

## Development of Township Planning Of Pune City and Jalgaon District as Per Unified Development Control and Promotion Regulations for Maharashtra State.

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### ABSTRACT

Township Planning Requires To Manage Land And Resources In The Previous Established Township And New Proposed Townships For Fulfilling The Demands Of The Locals And Amenities Required In Next Few Years Or In Upcoming Decades A Successful Township Planning Provide Protection For The Environment, Can Promote And Facilitate Regeneration, Can Help Create And Sustain Communities, And Can Create New And Exciting Places To Live. By Considering The Future Expansions Of Cities And To Maintain The Environmental Balance For Successful Implementation Of The Bye Laws The Department Of Town And Regional Planning Implements Building Bye Laws And Every Proposed Township Should Fulfill All The Clause In The Bye Laws ,The Building Bye Laws Various From Region To Region And As Per Class Of Municipal Council We Are Doing The Comparison Of The Building Bye Laws And Its Application For Developing The Township In The Pune City Municipal Corporation And Jalgaon City Municipal Corporation The Various Provisions Amenities And As Per The Unified development control and promotion regulation for Maharashtra state For Maintain The Environmental Balance And Sustainable Development Of A Township

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### I.INTRODUCTION

The lack of adequate infrastructure and services has been recognized as one of the most important roadblocks on the path to rapid, equitable and sustainable growth in Indian cities. Both the local and national governments in India are looking for mechanisms to accelerate the supply of infrastructure and services to cope with the growing needs resulting from fast urbanization and motorization. This urban growth currently underway, and projected to increase over time, needs to be directed towards sustainable practices, in order to build environments that are climate resilient and culturally inclusive. In an ideal world, during the phase of such massive investments, plans that integrate land use and transport investments need to be developed and implemented to structure sustainable city form. In India, a city masterplan is the statutory document that identifies growth perspectives, develops land use plans addressing the urban agglomeration area's growth, and lays out Development Control Regulations (DCRs) to

regulate the city's development . The Master Plan also collates the sectoral plan for urban basic service delivery in the city addressing service delivery, and associated institutional reforms for services provided by local self-government institutions (LSGIs) in the city. However, the experience of city master plans being implemented has been very poor. Most master plan updates have been more about reflecting what has been built than about regulating what will be built in the future. The growth patterns have created frenzy in the housing sector. It is projected that the Indian real estate market will show a 30% growth in the next decade. The National Urban Housing and Habitat Policy (NUHHP) of 2007 identified a housing shortage of 24.7 million households. The housing sector contributes up to 5-6% of the country's GDP and this will increase given the shortage of housing to avoid this shortage we should develop a sustainable township considering the present and future expansion of city the department of town planning regulates the building bye laws and implements the bye laws to that township project and verify the

various clause in which the township project should fulfill the rules. The building bye laws varies according to the regional planning and as per the class of municipal council as per latest government gazette the new unified development control regulation has been published in which some new provisions are made for the new expansion of development limit and clause related where the zonal plans are not prepared in this project we study and discuss the various provisions for development of township according to bye laws in this project we are going to compare the various regulations between PMC and jalgaon district

## II.CONCEPT OF TOWNSHIP

Town planning is the process of managing land resources. It involves the control of existing and new developments, as well as strategy preparation to ensure manage future requirements. It is a dynamic process that changes in response to policy, development proposals and local needs. Town planners must try and balance the demands of landowners and developers, with the needs and concerns of the community and the policy framework. If planning is successful, it can provide protection for the environment, can

promote and facilitate regeneration, can help create and sustain communities, and can create new and exciting places. Town planning maintains the best of the past while encouraging creativity and innovation in the development of sustainable future

## III.VARIOUS RULES AND REQUIREMENT FOR DESIGNING TOWNSHIP PUNE

### 1. Requirement of site

i)Any suitable area having area of 40 hect. (100 Acres) or more at one place.

ii)The area shall be one, contiguous, unbroken and uninterrupted. Provided that, such area if divided by one or more water courses (such as nalas, canals, etc.), existing or proposed roads of any width or by railways etc., shall be treated as one, contiguous, unbroken and uninterrupted, subject to condition that the Project Proponent/s shall construct necessary connecting roads or bridges as per site requirements at his own cost with due permission from concerned authorities.

### 2.Permissibility in respect of Zoning:-

Table no 01

Sr. No.	Type of Zone	Premium Charges	Revised Premium
a	Afforestation Zone, Hill Top & Hill Slope Zone as shown on Regional Plan / Development Plan subject to clause 2 (ii)	20 %	10 %
b	Public / Semi-public Zone, Industrial Zone, TH & LP	10 %	5 %
c	Agriculture/ No Development Zone/G1 zone / Low Density Residential Zone / Buffer Zone of ESZ and other zones excepting at Sr. No. a & b above.	15 %	8 %

Table no 1

### 3.Permissible Floor Space Index (FSI):-

The Basic Permissible FSI Is1.00 But If Any Additional FSI Requires The By Paying The Premium FSI Charges We Can Add Some More FSI As Below

Area under Township	Additional built-up area on payment of premium
40 hec. and up to 200 Hector.	Up to 70 % of basic permissible FSI
More than 200 hec. and up to 500 Hector	Up to 80 % of basic permissible FSI
More than 500 hec. Hector	Up to 100 % of basic permissible FSI

**4.Mandatory town level amenities :-**

a)spaces for recreation

Sr.no.	particulars	Minimum area required	condition
I	Garden's and parks	5% of Master Layout Area.(out of this 50% area may be allowed on Hill Top Hill Slope Zone and Buffer Zone of ESZ)	Out of this at least 1000 sq. mt. area shall be kept open for Town Plaza/Town Square. Such area shall be kept open and may be allowed to be proposed at suitable places. Major public amenities/activities shall be cluster around this area.
ii	Playground's	7.5% of Master Layout Area (may be allowed in Buffer Zone of ESZ having slope less than 1: 5)	Maximum 10% of area under Play Ground which may accommodate indoor games, stadiums and allied users only.

b)Spaces for combined schools(primary schools +high school)

Sr.no.	particulars	Minimum area required	Minimum built up area required
I	For Master Layout area of 40 Ha	5000 sq.m	5000 sq.m
ii	For Master Layout area more than 40 Ha.	To be increased proportionately with increase in Master Layout area and be proposed at one or more locations, as per requirements.	

c) Community Health Care Facilities:-

Primary and Secondary Health Care Facilities like Dispensary, Maternity Home, Hospital etc.

Sr. No.	Particulars	Minimum Area Required	Minimum Built-up Area required
i	For Master Layout area of 40 Ha.	1,000 sq. m.	1500 sq. m.
ii	For Master Layout area more than 40 Ha.	To be increased proportionately with increase in Master Layout area and be proposed at one or more locations, as per requirements.	

d) Community Market:-

Sr. No.	Particulars	Minimum Area Required	Minimum Built-up Area required
i	<b>General Market including Mutton and Fish Market</b>		
	For Master Layout area up to & inclusive of 200 Ha.	1000 sq. m.	As per requirement
	For Master Layout area more than 200 Ha.	To be increased proportionately with increase in Master Layout area and be proposed at one or more locations, as per requirements.	
ii	<b>Fish Market &amp; Vegetable Market</b>		
	For Master Layout area up to & inclusive of 200 Ha.	1000 sq. m.	As per requirement

	For Master Layout area more than 200 Ha.	To be increased proportionately with increase in Master Layout area and be proposed at one or more locations, as per requirements.
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e) Public Assembly Facilities:- Town Hall and/or Auditorium including Library

Sr. No.	Particulars	Minimum Area Required	Minimum Built-up Area required
i	For Master Layout area up to & inclusive of 100 Ha	5000 Sq.mt	5000 Sq.mt
ii	For Master Layout area more than 100 hac. and up to 200 Ha.	10000 sq. mt.	10000 sq. mt.
iii	For Master Layout area more than 200 Ha.	To be increased proportionately with increase in Master Layout area and be proposed at one or more locations, as per requirements.	

f) Economic Activities:-

Economic activities including users such as Market, Multiplex, Mall, Information Technology & Information Technology enabled Services (IT & ITeS) including SEZs, Essential Shopping, Recreational Centers, Trade & Commerce, Education, Hospitals, Non-polluting Industries,

Service Industries, Entertainment, Tourism, Star Category Hotels, Convention Centers, Gymnasiums, Socio- economic activities, such as workshop, hostel for Autistic persons and Mentally Retarded challenged persons old age home etc. except independent residential tenements, etc. as per requirements.

Sr. No.	Particulars	Minimum Area Required	Minimum Built-up Area required
i	For Master Layout area of 40 Ha.	40000 sq. mtr.	80000 sq. mtr.
ii	For Master Layout area more than 40 Ha.	To be increased proportionately with increase in Master Layout area and be proposed at one or more locations, as per requirements.	

g) Public Utilities:-

For Master Layout area up to & inclusive of 200 Ha.

Sr. No.	Particulars	Minimum Area Required	Permissible Built-up Area
i	Fire Brigade Station-	3000 sq.m. or as prescribed by the Director of Fire Services, Maharashtra State/ Chief fire Officer of the concern Authority.	As per recommendations of the Director of Fire Services, Maharashtra State/Chief fire Officer of the concern Authority.
ii	Sewage Waste Management Project (SWMP)	4000 sq.m.	As per requirements
iii	Cremation Ground	2000 sq.m.	As per requirements
iv	Burial Ground	2000 sq.m.	As per requirements
v	Bus Station / Transport Hub	3000 sq.m.	

vi	Police Station	1000 sq.m.	
vii	Electric Sub-station	As per requirement	
viii	Other Public Utilities	As per requirement	
ix	Public Parking Facilities	As per prevailing DCR	
x	Solid waste management	As per requirement	

**h) Transport & Communication:-**

i) The entire area of the project shall be well-knitted with proper road pattern, taking into consideration the linkages with existing roads within the project and outside area as well. All such roads shall be developed by the Project Proponent/s as per standard prescribed by the Indian Road Congress.

ii) The width of the Means Of Access-

1. Classified Road should not be less than as may be prescribed by concerned public authority;
2. Main / Arterial / Ring Road should be minimum right of way of 18 mt.
3. Other Sub-Arterial roads, Collector streets, local streets, etc., shall be proposed as per the requirements to cater to the need of occupancies on such roads including for pedestrians.
4. Network of cycle track in entire Township area of minimum width of 3 meter shall be provided without clashing with the vehicular traffic.

iii) It may be permissible for Project Proponent/s,

**5. PLOT AREA, PLOT WIDTH FOR VARIOUS USES:**

Minimum plot areas and widths for various uses shall be as given in unified development control

to realign the Regional Plan / Development Plan Roads, and earlier existing roads passing through the project area, without changing the entry and exit points of such roads.

iv) All the Regional Plan / Development Plan Roads and all the Main / Arterial / Ring Roads, shall always be open for general public, irrespective of the fact that, they resides in the project or not.

**General Note for Amenities (a) to (h):**

i) The requirements prescribed above for items (a) to (f) are by considering FSI proposed for the project is only 1.0. If the FSI proposed is increased or decreased then the only built up area requirement shall be increased or decreased proportionately.

ii) The requirements prescribed above for items (g) are for Master Layout area up to & inclusive of 200 Ha.

It shall be increased or decreased proportionately and may be proposed at one or more locations, as per requirements

and promotion regulations for Maharashtra state the plot width and regarding to the road approaches and various other clauses which help to decide the plot width and depth ratio

**6. VARIOUS ROADS AND MINIMUM PLOT AREA AND PLOT WIDTH IN ABUTTING ROADS AS PER UNIFIED DEVELOPMENT CONTROL AND PROMOTION REGULATION FOR MAHARASHTRA STATE AS BELOW IN TABLE NO 2**

TABLE NO 2							
Sr. No.	Description of the road	Min Plot Size in Sq. m.	Min width of plot in meter	Min set back from road side in meter	Min. side margins in meter	Min. rear margins in meter	remarks
1	NH/SH	450	15	6.0 mt. for NH and 4.5 m. for SH or as specified by Highway rule whichever is more	3.0	3.0	--
2	MDR/ODR	450	15	6.00 mt. or as specified by Highway rule whichever is more	3.0	3.0	--
3	Roads 24 meters and above	300	12	4.50 mt for residential & 6.00 m. for residential with mix use	3.00	3.0	--
4	Roads of width	250	10	4.50 mt for	3.00	3.0	--

	below 24 m and upto 18 m.			residential & 6.00 m. for residential with mix use			
5	Roads of width below 18 m. and upto 15 m.	250	10	3.00 mt for residential & 4.50 m. for residential with mix use	2.25	2.25	--
6	Roads of width below 15 m. and above 9 m.	150	8	3.00 mt for residential & 4.50 m. for residential with mix use	1.50 (in case of semi-detached building, only one side open space shall be permissible)	1.50	Side and rear margins shall be 2.25 m. for building more than G+2 or stilt + 3 structure

7	Road of width upto 9 mt.	100	7	3.00	1.50 (in case of semi-detached building, only one side open space shall be permissible)	1.50	--do-
8	Row Housing on roads of 12 mt. and below	30 to 125	3.50	2.25	0.00(In case of corner plot, 1.50 or building line of adjoining road whichever is more)	1.50	Side rear margins this only G+1 stilt + structure
9	Row Housing for EWS/LIG/Slum Up gradation etc. by public authority.	20 to 50	3.00	0.90 mt from pathway or 2.25 mt from road boundary	0.00(In case of corner plot, 1.50 or building line of adjoining road whichever is more)	0.90m	Side rear margins this only G+1 stilt + structure

#### IV.DISSUSSION

i. In the pmc there is no restriction of space and land due to its geological conditions

ii. In the jalgaon district there is restriction of space due to geological conditions the jalgaon region surrounded by rivers and other zonal plans such as green zone , no development zone , yellow zone , industrial zone. Agricultural zone

iii. In pmc there are various zones but due to increased populations and growth in it sectors near pune they give permission for development in such zones or as per decision of the in charged assistant director town planner

iv. The development of land for residence is more in pmc compared to jalgaon district is more In pmc various IT SECTORS , Constructions Companies are more hence the job opportunities are more and due to which the peoples from all over Maharashtra prefer pune city for residence to fulfilling their demand the rate of development in pmc is more

v. In jalgaon district the main occupation of maximum peoples are agriculture and as per regional plans and geological conditions the rate of development is less as compared to pmc

vi. In pmc there is apartment/high rise building system but as comparative to pmc the tendency of peoples in jalgaon district is less to live in apartments they prefer group housing/ row housing rather than apartment

vii. Jalgaon city is bound by the Satpuda ranges in North, and Ajanta, Satmala and Chandur ranges in South with the Girna River running in the West. Road linkage - National Highway - 06 from Mumbai - Nagpur passes through the breadth of the city and is the central axis of the city of Jalgaon. Further, the State Highway of Jalgaon- Ajantha and Jalgaon- Pachora, pass through the South of the city and the Jalgaon- Marmurabad State

Highway pass through the North of the city. Rail connectivity - Jalgaon City is situated at the centre of the district and is well connected by the broad gauge lines of both the Central and Western Railway to Bombay, Delhi, Ahmedabad, and Calcutta.

viii. Pune city is well connected to most of the important metropolitans in India like Mumbai, Hyderabad , Bangalore , Delhi, Kolkata and Chennai the city is located at the confluence of national highways NH-4 leading to Mumbai in north and Bangalore in south, NH-50 to nashik , NH-9 to Solapur state highways connected to pmc SH-27 connects to Ahmednagar , SH-60 to kolad , SH-64 to sasvad , SH-57 to pirangut Maharashtra district road MDR-60 connects Pune to Mulshi. In addition, the westerly bypass connects the Pune-Satara Road (NH-4) in the south to Mumbai-Pune (NH-4) in the North. PMC is internally wellconnected through an extensive road network comprising 11 major intercity roads. rail connectivity Pune has two main railway stations namely, Pune Junction and Shivajinagar Station; most trains halt at Pune Junction. Pune suburban trains run from Pune Junction to the industrial towns of Khadki, Pimpri, and Chinchwad etc. air connectivity The city has an international airport at Lohegaon operated by the Airport Authority of India. It shares its runways with the neighboring Indian Air Force base. Apart from daily domestic flights to all major Indian cities, this airport serves two international direct flights to Singapore and Dubai. The airport handled 28.14 lakh passengers during 2010-11 (financial year) as against 22.57 lakh in 2009-10 as per Airport Authority of India (AAI) i.e. an increase of 24.64% if compared to 2009-10.

ix. Population index of pune city as per census of 2011

Year	Population total	Decadal change	Decadal growth rate
1951	488,419	-	-
1961	606,777	118,358	24.23%
1971	856,105	249,328	41.09%
1981	1,203,363	347,258	40.56%
1991	1,691,430	488,067	40.56%
2001	2,538,473	847,043	50.08%
2011	3,115,431	576,958	22.73%

Source: Census of India & Provisional figures of Census India, 2011

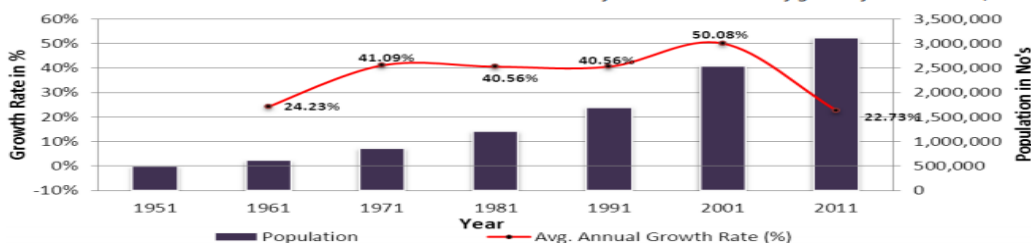


fig no 1

x. Population index of jalgaon as per census of 2001

As per latest census total population in jalgaon district 42,24,442 percentage decadal growth is 14.71%

Year	Population	Decennial variation	Percentage variation	Annual growth rate %	Incremental increase per decade
1	2	3	4	5	6
1951	75,303	-	-	-	-
1961	88,452	13,149	17.46	1.74	-
1971	1,17,312	+ 28, 860	32.63	3.26	+ 15, 711
1981	1,65,507	+ 48, 195	41.08	1.1	+ 19, 335
1991	2,42,193	+ 76, 686	46.33	4.63	+ 28, 491
2001	3,68,000	125807	51.94	5.19	49121

fig no 2

xi. As per fig no 1 and fig no 2 the difference in decadal growth rate compared to pune and jalgaon is about 8.02%

xii. The main barriers to development in the jalgaon city is the population growth and insufficient amount of jobs and also the geological conditions for sustainable development

xiii. In some future decades it is expected that the growth of industries and IT sectors will be increased in the jalgaon district due to sufficient amount of availability land and resources

xiv. The jalgaon city is ideal city for development of township because it fulfills the overall requirement required for residential as well as industrial development such as various natural resources and manpower

xv. If the urban areas get overcrowded eventually the industries will approach and develop the rural areas for economical and efficient production

xvi. In this paper we discuss the various laws for development of township and requirements of land and regulations for development of township as per new unified development control and promotions rules and regulations applicable for Maharashtra the all clause area same but due to the urban area the rules are slightly changes compared to jalgaon district

xvii. The main difference is in width of road in pmc and jalgaon district in pmc they generally provide 12.0 m wide roads in jalgaon they provide 9.0 m wide roads

xviii. In the pmc they can develop township due to availability of land in the jalgaon district it is hard to develop township due to ownership titles in jalgaon and geologicals conditions they generally develop residential lay-outs

xix. The development plan of pmc is much efficient than development plan of jalgaon

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