



## **To Development Layout of Land for Urban Areas as Per UDCPR.**

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### **ABSTRACT**

The aim of this project is to identify the various factors which impact on layout approval and sanctioning of N.A. order of various land development. In the current period of stage of development land is one of the premium assets of the holder. The concept Masterplan Will Provide a guide for development of a property over the next 25 to 30 years. It will ensure that the vision of the planner for the property is reflected in the eventual development of the Property. The layout planning for urban areas as per UDCPR is technical and political process that is focused on the development of land use. 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.

Keywords: Layout, Land, N.A. order, Development, Commercial, Residential, Highways, Roads, Zones.

### **1. Introduction**

In the current period of stage of development of land is one of the premium assets of the holder. This premium asset is as such that the value of which is appreciating with tremendous increase in comparison with the value of built asset or even gold. The financial transaction in this field has importance if we see the economical growth of any state. Because of this reason State Government has vital role to play in Land Management and making land available for various purpose. The use of land may residential, commercial or industrial other than agriculture.

A successful *layout development* must work on many levels – financial, social and environmental. Applying for Tentative layout Approval from Town Planning Department and relate department. Conducting case study and formation on actual layout plan for development of agriculture land to non-agriculture land and giving the recommendations regarding the failure of plan from government authorities so that it could be corrected for future.

At the Period of Development of a Layout of land, the notice shall be accompanied by the sub-division/ layout plan which shall be drawn to a scale of not less than 1:500, however, for layout of land having areas 4.0 ha. And above, the plan shall be drawn at a scale of not less than 1:1000, containing the following:

- a. Scale including a graphical scale used and north point.
- b. The location within the land of all proposed and existing roads with their existing/ proposed widths and all the proposals of the Development Plan.
- c. Proper dimension of plots. And avoid south facing Plots.
- d. The location of drains, sewers, public facilities and services, electrical lines, Natural water courses, water bodies and streams etc.
- e. The statement indicating the total area of the site, area utilized under roads, recreational open spaces, playground, amenity space, and development plan reservation/ roads, schools, shopping and other public places along with their percentage with reference to the total area of the site proposed to be sub-divided/ laid out.
- f. In case of plots which are sub-divided in built-up areas in addition to the above, the means of access to each sub divided plot from existing streets.

#### **1.1 Important factors use in project**

**N.A. Land** - Non agriculture land is a land, on which any activity in the nature of development is carried over on the land which makes land unfit for cultivation.

**Permit / Permission** - A permission or authorization in writing by the Authority to carry out the work regulated Development control and promotion Regulations

**Regional Plan** - Regional Plan” means a plan for the development or redevelopment of a region which is approved by the State Government and has come into operation under Maharashtra Regional & Town Planning Act, 1966.

**Development Plan** - Development Plan” means a plan for the development of the area within the jurisdiction of Planning Authority and includes revision of a development plan and proposals of a Special Planning Authority for development of land within its jurisdictions.

**Layout Open Space / Recreational Open Space** - Layout Open Space means a statutory common open space kept in any layout exclusive of margins and approaches, at a height not more than ground level of the building unit.

**Amenity Space** - For the purpose of these Regulations, amenity space means a statutory space kept in any layout to be used for any of the amenities such as open spaces, parks recreational grounds, playgrounds, sports complex, gardens, convenience shopping, parking lots, primary and secondary schools, clinics, dispensaries, nursery, health club, sub post-office, police station, electric substation, ATM of banks, electronic cyber library, open market, garbage bin, water supply installation, electricity supply installation, sewage treatment plant and includes other utilities, services and conveniences.

**Sub division of land** - It is a simple process of divagation of land into small part which are easier to sell.

**Building Line** - (For Residential users) The line up to which the plinth of a building adjoining a street or an extension of a street or future street may lawfully extend, It includes the lines prescribed, if any, in any scheme and/ or development plan, or under any other law in force.

**Control Line** - (For Commercial users) A line on either side of a highway or part of highway beyond the building line fixed in respect of such highway by the Highway Authority.

**Permit / Permission** - A permission or authorization in writing by the Authority to carry out the work regulated Development control and promotion Regulations.

**N.O.C.**- Non-Objection Certificate.

**Owner** - The person who has legal title for land or building. (As per 7/12 extract, property card etc.)

**Road / Street Line** – The line defining the side limit of a road / street

### 1.2 Objectives

- a. To study the regulations of **UDCPR**.
- b. To design the layout for urban areas as per **UDCPR**.
- c. To draft layout plan for urban areas using **AutoCAD**.
- d. To study the standardized D.C. rules and regulations for Regional Plans in Maharashtra.
- e. Planning frame work and regulate the development.
- f. To facilitate the implementation of Master Plan and to improve the circulation Pattern of roads, water supply, drainage, street lights.
- g. Recommendations on formulation of efficient layout.

### 1.3 Methodology

- a. Studying the various paper, Journals, Technical Magazines, laws and procedure and complete information regarding Layout.
- b. By actual submitting the document and related papers regarding the government forms, stamps etc. objectives second is completed.
- c. Planning of small industrial work in related plots then regarding work additional provision is made along with other recommendation.
- d. Recommendation and suggestions for new development of the work for plotting of land layout and non-agriculture.

## 2. Roads

**2.1** Width of roads to be considered while granting development permission, unless indicated otherwise in Development Plan/ Regional Plan/ Planning Proposal/ T.P. Scheme shall be as mentioned in table below:

**Table No. 2.1**

Sr. No.	Category of Road	Width of Right of Way of Road (m)	Remarks
1	National Highway	60	Width inclusive of 12m. Service roads on both sides.
2	State Highway	45	Width inclusive of 9m. service roads on both sides.
3	Major Dist. Road	24	No service road required.
4	Other Dist. Road	18	No service road required.

5	Village Road	15	No service road required.
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**2.23.3.2 Roads / streets in Land Sub-division or Layout**

**A) For Residential Development-** The minimum width of internal road in any layout or subdivision of land shall be as given in Table No.2.2A.

**Table No.2.2A - Internal Roads for Residential Development**

Sr. No.	Length of Internal Road in Layout / Sub division (m)	Width of Internal Road in Layout / Sub Division (m)
i	Upto 150	9.00
ii	Above 150 and upto300	12.00
iii	Above 300	15.00

**Note -** For layout or part of layout where plots of 100 sq.m. or less are proposed for Economical weaker Sections (EWS), 4.5 m. wide road of length upto 60 m. and 6 m. wide road of length upto 100 m. may be permitted so that EWS plots shall abut on both sides of such roads.

**B) For Other than Residential Development :**The minimum width of internal road in any layout or subdivision of land shall be as given in Table No. 2.2B

**Table No.2.2B - Internal Roads for non-residential Development**

Sr. No.	Length of Internal Road in Layout / Sub division (m)	Width of Internal Road in Layout / Sub Division (m)
i	Upto 150	12
ii	Above 150 and upto300	15
iii	Above 300	18 or more

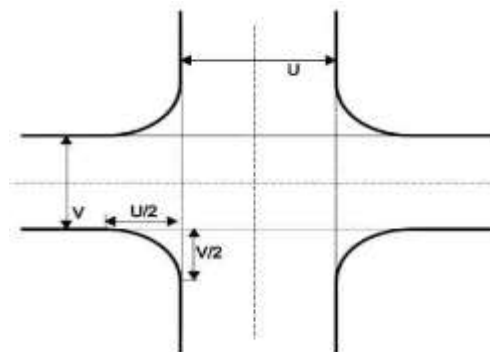
**C) Group Housing Scheme :**In case of group housing schemes, minimum width of internal roads shall be as given in Table No. 2.2C

**Table No. 2.2C - Internal Roads for Group Housing Scheme**

Sr. No.	Length of Internal Road (m)	Width of Internal Road (m)
i	Upto 150	7.50
ii	Above 150 and upto300	9.00
iii	Above 300and upto 600	12.00
iv	Above 600	15.00

**2.3 Intersection of Roads**

At junctions of roads meeting at right angles, the rounding off at the intersection shall be done with the tangent length from the point of intersection to the curve being half the road width across the direction of tangent as shown in Fig. 2.3A. The building shall also set back at required marginal distance from this rounding off.



**Fig. 2.3A - Rounding off at junctions of right angled intersections**

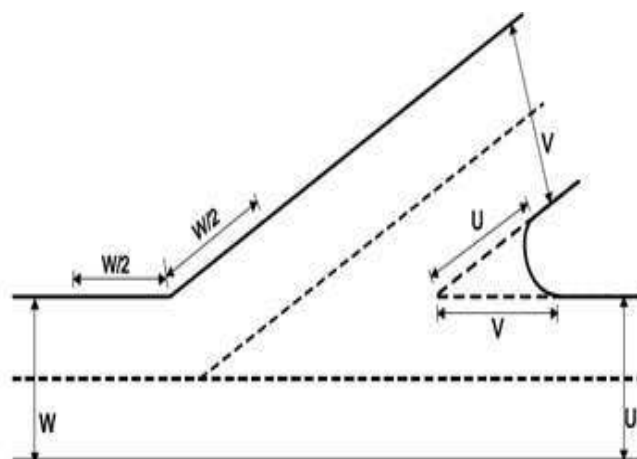


Fig. 2.3B - Rounding off at junctions at acute/ obtuse intersections.

### 3. Conclusion

a. The overall Project Concludes the necessity of layout planning for proper zoning. Identifying the proper zone is an important task for defining effective and efficient planning. Measures are discussed and suggested for successful layout approval.

b. The role of government authority in the layout planning is that they shows us the path that how to prepared a plan with respect to rules and byelaws.

c. The open space required is depends on density of population according to standard the open space for outdoor recreational purpose should not be less than 1.0 hect. or 2.5 hect. For 1000 population. Hence the required of open space for a residential neighborhood unit of 10000 population will be: parks for children 1hect, parks and and garden 2 hect. Within 1km is used.

d. The approach for land which is to be developed is find out with the adjoining land which is already developed by considering their approach road it should be connects to the proposed layout plan.

e. The zones are divided into the four categories i.e., residential, commercial, industrial and recreational zone. For zoning purpose, the usual percentage of each zone in a normal town varies for residential 40-50 %, commercial zone 2-5%, industrial zone 2-25% and recreational zone remaining percentage.

f. The goal of a new integrated approach to planning the use and management of land resources is to make optimal and informed choices on the future uses of the land.

g. By adopting certain proper planning technique we can develop a proper suitable and systematically develop plan.

h. Formulation of actual layout plan for development of agriculture land to nonagricultural land and giving the recommendations regarding the failure of plan from government authorities so that it could be corrected for future.

i. The land which is to be intended to be used as a layout purpose should be zoned on residential zoning.

j. Planning framework for sanctioning of layout for proposed area right from planning stage to completion stage is controlled by various authority the mainly of them are town planning department.

k. For developing any layout zoning is very essential factor.

### References

- [1] Unified Development Control Promotion Regulations For Maharashtra State, 2022
- [2] Ashwini Sanjay more, "Development of Layout as Per UDCPR for Jalgaon District", International Journal of Research in Engineering, Science and Management, ISSN(Online): 2581-5792, Volume 5, Issue 5, May 2022, PP 243 – 245.
- [3] Sameer Gujar, Amit Deshmukh and Reshu Gupta, "Review of open space rules and regulations and identification of specificities for plot-level open spaces to facilitate sustainable development: An Indian case", IOP Conf. Series: Earth and Environmental Science, doi:10.1088/1755-1315/1084/1/012073, 2022.
- [4] Supriya Tulsidas Yeole, Dr. Pankaj Pitamber Bhangale, "New Unified UDCPR Rules Compare with Old Rules in Residential Building" , INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH IN TECHNOLOGY , ISSN: 2349-6002, Volume 7, Issue 11, April 2021, PP 713 – 719.

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- [5] K. PRABIN KUMAR1, GOPI BALA VINAY, "A STUDY ON DESIGN OF COMMERCIAL BUILDING-A REVIEW", International Journal of Pure and Applied Mathematics, ISSN: 1314-3395, Volume 119, No. 17, 2018, PP 2785-2788
- [6] Mounika.Pallapolu, Aquila Angel. Pilli, "ANALYSIS AND DESIGN OF COMMERCIAL BUILDING", International Journal of Civil Engineering and Technology, ISSN Online: 0976-6316, Volume 8, Issue 4, April 2017, pp. 1445–1451
- [7] Sagar K. Patil, "Development of Layout for Project", International Journal of Engineering Sciences & Research Technology, ISSN: 2277-9655, September, 2016, PP 743 – 764.
- [8] Fitrynadia Mohd Shahli, Mohd Ramzi Mohd Hussain, Izawati Tukiman and Nurbazliah Zaidin, "The Importance Aspects of Landscape Design on Housing Development in Urban Areas", Published by Elsevier B.V, February 2014, PP 311 - 315
- [9] Amit R Soygaonkar, Dr. Pankaj Pitamber Bhangale," Study of Job Layout for Construction Project", International Journal of Engineering Research & Technology, ISSN : 2278-0181, Volume 3, Issue 11, November -2014, PP 466 – 471.
- [10] Schlebusch, Sanmarie&CilliersElizelle, Juane,(2013),Planning For Sustainable Communities: Layout And Design Approaches,Planning For Sustainable Communities 49th ISOCARP Congress,2013
- [11] Schlebusch, Sanmarie & Cilliers Elizelle, June, (2013), Planning for Sustainable Communities: Layout and Design Approaches, Planning for Sustainable Communities 49th ISOCARP Cogress,2013
- [12] The Maharastra Land Revenue (Conversion of use of land and Non Agriculture Assesment) Rules, 1966