

Circular No : URA/PB/2017/02-PCUDG  
Our Ref : DC/ADMIN/CIRCULAR/PB\_17  
Date : 24 January 2017

## **CIRCULAR TO PROFESSIONAL INSTITUTES**

### **Who should know**

Architects, landscape architects, building owners and developers

### **Effective date**

With effect from 24 April 2017

**This Circular has been superseded by the Circular: URA/PB/2022/07-AUDG on “Update to the Design Guidelines for Privately Owned Public Spaces (POPS)” dated 3 June 2022.**

## **DESIGN GUIDELINES AND GOOD PRACTICE GUIDE FOR PRIVATELY OWNED PUBLIC SPACES (POPS)**

1. As part of URA’s efforts to improve the quality of public spaces, including those in private developments, URA is pleased to release the following documents:

- i. Design Guidelines for Privately Owned Public Spaces (POPS)

The Design Guidelines outline the minimum design standards to be complied with for developments which are required to provide a POPS and/or seeking GFA exemption for a first-storey covered public space (**Appendices 1 and 2**).

- ii. Good Practice Guide for Privately Owned Public Spaces (POPS)

The Good Practice Guide is intended to facilitate better design of public spaces across Singapore (**Appendix 3**). All property owners, developers and qualified professionals are encouraged to refer to and adopt the guidelines (where appropriate), from project inception and design to management and use of the space by the public.

The recommendations included in the Good Practice Guide will be considered in the assessment of Development Applications for sites with public space(s).

## **Developments required to provide POPS**

2. Property owners and developers are required to provide public spaces at certain development sites. These include:
  - i. New sites where public spaces are required as part of the Technical Conditions of Tender for Government Land Sales site; and
  - ii. Redevelopment sites where public spaces are required as part of the planning conditions for major Alterations & Additions works or redevelopment proposals. These include public space locations marked on URA’s Parks and Waterbodies Plan.

3. Developments that are required to provide public spaces, as well as those seeking Gross Floor Area (GFA) exemption for a first-storey covered public space would have to comply with the minimum design standards defined in the Design Guidelines for POPS (See [Appendix 1](#)). This set of guidelines will replace the Covered Public Spaces Guideline<sup>1</sup>.

### Submission requirements

4. Where the Design Guidelines for POPS apply, developers and property owners must submit a public space proposal and declaration of compliance. They should submit these proposals to URA's Development Control Group for approval as part of the Development Application process.
5. Please refer to [Appendix 2](#) for details of the submission requirements and the process for seeking Provisional/Written Permission and URA's clearance for the completed works.

### Implementation

6. The guidelines will take effect from 24 April 2017 and will apply to all new development applications received on or after the effective date. The guidelines will not apply to formal Development Applications (excluding Outline Applications) with a valid Provisional Permission issued prior to the effective date.
7. I would appreciate it if you could convey the contents of this circular to your members. We have updated the same in the [Development Control Handbooks](#). You are advised to refer to these Handbooks for the updated guidelines instead of referring to past circulars.
8. For other information on the master plan, urban design guidelines, private property use and approval, car park locations and availability, private residential property transactions, and conservation areas and buildings, use [URA SPACE](#) (Service Portal and Community e-Services). This is an online portal packed with useful data and visualisation to help building professionals, business operators and the general public in their decision-making. It consolidates detailed information on land use and private property into a one-stop platform presented on geospatial maps. For feedback or enquiries, please [email](#) us.

Thank you.

CHOU MEI (MS)  
GROUP DIRECTOR  
(CONSERVATION AND URBAN DESIGN)  
for CHIEF EXECUTIVE OFFICER  
URBAN REDEVELOPMENT AUTHORITY

Subscribe to [URA's mailing list](#) to get the latest updates on current and future plans and developments around Singapore

---

<sup>1</sup> The revised POPS guidelines will supersede the earlier guidelines for GFA exemption on covered public spaces (URA/PB/2004/24-DCD dated 2 Aug 2004 – Revised Guidelines on Gross Floor Area Exemptions for Covered Public Space).

## DESIGN GUIDELINES FOR PRIVATELY OWNED PUBLIC SPACES

The Design Guidelines for Privately Owned Public Spaces (POPS) should be read in conjunction with the *Good Practice Guide for Privately Owned Public Spaces* (**Appendix 3**).

Developments that are required to provide public spaces must comply with the guidelines outlined in Table 1 below.

<b>TABLE 1: DESIGN GUIDELINES FOR DEVELOPMENTS REQUIRED TO PROVIDE POPS AND/OR SEEKING GFA EXEMPTION FOR FIRST-STOREY COVERED PUBLIC SPACE</b>		
	<b>PARAMETERS</b>	<b>DETAILS</b>
1	Urban Design Guidelines	<p><u>1. Size &amp; Configuration</u></p> <ul style="list-style-type: none"> <li>The public space area should be large enough to improve the amenity of the local area and serve as a meaningful space for users. As a guide, the public space area should be at least:- <ul style="list-style-type: none"> <li>1sqm for every 50sqm of total development GFA; or</li> <li>25% of the 1<sup>st</sup> storey built footprint.</li> </ul> </li> <li>Covered public spaces should have high volume of at least 2 storeys or an appropriate height in proportion to its size.</li> <li>At least 75% of the total public space area should consist of a contiguous space which is regular in shape, subject to detailed evaluation.</li> </ul> <p><u>2. Access &amp; Location</u></p> <ul style="list-style-type: none"> <li>The public space should be located at the first storey with a frontage onto a major street or pedestrian thoroughfare.</li> <li>The public space frontage should be open and unobstructed to allow for easy pedestrian access and be highly visible from the adjoining street or pedestrian thoroughfare.</li> <li>The access and circulation within the public space should be barrier-free and comply with BCA's universal design guidelines.</li> </ul> <p><u>3. Public Seating &amp; Amenities</u></p> <ul style="list-style-type: none"> <li>Public seating should be provided. The minimum requirement is:- <ul style="list-style-type: none"> <li>1 seat/20sqm of public space area (1m of bench/ledge = 2 seats)</li> </ul> </li> <li>A variety of seating to cater to different users, age groups and physical abilities is encouraged, e.g. seats with back and arm rests are highly encouraged to cater to the elderly; movable seats to allow for interaction, etc.</li> <li>The public space may include other amenities to encourage public use of the space, such as: <ul style="list-style-type: none"> <li>Design Features: Public Art, Water Features;</li> <li>Furniture + Equipment: Tables, Play/Exercise Equipment, Built-in Lighting and Audio Equipment for events; and</li> <li>Services: Drinking Fountains, Wi-Fi Connection, Phone Charging Points.</li> </ul> </li> </ul>

		<p><u>4. Shade</u></p> <ul style="list-style-type: none"> <li>• The public space should be well shaded to encourage public use throughout the day.</li> <li>• Shade can be provided by integration within the building form, by adjacent buildings, trees, canopies/pergolas, adjustable umbrellas/awnings, and/or landscape elements.</li> <li>• The material used to provide shade must not result in additional heat retention in the public space.</li> <li>• Sun shadow study should be undertaken to demonstrate that sufficient shade is provided between 9am and 4pm. Shadow diagrams are to be studied for shadow cast on 21 Jun: at 9am, 12pm and 4pm. For each shadow diagram: <ul style="list-style-type: none"> <li>○ At least 50% of the total public space area is to be shaded; <u>and</u></li> <li>○ At least 50% of public space seating is to be shaded.</li> </ul> </li> </ul> <p><u>5. Signage</u></p> <ul style="list-style-type: none"> <li>• An information plaque should be installed at a visible and fixed location near the main entrance of the public space.</li> <li>• The plaque should include the following information: <ul style="list-style-type: none"> <li>○ Public Open Space logo measuring at least 30 cm by 30 cm;</li> <li>○ “Open to public 24 hours” statement;</li> <li>○ Public space owner and their contact information.</li> </ul> </li> <li>• Refer to <b><u>Appendix 1-1</u></b> for the template file in PDF (editable in Adobe Illustrator) and high resolution logo image;</li> <li>• All text on the signage should be highly contrasting with the background colour of the sign, at least 20mm in height, and in a highly legible font.</li> <li>• The signage must be constructed of highly durable material such as metal or stone that is fully opaque and non-reflective.</li> <li>• The signage should be integrated with other signage in the same vicinity (if any), to reduce visual clutter.</li> </ul>
2	Operational Guidelines	<ul style="list-style-type: none"> <li>• The public space: <ul style="list-style-type: none"> <li>○ Must be open to the public at all times;</li> <li>○ Cannot be enclosed and cannot be converted to any other permanent uses in the future; and</li> <li>○ Must remain as common property, in the event of strata subdivision.</li> </ul> </li> </ul>

3	Eligibility for GFA Exemption for First-Storey Covered Public Space	<p>To be eligible for GFA exemption, the first-storey covered public space should be within a development that is frequented by the general public and situated along popular pedestrian routes. These are typically:</p> <ul style="list-style-type: none"> <li>• Commercial developments / developments with significant commercial component (e.g. offices, business parks, shopping centres, hotels) or Civic &amp; Community institutions and Educational institutions; and</li> <li>• Located in Central Area, a Regional / Sub-Regional / Fringe Centre, a Growth Area (e.g. Tampines, Jurong East, Paya Lebar, Woodlands etc.) or a Town Centre.</li> </ul>
4	Extent of GFA Exemption for First-Storey Covered Public Space	<ul style="list-style-type: none"> <li>• The GFA exemption applies to the entire covered area of the public space.</li> </ul>



**OPEN TO PUBLIC 24 HOURS**

Brought to you by:

[Company Name]  
[Address Line 1]  
[Address Line 2]  
[Contact Number]  
[Contact Email]



## **SUBMISSION AND EVALUATION PROCESS FOR PRIVATELY OWNED PUBLIC SPACES (POPS)**

### For Provisional Permission/Written Permission

1. Developers and property owners who are required to provide public spaces and/or seeking GFA exemption for a covered public space must formally submit the proposal to URA's Development Control Group for approval as part of the Development Application process.
2. To ensure that these spaces are considered as an integral part of the design of the development, the proposal must be submitted as part of the development plans at the Provisional Permission (PP) Stage. Please refer to **Appendix 2-1** for a list of the submission requirements.
3. The approved public space must be constructed according to the approved plans, and verified and endorsed by URA.
4. When required by URA, the Qualified Person (QP) must submit accurately labelled photographs (in pdf file format) showing the completed public spaces and/or arrange for a site inspection upon completion of works.

## SUBMISSION REQUIREMENTS CHECKLIST FOR PRIVATELY OWNED PUBLIC SPACES (POPS)

### For Provisional Permission/Written Permission

The following checklist is a guide on the submission documents that are required to facilitate our evaluation of the proposal. Additional and/or alternative information may be submitted.

### 1. Design Statement

Please provide a short statement (may include illustrations) describing the design concept for the public space, as well as how the public space would contribute to the amenity of the proposed development and surrounding area. This should include the following:

- a) Who are the intended user groups  
*e.g. local residents, office workers, visitors from other areas of Singapore, tourists;*
- b) How is the space intended to be used  
*e.g. passive recreation, events, active recreation; and*
- c) What type of space is proposed  
*e.g. park, urban park, plaza, square, pocket park, atrium, courtyard, forecourt, sky garden, pedestrian mall/ promenade etc.*

### 2. Drawings

<u>ANNOTATED DRAWINGS:</u> <i>To illustrate the design approach and demonstrate general compliance with the guidelines.</i>	<ol style="list-style-type: none"> <li>i. Location plan;</li> <li>ii. Plans / sections / elevations at an appropriate scale to demonstrate the overall planning and design intent;</li> <li>iii. The area of public spaces, and extent of contiguous usable space on the relevant plans; and</li> <li>iv. Detailed drawings showing the proposed shade, landscape provision and location of seats;</li> </ol>
<u>ZONING AND CIRCULATION DIAGRAM:</u> <i>To demonstrate the relationship between the proposed uses, amenities, and circulation.</i>	<ol style="list-style-type: none"> <li>v. Schematic drawing illustrating zones for key programmes/activities, amenities and circulation; and</li> <li>vi. Schematic drawing illustrating key circulation routes within and adjoining site for: pedestrians, cyclists and vehicles.</li> </ol>
<u>SIGNAGE DESIGN:</u> <i>To illustrate the signage design and location.</i>	<ol style="list-style-type: none"> <li>vii. Design, dimensions, materials and method of installation of the public space signage; and</li> <li>viii. Location of the signage on the relevant plans / sections / elevations.</li> </ol>
<u>SHADOW DIAGRAMS:</u> <i>To demonstrate adequate provision of shade in public space area.</i>	<ol style="list-style-type: none"> <li>ix. Diagrams illustrating shadows cast for 21 Jun at 9am, 12pm, and 4pm. These are to clearly identify:               <ol style="list-style-type: none"> <li>a. the area of shade provided as a percentage of public space area; and</li> <li>b. the shaded seating as a percentage of total seating provided.</li> </ol> </li> </ol>

### 3. Declaration

The applicant must submit the declaration form included in **Appendix 2-2** confirming compliance with the Design Guidelines.



**DECLARATION FORM FOR PRIVATELY OWNED PUBLIC SPACE (POPS)**

<b>PART I PARTICULARS OF PROJECT</b>	
Development Name:	
Address:	
Description of Project:	
Is your development required to provide a Public Space?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Is your development seeking GFA exemption for a Covered Public Space?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<b>PART II - PARTICULARS OF THE APPLICANT (OWNER / DEVELOPER)</b>	
Company Name:	
Address:	
Contact Person:	
Contact Number:	
<b>PART III - PARTICULARS OF THE QUALIFIED PERSON</b>	
Company Name:	
Address:	
Contact Person:	
Contact Number:	
<b>PART IV - PROJECT DETAILS</b>	
Site Area: _____ sqm	1 <sup>st</sup> Storey Built Area: _____ sqm
Total GFA: _____ sqm	POPS Area: _____ sqm
<b>PART V - COMPLIANCE WITH GUIDELINES</b>	
<b>Urban Design Guidelines</b>	
<b>1. Size</b>	Public space area is at least <input type="checkbox"/> 1sqm of public space area for every 50sqm of GFA; or <input type="checkbox"/> 25% of the 1st storey built footprint. <input type="checkbox"/> Covered public space has high volume ceiling (of at least 2 storeys or an appropriate height in proportion to its size).
<b>2. Access &amp; Location</b>	<input type="checkbox"/> At the first storey with a frontage onto a major street or pedestrian thoroughfare; <input type="checkbox"/> Easily-accessible, well-linked to pedestrian network; <input type="checkbox"/> Barrier-free and comply with BCA's universal design guidelines; and <input type="checkbox"/> Public space frontage is open and unobstructed, and highly visible.
<b>3. Amenities</b>	Total no. of seats provided: _____
<b>4. Shade</b>	<input type="checkbox"/> At least half of the public area is shaded between 9 am and 4 pm. <input type="checkbox"/> At least half of the public seating is shaded between 9 am and 4 pm.
<b>5. Signage</b>	<input type="checkbox"/> At a visible and fixed location; <input type="checkbox"/> Contains required logo and content in a legible colour and font; <u>and</u> <input type="checkbox"/> Of highly durable material.
<b>Operational Guidelines</b>	
<input type="checkbox"/> Public space is open to the public at all times; <input type="checkbox"/> Public space will not be enclosed and will not be converted to any other uses in the future; <u>and</u> <input type="checkbox"/> Public space will remain as common property, in the event of strata subdivision.	

**PART VI – DESCRIPTION OF PROPOSAL**

Please include the design statement, drawings referred to in **Appendix 2-1**, and any other supporting materials, documents or information, e.g. simulations, plans, detailed drawings, shadow diagrams, artist impression, etc, that you deem will help to illustrate and support your proposal.

The submission should include the following:

S/N	Items	Checklist
1	Design statement	
2	Annotated plans, elevations and other drawings	
3	Zoning and circulation diagram	
4	Signage design	
5	Shadow diagrams	

**PART VII - DECLARATION**

I/We certify that the particulars and information given in this application are true and correct:

**Owner/Developer****Qualified Person**

Signature: \_\_\_\_\_

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

## APPENDIX 3

# GOOD PRACTICE GUIDELINES FOR PRIVATELY OWNED PUBLIC SPACES (POPS)



July 2016

## CONTENTS

### 1.0 INTRODUCTION

- 1.1 WHAT IS PRIVATELY OWNED PUBLIC SPACE?
- 1.2 TYPES OF PRIVATELY OWNED PUBLIC SPACE

### 2.0 DESIGN GUIDELINES

- 2.1 PLANNING + LAYOUT  
*Size, Location, Configuration/Shape, Open Space*
- 2.2 ACCESS + CIRCULATION  
*Access Points, Paths, Level Changes, Co-ordination*
- 2.3 USER COMFORT  
*Shade, Light, Air, Noise*
- 2.4 LANDSCAPING  
*Area, Softscape, Hardscape*
- 2.5 AMENITIES  
*Basic Amenities, Additional Amenities*
- 2.6 SIGNAGE  
*Location, Content, Material*

### 3.0 FURTHER READING

Cover Image  
© Asia Square

## 1.0 INTRODUCTION

As Singapore's urban landscape grows denser with a higher population, the provision of well-designed public spaces within private developments will complement the provision of the public parks and open spaces to promote city life and make Singapore a more attractive city to live, work and play in.

These guidelines are intended to provide clear and practical advice to architects, landscape architects, building owners and developers, so as to promote better design and management of public open space across Singapore.

### 1.1 WHAT IS A 'PRIVATELY-OWNED PUBLIC SPACE'?

Privately owned public spaces (POPS) are dedicated public spaces within private development.

Property owners and developers are required to provide public spaces at certain development sites. These include:

1. New sites where public spaces are required as part of the Technical Conditions of Tender for Government Land Sales site; and
2. Redevelopment sites where public spaces are required as part of the planning conditions for major Alterations & Additions works or redevelopment proposals. These include public space locations marked on URA's [Parks and Waterbodies Plan](#).

Property owners and developers may also voluntarily provide such public open spaces to offer amenity to their development and the surrounding area.

## 1.2 TYPES OF PRIVATELY OWNED PUBLIC SPACE

Every privately owned public open space should be designed to respond to the design intent of the overall development as well as the surrounding context.

The most common types of privately owned public spaces are:

- City Rooms** Covered public spaces located at the 1<sup>st</sup> storey of the building. They function as spaces for respite within the dense urban built environment.
- Plazas** Outdoor public spaces that are typically paved, and defined on two or more sides by buildings.
- Urban Parks** These spaces function as green lungs for the city while enhancing the attractiveness of surrounding buildings.



Images: 1 Asia Square, © Asia Square,  
2 ION Orchard, © STB

3 Plaza Singapura, © URA

## 2.0 DESIGN GUIDELINES

The design guidelines are set out to safeguard the quality of privately-owned public spaces and ensure that these spaces are well-utilised and serve as meaningful places for people for enjoy.

The guidelines set out to ensure that POPS are:

1. Integrated with the overall form of the development;
2. Accessible to all users and well connected to the surrounding area;
3. Comfortable to use throughout the day and in a variety of weather conditions;
4. Well provided with amenities to encourage active and passive recreation; and
5. Safe and secure for all users.

With the design guidelines as basic principles, designers should exercise creativity to create delightful public spaces through choice of materials (including colours and textures), the use of water elements, lighting to design light and shadows, as well as integration and placement of engaging street furniture and art works.

The guidelines cover six key areas:

1. Planning and Layout;
2. Access and Circulation;
3. User Comfort;
4. Landscaping;
5. Amenities; and
6. Signage

The recommendations included in this document serve as a good practice design guide and should not be considered as exhaustive.

For further reading on public space design, refer to 3.0 Further Reading.

#### APPLICATION OF THE GUIDELINES

All property owners, developers and qualified professionals are encouraged to refer to and adopt the guidelines.

The Design Guidelines will be used in the assessment of Development Applications for the design of POPS.



Image: Lasalle College of the Arts © Randy Loh

## 2.1 PLANNING + LAYOUT

The geometry and location of POPS should be considered upfront as part of the development during site planning. It should be an integral part of the overall form and architectural treatment of the development.

---

### 1. SIZE

- POPS should be large enough to improve the amenity of the area and be a meaningful space for users.
- As a guide, the total size of the POPS should be equal to (or greater than):
  - *1sqm of public space area for every 50sqm of total GFA of the development; or*
  - *25% of the 1st storey built footprint.*
- The following areas should be excluded from calculation of POPS area:  
*Covered Walkways, Footpaths (within Road Reserve), Outdoor Refreshment Areas (ORA), and Vehicular Driveways*
- POPS which are sheltered should have high volume of at least 2 storeys or an appropriate height in proportion to its size.

---

### 2. LOCATION

- The public space frontage should be open and un-obstructed to allow for easy pedestrian access and good visibility from the adjoining street /pedestrian thoroughfare.

---

### 3. CONFIGURATION / SHAPE

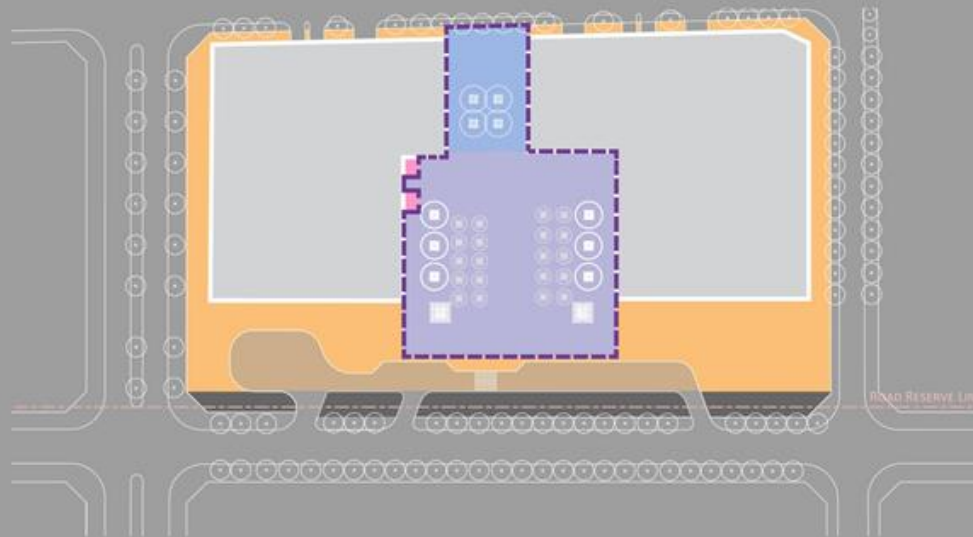
- At least 75% of the total POPS area should consist of a contiguous space which is regular in shape.

---

### 4. OPEN SPACE

- POPS should provide an open space (free of permanent furniture) designed for passive recreation and temporary event use.
- The open space should generally be equal to (or greater than) 50% of the POPS area.

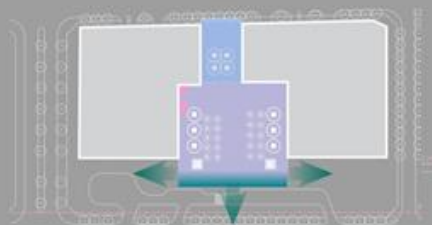




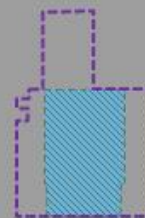
- COVERED WALKWAY
- COVERED DRIVEWAY
- OPEN WALKWAY
- ORA/ODAs
- BUILDING OUTLINE

- POPS AREA BOUNDARY
- MAIN SPACE OF POPS  
AT LEAST 75% OF THE TOTAL POPS AREA SHOULD CONSIST OF CONTIGUOUS SPACE WHICH IS REGULAR IN SHAPE.
- FIXED FURNITURE/LANDSCAPE
- MOVABLE FURNITURE/LANDSCAPE

**LOCATION**  
UNOBSTRUCTED STREET FRONTAGE



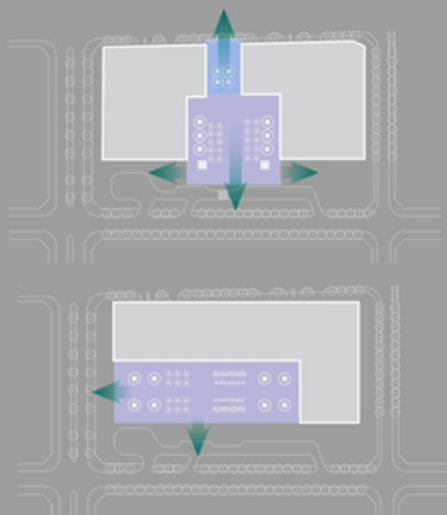
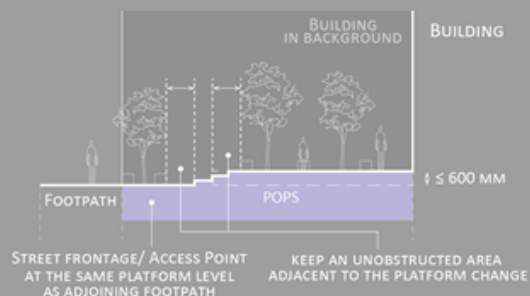
**OPEN SPACE**  
OPEN SPACE SHOULD BE EQUAL TO OR GREATER THAN 50% OF TOTAL POPS



**EVENT SPACE**  
(MOVABLE FURNITURE CAN BE REMOVED FOR EVENTS)

**ACCESS POINTS**

A MINIMUM OF 2 ENTRY/EXIT POINTS

**LEVEL CHANGES**

DIAGRAMS ARE NOT DRAWN TO SCALE.

**2.2 ACCESS + CIRCULATION**

The POPS should be accessible to all users and well-connected to the adjoining street/ pedestrian thoroughfare and neighbouring buildings. The access and circulation within POPS should be barrier-free and comply with BCA's universal design guidelines.

It should not be enclosed or fenced in and should be open to public at all times.

**1. ACCESS POINTS**

- POPS should have a minimum of 2 public entry/exit points.
- The entry/exit points should ideally be on opposite sides of the space and located to provide the most direct connection to pedestrian thoroughfares and any nearby public transport options.

**2. PATHS**

- POPS should have pedestrian paths connecting the access points to building entries and design features/amenities within the POPS area.
- The paths should be extensive and without 'dead-ends'.

**3. LEVEL CHANGES**

- Access points should be at the same platform level as the adjoining footpath.
- Where a level change is required and/or proposed for the POPS:
  - An unobstructed area adjoining to the platform change is to be provided;
  - Any single level change should not be greater than +/- 600mm.

**4. PEDESTRIAN VS VEHICULAR TRAFFIC**

- POPS should be 'pedestrian only' zones.
- Where a vehicle drop-off point and/or car park access ramps is located adjacent to the POPS, pedestrian crossing points should be provided and clearly marked.
- Overall site planning should consider pedestrian, cyclist and vehicular movements and ensure that these are co-ordinated and de-conflicted to ensure safety and convenience for all users at peak periods.

## 2.3 USER COMFORT

POPS should be designed to provide users with comfort throughout the day and in a variety of weather conditions.

### 1. SHADE

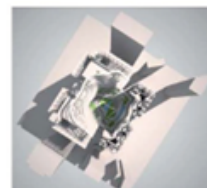
- POPS should be well shaded to encourage public use throughout the day.
- Shade can be provided by integration within the building footprint, or by adjoining or adjacent buildings, trees, canopies/pergolas, adjustable umbrellas/awnings, and/or landscape elements.
- Sun shadow study is to be undertaken to demonstrate that sufficient shade is provided between 9 am and 4 pm. Shadow diagrams are to be studied for shadow cast on 21 June: at 9am, 12pm and 4pm. For each shadow diagram:
  - At least 50% of the POPS area is to be shaded; and
  - At least 50% of POPS seating is to be shaded.

### 2. LIGHTING

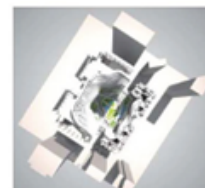
- POPS should be attractively lit to create an environment which is welcoming and safe.
- Spaces should ideally be naturally lit during daylight hours and be artificially lit until 10pm to encourage nighttime use of the space.
- Night lighting should complement the overall lighting design for the development, and be guided by any prevailing night lighting guidelines for the area.
- Where the POPS is located within a Mixed Use Development and adjacent to/visible from residential units, night lighting design should maintain the amenity of residents and ensure that light is directed away from residential units.

### EXAMPLE OF SHADOW DIAGRAMS

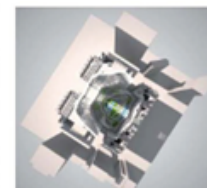
SOURCE: MARINA ONE DAP 2 REPORT, GUSTAFSON PORTER



9 AM  
95% SHADED POPS AREA  
100% SHADED SEATING



12 PM  
50% SHADED POPS AREA  
75% SHADED SEATING



4 PM  
90% SHADED POPS AREA  
90% SHADED SEATING

Image © Gustafson Porter

### 3. VENTILATION

- POPS should be naturally ventilated and orientated to optimise prevailing wind conditions and create a comfortable, passively cooled environment throughout the day.
- Where necessary consider use of outdoor fans/mist systems to supplement passive cooling.

### 4. NOISE

- POPS should be protected from major external noise sources.
- Where necessary consider using water features and landscape elements to mask unwanted external noise.

### 5. EXHAUST VENTILATION DUCTS

- Exhaust ventilation ducts should not be located within or fronting POPS.
- These should be located and integrated within the building envelope and discharged away from public areas.



## 2.4 LANDSCAPING

POPS should be lushly landscaped, to achieve Singapore's aspirations to be a 'City in a Garden'.

### 1. AREA OF SOFTSCAPE / HARDSCAPE

- POPS should include both softscape (grass, planter beds, trees) and hardscape (paving) elements to suit the development typology and the site context.
- The recommended areas of softscape are:
  - 10-20% of the POPS areas which are covered and/or planned for large scale/regular events use; and
  - 20-40% of the POPS areas which are open-to-the-sky.
- POPS which comprise predominantly hardscape should include vertical greenery.

### 2. SOFTSCAPE

#### Trees

- POPS should include trees to provide shade in spaces which are open-to-the-sky.
- Spaces which are open-to-the-sky should include 1 tree/100sqm of POPS area.
- Tree species should be selected to suit the site conditions and space typology, and to ensure long term sustainable growth.
- Trees can be planted in raised planters where POPs are located above basement spaces or drainage canals.

#### Grass

- Grass is encouraged in larger spaces which are planned for active recreation by local area residents/workers e.g. informal sporting use, kite flying, etc.

#### Planter Beds

- Where possible, planter beds should be flushed with the ground, or raised to no more than 400-500mm above the finished floor level to create additional ledge seating.

### 3. HARDSCAPE

- Paving is encouraged in high-traffic areas/paths and for open spaces which are planned for large scale/regular events use.



## 2.5 AMENITIES

Amenities encourage people to stop, relax and enjoy the public space. Design of amenities should be inclusive to serve different uses and user groups.

### 1. BASIC AMENITIES

All POPS should include the following basic amenities:

#### A. Seating

- Seating should be located throughout the space and there should be a variety of seating to cater to different uses, age groups and physical abilities.
- As a guide, POPS should include at least 1 seat/20sqm of POPS area. (1 metre of bench/ledge = 2 seats).
- The different types of seating are: movable seating, and fixed seating such as seats and benches, walls, planter ledges, steps. As a guide:
  - No more than 15% of seating should be on steps or ledges; and
  - At least 50% of seats should have back and arm rests.
- Seats are to be made of durable and comfortable materials. Seats with materials which are highly heat absorbent should be located in shaded areas.

#### B. Bicycle Parking

- POPS should include bike racks directly adjacent but not within/inside the space.

### 2. ADDITIONAL AMENITIES

- Large POPS should consider additional amenities, such as:
  - Design Features : Public Art, Water Features
  - Furniture + Equipment: Movable Seating, Tables, Play/Exercise Equipment, Built-in Lighting and Audio Equipment for events
  - Services for Public Use: Drinking Fountains, Wi-Fi, Phone Charging Points
- As a guide, additional amenities should be provided as follows:

POPS Area	Additional Types of Amenities Req'd
500-1,000 sqm	1
1,000 – 2,000 sqm	2
Over 2,000 sqm	3



Images 1 © Asia Square; 3 © Travel Drafts; 2, 4, 5 © URA

## 2.6 SIGNAGE

The provision of clear, visible, and readable signage is essential to identify POPS as accessible to the public, and inform the public about the provider of the public space.

### 1. LOCATION

- An information plaque is to be installed at a visible and fixed location near the main entrance of the public space.

### 2. CONTENT

- The information plaque is to contain the following information:
  - Public Open Space logo measuring at least 30 cm by 30 cm;
  - “Open to public 24 hours” statement;
  - Public space owner and their contact information.

*See image on the right for example. Please refer to [Appendix 1-1 of Circular URA/PB/2017/02-PCUDG](#) on POPS Design Guidelines for template of the logo.*

- All text on the signage is to be highly contrasting with the background colour of the sign, at least 20mm in height, and in a highly legible font.

### 3. MATERIAL

- The signage must be constructed of highly durable materials such as metal or stone that are fully opaque and non-reflective.

POPS signage should be integrated with other signages within the development, and in the same vicinity where possible to reduce visual clutter.



### 3.0 FURTHER READING

**Carmona, Matthew and T. Heath, T. Oc, S. Tiesdell.** *Public Places, Urban Spaces: The Dimensions of Urban Design*. Architectural Press. Burlington, MA. 2003.

**Carmona, Matthew and C. Magalhaes, L. Hammond.** *Public Spaces: The Management Dimension*. Routledge. New York. 2008.

**Gehl, Jan.** *Cities for People*. Island Press. 2010.

**Gehl, Jan.** *Life between Buildings: Using Public Space*. Island Press. 2011.

**Lynch, Kevin.** *Site Planning*. Cambridge, Mass.: MIT Press. 1962.

**Marcus, Clare Cooper and Francis, Carolyn.** *People Places: Design Guidelines for Urban Open Spaces* 2<sup>nd</sup> Ed. John Wiley and Sons, Inc. 1998.

**Whyte, William H.** *City: Rediscovering the Centre*. Doubleday. 1988.

**Whyte, William H.** *The Social Life of Small Urban Spaces*. The Conservation Foundation. Washington DC. 1980.