

EXPLORATORY STUDY FOR THE NEIGHBOURHOOD FACILITIES PROVISION IN BANDAR BARU BANGI, MALAYSIA

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ABSTRACT

This study reviews the findings from exploratory studies for the neighbourhood facilities provision in Bandar Baru Bangi. It is based on integrated planning that is expected to continue to develop not only can accommodate residential population but also provides commercial, industrial, business, training institutions, recreation and education. The aim of the exploratory study are to identify the existing neighbourhood facilities, affected residential development area within Bandar Baru Bangi, determine the radius of case study area, refine the research question and choice of research approach in this study. Researcher chosed to study the neighbourhood facilities available in Bandar Baru Bangi because it can give attractions, benefits and advantage of living in a particular neighbourhood. Three techniques used in data collection are observations, interview and document review. Three parts focused in this study are Institutional and Community, Open Space And Recreation and Accessibility. In Bandar Baru Bangi it devided into 16 sections and all the findings of neighbourhood facilities identified in each section which, study area within the range 3.5km. Research reflection and conclusion had been made in this study also.

Keywords : exploratory studies, neighbourhood facilities, Bandar Baru Bangi

INTRODUCTION

The main focused of this research area is Bandar Baru Bangi well known and recognized as Malay Elite Town or Satellite Town.(Norngainy *et al.*, 2011). Bandar Baru Bangi comes from an oil palm. This town was first developed in 1974 after the acquisition of land by the State Government from the year 1972-1978. Recruitment process carried out in stages, starting with section 1 which involves the construction of low cost housing, medium and high, amounting to 200 units. Futhermore, Bandar Baru Bangi is one of the center of the main settlements besides Kajang (Local Plan Draft Kajang Municipal Council , 2011).

Bernamea (2008), stated work to develop this area ended in 2007, with the construction of 11.040 residential units, 308 shops, 43 factory units and an office complex. This satellite town which is also the second largest city after Shah Alam, is based on integrated planning that is expected to continue to develop not only can accommodate residential population of 60,000 people, but also provides commercial, industrial, business, training institutions, recreation and education. It is suitable with the recommendations of the Tun Abdul Razak, the Prime Minister at that time, to change the perspective of society, and the Malaysian economy from agriculture to industry. Thus, an oil palm estate in the district of Hulu Langat was chosen as a new placement.

Bandar Baru Bangi also has been divided into 16 sections. This town also covering 82 acres of open space is equipped with two-fold system of roads and sidewalks for pedestrian (Local Plan Draft Kajang Municipal Council, 2011). The overview of Bandar Baru Bangi such as below:



Figure 1 : Maps of Bandar Baru Bangi in Pink Circle (Sources : Google Earth 2012)

The Aim Of The Exploratory Study

The aim of the exploratory study are as follows:

1. To identify the existing neighbourhood facilities at Bandar Baru Bangi
2. To identify the affected residential development area within Bandar Baru Bangi
3. To determine the radius of case study area of Bandar Baru Bangi
4. To refine the research objective for this study
5. To refine the choice of research approach in this study

LITERATURE REVIEW

Bandar Baru Bangi was developed in stages beginning in 1974. Bandar covers approximately 2,925 hectares (7,228 acres). The main goal of the opening of Bandar Baru Bangi is to countless as a regional growth center for the south of Klang Valley, provides an opportunity to natives in the economy in line with the National Development Policy, and make this city as the knowledge city and further scientific research center (JTTS, 2005). Bandar Baru Bangi has various physical components. Among these components are housing, industrial land, institutional land, infrastructure works, commercial land and neighbourhood facilities.

Remarkably successful in develop Shah Alam, induce PKNS to develop Bandar Baru Bangi which an area of 1.869 hectares located in southern Klang Valley (Bernama, 2008). As a planned city, neighborhood facilities fittings certainly equipped to accommodate the needs of people who live there. So that, for this study researcher chosed to study the neighbourhood facilities available in Bandar Baru Bangi. Besides, neighbourhood facilities can give attractions, benefits and advantage of living in a particular neighbourhood because they represent satisfaction and utility of homeownership. A good residential area must adequate with various facilities that appropriate for the use such as public services, roads and others amenities (Chin, 2006).

METHODOLOGY USED

Qualitative research is a study that emphasizes the production of meaning. It was also supported by Jaafar & Ludin (2007), qualitative research is research aimed at understanding the phenomenon in depth. While a qualitative study is the observation, participant observation, unstructured interviews, reference documentation and case studies. In qualitative research there are several techniques in collecting data, and for this study researcher have used three techniques in data collection.

- i. observations
- ii. interview
- iii. document review

Interview

Other than that, interview session also has been held to get the data of facilities in Bandar Baru Bangi. To get the data of facilities in Bandar Baru Bangi, researcher has been conducting interviews at the Kajang Municipal Council. Researchers have been interviewed by several officers in two department at the Kajang Municipal Council which are Town And Contry Planning Department (Development) and Valuation Department.

Document Review

Researcher choosed a qualitative approach in this study because required the review of documents in this study. Document review is the data obtained from the policies, laws and acts. The data that obtained from document review is Kajang Municipal Council Local Plan Draft (2011) to get deeper knowledge on neighbourhood in Bandar Baru Bangi and development surrounding case study.

Observation

In addition, this research also applied observation to get a true picture of the neighbourhood facilities existing in Bandar Baru Bangi. There are a lot of neighbourhood facilities in Bandar Baru Bangi. However, researcher choosed and focused more on education facilities under group Of Institutional And Community Facilities. Researcher have made a survey of the study area and an observation several times in July and September 2012. In this research, researcher used structured observation. A study by Arumugam, V., Antony, J., & Douglas, A. (2012), emphasized observer should have framework in structured observation which is starting with pre-decide, it all about what to observe and what to record and what type of incident.

DATA ANALYSIS

Data analysis is very important for this explaratory study. In addition, from data analysis also we can figure out either objective can be obtained or not. For this study, researcher used Thematic Analysis only.

Thematic Analysis

There are many qualitative approaches used to analyze various communication or informants talk (Mahrer, 1988; Spradley, 1979; Taylor & Bogdan, 1984), and thematic analysis is one such way. Other than Thematic Analysis, other researcher used Content Analysis or other qualitative approach to analyze interview approach. Miles and Huberman (1994) stated that, Thematic Analysis involving the encoding of interviews, themes or patterned the phenomena and developed the categories than resulted them. While in other word, this analysis more focused on patterns of living or behavior and identifiable themes (Aronson, 1994). For this study, researcher used Thematic Analysis approach in analyze the data obtained.

The step that involved in Thematic Analysis that summarized by Aronson (1994); firstly is data collection. In data collection, audiotape must be collected purposely to study the talk of a session or interview. Then, from transcribed conversation, listed the patterns of experience. This can come from direct quotes or paraphrasing common ideas. The summarizing the steps of Thematic Analysis for this study are as follow :

- *Phase 1: familiarising with data*

Researcher have to familiar with own data that got from interviewed by officers in two department at the Kajang Municipal Council. The data are about neighbourhood facilities in Bandar Baru Bangi.

- *Phase 2: generating initial codes*

Then initial codes have to generate and decision about the code depends on question being addressed to officer

- *Phase 3: searching for themes*

For this phase, researcher still choosed themes according to type of facilities in Bandar Baru Bangi

- *Phase 4: reviewing themes*

Then, researcher review the data obtained and classified to group needed

- *Phase 5: defining and naming themes*

Researcher define the theme that classified into three neighbourhood facilities which are Institutional And Community Facilities, Open Space And Accessibility. Arrange the data obtained through table or figure.

- *Phase 6: producing the report*

Lastly writing the report from data analysed.

Existing Neighbourhood Facilities

Based on the Kajang Municipal Council Local Plan (2011), in this study researcher focused in three parts of neighborhood facilities which are:

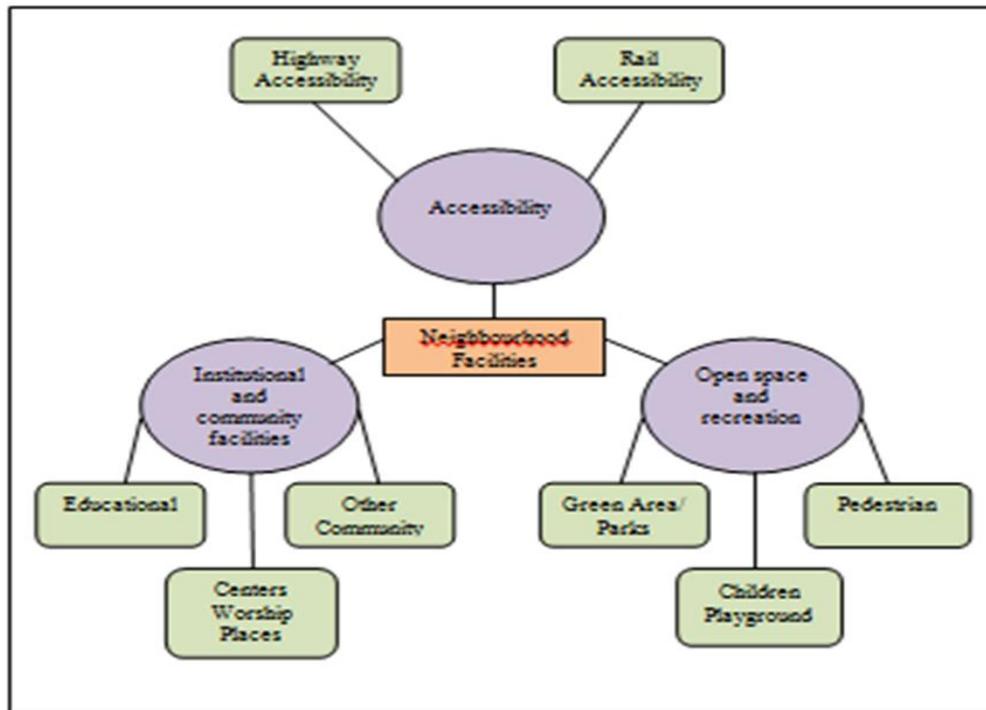


Figure 2 : Parts Of Neighbourhood Facilities (Sources : Kajang Municipal Council Local Plan (2011))

Theme 1 : Institutional and community facilities

(a) Education Centre

Bandar Baru Bangi is a township recently crowned as "Knowledge City" (Bernama, 2008). Besides, it is also equipped with educational facilities such as school, higher education, training center and research centre. Generally, educational facilities in Malaysia are manned by Ministry of Education (Ministry of Education, 2012) and Ministry of Higher Education (Ministry of Higher Education, 2012). But there are also educational facilities provide by private sector.

Schools

There are two types of schools in Malaysia, government and privately managed schools. But even privately owned schools are under the jurisdiction of the Ministry of Education particularly in terms of curriculum and discipline. Operating a private colleges and school must registered and have approval from the Ministry of Education before any school starts operation (section 79 of the Education Act 1996 (Act 550). At the school level in Bandar Baru Bangi, academic facilities are divided into three parts; (1) primary school and (2) secondary school and (3) private school. Please refer **APPENDIX A** for schools pictures (primary and secondary schools under government) in Bandar Baru Bangi. List of schools in Bandar Baru Bangi as follows:

Table 1 : Listing Of Schools In Bandar Baru Bangi (Sources : Field Study 2012)

No.	Primary Schools	Secondary Schools	Private Schools
1	Sekolah Kebangsaan Bandar Baru Bangi	Sekolah Menengah Kebangsaan Bandar Baru Bangi	Sekolah Rendah Islam Pintar Tahfiz
2	Sekolah Kebangsaan Jalan Tiga (3) Bandar Baru Bangi	Sekolah Menengah Kebangsaan Jalan 3 Bandar Baru Bangi	Institut Pintar Tahfiz Fuqaha (Secondary School)
3	Sekolah Kebangsaan Jalan Empat (4) Bandar Baru Bangi	Sekolah Menengah Kebangsaan Jalan 4 Bandar Baru Bangi	SRI Ayesha Islamic School
4	Sekolah Kebangsaan Jalan Enam (6) Bandar Baru Bangi		Seri ABIM
5	Sekolah Kebangsaan Seksyen 7 Bandar Baru Bangi		Sekolah Al-Amin
6	Sekolah Rendah Agama (Integrasi) Bandar Baru Bangi		Sekolah Rendah Islam Tahfiz Ilmuwan

Higher Educations

In connection with Bandar Baru Bangi, there are several higher education. Higher Education in connection to Bandar Baru Bangi consists of University, Colleges and Institute. The list of higher education in connection to Bandar Baru Bangi is as follows:

Table 2 : Listing Of Higher Education In Connection To Bandar Baru Bangi (Sources : Field Study 2012)

No.	Higher Education	No.	Higher Education
1.	Universiti Kebangsaan Malaysia (UKM) 	2.	Kuala Lumpur Infrastructure University College 
3.	Malaysian France Institute (UNIKL - MFI) 	4.	Kolej Poly-Tech MARA (KPTM) 

5.	<p>Maktab Perguruan Islam (MPI)</p> 	6.	<p>Open University Malaysia</p> 
7.	<p>Institut Latihan Islam Malaysia</p> 	8.	<p>German-Malaysian Institute (GMI)</p> 
9.	<p>Universiti Tenaga Nasional (UNITEN)</p> 	10.	<p>Granada International College</p> 

Training Centres

Bangi Government and Private Training Centre Area is an important group of training facilities in Malaysia. It is located in Bandar Baru Bangi, Selangor near the North-South Expressway Southern Route. Please refer following list of Government and Private Training Centres in Bandar Baru Bangi:

Table 3 : List of Government and Private Training Centres (Sources : Field Study 2012)

No.	Government and Private Training Centres	No.	Government and Private Training Centres
1.	Public Bank Training Centre 	2.	RHB Bank Training Centre 
3.	Maybank Training Centre 	4.	CIMB Bank Training Centre 
5.	National Anti-Drug Agency 	6.	Nationale Institute Of Occupational Safety And Health 

<p>7.</p>	<p>INSPEN</p> 	<p>8.</p>	<p>Kumpulan Wang Simpanan Pekerja (KWSP) Training Centre</p> 
<p>9.</p>	<p>National Tax Academy</p> 	<p>10.</p>	<p>Institut Latihan Perundangan Dan Kehakiman Negara (Seksyen 15)</p> 
<p>11.</p>	<p>Agro Bank Training Centre</p> 	<p>12.</p>	 <p>Bank Simpanan Nasional Training Centre</p>
<p>13.</p>	<p>Defence Training Academy Malaysia</p> 	<p>14.</p>	<p>Industrial Training and Rehabilitation</p> 

			Centre Bangi
15.	 <p>Institut For Rural Advanuemment (INFRA)</p>	16.	<p>Petronas Leadership Centre</p> 
17.	<p>Malaysian Highway Authority Main Headquarters</p> 	18.	<p>Pos Malaysia Training Centre</p> 
19.	<p>Ilsas (Institut Latihan Sultan Ahmad Shah) - Tenaga Nasional Berhad (TNB) Training Centre</p> 		

Research Centre

In Bandar Baru Bangi there are only several research centre developed. Purpose of research center generally generating knowledge and technology through research, development and application in particular industry. Research centres; Malaysia Nuclear Agency, Malaysian Palm Oil Board, TNB Research Sdn. Bhd. and Petronas Research are located in Bandar Baru Bangi. Following is the research centre in Bandar Baru Bangi :

Table 4 : Listing Of Research Centre In Bandar Baru Bangi (Sources : Field Study 2012)

No.	Research Centre	Remarks
1.	<p>Malaysia Nuclear Agency (formerly known as Malaysia Institute of Nuclear Technology Research (MINT))</p> 	<ul style="list-style-type: none"> - The functions of Malaysian Nuclear Agency are as follows: <ul style="list-style-type: none"> • Conduct research and development (R&D), services and training in nuclear technology for national development • Promote the application, transfer and commercialization of nuclear technology • Coordination and management of nuclear affairs at national and international levels and as liaison agency for the International Atomic Energy Agency (IAEA). - Strategically located nearby the government administration, centre Putrajaya, and Cyberjaya. - The Centre for Application of Nuclear Energy (CRANE) was the entity to mark the of Malaysia's nuclear programme, focussing on manpower development for a nuclear power programme to provide an option for energy source, following the worldwide oil crisis of the early 1970's (MOSTI, 2012).
2.	<p>Malaysian Palm Oil Board (MPOB)</p>	<ul style="list-style-type: none"> - A government agency responsible for the development, promotion and regulation of the palm oil industry in Malaysia - One of agencies under the Ministry of Plantation Industries and Commodities and is based in Kuala Lumpur and Selangor, operating over 30 regional offices,

		<p>laboratories and research stations in Malaysia as well as Overseas Advisory Offices in Shanghai, Brussels, Washington DC, Giza, Egypt and Karach (MPOB, 2012)</p>
<p>3.</p>	<p>TNB Research Sdn. Bhd.</p> 	<ul style="list-style-type: none"> - Known as TNBR, has been the in-house solution provider for Tenaga Nasional Berhad since 1993. Situated in Bangi, Selangor, the R&D Centre provide a centralised, one-stop centre for technical solutions and innovation. - Current TNBR has been focusing on conducting R&D that adds value and aligned to TNB corporate needs as well as national aspiration. - Future TNBR aspires, in the near future, to be at the forefront of technology related to renewable and green energy – providing solutions not just to TNB but to other utilities in the region and Asia. (TNRD, 2012)
<p>4.</p>	<p>Petronas Research</p> 	<ul style="list-style-type: none"> - Principal Activity for Petronas Research is provision of research and technology development services. - Purpose of Petronas Research is to facilitate initiatives in the areas of renewable energy and related fields, and to develop preliminary concept of the proposed laboratory (Media Releases, (2007)).

(b) Worship Places

Religious facilities are also very important in a neighborhood. One of the factors in the selection of the living area, people will take into account the existence of religious facilities for their use. Religious facilities are widely distributed among the diverse religious belief of the population. In Bandar Baru Bangi, the population comes from a very diverse background. As such, religious beliefs are also very

diverse, but the four dominant religions are Islam, Christian, Buddhist and Hindu. In Bandar Baru Bangi not every section provided religious facilities. After the fieldwork done, the following is the listing and placement of the provision of among religious facilities:

Table 5 : Listing Of Religious Facilities In Bandar Baru Bangi (Sources : Kajang Municipal Council Local, 2011)

No.	Religious Facilities	Religion	Location
1.	Mosque a. Masjid Al-Hasanah b. MasjidAs-Solihin	Islam	a. Seksyen 9 b. Seksyen 14
2.	Church a. Canaan Lutheran Church	Christian	a. Seksyen 7
3.	Chinese Temple	Buddhist	Seksyen 8
4.	Temple / Monastery	Hindu	Seksyen 8

(c) Other Community Facilities

There are also others facilities needed by community in a residential area. These facilities provide important services to the development of the socio-economic and wellbeing of the State.

Medical and Health Facilities

According to Kajang Municipal Council Local Plan Draft (2011), until now the existing of health facilities owned by government in Bandar Baru Bangi is very limited. There are Health Clinic in and Dental Clinic, both in Seksyen 3. However, there is the proposed construction of a hospital in Seksyen 8. Neighbourhood also uses private health facilities built around the residential areas. Between the private medical and health facilities provide in Bandar Baru Bangi such as below:

Table 6 : Listing Of Private Medical And Health Facilities (Sources : Field Study, 2012)

No.	Private Medical And Health Facilities	Seksyen
1.	Poliklinik Al-Haj	Seksyen 4
2.	Hospital Pakar An-Nur Hasanah Sdn. Bhd	City Centre of Bandar Baru Bangi
3.	Pusat Rawatan Islam Az-Zahrah	City Centre of Bandar Baru Bangi
4.	Klinik Syifa	Seksyen 3
5.	Klinik Dr. Suraya	Seksyen 3
6.	Honey Veterinary Clinic	Seksyen 3

Sports Centre

Sport centres are mostly provided in most of the primary and secondary schools and government university but private colleges lack of this facility. Several government as well as privately own sport centres can be found in Bandar Baru Bangi also (Kajang Municipal Council Local Plan Draft, 2011).

Community Halls

Community hall in Bandar Baru Bangi just provided in several seksyen only. There are in Seksyen 8, seksyen 7, Seksyen 3, Seksyen 1, Seksyen 14 and Seksyen 15. All this Community Hall varies in size and facilities (Kajang Municipal Council Local Plan, 2011).

Financial Institutions Facilities

In residential area banks are very needed for community. Banks are convenience facilities available which provides access to financial services to the public. Facilities or infrastructure, including in the economic context in Bandar Baru Bangi is such as banks. Following are some of the bank in Bandar Baru Bangi :

Table 7 : Listing Of Financial Institution (Sources : Field Study, 2012)

No.	Financial Institution	Location
1	Maybank	Seksyen 4, 9 and 16
2	RHB	Seksyen 9
3	BSN	Seksyen 16
4	Bank Muamalat	Seksyen 9 and 16
5	Bank Islam	Seksyen 16
6	CIMB Bank	Seksyen 8,

Public Libraries

Bandar Baru Bangi is a town. Normally, library facilities in each town are provided by Branch Library. Branch Library in Bandar Baru Bangi located in Seksyen 9 which is in City Center of Bandar Baru Bangi (Kajang Municipal Council Local Plan Draft , 2011). School libraries are also found in almost all the colleges and university in Bandar Baru Bangi but public access to these libraries are limited.

Shopping Complex

Nowadays, shopping complex become a very important and convenience facility to the community. This is because in the shopping complex there are a variety of goods sold as a daily requirement of society. Shopping complex is classified as an one stop center because there is also commercial and services such as post office, spa, slimming centre, restaurant, mobile centre and also offices. Method of one-stop center to facilitate people in managing their daily lives, especially if the shopping center near the residential

area. Please refer **APPENDIX B** for pictures of shopping complex in Bandar Baru Bangi. Here is a list of available shopping complex in Bandar Baru Bangi stated from interviewees:

Table 8 : List Of Shopping Complex in Bandar Baru Bangi (Sources : Field Study 2012)

No.	Shopping Complex	Seksyen
1.	Bangi Utama Shopping Complex (WARTA)	Seksyen 16
2.	Econsave (Reko Central)	Seksyen 7
3.	Kompleks PKNS	City Centre
4.	Giant Hypermarket	Seksyen 16

Theme 2 : Open space and recreation

(a) Public Parks

It is believed that public parks are provided in every district for community and public use. Same as Bandar Baru Bangi, interviewees stated provide parks for recreation in this area. One of the famous public parks is Taman Tasik Cempaka located in City Centre in Bandar Baru Bangi. While Pusat Tenaga Malaysia (Seksyen 9) is one one the open space in Bandar Baru Bangi. Following are pictures of open space and recreation in Bandar Baru Bangi :



Picture of Taman Tasik Cempaka, BBB



Figure 3 :

Figure 4 : Picture of Pusat Tenaga Malaysia, BBB

(b) Children Playground

A playground or play area is a place with a specific design for children be able to play there. It may be indoors but is typically outdoors. Most of the open playground located adjacent to a public field that can be supervised or monitored by adults. Normally each residential area provided minimum one children

playgrounds. Nowadays, recreational equipment are provided in modern playgrounds such as seesaw, merry-go-round, swingset, slide, jungle gym, chin-up bars, sandbox, spring rider, monkey bars, overhead ladder, trapeze rings, playhouses, and mazes. All this type of recreational equipment will help children develop physical coordination, strength, and flexibility, as well as providing recreation and enjoyment.

Besides, near children playgrounds often also have facilities for adults such as basketball court, football field, badminton court and exercise equipment. The position of these adults' facilities is close to children playground convenience for adult to supervise the safety of childhood. Children playground in residential area also is designed to provide a safe environment for play in a natural setting.

(c) Pedestrian

A pedestrian is a person traveling on foot, whether walking or running. In some communities, those traveling using tiny wheels such as roller skates, skateboards, and scooters are also included as pedestrians. In modern times, the term mostly refers to someone walking on a road or footpath, but this was not the case historically. In Bandar Baru Bangi, there are also provide pedestrian for communities especially in public parks such as Taman Tasik Cempaka and also commercial area.

Theme 3 : Accessibility

(a) Rail Accessibility

In Bandar Baru Bangi both of the accessibility; rail and highway accessibility have been provided for public; to work, to school and anywhere. However, there are only commuter services which are under rail accessibility provided in Bandar Baru Bangi (Kajang Municipal Council Local Plan Draft, 2011). Therefore, these commuter facilities become daily transportation due to lack of rail transport choice. Following is a KTM commuter routes map in Malaysia :

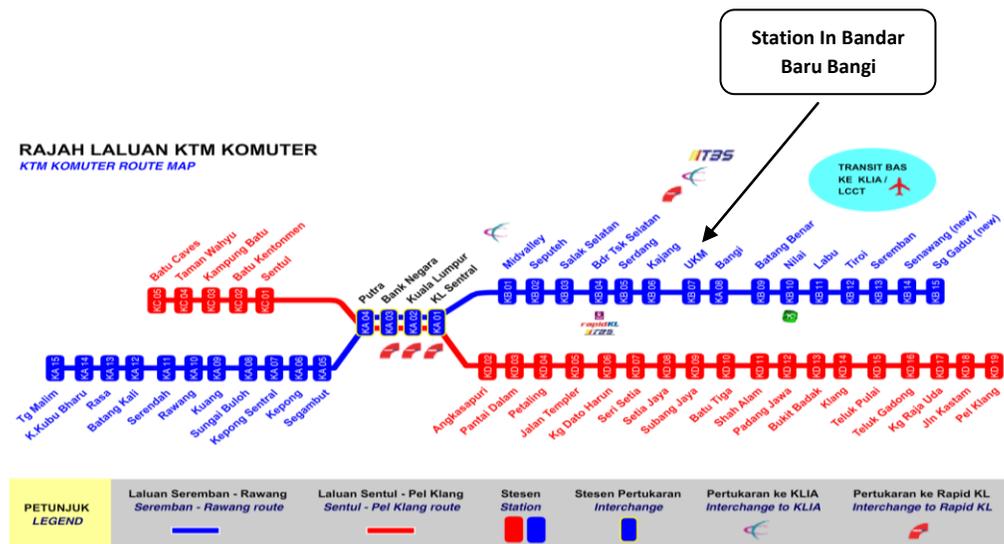


Figure 5 : KTM commuter routes map in Malaysia (Sources : KTM Komuter, 2012)

(b) Highway accessibility

Highway is an important accessibility for the community. As one of the main accessibility, highway represent sorts of benefits in saving time and distance. Bandar Baru Bangi is very strategic place because it is very well connected to highways as in Table 4.9. Both of these highways are undoubtedly linked to other major townships such as Cyberjaya, Putrajaya, Puchong and the bustling city of Kuala Lumpur for those who still wants to be part of the happening city life. Following is circulation for both highway in Bandar Baru Bangi :

Table 9 : List Of Highway in Bandar Baru Bangi (Sources : Field Study 2012)

No	Type Of Highway
1.	North-South Highway
2.	SILK Highway

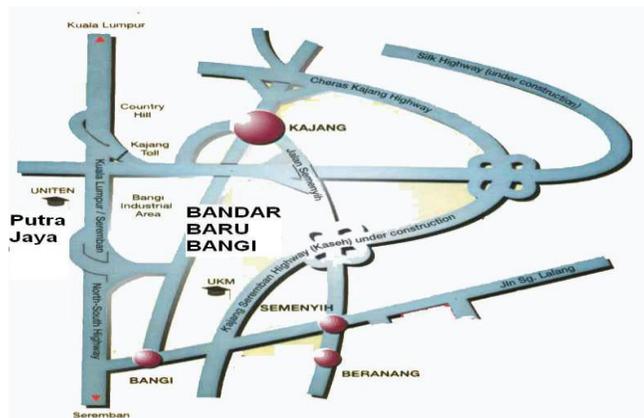


Figure 6 : Circulation Of Highway in Bandar Baru Bangi (JTTS, 2005)

Overview Of Residential Development Area Within Bandar Baru Bangi

PKNS (in Norngainy *et al.*, 2011) emphasized the development of Bandar Baru Bangi are almost completely. Residential area is the biggest area in Bandar Baru Bangi. Furthermore, Bandar Baru Bangi also known as the center of the main settlements (Kajang Municipal Council Local Plan Draft, 2011). Residential area in Bandar Baru Bangi divided by section. There are 16 sections in Bandar Baru Bangi. Normally, residential area in Malaysia used ‘Taman’ as identification. But, overall residential area in Bandar Baru Bangi used concept of ‘Seksyen’ as identification same as Shah Alam. Researcher will identify all the residential area using ‘Taman’ as identification under concept of ‘Seksyen’.

According to Kajang Municipal Council Local Plan Draft , (2011) Bandar Baru Bangi more focused on development of residential area such as City Centre, Seksyen 1, Seksyen 2, Seksyen 3, Seksyen 4, Seksyen 5, Seksyen 6, Seksyen 7, Seksyen 8, Seksyen 9, Seksyen 11, Seksyen 12, Seksyen 13, Seksyen 14 and Seksyen 15. Seksyen 10 and Seksyen 13 focused on industrial area. Please refer

APPENDIX C map for each section. Here is a map of section breakdown for Bandar Baru Bangi in Selangor:

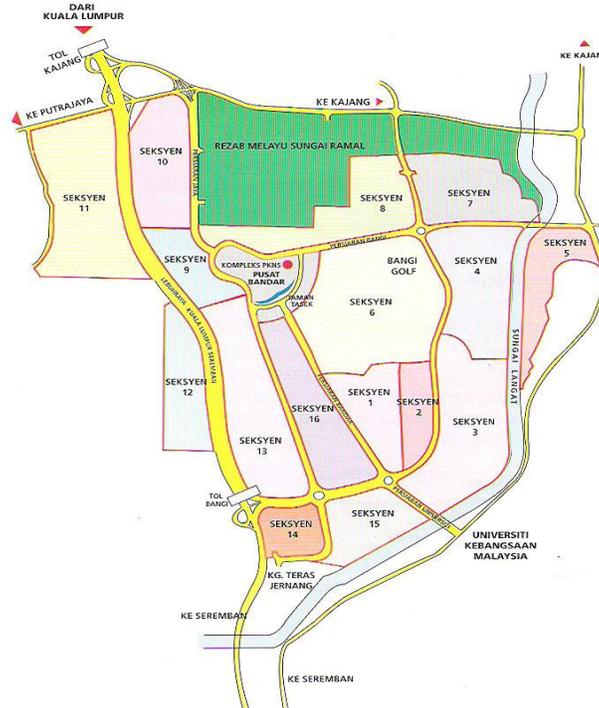


Figure 7 : Maps of Sections In Bandar Baru Bangi (Sources: JTTS Sdn. Bhd., 2005)

Radius Bandar Baru Bangi

For this study researcher decided to determine the radius of case study of Bandar Bangi using an application from <http://www.freemaptools.com/> and applied radius distance was 3.5 kilometres (km) or 13.665 miles. The area of this radius covered 38.485 km² or 9509.715 acres in Bandar Baru Bangi are as following:

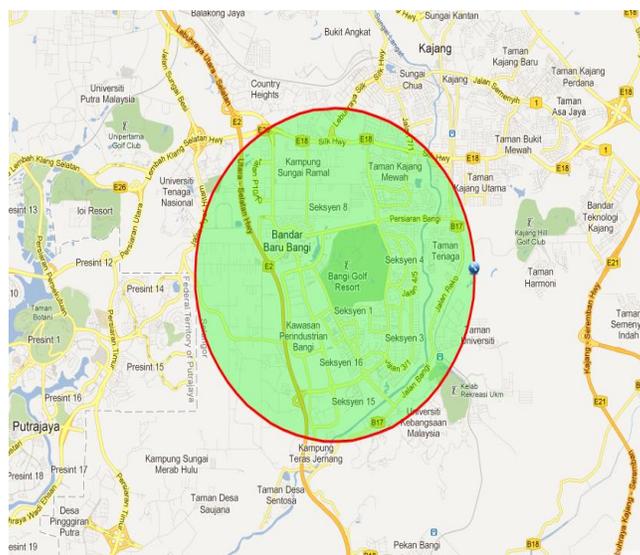


Figure 8 : Case Study Area Within The Range Of 3.5km (Sources: Google Map, 2012)

RESEARCH REFLECTION

Based on findings from the exploratory study for the neighbourhood facilities provision in Bandar Baru Bangi, researcher find out that :

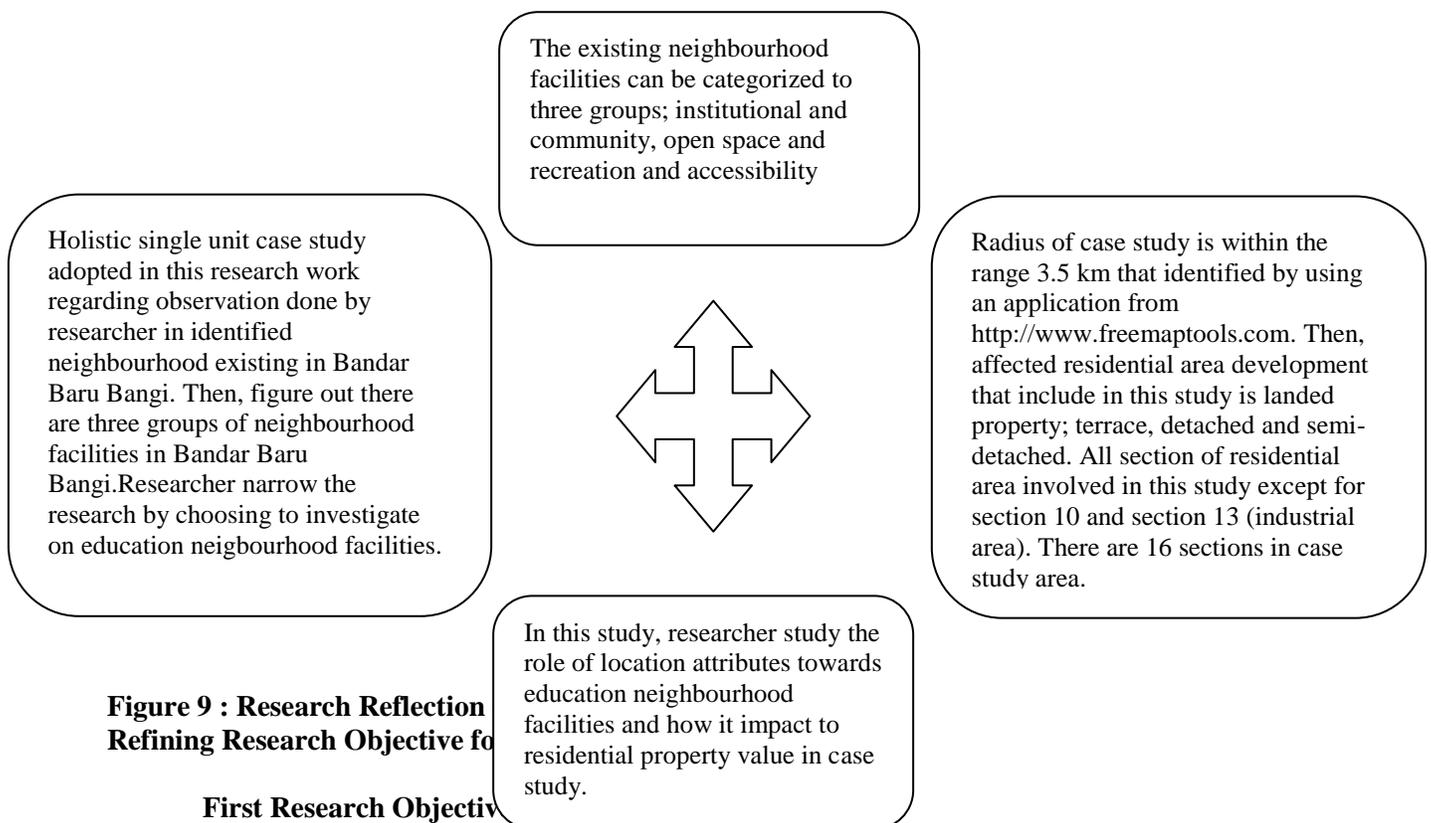


Figure 9 : Research Reflection Refining Research Objective fo

First Research Objectiv

To investigate the existing neighbourhood facilities provision in the study area.

For first objective researcher had done the field worked and made observation to figure out the existing neighbourhood facilities in Bandar Baru Bangi. From the field worked, identified that existing neighbourhood facilities can be categorized to three groups which are :

1. Institutional and community
2. Open space and recreation
3. Recreation and accessibility

All the existing neighbourhood facilities can be found in all section in Bandar Bangi except for Seksyen 10 and Seksyen 13. Both of these sections are industrial area. Following is the research framework on refining the first objective :

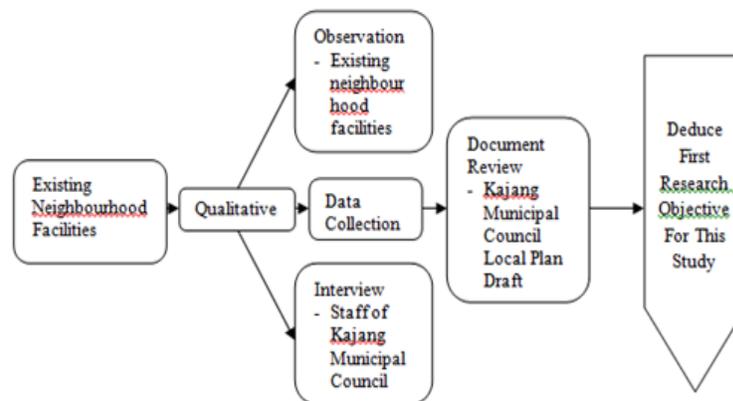


Figure 10 : Research Framework To Investigate Existing Neighbourhood Facilities (Field Study, 2012)

Second Research Objective :

To investigate the implication of the locational attributes towards neighbourhood facilities (education) provision on the value of the residential property value in the study area.

For second objective researcher want to study the implication of neighbourhood facilities by location on the value of the residential property value in Bandar Baru Bangi. Researcher also narrows the research by choosing education facilities on higher educations, training centres and research centre only. For this objective, researcher want to figure out either education facilities that highlighted before are among the factor that gave impact on residential property value. To figure out the impact, Hedonic Price Analysis will be applied in data analysis chapter.

Refining The Choice Of Research Approach

For this study, the aim is to examine the impact of location attribute towards neighbourhood facilities (education) provision on residential property value in Bandar Baru Bangi, Malaysia. For that, holistic

single unit of case study adopted in this research work regarding the field work that identified by researcher to investigate existing neighbourhood facilities in Bandar Baru Bangi. From that, researcher narrows the study by choosing education centre as unit of analysis for single case study.

In this study also researcher only investigates on landed property which are terrace, detached and semi detached. It is because from the observation made by researcher in this study area, landed property developed more compare to strata property. Besides, all the section involved in except for section 10 and section 13. Both of these sections are industrial area.

CONCLUSION

This chapter having investigated existing neighbourhood facilities in Bandar Baru Bangi, identified the affected residential development area in case study area, determined the radius of this case study area, refined the research objectives of this study and refined the choice of research approach in this study.

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Appendix A

No.	Primary Schools	Secondary Schools
1	<p>Sekolah Kebangsaan Bandar Baru Bangi</p> 	<p>Sekolah Menengah Kebangsaan Bandar Baru Bangi</p> 
2	<p>Sekolah Kebangsaan Jalan Tiga (3) Bandar Baru Bangi</p> 	<p>Sekolah Menengah Kebangsaan Jalan 3 Bandar Baru Bangi</p> 

Sekolah Kebangsaan Jalan Empat (4)
Bandar Baru Bangi



3

Sekolah Menengah Kebangsaan Jalan
4 Bandar Baru Bangi



	Primary Schools	Secondary Schools
4	<p>Sekolah Kebangsaan Jalan Enam (6) Bandar Baru Bangi</p> 	
5	<p>Sekolah Kebangsaan Seksyen 7 Bandar Baru Bangi</p> 	
6	<p>Sekolah Rendah Agama (Integrasi) Bandar Baru Bangi</p> 	

Appendix B



Bangi Utama Shopping Complex (WARTA)
(Seksyen 16)



Econsave (Reko Central) (Seksyen 7)



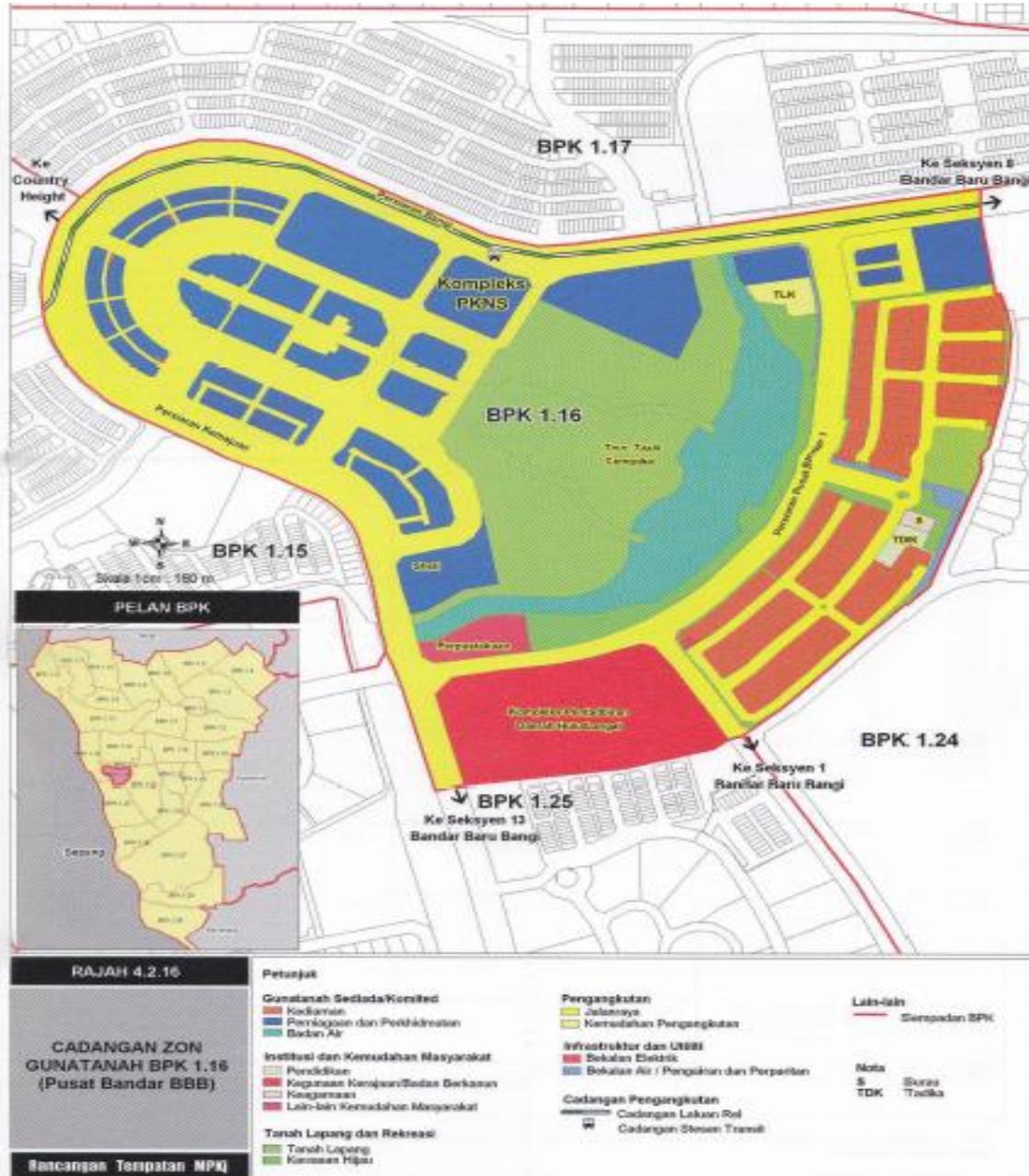
Kompleks PKNS (City Centre)



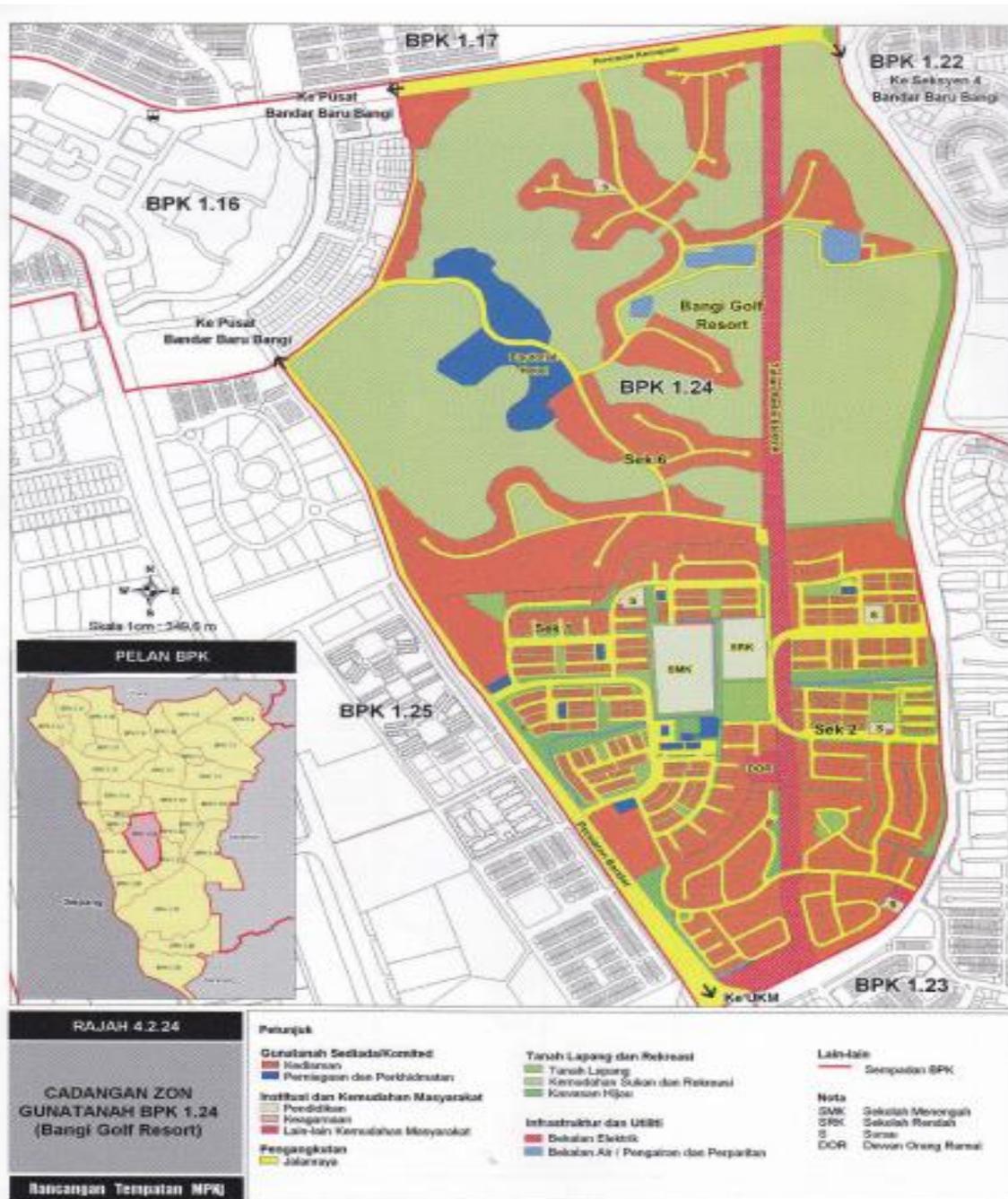
Giant Hypermarket (Seksyen 16)

APPENDIX C

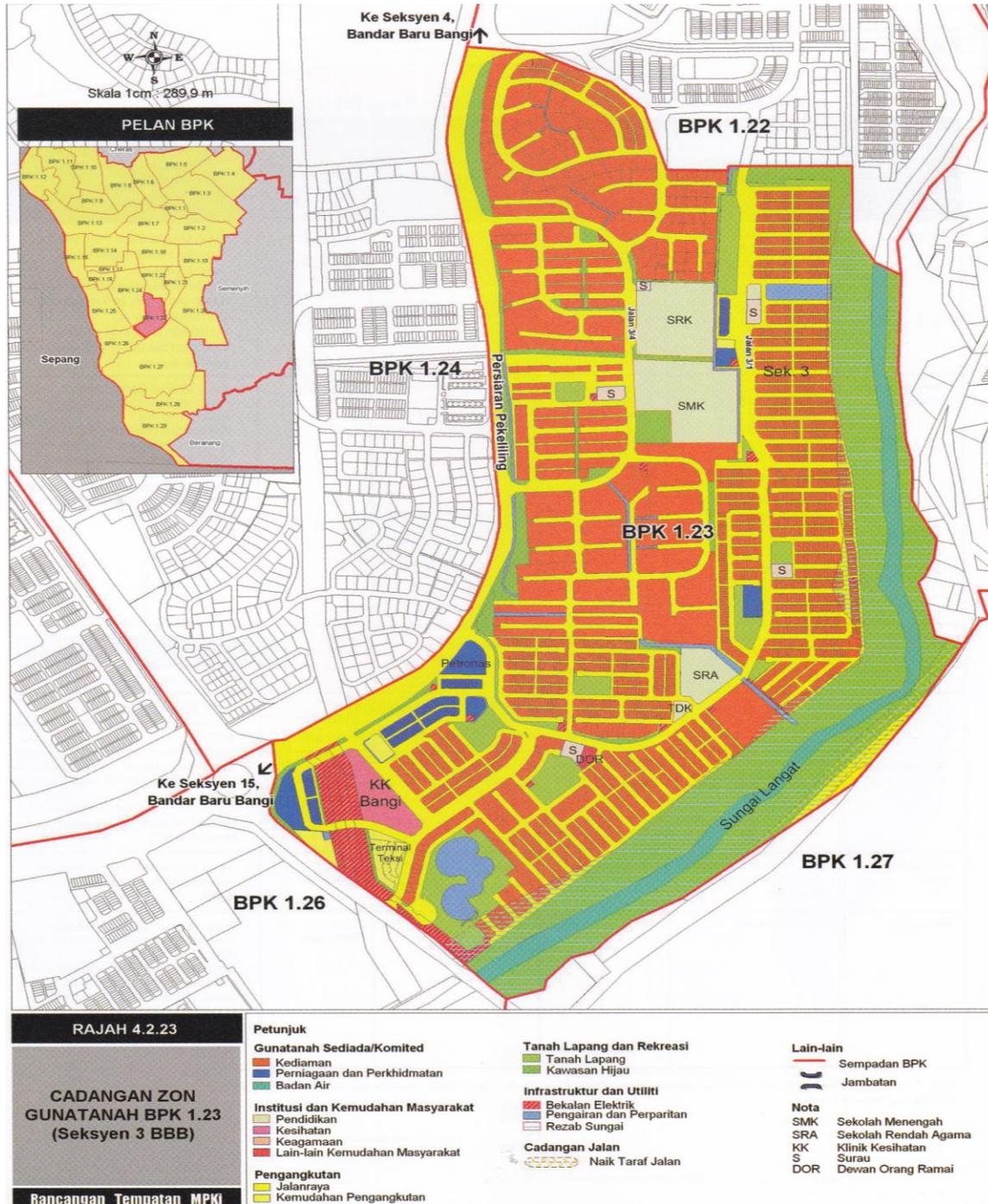
City Centre



Seksyen 1, 2 dan 6

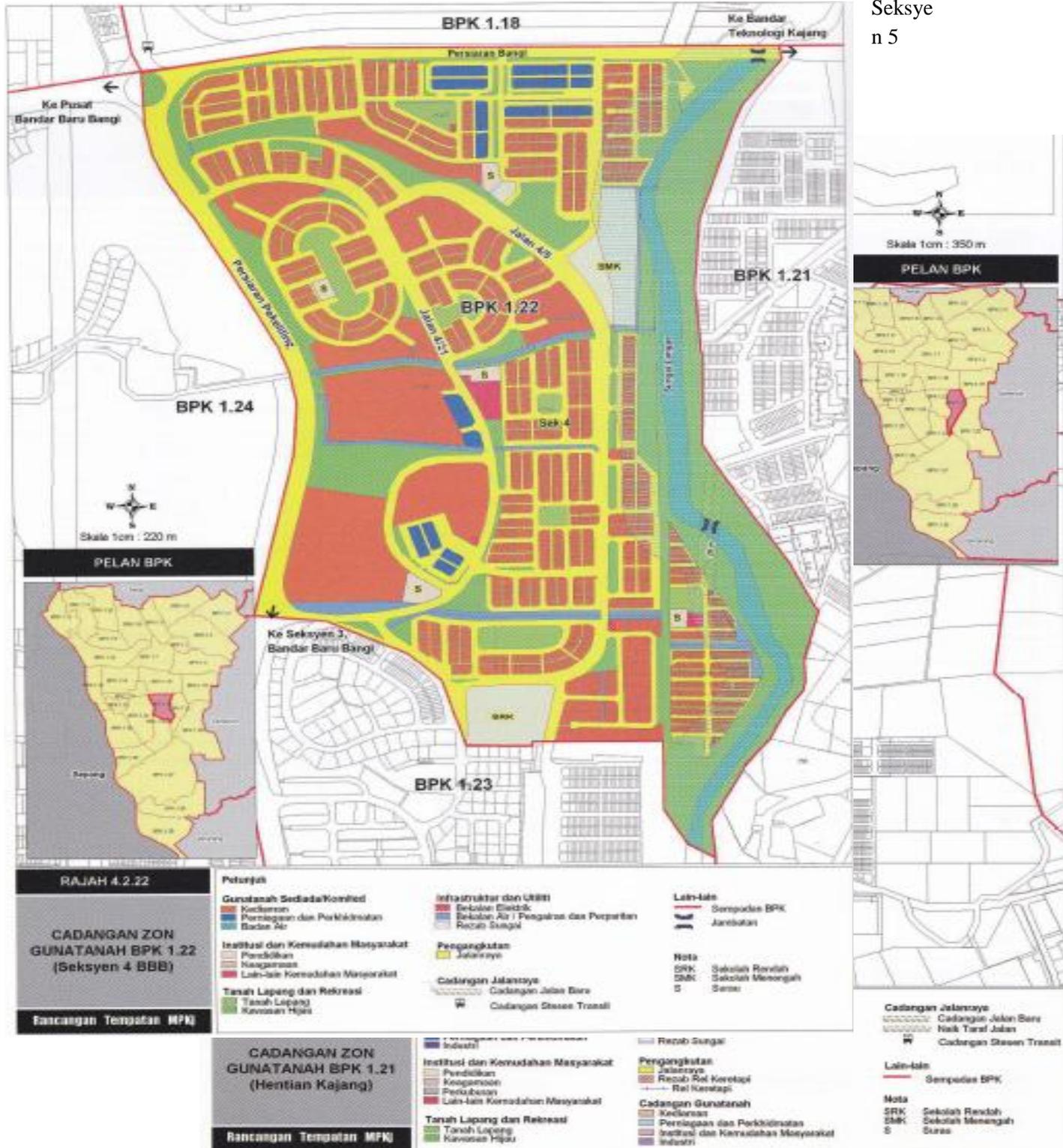


Seksyen 3

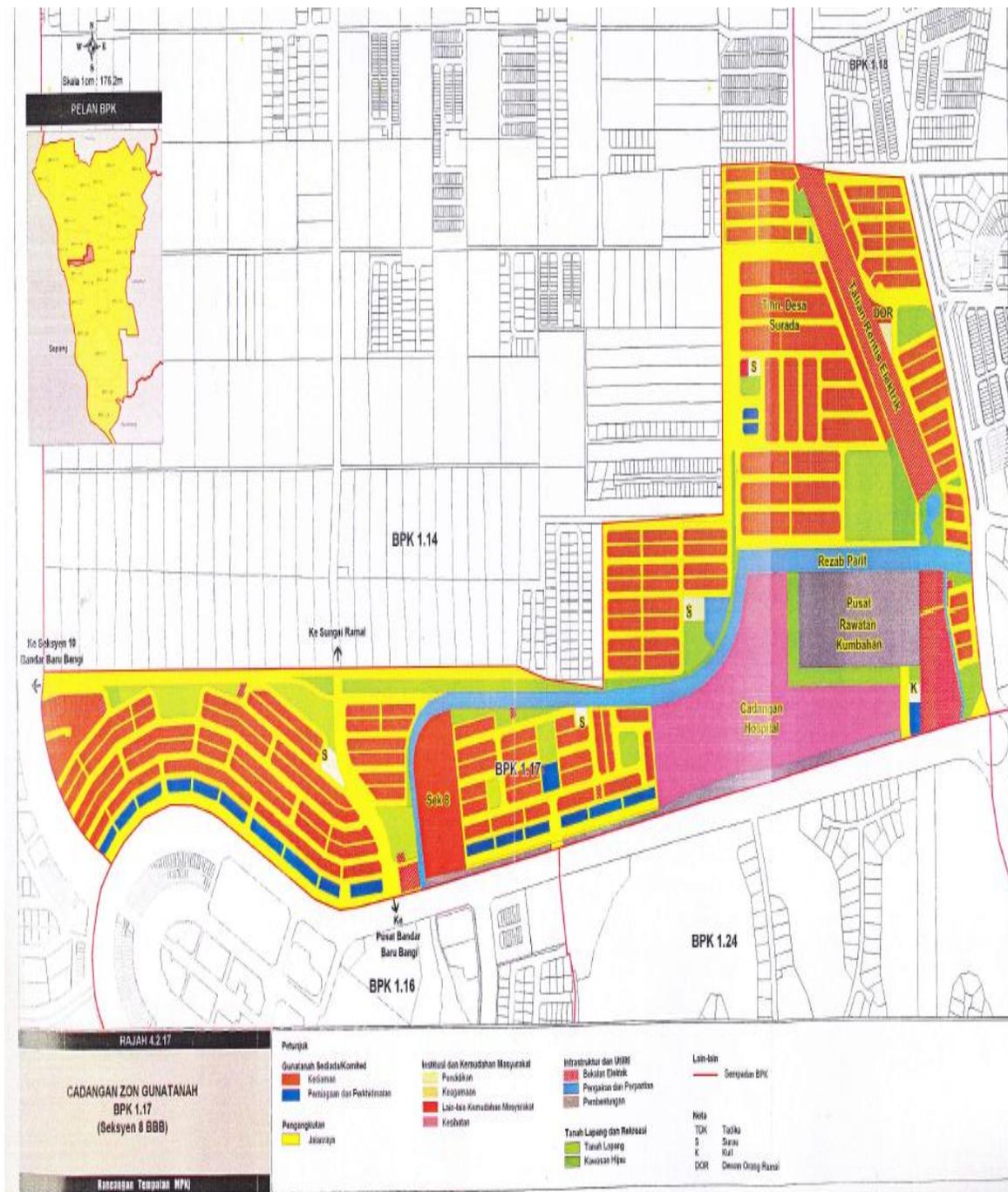


Seksyen 4

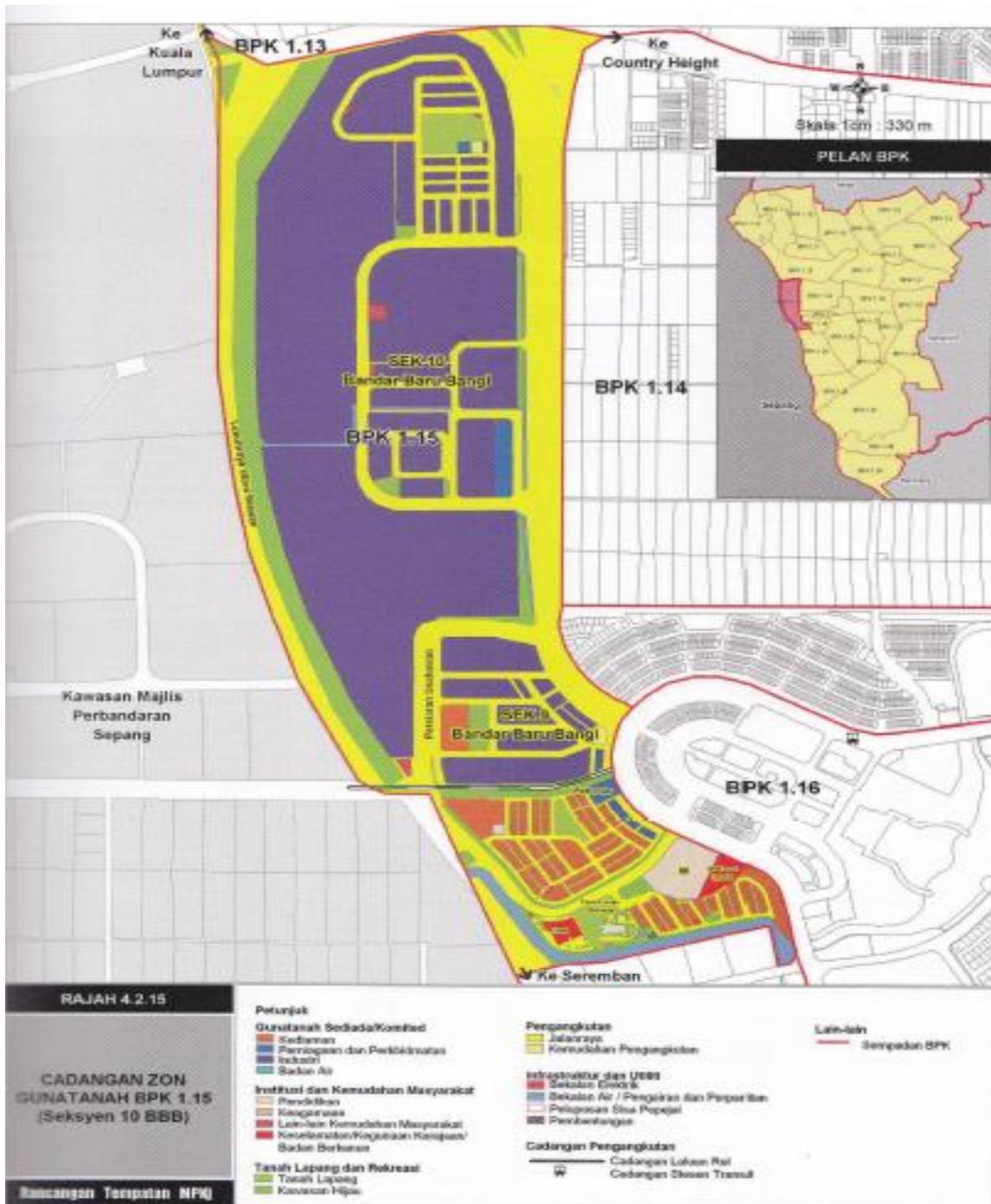
Seksyen 5



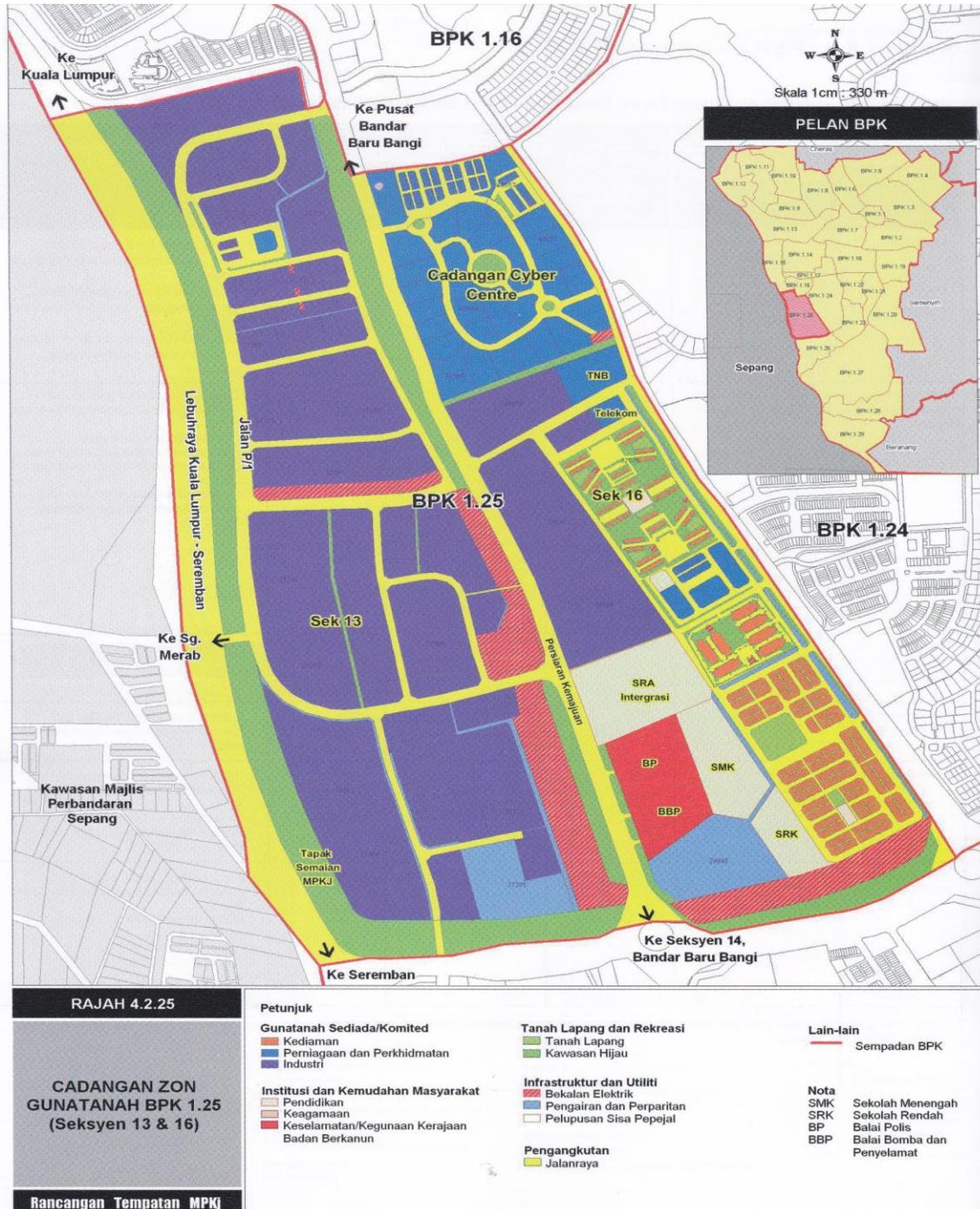
Seksyen 8



Seksyen 9 and 10



Seksyen 13 and 16



Seksyen 14 and 15

