collection and distribution of goods. Khurja is on the SE side of the YIEDA phase 1 region and approximately 33 km from proposed Jewar airport.
- **Delhi – Faridabad – Ballabgarh – Palwal Expressway:** Faridabad-Ballabgarh complex, an important industrial town of NCR, is re-emerging as a fast-growing urban centre with metropolitan dimensions. This Expressway also connects Delhi with the proposed 2nd International Airport at Jewar.
- **Rewari-Palwal-Khurja Expressway:** The Rewari-Palwal-Khurja Expressway forms the southern portion of the outer grid Expressway system. This provides connectivity to the proposed 2nd International Airport at Jewar.
- **Khurja-Hapur-Meerut Expressway:** The Khurja-Hapur-Meerut Expressway forms the eastern portion of the outer grid Expressway system.

2.2.2 Rail Connectivity

Chola Railway Station of Delhi Kolkata Railway line which connects through a broad-gauge line to Delhi falls in eastern boundary of YEIDA Region. The proposed new rail link connecting Khurja to Palwal is passing through YEIDA phase 1 region. The mass rapid transit network is also proposed to be connected from Jewar as per the Functional Plan of Transport for NCR.

The Eastern Dedicated Freight Corridor is passing adjacent to the city boundary parallel to Delhi Kolkata Railway line. YEIDA falls under the jurisdiction of northern railway, and it is surrounded by Eastern and western DMIC (Delhi-Mumbai Industrial corridor currently known as DFC). The western DFC connects Dadri to Navi Mumbai by freight movement and eastern DFC connects Amritsar to Howrah.

Map 2-2: Existing and Proposed Major Rail Network for NCR



Source: Functional Plan of Transport for NCR, 2032

2.2.3 Air Connectivity

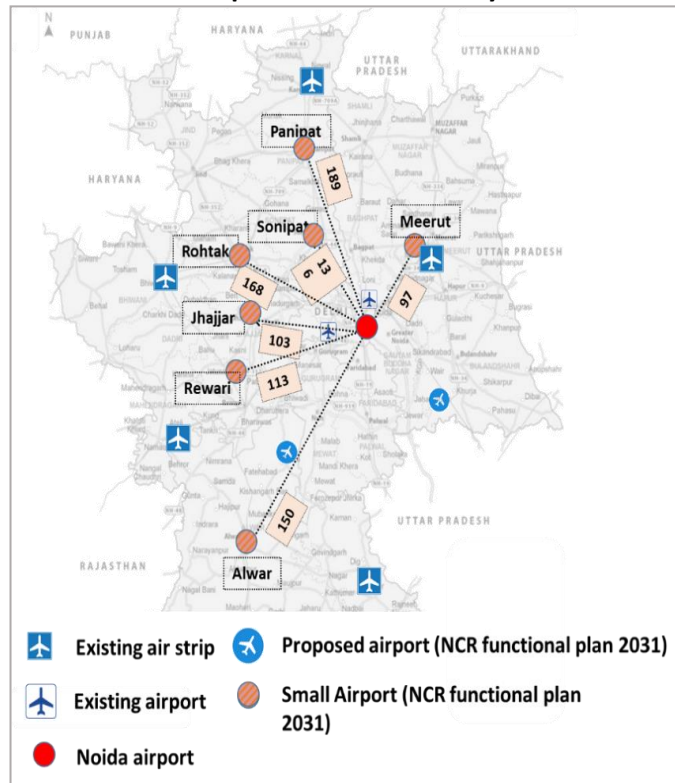
Nearest Airport to YEIDA Phase 1 is the Indira Gandhi International Airport at New Delhi at a distance 72 km presently. A new greenfield Noida international airport is being proposed in the southern part of the planning area and considered to be the nearest airport once it is operational. It is situated at a distance of 36 km from Bulandshahr, 60 km from Noida, 70 km from Faridabad and Ghaziabad, about 48 km from Greater Noida, 65 km from Gurgaon (Gurugram), 89 km from Mathura and 130 km from Agra.

The techno-economic feasibility report at Noida international airport states that there will be four development stages which would handle a traffic of 12 MPPA, 30 MPPA, 50 MPPA and 70 MPPA. These activity levels have been denoted as Planning Activity Levels (PAL). Future activity levels are projected as the annual forecast of passenger traffic, air cargo tonnage, and air traffic movements (ATMs) for each PAL. Presently, the execution of development work is under progress.

As per Noida International airport (NIA) master plan report the NIA will be the second airport in the NCR and will complement Indira Gandhi International Airport to meet the aviation demands of the growing population in the region. The Airport is expected to accommodate multiple runways in the long term and become one of the busiest airports in the world. NIA's mission is to activate Greater Noida's catchment area and extended catchment areas in neighboring regions to connect it to other metropolitan areas in the region. It would be a user-friendly and efficient Airport.

It would encourage religious tourism by improving the connectivity via Mathura, Vrindavan, Rishikesh, Haridwar in Uttar Pradesh and Uttarakhand State.

Map 2-3: Air Connectivity



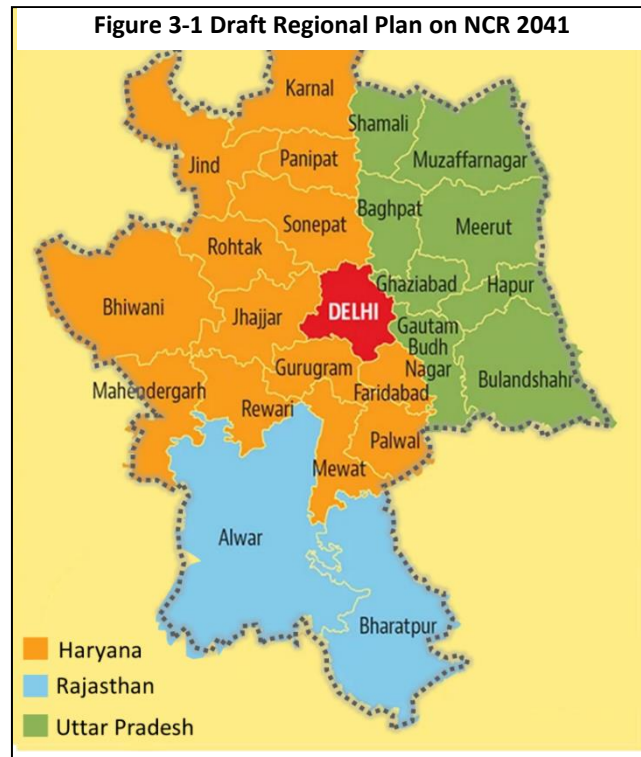
3 THE NCR CONTEXT & PREVIOUS PLANS

This section details out the planning efforts and strategies having direct or an indirect impact on the planning process of YEIDA. This includes the existing master plan prepared for YEIDA for the horizon year of 2031, Uttar Pradesh Sub Regional Plan- 2021, and National Capital Region Plan for 2021 and 2041.

3.1 National Capital Region Plan- Draft—2041

National Capital Region has been created under the National Capital Region Planning Board (NCRPB) Act, 1985 of Government of India, based on authorization of the Parliament by all the four States/UTs. The NCR area is 55,083 sq. km. The plan aims for people centric planning and ensuring development with conservation. Exploration of possibilities of establishing 5 to 8 new greenfield townships are proposed, based on productive economic impulses in UP, Haryana and Rajasthan sub regions. The plan priority areas are transport and logistics, economic corridor, future ready citizen infrastructure etc.

Regional Plan-2041 has proposed the development of NCR through five policy zones, namely, (i) NCT Delhi, (ii) Central National Capital Region (CNCR) (iii) Highway Corridor Zone (iv) Conservation Zone (natural and manmade) and (v) Rest of NCR.



3.1.1 YIEDA in NCR Settlement Hierarchy

NCR plans for a seven-tier settlement hierarchy for 2041 with the highest in the pyramid being a metro centre. Metro centres are defined as settlements having a population of greater than 10 lakhs. YEIDA is one of the 11 metro centres proposed in NCR regional plan for 2041. Others being Muzaffarnagar, Meerut and NCT of Delhi. The large projects like International Airport at Jewar, and upcoming World Class Film City are also

3.2 UP Sub Regional Plan 2021

Uttar Pradesh sub regional plan of 2021 mentions YEIDA in the context of "Dadri- Noida- Ghaziabad Investment Region" (DNGIR). The sub regional plan envisages a requirement of land for greenfield townships for the increase in new population and non-agricultural economic activities due to the investment regions and the transport infrastructure along with it. **Hence, Yamuna Expressway Industrial Development Authority (YEIDA) has proposed an Industrial Green field Township of a Metro size along Yamuna Expressway outside CNCR in UP Sub-region with an approximate Urbanisable area of 20,000 Ha for 2021 with an approximate population of 20 lakh.**

3.3 Planning History of YEIDA

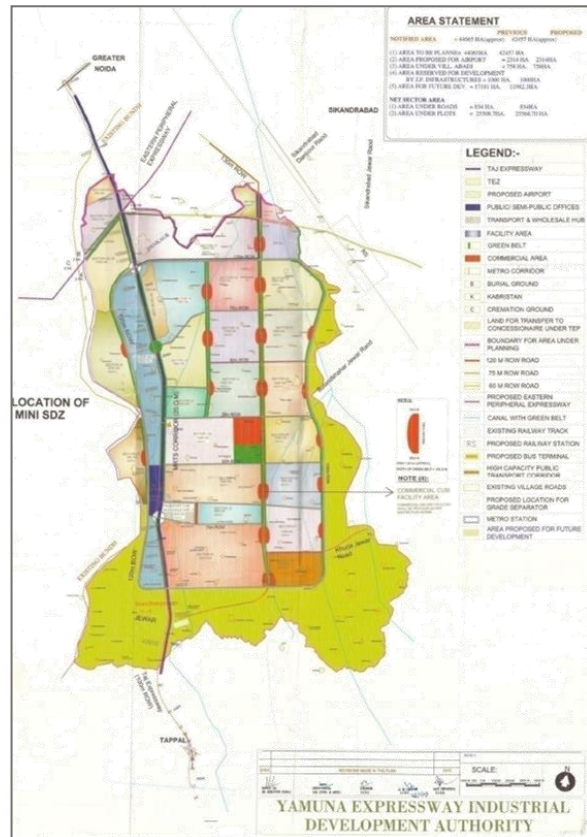
Planning proposals for YEIDA started with a conceptual structure plan prepared in 2007. Master plans for both 2021 and 2031 were prepared and approved by 2013.

3.3.1 City Level Zonal Development Plan

In the year 2007, YEIDA prepared a Conceptual Structure Plan for the Yamuna Expressway Area. The key concern of the plan was to strike a balance between development and environment protection. The Conceptual Structural Plan was approved by the Board of Authority in its 17th Board Meeting held on 14th November 2007. **The Plan laid out a network of roads in the area dividing it into land parcels of approximately 1000 Ha each as Special Development Zones (SDZs).** Later in the year 2008 the Conceptual Structure Plan was re-designated as ‘City Level Zonal Development Plan’ and slightly modified based on the satellite imagery data. Some policy framework for its development was also laid out. The Plan was approved by the Board of the Authority in its 23rd meeting held on 24th July 2008. The Plan envisaged a **population of 7.0 lakhs by the year 2031** (excluding Rural settlement).

The area under plots in the plan was divided into sectors of modules of 1000 Ha, which included land-uses such as- Core Activities, Residential, Commercial, Institutional/ Amenities, Roads, Open spaces, and other circulation etc. **The city level zonal development plan is a broad plan with provision of mainly SDZ land use.** These SDZ’s were obligated to provide minimum 35 percent of the core activities- Industries, IT Parks, Institutional area/ Parks, BT parks, Sports Complex, Recreational Hubs and Service Industry Hubs. Although the authority experienced a lack in demand for SDZ, the demand of land for specific land uses was experienced in its various schemes in accordance with SDZ Policy. Hence the authority decided to prepare the master plan specifying various land uses such as residential, industrial, commercial, recreational etc. and earmarking some of the areas for mixed use.

Figure 3-2: City Level Zonal Development Plan for YEIDA



3.3.2 Master Plan 2021

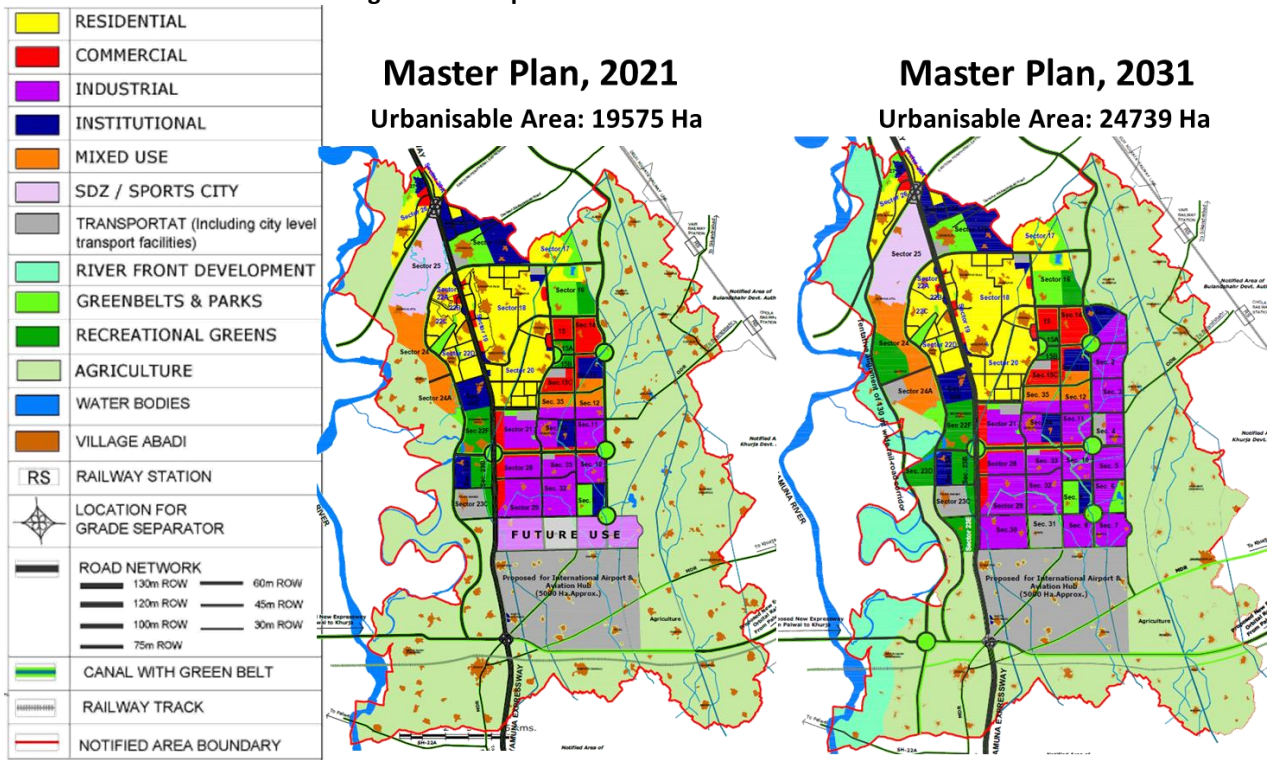
Master Plan 2021 envisaged an Urbanisable area of 19,575.12 hectares. The proposed Land use classification for area focused on creating residential areas at Sector 18 and Sector 20 towards the opposite side of Yamuna Expressway from that of the Sports city.

Table 3-1: Proposed Land Use- Master Plan 2021

Land Use	Area (Ha)	Percentage
Commercial	1275.12	6.9
Industry	2394.15	13.0
Institution	1617.02	8.8
Mixed Use	1219.82	6.6
Special Development Zone	1142.87	6.2
Residential	4569.76	24.8
Transportation	2480.34	13.4
Greens	3751.59	20.3
Total (Urban Area excluding Village Abadi)	18450.43	100
Village Abadi Area	1124.69	
Total	19,575.12	

Source: YEIDA Master Plan (Phase-1), 2031

Figure 3-3: Proposed Master Plan 2021 & 2031



Source: YEIDA Master Plan (Phase-1), 2031

3.3.3 Master Plan 2031

The Master Plan 2031 envisaged a development concept of Industrial Eco-City for YEIDA Phase- 1. The overall principles deployed for the master plan was of polycentric city, Green City, Eco- Industrial City, Integrated Infrastructure and marking appropriate densities.

The **Population projected for Master Plan 2031 was 35 lakhs in an Urbanisable area of 24739.01 Ha.**

The break-up of Proposed Land-use 2031 for YEIDA has been shown in the table below:

Figure 3-4: Proposed Land Use Classification- 2031

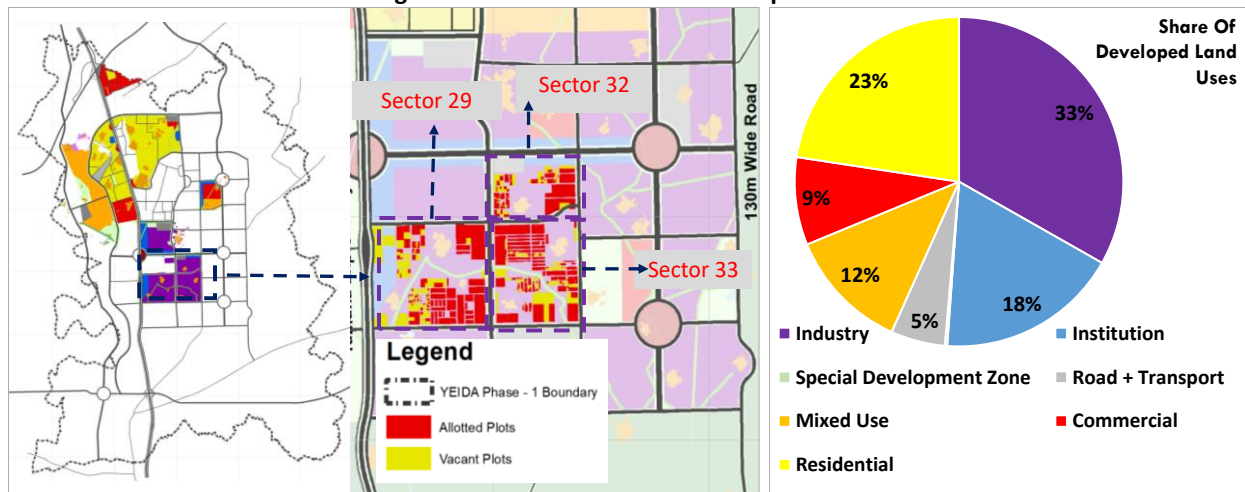
Land Use Category	Area (ha)	Percentage
Commercial	1275.12	5.4
Industrial	4698.15	20.0
Institutional	1759.03	7.5
Mixed Use	1370.23	5.8
Special Development Zone	1142.87	4.9
Residential	4569.52	19.5
Transportation	3512.13	15.0
Greens	5148.19	21.9
Total (Urban Area excluding Village Abadi)	23475	100
Village Abadi Areas	1263.79	
Total	24,739.01	

Source: YEIDA Master Plan (Phase-1), 2031

A grid iron structure was chosen as the basic structure of the plan. The 130 m road acts as the major spine of the city with high intense activities planned around it. The city centre was proposed towards the eastern side of the centre of the planning area. A hierarchical residential system of residential block, community and sectors were proposed. The Plan tried to ensure unhindered connectivity to ensure support to the industries and act as a logistics hub. Comparing the Master Plan 2021 & Master Plan 2031, it is observed that the Master Plan is proposed to be developed in two stages with the first stage development proposed till 2021 for an area of 19575 ha while the second stage is proposed till 2031 for an area of 24739 ha. The proposed area under Transportation was increased from 880 ha to 3512 Ha. Green areas proposed increased significantly from 908 Ha to 5148 Ha. Residential area has remained same but due to increase in urbanizable area landuse percentage differs. Proposed area under industrial is found to increase from 2394.15 ha in 2021 to 4698.15 ha in 2031.

3.3.4 Current Status of Development

Figure 3-5: Current Status of Development



As shown in the graph above, 1/3rd part of the land developed is Industrial followed by Commercial. Sectors 29, 32 and 33 are mainly those industrial sectors where land has been allotted. Commercial areas (18%) have been proposed in hierarchy, in areas with prime connectivity planned as commercial to avoid congestion. Residential plots have been the highest to be sold/ layouts approved on ground compared to the other land uses. The highest sale in residential plots could be attributed to the higher demand of housing for the people working in Greater Noida and other parts of NCR. Although, the numbers show that the targets of 2021 have not been achieved as per the implementation stages of Master Plan 2031, but after the development of Noida International Airport, the resultant development is expected to take place in form of residential, commercial and industrial uses.

3.4 Need for revision of Master Plan 2031 (Phase-1)

The Govt of Uttar Pradesh has approved the Master Plan 2031 phase 1 of the notified area of District Gautam Budha Nagar and Bulandshahr through Govt order dated 08/10/2013 and amended master plan 2031 has been approved by State Government on dated 20/04/2018 (The amendment related to International Airport). This comprehensive plan is designed to guide the sustainable development of the area, addressing various aspects such as land use, infrastructure, transportation, housing, and environmental conservation.

With the YEIDA 2031 Master Plan in effect, significant new developments such as Film City, Noida International Airport, Medical City, IT City, and Sports City have emerged, bringing transformative opportunities to the region. Recognizing the need to address the evolving landscape and manage these developments effectively, the authority has decided to prepare a comprehensive Master Plan 2041. The area around the Noida International Airport, in particular, requires careful attention to prevent unplanned urban sprawl and congestion. To maximize the potential of this rapidly expanding area, the concept of an aerotropolis—a planned airport city—will be incorporated to capture the value of surrounding land and create a thriving hub for business, logistics, and residential life.

Moreover, with the airport set to become a major cargo hub for India, the master plan will integrate robust infrastructure to support logistics and trade, driving economic growth and job creation. Environmental sustainability will also be a key focus, emphasizing green building standards and sustainable transportation to ensure the region's long-term livability.

4 DEMOGRAPHY AND SETTLEMENT ANALYSIS

Demographic trends help in analysing the population size, territorial distribution and composition including the changes over decades. It provides a lot of indicators regarding the economic growth of the region. Demography not only research the current population, but it works more with the factors that can influence population change. This chapter is based on the demographic dataset of 2001 and 2011 census.

4.1 Population Size and Distribution

The YEIDA phase 1 comprises of two districts i.e., Gautam Buddha Nagar and Bulandshahr which includes four tehsils that are Jewar, Khurja, Sadar and Sikandrabad. Four Tehsils comprise of 226 villages. **Total population of the existing planning area as per census 2011 is 4,93,983 in which 14.6% is urban population and 85.37% is rural population. Jewar** tehsil had the highest population of 1,57,328 and Sadar tehsil had the lowest population of 75,173.

Table 4-1: Tehsil-wise population distribution

District	Tehsil	Population (2011)		
		Rural	Urban	Total
Gautam Buddha Nagar	Jewar	1,57,328	58,729	2,16,057
	Sadar	75,173	13,520	88,693
Bulandshahr	Sikandrabad	78,929	0	78,929
	Khurja	1,10,304	0	1,10,304
Total		4,21,734 (85.37%)	72,249 (14.62%)	4,93,983

Source: Census of India 2011

4.2 Population Growth Rate

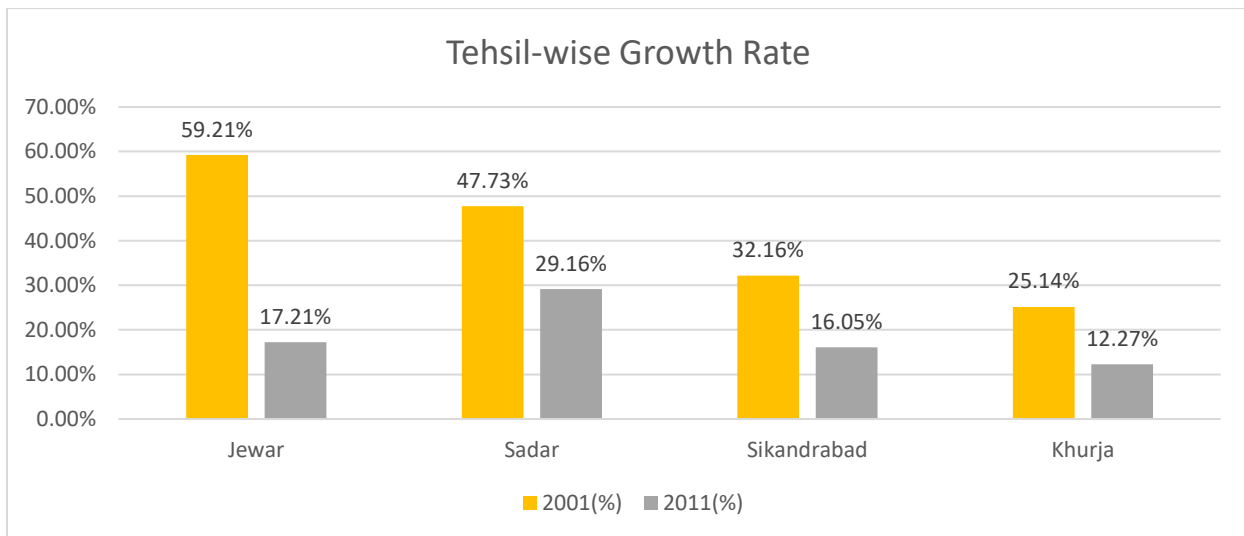
The trend analysis of growth rate provides a brief understanding regarding the growth potential along with growth direction of the region. The decadal population growth rate of Uttar Pradesh as per census 2011 is around 20.2%, while the growth rate of Gautam Budha Nagar and Bulandshahr districts is 49.1% and 16.3% respectively. The growth rate of tehsil Jewar, Sadar, Sikandrabad and Khurja is 39%, 20%, 31% and 52%.

Table 4-2: Decadal Growth Rate

Sr. No.	Administrative level	Name	Decadal Growth Rate	
			2001 (%)	2011(%)
1	State	Uttar Pradesh	25.85%	20.23%
2	District	Gautam Budh Nagar	41.00%	37.00%
3		Bulandshahr	29.00%	20.00%
4	Tehsil	Jewar	59.21%	17.21%
5		Sadar	47.73%	29.16%
6		Sikandrabad	32.16%	16.05%
7		Khurja	25.14%	12.27%

Source: Census of India 2011

Figure 4-1: Tehsil-wise Growth Rate

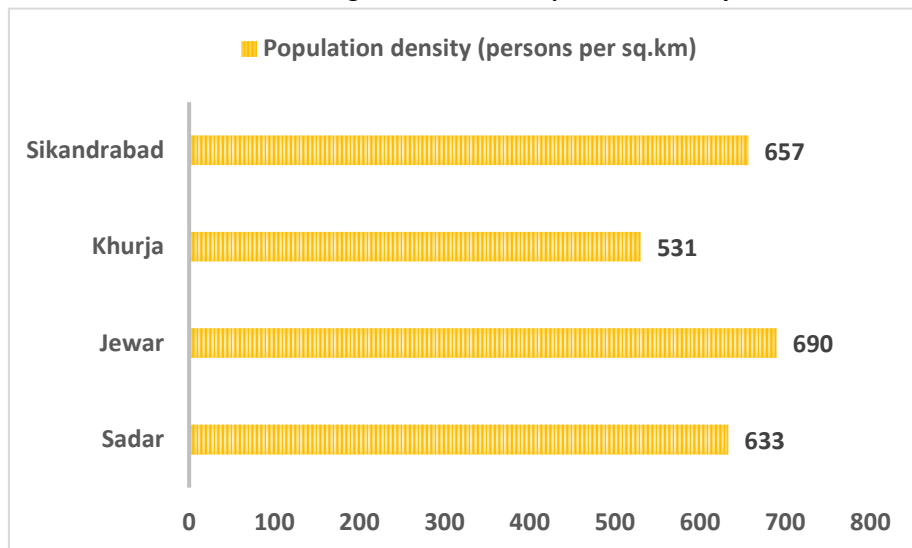


In tehsil – wise classification, Jewar tehsil and Khurja tehsils have shown rapid increase in growth rate from 2001 – 2011 which is 39% and 52% respectively as per census 2011., whereas the tehsils Sadar have shown decline in population growth rate. Thus, it can be said that in Sadar tehsils the out-migration rate of rural people has increased over a decade. This decline in the population of the rural areas also indicates the need of economic opportunities for the sustenance of the rural areas as well as the developing urban centres.

4.2.1 Population Density

Population density is one of the key indices of population concentration. It refers to the number of people living per square kilometre in a given area. Population density of Uttar Pradesh is 828 persons per sq. km., which is higher than the national average density. However, population density of

Figure 4-2: Tehsil Population Density



Gautam Buddha Nagar district is around 1100 sqkm. While comparing the population density of Jewar, Khurja, Sadar and Sikandrabad tehsil it was found that Jewar tehsil has the highest density of 690 persons per sq.km followed by Sikandrabad, Khurja and Sadar which are low as compared to the state level density.

4.2.2 Urbanization Level

The urbanization level can be measured with the increase of urban population of the area. Urbanization enhances productivity of the rural sector through two kinds of complementarities. First, the rural sector benefits from a higher demand for rural goods from urban residents and from infrastructure, like farmers’ markets, that lower transaction costs in catering to that demand. Second, the productivity of the rural sector is also enhanced due to availability of new technologies. However, as per census 2011 the percentage increase of urban population is seen highest in Khurja tehsil that is 66.05%.

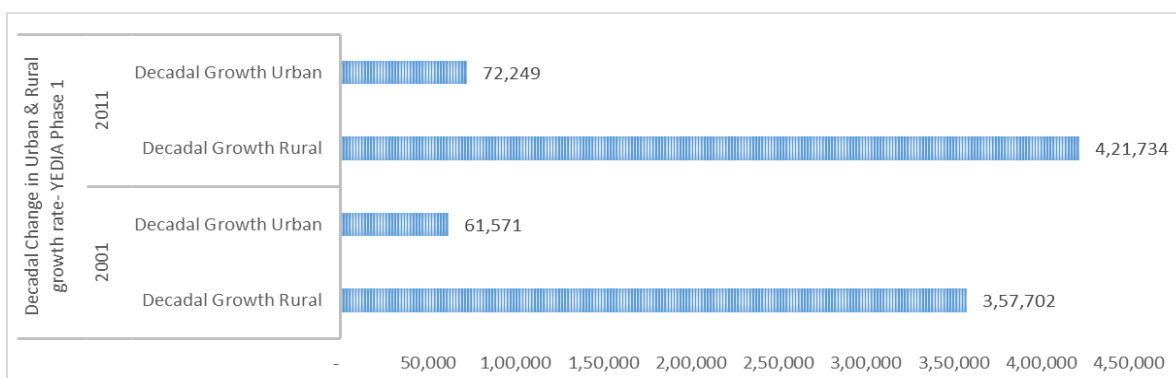
Table 4-3: Comparison of Urban Population

Indicator	National Avg.	State Avg	District		Tehsils				Total YIEDA phase- 1
			GB nagar	Bulandshahr	Sadar	Jewar	Sikandrabad	Khurja	
% Urban Population	34	22.27	59	24.79	16.05	23.62	–	32.35	19.25

Source: Census of India 2011

Gautam Budh Nagar District owing to its proximity to NCR has higher percentage of urban population. However, coming to the parts which fall under YEIDA phase 1, Urbanisation levels are low. This is expected to increase with the development of the area.

Figure 4-3: Decadal change in Urban & Rural growth absolute population - YEIDA Phase 1



- As part of Urban population the absolute population has increased from 61,571 in 2001 to 72,249 in 2011 .
- The overall population is yet anticipated to grow given the transportation and urbanization trends. The small population base in 2001 and immigration explains the phenomenon.
- Hence out migration rate of the rural areas has increased over a decade.

The increase in the base of rural population from 3,57,702 in 1991-2001 dacede to 4,21,734 in the 2001-11 decade would further contribute to more urbanization and population growth.

4.3 Population Characteristics

4.3.1 Literacy rate

Literacy rate is the key for socio-economic progress. Literacy forms an important input in overall development of individuals enabling them to comprehend their social, political, and cultural environment better and respond to it appropriately. Higher levels of education and literacy lead to a greater awareness and also contributes to improvement of economic and social conditions. The average literacy rate of Jewar, Sadar, Khurja and Sikandrabad is 57.58%, 58.28%, 61.94% and 60.84% respectively which is low as compared to national and state average. The literacy rate of the female population is lower than the male literacy rate in all four tehsils.

Table 4-4: Literacy Rate at various Administrative Levels- 2011

Administrative level	Name	Literacy rate (%)		
		Total	Male	Female
National	India	63.07%	69.76%	55.97%
State	Uttar Pradesh	67.70%	77.30%	57.20%
District	Gautam Budh Nagar	58.07%	67.76%	44.81%
	Bulandshahar	61.48%	72.32%	44.20%
Tehsil	Jewar	57.58%	67.19%	46.64%
	Sadar	58.28%	67.99%	44.09%
	Khurja	61.94%	72.97%	42.00%
	Sikandrabad	60.84%	71.40%	47.72%

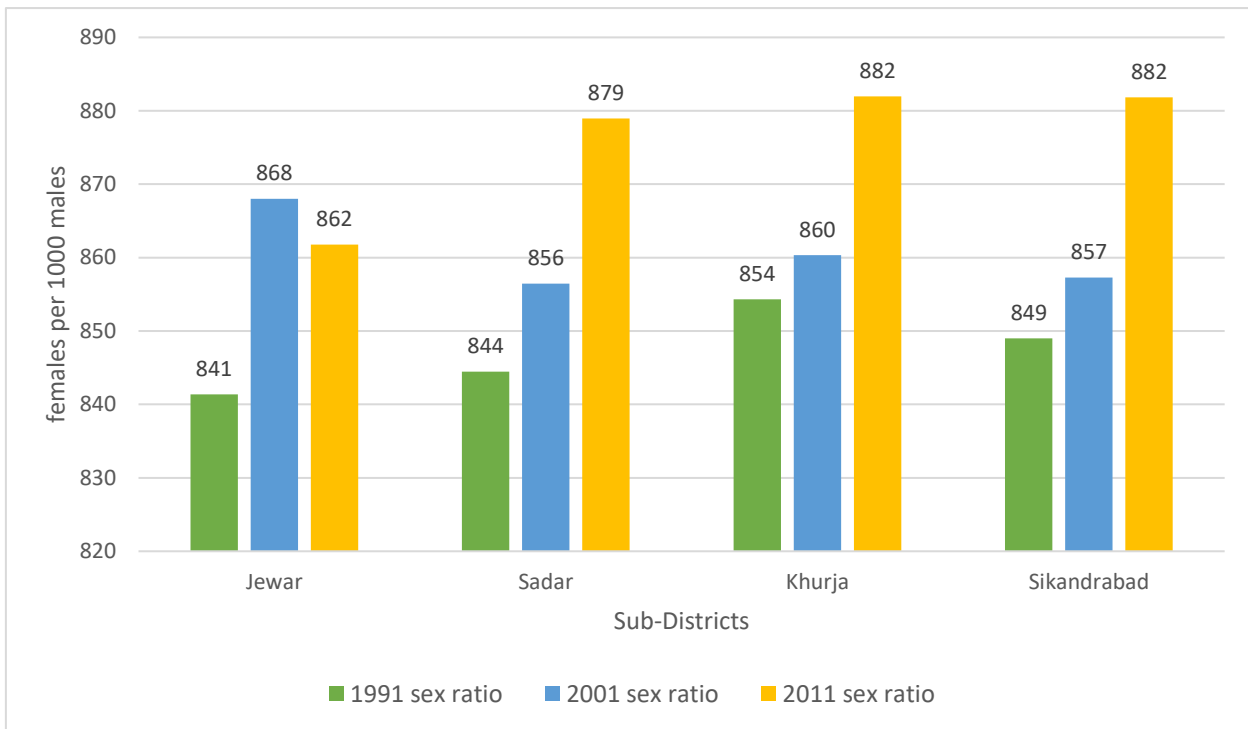
Source: Census of India 2011

4.3.2 Sex Ratio

The sex ratio of the population affects, and is affected by, birth, death, immigration, and emigration rates. It is measured as the ratio of the number of individuals of one sex to that of the other sex, or the ratio of allocation in each. Sex ratios are among the most basic of demographic parameters and provide an indication of both the relative survival of females and males and the future breeding potential of a population. The average sex ratio of four tehsils Jewar, Sadar, Khurja and Sikandrabad is 862, 879, 882 and 882 which is low as compared to the national and state level sex ratio.

Out of all the four tehsils, the sex ratio of Sikandrabad and Khurja shows slight improvement in 2011 from that observed in 2001. This gain can be attributed to better health facilities for women and, to some extent improvement in the status of women and availability of better economic opportunities for women. But any complacency over this development must be tempered by the fact that there are sharp differences in Jewar and Sadar tehsil.

Figure 4-4: Tehsil-wise decadal Sex ratio

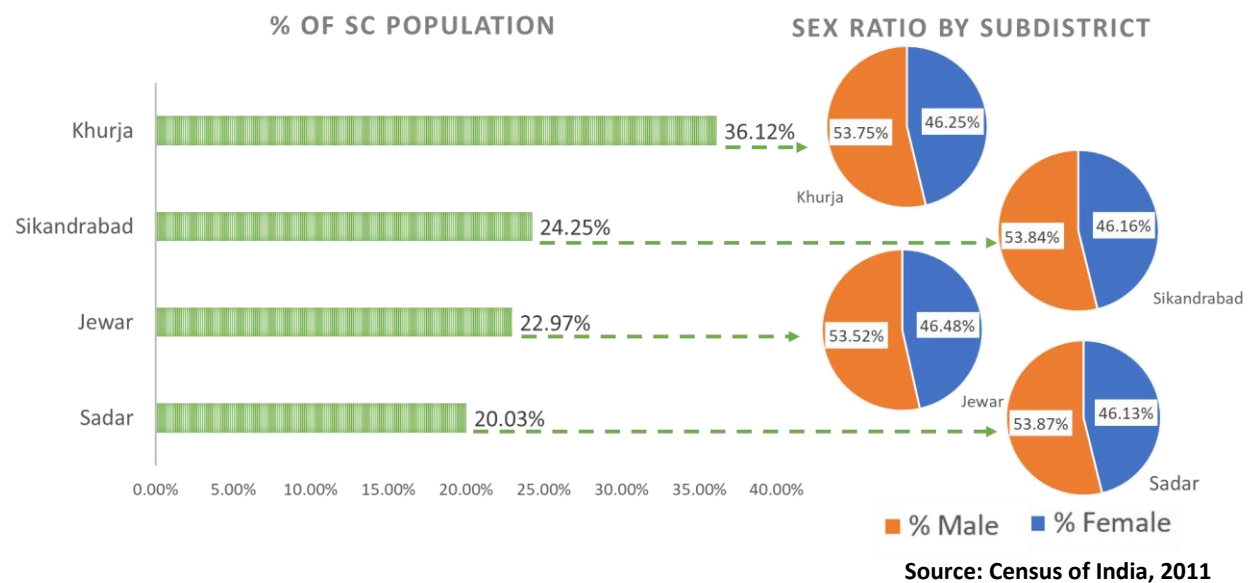


Source: Census of India 2011

4.3.3 Scheduled Caste Population

The SC population of YEIDA is around 87,401 that is 23.3% of total population. Khurja tehsil has the maximum concentration of SC population which is 36.12% as per census 2011.

Figure 4-5: SC population with Sex Ratio



Source: Census of India, 2011

Map 4-1: Percentage SC Population, 2011

Map 4-2 Workforce Participation Rate, 2011

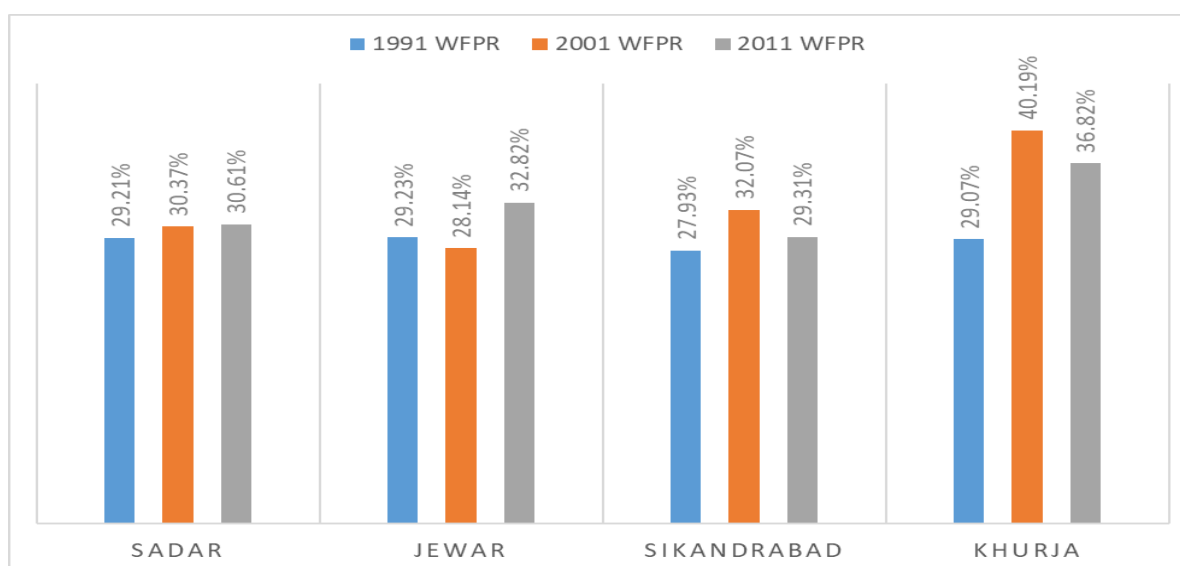
Source: Census of India, 2011

4.3.4 Workforce Participation

Demographic and non-demographic factors appear to be important in any analysis of labour force changes in developing countries. Under the demographic factors high rate of population growth directly affects the work participation rates. On the other hand, the initial efforts to develop an economy, expansion of school enrolment, improved health and welfare services, increased urbanization may be accompanied by declining trend in work participation rates and increase in the unemployment rates (**Rayappa and Erpenshade: 1975**).

Workforce participation rate is the measurement of number of persons employed in an area. As per census 2011 Sikandrabad tehsil, Jewar tehsil, Khurja tehsil and Sadar tehsil has workforce participation rate of 29.31%, 32.82%, 36.82% and 30.61% respectively. The workforce participation rate of Jewar, Sikandrabad, Sadar and Khurja is much less than the state average and national average workforce. The decadal change in the workforce participation rate is shown below, where we may infer that the workforce participation rate has increased over decades in Jewar and Sadar tehsil. However, the workforce participation in Sikandrabad tehsil was observed to be decreasing over decades.

Figure 4-6: Workforce participation rate, (1991-2011)

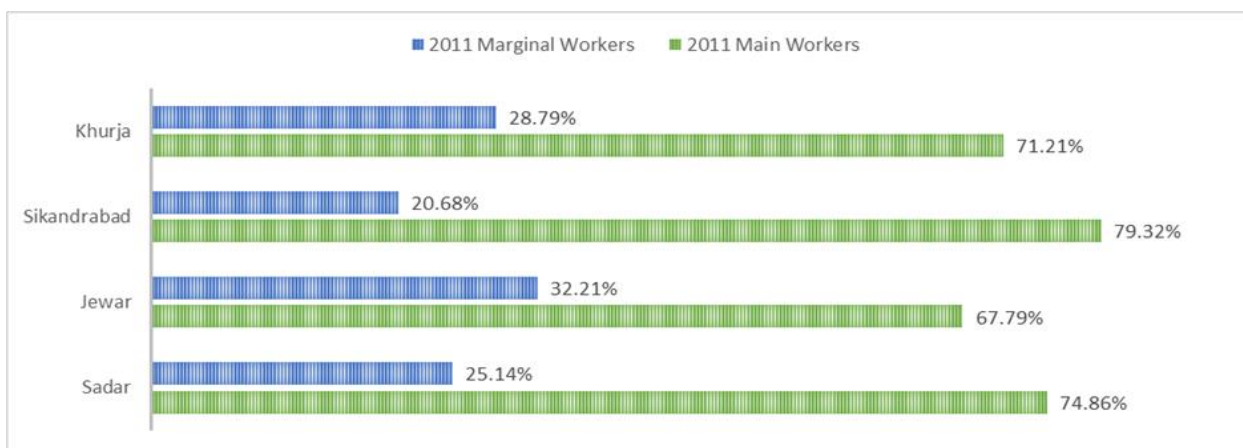


Source: Census of India, 2011

4.3.5 Main and Marginal Workers

In the previous section it is observed that the work force participation rate is in the range of 29%-40% within the planning area. The total workforce is further divided into Main and marginal workers. Main workers are the workers who work for more than 6 months. In rural areas main workers are mostly associated with agricultural activities. Marginal workers are engaged in work for only 3 to 6 months duration, and they are mainly migrating from one place to another for work.

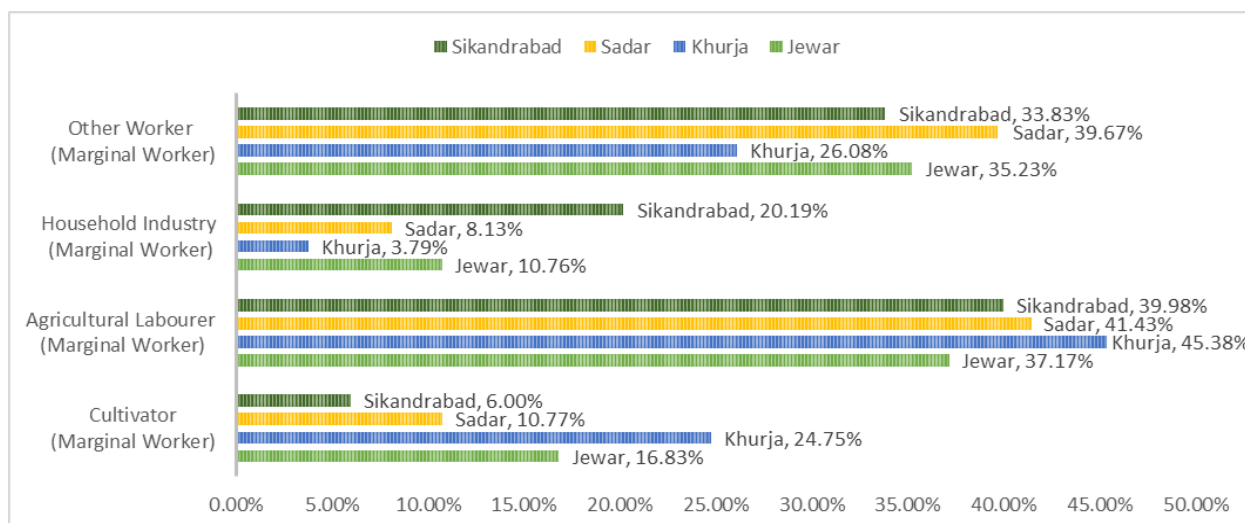
Figure 4-7: Main & Marginal workers



Source: Census of India 2011

Main and marginal workers are categorized into cultivator, agriculture laborers, Household industry worker and other workers.

Figure 4-8: Tehsil-wise Main workers



Source: Census of India 2011

Table 4-5: Tehsil-wise Main workers

Tehsil	Main Worker	Cultivator	Agricultural Labourer	Household Industry	Other Worker
Jewar	49034	18846	8526	3398	18264
Khurja	27685	13982	5141	752	7810
Sadar	20325	7600	2363	1398	8964
Sikandrabad	18382	8195	2921	548	6718

Source: Census of India 2011

Therefore, from the above graph Jewar and Sadar tehsils have a greater number of workers who are associated with service sector, whereas in Khurja and Sikandrabad people are more into agricultural activities.

Map 4-3: Main Workers

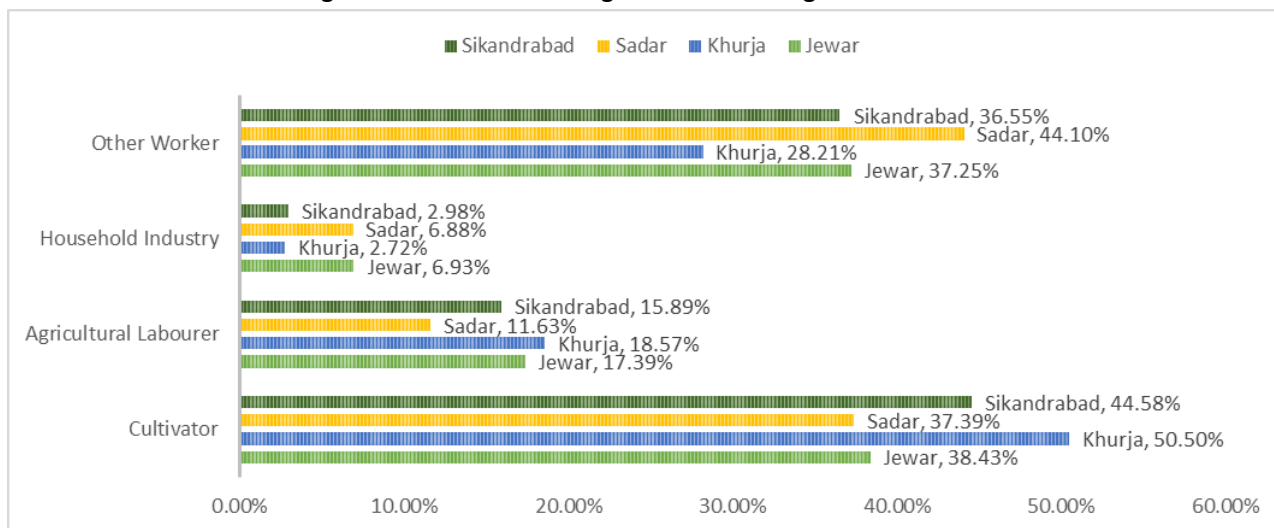
Map 4-4: Marginal Worker

Table 4-6: Tehsil-wise Marginal worker

Sub-District	Marginal Worker (Marginal Worker)	Cultivator (Marginal Worker)	Agricultural Labourer (Marginal Worker)	Household Industry (Marginal Worker)	Other Worker (Marginal Worker)
Jewar	21884	3684	8135	2355	7710
Khurja	12925	3199	5865	490	3371
Sadar	6826	735	2828	555	2708
Sikandrabad	4750	285	1899	959	1607

Source: Census of India 2011

Figure 4-9: Tehsil-wise Marginal workers categorization



Source: Census of India 2011

Therefore, from the above graph it can be seen that a greater number of marginal workers are agricultural labourer.

4.3.6 Housing characteristics

The houses which do not require any repairs and in good condition may be considered as ‘Good’, the houses which require minor repairs may be considered as ‘Liveable’ and the houses which are showing the sign of decay or breaking down and require minor repairs or ruined & are far from being in conditions that can be restored or repaired may be considered as ‘Dilapidated’. Bulandshahar district housing condition is liveable in residential and residential-cum-other uses. Gautam Budh Nagar district has the good quality of housing condition in both residential and residential-cum-other uses.

Table 4-7: Housing condition of urban Centre of YEIDA 2011

Sr. No.	Urban-Center	Total Household	Good	Livable	Dilapidated
1	Jewar (NP)	4623	1074	1218	42
2	Rabupura (NP)	2334	1393	722	86
3	Jahangirpur (NP)	1818	2654	1923	46
4	Dankaur (NP)	2201	674	1078	65

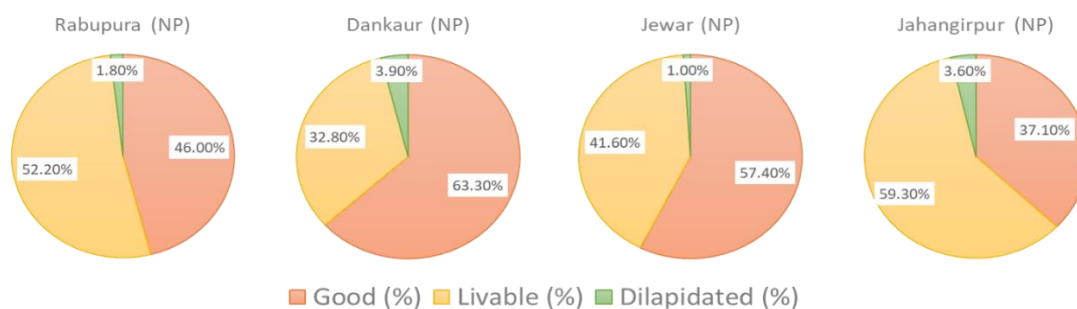
Source: Census of India, 2011

Table 4-8: Housing condition as per census 2011

Sr. No.	District	Good (%)	Livable (%)	Dilapidated (%)
Total Housing condition				
1	Bulandshahar	47.20%	47.10%	5.69%
2	Gautam Budh Nagar	51.73%	44.96%	3.31%
Residential Housing condition				
1	Bulandshahar	48.29%	45.77%	5.94%
2	Gautam Budh Nagar	51.96%	44.84%	3.20%
Residential-cum-other use Housing condition				
1	Bulandshahar	45.66%	51.63%	2.71%
2	Gautam Budh Nagar	42.89%	54.16%	2.95%

Source: Census of India, 2011

Figure 4-10: Housing Characteristics- YEIDA - 2011



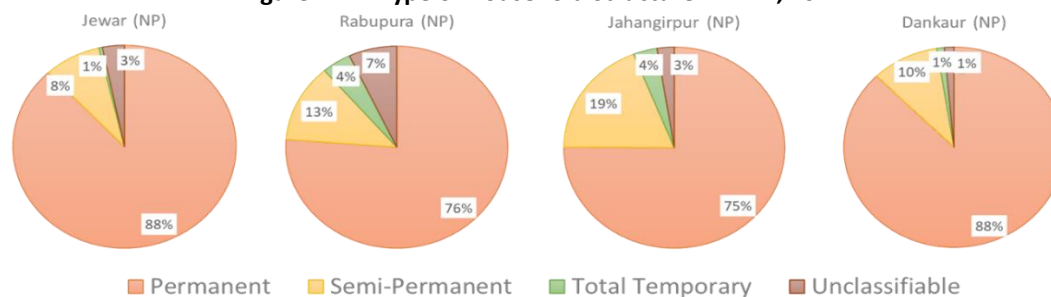
Thus, it can be observed that the housing condition of the urban centres of the planning areas is mostly good and liveable. Therefore, the exiting housing infrastructure is adequate in condition and therefore further provision should be provided for the future population.

Table 4-7: Type of household structure

Sr. No.	Urban-Center	Total Population	Permanent	Semi-Permanent	Total Temporary	Unclassifiable
1	Jewar (NP)	4623	4073	384	23	148
2	Rabupura (NP)	2334	1779	292	100	163
3	Jahangirpur (NP)	1818	1364	344	64	45
4	Dankaur (NP)	2201	1926	218	24	31

Source: Census of India, 2011

Figure 4-11: Type of Household Structure- YEIDA, 2011



Source: Census of India, 2011

5 INFRASTRUCTURE PROFILE

This section details out the infrastructure presently available in YEIDA Planning Area. The section is divided into two parts. i.e., Physical Infrastructure which comprises of Water Supply, Sewerage, Drainage and Solid waste management while the second sub section talks about Social Infrastructure. (Education, Health, and Recreational and Green spaces).

5.1 Physical Infrastructure

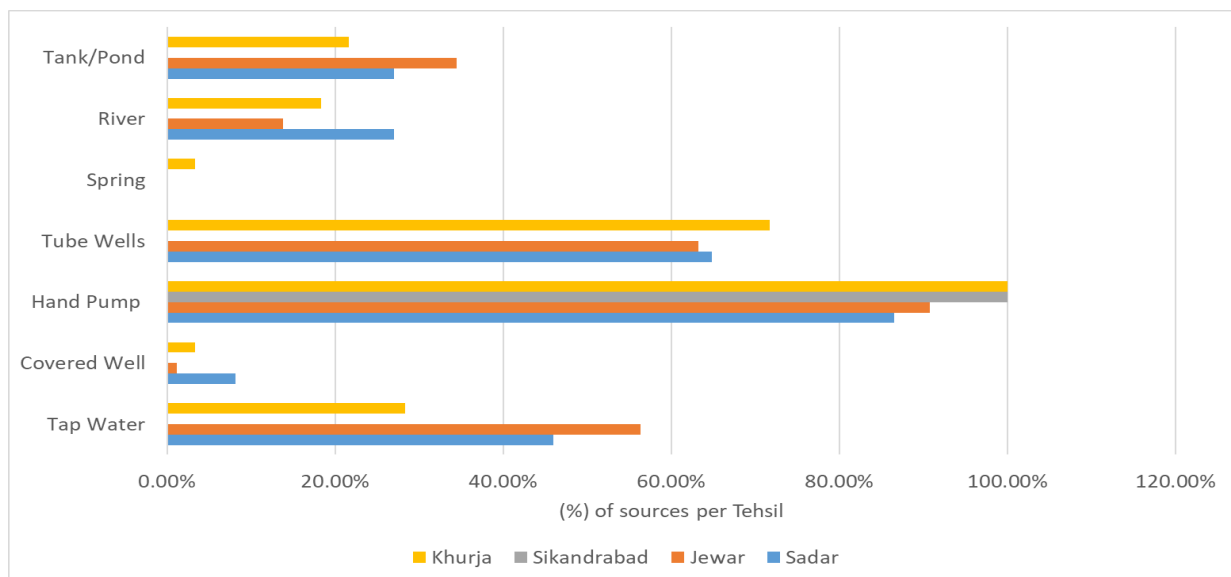
5.1.1 Water Supply

The main sources of water supply in the region are surface water and groundwater. Extraction from Groundwater is predominant for both irrigation and domestic use. The area has a wide network of canal systems. The major irrigation network system in the study area include:

1. **Upper Ganga Canal (Mat Branch):** The canal originates from Dehra Village. The upper part of the canal passes through Sunpehra-Rawani-Subra-Kapna-Hasanpur-Kolukhur-Machar. This canal serves to Inayatpur, Jewar and Barauda distributaries. In this branch the water flow is maintained throughout the year.
2. **Jewar Distributary System:** It originates from Upper Ganga Canal and it flows from Talra-Dhanon Kalan-Parsaul-Rustumpur-Bhaipur-Nangal Narayansingh-Dayanatpur & Jewar Villages in the area.
3. **Inayatpur Distributary:** It passes through Amanullahpur-Bhikanpur-Mandra-Banka.
4. **Barauda Distributary:** A very small portion of this canal passes through the city. IT passes through Siryal, Bhunnajathan and Alampur Hotla Village. The major water source for all the villages in YEIDA Region is Ground water (Hand Pumps, etc.). Except for Bela Khurd, jaganpur doawa, latifpur bangar, mathurapur, mustafabad, and Rampur khadar.

Figure 5-1: Existing water supply sources

Source: Census of India, 2011



The water supply sources in each tehsil are shown in the figure above, where it can be observed that the major source of water supply in villages is ground water. However, 20-30% Tap water supply is also available in the villages as well as in the urban centres of Jewar, Khurja, Sikandrabad and Sadar Tehsil.

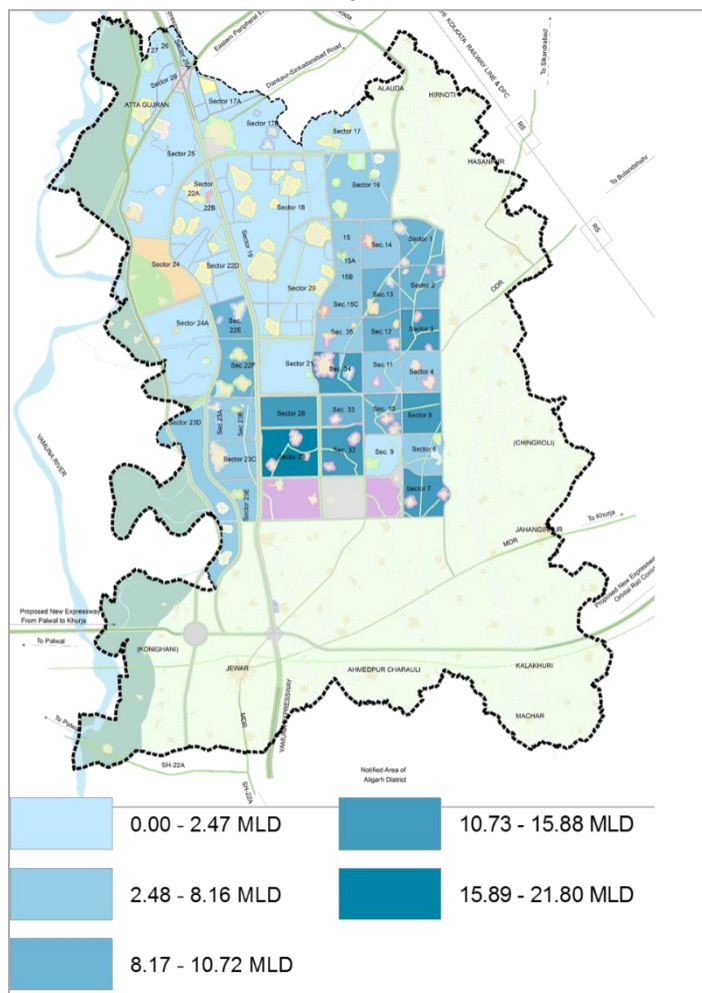
Table 5-1: Water Supply Norms as per URDPFI

S.No	Classification of town/cities	Recommended maximum water supply levels (lpcd)
1	Towns provided with piped water supply but without sewerage system	70
2	Cities provided with piped water supply where sewerage system is existing / contemplated	135
3	Metropolitan and Mega cities provided with piped water supply where sewerage system is existing/contemplated	150

Source: URDPFI Guidelines section 8.3.1.1

The URDPFI guideline suggests water supply demand to be calculated considering 135-150 LPCD for the projected population. In the city at present the requirement of water supply is 150 LPCD +15%. As per YEIDA 2031 master plan the Jewar Distributory in Sector 18 having water supply of 293 MLD will cater the demand of 25.7 lakh population. The map shown here, depicts the sector-wise storage capacity of water in YEIDA phase 1 area. There are total 27 water works to fulfil the water demand of the city.

Map 5-1: Water Storage Capacity as per Yeida 2031 Master Plan



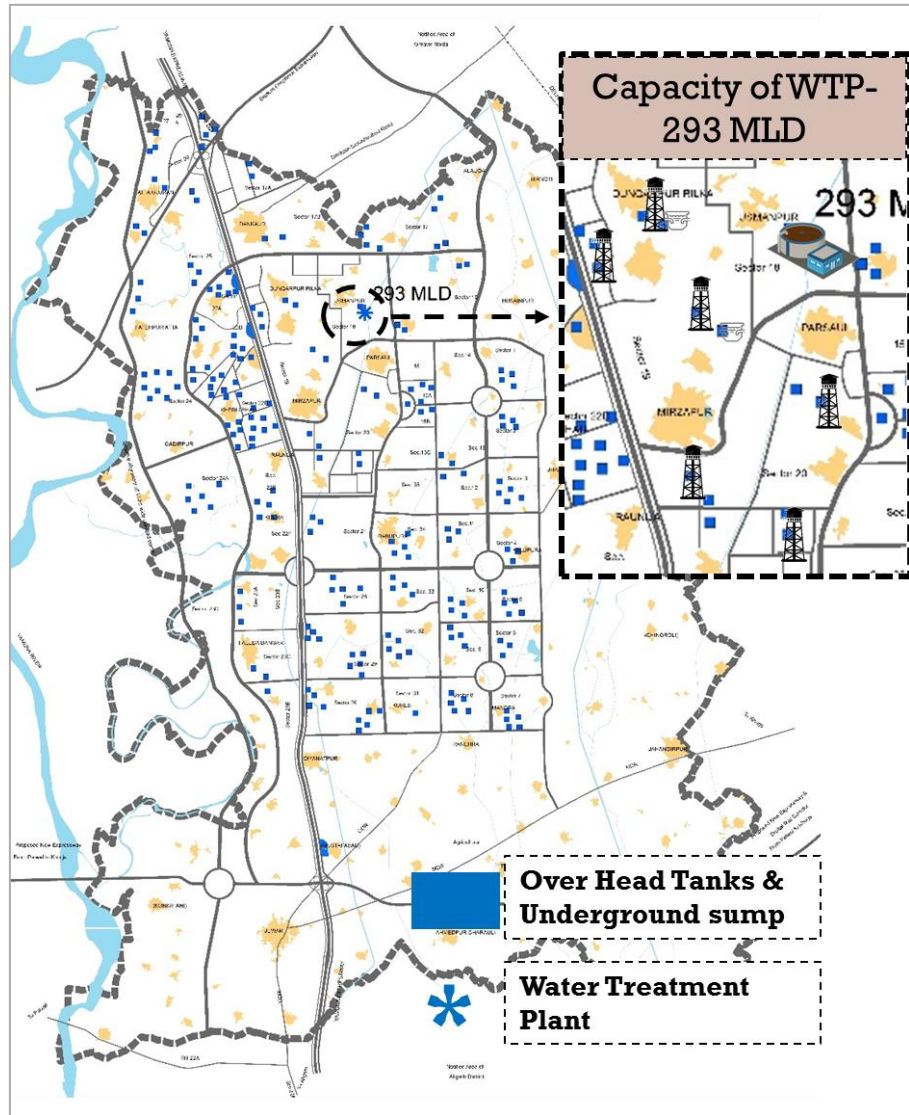
5.1.2 Sewerage and Sanitation

Earlier in YEIDA Abadi areas in Sadar, Jewar, Sikandrabad and Khurja the sewerage is discharged directly into local nallas which ultimately flows into Yamuna River.

However, to prevent the water pollution and to conserve Yamuna River, sewerage treatment plants are proposed in sector 15B, Sector-6, sector-11 and sector – 29 with a capacity of 5-10 MLD, 20-40 MLD, 20-20 MLD and 20-40 MLD respectively.

As per CPHEEO manual, 80% of water supply may be expected to reach the sewers and accordingly will be treated and disposed as per the existing disposal network. The Map 5-2: Location of WTP, STPs & Water Work shows the location of STPs and WTP whereas the Map

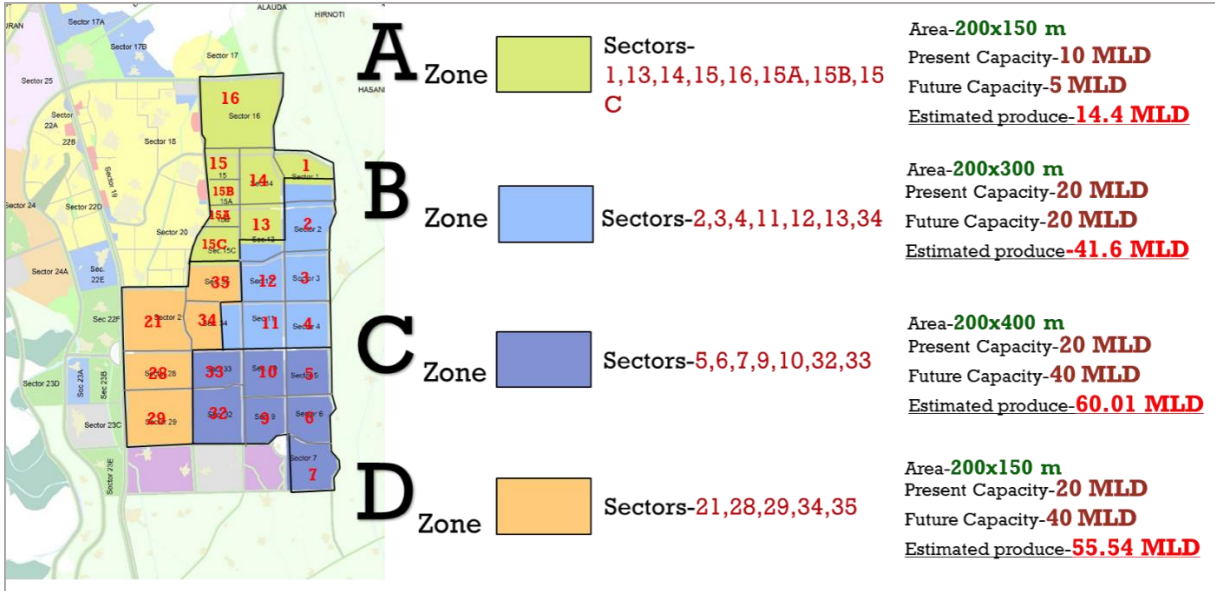
Map 5-2: Location of WTP, STPs & Water Work YEIDA Phase 1- as per Master Plan 2031



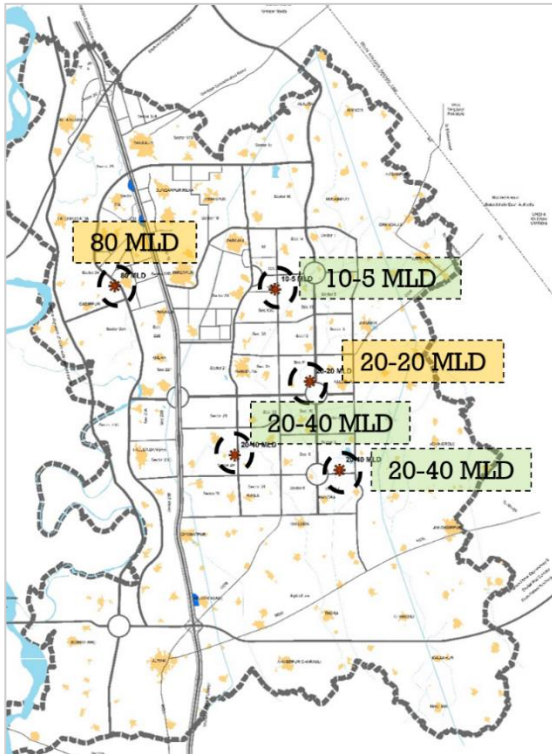
5-3: shows Location of sewage treatment Zones and plants.

Sanitation is the process of safe disposal of human excreta in order to maintain a hygienic as well as disease free living environment. Basic issues in establishing proper sanitation framework are lack of awareness, social and occupational aspects, fragmented institutional roles, lack of integrated city approach and lack of demand responsiveness etc. Hence this can be effectively achieved by preparing a framework of sanitation at local level. Authority shall be prepared a Detail Project Report for Sewerage and Sanitation for effective management.

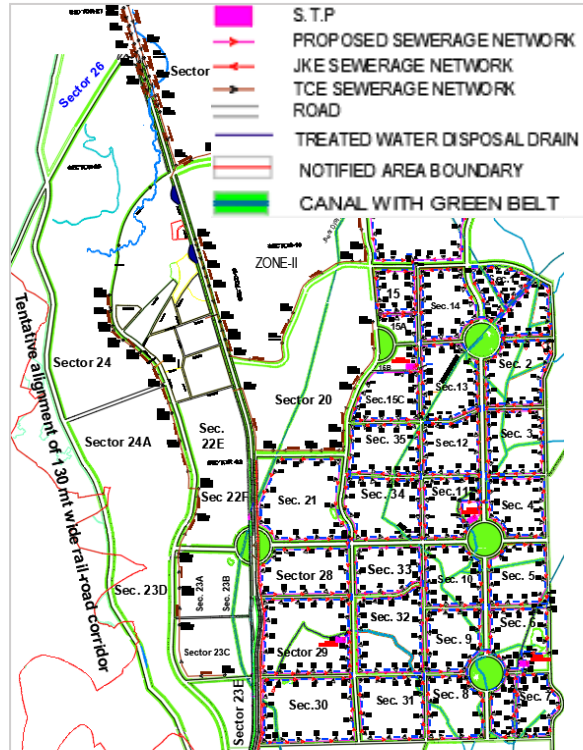
Map 5-3: Location of sewage treatment Zones and plants



Map 5-4 Sewage treatment zones as Per Master Plan 2031



Map 5-5 Sewerage Network as per YEIDA 2031



5.1.3 Drainage

Improved drainage is often a high priority for people living in urban areas, poor communities may be less apparently concerned about drainage problems than expected. In YEIDA planning Area, there are several small to medium sized natural water bodies in the area which collect, store and eventually discharge rainwater into the tributaries and finally fall into river Yamuna or percolate into ground. There are total 5 major natural drains in the YEIDA Phase-1 which finally discharge into the Yamuna River. These natural drains are: Bhuria Nala, Kund Nala/ Old Yamuna, Kharia Nala, Pathwaya Nala and Parauri Nala.

Map 5-6: Existing Drainage line



At present, apart from a couple of locations, no major water logging has been observed in the area. Since, the area is agricultural and most of the areas are unpaved, most of the rainfall finds its way in the subsoil through percolation and very less rainwater flows through the natural drain. The proposed development in the area would also create increased run off. Hence, it is crucial to have proper planning for storm water drainage system in YEIDA Planning Area. It is also important to integrate the storm water drainage system with rain water harvesting system so that impact of tapping of ground water as a water supply source would be minimized. Authority shall be prepared a Detail Project Report for Drainage system for effective management.

5.1.4 Solid Waste Management

Solid waste It refers to the range of garbage materials arising from various animal and human activities that are discarded as unwanted and useless. Categorization of waste can be done based on organic

and inorganic wastes. Also, categorization may be based on hazardous waste, including radioactive, flammable, infectious, toxic, or non-toxic wastes. Further, categorization can also be done based on the origin or type of waste, whether the waste is industrial, domestic, commercial, institutional, or construction and demolition. Solid waste management is the process associated with control of generation, storage, collection, transport or transfer, processing, and disposal of solid waste materials in a way that best addresses the range of public health, conservation, economic, aesthetic, engineering, and other environmental considerations. Proper framework of solid waste management can lead to generation of economic development of the city.

In 2001 the UP-Sub region has generated 2270 MT of solid waste per day, and it was estimated to be 6138 MT per day in 2021. It has been revealed that the towns in NCR are not disposing solid waste in environmentally friendly manner. In 2011 the waste generated in the city is 179.65 TPD with a population of 3.82 lakh. In 2011, the waste generation rate of YEIDA was 0.16 km per capita per day. To calculate the total waste generation for the year 2041, 0.47 kg per capita per day is assumed for YEIDA on baseline trend of NOIDA as it is similar industrial town.

Table 5-2: Physical composition of MSW of YEIDA

Item	Item Wise Generation %
Organic Waste Comprising of leaves, fruits, vegetables, food waste, fine organic matter, hay, and straw etc.	40- 60%
Recyclables Comprising of rubber and leather, plastics, rags, paper, wooden matter, metals, glass, coconuts, bones, straw, fibers	10-18%
Inert matter Comprising of ash, crockery, earthen ware (pots), stones and bricks, sand & silt etc.	25-35%

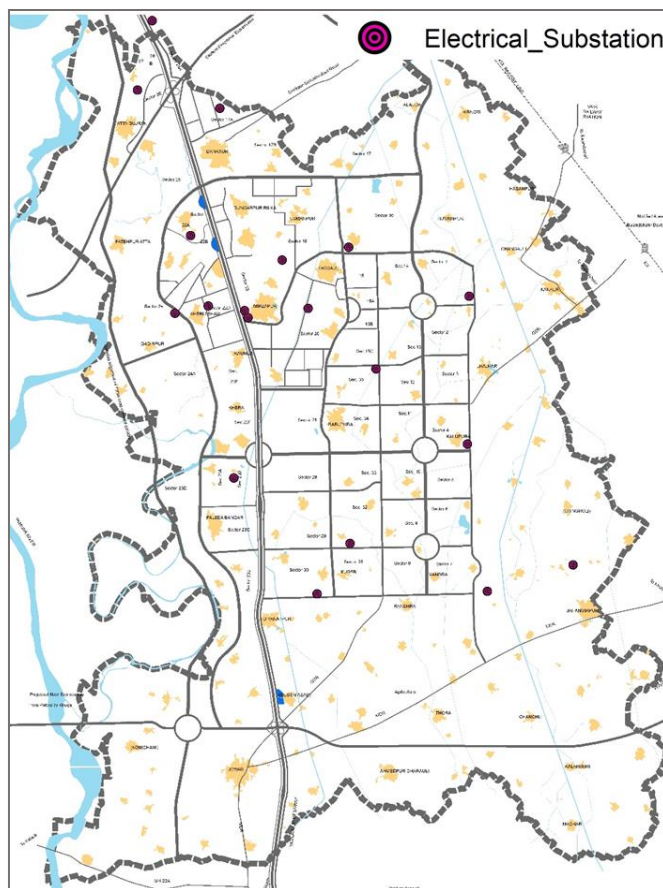
The physical composition of solid waste is given in the above table as organic, recyclable, and inert matter.

Issues and Observations:

Increase in solid waste generation is expected in the region due to the proposed developments in YEIDA Phase 1 area. Inefficient disposal techniques may result in the contamination of groundwater through effluents from it and run off from waste. Hence, there would be a need to prepare a Detail Project Report for effective management of Solid Waste. Segregation of waste at source, effective transportation to the site and segregation for processing needs to be considered as the key steps in solid waste management. Scientific solid-waste management needs to be ensured. Aim should be to minimise the amount of solid waste generated so as to minimise the area required for waste disposal. Waste generated needs to be considered as a resource and suitable recycling techniques need to be adopted so that the percentage of waste reaching the disposal site is minimised.

5.1.5 Power Supply

Map 5-7: Proposed Sub-Station in Master Plan 2031



Paschimanchal Vidyut Vitran Nigam Ltd (PVVNL) is responsible for the power distribution in Bulandshahar and Gautambudh Nagar districts. The various activities which consume power are domestic and commercial lighting, industries, public light system, rail/traction, agriculture and public water supply. Out of this industrial sector consumes the highest percentage of power which is 50% of the total consumption. Gautambudh Nagar is one of the districts which have a high requirement for power (34% of the total requirement of the UP Sub Region. Moreover, the proposed development activities in the YEIDA Phase-1 would impose a high demand on the existing power supply in the UP Sub Region;

Plan for power sector should be integrated with the sub-regional plan so as to meet the additional power demand of the area. In addition to meeting the additional power requirements, promotion of non-conventional energy sources such as solar energy plants needs to be emphasized by the government.

5.1.6 Telecommunication

Out of 226 notified villages in YEIDA Phase-1, 119 villages have post office, telegraph offices and telephone Connections (Census of India 2011). It can be observed that the area have poor coverage in terms of communication facilities, as there is less than 40% coverage of communication facilities in the notified villages of YEIDA Phase-1.

Dedicated telecommunication exchanges to meet the communication needs of the existing and the projected population by 2041 in the YEIDA Phase-1 should be proposed. The possibility of integration

of telecommunication service network with the powerdistribution network could be explored wherever it is technically and commerciallyfeasible.

5.2 Social Infrastructure

5.2.1 Education

In the National Capital Region as per 2016-17 UDISE data there are 45,261 elementary schools and 12,200 secondary/ Higher Secondary schools. In the National Capital Region, it has been found that number of elementary schools per lakh population was 74 nos. in 2016-17, while the same for secondary/higher secondary schools was 20 nos.

In Bulandshahr, 70.75% of the elementary schools are Government schools while the other 29.25% of the schools are private. 37.04% of Secondary/ Higher secondary schools are Government schools and 62.96% are private schools. In Gautam Buddha Nagar, 58.82% of the elementary schools are Government schools while the other 41.18% of the schools are private. 73.63% of Secondary/ Higher secondary schools are Government schools and 26.32 % are private schools.

Figure 5-2: Education Facilities requirement as per URDPFI section 8.4.2

Sr. No.	Category	Population served per unit (URDPFI Norms)	Area (Ha) Required Per Unit (URDPFI Norms)
1	Pre – Primary School	2500	0.08
2	Primary School	5000	0.4
3	Senior Secondary School	7500	1.8
4	Other Colleges	1,25,000	4
5	Engineering College	10,00,000	6
6	Medical College	10,00,000	15
7	Polytechnic, Vocational Training School, Non-Formal Training Centre	10,00,000	4
8	School for Physically Challenged	45,000	0.7
9	School for Mentally Challenged	10,00,000	0.2
	Total		

However, in order to make education accessible and affordable to each and every child of India the Government of India have started initiatives such as DIKSHA Portal, SWAYAM Programme, NEAT (National Educational Alliance for Technology), National Skills Qualifications Framework (NSQF), a quality assurance framework, NSDC (National Skill Development Corporation). There are 206 educational institutions in Jewar, Sadar, Khurja and Sikandrabad, which includes primary schools, secondary, and high schools. The required facilities will be calculated based on the population projected for the year 2041.

5.2.2 Health

For an industrial city it is mandatory to have adequate health facilities for both the residents as well as the workers. At present, there are 141 health institutions in the city that includes primary healthcare centres, dispensaries, and other health centres. According to census 2011 population and URDPFI the requirement for health facilities are around 54 units.

Figure 5-3: Requirement of Health Facilities as per URDPFI as per section 8.4.3

Sr. No.	Category	Population served per unit (URDPFI Norms)	Area Required Per Unit (URDPFI Norms)
1	Dispensary	15,000	1
2	Nursing home, child welfare and maternity Centre	75000	0.25
3	Family Welfare Centre	50,000	0.08
4	General Hospital	2,50,000	6
5	Veterinary Hospitals	5,00,000	0
6	Polyclinic	1,00,000	0.25
7	Intermediate Hospital (Category A)	1,00,000	3.7
8	Multispecialty Hospital	1,00,000	9
9	Specialty Hospital (NBC)	1,00,000	3.7
10	General Hospital (NBC)	2,50,000	6
11	Diagnostic center	50,000	0.08
12	Dispensary for pet animals and birds	1,00,000	0.03
	Total		

5.2.3 Recreational & Green Spaces

As per the Master Plan 2031 sector-25 of YEIDA is sports city, racing tracks and residential units are also there within the sector. Apart from sector 25, YEIDA could be developed in such a way that it will have potential to be a host city for Olympic game, international expositions, or other related events. Open space includes, recreational areas, green areas, vacant lands, flood plains etc. URDPFI suggests that for open space, 10-12 Sqm per person is desirable.

Housing Area Park	5000	
Neighbourhood Park	15000	
Community Park	1 lakh	
District Park	5 Lakh	
Sub City Park	10 lakh	

***The suggested standards for open spaces in large and metropolitan cities are 1.2 to 1.4 ha per 1000 persons, depending upon the land availability.**

6 TRANSPORTATION PROFILE

A transport network of a city comprises of road, rail and air network and it provides one of the major supports for economic development of the city. As per the existing scenario, YEIDA has good local and regional connectivity. YEIDA phase-1 is directly connected to the ring road of Delhi through Yamuna expressway and eastern peripheral expressway connecting Faridabad on west and Ghaziabad on east. It is also connected to Jewar, Palwal, and Aligarh through Yamuna expressway.

6.1 Transport Proposals in Master Plan 2031

1. **Roads:** In Master Plan 2031, higher width of roads were proposed. The 130 m wide road is connecting to Greater NOIDA and NOIDA. The 120 m width road is connecting to 130 m width road and proposed peripheral expressway on the southern side of the city. The 100 m wide roads connect peripheral roads and passes through the city. Also, Yamuna Expressway, Easter Peripheral Expressway and Proposed Peripheral Expressway have a width of 100 m.
2. **Metro:** A metro link is also proposed in the Master Plan 2031 connecting Greater NOIDA Metro line to the YEIDA.
3. **Multi-Modal Hub:** In the Multi modal hub MRTS, BRTS, Metro, parking facilities and intermediate public transport mode are considered and given space. The metro is contemplated along the main spine of the city which will support the concept of Transit oriented development (TOD) in the Master Plan.
4. **BRTS:** A median side BRTS is proposed to improve the public transport connectivity in the city and to give a feeder service to the proposed metro line.
5. **Personalized Rapid Transport:** Personalized rapid transport was proposed in order to connect Noida International Airport to Film city which covers sector-21, 35, 34, 33, 28, 32, 29, 30, and Sector-3. Its alignment Length is 14.6 km and has 12 stations and the stations are planned at every 500m to provide easy access to nearby commuters.
6. **Logistic Park:** Logistic Park is located within Aligarh district of YEIDA Phase 2 region which is approximately 70 km South of Delhi and 24 km East of Palwal. The area of land provided by YEIDA is 494 Ha, the area is surrounded by major cargo clusters such as Delhi, Noida, Bulandshahr, Faridabad, Mathura, etc.

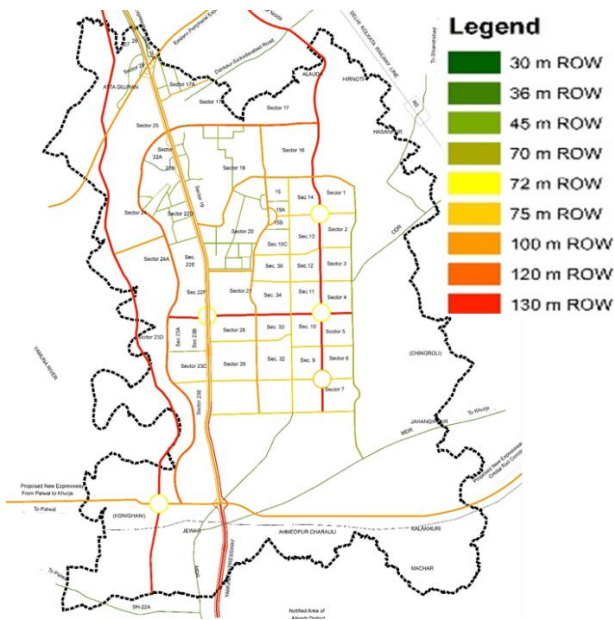
As per draft report on feasibility study cum detailed project for development of logistic park in Tappal Bajna Urban Centre in YIEDA region the entire region is expected to undergo large scale development and industrialization. The region is strategically located in the southern NCR, which is witnessing a large-scale regional transformation. Further, the overlapping catchments of Tappal-Bajna UC, NCR, and Delhi Mumbai industrial Corridor (DMIC) adds on to the cargo potential in the region. The region's excellent connectivity and potential for intermodal integration covering rail, air and road transport would act as a catalyst for development of the proposed master plan and attract commodities from the larger catchment area.

The principal infrastructure facilities in the logistics park would comprise storage infrastructure, handling area, vehicle parking area for trucks and other vehicles, equipment yards, maintenance facilities, office space, gate complex, open plots and support infrastructure including utilities such as road, water, sewerage, power, telecommunication among others.

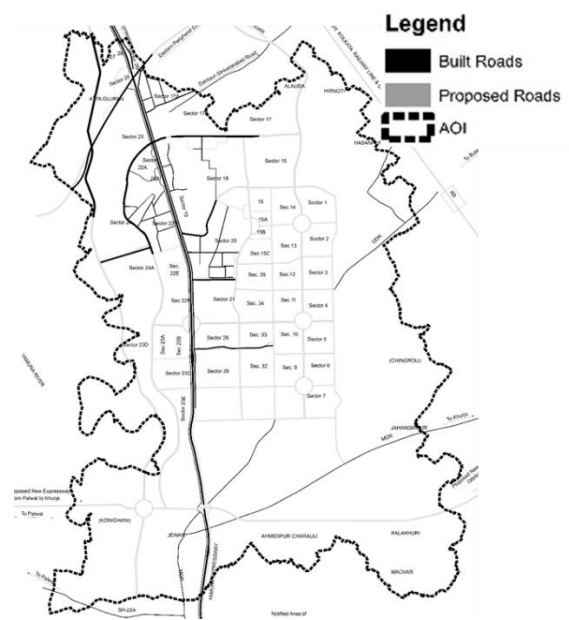
6.2 Current Status of Master Plan 2031 Proposals

The roads proposed in Master Plan 2031 are shown below:

Map 6-1: proposed roads and its width in Master Plan 2031



Map 6-2: Status of Developed roads as per Master Plan 2031



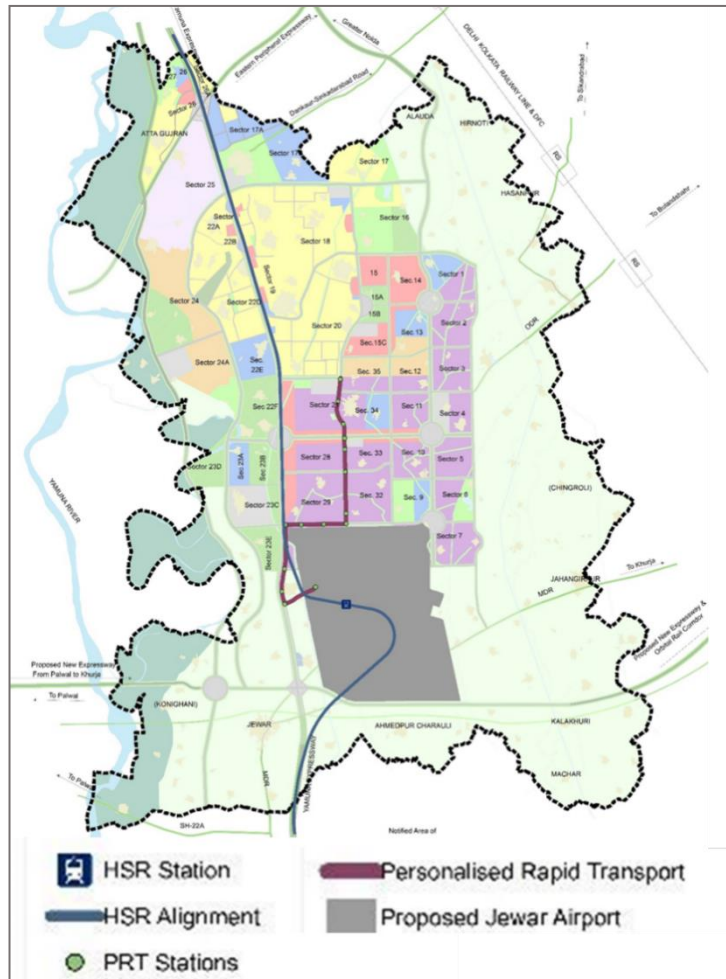
In the above map it is given that some of the roads proposed in the Master Plan 2031 are implemented. It includes the roads of width 130 m, 120 m, 100 m, and 75 m.

6.3 Other Transportation Proposals

The proposed transportation networks in the area are as follows:

1. High Speed Rail (HSR): HSR Corridor is proposed parallel to the Yamuna expressway with an aim to meet the growing passenger demand and to optimize the high-speed rail connectivity between major cities/commercial/economic centres, the following high-density passenger routes were identified for developing High Speed Railway (HSR) corridors. **High speed rail will have a stop at Noida International Airport.** This system will increase the connectivity and travel speed of YEIDA and Noida International Airport significantly.

Figure 6-1: Alignment of High-Speed Rail Corridor



2. Rapid Rail Transit System (RRTS): National Capital Region Planning Board

(NCRPB) has proposed eight RRTS corridors for commuter traffic travelling between Delhi in NCR. Three corridors are already under implementation by National Capital Region Transport Corporation (NCRTC) and are proposed to be implemented by 2026. The remaining corridors will be implemented by 2031. Implementation of Delhi-Ghaziabad-Meerut RRTS Corridor is expected to shift the modal share in favour of public transport from 37% to 63% in the region, which ultimately help in curbing pollution.

3. Metro: A metro link is also proposed that will connect Noida International Airport to Delhi. This metro line will ease the movement of passengers to travel from one airport to the other in two and a half hours and also makes travel easier for those travelling from airport to Noida or South Delhi to Greater Noida.

6.4 Impact of these proposals on YEIDA:

Today, commuting in the shortest time is highly preferred by the end users. The proposals like HSR will be conducive in connecting YEIDA phase 1 region to the state level like Punjab in the north and Kolkata in the east. Another proposal, RRTS would increase the high speed and minimum commute time at NCR level. Metro would effectively be communicating people in masses on daily basis from YEIDA airport to Delhi IGI.

YEIDA falls under the jurisdiction of northern railway and it is surrounded by Eastern and Western Dedicated Freight Corridors. The western DFC is used for passenger and freight movement and eastern DFC is heavily loaded and it connects Delhi to Howrah. The presence of the DFCs shall have significant impact on the YEIDA region development.

It is still evident that the role of transport and logistics in YEIDA Phase-1 is dependent on the implementation of transport projects in the region. The overall development of the YEIDA Phase-1 is strongly related to the proposed economic and transportation projects in the regional and sub-regional plans. However, in order to support the industrial development of YEIDA Phase-1, enhanced freight and passenger movement would be given a priority in near future. And with the enhanced connectivity to Delhi and other urban centres in the NCR, YEIDA planning area will become a major economic center in the urban hierarchies of UP and NCR, because of industrial and airport related activities.

7 ENVIRONMENT PROFILE

YEIDA consists of natural drains, rivers, agricultural cultivable land, plantations etc., the city is a part of the fertile and agriculturally productive land with alluvial soil plains formed by deposition of soil by rivers originated in Himalayas. This section attempts to outline the current condition of the environment in YEIDA.

7.1 Existing Features

7.1.1 Climate

This city experiences extreme climate. The average minimum temperature in winter varies from 3 degree C to 5 degree C and in summer maximum temperature reaches to average of 40 degree C to 45-degree C. In 2006-07 the temperature recorded was varying from 6 degree C to 43 degree C **(2006-2007)**. **(YEIDA-approved masterplan report-master plan phase 1 2031)**. Southwestern monsoon is the major source of rain. The region receives an average of 700 mms of rain annually. 85% of the average annual rainfall is received in the months of monsoon.

7.1.2 Topography

Tehsils Jewar, Sikandrabad, Khurja and Sadar falls in upper Ganga plains and Trans Ganga Plains. Apart from the rivers, the area supports numerous wetlands and dry deciduous to Thorn forests. YEIDA lies on Upper Gangetic alluvial plain. It has a gentle slope of 22m over an area of 35km. The highest point is at Dankaur railway station in the north-western area of the region, where it descends towards the Yamuna River. There is a ridge of width 500m from north to south in the middle left with a slope from west to east and this corridor has more gradient compared to the rest of the areas.

7.1.3 Forest

As per India State of Forest Report (ISRF) 2019, of Forest Survey of India, total forest cover and tree cover is 24.56 % of the total geographical area of the country (forest cover is 21.67% and tree cover is 2.89 %). As per the report, the area under forests in NCR is about 3262 (sq. km) which constitutes about 5.75% of its total area, which is much below national average. At present, agriculture is the main economic activity in YEIDA phase-1 and it is supported by natural water bodies, canals and ground water. The main crops in the region are sugarcane, wheat, rice, maize, barley, oilseeds, potato and sugar cane.

7.1.4 Water Bodies

- 1) **Tributaries and Streams:** Rivers passing through the urban areas are their lifelines and for rural areas its blessing. However, due to unprecedented urbanization and manufacturing activities in the areas along the rivers, many of these have become polluted and, in some cases, unfit even for bathing. Flood plains of the rivers in urban areas have witnessed the construction activities including the unauthorized residential development, a phenomenon which has severely degraded the overall natural environment and river ecology. **(River centric urban planning Guideline 2021)**. An urban river is a stretch or section of a water resource located within a catchment that contains a town or a city, where the structure and function of that water resource is altered from its natural state. Rivers are essential not only from the point of view of water demand, but it provides a fabric of social connectivity. YEIDA phase-1 is adjacent to Yamuna River, and it also has natural drains and tributaries of Yamuna River. The smaller drains

together form a network which helps in the drainage of surface water during the times of rain. The pollution load in rivers has been increasing over the years due to disposal of human and industrial waste in the rivers. According to the guideline of river centric development, cities should be responsible for the conservation and rejuvenation of its river. Thus, special emphasis is given on the conservation of Yamuna River.

- 2) **Natural and manmade ponds and lakes:** Other than Tributaries & Streams, there are 10 major lakes in the YEIDA Phase-1. These lakes and ponds could be conserved in order to facilitate ground water recharge of aquifers. The climate change is causing effects on these lakes, besides the agriculture activities are also responsible for reduction in water availability in the waterbodies. Hence, restoring the water level and protecting the ecology around / of the lake/pond is a must, with necessary conservation measurements. In order to preserve the waterbody, the foremost step involves delineation of the waterbody and its zone of influence. Hydrological regime should be considered as the primary delineation characteristics for defining waterbody boundary of lake/ pond.

Figure 7-1: Natural and manmade ponds and lakes

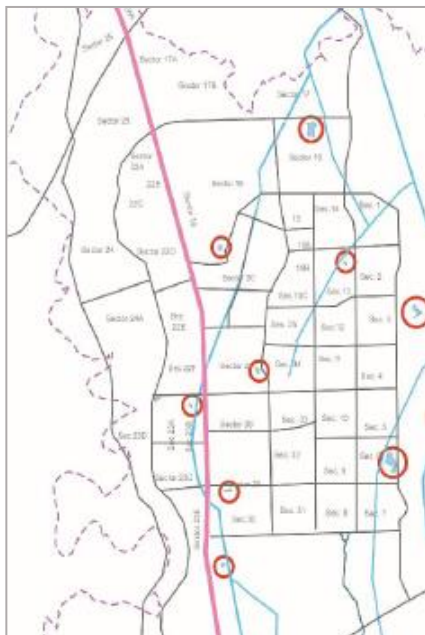
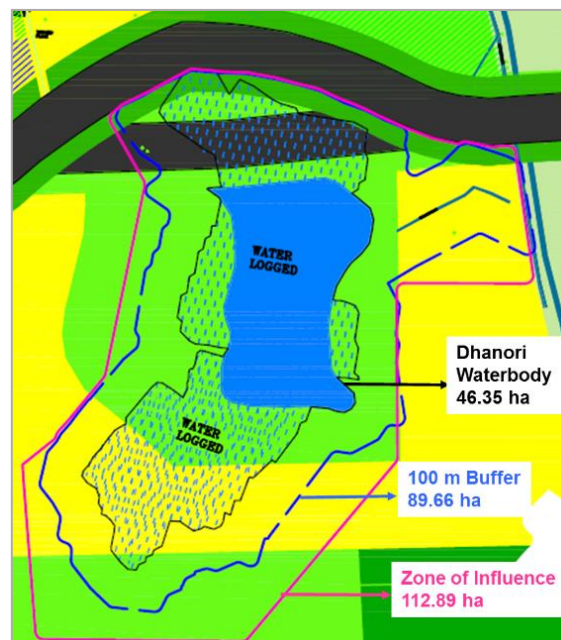


Figure 7-2: Dhanori Waterbody



Dhanori lake/ pond falls under the YEIDA Planning Area, situated in North-east part. This pocket of marshy land is surrounded by green multi-crop agricultural fields, is spread over an area of 100 acres (40 hectare). Dhanoricovers a total land of 46.35 hectare which includes marshy land/water logged area. For the preservation of lake, the zone of influence area has been demarcated as 112.89 ha (including a 100 m buffer of 89.66 ha, waterbody area& come other additional area for ground water recharge of aquifer).

- 3) **Kund Nalah Rivulet:** This rivulet passes through the YEIDA Phase-1 is part of the larger system of rivulets related to Yamuna River. Hence, development activities in the area need to be sensitive to the natural systems and they could be integrated with the recreational and conservation zone of the Master plan.
- 4) **Upper Ganga Canal:** The upper Ganga canals are a part of larger system of irrigation networks that water the huge agricultural hinterland. Care needs to be taken when they get included in urban areas because they can become subject of pollution and development pressures. Hence the Master plan identifies the canal as green preservation zone and major open spaces of the proposed city are developed along them. Conservation measures such as repairing of the canals and controlling their

usage for various purposes could be addressed in a conservation master plan. Protection of flora and fauna in the YEIDA region through development of biodiversity parks, sanctuaries etc.

7.1.5 Ground water resources

As per the required water supply demand for YEIDA phase-1 its 50% demand will be fulfilled by surface water demand and 50% demand will be fulfilled by ground water.

Figure 7-3: Ground Water Level in NCR

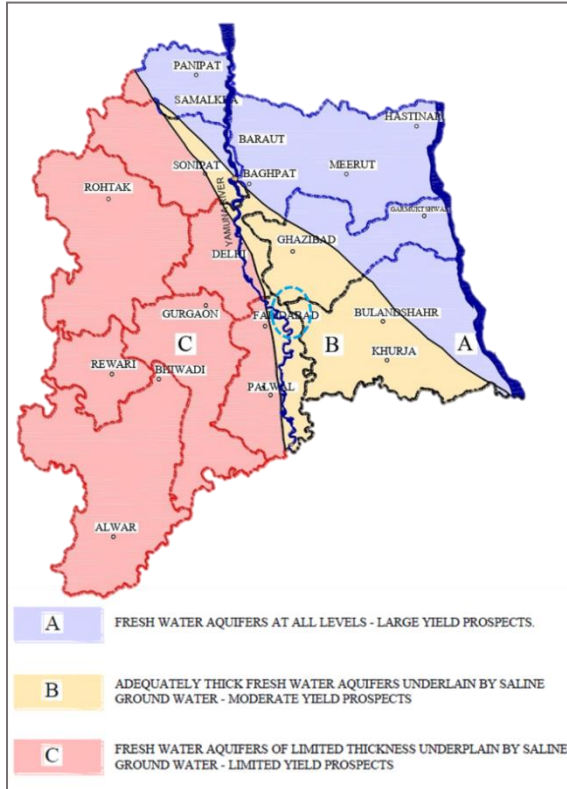


Figure 7-4: Ground Water in UP Sub Region

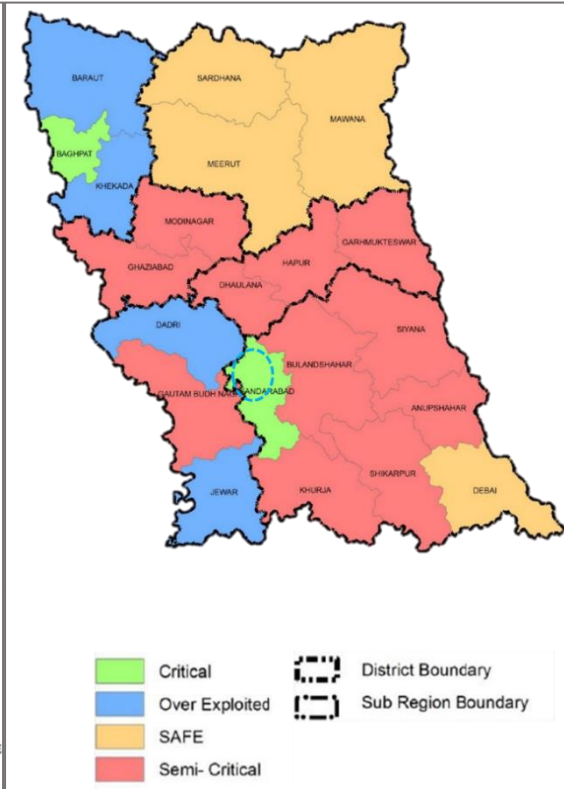


Table 7-1: Depth to water level trend of ground water monitoring wells for the period 2009-2018

Location	Pre-Monsoon fall (m/ Year)	Post Monsoon fall (m/Year)
Jewar Pz	0.4901	0.4933
Jewar nw	0.1799	0.1817
Sikandrabad	0.0282	0.2182

From the map it can be seen that the city lies on the bottom right side of the river which falls under an adequately thick fresh water aquifers at shallow depth but underlain by saline ground water where there are moderate yeild prospects. Thus water supply demand could be fulfilled by gourned water sources.

7.1.6 Flora and Fauna

YEIDA falls under sub-tropical deciduous type of vegetation. The important trees found here are Shishum, Mango, Jamun, Imlı and Babul. Ornamental trees found here are Gulmohar, Ashok, Eucalyptus and Chameli. Scrubs and bushes found here are Arua, Hina, Panwar, Madar, Karauda and Mako. Wildlife is not much seen in this region. Most common animals found here are wolf, monkey and pig and the most common birds seen are peacock, duck, partridge, and snipe.

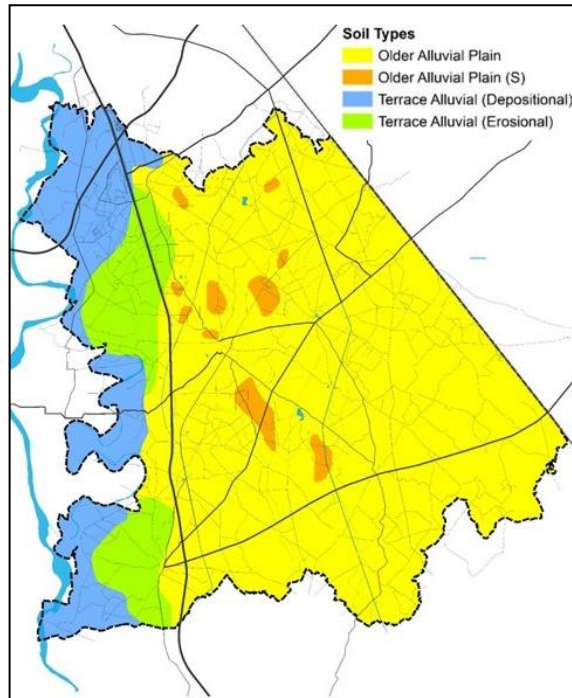
7.2 Other Features

7.2.1 Geo-morphology

The city has a quaternary alluvial soil which comprises of sand, silt, and gravel. The soil thickness is around 400 m hence this area is characterized by uninterrupted agricultural fields mixed with open scrub and sparsely scattered trees and constitutes of potential water bearing zones. Gautam BuddhaNagar has a moisture content of 11.3% and a water holding capacity of 30%. The Groundwater is depleting at a rate of one metre per annum in Gautam Budh Nagar district.¹

However, in 2020, ground water level for Bulandshahr District was 19.44 meters below ground level. Ground water level of Bulandshahr District increased from 7.85 meters below ground level in 2014 to 19.44 meters below ground level in 2020 growing at an average annual rate of 18.81%. However, in Jewar, Sadar, Khurja & Sikandrabad the ground water level has shown declining trends.² In Sadar tehsil the ground water is at level of 7.46 metres bgl and in Jewar its 5.6 metres bgl.

Figure 7-5: Soil type- YEIDA



7.2.2 Natural Hazards

Bulandshahr and Gautam Buddha Nagar districts lie in zone 4 of earthquake prone zone which is a severe intense zone. Earthquakes of intensity between 8 to 9 on the Richter scale can be experienced in Zone 4. Earthquakes with such severity can cause damage to property.

Accordingly, Jewar, Sadar, Khurja & Sikandrabad Tehsils are also in the earthquake prone zone.

Figure 7-6: Earthquake Prone Zone- Uttar Pradesh



1. Article by Sunil Ghosh- MAR14-2018

2. <https://jjmup.org/wq/gwd.php>

7.3 Environmental Threats

7.3.1 Pollution

Urbanization, transportation, industrialization, power generation, and agricultural activities are the key drivers that lead to air pollution through release of emissions. Also, it is most concerned topic in the entire NCR. Increased air pollution level in NCR is very concerning at present. As per NCR draft master plan 2041, there are about 64 of Ambient Air Quality Monitoring Stations in NCR. With rising air pollution in the region, 07 cities in NCR i.e., Delhi, Faridabad, Ghaziabad, Noida, Meerut, Khurja and Alwar are identified as non-Attainment cities under the National Clean Air Action Plan.

Therefore, it is very necessary to have a proactive effort in managing the adequate air quality. For developing a programme for the effective management of ambient air quality and to reduce the damaging effects of air pollution, development of national ambient air quality standards (NAAQS) is a pre-requisite.

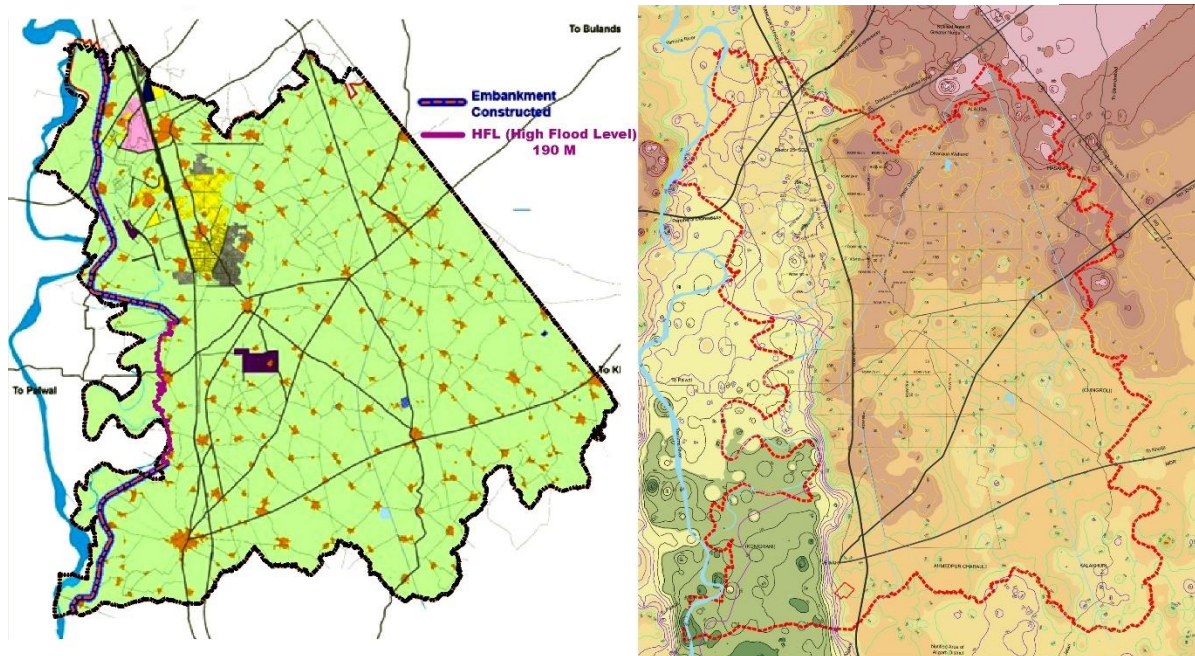
Also, as per The Air (prevention and control of pollution Act)1981, the pollutant generating from the industrial emission and from certain human activities such as traffic, heating, use of domestic fuel, refuse, incineration etc. Hence proposal for solar lighting, use of cleaner fuels, controlling refuse burning, application of fuel quality and vehicle emission norms and generating awareness.

- **Encouraging use of cleaner fuels and supply of cleaner fuels in rural areas:** In urban areas people should be encouraged to use cleaner fuels for their domestic use. Also, in rural areas subsidies should be provided for using LPG/PNG and people should be encouraged to use traditional biomass as cooking fuel.
- **Solar lighting:** people of Urban and rural areas should be encouraged to adopted solar lighting systems and incentives should be provided to them as per the provisions of UP solar power policy.
- **Controlling refuse burning:** Solid waste generated in urban and rural areas are needed to be taken care in a scientific manner. Traditionally, landfill sites are proposed for disposal of solid waste and incineration method is followed. However, these methods generate a lot of pollutants and results in increase in pollution level. Therefore, SWM policy should be strictly followed in YEIDA phase 1. Collection and segregation of solid waste at source, and application of 5 R's i.e., Reduce, Re-fuse, Recycle, Reuse, Recovery should be promoted into YEIDA.
- **Generating Awareness:** The main and important task for reduction of air pollution is generating proper awareness among people regarding the increased pollution level and its hazardous impact on human health. However increased pollution levels ultimately lead to negative impact on climate change effects.

7.4 Disaster Management:

Through the years, cities and towns have witnessed loss of countless human lives and so many communities and livelihoods ruined because of floods, landslides, storms, earthquakes, volcanic eruptions, wildfires, droughts, and more recently tsunamis. Disaster management is a process of effectively preparing for and responding to disasters. However, it is essential to identify the potential disasters in YEIDA Planning area, in order to prepare for disaster preparedness, mitigation and responsibilities. The possible hazards in the form of natural disasters in YEIDA phase 1 are earthquakes, floods, as well as manmade disasters such as fire, traffic, and industrial accidents etc.

Figure 7-7 Embankment in YEIDA Phase-I



- The embankment roads along the boundary of the Yamuna River towards the Urbanisable area has been constructed. These embankments, serve as vital preventive measures by acting as barriers to contain the river's waters and prevent inundation of the surrounding areas. 130 M wide road and 120 M wide road has been proposed towards the Yamuna River parallel to Embankment to prevent the inundation in any difficult time. The level of these roads will be kept on higher side based on ground condition to further enhance safety.
- YIEDA phase 1 falls in seismic zone IV and shares common boundaries with vulnerable states like Delhi, Haryana, and Ghaziabad District in Uttar Pradesh, all of which are in seismic Zone IV.
- The area is located in a high damage risk zone ($V_b = 47\text{m/s}$) due to high wind velocity as per the Wind Hazard Map of Uttar Pradesh (Map 13) (BMTPC, 2006).
- Possibilities of manmade disasters occurring in the area due to pollution, accidents that may cause emission of large volumes of chemicals and poisonous gasses, possibility of heavy vehicles getting involved in road accidents as well as oil spillage, explosions of highly inflammable material that the trucks/tankers may be transporting and damage likely to be caused by high wind velocity in the event of storm or cyclonic formations.
- Expressways and highways roads, though essential for development of YIEDA, are potential hazards for possible major accidents unless adequate prevention, mitigation and preparedness measures are integrated with the development process so that disaster risk is reduced.
- As per the study by NIDM 2010 It indicates that in the rural areas of Noida and Greater Noida a large percentage of buildings are at risk and their vulnerability is very high. Whereas, in the newly planned areas of Noida and Greater Noida, most of the buildings being engineered buildings, the risk appears to be comparatively less. Similarly, for the YIEDA region where there are existing villages which will going to be urbanized and would need steps to ensure structural and fire safety of the buildings in the villages.
- With the kind of visioned master plan there is going to be plethora of multi-story buildings in sectors and also highly populated urban villages making it more vulnerable from earthquake and fire disasters. Most importantly, the city will be going to be the industrial hub of the NCR and chances of CBRN (chemical, biological, radiological, and nuclear) emergency cannot be ruled out.

UP sub regional plan has specified the institutional framework and policies for addressing the issues of Disaster Management Committees at State level. Also, at district level, Disaster Management Plan for Gautam Buddha Nagar, 2010 also exists. However, only few mitigation strategies have been listed which can be adopted at master plan level to mitigate the impact of disasters. As per NCR plan, Disaster Management Centres may be established at strategic locations in the region for sensitizing people, training of personnel and mitigation measures. Vulnerability and risk assessment to be undertaken at the city level to strategize on disaster prevention and mitigation plans, keeping following considerations in mind:

1. Regulations for the urbanized villages to ensure structural safety and also roads with sufficient width which allows free movement of fire vehicles.
2. Provision of seismic safety provisions to be incorporated in the byelaws.
3. Drainage level
4. Assessment of vulnerable zones of major accident hazard units based on worst-case scenario should be done to mitigate industrial and chemical disaster hazard.
5. Planning, adopting, and enforcing stringent building codes, flood-proofing requirements, seismic design standards and cyclone wind bracing requirements for new construction or repairing in the urban sectors.

SECTION- II: DRAFT MASTER PLAN 2041 & PROPOSALS

8 VISION AND OBJECTIVES

8.1 Vision

The vision statement for the development of any place/region becomes very important since it helps in visualization of where and how one wants the city to be in the coming years. The vision statement is carefully carved and encompasses the aspirations of various stakeholders involved directly or indirectly in the development process. YEIDA aspires to attract residents with a demographic profile that aligns with a vision, particularly young creative thinkers, through businesses that will relocate to work with those people. YEIDA aspires to develop a reputation as the place to be for particular industries and lifestyles. This would in turn creates a buzz about the city which later will grow into national, and sometimes global, mass consciousness. Considering this the vision of this Master Plan has been derived which is to develop YEIDA as:

“A sustainable, efficient, well-connected, and globally recognized City that capitalizes on the economic opportunity surrounding the Noida International Airport and economic corridors while ensuring the high living standards for its citizens”.

8.2 Objectives



OBJ 1- To strengthen the economic base and generate an employment surplus region through creation of an Aerotropolis and cities within the city.



OBJ 2- To provide high quality and affordable infrastructure ensuring quality of life



OBJ 3- To provide safe, reliable, economical and environment friendly mobility



OBJ 4- To create a unique identity for the city through culture and public life

OBJECTIVE 1- To strengthen the economic base and generate an employment surplus region through creation of an Aerotropolis and cities within the city.

Key Features

1. Tapping the potential of strategic location between DFC and Yamuna Expressway and upcoming Noida International Airport.
2. Promoting various zones of the city as themed zones such as logistics and sports city zones, smart city, Fun city developing “Cities within City” to enhance global outreach.
3. Norms for Ancillary facilities like serviced apartments, dormitories in Industrial & commercial zones.
4. Dedicated zones for informal land use to ensure inclusivity of stakeholders into the plan and support for unorganised economies.
5. Provisions for multiple land use to respond to dynamic and evolving market conditions.

6. Logistic facilities to cater to industrial demand.
7. The medical park has been proposed in sector 28 in YEIDA phase 1 region. The Park will have campuses for medical industries that will cater to the growing medical industrial need of the nation. The total land area of the park is 350 Acres while the estimated available area for allotment to Medical Device Units is 193 Acres. The Master plan have Industrial plots that makes 55 % of the total available land and space for data Centre Park and common facilities.

YEIDA aspires to be a globally recognized city, expecting to contribute to be a vibrant and a booming economic center in the National Capital Region. It aspires to be an economy at par with the major metropolitan cities of the country once fully developed. The growth of the economy and the city depends upon the ability to attract investment and industries to the region. There are projected to be more than 17 lakh jobs in YEIDA by 2041 owing to various strategies and plans adopted in YEIDA.

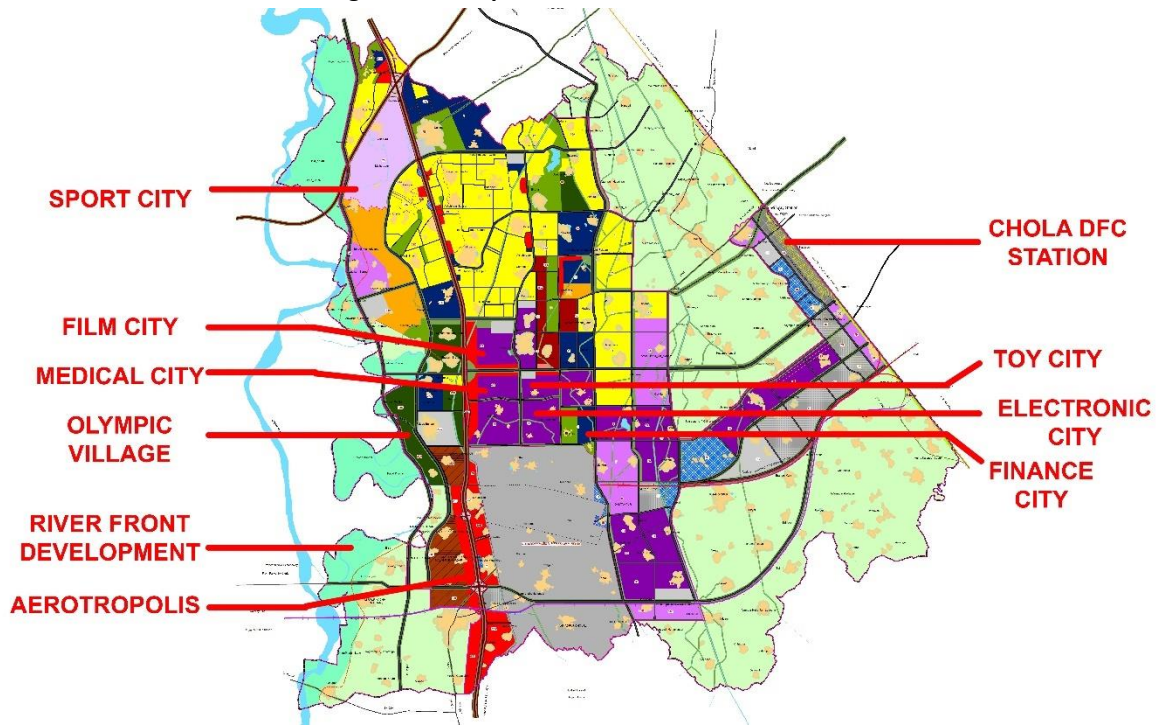
The new jobs created are distributed across YEIDA phase 1 owing to its locational advantage of being adjacent to the Yamuna Expressway, Economic corridors such as dedicated freight corridors (E-DFC and NS DFC) and the upcoming Noida International Airport. The Master Plan for 2041 will plan for this anticipated growth through its objectives and strategies.

The Master Plan 2041 seeks to strategically locate employment, ensure good management of existing land resources, ensure there is sufficient supply of suitable commercial sites and employment lands and efficiently utilise existing infrastructure. A dispersed city with low concentrations of jobs would have high economic, social and environmental costs. By 2041, the majority of jobs are likely to be located in strategic centres or industrial lands, which will provide the basis for more sustainable and targeted infrastructure and transport planning. There will be a new emphasis on innovation. Increasingly, global competitiveness depends on investment in knowledge and innovation. The Master Plan 2041 supports an innovative and efficient economy, focusing on where these industrial/ employment lands will be located and how YEIDA can work with industry and the community to influence economic and job outcomes. Ensuring there is sufficient land for employment and delivering this land with services in a timely fashion, is essential.

In order to encourage and attract the employment surplus, YEIDA would harbor a variety of themed zones/ sub cities within Phase 1. They will focus on businesses, tourism, cultural, education and entertainment activities. These centres will attract new shopping, health, education, business, and cultural facilities.

Themes envisaged in YEIDA Phase 1 includes Sports city developed as a Special Development Zone in Sector 25, Film City envisioned in Sector 21, Toy City, Financial City, Electronic City, Aerotropolis, medical park envisioned in sec 28 etc. Tentative locations of each of these is denoted in figure below

Figure 8-1: Proposed themes in YEIDA Phase 1



Each of these zones are intended to create a global outreach for strengthening the economic base and generating the employment opportunities, in YEIDA area. All these centres are connected through 130 m wide roads.

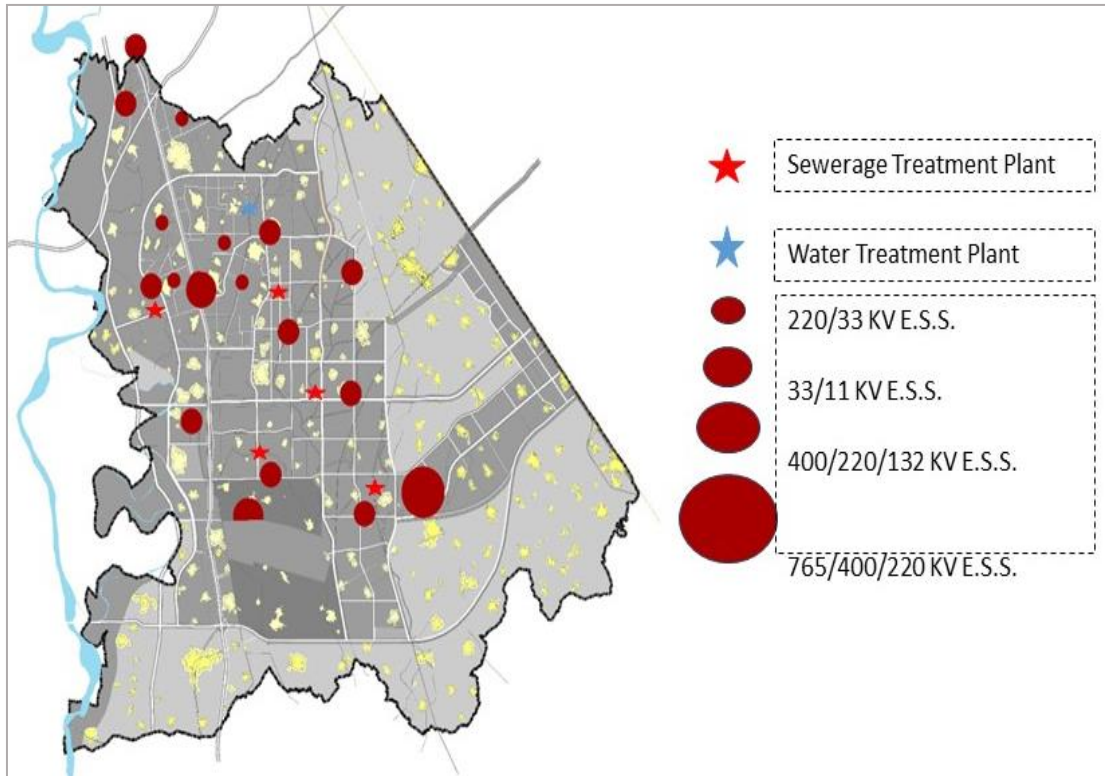
OBJECTIVE 2- To provide high quality and affordable infrastructure ensuring quality of life

Key Features

1. Rationalisation of supply norms of water
2. Norms for decentralisation of wastewater treatment, recycling of wastes, and maximum reuse of recycled water and solid waste
3. Priority for affordable housing for industrial workers
4. Ensuring the natural drain features are preserved to eliminate the risk of urban flooding

Forecasts show that YEIDA's population will grow by around 37.09 lakh people by 2041 and will require a range of housing options that differs significantly. With the population growing to 30 lakhs by 2031, YEIDA would have approximately 7.5 lakhs additional dwelling units. Currently, YEIDA has approximately 2 lakh dwellings, but a proportion of the total is always vacant or otherwise not available owing to the nascent stage of the development of the city and various other issues. Making an allowance for this, means that YEIDA would need a minimum additional 5 lakh new dwellings by 2041. This additional housing and existing dwelling units including the village Abadi areas needs to be provided with necessary physical infrastructure (water, sewerage, Drainage etc.) to ensure that a futuristic city such as YEIDA provides the basic infrastructure to 100 percent of its citizens.

Figure 8-2: Infrastructure Provisions in YEIDA Phase 1



OBJECTIVE 3- To provide safe, reliable, economical and environment friendly mobility

Key Features

1. Utility based street classification system.
2. Reliable and seamless Regional Connectivity.
3. Transit oriented development aligned with mass transit
4. Identification of mobility corridors
5. Ensuring accessibility of public transport within 5 minutes of walk.
6. Multi modal Integration and facilitation of first and last mile connectivity
7. Integration of Public transport system through Metro Neo, buses, cycle track, Pedestrian Street and IPT.

The transport network envisaged for YEIDA supports the economic growth of the city by getting people to jobs and services and other daily activities in a fast, safe, and reliable way, and through efficient freight movements. The system encourages travel choices which create stronger communities and improve people’s health while reducing impact on the environment.

The trunk public transport system is the Metro which connects to Delhi, while a network of Metro Neo, buses and para transit facilities complement this.

Land use and transport planning proposed in Master Plan 2041 enhances access and connections between where people live, work and visit. As YEIDA grows, YEIDites need to be supported by appropriate transport.

Transportation facilities is not limited to the movement of people. Envisioned as a burgeoning industrial and commercial hub, Master Plan 2041 supports efficient and appropriate freight transport facilities for the transportation of raw materials and finished goods.

OBJECTIVE 4- To create a unique identity for the city through culture and public life

Key Features

1. Creation of pedestrian friendly public squares and plazas with state-of-the-art street facilities
2. “Image of the City” city level CBD with world class infrastructure along with iconic pedestrian promenade
3. A distinctive and appealing low rise smart city with horizontal mixing to complement the Noida International Airport

People become attached to parks, gardens, and other open places, and appreciate them for what they offer culturally, socially, and personally. A high-quality public environment can have a significant impact on the economic life of urban centres big or small and is therefore an essential part of any successful development strategy. As towns increasingly compete with one another to attract investment, the presence of good parks, squares, gardens, and other public spaces becomes a vital business and marketing tool: companies are attracted to locations that offer well-designed, well-managed public places and these in turn attract customers, employees, and services. In town centres, a pleasant and well-maintained environment increases the number of people visiting retail areas, otherwise known as ‘footfall’. A good public landscape also offers very clear benefits to the local economy in terms of stimulating increased house prices, since house-buyers are willing to pay to be near green space. Access to good-quality, well-maintained public spaces can help to improve our physical and mental health by encouraging us to walk more, to play sport, or simply to enjoy a green and natural environment. In other words, our open spaces are a powerful weapon in the fight against diseases such as obesity and its associated risks.

Master Plan 2041 intends to create a hierarchy of public spaces ranging from an iconic square of the likes of La Défense, Paris to neighbourhood open spaces and parks which are age friendly and accessible to all.

9 POPULATION PROJECTION

Demographic factors play a crucial role in driving and responding to future economic, environmental, and social changes. Interdisciplinary studies of change can draw on projected trends in population size, growth rate, age structure, urbanization, and migration, among other variables.

The analysis of demographics has provided valuable insights into the urbanization trends of the tehsils in which YEIDA is planned. The primary objective of the city's development concept is to cater to the working population of neighbouring areas while ensuring quality infrastructure within the planning area.

The projected population according to Master Plan 2031 was 35 lakhs in which 26 lakhs were projected by the employment generation and 9 lakhs from the abadi areas. The Master Plan 2041 revisits these numbers and incorporates the potential spill over employment generated through the upcoming Airport. The estimates for potential employment generated in the planning area is evaluated from employment generated from various land uses adopted from case studies.

9.1 Expected Employment Generation

YEIDA Phase-1 was developed as an Industrial township, benefitting from the proximity to Noida International Airport. . The anticipated employment opportunities will arise from commercial, industrial and Airport related activities. A major portion of population will be attracted to YEIDA due to the available employment opportunities at local level. **Creation of employment is an essential aspect of social development process and YEIDA aims to cater to the employment needs of the surrounding areas.** To calculate the potential employment generation in YEIDA, case studies of NOIDA master plan, Greater NOIDA master plan, Gurgaon master plan and Faridabad master plan was analysed and for airport city side development case studies of Bangalore, Hyderabad and Nagpur Airport have been analysed. The activity structure is segmented with respect to the land use and it gives an insight about the employment generation in YEIDA.

The Table shows the potential employment generation from the land uses from Master Plan 2041.

Table 9-1: Calculation for employment generation in 2041

Land Use (2041)	Approx Area in Ha	Area in sqm	After reduction of service area	Assumption	Employment
Commercial	2091	2,09,09,956	1,47,88,545	1 in 30 sqm	4,92,952
Logistics	1500	1,50,00,364	1,12,16,889	1 in 130 sqm	86,284
Industry Large Scale	4070	4,07,03,526	2,67,00,285	50 per ha	1,90,716
Industrial Small scale	2714	2,71,35,684	2,18,45,688	100 per ha	3,12,081
Institution	2988	2,98,77,909	2,09,75,558	1 in 40 sqm	5,24,389
Multiple Landuse	1853	1,85,27,334	1,29,90,630	1 in 60 sqm	2,16,510
SDZ	1142	1,14,21,556	79,95,095	1 in 100 sqm	79,951
Airport Employment					5000
Total Employment Generation (2041)					19,07,883

In commercial areas one job is estimated to be created for 30sq. m area. In case of the logistics area, one job is estimated to be created for every 130 sq. m area. **The employment generation for industrial area is calculated as 100 jobs per ha for MSME and 50 jobs per ha for large scale industries.** Job creation of **institutional land uses is estimated at one job per 40sqm area.** The estimates for commercial and institutional land uses are taken from various benchmarking studies from Bangalore, Mumbai, and Nagpur while the assumption for Industrial land use is adopted from Master Plan 2031 for YEIDA. Expected employment hence generated from land uses of Master Plan 2041 would be **19.07 lakhs.**

9.2 Population Estimations

According to YEIDA Master Plan 2031 for Phase 1, the projected population was 35 lakhs considering a workforce of 9.0 lakhs. **For the purpose of population estimation for 2041 master plan, the estimated employment generation of 19.07 lakhs is taken based on assumptions as discussed above. Work Participation rate of 36 percent is assumed which would create a total population of 52.99 lakhs.**

Table 99-2: Projected population for 2041

Total Employment	Work Participation Rate	Total Population	Containment Ratio	Population
19,07,883	36%	52,99,676	70%	37.09 Lakhs

As YEIDA is being envisaged to have good connectivity with adjoining towns of Greater Noida, Noida, Bulandshahr etc, the potential population of 52.99 lakhs is not expected to reside in YEIDA. It is estimated that a certain percent would float from the adjoining cities of Noida, Greater Noida, and Bulandshahr etc. In order to estimate the percent of population that would reside in the planning area, the containment ratio of adjacent cities have been studied. The containment ratio of **Noida (containment ratio-64%), Gurgaon (containment ratio-82%) and Faridabad (Containment ratio-75%)** were analysed. Keeping in mind the enhanced connectivity proposals and the location of YEIDA in NCR the Containment ratio is taken as 70% and in consonance with the vision to limit the floating population in the city the estimated population for YEIDA for 2041 is estimated to be 37.09 lakhs.

10 MASTER PLAN PROPOSAL

10.1 Urbanisable area, Non Urbanisable area & Noida International Airport & Aviation Hub

In the YEIDA Master Plan, the allocation of **Urbanisable**, **non-Urbanisable**, and **Noida International Airport and Aviation Hub** areas is crucial for balanced urban growth. **Urbanisable areas** facilitate residential, commercial, and industrial expansion, supporting economic development and infrastructure. **Non-Urbanisable areas** safeguard environmental and ecological resources, including floodplains and conservation zones, preventing unsustainable construction and preserving natural balance. The **Noida International Airport and Aviation Hub** area is pivotal for enhancing connectivity and economic potential, positioning YEIDA as a key logistics and aviation center. Together, these designations ensure structured growth, environmental protection, and strategic economic development, creating a resilient and well-integrated urban landscape.

10.2 Proposed Land use Distribution

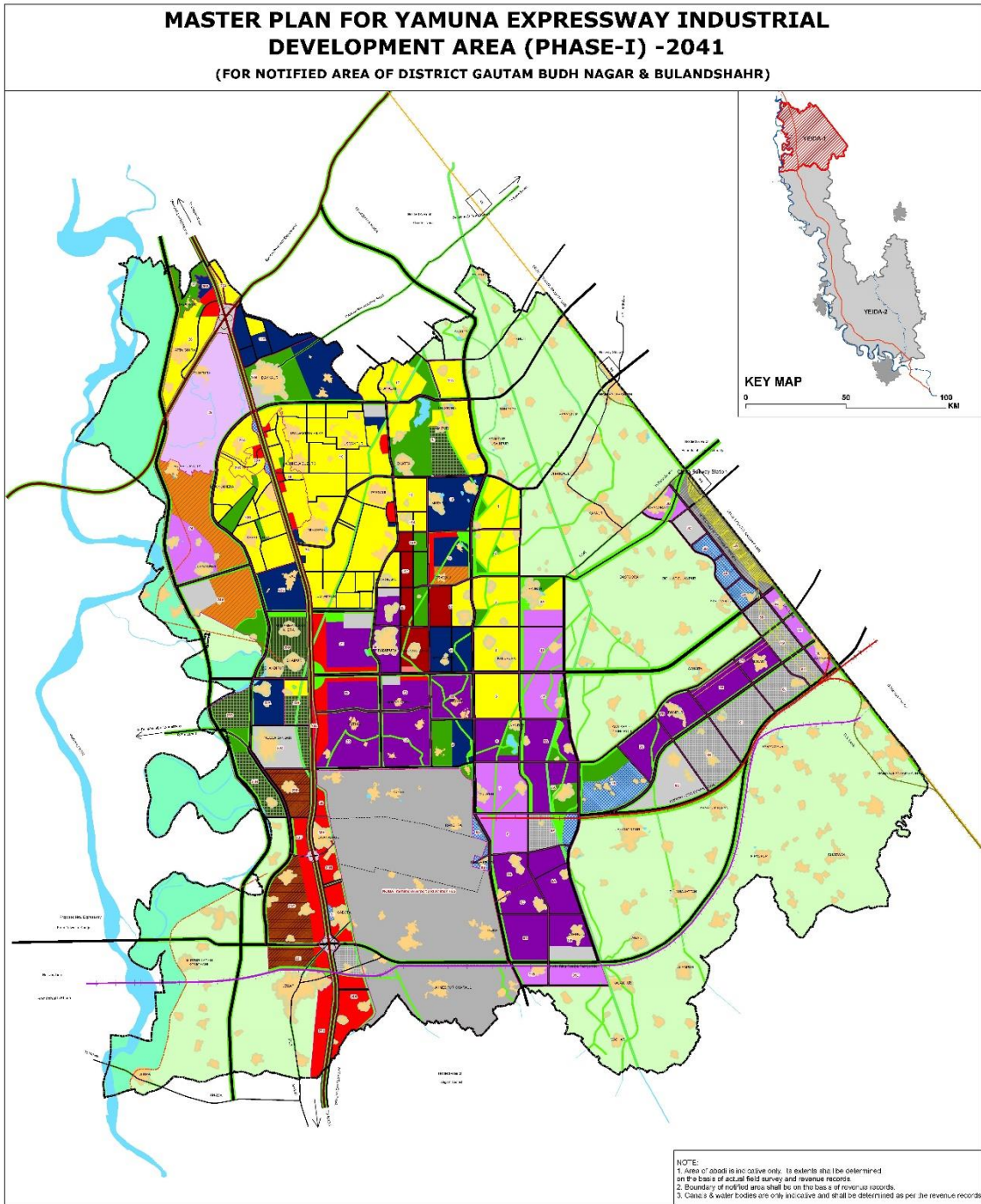
The conceptual plan provides an insight regarding the structure of the YEIDA by the year 2041. Depending upon the concept various densities were analysed and accordingly proposed land use was formulated. The land use proposed is based on the population projected for the year 2041 and a concept of multiple land use was introduced as a part of airport city development with reference to the case study of Rajiv Gandhi international airport of Hyderabad-Telangana. The total planning area of YEIDA phase-I is **76779 ha (767.79 Sq. km)**, out of which **37539 ha** of land is urbanisable area. **Urbanisable Area means the area earmarked for different landuses as defined in the YEIDA Building Regulations,2010 and it also includes village Abadi and Village Abadi extension area proposed in the Masterplan.** The table shows the proposed land use for master plan 2041.

Thus, the total Urbanisable area is 37539 Ha for a projected population of 37.09 lakhs by 2041. YEIDA phase-1 has kept provision for group housing as well as plotted development. In the master plan various density are considered for different residential sectors which is explained in the subsequent section. The gross density for the total Urbanisable area is 96.3 pph. However, since the Yeida area is a greenfield project and national level logistics facilities are being developed it is estimated that a percentage of the working population shall be catered to from the nearby urban areas. Hence, the net density for the Urbanisable area in Yeida has been computed as 146 pph post removing logistics sector, transportation sector and green areas.

Table 10-1: Proposed Land use 2041

SrNo	Landuse	Sub Landuse	Area (Ha)	%	Con. Area (Ha)	Con.(%)
1	Residential	Residential	6806.59	18.13	9785.26	26.07
		Existing Village Abadi	1811.22	4.82		
		Village Abadi Extension	1167.46	3.11		
2	Commercial	Commercial	1583.60	4.22	2076.77	5.53
		Wholesale Commercial	14.82	0.04		
		Central Commercial Area	478.35	1.27		
3	Multiple Landuse Hospitality	Multiple Landuse Hospitality	797.55	2.12	797.55	2.12
4	Industrial	Industrial	4637.56	12.35	6605.91	17.60
		Multiple Landuse Industry	1968.35	5.24		
5	Mixed Use	Mixed Use	1042.18	2.78	1042.18	2.78
6	Logistics	Logistics	1500.04	4.00	1500.04	4.00
7	SDZ	SDZ	1142.16	3.04	1142.16	3.04
8	Public & Semi-Public	Institutional	2125.14	5.66	2808.97	7.48
		Utility/Facility	683.83	1.82		
9	Transportation	Transportation	5900.28	15.72	5900.28	15.72
10	Greens	Green Belt	2789.41	7.43	5544.27	14.77
		Park & Play Ground	1752.95	4.67		
		Recreational Green	1001.91	2.67		
11	Water Body	River/Canal/Drain/Lake/Pond	335.53	0.89	335.53	0.89
(A)		Total Urbanisable Area	37538.91	100.00		
12	Non Urbanizable	Village Abadi outside Urbanisable area	1276.05			
13		Village Abadi Extension outside Urbanisable area	1540.21			
14		River Front Development	4517.61			
15		Airport	6286.73			
16		Agriculture & Remaining Area	25776.85			
(B)		Total Non-Urbanisable Area	39397.46			
		Grand Total (A+B)	76936.37			

Map 10-1B: Proposed Master Plan 2041

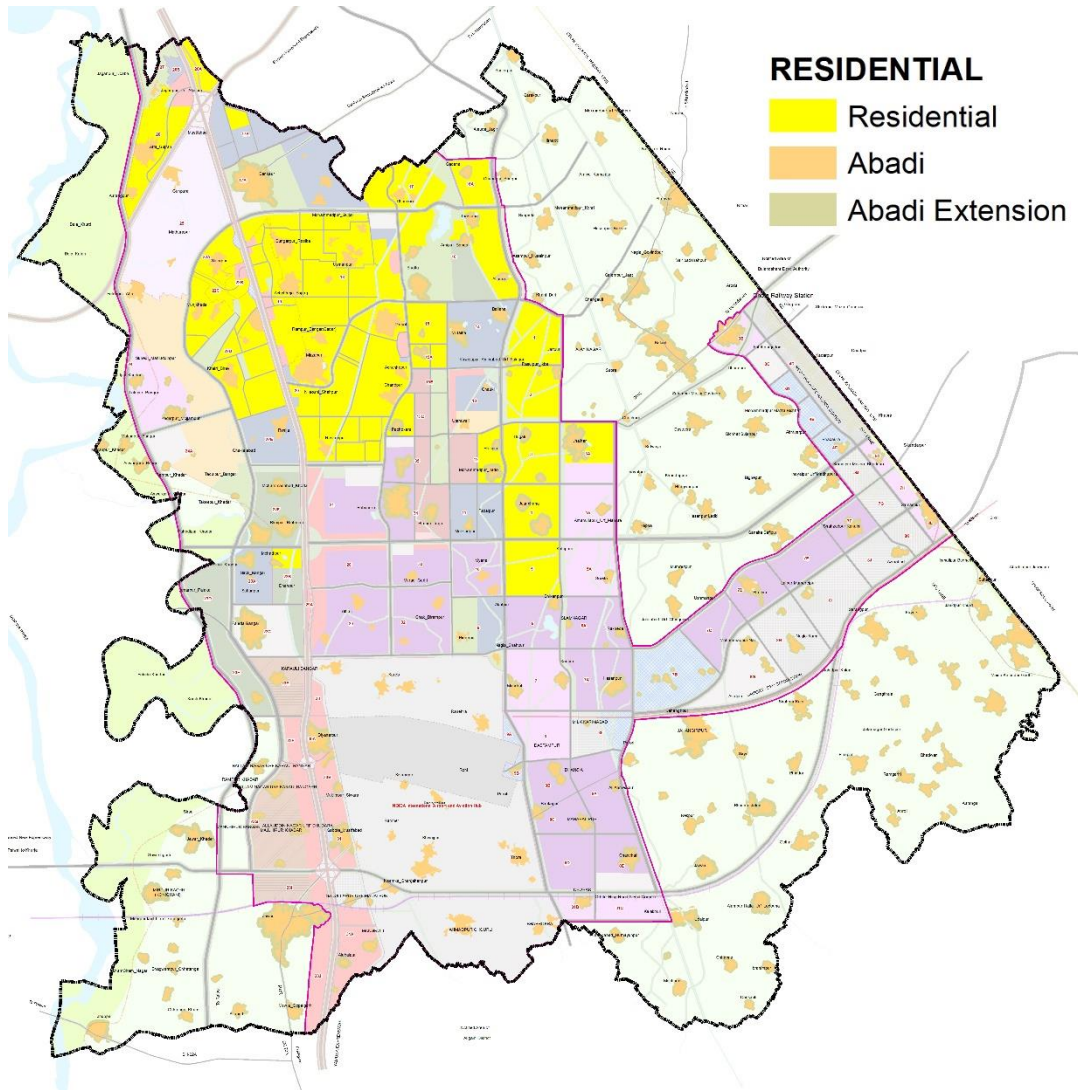


NOTE:
 1. Area of abadi is indicative only. Its extent shall be determined on the basis of actual field survey and revenue records.
 2. Boundary of notified area shall be on the basis of revenue records.
 3. Canal & water bodies are only indicative and shall be determined as per the revenue records.

<p>Legend</p> <ul style="list-style-type: none"> Planning Area Boundary Existing Rail Existing OFC LC Proposed OFC Airport Rail Existing Major Roads Proposed Road Network 100' ROW 200' ROW 100' ROW 200' ROW 300' ROW 400' ROW 500' ROW Social Boundary Embankment 	<p>RESIDENTIAL</p> <ul style="list-style-type: none"> Residential Abadi Abadi Extension <p>COMMERCIAL</p> <ul style="list-style-type: none"> Commercial Central Commercial Area Whitefield Commercial <p>MULTIPLE LANDUSE HOSPITALITY</p> <ul style="list-style-type: none"> Multiple Landuse - Hospitality Multiple Landuse - Industry 	<p>MIXED USE</p> <ul style="list-style-type: none"> Wood Use <p>LOGISTICS</p> <ul style="list-style-type: none"> Logistics <p>SPECIAL DEVELOPMENT ZONE</p> <ul style="list-style-type: none"> SDZ <p>PUBLIC & SEMI PUBLIC</p> <ul style="list-style-type: none"> Institutional Utility/Facility <p>TRANSPORTATION</p> <ul style="list-style-type: none"> Transportation 	<p>GREENS</p> <ul style="list-style-type: none"> Green Belt Parks & Playground Recreational Green <p>WATER BODY</p> <ul style="list-style-type: none"> River/Canal/Drain/Lake/Wood <p>AIRPORT & AVIATION HUB</p> <ul style="list-style-type: none"> Airport & Aviation HUB <p>RIVER FRONT DEVELOPMENT</p> <ul style="list-style-type: none"> River Front Development <p>AGRICULTURE</p> <ul style="list-style-type: none"> Agriculture 	<p>Map Title Proposed Land Use 2041</p> <p>Scale 1:50,000</p> <p>0 1 2 4 6 Kilometers</p>	<p>Project MASTER PLAN - 2041 YAMUNA EXPRESSWAY INDUSTRIAL DEVELOPMENT AREA (PHASE - I)</p> <p>PREPARED FOR: Yamuna Expressway Industrial Development Authority <small>Industrial Development Authority</small></p> <p>PREPARED BY: M&RS Planning & Engineering Services Pvt. Ltd. <small>Plot 111, Block - 10, Sector - 10, Phase - 1, Yamuna Expressway Industrial Development Authority, Ghaziabad - 201015. To know more about us, visit our website: www.marsplanning.com</small></p>
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10.2.1 Residential Landuse

Figure 10-1 Residential

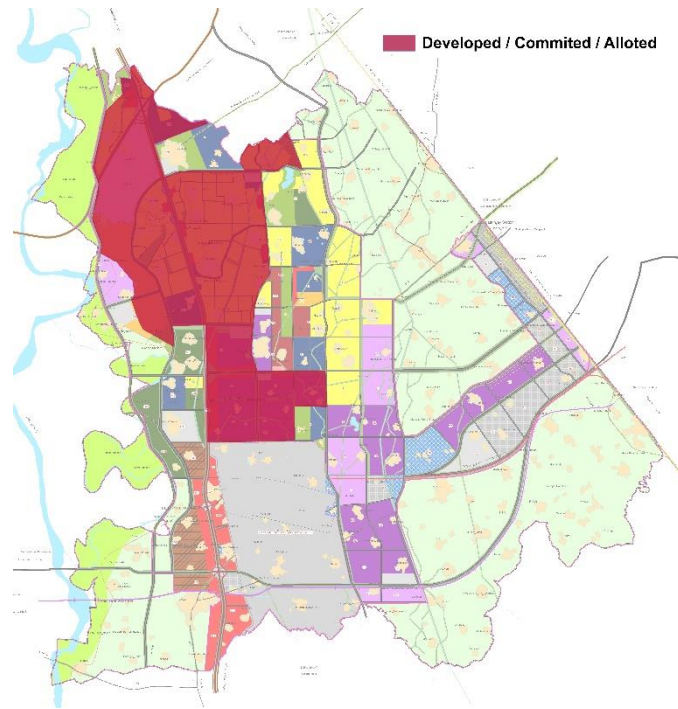


10.2.1.1 Residential Development

The residential land use is proposed for plotted development and group housing, the residential area is evenly distributed in the master plan. In Approved master plan 2031, the residential area is proposed 6806.59 Ha in 2041 Master Plan to constitutes of 18.13% of total Urbanisable area.

Location of the residential area is based on the location of employment generating uses and correlated with transportation facilities. The facilities proposed at the sector level are senior secondary, primary and nursery schools, dispensaries, community halls and libraries, local shopping centres, auto rickshaw and taxi stand, etc. Parks and playgrounds shall be provided at convenient distances from the residential pockets within the sectors.

Figure 10-2 Alloted or Committed Development



For finalizing the population density, it was proposed to differentiate the residential area into two categories such as group housing and plotted housing. Group housing was further categorized into High density and medium density. **In already developed sectors it was proposed to have a population net density of 1000 pph for high density group housing that included, EWS, LIG and MIG. For medium density housing the population was proposed to be 700 pph and for plotted development the density was proposed to be 200 pph.** The development of infrastructure facilities and services was also be planned to accommodate the high density of population. Green buffers and supportive facilities will help in containing any adverse effect of the proposed high population density. The overall gross density of Urbanisable Area would be within 500 pph. As per Master Plan 2031, 22 lakh population has already been allotted in the sectors 17, 18, 20, 19, 22A, 22B, 22C, 22D, 25 and 26. **(As shown in above Map)**

Table 10-2: Population & density of Allotted Sectors in YEIDA

Sector	Population	Net Sector Area (ha)	Density (pph)
Sector 17*	211000	199.12	1060
Sector 18*	270000	996	271
Sector 20*	216000	1151	188
Sector 19**	250000	415	602
Sector 22 B**			
Sector 22 C**			
Sector 22 A*	945000	901.4	1048
Sector 22D*			
Sector 25	236000	1142	207
Sector 26***	100000	286	350
Total	22,28,000	5090.52	438

The new sectors have been planned to achieve integrated socio-economic development by proposing the housing of different income categories such as economically weaker section, low income group, medium income group and high income group and various forms of development such as group housing and plotted development and public private housing with varying plot and dwelling unit sizes, location factors such as comparative proximity to work centres will be considered while deciding about the density and type of development in a particular sector/pocket. Also, it is proposed that of the total housing, 10% of EWS and LIG each be developed by the Authority as per State/Authority policy. However, in general, the residential development shall be as per prevailing policies for residential development.

10.2.1.2 Existing Village Abadi

As a strategy of inclusive development of the region, there is need of integrating existing rural settlements with the proposed urban development. Keeping in view, the village abadis will be integrated both spatially and socio-economically through an upgrading programme as per prevailing Abadi Development Policy of State Govt. and guidelines as “Planned Village Abadi Expansion Scheme” of YEIDA Building Regulations or as may be decided by the Authority. As part of it, the planned development of the village abadi’s falling within the Urbanisable area will be carried out to enhance the quality of life of the people of rural settlements. As per prevailing policy and guidelines, the development of the village will be planned by providing the basic physical and social infrastructure and developed plot will be returned to the land owners against the land acquired from them. For the purpose, abadi areas are to be marked and verified by Competent Authority at the time of preparation and implementation of Layout Plan.

Presently the area covered under Abadi is 1811.22 ha which is around 4.82% of the Urbanisable area. In order to prevent villages from expanding on roads and creating traffic problems, as far as possible, the villages are to be surrounded with planned area.

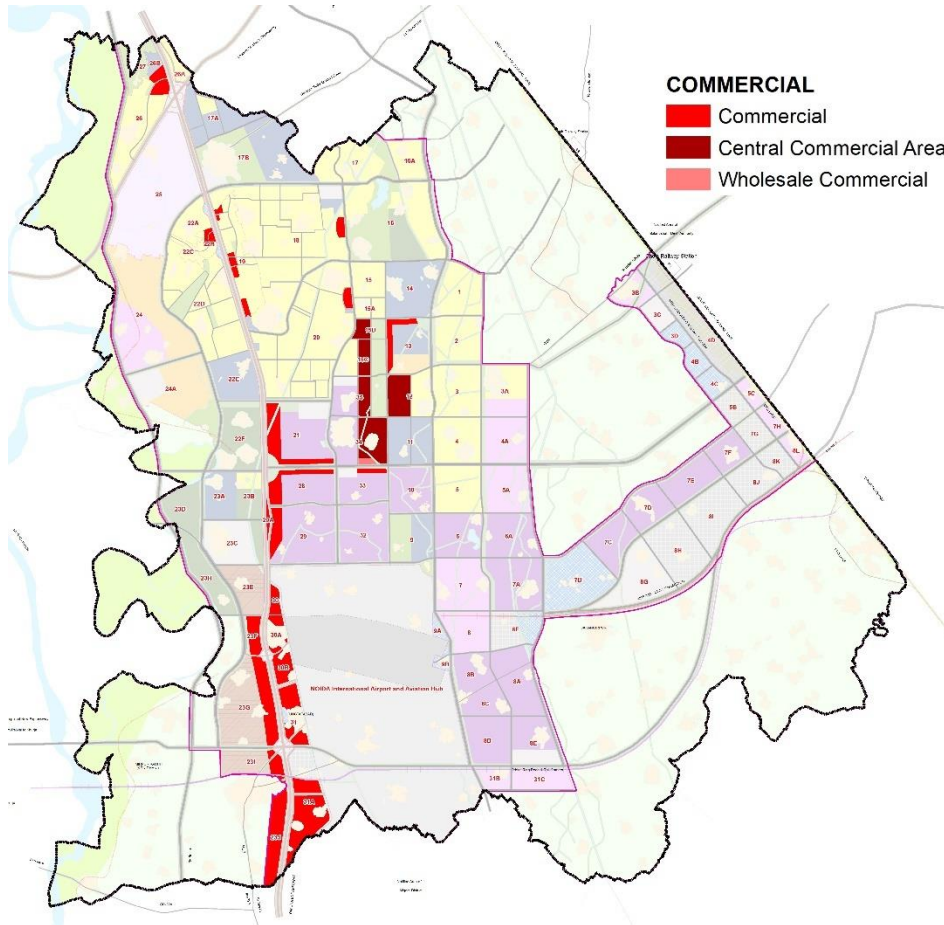
10.2.1.3 Village Abadi Extension:

Presently the area covered under Abadi is 1167.46 ha which is around 3.11% of the proposed Urbanisable area. The natural growth of the village abadis outside the proposed Urbanisable area but within the YEIDA is inevitable. Moreover, to make them part of the development process, the rural development measures have been recommended to make basic social and physical infrastructure available to them based on the requirement. Village Abadi Extension areas are also to be marked and verified by Competent Authority at the time of preparation and implementation of Layout Plan.

10.2.2 Commercial

Trade and commerce play a vital role as a supporting activity for proper industrial growth in an industrial township. The centres for trade and commerce have to be planned with much more liberal standards for parking and open space requirement and should leave enough scope for accommodating dramatic changes in the pattern of use of commercial areas.

Figure 10-3 Commercial

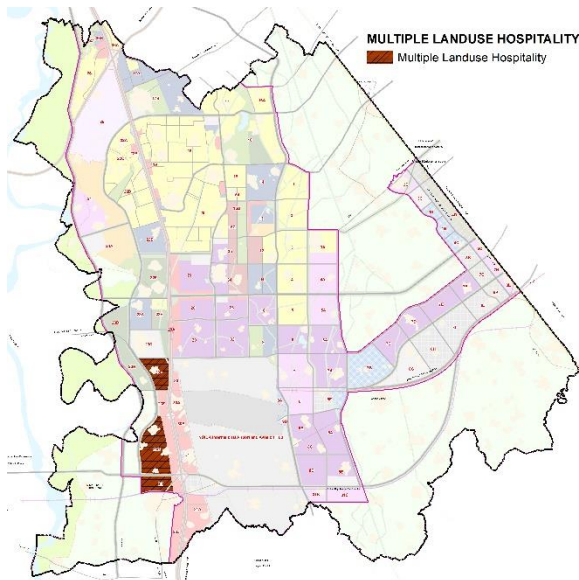


At present, in YEIDA area, the commercial activity exists in the northern tip of the boundary. Rest of the commercial area has developed in form of small-scale retail and service usebased shops in nature around the residential area and in the city centre. Majority of the shops are single unit. Core Commercial landuse proposed to be 1583.60 ha i.e. 4.22% of the total Urbanisable area and it is proposed in different areas of the city for easy accessibility. Commercial facilities such as, central commercial area 478.35 Ha (1.27%) and wholesale commercial areas 14.82 Ha (0.04)% has also been additionally proposed. Moreover, to accommodate the required shopping, commercial offices, and other activities like cinema, hotel and related facilities, the following 3-tier system of commercial development is proposed.

- a. **District Level Commercial Centre:** To cater to the city-level business and shopping facilities, a Central Commercial Area has been proposed in **Sector 15 B, 15 C, 35, 12 & 34, over an area of 900 ha. The details of the same have been provided in section 11.3.1**
- b. **Sector Level Commercial Centres:** Within the proposed land use, in new developments, two categories of shopping centres shall be provided:
 - i. Local Shopping for a Neighborhood of 15,000 population, area 0.46 hectare, and
 - ii. Convenience shopping for 5,000 populations, area 0.11 hectare.
- c. **Housing Area Retail Shops (remaining commercial area):** The lowest level of commercial shopping in terms of standalone shops or cluster of shops shall be provided under this category.

10.2.3 Multiple Landuse Hospitality

Figure 10-4 Multiple Use Hospitality



The concept of multiple land use was developed about two decades ago alongside the mixed land use concept. Multiple land use is not a land use category, but ‘presents a concept of action, more than of content. It is about the creation of synergy between land use functions. The Multiple Use planning agenda tries to improve areas as places to live and as spaces for investment. The market conditions for a horizon period of 20 years are uncertain. There remains a percentage of uncertainty even after the various methods adopted to predict the outcome of the area. The traditional planning norms tend to be regulatory in nature with limited avenues for flexibility in

terms of permitted activities. The investors in certain cases require a flexibility in the use of land to cater to the evolving market conditions and technological developments.

The multiple land use hospitality is around 797.55 Ha and that is 2.12% of total proposed urbanisable area. This is catered through multiple land use where the same area is used for distinct functions over a period of time through various percentage of different land uses as defined below. Horizontal mixing of activities are envisaged in this landuse category as depicted in the following table.

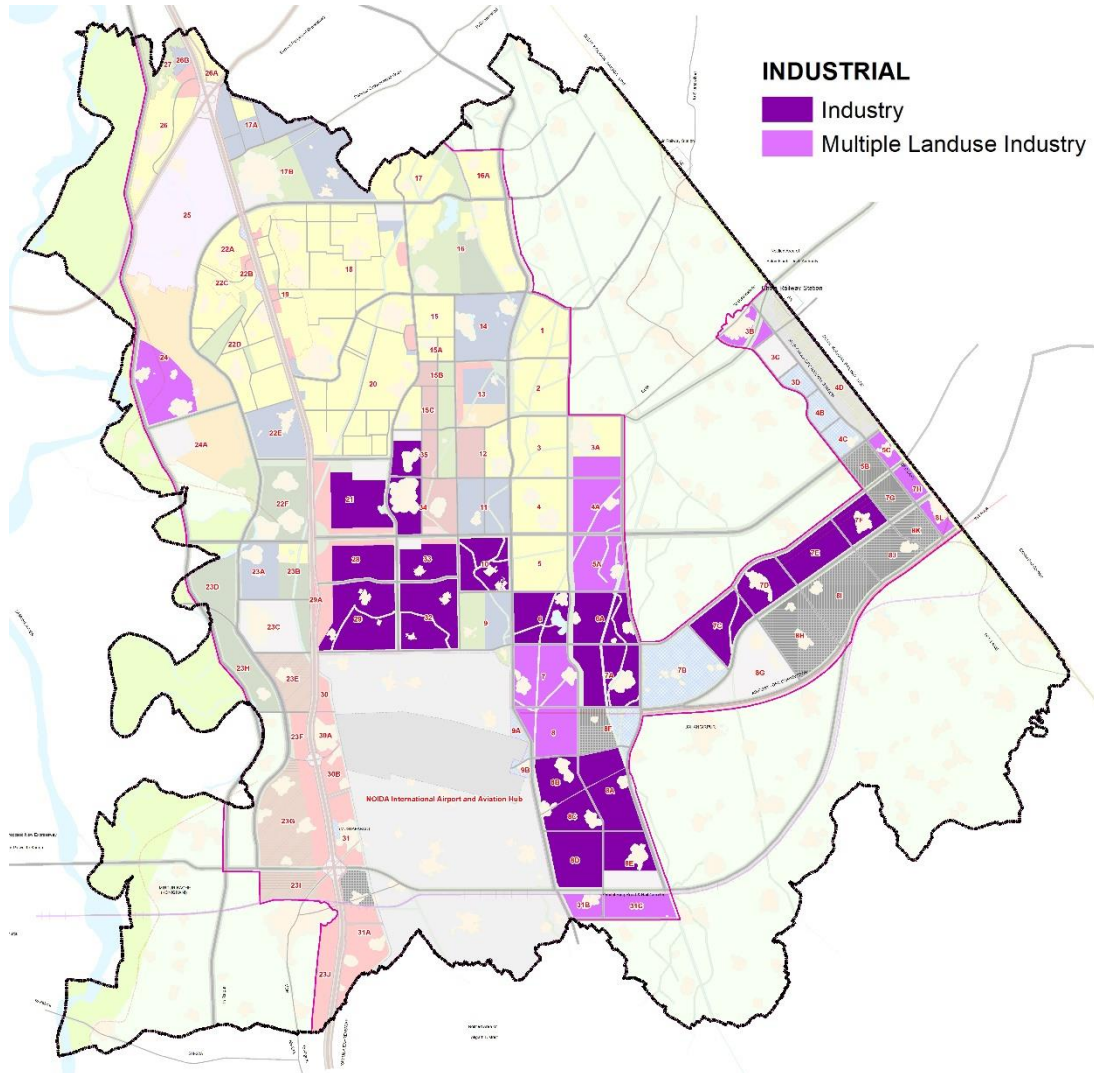
Table 10-3: Multiple land use Hospitality

Land Use	Percentage
Commercial	Minimum 65%
Industrial	Maximum 10%
Residential/ Institutional	Maximum 20%
Institutional (Facilities)	Minimum 5%

10.2.4 Industrial Landuse

YEIDA phase-1 is planned as an industrial area, and with the development of the international airport the focus on logistics has increased in the area. However as per the current situational analysis the potential for industrial development will have to increase since the city need to cater the needs of the surrounding areas along with its own requirements. Therefore, 6605.91 Ha is proposed for industrial land use that is 17.60% which includes the industrial area of 4637.56 ha (12.35%) and multiple land-use industry area of 1968.35 ha (5.24%).

Figure 10-5 Industrial



10.2.4.1 Industrial

The important economic activity in the master plan area is proposed to be industrial development. Due to the existence of the industrial area in vicinity, DFC Corridor & Chola Railway Station and proposed airport, the large scale industries such as refinery, existence of raw material, presence of infrastructure as water, gas pipeline, there is large potential of manufacturing industries in Master Plan Area. The industrial area is planned as a characteristic, prominent and diversified industrial area with flexibility in providing type and size of industrial units. The industrial land distributed covers an area of 4637.56 ha which is around 12.35% of the Urbanisable area, considering the varying FAR from 1 to 1.5 as per Yamuna Expressway Authority, Building Regulation.

However, the industrial areas have been located largely on the north-east and south of the planned city running from north to south considering the wind direction. The industrial areas shall be developed as per the planned sector layouts prepared by Authority and prevailing building bylaws. However, the various development incentives shall be provided as per Government Orders with regard to Industrial and Infrastructure Development Policy of Uttar Pradesh-2012 and guidelines of Authority.

Industrial development will be supported by key industrial infrastructure viz. provision of Freight Complex 24X7 power supply, water supply, sewerage system etc. Moreover, the expansion or reconstruction more than the existing area shall be governed of that activity by the permissibility as provided in zoning regulation. However, the Authority/State Govt./Central Govt. or its departments/agencies can take appropriate decision/actions as per law with regards to existing structures in the ROW of existing roads and ROW of the proposed Master Plan Roads/Railway/Other Transport Mode.

10.2.4.2 Multiple Land Use Industrial

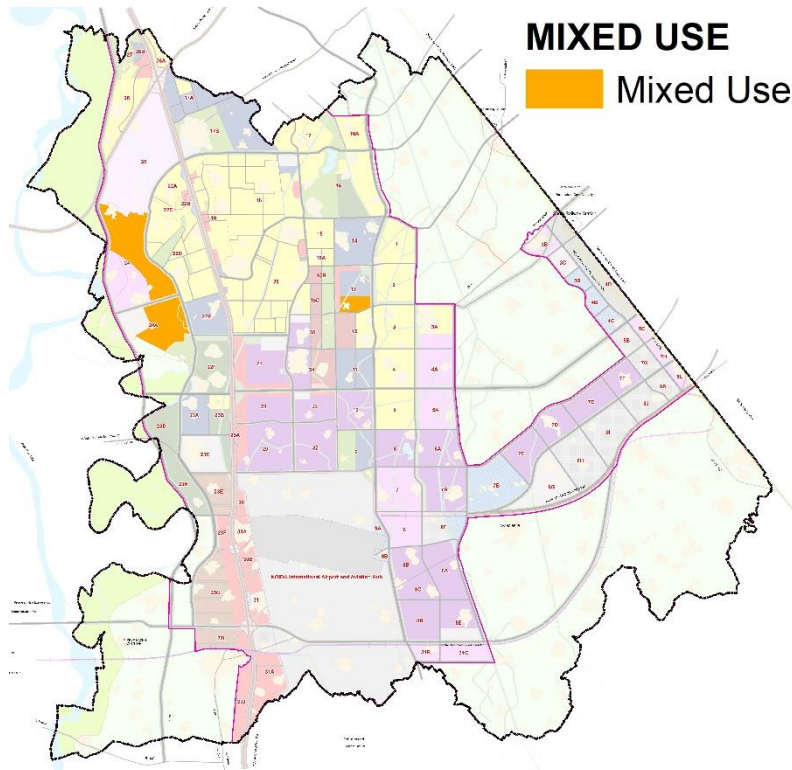
Multiple industrial landuse is introduced to improve the areas and spaces within the industrial land use, which is about 1968.35 Ha (5.24%). In the proposed multiple land use, 70%, is allotted to industrial and the rest 30% are further bifurcated into other land uses. The other land uses are Residential (Minimum 5% and Maximum 12%), Commercial (Maximum 13%), Institutional (Maximum-5%).

10.2.5 Mixed Use

The concept of mixed land, in recent planning paradigms has become a common practice. A judicious mix of activities like residential, commercial, institutional and non-polluting type of economic activities can have a positive impact by reducing travel needs and thereby the energy consumptions. This also leads to greater efficiency of manpower by saving time and energy generally lost in commuting between residence and workplace. An area of about 1042.18 Ha (2.78%) is earmarked for mixed use in the Plan 2041. The type of Land uses, their extent in the mixed-use zone shall be as follows:

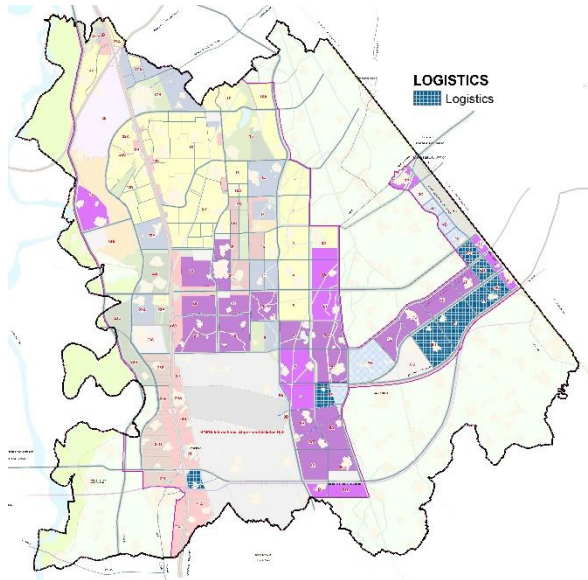
- Industrial/Institutional/Recreational - Maximum 75%
- Residential - Minimum 5% and Maximum 12%
- Commercial - Maximum 8%
- Institutional (facilities/Utilities) - Minimum 5%

Map 10-2 Mixed Use



10.2.6 Logistics

Figure 10-6 Logistics



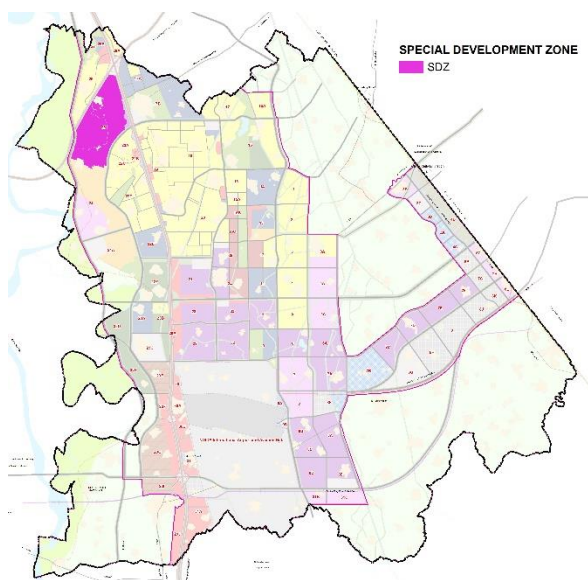
The YEIDA Master Plan Area is strategically designed to become a major logistics hub, leveraging its advantageous location and excellent connectivity. Strategically located near the DFC Corridor, Chola Railway Station, and the proposed airport, the area is ideally suited for logistics and warehousing activities. Essential infrastructure, such as reliable water and power supply, along with an extensive road and rail connectivity, further enhances its suitability for logistics operations. Total area of 1500.04 Ha which is 4.00% of the Urbanisable area, are allocated for logistics use, with land strategically distributed primarily in the north-east and south-east regions to maximize the benefits of existing and planned infrastructure. The plan offers flexibility in the type and size of logistics units, accommodating a

range of activities from large-scale warehousing to smaller distribution centers.

Logistics areas will feature 24X7 power supply, efficient water systems, robust sewerage networks, and dedicated Freight Complexes designed to handle large volumes of goods. These complexes will include support services such as loading/unloading bays, truck terminals, and maintenance facilities. Development, Expansion or reconstruction within logistics zones will adhere to sector layouts prepared by the Authority and comply with prevailing building bylaws, with various incentives provided under the Industrial and Infrastructure Development Policy of Uttar Pradesh-2012 and the Authority's guidelines. Authority will ensure compliance with regulations regarding existing structures within the Right of Way (ROW) of roads and other transport modes, ensuring smooth project implementation and policy adherence.

10.2.7 SDZ (Special Development Zone)

Figure 10-7 SDZ

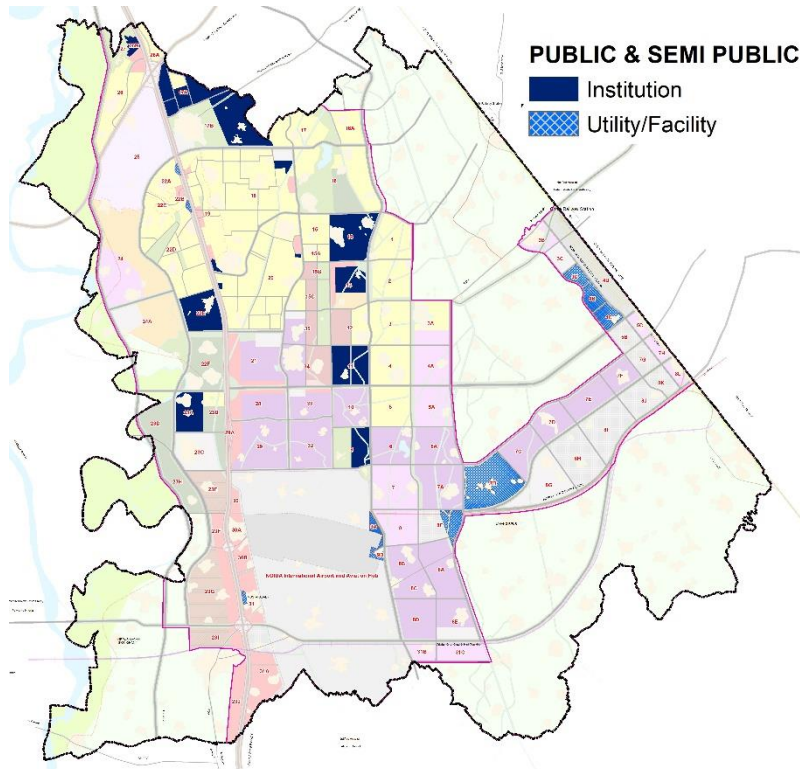


The area earmarked as SEZ is already allotted in Sector 25 in form of a Sport City with a specific purpose. The Conceptual Structural Plan for the same was approved by the Board of YEIDA in its 17th Board Meeting held on 14.11.2007. The Plan basically laid out a network of roads in the area dividing it into land parcels of approximately 1000 Ha each as Special Development Zones (SDZs). The provision of SDZs has been made in accordance with the SDZ policy of the State Government.

10.2.8 Public & Semi-Public

This category of includes Land for Institutional use and land allocated for the public utilities and facilities. The proposed area for Public Semi-Public use is 2808.97 Ha which is 7.48% of total Urbanisable area, distributed along the entire city at various locations.

Figure 10-8 Public & Semi-Public



10.2.8.1 Institutional

The institutional development within the YEIDA Master Plan Area is pivotal to its socio-economic growth, featuring an array of educational, healthcare, and research facilities. The proposed area for Public Semi-Public use is 2125.14 Ha which is 5.66% of total Urbanisable area. Strategically located schools, colleges, and vocational training centers cater to diverse educational needs, fostering community stability and attracting families and professionals. Healthcare infrastructure, including hospitals and clinics, ensures comprehensive medical services are readily available to residents.

Research centers and think tanks promote innovation and economic growth, while administrative buildings facilitate efficient governance and public administration. These institutional facilities are designed with modernity and sustainability in mind, incorporating green building technologies and eco-friendly practices. This approach ensures that the institutional development not only meets community needs but also contributes to environmental sustainability and long-term economic resilience.

10.2.8.2 Utilities and Facilities

Utilities and facilities are crucial for the seamless functioning of the YEIDA Master Plan Area, covering essential services like water supply, power distribution, sewerage, and waste management. The proposed area for Utilities/Facilities use is 683.83 Ha which is 1.82% of total Urbanisable area. A robust water supply network ensures a reliable and sustainable water source, while a 24X7 power supply

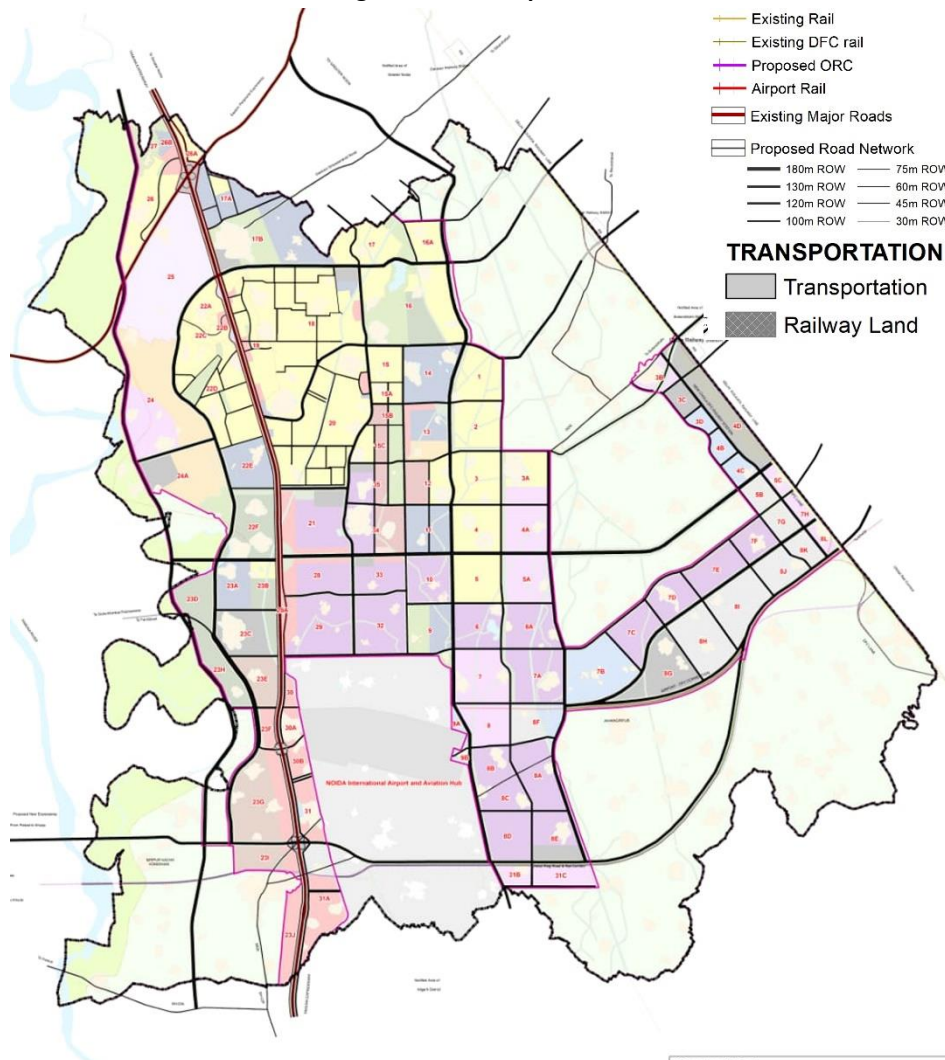
network incorporates renewable energy sources for efficiency and sustainability. Advanced sewerage and waste management systems include treatment plants and recycling facilities to minimize environmental impact.

Emergency services such as fire stations, police stations, and disaster management centers are strategically placed for quick response times, enhancing regional safety and security. Public amenities like community centers, parks, and recreational facilities are integrated to improve residents' quality of life. These utilities and facilities emphasize sustainability and resilience, utilizing advanced technologies and intelligent infrastructure management systems to ensure efficient resource use and service delivery. This comprehensive approach supports sustainable development and enhances the overall quality of life in the YEIDA Master Plan Area.

10.2.9 Transportation

Transportation includes all the transport related utilities, Roads (expressways, arterial, sub-arterial and collector roads), Rails and land kept for the railway development proposed under NCR plan and Sub Regional Plan along with other Road and Rail-based connectivity essential for logistic park and airport connectivity. The proposed area for Transportation is 5900.28 Ha which is 15.72% of total Urbanisable area.

Figure 10-9 Transportation



The transportation infrastructure in the YEIDA Master Plan Area is meticulously designed to facilitate seamless connectivity and support the region's growth as a major economic hub. The area boasts an extensive road network, including the Delhi-Mumbai Freight Corridor (DFC) and the Eastern Peripheral Expressway, providing efficient linkages to major cities and industrial centers. Key arterial roads and highways are designed to accommodate high traffic volumes, ensuring smooth transit for both passenger and freight vehicles. Strategically located transport hubs, such as the proposed airport, further bolster the region's connectivity. The integration of multi-modal transport facilities ensures that goods and passengers can move efficiently between different modes of transport. The road network is complemented by robust public transportation options, including dedicated bus lanes and future provisions for metro rail connectivity, enhancing accessibility and reducing traffic congestion.

The transportation facilities are designed with a focus on sustainability, incorporating green infrastructure and eco-friendly technologies. Wide roads with designated pedestrian pathways and cycling lanes promote non-motorized transport, reducing the carbon footprint. Intelligent Transport Systems (ITS) will be implemented to manage traffic flow, enhance safety, and provide real-time information to commuters. Additionally, the road infrastructure will adhere to the highest standards of safety and accessibility, ensuring that all segments of the population, including the elderly and disabled, can move freely and safely.

Relative pockets are given at different locations for facilitating bus station and depots, truck terminal and parking facility, general parking etc. In further section, detail recommended proposals in transportation have been elaborated in further section of the chapter.

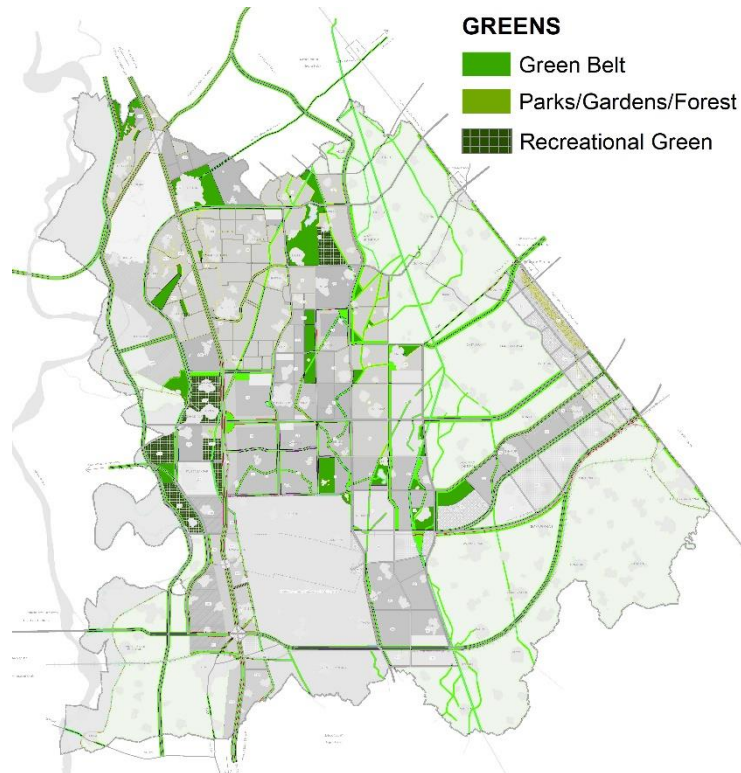
Railway infrastructure plays a crucial role in the YEIDA Master Plan Area, enhancing the region's connectivity and supporting its development as a logistics hub. The presence of Chola Railway Station, a key node in the area's transport network, ensures efficient rail connectivity to major industrial centers and cities. The station is strategically positioned to facilitate the movement of both passengers and freight, complementing the extensive road network and proposed airport. Plans include the development of dedicated freight terminals and logistics parks near the railway station, equipped with modern amenities to handle large volumes of goods. These facilities will feature loading/unloading bays, truck terminals, and maintenance areas, ensuring efficient operations and quick turnaround times.

The integration of railway infrastructure with other transport modes promotes seamless multi-modal transport options, enhancing the efficiency of logistics operations. Future provisions for metro rail connectivity will further improve accessibility within the region, reducing traffic congestion and supporting sustainable urban development. The comprehensive railway infrastructure plan aims to create a well-connected, efficient, and sustainable transport network, driving economic growth and improving the quality of life for residents and businesses alike.

10.2.10 Greens

The comprehensive approach to green infrastructure in the YEIDA Master Plan Area ensures that environmental sustainability is integrated into the urban landscape. The proposed area for Green use is 5544.27 Ha which is 14.77% of total Urbanisable area. Further it is divided in to Green belt, parks and Play Ground, and Recreational Green spaces to collectively contribute to a healthier, more vibrant, and ecologically balanced community, supporting the region’s long-term environmental and social well-being.

Figure 10-10 Greens



10.2.10.1 Green Belt:

The YEIDA Master Plan Area incorporates green buffers as a critical element of its green infrastructure strategy. The proposed area for green belt is 2789.41 Ha which is 7.43% of total Urbanisable area. These buffers serve as transitional zones between different land uses, such as residential and industrial areas, mitigating environmental impacts and enhancing air quality. Strategically placed green buffers reduce noise pollution and act as natural barriers, promoting a healthier living environment. Additionally, these green zones support biodiversity by providing habitats for various plant and animal species, contributing to the ecological balance of the area.

Proposed recreational areas include the green buffers along the roads, drains, canals, between industrial areas and residential areas to segregate them. All the ecologically sensitive areas such as rivers, canals, natural drains, ponds and other water bodies have to be conserved as per MOEF guidelines. However, the green belts of varying width have been provisioned along Expressway, other roads, drains, canals etc. Green belt of 30m on each side of the canal and 15m on each side of natural drain has been provided to protect natural drains. In addition, green belts have been provisioned along roads to provide lung spaces and to absorb the traffic pollution. Green belt of 50m on each side of Yamuna Expressway and varying width have been provisioned along other Master Plan Roads

including State Highway and National Highway passing through the city has been proposed. Further, the green belt of 50m on both sides of Railway line is proposed to be developed.

10.2.10.2 Parks and Play Ground

Park and Play Ground form the backbone of the green infrastructure in the YEIDA Master Plan Area. The proposed area under this zone is 1752.95 Ha which is 4.67% of total Urbanisable area. These spaces are designed to offer residents access to natural environments, promoting physical and mental well-being. Large parks and gardens are interspersed throughout the area, providing recreational spaces and enhancing the aesthetic appeal of the region in form of Regional and City Park, Theme Park, Golf Course, Botanical Park, Play Grounds, Amusement Park etc. which will be developed by the authority while making a sector layout plan. However, Authority reserves the right to modify the same with stated reasons. The forest shall be determined from revenue records of forest department while detailed planning. Similarly, there are open scrubs and any other area which is ecologically sensitive, Authority shall identify the same at the time of layout preparation and preserve them. If the Forest area is identified as per revenue records, to increase the tree cover area of forest by adding surrounding area as a green buffer to improve air quality and act as carbon sinks, supporting the region's sustainability goals. The Dhanori Wetland has been added with extra green for its protection as per Wetland guidelines. These green spaces also serve as community hubs, fostering social interaction and community engagement.

10.2.10.3 Recreational Green

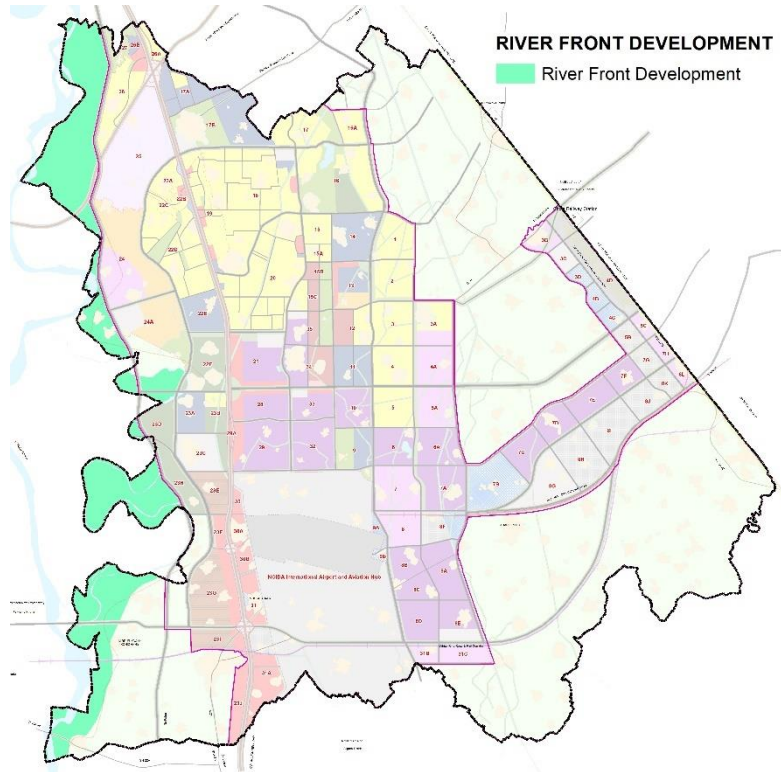
YEIDA is principled to be developed as eco-city development with huge lung spaces and recreational spaces spread over the entire city. The proposed area for Recreational use is 1001.91 Ha which is 2.67% of total Urbanisable area. Recreational green spaces offering a variety of outdoor activities and leisure opportunities for residents. Sports fields, playgrounds, and walking trails are distributed across the area, encouraging an active lifestyle and providing venues for community events and sports activities. These recreational green areas are designed to be accessible to all age groups, ensuring that every resident has the opportunity to engage in outdoor activities. The focus on recreational green spaces not only enhances the quality of life but also strengthens the social fabric of the community by providing common areas for socializing and recreation.

The proposed recreational activities are distributed suitably well within the city. The theme based Olympic Village Park being serving the entire city and its surrounding areas and is proposed to be centrally located and accessible from Yamuna Express Way. Further, the trade and exhibition ground is proposed to be developed on the western side of the Expressway opposite to airport and city level institutional.

10.2.11 River Front Development

The Riverfront Development Zone along the Yamuna River is a pivotal component of the YEIDA Master Plan, aimed at transforming the river’s edge into a vibrant, sustainable urban space while addressing flood management concerns. This zone enhances the river’s ecological health and provides recreational, cultural, and commercial opportunities for residents and visitors, all while incorporating crucial flood prevention and mitigation measures. All River Front Development zone falls outside the Urbanisable area.

Figure 10-11 River Front Development



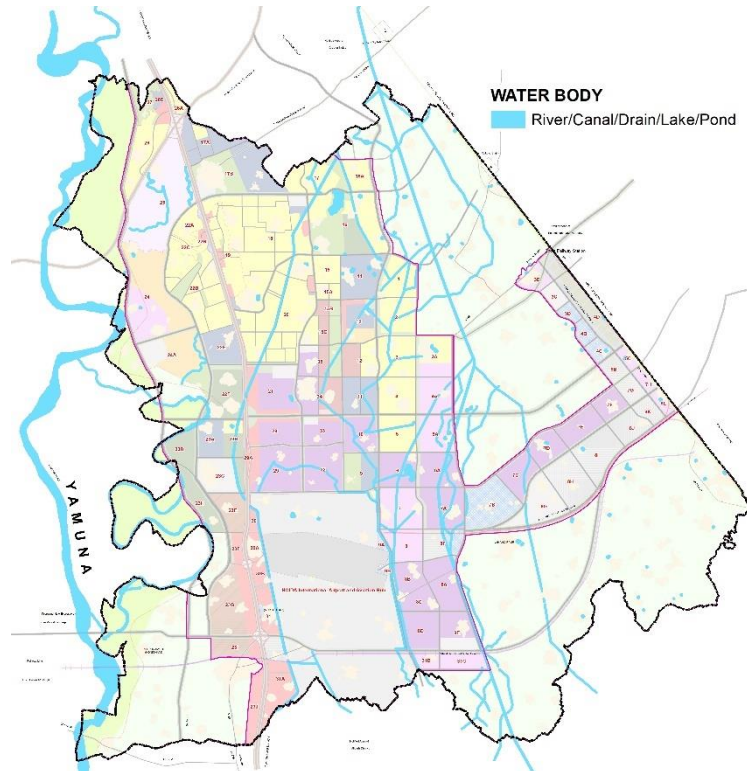
The development includes scenic promenades, waterfront parks, and green buffers designed to protect the riverbanks from erosion and improve water quality. These spaces offer stunning views and recreational activities such as walking, cycling, and community events, fostering a strong connection between the community and the river. To ensure environmental sustainability, naturalized landscaping and habitat restoration projects will support local wildlife and enhance biodiversity.

A significant aspect of the riverfront development is its role in flood management. The zone features an embankment designed to protect against seasonal floods, particularly during the monsoon season. In addition to the embankment, the development incorporates advanced flood prevention and mitigation measures such as . drainage systems, Rain gardens, retention ponds, and permeable surfaces will be integrated to absorb and manage excess rainwater, while real-time flood monitoring and early warning systems will enhance flood preparedness and response. Activities along the Yamuna River shall be permitted as per MOEF guidelines. However, basic facilities and amenities as required in the existing Rural Abad Area shall be permitted with the special permission of the Authority.

10.2.12 Water Body

The area covered under this land use is 335.53 ha which is 0.89% of the Urbanisable area. Non Urbanisable area also consist considerable amount of waterbody in the master plan. All the ecologically sensitive areas such as rivers, canals, natural drains, ponds and other water bodies are the main ecological resources which have to be conserved. These ecological resources conservation has been made possible by provision of green belts along them and provision of green spaces, parks and recreational spaces wherever possible to safeguard them against rampant environmental pollution where waterways have been allowed to be indiscriminately exploited.

Figure 10-12 Water Body



The water bodies including river, canals, lakes, ponds have been marked from secondary sources i.e. satellite imagery and toposheets. For above purposes, all natural features including water bodies, river, ponds, canals, drains etc. are to be marked and verified from revenue record and through primary surveys by Competent Authority at the time of preparation and implementation of layout plans and these shall be protected from any development.

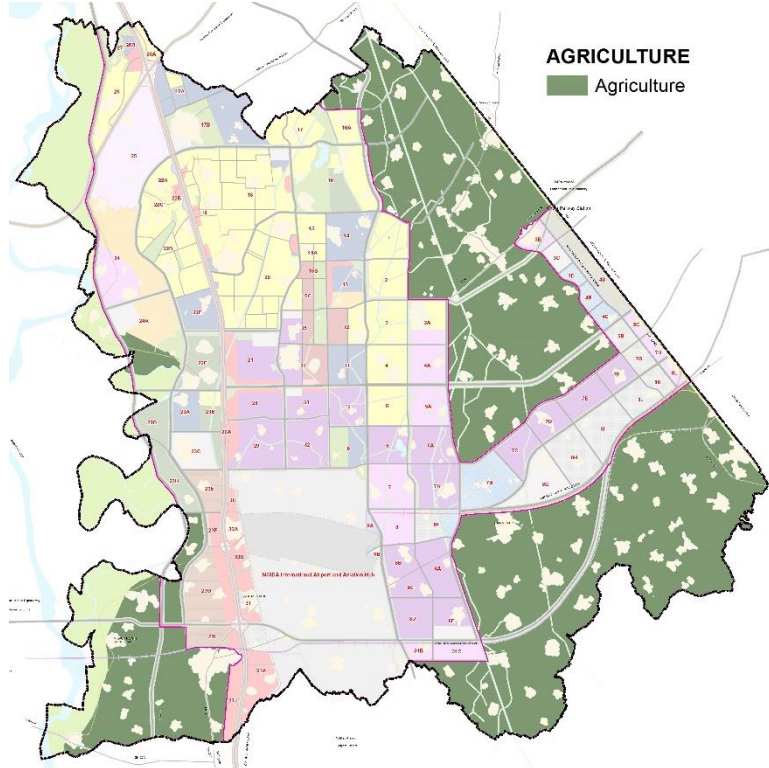
The area covered by various water bodies is different in various secondary sources such as toposheet, satellite imagery procured, revenue records etc. In such case Authority shall take suitable decision before implementation. As per Master Plan, canals and drains have been provided with average width based on Satellite Imagery which shall be verified while layout preparation and accordingly space shall be reserved for the same as no development area. Further, green belt of 30m on each side of the canal and 15m on each side of natural drain has been provided to protect natural drains. Water bodies like lake/ponds identified as per revenue records shall be preserved and thus 30m buffer of 'No Development Zone' shall be maintained around with exception of activities associated with the development and maintenance of lake/pond. There is wetland area which is ecologically sensitive,

Authority shall earmark the same at the time of layout preparation and take appropriate decision to use and preserve them.

In order to protect any other natural features not specified above, a suitable distance from the edge of the natural feature shall be demarcated as “No Development Zone” at the time of detailed planning.

10.2.13 Agriculture

Figure 10-13 Agriculture



The area within YEIDA Phase 1, other than proposed Urbanisable Area, wherein Agriculture and Allied activities are continued to be the main economic activity falls within this zone. Activities permitted within this zone such shall be permitted as per zoning regulations.

10.3 Salient Features of the Plan

1. Create an appropriate urban form for the Greenfield city.

Quality of life is determined by various parameters, such as physical and mental health, safety and security, health and education, economic and financial opportunities, education and culture, spirituality and right to personal beliefs, public services, and transportation, and a well-balanced live, work, and play environment. Therefore, determining of urban form in Greenfield city.

2. Provide adequate space for airport city side development

Aerotropolis development requires adequate amount of space for increasing the functionality and economic benefits from the Aerotropolis.

3. Balanced regional development and conformity with regional plan

The city is planned to create as well as maintain the regional development balance and the proposal of the NCR regional plan is also incorporated in the Master Plan.

4. Provision of high containment ratio to control traffic demand within the city limits.

5. Sustainable development of a new planned Greenfield city along with surrounding urban centres.

The city is planned by considering the concept of sustainability so that development and environmental protection can be done simultaneously. A well-planned city with ICT-enabled infrastructure allows for zero waste, systems for 100 percent recycling & reuse, renewable energy generation, and desalination. These in turn make our cities self-dependent and sustainable in all aspects.

6. Flexibility in land use to respond to dynamic and evolving market conditions.

Greenfield smart cities have the potential to maximise with flexibility in land use. Flexibility in land use enables efficient use of natural, human, and economic resources and promote cost saving.

7. Prioritization of affordable housing for industrial workers

Affordable housing is a segment of economy that is of critical importance and requires long term funding. Urban local bodies and Urban Development Authorities need to be delegated power to undertake the required initiatives for providing affordable housing. The schemes for potential schemes are required to be identified and adequate availability of land for housing should be provided.

8. Integration of public transport system through Metro Neo, buses, NMT, cycle track, pedestrian pathway and IPT

A successfully integrated transport system involves the coordination and optimisation of timetables, to ensure that users do not have undue waiting times between different modes. The central aim should always be the decrease in time of the user's journey from the origin to destination.

9. "Image of the City:" City level Central Commercial Centre with world-class infrastructure along with iconic pedestrian promenade.

Central commercial centre is known as the most frequently used and most expensive area of the city. It is the business hub of the city and has high real estate value. Thus, the city is planned with a prime location of central commercial centre that will consist of high-quality infrastructure, skyscraper along with the provision of pedestrian promenade.

10. Facilities and movement of heavy industrial traffic through peripheral road.

Peripheral roads are planned in such way that most of heavy industrial traffic can be directed outside the city without causing any traffic congestion within the city and at the same time it ensures the safety of the citizens.

11. Logistics facilities near airport to cater to industrial demand

Air cargo logistics play a vital role in the economic development. Speedier services in the Air Cargo supply chain facilitate large number of business entities to become more competitive. The air cargo industry incorporates an industrial supply chain, which includes airlines, customs, ground services, air cargo forwarders, brokers, domestic transportation, air cargo terminals, distribution centres and integrated international express services.

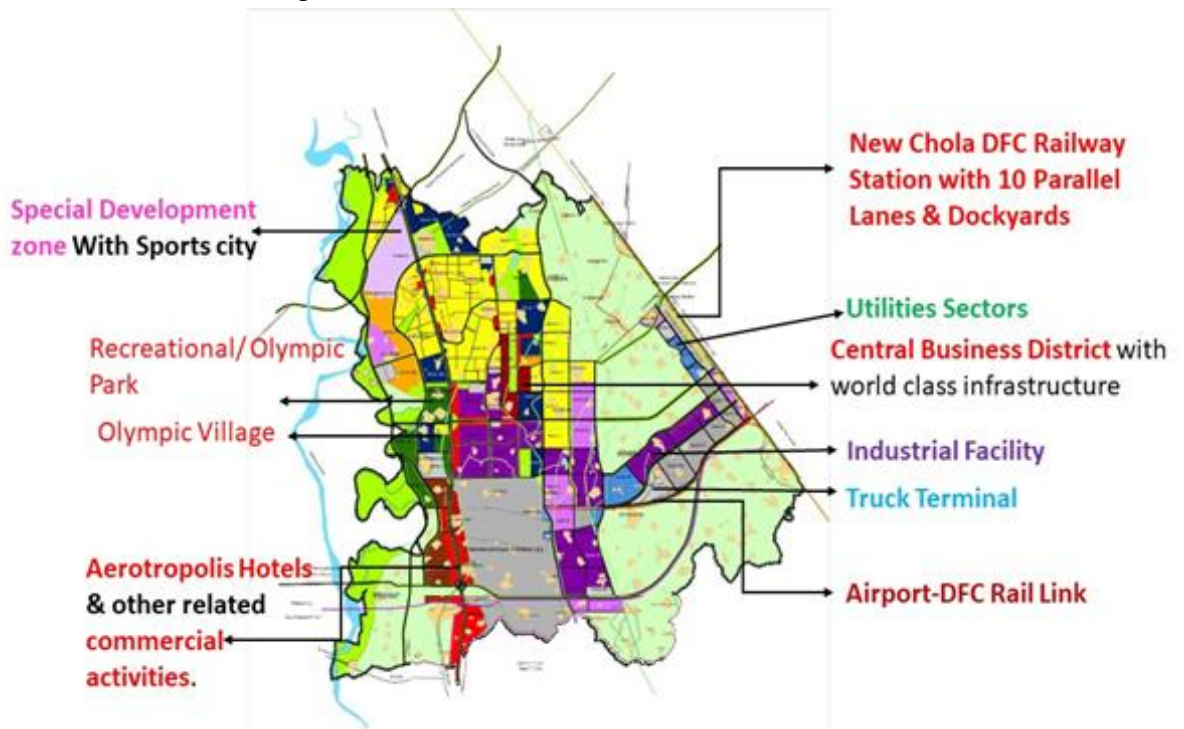
12. Integration of existing villages:

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

13. Green buffer along Yamuna River, water bodies and canals.

Dhanauri wetland, Tree Plantation, tributaries of Yamuna are some of the existing natural resources that must be protected. Thus, green buffer along the natural resources shall be provided to conserve and to avoid encroachment.

Figure 10-14: Salient Features of the Plan



10.4 Key Proposals

10.4.1 Central Commercial Area

This new zone in YEIDA expects to create a high-density district with a distinct character and a clearly identifiable urban form. The land uses in this central commercial area would include a mix of offices, retail and other business uses, along with some residential developments. This zone should be strengthened by a transit shuttle route to serve the Central commercial area and to connect with Mass transit and metro stations at the northern and southern ends. This zone will provide a distinct character and form to YEIDA and provide a unique image to the city.

Central Commercial Area integrates a great deal of financial, business, commerce, culture, and service institutions, and lots of supporting facilities, such as business office buildings, hotels, and apartments, etc., with perfect and convenient traffic, communications and other infrastructures, favourable economic development environment as well as places which are convenient for commercial activities. Among other things, corporate headquarters, financial centres, and specialized production service are also a part of it.

Figure 10-15: Location of Central Commercial Area

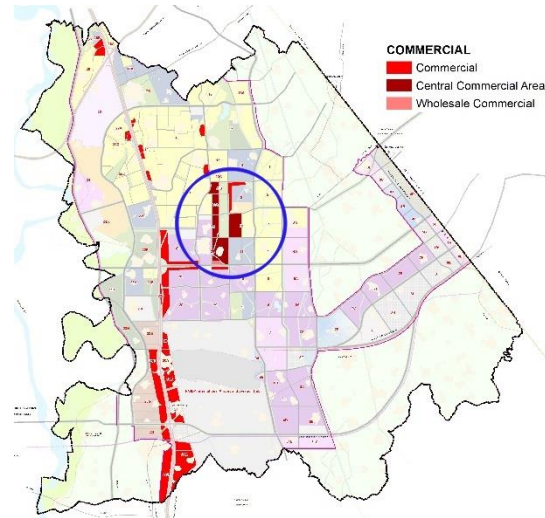
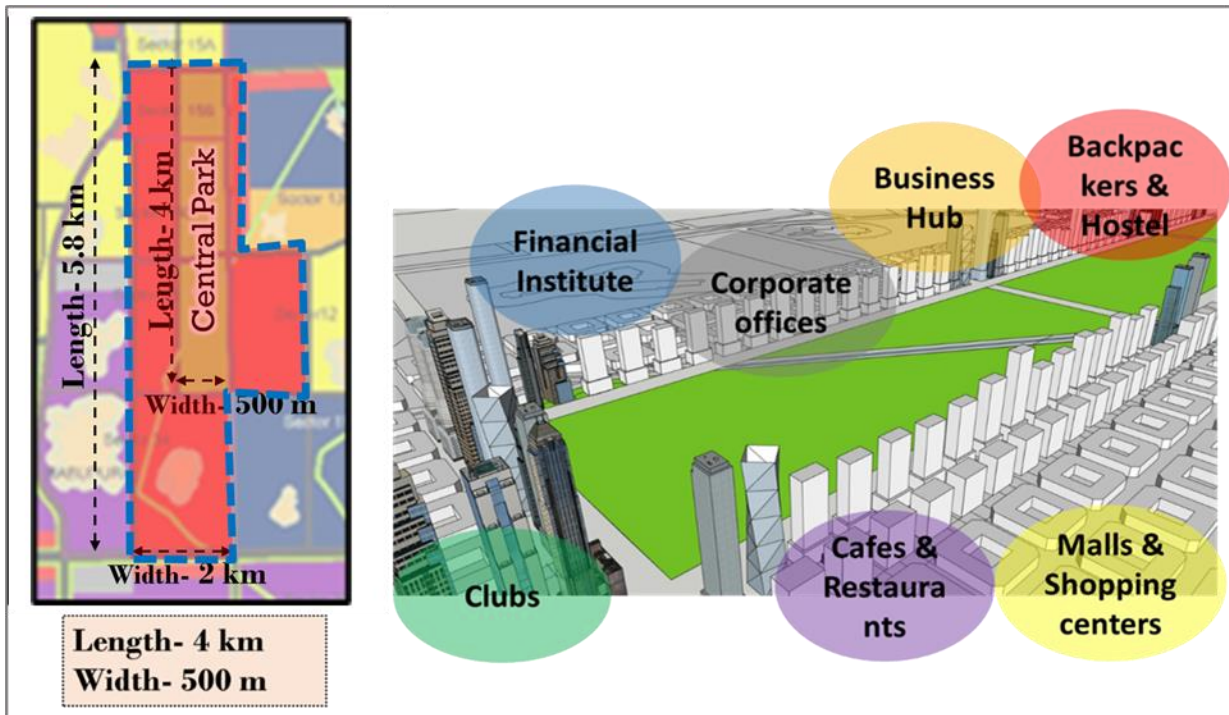


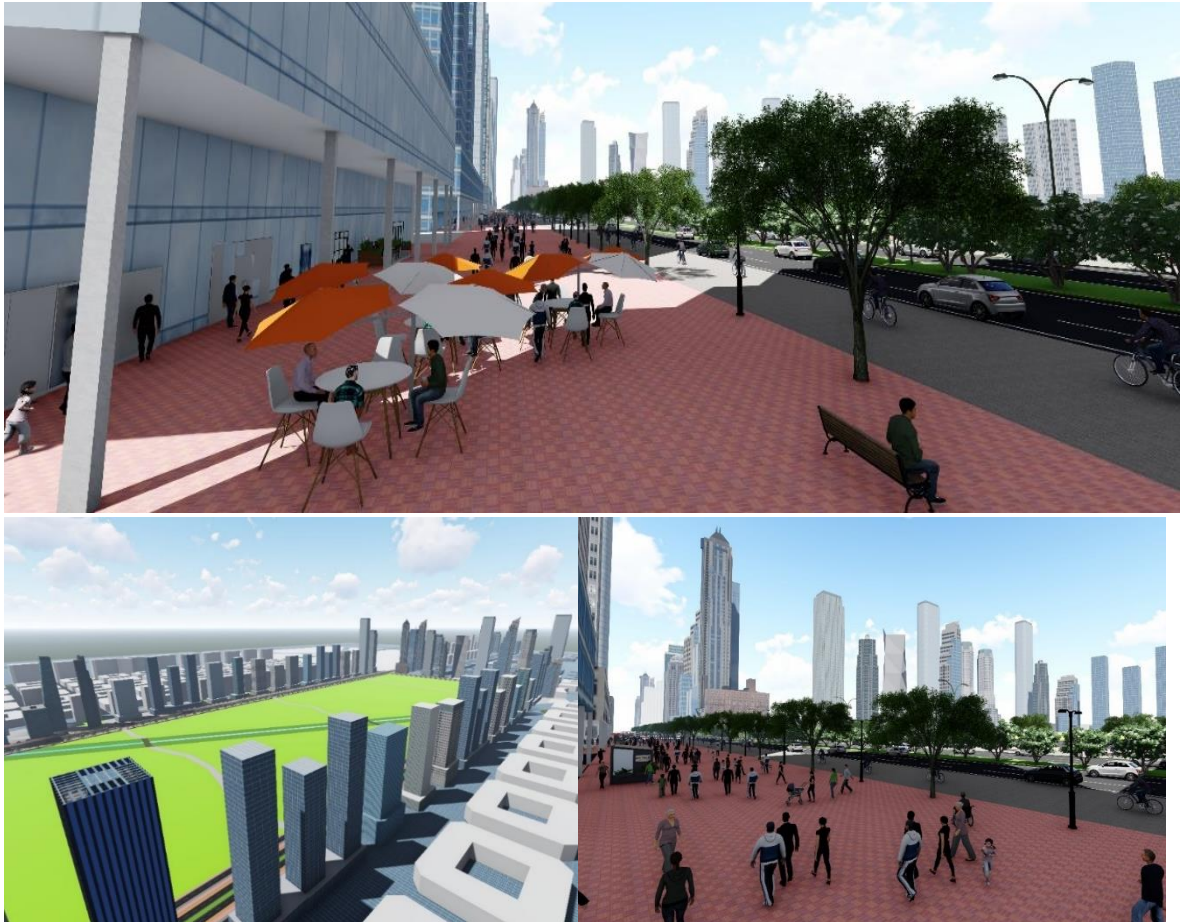
Figure 10-16: Proposed Central Commercial Centre



The multi-functional area would spread over an area of 900-1000 ha; and the building capacity is relatively high. This area would have the highest service centralization level and can provide extensive services for economy, management, recreation, culture and even administration. The Central

Commercial Area usually has a peak land value. Intensity of land exploitation and utilization is higher. This district has the highest land price and rent in the city. The floor area ratio and building density are high and the building form grows vertically.

Figure 10-17: Visualization of Central Commercial Area with Pedestrian facilities



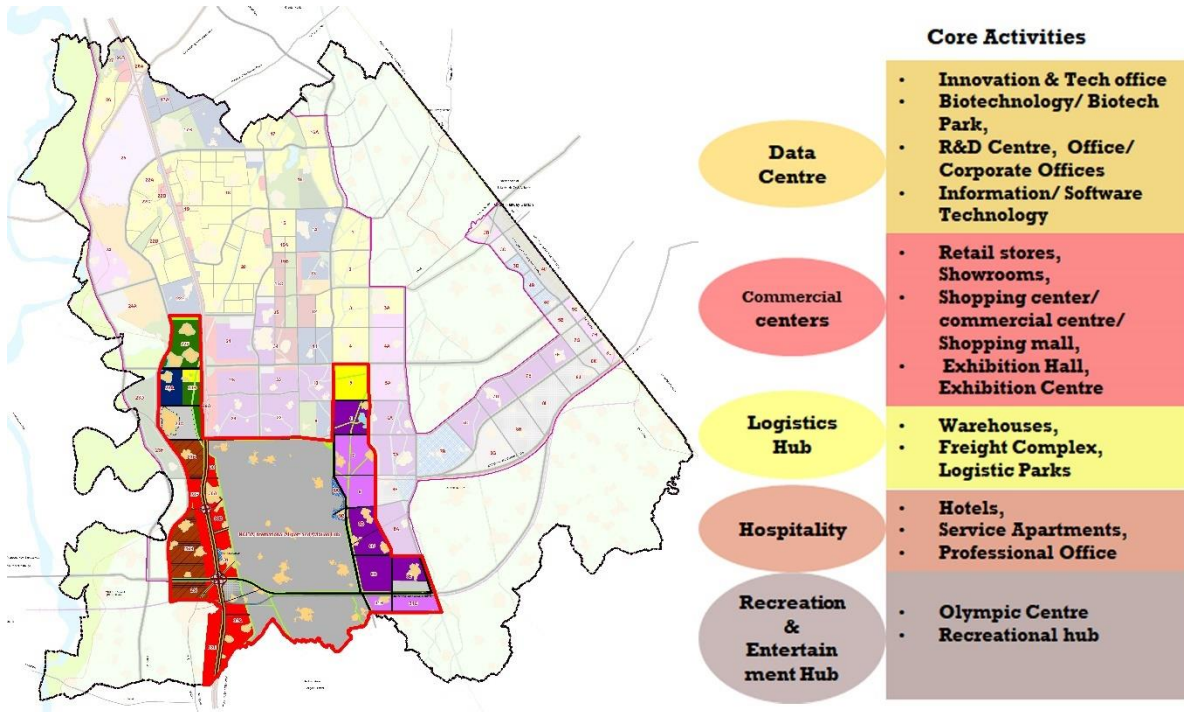
The Central Commercial Centre is the comprehensive representation of gathering and distributing of urban population, land utilization patterns and the level and trend of industrialization. The focusing effect can bring more business opportunities with lower cost and promote economic development of city. **Looking towards the positive impacts, the central commercial centre in YEIDA is proposed in Sector 15 B, 15 C, 35, 12 & 34.**

The area also has a central park in its centre which is city level park proposed with a point of view of recreational facility. The commercial area constitutes for 478.35 ha.

10.4.2 Aerotropolis

The goal in future would be to develop the Airport and Aviation Hub as an Aerotropolis. **As per NCR Functional Plan 2032, an aerotropolis is a number of air transport related functional complexes along with a new town of reasonable size**". An airport accommodates corporate suits, flex offices, business meetings, support services, retail, and airline services etc. The broad tentative activities proposed for aerotropolis have been listed in section 12.1.1. However, competent authority may decide to add similar kind of other activities in view of the demand which may arise in future.

Figure 10-18: Proposed Aerotropolis in YEIDA



Key Component of Airport city-side development:

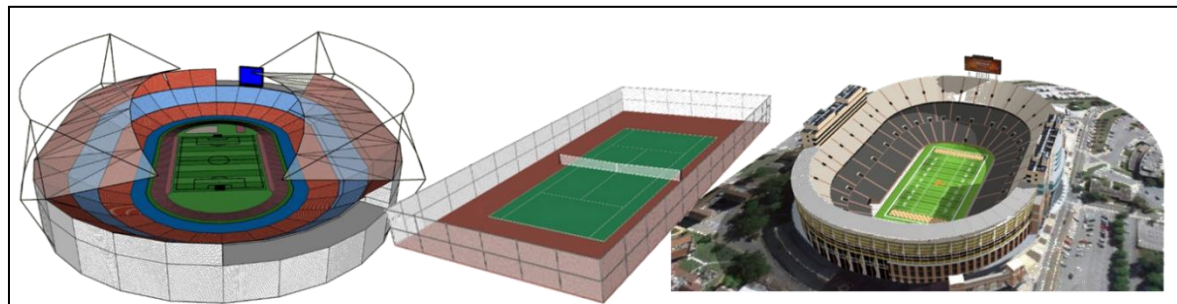
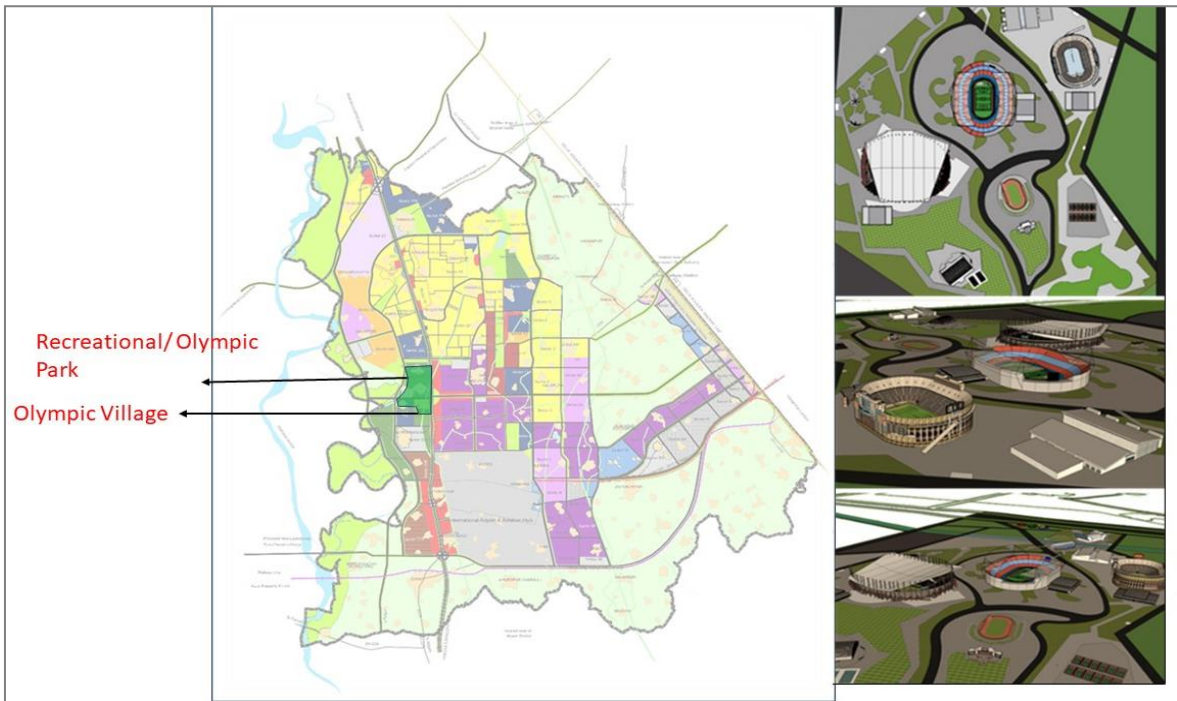
- Smart infrastructure for Logistics:** New technologies are the main driving force for the development of the society and smart logistics will embrace the smart service as well as smart product within logistics.
- Aero-services and Manufacturing:** design and manufacture of items for the aviation, and transport industries.
- E-Commerce and Distribution:** Advancement in technologies has benefited all the possible commerce activities by increasing efficiency in very short time.
- Intermodal Freight Hub:** Reduces cargo handling with better safety, reduced damages and has resulted in faster freight transport.
- Office parks and office corridors:** The location of business centres would be based upon the proximity to the airport based on their frequency of use. They connect executives and professionals quickly to distant markets more efficiently.
- Hotels, Entertainment and Retail Clusters:** They will serve all the travellers as well as they will be fulfilling the local needs.
- Medical and Wellness centres:** The airport and the airport city-side development both requires provisions of health care facilities. Thus, airport city-side development will have a zone for health care facilities.

The existing Abadi area in the phase 1 development of aerotropolis will be resettled and decision of the remaining Abadi area and its population in the further development will be based on the airport authority. The Aerotropolis consists primarily of multiple land use – hospitality and multiple land use industrial along with a mix of commercial activities including space allotted to logistics. The airport height restrictions are expected to limit the achievable FAR in this area.

10.4.3 Recreational/ Olympic Hub

In YEIDA phase-1, sector 22 and 23 would be developed as recreational city. It may include various activities such as Olympic city, sports club or recreational park and some residential provisions for players/ sports students/ trainers. In other words, the sector 22 and 23 can be developed in two parts- one will be developed as Olympic city and Recreational/Sports Park and other will be as Olympic village. Capturing the Games will allow authority to undertake long-term activities designed to boost or alter the image of YEIDA as a city. The area would comprise a set of interlocking component festival rather than a single festival.

- **Recreational/ Olympic City Area: 390 Ha**
Can be converted into sports club or recreational park with chargeable entry tickets.
- **Recreational/ Olympic Village Area: 52.4 Ha**
Olympic village can accommodate 4000-4500 Residential Units.



10.5 Recommended Transportation Strategies

1. Promotion and supply of high-capacity public transport and support systems to facilitate integration.

The public transport systems such as Metro, Neo Metro and city bus are proposed to reduce the transport issues. To integrate these systems, the Multi Modal Transport Hub is proposed.

2. High-capacity low-cost public transport system such as Neo Metro, which is financially and economically viable.

The Neo Metro system which has a capacity of 250 persons and costs 71 cr. per km as per MoHUA which is 20 to 25% of the conventional metro system. This system is rail-guided system with rubber-tyred electric coaches powered by an overhead traction system, generally at grade alignment, simple stations on central median similar to normal bus stops.

3. Provisions for transport terminal (Transport Nagar) as per the demand.

The transport terminal is provided to support the freight movement in the city at the peripheral road to ensure these freight does not cause congestion inside the city.

4. Designating areas for Intermediate public transport facilities

The rickshaw stands for the IPT vehicles is proposed at every 1 to 3 km of distance. To integrate it with the public transport the IPT stands are provided near the city bus and Neo Metro stops. So that it can be used as feeder system to the public transport.

5. Creation of peripheral expressway on eastern boundary for the free flow to and from the city.

To ease the movement of traffic coming within city and going outside the city a peripheral expressway is proposed on the eastern side of the city which connects all the important roads going in the city.

6. Pedestrian and cycle track demarcation on major roads

To promote the future population of the city to travel by walk and cycle the cycle tracks and footpaths are proposed on all major roads of the city. These NMT infrastructure is ensured to be continuous, comfortable, and convenient to travel.

7. Pedestrian precinct in the city centre to give vibrant atmosphere.

To create a vibrant environment in the city, a pedestrian street is proposed going from the Central Commercial Area. This street has a wide spread of footpath and cycle track along with three lane carriageway and space for public transport.

8. Provisions for parking facilities.

To includes comprehensive provisions for parking facilities to accommodate the needs of residents and visitors. Strategically located multi-level parking structures and surface parking areas ensure convenient access across the region. These facilities are integrated with commercial, residential, and recreational zones to optimize land use and reduce traffic congestion. Additionally, designated parking for bicycles and electric vehicle charging stations promote sustainable transportation options.

9. Connectivity to NIAL through metro, HSR and local Metro Neo.

To support the traffic demand of Noida International Airport in the future, Delhi –Varanasi High Speed Rail (HSR) is already proposed by the NHSRCL. The HSR connects the major cities through U.P. and Delhi. The Metro extension from Greater NOIDA is majorly proposed to connect major parts of YEIDA and other NCR cities like NOIDA, Greater NOIDA, Delhi.

10. Transit Oriented Development (TOD) framework for effective transportation and land use integration.

The TOD Zone is proposed within 500 m of Neo Metro route. These zones will have high density buildings, ensuring accessibility to public transport by wider footpaths and cycle tracks to ensure convenience.

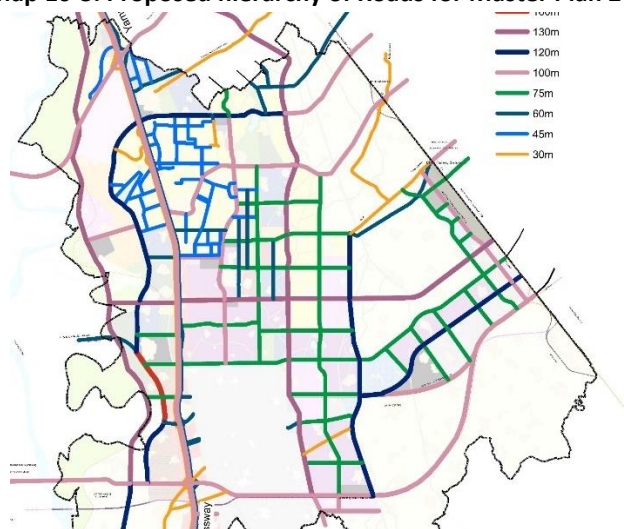
10.6 Recommended Transportation Proposals

Keeping the major transportation challenges and goals for sustainable transportation system, following proposals at various level have been identified.

10.6.1 Hierarchy of Road Network and Recommended Road Sections

For an efficient public transport system and also for multiple movement options thereby facilitating better dispersal of traffic, Grid iron pattern of road network has been proposed as the basic structure of the urban form for the YEIDA planning area. It is also framed by a ring road all around to provide connectivity to the expressway and surrounding connections. The next step is to plan and classify the hierarchy of proposed road network based on importance and right of width of the road. These also considers the length of the street, land use characteristics etc. First hierarchy of roads include- Yamuna expressway, Eastern Peripheral expressway and proposed new expressway from Palwal to Khurja. Then Peripheral expressway, Arterial Road, sub arterial road, collector road and local road. Hierarchy of proposed road network is as follows-

Map 10-3: Proposed hierarchy of Roads for Master Plan 2041

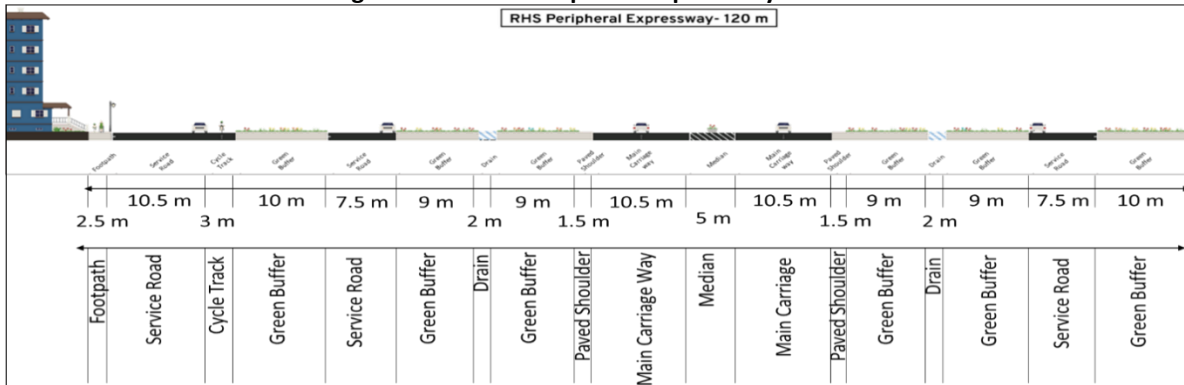


Peripheral Road

These streets are mainly used to cater the through movement of the city. The freights, passenger or public vehicles travelling from other cities and passing through or stopping inside the city will be the

major purpose of this road. It will be the longest roads within city boundary after expressway. It is proposed to be 120 m wide right of way, it will have three service roads because of the major freight movement.

Figure 10-20 RHS Peripheral Expressway – 120 m



- **Arterial Road**

These are some of the most important roads of the city which connects important parts of the city like railway station, bus stops, and city level tourism places etc and connects city's network with intercity roads of highways and expressways. In the proposed road network, the arterial roads vary from 75 meter to 120 meters. Neo Metro and city bus. NMT infrastructure is highly recommended on these roads.

Figure 10-21: 60 m wide road (60-meter two lane road without Neo Metro)

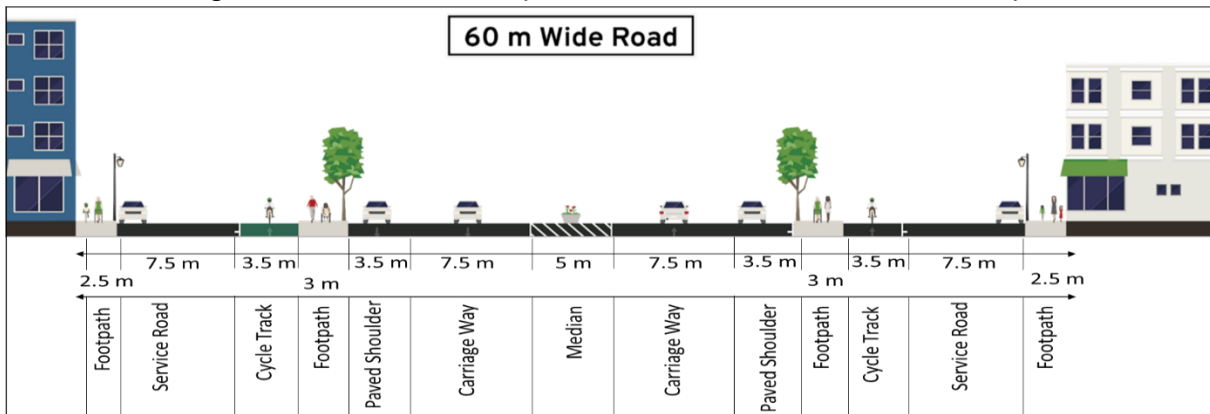


Figure 10-22: Arterial Road (75-meter two lane road with Neo Metro)

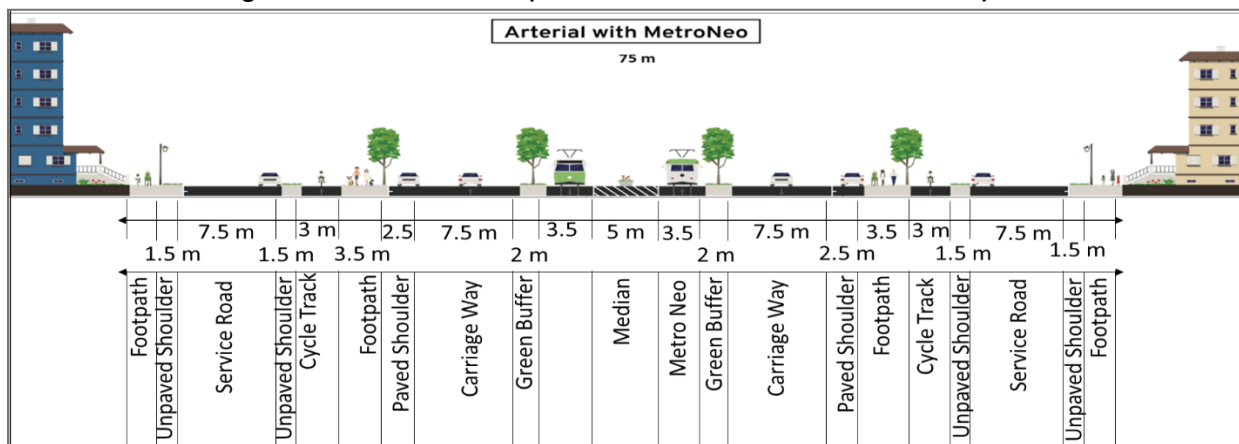


Figure 10-23: Arterial (75m wide without Metro Neo)

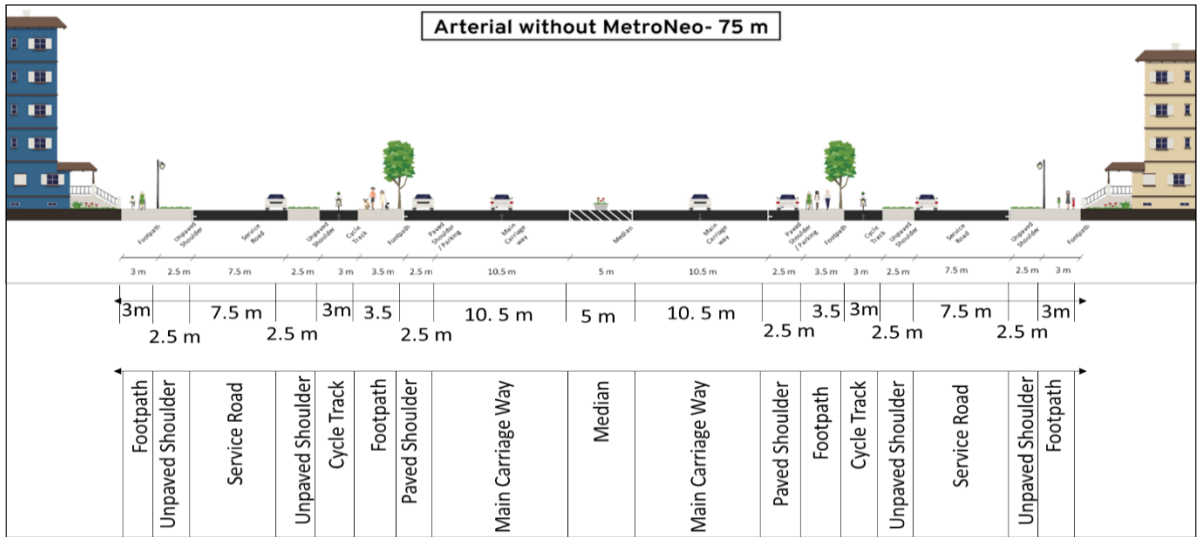


Figure 10-24: Arterial with Metro Neo – 100 m

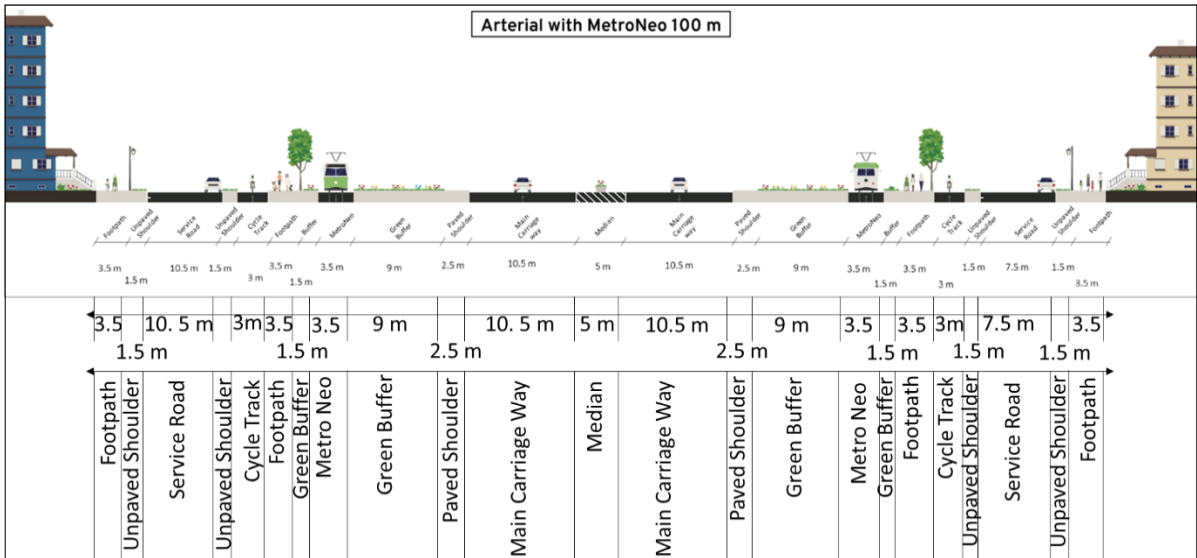
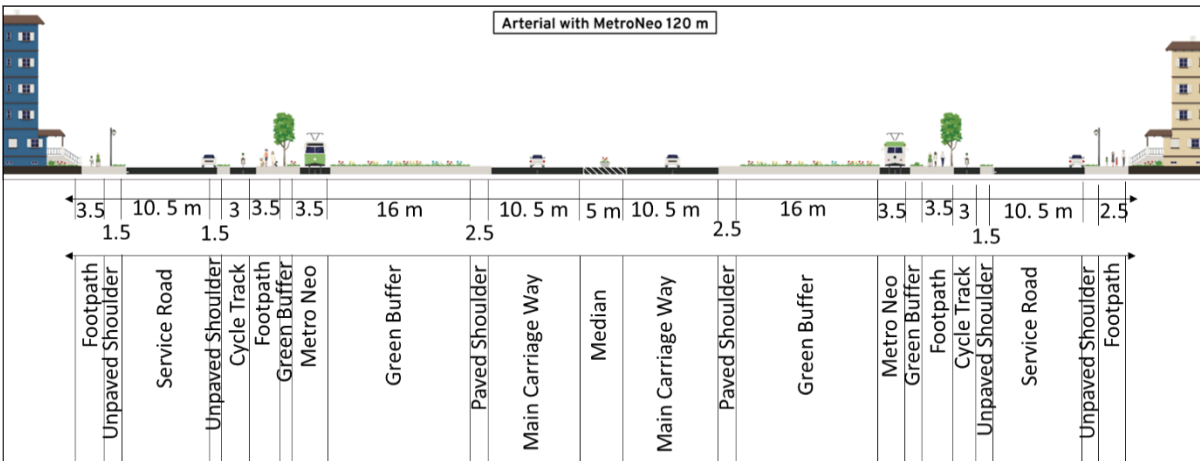


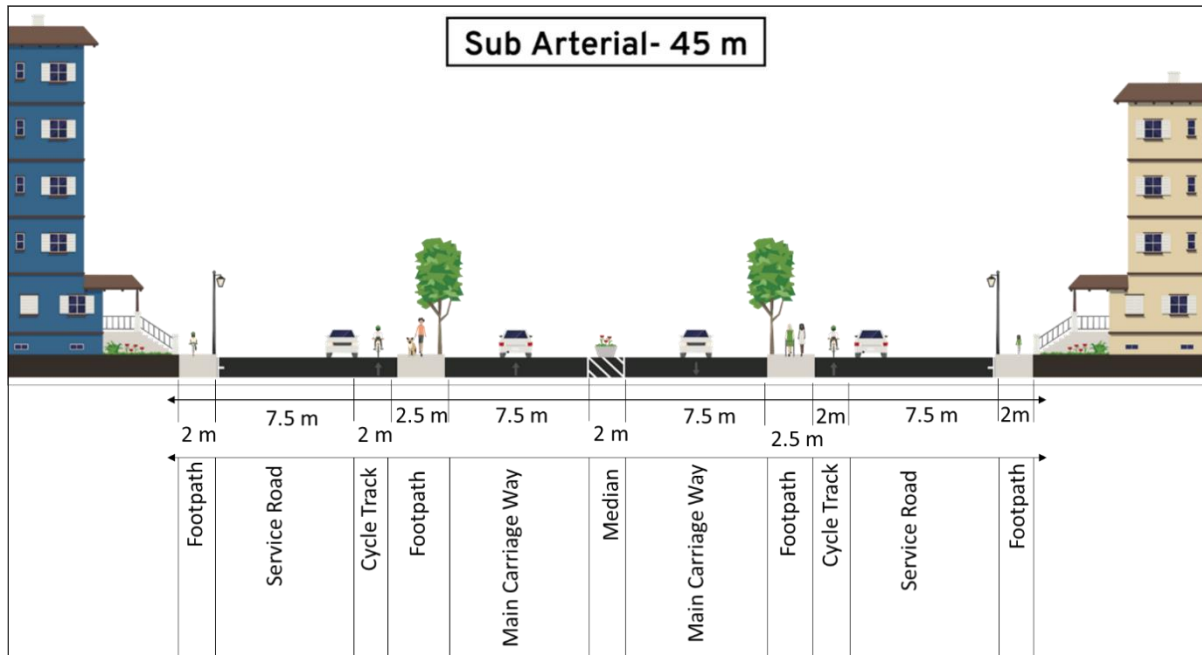
Figure 10-25: Arterial with Metro Neo – 120 m



• **Sub arterial Road**

These roads are functionally similar to arterial road but with lower traffic volume. These will have local retail shops, vendor activities, and commercial frontages. Their right of way may vary from 45 meter to 60 meter.

Figure 10-26: Sub Arterial – 45 meters



• **Collector road**

These roads collect the traffic from local streets and connect it to the sub arterial and arterial streets. Collector roads will have less right of way, ranging from 18 meter to 30 meter. This road will have maximum two lane carriageway.

• **Local road**

The local roads directly connect to the local neighbourhood areas. These are the streets where majority of the trips either originates or terminates. The local streets maybe residential, commercial, or industrial streets depending on their adjoining land use.

The cross section of these roads is given in the Annexure- I, at the end of this chapter. This street classification system should be considered and prioritized while proposing any new project and organising, designing and improving transportation network. In the Master Plan 2031 majority of the roads are 75 to 130 m of right of way. Here the roads proposed are as per the capacity required to handle generated traffic. The key features of the road hierarchy are as follows:

- The right of way of the roads from Master Plan 2031 is reduced as per traffic generation from adjacent land use and to avoid excessive use of costly land resources.
- The proposed roads are inclusive of provision for future expansion within allocated right of way in high traffic volume corridors. In case there is a need to expand the road as per the traffic demand the carriageway can be extended.
- The Parking lane are proposed at areas with commercial and institutional adjacent land use. In the high traffic areas like Central Commercial Area, the parking need to be regularized otherwise it will get spill over on roads.

- Cycle track in all roads including and above sub arterial level to promote NMT through adequate provisioning.
- Footpaths at all road levels including local streets for safe pedestrian movement.
- Footpaths with provision for tree plantation and services (drainage, sewerage etc.) below ground level to minimize damage to main carriageway during repairs etc.
- Service road are proposed from sub arterial road level to avoid direct traffic to/from main carriageway. There will be more freight movement in the city because of the industrial influence in the city so there trucks can travel from these service roads while moving towards destination.
- Road parallel to Yamuna Expressway connecting Greater Nodia to Palwal Khurja Road is proposed of 130m ROW.

10.6.2 Public Transport System

To minimise the share of private transport and promote sustainable development the public transport system is promoted. Currently, as per census 2011 the population of the proposed area is 3.7 lakhs and for the year 2041 the population is proposed to be 35.51 lakhs. So, there will be a need of the public transport system which will help the population to commute.

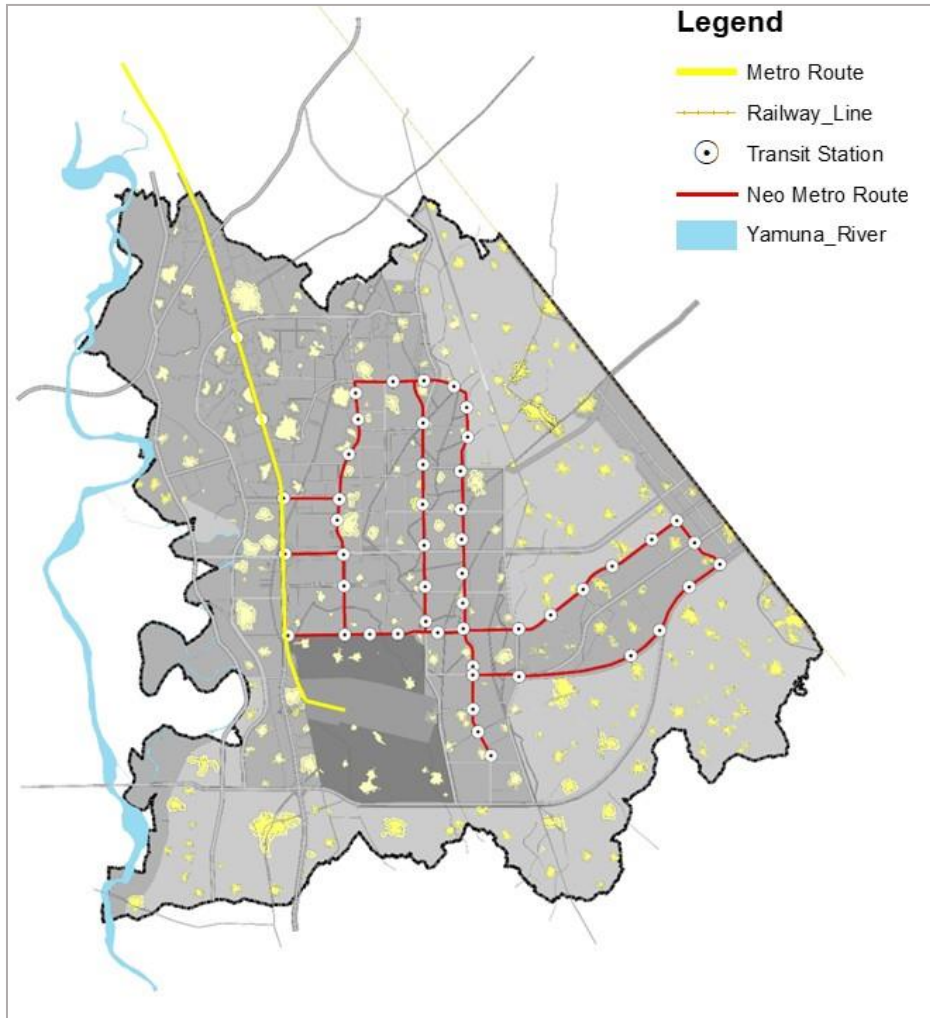
The Delhi Metro Rail Corporation (DMRC) has given a proposal to extend the metro to the southern part of Greater NOIDA. As Greater NOIDA is on the north of YEIDA, these extended metro lines can be further extended to YEIDA. The extended metro will be majorly connecting Noida International Airport to Greater NOIDA, NOIDA, and Delhi. So, Metro extension is from Greater NOIDA to YEIDA, and Neo Metro is for the within city connectivity. The proposal to extend the Delhi Metro line and Neo Metro is given below:

Figure 10-27: Neo Metro



There are four metro stations proposed for the extended line on Yamuna Expressway. Neo Metro stations are placed Between 1 km to 2.5 km distance. There are 21 Neo Metro stations and 4 Metro stations proposed in the city. The network length of Metro within YEIDA Boundary is 30 Km and of Metro Neo is 45 km.

Figure 10-28 Metro & Metro Neo Route



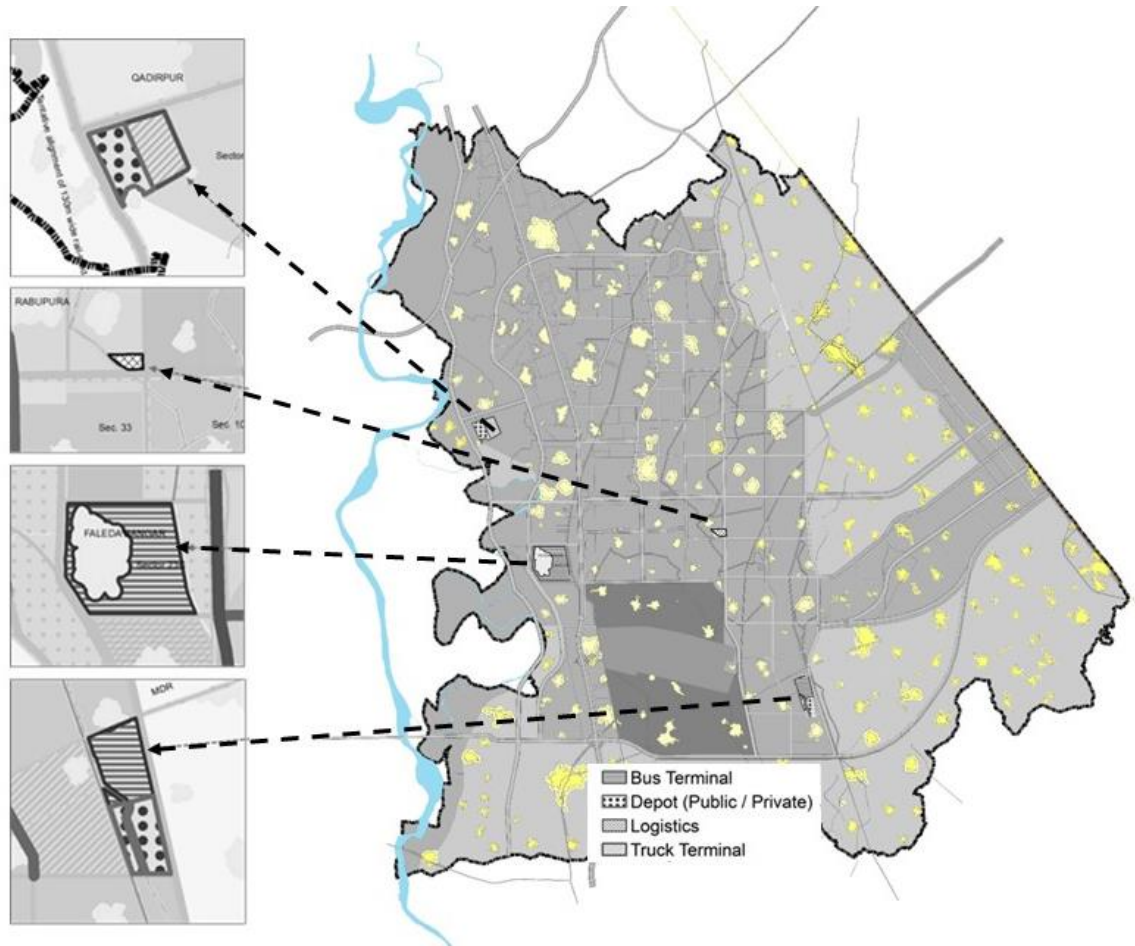
10.6.3 Transport Infrastructure

The services like Neo Metro, Interstate buses will need a space for their operation, maintenance, or parking according to the service. The proposal for the same is given as follows:

1. Inter-State Bus Terminal (ISBT)

The state buses connecting YEIDA to the major regional nodes around the city need to have a place where buses can stop, and passenger can access and egress. The Inter State Bus Terminal (ISBT) is proposed on three locations in the city, one in the north, one in the south and the third one is proposed on the west side of the city towards Yamuna River. These gives connectivity to all the areas of the city. Each of these ISBT's are proposed on 5 hectares of land.

Map 10-4: Transport Infrastructure Proposal



2. Depot

The proposed Neo Metro and city bus will need a depot, workshop and parking space for the operation, maintenance, cleaning, washing, and parking of the system. Also, to avoid congestion on road there will be provision to park private buses in this depot. This space is provided in the southern side of the city, near the proposed peripheral road adjacent to the Southern ISBT.

3. Truck terminal

The Truck terminal is proposed on a peripheral road given. The main purpose of truck terminal is to accommodate the trucks passing through the city. To deliver goods in the city through smaller vehicles, these trucks park their vehicles and load and unload the goods. This is done to divert the freight travelling from city centre.

4. Street Design Guidelines

The industrial cities like YEIDA will have bulk of freight movement on roads along with lot of pedestrian movement. To ensure the safety of pedestrians there should be some regulations and guidelines and those are as follows.

- i. All streets should design as complete streets that are safe and prioritize NMT users and public transport.
- ii. All streets should have slow zones where pedestrians are priority.

- iii. It should be ensured that design of footpaths and cycle tracks will have usability, convenience, accessibility, and safety.
- iv. The streets should be designed for PT, non-motorized vehicles, and other vehicles at moderate speeds.
- v. Design guidelines for junctions and crossing should be provided in the Street Design manual.
- vi. The authority will implement and maintain landscaping for NMT infrastructure as per guidelines.
- vii. Footpaths, cycle tracks and NMT facilities must be continuous and parking facilities need not be continuous and can be break wherever NMT facilities are provided.
- viii. In the areas where pedestrian traffic is more, pedestrian only zones should be demarcated.
- ix. Streets and public spaces should be designed and integrated to support the public transport service. It will develop understandable and accessible multi modal interchanges at PT stations and bus stops.

5. Parking Provision Guidelines

The industrial areas of YEIDA city will cater high freight transport as well as employment traffic. To avoid congestion, it is important to setup guidelines and policies to control the parking demand of the city.

A. On street parking

The on-street parking strategies and guidelines are as follows:

1. The parking supply should consider the supply of all modes including emergency vehicles, IPT, public transport, cycles, freight etc.
2. The parking zone and no parking zone should be clearly indicated by sign and ground markings with clear and easy to read signage.
3. The on-street parking is not allowed within 100 m radius of the major junctions of the city.
4. The parking fees should be considered based on zones and importance of the area.
5. If any person declines to pay the parking fees, the concerned department may take necessary action based on the motor vehicle act 1988.
6. If any person parks the vehicle in the no parking zone, then the concerned department should take necessary action as per motor vehicle act 1988.
7. At least 10% of the area should be reserved for cycle parking in all the parking areas allocated by the authority.
8. The on-street vehicle parking should be planned and implemented such that it should not disturb the movement of pedestrian and cyclists.
9. The zone for three-wheeler parking areas should be properly demarcated. If the three-wheeler is parked outside the zone, penalties should be applied.

B. Off-Street parking

Off street parking is needed when the areas in the premises have started spilling over on roads, footpaths, or cycle tracks.

1. Off street parking area should be located near high footfall areas such as commercial places, public offices etc., only wherever needed.
2. While demarcating parking lots, if the green area is deficient then reduce the parking lot and ensure the green areas to be at least 20% of the overall area.
3. The off-street parking should be such that, it should not hinder the vehicular access to street.
4. The off-street parking should include a demarcated parking space for cycle, IPT and taxis.

C. Private parking

Private parking includes parking provided on individually owned plots whether it is for residential, commercial, institutional, or industrial. Regulating the private parking is necessary to reduce the congestion on streets so, it is important to regulate the parking within their boundary. Following are the guidelines and strategies to regulate the parking:

1. The private parking area should be given as per the Building Byelaws.
2. The parking penalty as per the land use of the property should be decided according to the amount of spill over. The parking penalties should be revised every year.
3. The goods vehicle should be parked in the respective industry otherwise the penalties should be levied.

6. **Non-Motorized Transport System Guidelines**

For the city, the public transport is promoted and in order to make it successful, last mile connectivity is very important. Unless and until the city will not implement the NMT infrastructure the people using public transport will not be comfortable while walking on the road. Also, the whole area is industrial area and there will be high freight movement in the area. When freight starts moving in any road the fear of getting hit increases specifically for the NMT users. So, it is important to implement NMT infrastructure throughout the city. In addition, the Transit Oriented Development is also proposed in the city, and to increase accessibility in the TOD zone NMT infrastructure is required.

While implementing, planning, and managing the NMT infrastructure there should be some strategies and guidelines to ensure the safety, convenience, usability, and accessibility of the users.

1. To ensure the safety of the pedestrians on the junctions, intersections should be managed with focus on NMT mobility and safety.
2. The vendors should be accommodated at potential demand locations such as major intersections, market areas, commercial centres, and other key destinations.
3. Supportive infrastructure should be provided such as waste bins and public toilets on the intersections.
4. Street vending should be regulated by giving vendor infrastructure in locations that ensure the continuity of footpaths and cycle tracks.
5. Repair and maintenance program should be conducted to keep all footpaths and cycle tracks in a good state of repair and cleanliness.
6. Remove all temporary and permanent obstructions that force pedestrian to walk on the carriageway.
7. During construction of NMT infrastructure, provide alternative means for pedestrian and cyclist to circulate.
8. Implement and maintain street furniture for NMT users as per standards.
9. Advertisement panel and utility boxes should not interrupt in NMT path to maintain an unobstructed 2m wide clear path of travel for NMT users.
10. The access points for underground utilities like storm water, sewage, electricity, telecommunications, and other services should not conflict with NMT user movements.

7. **Guidelines for Cycle Track and Footpath:**

For the management of Footpath and cycle tracks the plan enforces following rules provided by Motor Vehicle Act, Central Motor Vehicle Rules, Gazette of India, New Delhi, 23rd June 2017 (for Motor Vehicle Act, 1988)

1. Motor vehicle cannot use footpath or cycle tracks unless Police Officer in uniform allows the person.

2. The driver of motor vehicle should slow down when approaching a junction, pedestrian crossing and he has become aware that he may do so without endangering the safety of persons thereon.
3. Motor vehicle should not be parked in such a way that it will likely cause danger, obstruction, or inconvenience to other road users.
4. Driver should not park the motor vehicle on footpath or cycle track.
5. The footpaths and cycle tracks should be consistent by network, section, and intersection to ensure the safety of the users.
6. The cycle tracks should be direct with minimum detours and delays.
7. The number of conflict points with motorized traffic should be as less as possible.
8. The footpath and cycle infrastructure should be integrated with proposed metro station and public transport.
 - a. Provide space for bicycle parking inside or very close to transit stops for long time.
 - b. Display information about pedestrian and cycle network.
 - c. Ensure the usage of common mobility card for proposed metro and BRT.
9. The provision of cycle parking should be given at buildings and private properties.
10. On street and off-street cycle parking space should be equivalent to 10% of the total area provided for vehicular parking or two car parking bays, whichever is more. If cycle parking gets full, more cycle parking must be created, even if it has to be created by removing vehicular parking that might also be full.
11. Cycle parking facilities will be created as Bicycle Zones, which are clearly indicated, with signage and road markings, with appropriate cycle stands where required
12. The locking facilities should also be provided for off street parking locations.

8. Guidelines for Multimodal Integration HUB

Cities like Delhi, Mumbai are the cities with more than two transit systems running parallel to each other or crossing each other and because of the spread of the city they need to shift the mode from one transit system to another. For YEIDA, Multimodal Hub and fare integration in form of common mobility card is recommended which will operate for Metro, Neo Metro, and city bus service.

1. The MMH will be a common infrastructure platform where Neo Metro, Metro, IPT and City bus are integrated at same place.
2. The multimodal hub should be such that it should reduce the time required to transfer from one mode to another mode.
3. The multimodal hub should have a space for E-rickshaw, bicycle parking, private vehicle parking and other modes either in the hub or around the hub but not more than 100 m radius from hub.
4. The MMH should be designed such that it should give priority to pedestrian, public transport, E-rickshaw, NMT modes over private modes of transport.

10.7 Infrastructure Projections and Strategies

10.7.1 Water Supply

a. Water Supply Action Plan

Water resources are closely linked to environmental, economic, and social considerations, as well as to health and economic development. Infrastructure provisions must be responsive to natural resources. Key principles for sustainable water management as mentioned by World Commission on Environment and Development in its report "Our Common Future" include:

- I. Fresh water should be regarded as a finite and vulnerable resource;
- II. Water is to be recognized as an economic good while being cognizant of the basic right of all humans to have access to safe, drinkable water and sanitation.
- III. Water development and management should be based on a participatory approach, involving users importantly women, planners, and policymakers at all levels;

For a variety of activities like drinking, sanitation, agriculture, inland fisheries, industry, transportation, hydroelectricity generation, urban development, recreation, and other endeavors; fresh water is essential. Alternate sources and techniques for green and sustainable infrastructure such as green roofs, rainwater harvesting, rain gardens, tree planting, and permeable pavement provide defenses against more frequent and severe heat waves, droughts, and flooding that a changing climate is bringing to many urban areas, other than their primary benefits (reduced air pollution, energy use, and urban heat island effect).

Broad goals to achieve Sustainable Water Supply Principles

- A. **Sustainability of source:** Water being a finite and vulnerable resource will remain sustainable only if action is taken for its preservation by recharging and conserving techniques. In their natural state, without adverse human intervention, all water sources are essentially sustainable.
- B. **Adequate supply of piped water:** Piped water supplies for different sectors of the area should be provided adequately for domestic needs (drinking, washing, bathing, flushing of toilets, gardening, etc.), institutional needs, public purposes (street washing, flushing of sewers, etc.), industrial and commercial uses, firefighting, etc.
- C. **Alternate and new technologies:** Innovations in technology, newer sources as well as low cost traditional measures can give solutions to meet water supply deficits.
- D. **Water literacy:** The limit and extent of finite availability of clean water must be understood by all. Encouragement to limit the use of water will help make the rate of use closer to the rate of renewal.

Overall Strategy to achieve Sustainable Water Supply Principles

1. **Restoration and Preservation:** To ensure sustainability of source, water bodies, lakes, wetlands and creeks and streams that make up the water networks need to be restored and preserved to ensure natural water supply renewal.
2. **Regional approach in planning for augmenting water infrastructure facilities:** As towns are being planned by their respective authorities for their individual needs, there has been a total lack of regional approach for sustainable use of available water and its conveyance from areas of plenty to scarcity. Long term sustainable solutions such as construction of upstream reservoir to store excess water during monsoon for use in the lean period, inter-basin transfer of water such as Sarada -Yamuna link canal to transfer surplus water from Sarada river to areas of UP, NCT and Rajasthan should be augmented.

3. **Efficient use of available portable water:** as per NCR plan, 2041, Sub-regions should 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 and also setup sufficient number of recharge wells in Yamuna flood plains. The plan also focuses on ground water recharging, revival and rejuvenation of rivers and water bodies etc.
4. **Encourage exploring non-traditional sources:** There is a need to explore the potential of using non-traditional sources such as rainwater harvesting and recycling techniques to reduce the overall load on fresh water sources. Adopting tree planting measures, green roofs, permeable pavements and infiltration trenches to allow ground water recharge are needed. Channelizing storm water along natural slopes so as to feed surface water bodies such as lakes and tanks are necessary as they are able to support water needs to some extent and can also be used locally for landscaping purposes.
5. **Watering landscaping and flushing toilets through recycled water:** In order 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. Recycled water may also be used for purposes such as firefighting.
6. **Ensuring accountability through education and enforcement:** Citizens need to use water more responsibly. Guidelines to daily per capita water consumption limiting usage to 135 l/day have been recommended in the Water Supply Master Pan of YEIDA Phase-1. Water tariffs are often called upon to discourage "excessive" or "wasteful" uses of water, thus promoting conservation of depleting sources, or the sustainable use of renewable water sources. Industries which rely on water for operations need to be utilizing best practices to reduce water use, and to avoid contamination of water sources at all costs. There is a need to make changes to enforce this kind of accountability, and need to ensure that the measures enacted are strong enough to actually create sustainability.

b. Water Supply Proposals

Based on the projected population for 2041 is around **37.09** Lakhs, the total water demand of around 538.78 MLD will be required for the projected population. The water supply requirement for the population by the year 2041 is shown below:

Table 10-4: Water Supply requirement in urban area by 2041

Sr. No.	Facilities	URDPFI Standards as per section 8.3.1	Requirements 2041	Unit
1	Water supply	150	538.78	MLD
2	Elevated Service Reservoir	150	89	Number of Reservoir
3	Under Ground sump	150	178	Number of Ground sump

The area dedicated to WTP is in the utility zone in NE and SE. The water supply for the area would be met jointly by 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 bore wells while the surface water would be drawn majorly from Upper Ganga Canal (Mat Branch), Jewar Distributary System, Inayatpur Distributary and Barauda Distributary. However a detailed the water supply master plan study needs to be carried out based on DPR.

10.7.2 Sewage

Effective sewerage is important for health and hygiene. Wastewater reuse is an important dimension of water resources planning.

Broad Goals

- i. **100% Sewage Treatment:** To have complete treatment of the sewage generated including those generated by industries, urban areas and villages so that deterioration of the outfall water quality is prevented; Low cost sanitation techniques to ensure 100% sanitation in village areas is one of the strategies recommended;
- ii. **Use treated sewerage and effluents in industry:** The water supply demand of the industrial areas planned should be managed from the treated effluents of waste water treatment plants.
- iii. **Wastewater usage in agriculture:** The use of urban wastewater in agriculture is a common practice for diverse reasons, some of which are water scarcity, fertilizer value, and lack of an alternative source of water.
- iv. **Wastewater aquaculture:** is carried out in natural ponds which serve the dual purpose of inundation control and as collection sinks for city wastewater.

Overall Strategy to achieve Sustainable Sewerage system

For 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. The sewerage Master Plan prepared on the basis of the City Level Zonal Development Plan shall be reformulated in light of the Master Plan. As per master plan 2031, STPs are proposed in sector 15B, Sector-6, sector-11 and sector – 29 with a capacity of 5-10 MLD, 20-40 MLD, 20-20 MLD and 20-40 MLD respectively, with a total capacity of 171 MLD. Based on projected population for 2041 was around **37.09** Lakhs, total sewage demand is going to be 359.19 MLD.

Table 10-5: requirement of sewage treatment by 2041

Sr. No.	Facilities	URDPFI Standards	Requirements	Unit
		as per section 8.3.2	2041	
1	Sewerage	100 litres per capita per day	359.19	MLD

In phase one, the goal is to set up waste water treatment system that uses the most appropriate technology so that maximum recovery and re-use of treated water and by-products is ensured. A decentralized sewage treatment system is planned which would keep waste water recycling energy efficient. The concept of treatment of waste water should be established at the primary level which is at the household level. The two types of wastewaters produced at the household which is the black water (water from the toilet) and grey water (water from showers, kitchen, basins and taps) could be treated and used in various ways. The grey water from bathrooms could be separated at source and given a lesser degree of treatment and recycled within the premises. Treated grey water could be re-used for toilet flushing and gardening.

10.7.3 Storm water and Drainage

In high rainfall areas, the volume of storm water runoff is enormous and is a potential source of water. Storm water drains also collect the excess water that does not get absorbed into the ground as surfaces such as concrete and asphalt allow very less absorption. This run off can also pick up

pollutants and wash them into rivers and streams. Efficient management of storm water systems is essential and could be combined with sustainable and alternate systems.

Broad Goals

- i. Green storm water infrastructure: To employ natural methods of catching water where it falls and further replenishing of ground water with the same.
- ii. Ground water recharge: Ground water is often tapped as a source of potable water and requires to be replenished as this is a finite supply source.

Overall Strategy

- A. Harvesting flow of storm water along the natural slopes: Flow of storm water is to be channelized along natural slopes so as to feed surface water bodies such as lakes and tanks. Large lakes and tanks are able to support partial water needs of the population of a few planning districts, and can also be used locally for landscaping purposes.
- B. Integrated of systems for ground water recharge: To have integrated storm water drainage system with rain water harvesting systems so that impact of ground water tapping as a water supply source would be minimized. Rainwater harvesting techniques such as percolation ponds, recharge pits/trenches could be provided in large recreational areas and green buffers along Yamuna. Local recharge/pits could be proposed in the low lying areas to prevent water logging and at places where sudden excess run off can accumulate (for valley areas); the recharge troughs could be used. Roof rainwater harvesting, check dams, percolation tanks are some of the techniques that can be used for rainwater harvesting at various levels.
- C. Segregation of sewage and storm water: As pipes of both systems typically run in proximity, consideration to be given to ensure that raw sewage is not getting into storm water drains or water bodies in the vicinity.
- D. Mimicking nature: Alternate technologies such as landscaped planters, swales, infiltration trenches and rain gardens or implementing an eco-roof reduce and filter storm water runoff. Such green storm water management technologies including rainwater gardens, storm water planters, pervious concrete and green streets can be incorporated into various urban design aspects such as tree planters, container gardens, traffic calming devices (such as bulb-outs and medians), parks and schools to create multi-purpose designs that beautify, increase pedestrian safety, and provide either passive or active recreational opportunities.

Storm Water Proposals

- The Storm Water Drainage Master Plan containing DPR Volume III- has proposed trunkcovered surface drainage network on the main roads and covered surface drains on the major roads which receive the storm water from the sectors through the internal drains. The road side drains are discharging into the natural drains. The Waste Water System Master Plan prepared on the basis of the City Level Zonal Development Plan shall be reformulated in light of the Master Plan.
- AS per NCR Plan 2041, Green Stormwater Infrastructure (GSI) is a nature-based solution to water quality issues that urban stormwater runoff causes and provides greater benefits than conventional (or “Gray”) stormwater solutions. GSI combines economic and environmental sustainability, adaptability, resiliency, and social equity. GSI is defined as soil-water-plant systems that intercept stormwater, infiltrate a portion of it into the ground, evaporate a portion of it into the air, and in some cases release a portion of it slowly back into the sewer system. In addition to better stormwater management practices and improved water quality, GSI provides benefits such as beautified communities, improved public health, creation of ecological habitat, and enhanced local economic vitality.
- Storm water trenches along with permeable spaces along roads to capture surface runoff, be ensured.
- Digital storm water management should be promoted to help practitioners to scale up rainwater harvesting and improved storm water management for sustainable water management including urban flooding in the NCR.

- Localization of storm water runoff be made integral part of urban & rural development plans for recharging aquifers. States to start a drive-in mission mode to separate storm water drains from sewage drains so that storm water is used for groundwater recharge.
- Efforts should also be made for groundwater recharge from storm water run-off on roads and footpaths through installation of prefabricated structures between road carriageways and footpaths.

10.7.4 Solid waste generation.

Broad Goals

- I. Protect the health of all citizens & ensure environmental sustainability
- II. 100% waste minimization through recycling /recovery of resources to be achieved.
- III. 100% safe and sustainable solid waste management by 2041.

Overall Strategy

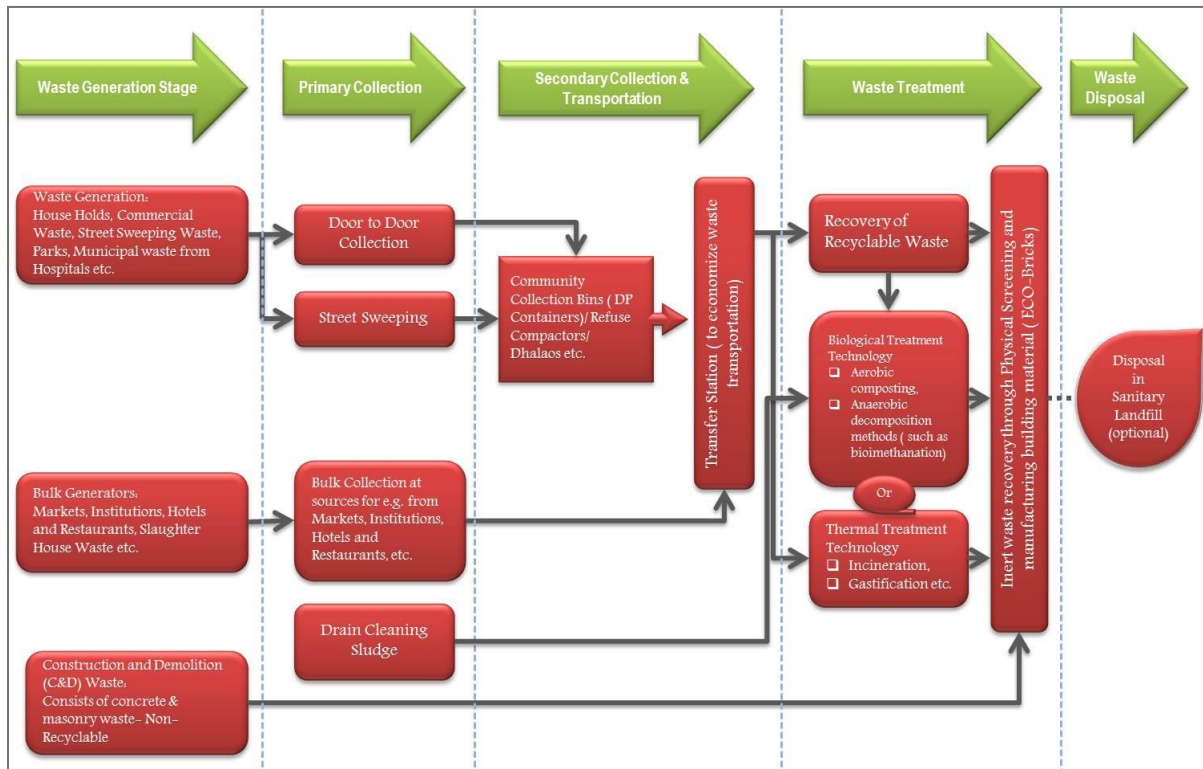
1. Minimize waste generation.
2. Maximize waste recycling and reuse.
3. Ensure the safe and environmentally sound disposal of waste.
4. Institutional capacity building measures to be taken up including involvement of NGO's/Private Sector to improve the efficiency and effectiveness of Solid waste management at all stages especially at collection stages is critical.
5. Land for treatment/disposal of solid waste to be identified and earmarked after Environmental Impact Assessment of possible options.

For hazardous and industrial waste:

Concerted efforts are required to institute and improve environmental monitoring and controls to keep hazardous wastes out of the municipal system, especially landfills, sewers, and drains. The following are some major functions for management of hazardous and industrial waste.

- A. The laws controlling industrial and hazardous waste are normally enacted at the National, State or YEIDA level and have the key role in monitoring the generation of industrial and hazardous waste.
- B. Identify suitable sites for environmentally safe disposal and monitoring the collection and disposal operations.
- C. Special provision to be made for management of infectious waste originating from hospitals and other health care institutions. The hazardous and hospital waste need to be handled at regional level to minimize the number of such facilities as it is difficult to earmark sites away from habitations for such uses. Hence the combined effort of NOIDA, Greater NOIDA and YEIDA Authorities in this regard is proposed.
- D. Steps proposed for the treatment of solid waste management are as follows.
 - Step 1- Household door to door collection and segregation of Solid waste.
 - Step 2- Transportation of solid waste to the waste treatment site.
 - Step 3- Segregation of solid waste at waste treatment site for the processing.
 - Step 4- Shredding of the compostable waste to desired particle size.
 - Step 5- Treatment of biodegradable waste through composting.
 - Step 6- Disposal of non-bio-degradable sold waste into secured landfill facility.

Table 10-6: Solid Waste Management Process



(Source: URDPFI Guidelines section 8.3.6.5)

The expected solid waste generation by the year 2041 due to population of 37.09 lakh from various sectors is shown below. However, a proper solid waste management plan shall be made that will not only cater the solid waste generated around 4752.19 tons/day but also will have the concept of three R’s i.e., recycle, reuse, refuse. A holistic and sustainable approach is needed for the solid waste management in YEIDA.

Table 10-7: Solid waste generation by 2041

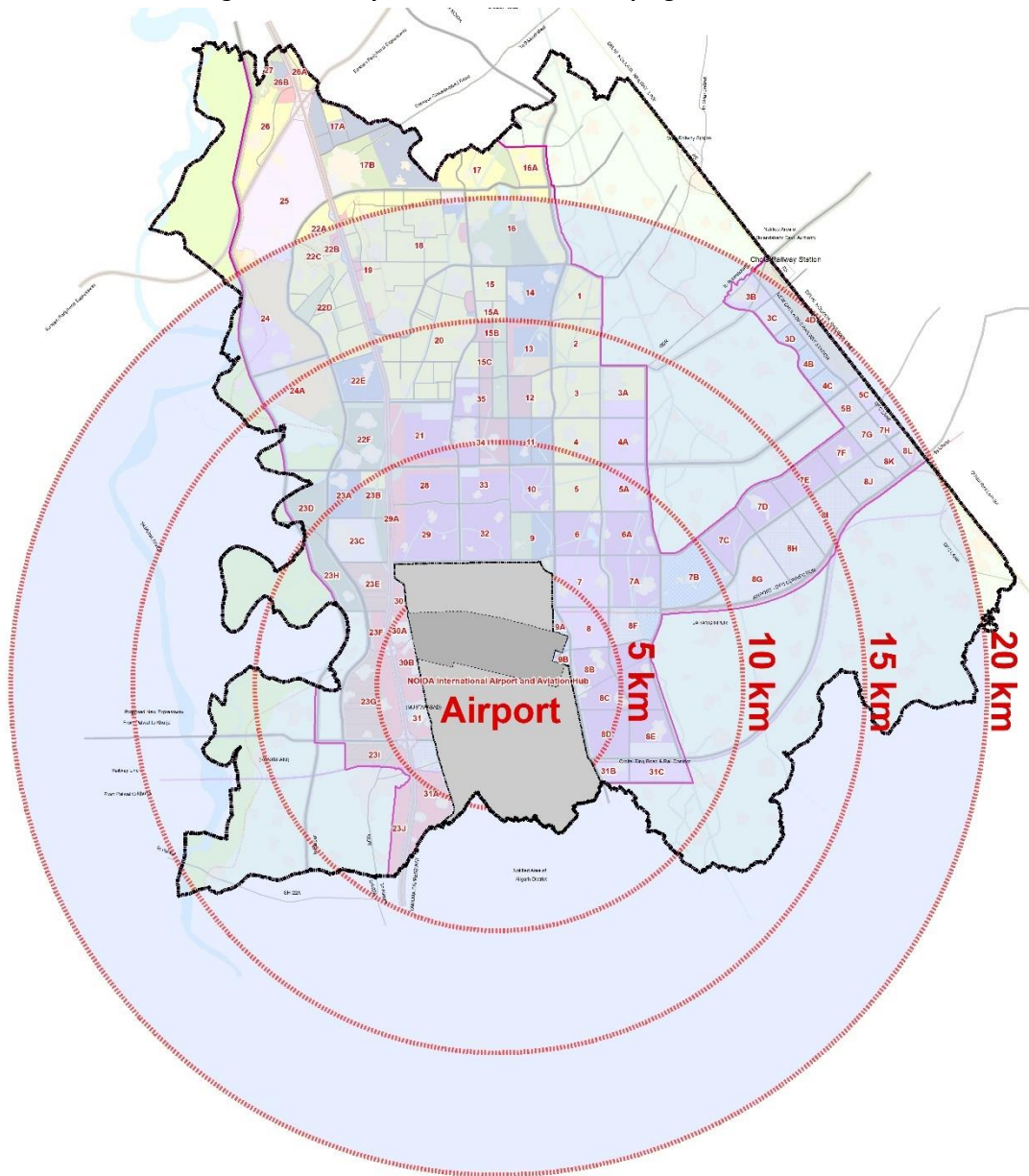
Sr. No.	Facilities	URDPFI Standards as per section 8.3.6	Requirements	
			2041	Unit
1	Solid waste			
	Population of 37.09 Lacs	0.6 (kg per person)	2225	Tonne/day
	Floating Population @20%	0.1 (kg per person)	74	Tonne/day
	Total		2300	Tonne/day

Solid Waste Treatment and Disposal Site:

Local level of collection and segregation (Material Recovery Facility cum Transfer Station) for solid waste handling shall be required at 15-18 location depending upon Sector sizes, landuse and waste generated per day. Each such location required and area of 1-1.5 ha of land for the MRF cum Transfer station Facility. Space for such activity shall be incorporated while preparing sector layouts. For the city level, assuming that 70% waste will be treated and reuse through waste processing plant and 30 % waste will be dumped at Solid Waste Dumping site. Such site shall be planned for handling waste dumping for 50 Years assuming that it requires 3.5 Ha land every year. **Thus, Total of 175 Ha of land will be required in the vicinity of the city can be identified by the competent authority in the South-East or North-East side of the city after leaving 20 KM Buffer from the proposed Noida International Airport**

as per Airport Policy. The proposed site for these facilities should be in such a way that it should cause minimum affect to the surrounding environment for ground and surface water contamination, soil contamination, ambient air pollution etc. The area for the plants will be decided in view of the technology to be applied at the time of actual commissioning. This area can be used to develop different plants for municipal solid waste, medical wastes, e-wastes, demolition waste.

Figure 10-29 City Level Solid Waste Dumping Site Distance



The guidelines for the Solid Waste Management system are as follows,

- In door-to-door collection there should be provision for adequate machinery, equipment, and staff.
- The door-to-door collection vehicles should be high capacity, covered and should have alarm system.
- There should be waste bins on streets at every 500 m for the community collection of waste.

(Source: CPHEEO)

- Public awareness campaigns should be done for better waste management.

10.7.5 Power supply: Application of new and renewable technologies

Adequate power supply is a significant input necessary for the economic growth and development. The effective performance of other critical areas of physical infrastructure particularly water supply and environmental sanitation depends on power sector.

As per the Plan prepared for power sector by UPPCL based on the City Level Zonal Development Plan prepared earlier, the estimated power demand is 5000 MVA (Source: Report on YEA – Transmission and Distribution by Feedback Ventures Pvt Ltd). Capacity additions in the form of commissioning of new 765/400/33 KV, 33/11KV substations and 11 KV feeders are proposed in the Power Master Plan to meet the load demand. The Power Master Plan prepared on the basis of the City Level Zonal Development Plan shall be reformulated in light of the Master Plan.

Renewable energy sources: Use of renewable energy sources such as solar energy at settlement level as well as at local industries level with the support of the government is recommended as a strategy. Other renewable energy sources such as biomass energy using industrial and municipal waste has been recommended as a strategy.

There is a huge potential for utilizing energy from the renewable sources for the YEIDA Phase-1. The sections below would give a brief description of the possibilities of exploration of each type of source for the YEIDA Phase-1. Although detailed analysis is required to determine the exact potential of a particular source:

1. Solar Energy
2. Wind Energy
3. Hydro Energy
4. Bio Energy
5. Waste to Energy

1. Solar Energy: Solar energy is the most readily available and free source of energy. India receives solar energy in the region of 5 to 7 kWh/m² for 300 to 330 days in a year. This energy is sufficient to set up 20 MW solar power plants per square kilometre land area¹⁴. Solar energy can be utilised 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 YEIDA Phase-1, depending on the quantum of radiation available in the area.

2. Hydro Energy: Hydro power is generated by using electricity generators to extract energy from moving water. Hydro energy can be obtained by using many methods of capture. The most common method of using energy from water is a hydroelectric dam, where water coming down through an area causes turbines to rotate and the energy is captured to run a generator. Since there is presence of canals in the YEIDA Phase-1, Small Hydro Power (SHP) projects could be a potential source of capturing power. The electricity generated from Small Hydro Power (SHP) projects is cost-effective. Such projects are simple to operate, have a relatively short gestation period, and are environment friendly. In addition, SHP projects can be located in remote areas for generating power.

3. Bio Energy: Biomass is a renewable energy resource derived from the carbonaceous waste of various human and natural activities. It is derived from numerous sources, including the by-products from the wood industry, agricultural crops, household wastes etc.

4. Waste to Energy: Waste-to-energy is the process of creating energy in the form of electricity or heat from the incineration of waste source. For the YEIDA Phase-1, waste to energy hold a lot of potential due to the municipal waste and industrial wastes that would be generated by the projected population and the proposed industries that would come up in the area.

5. Wind Energy: Wind is a form of solar energy. Winds are caused by the uneven heating of the atmosphere by the sun, the irregularities of the earth's surface, and rotation of the earth. Although for a wind energy system to be feasible there must be adequate wind supply. A wind energy system usually requires an average annual wind speed of at least 15 km/h¹⁶. Detailed study has to be conducted for determining the potential for YEIDA Phase-1 for utilizing the wind energy.

Sectoral Goals

- As a long term option, the setting up of a dedicated captive power plant should be explored. YEIDA Phase-1 substation capacity would be enhanced to 4500 MVA to meet the demand of 5000 MVA, if UPPCL provides 500 MVA power. The Power Master Plan prepared on the basis of the City Level Zonal Development Plan shall be reformulated in light of the Master Plan.
- As per NCR Plan 2041, we must adopt, **promote, and set annual targets for getting 'Green Rating' for all large non-domestic structures and accordingly work towards Zero-Energy Building (ZEB)** i.e., buildings with zero net energy consumption through energy efficiency and use of renewable energy and should also aspire and explore options for utilization of 'Hydrogen Energy' wherever possible.

10.7.6 Telecommunication

Overall Sectoral Strategy

Segregated duct system for cables: Underground duct system for telecommunication and dedicated exchange to meet the communication needs of the existing and the proposed population are the strategies recommended for telecommunication sector.

Sectoral Goals

The highest level hierarchy of Exchange (TAX) for the entire district of Gautambudh Nagar is located in sector 62 of Noida, which could feed parts of YEIDA Phase-1 in the initial phase. For the remaining areas in YEIDA, a new Trunk Exchange should be established which would be sufficient to cater to the future demand of the entire telecom facilities in the area. The proposed Trunk Exchange will have sufficient capacity to serve the entire YEIDA Phase-1 in the later phase of development.

The goal of power and telecommunication sector will be to make YEIDA Phase-1, a wireless city. All high tension and other electricity cables, telecommunication wires, cables for TV system could be put under ground in service ducts. It is also desirable that Wi-Fi system could be planned for internet and telecommunication connectivity in YEIDA Phase-1. Ducts within the right of way of road shall be reserved for telecom facilities such as optical fibre cable lines which would carry the entire traffic of data, telephony and television to and fro from the consumers. Land shall be reserved for mobile telecom in order to accommodate signal transmission towers and associated operation/maintenance facilities. The telecommunication towers which will be erected for providing mobile services in the area could explore the latest technologies where the erection of towers will not affect the aesthetics.

10.7.7 Education

As per the existing analysis, the settlements in YEIDA area at present lack the provision of quality education services and depend on the bigger urban centres for it. Moreover, the numbers of facilities existing in the villages are more than the required facilities in present condition, the location of facilities in accessible distances for students is of concern. It is noted that the existing basic education is not a major problem in the area, however there is a major need for augmentation of skills focusing on the types of industrialization. Therefore, we need to plan for educational facilities that will be required for the population of 35.51 lakh. The table below shows education facilities required by the year 2041.

Table 10-8: Education facilities required by the year 2041

	Category	Population served per unit (URDPFI Norms)	Units required	Area Required Per Unit (URDPFI Norms)	Area Requirement (Ha.)
1	Pre – Primary School	2,500	1437	0.08	114.9
2	Primary School	5,000	718	0.4	287.3
3	Senior Secondary School	7,500	479	1.8	862.0
4	Other Colleges	125,000	29	4	114.9
5	Engineering College	1,000,000	4	6	21.6
6	Medical College	1,000,000	4	15	53.9
7	Polytechnic, Vocational Training School, Non-Formal Training Centre	1,000,000	4	4	14.4
8	Special School for Disabled	100,000	36	1	35.9
	Total		2709		1505

Education services should be developed at various hierarchies such as sub region level, city level, and sector and neighborhood level. As per the URDPFI guidelines, there would be a requirement of 479 Senior Secondary schools and engineering & medical colleges. There is a need to establish a National Level Affiliating University in NCR recognized not only nationally but also internationally for its academic standards, to which the NCR institutions can be affiliated. It's a great opportunity to develop this university in YEIDA Phase-1 to spearhead the reform of education scenario in the UP Sub-region. Moreover, there is a major need to upgrade the availability of skills, encouragement of R&D centres and development of technical education and management institutions, as the industrial scenario is further expected to expand in YEIDA area on a large scale with the advent of major infrastructural projects such as DMIC, freight corridors and expressways.

10.7.8 Health

Health facilities are the basic need of every citizen residing in a particular area. At present, there is a lack of quality health services in areas outside NCT. This causes movement of people towards Delhi for health services, increasing congestion there and inconvenience for people in rest of the region. Poor accessibility & maintenance of the existing facilities is another concern. Thus, with increasing population health facilities need to be increased. Hence the table below shows the required number of health infrastructure as per population demand by 2041.

Table 10-9: Health Facilities Required as per Master Plan 2041

	Category	Population served per unit (URDPFI Norms)	Units required	Area Required Per Unit (URDPFI Norms)	Area Requirement (Ha.)
1	Dispensary	15,000	239	1	239.5
2	Nursing home, child welfare & maternity center	75000	48	0.25	12.0
3	Family Welfare Centre	50,000	72	0.08	5.7
4	General Hospital	250000	14	6	86.2
5	Veterinary Hospitals	500000	7	0	0.0
6	Polyclinic	100000	36	0.25	9.0
7	Intermediate Hospital (Category A)	100,000	36	3.7	132.9
8	Multispecialty Hospital	100000	36	9	323.3
9	Specialty Hospital (NBC)	100,000	36	3.7	132.9
10	General Hospital (NBC)	250000	14	6	86.2
11	Diagnostic Centre	50,000	72	0.08	5.7
12	Dispensary for pet animals and birds	100000	36	0.03	1.1
	Total		647		1034

To cater to the sufficient and accessible health services, these should be developed at various hierarchies such as sub region level, city level, and sector and neighbourhood level. As per the URDPFI guidelines, there would be a requirement of 1023 ha of land for various health facilities which would include, Dispensary, Nursing home etc. Special importance for development of super specialty medical treatment and training services should be given. Private participation in providing health services should also be encouraged. Centres of excellence in indigenous medical systems should be developed by providing incentives.

11 ZONING REGULATIONS

Zoning is one of the important planning tools to manage growth, regulate density and organize land uses within the urban area. By regulating land uses it helps to segregate incompatible uses, increase liveability, and create desirable character for different areas for the city.

This chapter details out guidelines for enabling the preparation of detailed Layout Plan for the sectors in the Master plan. It includes designation of use zones and use premises, use premises to be permitted in the use zone, use activities to be permitted in use premises and restrictions on subdivision of use zones.

11.1 Zones- Master Plan 2041

The zoning regulations are regulations which try to achieve the vision and objectives of the development. These objectives are placed along with the projections for population. The major consideration for these zoning regulations were

- Existing Growth pattern and trend
- Population projections for 2041
- Comprehensive assessment of existing conditions, land uses, development typologies, socio-economic parameters etc
- Existing supply of buildable land in approved layouts
- Availability of land suitable for urbanization
- The overarching vision for YEIDA 2041, the planning and growth management principles including compact growth, land use -transportation co-ordination, green network, sustainable environment, and affordable development
- Incorporation of comments and suggestions from Working group and stakeholder meetings

11.1.1 Aerotropolis

Aerotropolis includes an area around the airport with a height limitation of 24 meter as per Airport Authority of India. These are broad tentative activities proposed for aerotropolis however the Authority may decide to add similar kind of other activities in view of the demand which may arise in future.

- Relaxation of 5% to 10% in Ground Coverage shall be allowed if permissible FAR is not achieved due to height restrictions surrounding the Airport with special permission of Authority Board .
- In cases, where the permissible FAR is not attained, the unachieved FAR may be transferred to the Central Business District through Transfer of Development Rights (TDR).The detail policy may be prepared by the Authority for this purpose.
- Proposal for Night life may be explored in this area. Authority may permit extended timing for hotels, restaurants, socio- cultural activities, entertainment, sports facilities, retail stores etc., to function in the night as per stipulations

Concerned agencies shall work jointly to facilitate adequate illumination, security, and easy access by public transport.

Table 11-1: Aerotropolis Major Activities

Proposed themes	Major Activities
Innovation and tech-hub	<ul style="list-style-type: none"> • Biotechnology/ Biotech Park, • R&D Centre, Office/ Corporate Offices, • Data Centra • Information/ Software Technology • Industrial activity -aero service centre & manufacturing

Commercial Centers	<ul style="list-style-type: none"> • Retail stores, Showrooms, • Shopping center/ commercial Centre/ shopping mall, • Exhibition Hall, Exhibition Centre
Logistics Hub	<ul style="list-style-type: none"> • Warehouses, Transit Facilities, • Freight Complex, Logistic Parks,
Hospitality	<ul style="list-style-type: none"> • Hotels, Connection Centres, Resorts, Banquet halls, guesthouse • Wellness/ Health services • Service Apartments, • Professional Office
Recreational and Entertainment Hub	<ul style="list-style-type: none"> • Sports facilities • Recreational hub, Socio-cultural activities
Smart Residential Zone	<ul style="list-style-type: none"> • Low Rise residential with horizontal mixing of land uses

11.1.1.1 International Airport

An International Airport and Aviation Hub is proposed to be developed in the Southern part of YEIDA Phase-1. This is in close proximity of Yamuna Expressway and will be developed as a regional facility with world class Aeronautical & Non-Aeronautical facilities related to Airport / Aviation hub. The hub would be self-contained with logistic activities, business zones, recreation, commercial, hospitality & other supporting activities in it and connected to the major movement corridors in the region. Existing village Abadis and facilities within airport area shall be relocated as per detail plan of the proposed Airport and Aviation Hub approved by the competent authority of State/ central Government and R & R scheme plan of Right of Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013. All the development activities in scheme plan for Rehabilitation and Resettlement of existing Abadi shall be decided by R&R Administrator/ Collector (Acquisition).

- The Aeronautical functions area and operational function area shall be in compliance to the prevailing norms of AAI(Airport Authority of India), ICAO(International Civil Aviation Organisaon), DGCA(Directorate General of Civil Aviation), NBC(National Building Code),any other relevant applicable regulations) and as per the provisions of Concession Agreement within the Airport area.
- Relaxation of 10% in Ground Coverage is allowed if permissible FAR is not achieved due to height restrictions in the City Side Development of International Airport.

11.1.2 Central Commercial Area

- The land uses in this central commercial area would include a mix of offices, retail and other business uses.
- The area should be strengthened by a transit shuttle route to serve the CBD and to connect with metro Neo stations at the northern and southern ends.
- **Provision for extra FAR may be explored by the Authoirty over the building byelaws in this zone. This extra FAR includes the TDR FAR allowed from aerotropolis. A Detail policy may be prepared by Authority.**
- Proposal for night life may also be explored in this area.
 - Authority may permit extended timing for hotels, restaurants, socio- cultural activities, entertainment, sports facilities, retail stores etc., to function in the night as per stipulations
 - Concerned agencies shall work jointly to facilitate adequate illumination, security, and easy access by public transport
- The Central Park envisaged in the middle of the Central Commercial Area needs a detailed layout plan to be prepared. Permitted activities in the recreational green is to be followed while preparation of detailed layout of the Central Park

11.1.3 Recreational/ Olympic Hub

Following activities should be allowed in Recreational/ Olympic Hub.

1. Sports infrastructure which includes sports stadium, sports academies, and sports stadium for different disciplines.
2. Accommodation facilities for trainers, sports person etc.
3. Storage display and commercial areas for sports related equipment's, dresses, and other related materials.
4. Sports medical.
5. Entertainment areas.

However, detailed Layout, list of permissible activities and Development controls should be decided by the authority at the time of DPR implementation.

11.1.4 Floating Activities

After coming of the scheme in force some activities/utilities are proposed according to the changing physical, social, economic and political scenario of the city, which become essential according to the demand of time, but are not envisaged in the scheme of zoning regulations. Such activities include bus/ truck/ rail terminal, wholesale trading complex, public utilities and services, electricity substation, treatment plants etc. To permit such activities it becomes inevitable at times, to change the land-use. Therefore, to permit for such activities/utilities, as per demand, the concept of floating use/activity is included.

Its advantage is that there will be no centralization of non-performing activities in any single land use zone. In addition to that, to curb any ill effect or deterioration on the dominant character of a land-use zone due to extra floating utilities and to control the pressure on the establishments in the concerned area, a provision has been laid down that if floating utility is not permissible in a particular zone, it may be allowed by the Authority by specific permission on the ground of the merits/ demerits of the case.

11.1.5 Mixed Use

The concept of mixed land is becoming popular and is being encouraged in recent planning paradigms. A judicious mix of activities like residential, commercial, institutional and non-polluting type of economic activities can have a positive impact by reducing travel needs and thereby the energy consumptions. This will also lead to greater efficiency of manpower by saving time and energy generally lost in commuting between residence and workplace. The type of Land uses, their extent in the mixed-use zone shall be as follows:

- Industrial/Institutional/Recreational - Minimum 75%
- Residential - Minimum 5% and Maximum 12%
- Commercial - Maximum 8%
- Institutional (facilities) - Minimum 5%

Note-

- 1) Green area & Road/ transportation area requirement shall be as per the norms of Building Regulations & Subdivision norms of Master Plan while preparing the Sector Layout Plan.
- 2) Authority may plan or subdivide a sector into different uses proportionately as per above or Authority may plan mixed use plots as a single unit in Sector Layout.

- 3) If Authority plans mixed use plots as a single unit, in that case only industrial, residential & commercial use shall be allowed proportionately. Support activities/ essential utilities as provided in the zoning Regulations for different uses (mentioned above) shall be allowed in the Plot of the 'Mixed Landuse'.
- 4) Core activities and support activities (with permissibility) are defined in zoning regulations of master plan (support activities to the extent of 25% of permissible FAR). These support activities are essential for the core activity. Hence, support activities shall be permitted in both type of plots as planned by authority as per provision of point 2 of this Note.
- 5) In case of Mixed Landuse plot as a single unit, the authority may decide the permissible FAR and Ground Coverage in the scheme as per requirement and recording the reasons thereof.
- 6) If in mixed use sector, any industrial plot has been allotted by Authority as a core activity at 100% in a separate plot, the support facilities/essential utilities for running industrial or institutional or recreational units shall be allowed upto maximum 25% of permissible FAR. In that case, Institutional (facilities) which is separated on a different plot shall act as a main institutional activity.

11.1.6 Multiple Land Use Industrial

The type of use, their extent in the Multiple industrial landuse zone shall be as follows:

Land Use	Percentage
Industrial	Minimum 70%
Residential	Minimum 5% and Maximum 12%
Commercial	Maximum 13%
Institutional (Facilities/Utilities)	Minimum 5%

Note-

- 1) Green area & Road/ transportation area requirement shall be as per the norms of Building Regulations & Subdivision norms of Master Plan while preparing the Sector Layout Plan.
- 2) Authority may plan or subdivide a sector into different uses proportionately as per above or Authority may plan multiple use plots as a single unit in Sector Layout.
- 3) If Authority plans multiple use plots as a single unit, in that case only industrial, residential & commercial use shall be allowed proportionately. Support activities/ essential utilities as provided in the zoning Regulations for different uses (mentioned above) shall be allowed in the Plot of the 'multiple Landuse-Industry'.
- 4) Core activities and support activities (with permissibility) are defined in zoning regulations of master plan (support activities to the extent of 25% of permissible FAR). These support activities are essential for the core activity. Hence, support activities shall be permitted in both type of plots as planned by authority as per provision of point 2 of this Note.
- 5) In case of multiple Landuse plot as a single unit, the authority may decide the permissible FAR and Ground Coverage in the scheme as per requirement and recording the reasons thereof.
- 6) Support Activities/ essential utilities as provided in the zoning Regulations for different uses as mentioned in table above shall be allowed on the Plot/ Area of the 'Multiple Landuse Industrial'.

11.1.7 Multiple landuse Hospitality

Horizontal mixing of activities are envisaged in this landuse category as depicted in the following table.

Land Use	Percentage
Commercial	Minimum 65%
Industrial	Maximum 10%
Residential/ Institutional	Maximum 20%
Institutional (Facilities)	Minimum 5%

Note-

- 1) Green area & Road/ transportation area requirement shall be as per the norms of Building Regulations & Subdivision norms of Master Plan while preparing the Sector Layout Plan.
- 2) Authority may plan or subdivide a sector into different uses proportionately as per above or Authority may plan multiple use plots as a single unit in Sector Layout.
- 3) If Authority plans multiple use plots as a single unit, in that case only industrial, residential & commercial use shall be allowed proportionately. Support activities/ essential utilities as provided in the zoning Regulations for different uses (mentioned above) shall be allowed in the Plot of the 'multiple Landuse- Hospitality'.
- 4) Core activities and support activities (with permissibility) are defined in zoning regulations of master plan (support activities to the extent of 25% of permissible FAR). These support activities are essential for the core activity. Hence, support activities shall be permitted in both type of plots as planned by authority as per provision of point 2 of this Note.
- 5) In case of multiple Landuse plot as a single unit, the authority may decide the permissible FAR and Ground Coverage in the scheme as per requirement and recording the reasons thereof.
- 6) Support Activities/ essential utilities as provided in the zoning Regulations for different uses as mentioned in table above shall be allowed on the Plot/ Area of the 'Multiple Landuse Hospitality'.

11.1.8 Special Development Zone (SDZ)

The Conceptual Structural Plan was approved by the Board of YEIDA in its 17th Board Meeting held on 14.11.2007. The Plan basically laid out a network of roads in the area dividing it into land parcels of approximately 1000 Ha each as Special Development Zones (SDZs). The provision of SDZs has been made in accordance with the SDZ policy of the State Government.

11.1.9 Non-Conforming Uses

A Non-conforming use is a use of land that is not allowed as per the land use map and Zoning regulations of the new Master Plan on that particular zone, but was allowed earlier and was built with proper approvals under the previously prevailing regulatory conditions. E.g., industrial use in a residential area is a non-conforming use. A structure used for non-conforming use may be maintained, repaired, or renovated without changing, extending, expanding its external dimensions as per the detailed policy on Non-Conforming use that shall be prepared by the Authority for regulating such uses from the date of Master Plan coming into force.

11.1.10 Categories of Different Activities

The different activities to be provided or planned in the proposed main land-use are as under

(a) Permissible Uses

These activities are ancillary to the main land use and are planned and permitted.

(b) Conditional Uses

These activities which are planned and permitted under the required terms and conditions in connection with the main land-use on the basis of their specific requirements. The required terms and conditions are given with the zoning matrix.

(c) Permissible uses under the specific permission of the Authority

These activities will be planned or permitted under specific permission of the Authority keeping in view the infrastructure and its environmental impact on the surrounding area etc. i.e. on the basis of their merits and demerits.

(d) Prohibited Activities

These activities will generally not be permitted in the respective land-use.

11.2 Landuse Zones

SrNo	Landuse	Sub Landuse
1	Residential	Residential
		Existing Village Abadi
		Village Abadi Extension
2	Commercial	Commercial
		Wholesale Commercial
		Central Commercial Area
3	Multiple Landuse Hospitality	Multiple Landuse Hospitality
4	Industrial	Industrial
		Multiple Landuse Industry
5	Mixed Use	Mixed Use
6	Logistics	Logistics
7	SDZ	SDZ
8	Public & Semi-Public	Institutional
		Utility/Facility
9	Transportation	Transportation
10	Greens	Green Belt
		Park & Play Ground
		Recreational Green
11	Water Body	River/Canal/Drain/Lake/Pond

11.3 Defining Land Use/ Activities

Table 11-2: Activities in a Use Premise

S. no	Activities /Uses	Definition
1.	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 and one accessory block for garage / garages and servant quarters. Residential Flat: Residential accommodation for one family (one household) which may occur as part of group housing or independently
1.2	Group Housing	A premise of size not less than 2000 sq.m. comprising of residential flats with basic amenities like parking, park, convenient shops, public utilities etc.
1.3	Guard chaukidar residence	Residential accommodation for watch and ward staff responsible for security and/ or maintenance of principal use.
2.	Commercial	
2.1	Retail shops/Platform	A premise for sale of commodities directly to consumers with necessary storage
2.2	Repair shops	A premise equivalent of a retail shop for carrying out repair of household goods, electronic gadgets, automobiles, cycles etc.

S. no	Activities /Uses	Definition
2.3	Personal Service shops	A premise equivalent of a retail shop providing personal service like tailor, barber etc.
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.
2.5	Showroom	A premise with facilities for display, sale, and storage of commodities.
2.6	Weekly market	An area used in a week by a group of informal shop establishments in the form of a market. These markets shift from one area to another on different days of the week.
2.7	Convenience shopping centre	A group of shops not exceeding 50 in number in residential areas serving a population of about 5,000 persons
2.8	Local/sector level shopping centre	A group of shops not exceeding 75 in number in residential areas serving a population of about 15,000 persons.
2.9	Shopping centre/ commercial centre/ shopping mall	<p>Shopping Centre/Commercial Centre: A premise having group of shops/commercial establishments Constructed on designated plots.</p> <p>Shopping Mall: A Shopping Mall is one or more buildings forming a complex of shops representing merchandisers, with interconnecting walkways enabling visitors to easily walk from unit to unit, along with a parking area – a modern, indoor version of the traditional marketplace with controlled Environment.</p>
2.10	Informal commercial unit/platform	A premise meant for commercial activities for informal sector.
2.11	Wholesale market/Mandi	A premise from where goods and commodities are sold/delivered to retailers. The premise includes storage, godown, loading and unloading
2.12	Bakery/Confectionary/Atta Chakki	<p>Bakery: A Bakery (also called baker's shop or bakehouse) is an establishment which produces or/and sells baked goods from an oven such as bread, pies, bagels etc.</p> <p>Confectionary: A premise for retail sale of confectionary items directly to consumers with necessary storage.</p> <p>Atta Chakki: A premise where grinding of grain, spices and dried eatables are carried out.</p>

S. no	Activities /Uses	Definition
2.13	Coal/wood/Building material market	<p>Coal Market: A premise for retail sale of coal directly to consumers with necessary storage.</p> <p>Wood Market: A premise for retail sale of fuel wood directly to consumers with necessary storage</p> <p>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.</p>
2.14	Vegetable/Fruit market	A premise for retail sale of fruits and vegetables in shops (area not more than 10 sq.m.) or platforms.
2.15	Cold storage	A premise where perishable commodities are stored in covered space using mechanical and electrical devices to maintain the required temperature etc.
2.16	Hotels	A premise used for lodging of 15 persons or more on payment with or without meals.
2.17	Service Apartment	A serviced Apartment is a type of furnished apartment available for short term or long-term stays, which provides amenities for daily use.
2.18	Restaurant/ Canteen/ Food Court	<p>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.</p> <p>Canteen: A premise used for serving food items to workers in an institution including cooking facilities. It may have covered or open space or both for sitting arrangement.</p> <p>Food Court: A Food Court is a (usually) indoor plaza or common area within a facility that is contiguous with the counters of multiple food vendors and provides a common area for self-serve dining. Food Courts may be part of shopping malls etc. or may be stand-alone development.</p>
2.19	Cinema/Multiplex	A premise with facilities for projection of movies and stills with a covered space to seat audience
2.20	Drive-in cinema	A cinema with facilities for projection of movies and stills for car audience including an audience for other audience.
2.21	Exhibition hall/ Exhibition centre	<p>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.</p> <p>Exhibition Centre:</p>

S. no	Activities /Uses	Definition
		A premise with facilities for exhibition, display and storage of paintings, photographs, sculptures, murals, ceramics, handicrafts, or products of specific category/ class
2.22	Banquet hall/ Barat Ghar	A premise used for marriage and other social functions and run by an individual, or institution or a public agency.
2.23	Electric Charging Station	A premise and an infrastructure that supplies electric energy for the charging of plug-in electric vehicles- including electric cars, neighbourhood electric vehicles and plug-in – hybrid to consumers. It may include servicing of automobiles.
2.24	Petrol pump/Diesel station	Petrol/Diesel / Gas filling station: A premise for sale of petroleum products to consumers. It may include servicing of automobiles.
2.25	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
2.26	Gas godown	Gas Godown: A premise where cylinders of cooking gas or other gas are stored.
2.27	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
2.28	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
2.29	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 automobiles.
2.30	Weigh bridge/ Dharmkanta	A premise with weighing facilities for empty or loaded trucks.
2.31	Storage Godown for Inflammable Items (LPG, Petrol, Diesel, Kerosene, Lubricants, Aviation Fuel etc)	A premise where inflammable items are stored in covered space
2.32	Agriculture Produce Selling Market/ Grain Market	A premise having storage and sale facilities for agricultural products.
2.33	Junkyard	A Junkyard is an establishment or place of business which is maintained, operated or used for storing, keeping,

S. no	Activities /Uses	Definition
		buying, or selling junk, or for the maintenance or operation of an automobile graveyard.
2.34	Steel/ Cement/ Building Material Yard	A premise having storage and sale facilities for bulk building materials like cement, steel etc.
3.	Industrial	
3.1	Service industries	Any industry which is engaged in producing, servicing or repairing goods, or articles for consumption in the neighbourhood/local area.
3.2	Cottage industries	An industry where the creation of products and services is home based, rather than factory based
3.3	Flatted factories	A premise having a group of small industrial units having up to 50 workers with non-hazardous performance. These units may be located in multi-storeyed buildings
3.4	Information/ software technology industry	A premise where computer software etc. is prepared for information technology and I.T. enabled services
3.5	Small/light industry	Small/light industries as per classification of the State Government
3.6	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.
3.6 A	Industrial Plot (Data Centre)	A Data Center is a dedicated secure space within a building/centralized location where computing and networking equipment is concentrated for the purpose of collecting, storing, processing, distributing or allowing access to large amounts of data.
3.7	Industrial Plot (integrated use)	A premise where industrial use is allowed along with staff housing commercial and facilities as an integrated use.
3.8	Medium & Large-scale industry	Medium and large-scale industries as per classification of the State Government.
3.9	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 medium. It may include some hostel accommodation for guest artists, and transmission facilities like tower.
3.10	Biotechnology/ Biotech Park	A Premise which is dedicated to scientific research or production, or business related to biotechnology.
3.11	Non- Polluting Agro based & food processing units	A premise having a group of industrial units with non-hazardous performance primarily working on agro based products
3.12	Milk Pasturing Plant	Milk processing plant means a place, premises, or establishment where milk or milk products are collected, handled, processed, stored, bottled, pasteurized, aseptically processed, bottled, or prepared for distribution, except an establishment that merely receives the processed milk products and serves them or sells them at retail.
3.13	Milk Collection Centre	Milk Collection Center or Milk Bulking Center means any place, premises or establishment where raw milk is received, collected, handled, stored or cooled and prepared for further transportation
4.	Logistics	

S. no	Activities /Uses	Definition
4.1	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>
5.a	Public/Semi-Public (Institutional & Offices)	
5.1	Govt./Semi Govt./Public undertaking/local body office	A premise used for offices of the Union and State Governments, semi Government organizations, Public Sector Undertakings and Local Body Offices.
5.2	Office/corporate office	A premise used for office of commercial establishment, profit making organization
5.3	Professional/personal office	A premise where professional consultancy services are provided by an individual or a small group of professionals like Chartered Accountant, Lawyer, Doctor, Architect, Designer, Computer Programmer, Tour & Travel Agent etc.
5.4	Project development/management/maintenance office	A premise used by a Real Estate Developer for project development, management office within the project site for a specified period with previous approval of the Authority.
5.5	Satellite/wireless/Telecommunication centre	A premise used for installation of a tower for communication purpose.
5.6	Guest house/lodging/boarding house	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.
5.7	Hostel	A premise in which rooms attached to "Institutions" or otherwise, are let out on a long-term basis.
5.8	Reformatory & Orphanage	Orphanage would mean a premise with facilities for boarding of children who are bereaved of parents. It may or may not have educational facilities. Reformatory would mean a premise with facilities for confinement and reform of offenders.
5.9	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, general health, catering etc. which may be managed by an individual or an institution.
5.10	School for mentally challenged persons	A premise with facilities for education, treatment, reformation, and empowerment of mentally and/or physically challenged persons. It may be managed by an individual or institution on commercial or non-commercial basis.

S. no	Activities /Uses	Definition
5.11	Crèche & day care centre/ play & nursery school	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.
5.12	Primary school	A premise having educational and playing facilities for students up to 5 th standard.
5.13	Secondary school/ integrated residential school	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. Integrated Residential School- A premise having educational and playing facilities up to XII standard. It shall have boarding facilities for students and may have residence for faculty.
5.14	Vocational Institute / training Institute / ITI	A premise with training facilities for short term courses for discipline, predatory to the employment in certain profession and trade. It shall be run by public or charitable institution on non-commercial basis. It includes training-cum-work centre.
5.15	Degree / PG college	A premise with educational and playing facilities for undergraduate and post-graduate courses under a university. It includes all professional disciplines
5.16	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.
5.17	Post office	A premise with facilities for postal communication for use by the public
5.18	Telephone exchange	A premise having facilities for central operation of telephone system fora designated area.
5.19	Police station	A premise having facilities for the offices of local police station.
5.20	Fire station	A premise with facilities for firefighting for a catchment area assigned to it. It may include residence of essential staff.
5.21	Police post	A premise having facilities for a local police post of a temporary nature or on small scale as compared to a police station
5.22	Library	A premise having large selection of books for reading and reference for general public or specific class
5.23	R & D centre	A premise having facilities for research and development for any specialized field.
5.24	Health centre/ family welfare centre	A premise having facilities for treatment of indoor and outdoor patients having up to 30 beds. The health centre may be managed by a public or a charitable institution on non-commercial basis. It includes family welfare centre
5.25	Trauma centre	A premise having medical facilities of specialized nature for providing instant treatment to patients under trauma.
5.26	Medical college/ hospital	Medical College: A premise where teaching, treatment, operation, and research & development related to human bodies is carried out.

S. no	Activities /Uses	Definition
		Hospital: A premise providing medical facilities of general or specialized nature for treatment of indoor and outdoor patients.
5.27	Clinic	A premise with facilities for treatment of outdoor patients by a doctor. In case of a polyclinic, it shall be managed by a group of doctors
5.28	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.
5.29	Clinical laboratory / Diagnostic centre	A premise with facilities for carrying out various tests for confirmation of symptoms of a disease.
5.30	Veterinary hospital/ Dispensary	A premise offering medical and similar facilities for domestic pet care.
5.31	Health club/ Gym	A room or building equipped for indoor sports.
5.32	Dance/ Music/Art centre	A premise having facilities for imparting training and coaching for dance, music, and art.
5.33	Yoga/ Meditation centre	A premise having facilities for self-attainment, achieving higher quality of mind and body etc.
5.34	Religious building/centre	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.
5.35	Community centre	A premise having an enclosed space for various social and cultural activities of a neighbourhood of 15000 population.
5.36	Convention centre/ conference centre/ Auditorium	A premise having all facilities for meeting, symposium, seminar etc. where a number of people from different organizations will be participating.
5.37	Socio-Cultural centre	A premise with facilities for activities of socio-cultural nature runs by a public, voluntary or individual on primarily non-commercial basis.
5.38	PCO Public call office	A premise with facilities to make phone calls from telephone to local, STD and international subscribers on payment basis.
5.39	Internet/Information centre	A premise used for internet system for communication purposes
5.40	Social welfare centre	A premise with facilities for welfare and promotion of community development. It shall be run by a public or charitable institution.
5.41	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
5.42	Night shelter (rain basera)	Premise with facilities for accommodation usually given without fees or a minimal fee for resting during night

S. no	Activities /Uses	Definition
5.43	Disaster management centre	Premise having facilities for carrying out studies and identify the potential risks related to any disasters
5.44	Metrological station	Premise having facility for meteorological observations, weather forecasting facility, seismology etc.
5.45	Banks	A premise for office to perform banking functions and operations.
5.46	ATM	A premise that allows customers to complete basic transactions without the aid of a branch representative or teller.
5.47	Milk Booth	A premise for retail sale of milk directly to consumers by manual or other means.
5.b	Public & Semi-Public (Utilities/Facility)	
5.48	Sewerage treatment plant	A premise with treatment facilities used for treatment of sewage.
5.49	Pumping station	A premise with a pumping station used for pumping sewage/ water on to a higher gradient.
5.50	Solid Waste Treatment Plant:	A premise where solid waste is collected, treated mechanically /Electrically and processed for reuse.
5.51	Sanitary landfill site/ solid waste treatment plant	A Premise where solid waste is disposed of for short or specific period.
5.52	Recycling plant	A premise with treatment facilities used for recycling of solid waste
5.53	Tube well/ Overhead tanks/ Underground tanks/ Renny wall	<p>Tube well: A system to extract water from underground sources using mechanical means. It may consist of a room for operation and maintenance.</p> <p>Overhead tank: A premise having overhead tank for storage and supply of water to its neighbouring areas. It may or may not include a pump house.</p> <p>Underground tank: A premise having underground tank for storage and supply of water to its neighbouring areas. It may or may not include a pump house.</p> <p>Rainy well: A system to extract water from underground sources on the banks of a water body.</p>
5.54	Water treatment plants	A premise with treatment facilities used for treatment of water
5.55	Electric sub station	A premise having electrical installation and transformation for distribution of power
5.56	Public toilets	A premise having latrines and urinals for use of public.
5.57	Transmission tower/ mobile tower as per YEIDA policy	A transmission tower or Cellular mobile tower which may be erected on ground or roof top of a building as per policy of YEIDA
5.58	Drinking water booths	Premise having water distribution kiosk for use of public
5.59	Water Works	An establishment for managing a water supply

S. no	Activities /Uses	Definition
5.60	Electric Post	An electric tower which is erected on the ground for distribution of power
6.	Recreational Green	
6.1	Park/Playground	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. Playground: A premise used for outdoor games. It may have on it landscaping, parking facilities, public toilet etc.
6.2	Multipurpose open spaces	Space / Area which is essentially open and can be used for multiple temporal functions.
6.3	Golf course/ Racecourse	Golf course: Area earmarked for playing golf sport which is essentially open along with minimal built space which supports the sports. Racecourse: Area earmarked for racing with minimal built space for supporting the race.
6.4	Stadium/ Sports training centre/Sports complex	Stadium: A premise for outdoor games with pavilion building and stadium structure to seat spectators including related facilities for players 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 Sports Complex: A premise for outdoor and indoor games with pavilion building, stadium, and related facilities.
6.5	Picnic spot	A premise within the tourist/ recreational centre which is used for short duration stay for recreational or holiday purpose.
6.6	Indoor stadium/ games hall	A premise for indoor stadium with play area and spectator seating including related facilities for players.
6.7	Planetarium	A premise with necessary facilities and equipment for studying planets
6.8	Aquarium	A premise with necessary facilities and equipment in which aquatic plants or animals are kept or displayed
6.9	Amusement/ Specialized/ Theme 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.
6.10	Recreational club/ Swimming pool	Recreational Club- A premise for outdoor and indoor games with pavilion building. Swimming Pool- A premise with facilities for swimming and spectators seating which shall vary with standard and purpose.

S. no	Activities /Uses	Definition
6.11	Museum cum Auditorium	Museum means a premise with facilities for storage and exhibition of objects illustrating antiques, natural history, art etc... Auditorium means a premise having an enclosed space to seat audience and stage for various performance like concerts, play, recitals, functions etc.
6.12	Open air theatre	A premise having facilities for audience seating and a stage for performance open to sky.
6.13	National Memorials	A protected area that memorializes a historic person or event of national importance. The memorial need not be located on a site directly related to the subject.
6.14	Biodiversity Park	Premise having facility for conservation of flora and fauna.
6.15	Shooting Range	A shooting range, firing range, gun range or shooting ground is a specialized facility, venue, or field designed specifically for firearm usage qualifications, training, practice, or competitions.
6.16	Zoo, Wildlife/ Bird Sanctuary	A park where many kinds of wild animals are kept so that people can look at them and where they are bred, studied and protected
6.17	Tourist Facility Centre	Premise having facility for receiving tourists, guiding, and providing necessary information and support during their visit.
6.18	Sports City	A multipurpose sports and leisure facility
7.	Transportation	
7.1	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
7.2	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
7.3	Taxi/Auto stand	A premise used for parking of intermediate public transport vehicles run on commercial basis. The parking lots may be run on commercial or non-commercial basis
7.4	Truck terminal/ 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, petrol/ diesel filling stations and such other operational facilities
7.5	Bus depot/Bus terminal	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: A premise used by a public transport agency to park the buses for short

S. no	Activities /Uses	Definition
7.6	Bus stand/ Shelter	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
7.7	Motor garage/ service workshop	A premise for servicing and repair of automobiles
7.8	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.
7.9	Loading/ Unloading facilities	The provision and management of loading and unloading facilities / spaces for pickup-delivery vehicles
7.10	Transport/ cargo booking centre	Place where (advance) arrangements made for a specific shipment of goods.
7.11	Container depot	Open storage area for shipping containers
7.12	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.
7.13	Heli pad	Helipad (helicopter landing pad) is a landing area for helicopters. Usually a helipad does not have fuel and service facilities, and does not maintain a full-time air traffic controller
7.14	Railway Godown/ Railway Yard/ Siding Terminal	The whole system of tracks, the trains and the organization and people needed to operate them
7.15	Airport Strip	A runway without normal air base or airport facilities
7.16	Roads	Premise for travel in roads which are primarily paved
8.	Agriculture	
8.1	Orchard/ Plant nursery/ Social forestry	Orchard would mean a premise with a thick growth of fruit trees. It may also include garden with fruit trees. Plant nursery would mean a premise with facilities for rearing and sale of young plants. Forestry would mean a premise with thick natural flora including social forestry, which may have part natural flora and part man made flora.
8.2	Farmhouse	A dwelling house on a farm.
8.3	Dairy/ Poultry Farm	A premise with facilities for rearing and processing of dairy/ poultry products. It may have temporary structures for sheds of cows/ birds
8.4	Agriculture Equipment workshop/ Service Centre	A premise with facilities for servicing and repair of agricultural equipment's like tractor, trolley, harvesters etc.
8.5	Agriculture/ Horticulture/ Cash Crops	The science or practice of farming, including cultivation of the soil for the growing of crops and the rearing of animals to provide food, wool, and other products
8.6	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

11.4 Permissible Uses in a Land Use Zone

Table 11-3: Permissible and Supporting Activities of a Use Premise

Sr.No	Activities /Uses	Permissible Use
1	Residential	
1.1.	Single House/ Plot/ Flat	Residence Support Facilities- Professional practice by the residents
1.2.	Group Housing	As per Building Regulations Support Facilities- As per Building Regulations
1.3.	Guard chaukidar residence	Guard/Chaukidar residence Permissible uses- Residence for Guard/ Chowkidar
2	Commercial	
2.1.	Retail shops/Platform	Retail Shop/Plat Form Permissible uses- Retail Shop, Hawkers' Platform
2.2.	Repair shops	Permissible uses- Repair shop, spare parts shop
2.3.	Personal Service shops	Permissible uses- Personal service shop
2.4.	Vending booth	Permissible uses- Vending booth/kiosk
2.5.	Showroom	Permissible uses- Showroom
2.6.	Weekly market	Permissible uses- Weekly market, informal retail trade, kiosks, (all structures will be temporary and mobile, only for one day in a week, public conveniences temporary or permanent as per decision of the Authority)
2.7.	Convenience shopping centre	Permissible uses- Retail, Repair and Personal Service shop, 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, Multilevel Parking. Support Facilities- Guest House, Service Apartment, Health centre/ Dispensary, Nursing home, Health club/Gym, Yoga/ Meditation centre, Dance/Music/Art centre, religious centre, Barat Ghar, Exhibition Hall
2.8.	Local/sector level shopping centre	Permissible uses- Retail, Repair and Personal Service shops, Showroom, Restaurant, Canteen, Food Court, Clinic and Polyclinic, Clinical Laboratory, Kiosks, Vending booth, Bakery, Confectionary, Atta Chakki , Office, Bank, Coaching Centres/ Training Institutes, Informal commercial units / platform, Cinema/Multiplex, Multilevel Parking,

Sr.No	Activities /Uses	Permissible Use
		<p>Support Facilities- Guest House, Service Apartment, Banquet Hall, Exhibition Hall, Health Centre/Dispensary, Nursing home, Health club/Gym, Yoga/ Meditation centre, Dance/Music/Art centre, Religious centre, Convention/ Conference centre, Auditorium, Barat Ghar.</p>
2.9.	Shopping centre/ commercial shopping mall centre/ centre/	<p>Permissible uses- Retail shop, Showroom, Personal Service shop, Bakery, Confectionary, Food Court/ Canteen/ Restaurant, Office, Cinema/Multiplex, Drive in Cinema, Bank, Hotel, Guest House, Service Apartment, Banquet Hall/ Barat Ghar, Convention/ Conference centre, Auditorium, Art Gallery, Health Club/ Gym/ Spa, Guest House/ Lodging/ Boarding House, Vending Booth/ kiosk, Milk Booth, Clinic and Polyclinic, Clinical Lab, Internet/ Information Centre, Petrol / Diesel/ Gas filling Station, Coaching Centres/ Training Institutes, Fruit and Vegetable market, Informal Commercial unit/Platform, Multilevel Parking, Taxi/Auto/Rickshaw Stand, Bus Shelter, Transport /Cargo Booking Centre, Residential (as per Building Regulations)</p> <p>Support Facilities- Repair Shop, Motor garage and Workshop, Automobile showroom/ Showroom cum service centre, Warehousing, Exhibition Hall /Exhibition Centre, Recreational Club/Swimming pool, Socio Cultural centre, Dance/ Music/ Art Centre, Yoga/ Meditation Centre, Museum, Indoor Stadium/ Games Hall, Amusement/ Specialised /Theme Park, Open Air Theatre, Library, R&D Centre, Religious Centre, Community Centre, Social Welfare Centre, Health Centre/Family Welfare Centre/ Dispensary, Nursing Home</p>
2.10.	Informal commercial unit/platform	<p>Permissible uses- Informal commercial unit / Platform</p>
2.11.	Wholesale market/Mandi	<p>Permissible uses- Wholesale shop, Repair Shop, Bank, Automobile showroom/ Showroom cum service centre, Restaurant/Canteen/Food court, Coal/Wood/Building Material Market, Vegetable/ Fruit Market, Cold Storage, Warehouse/ Godown for Non-Hazardous items, Loading/unloading facility, Vending Booth/kiosk, Multilevel Parking, Taxi/Auto Rickshaw/Rickshaw stand, Office, Weighbridge/ Dharam Kanta, Petrol / Diesel/ Gas filling Station, Cinema/Multiplex, Informal Commercial unit/Platform</p> <p>Support Facilities- Guest House/Lodging/Boarding House, Hotel, Showroom, Retail Shop, Personal Service Shop, Truck Parking and other logistics, Health Centre/Family Welfare Centre/ Dispensary, Nursing Home, Service apartment</p>

Sr.No	Activities /Uses	Permissible Use
2.12.	Bakery/Confectionary/Atta Chakki	Permissible uses- Bakery/Confectionary/Atta Chakki
2.13.	Coal/wood/Building material market	Permissible uses- Wholesale shop, Repair Shop, Showroom, Bank, Automobile showroom/ Showroom cum service centre, Restaurant/Canteen/Food court, Warehouse/ Godown for Non-Hazardous items, Loading/unloading facility, Truck Parking and other logistics, Vending Booth/ Kiosk, Multilevel Parking, Taxi/Auto Rickshaw/Rickshaw stand, Office, Weighbridge/Dharam Kanta, Petrol / Diesel/ Gas filling Station, Informal Commercial unit/Platform, Support Facilities- Guest House/Lodging/Boarding House, Retail Shop, Personal Service Shop, Health Centre/Family Welfare Centre/ Dispensary, Nursing Home, Service apartment
2.14.	Vegetable/Fruit market	Permissible uses- Wholesale shop, Retail Shop, Repair Shop, Personal Service Shop, Bank, Restaurant/Canteen/Food court, Warehouse/ Godown for Non-Hazardous items, Cold Storage, Gas Godown, Loading/unloading facility, Truck Parking and other logistics, Vending Booth/Kiosk, Multilevel Parking, Taxi/ Auto Rickshaw/ Rickshaw stand, Weighbridge/ Dharamkanta, Petrol / Diesel/ Gas filling Station, Informal Commercial unit/Platform Support Facilities- Guest House/Lodging/Boarding House, Showroom, Office, Health Centre/Family Welfare Centre/Dispensary, Nursing Home
2.15.	Cold storage	Permissible uses- Cold storage, Loading/unloading facility, Truck Parking and other logistics, Support Facilities- Office, Canteen, Vending Booth/Kiosk,
2.16.	Hotels	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, Internet/Information Centre, Health Club/Gym/Spa, Discotheque, Yoga/ Meditation Centre, Multilevel Parking, Office, Support Facilities- Bank, Creche, Automobile showroom/ Showroom cum service centre, Retail Shop, Personal service shops, Showroom, Service Apartment, Health centre/Dispensary.
2.17.	Service Apartment	Permissible uses- Guest Suite, Conference Facilities, Office, Support Facilities-

Sr.No	Activities /Uses	Permissible Use
		Bank, Creche, Health Centre/Dispensary, Retail Shop, Personal Service Shop, Restaurant/Canteen/Food Court.
2.18.	Restaurant/ Canteen/ Food Court	Permissible uses- Restaurant, Canteen, Food court, Banquet Hall, Vending Booth, Support Facilities- Office, Bank extension counter
2.19.	Cinema/Multiplex	Permissible uses- Cinema/ Multiplex, Retail Shop, Personal Service Shop, Showroom, Office, Restaurant, Food Court, Vending booth/ kiosk, Multilevel Parking Support Facilities- Bank, Gym/ Health club/ Spa, Taxi/Auto/Auto rickshaw stand,
2.20.	Drive-in cinema	Permissible uses- Open air theatre, Drive in cinema, Open Air Restaurant, Support Facilities- Office related to cinema activity.
2.21.	Exhibition hall/ Exhibition centre	Permissible uses- Exhibition Hall, Exhibition centre 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,
2.22.	Banquet hall/ Barat Ghar	Permissible uses- Banquet Hall, Barat Ghar, Guest suite/room, Restaurant, Food court, Vending Booth/kiosk, Multilevel Parking Support Facilities- Retail shop, Personal service shop, Bank, Auto-rickshaw stand, Office
2.23.	Electric Charging Station	Permissible uses- public electric charging station, Automobile Repair Shop, Automobile Service station, Support Facilities- Office, Retail shop/Departmental Store, Showroom.
2.24.	Petrol pump/Diesel station	Permissible uses- Petrol/Diesel Pump/Fuel Station, Gas filling station, public electric charging station, Automobile Repair Shop, Automobile Service station, Support Facilities- Office, Retail shop/Departmental Store, Showroom.
2.25.	Oil depot and LPG refilling plant	Permissible uses- Oil and Gas Depot, LPG refilling plant, Truck Parking Support Facilities- Booking Office
2.26.	Gas godown	Permissible uses- Gas Godown, Truck Parking, Support Facilities-Booking Office,

Sr.No	Activities /Uses	Permissible Use
2.27.	Warehouses for non-hazardous items	Permissible uses- Store/Godown, Loading unloading facility, Truck Parking, Support Facilities- Booking Office,
2.28.	Warehouses for hazardous items	Permissible uses- Store/Godown, Loading unloading facility, Control/Inspection room, Truck Parking, Support Facilities- Booking Office,
2.29.	Automobiles showroom/Automobile Showroom cum Service Station	Permissible uses- Automobile showroom, Licensed service centre, Parking, Retail shop (Spare Parts), Truck Parking, Support Facilities- Office, Retail shop, Kiosk/Vending Booth,
2.30.	Weigh bridge/ Dharmkanta	Permissible Use Weigh Bridge, Dharmkanta, Vending Booth, Kiosk Support Facilities- Booking Office,
2.31.	Storage Godown for Inflammable Items (LPG, Petrol, Diesel, Kerosene, Lubricants, Aviation Fuel etc)	Permissible uses- Store/Godown, Loading unloading facility, Control/Inspection room, Truck Parking, Support Facilities- Booking Office
2.32.	Agriculture Produce Selling Market/ Grain Market	Permissible uses- Wholesale shop, Retail Shop, Repair Shop, Personal Service Shop, Bank, Restaurant/Canteen/Food court, Warehouse/ Godown for Non-Hazardous items, Cold Storage, Gas Godown, Loading/unloading facility, Truck Parking and other logistics, Vending Booth/Kiosk, Multilevel Parking, Taxi/ Auto Rickshaw/ Rickshaw stand, Weighbridge/ Dharmkanta, Petrol / Diesel/ Gas filling Station, Informal Commercial unit/Platform Support Facilities- Guest House/Lodging/Boarding House, Showroom, Office, Health Centre/Family Welfare Centre/Dispensary, Nursing Home
2.33.	Junkyard	Permissible uses- Junkyard, Loading unloading facility, Truck Parking, Support Facilities- Booking Office, Office
2.34.	Steel/ Cement/ Building Material Yard	Permissible uses Storage Yard, Loading Unloading Facility, Truck Parking, Weigh Bridge Support Facilities- Office, Storage Godowns
3	Industrial	
3.1.	Service industries	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

Sr.No	Activities /Uses	Permissible Use
3.2.	Cottage industries	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
3.3.	Flatted factories	Permissible uses- Industrial units (Non-Hazardous, Non-polluting) as per stipulation of Industries department, Canteen, Loading Unloading Facility, Truck parking, Multilevel Parking Support Facilities- Office, Bank, Gym, Storage, Taxi/Auto/Auto rickshaw stand, vending booth/kiosk, internet Centre, Creche and Day care centre.
3.4.	Information/ software technology industry	Permissible uses- IT plots/buildings Support facilities a) Commercial Shops, Ares for storage, display and sale of merchandise, Cinema halls, Hotels, Restaurants, open eating kiosks b) Residential uses, Hostel, Guest house, Staff quarters c) Institutional Facilities- Waiting and transit areas, Areas designated for public utilities, Travel services, Telephone Exchange, Electric substation, water works, Export related facilities, Canteen/Restaurant, Creche and day care centre, operation and maintenance by specialized agencies, Training centre and library, Health Club and Gym for users/residents of IT and ITES, Games/entertainment room for users/residents of IT and ITES, Banking and Financial services, Business and Financial services, Business Centre/Conference facilities, Shops, Open eating kiosks. Note: The extent of support facilities under Commercial, Residential, and Institutional uses for different size if plots shall be decided by the Authority in the scheme from time to time.
3.5.	Small/light industry	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.	Industrial plot (specific industry type)	Industrial units (Non-Hazardous, Non-polluting) as per stipulation of industry department, Canteen, Loading

Sr.No	Activities /Uses	Permissible Use
		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,
3.6 A	Industrial Plot (Data Centre)	Data Centre units as per State Government Policy, Canteen, Loading Unloading Facility, Vending booth, kiosk, Storage, Internet centre, Multilevel Parking, Chillers, DG Set, Support Facilities- Office, Bank, Gym/ Health club, Crèche and day care centre, Internet centre, Dispensary, any other activity permitted in State Government Policy for Data Centre.
3.7.	Industrial Plot (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 Bangalow shall be allowed with maximum 12% of permissible FAR. Commercial:- Commercial activity shall be allowed with maximum 8% 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 centre, 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.
3.8.	Medium & Large-scale industry	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,
3.9.	Film centre/ TV radio programme production centre	Permissible uses- Film Centre/TV Centre, Radio Programme Production Centre, Auditorium, Media Centre, Canteen, Library, Vending booth/ Kiosk Support Facilities- Office, Bank, counter Gym/ Health club, Creche and day-care centre, Taxi/Auto/Auto rickshaw stand.

Sr.No	Activities /Uses	Permissible Use
3.10.	Biotechnology/ Biotech Park	<p>Permissible uses- BT plots/buildings/Incubators/labs/ Virtual information Centre/Patent Facilitating Centre/Central Analytical Instrumentation Facility/Bioprospecting facility/Micro propagation Facility/Medicinal Plant Extraction Facility/Fermentation Facility/Food processing/Testing facility/Bioinformatics Support facilities a) Commercial- Shops, Ares for storage, display and sale of merchandise, Cinema halls, Hotels, Restaurants, open eating kiosks b) Residential- Residential uses, Hostel, Guest house, Staff quarters c) Institutional Facilities-Waiting and transit areas, Areas designated for public utilities, Travel services, Telephone Exchange, Electric substation, Neutralization tank and guard pond for process effluents, water works, Compressed Air generators, Vacuum generators, Chemical Store building, central treatment facilities, Cold room, Export related facilities, Canteen/Restaurant, Creche and day care centre, operation and maintenance by specialized agencies, Training centre and library, Health Club and Gym for users/residents of BT park, Games/entertainment room for users/residents of BT park, Banking and Financial services, Business and Financial services, Business Centre/Conference facilities, Shops, Open eating kiosks, Note: The extent of support facilities under Commercial, Residential and Institutional uses for different size if plots shall be decided by the Authority in the scheme from time to time.</p>
3.11.	Non- Polluting Agro based & food processing units	<p>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,</p>
3.12.	Milk Pasturing Plant	<p>Permissible Use Milk Pasturing Plant</p>
3.13.	Milk Collection Centre	<p>Permissible Use Milk Collection Centre</p>
4	Logistics	
4.1	Freight complex/ Logistic Park	<p>Permissible uses- Booking Office, Warehouse, Store/ Godown, Cold Storage, Space for Container Stocking, Truck Parking, Loading /Unloading facilities, Repair shop, Weighbridge, Vending Booth/Kiosk</p>

Sr.No	Activities /Uses	Permissible Use
		Support Facilities- Office, Petrol/Diesel/Gas filling station, Bank, Service Station, Restaurant/Canteen/ Food court,
5.a	Public/Semi-Public Institutional facilities	
5.1	Govt./Semi Govt./Public undertaking/local office	Govt./Semi Govt. /Public Undertaking/Local Body Office Permissible uses- Govt./Semi Govt./Public Undertaking/Local Body Office, Multilevel parking, Conference facilities, Seminar Hall, 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.
5.2	Office/corporate office	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.
5.3	Professional/personal office	Permissible uses- Professional/Personal/Agent Office, Conference room, Support Facilities- Canteen, Bank extension counter
5.4	Project development/management/maintenance office	Permissible uses- Project development/ Management/ Maintenance office, Support Facilities- Bank extension counter, Canteen,
5.5	Satellite/wireless/Telecommunication centre	Permissible uses- Satellite/Wireless/Telecommunication Centre, residential flat (for maintenance staff), Support Facilities- Research laboratory, Canteen
5.6	Guest house/lodging/boarding house	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
5.7	Hostel	Permissible uses- Rooms/suites, dining facilities,

Sr.No	Activities /Uses	Permissible Use
		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.
5.8	Reformatory & Orphanage	Permissible uses- Reformatory and orphanage, Hostel. Support Facilities- Health centre/ Dispensary, Residence of Caretaker and maintenance staff, Personal service shop
5.9	Old age home	Permissible uses- Rooms/suites, Dining facilities, Canteen, Support Facilities- Guest Room, Bank, Retail shop, Personal service shop, Chemist, Health Centre/Dispensary, Nursing home, Health club/Gym, Yoga/ Meditation centre, Dance/Music/Art centre, Religious centre, Bank extension counter, Vending booth/Kiosk
5.10	School for mentally challenged persons	Permissible uses- School for mentally, physically challenged, Hostel. Support Facilities- Health centre / Dispensary, Medicine shop, Residence of Caretaker, and maintenance staff, Personal service shop
5.11	Crèche & day care centre/ play & nursery school	Permissible uses- Crèche & Day Care Centre/Play & Nursery School, Support Facilities- Residence of caretaker and maintenance staff,
5.12	Primary school	Permissible uses- Primary school, Canteen, Swimming pool, Auditorium, Library, Indoor games Hall, Hostel. Support Facilities- Retail shop for books and stationery, uniform, Bank extension counter, Staff housing, Vending booth/Kiosk
5.13	Secondary school/ integrated residential school	Permissible uses- Senior secondary school, Canteen, Swimming pool, Auditorium, Library, Indoor games Hall, Hostel Support Facilities- Retail shop for Books and Stationery, Uniform, Chemist; Bank extension counter, Vending booth/Kiosk, Staff housing
5.14	Vocational Institute / training Institute / ITI	Permissible uses- Vocational training centre, Canteen, Swimming pool, Auditorium, Library, Indoor games Hall, Hostel Support Facilities- Guest house, Transit hostel, Retail shops for Books and Stationery, Chemist, Fruits and vegetables, general store;

Sr.No	Activities /Uses	Permissible Use
		Personal service shop, Repair shop, Vending booth/Kiosk, Bank extension counter, Staff housing
5.15	Degree / PG college	Permissible uses- Degree/P G/professional (MBA /Engg etc.) college, Canteen, Swimming pool, Library, Auditorium, Indoor games Hall, Hostel Support Facilities- Guest house, Transit hostel, Retail shop for Books and Stationary, Chemist, Fruits and vegetables, general store; Personal service shop, Repair shop, vending booth/Kiosk; Bank extension counter, Staff housing
5.16	University	Permissible uses- University, Educational Colleges, Canteen, Swimming pool, Indoor games Hall, Convention Centre, Exhibition Hall, Support Facilities- Auditorium, Indoor games Hall, Hostel, Guest house, Canteen, Retail shop 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 centre, International conference centre, internet café, Library, Museum, Planetarium, R&D Centre, Radio and Television station, Gym/ Health club, Guest House, Transit Hostel
5.17	Post office	Permissible uses- Post and Telegraph Office, Canteen,
5.18	Telephone exchange	Permissible uses- Telephone exchange/RLU/RSU, Support Facilities- Canteen, Bank Extension Counter, Staff Housing,
5.19	Police station	Permissible uses- Police Station, Support Facilities- Canteen, Bank Extension Counter, Staff Housing,
5.20	Fire station	Permissible uses- Fire Station, Service workshop, Hostel/dormitory, , Support Facilities- Canteen, Bank extension counter, Staff Housing
5.21	Police post	Permissible uses- Police post Support Facilities- Canteen, Bank extension counter, Staff Housing
5.22	Library	Permissible uses- Library, Internet/information centre, Exhibition Hall, and art gallery, Support Facilities- Auditorium, Canteen, Staff housing, Bank extension counter,
5.23	R & D centre	Permissible uses- Research and Development Centre, internet/Information Centre, Hostel, Library,

Sr.No	Activities /Uses	Permissible Use
		Support Facilities- Auditorium, Canteen, Staff housing, Guest House, Transit hostel, Bank Extension counter, Health/Gym
5.24	Health centre/ family welfare centre	Permissible uses- Health centre, Dispensary, Family welfare centre, Support Facilities- Canteen, Chemist shop, Vending Booth/kiosk, Office,
5.25	Trauma centre	Permissible uses Trauma centre, hostel, Support Facilities- Canteen, Vending Booth/ Kiosk, Bank extension counter, Chemist shop, Books/Stationery Shop, General Departmental store, Personal service Shop, Office, Staff Housing, Patient attendant accommodation, Gym,
5.26	Medical college/ hospital	Permissible uses- Hospital Support Facilities- Auditorium, Bank extension counter, Cultural and Information Centre, Chemist shop, Canteen, Books/Stationery /Flower Shop, Indoor Games Hall, International conference centre, Internet Centre, Library, Museum, Planetarium, R&D centre, 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
5.27	Clinic	Permissible uses- Clinic Support Facilities- Chemist shop
5.28	Nursing home	Permissible uses- Nursing Home, Clinical lab, Support Facilities- Chemist shop, Vending booth/kiosk,
5.29	Clinical laboratory / Diagnostic centre	Permissible uses- Clinic laboratory, Support Facilities- Clinic, Chemist shop, Vending Booth/kiosk,
5.30	Veterinary hospital/ Dispensary	Permissible uses- Veterinary Hospital/Dispensary, Diagnostic Centre, Support Facilities- Canteen, Chemist shop, Staff Housing
5.31	Health club/ Gym	Permissible uses- Health club/Gym, Vending booth/Kiosk
5.32	Dance/ Music/Art centre	Permissible uses- Dance/Music/Art centre, Support Facilities- Auditorium, Guest House, Canteen, Vending booth/Kiosk, hostel

Sr.No	Activities /Uses	Permissible Use
5.33	Yoga/ Meditation centre	Permissible uses- Yoga/Meditation centre, Library, Conference Facilities, , Hostel Support Facilities- Guest House, Auditorium, Canteen, Vending booth/Kiosk
5.34	Religious building/centre	Permissible uses- Religious Building/Centre, Yoga and Meditation Hall, Library, Ashram, Bathing Ghat, Gaushala, Dargah, Support Facilities- Residence for essential staff/ priest, Retail shop for flowers/ offerings, Charitable Dispensary, Dining Hall with kitchen,
5.35	Community centre	Permissible uses- Community centre/ Barat Ghar, Support Facilities- Indoor games, Library, Restaurant, Vending booth/kiosk, Guest rooms
5.36	Convention centre/ conference centre/ Auditorium	Permissible uses- Convention centre/Conference Centre/Auditorium, Exhibition Hall, Art Gallery, Internet/ information centre, Multilevel parking, Support Facilities- Restaurant, Hostel, Canteen, Library, Guest room, Bank extension counter, Caretaker and Maintenance Staff Housing,
5.37	Socio-Cultural centre	Permissible uses- Socio-cultural Centre, Exhibition Centre, Art Gallery, Dance/ Drama/Music Training centre, Swimming Pool, Multilevel parking, Support Facilities- Auditorium, Library, Museum, Canteen, Vending Booth/kiosk, Bank extension counter,
5.38	PCO Public call office	Permissible uses- PCO
5.39	Internet/Information centre	Permissible uses- Internet/Information Centre Support Facilities- Bank Extension counter, Canteen, Library
5.40	Social welfare centre	Permissible uses- Social Welfare centre, Support Facilities- Canteen, Library, Vending Booth/kiosk, Bank extension counter
5.41	Crematorium/ Burial ground/ cremation	Permissible uses- Cremation/Burial ground/Crematorium, Support Facilities- Retail shop of wood, flowers and related material, Maintenance staff residence

Sr.No	Activities /Uses	Permissible Use
5.42	Night shelter (rain basera)	Permissible uses- Night shelter Support facilities
5.43	Disaster management centre	Permissible uses- Disaster Management Centre Support Facilities Office, Canteen, Training Centre,
5.44	Metrological station	Permissible uses- Metrological station Support Facilities Office, Canteen, Training Centre,
5.45	Banks	Permissible Uses- Bank Support Activities Bank, Canteen
5.46	ATM	Permissible Uses- ATM
5.47	Milk Booth	Permissible uses- Rooms/suites, Dining facilities, Canteen, Support Facilities- Guest Room, Bank, Retail shop, Personal service shop, Chemist, Health Centre/Dispensary, Nursing home, Health club/Gym, Yoga/ Meditation centre, Dance/Music/Art centre, Religious centre, Bank extension counter, Vending booth/Kiosk
5.b	Public/Semi-Public (Utilities/Facility)	
5.48	Sewerage treatment plant	Permissible uses- Sewerage treatment plant/Pumping station, Support Facilities- Office, Maintenance staff residence
5.49	Pumping station	Permissible uses- Pumping Station Support Facilities- Office, Maintenance staff residence
5.50	Solid Waste Treatment Plant:	Permissible uses- Solid waste treatment plant Support Facilities- Office, Maintenance staff residence
5.51	Sanitary landfill site/ solid waste treatment plant	Permissible uses- Sanitary landfill site Support Facilities- Office, Maintenance staff residence
5.52	Recycling plant	Permissible uses- Recycling Plant Support Facilities- Office, Maintenance staff residence

Sr.No	Activities /Uses	Permissible Use
5.53	Tube well/ Overhead tanks/ Underground tanks/ Renny wall	Permissible uses- Tube well/Overhead tanks/Underground tanks/Rainy well Support Facilities- Office, Maintenance staff residence
5.54	Water treatment plants	Permissible uses- Water Treatment Plant Support Facilities- Office, Maintenance staff residence
5.55	Electric sub station	Permissible uses- Electric sub-station Support Facilities- Office, Maintenance staff residence
5.56	Public toilets	Permissible uses- Public toilet
5.57	Transmission tower/ mobile tower as per YEIDA policy	Permissible uses- Transmission tower/Mobile tower as per Noida Policy
5.58	Drinking water booths	Permissible Use, Drinking Water Booth
5.59	Water Works	Permissible Use, Water Works
5.60	Electric Post	Permissible Use, Electric Post
6	Recreational Green	
6.1	Park/Playground	Permissible uses- Park, playground Support Facilities- Vending Booth/ Kiosk (max. 4 in number/ 40% depending on plot size)
6.2	Multipurpose open spaces	Permissible uses- Multipurpose open space Support Facilities- Vending Booth/ Kiosk
6.3	Golf course/ Racecourse	Permissible uses- Golf Course, Racecourse, Swimming Pool, Indoor/ Outdoor games facilities, Multilevel Parking Support Facilities- Pro shop/ Sports goods shop, Bar/ Restaurants, Vending booth/ Kiosk, Conference facilities, Bank extension counter, Caretaker Residence, Guest house, Golfers' temporary accommodation
6.4	Stadium/ Sports training centre/Sports complex	Permissible uses- Stadium/ Sports Training Centre/ Sports Complex, Indoor/ Outdoor games facilities, Hostel, Swimming pool, Multilevel parking Support Facilities- Staff housing, Grocery shop, Sports goods shop, Personal service shop, Canteen, Vending booth/Kiosk, Conference

Sr.No	Activities /Uses	Permissible Use
		facilities, Bank extension counter, Caretaker Residence, Guest house, Players' temporary accommodation
6.5	Picnic spot	Permissible uses- Picnic huts, Camping site, Park, playground, landscaped garden Support Facilities- Restaurant/Food court/ Canteen, Vending booth/ Kiosk, Caretaker Residence
6.6	Indoor stadium/ games hall	Permissible uses- Multipurpose Indoor Stadium, Indoor Games Hall, Indoor Games facilities, Swimming pool, Outdoor sports facilities, Park, Playground Support Facilities- Hostel, Canteen, Office related to sports facilities, Vending booth/ Kiosk, Conference facilities, Bank extension counter, Caretaker Residence, Guest house, Players' temporary accommodation
6.7	Planetarium	Permissible uses- Planetarium Support Facilities- (20% of permissible FAR) Restaurant/ Food court/Canteen, Vending booth/ Kiosk, Bank extension counter, Indoor games, Retail shop, Caretaker Residence
6.8	Aquarium	Permissible uses- Aquarium Support Facilities- (20% of permissible FAR) Restaurant/ Food court/Canteen, Vending booth/ Kiosk, Bank extension counter, Indoor games, Retail shop, Caretaker Residence
6.9	Amusement/ Specialized/ Theme Park	Permissible uses- Amusement/ Specialised/ Theme Park, Playground Support Facilities- (30% of permissible FAR) Restaurant/ Food court/Canteen, Vending booth/ Kiosk, Bank extension counter, Indoor games, Retail shop, Caretaker Residence
6.10	Recreational club/ Swimming pool	Permissible uses- Recreational Club, Swimming Pool, Indoor/Outdoor games facilities, Park, playground Support Facilities- Restaurant/ Food court/ Canteen, Vending booth/ Kiosk, Caretaker residence, Library, Bank extension counter,
6.11	Museum cum Auditorium	Permissible uses- Museum cum Auditorium/Conference Hall/ Art Exhibition Gallery, Open air theatre, Multi level Parking Support Facilities- (10% of permissible FAR) Canteen, office, Vending booth/ Kiosk, Caretaker residence, Library, Bank extension counter,
6.12	Open air theatre	Permissible uses- Open Air Theatre, Support Facilities-

Sr.No	Activities /Uses	Permissible Use
		Canteen, Office, Vending booth/ Kiosk, Caretaker residence,
6.13	National Memorials	Permissible uses- National Memorial, Support Facilities Canteen, Office, Card/gift shop, Vending booth/ Kiosk, Caretaker residence,
6.14	Biodiversity Park	Permissible Activity Biodiversity Park + support activity 10%
6.15	Shooting Range	Permissible Activity Shooting Range Support Activity- (10% of permissible FAR) Restaurants, Food Court, Canteen, Gift shop, Retail Shops, Caretaker Residence, Bank Extension Counter
6.16	Zoo, Wildlife/ Bird Sanctuary	Permissible uses- Zoo, Wildlife Sanctuary, Bird Sanctuary Support Facilities- (20% of permissible FAR) Restaurants, Food Court, Canteen, Gift shop, Retail Shops, Caretaker Residence, Bank Extension Counter
6.17	Tourist Facility Centre	Permissible uses Tourist facility Centre Support Facilities- Restaurant/ Food court/Canteen, Vending booth/ Kiosk, Bank extension counter, Indoor games, Retail shop, Caretaker Residence
6.18	Sports City	Permissible Uses: All kinds of Indoor/ Outdoor sports Facilities, Training centre, Swimming pool Complex- in 15% of the area Support Facilities- (in 15% of the area) Hostel, Staff housing, Guest house, Office, Retail shops of grocery, sports goods, Chemist, Restaurant/ Food court/ Canteen, Vending booth/ Kiosk, Caretaker residence, Library, Bank extension counter, Players' temporary accommodation Ground Coverage in green area 20%, FAR 0.40, + FAR 20% purchasable
7	Transportation	
7.1	Open Parking	Permissible uses- Open Parking, Vending booth/Kiosk
7.2	Covered/ multi-level parking	Permissible uses- Multi-level parking, Support Facilities- Office, Maintenance staff residence
7.3	Taxi/Auto stand	Permissible uses- Taxi/Auto/Rickshaw Stand Support Facilities- Vending Booth/kiosk,
7.4	Truck terminal/ transport Nagar	Permissible uses- Truck parking, Service Garage, Spare parts shops, Repair shop, Transport Agencies offices and

Sr.No	Activities /Uses	Permissible Use
		other related offices, Showroom, Weighbridge/Dharamkanta, Storage Godowns, Multi-level parking, Support Facilities- Retail shop, showroom, Office, Restaurant, Hotel, Bank, Vending booth/kiosk
7.5	Bus depot/Bus terminal	Permissible uses- Bus Terminal, Support Facilities- Office, Canteen
7.6	Bus stand/ Shelter	Permissible uses- Bus stand/ Shelter
7.7	Motor garage/ service workshop	Permissible uses- Motor Garage/Service Garage/Workshop, Service Station Support Facilities- Automobile showroom, Spare parts shop, office, Vending Booth/kiosk
7.8	Traffic Park/ children traffic park/ training centre	Permissible uses- Traffic Park/Children Traffic Park/Training Centre, Support Facilities- Restaurant, Vending Booth/kiosk
7.9	Loading/ Unloading facilities	Permissible uses- Loading/Unloading Facilities/Space, Weighbridge, Support Facilities- Vending booth/kiosk
7.10	Transport/ cargo booking centre	Permissible uses- Transport/Cargo booking office, Warehousing/Godown, Truck Parking Support Facilities- Office, Vending booth/kiosk, Canteen,
7.11	Container depot	Permissible uses- Storage of Containers, Weighbridge, Truck parking, Warehousing/Storage Godown, Office Support Facilities- Vending booth/kiosk, Canteen,
7.12	Toll plaza	Permissible uses- Toll plaza, Maintenance office Support Facilities- Office
7.13	Heli pad	Permissible uses- Helipad, Office, Waiting Area,
7.14	Railway Godown/ Railway Yard/ Siding Terminal	Permissible uses- Railway, Godown, Railway Yard, Siding Terminal
7.15	Airport Strip	Permissible uses- Airport Strip
7.16	Roads	Permissible Uses Roads, Green belt, footpath
8	Agriculture	

Sr.No	Activities /Uses	Permissible Use
8.1	Orchard/ Plant nursery/ Social forestry	Permissible uses- Orchard/ Plant nursery/ Social forestry Support Facilities- Shop selling seeds, Plants, gardening equipment, vending booth/ Kiosk, Caretaker residence (all structures shall be temporary in nature)
8.2	Farmhouse	Permissible uses- Farmhouse Support Facilities- Caretaker residence
8.3	Dairy/ Poultry Farm	Permissible uses- Dairy Farm, Poultry Farm Support Facilities- Caretaker residence
8.4	Agriculture Equipment workshop/ Service Centre	Permissible uses- Agriculture Equipment workshop/ service centre Support Facilities- Spare parts shop, Repair shop
8.5	Agriculture/ Horticulture/ Cash Crops	Permissible uses- Agriculture, Horticulture, Cash Crops Support Facilities- Caretaker residence
8.6	Apiary/ Pisci Culture	Permissible uses- Fish Farm, Bee Farm Support Facilities- Caretaker residence

Note:

1. For support facilities maximum 25% of Permissible FAR may be allowed.
2. Support facilities mentioned below are permissible in all use premises mentioned except for residential (unless otherwise specifically prohibited by the Authority in any premise)
 - Guard/ Chowkidar residence
 - ATM
 - PCO
 - Open Parking, Covered parking
 - Public conveniences
 - Helipad
 - Public facilities and utilities (Post office counter, Post office, Post and Telegraph office, Police Post, Police Station, Fire Post, Fire Station, Telephone exchange, RLU/RSU, Electric Sub Station, Sewage Treatment plant, Sewage pumping station, Water works, Underground Reservoir, Water treatment plant)
 - Satellite wireless telecommunication centre or tower,
3. In addition to the permissible activities mentioned above, if any other uses have been permitted in earlier schemes, allotment or lease conditions prior to these regulations, the same uses shall continue to be permissible unless otherwise specially prohibited under special circumstances, if any by the Authority in any scheme.

Table 11-4: Permissibility of Activities in Land Uses

Sr No	SYMBOLS Activity/ Use	Permissible Use				Central Commercial Area	Not Permissible				Logistics	Conditional Permissible Use (1-7)				With Special Permission of the Board			
		Residential	Existing Village Abadi	Commercial	Wholesale Commercial		Multiple Landuse Hospitality	Industrial	Multiple Landuse Industry	Mixed Use		SDZ	Institutional	Utility/Facility	Transportation	Green Belt	Park & Playground	Recreational Green	River Front Development
1	Residential																		
1.1	Single House/ Plot/ Flat			6	6	6	6												
1.2	Group Housing			6		6	6												
1.3	Guard chaukidar residence																		
2	Commercial																		
2.1	Retail shops/Platform	1			1			1			1		1	1	1				
2.2	Repair shops	1						1	1		1								
2.3	Personal Service shops	1											1						
2.4	Vending booth	1						1					1						
2.5	Showroom	1						2						1					
2.6	Weekly market	3	3	3	3	3	3	3	3	3	3			3					
2.7	Convenience shopping centre	1						1			1		1		1				
2.8	Local/Sector level Shopping centre	1						1			1		1				1		
2.9	Shopping centre/ commercial centre/ shopping mall	1						1			1								
2.10	Informal commercial unit/platform	1						1			1								
2.11	Wholesale market/Mandi			1		1	1				1								
2.12	Bakery/Confectionary/Atta Chakki	1			1														
2.13	Coal/wood/ Building material market																		
2.14	Vegetable/ Fruit market	1									1								
2.15	Cold Storage										1								
2.16	Hotels	1						1	1				1	1					
2.17	Service Apartment												1	1					
2.18	Restaurant/ Canteen/ Food Court	1																	
2.19	Cinema/Multiplex	1						1									1		
2.20	Drive-in cinema																		
2.21	Exhibition hall/ Exhibition centre	1																	
2.22	Banquet hall/ Barat Ghar	1						1					1	1					
2.23	Electric Charing Station	1																	
2.24	Petrol pump/Diesel station/ Gas Filling Station	1					1						1	1					
2.25	Oil depot and LPG refilling plant																		
2.26	Gas Godown																		

Sr No	SYMBOLS Activity/ Use	Permissible Use				Central Commercial Area	Not Permissible				Logistics	Conditional Permissible Use (1-7)				With Special Permission of the Board			
		Residential	Existing Village Abadi	Commercial	Wholesale Commercial		Multiple Landuse Hospitality	Industrial	Multiple Landuse Industry	Mixed Use		SDZ	Institutional	Utility/Facility	Transportation	Green Belt	Park & Playground	Recreational Green	River Front Development
2.27	Warehouses for non-hazardous items																		
2.28	Warehouses for hazardous items																		
2.29	Automobiles showroom/Automobile Showroom cum Service Station																		
2.30	Weigh bridge/ DharmKanta																		
2.31	Storage Godown for Inflammable Items (LPG, Petrol, Diesel, Kerosene, Lubricants, Aviation Fuel etc)																		
2.32	Agriculture Produce Selling Market/ Grain Market																		7
2.33	Junkyard/ Kabadkhana																		
2.34	Steel/ Cement/ Building Material Yard																		
3	Industrial																		
3.1	Service industries						4												
3.2	Cottage industries						4												
3.3	Flatted factories						4												
3.4	Information/ software technology industry						4												
3.5	Small/light industry						4												
3.6	Industrial plot (specific industry type)						4												
3.6A	Industrial Plot (Data Centre)						4												
3.7	Industrial plot (Integrated Use)						4												
3.8	Medium & large-scale industry						4												
3.9	Film centre/Film City/ TV radio programme production centre						4												
3.10	Biotechnology/ Biotech Park						4												
3.11	Non-Polluting Agro based Industries						4												
3.12	Milk Pasturing Plant						4												
3.13	Milk Collection Centre				1	1													
4	Logistic																		
4.1	Freight complex/ Logistic Park																		
5.A.	Public & Semi-Public (Institutional & Offices)																		
5.1	Govt./Semi Govt./Public undertaking/local body office	5						5											
5.2	Office/corporate office	5						5											
5.3	Professional/personal/Agent office																		
5.4	Project development/management/maintenance office	5						5											
5.5	Satellite/wireless/Telecommunication centre	5																	

Sr No	SYMBOLS Activity/ Use	Permissible Use				Central Commercial Area	Not Permissible				Conditional Permissible Use (1-7)				With Special Permission of the Board				
		Residential	Existing Village Abadi	Commercial	Wholesale Commercial		Multiple Landuse Hospitality	Industrial	Multiple Landuse Industry	Mixed Use	Logistics	SDZ	Institutional	Utility/Facility	Transportation	Green Belt	Park & Playground	Recreational Green	River Front Development
5.6	Guest house/lodging/boarding house	4																	
5.7	Hostel	4																	
5.8	Reformatory & Orphanage	4																	
5.9	Old age home																		
5.10	School for mentally/ physicallychallenged persons	4					4												
5.11	Creche & day care centre/ play & nursery school																		
5.12	Primary school	4						4					4						
5.13	Secondary school/ integrated residential school	4						4											
5.14	Vocational Institute / training Institute / ITI	4																	
5.15	Degree / PG college/ Professional College	4																	
5.16	University																		
5.17	Post office																		
5.18	Telephone exchange	4						4											
5.19	Police station	4						4											
5.20	Fire station	4						4											
5.21	Police post																		
5.22	Library																		
5.23	R & D centre	4																	
5.24	Health centre/ family welfare centre	4						4											
5.25	Trauma centre	4																	
5.26	Medical college/ hospital	4					4	4											
5.27	Clinic																		
5.28	Nursing home	4						4											
5.29	Clinical laboratory / Diagnostic centre	1						1											
5.30	Veterinary hospital/ Dispensary																		
5.31	Health club/ Gym	4																	
5.32	Dance/ Music/Art centre	4						1											
5.33	Yoga/ Meditation centre		4									4							
5.34	Religious building/centre	4						4				4							
5.35	Community centre / Barat Ghar	4						4				4			4				
5.36	Convention centre/ conference centre/ Auditorium	4						4											
5.37	Socio-Cultural centre	4					4	4			4								
5.38	PCO Public call office																		

Sr No	SYMBOLS Activity/ Use	Permissible Use				Central Commercial Area	Not Permissible				Conditional Permissible Use (1-7)					With Special Permission of the Board			
		Residential	Existing Village Abadi	Commercial	Wholesale Commercial		Multiple Landuse Hospitality	Industrial	Multiple Landuse Industry	Mixed Use	Logistics	SDZ	Institutional	Utility/Facility	Transportation	Green Belt	Park & Playground	Recreational Green	River Front Development
5.39	Internet/Information centre	1					1												
5.40	Social welfare centre	1																	
5.41	Crematorium/ Burial ground/ cremation												4						
5.42	Night shelter (rein basera)						4												
5.43	Disaster management centre																		
5.44	Metrological station																		
5.45	Banks	5																	
5.46	ATM																		
5.47	Milk Booth																		
5.B	Public & Semi-Public (Utilities/Facilities)																		
5.48	Sewerage treatment plant	4		4	4	4	4				4				4			4	
5.49	Pumping station	4									4							4	
5.50	Solid Waste Treatment Plant								4										
5.51	Sanitary landfill site																		
5.52	Recycling plant	4						4					4						
5.53	Tube well/ Overhead tanks/ Underground tanks/ Renny well																		
5.54	Water treatment plants	4		4	4	4	4	4	4		4				4			4	
5.55	Electric sub station	4																	
5.56	Public toilets																		
5.57	Transmission tower/ mobile tower as per YEIDA policy	4																	
5.58	Drinking water booths																		
5.59	Water Works	4		4	4	4	4	4	4		4		4	4					
5.60	Electric Post																		
6	Recreational Green																		
6.1	Park/Play ground																		
6.2	Multipurpose open spaces																		
6.3	Golf course/ Race course																		
6.4	Stadium/ Sports training centre/Sports complex	4						4	4										
6.5	Picnic spot																		
6.6	Indoor stadium/ games hall	4																	
6.7	Planetarium	4																	
6.8	Aquarium	4																	

Sr No	SYMBOLS Activity/ Use	Permissible Use				Central Commercial Area	Not Permissible				Conditional Permissible Use (1-7)					With Special Permission of the Board			
		Residential	Existing Village Abadi	Commercial	Wholesale Commercial		Multiple Landuse Hospitality	Industrial	Multiple Landuse Industry	Mixed Use	Logistics	SDZ	Institutional	Utility/Facility	Transportation	Green Belt	Park & Playground	Recreational Green	River Front Development
6.9	Amusement/ theme park	4																	
6.10	Recreational club/ Swimming pool	4					4	4											
6.11	Museum cum Auditorium/ Conference Hall/ Art/ Exhibition Gallery	4					4	4											
6.12	Open air theatre	4					4	4											
6.13	National Memorials																		
6.14	Bio diversity park																		
6.15	Shooting Range																		
6.16	Zoo, Wildlife/ Bird Sanctuary																		
6.17	Tourist Facility centre																		
6.18	Sports City	1																	
7	Transportation																		
7.1	Open Parking																		
7.2	Covered/ multi-level parking																		
7.3	Taxi/Auto stand	1															4		
7.4	Truck terminal/ transport nagar						4	4		4									
7.5	Bus depot/ Bus terminal						4	4	4	4									
7.6	Bus stand/ Shelter																		
7.7	Motor Garage/Service Garage/Workshop						4	4	4										
7.8	Traffic park/ children traffic park/ training centre	4					4	4		4									
7.9	Loading/ Unloading facilities			4	4	4	4												
7.10	Transport/ Cargo booking centre	1																	
7.11	Container depot																		
7.12	Toll plaza																		
7.13	Heli pad																		
7.14	Railway Godown/ Railway Yard/ Siding Terminal																		
7.15	Airport Strip																		
7.16	Roads																		
8	Agriculture																		
8.1	Orchard/ Plant nursery/ Social forestry																		
8.2	Farm house																		
8.3	Dairy/ Poultry Farm																		
8.4	Agriculture Equipment workshop/ Service Centre																		

Sr No	Activity/ Use	Permissible Use				Central Commercial Area	Not Permissible				Logistics	Conditional Permissible Use (1-7)				Green Belt	With Special Permission of the Board			
		Residential	Existing Village Abadi	Commercial	Wholesale Commercial		Multiple Landuse Hospitality	Industrial	Multiple Landuse Industry	Mixed Use		SDZ	Institutional	Utility/Facility	Transportation		Park & Playground	Recreational Green	River Front Development	Agriculture
8.5	Agriculture/ Horticulture/ Cash Crops																			
8.6	Apiary/ Pisci Culture																			
9	Floating Activities																			
9.1	Residential																			
9.2	Commercial	1						1					1							
9.3	Public and Semi Public																			
9.4	Transportation																			
9.5	Industry																			
9.6	Recreational																			
9.7	Abadi Extension, Resettlement & Rehabilitation	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4			4

Sr No	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 YEIDA.
4	Planned and designated plot.
5	Planned Commercial or 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	Only on 24 meter or more wide roads earmarked by YEIDA or 24 meter wide Existing Road.
Sr No	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 area or abadi Extension Area.
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 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	In SDZ core and non-core activities shall be permitted as per SDZ policy.
8	No activity other than incidental to riverfront development land use (to be decided by the authority) shall be permissible in river front development land use
9	Any government scheme or activity approved or decided by State Government shall be allowed in notified Area of Authority.
10	Electric Sub Station/ water works/ other essential utilities shall be developed as per their controlled designs.
11	The Authority may alter or determine the Master plan Road Alingment paritally on the basis of ground feasibility/survey.

11.5 Subdivision of Use Zones and Subdivision Regulation

The Subdivision of land with a view to prepare a layout plan is done for a sector or area, which is designated primarily for a specific use zone already specified earlier as per the Master Plan. The objective of regulations detailed herein is to guide the preparation of layout plans for use areas. These regulations include norms for provisions of circulation system, open spaces, and facilities. The service plans corresponding to these layout plans for provisions of physical infrastructure like water supply, sewerage, drainage, power, telecom, gas and solid waste management etc. shall conform to the norms framed by the Authority from time to time.

11.5.1 Residential Use Zones

The sub-division of this use zone shall be governed by the provisions stated below:

- This use zone will have plotted development or flat development or group housing or mix of both or all as per the scheme.
- Green and Open Spaces
- The minimum area required under open space for tot-lots, parks and playground 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 average width of the green and open space shall be 7.5m. The green and open spaces can be of varied shapes provided they fulfil the recreational need of the community.
- The landscape plan shall be prepared and submitted in accordance with the provisions of building regulations.
- Certain open spaces shall be designated as playgrounds while preparing the layout plan.

Roads

- I. The minimum Right of Way of a vehicular road shall be 12 m. However, in situations where the road adjoins a park or any open space with building only one side, it may have a minimum width of 9 m.
 - II. In case of group housing development, the minimum width of road shall be 18 meters.
 - III. The roads shall have minimum width depending on the length of the road as follows
 - IV. Up to 400.0m. - 12.0 m.
 - V. 401-600.0m. - 18.0 m.
 - VI. 601-1000.0 m. - 24.0 m.
 - VII. Above 1000.0 m.- 30.0 m.
 - VIII. The minimum width of Loop Street shall be 12.0 m. and maximum length 400.0 m.
 - IX. Maximum length of a 12.0 m wide dead-end road shall be 100.0m. The road shall be provided with a cul-de-sac of 7.5 m radius at the dead end. Roads of less than 25 m length, cul-de-sac will not be required
- 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 5%.
 - The minimum area under facilities shall be 5%.
 - Provision of Social and Physical Infrastructure

11.5.2 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
 - I. 10% of the total area of non-residential sector/area shall be green
 - II. Area under green and open spaces of the scheme or sector shall be in addition to the area under Master Plan green areas.
 - III. The landscape plan shall be prepared and submitted in accordance with the provisions of building regulations.

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 400.0m. - 18.0m
 - b. 401-1000.0m. - 24.0m
 - c. Above 1000.0m. - 30.0 m.
- III. The width of other roads shall be in accordance with the width specified in Master Plan.
- The provisions for rainwater harvesting shall be in accordance with the provisions of Building Regulations 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 Multiple 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%.

12 MASTER PLAN IMPLEMENTATION & PHASING

The successful implementation of the YEIDA Master Plan is a long-term endeavor, with development expected to unfold over several decades to fully realize the area's vision. This phased approach is essential to ensure that growth is both sustainable and economically feasible, minimizing uncertainty and aligning development with market demand and the region's strategic goals.

The Yamuna Expressway Industrial Development Authority (YEIDA) will spearhead the development process, guiding the pace, location, and type of development within the plan area. This approach will be driven by several key factors, including market demand, the overarching vision for the region, the regulatory framework, and the availability of infrastructure. Additionally, fiscal considerations will play a critical role, ensuring that development remains economically viable throughout the implementation process.

12.1 Phased Development Strategy

1. **Initial Phase:** The initial phase will focus on establishing critical infrastructure, including roads, utilities, and basic services, to support early investments and attract residents and businesses. Key sectors such as industrial zones, transportation hubs, and essential public services will be prioritized to create a solid foundation for future growth. This phase will also involve significant land acquisition, zoning, and environmental assessments to ensure that development proceeds smoothly.
2. **Mid-Term Phase:** In this phase, the emphasis will shift towards expanding residential and commercial areas, supported by the development of social infrastructure such as schools, healthcare facilities, and recreational spaces. The goal is to create a balanced urban environment where people can live, work, and play. This phase will also see the further expansion of industrial and logistical facilities, leveraging the area's strategic location and existing infrastructure to attract businesses and drive economic growth.
3. **Long-Term Phase:** The final phase will focus on completing the remaining infrastructure projects and fine-tuning the urban fabric to ensure that the area meets its long-term objectives. This phase will include the development of high-density residential areas, advanced industrial zones, and comprehensive public transportation systems. Additionally, green infrastructure and sustainability initiatives will be fully integrated into the urban landscape, ensuring that the area is resilient and environmentally responsible.

12.2 Regulatory Framework and Governance

YEIDA will play a central role in overseeing the implementation of the Master Plan, ensuring that development aligns with the established regulatory framework. This framework will be designed to facilitate streamlined decision-making, reduce bureaucratic delays, and provide clear guidelines for developers and investors. The authority will also be responsible for coordinating with other

government agencies and stakeholders to ensure that infrastructure projects are completed on time and within budget.

12.3 Financial Planning and Investment

Financial planning will be a critical component of the implementation process. YEIDA will develop a comprehensive financial strategy to fund the various phases of development, balancing public and private investment to maximize economic returns. This strategy will include budget allocations for infrastructure projects, incentives for private developers, and mechanisms for generating revenue from land sales and property taxes. The financial feasibility of each phase will be carefully assessed to ensure that the plan remains viable throughout the development process.

12.4 Final Decision-Making Authority

Throughout the implementation process, YEIDA will retain the final decision-making authority, ensuring that development aligns with the region's strategic vision and long-term objectives. This centralized governance structure will allow for flexibility and adaptability, enabling the authority to respond to changing market conditions, regulatory requirements, and community needs. The development works across the entire area are expected to be completed by 2041, with YEIDA's decisions serving as the guiding force in achieving this ambitious timeline.

Overall, the phased implementation of the YEIDA Master Plan is designed to create a sustainable, economically viable, and vibrant urban region that meets the needs of its residents and businesses while adhering to the highest standards of planning and development.

13 ANNEXURE

Table 13-1 LIST OF NOTIFIED VILLAGES; YEIDA PHASE - I

Sr.No.	District wise Sr. No.	District	Tehsil	Village Name
1	1	Bulandshahr	Khurja	Bhunna Jatan
2	2	Bulandshahr	Khurja	Chhapna
3	3	Bulandshahr	Khurja	Dansauli
4	4	Bulandshahr	Khurja	Gowila
5	5	Bulandshahr	Khurja	Hasanpur
6	6	Bulandshahr	Khurja	Ibrahimpur
7	7	Bulandshahr	Khurja	Jalalabad Urf Chingrawli
8	8	Bulandshahr	Khurja	Kalakhuri
9	9	Bulandshahr	Khurja	Kapna
10	10	Bulandshahr	Khurja	Khani Buri
11	11	Bulandshahr	Khurja	Machand
12	12	Bulandshahr	Khurja	Mohammadpur Nar
13	13	Bulandshahr	Khurja	Mumrezpur
14	14	Bulandshahr	Khurja	Nekpur
15	15	Bulandshahr	Khurja	Parori
16	16	Bulandshahr	Khurja	Rakheda
17	17	Bulandshahr	Khurja	Udaipur
18	18	Bulandshahr	Khurja	Ushmanpur
19	19	Bulandshahr	Khurja	Abrahimpur Junedpur (Southern part of Railway Line)
20	20	Bulandshahr	Khurja	Khabra (Southern part of Railway Line)
21	21	Bulandshahr	Khurja	Samaspur (Southern part of Railway Line)
22	22	Bulandshahr	Khurja	Ismailpur Budhena (Southern part of Railway Line)
23	23	Bulandshahr	Khurja	Sultanpur (Southern part of Railway Line)
24	24	Bulandshahr	Khurja	Sikandarpur (Southern part of Railway Line)
25	25	Bulandshahr	Khurja	Sikri (Southern part of Railway Line)
26	26	Bulandshahr	Khurja	Salampur Mazar Dastoora
27	27	Bulandshahr	Khurja	Dastoora
28	28	Bulandshahr	Khurja	Khandupura
29	29	Bulandshahr	Khurja	Bhagwanpur
30	30	Bulandshahr	Khurja	Hasanpur Ladki
31	31	Bulandshahr	Khurja	Bighepur
32	32	Bulandshahr	Khurja	Bichhat Sujanpur
33	33	Bulandshahr	Khurja	Mohammadpur Mazra Bichhat
34	34	Bulandshahr	Khurja	Akhtyarpur
35	35	Bulandshahr	Khurja	Sanaita Safipur
36	36	Bulandshahr	Khurja	Bhaipur
37	37	Bulandshahr	Khurja	Lalpur Mumerejpur
38	38	Bulandshahr	Khurja	Shahzadpur Kanaini
39	39	Bulandshahr	Khurja	Azmabad
40	40	Bulandshahr	Khurja	Sarangpur
41	41	Bulandshahr	Khurja	Nagla Rumi
42	42	Bulandshahr	Khurja	Asafpur
43	43	Bulandshahr	Khurja	Siryal
44	44	Bulandshahr	Khurja	Shahpur Kala
45	45	Bulandshahr	Khurja	Gothni
46	46	Bulandshahr	Khurja	Bhindor
47	47	Bulandshahr	Khurja	Firojpur

Sr.No.	District wise Sr. No.	District	Tehsil	Village Name
48	48	Bulandshahr	Khurja	Ahroli
49	49	Bulandshahr	Khurja	Auranga
50	50	Bulandshahr	Khurja	Bhadwan
51	51	Bulandshahr	Khurja	Ramgarhi
52	52	Bulandshahr	Khurja	Jafarnagar Gadaipur
53	53	Bulandshahr	Khurja	Jahidpur Kalan
54	54	Bulandshahr	Khurja	Gangthala
55	55	Bulandshahr	Khurja	Maina Kalandar Gadhi
56	56	Bulandshahr	Khurja	Kuarsi
57	57	Bulandshahr	Khurja	Jahidpur Khurd
58	58	Bulandshahr	Khurja	Kamalpur Mazara Bhadaura
59	59	Bulandshahr	Khurja	Inayatpur Urf Madhupura
60	60	Bulandshahr	Khurja	Bhadaura
61	1	Bulandshahr	Sikandrabad	AJAY NAGAR
62	2	Bulandshahr	Sikandrabad	Alauda Jagir
63	3	Bulandshahr	Sikandrabad	Alipura
64	4	Bulandshahr	Sikandrabad	Amipur Bangar
65	5	Bulandshahr	Sikandrabad	Arniya Kamalpur
66	6	Bulandshahr	Sikandrabad	Azampur Husainpur
67	7	Bulandshahr	Sikandrabad	Bailana
68	8	Bulandshahr	Sikandrabad	Chauki
69	9	Bulandshahr	Sikandrabad	Gadana
70	10	Bulandshahr	Sikandrabad	Hasanpur Baksua
71	11	Bulandshahr	Sikandrabad	Hirnaoti
72	12	Bulandshahr	Sikandrabad	Inayatpur
73	13	Bulandshahr	Sikandrabad	Jaitpur
74	14	Bulandshahr	Sikandrabad	Jhajhar
75	15	Bulandshahr	Sikandrabad	Kakod
76	16	Bulandshahr	Sikandrabad	Khwajapur Aminabad Urf Fakigar
77	17	Bulandshahr	Sikandrabad	Kutwaya
78	18	Bulandshahr	Sikandrabad	Mohammadpur Kehri
79	19	Bulandshahr	Sikandrabad	Nagla Govindpur
80	20	Bulandshahr	Sikandrabad	Salempur Jaat
81	21	Bulandshahr	Sikandrabad	Subra
82	22	Bulandshahr	Sikandrabad	Sunpeda
83	23	Bulandshahr	Sikandrabad	Daudpur (Southern part of Railway Line)
84	24	Bulandshahr	Sikandrabad	Nurpur (Southern part of Railway Line)
85	25	Bulandshahr	Sikandrabad	Nithari (Southern part of Railway Line)
86	26	Bulandshahr	Sikandrabad	Gangraul (Southern part of Railway Line)
87	27	Bulandshahr	Sikandrabad	Kadarpur (Southern part of Railway Line)
88	28	Bulandshahr	Sikandrabad	Bhanvra (Southern part of Railway Line)
89	29	Bulandshahr	Sikandrabad	Saloni urf Rauni (Southern part of Railway Line)
90	30	Bulandshahr	Sikandrabad	Makrandpur urf Fatehpur (Southern part of Railway Line)
91	31	Bulandshahr	Sikandrabad	Vair badshahpur (Southern part of Railway Line)
92	32	Bulandshahr	Sikandrabad	Aroda (Southern part of Railway Line)
93	33	Bulandshahr	Sikandrabad	Fatehpur jadon (Southern part of Railway Line)
94	34	Bulandshahr	Sikandrabad	Dhanaura
95	35	Bulandshahr	Sikandrabad	Shekhpur Mazra Gangraul
96	1	GB Nagar	Jewar	AHMADPUR CHOURLI
97	2	GB Nagar	Jewar	Akalpur
98	3	GB Nagar	Jewar	Alabalpur
99	4	GB Nagar	Jewar	Alampur Hatla Urf Lodouna
100	5	GB Nagar	Jewar	Ali Ahmedpur

Sr.No.	District wise Sr. No.	District	Tehsil	Village Name
101	6	GB Nagar	Jewar	Aliabad
102	7	GB Nagar	Jewar	ALLAUDDIN NAGAR URF DHUDARA
103	8	GB Nagar	Jewar	Amanullapur Urf Mahara
104	9	GB Nagar	Jewar	Amarpur Palaka
105	10	GB Nagar	Jewar	Anwargarh Bangar
106	11	GB Nagar	Jewar	Anwargarh Khadar
107	12	GB Nagar	Jewar	Aurangabad Urf Humayunpur
108	13	GB Nagar	Jewar	BALLAM NAGAR KARAUŁ KHADAR
109	14	GB Nagar	Jewar	BALLAM NAGAR URF KARAUŁBANGARR
110	15	GB Nagar	Jewar	Bankapur
111	16	GB Nagar	Jewar	BanwariBas
112	17	GB Nagar	Jewar	BHABHOKRA
113	18	GB Nagar	Jewar	Bhagwantpur Chhatanga
114	19	GB Nagar	Jewar	Bhaipur Brahman
115	20	GB Nagar	Jewar	Bhikanpur
116	21	GB Nagar	Jewar	Bhunna Taga
117	22	GB Nagar	Jewar	Birampur
118	23	GB Nagar	Jewar	Chachura
119	24	GB Nagar	Jewar	Chak Birampur
120	25	GB Nagar	Jewar	Chakjalabad
121	26	GB Nagar	Jewar	Chanchali
122	27	GB Nagar	Jewar	Chhtanga Khurd
123	28	GB Nagar	Jewar	DASTAMPUR
124	29	GB Nagar	Jewar	DEORAR
125	30	GB Nagar	Jewar	Dhanpur
126	31	GB Nagar	Jewar	DHANSIA
127	32	GB Nagar	Jewar	Diyanatpur
128	33	GB Nagar	Jewar	Dugali
129	34	GB Nagar	Jewar	Faleda Bangar
130	35	GB Nagar	Jewar	Faloda Khadar
131	36	GB Nagar	Jewar	Fazilpur
132	37	GB Nagar	Jewar	Govinshgarh
133	38	GB Nagar	Jewar	Hazipur
134	39	GB Nagar	Jewar	Islam nagar urf bhathoa
135	40	GB Nagar	Jewar	Jahangirpur
136	41	GB Nagar	Jewar	Jaunchana
137	42	GB Nagar	Jewar	Jawan
138	43	GB Nagar	Jewar	Jewar
139	44	GB Nagar	Jewar	Jewar Khader
140	45	GB Nagar	Jewar	Jhuppa
141	46	GB Nagar	Jewar	Kalupura
142	47	GB Nagar	Jewar	Kanpur
143	48	GB Nagar	Jewar	KARAUŁI BANGAR
144	49	GB Nagar	Jewar	Karoli Khadar
145	50	GB Nagar	Jewar	Khwajpur
146	51	GB Nagar	Jewar	Kishorpur
147	52	GB Nagar	Jewar	Kureb
148	53	GB Nagar	Jewar	Mahadipur Khadar
149	54	GB Nagar	Jewar	Maksudpur
150	55	GB Nagar	Jewar	MANCHIPUR BANGAR
151	56	GB Nagar	Jewar	MANCHIPUR KHADAR
152	57	GB Nagar	Jewar	MANGROLI
153	58	GB Nagar	Jewar	Meerpur kachh urf kani garhi
154	59	GB Nagar	Jewar	Mehndipur Bangar
155	60	GB Nagar	Jewar	Mewla Gopalgarh
156	61	GB Nagar	Jewar	MILK KARIMABA
157	62	GB Nagar	Jewar	Mohammadabad Khoda

Sr.No.	District wise Sr. No.	District	Tehsil	Village Name
158	63	GB Nagar	Jewar	Mohammadpur Jado
159	64	GB Nagar	Jewar	MOHBALIPUR
160	65	GB Nagar	Jewar	Mukimpur Siwara
161	66	GB Nagar	Jewar	Mundrah
162	67	GB Nagar	Jewar	Murad Garhi
163	68	GB Nagar	Jewar	Myana
164	69	GB Nagar	Jewar	Nagla Shahpur
165	70	GB Nagar	Jewar	Neemka Shahjahanpur
166	71	GB Nagar	Jewar	Pachokara
167	72	GB Nagar	Jewar	Parohi
168	73	GB Nagar	Jewar	Rabupura
169	74	GB Nagar	Jewar	Ramner
170	75	GB Nagar	Jewar	RAMPUR KHADAR
171	76	GB Nagar	Jewar	Rampur Bangar(Sadar)
172	77	GB Nagar	Jewar	Ranehra
173	78	GB Nagar	Jewar	Rasulpur Ikbail
174	79	GB Nagar	Jewar	Rohi
175	80	GB Nagar	Jewar	Ronija
176	81	GB Nagar	Jewar	Rustampur
177	82	GB Nagar	Jewar	Sabota Mustfabad
178	83	GB Nagar	Jewar	SADULLAPUR URF MADALPUR
179	84	GB Nagar	Jewar	ShamSham Nagar
180	85	GB Nagar	Jewar	Siroli Bangar
181	86	GB Nagar	Jewar	Siroli Khadar
182	87	GB Nagar	Jewar	Sirsa
183	88	GB Nagar	Jewar	Sultanpur
184	89	GB Nagar	Jewar	Takeepur Khadar
185	90	GB Nagar	Jewar	Taquipur Bangar
186	91	GB Nagar	Jewar	Thora
187	92	GB Nagar	Jewar	Trithali
188	93	GB Nagar	Jewar	Utawali
189	1	GB Nagar	Sardar	Achchheja Bujurg
190	2	GB Nagar	Sardar	Achchhepur
191	3	GB Nagar	Sardar	Atta Gujran
192	4	GB Nagar	Sardar	Aurangpur
193	5	GB Nagar	Sardar	Banjarpur
194	6	GB Nagar	Sardar	Bela Kalan
195	7	GB Nagar	Sardar	Bela Khurd
196	8	GB Nagar	Sardar	Bhatta
197	9	GB Nagar	Sardar	Chandpur
198	10	GB Nagar	Sardar	Changauli
199	11	GB Nagar	Sardar	Chuadpur Bangar
200	12	GB Nagar	Sardar	Dankaur
201	13	GB Nagar	Sardar	Dhanouri
202	14	GB Nagar	Sardar	Dungarpur Reelka
203	15	GB Nagar	Sardar	Fatehpur Atta
204	16	GB Nagar	Sardar	Gunpura
205	17	GB Nagar	Sardar	Jaganpur Doaba
206	18	GB Nagar	Sardar	Jaganpur Urf Afjalpur
207	19	GB Nagar	Sardar	Kadarpur Mojjampur
208	20	GB Nagar	Sardar	Khelri Bhav
209	21	GB Nagar	Sardar	Latifpur Khadar
210	22	GB Nagar	Sardar	Latifpur Bangar
211	23	GB Nagar	Sardar	Makanpur Bangar
212	24	GB Nagar	Sardar	Makanpur Khadar
213	25	GB Nagar	Sardar	Mathurapur
214	26	GB Nagar	Sardar	Mirzapur

Sr.No.	District wise Sr. No.	District	Tehsil	Village Name
215	27	GB Nagar	Sardar	Mohammadpur Gujjar
216	28	GB Nagar	Sardar	Munjkheda
217	29	GB Nagar	Sardar	Mustfabad
218	30	GB Nagar	Sardar	Mutaina
219	31	GB Nagar	Sardar	Nilaouni Shahpur
220	32	GB Nagar	Sardar	Parsol
221	33	GB Nagar	Sardar	Rampur Khadar
222	34	GB Nagar	Sardar	Salarpur
223	35	GB Nagar	Sardar	Sarakupur
224	36	GB Nagar	Sardar	Suhedi Mahiuddinpur
225	37	GB Nagar	Sardar	Thasrana
226	38	GB Nagar	Sardar	Usmanpur