SALE OF SITE
FOR WHITE SITE DEVELOPMENT
LAND PARCEL
AT WOODLANDS AVENUE 2

TECHNICAL CONDITIONS OF TENDER

<table>
<thead>
<tr>
<th>CONTENTS</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PART I        GENERAL</td>
<td>2</td>
</tr>
<tr>
<td>PART II       PLANNING CONCEPT</td>
<td>3 - 4</td>
</tr>
<tr>
<td>PART III      SUMMARY OF PLANNING &amp; URBAN DESIGN REQUIREMENTS</td>
<td>5 - 6</td>
</tr>
<tr>
<td>PART IV       PLANNING &amp; URBAN DESIGN REQUIREMENTS</td>
<td>7 - 31</td>
</tr>
<tr>
<td>PART V        OTHER REQUIREMENTS</td>
<td>32 - 36</td>
</tr>
<tr>
<td>ANNEX A1</td>
<td>37 - 38</td>
</tr>
<tr>
<td>ANNEX A2</td>
<td>39</td>
</tr>
<tr>
<td>ANNEX A3</td>
<td>40 - 41</td>
</tr>
<tr>
<td>ANNEX A4</td>
<td>42 - 43</td>
</tr>
<tr>
<td>ANNEX B</td>
<td>44 - 48</td>
</tr>
</tbody>
</table>
PART I  GENERAL

1.1 The Urban Redevelopment Authority ("the Authority"), acting as agent for and on behalf of the Government of the Republic of Singapore ("the Government"), is inviting offers for lease by tender for the Land Parcel at Woodlands Avenue 2 ("the Land Parcel") for a mixed-use development.

1.2 The lease and development of the Land Parcel is subject to these Technical Conditions of Tender and the Conditions of Tender contained in the eDeveloper's Packet. In these Technical Conditions of Tender, where the context so admits, the expression "the Authority" includes the Government.

1.3 The successful tenderer must in addition to the Conditions of Tender observe and comply with these Technical Conditions of Tender. These Technical Conditions of Tender are to be read together with the Control Plans and the Conditions and Requirements of Relevant Competent Authorities & Public Utilities Licensees provided in the eDeveloper’s Packet.
PART II  PLANNING CONCEPT

Site context

2.1 The Land Parcel is located within Woodlands Regional Centre which is envisioned as the Northern Gateway to Singapore and the main commercial hub in the North region.

2.2 There will be two distinctive precincts within the Woodlands Regional Centre – Woodlands Central and Woodlands North Coast. Woodlands Central, where the Land Parcel is located at, is envisioned as a walkable, pedestrian-centric regional retail and employment hub serving the surrounding residents, as well as those in the North region.

2.3 Woodlands North Coast is envisioned as a unique waterfront destination offering a wide range of employment and investment opportunities, with a mix of business, residences and lifestyle uses, set within a lush green environment.

2.4 The detailed plans for Woodlands Regional Centre can be viewed on the Master Plan 2014 website at http://www.ura.gov.sg/Corporate/Planning/master-plan.aspx.

Convenient Rail and Road Access

2.5 Woodlands Central is served by the existing Woodlands MRT Station and Bus Interchange. In 2019, it will become an interchange station with the Thomson-East Coast Line (TEL), and additionally provide for direct connection to the City. It will also be one stop away from the Woodlands North Station, which will interchange with the future cross-border rail link to Johor Bahru.

2.6 Woodlands Central is also easily accessible via major roads like Seletar Expressway, Bukit Timah Expressway and the planned North South Corridor.

Sustainable Development

2.7 As part of Singapore’s blueprint for sustainable development, Woodlands Regional Centre is envisaged as a sustainable, high-density and mixed-use district. A key initiative being implemented for the area is for all developments to be designed to a minimum Green Mark standard of GoldPLUS rating and to include extensive greenery replacement.

Land Parcel at Woodlands Avenue 2

2.8 The Land Parcel is located along Woodlands Avenue 2, immediately adjacent to Causeway Point and close to Woodlands Civic Centre, providing access to amenities such as retail, food & beverage and entertainment uses. It is also
close to the upcoming commercial office development Woods Square. With its central location above the Woodlands MRT TEL Station, and near the Woodlands MRT North-South Line (NSL) Station and Regional Bus Interchange, the Land Parcel has the potential to be developed into a distinctive mixed-use development. The development will be connected to the adjacent developments via a planned comprehensive pedestrian network of at-grade, underground and elevated walkways with barrier-free provisions allowing for easy access to existing and future amenities within the district.

2.9 Companies that take up office spaces in the future development on the Land Parcel can tap on the nearby HDB towns in Woodlands, Sembawang, Yishun and Choa Chu Kang for their potential workforce, as well as business opportunities in the nearby industrial clusters at Woodlands, Senoko and the future agri-tech hub in Sungei Kadut, and the upcoming commercial developments in Woodlands Regional Centre. Workers and residents of the future mixed-use development can leverage the convenient public transport infrastructure and proximity to amenities within and near the development, while retail operators can benefit from the large catchment of nearby residents, as well as the high footfall resulting from the direct connection to the MRT station.
PART III  SUMMARY OF PLANNING & URBAN DESIGN REQUIREMENTS

3.1 The following planning and urban design requirements aim to achieve a high quality and well-designed development. These requirements serve to relate the development on the Land Parcel to the planned development of the Woodlands Regional Centre.

3.2 A summary of the planning and urban design requirements is set out in Table 1. The detailed planning and urban design requirements are set out in Part IV.

Table 1: Summary of Planning & Urban Design Requirements for the Land Parcel

<table>
<thead>
<tr>
<th>PARAMETERS</th>
<th>PROVISIONS / REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Area</td>
<td>Plot 1: 21,055.7 m²*</td>
</tr>
<tr>
<td></td>
<td>Plot 2: 6,450.3 m²*</td>
</tr>
<tr>
<td></td>
<td>Plot 3: 746.2 m²* (air space)</td>
</tr>
<tr>
<td></td>
<td>The subterranean space occupied by the Woodlands MRT TEL Station is excluded from the Land Parcel.</td>
</tr>
<tr>
<td>Land Use/Zoning</td>
<td>White</td>
</tr>
<tr>
<td></td>
<td>(Hotel use not allowed)</td>
</tr>
<tr>
<td>Gross Floor Area (GFA) and Allowable Uses</td>
<td>Maximum GFA (Plots 1, 2 &amp; 3): 115,747 m²</td>
</tr>
<tr>
<td></td>
<td>Minimum GFA (Plots 1, 2 &amp; 3): 104,172 m²</td>
</tr>
<tr>
<td></td>
<td>Minimum 45,000 m² of the total GFA shall be developed for Office use.</td>
</tr>
<tr>
<td></td>
<td>Remaining GFA: Additional office, commercial school, serviced apartments, residential flats and/or commercial uses</td>
</tr>
<tr>
<td></td>
<td>Maximum GFA of 33,000 m² for the commercial uses stated in Condition 4.2.6.</td>
</tr>
<tr>
<td></td>
<td>For the purpose of bonus GFA computation, the permissible bonus GFA shall be based on the total approved GFA of Plots 1 and 2 or 115,525 m², whichever is lower.</td>
</tr>
<tr>
<td></td>
<td>The details are set out in Part IV, Condition 4.2.</td>
</tr>
<tr>
<td>Building Height **</td>
<td>The development on the Land Parcel is subject to the following building height controls, as shown in the</td>
</tr>
<tr>
<td>Control Plans and as set out in Part IV (Condition 4.8):</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Plot 1:</td>
<td></td>
</tr>
<tr>
<td>Low-Rise Zone: 5 storeys, subject to LTA’s loading</td>
<td></td>
</tr>
<tr>
<td>requirements for areas above the TEL Station</td>
<td></td>
</tr>
<tr>
<td>High-Rise Zone: 90m Above Mean Sea Level (AMSL)</td>
<td></td>
</tr>
<tr>
<td>Plot 2:</td>
<td></td>
</tr>
<tr>
<td>High-Rise Zone: 90 to 100m AMSL, subject to LTA’s</td>
<td></td>
</tr>
<tr>
<td>loading requirements for areas above the TEL Station</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strata Sub-Division</th>
</tr>
</thead>
<tbody>
<tr>
<td>The successful tenderer shall not strata subdivide the</td>
</tr>
<tr>
<td>development unless in such a manner that the whole of the</td>
</tr>
<tr>
<td>development, excluding any GFA for use for residential</td>
</tr>
<tr>
<td>flats and/or serviced apartments, shall consist of not</td>
</tr>
<tr>
<td>more than 8 strata lots.</td>
</tr>
<tr>
<td>The details are set out in Part IV, Condition 4.6.</td>
</tr>
</tbody>
</table>

* Subject to final cadastral survey.

** For information of tenderers, all construction equipment and temporary structures, such as cranes, piling rigs etc. are to comply with the requirements of the relevant Competent Authorities.
PART IV  PLANNING & URBAN DESIGN REQUIREMENTS

4.1 General Guidelines

Development Control

4.1.1 The successful tenderer shall comply with the Development Control (DC) Guidelines issued or may be issued by the Competent Authority under the Planning Act.

4.1.2 The successful tenderer’s Qualified Person shall submit a Development Statement of Intent (DSI) together with their development proposal submitted to the Competent Authority under the Planning Act (Cap. 232) at the formal submission stage as per prevailing guidelines and circulars issued by the Competent Authority.

4.1.3 Given the prominent location, the design of the development is to relate sensitively to the surrounding context and enhance the experience of the streetscape. The detailed design and architectural treatment of the proposed development will be evaluated in detail by the Competent Authority at the Development Control stage. Relevant plans, sections, elevations, renderings, digital 3D model(s), etc., shall be submitted for evaluation and approval.

Access into State Land

4.1.4 For the purpose of entering State Land to do any works for the purpose of or in relation to the proposed development as may be required under these present Technical Conditions of Tender or Conditions of Tender, the successful tenderer shall obtain a Temporary Occupation Licence (TOL) from the Singapore Land Authority (SLA) for use of the State Land. The TOL may be granted on such terms and conditions and subject to the payment of such charges and fees as the SLA may determine.

Deviations from Planning Requirements

4.1.5 The requirements set out in this Part relating to location, height, size, area or extent of uses, etc. are specified with a view to achieve the relevant planning objectives as outlined or indicated in the provisions in this Part. The successful tenderer may submit for the Authority’s consideration alternative proposal to any such requirements. Where the Authority is satisfied that the alternative proposal will also serve to achieve the planning objective relevant to the requirement, the successful tenderer may be allowed to adopt such alternative proposals instead in which event the relevant provisions in this Part shall be deemed to be complied with. The Authority however reserves the absolute


discretion to decide whether or not to allow any alternative proposal to be adopted.

4.2 Land Use and Quantum

4.2.1 The Land Parcel is zoned for White use and is to be developed with minimum office use, as stated under Condition 4.2.3, together with complementary and supporting uses that will contribute to create an attractive development and add vibrancy to Woodlands Central.

4.2.2 The maximum permissible GFA of the development is 115,747 m² and the total GFA to be built is not to be less than 104,172 m².

4.2.3 At least 45,000 m² of the maximum permissible GFA of the development is to be for office use. No commercial school is allowed as part of the minimum office GFA.

4.2.4 The remaining GFA can be developed for additional office, commercial school, serviced apartment, residential flat and other commercial uses as stated in Condition 4.2.6, of such types and quantum as may be approved by the Competent Authority under the Planning Act (Cap. 232):

4.2.5 No hotel use is allowed within the development.

4.2.6 A maximum GFA of 33,000 m² in Plots 1, 2 and 3 can be for the following commercial uses:

(a) Shops and restaurants;
(b) Outdoor Refreshment Areas (ORAs); and
(c) Other commercial uses (excluding office, commercial school) such as fitness centres, gyms, medical clinics, bars, pubs, amusement centres, massage establishments, cinemas, etc. as may be approved by the Competent Authority under the Planning Act (Cap. 232).

4.2.7 For the purpose of bonus GFA computation, the permissible bonus GFA shall be based on the total approved GFA of Plots 1 and 2 or 115,525 m², whichever is lower.

4.2.8 All tenderers are advised to carry out their own simulation studies to ascertain the achievable GFA for the proposed development, particularly if any additional GFA allowable under the prevailing DC Guidelines is included in the development. Such simulation studies should take into account all relevant considerations including the technical height constraint and existing ground conditions of the Land Parcel as well as the possible need to provide basements.
4.2.9 Any additional GFA exceeding the maximum permissible GFA for the development on the Land Parcel will be subject to the prevailing DC Guidelines and the approval of the Competent Authority under the Planning Act. This additional GFA may be subject to the payment of Differential Premium, if applicable.

4.3 **Uses at Plot 3**

4.3.1 The successful tenderer is required to construct an Elevated Pedestrian Link (EPL) within Plot 3 air space, which will connect Plots 1 and 2 of the future development. The successful tenderer is allowed to provide activity generating uses along one or both sides of the EPL within Plot 3.

4.4 **Activity-Generating Uses**

4.4.1 Activity-generating uses, such as shops, restaurants, and other such uses are required at the 1st storey, 2nd storey and / or at Basement Level 2, fronting the pedestrian networks and public spaces as set out in Conditions 4.15 to 04.15, and as shown in the Control Plans..

4.4.2 The GFA for these uses will be computed as part of the maximum permissible GFA of the Land Parcel, and will count towards the maximum GFA of 33,000 m$^2$ permitted for the commercial uses set out in Condition 4.2.6. The allowable Shop and Restaurant GFA for the development will be subject to the prevailing DC Guidelines issued by the Competent Authority under the Planning Act.

4.5 **Outdoor Refreshment Areas (ORAs)**

4.5.1 ORAs are allowed fronting the public spaces of the development. The GFA for the ORAs will be computed as part of the maximum permissible GFA of the Land Parcel, and will count towards the maximum GFA of 33,000 m$^2$ permitted for the uses set out in Condition 4.2.6. These ORAs will be subject to the prevailing DC Guidelines issued by the Competent Authority under the Planning Act.

4.5.2 Where allowed, the ORAs are intended to be additional outdoor seating as an extension to a restaurant or café within the development. These ORAs should not compromise other street activities, circulation requirements and pedestrian or traffic safety.

4.5.3 The detailed design and layout of the ORAs will be subject to approval from the Authority and the relevant Competent Authorities. The type of structures, lightweight covers / shading devices, screens, furniture, etc., for the ORAs are to be designed to enhance the streetscape and character of the area, and to complement other elements such as public art, paving, landscaping, etc. The materials and finishes of the ORAs shall be of good quality and easy to maintain to ensure that these structures remain presentable at all times and
do not deteriorate over time. The storage of any utensils, preparation of food and beverages, or storage and collection point of refuse within the ORAs is not permitted.

4.6 **Strata Sub-Division**

4.6.1 The successful tenderer shall not strata subdivide the development unless in such a manner that the whole of the development, excluding any GFA for use for residential flats and/or serviced apartments, shall consist of not more than 8 strata lots, of which the 8 strata lots shall include the strata lots mentioned in (a) and (b) below, to be collectively known as “the Non-Residential Strata Lots”:

a) All the GFA for office use within the development shall be comprised in not more than 5 strata lots; and

b) All the GFA within the development which are not for office, residential flats or serviced apartments use, including the GFA for commercial uses as stated in Condition 4.2.6, shall be comprised in not more than 3 strata lots.

4.6.2 All the GFA for residential flat use (if any) shall be strata subdivided and a subsidiary management corporation (the “Residential Subsidiary Management Corporation”) representing the interests of all the subsidiary proprietors of the residential flats shall be formed.

4.6.3 If the development includes residential flat use, the public spaces within the development as stated in Condition 4.15 shall not be designated as common property under the control, management and administration of the management corporation of the development or as limited common property which is under the control, management and administration of the Residential Subsidiary Management Corporation. Each of the public spaces shall be either located within one of the Non-Residential Strata Lots or designated as limited common property under the control, management and administration of a subsidiary management corporation which comprises the subsidiary proprietors of two or more Non-Residential Strata Lots.

4.6.4 For the avoidance of doubt, the share value applicable to each strata lot is subject to the approval of the Commissioner of Buildings appointed under the Building Maintenance and Strata Management Act (Cap. 30C).

4.7 **Building Form and Massing**

4.7.1 The building form, massing and façade treatment of the development is to be well-articulated and well-integrated with greenery. The articulation and placement of the tower block(s) shall allow sufficient visual porosity such that
the development will not create a wall-like effect when viewed from all elevations. The provision of generous public spaces, balconies, sky terraces and roof gardens as part of the overall form and architectural treatment of the building is strongly encouraged.

4.7.2 Consideration is to be given to how the building form and massing relate and respond to the adjacent Causeway Point, the Woodlands MRT Station and viaduct, and the surrounding public housing developments along Woodlands Avenue 2.

**Building Facades**

4.7.3 The design of the building form and architectural treatment of the development is to respond to the tropical climate. The facades of the development fronting Woodlands MRT TEL Station, Woodlands MRT NSL Station, Woodlands Avenue 2, Woodlands Avenue 5, South Woodlands Drive and Woodlands Square are to be treated as main building elevations. No blank facades, services and other back-of-house uses shall be located along any of these elevations. All services and servicing areas are to be located away from the main roads and the pedestrian malls, be well-integrated into the building form and be well-screened.

4.7.4 Along the main elevation, the building facades of the development are to be well-articulated with solid (walls) / void (fenestration) areas that draw upon a combination of different materials (e.g. concrete, brick, steel, glass, greenery, etc.). Full-height glass facades are not allowed.

4.7.5 To create visual interest and to further break down the building mass, elements of tropical architecture such as sky terraces, balconies, sun-shading louvres, deep recesses, window ledges, roof terraces, communal planter boxes and vertical green walls are to be provided as part of the development and integrated with the overall building form and architectural treatment of the development.

**Porosity**

4.7.6 The building form and massing should not result in a wall-like development. A visual and physical porosity of minimally 15% of the site frontage of Plot 1, is to be maintained across the site at the elevation along Woodlands Avenue 2, and at the elevation along Woodlands Square and South Woodlands Drive, such that the development is articulated as three or more distinct building forms within Plot 1, as shown in the Control Plans.

4.7.7 The spaces between the buildings are to be designed as attractive landscaped public spaces that are well-integrated with the overall design and pedestrian network. These spaces are to be naturally ventilated, and may be covered
with lightweight structures such as canopies, or be open to the sky. Link-
bridges across these spaces can also be considered.

Perimeter Treatment

4.7.8 As a high degree of visual and physical porosity is envisioned at ground level,
the use of fences or boundary walls for access control is not allowed. Alternative methods of access control which are well integrated with the public
realm and greenery shall be proposed by the successful tenderer. These
include treatments such as planting, landscape berms and terraces,
landscape decks and security-controlled lift lobbies, etc.

4.8 Building Height

4.8.1 Building height controls have been specified for the Land Parcel to guide the
development to relate to the surrounding context and developments, and to
create an attractive skyline profile for Woodlands Central.

Plot 1:

High-Rise Zone

The development may be built up to a maximum technical building height of
90m AMSL, as shown in the Control Plans. Areas above the Woodlands MRT TEL Station are also subject to LTA’s loading requirements, which allow for
approximately 5 commercial storeys, and will be subject to the requirements
and approval of LTA.

Low-Rise Zone

The remaining parts of the development may be built up to a maximum
building height of 5 storeys, as shown in the Control Plans. As most of the low-
rise zone is above the Woodlands MRT TEL Station, it is subject to LTA’s
loading requirements, which allow for approximately 5 commercial storeys,
and will be subject to the requirements and approval of LTA.

Plot 2:

High-Rise Zone

The development may be built up to a maximum technical building height of
90m to 100m AMSL, as shown in the Control Plans. However, areas above
the Woodlands MRT TEL Station are also subject to LTA’s loading
requirements, which allow for approximately 5 commercial storeys, and will be
subject to the requirements and approval of LTA.
4.8.2 All construction equipment and temporary structures, such as cranes, piling rigs, etc., are to comply with the requirements of the relevant Competent Authorities.

4.9 Building Platform Level

4.9.1 There is an approximately 3.5m and 1.5m level difference within Plot 1 and Plot 2 respectively. The design of the development is to consider how the building platform levels of the development are designed to relate seamlessly to the surrounding road levels and adjacent buildings, so as to ensure an attractive and barrier-free pedestrian environment at the 1st storey.

4.9.2 The level differences stated above are subject to detailed survey by the successful tenderer.

4.10 Building Setback

4.10.1 The development on the Land Parcel is to be set back from the boundary to create space for landscaping, in line with the vision for Woodlands Central as a lushly landscaped precinct. The design and detailed landscaping proposal is subject to approval from the National Parks Board (NParks) and the Authority at the formal submission stage.

4.10.2 The development on the Land Parcel is subject to the following setback controls, as shown in the Control Plans:

   a) The development on the Land Parcel is to be set back a minimum of 5.0m from the common boundary adjacent to the Woodlands MRT TEL Station entrance and Woodlands MRT viaduct on Plot 1. The setback for the proposed development must also comply with the Code of Practice for Railway Protection on the minimum separation distance between the proposed building and MRT Structures.
b) The development is to be set back a minimum of 1.2m / 2.4m / 3.6m from the common boundary adjacent to the Woodlands MRT NSL Station and Regional Bus Interchange on Plot 2. The setback for the proposed development must also comply with the Code of Practice for Railway Protection on the minimum separation distance between the proposed building and MRT Structures. The setback area adjacent to the covered walkway shall be treated with landscaping (see Figure 1).

Figure 1: Section showing building setback area within Plot 2 facing Woodlands MRT NSL Station and Regional Bus Interchange
c) The development on the Land Parcel is to be set back a minimum of 5.0m from the line of Road Reserve along Woodlands Avenue 2 and Woodlands Avenue 5 on Plot 1, including a minimum 2.0 m wide pedestrian walkway and a minimum 3.0m wide green buffer planted with a row of trees abutting the Covered Walkway (see Figure 2).

![Figure 2: Section showing 5.0m building setback area within Plot 1 along Woodlands Avenue 2 and Woodlands Avenue 5](image)

d) The development on the Land Parcel is to be set back a minimum of 3.0m from the line of Road Reserve along Woodlands Square and South Woodlands Drive on Plot 1. The setback area is to be designed and landscaped as open landscaped walkways, providing a wider at-grade pedestrian area. The landscaping within the open landscaped walkways is to include a planting area of minimum 2.0m width green buffer abutting the site boundary to complement the tree planting within the roadside table. This planting area shall be designed as pockets of green spaces with trees and shrubs interspersed at intervals along the paved walkways, so as to allow for porosity between the development and the open walkway within the Road Reserve (see Figure 3).
e) The development on the Land Parcel is to be set back a minimum of 5.0m from the line of Road Reserve along Woodlands Square on Plot 2. The setback area is to be designed and landscaped as open landscaped walkways, providing a wider at-grade pedestrian area at street level. The landscaping within the open landscaped walkways is to include a planting area of minimum 3.0m width green buffer abutting the site.
boundary to complement the tree planting within the roadside table. This planting area shall be designed as pockets of green spaces with trees and shrubs interspersed at intervals along the paved walkways, to allow for a contiguous pedestrian area (see Figure 4).

Figure 4: Section and plan showing 5.0m building setback area within Plot 2 along Woodlands Square
4.10.3 The successful tenderer shall keep all portions of the Land Parcel within the building setback free and unobstructed and accessible to the public at all times and shall not erect or put up any fence wall structure or any form of obstruction on or along the site boundary. Where possible, services such as bulk water meters, breeching inlets, etc., shall be integrated within the building envelope and shall not be located within the building setback.

4.10.4 The successful tenderer shall also refer to Clause 8.0 of the Conditions and Requirements of Relevant Competent Authorities and Public Utility Licenses for more information of the requirements under NParks’ planting guidelines.

4.11 Building Edge

4.11.1 In order to create a well-defined urban streetscape, the development is to be built up to the building setback line to a minimum height of 2 storeys fronting Woodlands Avenue 2, Woodlands Avenue 5, South Woodlands Drive, Woodlands Square, and the Woodlands MRT viaduct, as shown in the Control Plans.

4.11.2 Up to a maximum of 40% of the length of the building facades between the corners at the road junctions may be further set back from this building line for articulation of the building form.

4.12 Common Boundary adjacent to Causeway Point

4.12.1 The successful tenderer shall construct the development within the Land Parcel to abut the common boundary line with the adjacent development with a party wall, as shown in the Control Plans. The party wall shall be built as follows:

a) A 2 to 5-storey party wall shall be provided along the common boundary with the adjacent development at 1 Woodlands Square (Causeway Point). Above this, the building shall have a 3m setback from the common boundary.

4.12.2 Any exposed party walls are to be properly finished.

4.13 Landscape Replacement Areas (LRAs)

4.13.1 The successful tenderer is required to provide LRAs within the development that are equivalent in size to the site area of the Land Parcel to create a distinctive, garden-like environment.

4.13.2 Within these LRAs, at least 40% of the areas are to be used for softscape (permanent planting) and the remaining areas can be used for hardscape, as
outlined in the prevailing DC guidelines on “Landscaping for Urban Spaces and High-Rises (LUSH)”.

4.14 **Roofscape**

4.14.1 The roof areas of both the high-rise and low-rise parts of the development are to be considered as the “fifth” elevation. They are to be fully integrated as part of the overall building form and architectural treatment of the development as either distinctive crowns to the buildings to contribute to the skyline profile of the region or lushly landscaped as roof gardens.

**Screening Requirements**

4.14.2 To ensure that the roof areas are well-designed and attractive when viewed from the surrounding developments, all service areas, Mechanical and Electrical (M&E) equipment, water tanks, etc., are to be located within the building envelope and visually well-screened.

4.14.3 The performance requirements for the screening of all M&E equipment and services are as follows:

a) To be screened from the top and on all sides;

b) The spacing between the trellis or louvered screening elements is to be equal to or less than their depth;

c) The screening elements are to be orientated to cut off views from the street level and surrounding buildings.

4.15 **Public Spaces**

4.15.1 The development on the Land Parcel is to include two public spaces:

a) A public space of a minimum 2,500 m² in size and a minimum 15.0m in height within Plot 1, as shown in the Control Plans. The public space is to be located such that it provides physical and visual connectivity between the Woodlands MRT TEL Station entrance and the bus stop along Woodlands Avenue 2. It is to include a main gathering space of minimum 30.0m depth fronting the entire width of the Woodlands MRT TEL Station entrance structure, as shown in the Control Plans. The public space is to be covered, and can take the form of a multi-volume covered public space. The design of the public space is to be fully integrated with the overall architectural treatment and building form of the development and also to be seamlessly connected to the key pedestrian routes within the development. The public space may be used for staging of temporary public and community events, such as exhibitions or concerts.
b) A public space of a minimum 400 m² in size and a minimum 10.0m in height within Plot 2, as shown in the Control Plans. The public space shall be covered and shall front the Woodlands MRT NSL Station Entrance, and shall have a minimum depth of 15.0m.

4.15.2 The public spaces are to be designed as attractive and inviting spaces and are to incorporate quality landscaping, street furniture, lighting and paved surfaces. The successful tenderer is encouraged to integrate public art (e.g. sculptures) and water features as part of the design treatment for the public spaces to enliven the space. The detailed location and layout of the public spaces will be subject to the evaluation and approval of the Authority and the other relevant Competent Authorities.

4.15.3 The public spaces form part of the public open space cum pedestrian network for the area. It is to be kept open and unobstructed for public use at all times.

4.15.4 The proposed public spaces are to comply with the Design Guidelines and Good Practice Guide for Privately Owned Public Spaces (POPS) and will be subject to detailed evaluation and approval upon the formal submission stage. Please refer to URA Circular No: URA/PB/2017/02-PCUDG dated 24 Jan 2017 or any subsequent prevailing guidelines for more information.

4.16 Overall Pedestrian Network

4.16.1 Developments within Woodlands Central are planned to be connected via a comprehensive, barrier-free sheltered pedestrian network that will link the buildings to the Woodlands MRT Station, Regional Bus Interchange and adjacent developments such as Causeway Point, and the surrounding public housing development along Woodlands Avenue 2. This network will provide seamless and all-weather protected pedestrian connections for people working and living in the area at three levels (at-grade, underground and elevated), so as to cater to the expected increased pedestrian traffic in Woodlands Central.

4.16.2 The successful tenderer is required to construct the following infrastructure to provide for direct, sheltered connections between the development and Woodlands MRT Station and Regional Bus Interchange, and the adjacent developments such as Causeway Point, and the surrounding public housing development along Woodlands Avenue 2:

a) At-grade Pedestrian Network (Condition 4.17);
b) Elevated Pedestrian Network (Condition 4.18); and
c) Underground Pedestrian Network (Condition 0).

Vertical Circulation Points

4.16.3 Vertical circulation points (each including a lift, two-way escalators and a staircase, sized appropriately to cater for pedestrian traffic through these points) are to be provided at the indicative locations shown in the Control Plans. These shall discharge directly into the covered walkways at the 1st storey or
the periphery of the public spaces and be visible from the at-grade, elevated
and underground pedestrian network.

4.16.4 The pedestrian network and its associated vertical pedestrian circulation
points may be excluded from computation as part of the maximum permissible
GFA of the development, subject to the prevailing DC Guidelines on the
exemption of GFA issued by the Competent Authority under the Planning Act.

4.17 At-Grade Pedestrian Network

4.17.1 The at-grade pedestrian network and all associated vertical circulation access
connecting within the Land Parcel shall be maintained by the successful
tenderer and be kept open for public use without any hindrance or obstruction,
to the satisfaction of the Authority and the relevant Competent Authorities, at
all times.

Covered Walkways

4.17.2 The development is to include the following continuous covered walkways at
the 1st storey level within the building envelope on all sides of the development,
as shown in the Control Plans:

a) Minimum 3.6m wide (and 3.0m clear) continuous covered walkways
   along the external facade of the developments at Plot 1 and Plot 2 facing
   Woodlands Avenue 2, Woodlands Avenue 5, South Woodlands Drive,
   and Woodlands Square, as well as along the external façade of the
   developments at Plot 1 facing the Woodlands MRT viaduct; and

b) A minimum 5.0m wide (and 4.4m clear) covered walkway along the
   external facade of the developments at Plot 2 facing the Woodlands MRT
   NSL Station.

4.17.3 The height of the external soffit of the covered walkways is not to exceed the
width of the covered walkway. Higher external soffit heights can be supported,
subject to the provision of drop-down panels along the edge of the covered
walkways or the width of the covered walkways being increased to match the
higher soffit height in order to provide adequate weather protection for
pedestrians during inclement weather.

4.17.4 To ensure convenient and unimpeded pedestrian movement and connectivity
within the proposed development and with the adjacent developments, the
covered walkways are required to:

a) Abut and open out onto, and match the platform level of the open
   walkways within the adjacent Road Reserves, wherever possible;

b) Be maintained at a constant level as far as possible. Any level changes
   are to be accommodated by ramps and to comply with the Building and
   Construction Authority’s (BCA) latest Accessibility Code;
c) Be kept free of structures and remain unobstructed and accessible to the public at all times;

d) Where the minimum platform level of the 1\textsuperscript{st} storey of the development is higher than the level of the covered walkways, ramps to connect the two levels shall be built within the 1\textsuperscript{st} storey of the development and not along the covered walkways; and

e) Where the covered walkways are intercepted by vehicular ingress / egress points, any cross ramps are to be located on either side of the covered walkways.

Covered Linkways

4.17.5 The development is to include the following continuous covered linkways at the 1\textsuperscript{st} storey level, to be built by the successful tenderer, as shown in the Control Plans:

a) A high covered linkway of minimum 7.0m width and minimum 5.7m road clearance height over the new signalised pedestrian crossing at Woodlands Square, connecting the sheltered public space within the development at Plot 1 to the covered walkway within the development at Plot 2 across Woodlands Square; and

b) A minimum 3.6m wide (and 3.0m clear) covered linkway connecting the sheltered public space within Plot 1 to the adjacent bus stop along Woodlands Avenue 2.

4.17.6 The platform level of the covered linkway shall match the platform level of surrounding pedestrian walkways.

4.17.7 The covered linkway is to be designed as a lightweight structure that is complementary to the design of the development and the existing covered linkways / walkways in the area, and well integrated as part of the overall building form and architectural expression of the development.

4.17.8 The parts of the covered linkway within Road Reserve are to be designed as independent structures which can be removed as and when required by LTA. These shall be handed over to LTA for ownership and maintenance.

4.17.9 The design and technical details for the linkway shall comply with LTA’s requirements and are subject to approval by the Authority and the relevant Competent Authorities at the formal submission stage.

4.17.10 The successful tenderer shall obtain a TOL from SLA to enter into and / or use State Land to undertake construction of the covered linkway within Road Reserve. The TOL shall be granted on the terms, charges and fees as stipulated by SLA.
4.17.11 The successful tenderer shall maintain the completed linkway within Road Reserve as part of the development at their own expense and to the satisfaction of the Authority and the relevant Competent Authorities during the defects liability period until such time that they are handed over to LTA.

Canopies at Woodlands MRT TEL and NSL Station Entrances

4.17.12 The successful tenderer shall build the following canopies at the 1st storey level, as shown in the Control Plans:

a) A canopy, with a minimum width to match the width of the Woodlands MRT TEL Station Entrance, including the stairs, ramps, and elevator, connecting the Woodlands MRT TEL Station entrance to the sheltered public space within Plot 1; and

b) A canopy, stretching from the site boundary to the edge of the Woodlands MRT NSL Station entrance canopy, connecting the Woodlands MRT NSL Station entrance to the sheltered public space within Plot 2.

4.17.13 The canopies are to be designed to provide seamless sheltered connections with adequate weather protection. The design of the canopy shall also be well-integrated with the overall architectural design of the development and take into consideration the interface with the existing Woodlands MRT Stations entrance structures.

4.17.14 The parts of the canopies within the Woodlands MRT TEL and NSL Station boundaries are to be designed as independent structures which can be removed as and when required by LTA. These shall be handed over to LTA for ownership and maintenance.

4.17.15 The design and technical details for the canopies shall comply with LTA’s requirements and are subject to approval by the Authority and the relevant Competent Authorities at the formal submission stage.

4.17.16 The successful tenderer shall obtain a TOL from SLA to enter into and / or use State Land to undertake construction of the canopies within the Woodlands MRT TEL and NSL Station boundaries. The TOL shall be granted on the terms, charges and fees as stipulated by SLA.

4.17.17 The successful tenderer shall maintain the completed parts of the canopies within the Woodlands MRT TEL and NSL Station boundaries as part of the development at their own expense and to the satisfaction of the Authority and the relevant Competent Authorities during the defects liability period until such time that they are handed over to LTA.

4.18 Elevated Pedestrian Network

4.18.1 The successful tenderer is to provide a series of single-storey, sheltered elevated pedestrian links (EPLs) as part of the elevated pedestrian network
within Woodlands Central, as shown in the Control Plans, and subject to the technical provisions given in Conditions 4.18.4 to 4.18.164.18.6:

a) To connect the developments at Plot 1 and Plot 2 across Woodlands Square, within Plot 3 air space; and

b) To connect the development at Plot 1 to the existing Pedestrian Overhead Bridge across Woodlands Avenue 2 at approximately RL 127.15m.

4.18.2 The levels stated above are subject to detailed survey by the successful tenderer.

4.18.3 The elevated pedestrian network and all associated vertical circulation access connecting within the Land Parcel shall be maintained by the successful tenderer and be kept open for public use without any hindrance or obstruction, to the satisfaction of the Authority and the relevant Competent Authorities, during the business operating hours of the development.

Technical Provisions for the EPL between Plot 1 and Plot 2 (within Plot 3 air space)

4.18.4 The requirements for the EPL within Road Reserve are as follows:

a) To have a minimum clear width of 6.0m;

b) To have a maximum external width of 14.0m;

c) To be fully air-conditioned;

d) To have a height clearance of minimum 5.7 m from the bottom of the link to the road surface, subject to LTA’s approval, for the entire length of the link located above the road carriageway;

e) To be maintained at a constant platform level throughout the entire length, wherever possible, and to comply with the relevant codes on barrier-free accessibility in buildings. Any changes in levels shall be kept to a minimum and shall be accommodated with ramps or with two-way escalators and lifts, subject to the requirements of the Authority and the relevant Competent Authorities;

f) To be designed to be adequately sheltered, visually porous and lightweight; and

g) Activity-generating uses are allowed along the link.
Technical Provisions for the EPL to existing Pedestrian Overhead Bridge at Woodlands Avenue 2

4.18.5 The requirements for the EPL within Road Reserve are as follows:

a) To have a minimum clear width matching that of the existing Pedestrian Overhead Bridge;

b) To have a maximum external soffit height matching that of the existing Pedestrian Overhead Bridge, with the provision of drop-down panels or the width of the walkway being increased to match the height if required to ensure adequate weather protection for pedestrians during inclement weather;

c) To be maintained at a constant platform level throughout the entire length, wherever possible, and to comply with the relevant codes on barrier-free accessibility in buildings. Any changes in levels shall be kept to a minimum and shall be accommodated with ramps or with two-way escalators and lifts, subject to the requirements of the Authority and the relevant Competent Authorities;

d) To be designed to be adequately sheltered, visually porous and lightweight; and

e) No commercial uses are allowed along the link.

4.18.6 The successful tenderer shall liaise with and make all necessary arrangements with LTA to obtain all agreements or consents to undertake construction of the EPL connecting to the existing Pedestrian Overhead Bridge.

Connections to Future EPLs

4.18.7 Two knock-out panels are to be provided at the 2nd storey level at the indicative locations shown in the Control Plans, and as follows:

a) A knock-out panel is to be provided at the line of Road Reserve along Woodlands Square facing Woodlands Civic Centre. This is to allow flexibility for a future EPL to be constructed across Woodlands Square, so as to connect the Land Parcel to the future development adjacent to Woodlands Civic Centre; and

b) A knock-out panel is to be provided at the common boundary adjacent to Causeway Point. This is to allow flexibility for a future EPL to be constructed, to connect the Land Parcel to Causeway Point.

4.18.8 The 2nd storey of the development is to be built up to the site boundary at the proposed locations of the knock-out panels. This is to be designed as an articulation of the façade, and integrated as part of the overall building form and architectural expression of the development.
4.18.9 The knock-out panels can be designed in the form of a parapet wall to facilitate integration and connection with future EPLs across Woodlands Square.

4.18.10 The knock-out panels are to match the width of their adjacent walkways, as set out in Condition 4.18.16.

4.18.11 The detailed location and finished floor level of the knock-out panels will be subject to the approval of the Authority and the relevant Competent Authorities at the formal submission stage.

4.18.12 The owner of the Development shall provide structural loading such that the future elevated pedestrian link bridges from the adjacent development can connect to the knock-out panel without the need for additional support and columns within Road Reserve. The loading provision shall take into account the prevailing guidelines for the future elevated pedestrian link bridges such as LTA’s Civil Design Criteria and BCA’s building codes.

4.18.13 For the purpose of pedestrian movement and fire safety, the successful tenderer shall provide permanent vertical circulation access and fire escape facilities close to the proposed knock-out panels.

4.18.14 The successful tenderer shall be responsible for liaising with the owners of the adjacent development and their appointed agents to grant them the necessary access, without any cost and expense to them, in order to facilitate construction and connecting to the future elevated pedestrian link.

Pedestrian Walkways within the Development

4.18.15 The internal layout and design of the development is to allow seamless and barrier-free connections between the two elevated pedestrian link bridges, knock-out panels, and associated vertical circulation access points within the 2nd storey of the development on Plots 1 and 2, as shown in the Control Plans.

4.18.16 These internal walkways shall have a minimum clear width as shown in the Control Plans, and as follows:

a) A minimum 6.0m clear width for internal walkways connecting between the two EPLs, the knock-out panel at the common boundary adjacent to Causeway Point, and associated vertical circulation.

b) A minimum 3.6m clear width for internal walkways connecting the knock-out panel at the line of Road Reserve along Woodlands Square facing Woodlands Civic Centre to the 6.0m clear width internal walkway(s) specified in Condition 4.18.15(a), and associated vertical circulation.

4.19 Underground Pedestrian Network

4.19.1 The successful tenderer is to provide underground pedestrian links connecting the developments at Plot 1 and Plot 2 to the concourse level of the Woodlands
MRT TEL Station as part of the underground pedestrian network within Woodlands Central, as shown in the Control Plans, and subject to the technical provisions given in Conditions 4.19.3 to 4.19.13.

4.19.2 The underground pedestrian network and all associated vertical circulation access connecting within the Land Parcel shall be maintained by the successful tenderer and be kept open for public use without any hindrance or obstruction, to the satisfaction of the Authority and the relevant Competent Authorities, during the operating hours of the Rapid Transit System (RTS).

Connections to Woodlands MRT TEL Station

4.19.3 The Land Parcel is located immediately adjacent to and partly above the upcoming Woodlands MRT TEL Station, which is scheduled to open in 2019. The MRT Station has been designed with a total of 4 knock-out panels along the walls of the Station box at the Basement Level 2 of the development, as shown in the Control Plans and as set out in the Development Interface Report (Annex G) of the Conditions and Requirements of Relevant Competent Authorities and Public Utility Licensees. These knock-out panels will allow for direct and seamless pedestrian connection from the development to the key pedestrian routes within the Station.

4.19.4 The successful tenderer is therefore required to provide underground pedestrian links at Basement Level 2 of the development to connect to the concourse level of Woodlands MRT TEL Station, as shown in the Control Plans.

Connection to future Underground Pedestrian Link to Causeway Point

4.19.5 The successful tenderer is to provide a knock-out panel at the basement level 2 along the common boundary adjacent to Causeway Point, at the indicative location shown in the Control Plans. This is to allow for future connection to Causeway Point.

4.19.6 The detailed alignment and floor finish level of the underground pedestrian link will be subject to the approval of the Authority and the relevant Competent Authorities at the formal submission stage.

4.19.7 The knock-out panels are to match the width of their adjacent walkways, as set out in Condition 4.19.10.

4.19.8 The successful tenderer shall be responsible for liaising with the owners of the adjacent development and their appointed agents to grant them the necessary access, without any cost and expense to them, in order to facilitate construction and connecting to the future elevated pedestrian link.

Pedestrian Walkways within the Development

4.19.9 The internal layout and design of the development is to allow seamless and barrier-free connections between the concourse level of Woodlands MRT TEL
Station, the knock-out panel at the common boundary adjacent to Causeway Point, and associated vertical circulation access points within the Basement Level 2 of the development on Plot 1 and 2, as shown in the Control Plans.

4.19.10 These internal walkways shall have a minimum clear width of 6.0m if no or some activity-generating uses are provided on one side of the walkways, and 7.0m if activity-generating uses are provided on both sides of the walkways.

4.19.11 A minimum 4.0m clear internal floor-to-ceiling height is to be maintained along the underground pedestrian links. A waiver of the minimum internal ceiling height requirement may be considered only where the site conditions do not allow for the required height or width to be provided, subject to approval by the Authority and the relevant Competent Authorities.

4.19.12 The underground pedestrian links shall be maintained at a constant platform level throughout the entire length, wherever possible and comply with the relevant codes on barrier-free accessibility in buildings. Any changes in levels shall be kept to a minimum and shall be accommodated with ramps or with two-way escalators and lifts, subject to the requirements of the Authority and the relevant Competent Authorities.

4.19.13 The underground pedestrian links and its associated vertical pedestrian circulation access are to be kept open for public use during the operating hours of the Rapid Transit System (RTS).

4.20 Development Above Part of Woodlands MRT TEL Station

4.20.1 The Woodlands MRT TEL Station is located below part of the Land Parcel. Part of the Station box has been constructed with loading provisions to support development of the at-grade area up to an equivalent maximum building height of approximately 5 commercial storeys, as shown in the Control Plans.

4.20.2 All development above the Woodlands MRT TEL Station shall comply with LTA’s requirements given in Clause 7.0 of the Conditions and Requirements of Relevant Competent Authorities and Public Utility Licensee.

4.21 Basement Level(s) / Subterranean Developments

4.21.1 New basement levels and permanent subterranean structures, including the underground pedestrian network, are allowed within the Land Parcel, and may extend up to the site boundary subject to the prevailing DC Guidelines issued by the Competent Authority under the Planning Act and the technical requirements of the relevant Competent Authorities, including LTA’s requirements as given in Clause 7.0 of the Conditions and Requirements of Relevant Competent Authorities and Public Utility Licensees.

4.21.2 A minimum 2.5 m soil depth for tree planting is to be provided for the portion of the basement structures within the building setback areas.
4.22 Integration of Rapid Transit System (RTS) - Related Structures

4.22.1 The development on the Land Parcel is to respond sensitively in design and scale towards the Woodlands MRT TEL Station entrance structure (adjacent to Plot 1) and the Woodlands MRT NSL Station entrance structure (adjacent to Plot 2). It should also include the design and integration of the existing at-grade RTS-related structures which provide firefighting access and services to the Woodlands MRT TEL Station, as shown in the Control Plans, including the following:

a) A fireman’s stairs, firefighting access road, and vent shaft structure within Plot 1; and
b) A vent shaft structure within Plot 2.

4.22.2 The development of the Land Parcel is to integrate the existing at-grade RTS-related structures of the Woodlands MRT TEL Station into the overall building envelope and architectural treatment of the development.

4.22.3 The detailed design and integration of these structures are subject to the evaluation and approval of the Authority and the relevant Competent Authorities at the formal submission stage. The refurbishment and new construction works shall comply with LTA’s requirements as given in Clause 7.0 of the Conditions and Requirements of Relevant Competent Authorities and Public Utility Licensees, and are subject to the requirements and approval of the Authority, LTA, Public Utilities Board (PUB), Ministry of Home Affairs (MHA), Singapore Civil Defence Force (SCDF), Fire Safety & Shelter Department (FSSD) and the relevant Competent Authorities.

Ownership, Maintenance and Use

4.22.4 The works to the RTS-related structures and services are to be completed prior to, or at the same time, as the Temporary Occupation Permit (TOP) for the development on the Land Parcel is obtained. The interface to the RTS-related structures located within the development are to be maintained by the successful tenderer at their own cost and expense. The successful tenderer is required to, without any hindrance or obstruction, and at no cost and expense, grant the necessary access and ‘right of ways’, and be responsible for liaising with the operators and relevant Competent Authorities where necessary.

4.23 Vehicular Access

4.23.1 Vehicular access (for servicing, car parking, passenger drop-off / pick-up points) for the residential component of the development shall be taken along Woodlands Avenue 2. Vehicular access for the commercial component of the development shall be taken along Woodlands Square and South Woodlands Drive. All vehicular ingress / egress points are to be taken within the indicative locations as shown in the Control Plans, at least 50.0m away from existing road junctions. These are also not to be located directly opposite the ingress / egress points of existing developments.
4.23.2 All vehicular ingress / egress points and external ramps to the car parking, passenger drop-off / pick-up points, taxi lay-bys, service areas and loading / unloading bays are to be located within the site boundary and be well-integrated with the overall building form and architectural treatment of the development and visually well-screened, subject to the approval of LTA, the Authority and the relevant Competent Authorities at the formal submission stage. All passenger drop-off / pick-up points, taxi lay-bys access shall comply with barrier-free accessibility requirements.

4.23.3 All vehicular access to the development and car parking facilities, passenger pick up / drop off points, taxi lay-bys, and loading / unloading bays, will be subject to the requirements and approval of the Authority, LTA and the relevant Competent Authorities at the formal submission stage and as set out in Clause 7.0 of the Conditions and Requirements of Relevant Competent Authorities and Public Utility Licensees.

4.24 Car, Motorcycle and Bicycle Parking

4.24.1 The successful tenderer shall comply with LTA’s requirements for car, motorcycle and bicycle parking provisions as set out in Clause 7.0 of the Conditions and Requirements of Relevant Competent Authorities and Public Licensees. The design and layout of the car parking facilities will be subject to the requirements and approval of the Authority and the relevant Competent Authorities at the formal submission stage.

4.25 Night Lighting

4.25.1 Night lighting can add visual interest to the building, enhance the experience of the pedestrian environment and help to provide a sense of orientation to pedestrians and drivers at night. The development is encouraged to be lit by a well-designed, subtle and attractive night lighting scheme that will bring out the key architectural features of the building form, crown and facades, public areas at street level, elevated pedestrian links, gardens and landscaped areas. The night lighting should be energy efficient and the fittings fully integrated into the overall architectural treatment and design of the building facades and landscaping of the open spaces.

4.25.2 The proposed facade lighting shall not cause any inconvenience or affect the amenity of the area. Flashing or animated lighting displays are not permitted, due to the proximity of the Land Parcel to existing residential developments. The owner of the development is required to adjust/retrofit the light fittings or take appropriate remedial action to address disamenity concerns, if complaints on the lighting are received from the surrounding developments. Any lighting proposal shall be submitted as part of the formal submission to the Authority for evaluation and approval.
4.26 Signage

4.26.1 Building name, tenant name / logo, directory, directional and information signs, if provided, are encouraged to be designed as an integral part of the overall architectural treatment of the development.

4.26.2 All signs are to be well-designed and flush-mounted on the building façades such that all structural supports, etc., are visually screened from the top, below and on all sides.

4.26.3 The prevailing Guidelines for Outdoor Signs Outside the Central Area, issued by the Competent Authority under the Planning Act, shall apply to this development.

4.26.4 All signs shall comply with LTA’s requirements for wayfinding signage as set out in Clause 7.0 of the Conditions and Requirements of Relevant Competent Authorities and Public Licensees.
PART V OTHER REQUIREMENTS

5.1 Cycling Path

5.1.1 The successful tenderer is to construct cycling paths / park connectors along Woodlands Square, South Woodlands Drive, Woodlands Avenue 5 and Woodlands Avenue 2, as shown indicatively in the Control Plans and as set out in Clause 7.0 of the Conditions and Requirements of Relevant Competent Authorities and Public Utility Licensees.

5.2 Road Improvement Works

5.2.1 The successful tenderer shall at his own cost and expense, carry out the road widening, construction and improvement works to the side tables, drains and kerbside planting within the Road Reserves along Woodlands Avenue 2, Woodlands Square, South Woodlands Drive, Woodlands Avenue 5 and Woodlands Avenue 7 as shown indicatively in the Control Plans and as set out in Clause 7.0 of the Conditions and Requirements of Relevant Competent Authorities and Public Utility Licensees. The works include relocation of the affected bus shelter and covered linkway along Woodlands Avenue 2. The required works shall comply with the Conditions and Requirements of the Relevant Competent Authorities and Public Utility Licensees, and shall be subject to the approval of the Authority, LTA, NParks and the relevant Competent Authorities, at the formal submission stage.

5.2.2 The design of the side tables within the Road Reserves are encouraged to be fully integrated into the overall design concept and treatment of the development and the pedestrian network within the building, including any proposed public spaces and covered linkways, subject to the approval of the Authority and the relevant Competent Authorities.

5.3 Site Works

5.3.1 Clearance from SLA, URA, LTA, NParks and the relevant Competent Authorities shall be obtained prior to commencement of any construction works affecting State land. All State land affected by the construction works associated with the developments on the Land Parcel shall be reinstated to the requirements and satisfaction of SLA, LTA, NParks and the relevant competent Authorities.

5.3.2 The portions of the road sidetables and carriageways affected by the construction works shall be upgraded to the requirements of LTA and the relevant Competent Authorities based upon the relevant road category and maintained until such time when they are taken over by LTA.

5.3.3 During the construction period, the development works on the Land Parcel shall be cordoned-off and screened by hoarding and illuminated by night.
lighting subject to the requirements and approval of the relevant Competent Authorities. Any inconvenience and disturbance to the adjacent developments shall be minimised and pedestrian access along all existing sidetables outside the site boundary shall be maintained at all times.

5.4 Public Communications Plan

5.4.1 The successful tenderer is required to carry out a public communications plan as part of the efforts to keep the local community informed of the development plans for the Land Parcel.

5.4.2 The local community is defined as:
   a) all residents of HDB flats, private condominiums / flats and landed houses;
   b) Management Corporation Strata Title (MCST) Committee of private residential developments and Neighbourhood Committees; and
   c) administration of schools and other institutions that fall within a 100m (approximate) radius of the Land Parcel.

In addition, it shall include the Constituency Director of the Constituency and General Manager of Town Council.

Stage 1: Prior to submission of application for Written Permission

5.4.3 Prior to the erection of any hoarding or commencement of any clearance and/or tree-felling on the Land Parcel, the successful tenderer shall distribute flyers to the local community containing the following information and ensure this information are accurately presented:

   a) Project information (e.g. type of development, number of units, storey height, vehicular access);
   b) Location map showing hoarding, construction access etc.;
   c) Infrastructure works to be carried out and removal of existing facilities such as removal of the existing covered linkway as mentioned in Clause 7.0 of the Conditions and Requirements of Relevant Competent Authorities and Public Utility Licensees and the alignment of its replacement covered linkway;
   d) Key milestones in the construction programme [e.g. site clearance, hoarding works, commencement and duration of piling works, expected date of issuance of Temporary Occupation Permit (TOP)];
   e) Details of proposed measures to mitigate the impact of development to the surrounding environment and users;
   f) Contact details of the successful tenderer for the community to highlight issues such as noise and dust arising from the construction activities, and to provide feedback on the proposal; and
   g) The hotline numbers of the relevant departments in BCA, National Environment Agency (NEA), Ministry of Manpower (MOM) and URA.
5.4.4 Prior to the distribution of the flyer, the successful tenderer shall ensure that information as outlined in Condition 5.4.3 are included in the flyer and inform the Authority on the distribution date with a copy of Form A (as shown in Annex A1) and flyer.

5.4.5 After the distribution of the flyers, the successful tenderer shall submit to the Authority a duly completed Form B (as shown in Annex A2) verifying that the requirements set out in Condition 5.4.4 have been complied with. Upon confirming that the declaration provided by the successful tenderer is in order, the Authority will give written consent for the successful tenderer to proceed with the submission of an application to the Competent Authority under the Planning Act (Cap. 232) for Written Permission (“development application”) for the proposed development on the Land Parcel. The successful tenderer shall not submit any development application for the proposed development on the Land Parcel without the prior written consent of the Authority as mentioned above.

5.4.6 Upon receiving the Authority’s written consent, the successful tenderer may proceed with the erection of hoarding, on which the contact details of the successful tenderer and the hotline numbers of the relevant departments in BCA, NEA and MOM shall be prominently displayed.

Stage 2: Prior to resubmission of application subsequent to the grant of Provisional Permission

5.4.7 After the grant of Provisional Permission by the Competent Authority under the Planning Act (Cap. 232), the successful tenderer shall distribute additional flyers to the local community containing detailed information on the proposed development. The information to be provided shall include those stated in Condition 5.4.3 as well as (but not limited to) the following:

a) Schematic site layout showing the location of building blocks and facilities such as the bin centre, electrical substation, BBQ pits etc.; and

b) Indicative timeframe for the community to respond to the proposal, which shall be at least 2 weeks from the date the flyers are distributed

The successful tenderer is required to submit a copy of the flyer for the Authority’s approval before the distribution to the local community.

5.4.8 At least 2 weeks after the date of distribution of flyers, the successful tenderer shall submit to the Authority a duly completed Form C (as shown in Annex A3) verifying that the requirements set out in Condition 5.4.7 have been complied with and detailing the preliminary feedback received from the local community for the Authority’s information, if any. Upon confirming that the declaration provided by the successful tenderer is in order, the Authority will give written consent for the successful tenderer to proceed with the resubmission of the application subsequent to the Provisional Permission granted by the Competent Authority under the Planning Act (Cap. 232), which shall be made no earlier than 3 weeks from the date the flyers are distributed. The successful
tenderer shall not resubmit any application without the prior written consent of the Authority as mentioned above.

5.4.9 The successful tenderer shall include a duly completed Form D (as shown in Annex A4), which is a final collation of the feedback received on the proposed development, if any, as part of the resubmission application. The developer shall explain how the development proposal seeks to sensitively address the concerns raised by the local community, if any.

5.4.10 The successful tenderer shall not commence structural works until the Authority has given written consent for the successful tenderer to proceed to apply to BCA for the permit to commence structural works, or has granted Written Permission under the Planning Act (Cap. 232).

5.5 Construction Quality Assessment System (CONQUAS)

5.5.1 Plans of the development on the Land Parcel are to be submitted to BCA for assessment for the construction quality of the building works under the Construction Quality Assessment System (CONQUAS).

5.5.2 The successful tenderer is to comply with all requirements, procedures, directions and requests of BCA and pay all fees, charges and other amounts payable to BCA for and in relation to the assessment of the construction quality of the proposed development under CONQUAS. The successful tenderer is to render full co-operation to BCA, its officers, employees and agents in relation to such assessment under CONQUAS.

5.6 Design for Maintainability

5.6.1 The successful tenderer is required to adopt the guidelines described in the BCA’s Façade Access Design Guide (FADG) and submit the façade access design of the proposed development to the BCA for review at the Development Control and Building Plan stages.

Stage 1 (Development Control Stage)

The successful tenderer shall upon the Authority’s acceptance of his tender and within such time as notified in writing by the BCA submit the proposed façade access strategy for the development to the BCA and obtain an in-principle acceptance (IPA) from the BCA on his proposal.

Stage 2 (Building Plan Stage)

The successful tenderer is required to submit the detailed façade access proposal of the development to the BCA and obtain a final acceptance (FA) from the BCA on his proposal. The successful tenderer is required to carry out the building works in accordance with the accepted detailed façade access proposal.
The successful tenderer is also advised to follow the recommendations of the prevailing BCA’s Design for Maintainability (DfM) Guide in the overall planning and design of the development to ensure higher productivity, safety and labour efficiency in downstream building maintenance regimes. In so doing, the successful tenderer should engage the BCA on the DfM Guide during the Building Plan Stage.

The successful tenderer shall comply with all requirements, procedures, directions and requests of the BCA and render his full cooperation in relation to meeting the DfM requirements.

5.7 Productive Formats for Shops, Restaurants and Entertainment Outlets

5.7.1 The successful tenderer is strongly encouraged to work with the tenants / operators of the shops, restaurants and entertainment outlets to adopt relevant productive formats in the proposed development. Outlets larger or equal to 200 m² should adopt at least 3 productive formats, while outlets smaller than 200 m² should adopt at least 2 productive formats. Enterprise Singapore has provided a set of examples of the productive formats in Annex B for reference. For more information on the productive formats, the successful tenderer is to contact Enterprise Singapore directly via email: food_division@enterprise.gov.sg or retail_design@enterprise.gov.sg.
### FORM A

**PUBLIC COMMUNICATIONS PLAN**

<table>
<thead>
<tr>
<th>Details of Developer</th>
<th>To:</th>
<th>INSTRUCTION:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Name:</td>
<td>Group Director</td>
<td>This form is to be duly completed and submitted to the Authority prior to distribution of the Stage 1 flyer.</td>
</tr>
<tr>
<td>Address:</td>
<td>Land Sales &amp; Administration Urban Redevelopment Authority</td>
<td></td>
</tr>
<tr>
<td>Tel no:</td>
<td>45 Maxwell Road</td>
<td></td>
</tr>
<tr>
<td>Email:</td>
<td>The URA Centre Singapore 069118</td>
<td></td>
</tr>
</tbody>
</table>

**INSTRUCTION:**

- This form is to be duly completed and submitted to the Authority prior to distribution of the Stage 1 flyer.

**Parcel Reference Number:**

____________________________________________________________

**Proposed Development:**

____________________________________________________________

____________________________________________________________

**Lot/Parcel Reference:** _____________________ **TS/MK:** ______________________

### Key milestones

*The Authority shall be kept informed of any changes to the public communications plan.*

The successful tenderer shall ensure the minimum periods stated below are adhered to:

1. Distribution of flyers containing brief project information and contact details of parties specified (Condition 5.4.4)  (dd/mm/yy)
2. Submission of Form B (Condition 5.4.5)
3. First submission of development proposal (Condition 5.4.5)
4. Erection of hoarding and site clearance (Condition 5.4.6)
5. Obtain grant of Provisional Permission (Condition 5.4.7)
6. Distribution of flyers containing detailed project information (Condition 5.4.7)
7. Submission of Form C (Condition 5.4.8)
8. Submission of Form D (Condition 5.4.9)
9. Construction schedule
   a) Piling
   b) Sub-structure
   c) Superstructure
   d) M&E works
   e) Finishes

**Name, Designation & Signature of Developer’s representative**
<table>
<thead>
<tr>
<th>NO</th>
<th>KEY MILESTONES</th>
<th>MINIMUM PERIOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Item 1 (Distribution of flyers containing brief project information and contact details of parties specified i.e. Stage 1 flyer) and Item 2 (Submission of Form B)</td>
<td>1 week</td>
</tr>
<tr>
<td>2</td>
<td>Item 3 (First submission of development proposal) and Item 6 (Distribution of flyers containing detailed information i.e. Stage 2 flyer)</td>
<td>6 weeks</td>
</tr>
<tr>
<td>3</td>
<td>Item 6 (Distribution of Stage 2 flyer) and Item 7 (Submission of Form C)</td>
<td>2 weeks</td>
</tr>
<tr>
<td>4</td>
<td>Item 6 (Distribution of 2nd flyer) and Item 8 (Submission of Form D)</td>
<td>3 weeks</td>
</tr>
<tr>
<td>5</td>
<td>Item 8 (Submission of Form D) and Item 9(a) (commencement of piling)</td>
<td>4 weeks</td>
</tr>
</tbody>
</table>
## FORM B

### DECLARATION BY THE DEVELOPER (PRIOR TO APPLICATION FOR WRITTEN PERMISSION)

**INSTRUCTION:**

This form is to be duly completed and submitted to the Authority prior to submission of an application to the Competent Authority under the Planning Act (Cap. 232) for Written Permission.

If the written consent of the Authority is not submitted together with the development application to the Competent Authority, the development application will be returned.

<table>
<thead>
<tr>
<th>Details of Developer</th>
<th>To:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Name:</td>
<td>Group Director</td>
</tr>
<tr>
<td>Address:</td>
<td>Land Sales &amp; Administration</td>
</tr>
<tr>
<td>Tel no:</td>
<td>Urban Redevelopment Authority</td>
</tr>
<tr>
<td>Email:</td>
<td>45 Maxwell Road</td>
</tr>
<tr>
<td></td>
<td>The URA Centre</td>
</tr>
<tr>
<td></td>
<td>Singapore 069118</td>
</tr>
</tbody>
</table>

Parcel Reference Number:

__________________________________________________________

Proposed Development:

__________________________________________________________

__________________________________________________________

Lot/Parcel Reference: _____________________ TS/MK: ______________________

I, ____________________________ (Name), ____________________________ (Designation), hereby declare on behalf of the developer that in accordance with Condition 5.4.4 of the Technical Conditions of Tender, flyers containing brief information on the project and the contact details of the parties specified in the said Condition have been distributed to the local community* on _______________ (Date).

We have enclosed supporting documents to show that the flyers have been distributed.

Signature: ____________________________  Date: ____________________________

* Local community is defined and includes the parties specified in Condition 5.4.2 of the Technical Conditions of Tender
**ANNEX A3**

**FORM C**

**DECLARATION BY THE DEVELOPER**

(FOR RESUBMISSION OF APPLICATION SUBSEQUENT TO THE PROVISIONAL PERMISSION)

**INSTRUCTION:**
This form is to be duly completed and submitted to the Authority prior to resubmission of development application and no later than 2 months after the grant of Provisional Permission. Upon confirming that the form is in order, the Authority will give written consent for you to proceed with the resubmission of the development application, which shall be made no earlier than 3 weeks from the date the flyers were distributed. If the written consent of the Authority is not submitted together with the resubmission of the development application, the development application will be returned.

<table>
<thead>
<tr>
<th>Details of Developer</th>
<th>To:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Name:</td>
<td>Group Director</td>
</tr>
<tr>
<td>Address:</td>
<td>Land Sales &amp; Administration</td>
</tr>
<tr>
<td>Tel no:</td>
<td>Urban Redevelopment Authority</td>
</tr>
<tr>
<td>Email:</td>
<td>45 Maxwell Road</td>
</tr>
<tr>
<td></td>
<td>The URA Centre</td>
</tr>
<tr>
<td></td>
<td>Singapore 069118</td>
</tr>
</tbody>
</table>

Parcel Reference Number: __________________________________________________________________________

Proposed Development: __________________________________________________________________________

_______________________________________________________________________________________________

Lot/Parcel Reference: _____________________ TS/MK: ______________________

I, ____________________________ (Name), ____________________________ (Designation),
hereby declare on behalf of the developer that in accordance with Condition 5.4.7 of the Technical Conditions of Tender, flyers containing detailed information on the development project and the contact details of the parties specified in the said Condition have been distributed to the local community* on _______________ (Date).

We have enclosed supporting documents to show that the flyers have been distributed.
Details of preliminary feedback received from the local community (if any):**

1) 

2) 

3) 

4) 

Signature: __________________________   Date: __________

* Local community is defined and includes the parties specified under Condition 5.4.2 of the Technical Conditions of Tender.

** This should include all feedback received up to the point of the submission of this form. If this space is insufficient, additional information should be provided on a separate page and submitted as part of Form C.
**ANNEX A4**

**FORM D**

**CONSOLIDATED FEEDBACK ON PROPOSED DEVELOPMENT**

**(FOR RESUBMISSION OF APPLICATION SUBSEQUENT TO THE PROVISIONAL PERMISSION)**

**INSTRUCTION:**
This form is to be duly completed and submitted to the Competent Authority as part of the resubmission of the development application subsequent to the grant of the Provisional Permission.

<table>
<thead>
<tr>
<th>Details of Developer</th>
<th>To:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Name:</td>
<td>Group Director</td>
</tr>
<tr>
<td>Address:</td>
<td>Development Control</td>
</tr>
<tr>
<td>Tel no:</td>
<td>Urban Redevelopment Authority</td>
</tr>
<tr>
<td>Email:</td>
<td>45 Maxwell Road</td>
</tr>
<tr>
<td></td>
<td>The URA Centre</td>
</tr>
<tr>
<td></td>
<td>Singapore 069118</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DC Reference:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Submission Number:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proposed Development:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lot Number:</th>
</tr>
</thead>
<tbody>
<tr>
<td>______________</td>
</tr>
</tbody>
</table>

I, ____________________________ (Name), ____________________________ (Designation), hereby declare on behalf of the developer that in accordance with Condition 5.4.9 of the Technical Conditions of Tender, the table below has included all feedback that has been received from the local community, up to the date of this resubmission of the development application.
Feedback received from the local community and how the development proposal has sensitively addressed the feedback raised**:  

<table>
<thead>
<tr>
<th>Feedback Received from Local Community</th>
<th>Proposed Measures to Address the Feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>1)</td>
<td>1)</td>
</tr>
<tr>
<td>2)</td>
<td>2)</td>
</tr>
<tr>
<td>3)</td>
<td>3)</td>
</tr>
<tr>
<td>4)</td>
<td>4)</td>
</tr>
</tbody>
</table>

Signature:  Date:  

* Local community is defined and includes the parties specified under Condition 5.4.2 of the Technical Conditions of Tender  
** This must include all feedback received up to the point of this resubmission of the development application. If this space is insufficient, additional information should be provided on a separate page and submitted as part of Form D.
The successful tenderer is strongly encouraged to work with the tenants/operators of the shops, restaurants and entertainment outlets to adopt relevant productive formats in the proposed development. Outlets larger or equal to 200 m² should adopt at least 3 productive formats, while outlets smaller than 200 m² should adopt at least 2 productive formats. Below is the list of initiatives suggested by Enterprise Singapore to raise productivity for Food Services and Retail Outlets:

**Suggested Initiatives to Raise Productivity (Food Services)**

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Functions</th>
<th>Manpower savings / Manpower needed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Digital Service</strong></td>
<td>Digital service technologies enable ordering and payment to be automated, with orders transmitted directly in real-time to kitchens and payment done wirelessly. For instance, self-ordering or payment kiosks enable patrons to order and pay via a kiosk system.</td>
<td>Reduces about 5 headcounts/outlet</td>
</tr>
<tr>
<td>E.g. Digital Kiosks, Mobile App, e-Menu, e-Waiter</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Kitchen Automation</strong></td>
<td>Investing in process automation through machinery and equipment to replace labour-intensive food preparation processes improves productivity.</td>
<td>Reduces about 4 headcounts/outlet</td>
</tr>
<tr>
<td><strong>Centralised Dishwashing</strong> (shared basis)</td>
<td>Outsourcing dishwashing to an on-site or off-site third-party centralised dishwashing provider reduces food services operators' costs.</td>
<td>Reduces 1 headcounts/outlet</td>
</tr>
</tbody>
</table>
| **Central Kitchen**               | Central kitchens enable economies of scale and comprises the following:  
  - Kitchen Automation: Purchase automation equipment or processing line  
  - Workflow Redesign: Streamline work processes to maximise efficiency  
  - 5S Housekeeping: Methodology to improve operational efficiency and space utilization  
  - Enterprise Resource Planning (ERP) | Reduces about 4 - 6 headcounts/outlet |
<table>
<thead>
<tr>
<th>Initiative</th>
<th>Functions</th>
<th>Manpower savings / Manpower needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meal Replacement Vending Machines</td>
<td>Meal replacement vending machines are machines which dispense meals to customers automatically after the consumer makes his/her purchase. These vending machines typically have microwave-enabled capabilities for further heating of meals. Some machines are able to prepare food within the machine.</td>
<td>Requires 1 - 3 headcount</td>
</tr>
<tr>
<td>Grab and Go Kiosks Retailing Ready Meals</td>
<td>Grab and Go kiosks facilitate takeaway orders. Minimal on-site food preparation is needed due to the usage of ready meals.</td>
<td>Requires 4 – 6 headcount</td>
</tr>
</tbody>
</table>
| Productive Food Court/ Coffee Shop             | Productive food courts/coffee shops are food courts/coffee shops that are equipped with two or more of the following productivity initiatives:  
   1. Digital service  
   2. Centralised dishwashing  
   3. Kitchen automation  
   4. Tray return (customised self-return counters, conveyor belt or RFID)  
   5. Supported by a central kitchen  

   The productive food court/coffee shop model could also include the following:  
   1. Shared kitchen space  
   2. Self-service model like IKEA or Marche  
   3. Retailing of ready meals  
   4. Incorporation of vending machines and grab and go kiosks  
   5. Other amenities not necessarily confined to food services, such as click-and-collect services  

   The productive food court/coffee shop model is more manpower-lean. | For a food court with 10 stalls, this requires about 15 - 18 headcount |
## Suggested Initiatives to Raise Productivity (Retail)

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Functions</th>
<th>Suggested Trades</th>
<th>Manpower savings/ Manpower needed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Self-Checkout (SCO) System</strong></td>
<td>A SCO system allows customers to scan, pack and pay for their purchases without a cashier's assistance.</td>
<td>Grocery and any other high-volume retail trades (e.g. bookstores, pharmacies, convenience stores)</td>
<td>Reduces 8 headcount/ outlet</td>
</tr>
<tr>
<td></td>
<td>SCO is typically used for single basket purchases in a grocery store. By using SCO, retailers can redeploy cashiers to other value-adding roles and alleviate long queues along traditional cashier counters.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cash Management (CM) System</strong></td>
<td>A CM system automates manual cash handling processes, from the point-of-sales to cash-in-transit pick up. With CM, the preparation of cash floats, collection and dispensation of cash payment and reconciliation of cash notes can be done with minimal human intervention.</td>
<td>Grocery and any other retail trades that has high cash transactions (e.g. stationery shops, pharmacies, convenience stores)</td>
<td>Reduces 1 headcount/ outlet</td>
</tr>
<tr>
<td></td>
<td>CM is typically used amongst retailers with high cash transactions. By using CM, a retailer can benefit from faster checkouts, higher accuracy in cash dispensation, man-hour savings from the elimination of manual cash counting and increase security.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Electronic shelf labelling</strong></td>
<td>Electronic shelf labels can be automatically updated from a centralized pricing system, reducing time spent by staff to print updated prices on price labels and reducing errors in tagging the right products.</td>
<td>Grocery and any other retail trades that has high cash transaction (e.g. stationery, pharmacies, convenience stores)</td>
<td>Reduces 1 headcount/ outlet</td>
</tr>
<tr>
<td>Initiative</td>
<td>Functions</td>
<td>Suggested Trades</td>
<td>Manpower savings/Manpower needed</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Radio Frequency Identification (RFID) technology</strong></td>
<td>With remote scanners to read RFID tags placed on individual products, an RFID system enables retailers to record a variety of information, including quantities of various stock items and their precise locations. Retailers can effectively identify and manage items by decreasing time spent on stock count.</td>
<td>All retail trades, especially those that carry a large number of stock-keeping-units (SKUs)</td>
<td>Reduces 2 headcount/outlet</td>
</tr>
<tr>
<td><strong>Digital catalogue</strong></td>
<td>A digital catalogue will allow customers to browse through a large inventory base without sales assistants having to physically locate the products. The catalogue can be integrated with retailers' inventory or content management system, allowing retailers to streamline their product updating processes and eliminate manual price lists.</td>
<td>All retail trades, especially those that carry a large number of stock-keeping-units (SKUs)</td>
<td>Reduces 3 headcount/outlet</td>
</tr>
<tr>
<td><strong>Vending machine</strong></td>
<td>Vending machines, or automated retail systems (ARS), bring together internet, robotics, cashless payment and digital media technologies to sell products round-the-clock without relying on manpower. By using ARS, retailers can increase efficiency and enhance customer experience through self-service.</td>
<td>All retail trades</td>
<td>1-3 headcount required/outlet</td>
</tr>
<tr>
<td><strong>Point-of-Sales (POS) System</strong></td>
<td>A POS system automates real-time tracking of inventory and sales transactions. It is able to generate sales reports and provide insights on customer behaviour and product popularity.</td>
<td>All retail trades</td>
<td>Reduces 1 headcount/outlet</td>
</tr>
<tr>
<td>Initiative</td>
<td>Functions</td>
<td>Suggested Trades</td>
<td>Manpower savings/Manpower needed</td>
</tr>
<tr>
<td>------------</td>
<td>-----------</td>
<td>------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>Initiative</td>
<td>The system’s API (Application Programmable Interface) should be able to integrate with existing accounting and inventory management system.</td>
<td>All retail trades, especially those that are service-related (e.g. beauty and hair services)</td>
<td>Reduces 1 headcount/outlet</td>
</tr>
<tr>
<td>Suggested Trades</td>
<td>An ASB system automates appointment scheduling and booking processes, helping companies to save manpower and time. It can also customise and send booking notifications, reminders and confirmation emails to staff and/or customers.</td>
<td>All retail trades</td>
<td></td>
</tr>
<tr>
<td>Trades</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manpower savings/Manpower needed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All retail trades</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For more information on these productivity initiatives, please contact <a href="mailto:food_division@enterprisesg.gov.sg">food_division@enterprisesg.gov.sg</a> or <a href="mailto:retail_design@enterprisesg.gov.sg">retail_design@enterprisesg.gov.sg</a>.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>You can also visit <a href="https://spring.enterprisesg.gov.sg/Growing-Business/Grant/Pages/capability-development-grant.aspx">https://spring.enterprisesg.gov.sg/Growing-Business/Grant/Pages/capability-development-grant.aspx</a> for more information on how Enterprise Singapore can support your capability upgrading initiatives.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>