

## Evaluating the Guidelines on Open Space: Making Neighborhoods Green

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### **Abstract**

Open space is one of the social needs of residents and a requirement for any housing development. Based on the Open Space Guideline by the Department of Town and Country Planning Peninsular Malaysia (2002), the main policy related to planning and provision of open space is the Planning Standard Open Space and Recreation JPBD 21/97. In many cases there are inadequate provisions of open space in neighbourhood areas. In this research, the existing guidelines were reviewed to evaluate the sufficiency of open space that caters to the needs of the neighbourhoods in order to produce a comprehensive guideline for future open spaces and to make neighborhoods more green. These guidelines can be used by local authorities in Malaysia. The observation survey and semi-structured interview with key informants were carried out. Findings from the questionnaire survey indicated that the current guidelines on open space need to be reviewed. Discussion was made on the importance of planned open space, its provision as well as its effective function to the surrounding community in order to make the neighborhood green.

### **Keywords**

Guidelines, Open Space, Neighborhood, Green

### **1. Introduction**

As outlined in the 10th Malaysian Plan, over 70 percent of Malaysia’s population will be in urban areas by the year 2020. Malaysia has experienced a trend of rapid urbanisation, with population in urban areas growing at a rate of 2.2 percent versus the rural population growth rate of 1.6 percent over the period of 2000 to 2009. In Peninsular Malaysia alone, 94 percent of population growth is expected between 2000 and 2020 and will be concentrated in urban areas. According to Moughtin & Shirley (2005), an important contributing factor affecting the deterioration of the environment is population growth. The high demand for land in urban areas has also led some local authorities to overlook the standards required for various uses and abuse of development control especially with regards to open spaces, recreational areas and forested areas. Local planning authorities require ample provision of open space when planning to ask for permission for any new development is submitted. The requirement of open space will be based on the policy and guidelines of the local authorities.

Open space as defined by the Town and Country Planning Act (Amendment) 1995, Act (A933) in Section 2 (f) as: "whichever land that is either bordered or not that has been specialized or reserved fully or only a

fraction as a public botanical garden, public park, sports field and public recreation or as a public place". Planning for open space is a condition which is vital in every development based on approved guidelines. The arrangement and character of open space and its relationship to the built environment can play a major role in the definition of community character. Open space areas also serve as parks and an important environmental function toward greening the neighbourhood. Conway (1991) said that the parks have an important role to play in overcoming the worst excess of urban expansion. The role of parks as a barrier between different types of housing, their relationship to zoning and their function as a focus for suburban development were important to the development of town planning and to loosen the texture of the urban environment.

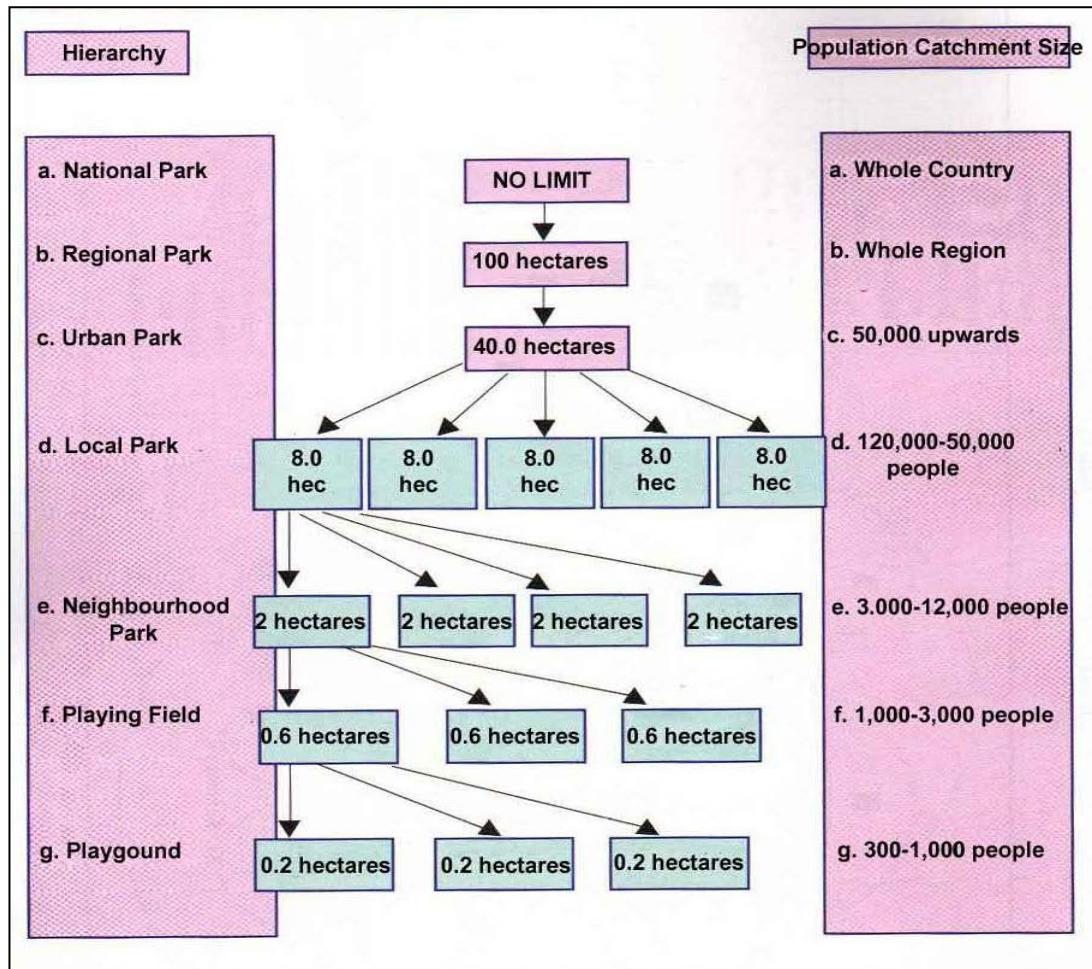
The 'green' theme has now appeared increasingly in every segment of most economies in the world, giving rise to a green culture which has led to serious questions about our current lifestyle and also promote the need for direct and indirect changes in encouraging a harmonious relationship between mankind and the environment (<http://www.doe.gov.my>). The neighbourhood cannot be green before greening the people. So the people need to participate by becoming involved in the development planning process and also educating the public with knowledge on the policies and guidelines in order to make the neighbourhood green.

## **2. Guidelines on Open Space**

Based on the Open Space Guideline by the Department of Town and Country Planning Peninsular Malaysia (2002), the main policy related to planning and providing open space is as below:

- i. Implementation of Open and Recreation Area development must abide by acts and guidelines that have been adopted by the Government which are:
  - a. Section 124A and 204D, National Land Code 1965 (Act 56)
  - b. Town and Country Planning Act, 1976 (Act 172)
  - c. Town and Country Planning Act (Amendment), 1995 (Act A933)
  - d. Environment Quality Order (Fixed activity - Evaluation Effects towards Environment 1987
  - e. Guideline for Natural Topography Conservation in Physical Planning and Development according to the Town and Country Planning Act, 1976 (Act 172)
  - f. National Landscape Guideline
  - g. Planning Standard for Open and Recreation Areas, JPBD 21/97.
- ii. Provide 10 percent Open and Recreation Areas for all types of following development:
  - a. Housing Development
  - b. Commercial Development
  - c. Industrial Development
  - d. Mixed Development
  - e. Tourism Development; and
  - f. Institution Development.
- iii. Facility of open and recreation areas must be taken into consideration in the provision of Development Plans such as the Structure Plan, Local Plan, District Development Plan and Rural Growth Centre Plan;
- iv. State Authorities must reserve and gazette open land that is approved in the Development Plans according to allocations under Section 62 and 204 of the National Land Code (NLC);
- v. Ensure developers fulfil minimum standards before handing over open land to State Authorities, which are levelling and clearing of, provision of a drainage system and entry roads and planting grass so that it can be used by the public;
- vi. State Authorities formulate conditions outlined in the Certificate of Fitness for Occupation (C.F.O) so that open land is maintained by developers before taken over by the Local Authority;
- vii. Ensure developers comply with minimum rules according to fixed standards before the Certificate of Fitness for Occupation (C.F.O) is issued;

- viii. Provide retention ponds as a part of open land to decrease flooding at urban areas. Preparation must be according to Planning Guidelines for Retention Ponds as an Open Area by the Federal Department of Town and Country Planning Peninsular Malaysia , JPBD, 4/97; and
- ix. Hierarchy and Function Distribution of Open and Recreation Area Planning Standard JPBD 21/97) as shown in Figure 2 and Figure 3.



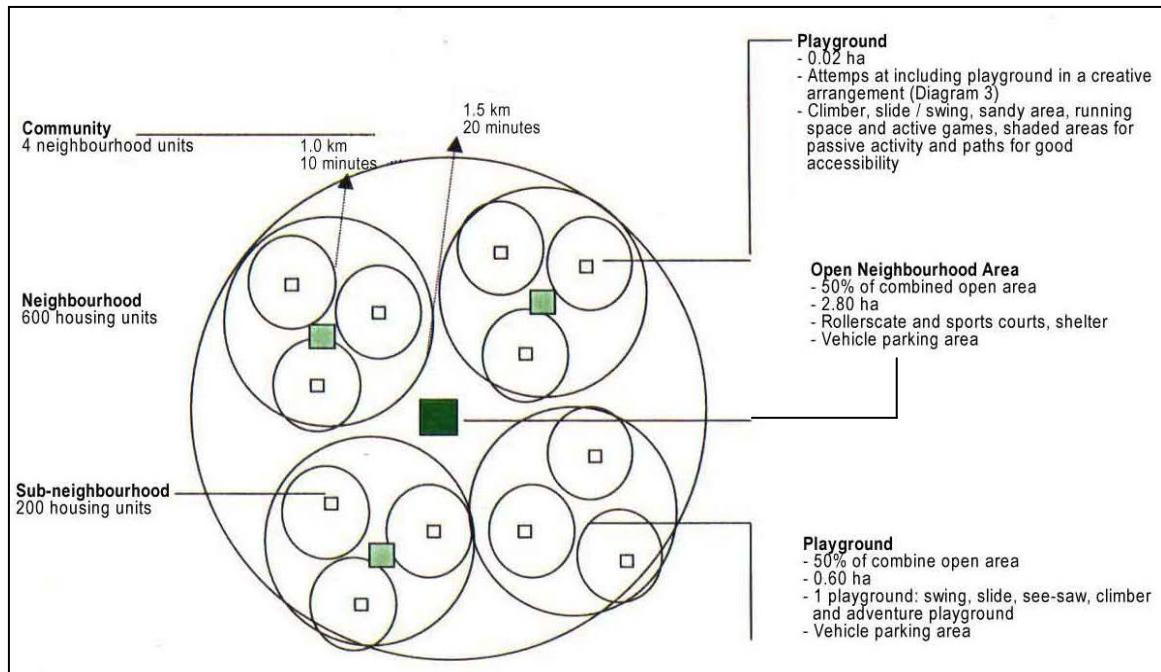
**Figure 2: Hierarchy of Open Space**  
Source: Department of Town and Country Planning Peninsular Malaysia (2002)

The hierarchy of open space as outlined in the Open Space and Recreation Guideline by the Department of Town and Country Planning(2002) as shown in Figure 2 is differentiated in terms of the hierarchy level by national, regional, urban park, local park, neighborhood park, playing field and playground level. The size of the open space depends on the hierarchy level and population in an area.

According to the guidelines, the provision of open space in the neighborhood area is also based on the hierarchy, number of houses and walking distance from the open space to the housing unit as shown in Figure 3. Furthermore, the Manual Planning Standard and Guidelines on Open Space used by Shah Alam City Council on the provision of open space is as following:

1. Provision of open space and recreation are based on types and hierarchy.
2. Provision of open space for development;
  - a. 10 percent from the total housing development area which consists of 50 or more units of housing, or development area of 5 acres and over, not included urban/regional park.

- b. For housing development which consists of 50 or less housing units or less than 5 acres, need to provide 5 percent of open space.
- c. For strata development, need to provide 10 percent open space and additional 50sqm (53.8sqft) for every unit of housing.
- d. 30 percent from buffer zone, green network and retention pond can be calculated as 10 percent open space.
- e. Open space needs to be surrendered to state authorities to gazette as open space.



**Figure 3: Hierarchy of Open Space in Neighborhood Areas (Size and Usage), Maximum Distance and Walking Distance**

Source: Department of Town and Country Planning Peninsular Malaysia (2002)

As outlined in the guidelines, the types and hierarchy of open space in neighborhood areas is based on the size and population of an area. The provision of open space is also taken into consideration with the location or the service distance of open space from the neighborhood within the accessible distance.

### 3. Methodology

This research applied methods of exploratory research on the guidelines of open space. The first stage was the analysis of the secondary information collected from the related agencies. Open Space Guideline by Department of Town and Country Planning Peninsular Malaysia (2002) and Manual Planning Standard and Guidelines Selangor which adopted by Shah Alam City Council were the main documents used for secondary data sources. These important documents were used comprehensively during the analysis.

The second stage of the research was the observation survey which was done at the end of February 2011. The selected neighborhoods within Shah Alam City Council administrative area were studied. The data collection involved taking photographs of the housing units in the neighborhood area, the provision of open spaces and the presence of the public.

The third stage is the semi-structured expert interviews involving twelve respondents. The respondents were from different backgrounds of professions. The experts were town planners and landscape architects from Shah Alam City Council, developers, council members of Malaysian Institute of Planners and academicians from University Technology MARA, Shah Alam. The questions asked their opinions on existing open space in neighborhood area, factors that need to be taken into consideration in the guidelines of open space and critical comments on guidelines used by Shah Alam City Council in the provision of open space,

## 4. Evaluation

### 4.1 Existing Open Space Guidelines

Provision of open space in neighborhood areas is guided by the Open Space Guideline by the Department of Town and Country Planning Peninsular Malaysia (2002). The guidelines contain the provision of open space based on hierarchy level, number of population, the appropriate location and distance of open space from the neighborhood. However it does not contain details about the physical planning of open spaces for specific areas in terms of its functionality and security aspects. The guidelines also did not incorporate the concept of green neighbourhoods although there are many initiatives by the government to guide cities in making choices and decisions toward greener solutions. In order to ensure that the guidelines are geared towards the green neighbourhood, the guidelines should be prepared with phasing in mind, where the schedule for the provision of open space should be based on an appropriate time of implementation according to the approved layout plan. The phasing plan will allow the development to be reviewed annually or as when necessary as part of the process.

In terms of the provision of facilities, the residents in Shah Alam have to compete for car parking spaces, benches and playground playing equipment. Respondents also complained that the provision of the recreational facilities do not cater to different types of users. Furthermore there is no consideration for the disabled to use the open spaces. The playing facilities are focusing only on young children but not for the toddlers, teenagers and adults. The location of some of the playgrounds and play lots in Shah Alam are not suitably located, perhaps this was not properly specified in the guidelines. They are located in an isolated area where acts of vandalism and rubbish dumping are hidden from the general view. And it is notable that these playgrounds lack playing equipment and lighting, which are important in terms of safety and security.

### 4.2 Observation Survey

The observation survey as the second stage of the research was conducted on the site by taking photographs to record the existing open spaces and the facilities at the open space within the neighborhood area. The photographs below show the usage, the conditions and the related problems of the open space in the neighborhood area.



Photo 1: The usage of the open space by an elderly.



Photo 2: The exercise facilities provided in the open space area.



Photo 3: Provision of open space in neighborhood area.



Photo 4: These playing equipments are in neighborhood area and can be enjoyed by the children.



Photo 5: Football fields are also counted as open space based on the guidelines.



Photo 6: Vandalism and lack of maintenance created an unpleasant environment in neighborhood area.

### 4.3 Expert Interviews

The expert interviews were conducted on twelve respondents. The questionnaires included personal data such as age, gender, educational background and profession. The questions asked about their general perception of the guidelines of open space and their personal opinion on the existing open space provided in Shah Alam. The surveys gathered the views, opinions and comments of key experts and then were analyzed. The majority of the respondents agree on the suitability of the guidelines which allocate ten percent (10%) for open space and also the effectiveness of the guidelines. But there are opinions that the current guidelines are i) not in favor of the lower income housing, ii) too generalized without taking into consideration the age-group of users and iii) the guidelines need to consider changing trends of recreation especially towards the green neighborhood.

Comments from the experts called for a review of the open space policy and guidelines to take into account the provisions for open space in the lower income housing; especially the provision of recreation such as playing fields, playgrounds and play lots. The guidelines should also be based on researches that “look at the use of playgrounds based on psychological and behavioral aspects of children”. The locations of some of the playgrounds and play lots in Shah Alam are not suitably located, perhaps this was not properly specified in the guidelines. They are located in an isolated area where acts of vandalism and rubbish dumping are hidden from the general view. These playgrounds lack playing equipment and lighting which are important in terms of safety and security. The respondents are concerned with too many accidental open spaces that are cannot be utilized as playgrounds and play lots. Some of these are located on slopes and near roads. The guidelines should also be based on the new concept of Green Townships as well as green neighborhoods.

### 5. Concluding Remarks

As outlined in the 10th Malaysian Plan under Chapter 6 in Building an Environment that Enhances Quality of Life, local plans will incorporate open space strategies that move beyond just allocating land for open space activities, to enhancing cities that can attract people to these public spaces. In order to encourage the development of public spaces, the Government will support local authorities in creating a seamless network of interconnected green spaces within the cities, connecting major activity hubs and housing sites, and be equipped with facilities such as amphitheatres, cycling and pedestrian pathways and other amenities. Companies will be encouraged to provide support in the establishment and maintenance of green spaces as part of their corporate social responsibility programmes. Therefore, measurable goals need to be set to measure and monitor open space in order to make neighbourhoods more green. The solutions can be further emphasized within the development plans by preparing the new planning standards on green/open space per person rather than just 10 percent as outlined in the guidelines. The

policy and guidelines are designed to regulate the development and serve as an important instrument for protecting and enhancing the built and natural environments. The spirit of the policy and guidelines should consider the quality of life of the Shah Alam residents, the comfort and safety of residents regardless of the type of housing, the age category, the lifestyle or the health of the person. Shah Alam is a modern and safe city with educated and sophisticated residents; therefore the planning of open spaces must be able to provide a healthy, creative and sustainable environment. When the development is carried out properly, it can translate the nation's vision of greening the country by greening the neighbourhood first.

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