

GENERAL NIGHT LIGHTING GUIDELINES

1. Good night lighting can help to transform the image of the city by improving the appearance of the city at night and extend the life of the city after dark.
2. Supplementary information on Good Night Lighting Practices can be found on the URA website at – www.ura.gov.sg/lightingplan.

Night Lighting Concept for the Streetscape

3. The night lighting design under the Master Plan refers to the lighting up of the exterior of the building to highlight the design of the building, in particular, the roof or crown, façades, main architectural features, covered walkways and open spaces, using permanent lighting fixtures.
4. The night lighting concept should also give legibility to the building form. Roofs and architectural details should be emphasized in proportional illumination to the rest of the building and surroundings.
5. As a guide, the nightly lighting shall be elegant, tasteful and sensitive to the architecture of the building and well-coordinated with the overall night time streetscape.
6. The guidelines aim to achieve a coherent and well-coordinated nightscape for the area and provide a recommended framework for the lighting treatment of various building types, which are broadly classified under two categories – Classic and Contemporary.
7. Classic Buildings - National Monuments, conservation buildings, places of worship, shophouses, and other developments built in the traditional style are guided to be of a lower lighting intensity and warmer colour temperature, to bring out the majesty and civic character of these buildings.
8. Contemporary Buildings - Depending on the architecture and choice of materials, contemporary buildings can be lit with white or warm white light. More flexibility is also given for the buildings to be lit in a range of varying lighting intensity. The lighting proposal should consider how it would enhance the architectural expression of the development, and complement the surrounding developments.

Light Trespass and Light Pollution

9. There is a growing concern about the excessive use of lights to illuminate the cityscape. Night lighting should thus be executed sensitively to avoid glare, light trespass and light pollution. Pedestrians, residents, drivers, and other fields of vision shall be considered to prevent light spillage and to increase the energy efficiency of the lighting.

Light Fittings and Mounting Details

10. Sufficient measures must be taken to ensure that night lighting fixtures and mounting details are fully integrated with the architecture and/or landscape design of the building and screened from view.
11. The fixtures are to be located fully within the site boundary and are not to encroach into the adjacent road reserves, etc.

12. The night lighting equipment shall have necessary protective means from damage, theft and harm to the public, for those elements that are accessible to the public.

Energy-Efficient and Maintenance-Friendly

13. Light sources that have a high energy-efficiency rating, have a long operating life for easier maintenance, and are of high economical efficiency, such as compact metal halide lamps, fluorescent lamps, LEDs, or electrodeless lamps, are recommended for use.

NIGHT LIGHTING GUIDELINES FOR DEVELOPMENTS IN CIVIC DISTRICT

1. The Night Lighting Master Plan for Civic District is to guide the lighting up of developments to achieve a unique, three-dimensional nightscape for the Civic District. This Master Plan will be realised incrementally as and when new buildings are developed and when existing buildings undergo major refurbishment.

Location


2. To enhance Civic District as the historical and civic hub of Singapore, all developments (see Appendix 2-1) are required to provide night lighting of the buildings to enhance the character of the district.

Lighting Concept

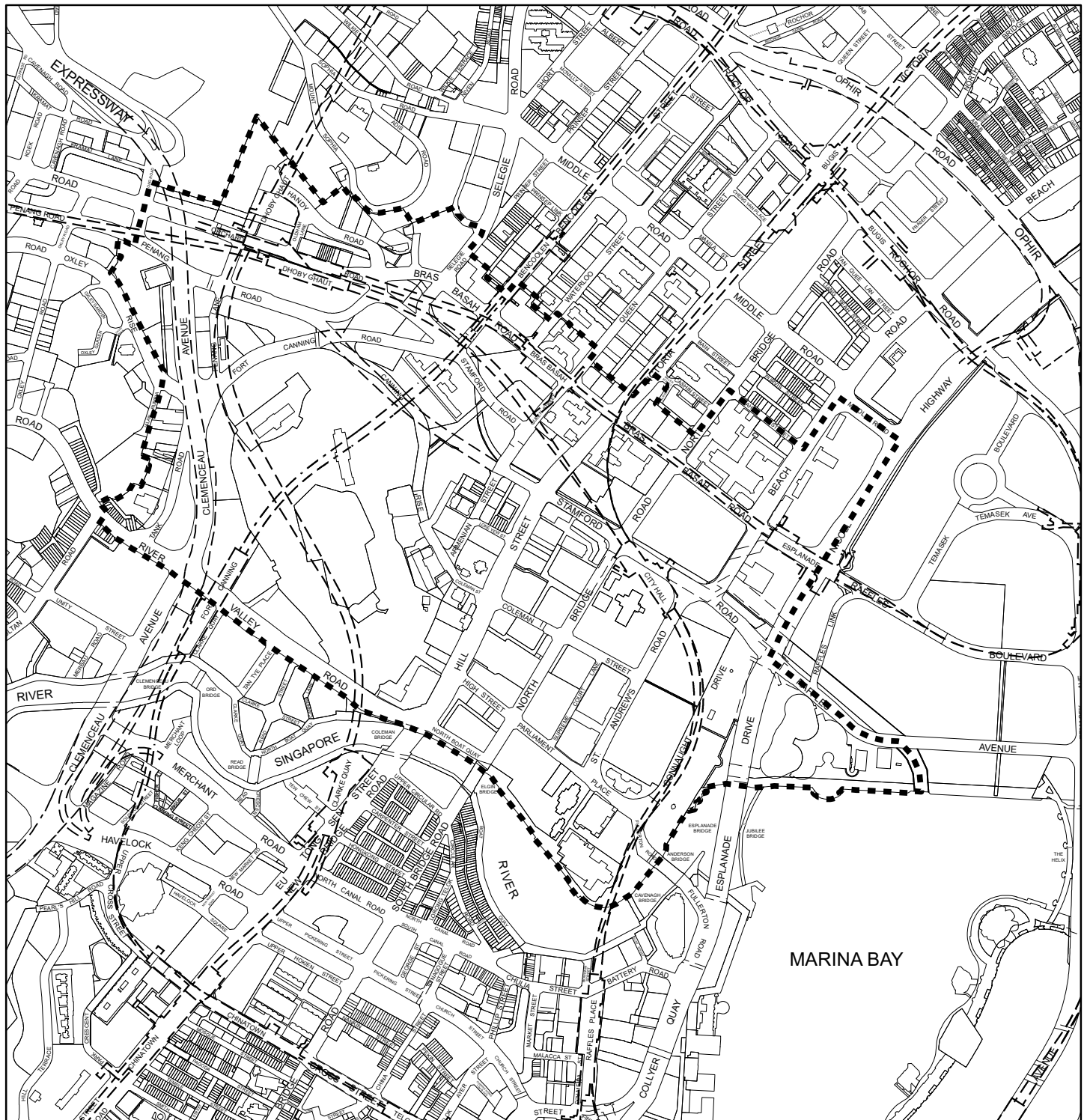
3. The vision for the night time skyline within the Civic District is one that is subtle and elegant to reinforce the district as a historic and civic hub. Coloured and animated night lighting sequences for nightly lighting up of the buildings are generally not allowed, in keeping with the civic character of the area.
4. The detailed guidelines in Table 1 below serve as a recommended guide, and are to be read in conjunction with the general night lighting guidelines and good lighting design practices given in Appendix 1.
5. All lighting proposals will be subject to evaluation based on the detailed lighting proposal, in relation to the building architecture and surrounding context.

Table 1

NO.	PARAMETER	REQUIREMENT	
		CLASSIC	CONTEMPORARY
1	Lighting Intensity (Lux)	20 to 75	≥ 50
2	Color Temperature (Kelvin)	2500 to 3500	3000 to 6500
3	Colour Rendition (Ra)	Minimum 85 Ra	
4	Index of Protection	Minimum 60	
5	Operation Hours	From 7:00pm to 11:00pm on Fridays, Saturdays and Sundays and during public holidays, national / district-wide events and festivals. Encouraged on all other days.	

6	Luminous Facade	<p>Luminous façades are walls or facades that are designed to emit light. Luminous facades are not allowed for <u>Classic</u> buildings. If proposed for <u>Contemporary</u> buildings, these are to be subtle and using only white lights. Coloured and/or moving lights are not allowed.</p> <p>The proposed lighting is to be dimmable and will be subject to final adjustment on site during the TOP/CSC clearance stage.</p>  <p><i>Examples of luminous facades or walls</i></p>
7	Use of Coloured and/or Moving Lighting	<p>Colored and animated night lighting sequences for daily lighting up of the buildings are generally not allowed, in keeping with the civic character of the area.</p> <p><u>Festive Lighting</u></p> <p>Coloured and animated lighting sequences can be considered for festive occasions or events. They are to relate to and complement the theme of the festival or event, and submitted for URA's separate approval at least one week prior to each event.</p>

LOCATION PLAN FOR CIVIC DISTRICT



 Boundary of Civic District

NIGHT LIGHTING GUIDELINES FOR DEVELOPMENTS IN BRAS BASAH BUGIS (BBB)

6. The Night Lighting Master Plan for Bras Basah.Bugis is to guide the lighting up of developments to achieve a unique, three-dimensional nightscape for the Bras Basah.Bugis (BBB) area. This Master Plan will be realised incrementally as and when new buildings are developed and when existing buildings undergo major refurbishment.


Location

7. To enhance BBB as an arts, learning & heritage district, the following developments (see Appendix 3-1) are required to provide night lighting of the buildings to enhance the character of the district:
- **Arts & cultural uses:** museums, art galleries, art housing, Places of Worship;
 - **Educational uses:** universities, colleges, tertiary institutions, etc.;
 - **Entertainment uses:** theatres, cinemas, etc.;
 - **Buildings with architectural heritage significance:** National Monuments and conservation buildings; and
 - **Buildings at gateway entry points:** key buildings along Selegie Road, Victoria Street and Bencoolen Street.
8. In addition, any new arts, cultural, educational or entertainment developments not identified in Appendix 3-1 are to be lit in accordance with the night lighting guidelines.
9. All other developments within BBB are also encouraged to provide night lighting to add to the buzz and vibrancy of the district. If proposed, the proposed night lighting is to be in compliance with the night lighting guidelines for BBB and subject to the same submission and evaluation procedures outlined in Appendix 4.

Lighting Concept

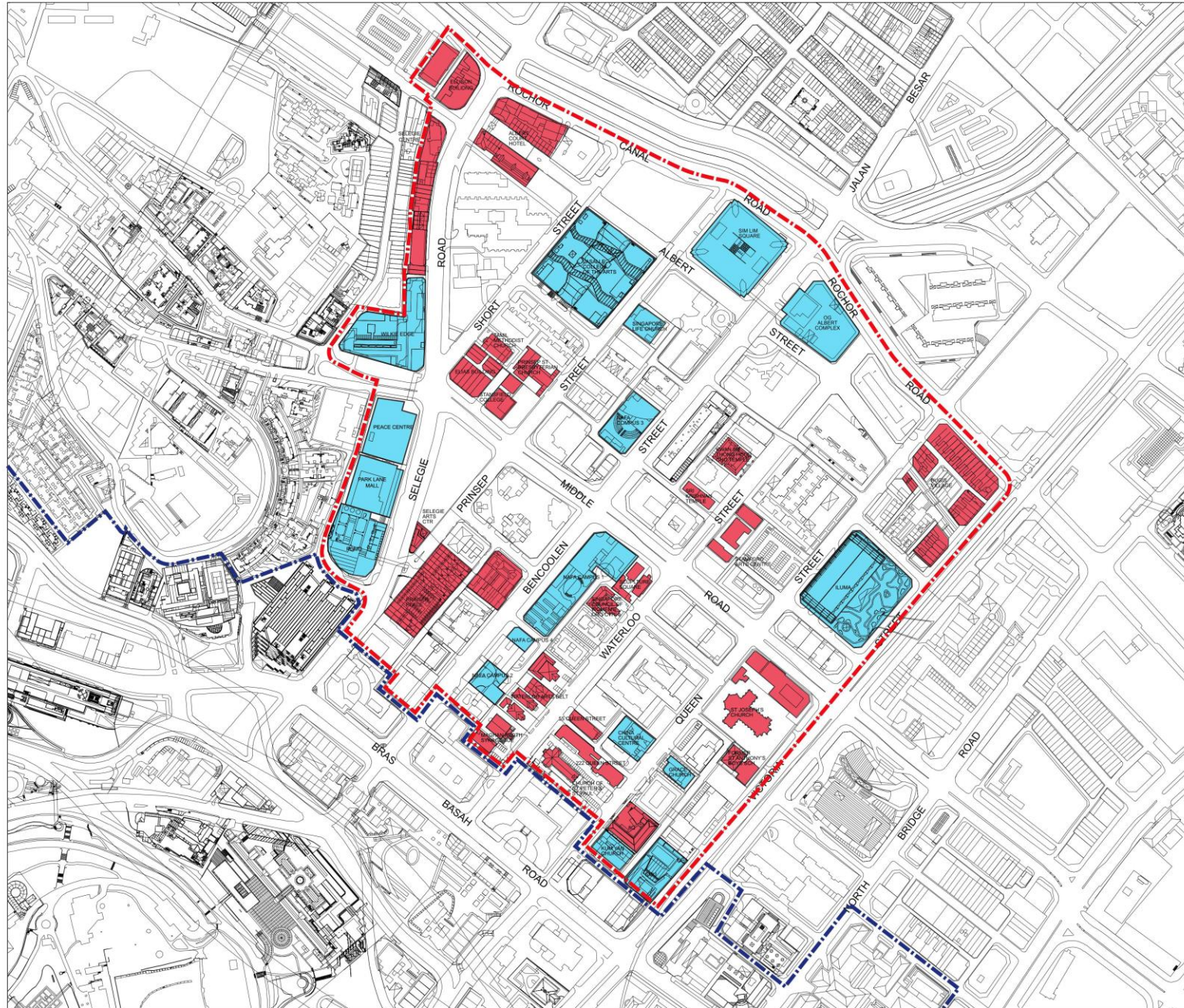
10. The lighting proposal is to enhance and emphasise BBB as a vibrant arts, learning and heritage district. Luminous facades, as well as the use of coloured and moving lights will add to the buzz and vibrancy of BBB and can be allowed for Contemporary buildings that suit the context of their locations.
11. The detailed guidelines in Table 1 below serve as a recommended guide, and are to be read in conjunction with the general night lighting guidelines and good lighting design practices given in Appendix 1.
12. All lighting proposals will be subject to evaluation based on the detailed lighting proposal, in relation to the building architecture and surrounding context.

Table 1

NO.	PARAMETER	REQUIREMENT	
		CLASSIC	CONTEMPORARY
1	Lighting Intensity (Lux)	20 to 75	≥ 50
2	Color Temperature (Kelvin)	2500 to 3500	3000 to 6500
3	Colour Rendition (Ra)	Minimum 85 Ra	
4	Index of Protection	Minimum 60	
5	Luminous Facade	<p>Luminous façades are walls or facades that are designed to emit light. Buildings with unique and attractive luminous facades will enhance vibrant street life and can be allowed for <u>Contemporary</u> buildings that suit the context of their locations. Luminous facades are not allowed for <u>Classic</u> Buildings.</p> <p>The proposed lighting is to be dimmable and will be subject to final adjustment on site during the TOP/CSC clearance stage.</p>  <p><i>Examples of luminous facades or walls</i></p>	
6	Use of Coloured and/or Moving Lighting	<p>Coloured and animated night lighting sequences can be allowed for <u>Contemporary</u> buildings that suit the context of their locations. Coloured and animated night lighting sequences are not allowed for <u>Classic</u> Buildings.</p> <p>The detailed proposal will be subject to evaluation in relation to the building architecture and site context to ensure that they do not cause disamenity to surrounding developments.</p> <p>The proposed lighting is to be dimmable and will be subject to final adjustment on site during the TOP/CSC clearance stage.</p> <p><u>Festive Lighting</u></p> <p>Coloured and animated lighting sequences can be considered</p>	

		for all building types for festive occasions or events. They are to relate to and complement the theme of the festival or event, and submitted for URA's separate approval at least one week prior to each event.
7	Operation Hours	From 7:00pm to 11:00pm on Fridays, Saturdays and Sundays and during public holidays, national / district-wide events and festivals. Encouraged on all other days.

NIGHT LIGHTING MASTER PLAN FOR
BRAS BASAH, BUGIS - ROCHOR (PART)
PLANNING AREA





CLASSIC



CONTEMPORARY



-  BRAS BASAH, BUGIS LIGHTING MASTER PLAN BOUNDARY
-  CIVIC DISTRICT LIGHTING MASTER PLAN BOUNDARY

DRAWING TITLE :

NIGHT LIGHTING CLASSIFICATION
FOR BUILDINGS

SCALE : 1 : 4000



DRWG NO : RC/2010/012
DATE : AUGUST 2013
DIVISION : CUDG

PREPARED BY :
HTO MOHD YAZID BIN IDRIS
PE ANNI

CHECKED BY :
A YAOU



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

SUBMISSION AND EVALUATION PROCESS

1. All night lighting proposals shall be submitted formally to URA's Development Control Group for approval as part of the Development Application process, using the submission form attached in Appendix 4-1. To ensure that the external building lighting installation is considered as an integral part of the design of the development, the night lighting proposal must be submitted as part of the development plans at the Provisional Permission (PP) stage.
2. To facilitate the submission of night lighting proposals, URA has drawn up a checklist of submission requirements (see Appendix 4-2). The checklist provides a step-by-step guide on the design issues to be addressed from the overall lighting concept through to the detailed proposals. The checklist also lists all the supporting drawings and technical information which is required to be submitted to facilitate the evaluation of the lighting proposal.
3. Approval of the night lighting proposal is subject to:
 - a. Compliance with the technical guidelines (specification of lighting levels and fixtures);
 - b. Submission of a Letter of Undertaking to comply with all prevailing operating requirements, for daily night lighting and during festivals and events;
 - c. Compliance with all other planning and urban design requirements for the site; and
 - d. Retention, operation and maintenance of the approved night lighting at the owner's own cost and expense.
4. The external night lighting must be reflected in the proposal plans for the development for URA's approval. A retention clause will be included as a condition in the Written Permission (WP) for the development to ensure that the night lighting is retained and operated and will be enforced through the Planning Act on the owner and any subsequent purchaser of the development.
5. Any changes to the approved night lighting proposal for the development (e.g. subsequent change in lighting concept, type of lighting equipment and specifications, etc.) are required to be submitted to the URA for evaluation and approval.
6. The entire night lighting proposal, including all external building lighting installations, shall be installed and commissioned according to the approved plans and verified and endorsed by URA under the Planning Act. URA's clearance of the completed Night Lighting Installation is required before the Commissioner of Building Control issues the Temporary Occupation Permit (TOP) or Certificate of Statutory Completion (CSC) (in the event the TOP is not required).
7. Details of the submission, requirements and process for seeking PP, WP and clearance of completed works under the Night Lighting Guidelines are included at Appendix 4-2. The standard processing time to evaluate and approve a complete and compliant submission for the clearance of the completed works is about 4 weeks. Please note that a longer processing time may be required if the submission is incomplete or not in order. The Applicant is to ensure sufficient lead time is allowed to secure the clearance prior to applying to the Commissioner of Building Control for TOP/CSC.

8. The submission is required to include labelled and annotated photographs (in .pdf file format) showing the completed night lighting installation on site. URA will evaluate the photographs submitted and, if necessary, arrange for a site inspection before issuing the clearance letter for the completed works.
9. If the external lighting fixtures are not installed and commissioned according to the approved plans, the Applicant or Building Owner will be required to revise the lighting installation to match the approved lighting design or provide reasons for the deviation for the URA's evaluation and approval.
10. The night lighting fixtures are to be retained and maintained throughout the entire life of the building and shall not be removed without the prior approval of the URA.

SUBMISSION FORM FOR NIGHT LIGHTING OF DEVELOPMENTS IN THE CIVIC DISTRICT AND BRAS BASAH.BUGIS

PART I – PARTICULARS OF PROJECT			
Development Name			
Description of Project			
Location			
Lot No		TS/MK No	
Is your development required to be lighted up? (see <u>Appendix 1</u>)			<input type="checkbox"/> Yes <input type="checkbox"/> No
Has Provisional Permission/ Written Permission been obtained for the development?			<input type="checkbox"/> Yes <input type="checkbox"/> No
If yes, please attach a copy of the Grant of PP/WP			
Ref No		Decision No	
PART II – PARTICULARS OF THE APPLICANT (OWNER / DEVELOPER)			
Name of Firm			
Address			
Tel No		Fax No	
Name of person for contact			
PART III – PARTICULARS OF THE QUALIFIED PERSON			
Name of Firm			
Address			
Tel No		Fax No	
Name of person for contact			
PART IV – PARTICULARS OF THE PROFESSIONAL QUANTITY SURVEYOR			
Name of Firm			
Address			
Tel No		Fax No	
Name of person for contact			

PART V – DESCRIPTION OF LIGHTING PROPOSAL

Please include a separate detailed write-up and any other supporting materials, documents or information, e.g., detailed models, simulations, plans, etc that you deem will help to illustrate and support your proposal. The attached submission must include the following:

S/N	Items	Checklist
i)	<i>Concept of lighting design and installation;</i>	
ii)	<i>Simulations / artist's impression showing the external building lighting proposal in the context of the surrounding (For developments visible from fronting roads, the artist's impression shall be a view from main fronting roads)</i>	
iii)	<i>Annotated plans, elevations and other drawings to a suitable scale;</i>	
iv)	<i>Specifications of lighting fixtures;</i>	
v)	<i>Installation methods;</i>	
vi)	<i>Specifications of lighting levels and colour temperature;</i>	
vii)	<i>Name of lighting designer (if relevant);</i>	
viii)	<i>Energy efficiency standards of the proposed lighting installation; and</i>	
ix)	<i>Letter of Undertaking to comply with the operating requirements as set out in the prevailing guidelines</i>	

Please list down and itemize the additional information that is included in the submission.

PART VIII – DECLARATION

I/We certify that the particulars and the information given in this application are true and correct _____ Name & Signature of Applicant
 (Owner/Developer) _____ Date _____
 Name & Signature of Qualified Person _____ Date _____

SUBMISSION REQUIREMENTS CHECKLIST

1. Write-Up with Appropriate Illustrations

Overall Night Lighting Concept

- a. Please describe the overall building type and use, and the architectural concept adopted for the building in response to the uses within the development and the surrounding context. Please also explain how the architectural concept is expressed in terms of the overall plan, building form and design of the façades and roof areas.
- b. Please describe the broader night lighting concept and how it enhances and complements the architectural concept for the building.

Detailed Night Lighting Proposals

- a. Please describe the detailed night lighting proposal for the building. In particular, how the night lighting proposal relate to the specific uses within the development and the architectural design of developments.
- b. Please provide a summary of the lighting proposal using the format provided in Appendix 4-3.

2. Drawings

- a. Please provide detailed drawings showing the proposed locations of all the proposed light fittings to achieve the desired overall night lighting concept and accentuate the architectural design of the façades and roof areas.
- b. The detailed drawings should include mounting details to illustrate how all the different lighting fixtures are integrated into the architectural detailing of the façades and roof areas. All night lighting fixtures should, as far as possible, be integrated with the external building elements/façades/special architecture features.
- c. Please also submit details to illustrate the measures taken in the choice and placement of the light fittings to ensure that they do not result in light spillage or trespass into the building or the adjacent developments.

3. Rendered Perspectives

- a. Please provide rendered perspectives of each of the building to illustrate the night lighting from street level from the main approaches to the façade.
- b. Additional views of the detailed lighting proposal at each of the individual zones of the building may be provided to further illustrate specific features of the proposal.

4. Technical Information

- a. Please provide illustrations of each of the light fittings together with their full technical specifications. Please also provide reasons for your selection and how the proposed fittings best achieve the desired overall lighting concept.
- b. Please refer to Appendix 2 or Appendix 3 and provide relevant information on the proposed lighting specifications. Please use Appendix 4-3 to declare your compliance with the guidelines. Where the proposal deviates from the guidelines, please provide justifications for your alternative proposal, in relation to the architectural and night lighting concept, for our evaluation and consideration.
- c. Please indicate the quantity of light fittings on the lighting layout plans.
- d. Please illustrate how the glare to the surrounding buildings is minimized.
- e. Please indicate the energy efficiency for the proposed external lighting. Please note that you are to ensure that the efficiency is to be equal to or less than 5 Watts per sqm.

5. For Clearance of Completed Works

- a. The night lighting Installations are to be implemented according to the approved plans and verified and endorsed by the URA under the Planning Act. URA's clearance of the completed Lighting Installation is required before the Commissioner of Building Control issues the Temporary Occupation Permit (TOP) or Certificate of Statutory Completion (CSC) (in the event the TOP is not required).
- b. The building owner is to submit confirmation of the completed works to URA to seek URA's clearance of the completed Lighting Installation. The standard processing time to evaluate and approve a complete and compliant submission is about 4 weeks. Please note that a longer processing time may be required if the submission is incomplete or not in order. The Applicant is to ensure sufficient lead time is allowed to secure the clearance prior to applying to the Commissioner of Building Control for TOP / CSC.
- c. The submission is required to include accurately labeled photographs (in .pdf file format) showing the completed Lighting Installations. URA will evaluate the photographs submitted and, if necessary, arrange for a site inspection before issuing the clearance letter for the completed works.
- d. Applicants are also required to declare upfront to the Commissioner of Building Control at the point of application for TOP or CSC (in the event the TOP is not required), that URA's clearance is required for Lighting Installations before issuance of TOP, or CSC (in the event the TOP is not required).

NIGHT LIGHTING PROPOSAL

Night Lighting Design for	(Name of Development)		
Name of Qualified Person	(Name of Qualified Person)		
Name of Lighting Designer	(Name of Lighting Designers)		
Summary of the Night Lighting Design (in font 10 – Arial)			
<p>* If luminous façade, coloured and/or moving lights are proposed, please provide details for our evaluation.</p>			
Technical Parameters of the Night Lighting Proposal			
CLASSIFICATION	BUILDING		PROPOSAL
	CLASSIC	CONTEMPORARY	
Façade Lighting (Lux)	20 to 75	≥ 50	
Color Temperature (Kelvin)	2500 to 3500	3000 to 6500	
Colour Rendition (Ra)	≥ 85		
Index of Protection	≥ 60		
Operation Hours	From 7:00 pm to 11:00pm on Fridays, Saturdays and Sundays and during public holidays, national / district-wide events and festivals from 7:00pm to 11:00pm. Encouraged on other days.		
Please insert Night Lighting Rendering(s) here			
Please limit to 1 page			

I _____ (owner/developer) _____ (name of development), give consent to the Urban Redevelopment Authority to post the above details on its official website once Written Permission for the lighting proposal has been granted.

Name: _____ Signature: _____ Date: _____ 1