

Violation of Development Control Rules and Regulations-A Case Study at Neeladri Nagar, Electronic City Phase-1, Bangalore-560100

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Abstract: Housing is the prime necessity of human beings. Government has made many policies to encourage the housing activities. Building Byelaws effect housing activities very significantly in terms of its utilization and cost. Building Byelaws controls the number of dwelling units, in some cases, that can be accommodated in a given parcel of land by implementing the essential clauses such as Built Up Area, FSI/FAR, Maximum Building Height, Margins to be kept open in front and around the buildings, etc. In the present study, an attempt has been made to study the violations of building byelaws at Neeladri Nagar, Electronic City Phase 1, Bangalore. The observed values are compared with standard values and deviations for each parameters were found out. The study reveals that the average violation in road width is 49%, plinth height is 87.17%, height of building is 73.32%, front setbacks is 98.36%, rear setbacks is 38.93%, left setbacks is 51.61%, right setbacks is 68.29%, plot coverage is 53.9%, floor space index is 208.8%.

Keywords: Neeladri Nagar, Built-up area, Setbacks, Height of building, FSI/FAR

I. Introduction

The building byelaws are defined as the standards & specifications designed to grant minimum safeguards to the workers during construction, to the health & comfort of the users & to provide enough safety to the public in general. The regulation set out the basic requirements to be observed in the design and construction of buildings. They are applied to new building and also to extensions, material alterations, and certain changes of use of existing buildings. A byelaw is a rule or law established by an organization or community to regulate itself, as allowed or provided for by some higher authority. The higher authority, generally a legislature or some other government body, establishes the degree of control that the by-laws may exercise. By-laws may be established by entities such as a business corporation, a neighborhood association, or depending on the jurisdiction, a municipality. A building byelaw is a local law framed by a subordinate authority. It channelizes to achieve the concepts & policies outlined in the Master plans of the city, in order to give a particular architectural character to the city. Bye-laws are an integral part of many organization yet they are often misunderstood because there are different policies and procedure concerning how bye-laws can be established or govern an organization. The town planning scheme controls the uses of land, roads etc.

II. Study Area

In the present study Neeladri Nagar (FIGURE 2.1) has been considered for the study area because of the fast development in the area. Neeladri Nagar is situated at Electronic city phase 1, Doddatogur village, Begur Hobli, Bangalore south taluk and Bangalore District. The Neeladri Nagar layout consists of 17 cross and 504 sites in the layout. Almost all site in the layout are of 40*60 and few sites are of 30*40 site. The width of the roads in the layout are of 30 feet's. Electronic city within Bangalore is the largest industrial hub in Bangalore, housing about 300 companies and a very large work force of employees. Electronic city consists of three phases: phase I, phase II, and phase III. Phase II is spread over 340 acres. Additional land of 122 acres was acquired in 2003 for the formation of phase III. While the phase I is completely to the western side of Hosur road, phase II lies on either side. To simply the area has been named as west and east. Electronic city comprises of all parts of phase I and small parts of phase II. Electronic city comprises of rest of phase II. Due to the increase in companies, the resident for the employees are highly demand in electronic city. Neeladri Nagar suffers a major development due to high demand. All the layouts in Neeladri Nagar are constructed as apartments and the value of the apartments is also very high. Neeladri Nagar sees a high traffic between Electronic city and Bannerghatta road at all hours. This road with high rise apartments on either side, is the home for lakh of E-Citizens. However Neeladri Nagar is deprived of civic amenities (road, pavement, street light, Cauvery water) due to negligence by all authorities.

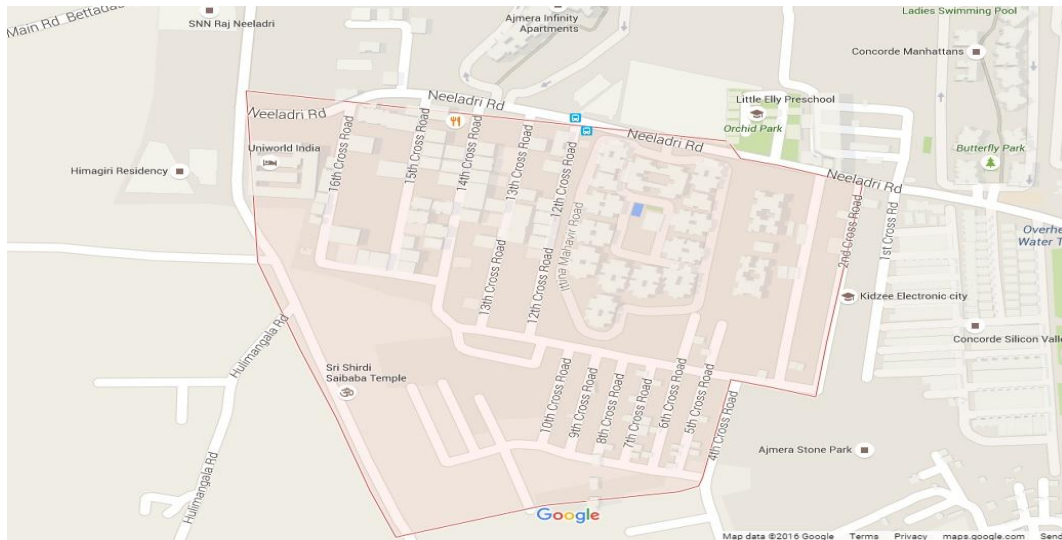


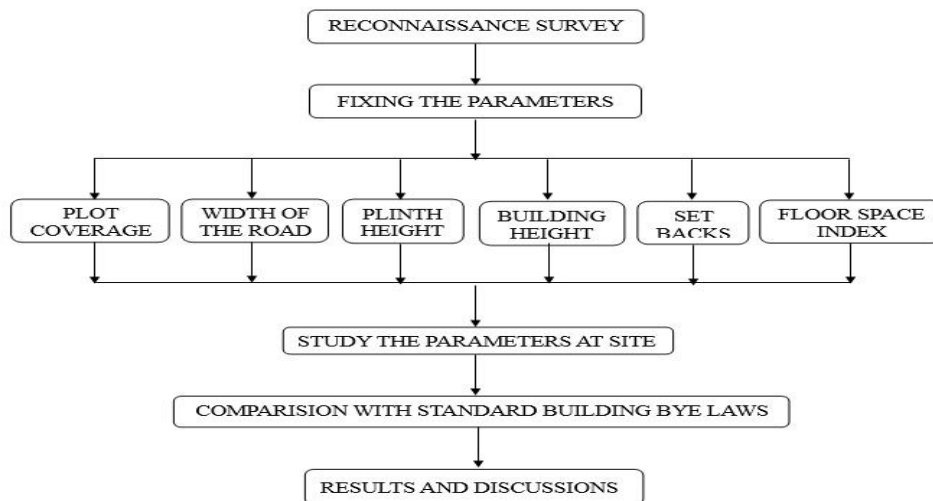
Figure 2.1 Layout Of Neeladri Nagar

The aim of this study is to identify various development control rules which are being violated. This study was conducted in Neeladri Nagar, Electronic city Phase 1, Bangalore. The necessary basic information about the Neeladri Nagar including the plot sizes, types of buildings, road facility, water supply, sanitary arrangements and the parameters which are to be considered for analyse are fixed. The parameters which are considered for analyses are,

- Floor area ratio
- Plot coverage
- Height of the building
- Plinth height
- Width of the road

The parameters taken for consideration are analysed in the site by using tape and other measuring equipments and then the values obtained in the site are compared with the standard values as prescribed by Bangalore building byelaws. At last, the results obtained from calculation are analysed and the violations are observed.

III. Methodology



Bangalore building byelaws 2003 has certain standard values for floor space index, plot coverage, height of the building, plinth height, width of the road. The standard values are given below (Figure 2.2),

COVERAGE AND FAR FOR RESIDENTIAL, COMMERCIAL, PUBLIC AND SEMI-PUBLIC, TRAFFIC & TRANSPORTATION, AND PUBLIC UTILITY BUILDING

Plot Area in Sq. mtr.	Residential		Commercial		Public & Semi Public T&T & Public Utilities		Road width (Mtrs)
	Plot Coverage Max.	F.A.R. Max.	Plot Coverage Max.	F.A.R. Max.	Plot Coverage Max.	F.A.R. Max.	
A – INTENSELY DEVELOPED AREA							
Upto 240	65%	0.75	65%	1.00	60%	1.00	Upto 6
Over 240							
Upto 500	60%	0.75	60%	1.00	55%	1.00	Over 6 upto 9
Over 500							
Upto 750	60%	1.00	60%	1.25	50%	1.00	Over 9 upto 12
Over 750							
Upto 1000	60%	1.00	60%	1.25	50%	1.25	Over 12 upto 15
Over 1000	60%	1.25	55%	1.50	45%	1.25	Over 15
B – MODERATELY DEVELOPED AREA							
Upto 240	65%	1.00	65%	1.25	60%	1.00	Upto 9
Over 240							
Upto 500	60%	1.25	60%	1.50	55%	1.25	Over 9 upto 12
Over 500							
Upto 750	60%	1.25	60%	1.50	50%	1.25	Over 12 upto 15
Over 750							
Upto 1000	60%	1.50	60%	1.75	50%	1.50	Over 15 upto 18
Over 1000	60%	1.75	55%	1.75	45%	1.50	Over 18
C – SPARSELY DEVELOPED AREA							
Upto 240	65%	1.00	65%	1.25	60%	1.25	Upto 9
Over 240							
Upto 500	60%	1.25	60%	1.50	55%	1.50	Over 9 upto 12
Over 500							
Upto 750	60%	1.50	60%	1.75	50%	1.50	Over 12 upto 15
Over 750							
Upto 1000	60%	1.50	60%	1.75	50%	1.80	Over 15 upto 18
Over 1000	60%	2.00	55%	2.00	45%	1.80	Over 18

Depth of site in mtrs.	Residential		Commercial		T & T, P.U. & Public and Semi-Public	
	Front	Rear	Front	Rear	Front	Rear
Upto 6	1.00	-	1.00	-	1.50	-
Over 6 upto 9	1.00	1.00	1.50	-	1.50	1.50
Over 9 upto 12	1.50	1.50	1.50	1.50	3.00	1.50
Over 12 upto 18	3.00	1.50	3.00	1.50	3.00	1.50
Over 18 upto 24	4.00	3.00	3.50	3.00	4.50	2.00
Over 24	5.00	3.50	4.50	3.00	6.00	3.00

Width of site in mtrs.	Residential		Commercial		T & T, P.U. & Public and Semi Public	
	Left	Right	Left	Right	Left	Right
Upto 6	-	1.00	-	-	-	1.50
Over 6 upto 9	1.00	1.00	-	1.50	1.50	1.50
Over 9 upto 12	1.50	1.50	1.50	1.50	1.75	1.50
Over 12 upto 18	1.50	3.00	1.50	3.00	2.00	3.00
Over 18 upto 24	2.50	3.50	2.50	4.00	3.00	3.00
Over 24	3.00	4.00	3.00	4.50	3.50	4.50

Figure 2.2 standard values for setbacks, height of building, width of road, plot coverage, FAR according Bangalore Building Byelaws 2003

IV. Results And Discussions

The calculated results along with deviations with respect to floor space index, plot coverage, height of the building, plinth height, width of the road are tabulated in the tables below, in the present work a complete set of results from analysis of violations in Neeladri Nagar is provided in above table. The following is a brief summary of these findings.

Width of the Road:

According to Bangalore building byelaws 2003, width of the road depends on the area of plot. As per code the width of the road should be 59 feet but width of the road in study area is 30 feet. Average percentage of violation is 49%

Plinth Height:

According to Bangalore building byelaws 2003, average plinth height of buildings is 2 feet. In this study area almost most of the plinth heights of buildings are violated. Average percentage of violation is 87.17%

Height of Building:

According to Bangalore building byelaws 2003, height of building for 30 feet road is G+2 i.e., 30 feet. In this study area almost all the height of buildings are violated. Average percentage of violation is 73.32%

Set Backs

According to Bangalore building byelaws 2003, set backs of building depends on the width and depth of plot.

Front:

In the study area, the violation of front setbacks is mostly occurred. Average percentage of violation is 98.36%

Rear:

In the study area, the violation of rear setbacks is less than front setbacks occurred. Average percentage of violation is 38.93%

Left:

In the study area, average violation in left setback is 51.61%

