



SCIP-03: PROGRAM MANAGEMENT, PROJECT PREPARATION AND IMPLEMENTATION SUPPORT FOR PLANNING AND DEVELOPMENT DEPARTMENT

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ZONING GUIDES & TOOLS

DRAFT

REQUITO V. BELLOSILLO

REGIONAL ECONOMIC & URBAN DEVELOPMENT ADVISOR

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Contents

1.0	INTRODUCTION	1
2.0	Elements of Zoning Regulations	1
3.0	Zone Classifications	2
4.0	Zoning Map and Zone Boundaries	3
4.1	Zoning Map	3
4.2	Zone Boundaries	3
5.0	Controls on Developments	4
5.1	Allowed and Permissible Uses	4
5.2	Density and Bulk Controls	5
5.3	Performance Standards	6
5.3.1	Urban Design	6
5.3.2	Environmental	8
5.3.3	Public Infrastructure	9
6.0	Permissible Uses	10
7.0	Appeals for Exceptions	10
7.1	Option 1: Outright denial for all cases	11
7.2	Option 2: Grant a Special Use Permit for all cases	11
7.3	Option 3: Grant a Special Use Permit for case (2) only/ outright denial for cases (1) and (3)	11
8.0	Implementation Framework	11
8.1	Administration and enforcement	11
8.1.1	Possible administrative arrangements	12
8.1.2	Functions	12
8.2	Relationship to building/ construction permit	12
8.3	Local Zoning Board of Appeals	12
8.4	Non-conforming uses at the time of the passage of the regulations	13
8.5	Review of Zoning Regulations	14
8.5.1	Monitoring	14
8.5.2	Evaluation	14
<u>LIST OF TABLES</u>		
	Table 1 – Typical Zone Classes	2
	Table 2 – Example of a Zone Description	5
APPENDIX A – Sample Outline		15
REFERENCES		17

ZONING GUIDES & TOOLS

1.0 Introduction

Zoning regulations¹ are one of the major implementation mechanisms of the Master Plan. These regulations interpret and translate the policy objectives provided in the Structure Plan and Land Use Plan into implementable terms. Zoning regulation's importance lies in it being used as a management tool of governments to guide individual developments towards a broader vision of the city as embodied in the Master Plan.

Zoning regulations are formalised through a zoning ordinance. Its application represents an exercise of the government's police power and, in this regards, the power to regulate the use of private property to promote public welfare. Other similar forms of the exercise of police powers include building control ordinances and land development regulations. It is, however, recommended that the zoning ordinance should be made a document distinct from building control and land use regulations in order to have a clear understanding of their various purposes.

This document is intended to support Sindh's Directorate for Urban Policy and Strategic Planning (DUPSP) in the development of "a simplified and practical land use zoning system..." and "suitable zoning guides and tools..." under Task A4 of Sindh Cities Improvement Investment Program (SCIP) – 03.² Focus was given to discussing the key elements of a zoning ordinance and options on how to approach the formulation of relevant provisions were presented. A sample outline of a zoning ordinance is presented at the latter part of the document.

The DUPSP will be oriented to these Guides and Tools at the first part the second phase of work, Orientation/ Situation Analysis, under Task A4. The outline presented herein will serve as the working base for the Situation Analysis portion of the second phase. This will be the point where the options presented will be discussed further and, depending on consensus reached, will be consulted further with concerned provincial and local government offices. A draft model zoning ordinance will be developed at this stage through the collaborative efforts of the DUPSP and the SCIP – 03 Consultant Team.

The draft model zoning ordinance will then be pilot-tested in Sukkur at the third phase of work which is Planning. The expected outputs at the end of Phase 3 are: (1) documentation of lessons learnt from Sukkur, (2) technical notes on how these Guidelines should be finalised, and (3) draft Zoning Ordinance for Sukkur.

2.0 Elements of Zoning Regulations

Zoning regulations typically contain the following:

- Statement of authority to enact, administer and enforce the zoning-ordinance
- Statement of the purpose(s) of the zoning ordinance
- Definition of zoning-related terms
- Statement of zone classifications/ sub-classifications and presentation of zoning map(s)

¹ Some cities, such as Mumbai, India, call it Development Control Regulations – term which has roots from the United Kingdom.

² Sindh Cities Improvement Investment Program – 03 Terms of Reference, September/ October 2011

- Descriptions of zone regulations (as to use, density and building control, performance standards, etc.); and
- Administration and enforcement provisions

This document focuses on the substantive elements particularly on zone classifications, zone regulations and certain contentious provisions at the administration and enforcement portion.

3.0 Zone Classifications

Zone classifications and sub-classifications emanate from the Land Use Plan. A typical zoning classification system, derived from the land use classification standards of the Karachi Building and Town Planning Regulations 2002³ and incorporating some modifications is presented below:

Table 1. Typical Zone Classes

Major Classification	Sub-classification
Residential	Low density residential
	Medium density residential
	High density residential
Commercial	Low density commercial
	Medium density commercial
	Central business district
Parks and playgrounds	
Institutional	Government
	Health and Welfare
	Education
	Religious
Manufacturing	Large-scale manufacturing/ heavy industry
	Small-scale manufacturing/ light industry
Utilities and Municipal Service Facilities	Water supply
	Sewerage
	Solid waste disposal
	Electricity
	Gas
	Communication
Burial grounds	Others
Transportation right-of-way	
Protection Zones	Buffer around industrial facilities
	Residual vacant land
Agriculture and Forestry	Agricultural
	Fishing
	Irrigation
Forestry	Woodlands
Mines and Quarries	
Salt Pans	
Water bodies	Sea, lakes, ponds, rivers
Notified areas	Historic sites
	Restricted land
Others	

³ Chapter 19 General Standards: Land Use Classification

Other zone classifications and sub-classifications may be identified depending on local needs and preferences. Some cities may adopt innovative nomenclature particularly when employing mixed-use zoning schemes to achieve flexibility. Another common tool that introduces flexibility is to designate an area or areas as Planned Unit Development (PUD) zone. PUDs are used for large scale, unitarily-planned, and mixed-use developments such as new townships where commercial, residential, recreational, and even industrial uses may be planned under one setting. If the area that has been notified to be planned along these lines, the local government may consider classifying it as a PUD zone but the developer has to provide standards that are in harmony with, if not superior to, those provided in the zoning regulations. These set of standards will have to be reviewed and approved by the local government and incorporated into the zoning ordinance.

Whilst innovation is encouraged, it is worthy to consider coming up with a certain level of standard in classifying lands in the Secondary Cities to facilitate planning and implementation co-ordination. Unitary uses pose no problem such as designating areas purely for residential, commercial or agricultural. For mixed-use areas, it is suggested to combine the basic terms where the envisaged dominant land use is named first. Thus, a Residential-Commercial Zone will be easily recognisable as an area intended predominantly for residential purposes but where support commercial developments may be allowed.

4.0 Zoning Map and Zone Boundaries

4.1 Zoning Map

The zoning map should exactly correspond to the various classifications and sub-classifications that are being presented. The zoning map should clearly provide the following information:

- Boundaries of the zoned area which includes the urban and peri-urban area
- Boundary per Union Council
- Individual zones with clear boundaries
- Existing and proposed roads

There will most likely be a “master zoning map” which will show the major zone classifications and a series of sub-classification zoning map. Hard copies of these should be made accessible to the public. Map scales may have to be made uniform and these normally range from 1:10,000 to 1:15,000.

4.2 Zone Boundaries

Zones should likewise be clearly indicated through a uniform colour coding scheme, at least for the major zone classifications. Boundaries should be clearly defined, such as following street blocks or, if along roads, specifications of “one lot deep” or 50m deep.

Existing roads that are programmed for expansion should be clearly marked and noted in the zoning map and in the ordinance itself. Property owners have to be notified that they should provide the required easement and these will define the applicable zone boundaries in their locations.

A proposed road network layout should be prepared for the yet un-built portions of the peri-urban area. The zone boundaries may then be defined by the road blocks. It is important that properties that will be affected by these roads be notified as early as possible.

5.0 Controls on Developments

Development applications are controlled by three basic and inter-related regulations. The first of these are the Use regulations which check a proposal's compatibility with the intended overall use of the zone where it will be located at. The second means are Density and Bulk Controls which seek to ensure that developments are encouraged in areas where high growth intensities are intended and discouraged in areas where infrastructure capacities or environmental conditions pose limiting factors. The last set is the Performance Standards which, in turn, ensure that high quality and equitable developments are achieved.

5.1 Allowed and Permissible Uses

Each zone should be described according to purpose (through a Policy Statement) and a list of allowed uses. Allowed uses are "uses by right" and zoning permission should readily be given based on the stated use provided that compliance with the other relevant provisions of the zoning regulations, such as on building bulk and other standards, are achieved. Allowed uses may also be called the basic use of the zone. The set of allowed uses may be single in nature, such as everything in list is residential use, or it may be of mixed nature such as the list includes both residential, commercial, institutional and others deemed appropriate for the zone in consideration.

Some regulations, on the other hand, include a list of permissible uses to provide more control to proposed developments. Permissible uses are deemed compatible with the basic use but regulators feel that these need to be evaluated further to ensure that there will be minimal or no detrimental effect to the neighbourhood. For example, while neighbourhood scale commercial uses are deemed appropriate in a predominantly residential zone, regulators may opt to put the former in the Permissible Use list to allow them to further check designs and operations and ensure that the proposal will not disturb the neighbourhood. Certain procedures are normally applied in the evaluation such as additional documentary requirements such as traffic impact assessment or public hearings.

Some zoning regulations have a closed list and anything not listed will not be allowed. This is the traditional approach which is easy to implement, gives no room for arbitrary decision-making and no space for negotiations. It has, however, been challenged for quite some time due to in-ability to react to changing market conditions and technological innovations. In response to this, some regulations provide an open clause which indicates that the list provided is not exhaustive nor all inclusive. This anticipates a future application for a certain use which may not have been considered during the preparation at the time when the zoning regulations were prepared. Thus, the zoning authority reserves the right to review applications for uses that are not on the list based on merits at the time such application is made. Rapid technological progress and the wealth of innovative ideas give credence to such consideration.

Some zoning regulations are also designed such that the allowed uses per zone have a pyramidal relationship. This means that uses allowed at a lower land use intensity, say Low Density Residential, will be allowed in a zone of higher intensity, say High Density Residential, but not vice versa. While intra-zonal movements are allowed, inter-zonal movements are not. Thus, residential uses will not be allowed in Commercial Zones and vice versa.

An example of a zone description, with allowed and permissible uses, is shown below.

Table 2. Example of a Zone Description

Major Classification: Residential Zone	
Policy statement:	
Residential areas form the majority of land uses in the city. As a general policy, these residential areas should be developed with accessible community facilities such as with neighbourhood scale parks and recreation, convenience stores, places of worship and similar uses.	
Sub-classification: Low density residential	
Policy statement:	
These areas are intended for low-rise sprawling developments with ample landscaped ground open spaces. Low-density residential areas include the existing and proposed locations of gated residential communities.	
List of allowed uses:	Detached housing, duplex housing
List of permissible uses that may be allowed (subject to approval of local authority):	Neighbourhood-scale community facilities and amenities such as small retail stores, groceries, parks, playgrounds, nursery schools, etc. along with small professional business offices such as medical clinics, dental clinics, law offices, etc.

In the process of developing the list of uses, it is important to consider the ease of securing zoning permission which is similar to an evaluation of the ease of securing a business permit. If the city wants to encourage the proliferation of small businesses as part of its Master Plan or Local Economic Development Strategy, it is advisable that these be incorporated in the list of basic or allowed uses. It may be noteworthy to examine the merits of coming up with a good mixture of what comprises a well-functioning neighbourhood, such as houses in convenient proximity to a community store, and create “selectively mixed zones.”

Getting a zoning permission is one of the first steps in seeking a building permit or business permit hence undue bureaucratic delays should be avoided. Improperly considered lists of allowed uses may cause a lot of applications to seek Special Use Permits or exceptions to the regulations which are tedious and time-consuming processes.

5.2 Density and Bulk Controls

Density and bulk controls provide upper limits to building size and, in some instances, to population. These controls are forms of incentives and dis-incentives and their application can direct growth to where it is wanted to go and discourage it

in locations deemed un-suitable. These are expressed in numeric terms and are normally determined through an assessment of the following, amongst others:

- Land values - higher limits in high value areas such as CBDs
- Existing land use, density and bulk patterns – present realities are sometimes approximated in setting standard values
- Planned growth areas – higher limits in areas that are planned to be growth areas as called for in the Master Plan
- Access to service infrastructure - availability and quality of service infrastructure can support higher densities; conversely, inadequacy of service infrastructure may result to low density regulations unless there are plans for upgradation
- Neighbourhood stability – low density regulations in traditional or high-value residential neighbourhoods
- Land constraints – low density regulations in areas that are not stable such as on hill slopes or for lands with high scenic values that have to be preserved for public enjoyment
- Surrounding urban environment – low density requirements due to proximity to an airport or a historically prominent landmark

Tools that are normally used to control development densities are building footprint to plot area ratios, floor areas ratios, and compulsory open space requirements. It is recommended that footprints and floor area ratios be made uniform for all lots, irrespective of size, within a certain zone classification/ sub-classification⁴. This will create variations in development densities amongst the zones. For instance, densities may be made highest in the CBD due to high land values or in new growth areas called for in the Master Pan. On the other hand, these may be rated lowest in Low Density Residential Zones in the peri-urban area or in locations where natural scenic views are to be preserved.

5.3 Performance Standards

Performance standards are used to ensure that individual developments are guided to achieve certain objectives which may pertain to the city's aesthetic qualities, its environment or the capacity of its service infrastructure. It is important to ensure that performance standards are consistent with and can reinforce existing regulations such as building controls and environmental requirements.

5.3.1 Urban Design

Zoning regulations can guide individual developments towards the creation of safe and high quality neighbourhoods and at the same time provide opportunities for the enhancement of property values through good urban design. Urban design-related regulations may pertain to the following:

- Building heights

The increasing heights of buildings often prove to be contentious in growing cities, particularly near established residential neighbourhoods.

⁴ As a reference, KBTR 2002 provides varying Building Bulk Standards depending on plot size. These standards may be used as references in developing similar control parameters for the Secondary Cities.

A tall building amidst a predominantly low-rise residential area has the potential to impair the entry of light and ventilation, cause the loss of privacy and/ or create nuisances, hazards or inconveniences to adjacent developments. These should be addressed at the early stages in the preparation of zoning regulations such as in conducting public hearings and discussing the proposed building height provisions with key stakeholders. Once finalised, building height provisions can help shape the city's urban form through its skyline.

- Building facades

Zoning regulations should encourage good architectural design of buildings as these contribute to the overall quality of the urban area. Box-type malls which are common phenomenon for low-cost shopping facilities and extensively long stretches of row apartments should be avoided.

- Firewalls

Firewalls are good means to maximise the use of properties. However, these are un-appealing, block the entry of light and air, and may tend to be a nuisance to adjoining properties. Consideration should be given whether firewalls should or should not be allowed in certain locations in the city.

- Fencing

To the extent possible, the design and construction of property fences along roads should be regulated. Extensive, tall, and solid concrete fences are not only un-attractive from an overall urban quality point of view but are also un-safe for pedestrians since these areas are normally bereft of other people. The preparation of zoning regulations should consider requiring "see-through" fences for properties along roads to achieve good quality urban environment.

- Parking spaces/ buildings

While building codes normally set the standards for quantity of parking slots, zoning regulations can provide standards regarding their layouts to attain certain objectives. These may include objectives such as (1) minimise roadside friction by requiring distinct single points of entry and exits only; (2) ensure ample ground level landscaped areas (requiring planted strips bordering a parking space/ lot and adjoining public sidewalk); or (3) ensure accessible and vibrant ground level spaces (requiring that ground levels of parking buildings be used as commercial spaces)

- Open parking lots

Wide, open, un-landscaped and concreted parking lots should be avoided. These are normally observed sprawling developments which

provide a significant area for vehicular parking. These types of development heat islands caused by lack of vegetation and a heat-reflecting ground surface. In these cases, zoning regulations should require that they be landscaped and provided with permeable ground surface cover. This will not only alleviate heat, but will contribute to the groundwater and surface drainage regimes as well.

- Public transport facilities

Developments such as schools, assembly halls, sports stadia, shopping malls and the like can attract a significant volume of public modes of transportation like rickshaws, minivans and taxis and thus have the potential to obstruct through traffic. Within certain project thresholds (such as total floor area), consideration should be given if these types of developments should already be required to provide on-site public transport parking spaces and lay-bys.

- Network of green and open spaces

This will entail requiring development proposals (of certain thresholds in terms of plot area) to provide tree-lined roads or landscaped parks that should be made accessible to the occupants and/ or the general public. These green and open spaces should then be notified in order to prevent future conversion into built-up areas.

As applicable, zoning regulations can also encourage the provision of landscaped roof decks and urban gardens.

- Heritage conservation and preservation

Heritage zones may be identified and regulations regarding their preservation put forward. Such regulations may entail the preparation of a specialised set of heritage conservation guidelines which will be applied in consonance with the zoning regulations.

- Scenic views

Regulations to control building height, bulk, orientation, fencing and landscaping should be provided in order to preserve scenic views for public enjoyment.

5.3.2 Environmental

Zoning regulations can also enable individual developments to become environment-friendly. Some aspects that may be addressed by zoning are provided below:

- Permeable surfaces

Controls to optimise ground level coverage of permeable surfaces should be considered. This is in order to (1) lessen surface water runoff

thus lessening each project's contribution to local flooding, (2) reduce local temperatures that are further heightened by man-made impermeable surfaces, and (3) provide opportunities to re-charge the groundwater.

- Groundwater supply

Development proposals that will entail excessive and potentially non-sustainable draw out of groundwater, such as golf courses and soft drink bottle companies, should be judiciously reviewed. These may be required to exhibit proof that their water requirements will not be detrimental to city residents.

- Natural watercourses and water bodies

Means to ensure that natural watercourses within plots are not unduly altered, built-upon, blocked nor should their discharge velocities reduced should also be considered in the zoning regulations. Rivers, streams, lakes and ponds should be protected from sedimentation and erosion damage.

- Floodplains

Whilst unprotected by appropriate flood control structures such as dikes, floodplains should be declared as a notified area where developments should not be allowed. These areas should not be altered, filled and/ or built-upon.

- Stormwater run-off

The zoning regulations should provide that proposed developments will not cause inundation effects on nearby areas. Appropriate drainage design should be required to ensure that an appropriate drainage system, to include outfalls, is provided in the proposal.

- Sloping areas

Developments on sloping areas should be required to provide adequate and appropriate slope, erosion and soil conservation measures as well as drainage design considering possible landslide and inundation effects to properties located downstream.

These areas may also be designated as low-density development zones where building footprints and floor area ratios are maintained at low levels.

5.3.3 Public Infrastructure

The zoning regulations should provide that developments will not cause excessive requirements at public cost to upgrade current public infrastructure and services. Developments should ensure that either their

requirements for public infrastructure are within the capacities of the system/s serving their properties or that they will bear the cost of augmenting these systems.

- Traffic generating developments

Thresholds may have to be established for traffic generating developments, or those that are expected to cause vehicular traffic problems. These may include large shopping malls, universities, hospitals, large housing schemes and the like which may generate and attract heavy vehicular traffic. Such developments may be required to prepare Traffic Impact Statements to warrant that proper provisions are provided to mitigate possible traffic impacts.

- Projects to affect the sewage and drainage system

Similarly, major proposals that will likely have serious effects on capacities of the existing sewage and drainage systems may be required to prepare Drainage Impact Statements (DIA). These may be large projects such as universities, shopping centres, business parks, etc. Certain thresholds would have to be provided to warrant a DIA such as gross floor area.

- Un-serviced and insufficiently serviced areas

Development applications that are located in areas that are yet un-serviced or insufficiently serviced by public infrastructure such as potable water supply, electricity supply, drainage, sewage and the like may be allowed provided the applicant will bear the costs of development and/ or upgradation of the same.

6.0 Permissible Uses

Permissible uses are those that are generally acceptable in the zone in consideration but, due to its nature, warrants closer scrutiny before a zoning permission is granted. Such permissions are often called Special Use Permits.

Evaluation will comprise a review of the standard documentary requirements of the local zoning office as well as public consultations. The latter normally involves solicitation of comments from adjoining property owners and a public hearing(s).

7.0 Appeals for Exceptions

There will be cases where development applications will seek to appeal for exceptions to certain provisions of the zoning regulations. These may take the form of any of the following: (1) exception from Use provisions; (2) exception from Density and Bulk Controls and/ or Performance Standards provisions; or (3) Exception from both of the two. Options for action are the following:

7.1 Option 1: Outright denial for all cases

This Option gives maximum opportunities to realise the Master Plan objectives, makes zoning regulations a very powerful growth determinant and facilitates implementation since there is no room for negotiation except in cases of deliberating on permissible uses. The downside is that this is a very rigid approach and does not give way for possible beneficial developments and innovative technological approaches, which may not have been foreseen to occur at the time the Master Plan and the zoning regulations were made. This is one of the reasons that cause zoning to sometimes be considered as being not market-oriented, creating artificial land scarcity, causing distortions to land prices, does not encourage design innovations and unrealistic.

7.2 Option 2: Grant a Special Use Permit for all cases

This is a highly flexible option and opens the zoning regulations to negotiation. Under this option, a procedure to review and reach a decision to grant or deny an application has to be firmly in place. This may include technical reviews and community consultations. The latter is particularly important in order to solicit the reaction of stakeholders either through public hearings or having the application publicised, or both.

The good points are that all development proposals are well considered for their benefits to the community and stakeholders get to participate in the review process. The difficulty lies in possibilities of politicised decision-making and getting public consensus.

7.3 Option 3: Grant a Special Use Permit for case (2) only/ outright denial for cases (1) and (3)

This puts a premium on the Use provisions by making it non-negotiable while providing flexibility on the technical aspects of the zoning regulations. The argument is that alternative and acceptable solutions may be provided by an applicant seeking relief from certain Density and Bulk Control provisions and Performance Standards. Or that the local government and the community (in cases where there are no objections) are willing to accept the possible consequences by having unmet technical objectives since these will be offset by the expected benefits of the proposal.

The positive points of this option are that it upholds the Master Plan objectives while providing room for technological innovation and realistic considerations. The downside is that some opportunities may be lost in the process, when an unforeseen yet beneficial application is not included in the list of Allowed and Permissible Uses.

8.0 Implementation Framework

8.1 Administration and enforcement

8.1.1 Possible administrative arrangements

There are two options to implement the zoning regulations:

- Create a new zoning office at the city government

This will entail the creation of a new office and is advisable if local capacities are present. This arrangement will bring regulation “closer to the ground” and could facilitate the approvals process. It could be that the city zoning office will be overseen by a body at the Provincial level.

- Create a new authority parallel to the Sindh Building Control Authority

This will entail the creation of a Provincial-level authority that is decentralised into regional offices following the structure of the SBCA. This new organisation may be called the Sindh Town Planning Regulatory Authority.

8.1.2 Functions

The zoning office or authority should have the following functions:

- To issue zoning permissions to developments within Allowed Uses and found in compliance with the other applicable provisions of the zoning regulations.
- To devise procedures and guidelines for the administration and enforcement of the zoning regulations.
- To issue Certificates of Non-conformance to existing developments to be non-conforming to the zoning regulations at the time of its enactment.
- To provide technical support to the Zoning Board of Appeals (ZBA) in the evaluation of applications seeking Special Use Permits and/ or Exceptions.
- To enforce the zoning regulations through the imposition of fines and found in violation of the zoning regulations.
- Maintain public records of zoning applications, zoning permissions, zoning violations, notice of non-conformance, inspection reports, and other related documents.

8.2 Relationship to building/ construction permit

The zoning permission shall be a requirement to the issuance of a building permit.

8.3 Zoning Board of Appeals

Should government opt to have Permissible Uses and entertain appeals for Exception as mentioned earlier, a Zoning Board of Appeals (LZBA) would have to be created. This will be a quasi-judicial board vested with the authority to grant or

deny applications for Special Use Permits and Exceptions.⁵ It is recommended that representatives from the following groups should constitute the ZBA:

- Local Council
- Academe (with expertise in town planning)
- Professional organisation (town planning)
- Business sector
- Non-government organisation

Depending on institutional structures, there are cases where adverse decisions of an ZBA are appealable to a higher, supervising body, such as a Town Planning Commission which will also have quasi-judicial powers. In others, such appeals may be lodged directly to the concerned courts.

8.4 Non-conforming uses at the time of the passage of the regulations

It should be noted that the zoning regulations are prospective in application. It does not apply to developments that exist at the time of its enactment into law.

However, there will be existing developments that do not conform to the provisions of the zoning regulations. These are called “non-conforming” developments and the local government should conduct an inventory of these, say within six months upon the passage of the regulations, and issue the respective owners with Certificates of Non-conformance. The conditions that are sometimes applied to such non-conforming developments are as follows:⁶

1. That no such non-conforming use shall be enlarged or extended to occupy a greater area of land than that already occupied by such use at the time of the adoption of (these regulations) or moved in whole or in part, to any other portion of the lot or parcel of land where such non-conforming use exists at the time of the adoption of (these regulations).
2. That no such non-conforming use which has ceased operation for more than one year be again revived as non-conforming use;
3. An idle/vacant structure may not be used for non-conforming activity;
4. That any non-conforming structure, or structures under one ownership which has been damaged maybe reconstructed and used as before provided that such reconstruction is not more than fifty per cent (50%) of the replacement cost;

That should such non-conforming portion of structure be destroyed by any means to an extent of more than fifty per cent (50%) of its replacement cost at the time of destruction, it shall not be reconstructed except in conformity with the provisions of the (zoning regulations);

⁵ Practices also vary per local government. The Board of Zoning Appeals in some cities in the USA such as Milwaukee, Wisconsin decides on both Use and Dimensional Variance. The same is done in some cities in the Philippines such as Valenzuela City. There are, however, some cities in the USA such as Raleigh, North Carolina where the Board of Adjustment decides only the “physical building and site development” only and not on the Use. The latter falls within the jurisdiction of the City Council.

⁶ Model Zoning Ordinance, Housing and Land Use Regulatory Board, Philippines, 4th Revised Edition, 1996

5. That no such non-conforming use maybe moved to displace any conforming use;
6. That no such non-conforming structure may be enlarged or altered in a way which increases its non-conformity, but any structure or portion thereof may be altered to decrease its non-conformity;
7. That should such structure be moved for any reason to whatever distance, it shall thereafter conform to the regulation of the district in which it is moved or relocated; and
8. In addition, the owner of a non-conforming use shall program the phase-out and relocation of the non-conforming use within 10 years from the effectivity of (these zoning regulations).

8.5 Review of Zoning Regulations

8.5.1 Monitoring

Monitoring of approved schemes

The local zoning office or authority should monitor developments in light of the conditions indicated in the zoning permission. The review should focus on maintaining compliance with the Use, Density and Bulk Controls and Performance Standards.

Monitoring of application trends

The local zoning office or authority should keep track of application trends particularly on the degree of compliance and non-compliance. These should also be according to Use, Density and Bulk Controls and Performance Standards and according to location. Such monitoring will be useful in determining whether the set policy objectives of the Master Plan remain attuned to evolving conditions as well whether the development control provisions are appropriate or not.

Spatial monitoring

The local zoning office or authority should further maintain a tracking map where the application trends can be reflected. This will provide a strong visual image as to whether the Master Plan is proceeding as envisioned.

Monitoring reports

Monitoring reports should be generated quarterly and annually, the latter in time with the review of the Master Plan.

8.5.2 Evaluation

The Zoning Regulations should be evaluated after five years, alongside the review of the Master Plan. Any amendment should be done in consonance with the amendment of the Master Plan.

APPENDIX A – SAMPLE OUTLINE**1.0 SHORT TITLE, COMMENCEMENT AND EXTENT****2.0 DEFINITIONS****3.0 AUTHORITY****4.0 ZONE CLASSIFICATIONS****4.1 Residential**

- 4.1.1 Low density residential
- 4.1.2 Medium density residential
- 4.1.3 High density residential

4.2 Commercial

- 4.2.1 Low density commercial
- 4.2.2 Medium density commercial
- 4.2.3 Central business district

4.3 Parks and playgrounds**4.4 Institutional**

- 4.4.1 Government
- 4.4.2 Health and Welfare
- 4.4.3 Education
- 4.4.4 Religious

4.5 Manufacturing

- 4.5.1 Large-scale manufacturing/ heavy industry
- 4.5.2 Small-scale manufacturing/ light industry

4.6 Utilities and Municipal Service Facilities

- 4.6.1 Water supply
- 4.6.2 Sewerage
- 4.6.3 Solid waste disposal
- 4.6.4 Electricity
- 4.6.5 Gas
- 4.6.6 Communication
- 4.6.7 Other

4.7 Burial grounds**4.8 Transportation right-of-way****4.9 Protection Zones**

- 4.9.1 Buffer around industrial facilities

4.9.2 Residual vacant land

4.10 Agriculture and Forestry

4.10.1 Agricultural

4.10.2 Fishing

4.10.3 Irrigation

4.11 Forestry

4.11.1 Woodlands

4.12 Mines and Quarries

4.13 Salt Pans

4.14 Water bodies

4.14.1 Sea, lakes, ponds, rivers

4.15 Notified areas

4.15.1 Historic sites

4.15.2 Restricted land

4.16 Others

5.0 ZONE REGULATIONS

5.1 Allowed and Permissible Uses

5.2 Density and Bulk Controls

5.3 Performance Standards

6.0 MITIGATING DEVICES

6.1 Special Use Conditions

6.2 Exceptions

7.0 ADMINISTRATION AND ENFORCEMENT

8.0 MISCELLANEOUS PROVISIONS

REFERENCES

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