
**SALE OF SITE
SALE OF COMMERCIAL & RESIDENTIAL SITE
AT SENGKANG CENTRAL**

TECHNICAL CONDITIONS OF TENDER

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PART I

1.0 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 Sengkang Central ("the Land Parcel"). The lease and development of the Land Parcel is subject to these Technical Conditions of Tender and the Conditions of Tender for the Land Parcel. In these Technical Conditions of Tender, where the context so admits, the expression "the Authority" includes the Government.
- 1.2 The successful tenderer must in addition to the said Conditions of Tender observe, and comply with, these Technical Conditions of Tender. The Conditions of Tender and these Technical Conditions of Tender shall be read in conjunction with the Control Plans provided in the eDeveloper's Packet.

PART II

2.0 PLANNING CONCEPT

- 2.1 The Land Parcel is located conveniently at the junction of Sengkang Central and Compassvale Bow in Sengkang Planning Area, and zoned Commercial and Residential.

A Vision for an Integrated Community Development

- 2.2 Located immediately next to Buangkok MRT Station on the NorthEast Line, the proposed development is envisioned as an integrated, one-stop community hub. As such, the proposed development shall comprise retail amenities, Hawker Centre, Community Club, Child Care Centre, Bus Interchange and public space integrated with private housing.
- 2.3 The proposed development is intended to meet the needs of residents, while functioning as an identity-marker for the larger Buangkok neighbourhood, including providing spaces for community gatherings and social events. The larger Buangkok neighbourhood currently comprises a large variety of private and public residential developments, such as Atrina, Aspella, Compassvale Helm, Esparina Residences, The Quartz and Jewel @ Buangkok, the Compassvale Ancilla Park, as well as Palm View Primary School.

Creating a Transit-Oriented and Pedestrian-Friendly Development

- 2.4 With the integration of community and transport uses, the proposed development will emphasize on the built form and design of the public realm and provide a seamless network of pedestrian-friendly streets to encourage

attractive street-life, good walkability, cycling and the use of public transport in the area. It is critical to provide direct, sheltered convenient access between the multiple uses within and immediately surrounding the site to the MRT Station and Bus Interchange.

- 2.5 The private residential component of the proposed development shall also be designed to be well-connected to the MRT Station and Bus Interchange to encourage public transport usage.

Tropical Architecture

- 2.6 To realise a delightful integrated community development for the neighbourhood, the building shall be designed to respond appropriately to Singapore's tropical climate.
- 2.7 Additionally, the design of the public realm and its integration with the community and transport uses shall reinforce the character and identity of the precinct.

PART III

3.0 SUMMARY OF PLANNING AND URBAN DESIGN REQUIREMENTS

3.1 The planning parameters for the Land Parcel are:

PARAMETERS	PROVISIONS / REQUIREMENTS
* Site Area	37,284.8 m ²
Land use	Commercial and Residential (integrated with Bus Interchange, Hawker Centre and Community Club)
Permissible Gross Floor Area (GFA)	<p>Maximum GFA: 78,299 m² Minimum GFA: 70,469 m²</p> <p>At least 46,980 m² GFA shall be for residential use.</p> <p>Of the remaining GFA:-</p> <ul style="list-style-type: none"> a Minimum 6,000 m² shall be for Community Club; b Minimum 3,300 m² shall be for Hawker Centre; c Minimum 3,315 m² shall be for Bus Interchange (inclusive of a minimum 215 m² for Shop and Restaurant use); and d Minimum 1,000 m² shall be for Child Care Centre <p>Rest of the remaining GFA [excluding all GFA for the uses stated from (a) to (d) above] may be for commercial use.</p> <p>Not more than 12,000 m² of the remaining GFA shall be for the following uses ("retail"):</p> <ul style="list-style-type: none"> a Shop and Restaurant uses (including such uses within the Bus Interchange, Hawker Centre and any Outdoor Refreshment Areas); b Medical Clinics; and c Other commercial (excluding office and commercial school) uses such as those for bar/pub, sports and recreation, amusement centre, etc. if permitted by the Competent Authority under the Planning Act (Cap. 232). <p>The detailed requirements are in Conditions 4.2.</p>
Type of Proposed Residential Development	<p>The proposed residential development shall be for any of the following types of housing only:-</p> <ul style="list-style-type: none"> a Flats; or b With the prior written approval of the Authority under Condition 7.5 of the Conditions of Tender, a combination of flats and strata landed houses. <p>Serviced apartments will not be allowed.</p>
Uses at First Storey	Activity-Generating Uses (AGUs) shall be provided on the first storey of the proposed development fronting the public space, through-block links and covered walkways along Sengkang Central and Compassvale Bow as set out in Part IV (Condition 4.4).
Building Height	A maximum technical height control of 64.0 m AMSL as set out in Part IV (Condition 4.7) and as shown in the Control Plans.

* Site area is subject to cadastral survey

PART IV

4.0 PLANNING AND URBAN DESIGN REQUIREMENTS

4.1 General

- 4.1.1. The Planning and Urban Design Requirements as set out in Part IV are to be read in conjunction with the Control Plans and the Conditions and Requirements of Relevant Competent Authorities & Public Utility Licensees provided in the eDeveloper's Packet.
- 4.1.2. The planning and urban design requirements relating to location, height, size, area or extent of uses, etc. as set out in this Part are specified with a view of achieving the prevailing planning objectives as outlined or indicated in the provisions in this Part. The successful tenderer may submit alternative proposals to any of such requirements for the Authority's consideration. 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 proposal 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 to be developed for an integrated mixed-use development. The maximum permissible Gross Floor Area (GFA) for the proposed development is 78,299 m², subject to the following conditions:-
- a. at least 42,980 m² GFA shall be for residential use of which the types of housing units to be allowed are flats and/or strata landed houses (with prior approval);
 - b. of the remaining total GFA of the integrated mixed-use development:-
 - i. Minimum 6,000 m² shall be for Community Club
 - ii. Minimum 3,300 m² shall be for Hawker Centre;
 - iii. Minimum 3,315 m² shall be for Bus Interchange (including a minimum 215 m² for Shop and Restaurant use); and
 - iv. Minimum 1,000 m² shall be for Child Care Centre
 - c. Subject to Condition 4.2.1d, the remaining total GFA of the integrated development, excluding all GFA for the purposes specified in 4.2.1b, may be for such commercial uses as the Competent Authority under the Planning Act (Cap. 232) may permit;
 - d. Not more than 12,000 m² of the total GFA of the integrated development shall be for the following uses ("retail"):-

- i. Shop and Restaurant uses (including such uses within the Bus Interchange, Hawker Centre and any Outdoor Refreshment Areas);
- ii. Medical Clinics, the total GFA for which shall not exceed 3,000 m² or 20% of the total GFA for commercial uses, whichever is lower; and
- iii. Other commercial (excluding office and commercial school) uses such as those for bar/pub, sports and recreation, amusement centre, etc. as may be permitted by the Competent Authority under the Planning Act (Cap. 232).

4.2.2 Any additional GFA, over and above the maximum permissible GFA specified for the development accrued from incentive GFA schemes will be subject to the prevailing Development Control 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.

4.2.3 The successful tenderer shall not sell or dispose the strata lot as mentioned in Condition 4.3.1 until the expiry of the period of 5 years after the issue of Temporary Occupation Permit (TOP) for the whole of the development.

4.2.4 The successful tenderer shall not sublease the strata lot as mentioned in Condition 4.3.1 for a period of longer than 5 years (excluding any period of extension), until the said expiry of the period of 5 years.

4.2.5 All tenderers are advised to carry out their own simulation studies to ascertain the achievable GFA for the proposed development, including additional GFA allowable under the prevailing Development Control Guidelines (e.g. for balconies in the residential component). Such simulation studies should take into account all relevant considerations including the building height controls and existing ground conditions as well as the need to provide basement levels.

4.3 Strata Sub-Division

4.3.1 Strata sub-division of the proposed development (excluding the Community Club, Hawker Centre and Bus Interchange) is subject to the prevailing Development Control Guidelines issued by the Competent Authority under the Planning Act, and all components excluding residential use are to be held under a single strata lot.

4.4 Uses at First Storey

4.4.1 Activity-Generating Uses (AGUs) such as Shops, Restaurants, Entertainment, Sports and Recreation (including gymnasium and fitness centres, etc.) and other similar uses, are to be provided at the first storey of the proposed development fronting the public space, through-block links and covered walkways along Sengkang Central and Compassvale Bow.

4.5 Outdoor Refreshment Areas (ORAs)

- 4.5.1 Where allowed, the ORAs are intended to provide an opportunity for outdoor seating that forms a natural extension to the indoor seating area within an adjacent restaurant or café within the 1st storey of the proposed development. The location and use of these ORAs should not compromise other street activities, pedestrian circulation or traffic safety.
- 4.5.2 The GFA for the ORAs will be computed as part of the maximum permissible commercial GFA and the cap of 12,000 m² of retail GFA, and will be subjected to the prevailing Development Control Guidelines issued by the Competent Authority under the Planning Act.
- 4.5.3 The detailed location, design and layout of the ORAs will be subject to approval of the Authority and the relevant Competent Authorities. The materials and finishes of the ORA shall be of good quality and shall be easy to maintain. This is to ensure that these materials do not deteriorate over time and appear presentable at all times. The storage of any utensils or preparation of food and beverages are not allowed within these ORAs.

4.6 Building Form and Massing

- 4.6.1 The building massing of the proposed development shall be laid out in an appropriate form and scale to provide a human-scale and street-based pedestrian mall experience.
- 4.6.2 The overall building form and massing are to complement the surrounding developments and avoid a wall-like effect.
- 4.6.3 The design of the building form and architectural treatment of the proposed development is to respond to the tropical climate.
- 4.6.4 The facades of the proposed development fronting Sengkang Central, Compassvale Bow and Compassvale Ancilla Park shall be treated as main building elevations.

4.7 Building Height

- 4.7.1 The proposed development is subject to the maximum allowable technical building height control of 64.0 m AMSL.
- 4.7.2 All construction equipment and temporary structures, such as cranes, piling rigs, etc., as well as permanent structures, such as water tanks, mechanical and electrical (M&E) equipment, lift motor rooms, TV antennae, etc., are subject to a maximum allowable technical height control of 64.0 m AMSL, and are to comply with the requirements of the relevant Competent Authorities.

4.8 Building Platform Level

- 4.8.1 The minimum platform level for the proposed development shall comply with the requirements of the relevant Competent Authority.

4.9 Basement Levels and Subterranean Developments

- 4.9.1 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 Development Control Guidelines issued by the Competent Authority under the Planning Act and the technical requirements of the relevant Competent Authorities, and subject to the following requirements:

- a. No new basement levels are allowed to be constructed below the existing MRT Station box and existing underground pedestrian network; and
- b. All excavation works within the Land Parcel are to comply with LTA's requirements, as stipulated in Code of Practice for Railway Protection and Guide to Carrying out Restricted Activities within Railway Protection and Safety Zones.

4.10 Building Edge

- 4.10.1 A building edge of a minimum height of 2 storeys along Sengkang Central and Compassvale Bow shall be provided as shown on the Control Plans. This is to provide a well-defined street edge. Up to 40% of the length of the building edges between the corners of the proposed development can be set back from the building setback lines/lines of Road Reserve to allow for articulation of building form.
- 4.10.2 The proposed building edge of the proposed development along the common boundary with the adjacent park shall be tiered with planters/vertical greenery.

4.11 Building Setback

- 4.11.1 The proposed development is subject to a minimum building setback of 5.0 m, inclusive of a minimum 3.0 m wide green buffer, from the line of Road Reserve along Sengkang Central and Compassvale Bow, as shown on the Control Plans. The building setback of residential blocks of the proposed development shall be subjected to prevailing URA Development Control Guidelines.
- 4.11.2 The proposed development shall set back as per URA Development Control Guidelines from the common boundary along the adjacent school and park.
- 4.11.3 The green buffer/planting strip areas of the proposed development shall be well-planted with trees and shrubs to create a lush and verdant

environment. The detailed landscaping proposal will be subject to the approval of the Authority and the relevant Competent Authorities at the formal submission stage.

- 4.11.4 There are existing services such as water mains, water meter, sump/ejector pipes, sewer line, manholes, inspection chambers, telecom cables and swan necks within the Land Parcel as shown indicatively on the Control Plans. Localised diversion is allowed subject to compliance of the relevant Competent Authorities and Utilities Agencies requirements. No buildings or structures shall be built over these services and the 1st storey building setback shall be adjusted accordingly to avoid these services if these services cannot be diverted within the 5m buffer. The successful tenderer can refer to the “*Land Transport Authority Technical Requirements For Sale Of Site For Commercial & Residential Development At Sengkang Central*” in particular to Clause 5.6.1 & Clause 6 of Section Two of LTA’s requirements on detailed conditions and layout plans of these services.

4.12 Public Space and Visual Porosity

- 4.12.1 The building form and massing of the proposed development of the Land Parcel shall be designed such that the lower floors of the building fronting Sengkang Central and Compassvale Bow would provide a high degree of visual and physical porosity to the internal uses.
- 4.12.2 The proposed development shall include a sheltered public plaza of a minimum 450 m² in size (excluding circulation areas) and minimum double-volume in height. This public plaza shall be centrally located and open out onto the minimum 7.0 m wide sheltered through-block pedestrian links towards the Buangkok MRT entrance and the proposed development drop-off entrance along Compassvale Bow, as shown on the Control Plans.
- 4.12.3 The public plaza may be used for staging of temporary events, such as exhibitions or concerts. The successful tenderer shall allow People Association (PA) unrestricted free usage of the covered plaza space for community events for 60 calendar days per year as stated in Condition 5.21 of the PA’s Technical Conditions of Contract for Design and Build of Proposed New Community Club (CC) at Sengkang Central (“PA’s TCOC”). The successful tenderer is encouraged to work with PA to identify potential areas for collaboration in programming.
- 4.12.4 The public plaza is to be held as part of the single strata lot as mentioned in Condition 4.3.1.
- 4.12.5 The prevailing Development Control Guidelines issued by the Competent Authority under the Planning Act regarding the Design Guidelines and Good Practice Guide for Privately Owned Public Spaces (POPS) will apply.

4.13 Pedestrian Network

At-Grade Pedestrian Network

- 4.13.1 The proposed development shall be designed to provide a direct, porous and legible at-grade and/or above-grade pedestrian network to facilitate pedestrian movement through the proposed development and into the surrounding HDB developments, adjacent park, school, MRT Station, Bus Interchange and bus shelter. These public linkages are to be well-sized and well-located to cater to expected crowds, while providing a comfortable street-based walking experience.

Internal Widths and Ceiling Heights

- 4.13.2 The proposed development shall include the following pedestrian facilities as shown on the Control Plans, subject to the requirements of the Authority and the relevant Competent Authorities:-
- a. Minimum 3.6 m wide (3.0 m clear) covered walkways/linkways (integrated with the building design) with a maximum soffit height of 3.6 m, at the 1st storey level fronting Sengkang Central, Compassvale Bow, around/connecting towards the existing MRT entrance/exit point roof canopy and connecting to the future LTA's covered linkway fronting adjacent developments and the covered walkways/ linkways shall also have minimum 3.6m wide (and 3.0m clear) wide sheltered connection to the relocated taxi-stand / pick-up/ drop-off point at Sengkang Central;
 - b. Minimum 7.0 m wide and double-volume sheltered through-block pedestrian link to connect from the required sheltered public space to the proposed development drop-off entrance along Compassvale Bow and to the MRT entrance/exit point/new bus shelter along Sengkang Central;
 - c. Minimum 6.0 m wide sheltered connection between Bus Interchange and MRT Station entrance for bus-rail transfer which shall be integrated with the proposed development and made accessible throughout the operating hours of both bus and rail facilities; and
 - d. Direct, porous and legible at-grade sheltered pedestrian network to facilitate pedestrian movement through the proposed development and into the surrounding HDB developments, adjacent park, school, MRT Station, Bus Interchange, traffic junction and bus shelter. A minimum 6.0 m wide sheltered pedestrian connection between the Bus Interchange and MRT Station shall be provided and integrated with the proposed development. This connection shall be made accessible throughout the operating hours of both bus and rail facilities.

- 4.13.3 Higher soffit heights for the covered walkways and linkways can be considered, subject to the approval of the Authority and subject to the provision of drop-down panels or the width of the covered walkways and linkways being increased to match the higher height to ensure adequate weather protection for pedestrians during inclement weather. Higher soffit heights can be allowed at the location of vehicular access points to comply with LTA's minimum clearance requirements for vehicular access.
- 4.13.4 The detailed alignment of the covered walkways and the through-block links as shown in the Control Plans are indicative only. They are required to connect between the identified key nodes and pedestrian facilities. The through-block link is to have a clear line of sight along its entire length. The Authority and the relevant Competent Authorities will review the extent and alignment of these covered walkways/linkways and the through-block link at the formal submission stage, in relation to the detailed design of the proposed development.

Other Requirements

- 4.13.5 The platform levels of the covered walkways and linkways and through-block link shall match the platform level of the open walkways within the adjacent Road Reserves, wherever possible. Where the platform level of the 1st storey of the proposed development is higher than the required level of the covered walkways and linkways, ramps and steps to connect the two levels are to be built within the 1st storey of the proposed development and not along the covered walkways and linkways. Where the covered walkways and linkways are intercepted by vehicular ingress/egress points, any cross ramps are to be located on either side of the pedestrian walkway area. The level of the covered walkways and linkways are to be maintained at a constant level as far as possible and any changes in levels are to be accommodated by ramps.
- 4.13.6 The covered walkways, linkways and through-block link are to be kept open and unobstructed for public use at all times. The prevailing Development Control Guidelines issued by the Competent Authority under the Planning Act regarding the exemption of GFA for covered walkways and pedestrian links at the 1st storey from GFA computation will apply.
- 4.13.7 The successful tenderer is to work with LTA to design and implement the connections to the MRT Station, the new bus shelters and taxi stand/pick-up/drop-off point.

Completion Timeframe

- 4.13.8 The covered linkways (within and outside the site boundary) are to be completed prior to, or at the same time as, the TOP for the proposed development on the Land Parcel is obtained. The successful tenderer shall, at his own cost and expense, maintain the completed covered linkways (outside the site boundary) to the satisfaction of the relevant Competent Authorities until such time when the covered linkways (outside the site

boundary) are handed over to LTA upon the issuance of Certification of Statutory Completion (CSC) for ownership and maintenance.

4.14 Integration of Rapid Transit System (RTS) – Related Structures

4.14.1 The successful tenderer shall ensure that the existing at-grade RTS-related structures which provide the access and services to the Buangkok MRT Station, shall be well integrated with the proposed development as shown on the Control Plans and these include the following:

- a. The existing main entrance / exit roof canopy structures; and
- b. The existing firemen and emergency access structure.

4.14.2 The successful tenderer has the option to introduce a new set of escalators from the station concourse unpaid area towards the south, as shown on the Control Plans. These works are subject to the requirements and approval of LTA and the railway operator, as stipulated in Annex A-3 of the Conditions and Requirements of Relevant Competent Authorities and Public Utility Licensees.

4.14.3 In addition, covered pedestrian linkways shall be provided to facilitate seamless and convenient pedestrian access between the existing entrance/exit points and the covered walkways and new Bus Interchange within the proposed development.

Integration of Existing MRT Entrance/Exit Point Roof Canopy Structure

4.14.4 The existing roof canopy structure over the existing entrance/exit point at Buangkok MRT Station fronting Sengkang Central (northbound only) shall be removed and replaced with a new roof canopy. The entrance/exit point new roof canopy structures shall be fully integrated with the overall building envelope and architectural treatment of the proposed development on the Land Parcel. There shall be no building structures except for the new roof canopy above the MRT entrance. These works are subject to the requirements and approval of LTA and the rail operator, as stipulated in Annex A-3 of the Conditions and Requirements of Relevant Competent Authorities and Public Utility Licensees.

Integration of Existing Firemen and Emergency Access Structure

4.14.5 The existing firemen and emergency access structures along Sengkang Central shall be retained and fully integrated as part of the proposed development. The successful tenderer shall ensure that there is no disruption to the RTS and Station's functions when the works are carried out. These works are subject to the requirements and approval of LTA and the railway operator, as stipulated in Annex A-3 of the Conditions and Requirements of Relevant Competent Authorities and Public Utility Licensees.

- 4.14.6 The works to the RTS-related structures and services are to be completed prior to, or at the same time, as the TOP for the proposed development on the Land Parcel is obtained.

4.15 Vehicular and Servicing Access

Vehicular Ingress/ Egress

- 4.15.1 Vehicular access to the proposed residential development shall be taken from Compassvale Bow at least 30 m from the adjacent school entrance. The vehicular access to the proposed commercial development shall be 30 m from the residential access point and away from the road bend along Compassvale Bow. The proposed residential and commercial accesses shall be constructed as a left-in-left-out arrangement.
- 4.15.2 Vehicular access to the proposed Bus Interchange shall be taken from Sengkang Central between the MRT Station and Compassvale Ancilla Park. The proposed Bus Interchange access shall be constructed as a fully signalised T-junction with Sengkang Central.
- 4.15.3 All vehicular lay-bys, ingress/egress and taxi stand and pick-up/drop-off points, external ramps to service areas, car parks and all associated structures to the car parking facilities, are to be located within the site boundary and be well-integrated with the overall architectural treatment and building form of the proposed development and visually well-screened, subject to the approval of LTA, the Authority and the relevant Competent Authorities at the formal submission stage.
- 4.15.4 Sufficient pick-up/drop-off bays, vehicle queuing length and adequate turning spaces shall be provided within the Land Parcel to avoid queuing-up of vehicles onto the main road so as to ensure smooth flow of vehicles along the main road.
- 4.15.5 Drop barriers shall be located within the proposed development so as to provide sufficient vehicle queue length. For the proposed residential development, at least 2 car lengths shall be provided to cater to possible traffic queues and prevent it from spilling on to the surrounding roads. For the proposed commercial development, drop barrier for entry should be placed as far from the road as possible, i.e. bottom of the ramp/entry to basement car park.

Service Areas and Mechanical & Electrical (M&E) requirements

- 4.15.6 The successful tenderer shall design the proposed Bus Interchange (BI), Hawker (HC) and Community Club (CC) to the requirements as stated in the respective Technical Conditions of Contract and Development Guideline by the Land Transport Authority (LTA), National Environment Agency (NEA) and People's Association (PA) as set out in Appendices H, I and J in the Conditions of Tender. The successful tenderer should integrate the bin centres for the commercial development, HC and CC at a single location and share a common service access. In addition, the successful

tenderer shall as part of the design of the integrated development also address all operational and future maintenance needs for its co-users (i.e. LTA, NEA and PA) arising of the shared services/M&E areas. All loading/unloading, refuse collection activities are to be conducted within the proposed development.

- 4.15.7 Sufficient service areas, including refuse bin centre, loading/unloading bays, etc., are to be provided within the proposed development.
- 4.15.8 The successful tenderer shall ensure that access to service areas (e.g. bin centre, electrical substation, loading / unloading areas) shall be taken from within the development. Service access taken directly from the public roads will not be allowed.
- 4.15.9 No service areas are to be located fronting Sengkang Central. Service areas/structures, such as air-conditioning ledges, etc., if provided, are to be located internally within the proposed development. These are to be well-screened and integrated with the overall design of the building elevations. All ventilation shafts to the basement levels are to be fully integrated within the overall envelope of the proposed development and visually well-screened. The detailed screening requirements are given in Clause 4.18.
- 4.15.10 All service areas will be subject to the requirements and approval of the Authority and the relevant Competent Authorities at the formal submission stage.

Construction Access

- 4.15.11 Vehicular access to the site for construction shall be taken from Sengkang Central at least 50 m from junction and 30 m from bus bays and adjacent access point. This construction access shall be subjected to the requirements and approval of LTA and other relevant Competent Authorities.

4.16 Car, Motorcycle and Bicycle Parking Provision

Car Parking

- 4.16.1 The successful tenderer shall be required to fully comply with the physical parking requirements subject to the prevailing Parking Places (Provision of Parking Places and Parking Spaces) Rules or any statutory modification and re-enactment thereto. LTA has the full discretion to determine the applicability of the Range-based Car Parking Standards (RCPS) to the proposed development.
- 4.16.2 The successful tenderer is strongly encouraged to provide parking lots for motorcycles within the layout of the car park.
- 4.16.3 The facades of any at-grade or above-grade car parking levels are to be screened such that the direct lights from car headlamps do not project into the surrounding developments. The services within the car parking levels

located on the ceiling, near the periphery of the development, are to be visually well-screened from street level and the surrounding developments, subject to prevailing Development Control Guidelines issued by the Competent Authority under the Planning Act.

Bicycle Parking

- 4.16.4 To facilitate cycling as a mode of transportation to major transport nodes and key amenities, the successful tenderer is required to construct and provide bicycle parking(s) to accommodate a minimum number of bicycle parking lots within the Land Parcel at the rate as set out below or prevailing requirements set out by the relevant Competent Authority at formal submission stage:

- a. 1 lot for every 6 dwelling units; and
- b. 1 lot per 300 m² of the first 15,000 m² of commercial GFA, and 1 lot per 1,000 m² of commercial GFA subsequently.

An additional 150 bicycle parking spaces, over and above the minimum provision requirement are to be provided for commuters to the Bus Interchange. These additional parking spaces should be visible and freely accessible to the general public, with close proximity to the Bus Interchange.

- 4.16.5 Bicycle parking area(s) proposed based on dimensions illustrated in LTA's Code of Practice for Street Works Proposals relating to Development Works can be considered for GFA exemption. Any provision above the minimum requirement will be subjected to evaluation. The bicycle parking area(s), once approved, will not be allowed to be converted for other uses without the approval of the Authority and the relevant Competent Authorities.
- 4.16.6 The successful tenderer is encouraged to provide complementary facilities such as showers, lockers and changing rooms in close proximity to the bicycle parking facilities where appropriate. These supporting facilities that fulfil LTA's guidelines can also be considered for GFA exemption subject to URA's evaluation. These area(s), once approved, are not allowed to be converted to other uses without the Competent Authority's approval.
- 4.16.7 The successful tenderer shall ensure at least one of the passenger lifts is able to accommodate minimum one horizontally standing bicycle, if the bicycle parking area is not located at ground level. The recommended dimensions for the lift can be found in Code of Practice for Street Works Proposals relating to Development Works.
- 4.16.8 The design and layout of the bicycle parking facilities will be subject to the requirements and approval of the Authority and the relevant Competent Authorities at the formal submission stage and as set out in LTA's Code of Practice for Street Works Proposals relating to Development Works.

- 4.16.9 The successful tenderer shall be responsible for the operation and maintenance of the bicycle parking lots at all times and shall bear all the costs related to the proper functioning of the bicycle parking lots.

Wayfinding Signage

- 4.16.10 The successful tenderer is to provide a comprehensive wayfinding system for the public to easily find their way to any transportation nodes within the vicinity and towards the pedestrian and cyclist related facilities (e.g. bicycle parking) within the proposed development. A guide for wayfinding signage and related facilities can be found in the Code of Practice for Streetworks Proposals relating to Development Works or <https://www.lta.gov.sg/content/dam/ltaweb/corp/GreenTransport/2016/Guide%20for%20Wayfinding%20Signage.pdf>.
- 4.16.11 The successful tenderer shall obtain clearance from the Competent Authority on all matters related to the wayfinding system before commencing construction of the proposed development.
- 4.16.12 The successful tenderer shall be responsible for the maintenance of the wayfinding system at all times and shall bear all the cost related to the proper functioning of the wayfinding system.

4.17 Roofscape and Screening

- 4.17.1 Given the prominent location of the Land Parcel, the roof areas of the proposed development are to be considered as the “fifth” elevation and designed to be fully integrated with the overall building form, massing and architectural treatment.
- 4.17.2 To ensure that the roof areas are well-designed and attractive when viewed from the surrounding developments, all service areas, M&E equipment, car parking areas, water tanks, etc., are to be integrated within the overall building envelope and visually well-screened from the top and all sides of the proposed development.

Screening Requirements

- 4.17.3 The performance requirements for the screening of roof-top services and car parking areas are as follows:
- a. To be screened from the top and all sides;
 - b. The spacing between the trellis or louvre elements is to be equal to or less than their depth;
 - c. The elements are to be orientated to cut off views from the street level and surrounding buildings; and

- d. The openings in perforated panels are to be evenly distributed with a porosity ratio (i.e. percentage of void-to-solid) equal to or less than 25%. The width/diameter of the openings are not to exceed 30 mm.

4.18 Child Care Centre (CCC) Facility

- 4.18.1 The proposed development is to include a Child Care Centre (CCC) for infant care and child care services. The CCC shall be a minimum of 1,000 m² and is estimated to accommodate a total of 200 children (including infants). The GFA for the CCC will be computed as part of the maximum permissible GFA for the proposed development.
- 4.18.2 The CCC is required to be retained and operated for a minimum of 10 years from the date of the grant of licence for the CCC. The CCC is to be held as part of the single strata lot as mentioned in Condition 4.3.1.
- 4.18.3 The CCC shall comply with the requirements and guidelines established by the Early Childcare Development Agency (ECDA) for infant and childcare centres (refer to the guideline published by ECDA "Guide on Setting Up a Child Care Centre" which is found on ECDA's website at http://www.childcarelink.gov.sg/ccis/uploads/CCC_Guide.pdf).
- 4.18.4 The successful tenderer shall inform ECDA when the Certificate of Statutory Completion (CSC) for the proposed development is obtained. The successful tenderer shall appoint an operator to run the CCC. The operator shall comply with requirements stipulated under the Child Care Centre Act (Cap. 37A) and be licensed accordingly. The successful tenderer may approach ECDA for assistance in identifying an appropriate child care operator.
- 4.18.5 After the initial 10 year period of operation, the successful tenderer may convert the CCC space to other community-based uses, such as elder care centre, subject to approval of ECDA, URA and relevant agencies. In the event ECDA, URA and relevant agencies deem that the space is no longer suitable or required for other community-based uses, the space can be converted to commercial (non-retail) use, subject to the cap of 40% of the maximum permissible GFA as specified in Condition 4.2.1(c).
- 4.18.6 The CCC space should preferably be located on the ground floor of the building. The CCC space shall not be located at the basement and nor above the 5th storey of the proposed development. The CCC shall not be located along the road frontage and shall be located as far as possible from the main roads and sufficient space for the designated pick-up/drop-off points should be provided for the CCC.
- 4.18.7 Car parking spaces equivalent to 10% of the maximum enrolment capacity of the CCC facility and 1 bus car park lot shall be provided in addition to the car-park spaces required under condition 4.16. The Range-based Car Parking Standard (RCPS) will not be applicable.

4.19 Community Club (CC)

- 4.19.1 The successful tenderer shall design and construct a Community Club ('CC') within the stratum of space proposed for the CC ("the CC Lot") within the proposed commercial development comprising a minimum gross floor area of 6,000 m² ("CC Area") in accordance with the requirements in the Building Agreement and the Technical Conditions of Contract for Design and Build of Community Club at Sengkang Central ("PA's Agreement", Appendix I of the Conditions of Tender). The boundary of the CC Lot shall be determined by People's Association ("PA") at the sole discretion and upon the acceptance of the design of the CC by PA and is subject to cadastral survey.
- 4.19.2 The successful tenderer shall enter into a Design & Build Agreement ("D&B Agreement") with PA for the design and construction of the CC, in the form as set out in Appendix C of PA's Agreement. PA will reimburse the successful tenderer the cost of construction of the CC by way of monthly progress payments, as provided for in the D&B Agreement.
- 4.19.3 The Government shall retain all proprietary and ownership rights, title and interest in the CC Lot and the CC Lot will not be comprised in the lease for the said Land.

4.20 Hawker Centre (HC)

- 4.20.1 The successful tenderer shall design and construct a Hawker Centre ('HC') within the stratum of space proposed for the HC ("the HC Lot") within the proposed commercial development comprising a minimum gross floor area of 3,300 m² ("HC Area") in accordance with the requirements in the Building Agreement and the Technical Conditions of Contract for Design and Build of Hawker Centre at Sengkang Central ("NEA's Agreement", Appendix J of the Conditions of Tender). The development guide of the hawker centre is as shown in Annex A. The exact dimensions, form and boundary of the HC Lot shall be determined by National Environment Agency ("NEA") at its sole discretion and upon the acceptance of the design of the HC by NEA and is subject to cadastral and title survey by a registered surveyor.
- 4.20.2 The successful tenderer shall enter into a Design & Build Agreement ("D&B Agreement") with NEA for the design and construction of the HC, in the form as set out in Annex B of NEA's Agreement. NEA will reimburse the successful tenderer the cost of design and construction of the HC by way of monthly progress payments, as provided for in the D&B Agreement.
- 4.20.3 The Government shall retain all proprietary and ownership rights, title and interest in the HC Lot and the HC Lot will not be comprised in the lease for the said Land.

4.21 Bus Interchange (BI)

- 4.21.1 The successful tenderer shall design and construct a Bus Interchange ("BI") within the stratum of space proposed for the BI ("the BI Lot") within the

proposed commercial development comprising a minimum gross floor area of 3,315 m² for concourse space, including a minimum 215 m² of Shop & Restaurant space in accordance with the requirements in the Building Agreement and the Technical Conditions of Contract for Design and Build of BI at Sengkang Central (“LTA’s Agreement”, Appendix J of the Conditions of Tender). An indicative site plan of the BI is as shown in Annex B. The exact dimensions, form and boundary of the BI Lot shall be determined by Land Transport Authority (“LTA”) at its sole discretion and upon the acceptance of the design of the BI by LTA and is subject to cadastral and title survey by a registered surveyor.

- 4.21.2 The successful tenderer shall enter into a Design & Build Agreement (“D&B Agreement”) with LTA for the design and construction of the BI, in the form as set out in LTA’s Agreement. LTA will reimburse the successful tenderer all costs related to the design and construction for the BI, based on the cost apportionment formula stated in the aforesaid LTA’s “Technical Conditions of Contract for Design and Build of the Bus Interchange and the Associated Works at Sengkang Central” enclosed as Schedule 1 of Appendix J of the Conditions of Tender.

4.21 Development Control Guidelines

- 4.22.1 The successful tenderer is to comply with the prevailing Development Control Guidelines as issued by the Competent Authority under the Planning Act, and any modifications thereto, as well as the requirements of all relevant Competent Authorities on the Development of the Land Parcel.

PART V

5.0 OTHER REQUIRED WORKS

5.1 Road Improvement Works

- 5.1.1 The successful tenderer shall at his own cost and expense, design and construct the proposed localised road improvements along Sengkang Central as set out in Section 7.0 of the Conditions and Requirements of Relevant Competent Authorities and Public Utility Licensees.

5.2 Provision of Temporary Covered Pedestrian Footpath to Buangkok MRT Station

- 5.2.1 There are existing pedestrian footpaths through the Land Parcel, from Compassvale Bow to Buangkok MRT Station. To facilitate construction works, the successful tenderer shall, at his own cost and expenses, divert the existing pedestrian footpaths within the site by constructing a temporary pedestrian footpath, so as to maintain pedestrian connection from Compassvale Bow to Buangkok MRT Station.

5.2.2 The temporary pedestrian footpath with cover shall be of a minimum width of 2.4 m, complete with street lighting and fittings at the perimeter of the Land Parcel along Compassvale Bow and Sengkang Central. The temporary pedestrian footpath shall remain accessible at all times.

5.2.3 The successful tenderer shall put up a signage at least 1 month prior to the hoarding and demolition of existing footpath to inform the local community on the demolition of the existing footpath and the alternative footpath provided.

5.3 Relocation of Existing HDB Park Elements and Fixtures

5.3.1 As the construction of the proposed 3.5 m wide footpath and relocated taxi stand/pick-up/drop-off point along Sengkang Central will affect the existing park elements and fixtures, the successful tenderer shall, at his own cost and expenses, reinstate all affected park elements and fixtures. The successful tenderer is required to consult HDB on the revised design of the affected park area. As part of the submission to HDB on the revised design, the successful tenderer shall obtain PUB's ABC Certification and BCA's Green Mark Certification.

5.3.2 The successful tenderer shall obtain approval from the Pasir Ris-Punggol Town Council (TC) as the management and maintenance of common area are under the TC.

5.3.3 The successful tenderer shall undertake appropriate measures to ensure public safety and abate or minimise any noise, dust and other nuisances during the construction period.

5.4 Removal of Interim Surface Car Park

5.4.1 There is an existing interim surface car park within the Land Parcel. The successful tenderer shall, at his own cost and expenses, remove the interim surface car park as part of the development works.

5.4.2 The successful tenderer shall put up a signage at least 1 month prior to the removal of the existing interim surface car park to keep the local community informed on the removal of the interim car park.

5.4.3 The successful tenderer is required to ensure at all times that the buildings within the vicinity of the works are not damaged in any way or affected by the demolition works.

PART VI

6.0 OTHER REQUIREMENTS

6.1 Access into State Land

- 6.1.1 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 License (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.

6.2 Public Communications Plan

- 6.2.1 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.
- 6.2.2 The local community is defined as residents and administration of developments within a 100 m radius of the Land Parcel. This includes all residents of HDB flats, private condominiums / flats and landed houses, Management Corporation Strata Title (MCST) of private condominiums, Chairmen of Residents' and Neighbourhood Committees, Constituency Director of the Constituency Office and General Managers of Town Councils, the administration of schools and other institutions.
Stage 1: Prior to submission of application for Written Permission
- 6.2.3 The successful tenderer is required to submit to the Authority within 2 months from the date of the award of tender a duly completed Form A (as shown in Annex C-1) setting out the public communication plan for the proposed development for the Authority's information.
- 6.2.4 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 brief information on the development project including the temporary footpath, PPVC, removal of the existing interim car park, road improvement works, proposed mitigating measures to regulate noise from construction activities and proposal to ensure students' road safety in relation to the movement of heavy vehicles and the contact details of the successful tenderer and the hotline numbers of the relevant departments in the Building and Construction Authority (BCA), National Environment Agency (NEA), the Urban Redevelopment Authority (URA) and the Ministry of Manpower (MOM).
- 6.2.5 The successful tenderer shall submit to the Authority after the distribution of flyers to the local community a duly completed Form B (as shown in Annex C-2) verifying that the requirements set out in Condition 6.2.4 have been complied with. Upon confirming that the declaration provided by the

successful tenderer is in order, the Authority will give written consent to 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.

- 6.2.6 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

- 6.2.7 After the grant of Provisional Permission by the Competent Authority under the Planning Act (Cap. 232) for the proposed development, the successful tenderer shall distribute additional flyers to the local community containing detailed information on the development project. The information to be provided shall include but is not limited to the following:

- a. Project information (e.g. type of development, number of units, storey height, vehicle access points);
- b. Key milestones in the construction programme [e.g. commencement and duration of piling works, expected date of issuance of Temporary Occupation Permit (TOP)];
- c. Schematic site layout showing the location of building blocks and facilities such as the bin centre, electrical substation, BBQ pits, etc.
- d. Details of proposed measures to mitigate the impact of development to the surrounding environment and users;
- e. 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;
- f. Indicative timeframe for the community to respond to the proposal, which shall be at least 2 weeks from the date the flyers are distributed; and
- g. The hotline numbers of the relevant departments in BCA, NEA, MOM and URA.

- 6.2.8 After the distribution of flyers, the successful tenderer shall submit to the Authority a duly completed Form C (as shown in Annex C-3) verifying that the requirements set out in Condition 6.2.7 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 to 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 submit any application for the proposed development on the Land Parcel without the prior written consent of the Authority as mentioned above.

6.2.9 As part of the resubmission of the application subsequent to the Provisional Permission granted by the Competent Authority under the Planning Act (Cap. 232), the successful tenderer shall submit to the Competent Authority duly completed Form D (as shown in C-4), which is a final collation of the feedback received on the proposed development, if any. The developer is also to explain how the development proposal seeks to sensitively address the concerns raised by the local community, if any.

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

Approval of flyers prior to distribution

6.2.11 The successful tenderer is required to submit a copy of the flyers mentioned in Conditions 6.2.4 and 6.2.7 to the Authority before the distribution of the said flyers to the local community for the Authority's approval.

6.3 Prefabricated Prefinished Volumetric Construction (PPVC)

6.3.1 For information of tenderers, the successful tenderer is required to adopt the minimum level of use of Prefabricated Prefinished Volumetric Construction (PPVC) as stipulated under the Building Control (Buildability and Productivity) Regulations for the development on the Land Parcel for Residential use as set out in Clause 12.2 of the "Conditions and Requirements of Relevant Competent Authorities & Public Utility Licensees".

6.3.2 For the purpose of adopting the PPVC method of construction, the successful tenderer is required to set aside some space within the Land Parcel for storage and/or holding area for PPVC modules. No additional space outside the Land Parcel will be granted on TOL basis for this purpose.

6.4 CONQUAS Assessment of Construction Quality

6.4.1 The successful tenderer shall be required to refer and submit the proposed development to the Building and Construction Authority (BCA) to be assessed for the construction quality of the building works under the Construction Quality Assessment System (CONQUAS).

6.4.2 The successful tenderer shall for the purpose of this Condition comply with all requirements, procedures, directions and request of BCA and shall 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 shall also render his full co-

operation to BCA, its officers, employees and agents in relation to such assessment under CONQUAS.

6.5 Design for Maintainability

- 6.5.1 The successful tenderer is required to adopt the guidelines described in the BCA's Façade Access Design Guide and submit the façade access design of the proposed development to BCA for review prior to the development control and building plan approvals from the Competent Authority under the Planning Act (Cap. 232) and BCA, respectively.

Stage 1

Prior to the submission of the development application to Competent Authority under the Planning Act (Cap. 232), the successful tenderer is required to seek in-principle acceptance (IPA) from BCA on its overall façade access framework for the proposed development. Following which, BCA will issue an IPA letter for the successful tenderer to proceed with the development application for Written Permission to the Competent Authority under the Planning Act (Cap. 232).

Stage 2

The successful tenderer is required to submit the detailed façade access strategy of the development to BCA for review prior to the submission of building plan to BCA. BCA will then issue a Final Acceptance (FA) letter for the successful tenderer to seek building plan approval. The successful tenderer is required to carry out the works in accordance with the accepted detailed façade access strategy.

- 6.5.2 The successful tenderer is advised to follow the recommendations of BCA's Design for Maintainability Checklist (DMC) 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 BCA on the DMC prior to the submission of building plan to BCA.
- 6.5.3 The successful tenderer shall comply the directions and requests of BCA and render its full cooperation in relation to meeting the required Design for Maintainability requirements.

6.6 Productive Formats for Shops, Restaurants and Entertainment Outlets

- 6.6.1 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 said 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. SPRING Singapore has provided a set of examples of the productive formats in Annex D for reference. For more information on the productive formats, the

successful tenderer is to contact SPRING Singapore directly via email: food_division@spring.gov.sg or lifestyle_division@spring.gov.sg.

PART VII

7.0 Tender Submission (Concept and Price Revenue Tender System)

7.1 Concept and Price Revenue Tender System

7.1.1 The tender for the site will be based on a Concept and Price Revenue Tender System. Under this system, tenders will be evaluated with respect to the Concept Proposal and tendered sale price to be submitted by the tenderers.

7.2 Tender Evaluation Criteria

7.2.1 A Concept Evaluation Committee (CEC) will first evaluate the Concept Proposal, i.e. design concept and track record submitted by the tenderers. Only Concept Proposals that are in line with the planning and urban design intention for the site and substantially satisfy the evaluation criteria listed in Table 1 below will be short-listed by the CEC for the second stage of the tender evaluation. The three main criteria of “Quality of Design Concept”, “Quality of Public Realm” and “Track Record carry different weightages. In evaluating the Concept Proposals, the CEC will assess and grade the proposal against these criteria and weightage as shown below.

Table 1 – Tender Evaluation Criteria for Concept Proposal for the Site

Quality of Design Concept – Weightage at 40 Percent	
Overall Development Concept	<ul style="list-style-type: none"> The proposed development shall be an attractive one-stop centre that anchors and creates an identity for Buangkok neighbourhood. The development shall provide a range of community uses, retail and public spaces which are well-integrated with transport facilities so as to encourage community gatherings and programming of social events.
Layout of Building Form and Massing	<ul style="list-style-type: none"> The building massing of the proposed development shall be laid out in an appropriate form and scale to provide a good relationship to its neighbouring developments and a human-scale and street-based pedestrian experience. It shall feature active frontages that allow the indoor activities to be visible from the streets.
Placement of Uses	<ul style="list-style-type: none"> The proposed layout and placement of the various uses shall be well-considered so to create synergy and convenience for visitors, residents and commuters as well as to promote social interaction and a sense of community. Considerations should also be given to how the layout of the various uses would relate to the surrounding developments which include the park, school, surrounding housing estate

	<p>and MRT Station.</p> <ul style="list-style-type: none"> The placement of uses should be carefully planned so that their service areas and service access arrangements will not compromise the attractiveness and overall environment of the development and its neighbours.
Response to Tropical Climate	<ul style="list-style-type: none"> The building facades of the proposed development shall be designed to respond appropriately to Singapore's tropical climate. The facades are to be well-articulated with solid (walls)/void (fenestration) areas (e.g. recesses, ledges, sun-shading devices, etc.) to respond appropriately to the tropical climate.
Quality of Public Realm – Weightage at 30 Percent	
Good connectivity	<ul style="list-style-type: none"> The proposed development is to provide a direct, porous and legible at-grade and/or above-grade pedestrian network to facilitate convenient pedestrian movement through the proposed development and into the surrounding HDB developments, adjacent park, school, MRT Station, Bus Interchange and bus shelter. These public linkages are to be well-sized and well-located to cater to expected crowds, while providing a comfortable street-based walking experience.
Attractiveness of Public Spaces	<ul style="list-style-type: none"> Public spaces (e.g. the sheltered plaza) shall be designed to be delightful and pedestrian-friendly. Attention to details shall be given to the design of landscaping and generous provision of public seating and other amenities. The size, location and design of public spaces shall create a good sense of arrival and orientation for people arriving from the surrounding residential developments, as well as Buangkok MRT Station and adjacent common green. Public spaces should be well-designed to accommodate activities, ranging from organised community events to informal gatherings. It should be easily accessible and safe to use by all users at all times.
Track Record – Weightage at 30 Percent	
Track Record	<ul style="list-style-type: none"> The track record of the tenderer/developer and design teams will be assessed based on their relevant experience, particularly in developing similar mixed-use developments. Experience in developing such developments which are co-located with transport nodes and/or community facilities will be considered favourably. Design team may provide relevant awards to substantiate their track record. The workmanship quality of the tenderer's completed projects within the past 5 years based on Quality Mark and CONQUAS scores of these projects would be taken into consideration. Tenderers with only overseas projects may substantiate the workmanship quality of these projects with

	relevant international construction awards.
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7.3 Submission Requirements for Concept Proposal

7.3.1 The Concept Proposal is to demonstrate how the proposed development on the Land Parcel will address the evaluation criteria listed in Table 1 of Condition 6.2 above as well as the planning and urban design intention specified in the relevant sections of Parts II, IV and VI.

7.3.2 The submission of the Concept Proposal is to include the following:

Drawings

- a. A maximum of twelve (12) A0 sheets mounted on white foam boards not more than 6mm thick or other similar materials containing:
 - i. Scale drawings – including a site plan (at 1:1000 scale) and floor plans, sections and elevations (at 1:500 scale) – to illustrate the overall design, public open spaces, pedestrian network, landscaping treatment, vehicular access, etc. of the proposed development; Drawings of other scales can be included as additional drawings;
 - ii. Key sectional details (at least 1:100 scale) to illustrate the design of the pedestrian malls and adjacent elevations;
 - iii. Perspectives to give a comprehensive understanding of the proposal and to illustrate the proposed development within its context. The perspectives should also depict the building form and architectural design, day and night visualizations of the development, key public spaces, street level activities, views of the development from the adjacent developments, residential developments at the opposite side of the road and other vantage points; and
 - iv. Any other information, sketches, diagrams or details to illustrate the idea and workability of the design proposal.

Design Report

- b. Six (6) sets of Design Report in either A3 or A4 format containing:
 - i. A description of the overall design concept for the proposal;
 - ii. A list of the proposed mix of uses and their GFA breakdown is to be provided;
 - iii. A reduced copy of the A0 sheets provided under Condition 6.3.2(a);

- iv. Photographs of the scale model provide under Condition 6.3.2(c);
- v. Any other information, sketches, diagrams or details to illustrate the idea and workability of the design proposal;
- vi. A proposal to illustrate the incorporation of Green Mark design features in the proposed development;
- vii. A detailed landscape Masterplan and landscape design report;
- viii. The track record of the design team, including the name(s) of the lead Architect(s)/Designer(s) and supporting architectural and consultant team(s) who will oversee the detailed design development and implementation of the project and their track record(s) in designing and executing similar mixed-use projects, particularly with experience in developments which are co-located with transport nodes and/or community facilities. Additional information on the relevant completed projects, including awards and accolades, should be provided. The tenderer is to provide this information in the format as shown in Appendix 1.

Physical and digital 3D Models

- c. A scale model of the proposed development at 1:400 scale. The base of the model is to be 5mm thick and is to correspond with the site boundary of the Land Parcel for evaluation. Photographs of the scale model from all elevations and key vantage points are to be provided.
- d. A digital 3D model of the Land Parcel in AutoDesk 3DS Max file format is available for purchase in the eDeveloper's Packet. It is compulsory for all tenderers to purchase and utilise this set of digital 3D models from URA for their Concept Proposal submission in order to ensure that all Concept Proposals are all presented on the same digital base. Submissions are to be in Autodesk 3DS Max file format version 2016 and below (.max), or in Sketchup file format, version 8 and below (.skp), geo-referenced to SVY21 coordinates.

Soft Copies of Drawings and Design Report

- e Two (2) soft copies of the Drawings and Design Report of the Concept Proposal in CD-ROM. All drawings, perspectives, visualizations and photographs of the model(s) are to be in PDF format.

7.3.3 The tenderer shall submit a checklist of requirements on the submission of the Concept Proposal as shown in Appendix 2.

7.4 Other Information Regarding Tender Evaluation Process

Briefing on Tender Conditions and Concept and Price Revenue Tender Process

- 7.4.1 URA will conduct a briefing session on the planning and urban design requirements for the Land Parcel and the Concept and Price Revenue Tender process to all tenderers on 2 February 2018. Please register your attendance for the briefing session at <http://www.ura.gov.sg/uol/surveys/land-sale-briefing-sengkang-central> by 22 January 2018.

Presentation and Refinement of Concept Proposal

- 7.4.2 After the closure of the tender, tenderers will be required to work with URA to present their digital 3D model and proposals to the CEC and allow for the CEC to seek clarifications. The presentation sessions will be held on 30 July 2018 and 31 July 2018 in Singapore and details on the arrangements will be made known to the tenderers at a later stage. Any expenses related to the presentations incurred by the tenderers shall be borne by the tenderers.
- 7.4.3 As part of the evaluation of the Concept Proposals, the CEC may propose refinements to a tenderer's Concept Proposal with a view to ensuring that it will better meet and reflect the requirements and planning objectives for the site as set out in Parts II, IV and VI. If the tenderer agrees in writing within such time as the CEC may specify to the proposed refinements, they shall, in the event their tender is accepted by the Authority, work with the Authority, the DAP and all relevant Authorities during the design development proposal stage to incorporate the proposed refinements and comply with all their requirements relating thereto and to the proposed development of the site.
- 7.4.4 Upon receipt of the tenderer's written agreement with respect to the proposed refinements, the CEC will further evaluate the tenderer's Concept Proposal and consider whether or not to short-list it for the second stage of the tender evaluation.

Submission of Detailed Plans After Award

- 7.4.5 The successful tenderer is to, after the acceptance of their tender by the Authority, submit detailed plans for the proposed development on the Land Parcel to the Authority and the relevant Competent Authorities for approval. The detailed plans are to adhere to the Concept Proposal submitted in the tender and accepted by the Authority and any changes will be subject to prior approval of the Authorities and the relevant Competent Authorities.

PART VIII

8.0 DESIGN ADVISORY PANEL

8.1 General

8.1.1 To ensure that the development meets the planning and urban design objectives described in Part IV, the proposal for the Land Parcel will be subject to review by a Design Advisory Panel (DAP) and approval from the Authority as part of the development application submission process.

8.1.2 The DAP will be appointed by the Authority and comprise members from the building and real estate industries as well as representatives from related fields, as and when necessary. The DAP will convene necessary meetings to provide inputs and comments on the overall building layout and architectural design, including the appropriate use of building materials, finishes and external lighting. The successful tenderer will have the opportunity to clarify or propose alternatives to address the DAP's concerns through the DAP evaluation process.

8.2 DAP Evaluation Process

8.2.1 The DAP evaluation will be a two-stage process.

Stage 1

8.2.2 At the Provisional Permission (PP) stage, the DAP will address the broader urban design aspects of the development proposal in relation to the form, massing, pedestrian connectivity, vehicular circulation, view corridors and landscaping. This is to ensure major issues affecting the layout of the proposal are addressed by the time that PP is issued for the development.

8.2.3 As part of the PP submission, plans, sections and elevations, as well as a 1:400 scale massing model are required to be submitted to show the proposed development in relation to the adjacent sites and surrounding context.

8.2.4 A digital textured model is required to be submitted to show the proposed development in relation to the adjacent sites and surrounding context. The files for the digital 3D model should be in any of the following formats: AutoDesk 3Ds Max file format, version 2016 and below (.max), or a digital 3D model in SketchUp file format, version 8 and below (.skp), geo-referenced to SVY21 coordinates.

Stage 2

- 8.2.5 At Written Permission (WP) stage, the DAP will focus on the building layout and architectural design aspects of the proposal including the appropriate use of building materials, finishes and external lighting.
- 8.2.6 As part of the WP submission, 1:50 scale elevations and sections, a 3D digital textured model in any of the formats in Condition 7.2.4, and a 1:200 scale architectural model if necessary, as well as material samples of the facade and roof materials are required to be submitted to show the architectural design of the development.

SENGKANG CENTRAL		[Updated as of 20 Oct 2017]
PART A: GENERAL		[Refer to text in bold for quick referencing of key design requirements.]
S/N	Items	NEW HAWKER CENTRE (CO-LOCATED)
A1	Location	a. HC to be located only on ground floor or 2nd Storey, with prioritized siting on the ground floor. If Hawker Centre is located on 2nd Storey, there should be sufficient frontage and the centre should be visible along the facade and main circulation passageway of the development. Ample access points / linkages (e.g. escalators, lifts, external staircases, etc.) from the ground level to the Hawker Centre shall also be provided.
A2	Visibility/ Connectivity/ Porosity	<p>a. Plan for pedestrian linkages to allow connectivity between the Hawker Centre and important amenities such as transport facilities (e.g. MRT/LRT stations), green spaces (e.g. common green), commercial, and social community facilities. Connectors should be safe and comfortable for pedestrian usage (e.g. well-shaded, barrier-free, etc.)</p> <p>b. The design of the centre must ensure visibility and porosity at all times.</p> <p>c. To provide sufficient and prominent illuminated directional road signs to indicate location of the HC. Illuminated road signs must be:</p> <ul style="list-style-type: none"> i. Energy efficient, ii. Of IP65 and vandalproof iii. Corrosion-resistant iv. Easily maintained v. Weatherproof and Ultra-violet (UV) stabilized vi. Self Cleansing <p>d. Proposed colours and material selected should consider the ease of maintenance and not cause glare to road users and resistance.</p>
A3	Authorities' Compliances	a. Design of HC should be in compliance with all Authorities codes and regulations.

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[Updated as of 20 Oct 2017]

PART A: GENERAL[Refer to text in **bold** for quick referencing of key design requirements.]

S/N	Items	NEW HAWKER CENTRE (CO-LOCATED)
A4	Relationship to Others	<ul style="list-style-type: none"> a. Where necessary, the design should segregate and contain possible odours (e.g. from bin centre, food waste recycling etc.) from cooking, and minimize sound disturbance to the surrounding developments. b. Design should ensure the privacy of adjacent residences. c. Design should take into account existing and future pedestrian circulation patterns. d. Consider visual impact of the HC to the surrounding residences/buildings. e. Design of the HC shall consider and be consistent with the physical and social context of the surroundings. f. Boundary of Hawker Centre should be clearly demarcated for co-located developments (e.g. via floor strips)
A5	Layout	<ul style="list-style-type: none"> a. To maximize stall frontage with most of the stalls having a minimum width of 2.8m. b. HC stalls and refreshment areas to have a regular and contiguous placement (e.g. refreshment areas should not be placed in an isolated area, away from stalls). c. Efficient space planning for <ul style="list-style-type: none"> i. Seating capacity ii. Human circulation and access at common areas d. Stall layout to allow for effective cross-ventilation, taking into consideration the prevailing wind direction. e. Stalls to be adequately protected from sunlight and rainwater penetration. f. The design should consider various Hawker Centre (HC) layouts including but not limited to: L-shape, U-shape, T-shape, H-shape and grid layouts. g. The orientation of the cooking and seating areas must also be carefully considered to prevent sources of heat and noise (from central exhaust system, lift etc.) from affecting the comfort of patrons and the surroundings.
A6	White spaces	To design for : <ul style="list-style-type: none"> a) Arrival node to accentuate sense of arrival b) Space to hold small scale events
A7	Floor Area	<ul style="list-style-type: none"> a. To design for a GFA of approximately 3,300 m² (subject to detailed design), not inclusive of bin centre, substation, sprinkler water tank, pump room, and FCC.

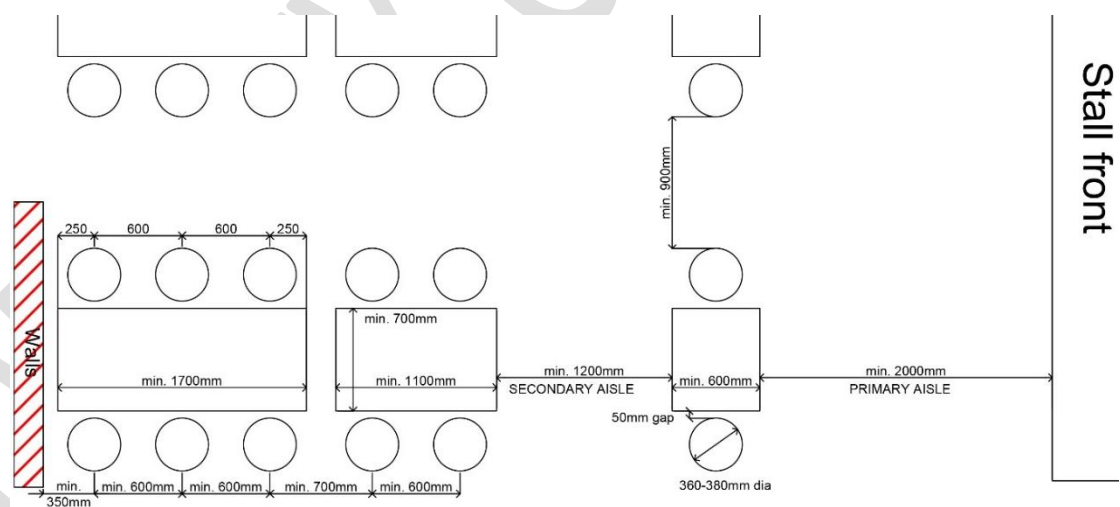
SENGKANG CENTRAL		[Updated as of 20 Oct 2017]
PART A: GENERAL		[Refer to text in bold for quick referencing of key design requirements.]
S/N	Items	NEW HAWKER CENTRE (CO-LOCATED)
A8	Floor Level (see latest COPEH)	<p>The entire hawker centre should be on one level (ie, no steps within the hawker centre, no split-level).</p> <p>a. <u>Between Perimeter of Hawker Centre and Exterior:</u></p> <p>i. To use different coloured floor finishes demarcating difference in floor level. Nosings on steps to be demarcated with contrasting color.</p>
A9	Roof/ Ceiling	<p>a. To provide a minimum of 6m clear height.</p> <p>b. Design of the roof/ceiling should facilitate cross ventilation.</p> <p>c. To maximise the functional use of rooftop where possible.</p> <p>d. Design of ceiling should discourage bird perching.</p> <p>e. Material of the roof / ceiling shall be light weight and non-reflective.</p> <p>f. To ensure sufficient overhung or fins to protect centre from the elements (all vertical openings to be covered within a 45 degree line taken from edge of the overhung).</p> <p>g. To ensure ease of maintenance.</p>
A10	Natural Ventilation	<p>a. To incorporate passive design to ensure that the HC is well-ventilated at all times, yet adequately protected from the weather, for example, orientation of HC and stalls, layout of stalls, provision of courtyard and weather protection devices, etc.</p> <p>b. Layout of the hawker centre should take advantage of the different levels of the terrain.</p>
A11	No. of stalls	<p>a. To design to have 40 cooked food stalls.</p> <p>b. Maximum number of stalls in a row to be limited to 6 stalls for better human circulation.</p> <p>c. "Hot wall" (at which exhaust hood are installed) at gable end shall be avoided.</p>

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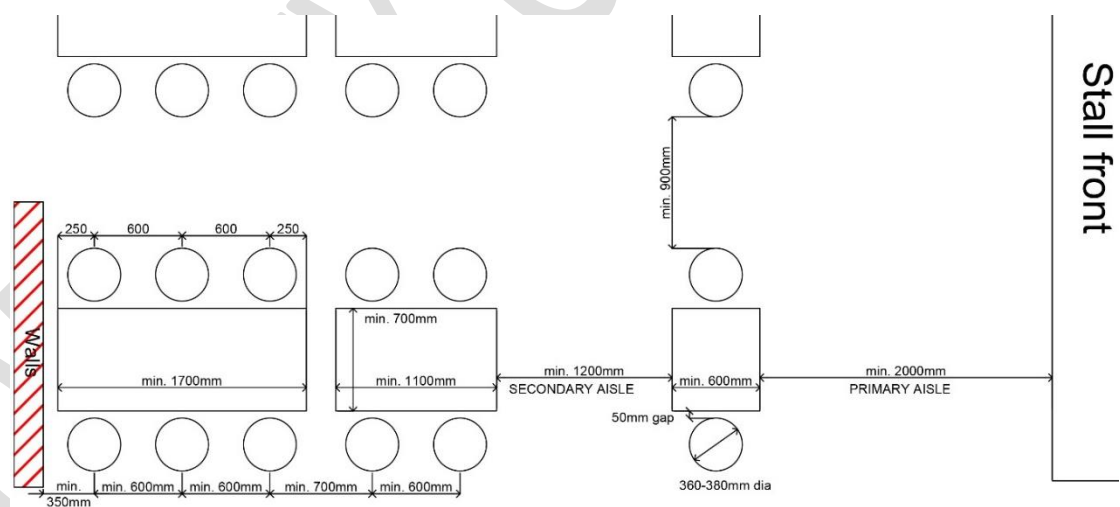
[Updated as of 20 Oct 2017]

PART A: GENERAL[Refer to text in **bold** for quick referencing of key design requirements.]

S/N	Items	NEW HAWKER CENTRE (CO-LOCATED)
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A12	Fixed Tables/ Seats at refreshment area	<p>a. To distribute tables and seats evenly for all stalls.</p> <p>b. To pay attention to design of base stumps to fixed tables/stools so as to prevent corrosion, trapping of food particles and infestation of vectors and pests.</p> <p>c. Materials used for tables/seats stand/support shall be :</p> <ol style="list-style-type: none"> Heavy duty Corrosion-resistant Easily maintained <p>d. Materials used for seats and tables top shall be:</p> <ol style="list-style-type: none"> Durable Heat resistant able to withstand greasy environment Easily maintained Not easily stained <p>e. Tables/seat edges to be rounded without sharp edges/corners.</p> <p>f. <u>Suggested dimensions:</u></p> <ol style="list-style-type: none"> Diameter of base plate: at least 2/3 of stool dimension. 
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- a. To distribute tables and seats evenly for all stalls.**
- b. To pay attention to design of base stumps to fixed tables/stools so as to prevent corrosion, trapping of food particles and infestation of vectors and pests.
- c. Materials used for tables/seats stand/support shall be :
- Heavy duty
 - Corrosion-resistant
 - Easily maintained
- d. Materials used for seats and tables top shall be:
- Durable
 - Heat resistant
 - able to withstand greasy environment
 - Easily maintained
 - Not easily stained
- e. Tables/seat edges to be rounded without sharp edges/corners.
- f. Suggested dimensions:
- Diameter of base plate: at least 2/3 of stool dimension.



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PART A: GENERAL[Refer to text in **bold** for quick referencing of key design requirements.]**S/N Items NEW HAWKER CENTRE (CO-LOCATED)**

ii. Width & Diameter of table:

Number of Seaters	Minimum Width/diameter of table
2 seaters (rectangular)	Length: 600mm
4 seaters (rectangular)	Length: 1100mm
6 seaters (rectangular)	Length: 1700mm
6 seaters (circular)	Diameter: 1100mm

g. Seats:

- i. **To design seating capacity based on – at least 1 stall to 18 seats.**
- ii. **To provide seating in permutations of 6/4/2, with 4-seater forming the majority.**
- iii. **To provide a straight and clear passageway through tables/seats for trolleys.**
- iv. Height of stool: 450mm from finished floor level.
- v. Bolts to secure seats should not be exposed to users.

h. Tables:

- i. To provide a variety of tables shapes/sizes.
- ii. To secure table numbering to prevent vandalism and food trapping.
- iii. Height of table 765 – 780 mm from finished floor level.
- iv. Provision to hold umbrella at all tables.
- v. Bolts to secure tables should not be exposed to users.

i. Tables/seats for Family-Friendly Section:

- i. **To designate 3-5% of overall seating provision as family-friendly seating. These may comprise a mix of regular-height tables/seats as well as child-friendly tables/seats.**
- ii. **Family-friendly seating should preferably be located in close proximity to the Family Room and toilets.**
- iii. **To provide some 8/10-seater round tables with adequate space between seats to accommodate a baby-chair/stroller/wheelchair.**

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[Updated as of 20 Oct 2017]

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S/N	Items	NEW HAWKER CENTRE (CO-LOCATED)
		<ul style="list-style-type: none"> iv. Some child-friendly tables/seats can be created by lowering regular tables/seats to allow easy usage by both children and adults. Suggested dimensions are: <ul style="list-style-type: none"> a. Child-friendly Tables: 660mm high b. Child-friendly Seats: 375mm high j. Tables/seats for Priority users (eg. elderly, persons with disabilities, pregnant women, single parents with young children) <ul style="list-style-type: none"> i. To designate at least one table for every 3 tables (fronting the stalls) or part thereof as a Priority table, or at least 10% of the total number of tables in the hawker centre, whichever is greater. (Final provision to be reviewed on a case-by-case basis.) ii. Priority tables should have one vacant spot to allow for wheelchair or stroller to be positioned at the table. iii. Priority seats to have backrests and arm rests. iv. Tables and seats to have distinct, contrasting color from other tables/seats. v. To provide clear labels to indicate that this is a priority table.
A13	Finishes (see latest COPEH)	<p><u>Wall & floor finishes shall be:</u></p> <ul style="list-style-type: none"> i. Appropriately chosen to suit the purposes and uses of the stalls and various areas of the Hawker Centre. ii. Homogenous iii. Anti-slip (for floors) iv. Waterproof v. Heavy duty vi. Easily maintained vii. Not easily stained <p>(Refer to latest SS485 - Specification for slip resistance classification of public pedestrian surface materials)</p>
A14	Green Mark/ Universal Design (UD) Certification	To achieve minimum Gold rating for BCA Green Mark & Gold rating for UD Mark.

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*[Refer to text in **bold** for quick referencing of key design requirements.]*

S/N	Items	NEW HAWKER CENTRE (CO-LOCATED)
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A15	Green Features	<p>a. To incorporate environmentally friendly design features e.g. energy saving features, recycling features, materials that reduce carbon footprint, etc.</p> <p>b. Adequate bicycle racks to be provided where possible. If added it should be:</p> <ul style="list-style-type: none"> i. Space efficient type ii. Impact resistance iii. Durable iv. Corrosion resistant v. Easily maintained <p>c. Adequate Directional signage to the bicycle racks shall be provided.</p>
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SENGKANG CENTRAL

[Updated as of 20 Oct 2017]

PART B: Ancillary Spaces

S/N	Items	NEW HC
B1	Integrated Tray Return Facility with Central Wash	<p>a. To provide area naturally-ventilated space of approximately 50-60sqm to accommodate integrated tray return and central wash facilities. Such area to be designed to facilitate adoption of Automated Tray Return system such as conveyor belt or other systems. Where necessary, the tray return network shall comprise satellite tray return stations (complete system for receiving crockeries, hand washing facilities for patrons and crockeries' storage area for cleaners.)To provide at least 2 wash-hand basins at each Tray Return station for patrons' use, one of which is at child's height.</p> <p>b. If handwash basins are provided,</p> <p>a. <u>Wash-hand basin:</u></p> <p>i. To provide at least 2 wash-hand basins at each Tray Return station for patrons' use, one of which is at child's height.</p> <p>ii. The hand wash basins should have a steeper gradient base.</p> <p>iii. Wash-hand basins should be:</p> <p>iv. Heavy duty</p> <p>v. Not easily stained</p> <p>vi. Easily maintained</p> <p>vii. Non sharp corners.</p> <p>viii. Design of wash hand basins and tap should minimise front/back-splashing of water.</p> <p>b. <u>Taps and soap dispensers:</u></p> <p>i. To provide durable sensor taps and soap dispensers, together with signages"For Customer's Use Only".</p> <p>ii. To provide 1 stainless steel soap dispenser to each wash-hand basins.</p> <p>iii. To provide 1 no. of lockable IP65 13A SSO under the sink for each sensor tap and soap dispenser. The location should be accessible for maintenance.</p> <p>iv. To provide enclosure for sensor tap mechanism to prevent tampering.</p> <p>v. Water pressure and position of the tap/wash basin shall avoid splashing onto users when activated..</p> <p>c. <u>Hand-dryer:</u></p> <p>i. To provide hand-dryer at the wash-hand area.</p> <p>ii. 1 no. 15A fused connection unit in lockable enclosure which is accessible for maintenance.</p> <p>iii. The hand-dryer shall be corrosion-resistant and durable.</p> <p>d. <u>Signages:</u></p> <p>i. To provide signage "For Customers' Use Only" for each hand wash basin setup.</p> <p>ii. Adequate Directional signage (pictorial mode) to the Hand wash area shall be provided.</p>

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PART B: Ancillary Spaces

S/N	Items	NEW HC
		<p>e. <u>Scupper:</u></p> <p>i. Scupper with heavy duty stainless steel grating to be provided below the lips of the wash-hand basins.</p> <p>c. Integrated facility is to be located at central/strategic spot(s) within the HC to allow for easy access by all patrons and smooth operation by cleaners.</p> <p>d. To enclose area with walls up to 900mm--high and provide entrance at least 1500mm width.</p> <p>e. Entrance should not be visible from refreshment area (ie. screen off).</p> <p>f. Location/design of room should consider the need to minimise heat and noise from escaping into the public refreshment areas.</p> <p>g. Prominent signage should be provided to enable easy identification of the integrated facility from a distance. Workflow for cleaning to be considered as part of design process.</p> <p>h. To demarcate for Halal and non-Halal return points. The halal and non-halal tray return slots should be segregated physically and separated distinctly.</p> <p>i. There should be a physical separation inside the working area between the halal and non-halal section.</p> <p>j. To provide electrical and water supply, mechanical exhaust ducting system to extract heat and steam, and adequate drainage for this area.</p> <p>k. To provide 4 number of water points that are segregated.</p> <p>l. Floor level shall be lowered by 50mm from common area, with a ramp access.</p> <p>m. To meter electricity and water consumptions separately from the rest of the centre.</p> <p>n. For possible installation of mechanised dishwasher, provision should be made for:</p> <p>o. To provide 1 nos. of 150Amp, 3-phase and 1 no. of 100Amp, 3-phase for electrical supply</p> <p>p. To provide full height tiled wall finishes.</p> <p>q. To provide a minimum of 2 nos. of fan points for fans.</p> <p>To design and provide for extraction of heat from future dish washing machine.</p>

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PART B: Ancillary Spaces

S/N	Items	NEW HC
B2	Standalone Tray Return Station	<p>a. Where necessary to complement the integrated tray return system, standalone tray return stations (complete system for receiving crockeries and crockeries' storage area) shall be provided.</p> <p>b. Prominent signage should be provided to enable easy identification of the satellite tray return station from a distance.</p> <p>c. Every station should accommodate 2 segregated and separated tray return points (Halal and Non-Halal), each equipped with service sinks. The station should be designed with space to be manned by personnel.</p> <p>d. If handwash basins are provided, location of the wash-hand area should be adjacent to Tray Return stations and not too near to the stalls, tables and chairs.</p> <p>1. <u>Wash-hand basin:</u></p> <p>i. To provide at least 2 wash-hand basins at each Tray Return station for patrons' use, one of which is at child's height.</p> <p>ii. The hand wash basins should have a steeper gradient base.</p> <p>iii. Wash-hand basins should be:</p> <p>iv. Heavy duty</p> <p>v. Not easily stained</p> <p>vi. Easily maintained</p> <p>vii. Non sharp corners.</p> <p>viii. Design of wash hand basins and tap should minimise front/back-splashing of water.</p> <p>2. <u>Taps and soap dispensers:</u></p> <p>1.To provide durable sensor taps and soap dispensers, together with signages "For Customer's Use Only"</p> <p>2.To provide 1 stainless steel soap dispenser to each wash-hand basins.</p> <p>i. To provide 1 no. of lockable IP65 13A SSO under the sink for each sensor tap and soap dispenser. The location should be accessible for maintenance.</p> <p>ii. To provide enclosure for sensor tap mechanism to prevent tampering.</p> <p>iii. Water pressure and position of the tap/wash basin shall avoid splashing onto users when activated</p> <p>3. <u>Hand-dryer:</u></p> <p>i. To provide hand-dryer at the wash-hand area.</p> <p>ii. 1 no. 15A fused connection unit in lockable enclosure which is accessible for maintenance.</p> <p>iii. The hand-dryer shall be corrosion-resistant and durable.</p> <p>4. <u>Signages:</u></p>

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PART B: Ancillary Spaces

S/N	Items	NEW HC
		<ul style="list-style-type: none"> i. To provide signage "For Customers' Use Only" for each hand wash basin setup. ii. Adequate Directional signage (pictorial mode) to the Hand wash area shall be provided. <p>5. <u>Scupper</u>:</p> <ul style="list-style-type: none"> iii. Scupper with heavy duty stainless steel grating to be provided below the lips of the wash-hand basins.
B3	Family Room	<ol style="list-style-type: none"> 1. To provide a naturally-ventilated family room of approximately 10 sqm to serve as a room for diaper-changing and nursing. 2. Family Room should preferably be located adjacent to the toilets or public thoroughfare and should be highly visible/ conspicuous to discourage mis-use/loitering. Enclosure, if provided, to be made of frosted/clear glass to offer a good balance of privacy, yet transparency for public surveillance. 3. Family Room should have a lockable sliding door. 4. Nursing area to be a lockable cubicle with a reasonable gap at the bottom of the cubicle door to allow some measure of surveillance and discourage mis-use. To provide fixed seating with back rest. 5. Lighting provision should: <ul style="list-style-type: none"> i. Be conducive ii. Not be glaring. 6. To provide: <ul style="list-style-type: none"> i. Minimum 1 no. mechanical fan ii. Minimum 2 no. of 13A SSO. (1no. to be located in nursing cubicle) iii. Hot water dispensing facilities iv. Wash basin v. Step bin vi. Hand sanitizer vii. Countertop for diaper-changing 7. Wall finishes shall be: <ul style="list-style-type: none"> i. Homogenous ii. Waterproof iii. Heavy duty iv. Not easily stained v. Easily maintain

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PART B: Ancillary Spaces

S/N	Items	NEW HC
B4	Toilets (To comply with COPEH)	<p>a. To design toilet entrances without doors but maintaining privacy. There should be allowance for possible installation of doors or roller shutters at entrances of male and female toilets if necessary in future.</p> <p>b. To design toilets with incorporation of natural light and ventilation.</p> <p>c. Family/Child-friendly sanitary provisions to be provided in accordance with BCA's guidelines.</p> <p>d. Bins provided in the toilet shall not be easily damaged or stolen.</p> <p>e. To meter electricity and water consumption separately.</p> <p>f. To provide lockable water points for general washing.</p> <p>g. <u>WC and Urinal:</u></p> <ul style="list-style-type: none"> i. WCs shall be wall-mounted type. ii. To provide at least 1 squat pan toilet with grab bars. iii. To provide 1 no. 13A Socket Outlet to be mounted within the wall for each Auto-flushing unit. <p>h. <u>Cubicle:</u></p> <ul style="list-style-type: none"> i. Coat hooks shall be provided in every cubicle. ii. Individual drainage for each cubicle shall be provided to prevent floor drainage of one cubicle from draining to the adjacent cubicle. iii. Size of cubicle to meet UD requirements. iv. Cubicles to be provided with bidet spray incorporated with toilet seats. <p>i. <u>Wash-hand basin:</u></p> <ul style="list-style-type: none"> i. The hand wash basins should have a steeper gradient base. ii. Wash hand basin areas shall have features to prevent back and front splash. iii. Scupper with heavy duty stainless steel grating to be provided below the lips of the wash-hand basins. <p>j. <u>Taps and soap dispensers:</u></p> <ul style="list-style-type: none"> i. To provide durable sensor taps and soap dispensers. ii. To provide 1 stainless steel soap dispenser to each wash-hand basins. iii. To provide 1 no. of lockable IP65 13A SSO under the sink for each sensor tap and soap dispenser. The location should be accessible for maintenance. iv. Water pressure and position of the tap/wash basin shall avoid splashing onto users when activated.

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PART B: Ancillary Spaces

S/N	Items	NEW HC
	Toilets (Cont'd)	<p>k. <u>Sensor:</u></p> <ul style="list-style-type: none"> i. To design for 200 lux with provision for dimming up to 50% (linked to motion/photo sensor). ii. The motion sensors must: <ul style="list-style-type: none"> - Have a coverage of 80% of the area of the toilet - be installed at strategic locations according to approval - be linked to dimmers connected to all circuitries to reduce the original lighting level to 30%. iii. If required, to provide mechanical ventilation system (e.g. extractor system) linked to motion sensor and timer to improve the air exchange within the toilet. During operation hours, mechanical ventilation system to be kept at 50% when the motion sensor is not activated iv. Fans to be linked to timer & sensor control. <p>l. <u>Hand-dryer:</u></p> <ul style="list-style-type: none"> i. Hand dryers to be integrated with design of vanity/mirror so users are able to dry their hands at the hand wash area without having to move away from the basin. <ul style="list-style-type: none"> - 1 no. 15A fused connection unit in lockable enclosure which is accessible for maintenance. - The hand-dryer shall be corrosion-resistant and durable. <p>m. <u>Scupper and Drainage:</u></p> <ul style="list-style-type: none"> i. Efficient water drainage at toilets to cater for quick drying. ii. Plumbing designs for the toilets shall cater for water hammering issues. iii. Scupper with heavy duty stainless steel grating to be provided below the lips of urinals. <p>n. <u>Accessories:</u></p> <ul style="list-style-type: none"> i. All accessories shall be: <ul style="list-style-type: none"> - Heavy duty - Easily maintained - Non sharp corners - Corrosion-resistant

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PART B: Ancillary Spaces

S/N	Items	NEW HC
B5	Hawker's Rest Area	<p>a. To provide a naturally-ventilated room of approximately 13m² with 1 enclosed shower facility to serve as hawkers' rest area, space for lockers, storage space for tools and materials, in close proximity to cleaner's room and toilets.</p> <p>b. The room should be lockable.</p> <p>c. To provide energy efficient lighting with motion sensor</p> <p>d. To provide minimum 1 no. mechanical fan linked to motion sensor.</p> <p>e. To provide minimum 2 no. of 13A SSO.</p> <p>f. To provide heater point for each shower cubicle.</p> <p>g. The room should be lockable.</p>
B6	Cleaner's Room	<p>a. To provide a naturally-ventilated room of approximately 13m² with 1 enclosed shower facility, to serve as rest and shower area, space for lockers, storage space for tools and materials, in close proximity to toilets.</p> <p>b. Door of the shower facilities should be:</p> <ol style="list-style-type: none"> Durable Waterproof Corrosion resistant Easy to maintain <p>c. To provide energy efficient lighting with motion sensor</p> <p>d. To provide minimum 1 no. mechanical fan linked to motion sensor.</p> <p>e. To provide minimum 2 no. of 13A SSO.</p> <p>f. To provide heater point for each shower cubicle.</p> <p>g. The room should be lockable.</p>

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PART B: Ancillary Spaces

S/N	Items	NEW HC
B7	Drink Stall Storage (Applicable to Replacement Centres; to be reviewed on a case-by-case basis)	<p>a. To provide either a store room or multiple storage lots (aka “lock-up cages”). These are normally used by drink stalls to hold bottled beverages. One storage lot should be provided for every 5 stalls.</p> <p>b. To design dimensions based on size of drink crates.</p> <p>c. The store room or storage lots should be lockable.</p> <p>d. Ceilings of the storage lots shall be sloped.</p> <p>e. Floor level in the store room shall not be flushed with common area.</p> <p>f. Store room/storage lots shall not be located at the main human circulation area.</p> <p>g. If lock-up cages are used, material of the cages shall be:</p> <ol style="list-style-type: none"> Corrosion resistant Durable Heavy duty Easy to maintain
B8	Bin Centre (To comply with COPEH)	<p>a. To provide bin centre which are compactor ready with provision for possible food waste recycling system.</p> <p>b. The capacity should relate to the number of stalls, based on COP.</p> <p>c. The architect is to provide a refuse disposal route from HC to bin centre that does not traverse public areas.</p> <p>d. For co-located HC: Bin centre could be shared with other co-locators but should be easily accessible from the HC.</p> <p>e. To provide steel plates for the compactor machine.</p> <p>f. To provide for motorised roller shutters at the main entrance to the bin centre.</p> <p>g. To provide rubber wall guards on the inner walls of the bin centre.</p> <p>h. To provide electrical supply of 60Amp, 3-phase</p> <p>i. To provide energy efficient lighting of 200 lux linked to switch.</p> <p>j. Separate Powergrid meter shall be provided for the electrical supply for compactor.</p> <p>k. Separate PUB submeter shall be provided for water supply to bin centre.</p> <p>l. Bin centre shall be provided with fire protection and detection system.</p> <p>m. Odour removal agents/treatment, disinfectant agents, sanitisation agents to be provided by Bin Centre.</p>

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PART B: Ancillary Spaces

S/N	Items	NEW HC
B9	Transit Bin Centre	<ul style="list-style-type: none"> a. A Transit Bin Centre shall be provided to serve the Hawker Centre should the Bin Centre be located away from the Hawker Centre. b. Transit Bin Centre is preferred to be located away from refreshment areas to minimise odours spreading to the refreshment area. c. Entrance of Transit Bin Centre should not be directly visible from main refreshment areas. d. To provide a transit bin centre that can accommodate 6-8 nos. of 660L bulk bins. e. Transit Bin Centre should be naturally ventilated. f. To <u>EITHER</u> design for direct-waste disposal to Bin Centre via a refuse chute (where possible), <u>OR</u> g. If transit bin centre is provided, the architect is to provide a refuse disposal route from transit bin centre to main Bin Centre, which does not traverse public areas. h. To provide energy efficient lighting of 200 lux linked to switch. i. To provide isolator and meter electricity and water consumptions separately from the rest of the centre. The isolator for the compactor shall be separately metered. (i.e PUB submeter) j. Odour removal agents/treatment, disinfectant agents, sanitisation agents to be provided for Transit Bin Centre.
B10	Food Waste Recycling Facility	<ul style="list-style-type: none"> a. To provide space (approximately 24sqm – 6x4m) for a food waste recycling machine (1000kg/day). b. Min. door size of 3m(W) x 2.5m(H) c. Min. room height of 3.5m. d. The food waste recycling machine may be considered to be placed in the transit bin centre/bin centre/central wash area. e. To provide electrical supply/drainage for food waste recycling machine. <ul style="list-style-type: none"> 1) Power requirement : 3 phase, 100 Amps 2) Water drainage point : to accommodate minimum 60mm diameter PVC pipe and above 3) Water point : >13mm diameter water tap point
B11	Food waste conveyance System	To design for food waste conveyance system from individual stalls to centralised food waste recycling facility.

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PART B: Ancillary Spaces

S/N	Items	NEW HC
B12	Manager room	<ul style="list-style-type: none"> a. To provide a naturally ventilated Manager room /multipurpose room of approximately 10m² b. To provide a 2-pane sliding window with grilles. To provide electrical supply of 32 amps single phase (40 amps single phase if include electrical provision for aircon). c. To design space for air condensing unit. d. To provide energy efficient lighting of 500 lux measured at 0.7m from FFL with uniformity ratio of 0.7. e. To provide minimum 2 no. of 13A SSO. f. To provide 1 fan point g. No. of Tel point: 1 no. h. No. of lan point: 1 no. i. To provide door with viewing panel. Lockable A1-size notice board to be provided outside management office
B13	Robot Storage/Charging Room	<ul style="list-style-type: none"> a. To provide a room (approximately 10sqm) for storage/charging of robotic cleaners. b. Power Requirement: 4 nos. of 13Amp with IP65 c. No. of Water point: 1 no. d. No. of Floor Trap: 1 no. e. Fire Safety Requirements: Consultants to consult FSSD on the room enclosure for battery-operated device.
B14	ATM/AXS (Applicable to standalone centres)	<ul style="list-style-type: none"> a. To provide space for the placement of at least 2 ATMs and 1 AXS machine. b. The ATM/AXS should be within the coverage of the CCTV. c. Lighting shall be 200 lux measured from FFL with uniformity ratio of 0.7. d. Separate Powergrid meter shall be provided for the electrical supply. Lighting shall be 200 lux measured from FFL with uniformity ratio of 0.7. e. To provide the following for each AXS machine and ATM: <ul style="list-style-type: none"> i. 1 no. of 13A SSO and 1 telephone point
B15	Loading/ Unloading Bay	<ul style="list-style-type: none"> a. To provide at least 2 lorry-sized loading/unloading bays. b. To provide shelter for loading/ unloading bays. c. Loading bay should be able to cater for a truck of 10 tonnes; 9.4m (l) by 2.5m (w) by 3.2m – 3.8m (h) d. Close proximity to service lifts. e. Ramps shall be provided at the loading/unloading bay lobby and designed to gradient of 1:12. f. Lighting shall be 150 lux measured 0.7m from FFL with uniformity ratio of 0.7.

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PART B: Ancillary Spaces

S/N	Items	NEW HC
B16	Car Park	<p>a. To provide 2 car park lots per stall to serve hawker centre. This should include the required handicap-friendly lots and Family parking lots (subject to availability of space).</p> <p>b. To provide designated pedestrian walkways in car park. These should <u>not</u> be within vehicular driveway.</p> <p>c. Traffic analysis shall be conducted to study the traffic flow in and out of the HCs to prevent frequent congestions.</p> <p>d. Parking lots for handicapped should be strategically located to allow for safe & easy access from parking lot to Hawker Centre.</p> <p>e. To provide wheel stopper to every parking lot.</p> <p>f. To provide a parking lot size of hatch markings by the side of the egress.</p> <p>g. Car Park shall be Electronic Parking System (EPS) ready and include the following:</p> <ol style="list-style-type: none"> To provide power provision of 32 amp single phase To provide 32Amps single phase isolator per pair of gantry with lockable enclosure through 65mm diameter underground uPVC pipes across each traffic lane at the EPS gantry locations/GI conduit for ceiling installation (where applicable) at identified gantry location. Armoured type cable to be considered if necessary. Isolators to be connected to SP submeter. Gantry should be located as far back within the development as possible to achieve the longest queue. (Preferably more than 3 car length). Gantry should not be positioned on an up-ramp as cars may roll backwards when starting off. Space provision for the mounting of EPS equipment at ingress/egress. Provision of island for the mounting of the EPS should be sized at length 5m by width 0.5m for each pair of gantry. To ensure sufficient space for turning radius of vehicles at the entrance/exit gantry. If loading/unloading is separated from the carpark entrance, separate gantry to be provided for unloading/loading area. The position of the gantry should consider the space provision for the turning radius of delivery trucks and other service vehicles Width of single lane ingress/egress to be at least 3.6m. If carpark is shared with loading/unloading and service vehicles, the lane shall be at least 4.5m. Design for clear height of 2.4m from FFL of island for the barrier arm for gantry located within carpark (with headroom limitations) To design space provision for carpark booth of 1.5m by 1.5m located next to entrance/exit gantry. Proposed carpark booth location should preferably be located at area accessible by public. Power provision of 32Amps single phase isolator connected to SP submeter to be located next to proposed carpark booth. To provide 1 nos 13Amp 2 gang SSO connected to SP Submeter for future cashcard top-up machine. The proposed cashcard top-up machine should be located near the booth or at area easily accessible by public. To provide 65mm diameter underground uPVC pipes to designated carpark lots indicator signage (Signage to be installed by carpark operator).

PART B: Ancillary Spaces

S/N	Items	NEW HC
		<p>Allocation of Space and Electrical Provision for Electric Vehicle Charging</p> <p>The following guidelines can be considered to provide space and electrical provision for installation of each EV charger.</p> <ul style="list-style-type: none"> h. To provide a standard size car park lot. Wheel-stoppers can be provided if EV charger is installed at the back of the parking lot. i. To provide a full height wall with minimum width of 0.6 metre for the installation of EV charger. The maximum distance between the wall and the car parking lot shall be less than 1 metre. There shall be 0.6 metre access space in front of the EV charger. j. To provide a 32A single phase isolator for AC type 1 EV charger or 40A three phase isolator for AC type 2 EV charger. The isolator is preferred to be mounted at high level on the installation wall. k. The EV charger is preferably located at 1st storey, near to lift lobby or walkway for higher visibility. l. EV charger is most commonly installed at the back but not directly behind the parking lot to avoid vehicles from knocking into it accidentally. m. Signage of the EV charger shall be provided.

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PART B: Ancillary Spaces

S/N	Items	NEW HC
B17	Consumer Switchroom/ Metering Panel	<p>a. To provide a minimally sized Consumer Switchroom.</p> <p>b. To provide DB (Distribution Board) for each cluster of 6 to 10 stalls to prevent/ minimise leakages and overloading.</p> <p>c. To secure and enclose metering panels with sloping top cover, to prevent articles placing on top.</p> <p>d. To provide separate metering for electricity and water consumption for the cooked food section.</p> <p>e. Lighting level for Switchroom shall be 200 lux.</p> <p>f. To provide energy efficient light fittings. Switches shall be placed by the side of the entrance.</p> <p>g. Room should be naturally ventilated.</p>
B18	Sprinkler/hose reel room	<p>a. To provide a naturally-ventilated space for sprinkler/hose reel tank/pumps.</p> <p>b. To provide floor trap/waste and water point.</p> <p>c. Alarm device (alarm bell and red bulb) to be provided for faults relating to the system ie. overflow.</p> <p>d. Material of fire tanks shall be maintenance-free and leak-proof.</p> <p>e. Doors shall be Corrosion-resistant</p> <p>f. Room should be adequately lit with independent switch.</p>
B19	Centralised Chiller Room	<p>a. To provide for a centralised chiller room of approximate 10sqm to serve as a intermediate cold storage facility upon delivery of raw food ingredients.</p> <p>b. Area has to be located conveniently along the food delivery route.</p> <p>c. Power provision of one 15Amp for each chiller lot (estimated 10 freezer compartments)</p> <p>d. Floor trap to be provided</p>

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[Updated as of 20 Oct 2017]

PART C: Individual Stalls

S/N	Items	NEW HC
C1	Floor Area	Cooked food stalls: min 13m²
C2	Floor Level	<u>Between Common Area and Interior of Individual Stalls:</u> <ol style="list-style-type: none"> To provide kerb not more than 75mm high from finished floor level. To prevent falls and tripping, obvious warning feature/colours to indicate the presence of the kerb shall be provided.
C3	Scupper Drains and Main Drain	Refer to "Floor Traps/ floor sumps" under Section D.
C4	Exhaust Flue System (see latest COPEH)	<ol style="list-style-type: none"> To provide exhaust flue system with filtration system to remove smell, noise, and grease. Discharge points to be facing away and aesthetically screened from neighbouring premises Design for MV system should be energy efficient. All MV equipment shall be provided with digital timer and VSD. Vibration from exhaust fans should not create noise nuisance to users/ members of public at the Hawker Centre. Hood design to allow for ease of maintenance. Maintenance of MV systems shall not be within the tenatable space. To provide access to clean/maintain the exhaust system (including internal of ducts). Secondary filtration shall be provided. Exhaust system shall be efficient and designed towards zero spillage of plume at the cooking area as specified. Minimum hood size to be 1500mm x 600mm (working exhaust rate of 5000cmh)
C5	Signage for Stall	<ol style="list-style-type: none"> To provide standardised LED-illuminated light-weight frame for cooked food stalls. Signage should be easy to maintain and use. To prevent point injury, the corners of the signage should be rounded. Height of signage to be 700mm and tilted to face patrons when installed.
C6	Stall Number	To provide visible and permanent stall numberings.

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PART C: Individual Stalls

S/N	Items	NEW HC
C7	Roller Shutters	<p data-bbox="416 398 1289 521"> a. To provide roller shutters to each cooked food stall. b. Material used should be durable and corrosion resistant. c. Every stall should have a unique access key. d. Lock set of roller shutter to be clearly demarcated. (See image below.) </p> 

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PART C: Individual Stalls

S/N	Items	NEW HC
C8	Services	<p><u>Cooked Food Stalls:</u></p> <p>a. Electrical</p> <p>i. To provide:</p> <ul style="list-style-type: none"> - four 13 Amp power points. - two 15 Amp power point . - five lighting points. <p>(Total supplied loading: 40 Amp with diversity factor 1). To provide suitably rated MCB and RCCB protection.</p> <p>ii. To provide suitable space for installation of consumer's unit with a locking-eye system.</p> <p>iii. PG-meters to be installed for all stalls</p> <p>b. Water</p> <p>i. To provide two water point for each stall.</p> <p>ii. To provide two commercial-type sink for each stall.</p> <p>iii. To provide PUB water meter within each stall.</p> <p>c. Gas</p> <p>i. Centre shall be designed to hold town gas and an alternative gas type.</p> <p>ii. Space should be well-ventilated & not enclosed.</p>

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PART D: Mechanical & Electrical

S/N	Items	NEW HC
D1	Floor Traps/ floor sumps	<ul style="list-style-type: none"> a. Not to provide scupper drains outside stalls. Instead, the floor traps must have a good fall so that there is no water ponding at all common areas (i.e. during washings of floors, water will fall into the floor traps). b. Common area floor traps to be away from stall frontage. c. Floor trap should consist of strainer and anti-mosquito cover. d. Floor traps/waste shall be of heavy duty material to withstand frequent point pressure from moving traffic. Floor traps/waste shall not be obstructed and shall be located at less traffic areas. Floor trap gratings are to be anchored down with suitable screws. e. To prevent inconveniences and disruptions caused to public and stallholders, FT/FWs shall be individually discharged to waste sumps/ICs f. During design stage, to take in consideration of shoe heels stuck in floor sump. g. For quick drying and efficient drainage at common areas, drainage points shall be less than 10m apart. <ul style="list-style-type: none"> i. Discharge points (FTs & FWs) at common area shall not discharge to screen chamber and grease traps. To provide more than 1 grease trap. ii. Location of grease trap, oil water interceptor and screen chambers shall be away from food preparation and serving area. It shall be sited near a service road for easy maintenance. iii. Waste sumps, screen chamber and grease trap shall be provided for cooked food stalls before discharging into the inspection chamber.

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[Updated as of 20 Oct 2017]

PART D: Mechanical & Electrical

S/N	Items	NEW HC
D2	Lighting	<ul style="list-style-type: none"> a. To provide suitable energy savings luminaries for various functions, e.g. refreshment area, common passageways, etc. b. Refreshment area - Lighting shall be 200 lux measured at 0.7m from FFL with uniformity ratio of 0.7. c. Lux level simulation report for all areas to be submitted for approval before calling of tender for builder. d. To provide lighting control that allows user to adjust timing of luminaries. e. General lightings - Means of varying the general lighting circuitries is via timer relay control. Lighting circuitry shall be of 33%, 66% and 100% or subjected to approval is to be provided in the design. f. Perimeter light fittings and where light fittings are exposed to weather, the fittings shall be: <ul style="list-style-type: none"> i. IP65 ii. Vandalproof iii. Ultra-violet (UV) stabilized iv. Corrosion-resistant v. Accessible for easy maintenance and bulb replacement g. To avoid excessive illumination h. To minimise direct glare by ensuring no direct visual contact with light sources. i. To reduce reflective glare by eliminating reflective surfaces and by putting attention to the location of light sources relative to reflective surfaces such as mirrors, glazing and the like. j. To optimises the use of natural lighting via channelling daylight into the centre during the day.

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PART D: Mechanical & Electrical

S/N	Items	NEW HC
D3	Fans	<ul style="list-style-type: none"> a. To install oscillating fans with timer control and variable speed control as appropriate for air circulation. b. To allow flexibility and control, redundancy design for fans should be introduced. Fans shall be wired to different circuitries to allow for alternating use. Means of varying fans operation shall be provided in the design via timer relay control. c. To provide sufficient nos. of fans along passageways, refreshment area and where appropriate. d. Fans shall be mounted away from the heat source. e. To consider use of ceiling fans wherever appropriate. <ul style="list-style-type: none"> i. To prevent fans from falling, safety features shall be in place. ii. Fans to be secured and balanced to minimise "wobbling" f. No mist fans. g. To avoid mishandling or unauthorised adjustments, fans used must be vandal and tamper proof. h. To provide heat extractors/ fans or other suitable mechanical means based on M&E Consultant's advice on ventilation. i. Mechanical and wind generation sound should be reduced.
D4	Escalators	<ul style="list-style-type: none"> a. If Hawker Centre is not located on the ground level, escalators are encouraged to be provided to link all levels of the centre. b. The escalator shall operate in two modes: Continuous Operation with Energy Saving (standby speed) and automatic Start/Stop Operation. A time switch shall be incorporated in the escalator, which will switch to the automatic start/stop at a specific time. c. Photoelectric cells/pressure plates capable of detecting at many various angles, which incorporate a time delay, shall be provided to ensure that nobody is riding on the escalator at the time of switch-on or switch-off. d. An energy saving device shall be provided to conserve energy by the reduction of speed (standby speed) when the escalator/passenger conveyor is operated at no load. e. Step demarcation lighting shall be provided under the steps around the landing areas. f. Safety brushes shall be provided to the skirt plates of the escalators. g. Fall safe panels shall be provided to the outer sheathing panel of the escalators. h. Balustrades shall be made of stainless steel. i. To incorporate step lights for visual warning. j. More than 2 emergency stop buttons shall be provided if required. <ul style="list-style-type: none"> a. To provide anti-tampering caps for all emergency stop buttons. k. To provide drainage to discharge into sump/drainage system for passenger conveyor pit. l. Escalators should be specified for outdoor use.

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PART D: Mechanical & Electrical

S/N	Items	NEW HC
	Escalators (Cont'd)	<p>m. Design of the passenger conveyor pit shall cater for ease of maintenance and prevent high frequency of maintenance due to high capacity usage.</p> <p>n. The supplier of the escalators must:</p> <ol style="list-style-type: none"> Be of good track record Provide a current project references for consideration <p>o. To incorporate safety features in the design of the escalator. See examples below:</p> <ol style="list-style-type: none"> Emergency Stop buttons at the upper and lower landings. Mid-point emergency stop button.  Signage showing low headroom  Anti-climb barrier  Yellow strips highlighting the edge of the escalator's steps  Yellow colour comb plate – strong visual to alert users on approaching end/start of escalators.

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PART D: Mechanical & Electrical

S/N	Items	NEW HC
	 <p>6. Step Brush</p>  <p>7. Painted foot print to guide user where to stand on the step.</p>  <p>8. Signage with information on proper use of the escalator.</p>  <p>9. Warning stickers by the side of the escalator.</p>	

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PART D: Mechanical & Electrical

S/N	Items	NEW HC
		
D5	Passenger Lifts	<p>a. Passenger lift(s) shall be provided to serve the centre from other levels of the development.</p> <p>b. The lift shall be located at a prominent location.</p> <p>c. Lift hoistway should be naturally-ventilated.</p> <p>d. To provide adequate headroom for better ventilation and comfort of passenger.</p> <p>e. Passenger lifts must be;</p> <ol style="list-style-type: none"> energy efficient, handicap friendly. <p>f. A two-panel centre-opening door system shall be provided. A door vision panel, in compliance with SS 550 shall be included.</p> <p>g. CCTV shall be provided inside the lift car and lift landing. On-site system to be located inside management room.</p> <p>h. Energy efficient lighting shall be 100 lux measured from FFL.</p> <p>i. To provide door safety sensor.</p> <p>j. Lifts interiors shall be protected (e.g. padded protective drapes) for a period of at least 3 months after completion of the project.</p> <p>k. Consultants to provide Lift Traffic Analysis study before confirmation of the lift type.</p> <p>l. Motor-roomless lifts are preferred.</p> <p>m. To provide minimum 2 no. of lifts with hall lanterns, if no escalators are provided.</p> <p>n. If escalators are provided, to provide min. 1 no. of lift. Lift car to allow for min. 24 pax.</p> <p>o. To provide drainage pipe to discharge into sump/drainage system for lift pit.</p> <p>p. Floor finishes of lift interior shall be:</p> <ol style="list-style-type: none"> Anti slip Waterproof Easily maintained Not easily stained Corrosion resistant <p>q. Wall finishes of lift interior shall be:</p> <ol style="list-style-type: none"> Waterproof Easily maintained Not easily stained To provide signages to show lift location.

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PART D: Mechanical & Electrical

S/N	Items	NEW HC
D6	Service Lifts	<p>a. Where the Hawker Centre is located on a different floor from the Loading Bay, a service lift (min. 24 pax) shall be provided to provide vertical connectivity.</p> <p>b. Service lift, if provided, should be separated from passenger lifts.</p> <p>c. Motor-roomless lifts are preferred.</p> <p>d. CCTV shall be provided inside the lift car and lift landing. On-site system to be located inside management room.</p> <p>e. Service lifts must be;</p> <ol style="list-style-type: none"> Energy efficient. Well ventilated. <p>f. Energy efficient lighting shall be 100 lux measured from FFL.</p> <p>g. To provide door safety sensor.</p> <p>c. Lift interior walls shall be provided with protection of 1.2m high from FFL (e.g. Stainless steel chequered plate).</p> <p>d. Lifts interiors shall be protected (e.g. padded protective drapes) for a period of at least 3 months after completion of the project.</p> <p>e. To protect lift landing door jams, protection measure such as guard rails or bollards should be installed.</p> <p>f. To provide drainage pipe to discharge into sump/drainage system for lift pit.</p> <p>g. Floor finishes of lift interior shall be:</p> <ol style="list-style-type: none"> Anti-slip Waterproof Easily maintained Not easily stained Suitable for heavy traffic and related activities <p>a. Wall finishes of lift interior shall be:</p> <ol style="list-style-type: none"> Waterproof Easily maintained Not easily stained

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PART D: Mechanical & Electrical

S/N	Items	NEW HC
D7	Fire Safety Provisions (in accordance to SCDF's requirement)	<p>a. Loading/unloading bay shall not be located along the fire engine accessway.</p> <p>b. To house fire extinguisher in lockable casing without sharp edges.</p> <p>c. Sprinkler heads within cooked food stalls shall be protected to prevent accidental or incidental damage.</p> <p>d. Fire sprinklers pipe joints shall not be in the proximity of electrical services/trunkings.</p> <p>e. Fire engine accessway shall be clearly demarcated to prevent illegal parking.</p> <p>f. Fire protection risers, if provided, shall be next to the breeching inlets, where possible.</p> <p>g. Fire hose reels to be located at prominent and unobstructed area. Signages shall be provided to indicate and identify the location of fire hose reels.</p> <p>h. Fire hose reel drums shall be housed in lockable metal cabinet without sharp edges.</p> <p>i. Signages shall be of permanent type and heavy duty.</p> <p>j. Signages shall be at prominent location.</p> <p>k. Riser ducts, if provided, shall be designed to prevent any material storage within the ducts.</p> <p>l. To provide PWD space as per Authority requirement. PWD space to be provided with audio and visual alarm. 2-way intercom to be provided.</p>
D8	Electrical points for common area	<p>a. To provide sufficient electrical points in the centre for general washing as well as future installation of advertisement displays. Electrical points shall be 15A.</p> <p>b. To provide lockable enclosure of IP65 for electrical points.</p> <p>c. Electrical points must be:</p> <ol style="list-style-type: none"> Located at appropriate height from FFL subjected to confirmation Durable Easily accessible for usage. <p>d. All SSO to be flush mounted whenever possible and fixing screws should be concealed.</p> <p>e. To prevent point injury, the corners of the lockable enclosure should be rounded.</p>
D9	Water Point for Common Areas	<p>a. To provide sufficient lockable water point for general washing in the centre.</p> <p>b. Spacing of water points should allow for min. coverage of 15m radius.</p> <p>c. To prevent point of injury, the corners of the lockable enclosure should be rounded.</p> <p>d. Lockable enclosure should be:</p> <ol style="list-style-type: none"> Durable Corrosion-resistant Able to withstand greasy environment Low maintenance.

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PART D: Mechanical & Electrical

S/N	Items	NEW HC
D10	Metering Scheme	<p>The following areas are required to have public sub-metering scheme for both power and water supply :</p> <ul style="list-style-type: none"> i. Stalls ii. Compactor Bin Centre iii. Central wash area iv. Toilets <p>For power supply, Testing and Commissioning of PG-meters by SP shall be incorporated in the Builder's Contract.</p>
D11	Water services (To comply with CP48)	<ul style="list-style-type: none"> a. Isolation valves shall be provided at branch off of each area served for maintenance purpose and minimising disruption of water supply. Isolation valves shall be accessible for maintenance. b. Water distribution pipes serving common area shall not be routed in tenable area. c. Separate water meters shall be provided to water services to common areas. d. To provide a dedicated NEWater pipe system to take in NEWater if NEWater network is available.
D12	WLAN Infrastructure	<ul style="list-style-type: none"> a. To provide trunking for WiFi infrastructure for the whole centre. b. To prevent tampering and vandalism, enclosure must be provided to house the infrastructure.
D13	CCTV infrastructure	<ul style="list-style-type: none"> a. To provide dedicated trunking/conduit/cable tray for installations of CCTV cameras at common area.
D14	Provisions for vending machines	<ul style="list-style-type: none"> a. To design space for 2-4 vending machines at strategic locations with anticipated high foot traffic. b. Power provisions: 13Amp per vending machine.
D15	Water Cooler	<ul style="list-style-type: none"> a. To design space for 2 nos. of water coolers at strategic locations with anticipated high foot traffic. b. Power provisions: 13 Amp c. Water provision: 2 tap point.

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PART E: Signage & Displays

S/N	Items	NEW HC
E1	Building Signage	<ul style="list-style-type: none"> a. To provide suitable numbers of illuminated signage indicating block number and street name. b. To provide minimum 3 building signages located at different direction of the centre. c. Illuminated signages shall not cause nuisance/glare to neighbouring buildings. d. Illuminated signages shall be: <ul style="list-style-type: none"> i. Located in prominent location ii. Visible from the street iii. IP65 and vandalproof iv. Heavy duty v. Accessible for easy maintenance and luminaries replacement e. Signage to be linked with individual timer.
E2	General Signage	<ul style="list-style-type: none"> a. To provide sufficient number of signages indicating "Floor may be slippery when wet" and of dimension, width 400mm and length 300mm. Signage is to be in landscape orientation. (For those centres that have columns that are unable to accommodate the proposed signages (due to width limitation), signages to shrink in proportionate ratio i.e. width and height in constant ratio reduction.) b. To provide sufficient number of signages such as "No pets", "No bicycles", "No littering", "No smoking", "More stalls", "Free seating", "No touting", etc. c. To provide sufficient number of signages for tray return areas /stations. d. To provide sufficient number of signages to remind patrons to return trays and such e. To provide sufficient number of signages to show toilet location & Family Room location (where applicable). f. To provide sufficient number of directional signage on ground floor and main areas of the building to indicate direction to HC (e.g. "This way to Hawker Centre"). g. All signages shall be of heavy duty type. h. Surface finish of all signages shall not be reflective. i. All corners of the signages should be rounded. j. Pictorial signage shall be clear and easily understood. k. To provide signage to allow guide dog.

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SENGKANG CENTRAL

[Updated as of 20 Oct 2017]

PART E: Signage & Displays

S/N	Items	NEW HC
E3	Notice Board	<ul style="list-style-type: none"> a. To prevent injury, the corners of the lockable notice board should be rounded. Prominent location and design to be proposed by Architect. b. To be located at prominent and illuminated areas. c. Exact location and design to be proposed by Architect. d. Notice board shall be: <ul style="list-style-type: none"> i. Durable ii. Easily maintained iii. Located at areas which are not exposed to rain. e. Avoid placing notice boards at the blind spot of traffic paths (e.g. beside turns and corners of the walls)
E4	Banner	<ul style="list-style-type: none"> a. To provide banner posts at prominent locations. b. Banner posts should allow for display of up to 2 banners. c. Materials used shall be: <ul style="list-style-type: none"> i. Corrosion-resistant ii. Durable iii. Easily maintained
E5	Completion Plaque	<ul style="list-style-type: none"> a. To provide a Plaque to commemorate the completion. (For details on text, please consult Manager-in-charge). b. The plaque should be: <ul style="list-style-type: none"> i. Permanent type ii. Durable iii. Weatherproof iv. Corrosion resistant v. Not easily stained vi. Easily maintained

SENGKANG CENTRAL

[Updated as of 20 Oct 2017]

PART E: Signage & Displays

S/N	Items	NEW HC
E6	Hoarding	<ul style="list-style-type: none"> a. Branding – project publicity signboard b. Provision of temporary access around perimeter of work site <ul style="list-style-type: none"> i. To provide a sheltered walkway with security lighting for public access if required. c. Flooring of the sheltered walkway should be: <ul style="list-style-type: none"> i. Anti-slip ii. Weatherproof iii. Easily maintained d. Security lighting must; <ul style="list-style-type: none"> i. Have sufficient coverage of the site perimeters; or ii. Have minimum 1 light provision every 5 meters distance. e. Security lighting with an average lighting level of 70 lux measured from the FFL with uniformity ratio of 0.7 shall be provided. f. The material used for the hoarding should be: <ul style="list-style-type: none"> i. Made of metal around the entire contract boundary ii. Able to cater publicity panel. iii. Durable g. Corrosion-resistant

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SENGKANG CENTRAL

[Updated as of 20 Oct 2017]

PART F: Other Considerations

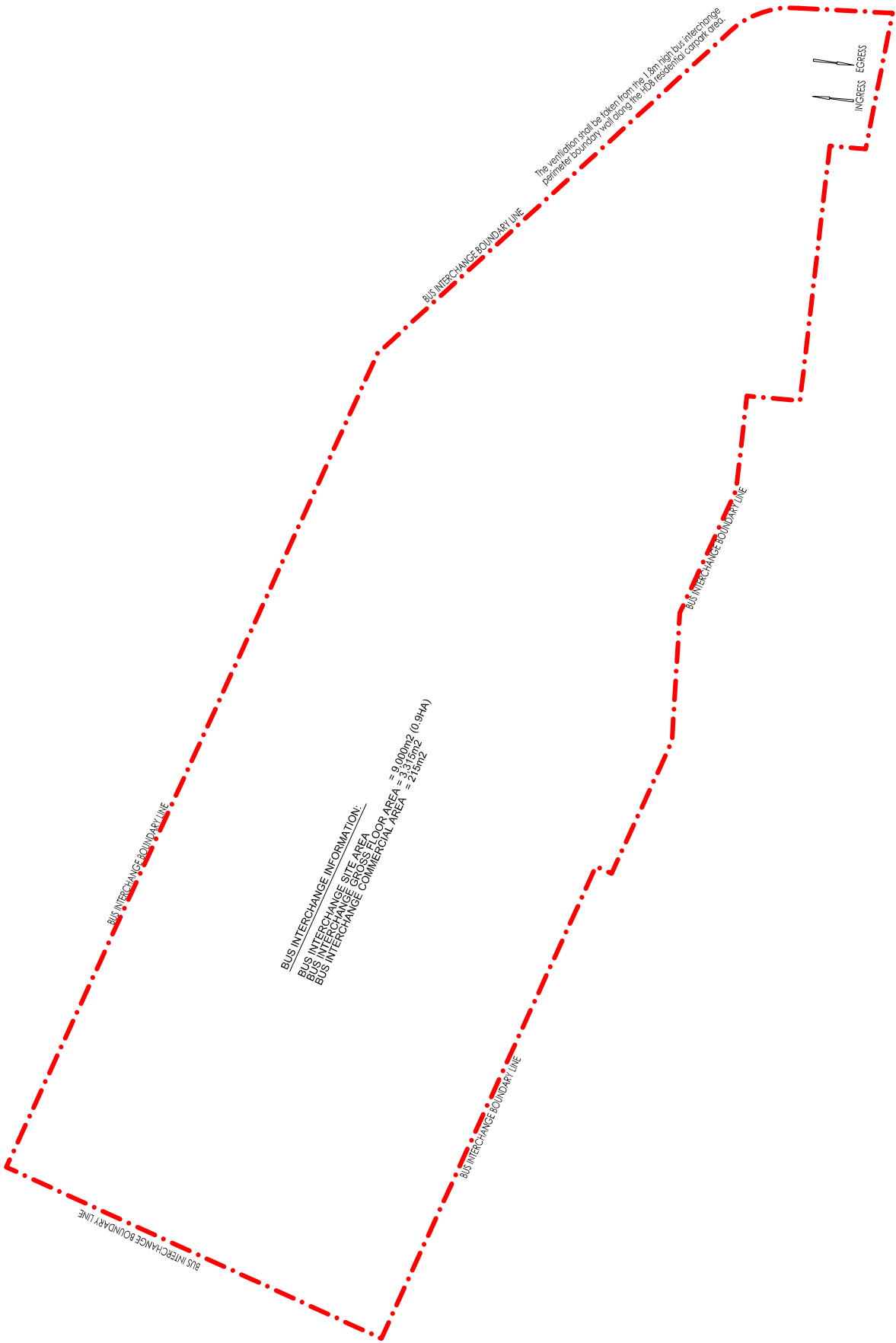
S/N	Items	NEW HC
F1	Hours of Occupancy	To plan HC for 24 hour occupancy. Some hawkers will arrive as early as 4am to prepare food while others will close beyond 12am. The HC should be designed in such a way so that while other co-locators (such as Community Centre) may close at night, the HC can remain open.
F2	Birds, Rodents and Dust	<ul style="list-style-type: none"> a. Design should minimize areas (such as exposed overhead pipe runs) that birds / rodents could perch or travel and dust could collect. b. Openings for utility ducts / lines should be sealed with appropriate materials to prevent rodents from gaining entry into the stalls. c. Refuse collection area such as bin centre / transit bin centre should be situated away from stalls to reduce opportunity for possible rodents' transition to food preparation areas. d. Anti-bird measures to be provided.
F3	Vegetated Open Space	<ul style="list-style-type: none"> a. The design is encouraged to maximize vegetated open space on both the horizontal and vertical plane (elevations). b. Should take into consideration ease of maintenance. c. Should take into consideration vector control. d. To have automatic irrigation system with timer.
F4	Storm water control	<ul style="list-style-type: none"> a. To slow down the amount of storm water flowing into drains and reduce the risk of flooding, the centre shall have pervious paving materials or grid pavers for all exposed, non-vegetated surface areas to promote infiltration. b. Design shall be cater to worst case scenario of rain water as per SS525. c. Bio swale to be considered where possible.
F5	Reduce water use – Water efficiency	To further increase water efficiency within the building, all installed water fittings and apparatuses must be rated under the PUB's Water Efficiency Labelling Scheme (WELS). (minimum of two ticks)
F6	Promote Energy Efficiency	To promote energy savings within the building, all installed electrical fittings shall be energy efficient.
F7	Reduce Noise Pollution	<ul style="list-style-type: none"> a. The centre's more noisy areas such as the loading/unloading areas, Central washing area, Tray Return area, mechanical ventilation fans, and the car park access and ramp areas shall be designed to be located away from residential areas. For example, if the centre is surrounded on two sides by HDB blocks and two sides by roads, the noisy areas shall face the road. b. The centre's residential area-facing sides shall provide a sufficient buffer area, or, the design shall incorporate noise attenuation measures to ensure that noise reaching the nearest residential unit is below permissible levels. c. Vibration and noise from mechanical equipments/pipings shall be isolated and reduced.

SENGKANG CENTRAL


[Updated as of 20 Oct 2017]

PART F: Other Considerations

S/N	Items	NEW HC
F8	Reduce Odour Pollution	<p>a. Odour-producing areas, such as the bin centre, cooking area, toilets, and mechanical exhaust fans shall be located as far away from residential areas and buildings with sensitive use.</p> <p>b. The design shall demonstrate that it has taken into account prevailing wind patterns based on the required CFD study under Green Mark and how odours from the centre will be transmitted.</p> <p>c. All exhaust air shall be treated with filtration devices that would reduce grease and food odours at the exhaust. Additionally, an odour/grease filtration system is to be provided. The ventilation equipment must be designed and installed to avoid noise or vibration nuisance.</p>
F9	Reduce Light Leakage	To minimize light trespass from the building and site and reduce sky-glow and glare at night, all external luminaries shall have shielding or have a line of sight that point away from the sky.
F10	Maintenance	<p>a. Building facades should be constructed with self-cleaning materials that are low maintenance to reduce frequency for washing. It is pertinent for the design of the hawker centre to be practical and functional.</p> <p>b. Materials selected shall be readily available in the market with more than 1 supplier.</p> <p>c. To prevent littering into the service rooms, any ventilation openings shall be located at high level.</p> <p>d. There shall be sufficient space for maintenance in all services rooms/areas.</p>
F11	Solar Panels	<p>a. To consider roof design with maximum sun exposure appropriate for future installation of solar panels. Design loading:</p> <ul style="list-style-type: none"> - Reinforced concrete roof at 1.5kN/m² - Metal roof at 0.75kN/m² <p>b. Design to comply with FSSD Fire safety requirements for Solar Photovoltaic installations on roof</p>



NOTE
- Drawing is strictly notional.

Rev.	Date	By	Description	Chck'd	App'd
Tenure of Land :					
Qualified Person Endorsement :					
LTA Endorsement :					
<div></div> <div>Project Title : DESIGN AND BUILD OF THE BUS INTERCHANGE AND ASSOCIATED WORKS AT SENGKANG CENTRAL</div>					
Drawing Title :					
Designed: SHAWN	Checked : MULIANA	Approved: JIMMY LAM			
Scale	Drawn	Date DEC 2017			
Drawing No. :					Rev.
CAD File Name:				Sheet	of A1

FOR INFORMATION ONLY



FORM A

PUBLIC COMMUNICATIONS PLAN

Details of Developer Company Name: Address: Tel no: Email:		To: Group Director Land Sales & Administration Urban Redevelopment Authority 45 Maxwell Road The URA Centre Singapore 069118	INSTRUCTION: This form is to be duly completed and submitted to the Authority within 2 months from the date of the award of tender.
Parcel Reference Number: _____ Proposed Development: _____ Lot/Parcel Reference: _____ TS/MK: _____			
Key milestones (Refer to Condition 6.2 of the Technical Conditions of Tender)			Proposed date of commencement*
1.	Distribution of flyers containing brief project information and contact details of parties specified (Condition 6.2.4)	(dd/mm/yy)	
2.	Submission of Form B (Condition 6.2.5)		
3.	First submission of development proposal (Condition 6.2.5)		
4.	Erection of hoarding and site clearance (Condition 6.2.6)		
5.	Obtain grant of Provisional Permission (Condition 6.2.7)		
6.	Distribution of flyers containing detailed project information (Condition 6.2.7)		
7.	Submission of Form C (Condition 6.2.8)		
8.	Submission of Form D (Condition 6.2.9)		
9.	Construction schedule a) Piling b) Sub-structure c) Superstructure d) M&E works e) Finishes		
Name, Designation & Signature of Developer's representative			

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



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.

Details of Developer

Company Name:

Address:

Tel no:

Email:

To:

Group Director

Land Sales & Administration

Urban Redevelopment Authority

45 Maxwell Road

The URA Centre

Singapore 069118

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 6.2.4 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 6.2.2 of the Technical Conditions of Tender.

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.

Details of Developer

Company Name:

Address:

Tel no:

Email:

To:

Group Director

Land Sales & Administration

Urban Redevelopment Authority

45 Maxwell Road

The URA Centre

Singapore 069118

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 6.2.7 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 6.2.2 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.*

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.

Details of Developer

Company Name:

Address:

Tel no:

Email:

To:

Group Director

Development Control

Urban Redevelopment Authority

45 Maxwell Road

The URA Centre

Singapore 069118

DC Reference: _____

Submission Number: _____

Proposed Development: _____

Lot Number: _____

I, _____ (Name), _____ (Designation), hereby declare on behalf of the developer that in accordance with Condition 6.2.9 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**:

Feedback Received from Local Community	Proposed Measures to Address the Feedback
1)	1)
2)	2)
3)	3)
4)	4)
<div>Signature:</div> <div>Date:</div>	

* Local community is defined and includes the parties specified under Condition 6.2.2 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.

ANNEX 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 sqm should adopt at least 3 productive formats, while smaller than 200 sqm should adopt at least 2 productive formats. Below is the list of initiatives suggested by SPRING Singapore to raise productivity for Food Services and Retail Outlets:

Suggested Initiatives to Raise Productivity (Food Services)

Initiative	Functions	Manpower savings / Manpower needed
Digital Service E.g. Digital Kiosks, Mobile App, e-Menu, e-Waiter	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.	Reduces about 5 headcounts /outlet
Kitchen Automation	Investing in process automation through machinery and equipment to replace labour-intensive food preparation processes improves productivity.	Reduces about 4 headcounts/outlet
Centralised Dishwashing (shared basis)	Outsourcing dishwashing to an on-site or off-site third-party centralised dishwashing provider reduces food services operators' costs.	Reduces 1 headcounts/outlet
Central Kitchen	Central kitchens enable economies of scale and comprises the following: <ul style="list-style-type: none"> ▪ 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

Initiative	Functions	Manpower savings / Manpower needed
Meal Replacement Vending Machines	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.	Requires 1 - 3 headcount
Grab and Go Kiosks Retailing Ready Meals	Grab and Go kiosks facilitate takeaway orders. Minimal on-site food preparation is needed due to the usage of ready meals.	Requires 4 – 6 headcount
Productive Food Court/ Coffee Shop	<p>Productive food courts/coffee shops are food courts/coffee shops that are equipped with two or more of the following productivity initiatives:</p> <ol style="list-style-type: none"> 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 <p>The productive food court/coffee shop model could also include the following:</p> <ol style="list-style-type: none"> 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 <p>The productive food court/coffee shop model is more manpower-lean.</p>	For a food court with 10 stalls, this requires about 15 - 18 headcount

Suggested Initiatives to Raise Productivity (Retail)

Initiative	Functions	Suggested Trades	Manpower savings/ Manpower needed
Self-Checkout (SCO) System	<p>A SCO system allows customers to scan, pack and pay for their purchases without a cashier's assistance.</p> <p>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.</p>	Grocery and any other high-volume retail trades (e.g. bookstores, pharmacies, convenience stores)	Reduces 8 headcount/ outlet
Cash Management (CM) System	<p>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.</p> <p>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.</p>	Grocery and any other retail trades that has high cash transactions (e.g. stationery shops, pharmacies, convenience stores)	Reduces 1 headcount/ outlet
Electronic shelf labelling	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.	Grocery and any other retail trades that has high cash transaction (e.g. stationery, pharmacies,	Reduces 1 headcount/ outlet

Initiative	Functions	Suggested Trades	Manpower savings/ Manpower needed
		convenience stores)	
Radio Frequency Identification (RFID) technology	<p>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.</p> <p>Retailers can effectively identify and manage items by decreasing time spent on stock count.</p>	All retail trades, especially those that carry a large number of stock-keeping-units (SKUs)	Reduces 2 headcount/ outlet
Digital catalogue	<p>A digital catalogue will allow customers to browse through a large inventory base without sales assistants having to physically locate the products.</p> <p>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.</p>	All retail trades, especially those that carry a large number of stock-keeping-units (SKUs)	Reduces 3 headcount/ outlet
Vending machine	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.	All retail trades	1-3 headcount required/ outlet
Point-of-Sales (POS) System	A POS system automates real-time tracking of inventory and sales transactions.	All retail trades	Reduces 1 headcount/ outlet

Initiative	Functions	Suggested Trades	Manpower savings/ Manpower needed
	<p>It is able to generate sales reports and provide insights on customer behaviour and product popularity.</p> <p>The system's API (Application Programmable Interface) should be able to integrate with existing accounting and inventory management system.</p>		
Appointment Scheduling and Booking (ASB) System	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.	All retail trades, especially those that are service-related (e.g. beauty and hair services)	Reduces 1 headcount/ outlet
Urban Logistics (UL)	<p>Improve the productivity of last mile deliveries through the use of infocomm technologies to optimize deliveries via analytics, technology and automation.</p> <p><u>In-mall distribution:</u> Retailers can skip the long queues at unloading bays. The UL operator manages the loading bay of the mall, receiving goods on behalf of the tenants and re-distributing them at scheduled times.</p> <p><u>Offsite Consolidation:</u> Instead of delivering direct to a mall, retailers' delivery vehicles are diverted to an offsite warehouse, where the UL operator will consolidate the goods and make a full truckload delivery to the mall.</p>	All retail trades	

For more information on these productivity initiatives, please contact food_division@spring.gov.sg or lifestyle_division@spring.gov.sg

You can also visit <http://www.spring.gov.sg/Growing-Business/Grant/Pages/capability-development-grant.aspx> for more information on how SPRING can support your capability upgrading initiatives.

APPENDIX 1

DETAILS OF TRACK RECORD OF TENDERER / LEAD ARCHITECT(S) / DESIGNER(S) (Please provide the following particulars)	
Tenderer	
Name of Tenderer*	
Where a tender is submitted by 2 or more tenderers, please indicate the shares of all tenderers in this joint tender	
Experience in developing similar mixed-use developments	Please fill in Form 1. For joint tender, all tenderers are to fill in Form 1.
Quality of completed residential developments within past 5 years	Please fill in Form 2. For joint tender, all tenderers are to fill in Form 2.
Lead Architect(s) / Designer(s)	
Name of lead architect / designer	
Name and Address of Company/Firm	
Description and location of completed project(s)	
Date of completion for the above completed project(s)	
Level of involvement in the above completed project(s)	
Awards and accolades accorded for the above projects, if any, and attach certificates	
Any additional information on relevant completed projects	

*Where a tender is submitted jointly by 2 or more tenderers, this space may be divided into corresponding number of columns for use.

EXPERIENCE IN DEVELOPING SIMILAR MIXED-USE DEVELOPMENTSNote:(1) For joint tender, ALL tenderers are to fill in Form 1.(2) ONLY include past developments which the tenderers have significant shares (i.e. at least 50% share).

S/No.	Project Name and Address of 3 Recent Developments (if no local projects, pls indicate overseas projects)	Year of Completion	Total GFA (sqm) [Please indicate breakdown of GFA: Commercial GFA: Residential GFA:]	Type of Co-located Facility (e.g. MRT, Bus Interchange, Community Club)
1				
2				
3				

QUALITY OF COMPLETED RESIDENTIAL DEVELOPMENTS WITHIN PAST 5 YEARS

Note:

- (1) For joint tender, ALL tenderers are to fill in Form 2.
 (2) Fill in ALL completed residential developments within past 5 years.
 (3) ONLY include past residential developments which the tenderers have significant shares (i.e. at least 50% share).

S/No.	Project Name and Address	Year of Completion	Quality Mark Rating, if any and attach certificates (If nil, indicate N.A.)	CONQUAS Score, if any and attach certificates (If nil, indicate N.A.)	Construction Awards on workmanship quality (if nil, indicate N.A.)
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

*To add more rows if required.

**TENDER SUBMISSION CHECKLIST
FOR LAND PARCEL AT SENGKANG CENTRAL
(TENDER SUBMISSION DATE: 21 JUNE 2018)**

(Please tick accordingly)

1	<p>ENVELOPE LABELLED “CONCEPT PROPOSAL AND FIXED AMOUNT DEPOSIT”</p> <p>A <input type="checkbox"/> Use the correct “Form for Submission of Concept Proposal” for the Land Parcel.</p> <p><input type="checkbox"/> Sign the “Form for Submission of Concept Proposal”.</p> <p><input type="checkbox"/> The particulars of tenderer in the “Form for Submission of Concept Proposal” must be the same as that in the “Form of Tender”.</p> <p>B FIXED AMOUNT DEPOSIT</p> <p><input type="checkbox"/> Ensure that the correct amount of Fixed Amount Deposit (S\$43,000,000.00) is enclosed by one or more of the following payment modes:</p> <p>(i) Bank / Insurance Guarantee</p> <p><input type="checkbox"/> Correct format is used (for single or joint tenderers).</p> <p><input type="checkbox"/> Tenderer’s name(s) in the Bank/Insurance Guarantee is exactly the same as in the Form of Tender.</p> <p><input type="checkbox"/> Indicate in the subject title and main text whether the Bank/Insurance Guarantee is for whole <u>or</u> part of the tender deposit.</p> <p><input type="checkbox"/> The Bank/Insurance Guarantee shall be valid for at least 14 weeks from the tender submission date.</p> <p>(ii) Cashier’s Order</p> <p><input type="checkbox"/> Cashier’s Order is addressed to the “Urban Redevelopment Authority”.</p> <p><input type="checkbox"/> Cashier’s Order is dated on or before the tender submission date.</p> <p>(iii) Bank Transfer</p> <p><input type="checkbox"/> Correct amount has been deposited into URA’s bank account (as specified in the Conditions of Tender) not later than 12 noon on the tender submission date.</p> <p>C CONCEPT PROPOSAL</p> <p><input type="checkbox"/> (i) A maximum of twelve (12) A0 sheets mounted on not more than 6mm thick white foam boards or other similar materials containing:</p> <p><input type="checkbox"/> Scale drawings – including a site plan (at 1:1000 scale) and floor plans, sections and elevations (at 1:500 scale) – to illustrate the overall design, open spaces, pedestrian network, landscaping treatment, vehicular access, etc. of the proposed development; Drawings of other scales can be included as additional drawings;</p> <p><input type="checkbox"/> Key sectional details (at least 1:100 scale) to illustrate the design of the pedestrianized mall between the developments’ massing;</p> <p><input type="checkbox"/> Perspectives to give a comprehensive understanding of the proposal and to illustrate the proposed development within its context. The perspectives should also depict the building form and architectural design, day and night visualizations of the development, key public spaces, street-level activities, views of the development from the adjacent developments, residential developments at the opposite side of the road and other vantage points; and</p>
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- ☐ Any other information, sketches, diagrams or details to illustrate the idea and workability of the design proposal.
- ☐ (ii) Six (6) sets of Design Report in either A3 or A4 format containing:
 - ☐ Description of the overall design concept for the proposal;
 - ☐ A list of the proposed mix of uses and their GFA breakdown is to be provided;
 - ☐ A reduced copy of the A0 boards;
 - ☐ Photographs of the scale model;
 - ☐ Any other information, sketches, diagrams or details to illustrate the idea and workability of the design proposal;
 - ☐ Proposal to illustrate the incorporation of Green Mark design features in the proposed development;
 - ☐ A detailed landscape Masterplan and landscape design report; and
 - ☐ Track record of the tenderer and design team in the format as shown in Appendix 1 of the Technical Conditions of Tender.
- ☐ (iii) One (1) scale model of the proposed development at 1:400 scale with frosted or opaque Perspex covers. The base of the model is to be 5mm thick.
- ☐ (iv) A digital 3D model of the Land Parcel in AutoDesk 3Ds Max file format is available for purchase on the eDeveloper's Packet Portal. It is compulsory for all tenderers to purchase and utilise this set of digital 3D models from URA for their Concept Proposal submission in order to ensure that all Concept Proposals are all presented on the same digital base. Submissions are to be in Autodesk 3DS Max file format, version 2016 and below (.max), or in SketchUp file format, version 8 and below (.skp), geo-referenced to SVY21 coordinates.
- ☐ (v) Two (2) soft copies of the Drawings and Design Report of the Concept Proposal in CD-ROM. All drawings, perspectives, visualisations and photographs of the model(s) are to be in PDF format.

2 ENVELOPE LABELLED "FORM OF TENDER"

- A
- ☐ Use the correct "Form of Tender" for the Land Parcel.
 - ☐ Sign the "Form of Tender".
 - ☐ The particulars of tenderer in "Form of Tender" must be the same as that in the "Form for Submission of Concept Proposal".

B ADDITIONAL AMOUNT DEPOSIT

- ☐ Where the Fixed Amount Deposit is less than 5% of the tendered sale price, an additional amount ('Additional Amount Deposit') which shall not be less than the difference between the amount of 5% of the tendered sale price and the Fixed Amount Deposit should be submitted.
- ☐ Ensure that the correct amount of the Additional Amount Deposit, if applicable, is enclosed by one or more of the following payment modes:

(i) Bank / Insurance Guarantee

- ☐ Correct format is used (for single or joint tenderers).
- ☐ Tenderer's name(s) in the Bank/Insurance Guarantee is exactly the same as in the Form of Tender.
- ☐ Indicate in the subject title and main text whether the Bank/Insurance Guarantee is for whole or part of the tender deposit.
- ☐ The Bank/Insurance Guarantee shall be valid for at least 14 weeks from the tender submission date.

(ii) Cashier's Order

- ☐ Cashier's Order is addressed to the "Urban Redevelopment Authority".
- ☐ Cashier's Order is dated on or before the tender submission date.

C Where the tenderer is a company not incorporated in Singapore, certified true copies of:

- ☐ (i) Certificate of incorporation or registration in its place of incorporation or origin or a document of similar effect; and
- ☐ (ii) Particulars of the company relating to its registered office address, principal activities, share capital, officers, directors and shareholders as registered with and maintained by the relevant authority at its place of incorporation or origin.

Tenderers are reminded not to include the duly completed "Form of Tender" in the envelope labelled "Concept Proposal and Fixed Amount Deposit".

I have checked and verified that the tender submission is in order.

Name of Tenderer

Designation

Signature/Date

FOR OFFICIAL USE ONLY

Tender submitted at: _____

(Time)

Name of Person submitting Tender

Signature/Date

Name of URA Officer

Signature/Date

Tenderer's telephone number:
(Contactable until 5pm)

Handphone Number: