

Circular No : [URA/PB/2019/18-CUDG](#)
Our Ref : DC/ADMIN/CIRCULAR/PB_19
Date : 27 November 2019

CIRCULAR TO PROFESSIONAL INSTITUTES

Who should know

Developers, building owners, architects and engineers

Effective Date

With immediate effect

UPDATED URBAN DESIGN GUIDELINES AND PLANS FOR URBAN DESIGN AREAS

1. As part of the Master Plan 2019 gazette, URA has updated the urban design guidelines and plans applicable to all Urban Design Areas as listed below:
 - a. [Downtown Core](#)
 - b. [Marina South](#)
 - c. [Museum](#)
 - d. [Newton](#)
 - e. [Orchard](#)
 - f. [Outram](#)
 - g. [River Valley](#)
 - h. [Singapore River](#)
 - i. [Jurong Gateway](#)
 - j. [Paya Lebar Central](#)
 - k. [Punggol Digital District](#)
 - l. [Woodlands Central](#)
2. Guidelines specific to each planning area have been merged into a single set of guidelines for easy reference. To improve the user-friendliness of our guidelines and plans, a map-based version of the urban design guide plans is now available on [URA SPACE](#) (Service Portal and Community e-Services).
3. All new developments, redevelopments and existing buildings undergoing major or minor refurbishment are required to comply with the updated guidelines.
4. The urban design guidelines provide an overview of the general requirements for developments in the respective Urban Design Areas. For specific sites, additional guidelines may be issued where necessary. The guidelines included herewith do not supersede the detailed guidelines issued, nor the approved plans for developments for specific sites.

5. I would appreciate it if you could convey the contents of this circular to the relevant members of your organisation. You are advised to refer to the [Development Control Handbooks](#) and URA's website for updated guidelines instead of referring to past circulars.
6. For other information on the master plan, urban design guidelines, private property use and approval, car park locations and availability, private residential property transactions, and conservation areas and buildings, use [URA SPACE](#) (Service Portal and Community e-Services). This is an online portal packed with useful data and visualisation to help building professionals, business operators and the general public in their decision-making. It consolidates detailed information on land use and private property into a one-stop platform presented on geospatial maps. For feedback or enquiries on this circular, please [email](#) us.

Thank you.

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URBAN DESIGN GUIDELINES (UDG) FOR THE PUNGGOL DIGITAL DISTRICT

About the Punggol Digital District

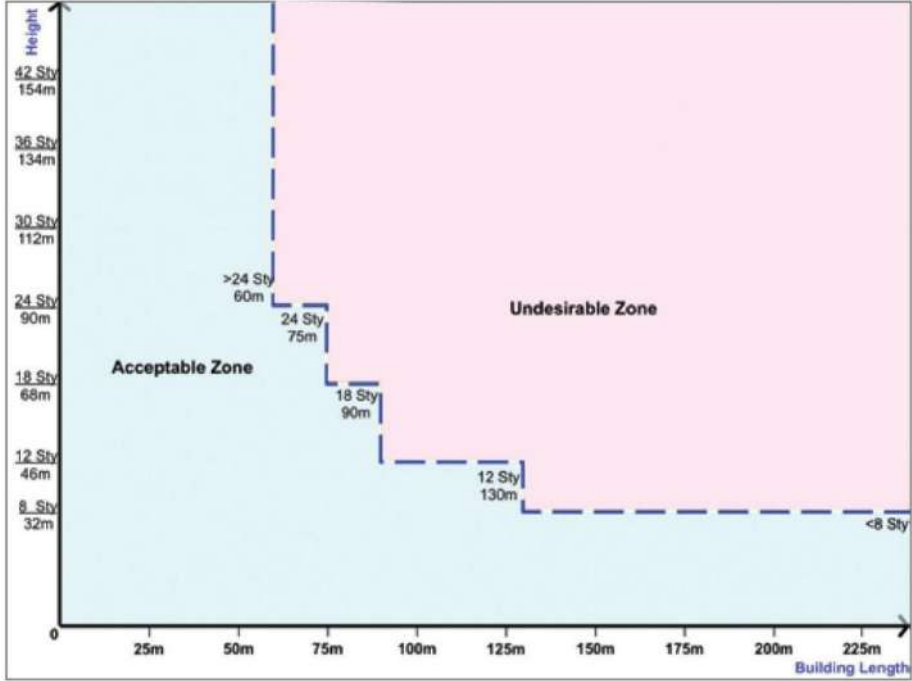
The Punggol Digital District (PDD) comprises of the Singapore Institute of Technology (SIT) and business park developments by JTC Corporation (JTC). This district is intended to become a growth cluster for the digital and cyber-security industries. It is envisaged to be a vibrant, well-connected, and sustainable district with close integration of industries, academia, and the community at large. Refer [Appendix 1: Boundary Plan](#).

Planned to be a public transport-oriented, walkable and cycling-friendly district, the developments shall be seamlessly integrated with a comprehensive network of walkways and cycling paths. The developments in this district should capitalise on the waterfront and lush greenery, while retaining the sense of undulating topography and rustic charm.

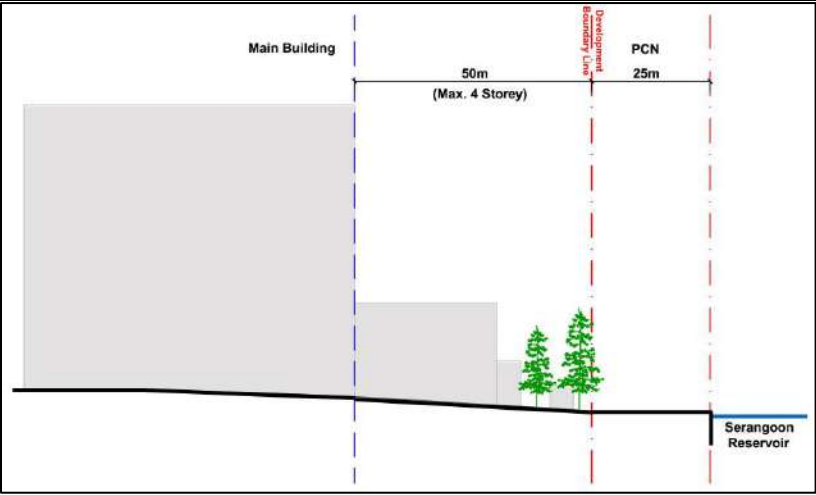
The following planning and urban design requirements serve to guide the realisation of high-quality and well-designed developments that relate to the surrounding context, in accordance with the planning intention for the Punggol Digital District.

The planning parameters and urban design guidelines are:

Parameters	Requirements
<p>Building Form & Massing</p> <p>Appendix 2: Urban Design Plan – Building Form</p>	<p><u>Building Form</u></p> <p>The building form and massing is to relate sensitively to the existing topography and natural features.</p> <p>The developments are envisaged to be nestled in a campus-like environment interspersed with lush landscaping, skyrise greenery, pockets of courtyard spaces and passive design elements; and to respond to the tropical climate.</p> <p>The building form is to consider views to the surrounding, as well as impact on views from major approaches and key open spaces.</p> <p>Developments shall not form a wall-like effect especially along Heritage Trail, the waterfront and new Punggol Road. They are envisaged to be articulated as a series of smaller scale buildings with high degree of visual and physical porosity towards the Heritage Trail, the waterfront and New Punggol Road.</p> <p>The scale and the massing for the developments shall be guided by the chart shown in FIG.1. Buildings shall be designed to fall within the Acceptable Zone. In the event that the length of a building exceeds the Acceptable Zone and needs to be articulated as two separate buildings, a minimum distance of 25m shall be maintained between the two buildings.</p>

Parameters	Requirements
	 <p>FIG 1: Chart to guide a comfortable scale and massing for developments.</p> <p>Building Facades</p> <p>The building façades of the development fronting all main roads and major public spaces are to be treated as main elevations.</p> <p>The building facades of the development are to be well-articulated with solid (walls) / void (fenestration) areas that draw upon a combination of different materials (e.g. concrete, brick, steel, glass, greenery, etc.).</p> <p>To create visual interest and to further break down the building mass, elements of tropical architecture such as sky terraces, balconies, sun-shading louvers, deep recesses, window ledges, roof terraces, communal planter boxes and vertical green walls are to be provided as part of the development and integrated with the overall building form and architectural treatment of the development.</p>
<p>Building Height</p> <p><i>Appendix 2: Urban Design Plan – Building Form</i></p>	<p>The detailed building height zones are demarcated for the developments in the Urban Design (UD) Guide Plans:</p> <ol style="list-style-type: none"> a) High-rise zone – up to allowable technical height control; b) Low-rise zone – <ol style="list-style-type: none"> i) <u>Fronting the waterfront promenade (within Market Village):</u> <p>Maximum 1 storey. To retain a more intimate scale along the waterfront promenade, the building height (within a depth of up to 50m wide) shall be kept not higher than single-storey and articulated as a series of discrete buildings or pavilions interspersed among the existing Casuarina trees so as to retain the existing rustic waterfront character. See FIG. 3.</p>

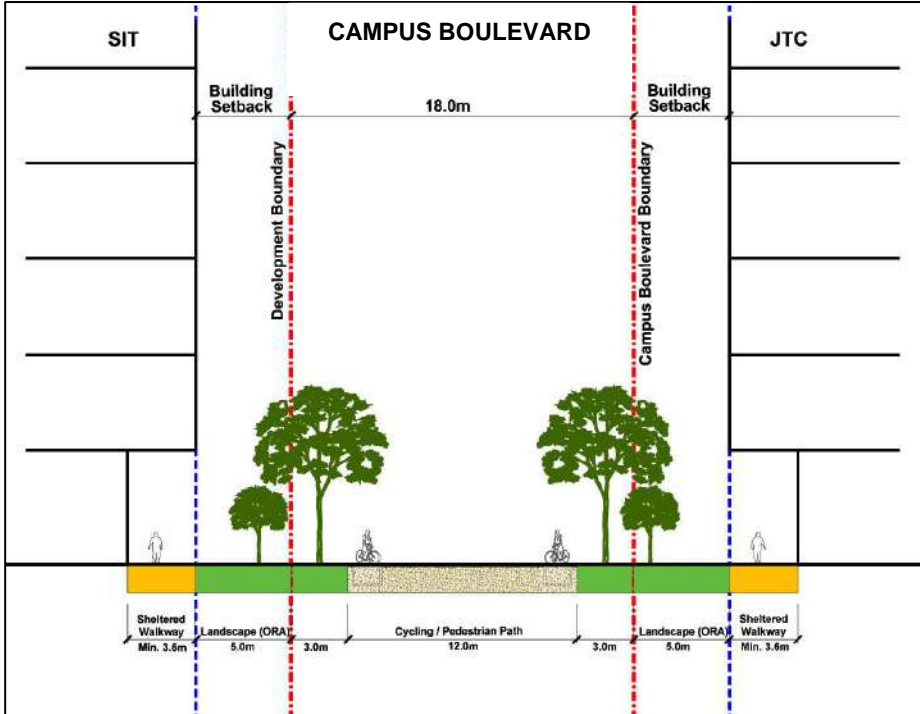
Parameters	Requirements
	<div data-bbox="512 280 1329 763" data-label="Image"> </div> <p data-bbox="512 790 1262 822">FIG 2: Casuarina trees lining the waterfront along the proposed Market Village</p> <div data-bbox="512 853 1342 1391" data-label="Diagram"> </div> <p data-bbox="512 1429 1390 1503">FIG 3: The Market Village with a depth of 50m wide shall be designed in consideration of the need to retain and integrate the existing trees. In addition, a smooth level transition to the lower promenade level shall be designed.</p> <p data-bbox="475 1536 1350 1570">ii) <u>Fronting the waterfront promenade (outside the Market Village):</u></p> <p data-bbox="507 1603 1390 1671">Maximum 4 storeys stepping down to single storey towards the waterfront. See FIG. 4.</p>

Parameters	Requirements
	 <p data-bbox="523 779 1385 853">FIG 4: A depth of 50m wide fronting the waterfront promenade shall be kept at a max. 4 storey and shall be designed in consideration of the need to retain and integrate the existing trees. In addition, a smooth level transition to the lower promenade level shall be designed.</p> <p data-bbox="480 887 1139 920">iii) <u>Fronting the Heritage Trail</u>: Maximum 4 storeys.</p> <p data-bbox="480 954 1337 987">iv) <u>Fronting the low-rise landed housing area</u>: Maximum 4 storeys.</p>
<p data-bbox="188 1021 384 1055">Building Edge</p> <p data-bbox="188 1088 384 1218"><i>Appendix 2: Urban Design Plan – Building Form</i></p>	<p data-bbox="416 1021 1385 1151">To provide a well-defined and active street edge along the key pedestrian thoroughfares, developments shall provide a minimum 4-storey high building edge abutting the building setback lines along the Campus Boulevard.</p> <p data-bbox="416 1189 1385 1319">Up to 40% of the length of the building façade is encouraged to be set back for articulation of the building form and skyrise greenery, or for the creation of open spaces so as to achieve a high degree of porosity at the ground level.</p>
<p data-bbox="188 1359 304 1420">Building Setback</p> <p data-bbox="188 1458 384 1588"><i>Appendix 2: Urban Design Plan – Building Form</i></p> <p data-bbox="188 1760 384 2024"><i>Appendix 8: Urban Design Plan – Landscape Within Building Setback Along New Punggol Road</i></p>	<p data-bbox="416 1359 1385 1420">Developments shall be guided by the following building setbacks as shown in the UD Guide Plans:</p> <p data-bbox="416 1458 794 1491">a) <u>Along Campus Boulevard</u></p> <p data-bbox="456 1525 1385 1693">Developments shall be set back 5m from the Campus Boulevard to create spaces for spill out-activities as an extension of the adjacent developments. Landscaping, seating areas, retail kiosks and outdoor refreshment areas, etc. shall be incorporated within this 5m building setback zone. See FIG. 5.</p> <p data-bbox="416 1727 879 1760">b) <u>Along the waterfront promenade</u></p> <p data-bbox="456 1794 868 1827">No building setback is required.</p> <p data-bbox="416 1861 1385 1921">c) <u>Along part of New Punggol Road, Punggol Coast Road and Punggol Close</u></p> <p data-bbox="456 1962 1385 2058">Developments shall be set back as per URA prevailing Development Control Guidelines from the line of Road Reserve. The building setback area shall be attractively landscaped with an additional row of tree</p>

Parameters	Requirements
<p><i>Appendix 9: Urban Design Plan – Landscape Within Building Setback Along Punggol way</i></p>	<p>planting to complement the adjoining public pedestrian walkway and greenery (within the Road Reserve).</p> <p>The landscaped areas within the building setback shall create a lush environment and provide multiple landscaped footpaths between the roadside public walkways and the covered walkways of the development seamlessly.</p> <p>d) <u>Along Punggol Way and Sentul Crescent Extension</u></p> <p>Developments shall be set back as per URA prevailing Development Control Guidelines from the line of Road Reserve. The area within the building setback is to be lushly planted to achieve a park-like setting in the heart of the Creative Cluster and Learning Corridor, and to accentuate the rustic character en-route to Coney Island via Punggol Way.</p> <p>The detailed landscaping proposal will be subject to the approval of the Authority and the relevant Competent Authorities at the formal submission stage.</p> <p>e) <u>Along Heritage Trail</u></p> <p>Developments shall be set back 7.5m from the Heritage Trail park boundary line.</p> <p>f) <u>Along Future Road</u></p> <p>Developments shall be set back 30m from the line of Road Reserve. The area within the building setback shall be lushly landscaped.</p> <p>Submerged basement structures can be built up to the common boundary lines and the lines of Road Reserve, provided the portion underneath the green buffer / planting strip is submerged at least 2 m or more below the ground level, so as to allow for meaningful tree planting and landscaping.</p>
<p>Ground Level Porosity</p> <p><i>Appendix 7: Urban Design Plan – Minimum Ground Porosity</i></p>	<p>A high degree of ground-level porosity is to be maintained so as to improve wind flows and views, as well as convenient public access through the precinct.</p> <p>The required amount of ground-level porosity shall be computed based on porous area over total site area. Areas with a minimum of 6m clear ceiling height measured from the proposed building platform levels are considered porous. The clear heights of the voids shall be varied, where possible, so as to create a diverse and defined outdoor space.</p> <p>There shall not be any physical enclosure or boundary walls around the site as the development ground-level open spaces/identified pedestrian thoroughfares shall be publicly accessible.</p>
<p>Public Spaces</p>	<p><u>Campus Heart along Heritage Trail</u></p> <p>A minimum 1.8 hectare public community park (excluding Heritage Trail) (Campus Heart) is to be provided at the location indicated. The Campus</p>

Parameters	Requirements
<p><i>Appendix 2: Urban Design Plan – Building Form</i></p>	<p>Heart is envisaged to be an attractive communal and academic nucleus of Punggol Digital District.</p> <p>The setting of this Campus Heart shall be informal and inviting for public to enjoy. It shall comprise of multiple scales of spaces and differentiated activities for students, industry engagements and community outreach. It shall be lushly landscaped with existing and new forest trees.</p> <p>The Campus Heart shall be open and unobstructed to allow for easy pedestrian access and be highly visible from the adjoining street or pedestrian thoroughfare. The access and circulation within the Campus Heart shall be barrier-free and comply with BCA’s universal design guidelines.</p> <p>The design of the Campus Heart shall include ample shade and seating to create a delightful and usable public space.</p> <p>The existing topography and mature vegetation with the Campus Heart shall be retained so as to reinforce the natural rustic charm of Punggol.</p>
<p><i>Appendix 3: Urban Design Plan – 1st Storey Pedestrian Network & Activity Generating Uses</i></p>	<p><u>NEXUS - ‘Entrance Node’ to the Integrated Transport Hub</u></p> <p>A public space (NEXUS) of minimum 4,000sqm at RL 109 shall be provided to accentuate the sense of place and arrival to the Integrated Transport Hub at CC1 (comprising the future MRT station and Bus Interchange) as indicatively shown in the UD Guide Plan.</p> <p>To be designed as a public plaza or forecourt, considerations shall be given to how the NEXUS can be used for events and activities in relation to the design and programmatic uses of the developments surrounding the public space. It can take the form of multi-volume covered spaces to be used as public ‘city-rooms’ and atrium spaces.</p> <p>The design of the NEXUS shall take into consideration visual links, physical connectivity, way-finding, activity-generating uses and weather protection (i.e. covered walkways, sheltered linkways, etc.) to create a vibrant and comfortable tropical urban space.</p> <p>An attractive entrance/ courtyard to the NEXUS from SIT shall be provided within SIT Parcel B.</p> <p>The design of the NEXUS shall comply with Design Guidelines for Privately Owned Public Spaces (POPS).</p>
<p><i>Appendix 3: Urban Design Plan – 1st Storey Pedestrian Network & Activity Generating Uses</i></p>	<p><u>Public Spaces at the Waterfront</u></p> <p>A public space (Promenade Plaza) of minimum 3,000sqm shall be provided at the termination of the Campus Boulevard so as to accentuate the sense of arrival at the waterfront, as well as to provide a signature waterfront location for the staging of various public/ community events.</p> <p>The setting of this Promenade Plaza shall be informal and cater for the students, office workers and residents of Punggol to enjoy the Punggol waterfront view.</p>

Parameters	Requirements
<p>Appendix 4: <i>Urban Design Plan – Elevated Pedestrian Network & Activity Generating Uses</i></p>	<p>Existing Casuarina trees adjacent and within the plaza shall be retained wherever possible. The Promenade Plaza shall be well-shaded to encourage public use throughout the day. A variety of seating for different users, age groups and physical abilities shall be provided.</p> <p>The Promenade Plaza shall be seamlessly connected to the adjacent Market Village and the waterfront promenade i.e. Park Connector Network (PCN) by mitigating level differences as it steps down towards the waterfront.</p> <p><u>Boulevard Plaza</u></p> <p>A public space (Boulevard Plaza) of minimum 1,000sqm shall be provided as a transitional node, confluence point and entry to the Campus Boulevard that receives commuters from Punggol South, residents of Northshore district/landed housing cluster and students from the future educational parcels. It shall feature existing or new trees to retain the character of Punggol Seventeenth Avenue (that will be expunged along this stretch).</p> <p>Relevant Circulars:</p> <ul style="list-style-type: none"> • Design Guidelines and Good Practice Guide for Privately Owned Public Spaces (POPS)
<p>Pedestrian Connectivity</p> <p>Appendix 2: <i>Urban Design Plan – Building Form</i></p> <p>Appendix 4: <i>Urban Design Plan – Elevated Pedestrian Network & Activity Generating Uses</i></p>	<p>The district is envisaged to be well-served by a network of pedestrian walkways at multiple levels that give easy access to the various amenities and transport nodes amid a lush green setting.</p> <p><u>Heritage Trail</u></p> <p>Old Punggol Road will be preserved as an undulating heritage trail for walking and cycling. This Heritage Trail will connect Punggol Central to Punggol Point at the north. Covering a distance of approximately 1.3km, it will enable the public to enjoy leisurely strolls amidst lush greenery from the Punggol Waterway Park to the Punggol Point Park.</p> <p>Considerations shall be given to the treatment of the trail where it intersects with the proposed future arterial road between Lorong Halus and Seletar, and other roads at Punggol North, as well as with the Integrated Transport Hub, in order to maintain an uninterrupted green corridor leading to the northern coast.</p> <p>The south of Heritage Trail will be connected to the Punggol Waterway Park via at grade pedestrian crossing at the future arterial road.</p> <p>Please consult NParks on the landscape requirements for Heritage Trail.</p> <p><u>Campus Boulevard</u></p> <p>A minimum 18m wide pedestrian mall (Campus Boulevard) at RL 115 shall be provided as the primary public thoroughfare connecting the Punggol Coast MRT Station (at Nexus) to the waterfront.</p>

Parameters	Requirements
	<p>The Campus Boulevard shall consist of a minimum 12m wide pedestrian walkway and cycling path, flanked by 3m wide landscaping on both sides of the Campus Boulevard as shown in FIG. 5.</p>  <p>FIG 5 : Typical section of the Campus Boulevard</p> <p>The Campus Boulevard is envisaged to be a well-shaded and vibrant pedestrian mall flanked by the SIT Development and JTC Development providing a focal point for social interaction and collaboration between education, research and industry.</p> <p>The Campus Boulevard as a public space shall be lushly landscaped for shade but with porosity at grade. It shall be designed as informal break-out spaces interfacing the adjacent developments, with seating for all users. The detailed design shall be subjected to further evaluation by relevant authorities.</p> <p>The Campus Boulevard shall respond to and take advantage of the natural terrain, and be guided by the following datum levels as shown in the UD Guide Plans:</p> <ol style="list-style-type: none"> RL 115 where it meets Sentul Crescent Extension at grade RL 115 where it meets the Heritage Trail at grade RL 115 where it crosses over the New Punggol Road RL 103.5 where it meets the waterfront promenade <p>The Campus Boulevard shall provide for barrier-free accessibility throughout the length of the Boulevard and be integrated seamlessly with the adjacent developments at the respective levels. Any level differences are to be mitigated by ramps, which shall not exceed a slope rise of 1:25 along the length of the Boulevard.</p>

Parameters	Requirements
<p><i>Appendix 4: Urban Design Plan – Elevated Pedestrian Network & Activity Generating Uses</i></p>	<p><u>Boulevard Extension</u></p> <p>Part of Punggol Seventeenth Avenue, which branches off from the existing Punggol Road westwards (towards the landed housing cluster) is to be expunged and pedestrianised.</p> <p>A minimum 15m wide pedestrian mall (Boulevard Extension) is to be provided, as an extension of the Campus Boulevard. This Boulevard Extension shall connect through the landed housing area, and onwards to the waterfront at the Northshore District.</p> <p>The existing roadside Rain Trees shall be retained so as to provide a well-shaded pedestrian mall with seating for all users from the neighbourhood to enjoy.</p> <p><u>Connection between Punggol Digital District to Punggol Town Centre</u></p> <p>To facilitate the North-South pedestrian connectivity, a roadside cycling cum pedestrian path will be provided along Sentul Crescent Extension from the Campus Boulevard to the Punggol Town Centre.</p> <p><u>Connection from Teck Lee LRT to the waterfront</u></p>
<p><i>Appendix 4: Urban Design Plan – Elevated Pedestrian Network & Activity Generating Uses</i></p>	<p>A minimum 3.6m wide covered walkway shall be provided for seamless connectivity from Teck Lee LRT to the waterfront across the Punggol Digital District. This shall be seamlessly connected to the Campus Boulevard and guided by the following datum levels as shown in the UD Guide Plan:</p> <ol style="list-style-type: none"> a) RL 122 where it meets Teck Lee LRT station concourse b) RL 116-117 where it meets the Heritage Trail at grade c) RL 115 where it crosses over the New Punggol Road, Punggol Coast Road and Punggol Close d) RL 103.5 where it meets the waterfront promenade <p>The walkway shall provide for barrier-free accessibility throughout its length and be integrated seamlessly with the adjacent developments at the respective levels. Any level differences are to be mitigated by ramps.</p>
<p><i>Appendix 3: Urban Design Plan – 1st Storey Pedestrian Network & Activity Generating Uses</i></p>	<p><u>Covered Walkways/ Linkways</u></p> <p>An all-weather pedestrian network, in the form of covered walkways, linkways and / or canopies shall be provided along the key pedestrian routes as shown indicatively in the UD Guide Plan. This shall take advantage of the existing terrain and the all-weather pedestrian connectivity shall be provided at 2 main datum levels:</p> <ol style="list-style-type: none"> a) <u>New Punggol Road/Bus Interchange level (RL 106-109)</u> <ol style="list-style-type: none"> i) Along New Punggol Road, Punggol Coast Road, Punggol Close and Punggol Way.

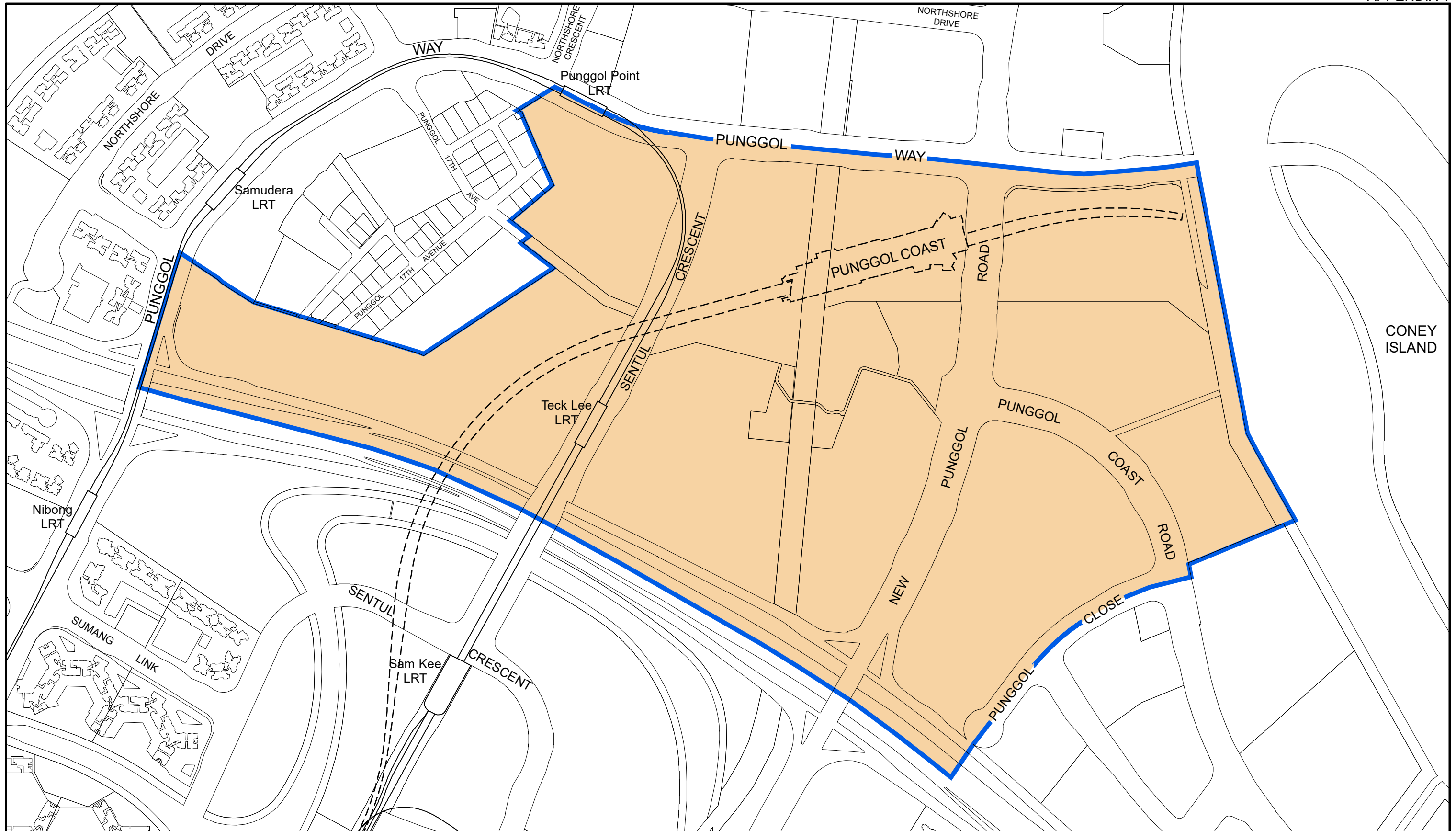
Parameters	Requirements
<p><i>Appendix 4: Urban Design Plan – Elevated Pedestrian Network & Activity Generating Uses</i></p>	<p>b) <u>Campus Boulevard / Elevated Pedestrian Network level (RL 115-122)</u></p> <ul style="list-style-type: none"> i) Along Campus Boulevard ii) Along the key pedestrian route between Teck Lee LRT station and the waterfront iii) Along part of New Punggol Road, connecting Campus Boulevard to the key pedestrian route leading to Teck Lee LRT and the Creative Cluster <p>The covered walkways/ linkways shall be at least 3.6m wide. The covered walkway shall be kept free from steps (wherever possible) throughout the entire length. Any level changes are to be accommodated by ramps. The covered walkway shall be kept free of structures and remain unobstructed and accessible to the public at all times.</p>
<p><i>Appendix 3: Urban Design Plan – 1st Storey Pedestrian Network & Activity Generating Uses</i></p>	<p><u>Through-block Pedestrian Link</u></p> <p>A minimum 6m and maximum 7m wide sheltered through-block link shall be provided at the following locations:</p> <ul style="list-style-type: none"> a) At RL 107 from the bus stop along New Punggol Road to the waterfront promenade at RL 102.5 b) At RL 109 between the Nexus and SIT's entrance node c) At RL 109 to 110 between the Nexus and Bus Interchange <p>These through-block pedestrian links within the developments shall be kept free, unobstructed and accessible for public use at all times.</p> <p>These links shall be at a constant level throughout the entire length. Any level changes are to be accommodated by ramps.</p>
<p><i>Appendix 4: Urban Design Plan – Elevated Pedestrian Network & Activity Generating Uses</i></p>	<p><u>Elevated Pedestrian Linkway (EPL)</u></p> <p>A minimum 3.6m wide EPL shall be provided at the following locations as shown indicatively in the UD Guide Plans, to complete the sheltered pedestrian network at the Campus Boulevard level:</p> <ul style="list-style-type: none"> a) Across Sentul Crescent Extension to Teck Lee LRT at RL 122 b) Across New Punggol Road at RL 115 c) Across New Road A at RL 115 d) Across New Road B at RL 115 e) Across Punggol Way to facilitate public connectivity to the developments north of the Punggol Digital District at RL 115 <p>These EPLs shall be sheltered and be connected directly to the sheltered pedestrian network within the developments, as well as to the bus stops along New Punggol Road and Punggol Coast Road.</p> <p>The detailed design of the EPLs shall be subject to the approval of relevant authorities.</p>

Parameters	Requirements
<p><i>Appendix 5:</i> Urban Design Plan – Underground Pedestrian Network & Activity Generating Uses</p>	<p><u>Underground Pedestrian Links (UPLs)</u></p> <p>An underground pedestrian link shall be provided at RL 97.95 under New Punggol Road to provide seamless connectivity between the MRT station / transport hub to the waterfront parcels across the road as indicatively shown in the UD Guide Plan.</p> <p>This link shall be at least 6m wide if shops are provided on one side of the link, and 7m wide if shops are provided on both sides of the links, with a clear height of at least 4m.</p>
<p>Integration of RTS (Rapid Transit System) and Related Structures</p> <p><i>Appendix 3:</i> Urban Design Plan – 1st Storey Pedestrian Network & Activity Generating Uses</p> <p><i>Appendix 4:</i> Urban Design Plan – Elevated Pedestrian Network & Activity Generating Uses</p> <p><i>Appendix 5:</i> Urban Design Plan – Underground Pedestrian Network & Activity Generating Uses</p>	<p>JTC development CC1 & CC2 shall ensure seamless integration and connectivity between the future Punggol Coast MRT station and bus-interchange, as well as the surrounding JTC and SIT developments.</p> <p>The public space NEXUS to be located within JTC development CC2, shall be designed to accentuate a sense of arrival and enable seamless interchange between transport nodes at all levels.</p> <p>The main entrance to the future MRT station shall be designed as a signature visual marker that is highly visible and easily identifiable to provide a sense of orientation to pedestrians at all levels, as well as to accentuate the sense of arrival to and from the Integrated Transport Hub.</p> <p>This shall be provided at both the NEXUS (RL 109) and Campus Boulevard level (RL 115) as shown in the UD Guide Plans.</p> <p><u>Vertical Circulation</u></p> <p>Vertical circulation, including a pair of two- way escalators, staircases, and two passenger lifts, shall be provided at convenient locations that are easily visible and directly accessible from the NEXUS to key pedestrian routes at various levels as indicatively shown in the UD Guide Plans:</p> <ol style="list-style-type: none"> a) Campus Boulevard at RL 115 b) Elevated pedestrian links (EPL) to the developments North of the Punggol Digital District at RL 115 c) Bus Interchange at JTC development CC1 at RL 110 d) MRT entrance below Heritage Trail at RL 109 e) MRT entrance near New Punggol Road at RL 107.5 f) MRT station concourse at RL 97.95 <p>The entrances, mechanical shafts and other related pop-up structures of the future MRT station shall be well-integrated with the building form and overall architectural treatment of the JTC development CC1 & CC2. The detailed design and integration of the RTS with the NEXUS and JTC development shall be subjected to further evaluation by the Competent Authority at the detailed design stage.</p>

Parameters	Requirements
<p>Activity Generating Uses</p> <p><i>Appendix 3: Urban Design Plan – 1st Storey Pedestrian Network & Activity Generating Uses</i></p> <p><i>Appendix 4: Urban Design Plan – Elevated Pedestrian Network & Activity Generating Uses</i></p>	<p>To create vibrant precincts, as well as attractive and pedestrian-friendly streets, activity-generating uses (AGUs) such as retail, food & beverage, and other active uses are to be provided at the following locations:</p> <ul style="list-style-type: none"> • Alongside Campus Boulevard, NEXUS, the Market Village along waterfront promenade; and • Alongside the through block links and underground pedestrian walkways of the developments. <p>Activity-generating uses and other public or shared spaces such as incubators spaces are also strongly encouraged along New Punggol Road, as well as along the main pedestrian network.</p> <p>For more information on AGUs, please refer to the Development Control Handbook.</p>
<p>Cycling connectivity</p>	<p>To facilitate cycling as a mode of transportation to major transport nodes and key amenities, the district shall provide a cyclist-friendly, well-connected network to and from the waterfront and MRT/LRT stations.</p> <p><u>Dedicated Cycling Routes</u> Certain key roads within the Punggol Digital District will be earmarked as dedicated cycling routes (please refer to the Special Detailed Control Plan: Connectivity Plan). The alignment, width and design of the cycling routes and associated street furniture are to be coordinated with NPARKS, LTA, and URA.</p> <p><u>Bicycle Parking</u> Developments within the Punggol Digital District shall be required to construct and provide bicycle parking to accommodate a minimum number of bicycle parking lots within the Land Parcel based on prevailing requirements set out by the relevant Competent Authority at the formal submission stage.</p> <p>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.</p>
<p>Basement Levels / Subterranean Development</p>	<p>The developments around the future MRT station are encouraged to make use of the knock-out panel provisions to the MRT station concourse at level RL 97.95 and utilise the underground spaces around the MRT station.</p> <p>The developments shall capitalise on the existing undulating terrain to introduce natural lighting and open courtyards to the subterranean spaces.</p>

Parameters	Requirements
<p>Integration of Services including Ventilation Building</p>	<p>All services such as ventilation buildings, mechanical shafts, cooling towers etc. shall be integrated within the design of the developments.</p> <p>Services are to be located underground, wherever possible or be well-integrated with the building form and overall architectural treatment of the development.</p>
<p>Vehicular Access and Servicing</p> <p><i>Appendix 3: Urban Design Plan – 1st Storey Pedestrian Network & Activity Generating Uses</i></p> <p><i>Appendix 4: Urban Design Plan – Elevated Pedestrian Network & Activity Generating Uses</i></p> <p><i>Appendix 6: Urban Design Plan – Vehicular Connectivity (Underground)</i></p>	<p>Vehicular ingress and egress to the developments for servicing, car parking and / or passenger drop-offs / pickup points are to be taken from the roads as indicated in the UD Guide Plans.</p> <p>All vehicular ingresses / egresses and external ramps to the car parking, passenger drop-off / pick-up points, taxi lay-bys, service areas and loading / unloading bays shall be located within the site boundary and be well-integrated with the overall architectural treatment and building form of the development and visually well-screened, subject to the approval of LTA, the Authority and the relevant Competent Authorities at the formal submission stage.</p> <p>Service areas such as refuse bin centres, loading / unloading bays, the electric substation and meter compartment etc. shall be located within basement levels of the developments as much as possible.</p> <p>A fully interconnected basement across the various parcels shall enable hub parking and building servicing. Connection levels and locations under roads are subject to detailed coordination with the relevant Authorities.</p>
<p>Car Parking Provision</p> <p><i>Appendix 6: Urban Design Plan – Vehicular Connectivity (Underground)</i></p>	<p>Punggol Digital District is envisioned to be a car-lite district which will be public transport-oriented, as well as pedestrian and cyclist friendly.</p> <p>Developments are to consider up-front demand management measures, such as reductions in car parking provision, variable pricing for parking and restrictions on delivery vehicles. These demand management measures shall be subject to the evaluation and approval of the relevant authorities.</p> <p>Car parking spaces shall be provided within the basement level(s) of the developments.</p>



Parameters	Requirements
	<p>A fully interconnected basement across the various parcels shall enable hub parking and building servicing. Connection levels and locations under roads are subject to detailed coordination with the relevant Authorities.</p>
<p>Roofscape and Screening</p>	<p>The roof areas are to be designed as an integrated part of the overall building form.</p> <p>Greenery shall be incorporated on the roof areas as much as possible to enhance the rustic and natural charm of Punggol.</p> <p><u>Screening Requirements</u></p> <p>To ensure that the roof areas are well-designed and attractive when viewed from the surrounding developments, all service areas, mechanical and electrical (M&E) equipment, water tanks, etc., are to be located within and fully integrated into the building envelope and be visually well-screened from the top and all sides of the development.</p> <p>The performance requirements for the screening of roof-top services are as follows:</p> <ol style="list-style-type: none"> a) To be screened from the top and on all sides; b) The spacing between the trellis or louver 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 porosity (i.e. percentage of void-to-solid) equal to or less than 25%. The width / diameter of the openings shall not exceed 30 mm. <p><u>Solar Panels on Building Rooftops</u></p> <p>For any solar photovoltaic (PV) panels installed on the rooftops of buildings of the developments, shall comply with the best practices guide for the installation of solar panels on rooftops.</p> <p>Relevant Circulars:</p> <ul style="list-style-type: none"> • Advisory Note on Best Practices for Installing Solar Panels on Building Rooftops
<p>Greenery Replacement and Landscaping</p>	<p>To create a green and sustainable city, all new developments will be required to incorporate landscaping in the form of sky terraces and roof gardens according to the Landscape Replacement Area (LRA) requirements. For more information, please refer to the Development Control Handbook.</p>
<p>Green Mark</p>	<p>The developments shall attain the BCA Green Mark Platinum rating in line with the Public Sector Taking the Lead in Environmental Sustainability (PSTLES) initiative.</p>



URBAN DESIGN GUIDELINES FOR PUNGGOL DIGITAL DISTRICT (PUNGGOL PLANNING AREA)

URBAN DESIGN PLAN - BOUNDARY

LEGEND

-  AREA WITH URBAN DESIGN GUIDELINES AND PLANS
-  URBAN DESIGN AREA

SCALE : 1:5000 @ A3



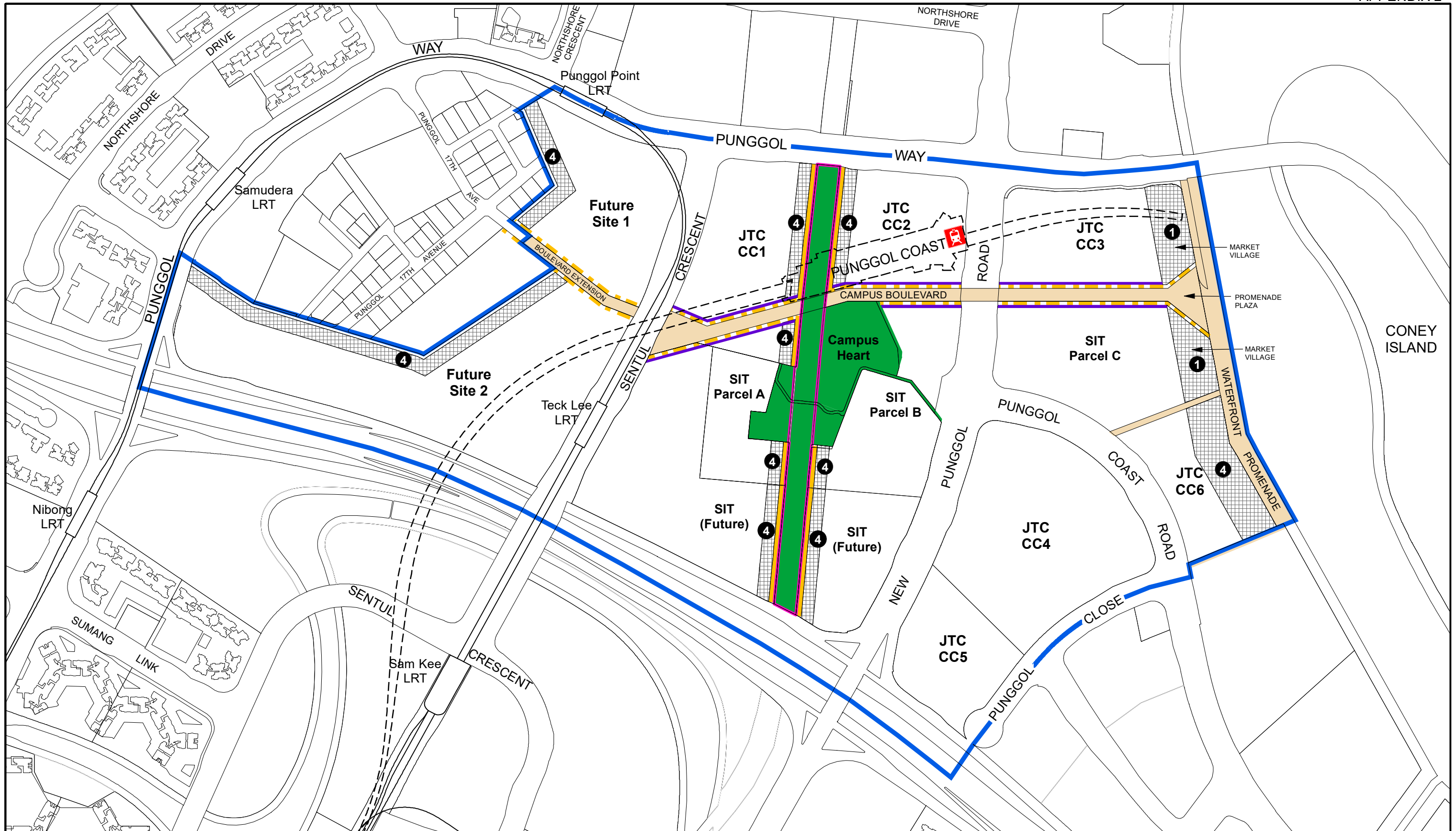
DRWG NO : UDE/2019/001

DATE : OCT 2019

GROUP : AUDG







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URBAN DESIGN GUIDELINES FOR PUNGGOL DIGITAL DISTRICT (PUNGGOL PLANNING AREA)

URBAN DESIGN PLAN - BUILDING FORM

LEGEND

-  AREA WITH URBAN DESIGN GUIDELINES AND PLANS
-  PARK
-  HERITAGE TRAIL
-  PEDESTRIAN MALL / PROMENADE / PLAZA

BUILDING HEIGHT

-  LOW ZONE - MAX ALLOWABLE STOREYS INDICATED

BUILDING EDGE

-  MIN. 4-STOREY

MINIMUM BUILDING SETBACK

-  5m SETBACK
-  7.5m SETBACK

SCALE : 1:5000 @ A3



DRWG NO : UDE/2019/002

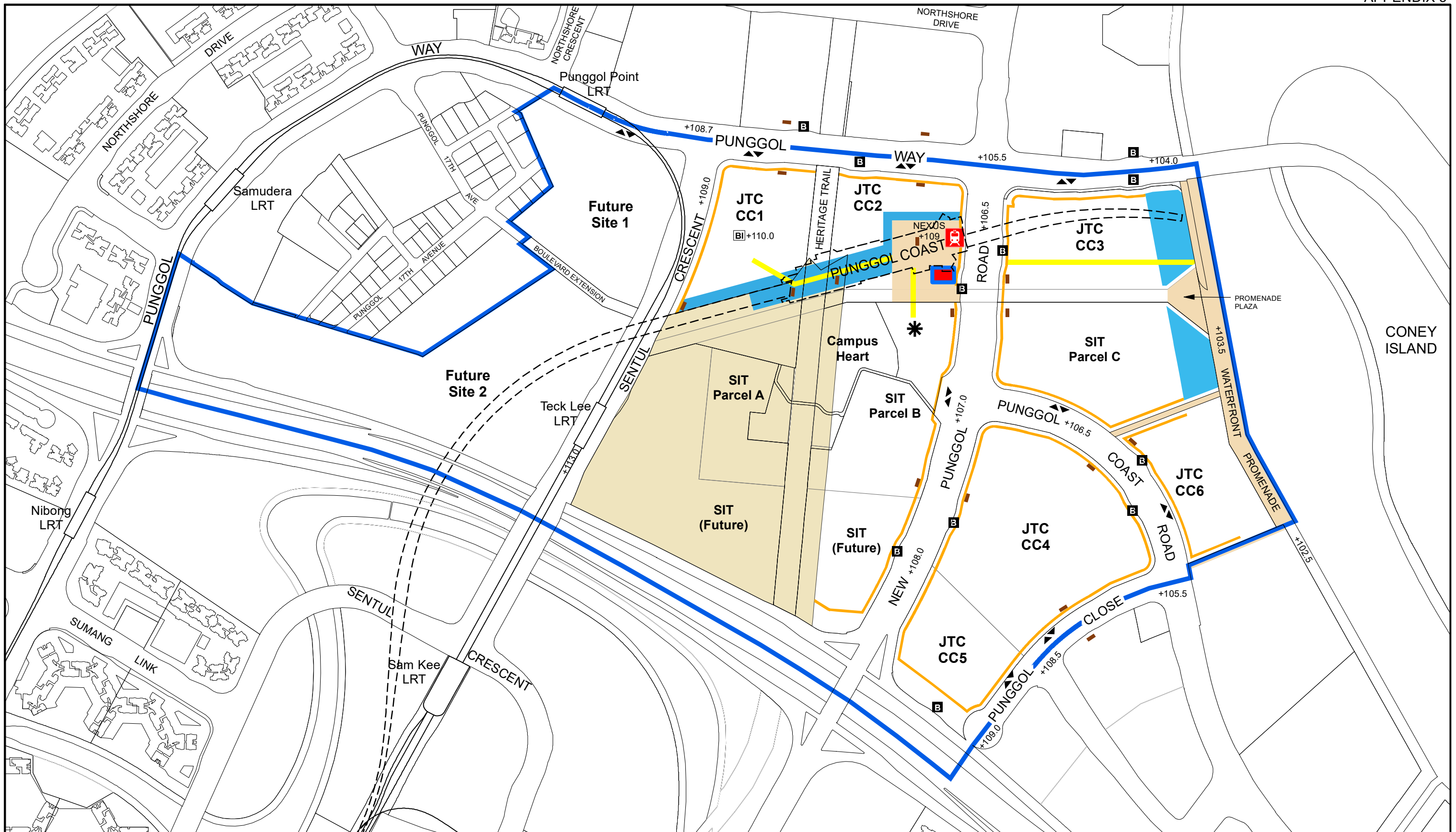
DATE : OCT 2019

GROUP : AUDG



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NOTE: WHEN THERE IS NO INDICATION, ALL SHALL BE SUBJECT TO PREVAILING GUIDELINES



URBAN DESIGN GUIDELINES FOR PUNGGOL DIGITAL DISTRICT (PUNGGOL PLANNING AREA)

URBAN DESIGN PLAN
 - 1ST STOREY PEDESTRIAN NETWORK & ACTIVITY GENERATING USES
 [NEW PUNGGOL ROAD / BUS INTERCHANGE DATUM (~RL 106-109)]

LEGEND

- AREA WITH URBAN DESIGN GUIDELINES AND PLANS
- BELOW GRADE

- MIN. 3.6m WIDE COVERED WALKWAY / LINKWAY
- MIN. 6m (MAX. 7m) WIDE THROUGH-BLOCK LINK
- PEDESTRIAN MALL / PROMENADE / PLAZA
- VERTICAL PEDESTRIAN CIRCULATION
- SIGNATURE VERTICAL PEDESTRIAN CIRCULATION

- ACTIVITY GENERATING USES
- SIT ENTRANCE
- BUS STOP
- BUS INTERCHANGE
- INDICATIVE VEHICULAR INGRESS / EGRESS (SUBJECT TO LTA'S REQUIREMENTS)

NOTE: WHEN THERE IS NO INDICATION, ALL SHALL BE SUBJECTED TO PREVAILING GUIDELINES

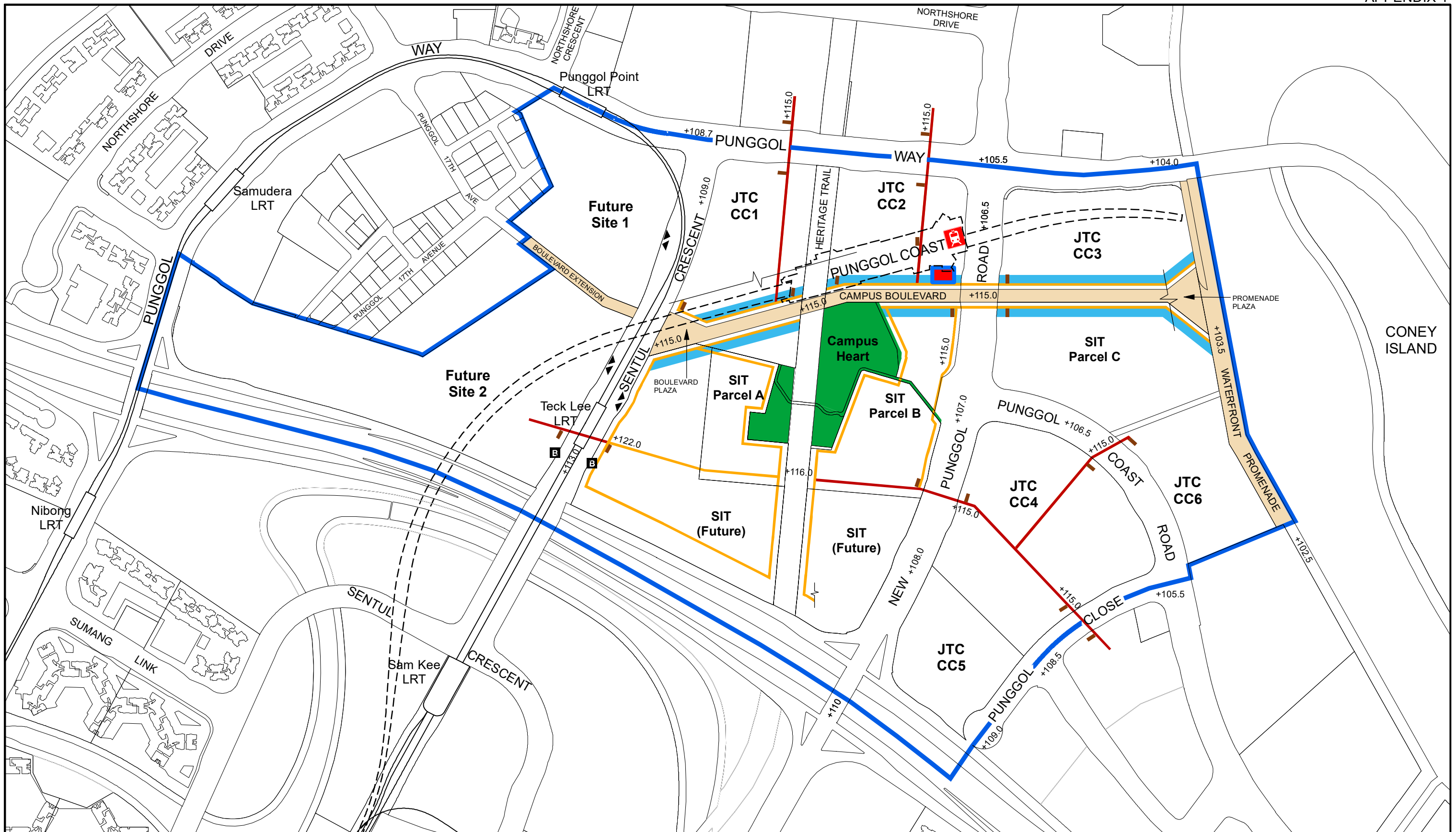
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DRWG NO : UDE/2019/003
 DATE : OCT 2019
 GROUP : AUDG



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URBAN DESIGN GUIDELINES FOR PUNGGOL DIGITAL DISTRICT (PUNGGOL PLANNING AREA)

URBAN DESIGN PLAN
 - ELEVATED PEDESTRIAN NETWORK & ACTIVITY GENERATING USES [BOULEVARD / ELEVATED PEDESTRIAN NETWORK DATUM (~RL 115-122)]

LEGEND

- AREA WITH URBAN DESIGN GUIDELINES AND PLANS
- PARK
- BUS STOP
- INDICATIVE VEHICULAR INGRESS / EGRESS (SUBJECT TO LTA'S REQUIREMENTS)

- MIN. 3.6m WIDE COVERED WALKWAY / LINKWAY
- MIN. 3.6m WIDE ELEVATED PEDESTRIAN LINK
- PLATFORM LEVEL FOR ELEVATED PEDESTRIAN LINK
- PEDESTRIAN MALL / PROMENADE / PLAZA

- ACTIVITY GENERATING USES
- VERTICAL PEDESTRIAN CIRCULATION
- SIGNATURE VERTICAL PEDESTRIAN CIRCULATION

NOTE: WHEN THERE IS NO INDICATION, ALL SHALL BE SUBJECTED TO PREVAILING GUIDELINES

SCALE : 1:5000 @ A3



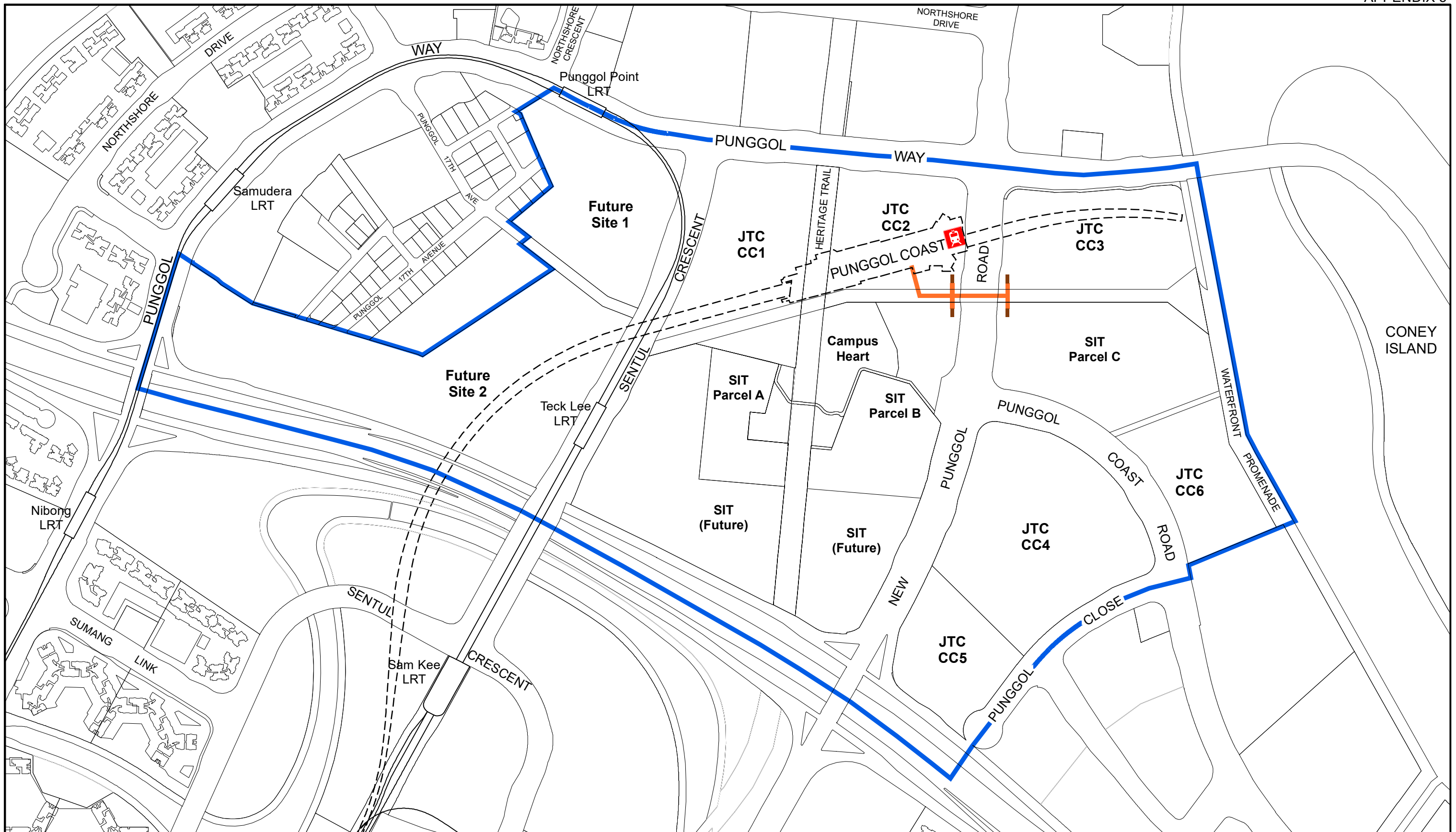
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DATE : OCT 2019

GROUP : AUDG






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URBAN DESIGN GUIDELINES FOR PUNGGOL DIGITAL DISTRICT (PUNGGOL PLANNING AREA)

URBAN DESIGN PLAN
 - UNDERGROUND PEDESTRIAN NETWORK & ACTIVITY GENERATING USES
 [MRT CONCOURSE DATUM (~RL 97.95)]

LEGEND

-  AREA WITH URBAN DESIGN GUIDELINES AND PLANS
-  MIN. 6m WIDE UNDERGROUND PEDESTRIAN LINK
-  VERTICAL PEDESTRIAN CIRCULATION

SCALE : 1:5000 @ A3



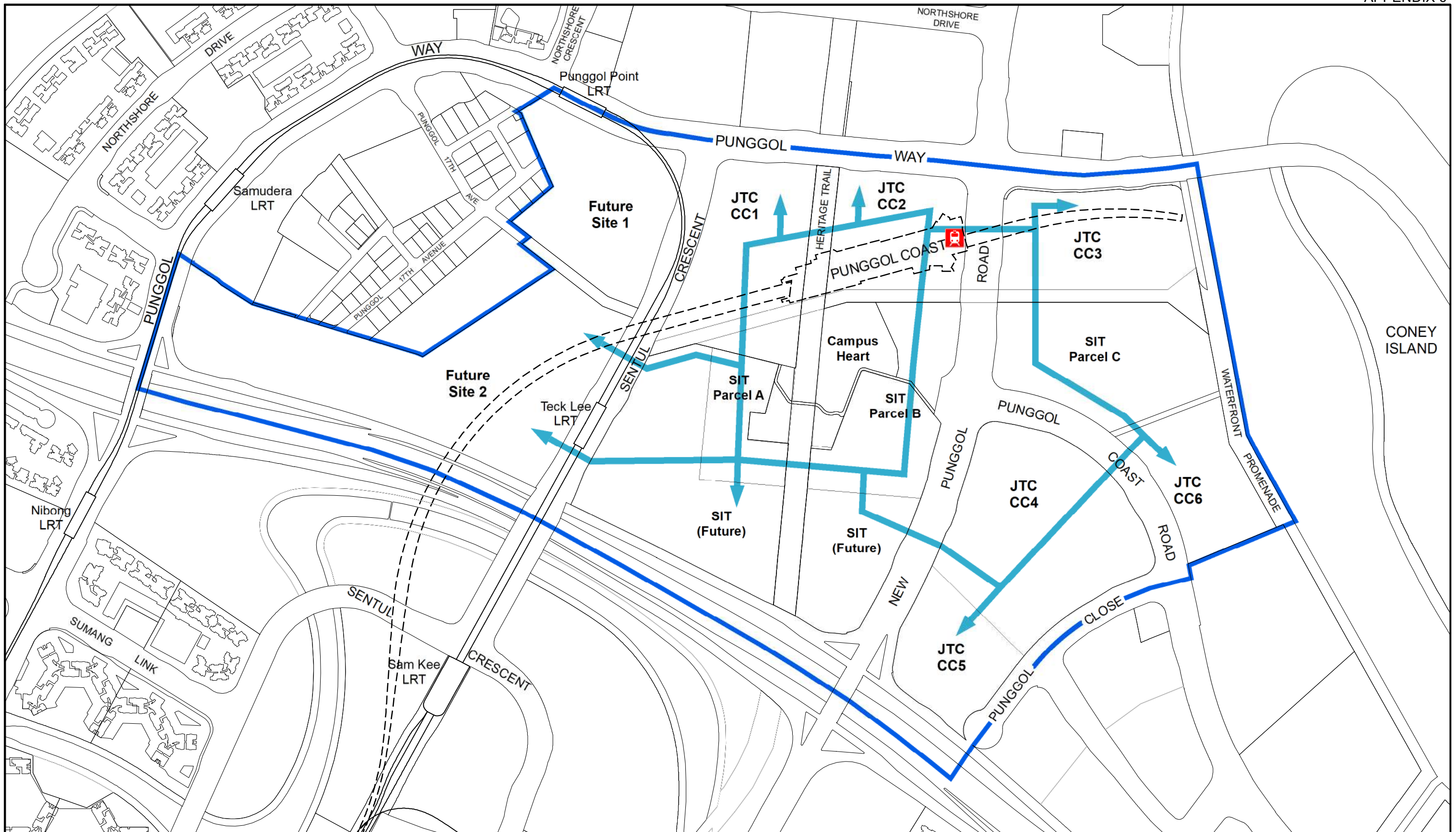
DRWG NO : UDE/2019/005

DATE : OCT 2019

GROUP : AUDG



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URBAN DESIGN GUIDELINES FOR PUNGGOL DIGITAL DISTRICT (PUNGGOL PLANNING AREA)

URBAN DESIGN PLAN
- VEHICULAR CONNECTIVITY: UNDERGROUND

LEGEND

- AREA WITH URBAN DESIGN GUIDELINES AND PLANS
- DEVELOPMENT VEHICULAR CIRCULATION / SERVICE ACCESS

NOTE: LEVEL SUBJECT TO SERVICES COORDINATION BETWEEN DEVELOPMENTS

SCALE : 1:5000 @ A3



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DATE : OCT 2019

GROUP : AUDG



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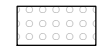
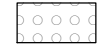

URBAN DESIGN GUIDELINES FOR PUNGGOL DIGITAL DISTRICT (PUNGGOL PLANNING AREA)

URBAN DESIGN PLAN - MINIMUM GROUND POROSITY

LEGEND

 AREA WITH URBAN DESIGN GUIDELINES AND PLANS

MINIMUM GROUND POROSITY

-  MIN. 50 %
-  MIN. 60 %
-  MIN. 70 %

NOTE: GROUND LEVEL POROSITY IS DEFINED AS THE ABSENCE OF BUILDING MASS WITHIN A MINIMUM 6M HEIGHT CLEARANCE FROM THE PROPOSED PLATFORM LEVEL.

SCALE : 1:5000 @ A3



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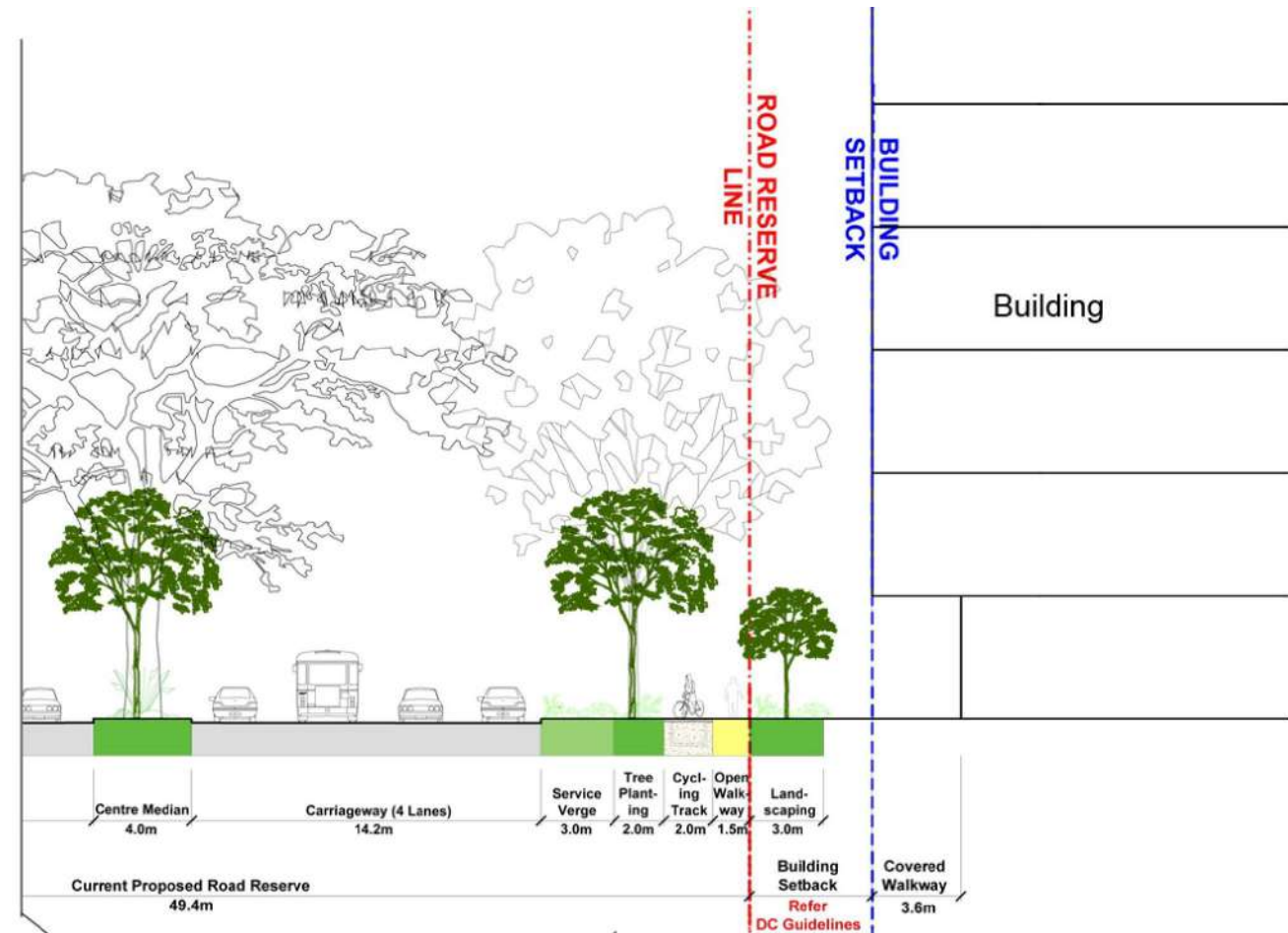
DATE : OCT 2019

GROUP : AUDG

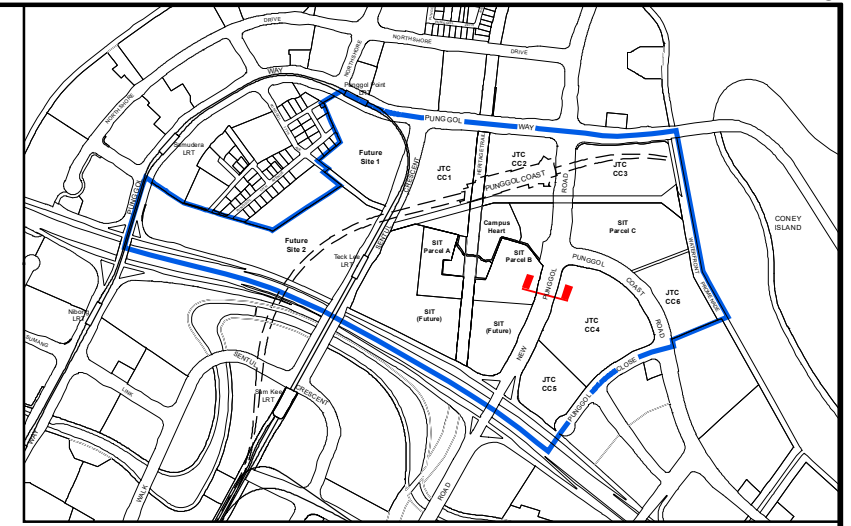
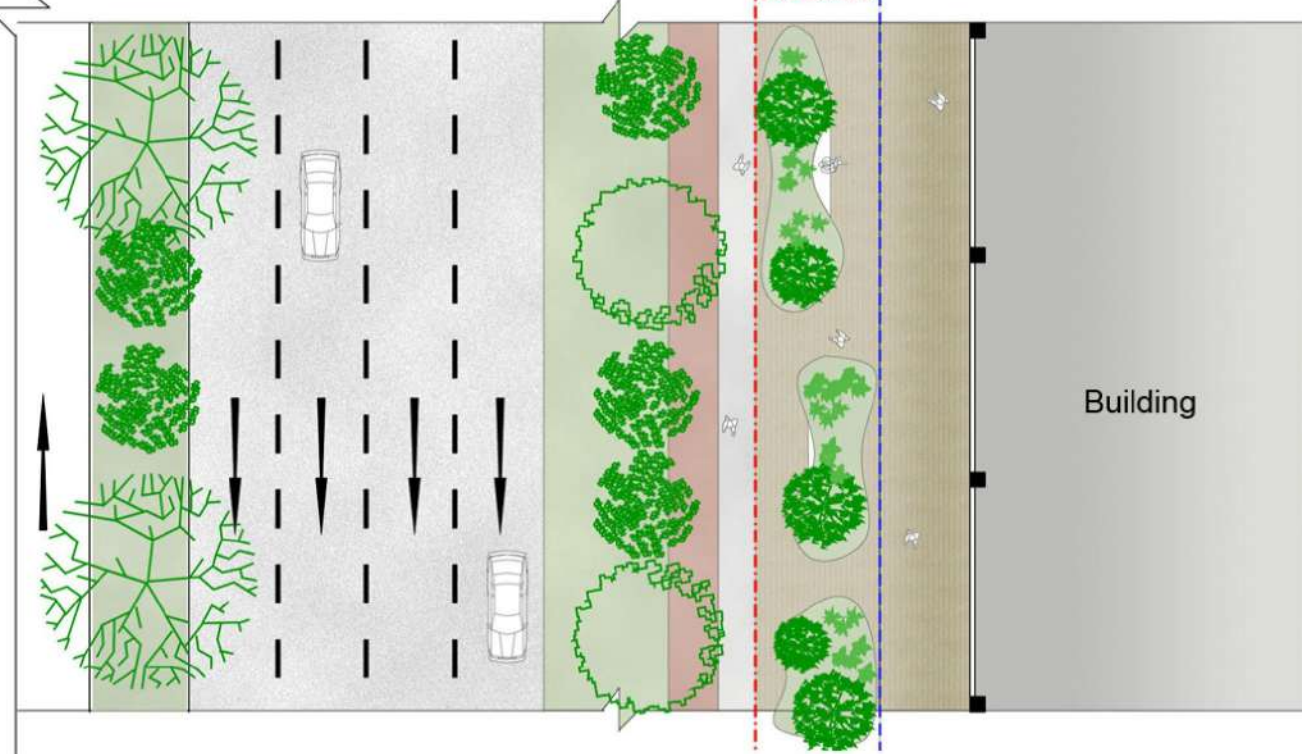


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TYPICAL SECTION
NEW PUNGGOL ROAD



TYPICAL PLAN
WITH 5m SETBACK



KEY PLAN
1 : 20 000

URBAN DESIGN GUIDELINES
FOR PUNGGOL DIGITAL DISTRICT
(PUNGGOL PLANNING AREA)

URBAN DESIGN PLAN
- LANDSCAPE WITHIN BUILDING SETBACK
ALONG NEW PUNGGOL ROAD

SCALE : 1:5000@A3



DRWG NO : UDE/2019/008

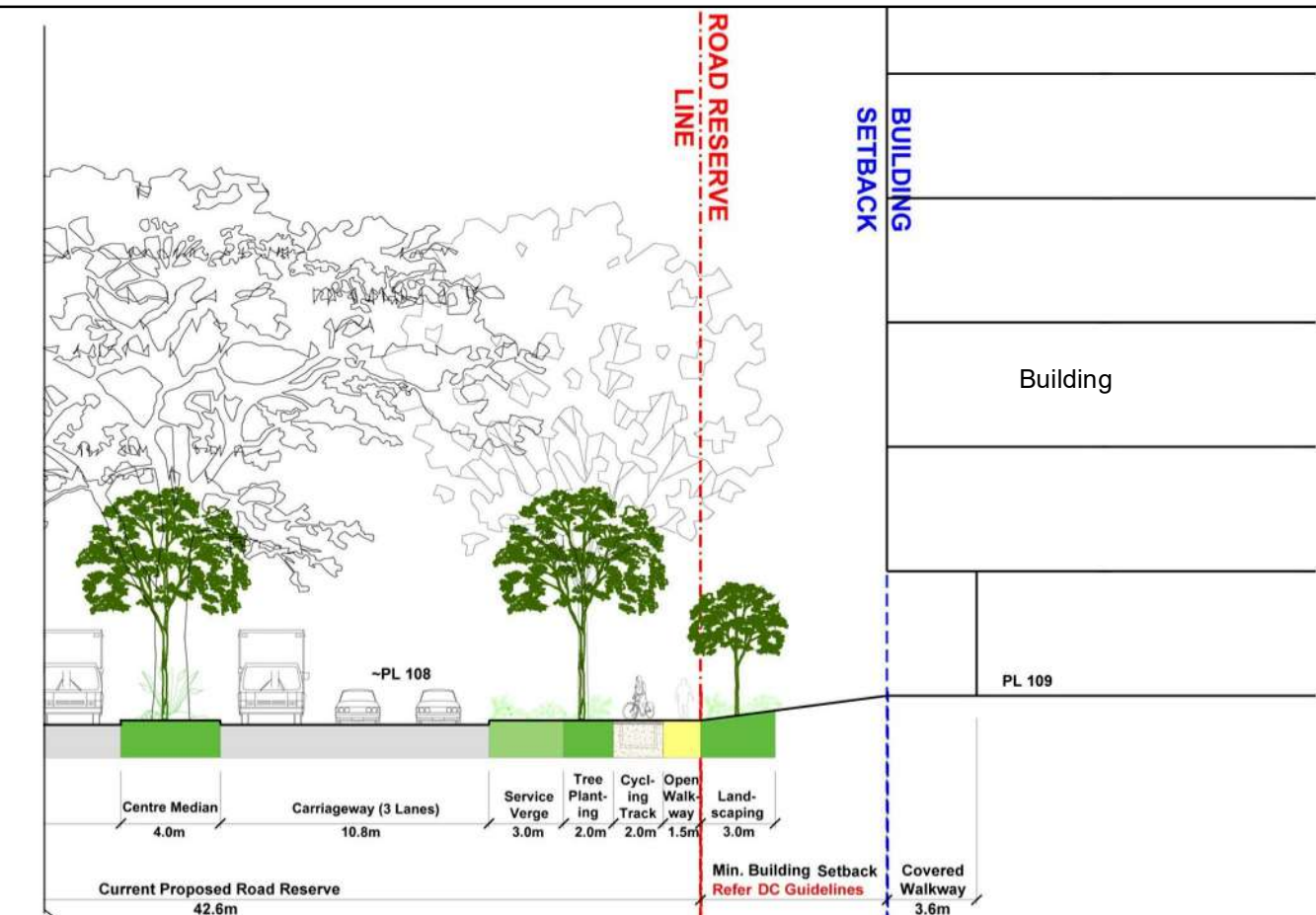
DATE : OCT 2019

GROUP : AUDG

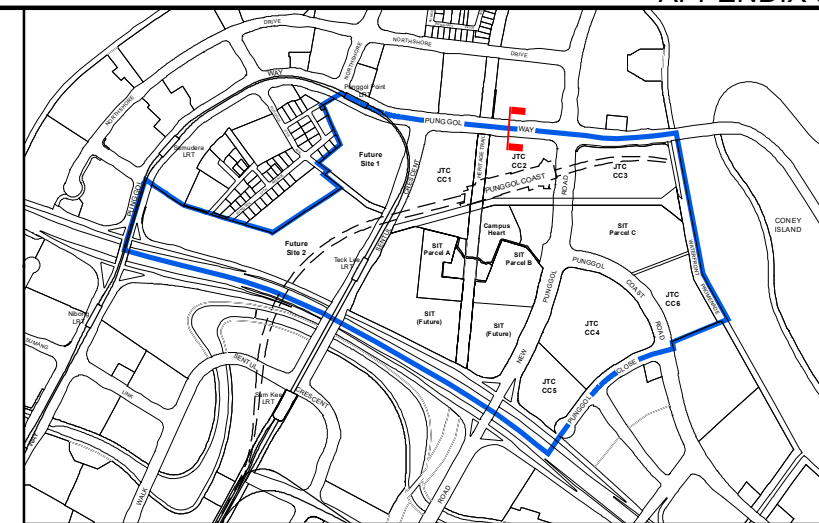
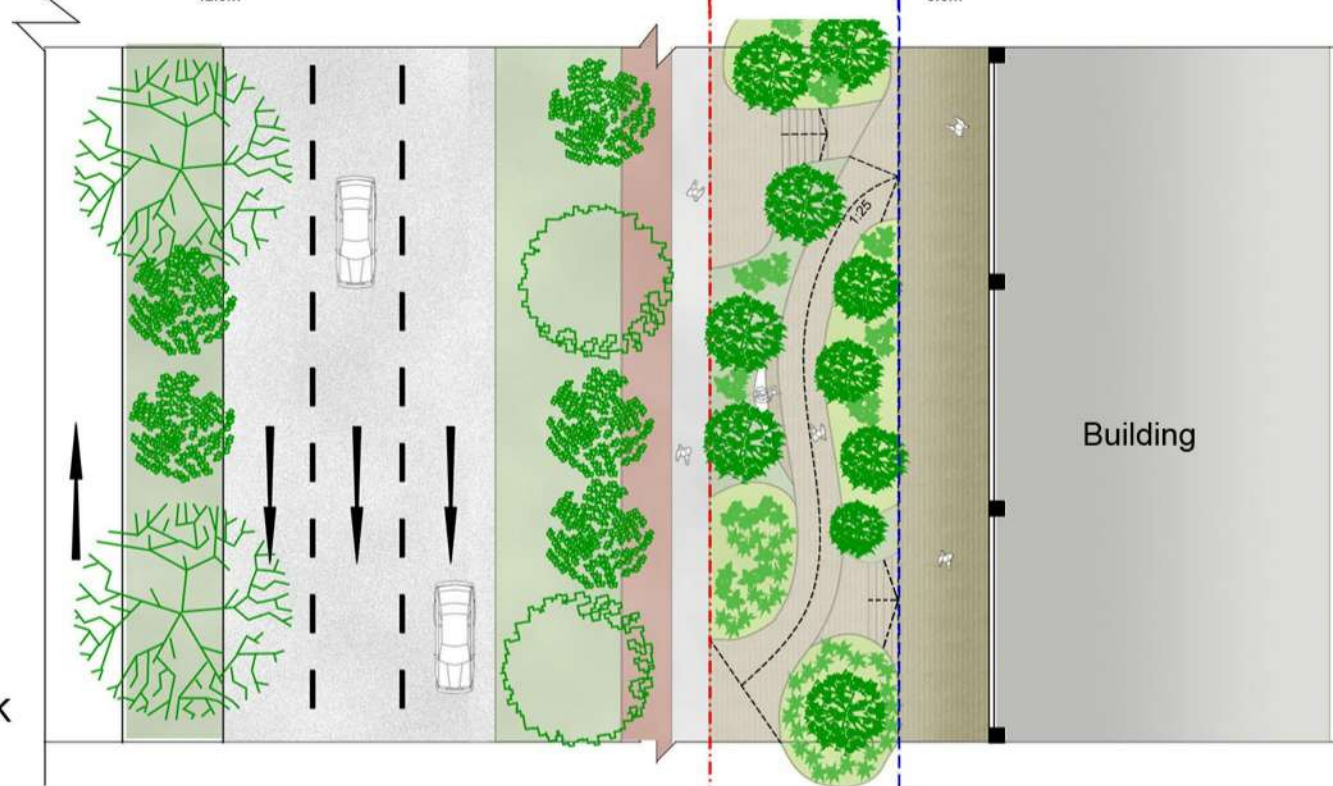


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TYPICAL SECTION PUNGGOL WAY



TYPICAL PLAN WITH 7.5m SETBACK



KEY PLAN
1 : 20 000

URBAN DESIGN GUIDELINES
FOR PUNGGOL DIGITAL DISTRICT
(PUNGGOL PLANNING AREA)

URBAN DESIGN PLAN
- LANDSCAPE WITHIN BUILDING SETBACK
ALONG PUNGGOL WAY

SCALE : 1:5000@A3



DRWG NO : UDE/2019/009

DATE : OCT 2019

GROUP : AUDG



To make Singapore a great city to live, work and play

Circular No : [URA/PB/2019/18-CUDG](#)
Our Ref : DC/ADMIN/CIRCULAR/PB_19
Date : 27 November 2019

CIRCULAR TO PROFESSIONAL INSTITUTES

Who should know

Developers, building owners, architects and engineers

Effective Date

With immediate effect

UPDATED URBAN DESIGN GUIDELINES AND PLANS FOR URBAN DESIGN AREAS

1. As part of the Master Plan 2019 gazette, URA has updated the urban design guidelines and plans applicable to all Urban Design Areas as listed below:
 - a. [Downtown Core](#)
 - b. [Marina South](#)
 - c. [Museum](#)
 - d. [Newton](#)
 - e. [Orchard](#)
 - f. [Outram](#)
 - g. [River Valley](#)
 - h. [Singapore River](#)
 - i. [Jurong Gateway](#)
 - j. [Paya Lebar Central](#)
 - k. [Punggol Digital District](#)
 - l. [Woodlands Central](#)
2. Guidelines specific to each planning area have been merged into a single set of guidelines for easy reference. To improve the user-friendliness of our guidelines and plans, a map-based version of the urban design guide plans is now available on [URA SPACE](#) (Service Portal and Community e-Services).
3. All new developments, redevelopments and existing buildings undergoing major or minor refurbishment are required to comply with the updated guidelines.
4. The urban design guidelines provide an overview of the general requirements for developments in the respective Urban Design Areas. For specific sites, additional guidelines may be issued where necessary. The guidelines included herewith do not supersede the detailed guidelines issued, nor the approved plans for developments for specific sites.

5. I would appreciate it if you could convey the contents of this circular to the relevant members of your organisation. You are advised to refer to the [Development Control Handbooks](#) and URA's website for updated guidelines instead of referring to past circulars.
6. For other information on the master plan, urban design guidelines, private property use and approval, car park locations and availability, private residential property transactions, and conservation areas and buildings, use [URA SPACE](#) (Service Portal and Community e-Services). This is an online portal packed with useful data and visualisation to help building professionals, business operators and the general public in their decision-making. It consolidates detailed information on land use and private property into a one-stop platform presented on geospatial maps. For feedback or enquiries on this circular, please [email](#) us.

Thank you.

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

YAP LAY BEE (MS)
GROUP DIRECTOR (ARCHITECTURE & URBAN DESIGN)
for CHIEF EXECUTIVE OFFICER
URBAN REDEVELOPMENT AUTHORITY

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URBAN DESIGN GUIDELINES FOR DEVELOPMENTS WITHIN SINGAPORE RIVER PLANNING AREA

About the Singapore River Planning Area

The Singapore River Planning Area covers Boat Quay, Clarke Quay, and Robertson Quay subzones. It has a good variety of commercial uses, supported by complementary uses such as hotel and residential uses. Singapore River is today a vibrant waterfront destination that offers various lifestyle options and quality waterfront city living.

These urban design guidelines aim to guide the physical development of the area to ensure that individual buildings contribute to, and strengthen the planning vision for the respective zones and create an attractive and pedestrian friendly physical environment.

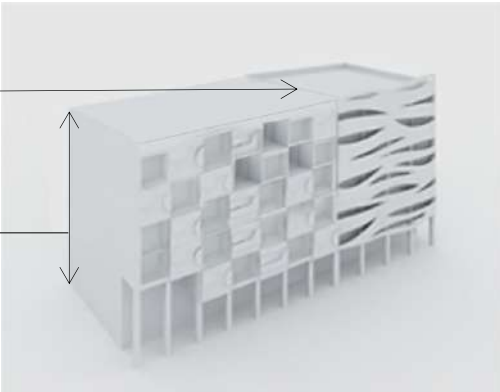
Innovative designs that do not fully conform to the guidelines or standard building typologies can be considered, subject to URA's evaluation of the detailed proposal.


Gazetted National Monuments and conserved buildings are subject to specific preservation and conservation guidelines respectively, which will take precedence over the guidelines below.



The planning parameters and urban design guidelines are:

Parameters	Requirements
Broad Positioning & Land Use Master Plan Appendix 1: Boundary Plan	<p>The Singapore River Planning Area is envisioned to be an exciting activity corridor that capitalises on the river frontage and reflects its unique historic character. It stretches 3km long and has three distinctive subzones, namely Boat Quay, Clarke Quay, and Robertson Quay. A tree-lined pedestrian promenade and bridges have been implemented along both banks of the river, connecting the three quays and enhancing the pedestrian friendliness along the river corridor.</p> <p><u>Boat Quay</u> The Boat Quay subzone is predominantly zoned for Commercial uses due to its proximity to the Central Business District. There are two conservation areas in this subzone, i.e. the Boat Quay Conservation Area, which is a key historic district with over 100 artfully conserved shophouses, and the Upper Circular Road Conservation Area, which is a secondary settlement with buildings of mainly Modern and Art Deco architectural styles.</p> <p><u>Clarke Quay</u> The Clarke Quay subzone has a mix of Commercial, Hotel and Residential uses. Consisting of mainly conserved warehouses, the Clarke Quay Conservation Area offers many entertainment and lifestyle options, while the Magazine Road Conservation Area has a good cluster of conserved and new buildings for mixed use developments.</p>

	<p><u>Robertson Quay</u> The Robertson Quay subzone, located at the upstream portion of the river, has a mix of different uses, including waterfront residences and hotels. Arts-related facilities housed in the conserved buildings help to further diversify the offerings.</p>
<p>Uses at the 1st Storey</p> <p>Appendix 2: <i>1st Storey Pedestrian Network & Activity Generating Use Plan</i></p>	<p>To create vibrant precincts, as well as attractive and pedestrian-friendly streets, activity-generating uses (AGU) such as retail, food & beverage, and other active uses are to be provided at the following locations:</p> <ul style="list-style-type: none"> • The 1st storey of developments fronting the riverfront promenade, pedestrian malls, through block links, key streets and public spaces. <p>For more information on AGUs, please refer to the Development Control Handbook.</p>
<p>Outdoor Refreshment Areas</p>	<p>Outdoor Refreshment Areas (ORA), i.e. outdoor dining areas, can be allowed along the riverfront promenade and considered within public areas or open spaces within private development sites. The scale and design of the ORA and its structures (if any) are to complement the adjacent building. They can only be considered as an extension of an adjoining indoor F&B unit and are for seating only.</p> <p>Developers are encouraged to incorporate spaces for ORAs at the design stage. The ORAs are to be clearly defined to prevent encroachment onto the adjacent pedestrian thoroughfares e.g. through the use of different floor finishes or planters, etc.</p> <p>For more information, please refer to the latest Guidelines for Outdoor Refreshment Area (ORA) along Singapore River Promenade for Robertson Quay and Clarke Quay (Annex A); and; Guidelines for Outdoor Kiosks and Outdoor Refreshment Areas (ORA) at Boat Quay Promenade (Annex B)</p>
<p>Building Form and Massing</p> <p>Appendix 3: <i>Building Form Plan</i></p>	<p>The overall building form and massing of individual buildings is to consider the scale, form and architectural expression of the surrounding buildings. Buildings should be designed to contribute positively to the skyline profile of the city and pedestrian experience along the riverfront promenade. The design of the building form and massing, together with the architectural treatment, is to consider how the building will be viewed as well as impact views from major approaches, key open spaces, promenade and pedestrian malls.</p> <p>Several buildings within Robertson Quay which were built of the style of the former warehouses that lined the river are to be retained. This includes the existing building and roof profiles, as well as the solid and void expression and key features of the front façade.</p>

<p>Building Height</p> <p>Appendix 3: <i>Building Form Plan</i></p>	<p>Different building heights are specified for individual precincts to create a layered, three-dimensional skyline profile, to respond to the specific site context and to reinforce the character of the district. In general, lower-rise heights are specified where there is a need to maintain a pedestrian-friendly scale, for example, along the riverfront promenade and to be compatible to the low-rise conserved buildings.</p> <p>The maximum allowable building height is generally higher for the non-river fronting portion and is subject to the prevailing Master Plan controls and technical height controls imposed by the technical agencies. Urban Design height controls will take precedence over technical height controls, whichever is lower.</p> <p>Relevant Circulars:</p> <ul style="list-style-type: none"> • Revised Streetblock Plan for Upper Circular Road Conservation Area (Singapore River Planning Area); • Streetblock Plan for No. 219, 221, 223, 225, 227, 229, 231 & 233 River Valley Road;
<p>Building Edge</p> <p>Appendix 3: <i>Building Form Plan</i></p>	<p>To create distinctive and well-defined streets, developments are generally to be built-up fully to the lines of Road Reserves / Promenade Reserve to a minimum height of 2 storeys, unless otherwise stated. Up to 40% of the length of the building facades, between the corners of the development, can be set back from the lines of Road Reserves to allow for articulation of the building form.</p>
<p>Party-Wall Developments</p> <p>Appendix 3: <i>Building Form Plan</i></p>	<p>Party-wall developments are required to abut the common boundary with the adjacent sites and match the podium levels or the full height of the developments. Window openings and façade articulation are not permitted along the party-wall.</p> <p>Party-wall developments are to abut the common boundary Window openings and façade articulation are not permitted along the party-wall.</p> <p>Party-wall developments are to match the full height of the adjacent party-wall sites.</p>  <p>Above the party-wall, developments are to be set back by a minimum of 3.0m from the common boundary for window openings.</p>

	 <p>Above the party-wall, developments are to be set back by a minimum of 3.0m from the common boundary</p> <p>Party-wall developments are to match the podium levels of the adjacent party-wall sites.</p> <p>Relevant Circular:</p> <ul style="list-style-type: none"> • Revised Streetblock Plan Upper Circular Road Conservation Area.
<p>Public Space</p> <p>Appendix 2: 1st Storey Pedestrian Network & Activity Generating Use Plan</p>	<p>It is important to provide public spaces within private developments for users to enjoy.</p> <p>Selected developments fronting the riverfront promenade, key pedestrian malls or nodes are required to provide public open spaces within the development site. These open spaces are to be well landscaped with a high degree of visual and physical porosity through the building.</p> <p>Public spaces are to be publicly accessible at all times. They are to be connected to the key pedestrian routes at the 1st storey (such as the river promenade, adjacent open and covered walkways, through block links), and, where applicable, are encouraged to be linked and designed to be well integrated and easily accessible from the underground and elevated 2nd storey pedestrian networks within the development.</p> <p>The design of these public spaces shall comply with the Design Guidelines for Privately Owned Public Spaces (POPS).</p> <p>Relevant Circular:</p> <ul style="list-style-type: none"> • Design Guidelines and Good Practice Guide for Privately Owned Public Spaces (POPS)
<p>Greenery Replacement and Landscaping</p>	<p>To create a green and sustainable city, all new developments will be required to incorporate landscaping in the form of sky terraces and roof gardens according to the Landscape Replacement Area (LRA) requirements. For more information, please refer to the Development Control Handbook.</p>

<p>Roofscape</p>	<p>The roofs of both the high-rise and low-rise parts of developments are to be considered as the “fifth” elevations and designed to complement the overall form, massing and architectural treatment of each development and articulated to contribute to a distinctive and coherent character for Singapore River.</p> <p>To better relate to the conserved/ retained buildings, all developments at Robertson Quay subzone (pictured below) are to have terracotta clay-tiled pitched roofs as the predominant roof form.</p>  <p>The pitched roof of new developments, such as this building next to the conserved shophouse (currently occupied by the Singapore Tyler Print Institute) ensures that the new buildings compliment the conserved buildings.</p>  <p>Robertson Quay : Coherent roofscape contributes to the precinct character</p> <p>Flat roofs, where allowed, can be designed to be usable outdoor spaces. All service areas, car parks, Mechanical & Electrical (M&E) equipment, water tanks, etc, are to be fully integrated within the overall building envelope and visually well-screened from the top and on all sides.</p> <p>Relevant Circulars:</p> <ul style="list-style-type: none"> • Guidelines to Encourage More Innovative and Better Design of Rooftops. A. Relaxation of the Gross Floor Area (GFA) Exemption Guidelines for Rooftop Covers. B. Screening of Mechanical & Electrical Services and Car Parks, on Roofs and Building Facades Within the Central Area.
<p>Night Lighting</p>	<p>All commercial developments within Clarke Quay and Boat Quay are encouraged to have a well-designed night-lighting scheme to reinforce the unique setting of the development when seen from the river promenade and street level.</p> <p>Any night lighting of the building form and crown, shall be subtle, such that the night lighting of the development is appropriate and sensitive when viewed from Fort Canning Hill.</p>

Pedestrian Network

Appendix 2:
1st Storey Pedestrian Network & Activity Generating Use Plan

The Singapore River Planning Area is planned as a pedestrian-friendly area with a comprehensive pedestrian network. The focus on the pedestrian network is on the street level (i.e. at-grade), in particular along and towards the riverfront promenade to provide convenient, comfortable and seamless connections between developments, transport facilities, key spaces and attractions, and ensure all weather comfort for pedestrians.

At-Grade Pedestrian Network

The riverfront promenade along the Singapore River not only connects the three quays together but also ensures that prime riverfront space is safeguarded for public access and enjoyment. The promenade is connected on both banks by bridges. Developments are required to be setback from the river wall for the 15m wide promenade that comprises foot path, cycling path, landscaping, and public amenities like street lamps and benches.

The at-grade pedestrian network is augmented by covered walkways that provide all-weather protected pedestrian routes, including along the river. All developments are required to provide covered walkways at the 1st storey along the site boundaries or the designated setback lines. The covered walkways function as public amenities. They are to be kept free of obstruction at all times. In exchange, the area is exempted from GFA computation.

The minimum widths of the covered walkways are either 3.0m or 3.6m depending on the category of road they are fronting onto. Where colonnades are provided, the internal clear widths of the covered walkways are to be 2.4m and 3.0m respectively. To provide adequate protection for pedestrians during inclement weather, the external soffit heights are to minimally match the width of the covered walkway

The respective widths apply to the following identified road frontages in Robertson Quay:

3.6m (3.0m clear)	3.0m (2.4m Clear)
Singapore River Promenade	Caseen St
Nanson Rd (Along Quayside)	Nanson Rd (Along Studio M & Intercontinental)
Unity St	Rodyk St
Merbau Rd	Robertson Quay
Mohd Sultan Rd	
Martin Rd	
Clemenceau Ave	
Saiboo St	

Through-Block Links and View Corridors

Selected developments, especially those with long frontages, are required to provide through-block links or view corridors to break





<p><i>Appendix 4: Underground Pedestrian Network & Activity Generating Use Plan</i></p>	<p>down the scale and improve permeability of the streetblock and in particular, towards the riverfront.</p> <p>Covered walkways and linkways, as well as through-block links may be exempted from GFA computation if they form part of the larger pedestrian network. Specific design requirements have been imposed on some key sites, depending on the locations of these through-block links or view corridors.</p> <p>The height of the through-block link is subject to detailed evaluation. The width of through-block links is to be 4m to 7m, unless otherwise specified, and have been indicatively marked in Appendix 2.</p> <div data-bbox="493 674 995 918" data-label="Image"> </div> <p>View towards river at The Quayside</p> <p><u>Underground Pedestrian Link</u> The Underground Pedestrian Network (UPN) complements the 1st storey pedestrian network and provides direct connection to Rapid Transit System (RTS) Stations. The UPLs are to be at least 6.0m wide.</p> <p>UPLs are to include vertical pedestrian circulation points within the building envelope to connect to the covered walkway at the 1st storey. Each vertical circulation point is to include a pair of two-way escalators, staircases and two passenger lifts. The entire UPL and the associated vertical circulation points are to be kept open for public access during the opening hours of the RTS.</p>
<p>Servicing, Vehicular Access & Car Parks</p>	<p>To maintain an attractive streetscape, all service areas, including refuse bin centre(s), loading / unloading bays, and vehicle storage lane(s), are to be located away from the riverfront promenade and fully integrated within the overall building form, and visually screened from above and on all sides. Electrical substation(s), where required, can be located at-grade but are not to front onto riverfront promenade, pedestrian malls or public spaces.</p> <p>All vehicular ingress / egress to car parks, service areas, passenger drop-off / pick-up points and taxi lay-bys, etc, including external ramps, all associated structures and fixtures, are to be well-integrated with the building form and overall architectural treatment of the development. Sufficient holding bays for the vehicular access points to the car parks and service areas are to be provided within the development to ensure the smooth flow of vehicles along adjacent roads.</p>

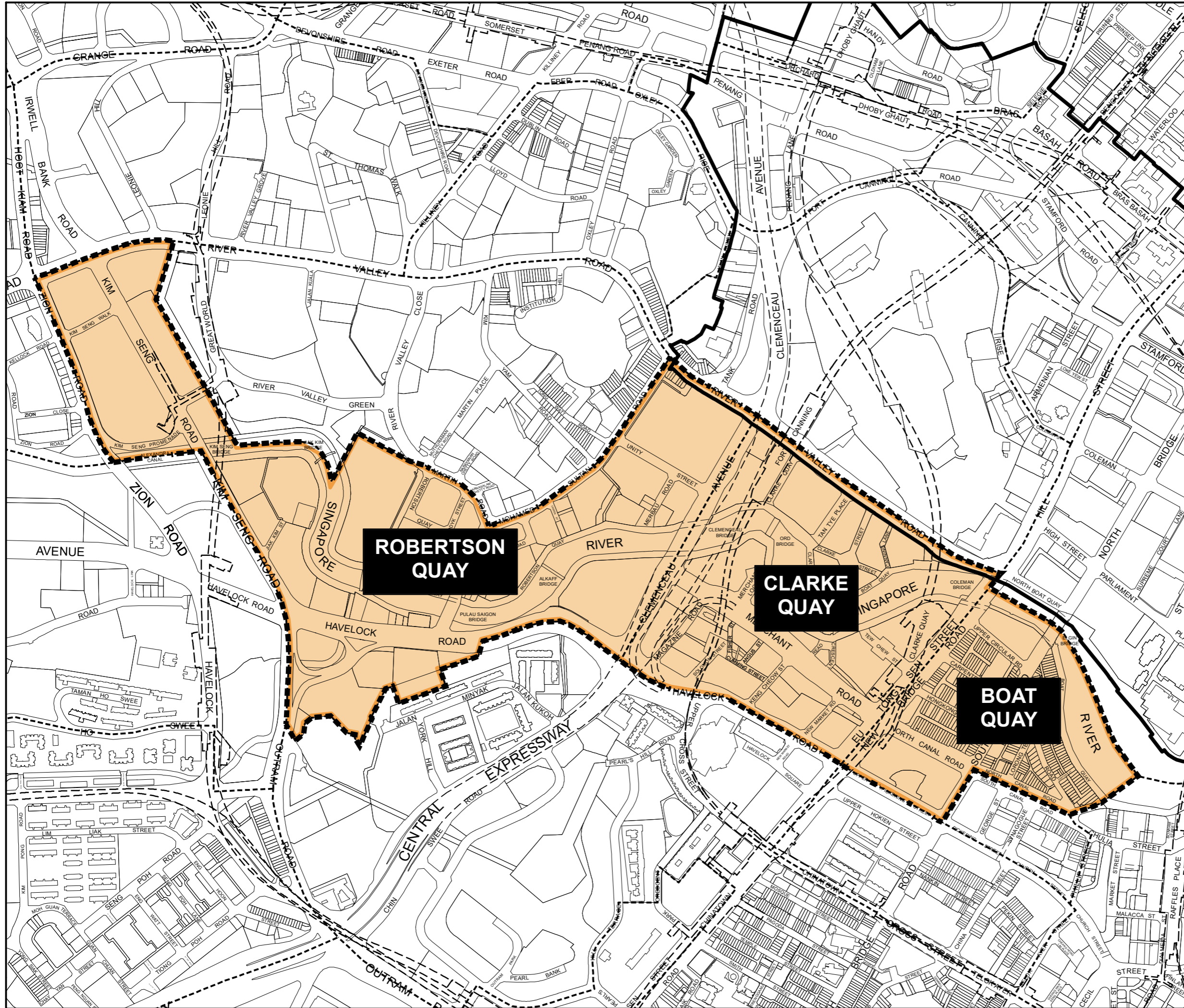
	<p>All car parks are not to front the riverfront promenade. Developments fronting the riverfront promenade are encouraged to provide basement car parks. Where there are technical / site constraints, any above-grade car parks are to be located away from promenade and open space, and to be set back from the facade to provide active uses (retail, F&B etc) fronting onto the promenade. Where the site configuration does not allow for active uses to be incorporated, the facade of the car parking floors is to be designed to match the rest of the building.</p> <p>Relevant Circular:</p> <ul style="list-style-type: none"> • Guidelines to Encourage More Innovative and Better Design of Rooftops. A. Relaxation of the Gross Floor Area (GFA) Exemption Guidelines for Rooftop Covers. B. Screening of Mechanical & Electrical Services and Car Parks, on Roofs and Building Facades Within the Central Area.
<p>Works within the Road Reserves</p>	<p>To achieve a pedestrian-friendly and consistent district character, all new developments or developments undergoing major Additions and Alterations fronting the river are required to include the upgrading of the existing riverfront promenade as part of the works. The key elements to consider are tree planting, paving materials, pedestrian walkways and street lighting etc.</p> <p>The detailed guidelines for each quay are different so as to enhance the character of each quay and to better relate to the historic river wall profiles that varies along the river.</p> <p><u>Open Walkway</u> As a guide, the open walkways within the Road Reserves are safeguarded for pedestrian use. Walkways along Clarke Quay are to be paved in grey granite and coordinated with the existing paving pattern within the covered walkway. This excludes precincts with specific paving guidelines (e.g. Civic District).</p> <p><u>Dedicated Cycling Routes</u> Certain key roads within the Singapore River Planning Area will be earmarked as dedicated cycling routes (please refer to the Special Detailed Control Plan: Connectivity Plan). The alignment, width and design of the cycling routes and associated street furniture are to be coordinated with NPARKS, LTA, and URA.</p> <p>Relevant Circulars:</p> <ul style="list-style-type: none"> • Design and Submission Guidelines for Implementation of the Singapore River Promenade.

URBAN DESIGN GUIDELINES FOR SINGAPORE RIVER PLANNING AREA

BOUNDARY PLAN

LEGEND

-  PLANNING AREA BOUNDARY
-  SUBZONE BOUNDARY
-  CIVIC DISTRICT BOUNDARY
-  URBAN DESIGN AREA



ROBERTSON QUAY

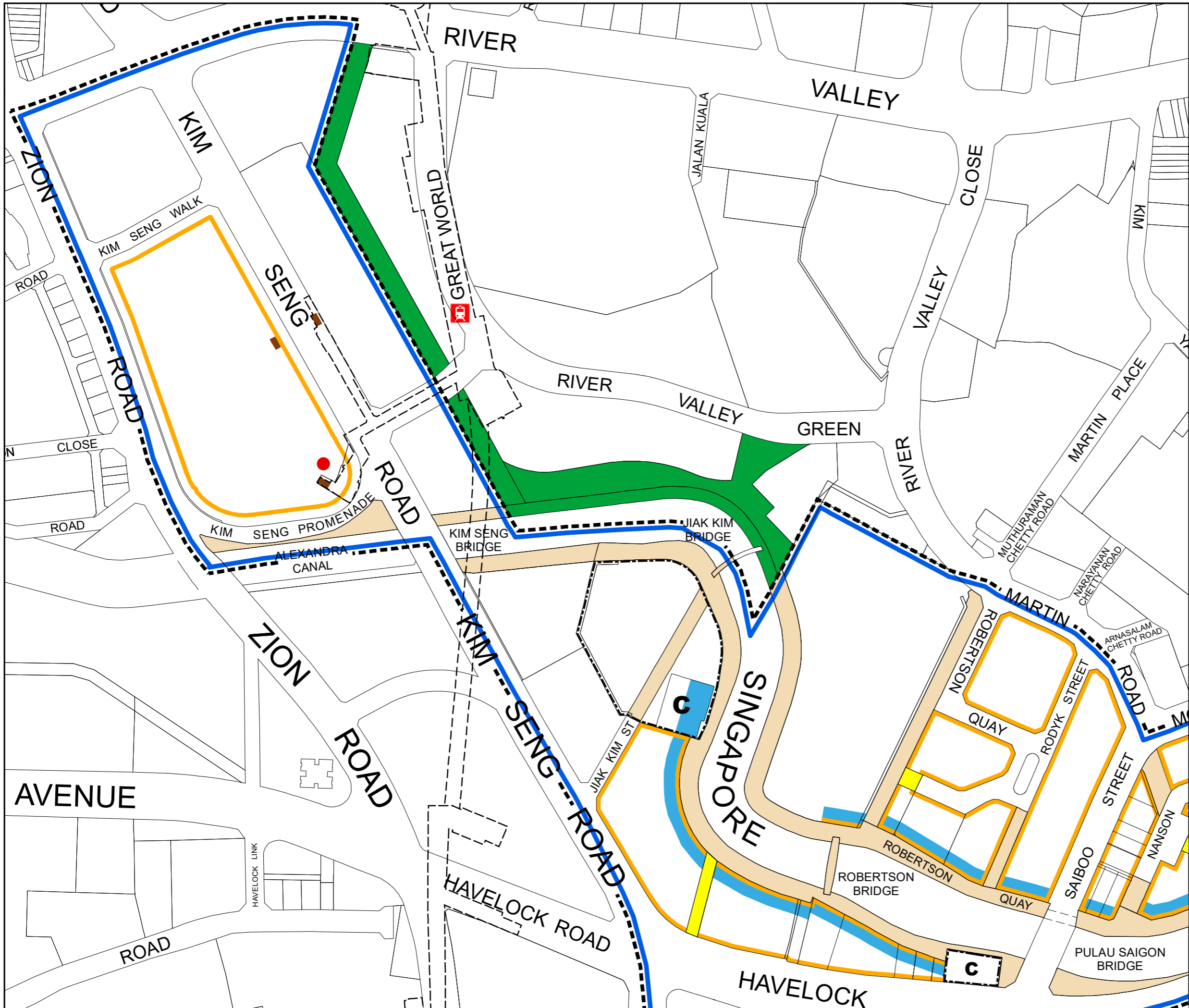
CLARKE QUAY

BOAT QUAY

SCALE : 1:7,500 @ A3



DRWG NO : SR/2019/017
 DATE : NOVEMBER 2019
 GROUP : CUDG



URBAN DESIGN GUIDELINES FOR SINGAPORE RIVER PLANNING AREA

1ST STOREY PEDESTRIAN NETWORK & ACTIVITY GENERATING USE PLAN

LEGEND

- PLANNING AREA BOUNDARY
- AREA WITH URBAN DESIGN GUIDELINES AND PLANS
- CONSERVATION AREA / BUILDING
- NATIONAL MONUMENT

PEDESTRIAN NETWORK

- PARK / OPEN SPACE
- PEDESTRIAN MALL / PROMENADE / PLAZA
- THROUGH BLOCK LINK
- COVERED WALKWAY
- ACTIVITY GENERATING USE
- VERTICAL PEDESTRIAN CIRCULATION
- PUBLIC SPACE

SCALE : 1:3,000 @ A3



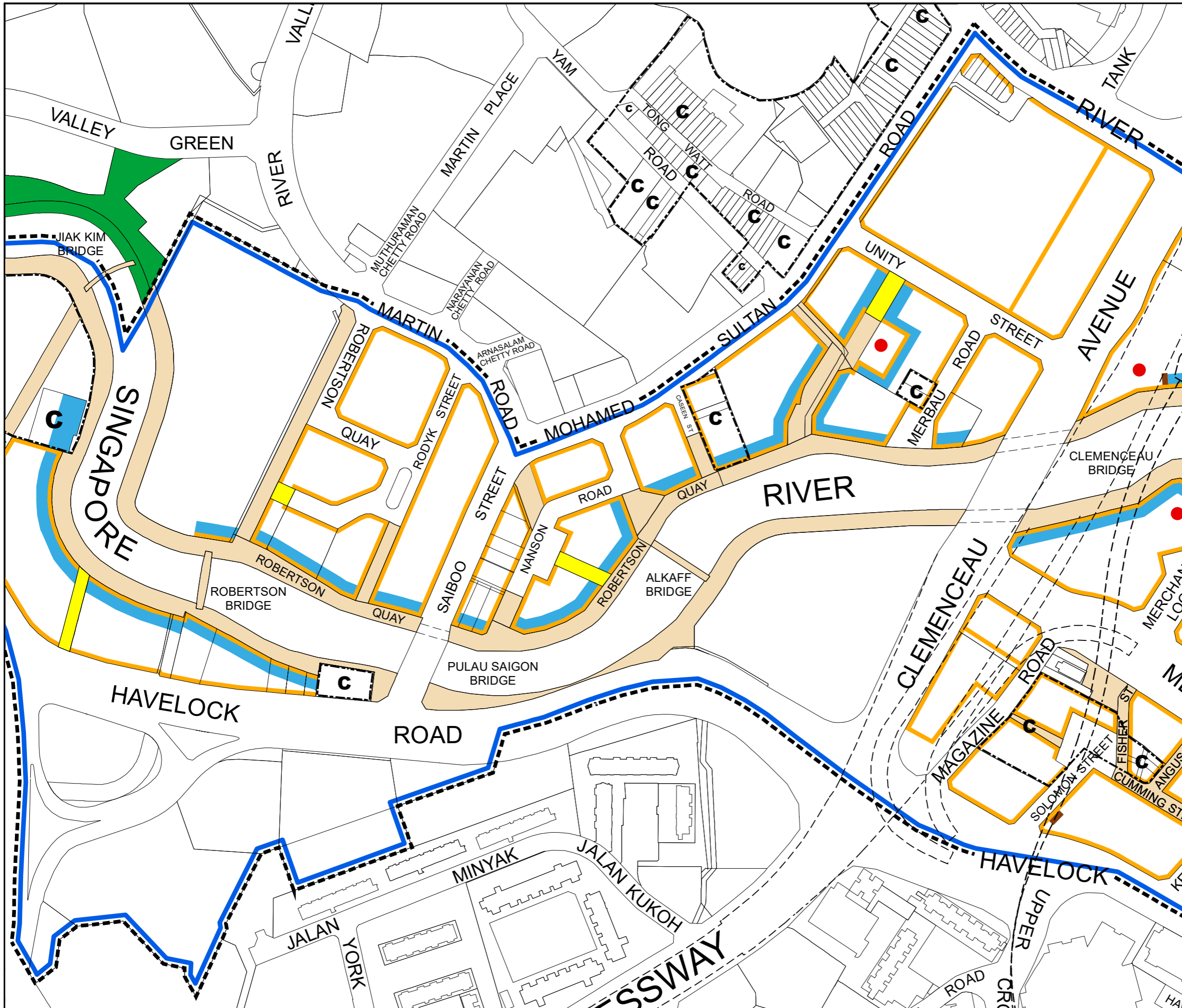
DRWG NO : SR/2019/018

DATE : NOVEMBER 2019

GROUP : CUDG



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URBAN DESIGN GUIDELINES FOR SINGAPORE RIVER PLANNING AREA

1ST STOREY PEDESTRIAN NETWORK & ACTIVITY GENERATING USE PLAN

LEGEND

- PLANNING AREA BOUNDARY
- AREA WITH URBAN DESIGN GUIDELINES AND PLANS
- CONSERVATION AREA / BUILDING
- NATIONAL MONUMENT

PEDESTRIAN NETWORK

- PARK / OPEN SPACE
- PEDESTRIAN MALL / PROMENADE / PLAZA
- THROUGH BLOCK LINK
- COVERED WALKWAY
- ACTIVITY GENERATING USE
- VERTICAL PEDESTRIAN CIRCULATION
- PUBLIC SPACE

LIST OF GAZETTED NATIONAL MONUMENT

- 12 TAN SI CHONG SU

SCALE : 1:3,000 @ A3



DRWG NO : SR/2019/019
 DATE : NOVEMBER 2019
 GROUP : CUDG







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


URBAN DESIGN GUIDELINES FOR SINGAPORE RIVER PLANNING AREA

1ST STOREY PEDESTRIAN NETWORK & ACTIVITY GENERATING USE PLAN




LEGEND

-  PLANNING AREA BOUNDARY
-  AREA WITH URBAN DESIGN GUIDELINES AND PLANS
-  CONSERVATION AREA / BUILDING
-  NATIONAL MONUMENT

PEDESTRIAN NETWORK

-  PARK / OPEN SPACE
-  PEDESTRIAN MALL / PROMENADE / PLAZA
-  THROUGH BLOCK LINK
-  COVERED WALKWAY
-  ACTIVITY GENERATING USE
-  VERTICAL PEDESTRIAN CIRCULATION
-  PUBLIC SPACE

LIST OF GAZETTED NATIONAL MONUMENTS

-  FORMER THONG CHAI MEDICAL INSTITUTION
-  TAN SI CHONG SU
-  SINGAPORE RIVER BRIDGES: ELGIN BRIDGE

SCALE : 1:3,000 @ A3



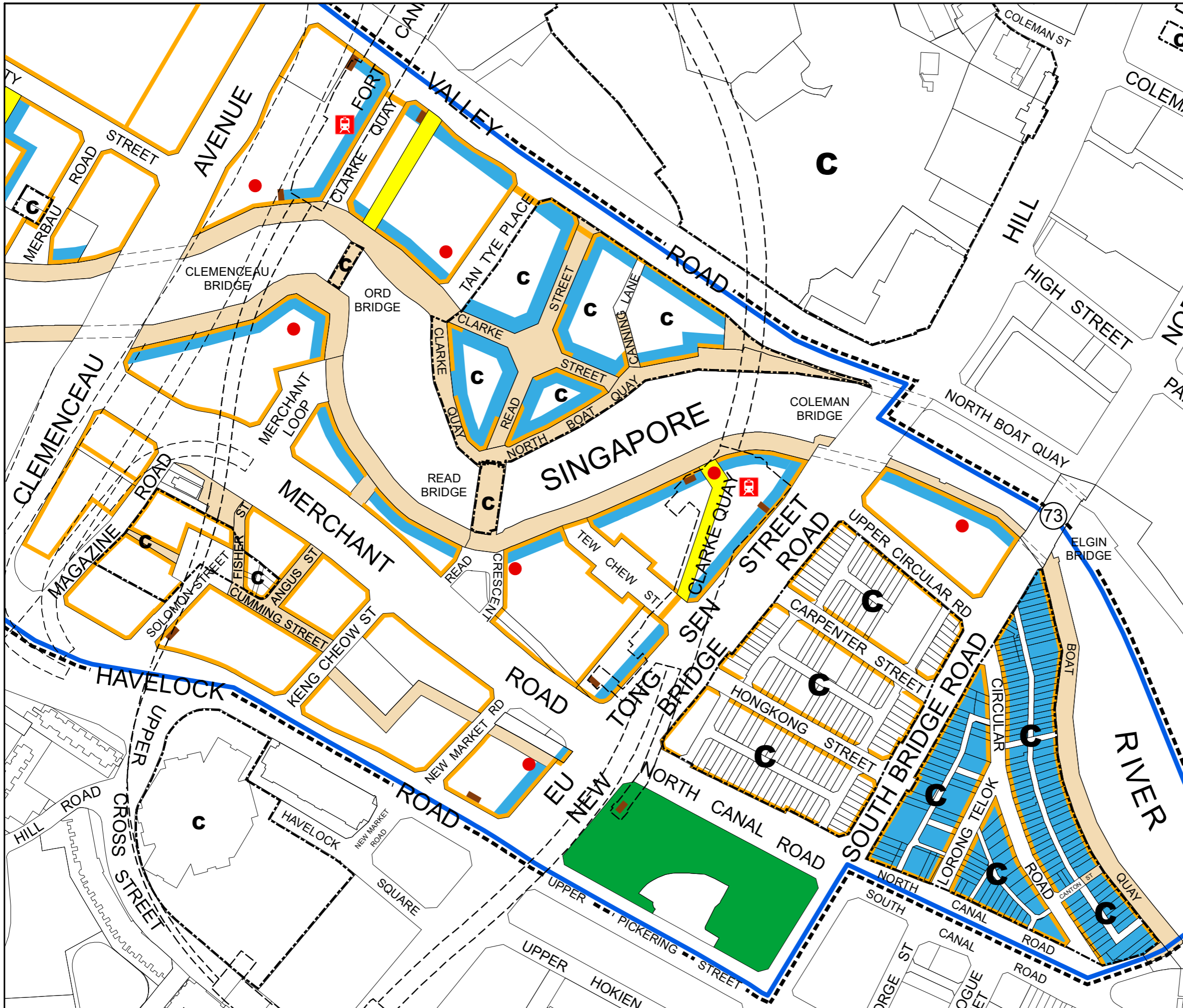
DRWG NO : SR/2019/020

DATE : NOVEMBER 2019

GROUP : CUDG







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

URBAN DESIGN GUIDELINES FOR SINGAPORE RIVER PLANNING AREA

BUILDING FORM PLAN



LEGEND

-  PLANNING AREA BOUNDARY
-  AREA WITH URBAN DESIGN GUIDELINES AND PLANS
-  CONSERVATION AREA / BUILDING
-  NATIONAL MONUMENT

BUILDING HEIGHT

-  BUILDING HEIGHT - LOW ZONE MAX. ALLOWABLE STOREYS
-  BUILDING HEIGHT - HIGH ZONE MAX. ALLOWABLE STOREYS
-  BUILDING HEIGHT - 12 STOREYS NOT TO EXCEED 44.0M SHD
-  BUILDING HEIGHT NOT TO EXCEED 28.0M SHD
-  SUBJECT TO DETAILED CONTROL
-  BUILDING TO BE RETAINED

BUILDING EDGE

-  MINIMUM 2-STOREY BUILDING EDGE *
 -  BUILDING EDGE TO MATCH FULL HEIGHT OF DEVELOPMENT
- * MAXIMUM BUILDING EDGE MAY APPLY

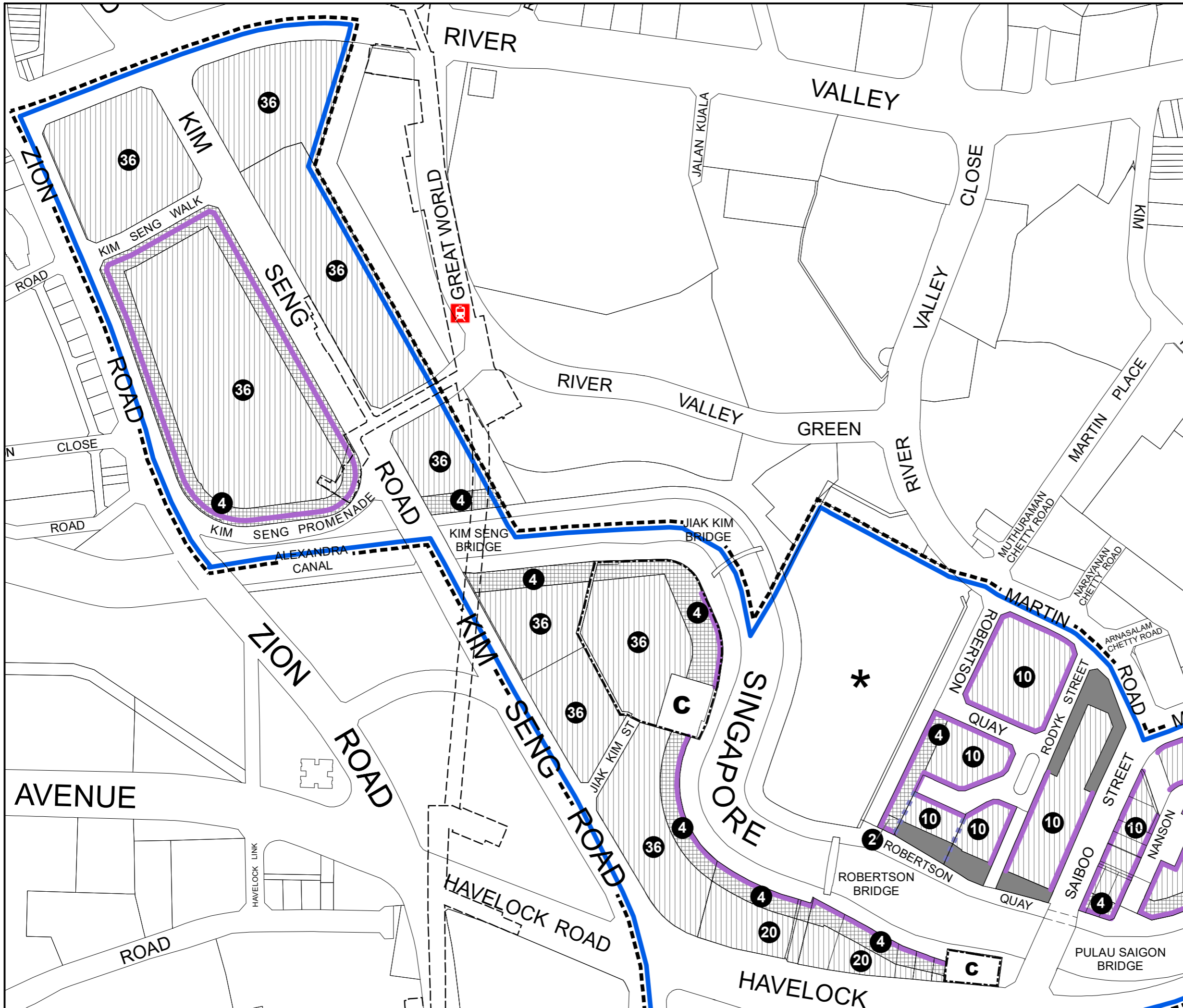
PARTY WALL

-  PARTY WALL

SCALE : 1:3,000 @ A3







DRWG NO : SR/2019/021
 DATE : NOVEMBER 2019
 GROUP : CUDG









URBAN DESIGN GUIDELINES FOR SINGAPORE RIVER PLANNING AREA

BUILDING FORM PLAN



LEGEND

-  PLANNING AREA BOUNDARY
-  AREA WITH URBAN DESIGN GUIDELINES AND PLANS
-  CONSERVATION AREA / BUILDING
-  NATIONAL MONUMENT

BUILDING HEIGHT

-  BUILDING HEIGHT - LOW ZONE
MAX. ALLOWABLE STOREYS
-  BUILDING HEIGHT - HIGH ZONE
MAX. ALLOWABLE STOREYS
-  BUILDING HEIGHT - 12 STOREYS
NOT TO EXCEED 44.0M SHD
-  BUILDING HEIGHT
NOT TO EXCEED 28.0M SHD
-  SUBJECT TO DETAILED CONTROL
-  BUILDING TO BE RETAINED

BUILDING EDGE

-  MINIMUM 2-STOREY BUILDING EDGE *
 -  BUILDING EDGE TO MATCH FULL HEIGHT OF DEVELOPMENT
- * MAXIMUM BUILDING EDGE MAY APPLY

PARTY WALL

-  PARTY WALL

LIST OF GAZETTED NATIONAL MONUMENT

-  TAN SI CHONG SU

SCALE : 1:3,000 @ A3



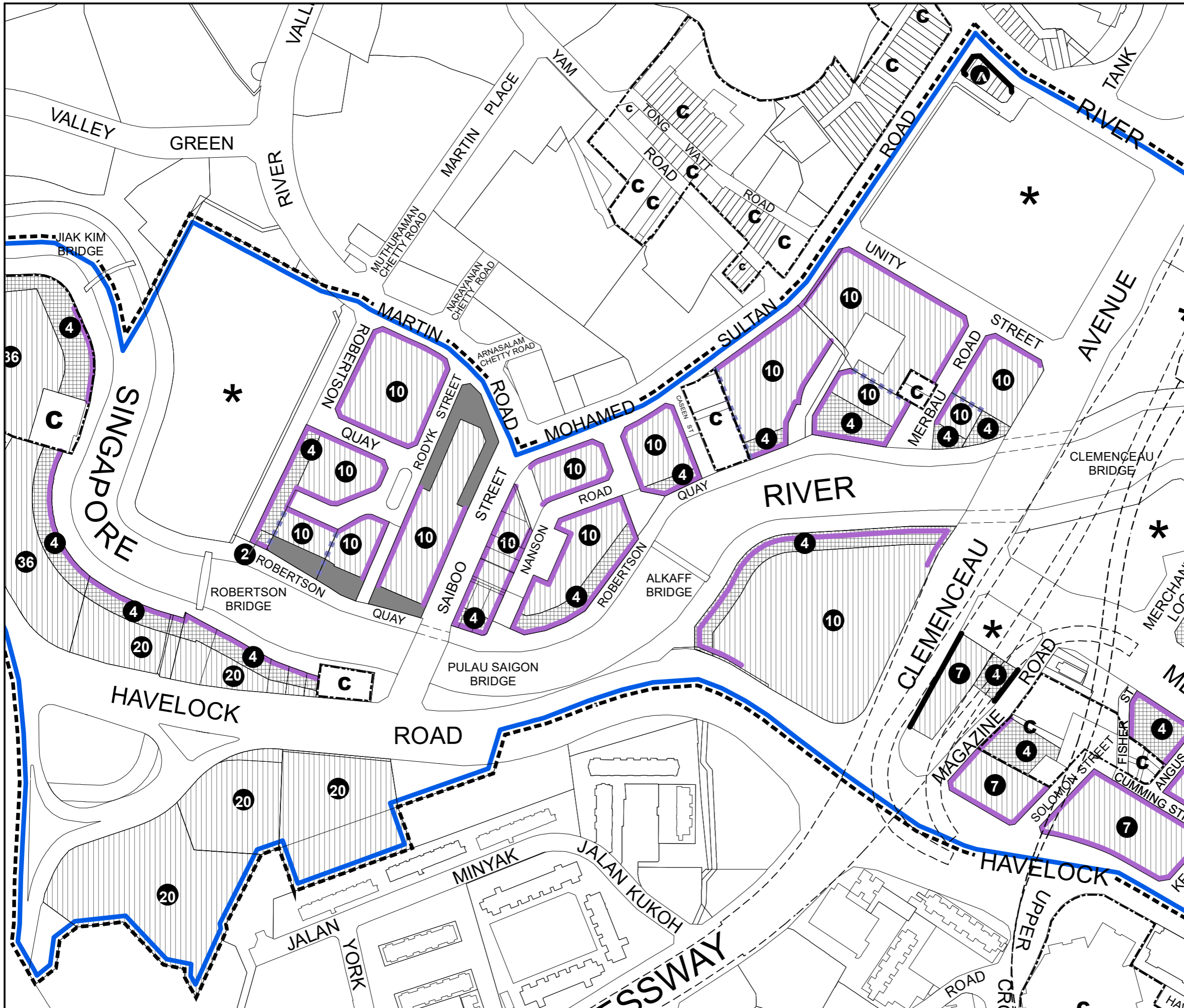
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DATE : NOVEMBER 2019

GROUP : CUDG







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URBAN DESIGN GUIDELINES FOR SINGAPORE RIVER PLANNING AREA

BUILDING FORM PLAN



LEGEND

-  PLANNING AREA BOUNDARY
-  AREA WITH URBAN DESIGN GUIDELINES AND PLANS
-  CONSERVATION AREA / BUILDING
-  NATIONAL MONUMENT

BUILDING HEIGHT

-  BUILDING HEIGHT - LOW ZONE
MAX. ALLOWABLE STOREYS
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MAX. ALLOWABLE STOREYS
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-  BUILDING TO BE RETAINED




BUILDING EDGE

-  MINIMUM 2-STOREY BUILDING EDGE *
 -  BUILDING EDGE TO MATCH FULL HEIGHT OF DEVELOPMENT
- * MAXIMUM BUILDING EDGE MAY APPLY

PARTY WALL

-  PARTY WALL

LIST OF GAZETTED NATIONAL MONUMENTS

-  FORMER THONG CHAI MEDICAL INSTITUTION
-  TAN SI CHONG SU
-  SINGAPORE RIVER BRIDGES: ELGIN BRIDGE

SCALE : 1:3,000 @ A3



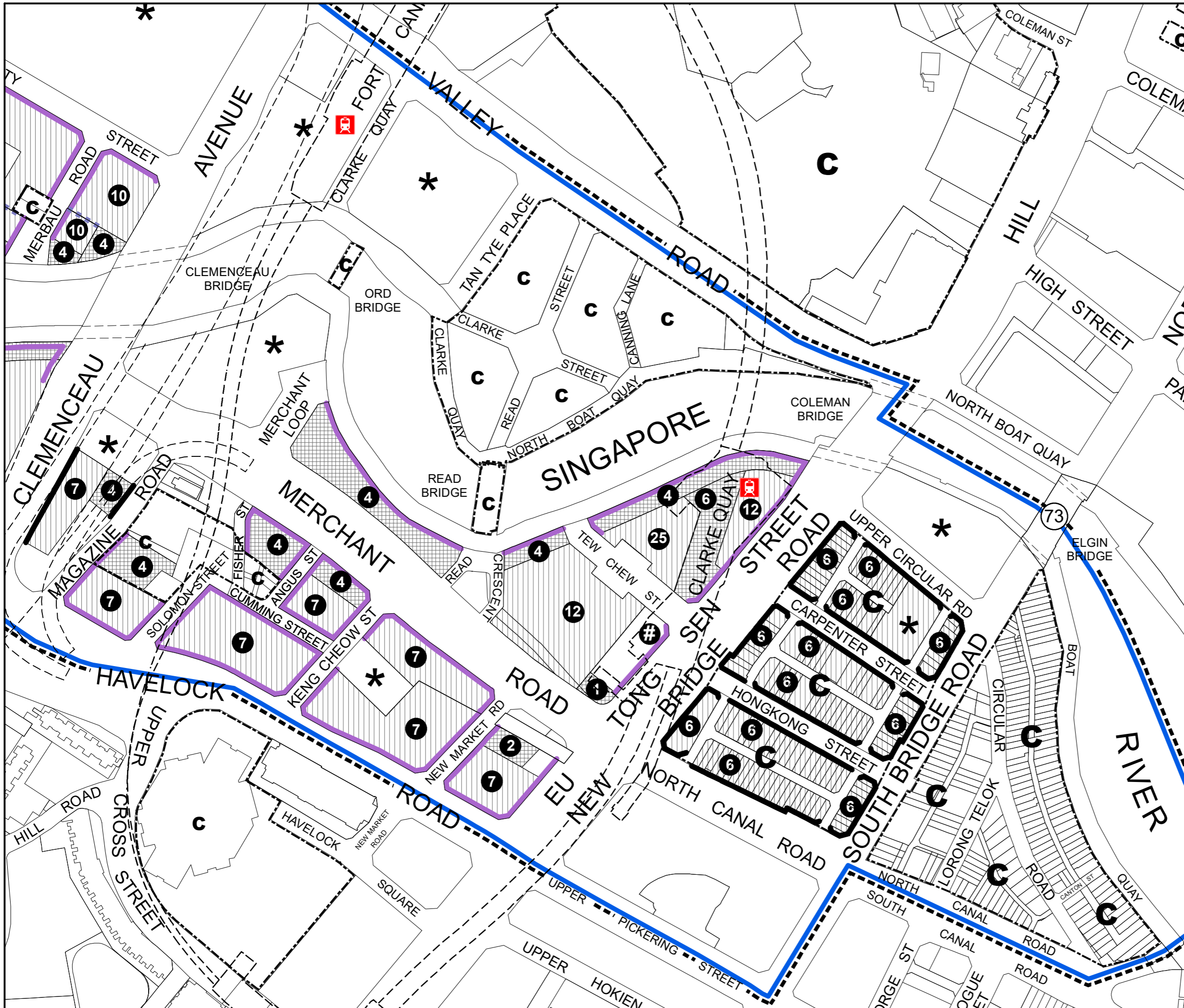
DRWG NO : SR/2019/023

DATE : NOVEMBER 2019

GROUP : CUDG







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URBAN DESIGN GUIDELINES FOR SINGAPORE RIVER PLANNING AREA

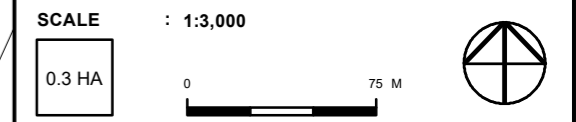
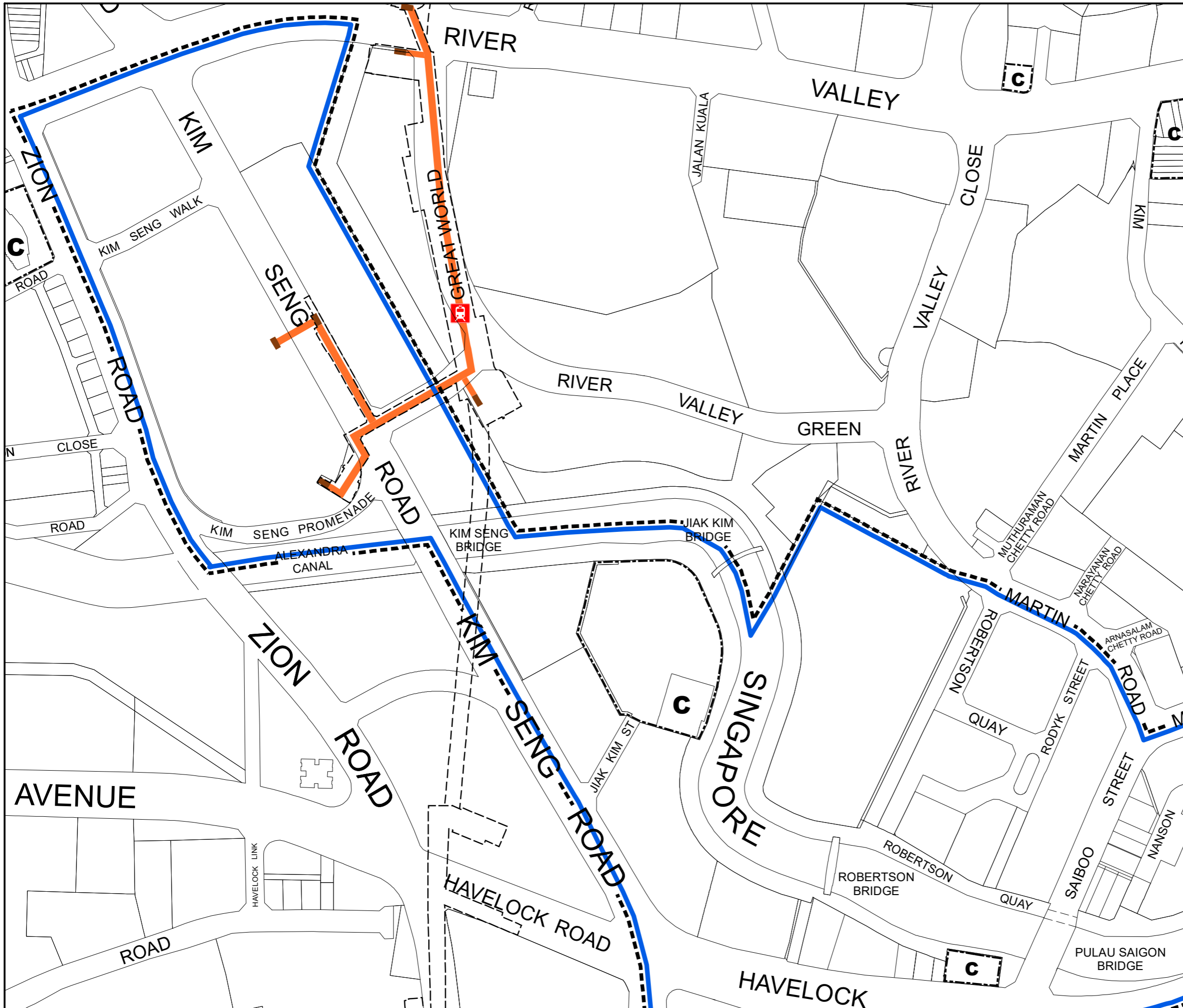
UNDERGROUND PEDESTRIAN NETWORK & ACTIVITY GENERATING USE PLAN

LEGEND

-  PLANNING AREA BOUNDARY
-  AREA WITH URBAN DESIGN GUIDELINES AND PLANS
-  CONSERVATION AREA / BUILDING
-  NATIONAL MONUMENT

UNDERGROUND PEDESTRIAN NETWORK

-  UNDERGROUND PEDESTRIAN LINK
-  VERTICAL PEDESTRIAN CIRCULATION







DRWG NO	: SR/2019/024
DATE	: NOVEMBER 2019
GROUP	: CUDG



URBAN DESIGN GUIDELINES FOR SINGAPORE RIVER PLANNING AREA

UNDERGROUND PEDESTRIAN NETWORK & ACTIVITY GENERATING USE PLAN




LEGEND

-  PLANNING AREA BOUNDARY
-  AREA WITH URBAN DESIGN GUIDELINES AND PLANS
-  CONSERVATION AREA / BUILDING
-  NATIONAL MONUMENT

UNDERGROUND PEDESTRIAN NETWORK

-  UNDERGROUND PEDESTRIAN LINK
-  VERTICAL PEDESTRIAN CIRCULATION

LIST OF GAZETTED NATIONAL MONUMENTS

-  FORMER THONG CHAI MEDICAL INSTITUTION
-  TAN SI CHONG SU
-  SINGAPORE RIVER BRIDGES: ELGIN BRIDGE

SCALE : 1:3,000



DRWG NO : SR/2019/025

DATE : NOVEMBER 2019

GROUP : CUDG



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