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Evaluating the Shah Alam City Council Policy and Guidelines on the Hierarchy of Neighborhood Open Space

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Abstract

This paper is part of a research to evaluate the existing policy and guidelines on open space used by Shah Alam City Council. The adequacy and suitability of open space is crucial as open spaces are known to be included as social needs of residents in any neighborhood area. Observation survey on the hierarchy of open space was carried out. Expert interviews were conducted and found that the current policy and guidelines for Shah Alam is adequate yet needed to be reviewed for future needs according to different types of housing, different categories of users and changing trends.

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1. Introduction

Open space and recreation is one of the social infrastructure required in any housing development. It plays an important role in improving environmental ecosystem. This is why open space is recommended as a focus point area for recreation and play role as social cultivation centre among the society. So it is important that open space and recreation need to be planned for optimizing the positive effect to the

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surrounding community. Open space can be in different hierarchy, from playing lot to neighborhood ground to regional facilities that will attract and serve a greater catchment population. Local planning authorities often require the provision of playground or neighborhood park to get the planning permission when new housing development is submitted. The requirement of the open space will be based on the policy and guidelines of the local authorities. In relation to this, two questions raised are; (i) does the Shah Alam City Council guidelines on hierarchy of open space sufficient for the needs of the residents (ii) does the allocation of the open space take into consideration the hierarchy, types and density of the residents in the neighborhood area. This paper is part of the preliminary study of a funded research that evaluate the policy and guidelines on the hierarchy of open space taking into the consideration the population and density of the housing area. This is to ensure that everyone in the community can enjoy the benefits of leisure and recreation in a green, natural and planned environment.

2. Literature Review

At present, there is not enough knowledge to translate findings into guidelines for urban planning and design of green infrastructure in small towns. In particular, little is known about the strength of relationships of attributes that promote beneficial well-being effects to residents (Mansor et al., 2010). Spatial planning for urban facilities should be integrated with the provision of public urban open spaces in the respective areas. The extent of public urban open space should be adequate enough to proportionally accommodate the expected activities in a healthy manner. As such, the provision of public urban open spaces would have a positive impact on the quality of public life and public health, which would in turn have an indirect bearing on the economic and social aspects of the respective communities (Williams, 2007). According to Calthorpe (2009), major open space corridors within the region, such as rivers, ridge lands, wetlands, or forests, can be seen as the “village green” at a metro scale - as the commons of the region. These natural commons establish an ecological identity as the basis of a region’s character. Similarly, the natural systems and parklands at the neighbourhood scale are fundamental to its identity and character. A neighbourhood’s open space, like the region’s, is as much a part of its commons as are its civic institution and commercial centres. As such, policy makers and administrators tend to view green infrastructure more as a luxury good than as a basic necessary for people living in towns, thus overlook the potentially important effects of green space on well-being (Mansor et al., 2010).

Open space as defined by the Town and Country Planning Act (Amendment) 1995, Act (A933) in Section 2 (f) is: "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". Analytically, it includes open space in development scheme which is submitted to state government at planning approval application level or during approval subdivision and recreation area such as swimming pool, stadium, sport complex, playground and others.

2.1. Open Space Planning Concept

There is various planning concept which concern on the interest of open space function in its provision. This concept has been implemented to prove there is a close relationship between open space and allocation developed land use. The early pioneer to the open space and recreation planning is Sir Ebenezer Howard who introduced the concept of Garden City to resolve planning problem due to industry revolution process which occurred in year 1880. From Garden City development, it indirectly had attracted others planner to obtain deep understanding then introduce other modern planning concepts (Monti Jr., 1999). It was related that Perry (1929) saw unsafe housing environment to users especially children and pedestrian with the increase of the use of motor vehicle. Among the important principles in

his idea of neighbourhood concept is to set aside 10 percent from total neighbourhood unit as park form or recreational area. The main purpose of this open space provision is to provide people's recreation facilities and rest.

Another planning concept which is the Radburn concept designed by Clarence Stein (1905) stress on inner park and integrated with pedestrian walkway. This concept stressed the use of green areas as green lung in housing area. Units of residential are encouraged to be built facing the green belt for creating safe environment where parents can oversee their children's behaviour and activity in front of their home. The planning provision changed according to time and rapidity of development. Improvements to the quality of life, the realization of the importance of recreation and focus to high density development, indirectly influence the provision of open space provision too.

2.2. *Hierarchy of Open Space*

According to Open Space and Recreation Guideline by Department of Town and Country Planning Peninsular Malaysia (2002), there are six hierarchy of open space that have been identified which are:

- Public Botanical Garden
- Open space and recreation used for active and passive recreation by all age categories in a city. It is used to give walking facility to public by enjoying the beautification and attractiveness of fauna and flora. This facility is provided for National and Regional Level.
- Public Park
- Public park is a park area or field in walking distance designed to facilitate the recreation or function for all age level of population. It provides for all age categories of public user and population and at the town level.
- Field for Sports and Recreation
- Public sports field and recreation is an area by for active recreation which include various sports field. It prepared to facilitate students and youth group for sport activities. It is also in walking distance provided at neighborhood and town level.
- Resort
- Resort or leisure place is place for rest, to fulfill leisure time when not working. It is provided depending on natural or man-made attractions.
- Public Pedestrian walkway
- It is an open pedestrian walkway space for public user. It is specialized for public use to walk. In Malaysia, the provision of pedestrian walkway is combined with other recreational facility such as public flower garden, public park and pedestrian's facility in housing area. Besides as space for pedestrian's convenience, it also aimed for jogging activity.
- Public Area
- Public Place or public area is any area that can use by the public. Example of public places are pavement, public park and public open space. This space is in for the public to carry out distinctive or collective activity.

Based on the hierarchy of open space above, the neighborhood open space is related to the public park, field for sports recreation, public pedestrian walkway and public area. All the hierarchy fulfill the requirement of the users by providing the facilities to cater different needs of age group. The five hierarchy of open space as outline in the Open Space and Recreation Guideline by to Department of Town and Country Planning(2002) is differentiated in terms of hierarchy level from national and regional level, town level and neighborhood level. But for the resort, public pedestrian walkway and public area, the hierarchy is only based on the types of activity that will be conducted in the area.

2.3. Policy and Guidelines on Open Space

According to Manual Planning Standard and Guidelines on Open Space used by Shah Alam City Council, the policy 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;
 - 10% from the total housing development area which consist of 50 or more unit of houses, or development area of 5 acres and over, not included urban/regional park.
 - For housing development which consist 50 or less unit of houses or less than 5 acres, need to provide 5% of open space.
 - For strata development, need to provide 10% open space and additional 50sqm (53.8sqft) for every unit of houses.
 - 30% from buffer zone, green network and retention pond can be calculated as 10% open space.
 - Open space need to be surrendered to state authority to gazette as open space.

The table below shows the hierarchy of open space from urban park to playing lot only. The national park and regional/state park is not outline because the paper only focused on hierarchy of open space in the neighborhood area.

Table 1. Guidelines on hierarchy of open space. Source: Manual Planning Standard and Guidelines Selangor, 2nd ed.2010.

Types and Hierarchy	Area Size	Population	Service Distance	Recreational facilities
Urban Park	40-100 hectares (100-250acres)	50,000 and above	Within 5km (0.3-6.0miles) 1/2hour journey	Field for Annual Sports; Games courts; Sports complex; Swimming pool; Golf Driving Range; Children’s playground; Picnic & camping area; Water sports Amenity forest and gardens; Wakaf or surau; Public toilets and telephones Lodging; Shop and stall; Parking for cars and buses; Bus stop
Local Park (1 park for each local authority)	8-40 hectares (20-100acres)	Every 12,000 people, and For every additional 12,000 people, 8hectares (20ac) required.	Within 3km (1.8miles)	Various games court and soccer field in the form of mini sports complex; Swimming pool; Park and children play areas; Picnic areas and adventure playground; Halls; Stalls;

Neighborhood Park	2-8 hectares (5-20ac)	Every 3000 people; For every additional 3000 people, 2hec (5ac) require.	Within 1.5km (0-9miles)	Public toilets; Wakaf; Public telephones; Bus stop; and Vehicles parking Children’s playgrounds; Soccer fields; Badminton, tennis, takraw courts, etc; Jogging track; Park and shelter; Rest areas; Car parks; Public telephones; Bus stops; Public toilets.
Playground	0.6-2 hectares (1.5-5ac)	i. Every 1000 people; ii. For every additional 1000 people, 0.6 hectares (1.5ac) required.	Within 1km (0.6mile)	Park sheltered areas; Paved and lighted areas for sports and games courts; Children play areas; Adventure grounds; Car parks; Public telephones.
Playing lot	0.2-0.6 hectare (0.5-1.5ac)	i. Every 300 people; ii. For every additional 300 people, 0.2 hectare (0.5ac) required.	Within 0.5km (0.3mile)	Grassy areas; Sandy areas; Sheltered area and seats; Pre-school children play equipment.

As outlined in the guidelines, the types and hierarchy of open space in neighborhood area is based on the size and population of an area. The provision of open space is also taking into consideration the location or the service distance of open space from the neighborhood within the accessible distance. The open space provisions are meant for public use, and thus their needs on the recreational facilities is also incorporated in the planning and guidelines of open space used by Shah Alam City Council.

3. Methodology

This preliminary study utilized exploratory methods focusing on the policy and guidelines of open space in northern part of central zone Shah Alam. The first stage is observation which was done at the end of February 2011. The selected parts of Shah Alam City Council administrative area were studied, and then the analysis was based on maps and secondary information collected from the related agencies. Open Space Guideline by the Federal Town and Country Planning Department Peninsular Malaysia (2002) and Manual Planning Standard and Guidelines Selangor which adopted by Shah Alam City Council are the main documents used for secondary data sources.

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

4. Results and Discussions from Literature Review

The city of Shah Alam is the first planned new town in Malaysia. It is located in the Klang Valley with other cities such as Kuala Lumpur, Ampang, Petaling Jaya, Subang Jaya and Klang. According to the state Local Plan, Shah Alam consists of 56 sections, covers an area of 29 030 hectares and administrated under Shah Alam City Council (MBSA). The total population in under Shah Alam City Council increase from 101 733 people in year 1991 to 395 637 in year 2000 and 475 260 in year 2005 with annual growth rate as much as 16.3percent.

4.1. Land Use and the Open Spaces

The main land use in Shah Alam City Council administrative area is vacant land which refer to the area that consist of abandoned project and site under construction covereing 7037.73 hectare or 24.24 percent from the total area of Shah Alam. The land use for housing area is the second largest which is 15.72 percent and followed by transport routes of about 12.25 percent. Section 2 to Section 24 is the residential area that well planned with great facilities. Shah Alam can be link by road network such as Federal Highway, New Klang Valley Expressway (NKVE), Shah Alam Expressway (KESAS) which also contribute to the third highest percentage of land use in MBSA area. Apart from that, agriculture covered 3361.78 hectares followed by forest area of about 2697.87 hectares. Refer table 2.

Table 2. Main land use in Shah Alam City Council. Source: Draf Rancangan Tempatan MBSA 2020

LANDUSE	MBSA	
	Size (Hectare)	(%)
Housing	4562.65	15.72
Industry	2225.37	7.67
Business and services	455.37	1.57
Institution and public facilities	2260.25	7.79
Open space and recreation area	1656.13	5.70
Belukar/ Tanah berumput/ Lalang/ Abandoned project/ Under construction	7037.73	24.24
Transport	3556.63	12.25
Infrastructure and utility	528.70	1.82
Agriculture	3361.78	11.58
Forest	2697.87	9.29
Water body	687.52	2.37
TOTAL	29,030.00	100.00

According to the Draft Shah Alam local plan, Shah Alam City Council consists of five planning blocks (BP 1.1 to BP 1.5). The total size of area under the administration of Shah Alam City Council is 30,177.63 hectares. The study area is in BP 1.2 which is also the first developed area of Shah Alam (Refer Figure 1). The observation survey on the open space was conducted at the northern part of central zone (BP 1.2) Shah Alam and this area was selected due to its residential characteristic.

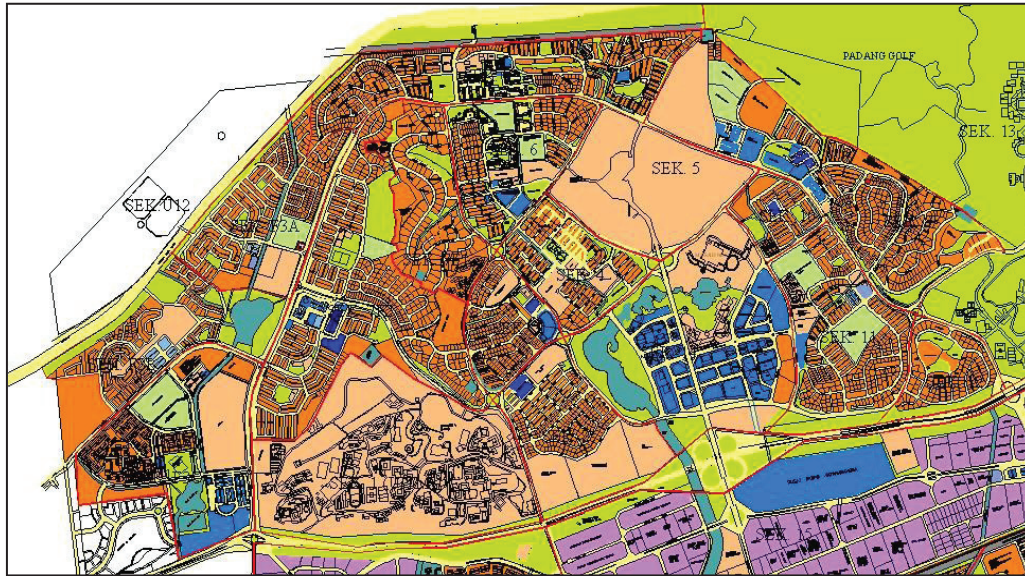


Fig. 1. Northern part of central zone (BP1.2). Source: Draf Rancangan Tempatan, MBSA 2020

5. Results and Discussions from Site Investigations and Observation

Observation survey on the site was carried out with the help of the camera to record the existing open spaces and its facilities at the Lake Gardens, neighborhood parks and playgrounds. The photographs will show the usage of the space and facilities, the conditions and the related problems. Due to limited space in this paper only some of the photographs with significant findings are shown.

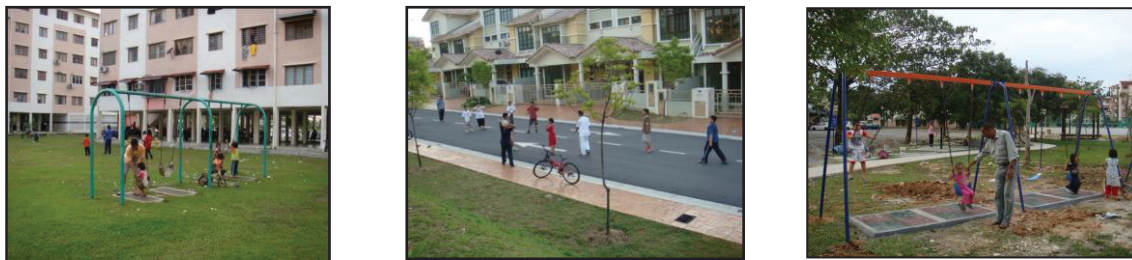


Fig. 2. (a) Centralized open space within apartment area. The units facing the open space can enhance the value of security for the users. Yet there is lack of provision for playing equipments here; (b) Open space provided fronting row of houses but without the recreational facilities, thus the youngsters tend to play on the streets; (c) Playing equipments provided but the grass is not maintained. The shoddy land-scaping works has created an unsafe place for little children to play in.



Fig. 3. (a) This new children playing equipments are in good conditions but the playground is located beside a main road; (b) Street furniture in bad condition and dangerous for the kids and toddlers. This is due to acts of vandalism. This is located the playground near the low cost apartments. (c) The drains surrounding the open space area are not closed thus prone to be filled with rubbish, smelly and dangerous. It is also an eye-sore.

6. Results and Discussions from Interviews with Professionals, Academicians and Town Planning Officers

The interview was conducted using two types of format; the first is the structured interview and the second is the open ended questions. The following are the results and discussions based on these two types of questions.

6.1. The Structured Interview

There were 12 respondents interviewed for the study. The questionnaires include personal data such as age, gender, educational background and profession. The questions asked concerning the general perception on the guidelines used by Shah Alam City Council and personal opinion on the existing open space provided in Shah Alam. The survey gathered the views, opinions and comments of key experts and analyzed through content analysis. About 42 percent of respondents are aged between 21 to 35 and 36 to 50 years old. The number of both male respondents and female respondents are equal. The majority of respondent (58.3 percent) is satisfied that the provision of open space in Shah Alam neighborhood area is based on hierarchy of open space with the desired acreage. But 8.3 percent of the respondents believe that the provisions of open space did not take into consideration the types of houses and density of population in an area. When asked on whether the respondents agreed with the 10 percent provision of open space in neighborhood area, only 33.3 percent of respondents are very satisfied. Majority of them suggested that the provision should be increased to cater the needs of population in Shah Alam.

Furthermore, the respondents were asked on the distribution of open space and 8.3 percent of respondents agreed that the distribution of open space is dispersed compared to 33.3 percent of them agreed that the open space centralized. Fifty percent of the respondents are satisfied that the location and design of open space in neighborhood area and did take into consideration the accessibility to the open space. About 58.3 percent are very satisfied with the street furniture provided. When asked about recreational component in open space area, 16.7 percent of the respondent agreed the recreational components provided were not based on age and categories of users. About 83.3 percent of the respondents agreed that the reserve for existing open space need to remain as reserved and cannot be developed for other purposes other than as open space.

6.2. Results and Discussions from the Open-Ended Interview

6.2.1. Problems of the Existing Policies and Guidelines

Most of the respondents agree on the suitability of the policy which allocate 10 percent 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 guideline need to consider changing trends of recreation.

Comments from respondents 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 field, playground and play lots. The guidelines should also be based on researches that “look at the use of playground based on psychological and behavioral aspect of children”.

Regarding the provision of the Lake Gardens in Shah Alam that function as the town park, it has attracted so many outside visitors from other towns as far as 30 to 40 kilometers away. During the weekends, it gets crowded and creates discomfort for residents coming to the Shah Alam Lake Gardens. The residents in Shah Alam have to compete for car parking spaces, benches and playground playing equipments. Respondents also complained that the provision of the recreational facilities do not cater for 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 locations of some of the playgrounds and play lots in Shah Alam are not suitably located perhaps this has not been 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 that these playgrounds lack playing equipments and lightings which are important in terms of safety and security.

The respondents are also 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.

6.2.2. Suggestions for Improvements

The respondents made up of professionals, academicians and officers from the Local Authority and they offer useful and helpful suggestion to improve the open space policy and guidelines. The first suggestion is to provide for a centralized location for open space such as for recreation areas, playgrounds and play lots. The open space should be properly distributed according to the types of house where the apartments and condominiums must be provided according to the number of population. The distance of open space from any homes in Shah Alam should be at least 30 feet. Every house should be connected to green network linkages of open space.

The orchid as the flower icon of Shah Alam should be planted or be incorporated in the design of the open spaces. Design competitions can be organized by MBSA to design the concept, layout design and also the design of equipments for the recreational areas. The aim of the design competition must address environmental sustainability issues and the community well-being. Types of playing spaces and equipments must follow new and changing trends of recreation and lifestyle. Teenagers are now attracted to active extreme games like skateboarding and others. Thus design of residential recreation areas must be geared towards the multiuse recreation space to meet new demands of the population increase and trends.

The landscape architect from MBSA suggests that the State Government should form a Landscape Department at the state level to coordinate landscape policies and guidelines for all local authorities in the state. And a professional town planner proposes that the planning guideline and planning should go through the public participation process involving the Shah Alam residents, the professionals and the NGO. This is to ensure that the planning of open spaces especially the recreation areas are given due attention and scrutiny for the betterment of the society.

7. Conclusion

Before we can plan for a good and effective open space; such as playing field, playground and play lots, we must firstly determine that policy and guideline are suitable and capable. The findings from the expert interviews has shown that the policy and guidelines although is good can be questioned and reviewed. 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 and 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. Thus the policy and guideline of open space is important as the tool to encourage the planning and implementation of such environment.

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