HKIA

# Study Guide for HKIA Professional Assessment

## Paper 1

## Statutory Controls in Building Works

The Hong Kong Institute of Architects 香港建築師學會

CONTENTS



**Written by**
Carolin Fong

**Reviewed by**
Rembert Lai
Kelvin Ip
Michael Pang
SS Yim

# INTRODUCTION

## THE THREE REGIMES

Development potential of lands in Hong Kong is controlled by three regimes:

| | |
|---|---|
| **PLANNING** | Town Planning Ordinance (TPO) (Cap. 131), a law. |
| **BUILDING** | Buildings Ordinance (BO) (Cap. 123), a law, (except as provided under BO S41(1)) |
| **LEASE** | the lease, a contract between the Government (the lessor / landlord) and the other party (the lessee / tenant). In private building projects, the lessee / tenant is usually referred as the 'lot owner' or the developer. |

Requirements and restrictions under the three regimes can be different. As an architect, you must know how to check the requirements and restrictions under each of the regimes, and the necessity of complying with such rules in building design. You must also understand the consequences of non-compliance, and what you must do when the requirements under these three regimes are different.

We will begin with the development potential control under BO, followed by the aspects of PLANNING and LEASE. Since the concepts and definitions of terminologies are interrelated, you may need to revisit earlier sections as you proceed. Furthermore, texts from laws, practice notes, code of practices and design manuals are not repeated in this Study Guide. Instead, only the identification numbers of sections, regulations or practice notes relevant to the discussions are quoted. You should look up the original laws and materials and make your own notes - spaces on the right are reserved for this purpose.

## INTRODUCTION

**THE THREE REGIMES (continued)**

Candidates are reminded of the following:

- When a building proposal exceeds the maximum plot ratio or site coverage permitted under the Building Planning Regulations (B(P)R), the Building Authority (BA) may disapprove the proposal under BO S16(1)(d) because it contravenes B(P)R20 or R21.
- When a building proposal exceeds the maximum plot ratio, height or any other requirements stated in draft or approved plans prepared under the TPO (the Planning regime), BA may also disapprove the proposal under BO S16(1)(d). (See also Part A2 3 of this Guide)

Without BA's approval, no consent to commence the building works will be available, and therefore the building proposal cannot be built on site.

Contravention of lease conditions is not a reason for BA to disapprove a building proposal. The landlord – represented by the Lands Department (LandsD) - will be the authority to approve or disapprove a building proposal under Lease. Special conditions on new leases often prohibit the commencement of construction works (except demolition, site formation and ground investigation) until the building proposal is approved by the Director of Lands. The lessee will probably be unable to assign the whole or part of the lot if the lease conditions are not followed. If it is a residential development, it means the developer will not be able to sell the flats.

SORT IT OUT
What are the meanings of the following:

**Lessee**
**Lessor**

**Part A1**

**1.**

# DEVELOPMENT POTENTIAL UNDER BO

## TERMINOLOGY

**Area of the site**
Area of a site is defined by B(P)R23(2). It is further elaborated in PNAP ADM-21 which should be read in detail. See also Part A1 6 of this Guide.

**Plot ratio (PR)**
Definition of PR is stated in B(P)R21(3). It is the building's total *gross floor area* divided by *area of the site.*

**Gross floor area (GFA)**
B(P)R23(3) gives the definition of GFA. A distinctly inclusive description for GFA is provided under B(P)R23(3)(a). B(P)R23(3)(b) and B(P)R23A provide that some areas may be excluded from GFA.

**Site coverage (SC)**
SC's definition can be found in B(P)R2. Domestic site coverage is the area covered by the domestic part of the building. Non-domestic site coverage is the area covered by the non-domestic part of the building.

**Height of building**
Height of building is defined in B(P)R23(1). It is measured from the mean level of the *specified street* on which the site abuts, to the mean level of the roof over the highest *usable floor space.* If there are more than one specified street abutting the site, the mean level of the lowest among all specified streets will be used to calculate the height of building.

**Usable floor space (UFS)**
UFS is defined in B(P)R2.

WRITE DOWN

Check the difference between usable floor area (UFA) and usable floor space (UFS), and list out how and when they are applied.

Scan through the BO, Cap123F, 123H, 123I and the CoP FS using the "find" or "word search" tool to find the answers.

**Part A1**

**2.**

# DEVELOPMENT POTENTIAL UNDER BO

## BUILDING TYPE and BUILDING HEIGHT

### What kind of building can you build on your site?

The BO does not control the type of building, or more specifically the use or functionality of the building from a land-use point of view. It, however, may prohibit some uses out of health and safety concerns, especially when there are other features and uses in the proximity, whether existing or proposed. B(P)R49 concerning dangerous trades and provisions for the place of public entertainment (PPE) are just some examples. These will be discussed in other Parts of the Study Guide.

### How tall can the building be?

There are laws and statutory provisions in Hong Kong that restrict the height of buildings. When a building proposal contravenes these provisions, the BA may disapprove the plans under BO S16(1)(d).

However, BO and its subsidiary legislations do not impose building height restrictions directly – except when the site cannot be classified and B(P)R19(3) needs to apply. In this case, the building height shall be determined by the BA. Please read Part A1 7 of this Guide.

**LAWS THAT CONTROL THE HEIGHT OF BUILDING**

The Hong Kong Airport (Control of Obstructions) Ordinance (Cap.301) imposes restrictions on height of buildings for aviation safety.

The OZPs (draft or approved) prepared under the TPO also provides restrictions on heights of buildings for some parts of Hong Kong. Please see Part A2.

# DEVELOPMENT POTENTIAL UNDER BO

**BUILDING TYPE and BUILDING HEIGHT (continued)**

**Building height determining PR and SC**

BO restricts the building's maximum PR and SC according to the height of building. Please read Part A1 4 of this Guide.

**Storey Height**

The B(P)R, however, regulates the height of storeys. Under B(P)R24, there are strict requirements on the *minimum* heights between the floor and the ceiling of a storey. Please remember the requirements. Note that the height under this regulation is measured between the structural levels: the floor and the ceiling. The thickness of finishing can be disregarded. However, please also be aware that there are many other clear height requirements under the regulations and practice notes; clear height refers to the measurement between the finished surfaces of the floor and the ceiling / soffit. For example, a minimum clear headroom of 2.0m is required for escape routes.

Height of building, to some extent, is indirectly controlled by the BA through the definition of GFA. If the height of storey exceeds the maximum floor height accepted by BD, its area may be required to be counted more than once for GFA calculation. Please also refer to the discussion in Part A1 8.

WRITE DOWN

the minimum height required by B(P)R24

Find out the maximum floor to floor height accepted by BD under PNAP APP-5

**Part A1**

**3.**

## DEVELOPMENT POTENTIAL UNDER BO

**BUILDING SIZE: PERMITTED MAXIMUM PLOT RATIO and SITE COVERAGE**

B(P)R20 and R21 state that the maximum domestic and non-domestic PR and SC of Class A, B and C Sites should be referred to the **First Schedule** of the B(P)R.

**Domestic**

Definition of domestic is given under BO S2 – constructed or intended for *habitation.*

**Habitation** – definition given under BO S2 explicitly states that guest-houses, boarding houses, dormitories etc. are considered domestic.

Please do not forget: a building in which people reside is a domestic building regardless of its name. Tenement houses, flats, apartments, service apartments, houses, villas, bungalows, lodges, etc., are all domestic buildings if spaces for living are provided.

**Non-domestic** – being NOT domestic, as stated in BO S2. Schools, factories, offices, shopping malls, warehouses, and theatres are examples.

B(P)R23(4) allows a small caretaker's residence to be proposed in a non-domestic building; in this case, the building is still considered as non-domestic despite of the domestic part it contains. That means the GFA of such residence can be considered as non-domestic GFA.

FIND OUT

The maximum size of a caretaker's residence under B(P)R23(4)?

**Part A1**

**3.**

## DEVELOPMENT POTENTIAL UNDER THE BO

**PERMITTED MAXIMUM PLOT RATIO and SITE COVERAGE (continued)**

**Composite building**

Composite building refers to a building that is partly domestic and partly non-domestic. Buildings with shops on street levels and the lower floors with residential towers above are typical composite buildings.

Hotel guestrooms are for guests to live in, and therefore are considered as domestic use. In hotels, there are also usually restaurants, business centers, and ballrooms. These are non-domestic uses.

Although both domestic and non-domestic uses exist in a hotel, B(P)R23A allows the entire hotel's GFA and SC to be considered as non-domestic for the purpose of B(P)R **subject to** various conditions as listed in the regulations and the practice notes. The topic of **hotel concessions** will be covered in detail in Part A1 11 of this Guide.

**Part A1**

**4.**

## DEVELOPMENT POTENTIAL UNDER BO

**THE FIRST SCHEDULE**

Candidates should study the First Schedule and be able to identify the correct maximum permissible PR and SC for your project, or for answering PA questions.

Candidates should know the following without referring to the First Schedule:

- With the same site classification and building height, maximum non-domestic PR and SC are always higher than the maximum domestic PR and SC.
- With the same building height and same use, maximum PR and SC are always the highest for a Class C site and lowest for a Class A Site, except for a non-domestic building over 61m.
- With the same use and same site classification, the maximum PR and SC increase with the building height.
- Maximum domestic PR is reached when the height of building is over 61m. The maximum domestic PR is 8, 9, and 10 for Class A, B and C sites respectively.
- Maximum non-domestic PR of 15 applies for all classes of site when the height of building is over 61m.

**Part A1**

**5.**

# DEVELOPMENT POTENTIAL UNDER BO

## SITE CLASSIFICATION

Site classification is very important since a Class C site can yield as much as 25% more domestic GFA than a Class A site with the same site area and same building height. B(P)R18A defines what constitutes a Class A, B or C site. Definitions of the three classes of site are fundamental knowledge; candidates should know them by heart.

The following terms appear in the definitions of Class A, B and C site and are discussed in detail below:

### Street

Street is defined under **BO S2** – note that the definition is very inclusive.

Street is defined again under **B(P)R2** – here it says that both public street and private street are streets in the context of B(P)R.

**PNAP APP-124** provides further explanations and elaborations about what constitutes a street. It also includes details of each of the five conditions for a street to considered as a specified street.

MEMORIZE

the definition of Class A, B and C sites.

Which of them must be a corner site?

Under what circumstances will the site be considered to abut on 2 streets? or 3 streets?

**Part A1**

**5.**

# DEVELOPMENT POTENTIAL UNDER BO

## SITE CLASSIFICATION (continued)

### Specified Street

Before 2005, any street more than 4.5m could be used for the purpose of site classification. B(P)R18A, which came into effect in 2005, provides detailed definitions of Class A, B and C sites and introduces the concept of 'specified street'. Circumstances leading to this change will be briefly explained in Paper 1 lectures.

Definition of specified street is given under B(P)R18A (3)(a) and (b). There are five conditions under which a street (it has to be a street to begin with) can be considered a specified street, such that it may be used for the classification of site. Paragraphs 3 of PNAP APP 124 provides further elaboration on the subject.

If a street is not a specified street, it is useless for the purpose of site classification regardless of its width.

Remember well and understand what those five conditions are. Only B(P)R18A(3)(a)(i) is straightforward. The remaining four (ii) to (v) deal with different circumstances and require special attention.

LIST OUT and MEMORIZE

the definition of 'specified street'.

**Part A1**

**5.**

## DEVELOPMENT POTENTIAL UNDER BO

**SITE CLASSIFICATION (continued)**

**About B(P)R18A(3)(a)(i)**

Not all streets that people can walk along and traffic can pass through freely are maintained by the Highways Department (HyD). Due to various reasons, some streets are simply unallocated government land and not maintained by HyD. It is prudent to check the status of the streets which your site abuts on before determining its site classification. What seems to be obvious can be deceptive. While most architects know they must be careful with B(P)R18A(3)(a)(ii) to (v), please do not miss out (i). A convenient way to find out is to check whether you can apply from HyD for excavation permit on that street. If this is the case, it is a street maintained by HyD and therefore is a specified street under B(P)R18A(a)(i).

**"Not less than 4.5m wide"**

Simple as it seems, this question always comes up: what is the width of a street? Does it include the pavements on both sides? Do we measure the width between the outermost walls of the buildings at opposite sides of the street?

Pavement, by virtue of definition under BO S2, is a street. But whether it is a specified street depends on whether the pavement falls into one of the five criteria of (B(P)R18A).

The external wall of a building is not necessarily the edge of a specified street. Buildings may be set back from its site boundary. Lease plans and lot index plans are useful tools for preliminary checking.

**Part A1**

**5.**

## DEVELOPMENT POTENTIAL UNDER BO

**SITE CLASSIFICATION (continued)**

**"Abut"**

If there is a piece of land between your site and a specified street, can your site be considered to abut on that specified street? What if there is a narrow nullah or a small slope between the boundary of your site and the specified street?

Paragraph 2(c) of PNAP APP 124 draws our attention to such cases.

Classification of site affects the maximum permissible PR and SC of a development under the BO. Therefore, subject to restrictions under the two other regimes (Planning and Lease), classification of site directly reflects the value of the land. Over the years, there have been many appeals and litigation cases in which the authorized persons (AP) and their clients disagreed with BA's interpretation of the law and the classification of the development site; and quite a few of them involved the definition of abutment. There are plentiful court judgements of precedent cases for candidates who are interested.

Paper 1 candidates are expected to have a thorough understanding of the fundamental principles and their applications to determine a site's classification under the BO. Court cases will not be examined, but candidates should be aware of possible complications in real-life situations.

**Part A1**

**6.**

## DEVELOPMENT POTENTIAL UNDER BO

**SITE AREA**

The maximum GFA that can be built on a site is determined by multiplying the permitted PR by the area of the site. The area claimed must be under the title of the building proponent (the owner or the developer) or under his realistic prospect of control. It cannot include the area of any land that is owned by others or any unallocated government land.

B(P)R23(2) further states that the area of the site must exclude any street. And according to the definition of street under B(P)R2, it is explicitly stated that street includes public or private street. Therefore, the area of the site cannot include any land which is a street, even when it is a private street within the development lot boundary.

However, **PNAP APP-73** lists out the circumstances under which the BA may grant exemption to allow a private lane (a lane inside the development lot boundary) to be included in the accountable site area.

Deduction of any area from the area of the site will almost always reduce the maximum GFA that can be provided on the site. We must think twice before we make the decision to provide a lane or a street within the site boundary and deduct its area from the accountable site area. Keep this in mind when answering PA questions, and more importantly, in real-life practice.

**Part A1**

**6.**

# DEVELOPMENT POTENTIAL UNDER BO

**SITE AREA (continued)**

**Accuracy of Site Area**

The maximum permitted PR, determined by the building's height and use (domestic or non-domestic) according to the site classification, is multiplied by the site area to calculate the maximum GFA that can be provided for the building. Therefore, the accuracy of the site area – how much area exactly is under the title or realistic prospect of control of your client - is extremely important.

On new leases, the site area and the boundary coordinates are provided by District Survey Office and are trusted by government departments, including the Buildings Department (BD), as accurate site parameters.

The site area stated in an old lease, on the other hand, is not considered dependable by the authorities for the purpose of determining how much GFA can be built. Strange as it might seem, the same applies to the site area stated on record plans of old buildings, even though all these plans were once approved by the BA. The BA considers that it is the *AP's responsibility* to ensure that the site area claimed in a building proposal is the area of the site that is under the title of the building proponent or his realistic prospect of control.

**PNAP ADM-21**, titled "Site Parameters – Documentary Proof", sets down clearly documents that are acceptable as proofs of the area of the site for purpose of calculating the maximum permissible GFA or SC area in a building proposal. The PNAP continues to explain before what stage such proofs must be submitted. Please read carefully.

WRITE DOWN

What documents are acceptable by the BA to bear accurate information about the site parameters including the site area?

**Part A1**

**7.**

# DEVELOPMENT POTENTIAL UNDER BO

## THE COMPOSITE FORMULA

Definition of a "composite building" can be found in BO S2. It is a building with domestic and non-domestic parts. Composite buildings are very common in urban areas. Buildings with shops at lower floors and residential tower(s) above are composite buildings.

Unlike controls under the Planning regime (which will be discussed in Part A2,) the B(P)R does not control the sum of domestic and non-domestic PR of a site. Instead, it adopts the concept of apportioning the development potential between domestic and non-domestic uses in a composite building.

One exception to the above might happen when the site cannot be classified as a Class A, B nor C site and B(P)R19(3) needs to apply.

A challenge for Paper 1 candidates over the years is to read B(P)R21(2) and translate the English into an arithmetic expression. You should be able to do the same.

The B(P)R does not state how the SC will be controlled when there are domestic and non-domestic buildings on the same site. In current practice, usually the principle of the composite formula for determining domestic and non-domestic PR is applied to determine the allowable domestic and non-domestic SC according to their building height.

WRITE DOWN

the arithmetic expression of the composite PR formula

B(P)R19(3) (please read) applies when the site does not abut on any specified street wider than 4.5m wide and cannot be classified. In such cases, the maximum permitted building height, PR and SC will be determined by the BA. This kind of site is not uncommon along narrow streets in the old districts.

How the BA determines the site's development potential under B(P)R19(3) is not written in the law and has changed tremendously over time. Currently for redevelopments, the height, PR and SC of the original building and buildings in the vicinity of the site alongside with other considerations and will be determined on a case by case basis.

**Part A1**

**8.**

## DEVELOPMENT POTENTIAL UNDER BO

### GROSS FLOOR AREA

According to B(P)R23(3), GFA is the area contained within the **external walls of a building measured at each floor level**.

**Where is the external wall of a building? And how many levels does a building have?**

Architects undoubtedly are the experts to provide the answers to these questions. However, in reality, BD adopts its own set of interpretations of 'external walls' and 'floor levels' in reviewing building proposals submitted for BA's approval to prevent abuse (owners carrying out unauthorized building works to create extra floor areas within the building after it is occupied) and excessive building bulk (which may adversely affect the microclimate of the building's vicinity). Architects may not always agree with these interpretations, but they need to be followed for the building proposals to be approved.

PNAP APP-2 (Calculation of GFA and non-accountable GFA), APP-19 (Projections) and APP-5 (Height of Storeys Regulations) provide the current practices of BD on GFA matters.

BD's practices may change in response to external factors, such as socio-economic conditions, or new risks or opportunities introduced by emerging habits or technologies. PNAPs are under constant review by the BD, and can be changed, added or abolished under the extant consultation mechanism. Candidates of Paper 1 will NOT be examined on BD's latest interpretations of what must (or may not) be included in GFA calculations. They only need to know the fundamental principles.

**Part A1**

**8.**

# DEVELOPMENT POTENTIAL UNDER BO

## GROSS FLOOR AREA (continued)

### GFA concessions

What and how GFA can be exempted or disregarded is a delicate topic in architectural practice. The more GFA is exempted or disregarded, the more "usable", "saleable" or "lettable" areas can be provided in the building. Unless your project has no concern about the saleable or lettable areas that it yields, the GFA exemption issue always requires attentive handling throughout the entire project process.

The "what" and "how" concerning GFA concessions are provided under B(P)R23(3)(b), B(P)R23A (for hotel), and scattered in PNAP ADM-2 (Appendix E), **APP-2**, 19, 35, 40, 42, 84, 89, 93, 104, 111, 122, 126, 150, **151**, **152**, 156, 161, and Joint Practice Notes JPN 1, 2 and 4. PNAP APP-151 is singled out for candidates to learn about **mandatory features** and **non-mandatory features**, both of which may be exempted from GFA calculations but subject to different criteria. Candidates should know the criteria well.

PNAP APP-2 is also important as it elaborates how voids, curtain wall and carparks are treated in GFA calculation. PNAP APP-152 contains the sustainable building design guidelines (SBDG) which a project must follow before it can enjoy GFA exemption of non-mandatory features.

Candidates of Paper 1 need not bother themselves about the latest details of GFA concessions. They only need to know the fundamental principles.

WRITE DOWN

READ PNAP 151 and answer the following questions:

- List out 5 mandatory feature
- List out 5 non-mandatory features
- What are the pre-requisites for non-mandatory to be exempted from GFA calculations
- Which non-mandatory features' exempted GFA are not considered in the 10% cap?

**Part A1**

**9.**

# DEVELOPMENT POTENTIAL UNDER BO

## SITE COVERAGE

The maximum SC listed in the First Schedule based on the height of the building must be followed for the entire building at all floors, except for non-domestic use below 15m as allowed under B(P)R20(3). Please avoid the common misconception that different floors of the same building can follow the maximum SC for different heights of buildings in the First Schedule.

B(P)R20(3) states that the permitted SC for the non-domestic part of a composite building or a non-domestic building may be exceeded to a height not more than 15m above ground level. This regulation defines our cityscape. Until PNAP APP-132 came into place, nearly all buildings in our urban areas have a 'podium' which usually comprises of 3 storeys (not more than 15m tall) and covers the entire site area (permitted SC can be exceeded). Above the podium sits the slender tower, the SC of which follows the First Schedule. (PNAP-132 is discussed in section A1-10)

The law does not provide for the exclusion of areas from site coverage. However, in practice, provisions to exclude some building elements from site coverage, like GFA, are scattered in the practice notes.

Site coverage directly affects the number of storeys in a building. With larger site coverage, more areas can be provided on each floor, and therefore fewer number of storeys will be required to attain all the maximum permissible GFA.

**Podium covering the entire site area not always possible:**

100% site coverage for the non-domestic podium may not be possible when a project involves GFA concession. Compliance with the Sustainable Building Design Guidelines (PNAP APP-152) is a prerequisite for GFA concession, and the site set back as well as building separation criteria under the SBDG may cause 100% SC for the podium to be not achievable.

**Part A1**

**10.**

# DEVELOPMENT POTENTIAL UNDER BO

## EXCEEDING THE PR and SC IN THE FIRST SCHEDULE

B(P)R22 provides that under two circumstances, the permitted PR and SC for a site under the First Schedule may be exceeded. They are:

- B(P)R22(1) - When a part of the site facing a public street is **dedicated** for the purpose of public passage, and
- B(P)R22(2).- When a part of the site facing a public street is **acquired by government** either by agreement or by resumption for the purpose of street widening.

Note that in both cases, a part of the site is used for public passage and is contributing to public good.

Dedication is part of the building proposal and is applicable for the lifetime of the building itself only. The ownership of the area dedicated for public passage does not change with the approval and implementation of the dedication proposal. Acquisition by government, on the other hand, is initiated and required by the government. The area acquired by government for public passage will be surrendered to the government and will no longer be owned by the lot owner.

### Bonus PR and Bonus SC

Parts **(a)** and **(b)** of both **B(P)R22 (1)** and **(2)** are similar, and they describe how much the PR and SC may be exceeded. In practice we normally call these "bonus" PR and SC. The English may seem complicated, but parts (a) and (b) are actually describing two very simple formulas which you should be able to write down after reading once or twice. **PNAP APP-108** provides further elaboration. Candidates of Paper 1 should know how bonus PR and SC are calculated.

WRITE DOWN

the arithmetic expression for the formula for bonus PR and SC.

**Part A1**

**10.**

## DEVELOPMENT POTENTIAL UNDER BO

**EXCEEDING THE PR and SC IN THE FIRST SCHEDULE (continued)**

**Dedication**

Government officials are extremely careful in considering dedication proposals for bonus PR and SC, because the approval directly enlarges the square footage, hence increases the investment return of the development. Since the objective to provide bonus PR and SC under **B(P)R22** is to improve the passage for the public, Transport Department's (TD) view on the dedication proposal is critical. Note that having TD's support to your dedication proposal will not suffice. TD needs to confirm that the proposed public passage is "***essential"*** before the matter can be taken forward for consideration by the authorities.

The final destination of the dedication application journey is the execution of a "deed of dedication", in which all the commitments by the project, including the promise to provide the public passage and the amount of bonus PR and SC it can enjoy in return, are written down in a legal document. To reach this destination there are plenty of hurdles to overcome. Land matters requires particular attention, as lease modifications may be needed. The same applies for determining the dedicate area which will directly affect the amount of bonus GFA and SC. And the list goes on.

Dedication is specific to a building proposal. Future redevelopments may or may not continue to dedicate its area for public passage as had been done in the original building. When it does, the dedication proposal will be considered according to the prevailing laws and practices at the time it is proposed.

**Part A1**

**10.**

## DEVELOPMENT POTENTIAL UNDER THE BO

**EXCEEDING THE PR and SC IN THE FIRST SCHEDULE (continued)**

**PNAP APP-132 – Site Coverage**

Candidates should be aware of PNAP APP-132. Subject to conditions, this PNAP allows the building's SC to exceed the maximum permissible SC under the First Schedule.

This PNAP, first issued in 2004, allows a departure from the podium-and-tower typology which is the natural result when maximum permitted PR and SC under the First Schedule has to be followed. Candidates are encouraged to sketch out and compare the building sections based on the control of SC under the First Schedule and under this PNAP for a better understanding.

**Part A1**

**11.**

# DEVELOPMENT POTENTIAL UNDER BO

## HOTEL CONCESSIONS

Hotel developments involve high capital input and a long investment return period. To incentivize hotel developments, a series of incentives are provided under B(P)R23A, which includes

- treating the domestic GFA in a hotel as non-domestic
- allowing areas of certain uses within the hotel building be disregarded from GFA / plot ratio calculation

It is necessary to ensure that only genuine hotel development projects are allowed to enjoy these incentives. B(P)R23A(2) and (3) state that the BA "*must be satisfied that the building is constructed or intended to be used as a hotel*" for hotel concessions to apply. The conditions by which the BA will be satisfied are given in PNAP APP 40.

Note that **B(P)R23A(4)** to **(9)** continue to ensure the conditions under which hotel concessions were approved MUST be maintained throughout the life of the hotel. The penalties for offences are also stated here for those who fail to maintain the conditions.

LIST OUT

the maximum PR of a high-rise service apartment development and of a high-rise hotel development on the same site which is a Class A site.

LIST OUT

the factors that BA will consider in determining whether a building qualifies for the application of B(P)R23A

LIST OUT

what features in a hotel can be excluded from GFA calculation

**Part A2**

**1.**

## DEVELOPMENT POTENTIAL UNDER TPO

**Draft and approved plans prepared under the TPO**

Candidates are recommended to begin their study of development control under the TPO by:

- Reading the long title of Cap.131 – this summarizes the objectives of the ordinance
- Visiting the website of the Town Planning Board https://www.info.gov.hk/tpb/en/whats_new/whats_new.html
- Checking out "List of Plans" https://www.info.gov.hk/tpb/en/list_of_plans/intro.html
- Checking out "Plan-Making" https://www.info.gov.hk/tpb/en/plan_making/participate.html to know how the statutory plans are made under the Ordinance

Outline Zoning Plans (OZP), Development Permission Area Plans, and Urban Renewal Authority Development Scheme Plans are **statutory plans**. For Paper 1 assessment, Candidates only need to know how the OZPs controls building development.

**OZP**

Before you continue, visit the Statutory Planning Portal www.ozp.tpb.gov.hk and read the "Map" and "Notes" for any site you choose to "*Identify*" to get acquainted with what OZP is about.

**Part A2**

**2.**

# DEVELOPMENT POTENTIAL UNDER TPO

## CONTROLS UNDER THE OZP

Use, building height, plot ratio / GFA, site coverage etc. of a site can be controlled by draft or approved OZPs prepared under the TPO. In fact, S4(1) of the ordinance allows such plans to provide for 'any matters'. In addition to the maximum height and PR / GFA limits, the OZP may also specify other controls. Examples are building set back, a non-building area for a ventilation corridor, etc.

Candidates should study the TPO and information provided in TPB's website to understand the functions of the TPB, how OZPs are drafted and approved, and how applications to the TPB are made.

For the control of development potentials, candidates should know the following:

**Uses**

"***Uses always permitted***" and "***uses that may be permitted with or without conditions on application to the TPB***" are listed under Column 1 and Column 2 respectively in the Notes of the OZP for the particular land use zoning.

**Height**

Building height limit in the form of maximum height of building in meters above Principle Datum (mPD), maximum number of storeys (including or excluding the storeys below ground), or absolute building height in meters can be controlled by the OZP. These may be stated in the Notes or on the Plans.

**Others**

Requirements on building setback, non-building area, number of basements and provision of community facilities may also be imposed under the OZP.

LIST OUT

All land use zonings that can be found in OZPs

Find out what are the differences between

Residential (Group A)

Residential (Group B)

Residential (Group C)

**Part A2**

**2.**

DEVELOPMENT POTENTIAL UNDER TPO

**PLOT RATIO or GFA**

OZP specifies the maximum PR for some (but not all) areas it covers. This PR is generally lower than the PR permitted in the First Schedule of the B(P)R. The OZP can control the domestic PR, the non-domestic PR, or the total PR (the sum of domestic and non-domestic PR) of a site, or any combination of the above.

Very often, when a maximum PR is imposed in the OZP, redevelopments are also allowed to achieve the same PR of the existing building even when it is higher than the imposed PR. For example:

*"…no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 12.0, or the plot ratio of the existing building, whichever is the greater."* (Notes of OZP S/K1/28 - Tsim Sha Tsui, for Commercial zone)

Sometimes, the height of the existing building comes into the picture too:

*"…no new development, or addition, alteration and/or modification to or redevelopment of an existing building shall result in a total development and/or redevelopment in excess of a maximum plot ratio of 5 and the maximum building height, in terms of metres above Principal Datum, as stipulated on the Plan, or the plot ratio and height of the existing building, whichever is the greater."* (Notes of the OZP S/H11/15 – Mid-levels West, for Residential (Group B) zone)

Unlike the First Schedule of the B(P)R, control of development potential under OZP is **site specific**. Draft OZP may also be revised and updated from time to time. Whenever we encounter a new project, we should always check the restrictions from the latest statutory plans.

**Part A2**

**3.**

DEVELOPMENT POTENTIAL UNDER TPO

**Comprehensive Development Area**

Comprehensive development area (CDA) is mentioned in the BO. S16(1)(da) states that when building works are within a CDA zone of an approved or draft OZP, and if the works contravene a Master Layout Plan (MLP) approved by the Town Planning Board (TPB), then the plans will be disapproved by the BA.

The CDA zoning facilitates appropriate planning control over the development mix, scale, design and layout of development, taking account of various environmental, traffic, and infrastructural constraints, among others. Unlike other land-use zonings which list out uses that are always permitted in Column 1 of the Notes of the OZP, the Column 1 of a CDA zone is always empty. For developments within a CDA, no use is *always* permitted, and application for the TPB's approval is always required.

The Notes of OZP for CDA always require the submission of a MLP, and, depending on the specific site conditions, it may also require the submission of various impact studies to address environmental, heritage, traffic or other constraints. Maximum permitted PR and building height may also be specified in the Notes.

Plans for a building proposal on a CDA site submitted to the BA for approval will be checked against the MLP approved by the TPB. If the proposal does not tally with the approved MLP, the plans will be disapproved under BO S16(1)(da). If no MLP for the CDA site has been approved in the first place, the building proposal contravenes the OZP, and the plans will also be disapproved, but only under B(P)R16(1)(d).

**Part A3**

**1.**

# DEVELOPMENT POTENTIAL UNDER LEASE

Restrictions of use, building height, GFA, site coverage, non-building areas, size and number of residential units, number of car parks, and even the location and the disposition and shape of buildings may be included under the lease. Note that apart from capping the maximum PR or GFA, the lease might also control the minimum GFA that must be provided on the lot.

**Old Lease**

All leases are site specific and are different. For some old lease, the following restrictions may appear:

*House* – The lease allows only one "house" or a certain number of "houses" to be built on the lot.

*Offensive trades* – The lease prohibits some uses on the lot. Examples are Brazier, Slaughterman, Soap-maker, Sugar-baker, Fellmonger, Melter of Tallow, Oilman, Butcher, Distiller, Victualler or Tavernkeeper, Blacksmith, Nightman, Scavenge etc. Most of these terms are outdated and we probably have to consult the dictionary to understand their meanings. Developments with restaurants, pubs or supermarket etc. will require extra caution.

According to the latest LAO Practice notes 3/2021, the Lands Department will grant an offensive trade license upon application. In that case, a lease modification to delete the offensive trade clause is not necessary.

**New Lease**

Every lease is different. Every lease condition, especially the Special Conditions, where restrictions of the building development potential and designs are stated, must be followed.

"HOUSE"

Candidates who are interested may visit https://www.landsd.gov.hk/en/resources/practice-notes/lao.html

and look at 3/2000 and 3/2000A to learn about the restrictions if the lease states that only "house" can be provided on the lot.

This is NOT within the scope of the PA Exam.

LIST OUT

Go to LandsD's land sale website https://www.landsd.gov.hk/en/whats-new/on-going-tenders/land-sale-programme/tender-forecast/forecast_q1.html

and download the lease conditions of any upcoming tender site. List out what aspects of development potential are controlled by this lease.

aspect

**Part A-Q**

**1.**

## CANDIDATE'S QUESTIONS

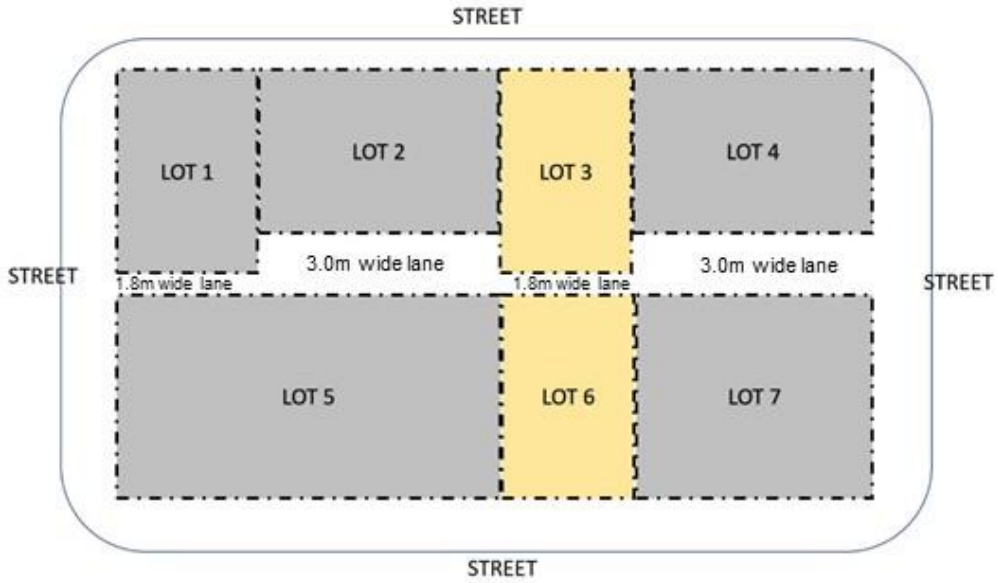
**SERVICE LANE and SITE AREA**

B(P)R28 says there must be a service lane not less than 3m at the side or rear of the site for a domestic building.

B(P)R23(3)(a) says any areas of street or service lane cannot be included in site area calculation.

If a domestic development is on Lot 1 or Lot 3, the domestic building will require a 3m wide lane and I must achieve this by contributing the remaining 1.2m from my site, and I should deduct the area of this 1.2m wide strip of land from this the area calculation. Am I correct?

However, if my site is Lot 6, must we do the same? It will be unfair if Lot 6 is required to contribute 1.2m of its site area to achieve a "3m" lane, as Lot 3 can then benefit later on when it is redeveloped, without having to contribute any areas of its site.




When faced with similar questions, many candidates often jumped to the conclusion that the areas had to be deducted from the lots (Lot 1, Lot 3 or Lot 6) because part of the site needed to be "used as a service lane". This is an overly simplistic approach and will cause problems for the candidates in the Paper 1 assessment as well as their future professional life.

A domestic development at Lot 1 does not require a service lane. Read B(P)R28(1)(a) CAREFULLY.

A domestic development at Lot 3 or Lot 6 does not necessarily require a service lane either. Read B(P)R28(1)(b) CAREFULLY. Look around our city. There are residential developments with adjoining lot boundaries, and without any service lane behind or between the lots. The stretch of residential towers between St Teresa's Church and Embankment Road along Prince Edward Road and Belfan Street / Duke Street is just one example.

**Part A-Q**

**1.**

CANDIDATE'S QUESTIONS

**SERVICE LANE and SITE AREA**

(continued)

Reduction of site area will directly result in reductions of the maximum permissible GFA and SC that can be provided on the lot. A professional architect must not make such decision or recommendation to his client without having gone through an astute analysis.

**Lot 3**

B(P)R28(1) requires the provision of service lane for a domestic building. Meanwhile, it states the circumstances under which a lane is not required. If detached or semi-detached buildings are proposed at Lot 3, B(P)R28(1)(b) is satisfied and a 3m wide lane will not be required.

But if the owner of Lot 3 wishes to achieve as much shop areas as possible at the podium floors, providing detached or semi-detached buildings will not be considered.

There remains B(P)R28(1)(c) which explicitly states that the BA may exempt the requirement of providing a service lane. Please refer to PNAP APP-73. Please read carefully.

**Part A-Q**

**1.**

CANDIDATE'S QUESTIONS

**SERVICE LANE and SITE AREA (continued)**

**Lot 6**

The 1st paragraph of PNAP APP-73 reads:

"*Service lanes, formally known as scavenging lanes, are an essential component of the urban fabric. Historically, they provided the means of removing waste from dwellings but in effect also acted as essential fire-breaks. Today, these lanes are commonly incorporated into building designs to provide sources of lighting and ventilation and routes for access and escape. Additionally, established lanes often provide a convenient neighbourhood pattern of footpaths*."

For the section of the lane between Lot 3 and Lot 6, it is only logical that the widening should be provided by Lot 3 rather than Lot 6 due to the lane's current alignment.

The architect (or more precisely the Authorized Person) of a domestic development (not being a proposal with detached or semi-detached buildings) on Lot 6 will probably apply for exemption from B(P)R28 to allow the development to be without a 3m wide lane at the rear. In such a case, the AP will need to provide justifications based on the specific conditions of the existing lane including its alignment, the site and the development proposal.

Whether or not the BA would approve such modification will depend on the individual circumstances of the case. In the end, the objectives of the BO – health, safety and environment - are always the guiding principles.

**Part A-Q 2.**

## CANDIDATE'S QUESTIONS

**SERVICE LANE and RIGHT OF WAY**

When must the area of the service lane be excluded from site area? How about a right of way?

For service lane, please read the discussion in Part A-Q 1.

**Right of way (ROW)**

Provision of **'right of way' (ROW)** within a lot is the contractual obligation of the lessor when such requirement is stated in a *legal instrument* – either a lease or a covenant between private owners. The Buildings Ordinance and its subsidiary legislations do not provide any definition of ROW.

The legal instrument can specify who has the right to pass through the ROW and during what periods of time such rights must be allowed.

Width of ROW is usually stated clearly in the legal instrument. Some covenants or leases may also specify the required clear height of the ROW, implying that the ROW can be built over and under.

Depending on its characteristics, a ROW can be a lane or a street. It can also be just a ROW, and neither a lane nor a street. In the former case, all provisions that apply to a lane or street will need to be followed. In the latter, there is no provisions in the BO to treat the area of a ROW differently to that of other parts of the site.

So the answer to this candidate's question is whether the ROW is a lane.

- If it is a lane, discussions in Part A-Q 1 may shed some light.
- If it is not a lane, then one should ask why the ROW area should be deducted, or more precisely, can S16(1) be invoked to disapprove the building proposal if the area of the ROW is not deducted from the site area.

**Part A-Q 3.**

## CANDIDATE'S QUESTIONS

**SERVICE LANE in EXAM QUESTION**

When a CDA site which is a class A site is surrounded by other private lots without any lane in between, is it necessary to provide a service lane behind when domestic use is proposed for the site?

When answering this question in PA assessment, can we assume there is already 3m wide public lane, such that we do not need to deduct the service lane area from our site?

When dealing with similar questions, candidates can demonstrate their understanding of the subject matter by listing out the assumptions based on which their answers are provided.

Example of assumptions:

If the candidate thinks a service lane should be provided and its area should be deducted from the site area, he/she must provide his/her reason(s) in the answer. Specifically, he/she should explain why B(P)28(1)(a),(b) and (c) do not apply. Also, the candidate should explain that the lane is needed for the building proposal to comply with particular regulations, codes of practice or practice notes and therefore para 6 of PNAP APP-73 does not apply. Following the above, the candidate will proceed to make assumptions on how much area of the site will need to be deducted in the calculation of maximum GFA or SC area that can be provided in the development.

OR

If the candidate thinks that there is no need to provide a service lane, he / she should also explain his/her reasons for such decision. For example, the candidate can say that buildings proposed on the site are detached or semi-detached (B(P)R28(1)(b)), or that there is no existing lane pattern (if the context of the question makes it apparent that lane pattern does not exist) and exemption as allowed under B(P)R28(1)(c) will be applied for.

*Some candidates wasted precious examination time to elaborate and calculate the site area when the question only asked for the maximum permissible PR and SC of the proposal. Please remember that the area of the site matters only when the GFA or SC area (the square footages) of the development are needed. When candidates are asked to work out the maximum permissible PR and/or SC only, the actual site area will not affect your answer.*

**Part A-Q**

**4.**

## CANDIDATE'S QUESTIONS

### RESIDENT'S CLUBHOUSE IN RESIDENTIAL DEVELOPMENT

Residents' clubhouses are often provided in private residential developments.

Since non-domestic uses like gymnasium, swimming pool, function room, reading room etc are provided in clubhouses, does it mean that residential developments with residents' clubhouses are actually composite buildings?

Although the terminology adopted in PNAP APP104 is 'recreational facilities for residential development', we will continue to call it clubhouse hereafter.

Many residential developments in HK provide clubhouses for use by their residents and bona fide visitors. Exemption of the clubhouse' areas from GFA calculation is allowed under the PNAP APP-04 and sometimes also explicitly under the lease, subject to various conditions.

- Gym, lounge, reading room, indoor pool etc are non-domestic. So clubhouse' areas are considered non-domestic GFA.
- PNAP APP-104 allows certain areas of recreational facilities to be excluded from GFA subject to conditions.
- When the clubhouse' design does not fulfil the conditions for its GFA to be exempted, or when its GFA exceeds the limit that can be exempted according to PNAP APP-104, the composite formula will need to be used to check whether the building proposal, which includes domestic and non-domestic GFA, exceeds the maximum permissible PRs under the First Schedule.

Note, however, that GFA exemption is subject to the discretion of the BA. GFA exemption practices which are stated in PNAPs can change from time to time. Furthermore, whether and how GFA is controlled in the lease conditions, which are specific to individual sites, must also be considered.

**Site Coverage for Clubhouse**

Since Clubhouse is non-domestic, its SC shall comply with the restriction of maximum permissible non-domestic SC stated in the First Schedule, except when the Clubhouse is located within 15m from street level.

**Part A-Q**

**5.**

## CANDIDATE'S QUESTIONS

**DEDICATION, SURRENDER and SITE AREA**

Surrendering a part of the site will cause reduction of its area.

Do we use the original site area or reduced site area to calculate the bonus PR /SC when there is a surrender or a dedication?

B(P)R23(2)(b) explicitly states that area dedicated for public passage shall be included in the area of the site. The regulation does not say anything about surrender.

Dedicated area (under B(P)R22(1)) is still owned by the building owner. Therefore, the intention of B(P)R23(2)(b) is obvious.

Surrender (B(P)R22(2)) is different. Once an area is surrendered, that area no longer belongs to the building owner. It becomes government land.

Based on the above,

Area **dedicated** for public passage is still part of the site owned by the lot owner and will still be included in site area upon redevelopment. (Unless the dedicated area has become part of a street at the time the redevelopment proposal is made, causing B(P)R23(2)(a) to apply. Examples will be provided in lecture.)

Area to be **surrendered** for bonus PR and SC under the building proposal is not yet surrendered and is still owned by the building owner. Therefore it can be included in the site area for the building proposal. For subsequent redevelopment, since the area will have been surrendered and will no longer be under the title of the building owner anymore, the surrendered area will not be included in site area for GFA calculation.

**Part A-Q**

**6.**

## CANDIDATE'S QUESTIONS

**EXAM QUESTION ABOUT DEVELOPMENT POTENTIAL (1)**

When answering questions about the maximum development potential of a site, do we always need to consider the PR/GFA restriction stipulated in OZP and the lease in addition to the First Schedule?

Candidates should demonstrate their understanding of how development potential is controlled in Hong Kong: the most restrictive control amongst BO, Planning and Lease regimes should be followed.

The maximum PR under these 3 regimes may be different, and the most stringent control amongst the three must be followed. The OZP and the lease may also restrict the building height differently.

In preparing for examination, candidates can try to figure out the development potential of real sites by reading the OZP online. These exercises will also be given in the form of 'homework' during the lecture series.

The Joint Practice Notes JPN 4 sets out in detail the practices that will apply when there are differences in development potential controls between the 3 regimes. While candidates of Paper 1 will not be examined for their knowledge on the details of these practices, the JPN is a good resource to facilitate a better understanding on the subject.

**Part A-Q**

**7.**

# CANDIDATE'S QUESTIONS

## EXAM QUESTION ABOUT DEVELOPMENT POTENTIAL (2)

When the examination question requires us to provide a development schedule, we need to calculate the number of storeys. How do we do that?

**Development Schedule**

Please look up PN 2/2018 in LandsD's website https://www.landsd.gov.hk/en/resources/practice-notes/lao.html to understand the list of information that should be provided in a development schedule

Shown below is an example of how we calculate the number of buildings and their storeys in a real life feasibility study for development projects:

Using a residential development on a site adopting one typical floor plan design for a few identical high-rise domestic towers as an example:

X = area of the outermost outline of the typical floor plan of the tower. Note that this outline must not protrude beyond the site boundary except when allowed under B(P)R7 and R10
Y = Site coverage area of this floor plan
Z = GFA of this floor plan

The site coverage area of the typical floor plan **Y** is usually LESS than **X** because there are features that may be excluded from site coverage calculation. Subject to conditions, these features may include

- Projections (PNAP APP-19)
- Prefabricated external façades (JPN2)
- Curtain Wall (APP APP-2)
- Half of balcony / utility platform areas (JPN1 JPN2)
- Etc.

Note that items excluded from SC are usually excluded from PR also, but not the other way round.

The GFA of the typical floor plan **Z** is usually LESS than **Y** because there are items that can be exempted or disregarded from PR but not from SC subject to conditions. Examples include

- Electrical meter rooms
- Water meter rooms
- Pipe ducts and hose reel cabinets
- Other non-mandatory features
- Etc.

**Part A-Q**

**7.**

## CANDIDATE'S QUESTIONS

**EXAM QUESTION ABOUT DEVELOPMENT POTENTIAL (2) (continued)**

SC and GFA of a floor plan

In PA assessment, candidates can make their assumptions of the SC area and GFA of a floor plan if such information are not provided in the questions – for e.g. assuming the GFA of a typical floor plan is 5% to 10% less than its SC area.

***Number of typical floors needed to attain the permitted GFA***

- obtained by dividing the maximum permissible domestic GFA (the most restrictive control among the 3 regimes) by the GFA of the typical floor plan (Z).

***Maximum number of storeys in a tower***

- obtained by dividing the permitted building height (under OZP or under lease) by a design floor to floor height. For residential towers, you may assume the storey height be anything from 2.8m (which is extremely low and probably the minimum floor to floor height needed to satisfy B(P)R24) to 3.5m (PNAP APP-5).

***Number of towers needed to attain the permitted GFA on the site***

- obtained by dividing the number of typical floors needed to attain the permitted GFA by the maximum number of storeys allowed in a tower. This is the least number of towers needed. Based on site analysis, the architect can provide more number of towers with less number of storeys, but it will be essential to ensure the maximum permitted SC under the First Schedule (and the lease as the case may be) can be complied with.

The above is a simplistic account of the process. In reality the architect will probably need to consider more than one type of typical floor plan, multiple uses of varied floor heights within the buildings, and other development constraints including noise mitigations measures, varied maximum building height limits and non-building areas controls etc specific to the site of his/her project.

Paper 1 candidates should be able to determine the maximum development potential of a site that complies with all three controlling regimes and be able to write down the development schedule(s) to show the corresponding building proposal(s). This knowledge is fundamental for practicing architects.

**Part A-E**

**1.**

## EXERCISES AND EXAMPLES

**WHICH USES ARE DOMESTIC and WHICH ARE NON-DOMESTIC?**

| | | | | | |
|---|---|---|---|---|---|
| Transform-er rooms and switch rooms | Kindergar-ten | Kitchen of restaurant | Bank | Admin. Office of a service apartment building | Restaurant |
| Gymnasium | Suite in a service apartment building | Dormitory room in refuge centre | Student hostel room | Residential flat | Rain water recycling plant room |
| Shop | University Staff quarter | Hotel ballroom | Resident's clubhouse | Watchman's quarter in school buildings | Sports arena |
| Classroom | House with living room, bedrooms etc | Canteen in a student dormitory building | Office | Hotel guestroom | University lecture hall |
| School assembly hall | Hospital ward | Laundry* | Student dormitory room | Bedroom in elderly care & attention homes | Shopping centre |
| Workshop | Factory | Carpark | Public toilet | Cinema | Caretaker's quarter of a factory |

**Part A-E**

**2.**

# EXERCISES AND EXAMPLES

## CHANGE IN USE OF BUILDING AND DEVELOPMENT POTENTIAL

When a change in use is proposed for an existing building, we must check whether there is any contravention of the BO, the OZP and the Lease if the subject part of the building is changed to the intended new use.

### BO S25 Change in Use of Building

BO S25 states that the BA must be notified in advance (one-month notice in specified form) for any intended material changes in use of buildings. BD may prohibit the change in use if the new use will cause contravention(s) of the BO, and such proposal, if submitted for approval, would be disapproved under BO S16. The issues generally include:

- **Development potential** – use, PR, SC, Heights controlled by the three regimes
- Safety – structural, fire, compatibility of existing uses that will remain in the same building (PPE, dangerous trades) etc.
- Health – lighting and ventilation, provision of sanitary fittings, drainage, etc.

### Checking of development potential for change in use of existing buildings

**Use**

- Check if the proposed use is allowed under the OZP or the Lease.

**Height**

- Check OZP and LEASE if different building height limits apply for different uses. If this is the case, you must check whether the height of the existing building satisfies the limit applicable to its proposed new use.
- Check the storey height of the existing building. Storey height that is acceptable for offices, shopping arcade, schools or factories may be excessive for domestic use. Changing high headroom spaces to domestic use might cause its areas to be counted more than once for GFA calculation purpose.

**Intensity (PR /SC)**

- Check the controls under the 3 regimes, in particular when the proposal involves the change of non-domestic areas to domestic areas. This is because the maximum permissible PR and SC is always more restrictive for domestic compared to non-domestic use, for the same Class of site and same building height under the BO. If the existing building had already maximized the development potential based on non-domestic use, a change to domestic use will likely incur major problems.

After it can be established that the development potential of the resulting building with the intended changes in use implemented can comply with restrictions under all three regimes, checking of the safety and health aspects should follow.

**Part A-E**

**2.**

## EXERCISES AND EXAMPLES

**CHANGE OF USE AND DEVELOPMENT POTENTIAL (continued)**

PLOT RATIO and SITE COVERAGE

- Check the OZP and lease conditions for any restrictions.
- Check the First Schedule. REMEMBER: unless alterations and additions are carried out to the building, the building's physical size will not change, and the GFA and SC of the existing building will also remain the same. The change in use will only cause these existing GFA or SC (or part of them) to change from domestic to non-domestic or vice versa, depending on the question.

EXAMPLE

An existing building on a Class A site of area 200m$^2$ is 25m in height. The total GFA of the building is approximately 1,000m$^2$.

- It is feasible to use the entire building for non-domestic purpose, since the non-domestic PR provided will be approx. 1,000 / 200 = 5, which is less than the maximum permissible non-domestic PR of 8.0 for height of non-domestic building over 24m but not exceeding 27m as stated in the First Schedule.
- It is NOT feasible to use the entire building for domestic use, since the domestic PR provided will be approx. 5 and exceeds the maximum permissible domestic PR of 4.4 for a domestic building of 25m height as stated in the First Schedule.
- It may still be possible to use part of the building for domestic purpose and the rest for non-domestic purposes. The composite formula will be used to verify the feasibility.

**Part A-E**

**2.**

## EXERCISES AND EXAMPLES

**CHANGE OF USE AND DEVELOPMENT POTENTIAL (continued)**

Example:
A 10-storey office building (building height 30m) is proposed to be used as staff quarters. Development summary in the record plans of the existing office building is shown on the right in grey. There are no restrictions under the OZP or the lease.

The study on the right shows that the change is NOT feasible.

| **EXISTING OFFICE BUILDING GBP Record plan** | |
|---|---|
| Class of site | B |
| Area of site | 1,000m$^2$ |
| Height of building above mean street level | 30m |
| Permitted non-domestic PR | 8.7 |
| Permitted non-domestic SC | 87% |
| Provided non-domestic GFA | 6,000m$^2$ |
| Provided non-domestic PR | 6,000 / 1,000<br>= 6.0 < 8.7 |
| Provided non-domestic site coverage area | 700m$^2$ |
| Provided non-domestic site coverage | 700 / 1,000<br>= 70% <87% |

If the same building is used for staff quarters, the GFA and SC of the building will become domestic. To check:

| **PROPOSED STAFF QUARTERS** | |
|---|---|
| Class of site | B |
| Area of site | 1,000m$^2$ |
| Height of building above mean street level | 30m |
| Permitted domestic PR | 5.2 |
| Permitted domestic SC | 52% |
| Provided domestic GFA | 6,000m$^2$ |
| Provided domestic PR | 6,000 / 1,000<br>= 6.0 > 5.2 NOT OKAY |
| Provided domestic site coverage area | 700m$^2$ |
| Provided domestic site coverage | 700 / 1,000<br>= 70% > 52% NOT OKAY |

## EXERCISES AND EXAMPLES

**CHANGE OF USE AND DEVELOPMENT POTENTIAL (continued)**

In the example it is NOT feasible to change the building to domestic use. But **WHAT IF**

- A vertical extension is built on top of the existing building such that a higher maximum PR will be allowed under the First Schedule based on the increased building height?
- Part of the existing building is demolished such that the remaining domestic PR will comply with the First Schedule?
- Some non-domestic use in the existing building is retained, such that the resulting composite building is still in compliance with maximum PR under the First Schedule and B(P)R21(2)?

*Some misconceptions and common mistakes observed in candidates' answers to a similar past PA exam question*

- *A surprisingly high percentage of candidates cannot read the correct maximum PR or SC from the First Schedule for the building when answering the question. Either the figures for domestic and non-domestic were mixed up (wrong column), or the PR / SC applicable for a height range which the height of building in question did not fall into was quoted (wrong row). Easy and straight forward as it seems, the use the First Schedule requires practice, especially when time is limited during a written examination.*

- *An equally high percentage of candidates used the composite formula to check the feasibility of changing a building from pure non-domestic use to pure domestic use. Remember: the composite formula is only used when BOTH domestic and non-domestic uses exist together in the same building at the same time.*

**Part A-E**

**3.**

## EXERCISES AND EXAMPLES

**THE BASICS: FINDING OUT THE PR and SC FOR YOUR SITE**


**EXAMPLE**

An existing tenement house building is proposed to be demolished and the site will be redeveloped to maximize the permissible GFA. The authorized land surveyor provided a land survey report which states that the site is a rectangle of 20m long and 10m wide and site area is 200m$^2$. The site and abutting streets are level at 5.6mPD.

The site abuts on two specified streets at the front and at the side (corner site). The long side abuts on a specified street of 8m width. The shorter side abuts on another specified street of 4.4m width.

**Under Lease**

- The lot is under an old lease with no development potential control restrictions.
- The site area printed on the old lease is 2,160 ft$^2$.

**Under OZP**

- The site is zoned Residential (Group A) under the OZP S-K1-28. Check out the Notes. https://www1.ozp.tpb.gov.hk/plan/ozp_plan_notes/en/S_K1_28_e.pdf

Task:
Find out the maximum PR and SC allowed for the following cases:
CASE 1 a residential development (wholly domestic)
CASE 2 an office and retail development (wholly non-domestic)
CASE 3 a composite development that maximizes domestic GFA
CASE 4 a composite development with 400m$^2$ of shops

**Part A-E**

**3.**

## EXERCISES AND EXAMPLES

**THE BASIC: FINDING OUT THE PR FOR YOUR SITE (continued)**

Suggestions of steps to be followed to answer the question:

**Step 1** **Identify the development potential limits under the three regimes.**

Step 2 Determine the development potential that should be followed

If the question requires to discuss whether it is possible to achieve PR or height that is larger than the most stringent control among the 3 regimes,

Step 3 Identify whether making planning application, lease modification or any other means may help to increase the development potential.

Step 4 Discuss what needs to be done to achieve planning or lease modification to increase development potential

**Step 1 Identify the development potential limits under the 3 regimes.**

Under Lease – Not mentioned.

Under Planning – PR and height specified.

Under BO –

**What is the class of site?**

| | |
|---|---|
| How many streets does the site abut? | 2 |
| How many of them are specified streets? | 2<br>Both maintained by HyD. B(P)R18A(3)(a)(i) |
| Out of the 2 specified streets, how many is / are more than 4.5m? | One only.<br>The other is only 4.4m wide. |
| Corner site? | Corner or not corner does not matter anymore as there is only 1 specified street >4.5m wide abutting the site. |
| Site Classification: | **It is a CLASS A Site.** |

**What is the site area?**

| | |
|---|---|
| 200.000$m^2$ as certified by the registered land surveyor<br>or<br>200.689$m^2$ according to the old lease? | PNAP ADM-21 refers.<br>The area of site in this case shall be 200.000$m^2$. |

**Part A-E**

**3.**

EXERCISES AND EXAMPLES

**THE BASIC: FINDING OUT THE PR and SC FOR YOUR SITE (continued)**

**Step 1 Identify the development potential limits under the 3 regimes (continued)**

| | Under B(P)R | Under OZP | Under Lease |
|---|---|---|---|
| Use | silent | Column 1: Flat and school always permitted<br>Office and shops always permitted at lowest 3 floors.<br>Column 2: Office and shops | silent |
| Site Area | 200.000 m2 | silent | 2160 $ft^2$ = 200,689 $m^2$ |
| Class of Site | A | | |
| Mean street level | 5.6mPD | | |
| Maximum **PERMITTED** building height | silent | 80mPD<br>equivalent to height of building of 74.4m<br>(Shop and office above the lowest 3 floors requires planning application) | silent |
| Maximum **PERMITTED** domestic PR | (Based on 74.4m) building height<br>8 | 7.5 | Silent |
| Maximum **PERMITTED** non-domestic PR | 15 | 9 minus domestic PR if composite development,<br>9 if non-domestic development | Silent |
| Maximum total **PERMITTED** PR | Not stated. But composite formula applies. | 9 | Silent |
| Max **PERMITTED** domestic Site Coverage | 33.33% | Silent | Silent |
| Max **PERMITTED** non-domestic Site coverage | 100% for part under 15m from mean street level<br>60% above 15m | Silent | Silent |

**Part A-E**

**3.**

EXERCISES AND EXAMPLES

**THE BASIC: FINDING OUT THE PR and SC FOR YOUR SITE (continued)**

**Step 2 Determine the development potential that must be followed**

**CASE 1 – RESIDENTIAL DEVELOPMENT (wholly domestic)**

The highest PR SC under the First Schedule applicable for buildings >61m tall can be used based on the height limit imposed by the OZP and the level of the site.

| CASE 1 | Under B(P)R | Under Planning |
|---|---|---|
| Site Area | 200.000 $m^2$ | |
| Class of Site | A | |
| Mean street level | 5.6mPD | |
| **Permitted** Building Height | | 80mPD<br>(equivalent to height of building of 74.4m |
| Proposed Building Height | (more than 61m) | |
| **Permitted** domestic PR | 8 | 7.5 |
| Proposed domestic PR | **7.5** | |
| Proposed domestic GFA | 1,500$m^2$ | |
| Proposed non-domestic PR | 0 | |
| Proposed non-domestic GFA | 0m2 | |
| TOTAL proposed domestic and non-domestic GFA | 1,500$m^2$ | |
| Total Proposed PR | - | 7.5 + 0 = 7.5 < 9 |

**Part A-E**

**3.**

EXERCISES AND EXAMPLES

**THE BASIC: FINDING OUT THE PR and SC FOR YOUR SITE (continued)**

**Step 2 Determine the development potential that must be followed**

**CASE 2 – OFFICE and RETAIL DEVELOPMENT (wholly non-domestic)**

Unless planning application is approved, offices and shops can only be provided at the lowest 3 floors according to the OZP. In theory when no planning application is made for this site, such development will only be of 3 storeys tall, which is around 15m in height.

| CASE 2 | Under B(P)R | Under Planning |
|---|---|---|
| Site Area | 200.000 $m^2$ | |
| Class of Site | A | |
| Mean street level | 5.6mPD | |
| Proposed Building Height | 3-storey, say 15m | |
| **Permitted** non-domestic PR | 5 | **9** |
| Proposed non-domestic PR | 5<br>(However, it is not possible for a building of only 3 storeys to provide a PR of 5.! Find out why from the First Schedule) | |

For this development, a planning application will have to be made to allow shops and offices above the lowest three storeys. If the application is approved (usually with conditions) by the TPB with maximum non-domestic PR of 9, the building must be over 30m in height to achieve the PR approved by the TPB.

**Part A-E**

**3.**

EXERCISES AND EXAMPLES

**THE BASIC: FINDING OUT THE PR and SC FOR YOUR SITE (continued)**

**Step 2 Determine the development potential that must be followed**

**CASE 3 – COMPOSITE DEVELOPMENT that MAXIMISES DOMESTIC GFA**

| CASE 3 | Under B(P)R | Under Planning |
|---|---|---|
| Site Area | 200.000 m2 | |
| Class of Site | A | |
| Mean street level | 5.6mPD | |
| Proposed Building Height | >61m | |
| **Permitted domestic PR** | 8 | 7.5 |
| Proposed domestic PR | 7.5 | |
| Proposed domestic GFA | 1,500m$^2$ | |
| **Permitted non-domestic PR** | [(8-7.5) / 8] x 15 = 0.9375 | 9 – 7.5 = 1.5 |
| Proposed non-domestic PR | 0.9375 | |
| Proposed non-domestic GFA | 187.500m$^2$ | |
| TOTAL proposed domestic and non-domestic GFA | 1,500.000 + 187.500 = 1,687.500m$^2$ | |
| Total Proposed PR | - | 7.5 (domestic) + 0.9375 (non-domestic) = **8.4375 < 9** |

**Part A-E**

**3.**

EXERCISES AND EXAMPLES

**THE BASIC: FINDING OUT THE PR and SC FOR YOUR SITE (continued)**

**Step 2 Determine the development potential that must be followed**

**CASE 4 – COMPOSITE DEVELOPMENT with 400m2 GFA of shops**

| CASE 4 | Under B(P)R | Under Planning |
|---|---|---|
| Site Area | 200.000 m2 | |
| Class of Site | A | |
| Mean street level | 5.6mPD | |
| Proposed Building Height | >61m | |
| **Permitted non-domestic PR** | 15 | 9 – 6.933 = 2.067 |
| Proposed non-domestic GFA | 400 $m^2$ | |
| Proposed non-domestic PR | 400 $m^2$ / 200 $m^2$ = 2 | |
| **Permitted domestic PR** | [(15-2) / 15] x 8 = 6.933 | 7.5 |
| Proposed domestic PR | 6.933 | |
| TOTAL proposed PR | - | 6.933 + 2.000 = 8.933 < 9 |

**Part A-E**

**3.**

EXERCISES AND EXAMPLES

**THE BASICS: FINDING OUT THE PR and SC FOR YOUR SITE (continued)**

**Step 3 Identify whether making planning application, lease modification or any other means may help to increase the development potential.**

For **Case 1** (residential development), the domestic PR is limited by the Planning regime – maximum 7.5. Para. (7) and (8) under the Schedule of Uses for Residential (Group A) of the Notes of the OZP list out the means by which the this PR limit can be exceeded.

- Para (7) is related to bonus PR for dedication or surrender under B(P)R22(1) or (2). When bonus PR is approved for dedication or for surrender, the PR limit under OZP can be increased accordingly.
- Para (8) states that minor relaxation in PR and building height may be allowed subject to individual merits of the proposed development.

For **Case 2** (office and retail development), please refer to the discussions under the table of Step 2.

**Part A-E**

**3.**

EXERCISES AND EXAMPLES

**THE BASIC: FINDING OUT THE PR and SC FOR YOUR SITE (continued)**

**Step 4 Discuss what needs to be done**

Planning applications must be supported by technical studies to address environmental, traffic, infrastructure and any other constraints specific to the proposal. Usual technical studies include

- Noise impact assessment
- Air impact assessment
- Traffic impact assessment
- Visual impact assessment
- Sewage impact assessment
- Drainage impact assessment
- Heritage impact assessment
- Etc.

For Case 2 which is a commercial development in an urban area without exceeding the height limit under OZP, it is likely that at least TIA and SIA will be required.

For lease modification, when required, similar scrutiny of technical feasibilities of the proposal also applies. When all technical issues are cleared, the lease modification approval, usually with conditions, may be subject to a land premium.