

Attachment 3

Draft VTE Governor's Decision on Urban Management Regulation and Its Guideline

Draft
VTE Governor's Decision on
Urban Management Regulation
and
Its Guideline

Project for Urban Development Management
Vientiane Capital, Lao PDR

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- (1) The Minister of Public Works and Transport has approved “Urban Management Regulation (kot la-biap)”, and issued it through the Governor’s Decision, number XXXX, on XX September 2016.
- (2) The Directorate General of DPWT of Vientiane Capital has approved “Guideline (bot-nenam) of Urban Management Regulation”, and issued it through the DG’s Decision, number XXXX, on XX September 2016.
- (3) This document consists of:
 - (a) “Urban Management Regulation”, which is shown in a box of black line, and
 - (b) “Guideline of Urban Management Regulation”.

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Article 1 Purpose and Status

This documents of “Urban Management Regulation” provides regulations necessary for the administration regarding City Planning in Vientiane Capital, based on the City Planning Law.

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Article 2 Target Objects

Target objects are:

- (1) Public Infrastructure,
- (2) Land,
- (3) Buildings, and
- (4) Structures.

<Exceptions>

- (Exception 1) Objects of National heritage
- (Exception 2) Objects of National defense facilities
- (Exception 3) Objects, which were constructed or installed before the enforcement of the requirement

<Special treatment of Exception 3 >

- (1) Notwithstanding Exception 3 above, the requirement is applied to the objects below.
 - (a) Objects coming under condition below:
 - They had been illegal before the enforcement, and do not meet the requirement.
 - (b) Objects coming under one of any conditions below:
 - They have extended part, or
 - They are renovated after the enforcement of the requirement, of which construction cost is more than one third of that of assumed whole construction.
- (2) One year after the enforcement of the regulation, notwithstanding Exception 3 above, all advertisement and sign including those, which have been existing before the enforcement of the regulation, become subject for the new requirement.

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Target objects in detail

“Building” means a kind of “Structure (sin koo saang, or sin pok saang)”, has a roof, and includes equipment installed to the building.

“Structure” includes advertisement and signs.

Detail of four Target objects mentioned in Article 2 is as below.

- (1) “Public Infrastructure” includes:
 - Road,
 - Park,
 - River,
 - Pond,
 - Water supply,
 - Wasted water drainage and Rain water drainage,
 - Electricity line and Telephone line, and
 - Trash clean-up system
- (2) “Land” is considered as Target objects from the viewpoint of:
 - Site of buildings and structures,
 - Land use with no buildings and structures.
- (3) “Buildings” include equipment installed to the building, such as:
 - Water tank,
 - Antena, and
 - Cooling tower.

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(4) "Structures" include:

- Chimneys,
- Towers,
- Retaining walls,
- Elevatory systems,
- Storage facilities,
- Advertisement and shop sign, which can be seen from the outside, and
- Objects on the reservation area and the road area.

The target object of this regulation includes "Land". "Land" includes not only the building site but also the land where no structure stand, because stock of hazardous materials on the land is also controlled by this regulation, for example.

Exceptions of Target objects

Article 2 mentions "exceptions of target objects" as below.

(Exception 1) Objects of National heritage

(Exception 2) Objects of National defense facilities

(Exception 3) Objects, which were constructed or installed before the enforcement of this regulation

"Exception 3" has a remark as shown below.

Special Treatment of Exception 3 (Treatment for existing structures)

(1) Building and structures, other than advertisement and sign

Case	Application
Building construction on the site where any buildings have existed since before enforcement.	Building constructed before enforcement → Renovated structure within the limitation mentioned in below. → Not to be applied.
	Renovated structure after the enforcement, of which construction cost is more than one third of assumed whole construction → To be applied.
	Building constructed after enforcement, including: - Reconstructed part, - Expanded part, and - Renovated part of external feature, such as painting. →
Building construction on the new site. →	

(2) Advertisement and sign

Case	Application
Being installed before enforcement →	Until one year after the enforcement → Not to be applied.
	After one year passed from the enforcement → To be applied.
Being installed after enforcement →	

- (A) Target of regulation,
- (B) Target of permission, and
- (C) Subject of countermeasures against violation

(A) Target of regulation

As Article 2 says, all objects related to City Plan are target of regulation regardless their scale, which include (1) Public infrastructure, (2) Land, (3) Buildings, and (4) structures. For example, one piece of block of a building is also involved in “the target of regulation”.

(B) Target of permission

As Article 6 says, some construction activities are target of permission. It means, for example, painting the external wall is subject for (A), while it is not subject for (B).



(C) Subject of countermeasures against violation

As Article 7 says, Items (A) may be subjects for countermeasures against violations, such as order to demolish. It is the point that the subject for countermeasures is not limited within the target of permission.

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Article 3 Target Area

This regulation covers the whole area of Vientiane Capital.

Article 4 Requirements

Requirements are provided in:

- G-LUP/ZC or D-LUP/ZC, and
- Land-development standard, and
- Specific requirements, which are attached with the permission for the specific project.

<Remark>

1. LUP/ZC consists of G-LUP/ZC and D-LUP/ZC, and they are issued for specific areas by the Provincial Governor, based on the City Planning Law. **In the target area of D-LUP, requirements provided by G-LUP/ZC are not applied.** Requirements provided by D-LUP/ZC are applied to each project instead.
2. As Article XX says, **Construction Management Committee of the Lao Government** and **Construction Management Committee of Vientiane Capital** have a power to agree special treatment for the specific project in considering its special circumstances.

1. As a part of Land-development permission says, the developer will be requested to proposal specific regulation items, such as Land Use, H (Maximum building height) , E (Land use ratio), and COS (Land use coefficient), if:
 - (i) there are no such regulation items specified by G-LUP/ZC or D-LUP/ZC, or
 - (ii) the applicant would like to propose regulation items different from current values.And then, if the proposed specific regulation items are approved, they will be attached to the permission as specific requirements.
2. When the Building Code is issued, it will be added in the requirements.

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Article 5 Obligation to comply with LUP/ZC

People have obligations below, based on the Article 5 of City Planning Law.

- (1) **Land owners** must keep their lands in compliance with the requirements provided in Article 4.
- (2) **Building owners** must construct and keep target objects in compliance with the requirements provided in Article 4.
- (3) **Designers** must design target objects in compliance with the requirements provided in Article 4.
- (4) **Builders** (including supervisors on the site) must not proceed construction activities in any of following cases:
 - Case where construction permission is not issued yet in spite that they are subjects of construction permission, and
 - Case where they do not meet a part of conditions of construction permission.
- (5) **Tenants and occupants** must make an effort to keep target objective in compliance with the requirements provided in Article 4.

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Article 6 Countermeasures against violations

The Government of Vientiane Capital has a power below.

- (1) Building officials of the Vientiane Capital may **request a report** on the target objects provided in the Article 2, from:
 - land owner,
 - owner of the building or objects,
 - custodian or occupant,
 - designer, or
 - supervisor or construction executor.
- (2) In limits necessary for building officials of the Vientiane Capital to perform execution of this regulation, he/she may:
 - **enter** the building concerned, its site or construction field and **inspect or examine** the building, its site, building equipment, building materials, drawings/specifications, and other articles related to construction work on the building, or
 - **question**:
 - land owner,
 - owner of the building or objects,
 - custodian or occupant,
 - designer, or
 - supervisor or construction executor.

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- (3) With respect to the target objects provided in the Article 2 in violation of the requirements provided in Article 4, the Governor (represented by DPWT):
 - may issue **orders**:
 - for:
 - the suspension of the construction work concerned,
 - the demolition, relocation, rebuilding, addition, repair, remodeling, prohibition or restriction of use of the building concerned, or
 - the implementation of other measures to correct violations against the regulation,
 - to:
 - land owner,
 - owner of the building or objects,
 - custodian or occupant,
 - designer, or
 - supervisor or construction executor.
 - providing a reasonable grace period, and
 - may **request related suppliers to stop** their supply of electricity, water, gas, or telephone.

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(4) In cases where the target objects provided in the Article 2 in violation of the requirements provided in Article 4 are located **in the reservation area or road area**, the Governor (represented by DPWT) may remove the objects from the reservation area or road area. In this case, the Governor (represented by DPWT) shall notice to:

- land owner,
- owner of the building or objects, or
- custodian or occupant,

as long as possible.

(5) In cases where the Governor (represented by DPWT) has issued an order for the necessary measures under paragraph 3, and if:

- the person ordered to take the measures does not perform the measures,
- the performance is insufficient, or
- the performance cannot be expected to be completed

within a period as mentioned in the said paragraph,

it may proceed

- to **execute, by itself**, the measures which should have been taken by the person under obligation or
- to cause a third party to take such measures,

under the agreement of the Ministry of Justice, at the expense of such person.

Countermeasures against Violations

In Article 5 and 6 provide:

- (1) Obligations of related people, and
- (2) Power of authorities (DPWT) against violations.

Obligations		
Land owners	must keep the land	In compliance with the requirements provided in Article 4.
Building owners	must keep the building	
Designers	must design the building	
Builders	must construct the building	
Tenants and occupants	must use the building	





Powers

DPWT has a power

- (1) To request a report,
- (2) To enter the building, and inspect or examine, and to question
- (3-1) To order:
 - suspension of the construction work,
 - restriction of use of the building,
 - demolition of the building, etc.
 providing a reasonable grace period.
- (3-2) To request related suppliers to stop their supply of electricity, water, gas, or telephone,
- (4) To remove the illegal objects from the reservation area and road area,
- (5) To execute what DPWT ordered, by DPWT it self, in cases where orders are not implemented within the grace period.

to the rerated people above, if the building is likely violating the requirements provided in Article 4.

Legal Penelty

Provisions stating penalty, such as fine and prison, will be provided in the Law, like below.

Persons shown in the table below are subject for fine or prison through the process of accusation.

Persons	Fine or/and jail	
	Fine (less than)	prison (less than)
Regarding (1) of previous Article, the person who did not reply the request of a report from the building official.	XX KIP	XX years
Regarding (2) of previous Article, the person who prevented a building official to enter and/or inspect buildings, etc.		
Regarding (2) of previous Article, the person who did not reply the question from the building official.		
Regarding (3) of previous Article, the person who did not obey the order of the Governor (represented by DPWT)		
Regarding (4) and (5) of previous Article, the person who prevented or obstructed execution.		

Article 7 Definitions

“Definitions”, which are provided here, are applied to every LUP/ZC in Vientiane Capital, unless specific statement is provided in the LUP/ZC.

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(Article 7) 1. “Road”

1. “Public Road ([sen thaang saathaalana](#))” means a road that meets one of the four categories defined in the Road Law.
 - (1) Primary arterial road ([thanoon saai eek](#))
 - (2) Arterial road ([thanoon saai lak](#))
 - (3) Connecting road ([thanoon saai suam too](#))
 - (4) Distributing road ([thanoon saai cheek](#))
2. “Land-development Road” means a road that was constructed up to “Land-Development Standard”.
3. “Qualified Common Path ([thaang hoom matha-thaan](#))” means a road that meets “Standard of Qualified Common Path”.
4. “Existing Common Path ([thaang hoom thii mii yuu](#))” means a road, which:
 - (a) does not satisfy the requirements of above roads of 1, 2, or 3, but,
 - (b) touches a public road,
 - (c) has existed at least since XX, XX, 2016, and
 - (d) buildings have existed along at least since XX, XX, 2016.In this case, road boundary of “Existing Common Path” is assumed to be located as same as the location of “Qualified Common Path ([thaang hoom matha-thaan](#))”.

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“Roads” defined in this Zoning Code

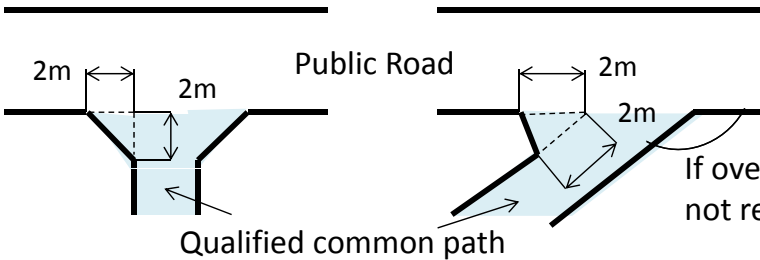
There are four kinds of roads in LUP/ZC, as shown in below.

1. “Public Road ([sen thaang saathaalana](#))”
Roads defined in the Road Law.
2. “Land-development Road”
In large-size Land-Development area, such as SEZ and concession area, roads will be developed by the developer in compliance with Land- Development Standard and they will become public roads or land-development road.
3. “Qualified Common Path ([thaang hoom matha-thaan](#))”
In small-size Land-Development area, roads will be developed by the developer in compliance with Standard of Qualified Common Path, and they will be called qualified common path.
4. “Existing Common Path ([thaang hoom thii mii yuu](#))”
There are many buildings, which only adjoin a existing common path, which does not satisfy the standard of width (4 m or 6m). New regulation accepts construction of buildings along these common paths with requirement of set-back from the existing width of common path in assuming that road boundary of “Existing Common Path” be located as same as the location of “Qualified Common Path ([thaang hoom matha-thaan](#))”.

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Standard of qualified common path

“Qualified common path” shall come under any of cases shown below. This shall not apply in cases where the administrative organization concludes that it is unfeasible or unnecessary due to surrounding conditions.

	Case (1)	Case (2)	Case (3)	Case (4)	Case (5)	Case (6)
Public road	Both ends touch the public road				One of the ends touch the public road	
Length	$L \leq 50 \text{ m}$	$50 \text{ m} < L \leq 100 \text{ m}$		$L \geq 100 \text{ m}$	$L \geq 50 \text{ m}$	$L \leq 50 \text{ m}$
Width	$W \geq 4 \text{ m}$	$W \geq 6 \text{ m}$	$W \geq 4 \text{ m}$	$W \geq 6 \text{ m}$	$W \geq 6 \text{ m}$	$W \geq 4 \text{ m}$
U-turn	Not required		Within every 50 m			Not required
Corner	Tip of the corner lot must be cut out within isosceles triangle whose two equal sides forming the tip have a length of 2 m or more. <div style="text-align: center; margin-top: 10px;">  </div>					

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(Article 7) 2. “Road level”, “Construction Line” and “Reservation Area”

1. “Road level” means the level of the road surface at a centerline. In case where the existing road is not a permanent road (completed road), “Road level” shall be the expected level of the road when it will be completed as a permanent road.
2. “Construction line” is a line along the road, which is decided by the Vientiane Capital.
3. “Reservation area” means the area between **the existing road boundary** and **the construction line**, excluding the underground part.

“Road level” is used as a base line of building height, etc.

Designation of construction line for all roads in the area of Detail LUP (4,000 ha + 190 ha + 50 ha) should be completed.

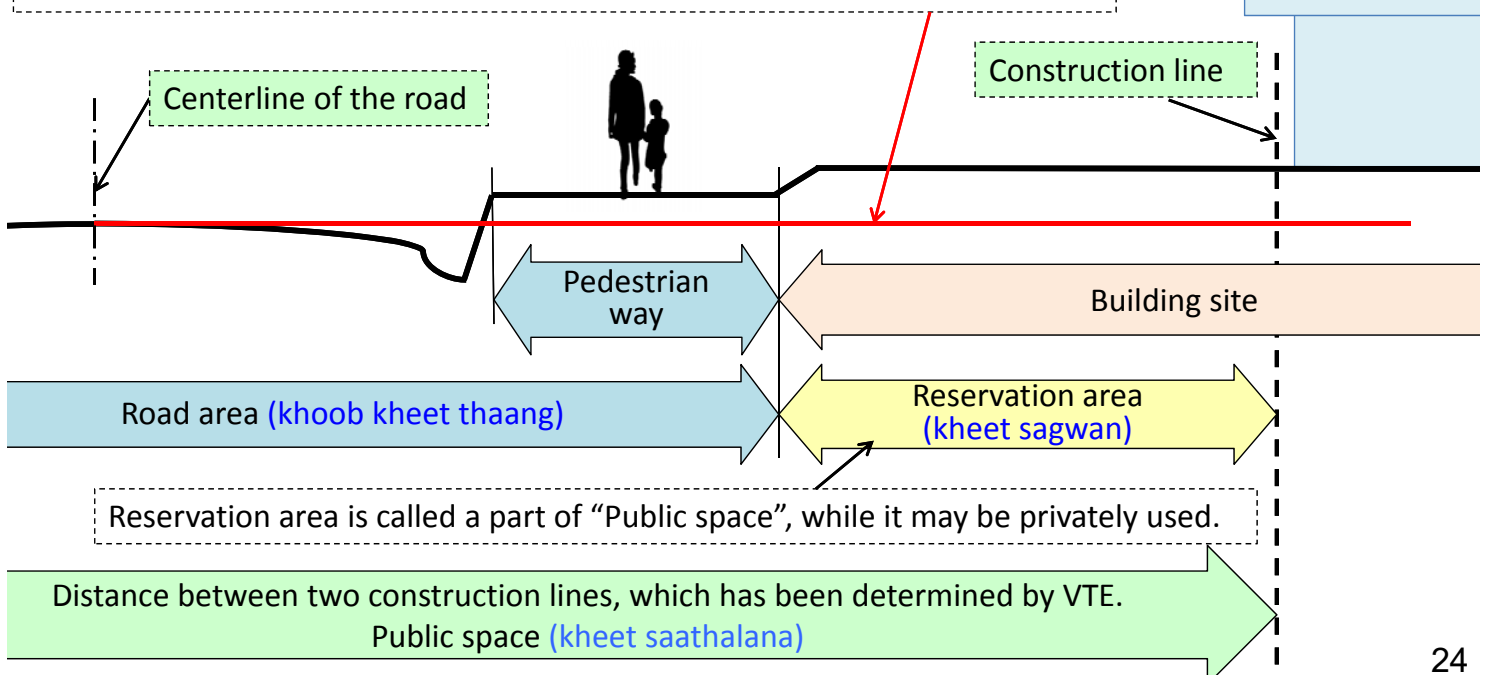
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“Road level”

The level of the road surface at a centerline. In case where the existing road is not a permanent road (completed road), “Road level” shall be the expected level of the road when it will be completed as a permanent road.

“Road level” is used as a base line of:

- Maximum building height,
- Minimum height of projected part (3 m), and
- Minimum height (0.3 m) of the first floor of row house.



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(Article 7) 3. “Row house” and “Independent building”

1. “**Row house (hong theew)**” means a building or one of the units of a building, which satisfies all requirements for “Row house” provided in this regulation.
2. “**Independent building (aakhaan diaw)**” means a building, other than “Row house”.

When building owners intends to construct their buildings, they must choose one of the styles from **row house** or **independent building**, then they must design their buildings in compliance with the requirements of row house or independent building that they have chosen.

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(Article 7) 4. “Building Height”

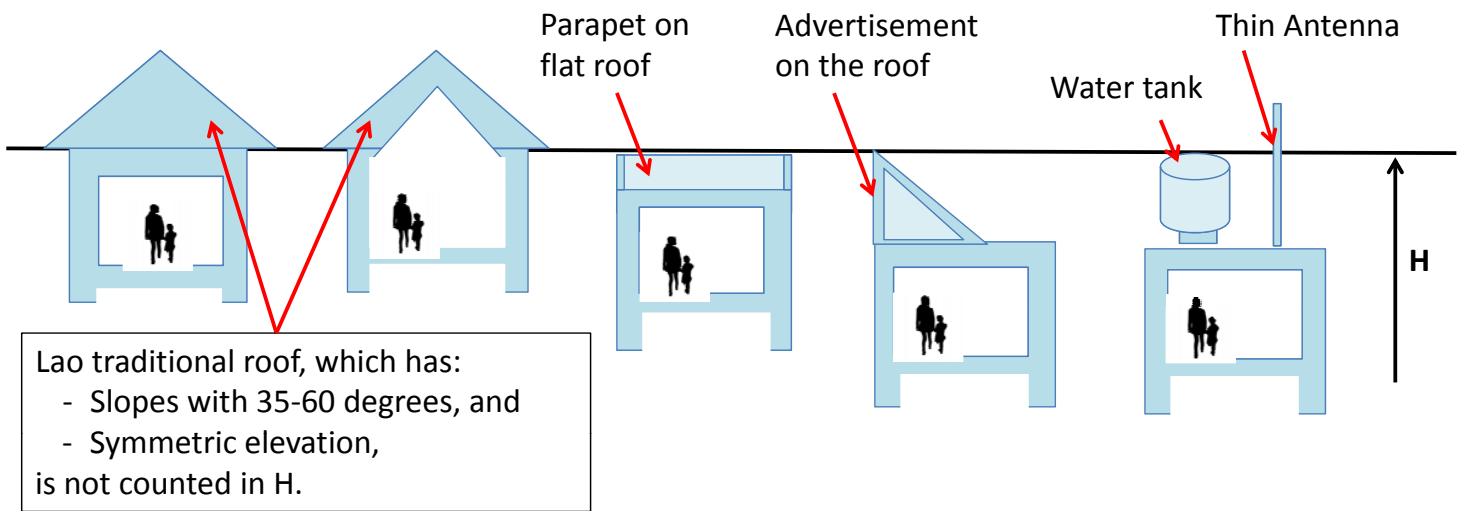
1. “Building Height” shall be measured as below.
 - **from the “road level”**, which the site faces.
 - **to the top of the external form** of the structure:
 - (a) Including:
 - (i) parapet,
 - (ii) advertisement board and the like (**paai khoo-sanaa le aeun-aeun thii mii luk sanaa khai khuu khan**),
 - (iii) equipment on the roof (such as water tank), and
 - (iv) the like.
 - (b) **Excluding:**
 - (i) **Lao traditional roof**, which has:
 - Slopes with 30-60 degrees, and
 - Symmetric elevation,
 - (ii) Lao traditional roof decoration,
 - (iii) thin antenna and the like.

<Remark>

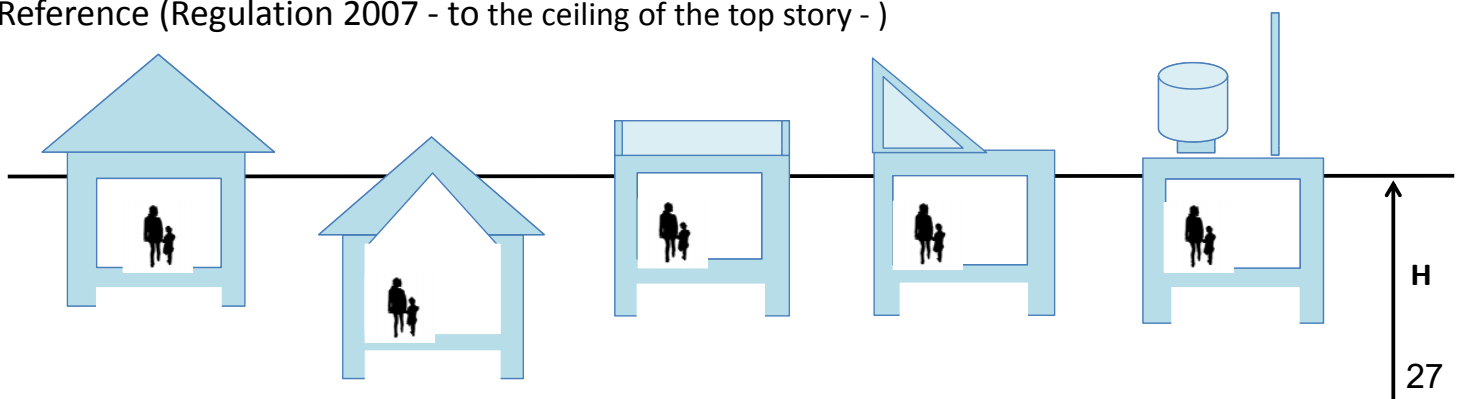
In case where there is a floor in space of roof, the Lao traditional roof shall be counted in building height.

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Upper edge of "Building Height"

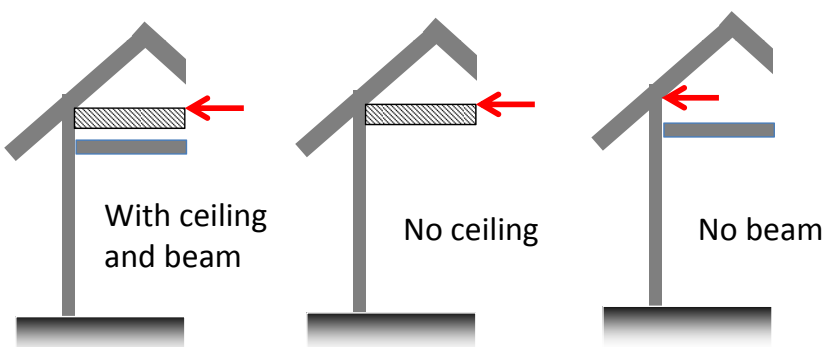


Reference (Regulation 2007 - to the ceiling of the top story -)



Upper edge of "Building Height" in case of installing Lao Traditional Roof

← : Top of "Building Height" ▨ : Beam

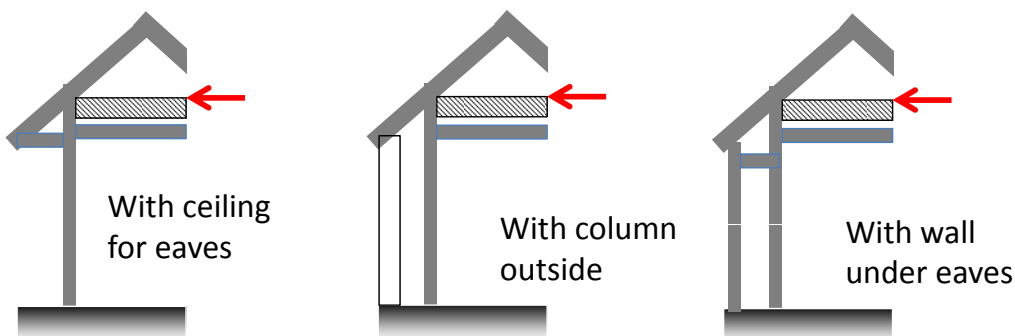


1. If the roof is out of Lao traditional style, the roof should be counted in "Building Height".

1. In case of Lao traditional roof, upper edge of "Building Height" is pointed regardless existence of:

- (1) ceiling,
- (2) beam,
- (3) column for eaves, and
- (4) wall under eaves.

3. Decoration of Lao traditional roof is not counted in "Building Height".



(Article 7) 5. "Floor Area"

"Floor area" means:

- (1) "an area covered by roof or the like", in case of the second floor or more and basement floor, and
- (2) "an area covered by roof or the like, and surrounded by walls, columns, or virtual lines connecting them", in case of the first floor.

<Exception>

In case where a part comes under conditions below, the area of the part is not counted in "Floor area".

- (a) Its structural elements, including wall, beam, column and roof, are constructed with thin structural elements. (light materials)
- (b) More than half of the total length of its external edge is open to the air.
- (c) The part is single story.

Area of room (including basement room) is counted in "Floor area", in principle. As for counting of terrace, balcony, etc. see the next table.

When the wall or column comes the edge of "Floor area", the center line of the wall or column shall be the edge of "Floor area".

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Counting of terrace, balcony, etc. in Floor Area

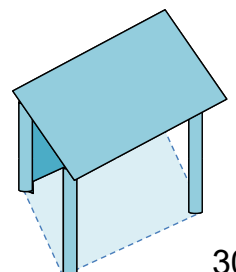
- : Room enclosed by walls including openings (windows or doors).
- : Area, a part of which is open to the air, and is **counted** in Floor Area
- : Area, a part of which is open to the air, and is **not counted** in Floor Area

	(1) Floor (Red line) with roof and column or side wall	(2) Floor (Red line) with roof and no columns and side walls	(3) Terrace (red line) without roof	Remark
The second floor or more				Counting is regardless of existence of columns or sidewalls.
The first floor				A part of floor with no columns and side walls is not counted.

<Exception>

In case where a part comes under conditions below, the area of the part is not counted in "Floor area".

- (a) Its structural elements, including wall, beam, column and roof, are constructed with thin structural elements. (light materials)
- (b) More than half of the total length of its external edge is open to the air.
- (c) The part is single story.



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(Article 7) 6. "Land Use Ratio (E)"

Land Use Ratio (E) shall be calculated below.

$$E (\%) = C / S \times 100$$

C: Floor area of the First floor in a building site

S: Area of a building site (including the reservation area)

Floor area of the basement is not counted in "C".

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(Article 7) 7. "Land Use Co-efficient (COS)"

Land Use Coefficient (COS) shall be calculated below.

$$COS = F / S$$

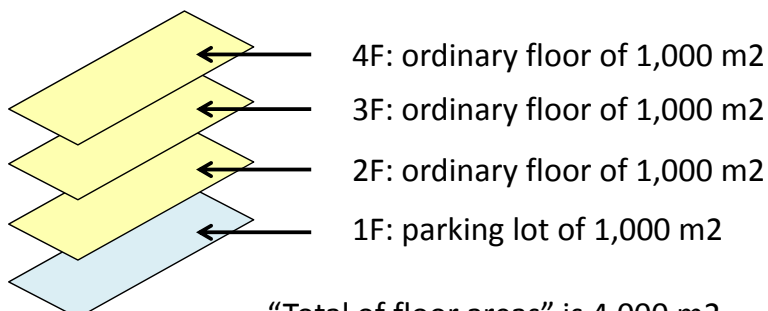
F: Total of floor areas in a building site (including the basement floor)

S: Area of a building site (including the reservation area)

<Exception of "F">

The floor area of parking lot is not counted in "F" at maximum of one fifth of "total of floor areas".

<Application of Exception>



"Total of floor areas" is 4,000 m².

One fifth is 800 m².

Parking lot is not counted in F within 800 m².

Therefore, F of this building is 3,200 m².

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(Article 7) 8. “Advertisement and Sign”

“Advertisement and Sign” means visual information methods, which are **written, drawn, or attached**:

- (1) Directly on the surface of building or structure,
- (2) On the board (paai),
- (3) On banners, and the like,

Including:

- (a) Advertisement board (paai khoo-sanaa), and
- (b) Sign board, such as shop-sign board (paai haan khai) and office-sign board (paai bolisat), and
- (c) Product Poster

Excluding portable ones.




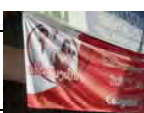





<Exception>

- (a) Those that the Government installs, and
- (b) Those that can be seen only from inside of the building.

Advertisement or sign painted on the wall is also a subject for this regulation.

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Categories of “Advertisement and Sign” from the Viewpoint of “Location” and “Relation with Building”

Location			In building site (Including vacant land)		Out of building site, such as road area including pedestrian way
			Normal building site	Reservation area (H ≥ 3m, W ≥ 1.2m)	
Attached to building	Fixed to building	On roof			
		On wall or window			
	Sticking out of the wall				
Not fixed to building, such as banner					
Apart from building	Fixed on the ground or Not portable (including “On fence”)				
	Portable				

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Article 8 Enforcement

(Date of enforcement)

(Application to existing building and structure)

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15 Items of Historic Area

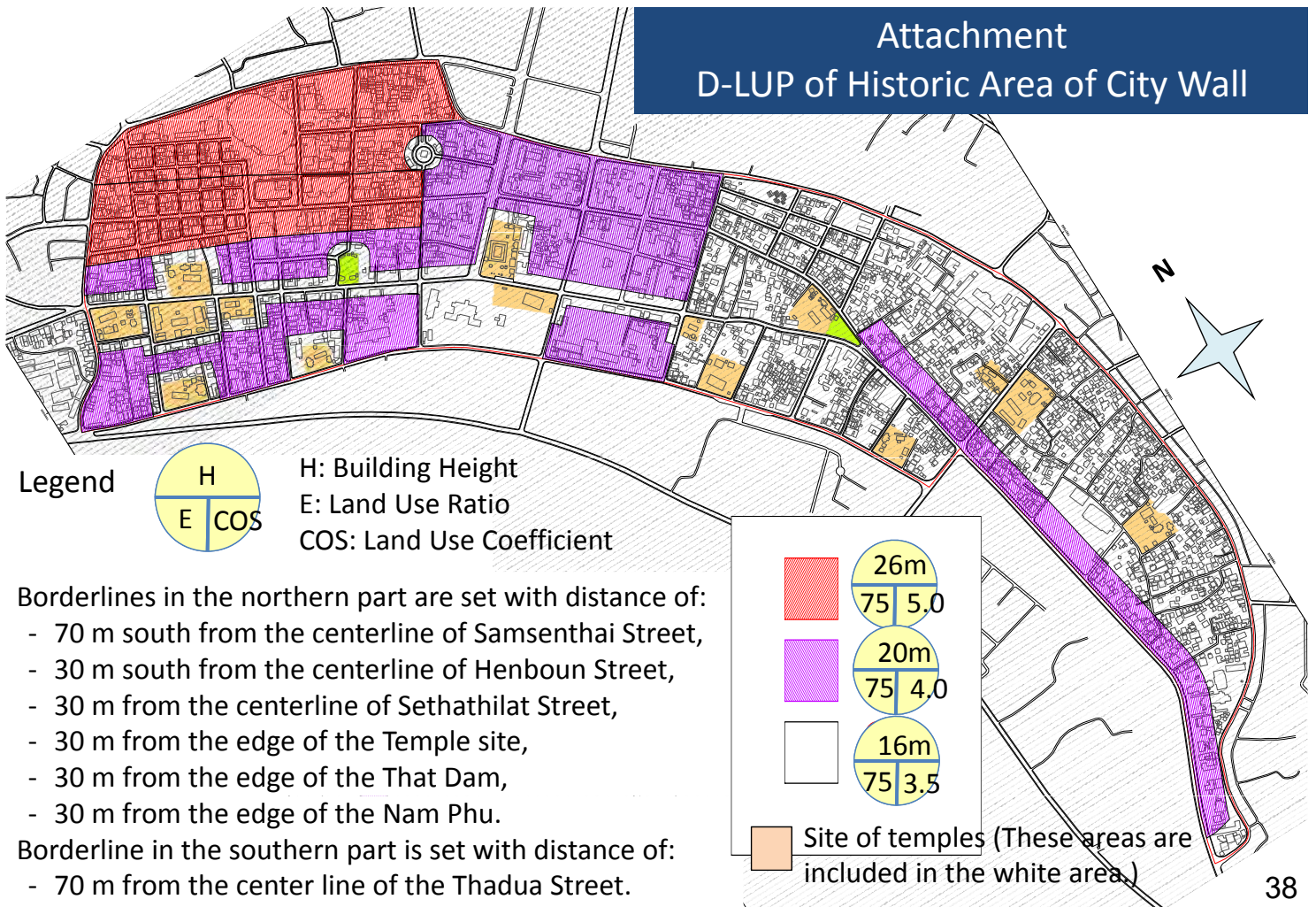
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Article 1 Target Area

This D-LUP/ZC is applied to the area identified in the map of D-LUP, which is attached to this document.

Article 2 Detail LUP of Historic Area

D-LUP is as shown in the attachment.

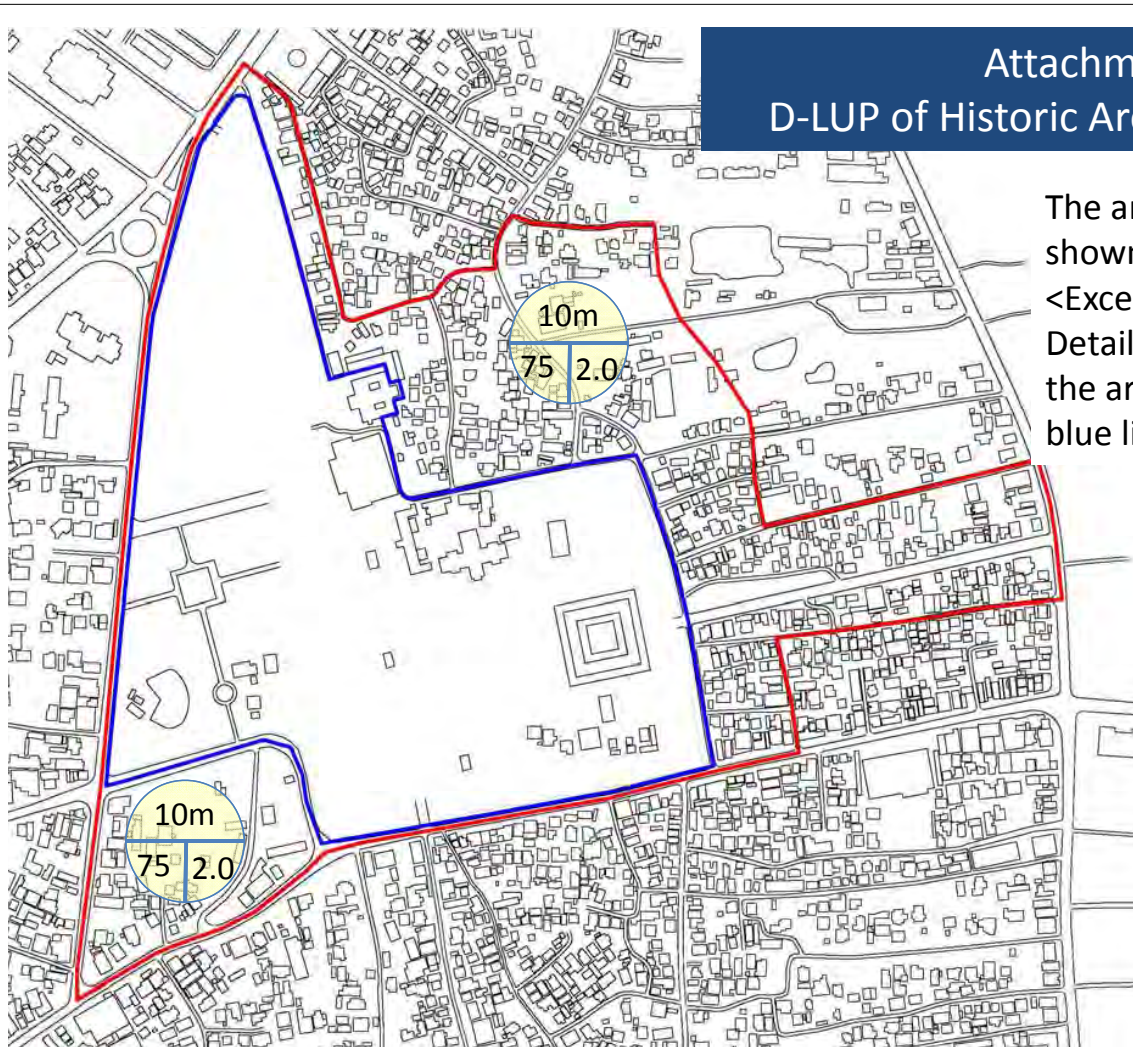


Attachment D-LUP of Historic Area of Thatluang

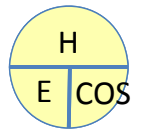
The area of Detail LUP is as shown in the red line.

<Exception>

Detail ZC is not applied to the area enclosed with the blue line.



Legend



H: Building Height

E: Land Use Ratio

COS: Land Use
Coefficient

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Article 3 15 items of Historic Area

15 items of Historic Area is as shown in below.

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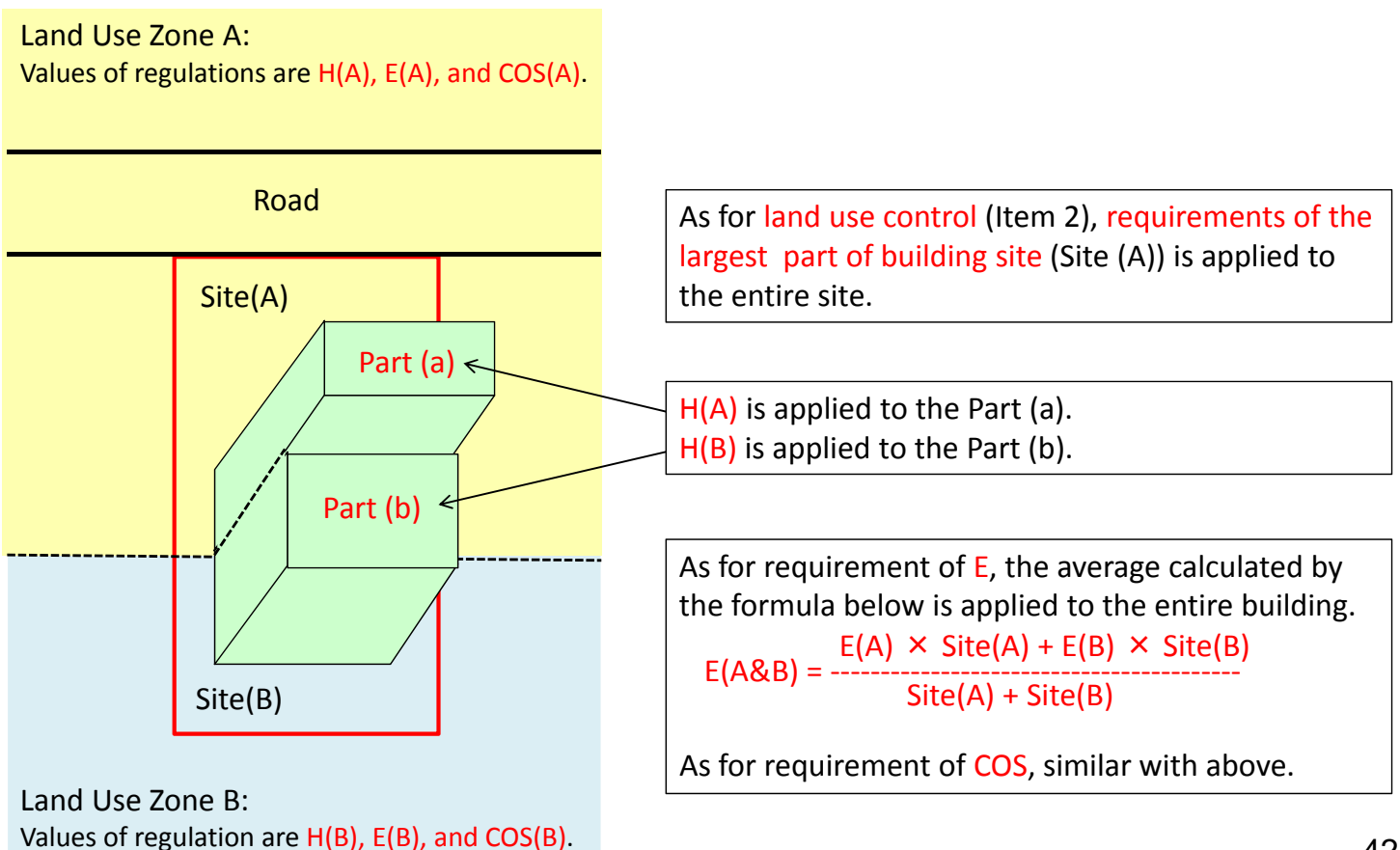
Building Site covering two types of land use zone

In case where a building site covers two or more Land Use Zones, regulation items are applied as shown in the table bellow.

	Items	Application
Items regarding the site	Item 2. Land Use Item 3. Technical Network Item 4. Road and Gateway Item 5. Characteristic of Site Item 6. Distance from Site Boundary Item 7. Distance among Buildings in a Site Item 13. Parking lot Item 14. Vacant Space and Tree Planting	Requirements of the Zone that has the largest part of the building site is applied to the entire site.
Items regarding specific part of building	Item 8. Road, Reservation Area, and Structure Item 9. Building Height (H) Item 12. External Feature	Each building part must comply with the requirements of the Zone that covers the building part.
Items regarding volume of building	Item 10. Land Use Ratio (E) Item 11. Land Use Coefficient (COS)	Average of the requirements of Zones that cover the building site is applied.

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In case where a building site covers two or more Land Use Zones, application of requirement items is as shown in bellow.



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(Article 3) 1. Development/Preservation Policy of the Zone

Development/Preservation Policy of this Zone is as below.

1. To keep identity of a historic area of Vientiane Capital.
2. To promote commercial activities as long as they do not obstruct identity of a historic area.

(Article 3) 2. Land Use

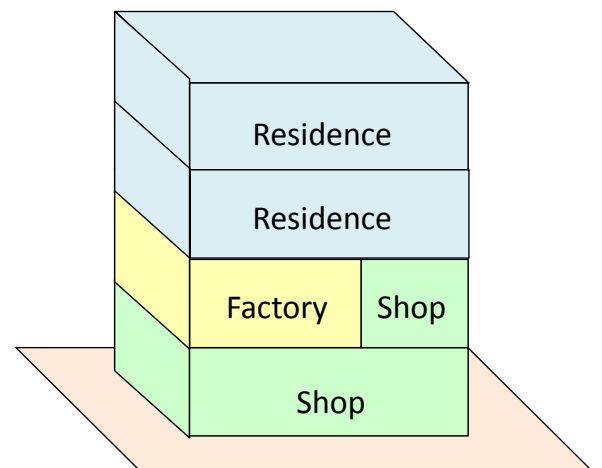
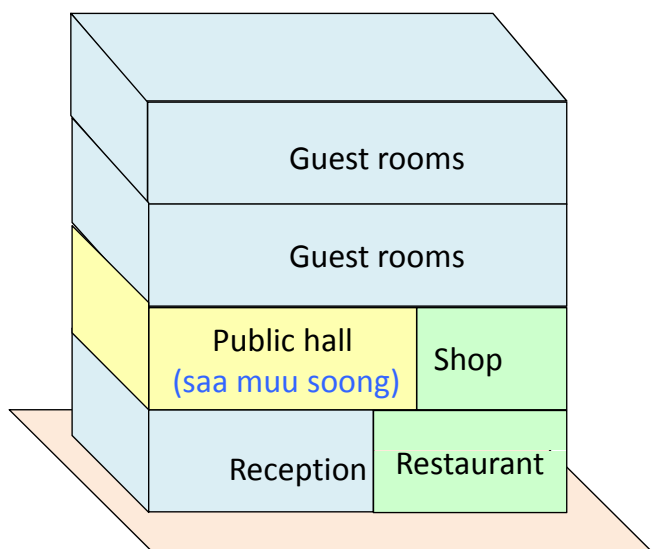
Land use coming under any use below are prohibited in this area.

- (1) All levels of industrial factories.
- (2) Facilities to keep hazardous materials with dangerous level from the viewpoint of:
 - types of material,
 - amount of material, and
 - method to keep.
- (3) Parking lot for:
 - (a) truck which has more than 2 axles, more than 4 wheels, and has total weight more than 8.5 tons, and
 - (b) public bus and tour bus, which has more than 25 seats.
- (4) Gas station

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Complex Buildings

- (1) There are **buildings consisting of various use** (the right figure, for example).
In this case, every part of a building (Residence, Factory, and Shop) must meet Item 2 individually.



- (2) There are **complex buildings** (like a hotel in the left figure, for example).
In this case, the hotel must meet Item 2 as a whole building, and additionally, every part of the building (Public hall, Restaurant, and Shop) must meet Item 2 individually.

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(Article 3) 3. Technical network

(Wastewater)

1. Wastewater including:

- black water (wastewater from toilet) and
- grey water (wastewater from kitchen, shower, washing machine, etc.)

must be discharged according to the table below.

Location of the development area	Building	Building other than the right	Residential building with total floor area less than 300 m ²
in the service area of public sewerage system		To the public sewerage system.	
out of the service area of public sewerage system		To the drainage after treatment less than 60 mg/liter in effluent BOD (Biochemical Oxygen Demand).	the septic tank in accordance with "Standard of Septic Tank for Household" shall be regarded as a method of treatment in the left.

(Rain water)

2. Rain water must be discharged to the rain water drainage.

45

(Other technical network)

3. It is recommended that a building site be equipped with:

- (1) electricity,
- (2) telephone,
- (3) water supply, and
- (4) trash clean-up system.

It is not mandatory if there is reasonable explanation.

(Land-development Standard)

4. In case of Land-development, technical network in the area must comply with Land-Development Standard.

Paragraph 3 is not a provision of obligation but a provisions of recommendation.

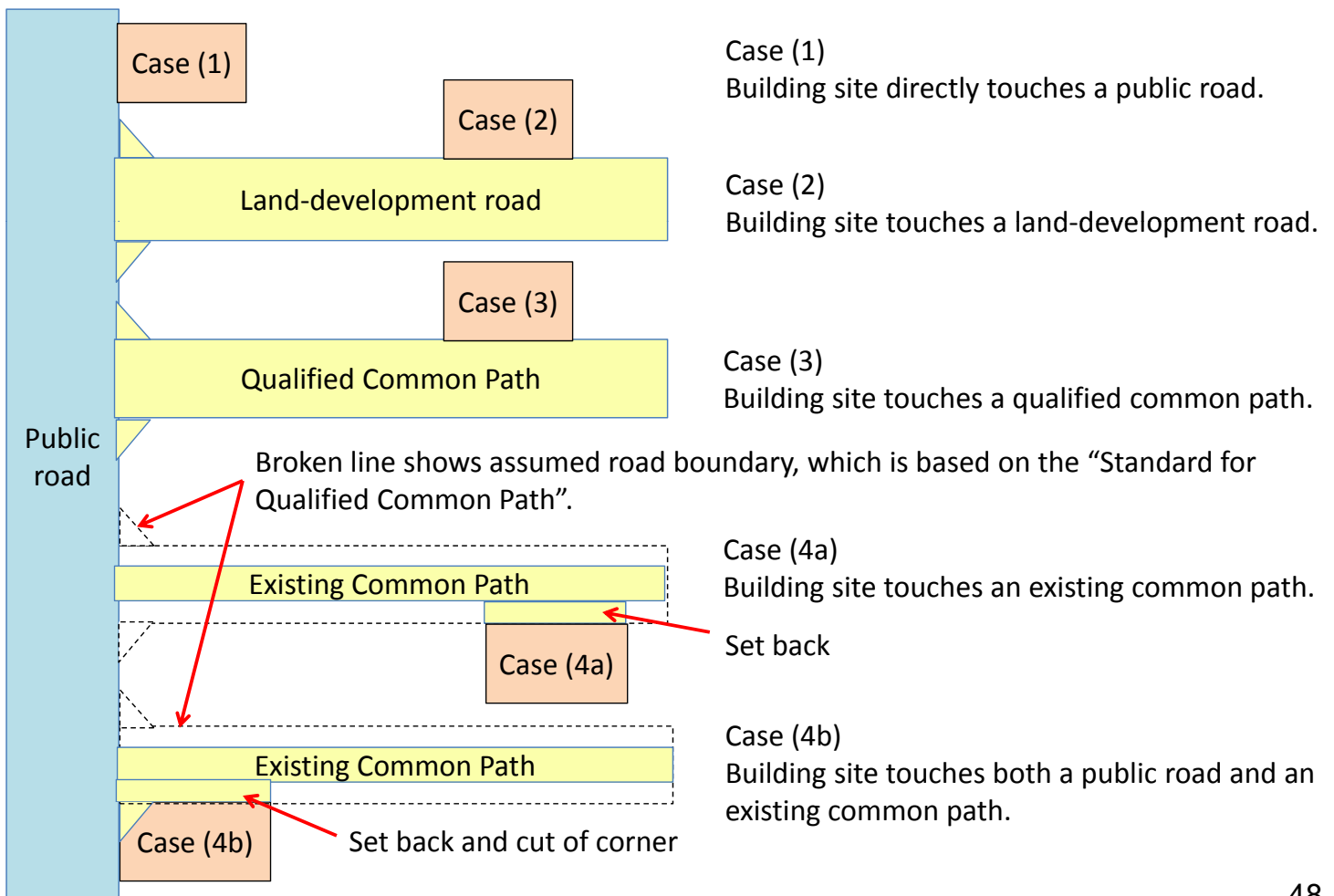
46

(Article 3) 4. Road and gateway

1. Every building site must effectively abut any of:
 - (1) Public road (*sen thaang saathaalana*),
 - (2) Land-Development road
 - (3) Qualified Common Path (*thaang hoom matha-thaan*), and
 - (4) Existing Common Path (*thaang hoom thii mii yuu*).
2. Notwithstanding previous paragraph, if the building site comes under any of below, authorities may decide not to apply the requirement.
 - (1) The building has been existing since before the enforcement of the regulation.
 - (2) There are enough spaces around the building, which is useful instead of the road, in the building site.

Definitions of roads are provided in former part.

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(Article 3) 5. Characteristic of site

1. A building site must touch a road provided in Regulation Item 4 with width of 4 m or more. In case where the building site of independent building touches the road with its narrow part longer than 50 m, width of the narrow part must be 6 m or more.

<Exception>

If the building site comes under any of below, authorities may decide not to apply the requirement.

- (1) The building has been existing since before the enforcement of the regulation.
- (2) There are enough spaces around the building, which is useful instead of the road.

2. Building site area excluding reservation area must be at least:

- (1) 48 m² in case of a row house (hong theew), and
- (2) 140 m² in case of an independent building (aakhaan diaw).

<Exception> Case where the former building site area was less than (1) or (2).

(Article 3) 6. Distance from Site Boundary

1. In case of independent building, the external wall and column of independent building (aakhaan diaw) must have distance with 2.0 m or more from the site boundary, except the site boundary facing the road.
2. In case of row house, the external wall and column of row house (hong theew) must have distance with 2.0 m or more from the back site boundary.

49

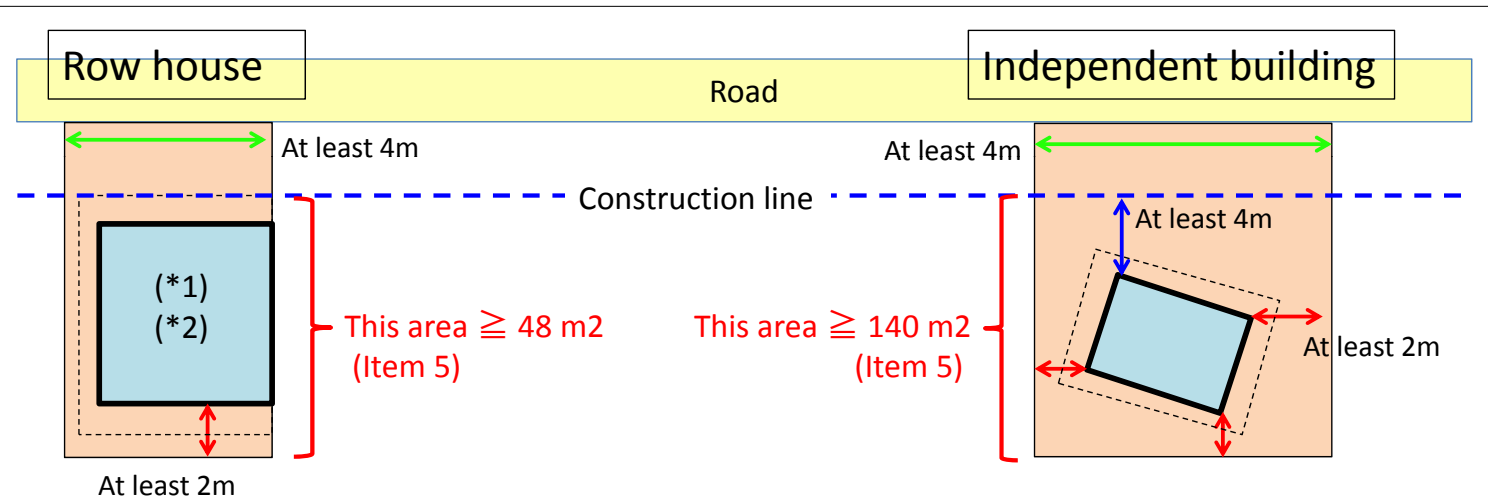
Summary of Ordinary Requirements for Row House and Independent Building

Subject		Item	Row house	Independent building
Width touching the road		Item 5	Width \geq 4 m	Width \geq 4 m (*)
Site area (excluding reservation area)		Item 5	Site area \geq 48 m ²	Site area \geq 140 m ²
Distance from the next site		Item 6	No requirements	Distance \geq 2 m
Distance from the back site		Item 6	Distance \geq 2 m	
External wall facing the road	Distance from the construction line	Item 8	No requirements	Distance \geq 4 m
	Parallel	Item 8	Parallel to the construction line	No requirements
Level of the first floor		Item 9	Height of the first floor \leq 0.3 m	No requirements

(*) In case that the building site is touching the road with its narrow part longer than 50 m, width of the narrow part \geq 6 m.

Means items, which are severer than that of the another type of building.

50



↔ 4.0 m or more (Item 5)

- In case where the building site of a independent building is touching the road with its narrow part longer than 50 m, width of the narrow part ≥ 6 m.

↔ 2.0 m or more (Item 6)

- Eaves (broken line) may invade space of 2.0 m.
- A part of wall and column constructed with light structural elements also must not invade space of 2.0 m.

↔ 4 m or more (Item 8)

- If the site area is more than 500 m², single story building with the floor area less than 5 m² may be built. (If the site area is more than 1,000 m², less than 10 m²).

(*1) External wall facing the road must be parallel to the construction line. (Item 8)

(*2) The level of the first floor must not over 0.3 m higher than the "road level". (Item 9)

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(Article 3) 7. Distance among Buildings in a Site

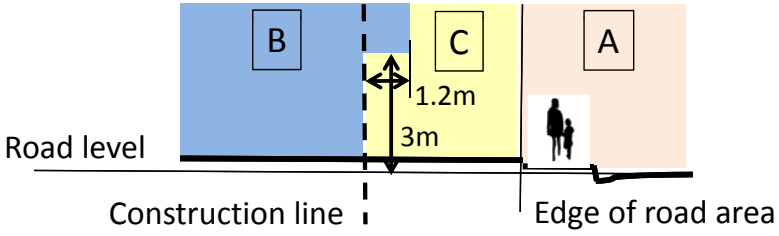
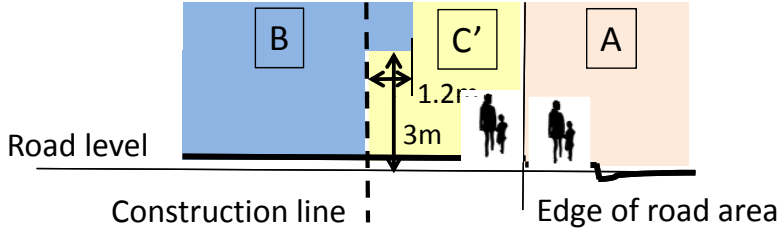
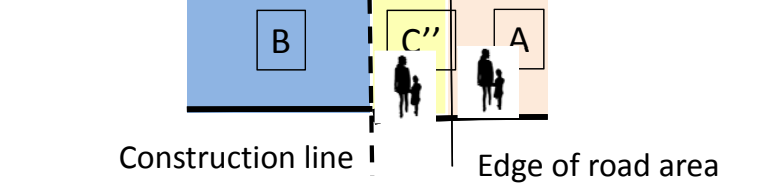
No requirements.

(Article 3) 8. Road, Reservation Area, and Structures

(Spaces to be regulated)

1. Spaces to be regulated shall be categorized into A, B, C, C', and C'' depending on the case of construction line of the area, as shown in the table below.

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Case of construction line	Spaces to be regulated (A, B, C, C', and C'')
Case (1): Ordinary cases (cases other than Case (2) and Case (3))	
Case (2): The reservation area is specifically designated by Vientiane Capital.	
Case (3): Distance between two construction lines is 6 m or less.	

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(Space A)

2. In Space A, any structures must not be constructed.

<Exception>

Structures, which are constructed:

- by road administration agency, police agency, or electric supplying company, or
- with permit by road administration agency.

(Space B)

3. In Space B, construction of structure including something sticking out from the external wall are allowed, unless they meet other requirements, such as maximum height.

(Space C)

4. In Space C, any structures must not be constructed.

<Exception>

- (i) **One board per building site, sticking out from the external wall**, coming under conditions below.
 - It invades the construction line by **horizontally 2.4 m or less, and with height of 1.0 m or less**, and
 - Its lowest point is **3 m or more higher than "road level of the facing road"**.
- (ii) **Low-elevated floor** coming under condition below.
 - Gap with "road level of the facing road" is 30 cm or less.
- (iii) **Sunshade** coming under conditions below.
 - Thickness of its part of roof is 1 cm or less.
 - It does not have a column nor wall.
 - Its height is between 2.2 m and 3.5m.

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(iv) Structures, which are constructed:

- by road administration agency, police agency, or electric supplying company, or
- with permit by DPWT or OPWT.

(Space C')

5. In Space C', any structures must not be constructed. And, any obstacles, such as plant boxes, tables, etc. must not be set. Then, the reservation area must be kept for pedestrians going through the area.

<Exception>

(i) One board per building site, sticking out from the external wall, coming under conditions below.

- It invades the construction line by horizontally 2.4 m or less, and with height of 1.0 m or less, and
- Its lowest point is 3 m or more higher than "road level of the facing road".

(ii) Structures, which are constructed:

- by road administration agency, police agency, or electric supplying company, or
- with permit by DPWT or OPWT.

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(Space C'')

6. In Space C'', any structures must not be constructed. And, any obstacles, such as plant boxes, tables, etc. must not be set. Then, the reservation area must be kept for pedestrians going through the area.

<Exception>

Structures, which are constructed:

- by road administration agency, police agency, or electric supplying company, or
- with permit by DPWT or OPWT.

(independent building)

7. In case of independent buildings, Paragraph 1 to 6 above are applied in assuming that the construction line be moved to the line 4 m behind the original construction line. And structures as below may be constructed in the area with width of 4 m.

(i) Fence or standing wall with height of 2 m or less.

(ii) Small buildings of single story, only coming under conditions below.

Maximum floor area of the small building	Site area of the main building
5 m ²	More than 500 m ² and 1,000 m ² or less.
10 m ²	More than 1,000 m ² .

(External wall of the row house)

8. External wall of the row house facing the road must be parallel to the construction line.

<Exception>

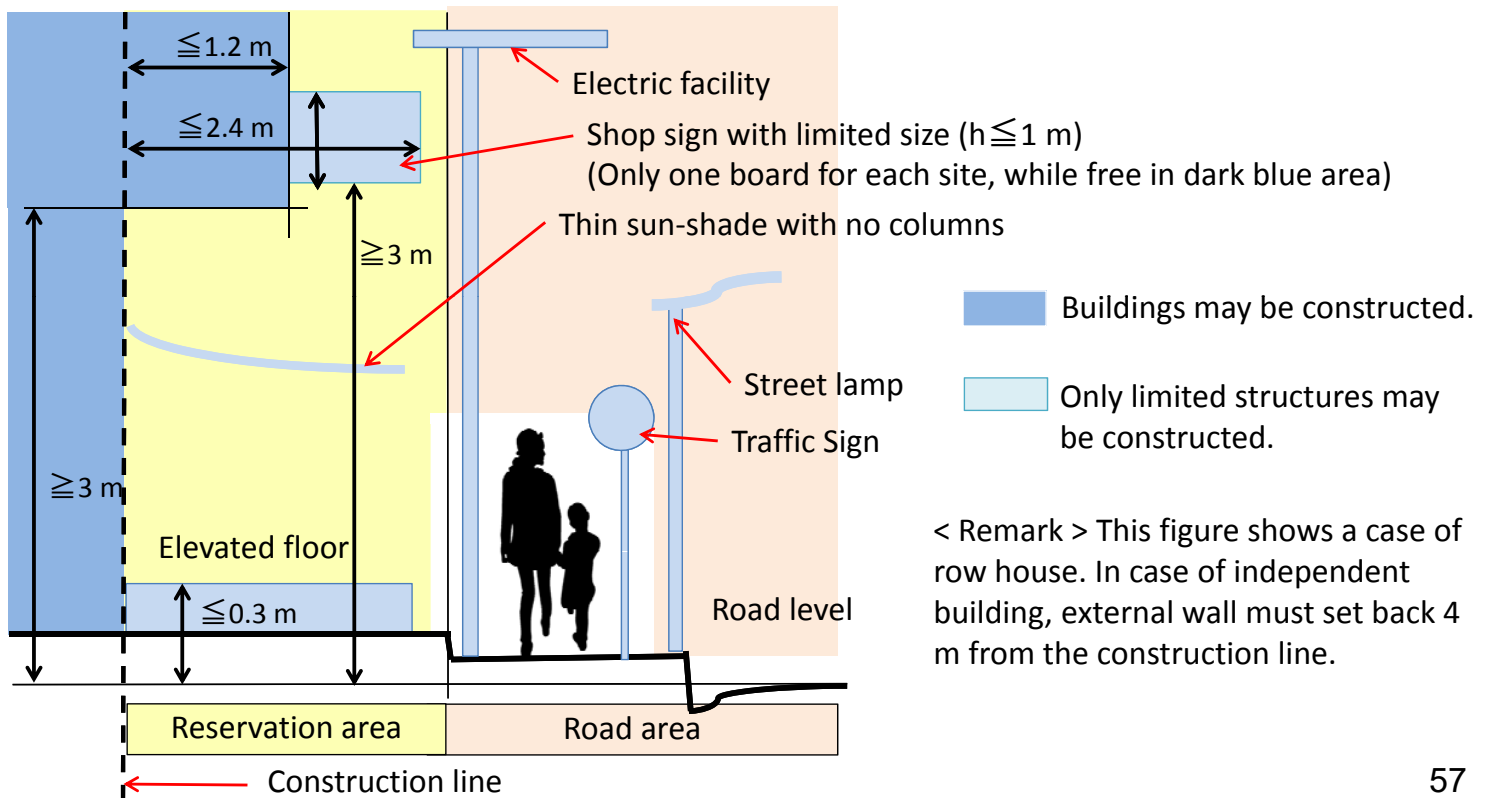
In case where a building site is not square to the facing road, and the authority agrees that it is reasonable not to construct a parallel external wall, this requirement will not be applied.

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Road, Reservation Area, and Structures

- Case (1): Ordinary cases -

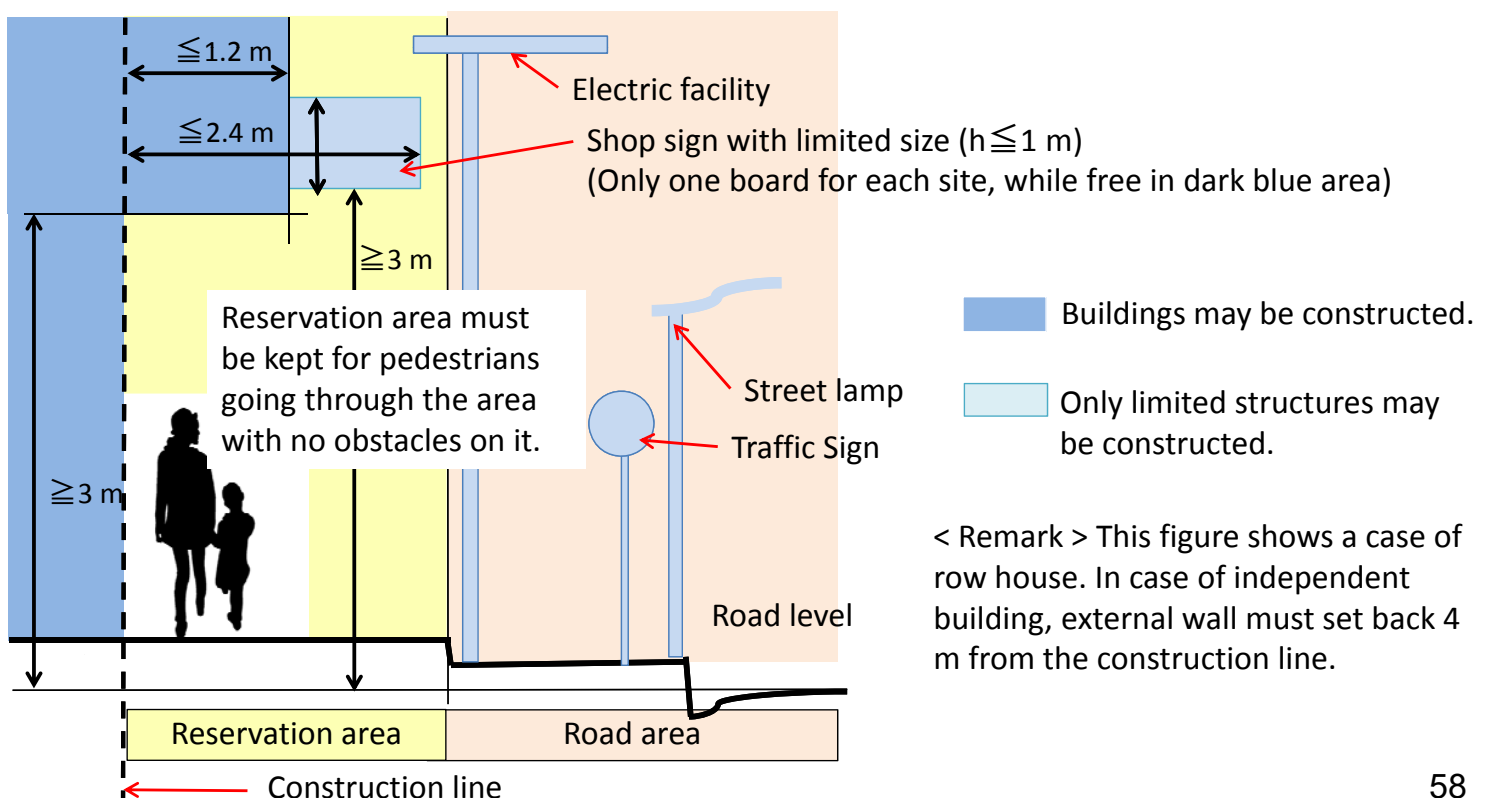
In Road area and Reservation area, Building, Fence, Standing wall, Advertisement board, etc. may not be constructed, in principle.



Road, Reservation Area, and Structures

- Case (2): The reservation area is **specifically designated by Vientiane Capital**. -

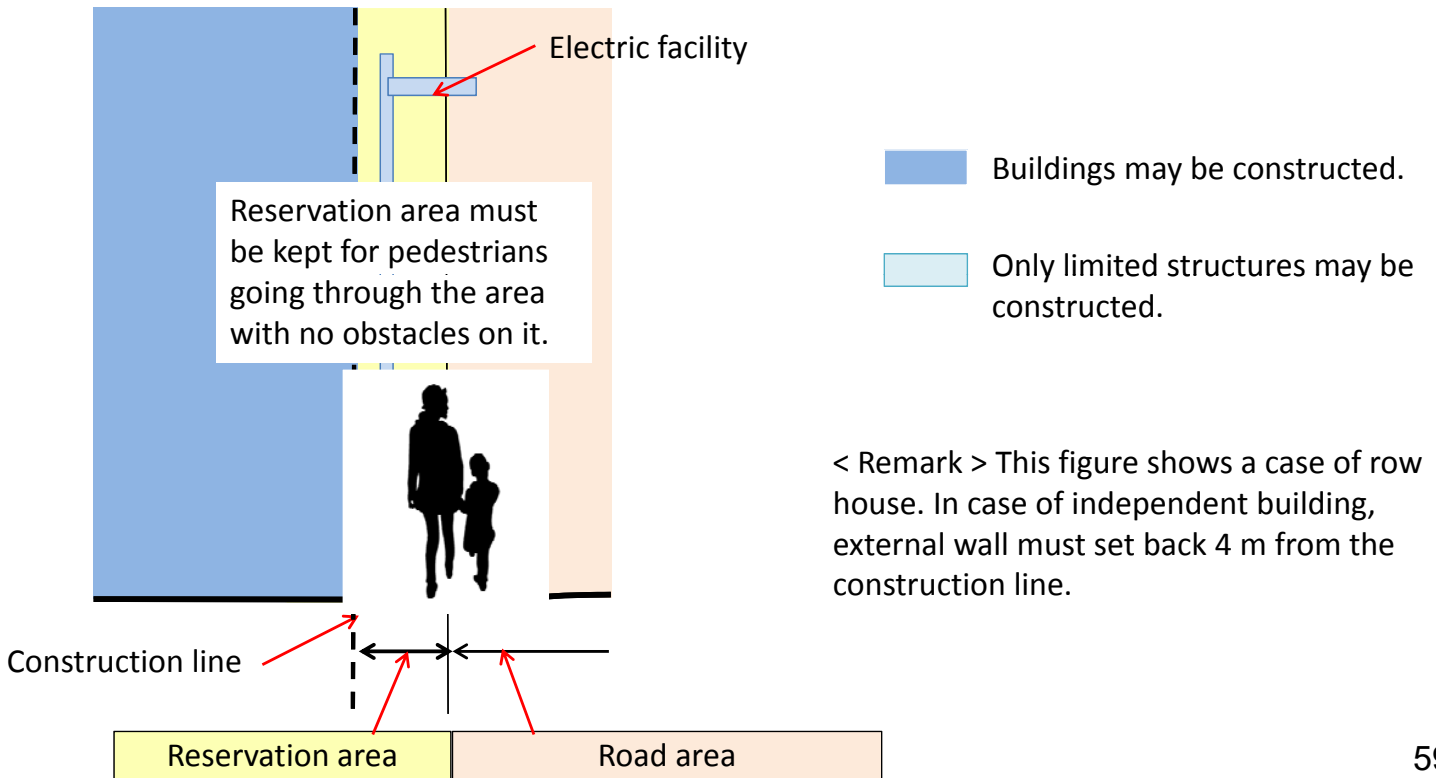
In Road area and Reservation area, Building, Fence, Standing wall, Advertisement board, etc. may not be constructed, in principle.



Road, Reservation Area, and Structures

- Case (3): Distance between two construction lines is **6 m or less.** –

In Road area and Reservation area, Building, Fence, Standing wall, Advertisement board, etc. may not be constructed, in principle.



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(Article 3) 9. Building Height (H)

1. Building Height **must not exceed the values, which are provided in LUP.**
2. The level of the first floor of the row house must not over 0.3 m higher than the “road level”.

<Exception>

In case where the ground level of the surrounding of the building is quite higher than the “road level” because of the mountainous location, these requirements may not be applied within reasonable limitation designated by the authority.

(Article 3) 10. Land Use Ratio (E)

Land Use Ratio (E) of a building site must not exceed the values, which are provided in LUP.

<Exception>

This requirement is not applied to the buildings in a road area, which is constructed with special permission.

60

(Article 3) 11. Land Use Coefficient (COS)

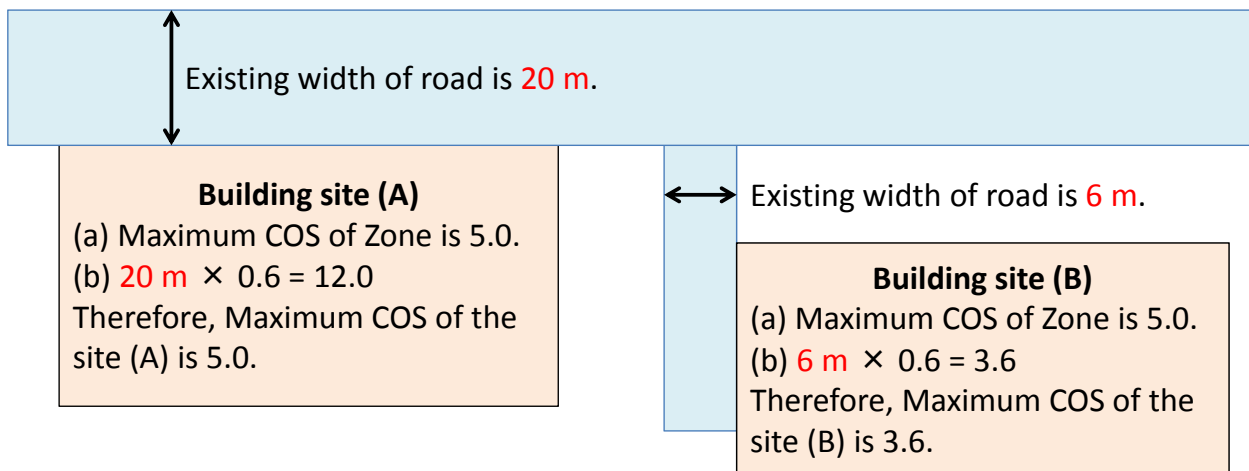
Land Use Coefficient (COS) of a building site must not exceed any of:

- (a) the values, which are provided in LUP, and
- (b) the value, which are calculated with:
 “The existing width (meter) of the front road” multiplied by “0.6” (in case of the Residential Zone, 0.4).

<Exception>

This requirement is not applied to the buildings in a road area, which is constructed with special permission.

Example (In case where Maximum COS of Zone is 5.0.)



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(Article 3) 12. External Feature

1. Buildings and Structures

1-1. Color

The external parts must be mat-white (khaaw daan). The slightest hint of color (sii ohne thii sut) may be added into mat-white.

<Exceptions>

Parts of exception	Required conditions
Glass of windows	Colorless and transparent only
Frame of windows	Not vivid color
Parts made of wood (excluding decoration panels attached to the external wall)	Mat white or Wood color only
Roofs (including decoration of roofs)	Not vivid color
Traditional ornament on the top of columns, and the like	Mat white or Gold, in principle
Floors	Mat white, Wood color or brick color only
Treads and risers of stairs	
Advertisement and sign	Not vivid color
Others that the administration organization allows	Only in the case there is historic reason.

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1-2. Fence and Standing Wall

In case there is a fence or standing wall, their maximum height must be 2 m or less. And, a part with height of 0.8 m or more must be see-through.

1-3. Building style, etc.

It is recommended to design roof, wall, windows, etc. in using Design Reference Book.

2. Advertisement and Sign

2-1. Location

- (1) Location of structures supporting "Advertisement and Sign" must meet requirements of Item 8.
- (2) In addition to (1), it is not allowed to install "Advertisement and Sign" on the roof.

2-2. Amount

- (1) Total surface area of "Advertisement and Sign" must be **10 % or less** of "façade area" of the buildings in the site. In case of a tall building, only a part less than 15 m in height may be counted in "façade area".
- (2) In case of the site with a small building or no buildings, notwithstanding (1), total surface area of "Advertisement and Sign" may be 10 % or less of "site width x 4m".

<Remark>

- In case "Advertisement and Sign" board sticking out from the building wall, both sides of the board are counted.
- In case of LED or LCD monitor display, its surface area shall be counted double.
- In case where the building locates at the intersection, this requirement is applied to each side of the building.

Design Reference Book

It is recommended to design roof, wall, windows, etc. in using Design Reference Book (DRB).
 DRB is under compilation. It will recommend to building owners and designers to design their building in reference with one of the building styles which are related to Vientiane, such as below.



French Colonial Style



Row House with Lao Conventional Construction Method



60's Style in Laos



Hausmannian Style (Building style popular in Paris and Ho chi Minh City)



Modern Style with Lao Traditional Roof

Requirements from the viewpoints of location

Relation with building			Location		Out of building site (*2)
			In building site (Including vacant land)		
			Normal building site	Reservation area (*1)	
Attached to building	Fixed to building	On roof		Not allowed.	
		On wall or window	Allowed in principle. <Exception>	Not allowed.	
	Sticking out of the wall	Direction not to			
Apart from building	Fixed on the ground or Not portable (including "On fence")		the facing road is not allowed.	Not allowed.	
	Portable		No requirements		

(*1) "Reservation area" in case of row house, and "Reservation area + Area of 4 m behind reservation area" in case of independent building.

(*2) Out of building site, such as road area including pedestrian way

(*3) Only one board sticking out from the external wall coming under conditions below is allowed.

- It invades the construction line by horizontally 2.4 m or less, and with height of 1.0 m or less, and
- Its lowest point is 3 m or more higher than "road level of the facing road".

Requirements from the viewpoints of Location

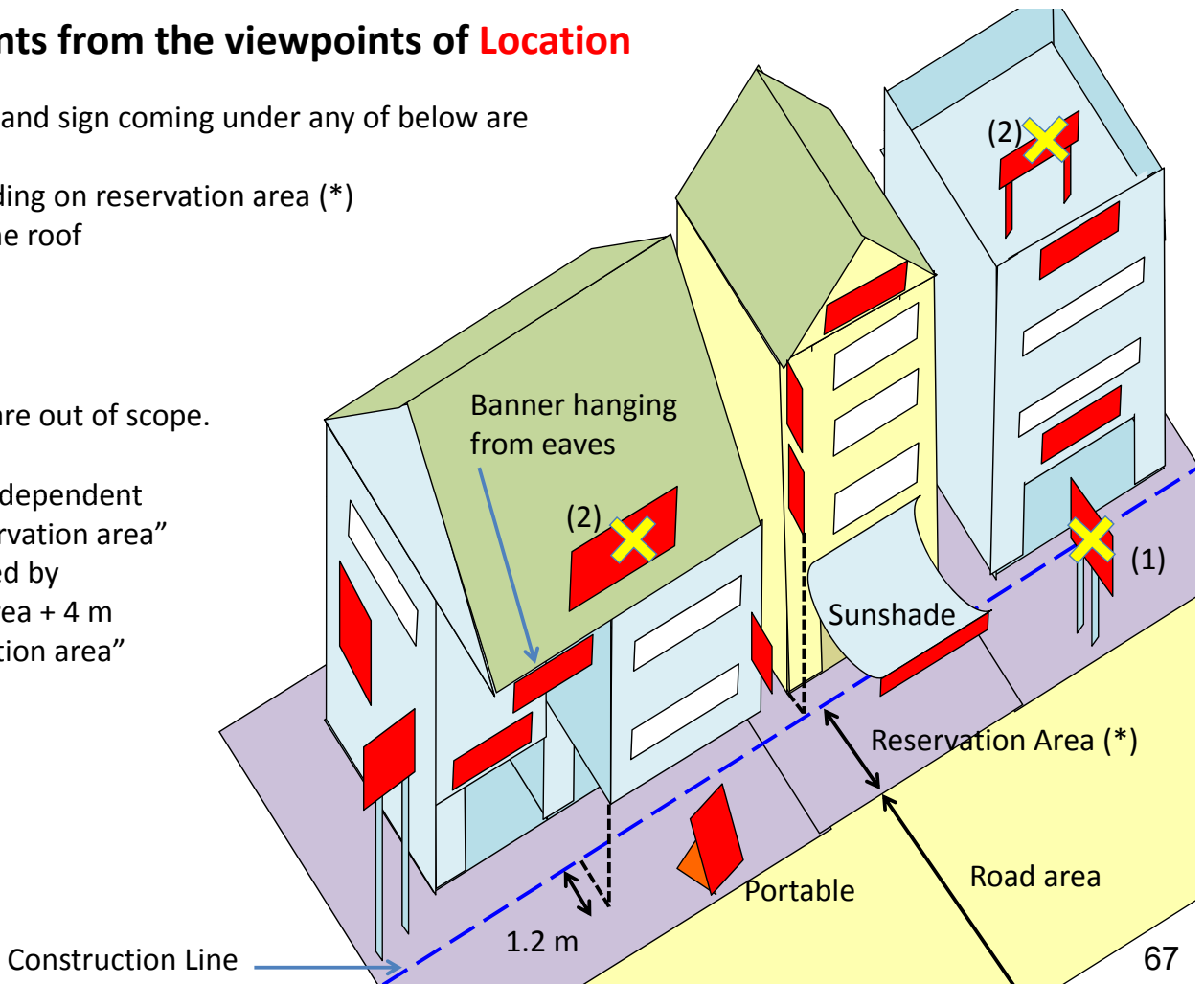
Advertisement and sign coming under any of below are not allowed.

- (1) Those standing on reservation area (*)
- (2) Those on the roof

<Remark>

Portable ones are out of scope.

(*) In case of independent building, "Reservation area" shall be replaced by "Reservation area + 4 m behind reservation area"



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Requirements from the viewpoints of Amount

<Calculation in Ordinary Case>

Maximum Amount of Advertisement and Sign (T-max)

= **façade area X 10 %**

= (10 m X 8 m) X 10 % = 8.0 m²

Total Amount of Advertisement and Sign (T)

= (A) 2m X 1m

+ (B) 2m X 1m

+ (C) 1m X 1m

+ (D) 1m X 1m X 2sides

+ (E) 4m X 0.2m

= 7.8 m²

(Portable ones are not counted.)

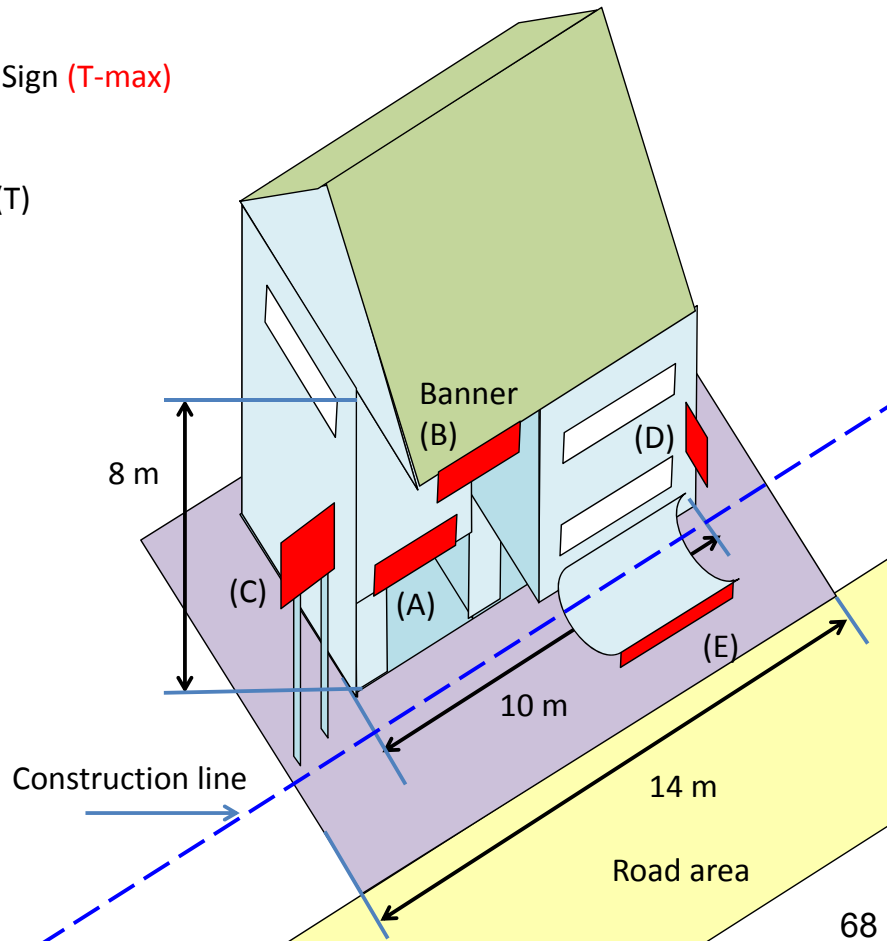
Confirmation of "T ≤ T-max"

<In case of tall building>

Only a part with height less than 15m may be counted in T-max.

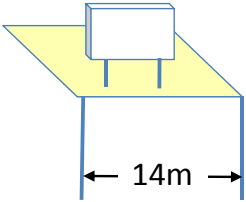
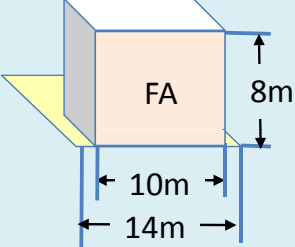
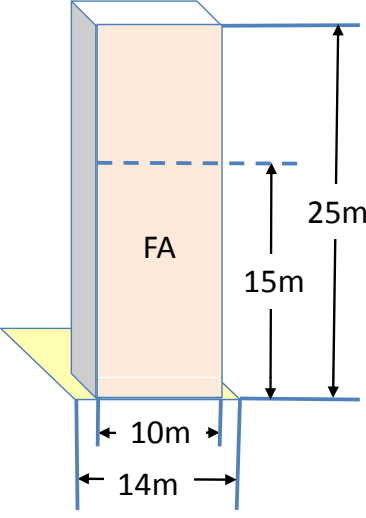
<In case of a site with small building or no buildings>

Value of T-max may be replaced with "site width x 4m".



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Maximum area of advertisement and sign in Historic Area (Ratio is 10 percent)

Sample	(1) Site with small building or no buildings	(2) Ordinary building (Basic regulation)	(3) Tall building
			
Façade area	None or small	80 m ² (10m x 8m)	250 m ² (10m x 25m)
	FA (Façade area) = WB (Building Width) x HB (Building Height)		
Maximum area of advertisement and sign (T-max)	14m x 4m x 10% = <u>5.6 m²</u> * Value of 4m is given to every site.	80 m x 10% = <u>8 m²</u>	(10m x 15m) x 10% = <u>15 m²</u> * Only a part less than 15m in height may be counted.

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Policy of new regulation and recommendation on external feature of buildings in Historic Area is:

- (a) To preserve the old buildings (not all old buildings) that have high values from the historic viewpoint.
- (b) To control new construction of buildings so that their external feature would contribute new cityscape of this area.
(*) This policy does not aim to preserve the old cityscape, because new regulation will allow 16m, 20m, or 26m in building height, while most old existing buildings are less than 7m in building height excluding slope roof.
- (c) To recommend building owners and architects to design their building referring the “Design Reference Book”.

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(Article 3) 13. Parking Lot

It is recommended to have enough parking lots in a building site, if the building owner expects visitors with cars to park in the building site.

(Article 3) 14. Vacant Space and Tree Planting

It is recommended to keep plant in the vacant area of the building site .

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(Article 3) 15. Special Treatment

1. Notwithstanding requirements stated in Item 2 to 14, in case where the authority issues permission with special treatment, the Item of the subject of the special treatment is not applied to the issued construction plan within the conditions attached to the permit.
2. A special treatment is decided thorough a process provided in Article 7 of “Ministerial Order on Construction Management Regulation”.
3. In the area of this LUP/ZC, possible examples as shown in the table below may be subject for consideration for a special treatment.

Items / Possible examples for consideration for a special treatment

Common in Items

Historic building

Government building

Item 2. Land Use

The land is used for any of structures below, and it is needed in the specific area.

(1) Slaughter house,

(2) Waste disposal plant, and waste incinerating plant

Item 3. Technical Network

No special treatment, in principle.

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Items / Possible examples for consideration for a special treatment

Item 4. Road and Gateway

The building is considered to be safe and does not cause disorderly urbanization, because of the enough space existing in or out the site.

Item 5. Characteristic of Site

The building is considered to be safe and does not cause disorderly urbanization, because of the enough space existing in or out the site.

Item 6. Distance from Site Boundary

The building does not cause inconvenience to the neighborhood, because of the characteristics of the location.

Item 7. Distance among Building in a Site

The buildings do not cause inconvenience to the neighborhood, because of the characteristics of the location.

Item 8. Road, Reservation Area, and Structure

The structure is a facility necessary for the neighborhood, such as public lavatories and police boxes.

Items / Possible examples for consideration for a special treatment

Item 9. Building Height (H)

The structure comes under any of the followings.

- (1) Its height is needed for the neighborhood.
- (2) Its site is large enough, and its height causes no inconvenience to the neighborhood and cityscape.
- (3) Its height is reasonable from the viewpoint of city plan.

Item 10. Land Use Ratio (E)

The building is considered to be safe, does not cause inconvenience to the neighborhood, and does not cause disorderly urbanization.

Item 11. Land Use Coefficient (COS)

Infrastructure, such as roads, in and around the building site, is enough for the COS that the building owner intends to construct with.

Item 12. External feature

The building does not cause inconvenience to the neighborhood and cityscape.

Item 13. Parking lot

Amount of parking lot stated in the regulation is not necessary, because of the characteristics of the building.

Item 14. Vacant Space and Tree Planting

Amount of vacant space and tree planting stated in the regulation is not necessary, because of the characteristics of the building.

15 Items of Inner Zone excluding Historic Area

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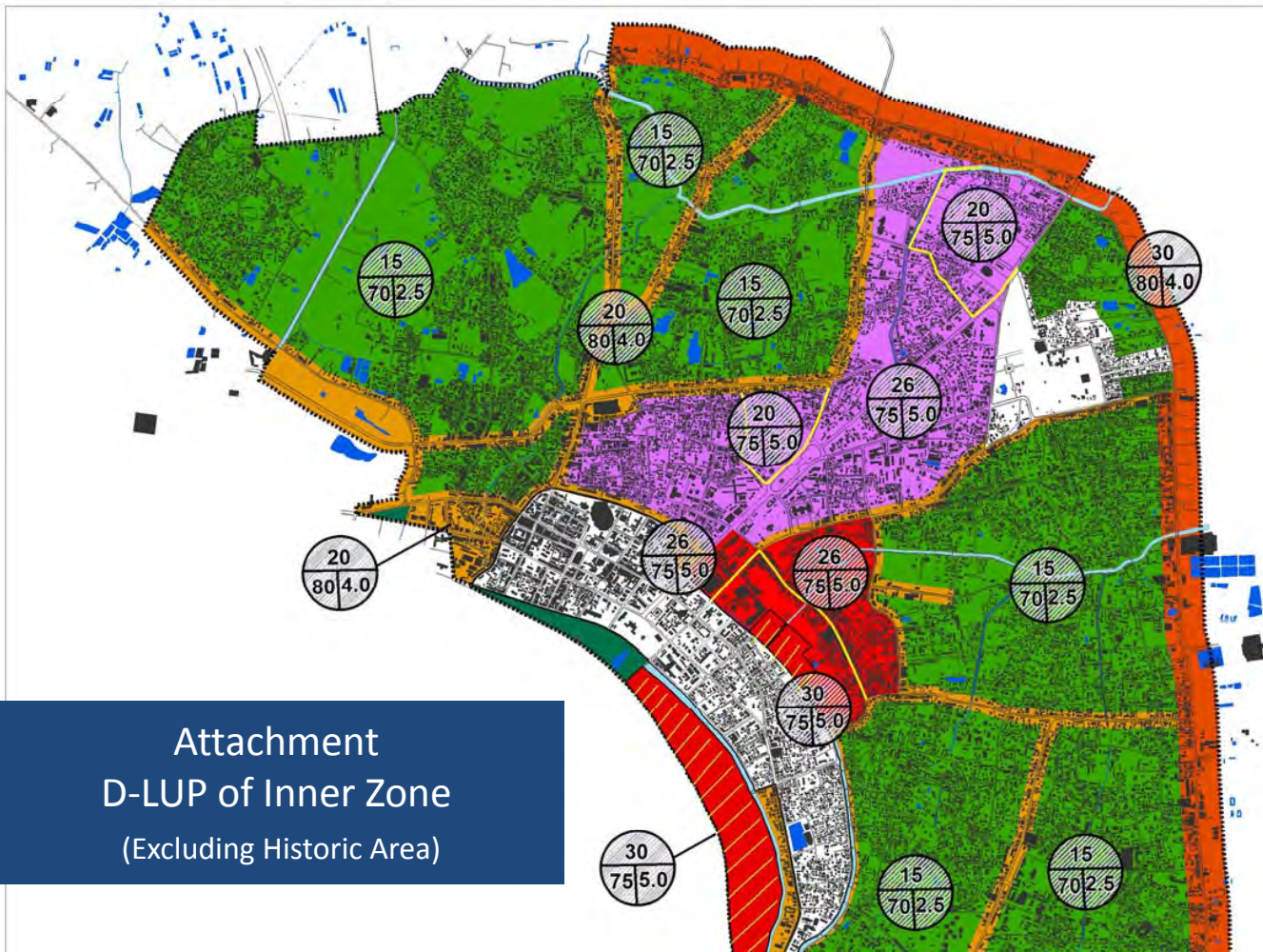
Article 1 Target Area

This D-LUP/ZC is applied to the area identified in the map of D-LUP, which is attached to this document.

Article 2 Detail LUP of Inner Zone excluding Historic Area

D-LUP is as shown in the attachment.

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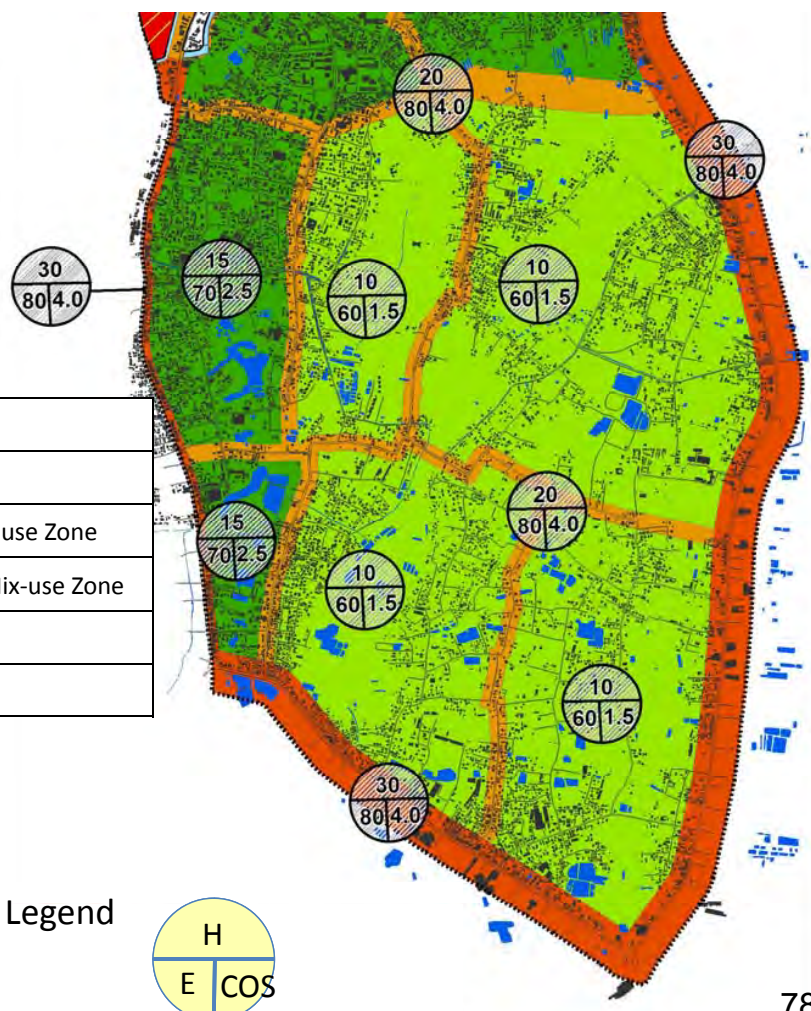
**Attachment
D-LUP of Inner Zone
(Excluding Historic Area)**

Legend

- Border line of Inner Zone
- Determined by other Detail LUP/ZC
- Pond, Canal
- Buildings
- Road

UA-1	C-1	Center Commercial Zone
UA-2	C-2	Administration and Business Zone
UB-RS1	M-1	High-rise Commercial/Residential Mix-use Zone
UB-RS2	M-2	Middle-rise Commercial/Residential Mix-use Zone
UB-R1	R-1	Middle-rise Residential Zone
UB-R2	R-2	Low-rise Residential Zone

- NE-1 Prohibited Zone (Park)
- NE-1 Prohibited Zone (Canal)
- Center Commercial Zone where Special Treatment is planned.



Legend

Borderlines of M-1 and M-2 along the streets are set with distance as below.

Sub-Zone	Street	Outside or Inside	Part	Distance from the center line
M-1	Khamphengmeuang Street (T4)	Outside	IC with Dondeng street - Nonghai	150 m
		Inside	IC with Dondeng street - Nonghai (except near Thatluang)	100 m
			Near Thatluang	0 m
	Thadeua Street	Outside	Singapore Embassy - Chinaimo	0 m
			Chinaimo - Nonghai	150 m
		Inside	Rashimi's Plaza Hotel - Chinaimo	50 m
			Chinaimo – Nonghai	100 m
M-2	New street under construction, connecting Lao-Thai Street and Khamphengmeuang Street (T4)			100 m (both sides)
	Other streets			50 m (both sides)

IC: Intersection

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Value of H, E, and COS in Inner Zone

Sub-Zones		H	E	COS
C-1	Center Commercial Zone	30m / 26m	75%	5.0
C-2	Administration and Business Zone	26m / 20m	75%	5.0
M-1	High-rise Commercial/Residential Mix-use Zone	30m	80%	4.0
M-2	Middle-rise Commercial/Residential Mix-use Zone	20m	80%	4.0
R-1	Middle-rise Residential Zone	15m	70%	2.5
R-2	Low-rise Residential Zone	10m	60%	1.5

1. Detail LUP/ZC of City Wall (190 ha) & That-luang (60 ha) are determined separately from Detail LUP/ZC of Inner Zone. Therefore, these areas are shown as blank (white) in this Detail LUP.
2. Areas of Nong-chang and Mekong River Side are included in the target area of Detail LUP of Inner Zone. It is expected for CMC to agree special treatment for these areas.

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Article 3 15 items of Inner Zone excluding Historic Area

15 items of inner Zone is as shown in below.

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(Article 3) 1. Development/Preservation Policy of the Zone

Development/Preservation Policy of Sub-Zones are as below.

	Name of Sub-Zone	Development/Preservation Policy
C-1	Center Commercial Zone	- Primarily to promote conveniences for commercial and business activities.
C-2	Administration and Business zone	- Primarily to promote conveniences for administration and business activities. - To preserve historic cityscape along Lanexang street, Kaysone Phomvihane street and 23 August street.
M-1	High-rise Commercial/Residential Mix-use Zone	- Primarily to promote conveniences for commercial and business activities. - To ensure living environment for high-rise buildings of mixed-use of business and residence.
M-2	Middle-rise Commercial/Residential Mix-use Zone	- Primarily to promote conveniences for commercial and business activities. - To ensure living environment for middle-rise buildings of mixed-use of business and residence.

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Name of Sub-Zone		Development/Preservation Policy
R-1	Middle-rise Residential Zone	- To ensure living environment for middle and low-rise buildings of mixed-use of business and residence.
R-2	Low-rise Residential Zone	- To ensure living environment for low-rise buildings of mixed-use of business and residence.
P	Prohibited Zone (Public Preservation)	- To preserve public space for green, park or water course

(Article 3) 2. Land Use

1. In Sub-Zones shown in the table below, land use must comply with followings.

R	R-1 (Middle-rise Residential Zone), and
	R-2 (Low-rise Residential Zone)
C	C-1 (Center Commercial Zone), and
	C-2 (Administration and Business zone)
M	M-1 (High-rise Commercial/Residential Mix-use Zone), and
	M-2 (Middle-rise Commercial/Residential Mix-use Zone)
I	I (Industrial Zone)

- (1) Land use coming under any use shown with "X" in the Table (1) are prohibited.
- (2) Factories coming under any use shown with "X" in the Table (2) are prohibited.
- (3) Facilities to keep hazardous materials over limitation shown in the Table (3) are prohibited.

2. In P (Prohibited Zone (Public Preservation Zone)), only public use of land is allowed. And structures other than below must not be constructed.
 - (a) Structures, which are operated by the Government organization that has responsibility on the area, and
 - (b) structures, for which the above agency issued permission.
3. In case of slaughter houses, waste disposal plants, or waste incinerating plans, each location must be agreed by the Construction Management Committee.

(Article 3) from 3 to 11

(Contents are same with item 3 to 11 of Article 3 of D-ZC of Historic Area.)

(Article 3) 12. External Feature

1. Buildings and Structures

1-1. Color

In case of buildings facing Lanexang street, Kaysone Phomvihane street or 23 August street, their external parts must be mat-white (khaaw daan). The slightest hint of color (sii ohne thii sut) may be added into mat-white.

<Exceptions>

Parts of exception	Required conditions
Glass of windows	Colorless and transparent only
Frame of windows	Not vivid color
Parts made of wood (excluding decoration panels attached to the external wall)	Mat white or Wood color only
Roofs (including decoration of roofs)	Not vivid color
Traditional ornament on the top of columns, and the like	Mat white or Gold, in principle
Floors	Mat white, Wood color or brick color only
Treads and risers of stairs	
Advertisement and sign	Not vivid color
Others that the administration organization allows	Only in the case there is historic reason. 87

1-2. Fence and Standing Wall

In case there is a fence or standing wall, their maximum height must be 2 m or less. And, a part with height of 0.8 m or more must be see-through.

1-3. Building style, etc.

It is recommended to design roof, wall, windows, etc. in using Design Reference Book.

2. Advertisement and Sign

2-1. Location

- (1) Location of structures supporting “Advertisement and Sign” must meet requirements of Item 8.
- (2) In addition to (1), it is not allowed to install “Advertisement and Sign” on the roof.

2-2. Amount

- (1) Total surface area of “Advertisement and Sign” must be **20 % or less** of “façade area” of the buildings in the site. In case of a tall building, only a part less than 15 m in height may be counted in “façade area”.
- (2) In case of the site with a small building or no buildings, notwithstanding (1), total surface area of “Advertisement and Sign” may be 10 % or less of “site width x 4m”.

<Remark>

- In case “Advertisement and Sign” board sticking out from the building wall, both sides of the board are counted.
- In case of LED or LCD monitor display, its surface area shall be counted double.
- In case where the building locates at the intersection, this requirement is applied to each side of the building.

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Requirements from the viewpoints of **location**

Relation with building			Location		Out of building site (*2)
			In building site (Including vacant land)		
			Normal building site	Reservation area (*1)	
				Area ($H \geq 3m$, $W \leq 1.2m$)	
Attached to building	Fixed to building	On roof	Not allowed.		
		On wall or window	Allowed in principle. <Exception>	Direction not to	Not allowed.
	Sticking out of the wall	(*3)			
	Not fixed to building, such as banner		the facing road is not allowed.	Not allowed.	
Apart from building	Fixed on the ground or Not portable (including “On fence”)			Not allowed.	
	Portable		No requirements		

(*1) “Reservation area” in case of row house, and “Reservation area + Area of 4 m behind reservation area” in case of independent building.

(*2) Out of building site, such as **road area** including pedestrian way

(*3) **Only one board sticking out from the external wall** coming under conditions below is allowed.

- It invades the construction line by **horizontally 2.4 m or less, and with height of 1.0 m or less**, and
- Its lowest point is **3 m or more higher than “road level of the facing road”**.

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Requirements from the viewpoints of Location

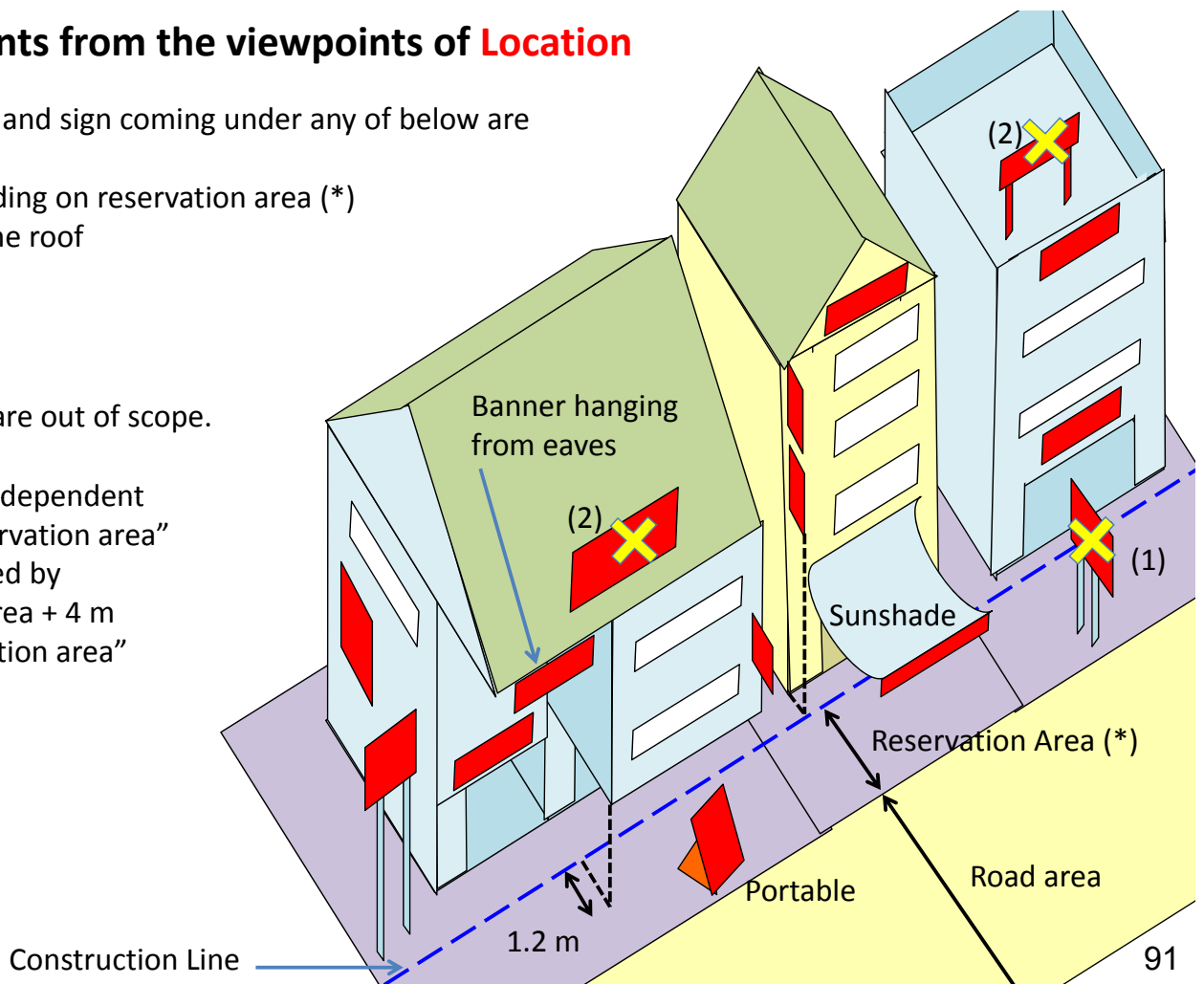
Advertisement and sign coming under any of below are not allowed.

- (1) Those standing on reservation area (*)
- (2) Those on the roof

<Remark>

Portable ones are out of scope.

(*) In case of independent building, "Reservation area" shall be replaced by "Reservation area + 4 m behind reservation area"



Requirements from the viewpoints of Amount

<Calculation in Ordinary Case>

Maximum Amount of Advertisement and Sign (T-max)

= **façade area X 20 %**

= (10 m X 8 m) X 20 % = 16.0 m²

Total Amount of Advertisement and Sign (T)

= (A) 2m X 1m

+ (B) 2m X 1m

+ (C) 1m X 1m

+ (D) 1m X 1m X 2sides

+ (E) 4m X 0.2m

= 7.8 m²

(Portable ones are not counted.)

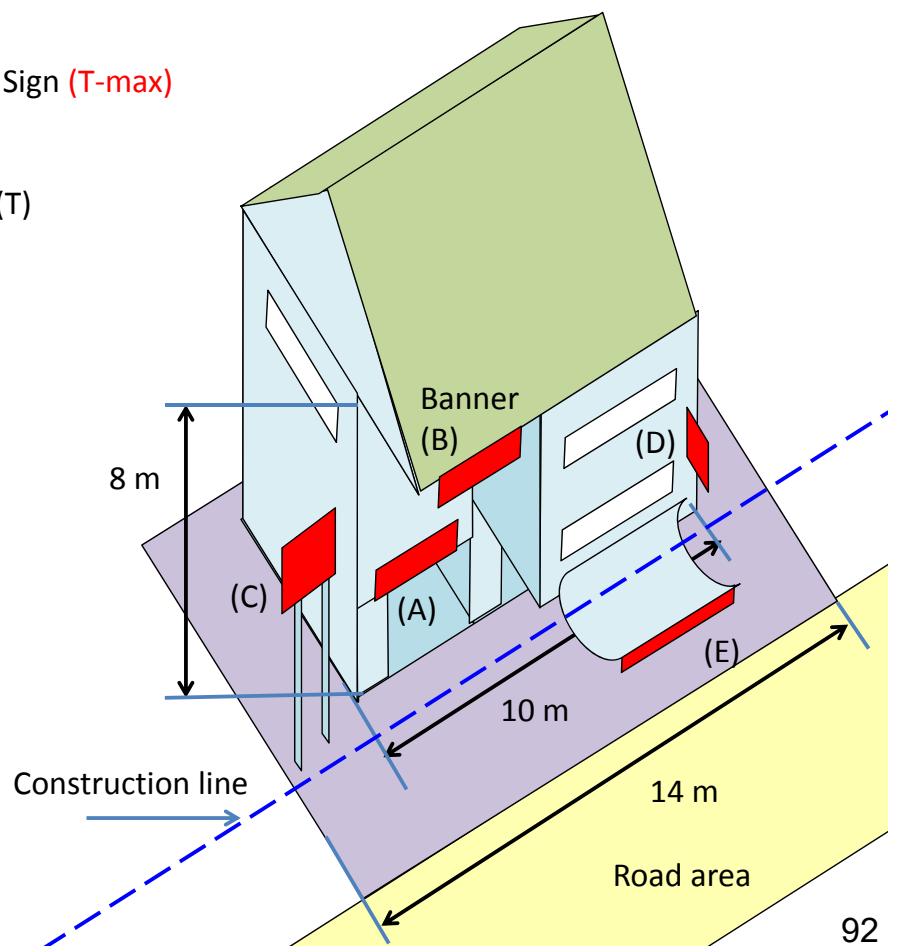
Confirmation of "T ≤ T-max"

<In case of tall building>

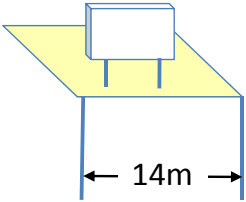
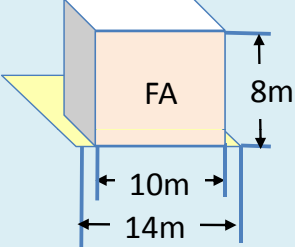
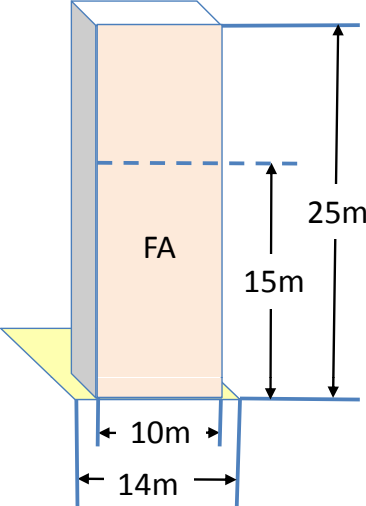
Only a part with height less than 15m may be counted in T-max.

<In case of a site with small building or no buildings>

Value of T-max may be replaced with "site width x 4m".



Maximum area of advertisement and sign in Inner Zone (Ratio is 20 percent)

Sample	(1) Site with small building or no buildings	(2) Ordinary building (Basic regulation)	(3) Tall building
			
Façade area	None or small	80 m ² (10m x 8m)	250 m ² (10m x 25m)
	FA (Façade area) = WB (Building Width) x HB (Building Height)		
Maximum area of advertisement and sign (T-max)	14m x 4m x 20% = <u>11.2 m²</u> * Value of 4m is given to every site.	80 m x 20% = <u>16 m²</u>	(10m x 15m) x 20% = <u>30 m²</u> * Only a part less than 15m in height may be counted.

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(Article 3) from 13 to 15

(Contents are same with item 13 to 15 of Article 3 of Detail ZC of Historic Area.)

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Attachment: Table (1)

Land Use		Land Use Zones		R		C		M		I
		R2	R1	C2	C1	M2	M1			
(1) Residential building (aa-khaan thii yuu aa-sai)										
(2) Hotel, Guesthouse										
(3) Religious building (Temple, Church, Mosque, etc.)										
(4) Hospital, Clinic										
(5) Car parking										
(6) Public park, Garden										
(7) Educational building	Secondary school, Primary school, Nursery									
	University, College, Vocational school, High school	X	X							X
(8) Gas station		X	X							
(9) Customers floor of: Shop (sales or services) or Restaurant, Entertainment facilities, Public hall (saa muu soong)	B, F1									
	F2	X	X							
	≥ F3	X	X							X
(10) Other than (1) to (9), such as offices, museum, stadium/gymnasium, bus station, etc.	B, F1									
	F2	X								
	≥ F3	X	X				X			

“X” means “Not allowed.” “B” means floor of basement. “F1”, “F2” and “F3” mean First floor. Second floor and Third floor.

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Attachment: Table (2)

Factories using motors (control on total floor area of workshop)

Land use		R	C	M	I
Automobile repair shops	exceeding 150 m2 in total floor area of workshop	X			
	exceeding 300 m2 in total floor area of workshop	X	X		
Factories other than above	exceeding 50 m2 in total floor area of workshop	X			
	exceeding 150 m2 in total floor area of workshop	X	X		

Factories of foods or medicine

Land use		R	C	M	I
Manufacture of fish paste using motors		X			
Milling using motors exceeding 2.5 kW in total output		X			
Manufacture of medical supplies from materials of internal organs or excrement of animals		X	X	X	

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Factories of metal forming

Land use		R	C	M	I
Hammer processing of metal boards 0.5 mm or more in thickness <Exception> Processing for the purpose of manufacturing metal crafted goods		X			
Press of metal using motors <Exception> Hydraulic press operations using a straightening press		X			
Shearing of metal using motors(Part of G4-2)		X			
Processing of wire, using a wire forming machine with a motor exceeding 0.75 kW in total output		X			
Cutting or shaving of metal , using motors exceeding 10 kW in total output		X			
Processing of metal, using bending machines (limited to roll type)		X			
Processing of metal, using tumblers		X			
Metal work using acetylene gas	using dissolved acetylene gas				
	using acetylene gas generators of 10 L or less in capacity				
	using acetylene gas generators from 10 L to 30 L in capacity	X			
	other than above	X	X		
Dry polishing of metal by using polishing machines run by motors <Exception> Polishing of tools and implements		X			
Metal spraying or sand blasting		X	X		

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continued

Land use		R	C	M	I
Corrugation of iron board		X	X		
Metal melting or refining	Casting of types <Exception> That at printing office	X	X		
	Casting of metal for art goods	X	X		
	using crucibles or furnaces not exceeding 50 L in total capacity	X	X		
	other than above	X	X	X	
Work using motors, of thick metal plates or shapes (1) Cutting work <Exception> Case of using grinders (2) Rivet work (3) Drilling work		X	X	X	
Manufacture of iron nails or steel balls		X	X	X	
Wire drawing, tube drawing or metal rolling	using motors 4 kW or less in total output	X	X		
	other than above	X	X	X	
Forging of metal , using forging machines	using spring hammers	X	X		
	using swaging or rolling machines	X	X		
	other than above	X	X	X	

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Chemical factories

Land use	R	C	M	I
Manufacture of ink for printing	X			
Manufacture of cement goods , using motors	X			
Injection molding process of synthetic resins	X			
Metal plating	X			
Work using a roller which uses rubber or synthetic resin <Exception> Work using a calendar roller	X			
Dry cleaning or dry dyeing , using inflammable solvents	X	X		
Heat drying of paint or baking of paint <Exception> Cases using infrared rays	X	X		
Heat treating of celluloid or saw-machine processing of celluloid	X	X		
Manufacture of paints or water paints	X	X		
Manufacture of viscose products, or acetate products	X	X	X	
Manufacture of cuprammonium rayon products <Exception> Those which do not use liquefied ammonia gas or aqueous ammonia with a concentration exceeding 30 percent	X	X	X	
Manufacture of synthetic dyestuffs or their intermediate products, pigments or paints <Exception> Manufacture of lacquer or water paints	X	X	X	
Manufacture of rubber products or aromatic oils , using inflammable solvents	X	X	X	

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Continued

	R	C	M	I
Manufacture of imitation-leather paper/cloth or water-proof paper/cloth, using drying oils or inflammable solvents	X	X	X	
Manufacture of chlorine , bromine, iodine, sulfur, sulfur chloride, hydrofluoric acid, hydrochloric acid, nitric acid , sulfuric acid , phosphoric acid, caustic potash, caustic soda , ammonia water, potassium carbonate, washing soda, soda ash, bleaching powder, bismuth subnitrate, sulfites, thiosulfates, arsenic compounds, lead compounds, barium compounds, copper compounds, mercury compounds, cyanogen compounds, chlor sulfuric acid, chloroform, carbon tetrachloride, formalin, sulphonal, glycerin, ammoniummethylol sulfonate, acetic acid, carbolic acid, benzoic acid, tannic acid, acetanilide, aspirin or guaiacol	X	X	X	
Manufacture of products by hydrolysis of protein	X	X	X	
Collection, hardening or heating work of oils and fats <Exception> Manufacture of toilet articles	X	X	X	
Manufacture of factice, synthetic resin , or synthetic rubber	X	X	X	
Manufacture of synthetic fibers <Exception> Those which use raw materials or manufacturing processes which have no objection from the viewpoint of safety and fire-prevention	X	X	X	
Manufacture of fertilizer	X	X	X	
Refining of asphalt	X	X	X	
Manufacture using such materials as asphalt , coal tar, wood tar, petroleum distillates or their residues	X	X	X	

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Factories of hazardous material

Land use		R	C	M	I
Manufacture of explosives	Manufacture of toy fireworks	X	X		
	other than above	X	X	X	
Manufacture of dangerous chemical substances as followings: (1) oxidizing solids, such as chlorates and dichromates (2) combustible solids, such as phosphorus sulfide, sulfur, and magnesium (3) spontaneously combustible substances and water-reactive substances, such as potassium and sodium (4) inflammable liquids, such as petroleum, alcohols, and oil extracted from animals and plants (5) self-reactive substances, such as nitro compounds and azo compounds (6) oxidizing liquids, such as hydrogen peroxide and nitric acid		X	X	X	
Manufacture of matches		X	X	X	
Manufacture of nitrocellulose products		X	X	X	
Manufacture of activated carbon from wood <Exception> manufacture using vapor method		X	X	X	
Manufacture of coal gases or coke		X	X	X	
Manufacture of flammable gases <Exception> Manufacture of acetylene gas		X	X	X	

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Factories other than above

Land use		R	C	M	I
Grinding or dry polishing of cork, ebonite or synthetic resin or grinding of wood, using motors		X			
Sawing or planing of lumber , sewing, machine weaving, stranding of thread for weaving machines, braid making, knitting, bag making or filing of saws, using motors exceeding 0.75 kW in total output		X			
Making of needles or cutting of stone , using motors exceeding 1.5 kW in total output		X			
Work using air compressors with motors exceeding 1.5 kW in total output <Exception> Those, which have effective sound blocking performance, using a motor no greater than 7.5 kW in total output		X			
Spraying of paints using motors	using motors 0.75 kW or less in total output	X			
	other than above	X	X		
Bleaching , etc. (1) Bleaching, using sulfurous acid gas (2) Washing, dyeing or bleaching of feathers or hair (3) Disinfection, selection, washing or bleaching, of rag, waste cotton, waste paper, waste yarn, waste fur or the like		X	X		
Manufacture of bone charcoal or other animal charcoal		X	X		
Manufacture of soap		X	X		
Manufacture of fish powder or feather-meal, bone and meat powder, meat powder, or blood powder, or feeds containing any of the above		X	X		
Manufacture of cotton , remanufacture of old cotton, nap raising, wool shearing, manufacture of reclaimed wool, or felt, using motors		X	X		

02

Continued

Land use		R	C	M	I
Sawing or dry polishing of bone, horn, tusks, hooves or shell, using motors		X	X		
Pulverizing of mineral, rock, sand, concrete, asphalt-concrete, sulfur, metal, glass, brick, pottery or porcelain, bone or shells, using motors		X	X		
Manufacture of ready-mixed concrete or filling bags with cement, using motors exceeding 2.5 kW in total output		X	X		
Manufacture of india-ink or briquette		X	X		
Manufacture of tile, brick, earthenware, pottery or porcelain, artificial whetstone, crucibles or enameled ironware		X	X		
Manufacture or sand blasting of glass		X	X		
Washing or remanufacture of drum containers		X	X		
Manufacture of paper	Manufacture of hand-laid paper	X	X		
	other than above	X	X	X	
Manufacture of pulp		X	X	X	
Manufacture of leather or glue, or refining of fur or bone		X	X	X	
Manufacture of cement, gypsum, hydrated lime, quick lime or carbide		X	X	X	
Manufacture of carbon or graphite products with carbon powder, or pulverizing of graphite		X	X	X	
Manufacture or pulverization of products containing asbestos <Exception> Those, which use dust collectors and other prevention methods that they are effective against dispersion of asbestos dust		X	X	X	

03

Attachment: Table (3)

Hazardous materials		Limit in each Land Use Zone			
		R	C	M	I
Explosives (excluding toy fireworks)	Gunpowder	20 kg	50 kg	20 t	NL
	Blasting powder	0 (Prohibited)	25 kg	10 t	NL
	Ball cartridge and blank cartridge	2,000 pcs.	30,000 pcs.	10 X 10 ⁶ pcs.	NL
Combustible gas (*1)		35 m3	70 m3	350 m3	NL
Compressed gas (*1)		350 m3	700 m3	3,500 m3	NL
Liquefied gas		3.5 t	7 t	35 t	NL
Class 1 Petroleum, such as Gasoline, etc. (*2)		100 L	200 L	1,000 L	NL
Class 2 Petroleum, such as Kerosene, light oil, etc. (*2)		500 L	1,000 L	5,000 L	NL
Class 3 Petroleum, such as Heavy oil, etc. (*2)		1,000 L	2,000 L	10,000 L	NL
Class 4 Petroleum, such as Cylinder oil, etc. (*2)		3,000 L	6,000 L	30,000 L	NL

<Note>

"NL" means "No Limit". (Hazardous materials must be kept in a safe manner in compliance with regulation, even if there are no limitation in amount.)

(*1) Values are assumed under the conditions at 0° C and 760 mmHg.

(*2) These requirement are not applied, in case where materials are stored in an underground storage tanks.