

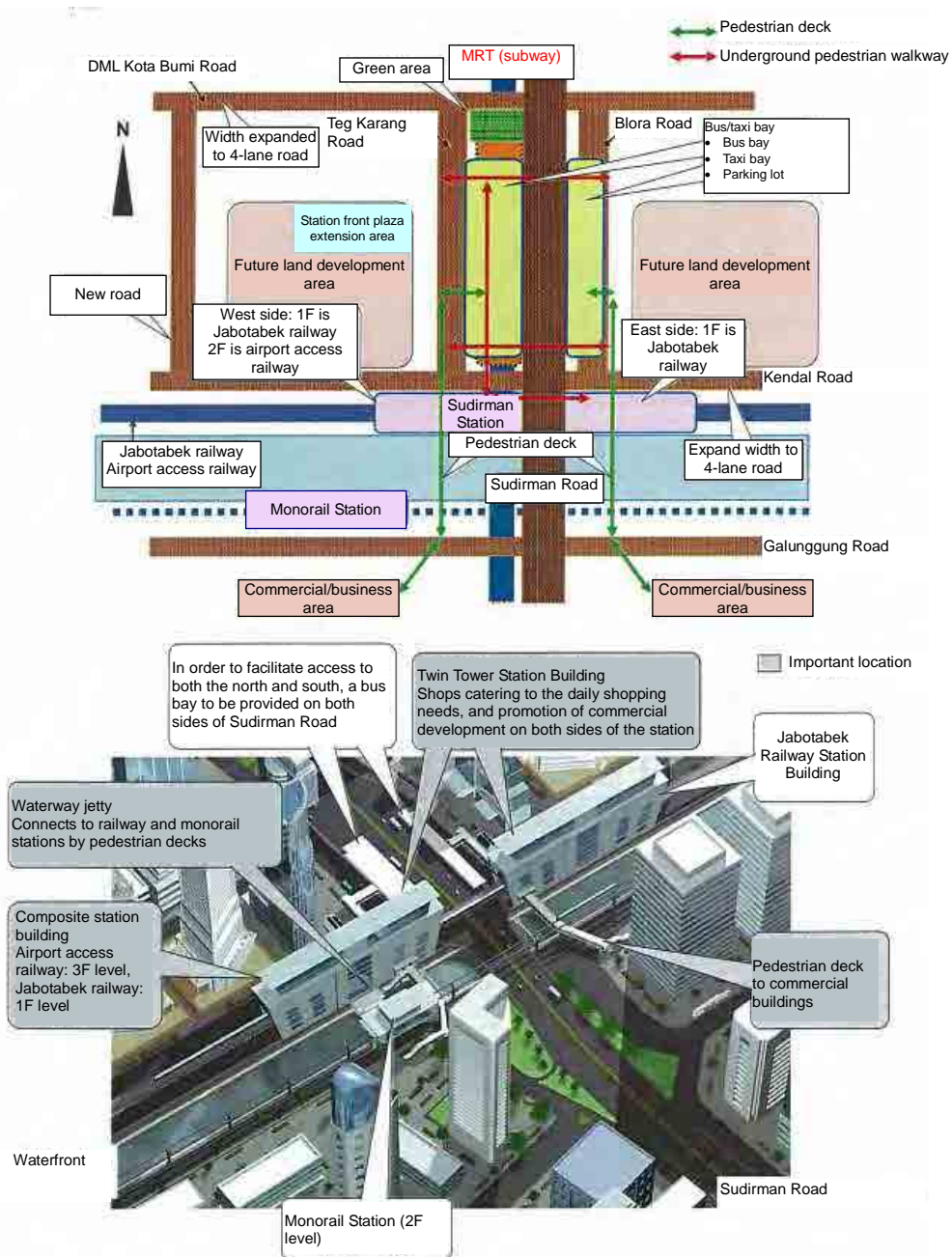
### 2.2.3 Details of surveys in past fiscal years

In the past, the Dukuh Atas area has been considered to be a Transit Oriented Development (TOD) potential model, from its position as a transport hub.

#### 1) Former JBIC survey

In July 2008, "Basic Survey concerning Railway Station Revitalization" which was commissioned by JBIC, proposed initiatives aimed at revitalization of Dukuh Atas Station, as a model for the solution of issues regarding stations in Indonesia.

In that survey, an outline survey of the status of Dukuh Atas Station surroundings was carried out, and proposals for the development of the area focusing on the station were made, but it did not indicate specifically how to proceed.

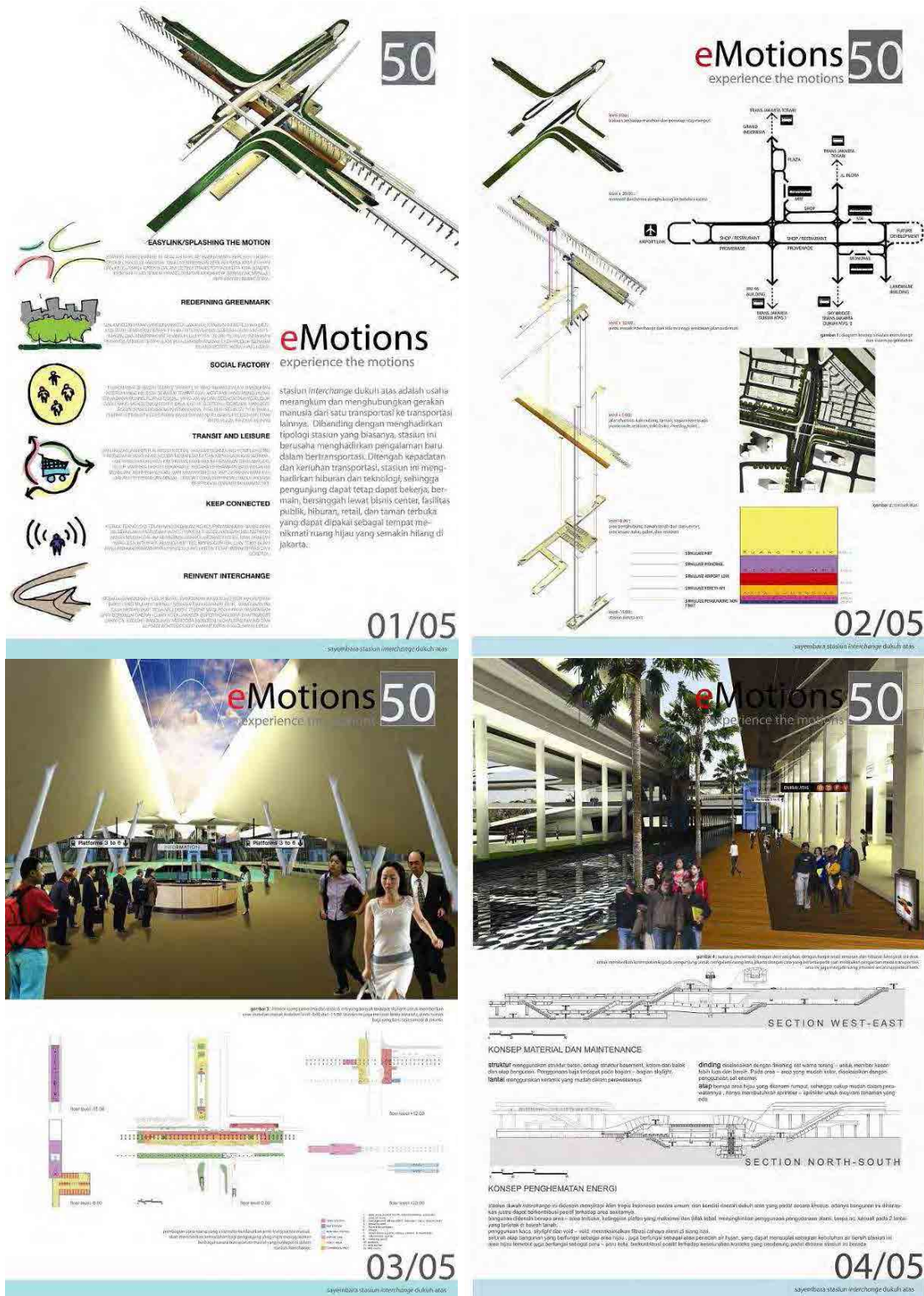


Source: JBIC "Basic Survey concerning Railway Station Revitalization" July 2008

Figure-2.2.30 JBIC survey proposals

## 2) Dukuh Atas Station Interchange Competition

In October and November of year 2008, The spatial planning agency of DKI Jakarta (JAKARTA DKI TATA RUANG), together with the Indonesia Architect Institute hosted a architectural competition “Sayembara Karya Stasiun Kereta Api Interchange Dukuh Atas 2008 (New Idea Competition for the Interchange Railway Station Dukuh Atas 2008), to gain new ideas from the public (Limited to have at least one member of the Indonesian Architect Institute with an architects license to be in the team) to implement to the current urban planning around the Dukuh Atas area. The condition of the competition was to propose a design idea of integrate station for the transport modes expected to come to Dukuh Atas in the future, which are the railway, MRT, BRT, monorail , Airport line, and waterway transport. 3 winners were awarded, and the first winner Mr. Yori Antars idea of multi later integration and roof top green building were implemented to the existing



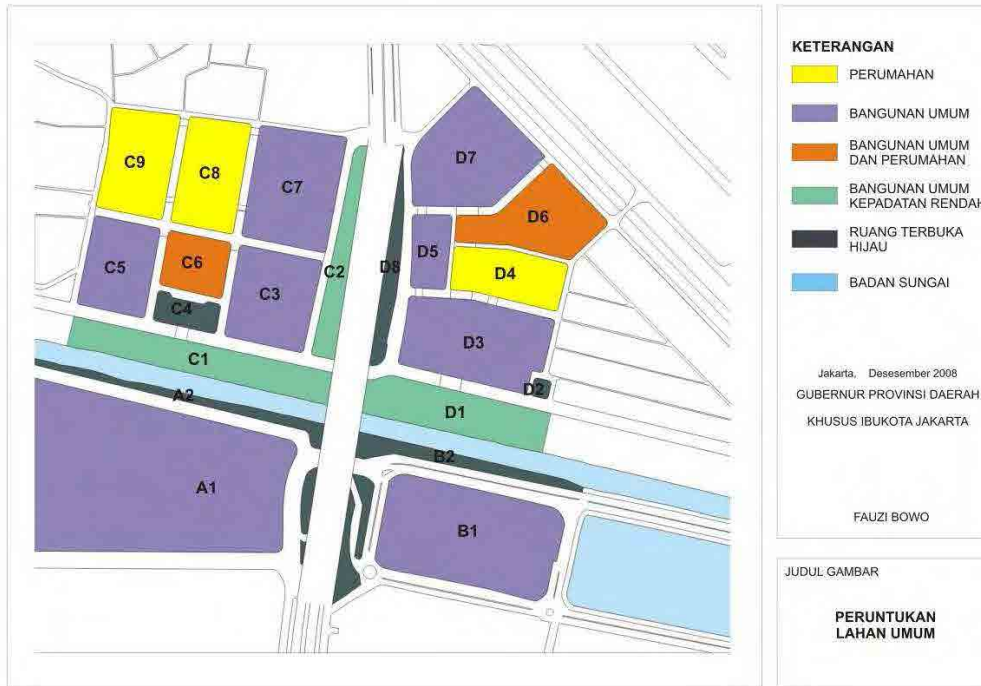
Source: [www.iai-jakarta.org/](http://www.iai-jakarta.org/)

Figure-2.2.31 Dukuh Atas Station Design Competition 2008



### 3) Urban Transport Hub report of Dukuh Atas

Based on the results of a competition in that year, Jakarta Provincial Government Planning Bureau (JAKARTA DKI TATA RUANG) produced a report on future urban plan for the Dukuh Atas Station surrounding area as a traffic hub “Panduan Rancang Kota Kawasan Dukuh Atas.” The report promotes the TOD type of urban development, and for the Dukuh Atas area proposes a scheme to provide a large public open space within a high floor area ratio area by forming a super block. The report itself was not certified under the Spatial Plan law, and the plan was not implemented in the LRK city plan sheet.



Source: Panduan Rancang Kota Kawasan Dukuh Atas DKI 2008

Figure-2.2.32 Design Guidelines for Dukuh Atas District 2008 (1)



Figure-2.2.33 Design Guidelines for Dukuh Atas District 2008 (2)

(Source: Panduan Rancang Kota Kawasan Dukuh Atas DKI 2008)



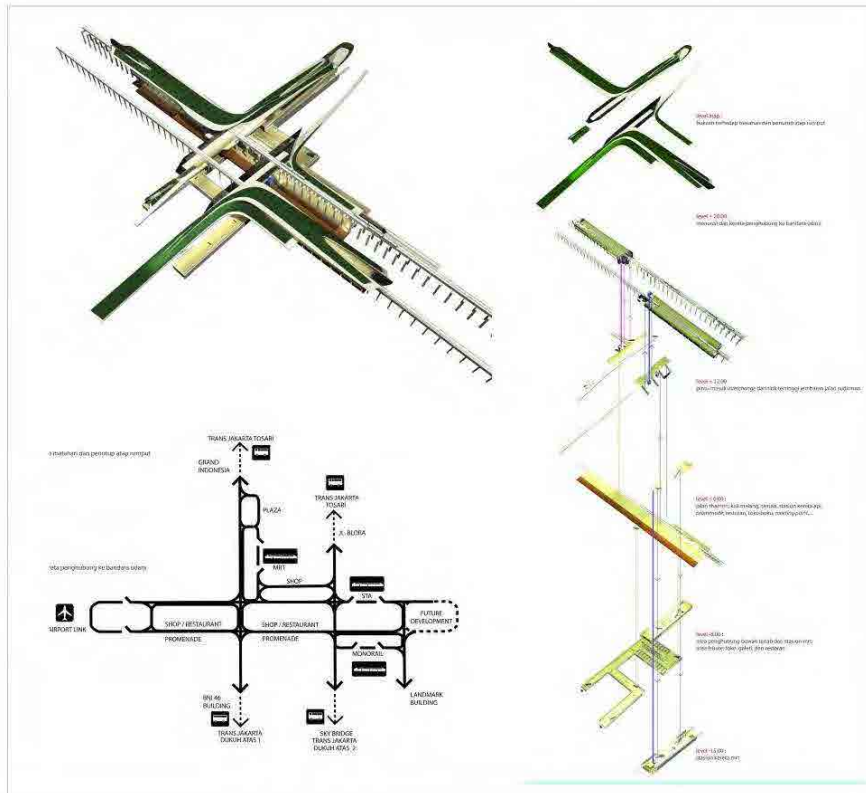
**KETERANGAN**

**JUDUL GAMBAR**

**ILUSTRASI  
KAWASAN**

Source: Panduan Rancang Kota Kawasan Dukuh Atas DKI 2008

Figure-2.2.34 Design Guidelines for Dukuh Atas District 2008 (3)



**KETERANGAN**

**SISTEM SIRKULASI TITIK  
TRANSPORTASI ANGKUTAN  
PUBLIK DI KAWASAN DUKUH  
ATAS BERDASAR PEMENANG  
SAYEMBARA**

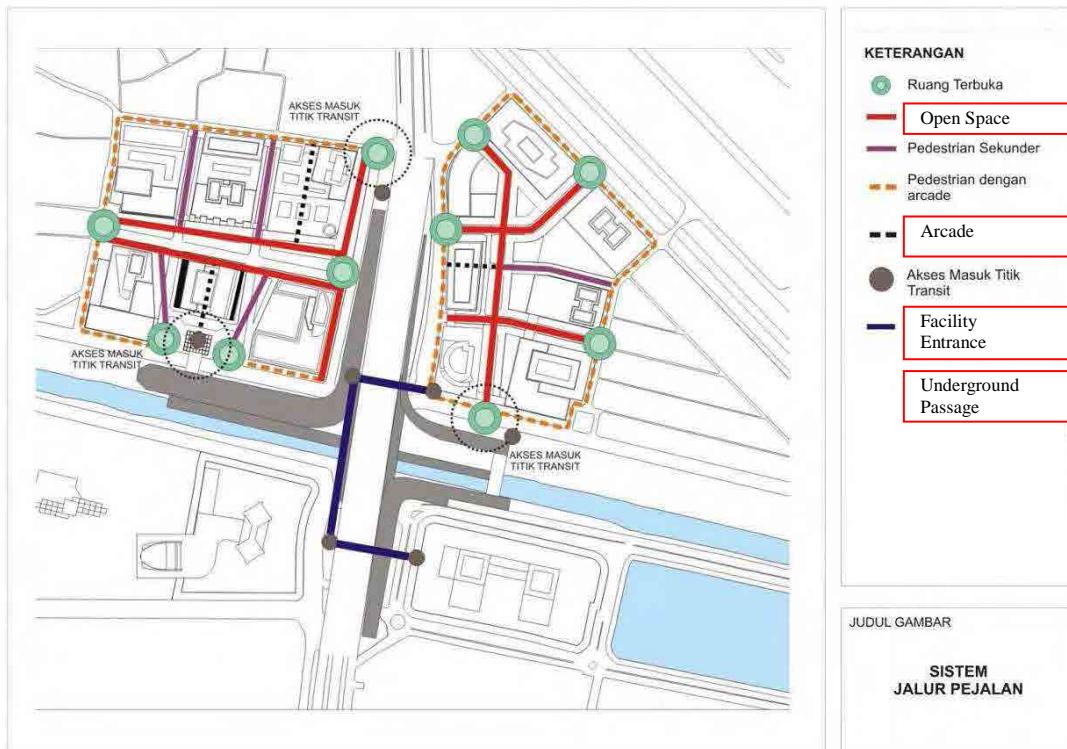
**JUDUL GAMBAR**

**SISTEM SIRKULASI  
TRANSPORTASI  
PUBLIK KAWASAN**

Source: Panduan Rancang Kota Kawasan Dukuh Atas DKI 2008

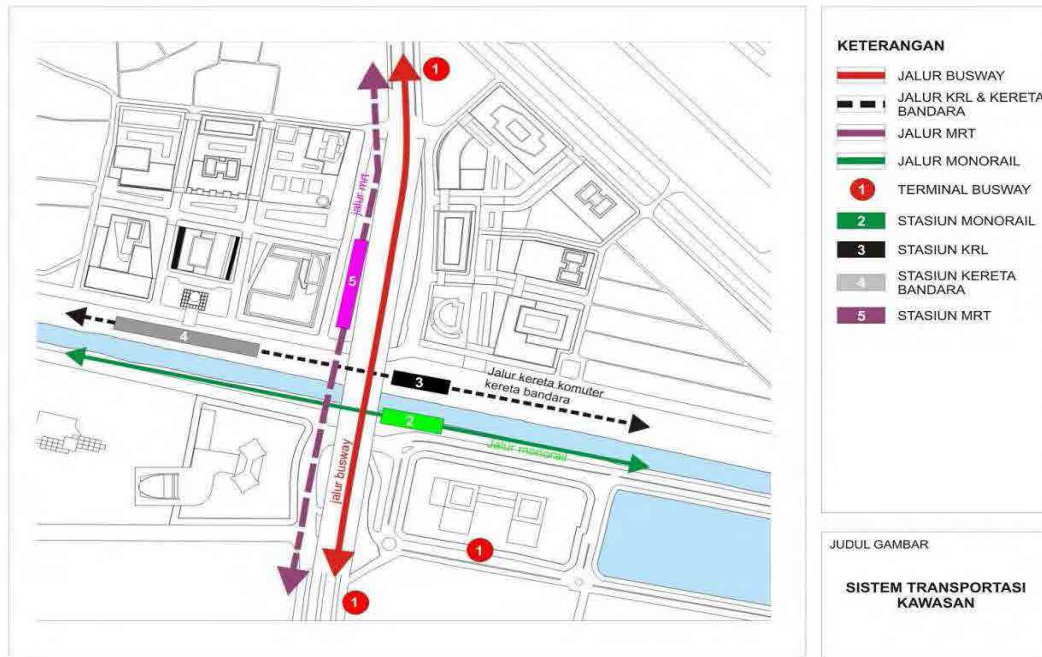
Figure-2.2.35 Design Guidelines for Dukuh Atas District 2008 (4)

In the scheme in this report, to promote TOD, a scheme in which pedestrians have priority is developed, and a network of pedestrian flow lines within the area is proposed. Also, open spaces are planned as the entrance spaces to the area, and it is proposed that these be connected by the pedestrian flow lines. Regarding transport facilities, the MRT, airport access line, BRT (TransJakarta) Koridor 1, and at the 2008 stage Koridor 4 & 6 in the east direction had started operation



Source: Panduan Rancang Kota Kawasan Dukuh Atas DKI 2008

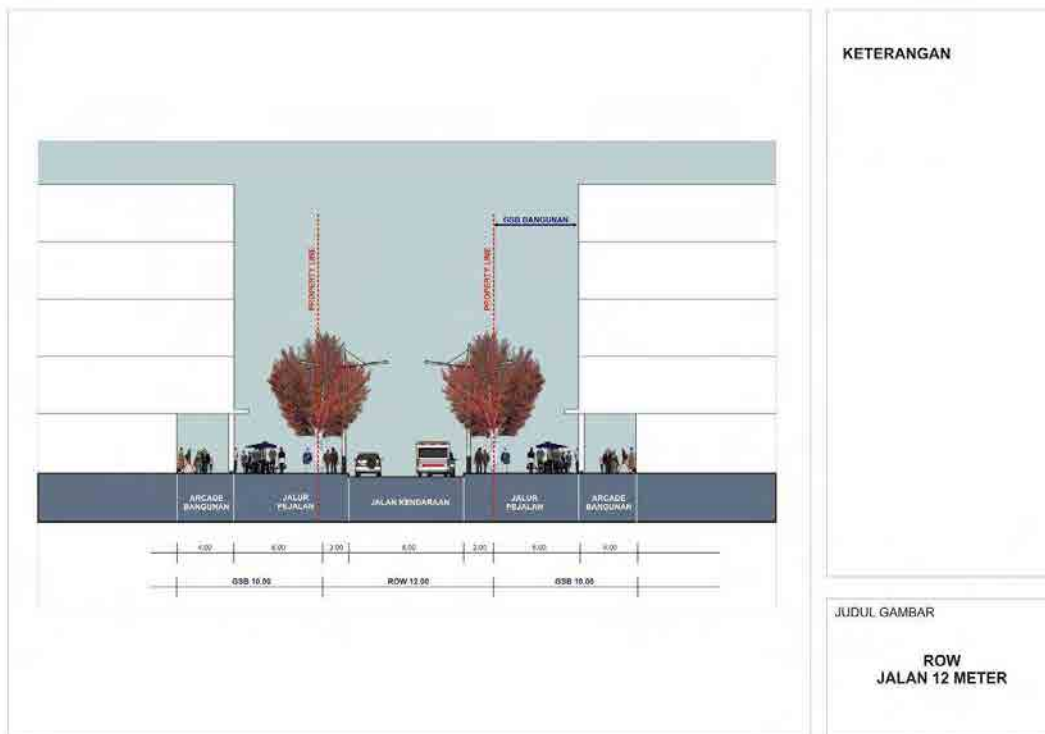
Figure-2.2.36 Design Guidelines for Dukuh Atas District 2008 (5)



Source: Panduan Rancang Kota Kawasan Dukuh Atas DKI 2008

Figure-2.2.37 Design Guidelines for Dukuh Atas District 2008 (6)

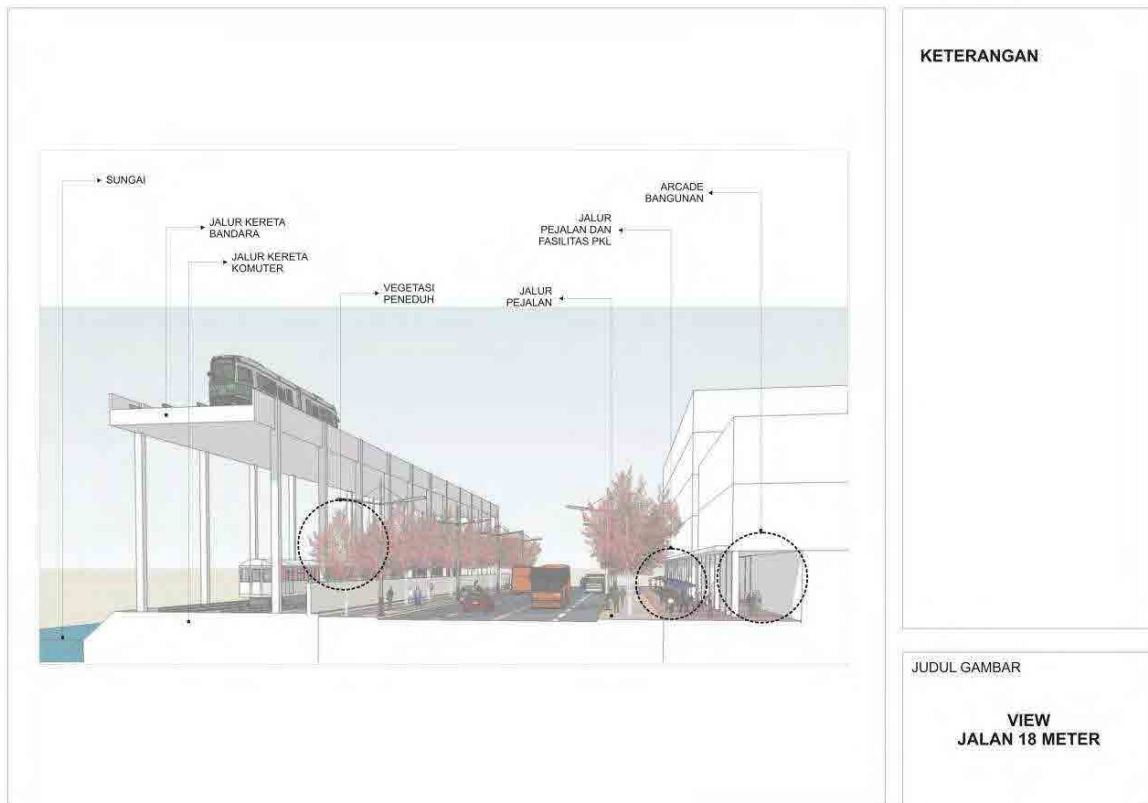
To provide the pedestrian network, pedestrian space provided in the public open space by setting back the private building side and providing a first-floor overhang is planned separate from the pedestrian space on the public road side.



Source: Panduan Rancang Kota Kawasan Dukuh Atas DKI 2008

Figure-2.2.38 Design Guidelines for Dukuh Atas District 2008 (7)





Source: Panduan Rancang Kota Kawasan Dukuh Atas DKI 2008

Figure-2.2.39 Design Guidelines for Dukuh Atas District 2008 (8)



### 2.2.4 Current area development outlook

#### 1) Outlook for land-use with the opening of MRT – Urban Design Guidelines

The DKI Urban Planning Bureau is reviewing the LRK for land-use, floor area ratios, building area ratios, etc., in an area extending to a radius of 500 m from the MRT station, in association with the development of the MRT.

For this study of Dukuh Atas area, we respected the current undergoing study of the UDGL done by the DKI Urban Planning Bureau, as the future vision of this area.

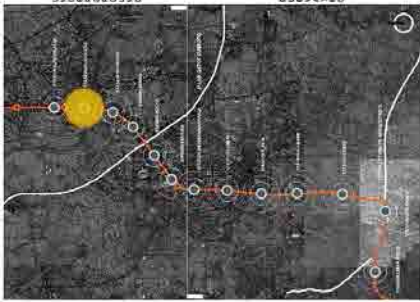
The undergoing UDGL study is based on the traffic hub report of “Panduan Rancang Kota Kawasan Dukuh Atas” in 2008, respecting the usage of average 1ha super block planning. The northern area of Dukuh Atas is planned to be raised to 600% KLB (Floor Area Ratio) from the current 180%~450%. This study also respects this concept, of making high volume development on north side aligning with the integration of the urban transport hub to be formed in the northern area.

Table-2.2.5 Urban Design Guideline Dukuh Atas 2012 (3)

Source: PRK Pengembangan Koridor MRT Jakarta versi februari 2012 draft

NAMA KAWLING			LUAS LAHAN / KAPLING	RENCANA PENGEMBANGAN						
BLOK	NOMOR KAPLING	PERUNTUKAN		INTENSITAS			LUAS LANTAI			
				T/D	KDB	KLB	TB	Dasar (m <sup>2</sup> )	Total (m <sup>2</sup> )	
DUKUH ATAS	DA_1	a	16.613	Klu/Kpd	T	40	5,0	40	6.645	83.065
		b	29.178	Wsn	T	40	5,0	40	11.671	145.890
	DA_2	a	10.652	Klu/Kpd	T	40	4,5	32	4.261	47.934
		b	7.003	Klu/Kpd	T	40	4,5	32	2.801	31.514
		c	9.850	Klu/Kpd	T	40	4,5	32	3.940	44.325
	DA_3	a	7.625	Wsn	T	40	0,0	-	-	-
		b	13.097	Klu/Kpd	T	40	6,0	42	5.239	78.582
		c	16.493	Wkt/Wkt	T	40	6,0	42	6.597	96.958
		d	14.087	Wkt/Wkt	T	40	6,0	42	5.635	84.522
		e	2.877	Wsn	T	40	0,0	-	-	-
		f	8.754	Klu/Kpd	T	40	6,0	42	3.902	52.524
		g	13.798	Wsn	T	40	6,5	40	5.519	89.887
		h	9.591	Wkt/Wkt	T	40	6,0	42	3.836	57.546
	DA_4	a	45.823	Klu/Kpd	T	40	5,0	40	18.329	229.115
		b	35.043	Klu/Kpd	T	40	5,0	40	14.017	175.215
	DA_5	a	21.459	Klu/Kpd	T	40	4,5	32	8.584	96.566
		b	10.959	Klu/Kpd	T	40	4,5	32	4.388	49.361
	DA_5	a	20.020	Wkt/Wkt	T	40	6,0	42	8.008	120.120
		e	6.074	Wkt/Wkt	T	40	6,0	42	3.230	48.444
	DA_7	a	442	Wsn	T	40	0,0	-	-	-
		b	4.813	Wkt/Wkt	T	40	6,0	42	1.925,2	28.878
		c	7.697	Wkt/Wkt	T	40	6,0	42	3.078,8	46.182
		d	7.062	Klu/Kpd	T	40	6,0	42	2.824,8	42.372
	DA_8	a	1.411	Klu/Kpd	D	60	1,2	2	846,80	1.693
		b	4.708	Wbs	T	60	1,2	2	2.824,80	5.850
		c	2.266	Wbs	T	60	1,2	2	1.371,60	2.743
	DA_9	a	11.858	Wbs	T	60	1,2	2	7.114,80	14.230
		b	1.526	Klu/Kpd	D	60	1,8	3	915,60	2.747
	DA_10	a	3.019	Wsn	T	40	0,0	-	-	-
		b	3.207	Mdi	T	40	0,0	-	-	-
c		4.179	Wsn	T	40	0,0	-	-	-	
DA_11	a	4.136	Wsn	T	40	0,0	-	-	-	
	b	5.683	Wbs	T	60	0,0	-	-	-	
	c	4.056	Mdi	T	40	0,0	-	-	-	
DA_12	a	5.554	Klu/Kpd	T	45	4,0	24	2.503,80	22.256	
DA_13	a	10.708	Wkt/Wkt	D	60	2,4	4	6.424,80	25.699	
	b	22.656	Wbs	T	60	1,2	2	13.683,00	27.167	
<b>TOTAL</b>						<b>39,51%</b>	<b>4.339</b>		<b>159.626</b>	<b>1.753.003</b>

**KETERANGAN  
PETA KUNCI**



- WISATA DENGAN FASILITASNYA
- WISATA DAN MANGSUKAN LAMUN DENGAN FASILITASNYA
- KAWASAN TAMAN DENGAN FASILITASNYA
- KAWASAN LINGKUNGAN DENGAN FASILITASNYA
- KAWASAN PERMINTAAN DENGAN FASILITASNYA
- SUB-FASILITAS (MIBP)
- PENYEMPURNAAN BUNYAN DENGAN FASILITASNYA
- PENYEMPURNAAN WILAYAH LINGKUNGAN DENGAN FASILITASNYA

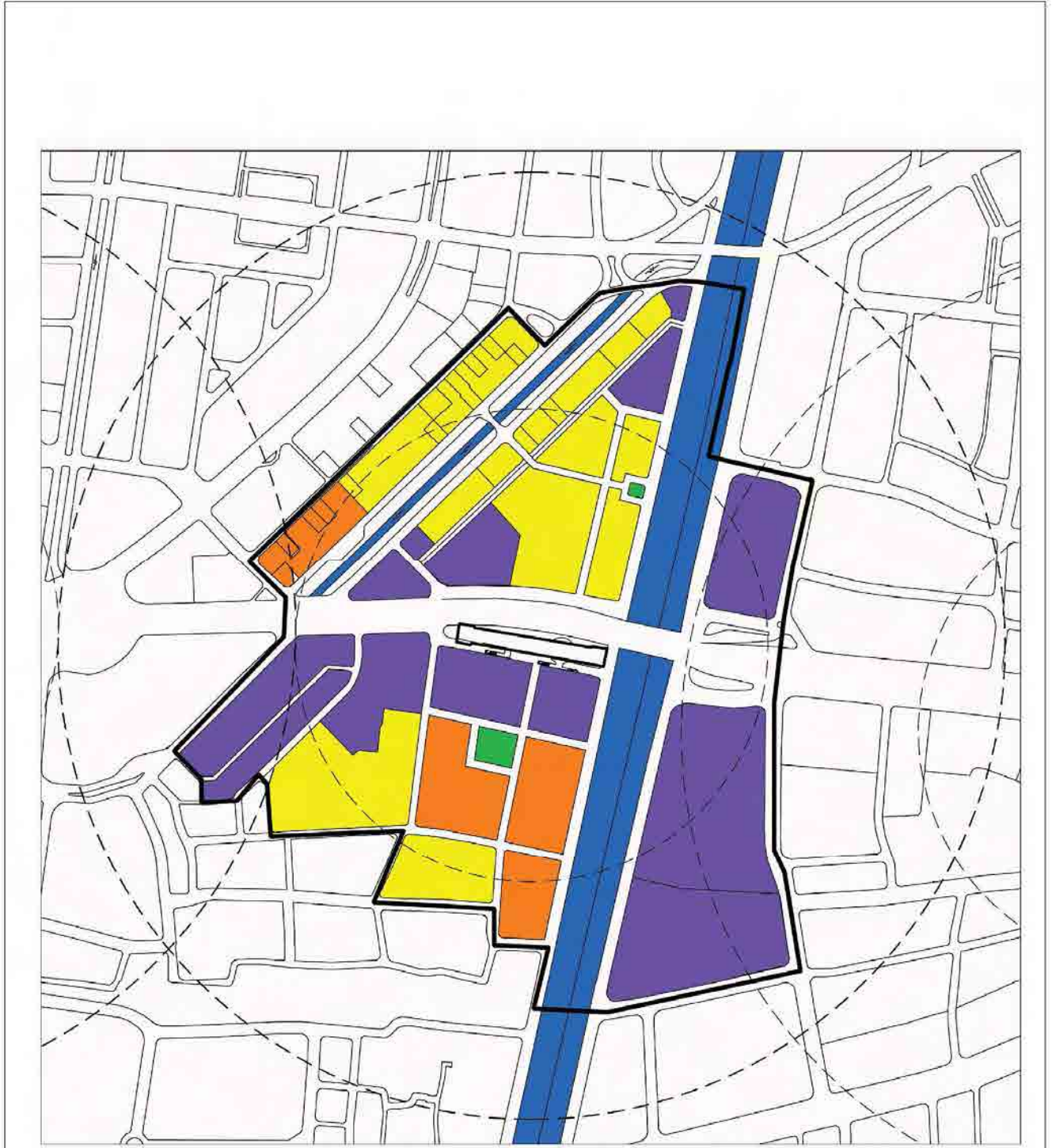
Jakarta

Jakarta,

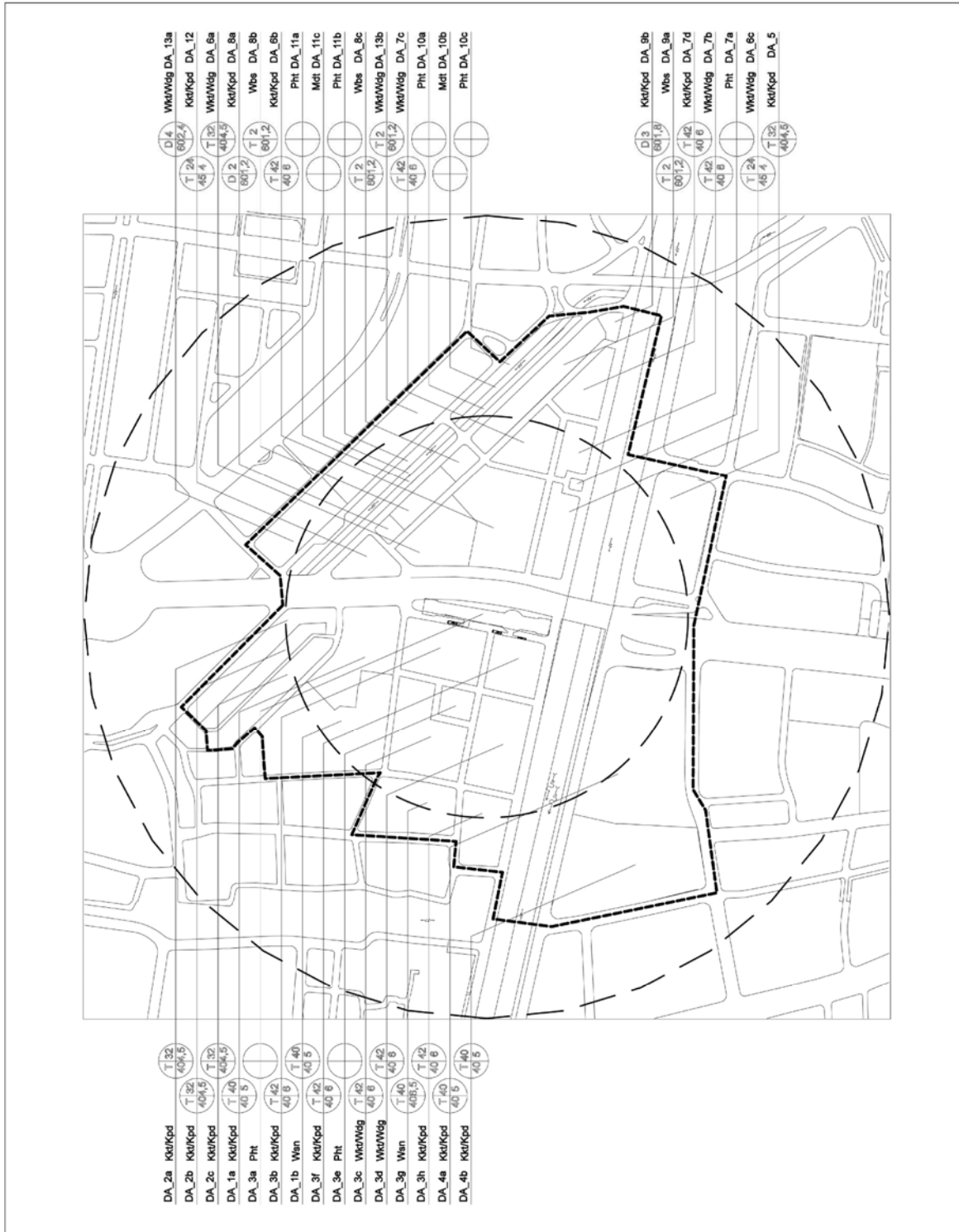
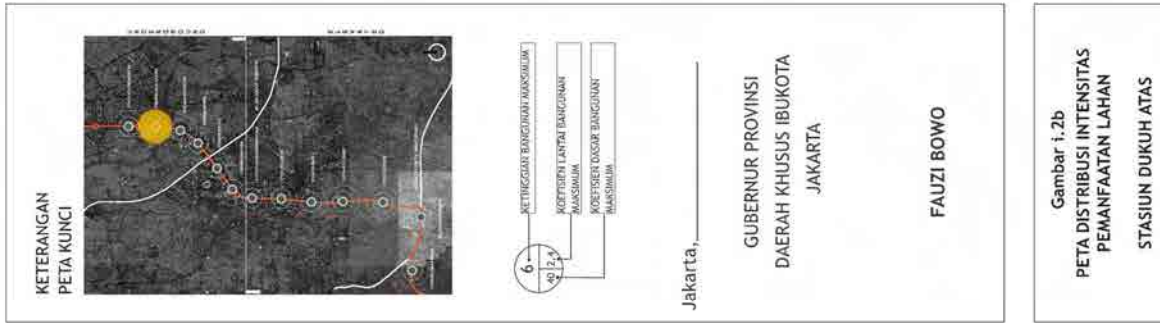
GUBERNUR PROVINSI  
DAERAH KHUSUS IBUKOTA  
JAKARTA

FAUZI BOWO

Gambar i.2a  
PETA PERUNTUKAN LAHAN UMUM  
STASIUN DUKUH ATAS



Source: PRK Pengembangan Koridor MRT Jakarta versi februari 2012 draft  
Figure-2.2.40 Urban Design Guideline Dukuh Atas 2012 (1)



Source: PRK Pengembangan Koridor MRT Jakarta versi februari 2012 draft  
Figure-2.2.41 Urban Design Guideline Dukuh Atas 2012 (2)



For other on going issues, Dukuh Atas has been placed as an area for TOD model, and the compilation of the Urban Design Guideline is underway to ease mandatory parking installations imposed on existing large development projects in Jakarta.

The issue of prime importance is an increase in ridership of public transport for both the Railway Bureau of the Ministry of Transportation and the Indonesian railway company, MRTJ, and there is no disagreement among the parties concerned on development to enhance convenience for users such as transfer of trains among multiple lines which will be supported by developing transfer circulations around Dukuh Atas Station. As regards MRT, although the urban planning department holds its own image of planning for the areas around MRT stations, it needs to be consistent with that of the DKI Urban Planning Bureau.

The DKI Transit Bureau, Transjakarta, has perceived problems in the current status of the greater distance between Dukuh Atas Stations 1 and 2 and the insufficiency of station space and connection passages for the large volume of users and has agreed on the transfer of buses onto an artificial ground in view of the flow of users after the opening of the MRT north-south line. The DKI Transit Bureau understands the policy on Dukuh Atas as the TOD area of the DKI Urban Planning Bureau; it has raised a question, however, on the easement of the mandatory parking installation in conjunction with the CAT function of the airport line.



### 2.2.5 Future public transport plans

As of 2012, Dukuh Atas is a transport hub where the railway West line and BRT (TransJakarta) Koridor 1, Koridor 4, and Koridor 6 lines connect as major public transport.

In 2030, the MRT North-South line will be capable of transporting a large number of passengers as an alternative to the BRT Koridor 1, and the area of influence of the railway station is expected to expand. Also, the railway Loop line, the Serpong-Bekasi shortcut, and the Airport Express will be completed, so the transport connections of Dukuh Atas will be capable of being accessed from all directions of the city by public transport, thereby raising it as a major city center area.

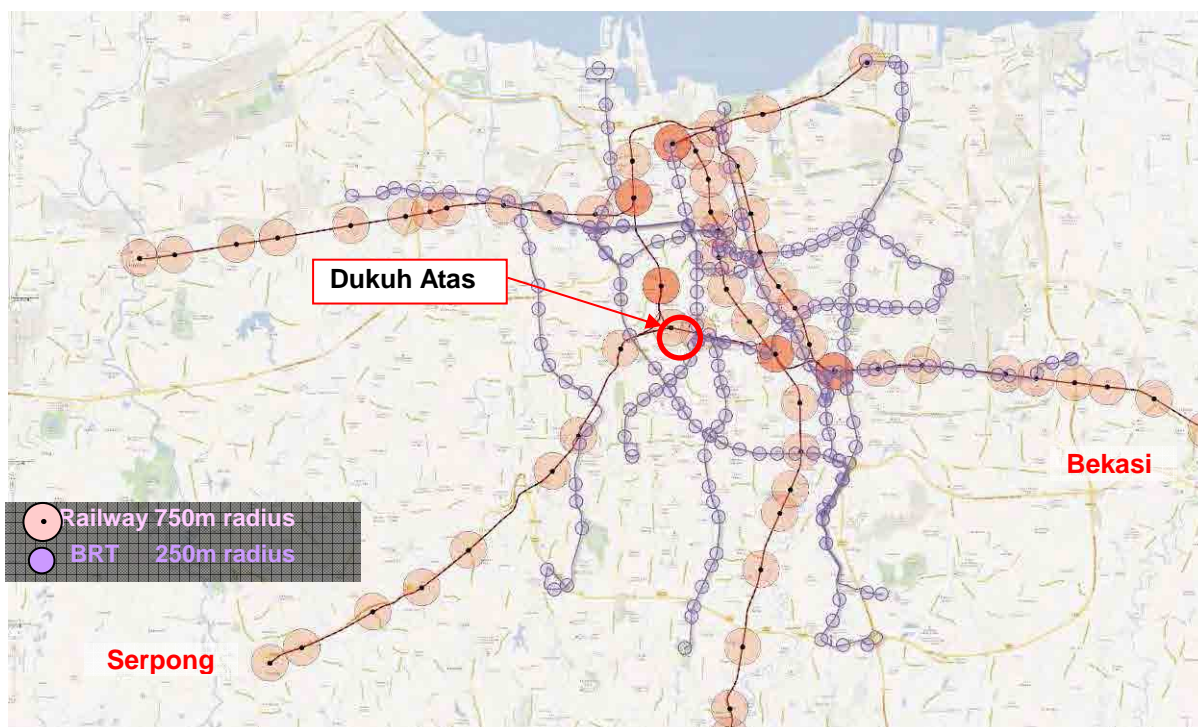


Figure-2.2.42 Public Transportation Network in Year 2012 (Source: Study Team)

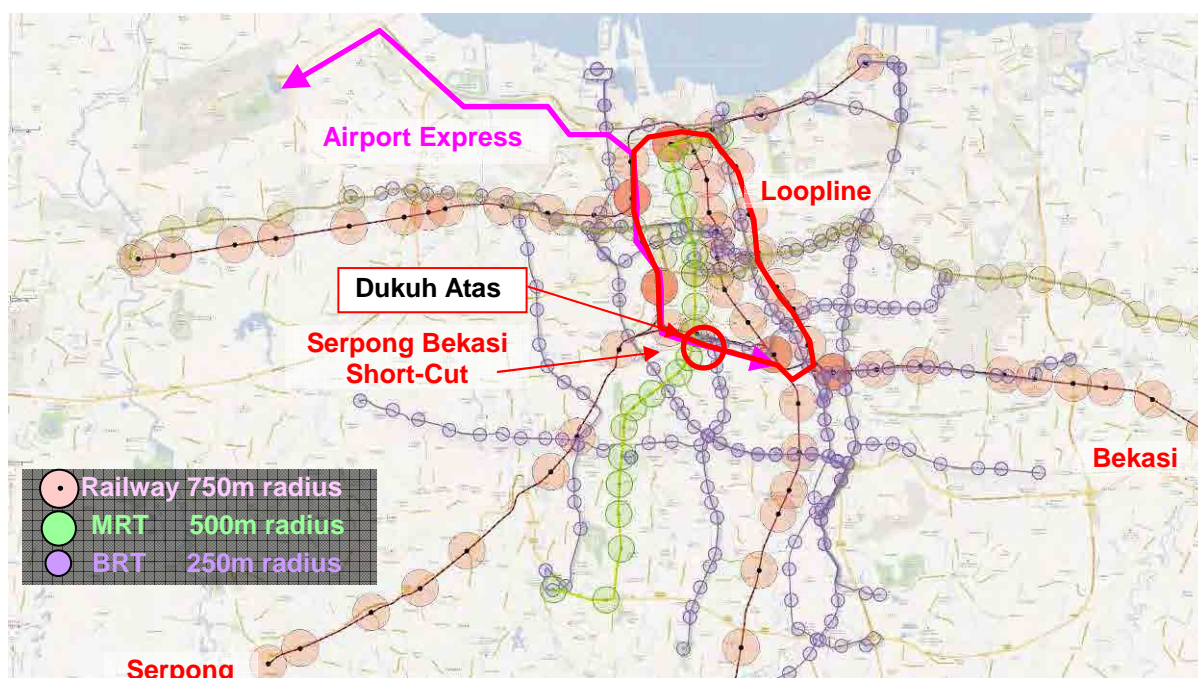


Figure-2.2.43 Public Transportation Network in Year 2030 (Source: Study Team)

### 2.2.6 MRT plans

Presently in this area, tendering for the detailed design of the Dukuh Atas Station (Intermediate Underground Station) scheme of the Jakarta MRT north-south line of the Jakarta special provincial urban expressway is in progress with Japanese ODA.

#### 1) MRT north-south line

Among the currently planned projects, only this project is making specific progress. The route has been determined and in October this year construction order was placed for work section 6 . As a Step project, it is planned that Japanese construction companies will participate in all the work sections and that the work will proceed on a design/build basis. This will be Indonesia's first underground railway, and will be a total of less than 24 km, from Lebak Bulus to Kampung Bandan in the east via Jakarta Kota. (See Fig. 2.2.27.) Phase 1 will be the 15.7km section from Lebak Bulus to Bundaran HI, and will include seven stations above ground, six stations below ground. Construction will start in 2012 and operation is scheduled to start by the end of 2016. Phase 2(from Bundaran HI to Kampung Bandan) is scheduled to open in 2018. The underground railway is being designed as 1500V direct current with narrow gauge tracks 1067mm wide. It will run north-south along Jakarta's main road, Sudirman Road and Thamrin Road, and is expected to greatly contribute to the development of the area around Dukuh Atas Station.

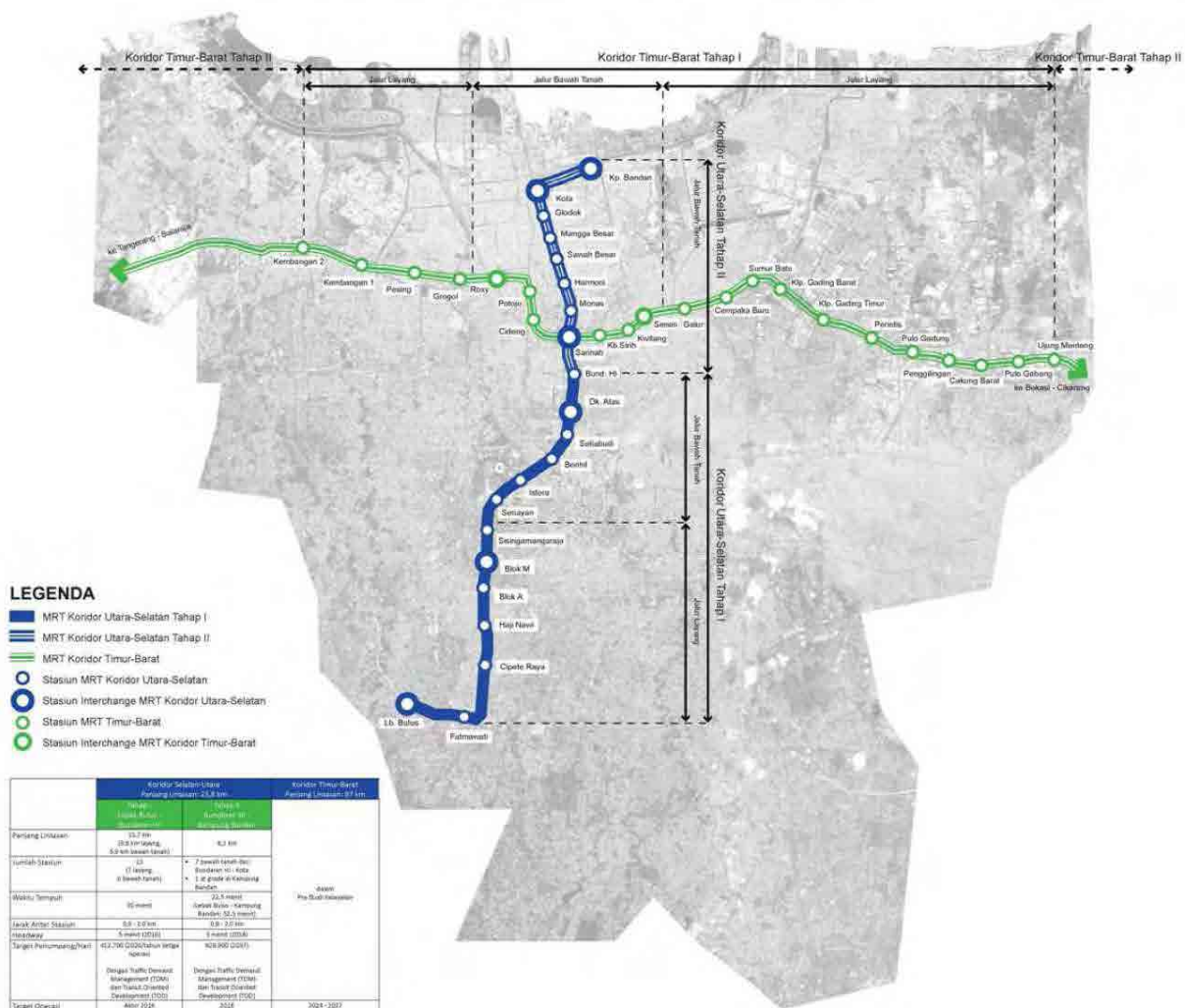
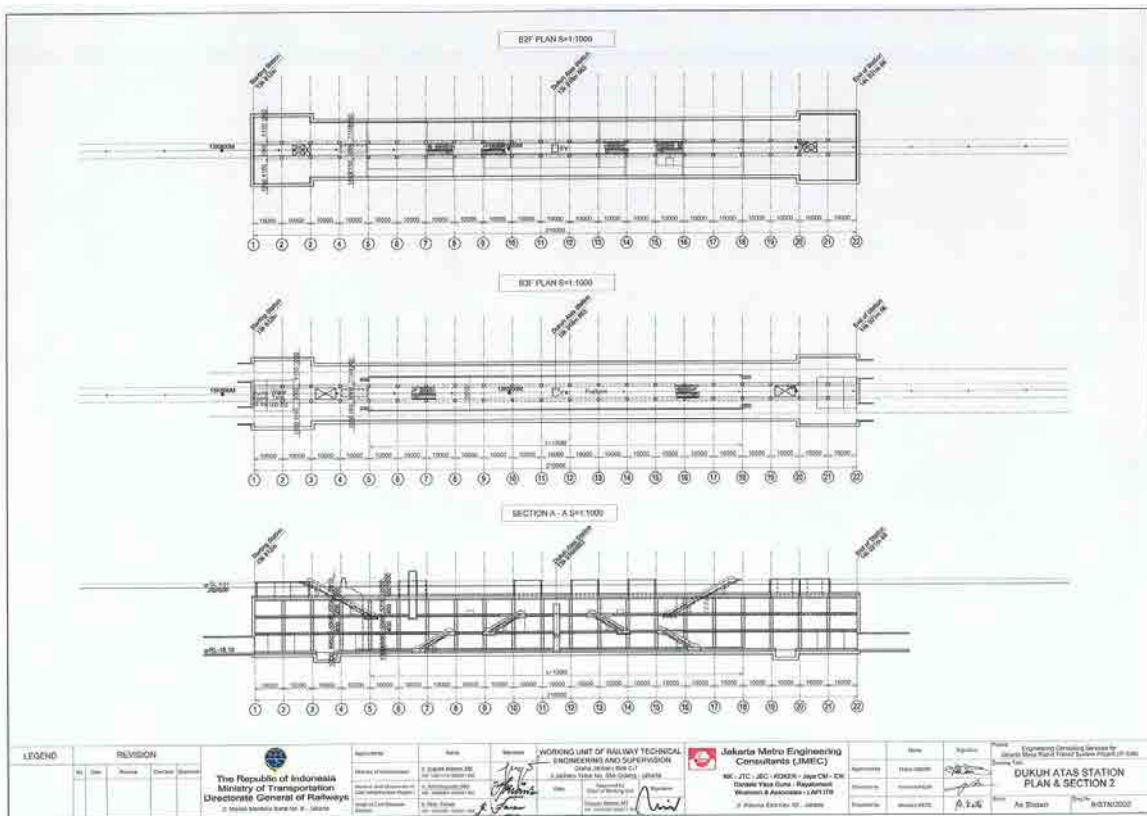
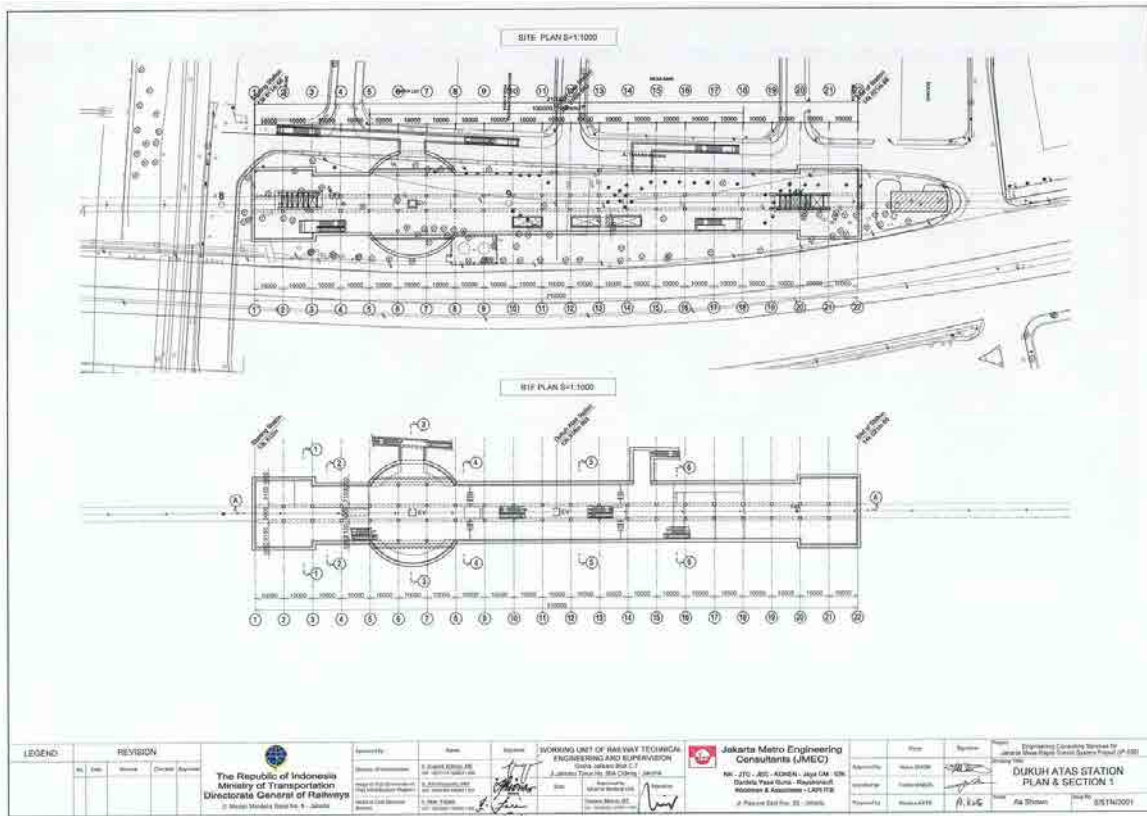


Figure-2.2.44 Underground Railway North-South Line  
(Source: <http://www.jakartamrt.com/>)





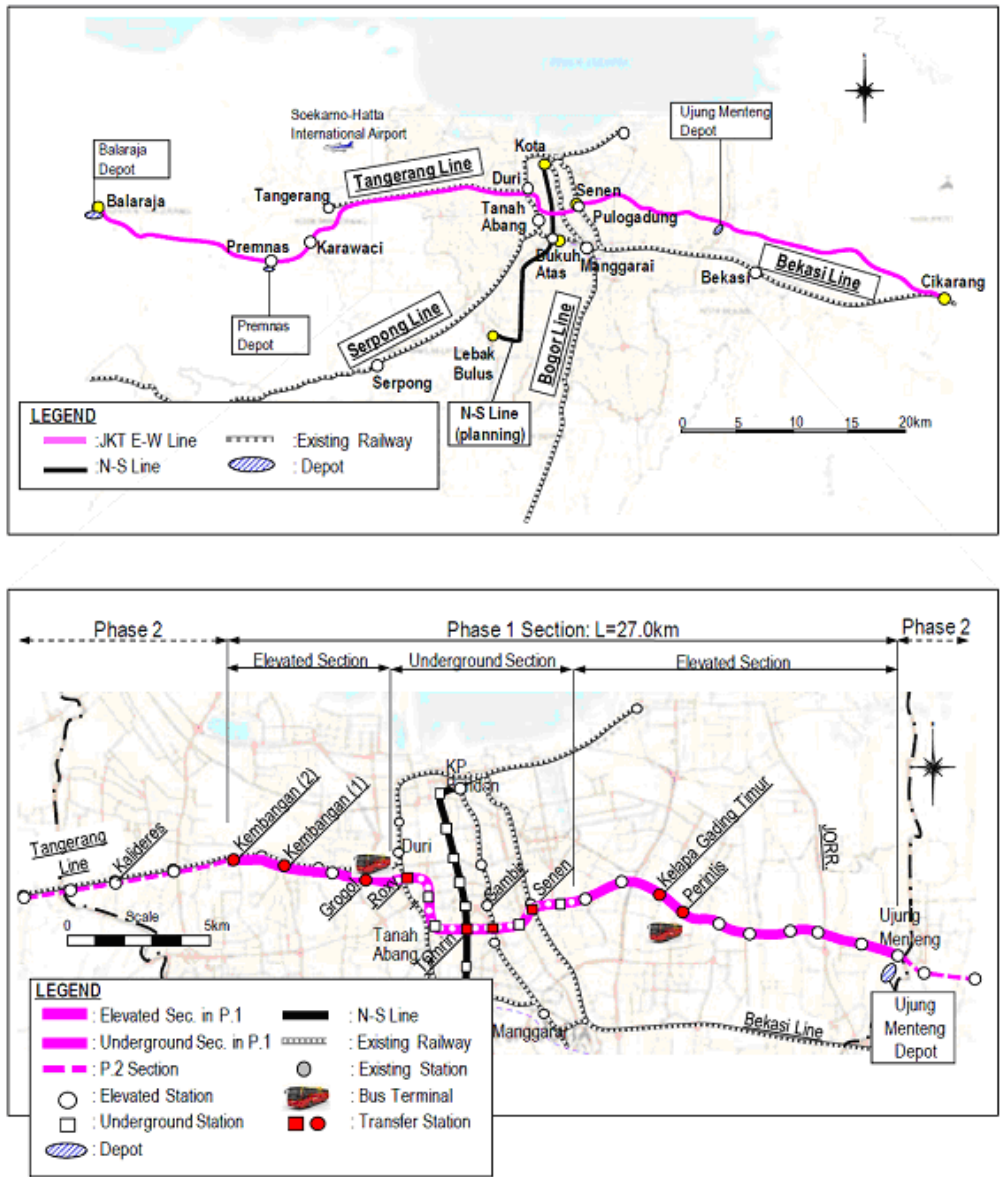
Source: Engineering Consulting Services for Jakarta Mass Transit System Project

Figure-2.2.45 MRT Dukuh Atas Station Basic Design Drawing

2) Underground railway east-west line

Although construction of multiple north-south lines is planned for the future, the following section (the Kembangan-Ujung Menteng route) was determined as a priority section (Phase 1). It is planned that the section in the areas other than central Jakarta will be constructed by above-ground or elevated systems and that the central area of Jakarta will employ an underground system. The priority section (Phase 1) is expected to be completed in 2020.

LOCATION MAP



Source: Preparatory survey for Jakarta Mass Rapid Transit East-West Line Project 2011, 11 JICA

Figure-2.2.46 Mass Rapid Transit East-West Line



### 2.2.7 Railway Schemes

At present, infrastructure for Indonesia's railways such as tracks, etc., are owned and maintained by the government, and vehicles and station facilities are owned and maintained by the Indonesia Railway Company (PT. Kereta Api <PT.KAI>), whose stock is 100% owned by the government.

The following railway projects would pass through the Dukuh Atas area.

- Serpong-Bekasi line short cut extension
- Airport line access railway
- Loop line (west line)
- High speed rail line
- Monorail

The following is a description of these schemes based on the present situation.

#### 1) Serpong-Bekasi line short cut extension scheme

The present Serpong line scheme is divided into STEP-1 and STEP-2.

STEP-1: From the west side, the railway will go underground directly below the current above ground railway on the north side of the canal, proceed towards Thamrin Road, and before Thamrin Road (between 2k200m and 2k700m) the existing railway tracks will be widened, and a box culvert will emerge from underground in the center. The station to be used is the current Sudirman Station.

For this scope, the railway land alone is insufficient, so it is necessary to use land from a park on the south side of the line and private land on the north side.

Also, during this STEP-1 period, construction of the planned elevated airport line access railway will be difficult. There is no space for installation of the elevated railway bridge for the airport line access railway, and even if it is installed on the box culvert, it would have to be removed during STEP-2, which is not rational.

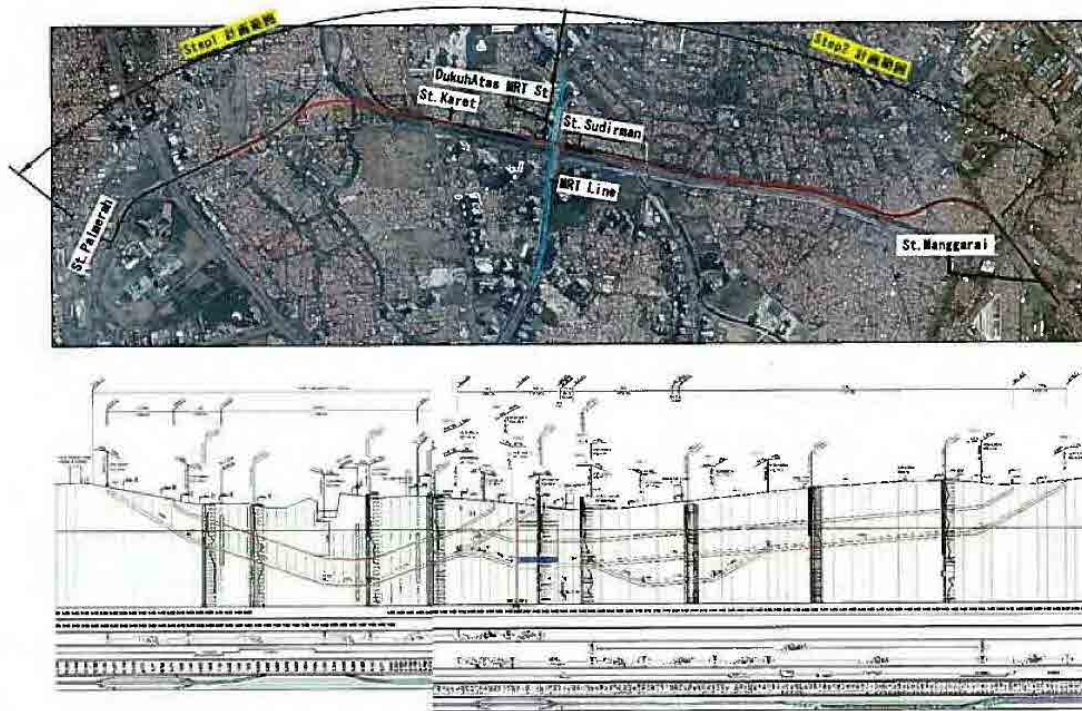
STEP-2: It is planned that after several years of operation of STEP-1, the whole line will be placed underground.

Taking into consideration the airport line access railway, it is conceivable that the Serpong line could be constructed completely underground from the start. However, the land for an underground station to the west of Thamrin Road and Sudiman Road (near (2k560m) has not been acquired, so acquisition of the land will be necessary.

If the Serpong line is constructed completely underground from the beginning, the method of installing the bridge piers for the elevated bridge on the stations and the box culverts could be considered. At Thamrin Road at 2k700m, the MRT north-south line shield tunnel will be constructed, so a truss bridge of about 100m span is envisaged.

Over the extent of the underground box culvert, it will be necessary to strengthen the box culvert and make it larger to be structurally stable for the foundations of the elevated bridge.

Also, it will be rational to construct the Serpong line at the same time as the airport line access railway, so the airport line access railway will commence service a few years after commencement of service of the Serpong line.



Source: Preparatory Survey for JABODETABEK Railways Capacity Enhancement Project

Figure-2.2.47 Serpong line short cut and extension scheme

## 2) Airport line access railway

There are two routes for the airport line access line: a route that leaves the Sukarno-Hatta Airport as a high-speed railway and passes through the north of Jakarta and enters the existing Angke Station, and a route that uses the Tangerang line as a commuter line.

In January 2012 PT.SMI (PT.SARANA MULTI INFRASTRUKTUR) placed an order with a consultant to carry out a F/S for the high speed railway, and it is currently being studied.

The seemingly promising proposal for the railway is to run from the airport through Pluit, Tanah Abang, Dukuh Atas, and Manggarai, and then extended to Halim. On the other hand, as regards the route connecting the Tangerang line from the south of the airport, elevated bridges are being constructed by PT.KAI, by which the line is to pass through Dukuh Atas and stretch to Manggarai.

To the extent that we have examined, when the positional relationship to the Serpong line is taken into consideration, it is conceivable that the airport line access line will pass through the park land to the south of the canal. However, there is also a future monorail scheme and a scheme for transJakarta (BRT) to pass through here instead of the monorail scheme. If it is to the south of the canal, the construction can be easily carried out separate from the existing railways.

If the airport line access railway is placed to the south of the canal, it will be necessary to construct structures crossing the canal, and there is a possibility that there will be insufficient land in places, so confirm whether land will become, insufficient that the height for passing above the road on artificial foundations will be high, or that the span will become larger due to the underground shield tunnel, etc.

3) Loop line (west line)

This is a scheme to make the JABODETABEK railway which at present operates above ground as the west line into a loop line such as the Yamanote Line in Japan. If the loop line can be constructed, railways can be constructed to the outskirts from each station, the same as in Japan, so it is expected that the number of rail users will increase.

From the results of predictions of passenger demand for the loop line, the number of passengers would be small, so joint operation with the west line is being considered.

4) High speed rail line

This is a scheme to connect Jakarta to Bandung, a distance of 144km, in a shortest time of 45 minutes, and it is intended to be implemented as a PPP project.

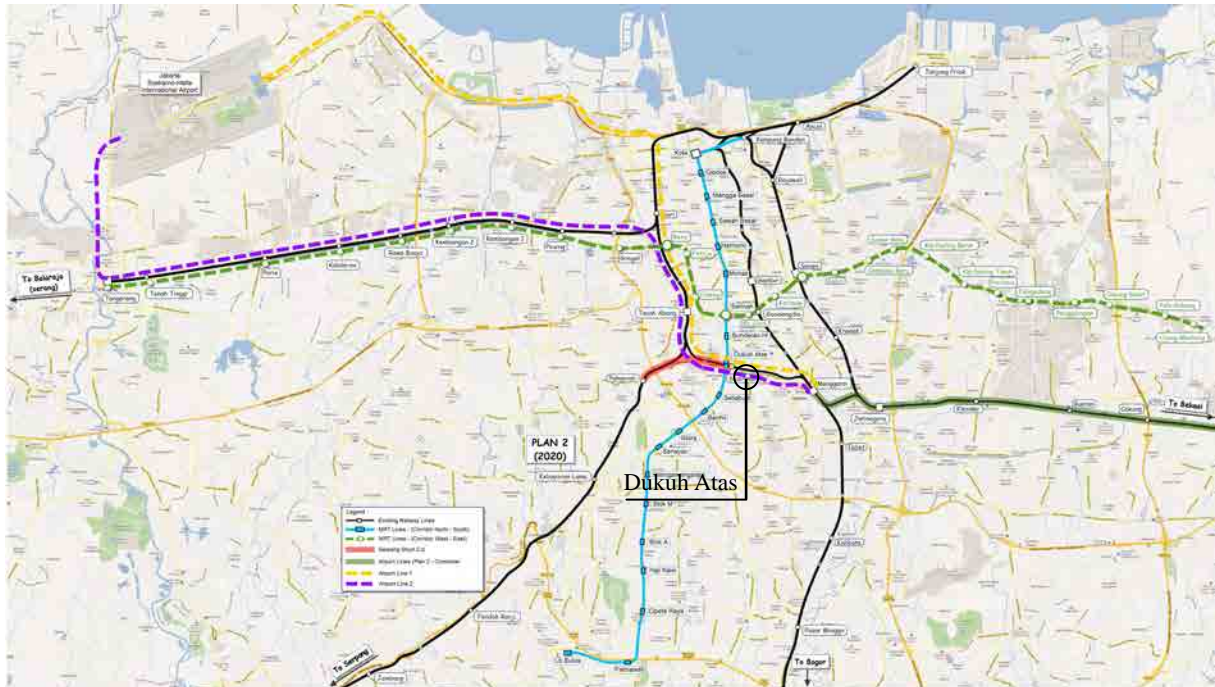
The earliest that this railway can be operational is 2017 to 2018. Depending on the concept the scheme will include six stations: Dukuh Atas, Bekasi, Karawang, the new airport (Karawang), Bandung, and Gedebage (Bandung), with Dukuh Atas as the terminal station. It is still at the preliminary study stage.

5) Monorail

Studies for the Jakarta Province monorail scheme were started in 2001 by the Jakarta Monorail Company who formed a consortium, the groundbreaking ceremony was held in June 2004, and it was started as a 30 year BOT scheme. However, the development company went bankrupt with the bridges in the Asia Africa Road and Setia Budi areas finished, and construction work has been completely stopped since July 2008.

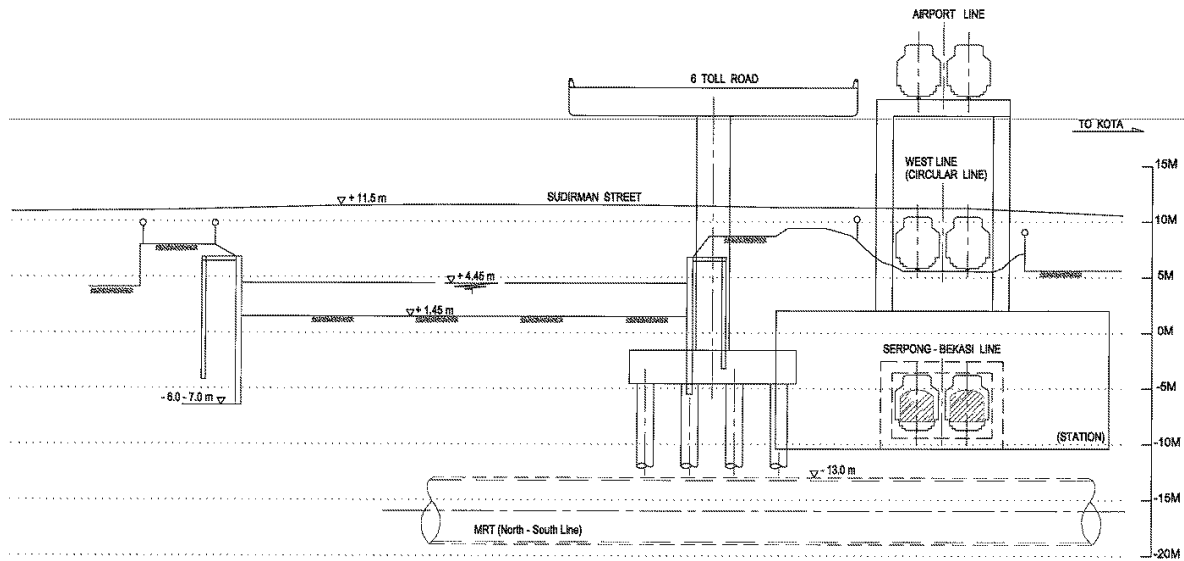
According to recent newspaper reports, a plan to use the substructure on an elevated road as a busway to operate Transjakarta and a new monorail route plan were announced; however, they have not been decided yet.

The following is a plan of each railway related project, and a cross-sectional view with the canal in the center.



(Source: Study Team)

Figure-2.2.48 Map of railway related projects



(Source: Study Team)

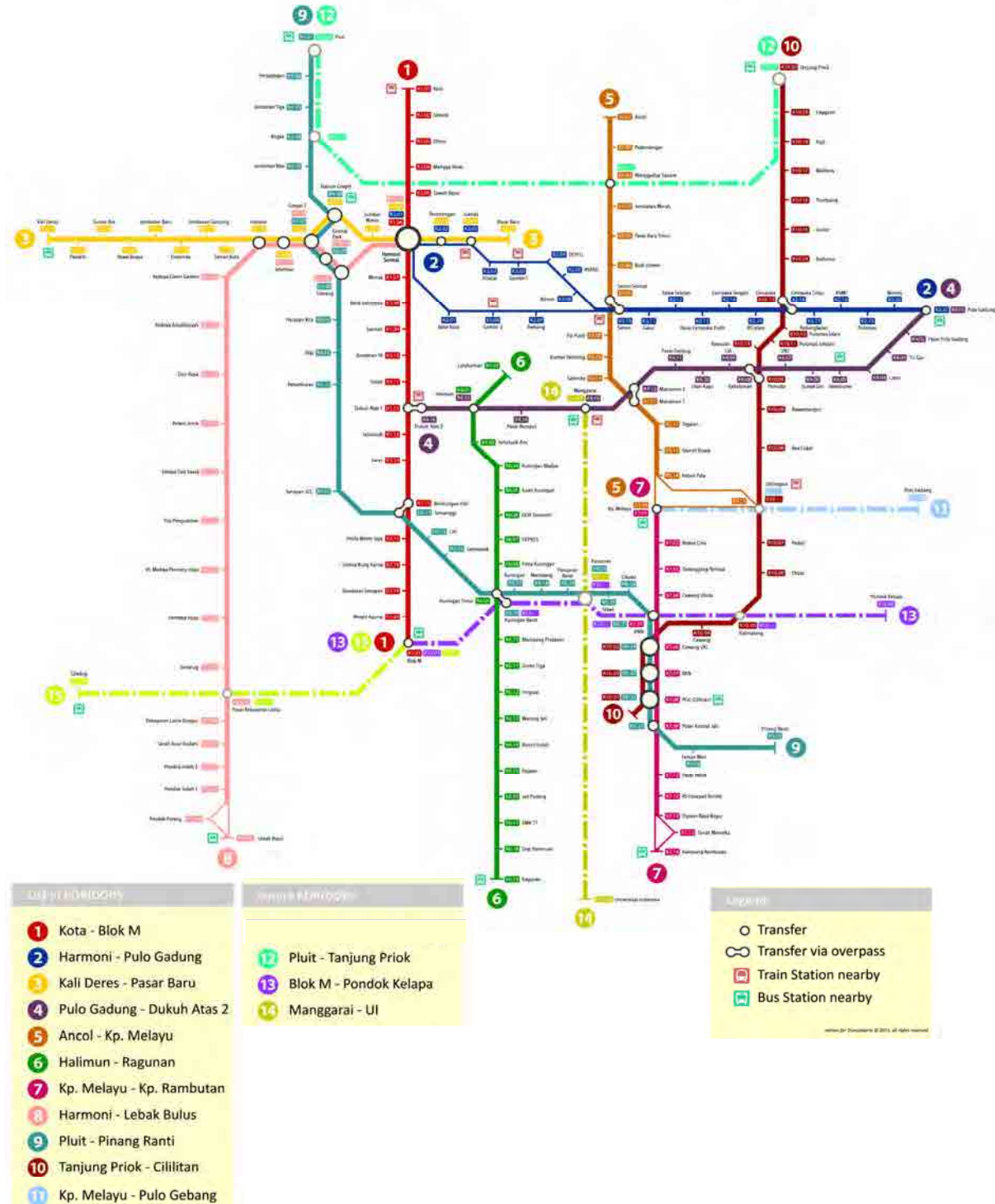
Figure-2.2.49 Cross-section at Banjir Kanal



### 2.2.8 BRT schemes

As of 2012 the BRT (TransJakarta) lines within the Jakarta capital area consists of 11 lines, a total of 172km, with stops at 181 locations. It is planned that this will be extended to a total of 15 lines by 2020.

Three lines enter Dukuh Atas Station, but there have been no official announcements of schemes for new lines.

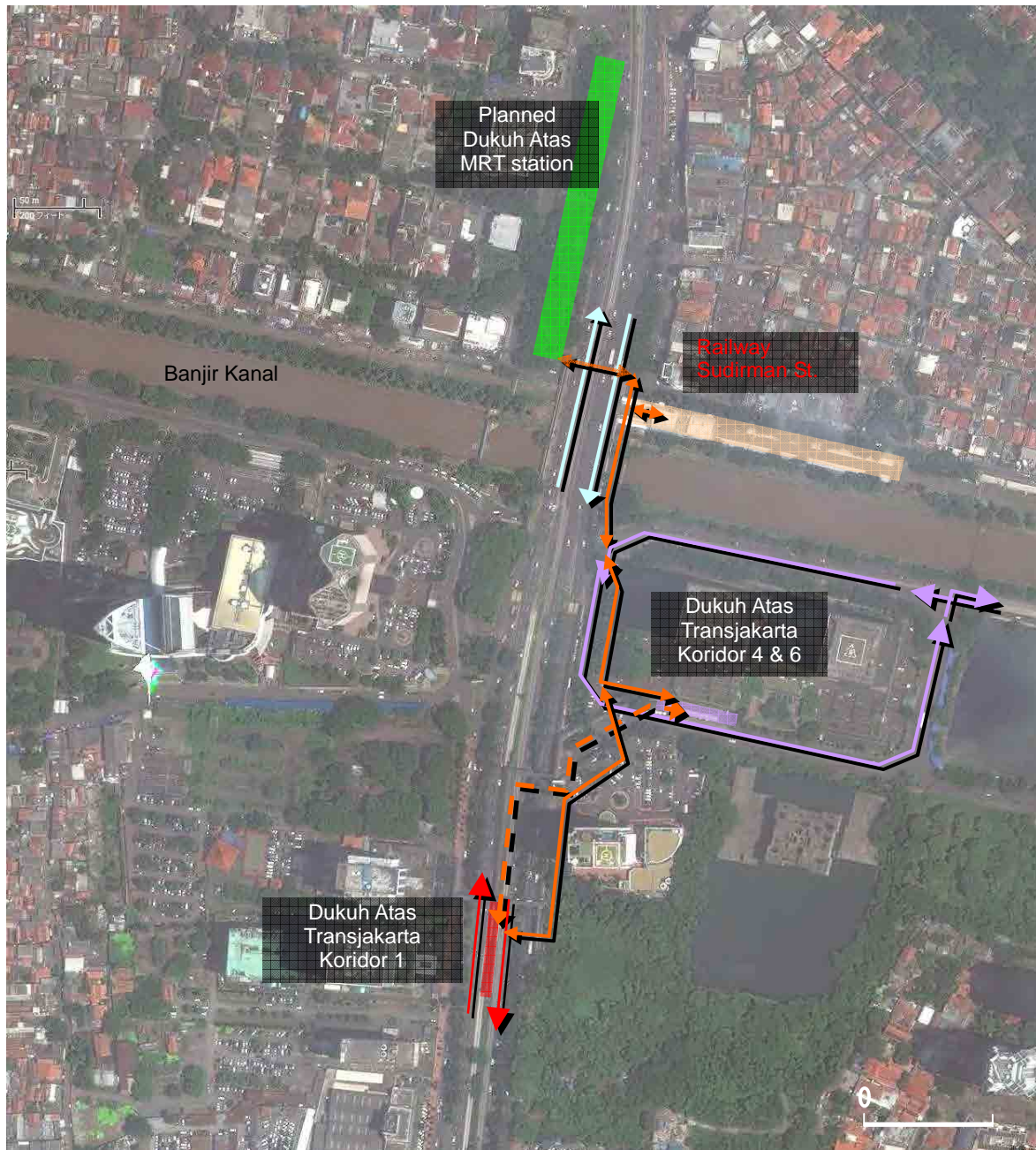


(Source: <http://www.transjakarta.co.id/>)

Figure-2.2.50 Existing and Planned network of TransJakarta

At present Dukuh Atas 1 Station of Koridor1 is located in the center of Sudirman Road, and Dukuh Atas 2 Station of Koridor 4 & 6 is located to the rear of Landmark Building on the south side. The two are connected by a pedestrian deck inside the ticket gates. The length of the flow line for changing between Koridor 1 and Koridor 4 & 6 is about 250m, and the distance between Koridor 1 and Sudirman Station is 400m. In addition, continuous pedestrian flow lines have not been developed on Sudirman Bridge and the pedestrian sidewalks on the roads, so this is a burden on users.

After the development of the planned MRT Dukuh Atas Station, some of the lines of Koridor 1 will overlap with the MRT, so they will be coordinated to be eliminated in stages during the open phase. It will be necessary to cross Thamrin Road and Sudiman Road to connect the MRT Dukuh Atas Station and the Koridor 4 & 6 Dukuh Atas 2 Station, and the distance for interchange will exceed 400m, so this will need to be improved.



(Source: Study Team)

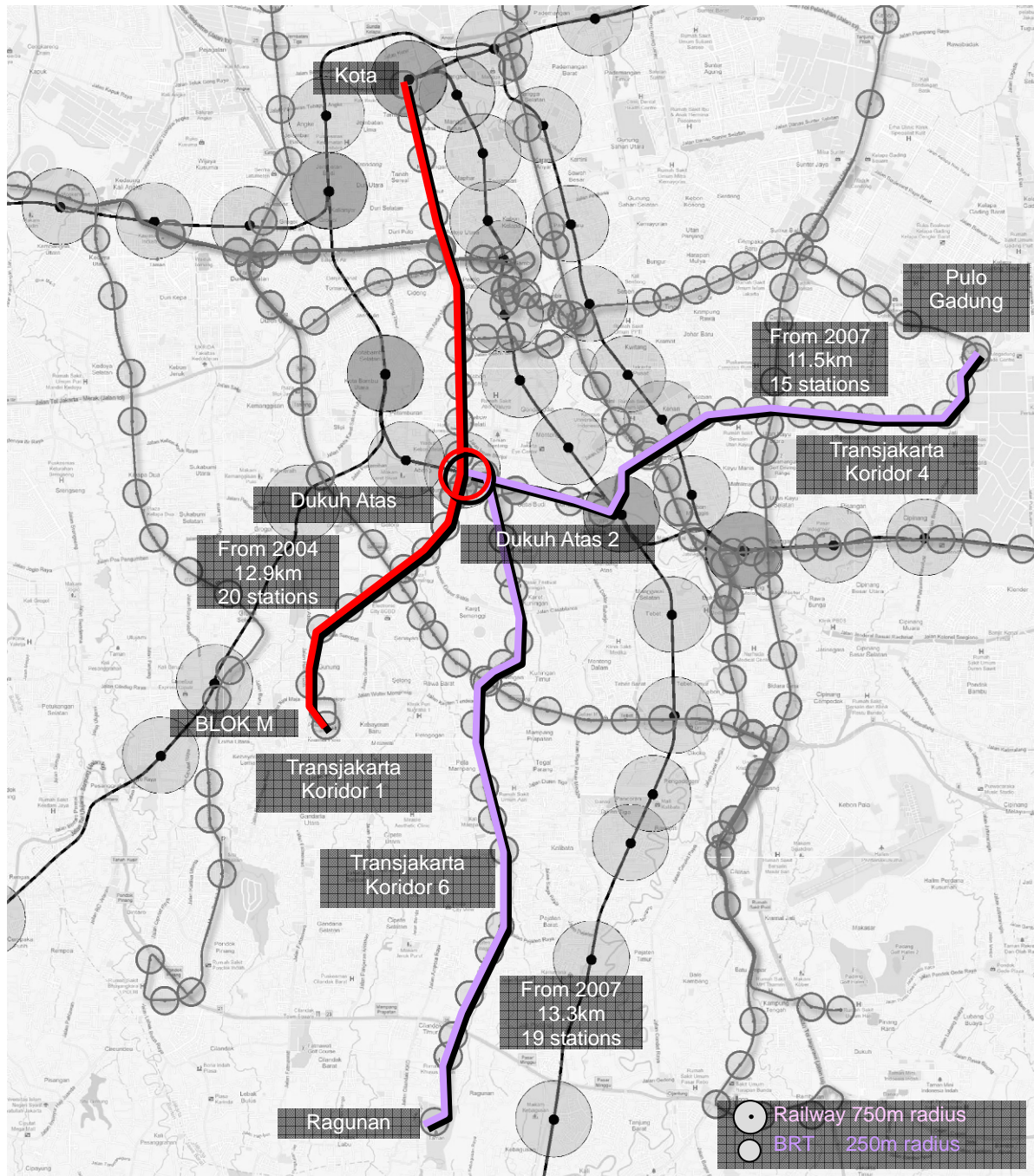
Figure-2.2.51 Existing Trans Jakarta Stops around the Dukuh Atas area



The current TransJakarta Koridor1 was the first TransJakarta line to open for service in 2004, and has stops at 20 locations over the 12.9 km distance from Kota north of Thamrin Road and Sudirman Road to Blok M in the south.

Koridor 4 opened in 2007, originating at Dukuh Atas Station, and has stops at 15 locations over the 11.5 km distance to Pulo Gadung, where there is an industrial estate and a bus terminal.

Koridor 6 opened in 2007, originating at Dukuh Atas Station, heading south along Rasuna Said Road which is the second main street of Jakarta where embassies and company offices are concentrated, and has stops at 19 locations over the 13.3 km distance to Ragunan Zoo.



(Source: Study Team)

Figure-2.2.52 Route of the TransJakarta koridors passing Dukuh Atas



Dukuh Atas Station currently has the least number of passengers in the Koridor1 line, which indicates that it plays a great functional role as a transit station.

Table-2.2.6 BRT Koridor 1 Passenger 2011  
(Source : Jakarta Pusat Dalam Angka 2012, Kota Administrasi Jakarta Pusat)

## TRANSPORTATION & COMMUNICATION

**Tabel 8.1.3** Jumlah Halte dan Jumlah Penumpang (Karcis Terjual) Trans Jakarta di Kota Jakarta Pusat Menurut Koridor dan Halte  
*Table* Number of Trans Jakarta Shelters and Passenger (Ticket Sold) in Jakarta Pusat by Corridor and Shelters

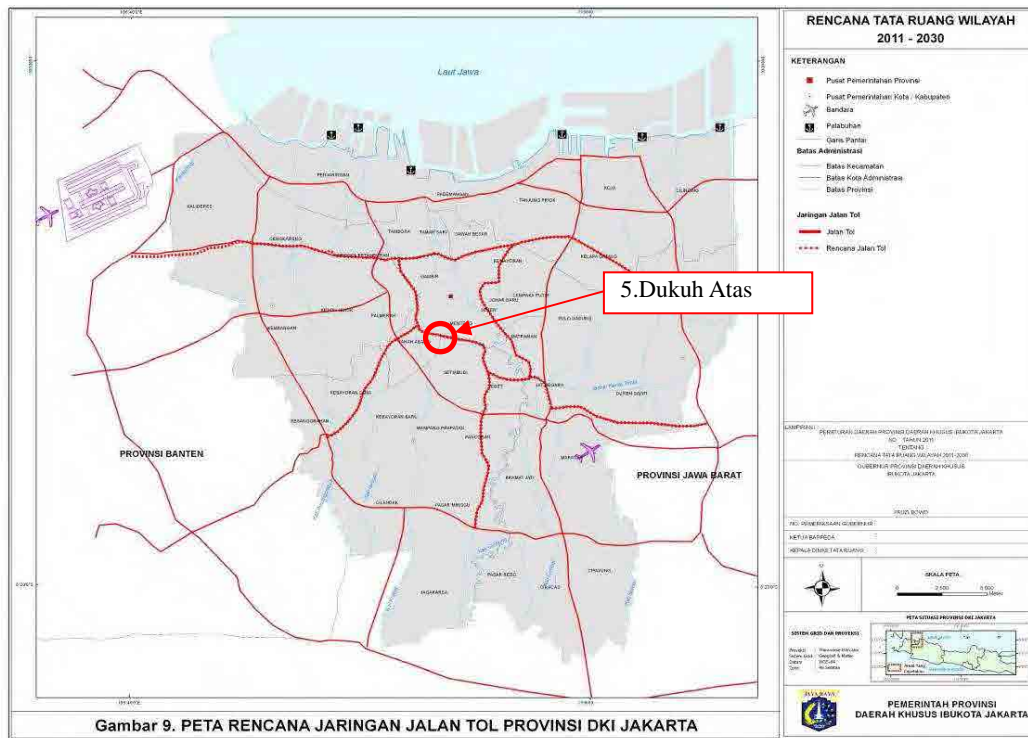
**2011**

Koridor <i>Corridor</i>	Halte <i>Shelters</i>	Jumlah Penumpang <i>Passenger</i>
(1)	(2)	(3)
Koridor 1*)	Bundaran Senayan	1 247 383
	Gelora Bung Karno	826 078
	Polda Metro Jaya	840 784
	Bendungan Hilir	1 368 998
	Karet	1 188 171
	Setia Budi	702 427
	Dukuh Atas	555 977
	Tosari	697 432
	Bundaran HI	1 234 347
	Sarinah	1 271 589
	BI	629 132
	Monas	982 707
	Harmoni	1 709 029
Sawah Besar	1 217 886	
Mangga Besar	880 453	

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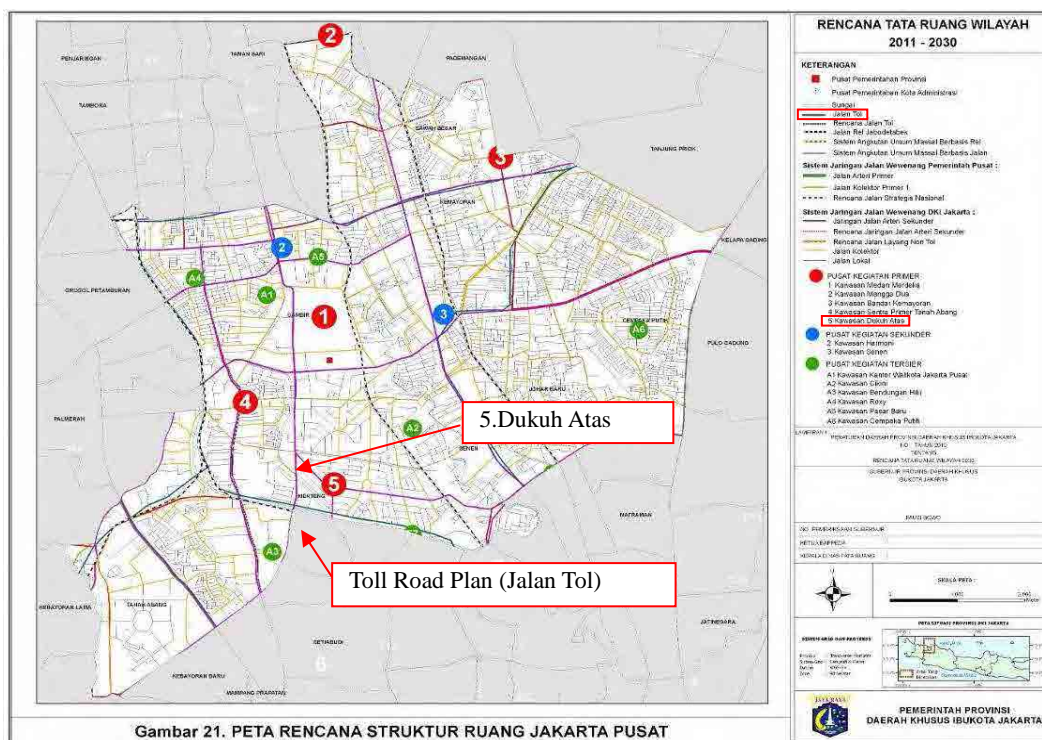
2.2.9 Special road schemes

Among the future expressway schemes, the Phase 2 “Duri Pulo – Kampung Melayu” 11.38km section of the “Jakarta Elevated Toll Road” scheme will pass through the Dukuh Atas area in the east-west direction.



Source: RENCANA TATA RUANG WILAYAH DKI JAKARTA 2030


Figure-2.2.53 Area DKI JAKARTA Province’s Strategic Plan



Source: RENCANA TATA RUANG WILAYAH DKI JAKARTA 2030

Figure-2.2.54 Area DKI JAKARTA Province’s Strategic Plan

Code No. P - 033 - 14 - 0109 - 39

<b>1. Project Title : Duri Pulo - Kampung Melayu Toll Road, DKI Jakarta</b>	
<p><b>2. Project Description</b></p> <p>The congestion is the main problem in Jakarta as the capital city of Indonesia. Thus, the alternative access, Duri Pulo - Kampung Melayu Toll Road, is required to reduce traffic volume in the existing road.</p>	<p><b>4. Type of Project Proposal</b></p> <p>Solicited.</p> <p><b>5. Contracting Agency</b></p> <p><b>Minister of Public Works</b></p> <p>Person in charge :</p> <p>1. Mr. Harris H. Batubara</p> <p>Position : Director of Bina Program</p> <p>Address : Jl. Pattimura No.20 Kebayoran Baru Jakarta 12110, INDONESIA</p> <p>Phone : +62 21 7200281 Fax : +62 21 7201760</p> <p>2. Mr. Yusid Toyib</p> <p>Position : Secretary of Toll Road Authority (Badan Pengatur Jalan Tol)</p> <p>Address : Gedung Balai Krida Jl. Iskandarsyah Raya No. 35 Kebayoran Baru Jakarta Selatan Jakarta 12110, INDONESIA</p> <p>Phone : +62 21 7258063, +62 21 7257126 Fax : +62 21 7257126, 7254415 Email : bpjt@pu.go.id</p>
<p><b>3. PPP Modality</b></p> <p>BOT (Build - Operate - Transfer).</p>	<p><b>6. Project Location</b></p> <p>DKI Jakarta Province.</p> <p>Map of Location</p> 

Source: PPP Infrastructure Plans in Indonesia 2011 BAPPENAS

Figure-2.2.55 Toll Road Plan Passing Dukuh Atas 1



<p><b>7. Project Feasibility Indicator</b></p> <p><i>Technical Overview</i></p> <p>Project Scope : Toll Road 11.38 km</p> <p><i>Technical Specification</i></p> <p>Length : 11.38 km Design Speed : 80.00 km/h Number of Lane : 2 x 3 lanes Lane of Width : 3.50 m Outer Shoulder Width : 2.00 m Inner Shoulder Width : 0.50 m Median Width : - Right of Way : 30.00 m (minimum)</p> <p><i>Financial Overview</i></p> <p>Estimated Project Value : US\$ 596.00 million Land acquisition : N/A Economic Feasibility : EIRR : 23.90 % Financial Feasibility : FIRR : 19.02 %</p> <p><i>Type of Government Support</i></p> <p>Government Supports can be made available. Government Guarantee can be made available.</p>	<p><b>8. Expected Time of Project Development</b></p> <ul style="list-style-type: none"> <li>• Project Preparation (including land acquisition) : 2011-2012</li> <li>• Tender : 2012</li> <li>• Contract Signing : 2012</li> <li>• Construction : 2013-2014</li> <li>• Operation : 2014</li> </ul> <p><b>9. Other Informations</b></p> <p>Please contact person in charge.</p>
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Source: PPP Infrastructure Plans in Indonesia 2011 BAPPENAS

Figure-2.2.55 Toll Road Plan Passing Dukuh Atas 2



Source: Study Team

Figure-2.2.56 Image of the Toll Road

## 2.2.10 Progress for Railway and Road Planning in Future

In the Indonesian government, progress for railway plan (without MRT) and road plan are shown in the following table at the present moment.

Table-2.2.7 Railway Plan Progress (Source : Study Team)

	Route	Executing Agency	Progress Situation	Planned Design/Year/Completed	Feasibility
Railway	Serpong-Bekasi Line	DGR, PT. KAI	Line extending Serpong-Bekasi plan is divided into two stages (Step1 and Step2), there are still issues of New Sudirman Underground Station and coordination with the Airport Line. Report "Survey for JABODETABEK Railway Capacity Enhancement Project" of JICA has been submitted to the Indonesian Government. But the elevated 6 Toll Road that DKI will construct is an issue, and Indonesian Government does not act concrete. It is not mentioned in the Blue Book yet.	<ul style="list-style-type: none"> <li>Planned Design : Undecided</li> <li>Construction : Scheduled to start in 2017</li> <li>Year Completed : Scheduled in 2020</li> </ul>	△
	Airport Line ( North side High-Speed Railway)	DGR, SMI	High-Speed Railway Route along the highway from Soekarno-Hatta International Airport has been studied, it is a route that extended to the Halim Airport through Angke station of West Line, Dukuh Atas station and Manggarai station.	<ul style="list-style-type: none"> <li>Planned Design : Under F/S</li> <li>Construction : Scheduled to start in 2017</li> <li>Year Completed : Scheduled in 2020</li> </ul>	△
	Airport Line (Tangerang Line Connection Route)	DGR, PT. KAI	Though PT. KAI has begun to land acquisition of about 6.5km from the back of the Soekarno-Hatta International Airport, it has been delayed. That route is through Duri station and Dukuh Atas station to Manggarai station of west line. It will be completed late.	<ul style="list-style-type: none"> <li>Land Acquisition : Started in 2012</li> <li>Construction : Scheduled to start in 2013</li> <li>Year Completed : Scheduled in 2014</li> </ul>	○
	Loop Line	DGR, PT. KAI	Karet-Palmerah short cut line between east line and west line is being envisaged.	<ul style="list-style-type: none"> <li>Planned Design : Undecided</li> <li>Construction : Scheduled to start in 2017</li> <li>Year Completed : Scheduled in 2020</li> </ul>	△
	Monorail Plan	State Owned of Enterprises Consortium (BUMN)	There was a plan that runs from east to west over the south embankment of the canal, and is now being stopped. But currently, the monorail plan revives and has been proposed station over the south side of the canal either BRT / MRT. (1) Cawang-Semanggi-Grogol-Harmoni-Monas-Senen, (2) Tanah Abang-Bundaran HI-Dukuh Atas-Kuningan-SCBD-Stasiun Palmerah and (3) Cawang-Otto Iskandardinata-Senen-Ancol, their routes have been studied.	<ul style="list-style-type: none"> <li>Planned Design : Undecided</li> <li>Construction : Scheduled to start in 2017</li> <li>Year Completed : Scheduled in 2020</li> </ul>	△
	High-Speed Railway Line	DGR, PT. KAI	The bullet train project between Jakarta and Bandung, Dukuh Atas station is listed as the starting station of Jakarta. However, Dukuh Atas station, it is difficult to space. As the starting station will be set away from Dukuh Atas station, its station is not considered in this plan.	<ul style="list-style-type: none"> <li>Planned Design : Undecided</li> <li>Construction : Scheduled to start in 2017</li> <li>Year Completed : Scheduled in 2020</li> </ul>	△
Road	Jakarta 6 Toll Road (6 Toll Road)	PT. JTD (Jakarta Toll Development)	6 Toll Road has been approved by the former governor as a route that passes through this district, it is scheduled to open in 2016. JAYA CM is the implementing agency and its project will be designed in the spring of 2013 and later. PT. JTD will confer with MPW and DGR in this district.	<ul style="list-style-type: none"> <li>Planned Design : D/B in 2013</li> <li>Construction : Scheduled to start in 2013</li> <li>Year Completed : Scheduled in 2017</li> </ul>	△

○ : Feasibility A  
△ : Feasibility B

## Chapter 3. Issues and Project Needs of the Area

### 3.1 Current issues in the area

The following are the current issues in the Dukuh Atas Station area based on the Chapter 2 Circumstances of the Project.

1) Division of the area

The area around Dukuh Atas is located between the commercial area Bundaran HI subdistrict to the north and the business area Setia Budi subdistrict to the south. Despite its excellent location, it is divided north-south by the Banjir Kanal and the West Line and further, it is fully divided also east-west by the bridge constructed where Thamrin/Sudirman Avenue extends beyond the Banjir Kanal and the Sest Line. Due to this, the travelling of people and vehicles is extremely limited.

2) Area left over after development

The south side of the Banjir Kanal was as the Landmark Center and BNI Town, but the northeast side is a spread of commercial and low-rise residential lots with floor area ratios restricted to between 180% and 300%. In the northwest side, a little higher floor area ratio of 450% is given and middle-rise buildings can be found on Tanjung Karang Avenue; however, the area on the back of it is characterized by one- and two-story houses, resulting in a situation which does not effectively use the floor area ratio.

Consequently, the Dukuh Atas area is left over after development.

3) Traffic congestion due to vehicle traffic and air pollution

As a result, economic activities in the center of Jakarta have been seriously impeded, and it might be said that the image of Jakarta has been damaged.

On Thamrin/Sudirman Avenue in the Dukuh Atas area, the section around Sudirman Bridge is a bottleneck, creating an extended line of vehicles congestion to the south side of Banjir Kanal during morning hours from 9 to 10 o'clock and in the evening peak time; conversely, the traffic line of congestion is stretched to the north side. The roads running east and west under Sudirman Bridge (RM Margomo Djojohadikusumo Avenue and Galunggung Avenue) are also congested in both the morning and evening rush hours.

4) Inefficient road network

The traffic in the north-and-south direction concentrates on Thamrin/Sudirman Avenue because Banjir Kanal flows east and west in the center of the Dukuh Atas area. Moreover, due to topographical problems and the artery nature of Thamrin/Sudirman Avenue, the roads connecting east and west are only RM Margomo Djojohadikusumo Avenue and Galunggung Avenue to the south of the canal, on which east- and west-bound traffic builds up. The roads on the north side of the canal do not form a network to allow vehicles to drive through to the east and west directions and are only used as alternative passages to limited routes, contributing to extremely inefficient traffic functions.



5) Concentrated traffic facility schemes

In the Dukuh Atas area, the MRT north-south line Dukuh Atas Station is planned. In addition, there is a high possibility of development of the Serpong - Bekasi line and the airport access line using the space below ground and above ground of the existing West Line. Also, there is a possibility of development of a monorail (or the BRT) to the south side of the Banjir Kanal. In addition, to the north side of the Banjir Kanal there is a scheme for six toll roads within the Province of Jakarta (already approved by the Governor of Jakarta Province), so transport facilities may be suddenly concentrated into the limited land. However each scheme is being planned without coordination between them.

6) Lack of flow lines for interchange, and interchange space

As described above many transport facilities are being planned, but each operator is planning them individually, without coordination between schemes. In particular, there has been no investigation into the flow lines for the users to interchange and interchange spaces. Therefore even when the transport facilities are completed interchange will be inconvenient and will take time, so there are concerns that passengers interchanging will flow out onto the surrounding sidewalks which is extremely dangerous. It can be said that the public transport organizations are not properly planning for interchange.

7) Lack of attractive public spaces

The Dukuh Atas area has valuable waterside and green spaces in the city center. These are the green areas along roads and rivers specified by the "Public Project Ministry Ordinance Concerning Green Space No. 5, 2.2.3-gl/g3," promulgated in 2008, in which many existing tall trees have grown, forming a lush landscape. However, it appears that it will become less verdant under the concentrated transport facilities. Even after felling trees for development purposes, if trees ten times the volume of the felled trees are planted in the province, then there will be no change in the overall volume of trees. However, at present there is no movement to take an overall view of the Dukuh Atas area, or to create even a small attractive open space provided with greenery.

## 3.2 Project needs

### 3.2.1 Project needs

At present the following projects are being implemented or planned in connection with the issues described above.

- (1) Formulation of Special Capital Territory of Jakarta or urban planning guidelines and management of urban development based on these guidelines: corresponds to the above issues 1) and 2)

- (2) Projects to develop and reorganize public transport, such as the MRT north-south line, and east-west line development projects, BRT line and the bus line development schemes: corresponds to the above issues 3), 4) and 5)

In order to supplement the above projects that are being implemented or planned, it is necessary to implement a project that satisfies the following items.

- 1) Development of concentrated transport facilities in three dimensions (corresponds to the above issue 4)

In order to accommodate the concentrated new transport facilities in the limited public land around Dukuh Atas Station, it will be necessary to develop a transport hub that uses the public land below ground, above ground, and above the Banjir Kanal.

- 2) Development of comprehensive terminal function for smoothly connecting public transport (corresponds to the above issue 5)

In the area around Dukuh Atas Station, development of the MRTJ Dukuh Atas Station, development of the Serpong – Bekasi Line Station, development of the Airport Access Railway Station, and re-organization of the BRT Dukuh Atas Station are intended, so it is necessary to create a comprehensive terminal function for smoothly connecting interchanging passengers of these main public transport organizations.

- 3) Expansion of urban planning based on pedestrians with attractive spaces using the space above the Banjir Kanal (corresponds to the above issue 6)

The development of not just a transport plaza, but an attractive space with a safe view of the city's valuable waterside space provided with greenery. Also, with this as a starting point to link it to a new urban area with pedestrians at the center.

Figure 3.2.1 shows the relationship between the current issues of the area and project needs, action currently taken for the needs; planning projects, and project position in relation to the needs.

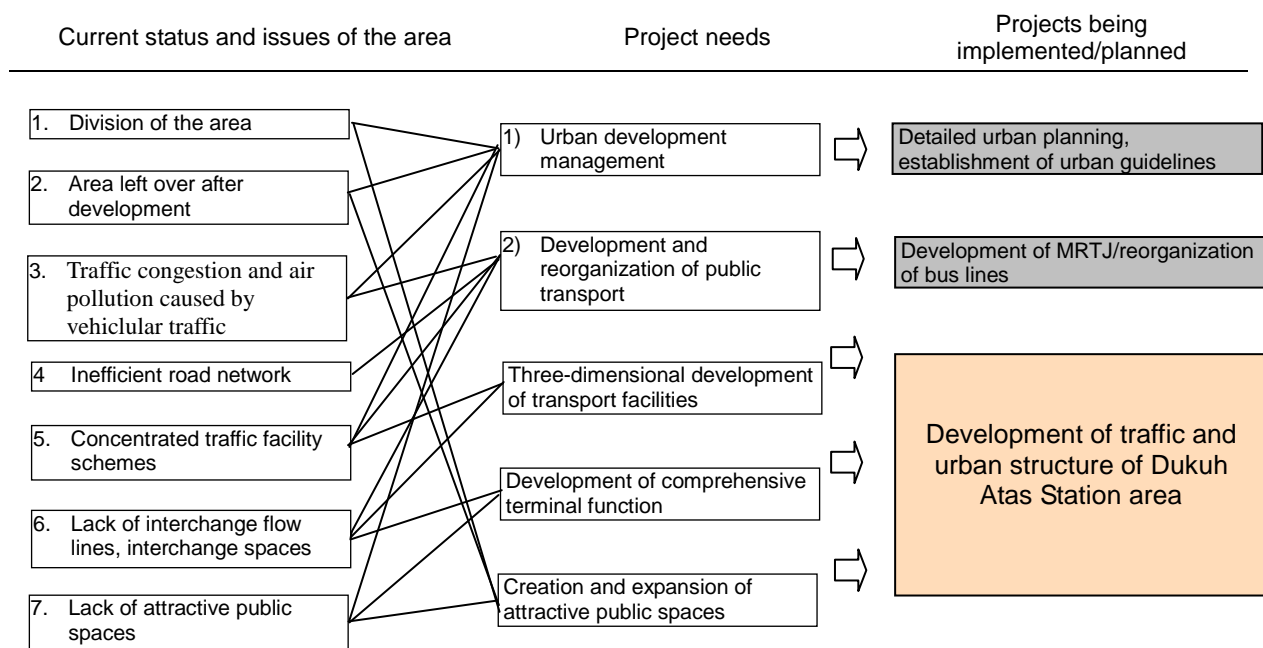


Figure-3.2.1 Current issues of the area and project needs

### 3.2.2 Project development effects and impacts

Project needs will be identified in connection with the current status and issues of the Dukuh Atas area and based on the needs, the “Development of Traffic and Urban Structures in the Dukuh Atas Station Area” will be implemented, from which a variety of development effects can be expected. The specific feasibility assessment is provided in Chapter 9. This section describes development effects and the impacts relating to an enhancement in competitiveness of the city. Development effects from the implementation of a project which fulfills project needs are summarized as follows:

#### 1) Multi-storied development of concentrated traffic facilities

Multiple transportation means are concentrated in a limited area with ground level differences and containing only a few public lots. The area will be developed by introducing multi-tiered land use where each facility will be interconnected and establishing the whole area as an attractive traffic nodal point. This will transform the area into an area of high convenience, contributing to enhance the economic activities in the area and an increase in the number of public transport users.

#### 2) Construction of comprehensive terminal functions providing seamless connection of public transports

Multiple public transport means will be connected in a comfortable environmental space. This will improve their convenience and consequently, development effects including an increase in the number of public transport users can be expected.



3) Expansion of development to pedestrian-oriented town using the space above Banjir Kanal  
Using the space above Banjir Kanal as a traffic plaza will not only increase the number of of public transport users but will also connect adjacent town blocks, increasing the expectation of greater circulation in the area, strengthened regional interaction, and expanded regional economic activities. Further, the connection of public transportation means and developed buildings in the surrounding area will also enhance the value of the adjacent town blocks, which will in turn add variety to economic activities in the Dukuh Atas area.

These development effects can be expected to serve as a model case of similar traffic nodes development and will also have a great impact on competition with major cities in Southeast Asia.