# Case Study on Sanctioning of a Residential Building from Amravati Municipal Corporation in both Old Byelaws and New UDCPR Regulations

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**Abstract - Building byelaws helps to prevent haphazard and unplanned urbanization. It is obligatory on the part of every individual who desires to construct a structure to obtain necessary permission from the local authority before proceeding for the construction. In this paper a case has been taken of a residential building of Amravati city (Maharashtra), India. This case was sanctioned in old byelaws of D Class Municipal Corporations and it has also got sanctioned in new UDCPR Regulations. Comparison of old byelaws and new UDCPR Regulations for this particular case has been done and changes have been revealed. The objective of this study is to observe the changes that has been made in new UDCPR Regulations and how the new UDCPR Regulations contributing to the city's overall development. A case of residential building of non-congested area within the limit of Amravati Municipal Corporation, Dist. Amravati, Maharashtra, India is taken for the study. It is concluded that more FSI, Building height, number of tenements are available in new UDCPR regulations compare to old D class byelaws which are helping in minimizing the conversion of land under agricultural use to non-agricultural use. It is also encouraging the high rise building culture which will ultimately boost the city's overall development.**

**Index Terms - FSI, Building Height, Setbacks, Ancillary FSI.**

## INTRODUCTION

Building byelaws prevents haphazard development without any resemblance to the development of the area as a whole. Starting the Construction of a building, however big or small, has always been associated with a big set of Questions. Among the many questions that crosses one's mind the most important question is, how to design and what things one should keep in mind while designing? Different buildings have different design requirements. There should be some standards on which building designs can be based. Keeping this need of standardization in mind there was a need to formulate certain rules and regulations that one should follow while constructing a building. Therefore, some rules and regulations were formed by government to regulate the construction of the buildings known as Building byelaws or Building Regulation. Building Byelaws are the rules and regulations set forth by the concerned government authorities and updated time to time. These regulations guide what to construct, how and where. All the government and non government authorities, work according to the building byelaws applicable in there locality. Any building plan submitted to the authorities which does not adhere to the building byelaws of the authority concerned is not passed. Compliance to them is mandatory byelaw whereas non compliance is punishable. As these rules and regulations apply to all, it helps to bring about a more uniform development.

Before starting the construction of any project taking sanction of building plan is mandatory from concerned Authorities. Without sanctioning the construction of project cannot be started. Taking sanction of building plan is one of the first steps for commencement of construction of a project.

In this paper a case has been taken of a residential building of Amravati city (Maharashtra), India. This case was sanctioned in old byelaws of D Class Municipal Corporations and it has also got sanctioned in new UDCPR Regulations. Comparison of old byelaws and new UDCPR Regulations for this particular case has been done and changes have been revealed. The objective of this study is to observe the changes that has been made in new UDCPR

Regulations and how the new UDCPR Regulations contributing to the city's overall development. A case of residential building of non-congested area within the limit of Amravati Municipal Corporation, Dist. Amravati, Maharashtra (Sate) is taken for the study

## LITRETURE SURVEY

M. SUBASH CHANDIRA (2007) This paper provides a comprehensive discussion on development control rules and building byelaws of Tamilnadu. The author provides critical commentary on the planning and other related statutes, and assesses their impact in controlling and regulating unauthorized constructions and misuse of premises. The author proposes - consolidation of all related organizations under the control of an umbrella organization for effective implementation of building byelaws and regulation of development control rules.

Vaghani K.B., Dr. Shah N.C. & Dr. Krupesh A Chauhan (2010) In this paper it is concluded that, the impact of building byelaws is significant on housing as parcels of land are sold on available FSI on that parcel of land. DCR (Development Control Rules) shall be made such that maximum number of dwelling units can be accommodated in the available parcel of land to optimize the use of land without affecting adversely the quality of urban life and for controlling land cost factor and minimizing conversion of land under agriculture use to non-agriculture use.

Ar. Shilpa Madangopal, Dr. Rama R. Subramanian (2014) The main basis of this paper is to understand sustainability of built environments from Macro-level to Micro-level. A comparative analysis is made between the Building Byelaws of Bangalore & Portland city to elaborate the scope of sustainable development in the built forms.

This paper is mainly divided into two parts; the first part tries to explain sustainability at various levels to understand the scope of sustainability in the field of built environment. Finally it is concluded by the inference that there is no single sustainable urban form, but rather a variety of urban forms that are more Sustainable than typical generic development Patterns.

Reshmi Banerjee (2015) The main purpose of building codes are to protect public health, safety and general welfare as they relate to the construction and occupancy of buildings and structures. Building codes are generally intended to be applied by architects, engineers, constructors and regulators. Building codes have been the primary source for guidance in the design and construction of building structures for many decades. In this context, India has not been an exception. The conclusion is building byelaws are the key policy instrument used by governments to limit buildings pressure on the energy sector and environment while providing occupants with comfort and modern living conditions.

Ar. Yogita Nagpure, Ar. Ashwini Sulekar, Ar. Mayur Survase (2016) This paper is an effort to understand the contribution of Building byelaws in architectural development. There has to be laws or regulations binding on the prospective builders, if not, the building constructed will be Un-scientific, Unhealthy and Inconvenient for the people to occupy. The building bye-laws should be reasonably rigid and adequately flexible as they have to be sometimes revised according the improvements affected in science and engineering and as per peculiar circumstances existing at the time. The conclusion of this paper is that proper adoption of Byelaws will lead to the most civilized and efficient development and will raise us a step up for growth & enlargement of habitat.

## OBJECTIVES AND NECESSITY OF THE DEVELOPMENT CONTROL REGULATIONS

Development Control Regulations are a set of rules that are planned to ensure the proper and effective development of a city, as well as the general welfare of the public. Regulation is necessary to ensure planned development. It depends on a "plan-led system" whereas development plans are made and the public is consulted.

1. To stop the unfavorable demand and misuse of land.
2. To assist private interest along with public interest in all phases of development.
3. Development control is legal in nature and the planning authority has the power to punish the defaulters.

4. To control and limit overcrowding on land.
5. To control the private development as per the required rules in connection to public safety, health, and convenience.

*Fig. 1: Planned Development*

*Fig. 2: Unplanned Development*

Case: - A case of residential building of non-congested area within the limit of Amravati Municipal Corporation, Dist. Amravati, Maharashtra (Sate) is taken for the study. The details of the plot are as follows,

*Plot no. 9, 14, 10A, 10B Survey no. 131/1-C Mouje: Rahatgaon, Taluka and District: Amravati (Maharashtra), Plot Area= 709.66 Square Meter, Abutting Road = 9.00 meter*

Area statement of the building from old sanction plan and new sanction plan has been taken for the comparison.

A. In old D class byelaws :- Commencement Certificate No. 0183 Dated: 6 January 2021

| Area Statement | Square Meter |
|---|---|
| 1. Area of Plot | 709.66 |
| 2. Deductions (From Gross Plot area) | |

| | |
|---|---|
| (a) Road setback area (RW) | 0.00 |
| (b) Others | 0.00 |
| Total (a + b) | 0.00 |
| 3. Balance Plot area | 709.66 |
| 4. Permissible FSI Factor | 1.40 |
| Permissible Built up area | 993.52 |
| 5. TDR Area | 283.86 |
| 6. Special Cases FSI | 0.00 |
| 7. Total Permissible Built up area | 1277.38 |
| 8. Proposed Areas | |
| (a) Proposed Residential area | 1277.38 |
| (b) Proposed Commercial area | 0.00 |
| (c) Proposed Industrial area | 0.00 |
| (d) Proposed Special use area | 0.00 |
| Total Proposed area (a + b + c + d) | 1277.38 |
| 9. Balcony area taken in FSI | 0.00 |
| 10. Excess Terrace area | 0.00 |
| 11. Existing Built up area | 0.00 |
| 12. Others (Substructure/Projections) | 0.00 |
| 13. Total Built up area Proposed (8+9+10+11) | 1277.38 |
| 14. Consumed FSI | 1.79 |

B. In New UDCPR Regulations:- Commencement Certificate No. 472 Dated: 13 December 2021

| Area Statement | Square Meter |
|---|---|
| 1. Area of Plot (Minimum area of a, b, c to be considered) | 709.66 |
| (a) As per ownership document (7/12, CTS extract) | 709.66 |
| (b) As per measurement sheet | 709.66 |
| (c) As per site | 709.66 |
| 2. Deductions for | |
| (a) Proposed D.P./D.P. Road widening area/Service Road/Highway widening | 0.00 |
| (b) Any D.P. Reservation area | 0.00 |
| Total (a + b) | 0.00 |
| 3. Balance area of Plot (1-2) | 709.66 |
| 4. Amenity Space (if applicable) | |
| (a) Required – | 0.00 |
| (b) Adjustment of 2(b), if any- | 0.00 |
| (c) Balance Proposed - | 0.00 |
| 5. Net Plot Area (3-4 (c)) | 709.66 |
| 6. Recreational Open Space (if applicable) | |
| (a) Required | 0.00 |
| (b) Proposed | 0.00 |
| 7. Internal Road Area | 0.00 |
| 8. Plotable area (if applicable) | 0.00 |
| 9. Built up Area with reference to Basic FSI, as per front road width (Sr. No.5 x Basic FSI) | 709.66x1.1= 780.62 |
| 10. Addition of FSI on payment of premium | 354.83 |
| (a) Maximum permissible premium FSI – Based on road width / TOD Zone | 0.50 |
| (b) Proposed FSI on payment of premium | 354.83 |
| 11. In-situ FSI / TDR loading | |
| (a) In-situ area against D.P. road (2.0 x Sr No. 2(a)), if any | 0.00 |
| (b) In-situ area against Amenity Space if handed over (2.00 or 1.85 x Sr. No. 4 (b) and /or(c)) | 0.00 |
| (c) TDR area | 283.86 |
| (d) Total in-situ / TDR loading proposed (11 (a)+(b)+(c) | 283.86 |
| 12. Additional FSI area under Chapter No. 7 | 0.00 |
| 13. Total entitlement of FSI in the proposal | |
| (a) (9+10(b)+11(d)) or 12 whichever is applicable | 1419.31 |
| (b) Ancillary area FSI upto 60% or 80% with payment of charges | 1419.31x0.60=851.58 |

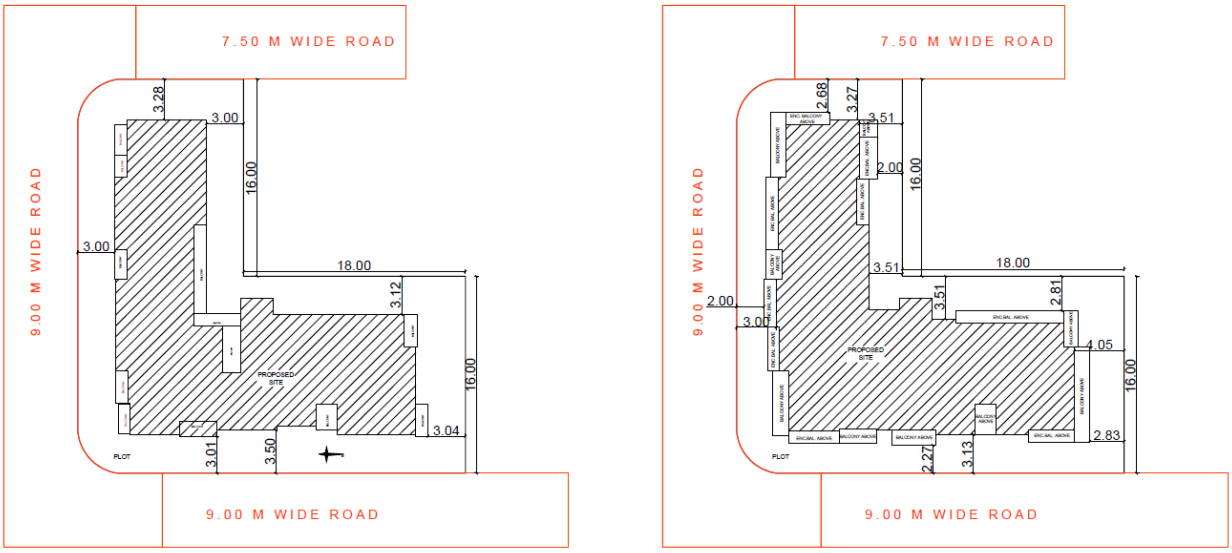
| | |
|---|---|
| (c) Total entitlement (a+b) | 2770.89 |
| 14. Maximum utilization limit of FSI (building potential ) Permissible as per road width ((as per Regulation No. 6.1 or 6.2 or 6.3 or 6.4 as applicable ) x 1.6 or 1.8 | 0.00 |
| 15. Total Built-up Area in proposal. (excluding area at Sr.No. 17 b) | |
| (a) Existing Built-up Area. | 0.00 |
| (b) Proposed Built-up Area (as per 'P-line') | 2176.08 |
| (c) Total (a+b) | 2176.08 |
| 16. F.S.I Consumed (15/13) (should not be more than serial No. above.) | 1.53 |
| 17. Area for Inclusive Housing, if any | 0.00 |
| (a) Required (20% of Sr. No. 5) | 0.00 |
| (b) Proposed | 0.00 |

## RESULTS AND DISCUSSION

Plot area = 709.66 Sq.m

| Sr. No. | Particulars | Old D class Byelaws | New UDCPR Regulations | % Difference |
|---|---|---|---|---|
| 1. | Floor Space Index (FSI) | 1.1x709.66=780.62sq.m | 1.1x709.66=780.62sq.m | 0.00 |
| 2. | Premium FSI | 0.30x709.66=212.89sq.m | 0.50x709.66=354.83sq.m | 50 |
| 3. | Transferable Development Rights (TDR) | 0.40x709.66=283.86sq.m | 0.40x709.66=283.86sq.m | 0.00 |
| 4. | Ancillary FSI | -- | 0.6x1419.31=851.58sq.m | -- |
| 5. | Total FSI (1+2+3+4) | 1277.37sq.m | 2270.89sq.m | 56 |
| 6. | Front Margin | 3.00m | 3.00m | 0.00 |
| 7. | Rear and Side Margins | 3.00m | 3.51m | 15.66 |
| 8. | Building Height | 15.85m | 17.55m | 10.17 |
| 9. | Enclosed Balcony | -- | 1.0m wide | -- |
| 10. | Open Balcony | 1.0m wide | 1.22m wide | 19.81 |
| 11. | Balcony to plot distance | 3.0m | 2.0m | 40 |
| 12. | No. of Tenements (Flats) | 22 | 27 | 20.40 |
| 13. | No. of floors | 5 | 6 | 18.18 |

1. Basic FSI is same as it was earlier.
2. TDR area percentage is also same as it was earlier.
3. Premium FSI was 30%, now it is 50% i.e. there is 20% increase in Premium FSI.
4. Earlier there was no concept of Ancillary FSI, now Ancillary FSI upto 60% of total potential i.e. (Basic FSI+ Premium FSI+ TDR) with the payment of premium is permissible.
5. Total permissible FSI was 127.37 sq.m now it is 2270.89 sq.m. Total permissible FSI has been increased by 56%.
6. Front margin was 3.00m for 9.0m wide road now also it is 3.0m for 9.0m wide road.
7. Rear and Side margin formula was H/4 subject to minimum 3.0m for residential building. (where H=Height of building). Now for building height more than 15.0m it is H/5. Provided further that building height for calculating the marginal distances shall be exclusive of height of parking floors up to 6.0m.
8. Earlier the Balconies were not allowed to be enclosed in room, now it is permissible to enclose the balcony in room up to one third of the room dimensions.
9. Balcony to plot distance was 3.0m now it is 2.0m only. There is 40% decrease in balcony to plot distance.
10. In old byelaws only 22 tenements /flats were sanctioned in new UDCPR Regulations 27 tenements/flats has been sanctioned i.e. there is 20.40% increase in tenement density.
11. Earlier 5 floors (G+4) were sanctioned now 6 floors (G+5) have been sanctioned on the same plot, it means building height has been increased by 18.18% in new UDCPR Regulations.
12. For calculating the side and rear marginal distances parking floor height up to 6.0m is exempted from Building height in new UDCPR regulations, earlier there was no such exemption




Old Byelaws New UDCPR Regulations

*Fig. 3: Site Plan of old D Class byelaws and New UDCPR Regulations*

## CONCLUSION

The impact of new UDCPR Regulations is significant on residential buildings compare to old D class byelaws in Amravati City. New UDCPR Regulations are favorable in case of residential buildings as more number of flats can be accommodated now on the same plot than earlier. In old D Class byelaws 22 number of flats were sanctioned but in new UDCPR regulations 27 flats has been sanctioned on the same plot it means there is a increase of 20.40% in number of tenements. Additional FSI on the payment of premium has been increased to 50% of plot area form 30% of plot area. Ancillary FSI up to 60% of total potential for residential use has come into force. Building height has increased by 10.17%. Total permissible FSI is 56% more than old D class Byelaws. Enclosed balcony is permissible now earlier it was not permissible. Balcony to plot distance which required to be left open was 3.0m now it is 2.0m only. For calculating the side and rear marginal distances parking floor height up to 6.0m is exempted from Building height in new UDCPR regulations, earlier there was no such exemption.

Finally it is concluded that more FSI, Building height, number of tenements are available in new UDCPR regulations compare to old D class byelaws which are helping in minimizing the conversion of land under agricultural use to non-agricultural use. It is also encouraging the high rise building culture which will ultimately boost the city's overall development.

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