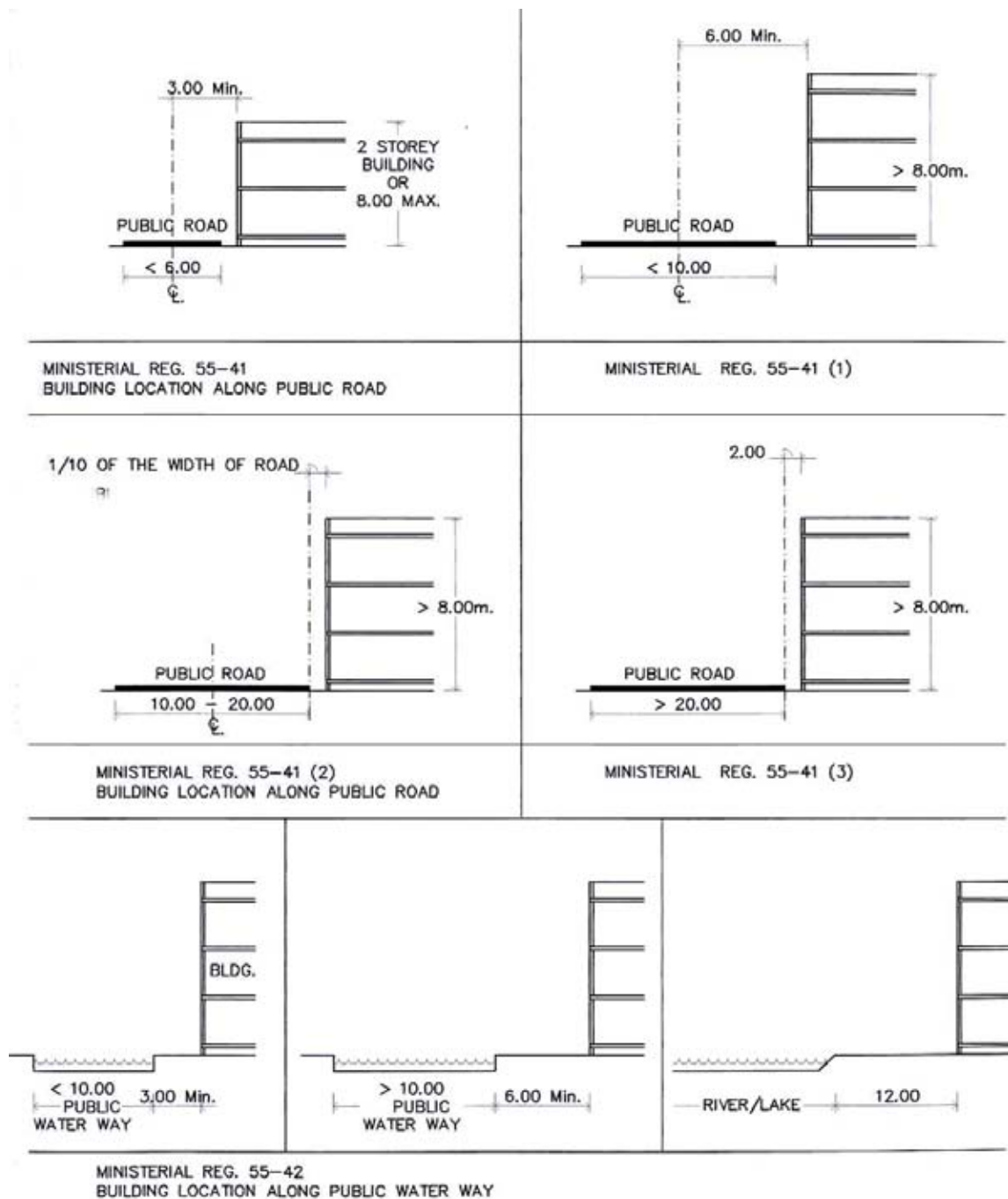
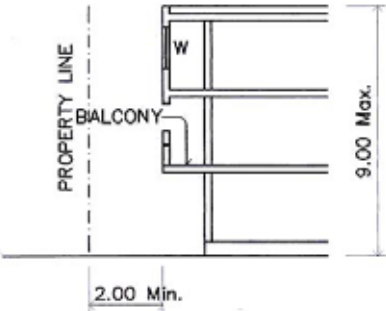
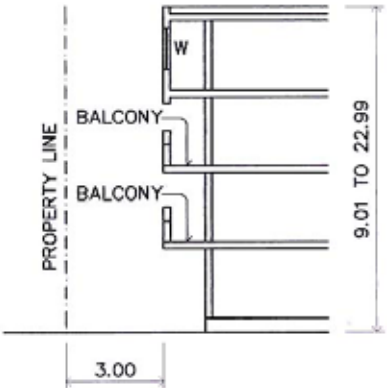
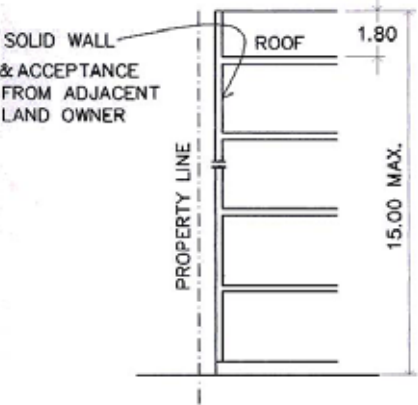
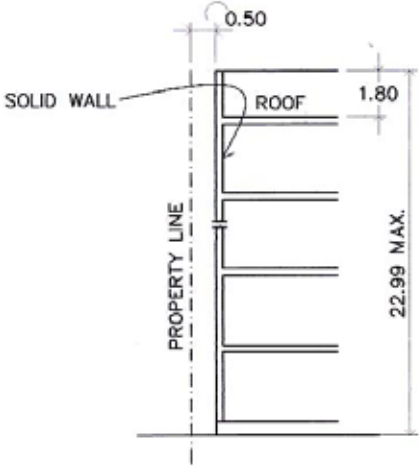


APPENDIX-8:

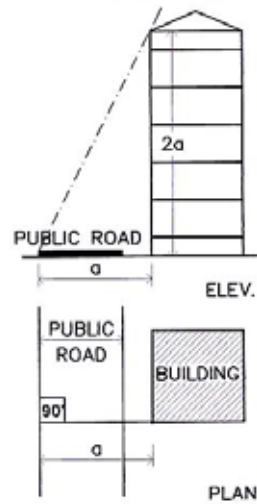
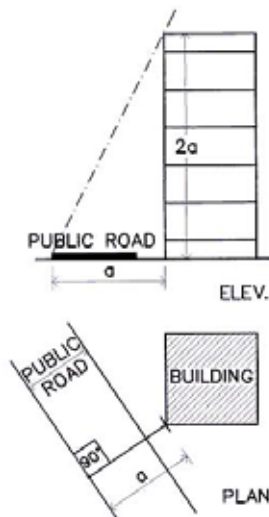
MAJOR REQUIREMENT BY THE BUILDING CONTROL ACT



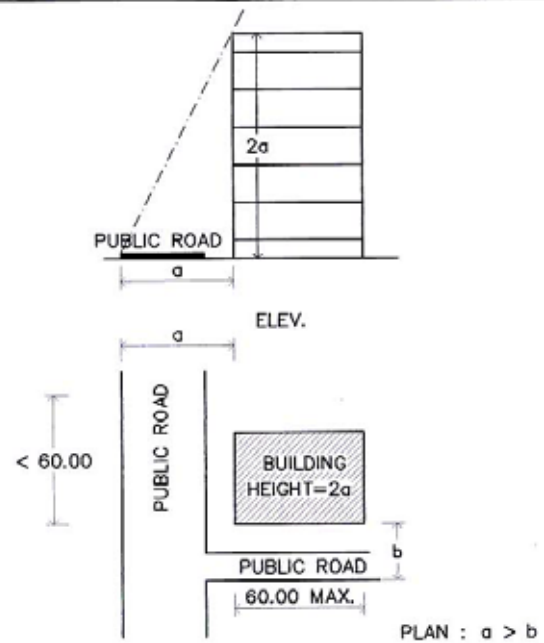
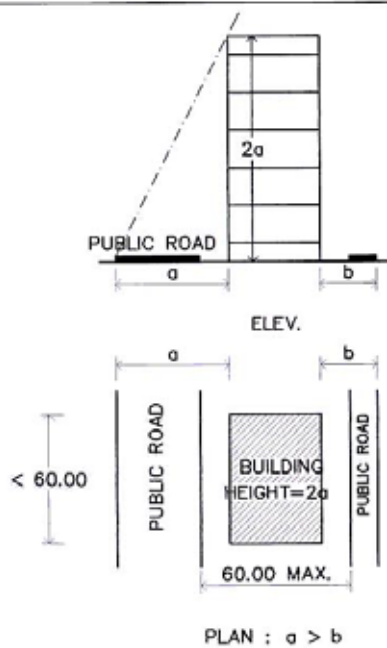
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<p>MINISTERIAL REG. 55-50 (1) DISTANCE - OPENING FROM PROPERTY LINE</p>	<p>MINISTERIAL REG. 55-50 (2)</p>
	
<p>MINISTERIAL REG. 55-50 DISTANCE - SOLID WALL FROM PROPERTY LINE</p>	<p>MINISTERIAL REG. 55-50</p>

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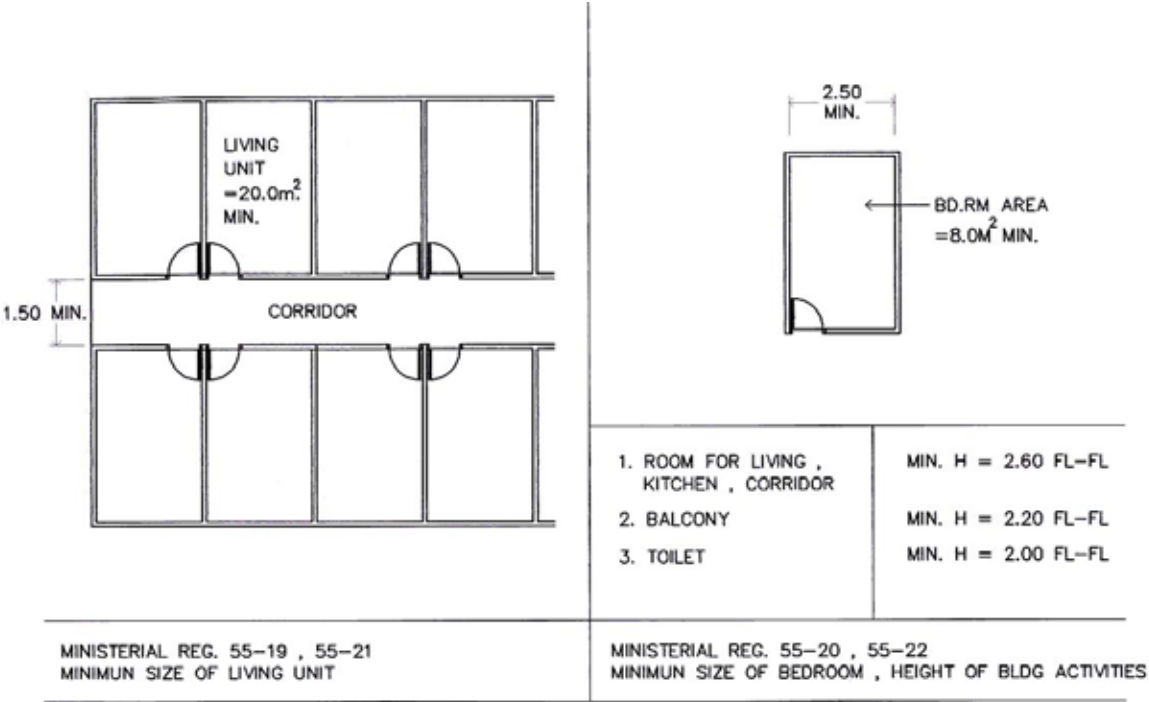
MINISTERIAL REG. 55-44
BUILDING HEIGHT



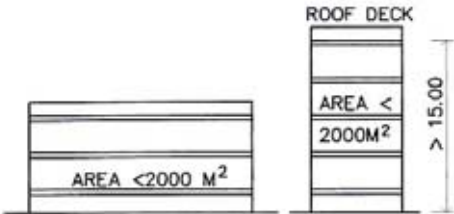
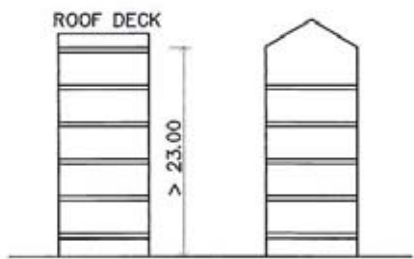
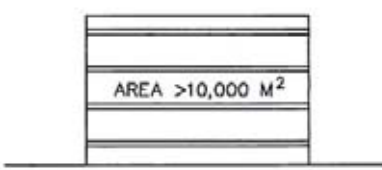
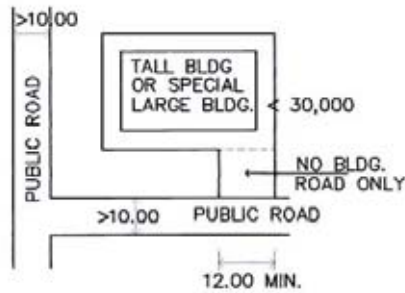
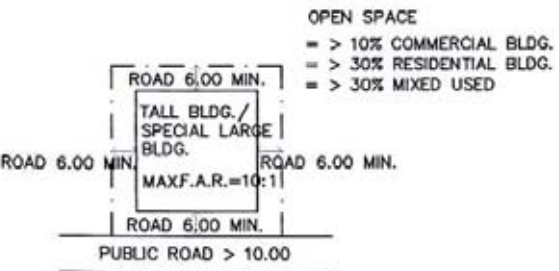
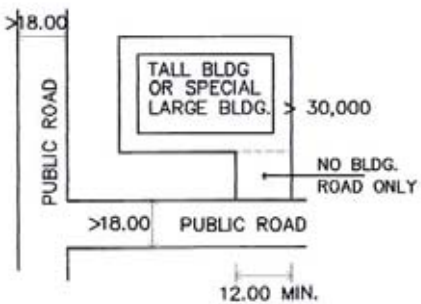
MINISTERIAL REG. 55-45
BUILDING HEIGHT BETWEEN 2 ROADS

MINISTERIAL REG. 55-46
BUILDING HEIGHT BETWEEN 2 ROADS

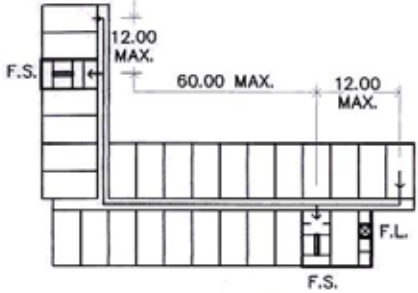
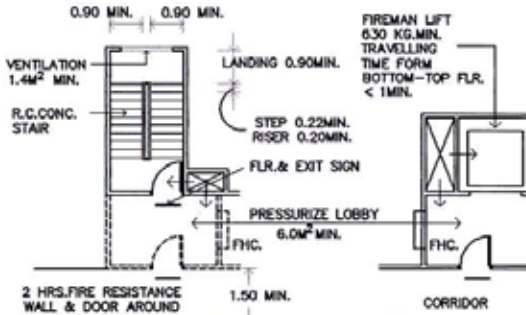
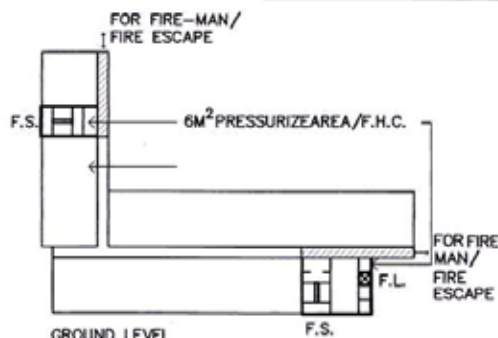
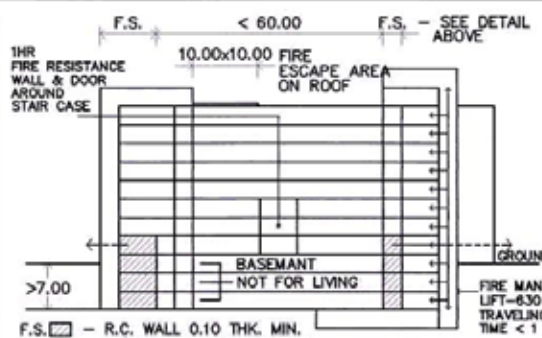
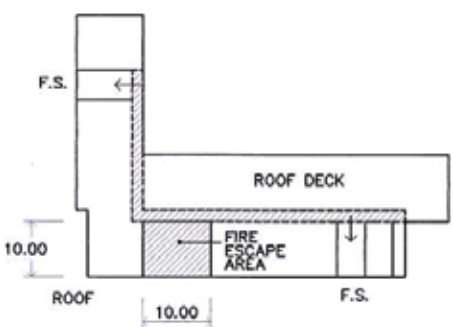
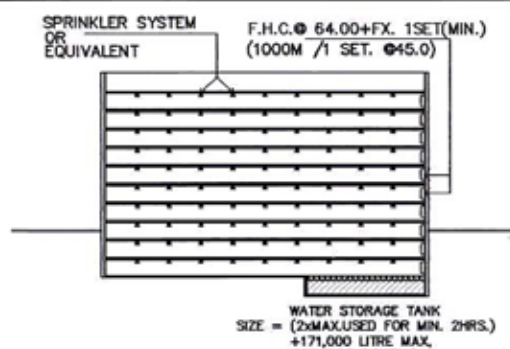
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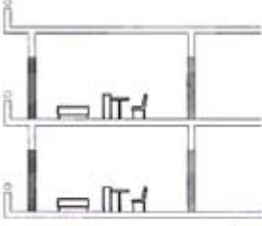



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<p>MINISTERIAL REG. 6-1 LARGE BLDG. = $>2000 \text{ M}^2$ OR > 15.00 HIGH</p>	<p>MINISTERIAL REG. 6-1 , 33-1 TALL BLDG. = >23.00 HIGH</p>
	
<p>MINISTERIAL REG. 6-1 , 33-1 SPECIAL LARGE BLDG. = $>10,000 \text{ M}^2$</p>	<p>MINISTERIAL REG. 33-2 BUILDING LOCATION</p>
	
<p>MINISTERIAL REG. 33-3, 33-4, 33-5, 33-6 OPEN SPACE & F.A.R.</p>	<p>MINISTERIAL REG. 33-2 BUILDING LOCATION</p>

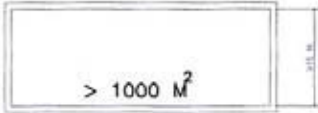

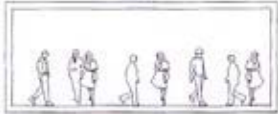
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 <p>2 F.S. - HAVE TO CALCULATE HOW TO MOVE PEOPLE OUT OF BLDG. WITH IN 1 HR.</p>	 <p>2 HRS. FIRE RESISTANCE WALL & DOOR AROUND FIRE ESCAPE STAIR & LOBBY</p> <p>FIREMAN LIFT 630 KG. MIN. TRAVELLING TIME FROM BOTTOM-TOP FLR. < 1 MIN. CORRIDOR DOOR = 0.90x1.90m.</p>
<p>MINISTERIAL REG. 33-22 TALL & SPECIAL LARGE BLDG.-2 FIRE STAIR CASE BLDG. < 60.00</p>  <p>GROUND LEVEL</p>	<p>MINISTERIAL REG. 33-23,33-25,33-26,33-27,33-28 TALL & SPECIAL LARGE BLDG.- FIRE ESCAPE STAIR DETAIL & FIRE MAN LIFT</p>  <p>1HR FIRE RESISTANCE WALL & DOOR AROUND STAIR CASE 10.00x10.00 FIRE ESCAPE AREA ON ROOF BASEMENT NOT FOR LIVING >7.00 F.S. - R.C. WALL 0.10 THK. MIN. W/LIGHTING & PRESSURIZE FIRE MAN LIFT-630 TRAVELLING TIME < 1 MIN. GROUND</p>
<p>MINISTERIAL REG. 33-28 TALL & SPECIAL LARGE BLDG.- SPECIAL CORRIDOR FROM OUTSIDE TO FIREMAN-LIFT</p>  <p>ROOF</p>	<p>MINISTERIAL REG. 33-7,33-8,33-8(2),33-28,29 TALL & SPECIAL LARGE BLDG.- FIRE ESCAPE STAIR & FIRE MAN LIFT LOCATION</p>  <p>SPRINKLER SYSTEM OR EQUIVALENT F.H.C. 64.00+FX. 1SET(MIN.) (1000M /1 SET. 45.0) WATER STORAGE TANK SIZE = (2xMAXUSED FOR MIN. 2HRS.) +171,000 LITRE MAX. FOR FIRE FIGHTING</p>
<p>MINISTERIAL REG. 33-29 TALL & SPECIAL LARGE BLDG. - 10.00x10.00 FIRE ESCAPE AREA ROOF DECK LEVEL</p>	<p>MINISTERIAL REG. 33-18,33-19,33-20,33-36 TALL & SPECIAL LARGE BLDG.- FIRE FIGHTING</p>

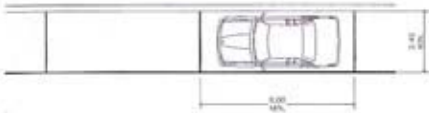
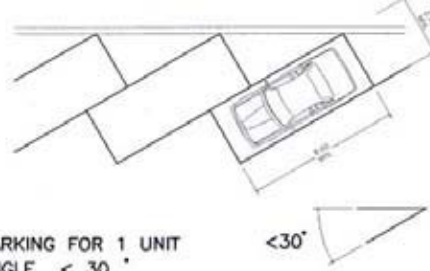
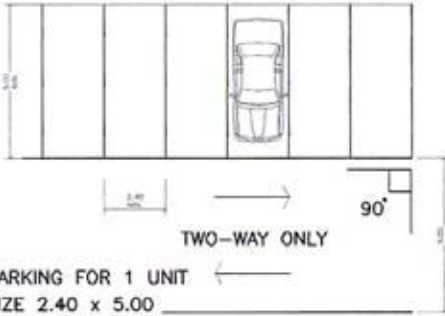
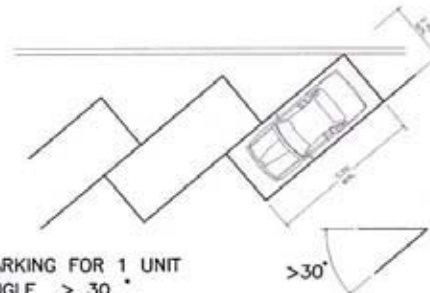
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 <p>THEATRE - > 500 SEATS PARKING = 20 SEATS/ 1 CAR OR = 10 SEATS/ 1 CAR IN DIRTRICT : Phranakorn, Thonburi, Bangrak, Pathumwan, Pomprab, Sampantawong</p>	 <p>HOTEL - >30 GUEST ROOMS PARKING - 1-30 RMS. = 10 CARS - 31-100 RMS. = 14 CARS (5 RMS./1 CAR) - 101 RMS. UP = 10 RMS./ 1 CAR</p>
<p>MINISTERIAL REG. 7(2537)- 2(1), 3(1)(n) BUILDING TYPE : PARKING SPACE REQUIRED</p>	<p>MINISTERIAL REG. 7(2537) - 2(2), 3(1)(๓) BUILDING TYPE : PARKING SPACE REQUIRED</p>
 <p>HOUSING UNIT - > 60 M² PARKING = 1 UNIT/ 1 CAR</p>	 <p>RESTAURANT > 150 M² (NET DINING AREA) PARKING = 15 M² / 1 CAR (FOR FIRST 750 M²) = 30 M² / 1 CAR (FOR > 750 M²)</p>
<p>MINISTERIAL REG. 7(2537) - 2(3), 3(1)(R) BUILDING TYPE : PARKING SPACE REQUIRED</p>	<p>MINISTERIAL REG. 7(2537) - 2(4), 3(1)(๔) BUILDING TYPE : PARKING SPACE REQUIRED</p>
 <p>DEPARTMENT STORE > 300 M² PARKING = 20 M² / 1 CAR</p>	 <p>OFFICE > 300 M² PARKING = 60 M² / 1 CAR (NET OFFICE SPACE)</p>
<p>MINISTERIAL REG. 7(2537) - 2(5), 3(1)(๕) BUILDING TYPE : PARKING SPACE REQUIRED</p>	<p>MINISTERIAL REG. 7(2537) - 2(6), 3(1)(๖) BUILDING TYPE : PARKING SPACE REQUIRED</p>

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 <p>LARGE BUILDING > 1000 M² , HEIGHT > 15.00M.</p>	 <p>LARGE BUILDING > 2000 M²</p>
<p>PARKING = 120 M² / 1 CAR (TOTAL FLR. AREA) OR = ALL NO. OF PARKING REQUIRED (BUILDING TYPE) UP TO MAXIMUM COUNT</p>	
<p>MINISTERIAL REG. 7(2537)- 2(7), 3(1)(๕)</p> <p>BUILDING TYPE : PARKING SPACE REQUIRED</p>  <p>HOTEL, RESTAURANT, LARGE BLDG'S, LOBBY</p> <p>PARKING = 10 M² / 1 CAR</p>	
<p>MINISTERIAL REG. 7(2537) - 3(1)(๕)</p> <p>BUILDING TYPE : PARKING SPACE REQUIRED</p>	

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 <p>PARKING FOR 1 UNIT SIZE 2.40 x 6.00</p>	 <p>PARKING FOR 1 UNIT ANGLE < 30° SIZE 2.40 x 6.00</p>
<p>MINISTERIAL REG. 41(2537) - 2(1) PARKING SPACE</p>	<p>MINISTERIAL REG. 41(2537) - 2(1) PARKING SPACE</p>
 <p>TWO-WAY ONLY</p> <p>PARKING FOR 1 UNIT SIZE 2.40 x 5.00</p>	 <p>PARKING FOR 1 UNIT ANGLE > 30° SIZE 2.40 x 5.50</p>
<p>MINISTERIAL REG. 41(2537) - 2(2) PARKING SPACE</p>	<p>MINISTERIAL REG. 41(2537) - 2(3) PARKING SPACE</p>

APPENDIX-9: OUTLINES OF URBAN MANAGEMENT SYSTEM IN JAPAN

A9.1 INSTITUTION

Institution in Japan is well known and understood in Thailand. Therefore, here, the Study Team briefly addresses the outline and the practice of City Planning Law, Building Standard Law, Land Readjustment Law, Urban Renewal Law, and Residential Area Improvement Law.

A9.1.1 City Planning Law

City Planning Law is the basic institution of shaping urban areas. The systems in the Law is summarized as below.

a)	Master Plan	metropolitan level, municipalities level
b)	Area Division	dividing the urban area into two: the area for promoting urbanization and the area for regulating urbanization
c)	Zoning	Land Use Zone: where use of building is controlled FAR (floor area of ration): the ratio of the total floor area of the building to the area of lot Building Coverage Ratio: the ratio of the area of the building to the area of the lot Special Urban Block Area: where FAR, building coverage area, and the limitation of building height are eased and where specific condition is satisfied Building Height Control District: where the maximum and minimum limitation of building height is regulated Others
d)	Urban Facilities	Urban facilities such as roads, railroads, parks, open spaces, sewerage, incinerator, rivers, canals, schools, hospitals, health centers, etc. can be specified in City Plan. Details are annotated in *2.
e)	Urban Development Project	Land Readjustment Project (explained below) Urban Redevelopment Project (explained below) Others
f)	District Plan	General District Plan (annotated in *3) Redevelopment District Plan (annotated in *4) Disaster Prevention District Improvement Plan Others
g)	Others	

*1 FAR is the highest at the city center and it goes down as the distance from the city center increases. Maximum FAR in the city center of big cities such as Tokyo and Osaka is 1000%. Maximum FAR in the city center of regional city is about 600%.

*2 There are other laws, specifying the installation and management criteria and the ratio of national subsidy, for these urban facilities. By specifying these facilities in city plan, the land necessary for the construction of the facilities can be expropriated because the public character of the facilities becomes clear.

*3 Ordinal city plans typically and comprehensively have decided from the view point of the conditions of the concerned city. Therefore, to pick out the needs by small district and to meet the request from residents have been very difficult.

To meet these requests, within the extent of the control in general city plan, various regulations can be set up. The regulations are the ones for layout of district facilities such as access roads and small parks, type of building use, FAR, building coverage ratio, building height, minimum limitation of land area, etc

*4 This system was enacted in high economic growth era, to mitigate the lack of office floors. The system makes it enable to develop reclaimed land, the site of demolished large scale factory or marshalling yard, which are located close to city center but isolated from the general urban areas.

These sites are isolated from the general urban areas, so the degree of influence to the nearest general urban areas is fairly small. In addition, the number of land owners in the sites is much smaller than that in the general urban areas, so it is easy for each land owner to coordinate opinions with one another. It is also easy for developers to bear the improvement cost of public facilities, because the benefit from the development is expected to be increased, judging from the previous land use. From the viewpoints of social significance for the development, whether special city planning system can be exclusively applied to redevelopment works has been discussed.

Accordingly, the existing urban control can be ignored, and each control tool such as FAR, building-to-land ratio, building height, etc. cannot be applied to the development. This system is valid, when the development meets social

significance, and when the environment and landscape is harmonized with surroundings.

However, in practice, the public bodies have been formulated their own planning systems to control the development. It is because of self-will by persons in charge and to avoid the unfairness among developments. Therefore, the significance of the system is getting smaller at present.

One of the features in each system, related with district level plan including this system, is that developers can request to apply district plan in the concerned development site, if the land owners reach the mutual agreement.

The system is applied in many large scale developments such as urban redevelopment project in the general urban areas.

A9.1.2 Building Standard Law

This laws is divided into two specifications, “building code” and “restriction for grouping”. In the building code, the structure, facilities, usage performance, fire protection, evacuation, etc. of a building are prescribed. In the restriction for grouping, FAR, building coverage, the type of use, building height, etc. of a building are stipulated.

The legal act in Building Standard Law, namely “building confirmation”, proves effective in the control tools such as FAR, build coverage, zoning control, height control, etc. in City Planning Law.

The detail that cannot be specified in City Planning Law is specified in this law. The operation of City Planning Control, based on the real situation in which buildings are placed, is also stipulated in this law. In this sense, Japanese recognize that “Building Standard Law is the sister law to City Planning Law in Japan.”

The examples of the detailed specifications are given below. In case a building is constructed along an existing road with the width of less than 4 meters, the land within 2 meters from the center line of the road cannot be used for the building. As a result of continuously applying the above regulation along the road, the road with the width of 4 meters is automatically secured in reality. In addition, the approval of private roads, the fix of the wall surface line of building, etc. are also examples.

The following shows the examples of City Planning Control operation in line with the real situation. In case a building is complied with a certain condition, the public body implementing building confirmation has a discretion to mitigate the type of building use, FAR, building height, etc. specified in City Planning Law. When the plural buildings are comprehensively planned on a group of land consisting of several lands, a group of land is regarded as one land where obligation of minimum contact to public road and FAR can be mitigated.

The following shows the unique case in the redevelopment district plan mentioned above. As long as the development is complied with the development concept of the concerned redevelopment district plan, the public body implementing building confirmation has a discretion to control each building use, FAR, building coverage, building height, etc.

As such, both Building Standard Law and City Planning Law supplement the missing part in each law with each other, and progress the city planning. This characteristics of both laws expresses the sister law.

[Land Readjustment Law (Land Readjustment Project)]

Land Readjustment Project is implemented where the implemented area is designated in the concerned city plan. The project is to improve public facilities and arrange the lots for buildings simultaneously and comprehensively. It is an areawide development method, and has a long history and lots of achievement.

In the project, first of all, the layout and scale of public facilities such as roads and parks are decided in line with the future image of the district. Occasionally, the layout and scale have already decided in the concerned city plan. After that, the lots belonging to each land owner are exchanged and readjusted. The lots are finally placed to realize the rational land use. This procedure is called “replotting lot”.

As a result, the area of lots belonging to each land owner decreases in the same rate with the increment of the area for the lots of public facilities. The area also decreases in the same rate with the increment of the area for sale to raise the project cost. The former is called “decrease for public facilities” and the latter is called “decrease for reserved land”. To obtain the lots for public facilities and reserved land results in the change of the location and the shape of the lots belonging to each land owner. In that case, the existing buildings on the lots need

to be transferred. In many cases, the owners construct new building with the compensation by the transfer and their own money.

The project fund, necessary for the public facilities improvement and the transfer of building, is principally covered by selling a part of lots in a district. The lots are called “reserved land”. However, the cost of purchasing lots, construction cost, etc. for the public facilities improvement, are subsidized, in case important public facilities such as arterial roads in the concerned district are planned and designated in city plan. In case the evaluated price of the whole lots in the district after implementing the project is lower than that before, the balance is subsidized.

Only public body can implement the project in built-up areas because of financial problems. In that case, each public body generally prepares its own supplementary budget.

To summarize the Urban Readjustment Project, the following two cost raising methods have been applied: 1)The cost is covered by selling preserved lands for the following developments, 2)The cost is raised by public subsidy and disposal fee of preserved land. The former is applied in housing developments including New Town Projects in suburban areas, and in the developments of built-up areas or low use / unused areas. It is because the benefit is obtained from the developments. The latter is applied in the general built-up areas.

A9.1.3 Urban Renewal Law (Urban Redevelopment Project)

In Urban Redevelopment Project, which is one of areawide improvement projects, the method of replotting lots in Land Readjustment Project is introduced. The redevelopment project is implemented to promote the improvement of public facilities such as station squares and arterial roads and to promote the moderate intensive land use. Therefore, it is implemented in front of railway stations of built-up areas or in the important districts of cities such as central business districts. In the redevelopment project, each real estate owned by private sectors is exchanged and readjusted three-dimensionally. This exchange and readjustment procedure is called exchange of right. A building is constructed through the exchange of right. As such, the project has the similar characteristics with land readjustment project in built-up areas.

However, some points in the redevelopment project are slightly different from the ones in the land readjustment project. The points are: 1) the necessary conditions

in project implementing areas are specified in detail, 2) preserved land in the project is converted to building floors with land, called “reserved floor area”, 3) the development and improvement costs of elevators, utility facilities, parking lots, artificial ground, sky walk, etc. are subsidized, and 4) the balance of land price is not subsidized even in case the estimated land price after the readjustment is lower than that before.

Recently, private associations and Urban Development Cooperation (UDC) have implemented the urban redevelopment project even in built-up areas where public bodies had implemented the project.

A9.1.4 Residential Area Improvement Law (Residential Area Improvement Project)

The Residential Area Improvement Project is implemented in the slum areas where a number of substandard houses are built up. It includes slum clearance, transfer of superior houses, improvement of public facilities, and supply of new middle-high-rise rental housing to the people who lose their houses by the project.

The necessary conditions of project area are specified in the Law. Substandard houses are the wooden houses in which the degree of deterioration of building materials and facilities is higher than a certain points. The degree is quantitatively graded. The designation of project area depends on the number of substandard houses and the density. The project area must have more than 80 houses/ ha, and more than 50 houses in the area where substandard houses occupies more than 80% of total houses.

It is considered that the existence of the above area is against a provision of “to be healthy and enjoy cultural life”. Therefore, in case people do not accept the purchase of wooden houses, the purchase of lands for public facilities and public rental houses, a system to make it possible to expropriate the houses and lands can be applied. Expropriation is involved in the project, so the implementing agency is limited to public body. In addition, government subsidizes for the project.

Compared with the above two Laws, the procedure such as decision by city plan is not necessary in the project.

2) Implementation System

Each municipality has responsibility to improve the public facilities of living environmental facilities such as arterial roads, parks and open spaces, etc. in the general urban areas.

Various implementing agencies are specified in the areawide developments mentioned above. The most important implementing agency differs in the type of development. UDC and association organized by land owners is the most important implementing body in Land Readjustment Project and Urban Redevelopment Project. In the Residential Area Improvement Project, municipality is the most important.

Municipality used to implement the former two projects in Japan, except Tokyo where metropolitan government had implemented. Recently, the Land Readjustment Project is not implemented in built-up areas. The Urban Redevelopment Project and the development in low and unuse lands are implemented by UDC instead of municipality.

However, the future of UDC is being discussed at present. It is not clear how the organization and function of UDC will be.

Private association, that big developers dominates, gets to implement the large scale Urban Redevelopment Project in the area with several hectors.

As a result, the role of public sector shifts from the implementation of the project to the direction and supervision of the project, determination of city planning, and the provision of subsidy.

The cases of Residential Area Improvement Project are decreasing, because nowadays the sites necessary for the implementation of the projects are almost used up.

APPENDIX-10: EXPERIENCES OF REDEVELOPMENT IN JAPAN

A10.1 RENEWAL OF HOUSING FACILITIES

(1) Legal Framework for Housing Renewal

It was in mid 1980s (about 15 years ago) when renewal of public housing was undertaken for the first time in Japan.

Basic policy for development of public housing had already been established by the central government when the renewal project was undertaken in Japan, which followed the following process:

Chronology of Public Housing Policy, Japan

5- year Plans for Public Housing Development	Number of Residential Unit Constructed (x 10,000)	Targets
First phase (1966- 1970)	674	To supply dwelling to every household.
2 nd phase (1971- 1975)	770	- Residential unit has rooms for every family member. - According to housing statistics, 1973, number of houses surpassed number of household in all prefectures.
3 rd phase (1976- 1980)	1,135	Introduction of target residential grade system (to set the minimum and average grade of residential unit, indicating floor area according to family size.)
4 th phase (1981- 1985)	934	Introduction of target living environment grade system (level of service systems)
5 th phase (1986- 1990)	1,167	Introduction of inductive residential grade system, aiming at early improvement of the minimum grade.
6 th phase (1991- 1995)	1,164	To set progress to improve a half of the minimum grade to the inductive residential grade by 2000.
7 th phase (1996- 2000)		- To set average floor area of a residential unit at about 100m ² . - Residential grade targets (4 family members) - Minimum residential grade: 50m ² - Average inductive residential grade: 123m ² - Inductive residential grade in urban areas: 91m ²

In the course of the above process, public housing renewal project was initiated by Urban Development and Housing Corporation (UDC) for the first time in the 5th phase. The occasion manifested the government's policy to upgrade the

quality of dwelling at an epoch time of achieving the target of “Dwelling to all Households”. Having set down criteria for residential grade, the government declared that those that did not comply with the criteria should be renovated. The government thus got on with the renewal project upon making clear the need for renewal. Without this kind of backing-up policy, it may be impossible to formulate consensus among resident community for the renewal project, and the execution body could not win a case if a complaint is filed with the court.

Furthermore, in case of an urban redevelopment the law prescribes that the project may be launched if 2/3 of the stakeholders agrees with it. In practice, maximum efforts are exerted to achieve 100% agreement, however, notwithstanding the efforts there would remain about 10% strong opposition in most cases.

That will be the case with Thailand as well; in spite of the target 100%, it could not always be attained. In Din Daeng Housing Community, people are living at an extremely low house rent compared with that of the market rate in the surrounding area despite the fact that they are capable of higher rent. In order to allow them to continue to live in the same place and to improve living environment, sooner than later the time will come for redevelopment in Din Daeng. It is considered essential to develop legal background to cope with unreasonable opposition group.

(2) Relocation and Construction Phasing

In housing renewal projects in Japan, moving-out residents and returning residents are normally divided into half and half, the fact ensures that half of the residences are vacated by the time construction gets started. This fact makes a sequential construction of new housing units rather practicable, dividing the project area into several zones. Demolishing/constructing half of the facility at first, the other half is kept for temporary settlement space for the returning residents until new residences get ready.

Renewal projects are commenced after achieving the vacancy rate of 30% by autonomous moving-out and suspension of moving-in. After then, it takes two years to identify individually moving-out and returning residents. Returning ratio among the remaining 70% residents is 60-70% for convenient location and 50% for inconvenient location.

(3) Negotiation with Community

In case the compensation money is set higher for moving-out residents, the proportion of moving-out residents is assumed to become higher. In general, the higher proportion of moving-out residents which enables a larger number of new comers would render financial management of a housing renewal project easier. At the final stage of negotiation with the residents, the compensation amount is tactically adjusted such that the proportion of the moving-out residents will reach the target range. It is, therefore, recommended to include in the project budget certain maneuvering allowance for this purpose.

In the course of negotiation, each project staff normally takes charge of 10 households to communicate with the resident community. When the project negotiates individually with a household, two project staffs would go together. Number of this kind of meetings would normally reach as many as 100 times. Applying this experience to Din Daeng's whole community (6,818 households), it would be necessary for total 680 project staff to have meetings 681,800 times altogether. It would be worth mentioning that tremendous efforts have to be exerted, though negotiation with the residents is not necessarily conducted all at once, as renewal is carried out part by part.

Consent of the residents' could not be obtained in a simple way. In the beginning stage, there would be strong anti-renewal group of 10% as opposed to pro-renewal group of 10%, while the rest is intermediate undetermined majority. It is a basic tactic to induce the intermediate group toward pro-renewal side little by little.

At general meetings, voice of the anti-renewal group is generally prominent, by which the intermediate group tends to be influenced. Therefore, the general meeting has to be followed up by individual meetings to stem the adverse flow by disseminating right information.

A10.2 Private Sector Participation for the Redevelopment

(1) Methods of Private Sector Participation

There can be four ways for private sector to participate in redevelopment as listed below:

- Project owner, for instance NHA, constructs buildings and leases floor to

private investors.

- Project owner constructs buildings and sells them to private investors.
- Project owner leases land to private investors and the latter constructs buildings.
- Jointly constructing buildings and operating them.

Generally, the first way, where the project owner as a developer constructs buildings and leases the floor to private investors, would be the most profitable for the project owner. However, the owner in this case will have to arrange huge investment money and be well versed in operation of rental buildings, without which he will have to carry a high risk. This way is not recommendable for NHA to take up for it is scarce of financial capacity and expertise in this line of business.

Another way is to let the owner build buildings and sell part of the floor to private investors to compensate part of construction cost, which is often exercised in Japan under a “Retained Floor Disposal Scheme”. This method, however, could not be employed by NHA as the land is the property of the government and could not be sold to the third party.

Consequently, the third way would have possibility, where NHA will develop land with infrastructures and utilities and lease the land for private investors to construct buildings, if NHA could have authority to earn revenue from floor rent and land lease hold fee is sufficiently profitable to compensate initial cost. Alternatively, the fourth idea could also be employed, where construction of buildings and their operation are jointly carried out, after the legal systems allow NHA to earn benefit.

(2) Land Lease Hold Method

It is generally recognized that 30 years lease period in the land lease hold method is too short for the invested money to be recovered, and so not suitable for a large scale project. If this method is to be employed, prior settlement on how to deal with renewal of lease contract, disposal of facility etc. upon expiry of the initial lease period between the landlord and the investor is indispensable.

Supposing a 30 years project life, the facility fund deposit method is considered more appropriate. Since the facility is the property of landlord, he can dispose the facility at his own discretion upon returning the deposit money. The private

investor on his part can diminish the risk involved in the initial investment money by spreading it to monthly rent payment. Although the landlord owns the facility, he does not necessarily have to build or manage it on his own, these being contracted out to private managing company. The private investor can also get rid of taxes associated with fixed property.

In the Study, this kind of private sector participation is excluded from the examination, as revenue for landlord (government) is limited.

(3) Land Trust Method

Land trust method adopted in the Study has history that it was once expected in Japan to promote efficient land use in relation with Urban Renewal Law enforced in 1969 and not put into effect. However the land trust had been recognized to utilize private sector vitality. Reflecting the Policy for the Introduction of Private Sector Vitality into Public Works issued by the Liberal Democratic Party in 1983, the project implementation system for the land trust was settled. It is 1984 in which the first case of the land trust by private sector was realized.

Further the governments revised the Local Administration Law and the National Property Law which enabled to make land trust of national property land. It is 1986 in which the land trust of the public land was carried out for the first time. Then the national land was also utilized for the land trust in 1989.

Land trust system aims at efficient land use as well as earning profit, by that a landlord entrusts a land to a land trust bank. The landlord will be the beneficiary and the bank will be the trustee who conducts provision of funds, construction, operation and management of tenants. The trustee also distributes profit to landlord (the beneficiary).

Dividend of the land trust is in the form of merit system. In other words, results from management and disposal of trusted properties exclude administration cost and remuneration for the trust. Thus the dividend will be directly reflected by the profit of the project.

Regarding the case of land trust of the national property land, merits are listed below.

- Earning the profit, the landlord (government) maintains land tenure. Therefore the landlord could utilize the land to follow future changes in the policy.
- Revenue reflects profit by the land development, which is not affected only

by the land price..

- Utilizing the trust system, it is possible to establish complicated right arrangement.
- Introducing knowledge of the private sector into construction, management, and disposal, the project could be flexibly proceeded.
- Private sector provides funds for construction of facilities. Therefore landlord is not required to arrange financial resource.
- Profit from the project is not subjected to taxation, as governments conducts the project.

(4) Necessity of Attitude Surveys for Private Sector

It is very important to ascertain the conditions for private sector participation in the commercial component since revenue from there would account for a significant portion of the project income. A whole lot of efforts are exerted, in Japan, in collecting the opinions of the investors about their interest, the same as in the community negotiation. Questionnaire survey to as many as 100 potential investors for a project and interview survey to potential participators are assiduously conducted. For these activities, a marketing consultant is hired who are well versed in basic market survey.

A10.3 Required Conditions for Redevelopment

(1) Consistency in Development Policy

Unwavering government policy is indispensable for the private sector to participate in a huge and time consuming project as repeatedly pointed out by private investors. In Japan for instance, consistency in development policy is ascertained by an established “Urban Redevelopment Policy System”.

This system lays down principal policy of urban redevelopment of the entire city, and formulates specific development plans in specific redevelopment areas, for which, in principle, continuous efforts are mandated to achieve the goal no matter how many years it might take. This kind of established system is laying ground for private sector’s participation in Japan. The similar measure to put principal redevelopment direction in the “Specific Plan”, thereby adorning legal status to a project, is also recommended in Thailand.

(2) Setting-up of Forum for Discussion and Coordination among

Concerned Parties

To formulate a firm redevelopment policy, concerned parties would have to have a forum to hold discussions and coordination.

In practice, a coordinating agency standing on neutral position is called for in order to work out a redevelopment policy coordinating opinions of concerned parties and concurrently paying due attention to possibility of private sector participation as well as the community opinion. Redevelopment consultants are playing coordinator's role in Japan. Introduction of similar system is also recommended in Thailand.

In the Din Daeng Community Redevelopment Project, concerned parties include BMA, NHA, SRT, and MOF (Ministry of Finance).

(3) Organizing Special Task Force for Project Implementation

An urban redevelopment undertaking calls for a host of professional expertise. To name a few, there should be an urban coordinator, survey/analyst, project planner, project operation and administration specialist, architect, electro-mechanical and civil engineers, legal advisor, community specialist, private sector specialist etc.

Project director controls the entire group of specialists, engages in decision making, and promotes the project implementation.

(4) Mobilization of Own Fund

It is quite risky to execute a redevelopment project by full 100% bond issuance. Minimum 20-30% own fund will have to be invested. The urban redevelopment project, in Japan, which is executed with legal back-up is subsidized by the government as much as 20% of the project cost in an effort to secure stable financial profile.

(5) Restriction of Right in Redevelopment

There occurs a speculative movement by the third parties trying to buy out the right of the residents counting on the rise in the fixed property value after the redevelopment once the redevelopment plan is officially approved. A few returning residents may attempt to profit from the rise in property value by sub-renting the residences. It will be necessary to restrict the transfer of right

among the current residents to curb the speculative activities when implementation of redevelopment project is officially determined.

(6) Flexibility in Project Planning

The project contents are subjected to change all the time by the interest of the private sector or opinions of returning residents. Financial profile is vulnerable to these changes, and accordingly physical facility plan would have to be altered. There is a large factor of change in an urban renewal project unlike other development projects because of the involvement of many stakeholders and participation of private investors. As a consequence, the project plan is required to be flexible such that revisions can be made complying with the ever-changing situation.