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CIRCULAR TO PROFESSIONAL INSTITUTES

Who should know

Building owners, developers, architects, engineers and building specialists

Effective date

With effect from 24 November 2021 for a period of five years.

BUILT ENVIRONMENT TRANSFORMATION GROSS FLOOR AREA INCENTIVE SCHEME

Objective

This circular provides details of the Built Environment Transformation Gross Floor Area (BE Transformation GFA) Incentive Scheme. The scheme aims to encourage the greater adoption of enhanced Construction Industry Transformation Map (ITM) standards in areas of digitalisation, productivity and sustainability ("ITM Outcome Requirements") in private sector developments. The greater adoption of ITM Outcome Requirements in private sector developments will contribute to the ongoing transformation of the BE sector to one that is more resilient, productive and sustainable.

Details of BE Transformation GFA Incentive Scheme

Background

- 1 Launched in October 2017, the Construction ITM comprises a series of key strategies and approaches that will transform the entire construction process and value chain. The ITM focuses on key transformation areas which include Integrated Digital Delivery (IDD), Design for Manufacturing and Assembly (DfMA), and Green buildings, while strengthening our local workforce and building the capacities and capabilities of firms in these transformation areas. The national targets under the ITM are to achieve (i) 70% DfMA adoption rate (by GFA) by 2025; and (ii) 80% green buildings (by GFA) by 2030.

BE Transformation GFA Incentive Scheme

- 2 To accelerate the adoption of ITM Outcome Requirements, BCA and URA have jointly launched the BE Transformation GFA Incentive Scheme. Under the BE Transformation GFA Incentive Scheme, developers / building owners (hereinafter referred to as "applicants") can enjoy up to 3% additional GFA allowed beyond the Master Plan Gross Plot Ratio (GPR) for

delivering the stipulated ITM Outcome Requirements in their building development on private sites¹ of at least in 5,000 sqm GFA^{2,3}.

- 3 The Built Environment Transformation GFA Incentive Scheme is applicable to development proposals for a period of five years from 24 November 2021 to 23 November 2026. Proposals which have obtained planning permission but have not commenced superstructure works may also be eligible for this scheme on a case-by-case basis. Should the applicant's application be accepted, applicants will need to submit an amendment or fresh submission to URA for planning permission, and include the additional bonus GFA in the development proposal.
- 4 The BE Transformation GFA Incentive Scheme is also applicable to proposals for new developments on sites launched for public tender under the Government Land Sales (GLS) Programme on and prior to 31 March 2022. Applicants can enjoy up to 2% bonus GFA beyond the maximum allowable intensity stipulated in the Technical Condition of Tender (TCOT) for the respective sale sites. Proposals on GLS sites that have obtained planning permission but have not commenced superstructure works may also be eligible for the BE Transformation GFA Incentive Scheme on a case-by-case basis. Similarly, successful applicants will need to submit an amendment or fresh submission to URA for planning permission to include the additional bonus GFA in the development proposal for such GLS sites. From 2Q2022, enhanced ITM Outcome Requirements will be required for GLS sites as part of the Conditions and Requirements of Relevant Competent Authorities and Public Utility Licensees. When the enhanced requirements take effect, the BE Transformation GFA Incentive Scheme will no longer apply for such sites.
- 5 The quantum of allowable bonus GFA under the BE Transformation GFA Incentive Scheme is based on the proposed uses, use quantum that complies with the Master Plan zoning, and any additional requirements imposed as part of the endorsement for bonus GFA.
- 6 The approval of the bonus GFA under the BE Transformation GFA Incentive Scheme is subject to:
 - a) Achievement of stipulated ITM Outcome Requirements listed in [Appendix 1](#) as assessed by BCA;
 - b) Compliance with all other planning, development control and urban design requirements for the site;
 - c) Compliance with tender requirements if it is a GLS site; and
 - d) Payment of Development Charge (DC) and/or Differential Premium (DP), where applicable.
- 7 The additional GFA granted under the scheme will not form part of the future development potential of the subject site and will be subjected to the [overall cap of 10% for additional GFA allowed beyond the Master Plan GPR](#).
- 8 The types of developments that are eligible for the BE Transformation GFA Incentive Scheme are shown in the table below.

¹ For avoidance of doubt, the BE Transformation GFA Incentive Scheme will not apply to public sector developments.

² The qualifying criteria of 5,000 sqm in GFA considers the fact that larger developments tend to achieve sizeable productivity and sustainability outcomes. Smaller developments of less than 5,000 sqm GFA may be considered on a case-by-case basis on agencies' assessment.

³ To further accelerate adoption of BE transformation measures, applications submitted under the [Strategic Development Incentive \(SDI\)](#) and [Central Business District \(CBD\) Incentive](#) Schemes will have to comply with stipulated outcomes in the areas of digitalisation, productivity and sustainability. The required ITM outcomes will be separately assessed in relation to the context of the proposal, upon submission of the outline application for the SDI/CBD development proposal. ITM outcomes will be imposed as conditions for planning approval for redevelopment proposals via the SDI/CBD Incentive scheme. SDI/CBDI proposals will not qualify for the additional GFA under the BE Transformation Gross Floor Area Incentive Scheme.

Residential ⁴	Condominium and Flat developments
Non- Residential	Commercial, Industrial and Institutional developments, such as office, retail, business parks, community building, hotel, hospital or white site developments
Mixed Use	Any combination of the above
All Others	To be assessed based on merits of proposal

- 9 Applicants who take up the BE Transformation GFA Incentive Scheme will not be eligible for other funding schemes with comparable outcomes for the same development. Unless otherwise stated, funding from other schemes with similar requirements may be adjusted accordingly based on the improvements in the outcome deliverables to ensure there is no duplication in funding.

Incentive Requirements and Application Process

- 10 Applicants who are interested to participate in the BE Transformation GFA Incentive Scheme can submit an application via [this Form](#). Supporting documents such as the ITM Outcome Concept Plan to detail the proposed ITM Outcome Requirements must be included for consideration.
- 11 If the application is approved by BCA, BCA will issue a Letter of Acceptance (“LOA”) to the applicant and a valid and binding agreement between the applicant and BCA based on the Terms and Conditions of the BE Transformation GFA Incentive Scheme (as set out in [Appendix 4](#) herein) (“T&Cs”) will be concluded in respect of the development’s participation in the BE Transformation GFA Incentive Scheme upon the applicant’s receipt of such LOA. The applicant can then proceed to submit their development application incorporating the bonus GFA, alongside with the GFA computation form (see [Appendix 5](#)) and the LOA to URA for planning approval.
- 12 Where development proposals fall within areas with specific planning considerations (e.g. storey height controls) or are unable to fully accommodate the additional intensity due to on-site conditions (e.g. areas with traffic concerns), the bonus GFA approved under the BE Transformation GFA Incentive Scheme may be lower than the endorsed quantum, and/or the bonus GFA may be limited to a particular use or uses.
- 13 The application of bonus GFA under the BE Transformation GFA Incentive Scheme will be accepted if URA grants in-principle approval for the bonus GFA. For avoidance of doubt, the written permission or provisional permission issued by URA, as the case may be, will have to state that the proposed bonus GFA, and the usage of the proposed bonus GFA under the BE Transformation GFA Incentive Scheme is endorsed.

Security Deposit

- 14 When the bonus GFA under the BE Transformation GFA Incentive Scheme is approved, the applicant will need to raise a Security Deposit (SD) which is equivalent to the market value⁵ of the full quantum of allowable GFA approved by URA (in Para 13) within thirty (30) days from

⁴ The maximum allowable number of dwelling units for residential developments located outside of Central Area is derived from the Master Plan permissible intensity, [which excludes any bonus GFA the site is eligible for](#).

⁵ The applicable DP/DC rate is pegged to the date of planning submission to URA where the BE ITM Bonus GFA is proposed and leading to a conveyance where the Built Environment Transformation GFA incentive scheme is first endorsed by URA and BCA.

the date of the written notice issued by BCA to request for the payment for the SD. The SD will have to remain valid for three (3) years from the projected date of Temporary Occupation Permit (TOP) for a development and will be released when the requisite ITM Outcome Requirements are fulfilled. In the event that the requisite ITM Outcomes Requirements cannot be fulfilled within this period, the applicant will need to extend the validity of the SD until such requirements have been fulfilled.

- 15 To ease the financial burden on the applicant as economy recovers from the impact of the COVID-19 pandemic, the SD required will be initially set at 50% of the market value of the full quantum of allowable GFA approved by URA. The quantum of the SD will be reviewed and adjusted, when needed, and advance notice will be given to the industry for adjustments to the quantum of the SD.
- 16 As the BE Transformation GFA Incentive Scheme is tied to ITM outcomes that involve improvements to the design and construction processes of new developments, evidence of compliance with the stipulated deliverables and timeline during the construction phase will be important. As such, the submission of half-yearly progress reports to BCA during the construction life cycle by the applicant will be required.
- 17 More details on the application and evaluation process, reporting requirements and T&Cs can be found in Appendices [2](#), [3](#) and [4](#). Examples of computation for SD and usage of the bonus GFA under the BE Transformation GFA Incentive Scheme can be found in [Appendices 5](#) and [6](#).
- 18 We would appreciate if you could convey the contents of this circular to the relevant members of your organisation. If you or your members have any queries concerning this circular, please do not hesitate to contact BCA through our online feedback form at <https://www.bca.gov.sg/feedbackform/> or URA's Feedback and Enquiry Form at https://www.ura.gov.sg/feedbackWeb/contactus_feedback.jsp.
- 19 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.
- 20 Thank you.

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BUILDING AND CONSTRUCTION AUTHORITY

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ITM Outcome Requirements for BE Transformation GFA Incentive Scheme

Building Type	(A) Digitalisation ⁶	(B) Productivity ⁷	(C) Sustainability ⁸
Residential - Condominium - Flat developments	- Minimum five (5) Integrated Digital Delivery (IDD) essential use cases covering three (3) stages of life cycle with at least one (1) use case per stage - Use of Common Data Environment (CDE) data standard and CDE compliant digital platform	- Minimum 65% Prefabricated Prefinished Volumetric Construction (PPVC) - Minimum 65% Prefabricated Mechanical Electrical & Plumbing (Prefab MEP) systems - Minimum 70% System Formwork - Quality Mark (QM) OR Requirements stipulated for developments classified under Building Type - Others	GM Platinum Super Low Energy (SLE) with Maintainability Badge* <i>* exemplary performance (that is 10 out of 15 points) under the Maintainability Section in GM 2021 framework</i>
Non-Residential - Commercial - Industrial - Institutional	- Minimum five (5) Integrated Digital Delivery (IDD) essential use cases covering four (4) stages of life cycle with at least one (1) use case per stage - Use of Common Data Environment (CDE) data standard and CDE compliant digital platform	<u>Hotel</u> - Minimum 65% PPVC - Minimum 65% Prefab MEP systems - Minimum 70% System Formwork <u>Office</u> - Structural Steel (SS) for minimum 80% of total office area - Minimum 65% Prefab MEP systems - Minimum 70% System Formwork OR Requirements stipulated for developments classified under Building Type - Others	GM Platinum SLE with Maintainability Badge* <i>* exemplary performance (that is 10 out of 15 points) under the Maintainability Section in GM 2021 framework</i>

⁶ More details at https://www1.bca.gov.sg/buildsg/digitalisation/integrated-digital-delivery-idd/idd-implementation-plan_and_http://www1.bca.gov.sg/buildsg/digitalisation/integrated-digital-delivery-idd/cde-data-standard

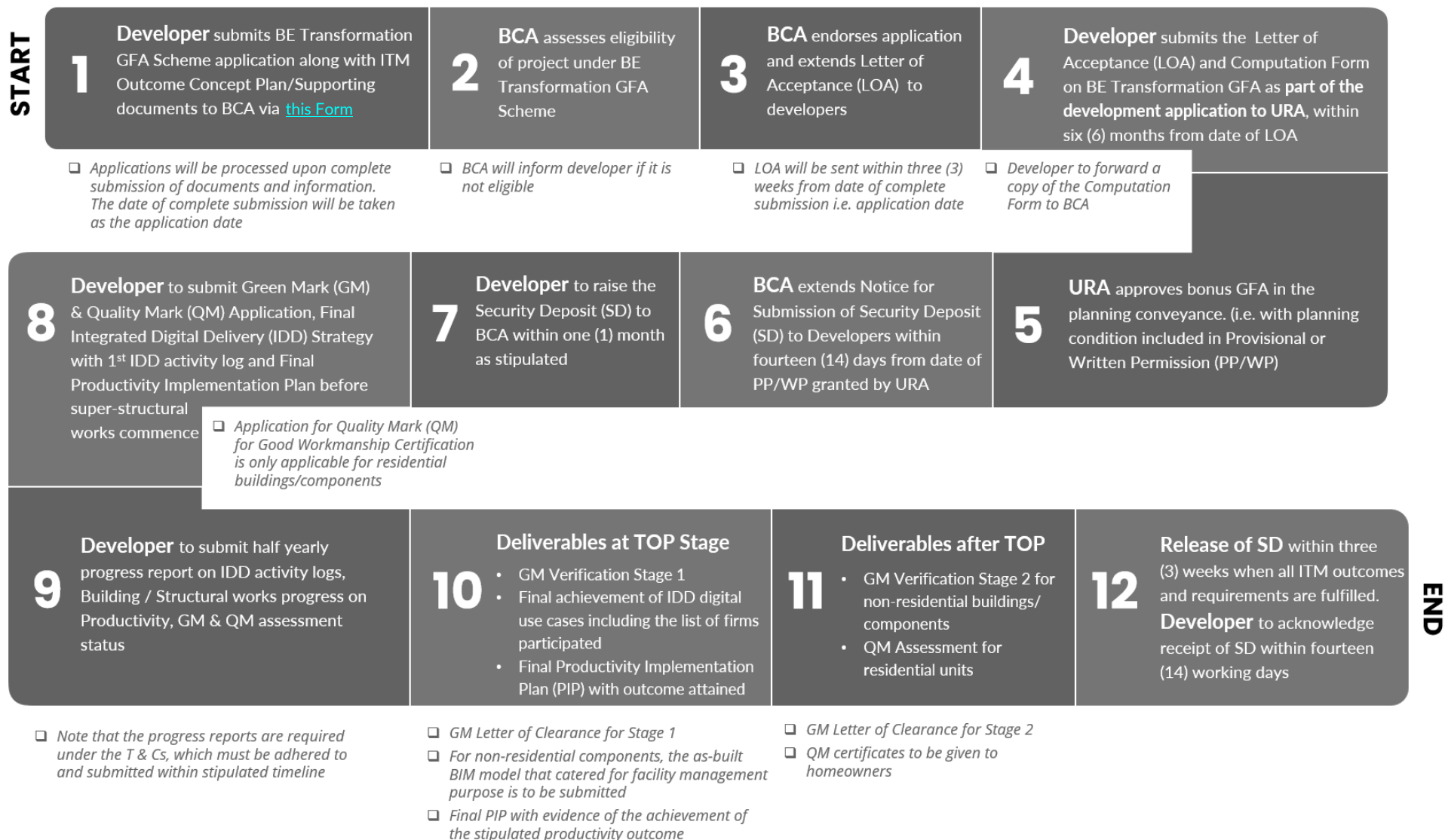
⁷ More details at <https://www1.bca.gov.sg/buildsg/productivity/design-for-manufacturing-and-assembly-dfma>

⁸ More details at <http://www1.bca.gov.sg/buildsg/sustainability/green-mark-certification-scheme/green-mark-2021>.

Building Type	(A) Digitalisation ⁶	(B) Productivity ⁷	(C) Sustainability ⁸								
Mixed-Use Development - Combination of the above building types Others - Non-Residential development not specified above - Developments subject to review by URA's Design Advisory Panel⁹	- Minimum five (5) Integrated Digital Delivery (IDD) essential use cases covering - Three (3) stages of project lifecycle for private residential sites - Four (4) stages of project lifecycle for private commercial/ industrial sites with at least one (1) use case per stage - Use of Common Data Environment (CDE) data standard and CDE compliant digital platform	- Minimum 30% productivity improvement (compared to 2010 levels) - Minimum prefabrication levels to be adopted for the following systems:<table><tr><td>Structural*</td><td>65%</td></tr><tr><td>Architectural</td><td>80%</td></tr><tr><td>Prefab MEP systems</td><td>65%</td></tr><tr><td>System Formwork</td><td>70%</td></tr></table> <i>*minimally Advanced Precast Concrete System to be adopted</i> - QM for Residential Non-Landed component of the development.	Structural*	65%	Architectural	80%	Prefab MEP systems	65%	System Formwork	70%	GM Platinum SLE with Maintainability Badge* for the respective residential and non-residential component of the development, where relevant. <i>* exemplary performance (that is 10 out of 15 points) under the Maintainability Section in GM 2021 framework</i>
Structural*	65%										
Architectural	80%										
Prefab MEP systems	65%										
System Formwork	70%										

⁹ Excludes development proposals submitted under the SDI/CBD incentive scheme. The required ITM outcomes for SDI/CBD incentive scheme development proposals will be separately assessed in relation to the context of the proposal, upon submission of the outline application for the SDI/CBDI development proposal.

Submission and Evaluation Process for the BE Transformation GFA Incentive Scheme



ITM Outcome Deliverables and Reporting Requirements

Progress reports which detail the specific deliverables will be required to be submitted during the construction phase, completion and operation phase for tracking purposes on a half yearly basis. They are as listed below:

Construction Phase	Specific Deliverables
Before Commencement of Superstructural Works	Submission of the following document: - Confirmation of Green Mark (GM) Application - Confirmation of Quality Mark (QM) Application for residential buildings/components - Final Integrated Digital Delivery (IDD) Implementation Strategy with details of the Common Data Environment (CDE) compliant digital platform and 1st IDD Activity Logs - Final Productivity Implementation Plan (PIP)
During Construction	Submission of the Half Yearly Reports which include the following: - GM Assessment Status and when completed, the Letter of Award showing the stipulated GM rating of Platinum Super Low Energy (SLE) with exemplary performance in Maintainability Section - QM Assessment Status if relevant - IDD Activity Logs - Building/Structural works progress for Productivity Outcome
Completion Phase	Specific Deliverables
At Temporary Occupation Permit (TOP) Stage	Submission of the Final Progress Report which include the following: - Evidence of completion of the Green Mark Verification (Stage 1) and Letter of clearance - Final IDD report showing the achievement of the required IDD digital use cases, including the list of firms that have participated and the as-built model handover for facility management purpose for non-residential building projects - Final PIP showing the achievement of the stipulated productivity outcome - QM Assessment status for residential buildings/components
Operational Stage	Specific Deliverables
1 year after TOP or earlier	- Evidence of completion of the Green Mark Verification (Stage 2) and Letter of clearance - Evidence of completion of the Quality Mark (QM) assessment for the residential buildings/components

BUILT ENVIRONMENT TRANSFORMATION GROSS FLOOR AREA INCENTIVE SCHEME

- TERMS AND CONDITIONS

- (A) BCA has implemented the Built Environment Transformation Gross Floor Area Incentive Scheme ("**Incentive Scheme**") with the aim of encouraging developers to achieve the Construction Industry Transformation Map (ITM) outcomes in respect of:
- (i) private sites not sold under the GLS Programme; and
 - (ii) new developments on sites launched for public tender under the GLS Programme on or prior to 31 March 2022.
- (B) Under the Incentive Scheme, projects located on land described in Recital (A)(i) may be granted up to 3% Bonus GFA and projects located on land described in Recital (A)(ii) may be granted up to 2% Bonus GFA.
- (C) The Developer is desirous of submitting the Application to BCA for purposes of obtaining the approval of BCA in relation to the Project's participation in the Incentive Scheme.
- (D) BCA is desirous of providing its assessment of the Developer's Application, and where appropriate, issue the Letter of Acceptance to the Developer for purposes of approving the participation of the Project in the Incentive Scheme.

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. DEFINITIONS AND INTERPRETATION

- 1.1. In these T&Cs, the following words and expressions shall have the following meanings, except where the context otherwise requires:

"Agreement" means the whole agreement between BCA and the Developer in respect of the Project's participation in the Incentive Scheme, comprising of the following documents:

- (i) the Application;
- (ii) the Letter of Acceptance; and
- (iii) these T&Cs,

"APCS" means a construction method that adopts precast concrete components and applies the principles of standardisation, simplicity, and single integrated elements as set out in the Code of Practice on Buildability;

"Application" means the Developer's application for the Project to be admitted into the Incentive Scheme and for such Project to be bound by these T&Cs;

"Balance Termination Sum" means the shortfall between the Security Deposit and the Termination Sum;

"BCA" means the Building and Construction Authority, a statutory board established under the Building and Construction Authority Act (Cap. 30A);

“BE Transformation GFA” means the allowable Bonus GFA that is awarded to a Project pursuant to URA’s Approval in relation to the Incentive Scheme;

“Bonus GFA” means GFA allowed over and above the Master Plan GPR subject to a maximum of 10% of the Master Plan GPR in respect of a Project;

“Building Control Act” means the Building Control Act (Cap. 29);

“Business Day” means a day between Monday and Friday (both days inclusive), excluding any public holiday in Singapore;

“CDE” means a common data environment for purposes of facilitating the integration of activities and collaboration of stakeholders throughout the construction and building life-cycle;

“CDE Compliant Digital Platform” means a commercially available digital platform which is used to manage and monitor the use of IDD digital use cases;

“CDE Data Standard” means the standard approach of managing project data and processes using a CDE as set out in the Singapore CDE Data Standard Guide;

“Computation Form” means the BE Transformation GFA computation form;

“Developer” means the person for whom or on whose behalf the Project is being carried out and who had submitted the Application in respect of the Project;

“Development” means the site on which the Project is being carried out as described by the Developer in the Application;

“Digitalisation Requirements” means the IDD requirements set out in Clause 4 of these T&Cs;

“Effective Date” means the date on which the Letter of Acceptance is issued by BCA to the Developer;

“EMV” means equivalent market value;

“GFA” means the total area of covered floor space measured between the centre line of party walls including the thickness of external walls but excluding voids;

“GLS” means Government Land Sales;

“GPR” means Gross Plot Ratio;

“IDD” means Integrated Digital Delivery;

“Incentive Scheme” has the meaning ascribed to it in Recital (A) of these T&Cs;

“ITM Outcome Requirements” means the Digitalisation Requirements, Productivity Requirements and Sustainability Requirements;

“Letter of Acceptance” means the letter of acceptance issued by BCA to the Developer in respect of the Developer’s Application;

“Master Plan GPR” means Master Plan Gross Plot Ratio;

“Notice for Balance Termination Sum” means the written Notice that shall be issued by BCA to the Developer for repayment of the Balance Termination Sum, and which shall include the following:

- (i) computation of the Balance Termination Sum; and

(ii) time and manner of payment of the Balance Termination Sum by the Developer to BCA.

"Parties" means BCA and the Developer;

"Planning Act" means the Planning Act (Cap. 232);

"PP Application" means the application submitted by the Developer to URA for planning permission in respect of the Project;

"PPVC" means a construction method whereby free-standing volumetric modules (complete with finishes for walls, floors and ceilings) are either (i) constructed and assembled, or (ii) manufactured and assembled, in an accredited fabrication facility, in accordance with any accredited fabrication method;

"Prefab MEP" means Mechanical, Electrical and Plumbing components or equipment which are manufactured and assembled in an accredited fabrication facility, in accordance with any accredited fabrication method;

"Productivity Requirements" means the productivity requirements set out in Clause 5 of these T&Cs;

"Project" means the building works that will be carried out at the Development as described by the Developer in the Application;

"Security Deposit" means the security deposit to be provided by the Developer to BCA pursuant to Clause 7 in the sum of 50% of the EMV of the BE Transformation GFA and to be calculated in accordance with Annex 2 of these T&Cs;

"SIAC" means the Singapore International Arbitration Centre;

"Sustainability Requirements" means the sustainability requirement set out in Clause 6 of these T&Cs;

"Termination Sum" means a sum equal to 100% of the EMV of the BE Transformation GFA;

"T&Cs" means the terms and conditions of the Incentive Scheme as contained herein;

"URA" means the Urban Redevelopment Authority, a statutory board established under the Urban Redevelopment Authority Act (Cap. 340); and

"URA's Approval" means the approval of URA in respect of the Developer's PP Application by way of a provisional permission and/or a written permission pursuant to section 13 of the Planning Act.

2. BCA'S RIGHTS AND OBLIGATIONS

- 2.1. Upon receiving the Developer's Application, BCA shall assess the Developer's Application, and where BCA, in its sole discretion, accepts the Developer's Application for the participation of the Project in the Incentive Scheme, BCA will issue the Letter of Acceptance to the Developer.
- 2.2. Upon receiving the Developer's Application, BCA shall have the right to provide a copy of the Application to URA.
- 2.3. If BCA accepts the Developer's Application and issues the Letter of Acceptance to the Developer, BCA shall:
 - (i) use reasonable efforts to procure URA to consider the Application for purposes of granting Bonus GFA for the Project; and
 - (ii) use reasonable efforts to liaise with the Developer and URA in respect of any queries arising from the Incentive Scheme and the Application.

- 2.4. BCA may conduct random audits of the Project, including but not limited to conducting site visits, with one (1) working day's prior notice to the Developer.
- 2.5. BCA may:-
- (i) publish, in any manner and on any medium it deems fit, a list of projects including the Project that have or have not been accepted under the Incentive Scheme, withdrawal of the Letter of Acceptance and any statistical and/or other information in relation to the Project; and
 - (ii) publish information in respect of the Project in any manner and on any medium it deems appropriate in so far as such publication is for the purposes of publicity of the Incentive Scheme.
- 2.6. BCA does not warrant or guarantee that URA's Approval will be granted in respect of the Developer's PP Application.
- 2.7. If the Developer's Application is rejected by BCA, BCA shall be under no obligation to make available to the Developer the specific reasons for such rejection.

3. BE TRANSFORMATION GFA INCENTIVE SCHEME

- 3.1. The Developer shall comply with the terms and conditions contained in these T&Cs, including but not limited to the ITM Outcome Requirements as set out in Clauses 4, 5 and 6 below in respect of building works carried out at the Project.

4. DIGITALISATION REQUIREMENTS

- 4.1. The Developer shall comply with the following Digitalisation Requirements in respect of building works carried out at the Project:
- (i) submit the final IDD Implementation Strategy before the commencement of super-structural works;
 - (ii) adopt the IDD digital use cases in the Project in accordance with the final IDD Implementation Strategy and submit an updated IDD Implementation Strategy if there are any changes;
 - (iii) adopt a minimum of five (5) IDD digital use cases across the three (3) project life-cycle stages for residential building project/component and/or four (4) project life-cycle stages for non-residential building project/component with at least one IDD digital use case being adopted for each project life-cycle stage;
 - (iv) adopt the use of the CDE Data Standard;
 - (v) adopt the use of a CDE Compliant Digital Platform to manage the IDD digital use cases across the project life-cycle;
 - (vi) submit the first IDD activity log of digital platform(s) before the commencement of super-structural works and at every six month intervals thereafter; and
 - (vii) provide a final report of achievements of IDD digital use cases, including a list of the firms that have participated and the as-built BIM model handover for purposes of facility management for non-residential building project.

5. PRODUCTIVITY REQUIREMENTS

5.1. The Developer shall comply with the following Productivity Requirements in respect of the Project:

- (i) submit the final Productivity Implementation Plan (PIP) before the commencement of super-structural works and submit a progress report (which shall include any changes to the PIP) at every six month intervals thereafter;
- (ii) adopt a minimum 65% level of use of Prefab MEP systems for the area consisting of the corridors, service ducts and plant rooms and in accordance with the requirements set out in the Code of Practice on Buildability;
- (iii) adopt a minimum 70% level of use of system formworks and in accordance with the requirements set out in the Code of Practice on Buildability;
- (iv) adopt a minimum 65% level of use of PPVC if the Project is for residential and/or hotel use. Alternatively, adopt a minimum 65% level of use of prefabricated structural systems utilising minimally APCS for the total super-structural floor area of the Project and a minimum 80% level of use of prefabricated architectural systems for the total wall length of the super-structural works of the Project, along with suitable productive technologies to achieve a minimum level of 30% productivity improvement (compared to 2010 levels). The adoption of the PPVC and/or the prefabricated structural/architectural systems shall be in accordance with the requirements set out in the Code of Practice on Buildability;
- (v) adopt a minimum 80% level of use of structural steel systems if the Project is for office use. Alternatively, adopt a minimum 65% level of use of prefabricated structural systems utilising minimally APCS for the total super-structural floor area of the Project and a minimum 80% level of use of prefabricated architectural systems for the total wall length of the super-structural works of the Project, along with suitable productive technologies to achieve a minimum level of 30% productivity improvement (compared to 2010 levels). The adoption of the structural steel systems and/or the prefabricated structural/architectural systems shall be in accordance with the requirements set out in the Code of Practice on Buildability; and
- (vi) adopt a minimum 65% level of use of prefabricated structural systems utilising minimally APCS for the total super-structural floor area of the Project and a minimum 80% level of use of prefabricated architectural systems for the total wall length of the super-structural works of the Project along with suitable productive technologies to achieve a minimum level of 30% productivity improvement (compared to 2010 levels) if the Project is for any other use not stated in Clause 5.1 (iv) and (v) or subject to the review of URA's Design Advisory Panel. The adoption of the prefabricated structural/architectural systems shall be in accordance with the requirements set out in the Code of Practice on Buildability.

5.2. For a residential building/component in relation to the Project, the Developer shall:

- (i) include in all options and agreements for the sale, sublease or disposition of the residential units within the Project such information as to highlight to the potential purchasers, sublessees or parties agreeing or intending to agree to accept from the Developer the disposition of the residential units within the Project that the PPVC method is used for the Project and any resulting conditions of use of the residential units (arising from the use of the PPVC method), including but not limited to restrictions on hacking/alteration of walls (including by way of drilling) within the residential units and keeping access panels (if any) within the residential units unobstructed to facilitate periodic inspections;
- (ii) submit the evidence of application to BCA Quality Mark (QM) for Good Workmanship Scheme ("**QM Scheme**") administered by BCA for the Project to be assessed for the workmanship quality of the building works before the commencement of structural works, and comply with all requirements, procedures, directions and requests of BCA and pay all fees, charges and other amounts payable to BCA for and in relation to the assessment of the construction quality of the proposed development under the QM Scheme; and

- (iii) obtain QM certificates for all the residential units in the Project.

6. SUSTAINABILITY REQUIREMENTS

- 6.1. The Developer shall comply with the following Sustainability Requirements in respect of building works carried out at the Project:
- (i) submit the evidence of application to the BCA Green Mark (GM) Scheme ("**GM Scheme**") for the Project to be assessed on its environmental performance before the commencement of super-structural works;
 - (ii) obtain the GM rating of Platinum Super Low Energy (SLE) with exemplary performance under the Maintainability Section for the Project based on the prevailing standard published before the application for temporary occupation permit ("**TOP**") and to provide the necessary documentation, including but not limited to proof of the GM rating obtained by the Project, to BCA for its verification and records;
 - (iii) initiate and complete the GM Verification (Stage 1) required under the GM Scheme and submit documentation that demonstrates achievement of the GM rating no later than two (2) years after obtaining the TOP for the Project;
 - (iv) initiate and complete the GM Verification (Stage 2) for non-residential building/components for the assessment of the environmental performance based on the actual operation of the Project based on the methodology prescribed under the GM Scheme and submit documentation that demonstrates achievement of the environmental performance and GM rating no later than three (3) years after obtaining the TOP for the Project; and
 - (v) comply with all requirements, procedures, directions and request of BCA and pay all fees, charges and other amounts payable to BCA for and in relation to the assessment of the environmental performance of the Project as specified in Clauses 6.1 (i) to (iv) for purposes of the GM Scheme.

7. SECURITY DEPOSIT

- 7.1. BCA shall be entitled to issue a written Notice to the Developer to request for the payment of the Security Deposit or such part thereof to BCA, and the Developer shall, within thirty (30) days from the date of such Notice issued by BCA to the Developer, pay to BCA such amount of the Security Deposit as BCA may request by way of a performance bond or banker's guarantee in the form set out in Annex 1 of these T&Cs.
- 7.2. If the Security Deposit is in a form of a performance bond, such performance bond shall be issued by a licensed finance company registered with the Monetary Authority of Singapore and if the Security Deposit is in a form of a banker's guarantee, such banker's guarantee shall be issued by a bank established in Singapore and duly approved by BCA. The cost of obtaining such a performance bond or banker's guarantee shall be borne by the Developer.
- 7.3. The performance bond or banker's guarantee shall remain valid for up to three (3) years from the projected TOP date of the Project and the Developer shall extend the validity of the performance bond or banker's guarantee as so directed by BCA. In the event that the Agreement is unlikely to be completed before the expiry date of the performance bond or banker's guarantee, the Developer shall without demand, secure a renewal thereof or obtain a new performance bond or banker's guarantee for the same amount and on the same terms as the expiring performance bond or banker's guarantee and deposit the same with BCA. If such renewal or new performance bond or banker's guarantee is not deposited with BCA within thirty (30) days before the expiry of the expiring performance bond or banker's guarantee, BCA shall have the right to call upon the bank or finance company to pay the sum stated therein.

- 7.4. The Developer and BCA hereby expressly agree and accept that the amount payable for the BE Transformation GFA calculated in the manner as set out in Annex 2 is a genuine pre-estimate of the market value of the BE Transformation GFA.
- 7.5. If BCA finds, in its sole discretion, that the ITM Outcome Requirements have been fulfilled, then BCA shall refund the Security Deposit or balance thereof to the Developer within three (3) months from the date of such determination.

8. APPLICATION FOR PLANNING PERMISSION

- 8.1. The Developer shall submit the PP Application to URA for approval within six (6) months from the Effective Date, and such PP Application shall be accompanied by the following documents:
- (i) a copy of the Application;
 - (ii) a copy of the Letter of Acceptance; and
 - (iii) the completed Computation Form.
- 8.2. The Developer shall also provide a copy of the completed Computation Form to BCA within seven (7) days from the submission of the PP Application to URA.
- 8.3. If the Developer receives URA's Approval in respect of its PP Application, the Developer shall provide a copy of URA's Approval to BCA as soon as practicable, and in any case no later than seven (7) days from the date the Developer receives URA's Approval.

9. LIMITATION OF LIABILITY

- 9.1. To the extent permitted under law, BCA and its directors, servants, agents, employees and authorized representatives shall not be liable for any and all direct and indirect loss, damage or claims arising from or in relation to the Agreement including the Letter of Acceptance.
- 9.2. To the extent permitted under law, BCA and its directors, servants, agents, employees and authorized representatives shall not be liable for any damage that arises from or relates to the Project or properties in the vicinity of the Project in the course of the performing the Agreement.
- 9.3. The Developer shall fully indemnify, defend and hold harmless BCA and its directors, servants, agents, employees and authorized representatives from any loss, damage, costs or expenses (including legal costs on an indemnity basis) incurred or to be incurred by BCA and its directors, servants, agents, employees and authorized representatives by any third parties arising from or relating to the Agreement.

10. TERMINATION

- 10.1. Without prejudice to its rights under common law, BCA may, without any compensation to the Developer, terminate the Agreement by giving the Developer a written Notice of termination, if:
- (i) the PP Application is rejected by URA;
 - (ii) the Developer fails to comply with any of the ITM Outcome Requirements, and the Developer fails to rectify the non-compliance within fourteen (14) days from the date of a written Notice of such non-compliance issued by BCA to the Developer in respect of the non-compliance;
 - (iii) the Developer submits information and/or documents which are false, forged, fraudulent, misleading or reasonably suspected by BCA to be false, forged, fraudulent or misleading; or

- (iv) the Developer fails to comply with any terms and conditions of the Agreement, including any terms and conditions in these T&Cs, and the Developer fails to rectify the non-compliance within fourteen (14) days from the date of a written Notice of such non-compliance issued by BCA to the Developer in respect of the non-compliance.

10.2. In the event of termination of the Agreement pursuant to Clause 10.1 above, the rights and obligations of each of the Parties shall be as set out in the table below:

Whether Bonus GFA has been utilised at the time of termination	Whether Developer has provided the Security Deposit at the time of termination	Rights and obligations on termination
Yes	Yes	- The Developer shall be liable to pay BCA the Termination Sum and BCA shall be entitled to recover such Termination Sum from the Developer⁽¹⁾ - BCA shall be entitled to withdraw its Letter of Acceptance issued to the Developer in respect of the Project
No	Yes	- BCA shall be entitled to withdraw its Letter of Acceptance issued to the Developer in respect of the Project - BCA shall refund the Security Deposit to the Developer
No	No	BCA shall be entitled to withdraw its Letter of Acceptance issued to the Developer in respect of the Project

Note:

(1) BCA shall be entitled to recover the Termination Sum from the Developer in the following manner:

- (i) drawing on the full amount of the Security Deposit provided by the Developer to BCA; and
- (ii) by issuing the Notice for Balance Termination Sum to the Developer for the payment of the Balance Termination Sum.

10.3. Save as expressly provided for to the contrary, a termination of the Agreement will be without prejudice to the accrued rights, obligations and liabilities of BCA and the Developer under the Agreement.

10.4. Regardless of termination, discharge or expiry of the Agreement, the rights and obligations of BCA and the Developer under the Agreement which by their context, intent and meaning would reasonably be expected to survive the termination, discharge or expiry of the Agreement or any part thereof, shall so survive, including but not limited to Clauses 7, 9, 11 and 14.

11. DISPUTE RESOLUTION

11.1. In the event of a dispute arising from or in relation to the Agreement, Parties shall attempt in good faith to settle the dispute through mutual discussion within fourteen (14) days from the date of commencement of such mutual discussion or any other timeframe as may be agreed by the Parties. If the dispute remains unresolved within:

- (i) fourteen (14) days from the date of commencement of such mutual discussion; or
- (ii) any other timeframe as may be agreed by the Parties,

whichever is the latest, the Parties shall discuss the dispute with the senior management of BCA and use all reasonable endeavours to resolve the dispute:

- (i) within a further fourteen (14) days from the meeting with the senior management; or
- (ii) within any other timeframe as may be agreed by the relevant Parties; or
- (iii) if for whatever reason the meeting is not conducted within thirty (30) days from a Party's request to meet,

whichever is the latest.

- 11.2. In the event of a failure to resolve the dispute in accordance with Clause 11.1, the relevant Parties shall make reasonable efforts to resolve the dispute by mediation in accordance with the mediation procedure for the time being in force, of the Singapore Mediation Centre. One mediator shall be appointed by the Singapore Mediation Centre to facilitate the mediation. A Party who receives a notice for mediation from the other Party shall consent to and participate in the mediation in good faith in accordance with this Clause. The relevant Parties undertake to abide by the terms of any settlement reached at the mediation. The Parties hereby agree that there will be a minimum of one (1) full-day mediation session. Failure to comply with this Clause shall be deemed to be a breach of the Agreement.
- 11.3. If the dispute is not resolved by mediation under Clause 11.2 within sixty (60) days (or any other timeframe as may be agreed by the Parties) from the initiation of that mediation, the Parties irrevocably agree to refer the dispute to and have the dispute finally resolved by arbitration in Singapore in accordance with the Arbitration Rules of the Singapore International Arbitration Centre for the time being in force, which rules are deemed to be incorporated by reference. The venue and seat of arbitration shall be Singapore. The Tribunal shall consist of one (1) arbitrator and the language of the arbitration shall be English.

12. NO WAIVER

- 12.1. Any failure to exercise, or any delay in exercising, by BCA of any right or remedy under the Agreement shall not operate as a waiver of such right or remedy.

13. RELATIONSHIP

- 13.1. Nothing in the Agreement shall be construed as to create a partnership or joint venture of any kind between the Parties.

14. CONFIDENTIALITY

- 14.1. Each of the Parties shall at all times keep confidential (and procure that its respective representatives and nominees keep confidential) any confidential information in relation to the Incentive Scheme or to the other Party and its business and affairs which it or they may acquire in the performance of the Agreement and shall not use or disclose such confidential information except with the prior written consent of the other Party.
- 14.2. The provision of Clause 14.1 shall not apply in respect of: (a) any disclosure required by any law, regulation, order or directive of any governmental or regulatory body or court of competent jurisdiction in Singapore or elsewhere (including any recognized stock exchange); (b) any information disclosed by a Party to its representative or nominee for the purpose of the Agreement; (c) any information which comes into the public domain otherwise than by a breach of Clause 14.1 by a Party; (d) any information which is developed by a Party independently of the confidential information disclosed by the other Party; or (e) any disclosure to a Party's financial or legal advisors.

15. WHOLE AGREEMENT

- 15.1. The Agreement sets forth the entire agreement and understanding between the Parties in respect of the subject matter hereof.
- 15.2. The Developer acknowledges that it has not been induced to enter into the Agreement by any representation, warranty or undertaking not expressly incorporated into the Agreement.

16. VARIATION

- 16.1. In the event any of the Parties seeks to vary the terms of the Agreement, the Parties must be in agreement regarding the variation, and no such variation of the Agreement shall be effective unless such variation is agreed to in writing and signed by all Parties.

17. ASSIGNMENT

- 17.1. The Developer shall not, without BCA's prior written consent, assign or otherwise transfer to any other party its rights, benefits and/or obligations under the Agreement.

18. THIRD-PARTY RIGHTS

- 18.1. A person who is not a party to the Agreement shall have no rights under the Contracts (Rights of Third Parties) Act (Cap. 53B) of Singapore to enforce or enjoy the benefit of any term of the Agreement.

19. NOTICES

- 19.1. Any notice or other communication in connection with this Deed (each, a "**Notice**") shall be:
- (i) in writing;
 - (ii) if applicable, legible; and
 - (iii) delivered by e-mail, hand, fax, pre-paid registered post or courier in accordance with this Clause 19.
- 19.2. A Notice to the Developer shall be sent to the address or e-mail address provided by the Developer under the "Project Team Details" section of the Application, or such other person or address as the Developer may notify in writing to BCA from time to time.
- 19.3. A Notice to BCA shall be sent to the following address or e-mail address, or such other person or address as BCA may notify in writing to the Parties from time to time:

BUILDING AND CONSTRUCTION AUTHORITY

Address: 52 Jurong Gateway Road
#11-01, Singapore 608550 (Above JEM)

E-mail: BCA_BE_ITM_GFA@bca.gov.sg

Attention: Administrator
BE Transformation GFA Incentive Scheme

19.4. A Notice delivered in accordance with this Clause 19 shall be effective upon receipt and shall be deemed to have been received:

- (i) 2 days after posting, if delivered by pre-paid registered post;
- (ii) at the time of delivery, if delivered by hand or courier;
- (iii) at the time when receipt is confirmed, if delivered by fax to the specified fax number; or
- (iv) at the time of transmission, if delivered by e-mail before 6pm on any Business Day, and on the following Business Day if sent after 6pm on any Business Day.

20. SEVERANCE

20.1. A court or administrative body of competent jurisdiction's determination that any provision of the Agreement is invalid or unenforceable shall not affect the other provisions of the Agreement, which shall remain in full force and effect. The Parties agree to substitute any invalid or unenforceable provision with a valid and enforceable provision which achieves similar effect as the invalid or unenforceable provision.

21. GOVERNING LAW

21.1. The Agreement is governed by and shall be construed in accordance with the laws of Singapore

BUILT ENVIRONMENT TRANSFORMATION GROSS FLOOR AREA INCENTIVE SCHEME Computation Form for BE Transformation GFA Quantum and Security Deposit		
PROPOSED BE TRANSFORMATION GFA QUANTUM AND USES		
Proposed development GFA, excluding all bonus GFA (subject to maximum allowable intensity for the site) [1]	Sqm	
Proposed uses and use quantum for BE Transformation GFA <i>* proposed uses and use quantum shall comply with Master Plan zoning, and any additional requirements imposed as part of the endorsement for BE Transformation GFA</i>	Total BE Transformation GFA [2]:	
	Sqm	
	Use Quantum for Bonus GFA	
	GFA	Use Type
	(e.g. 100sqm)	(e.g. Commercial)
(e.g. 100sqm)	(e.g. residential)	
Bonus GFA as % of Total Proposed GFA [(2) / (1) * 100] <i>*to be truncated to 2 decimal places</i>	%	
COMPUTATION OF EQUIVALENT MARKET VALUE (EMV)		
Development Charge (DC) Sector and Rate* <i>* DC rate is pegged to the date of planning submission to URA where the Bonus GFA is proposed and leading to a conveyance where the bonus GFA and usage of the GFA is first endorsed.</i> <i>The DC sector and rate can be assessed on URA SPACE at www.ura.gov.sg/maps</i>	Sector:	
	DC Rate	Use Type
Land Value [3] = Development Charge (DC) Rate / 0.7* <i>* formula is based on DC rates at 70% of the enhancement in land value</i>	Land Value	Use Type
EQUIVALENT MARKET VALUE [(2) X (3)] <i>* If the bonus GFA under this Scheme is used for multiple uses, to compute performance bonds based on the respective land value of the said use.</i>	\$	
SECURITY DEPOSIT [50% X EMV] <i>* in the form of a performance bond or banker's guarantee (Truncate to 2 decimal place)</i>	\$	

Examples on the Computation of Bonus GFA Quantum and Security Deposit

Example 1: Single-Use Development

A residential development at Marine Parade (Sector 94) on a site zoned residential in Master Plan 2019, with proposed GFA of 20,000 sqm (permissible under Master Plan without bonus GFA)*.

DC rate for Group B2 (as of Sept 2021) : \$9,450/sqm
 Land Value : \$13,500/sqm (derived from DC rates x 10/7)

Allowable BE Transformation GFA of 3% = 20,000sqm X 3% = 600 sqm

Proposed Bonus GFA from other GFA incentive schemes = 1,400 sqm

Total Bonus GFA = 600 + 1400 = 2000 sqm (Check that total bonus GFA is within 10% cap**)

Total proposed GFA for the development = 20,000 sqm + 2,000 sqm = 22,000sqm.

Equivalent Market Value (EMV) = Land Value X Allowable BE Transformation GFA
 (Use Quantum)
 = \$13,500 X 600 sqm
 = \$8,100,000

Security Deposit to be raised at 50% of EMV = \$4,050,000.

* The maximum allowable number of dwelling units for residential developments located outside of Central Area is derived from the Master Plan permissible intensity, [which excludes any bonus GFA the site is eligible for](#). In this case, the maximum allowable number of dwelling units = 20,000sqm / 85 sqm = 235 dwelling units (rounded down, excluding bonus GFA).

**The total proposed Bonus GFA is allowed over and above the Masterplan Gross Plot Ratio (MP GPR) subject to [a maximum of 10% of the MP GPR](#).

Example 2: Mixed-Use Development

Mixed use development comprising commercial and residential uses at Marine Parade (Sector 94), on a site zoned Commercial & Residential in Master Plan 2019, with proposed GFA of 10,000 sqm (comprising 4,000 sqm Commercial (40%), 6,000 sqm Residential (60%).)

DC rate for Group A (as of Sept 2021) :\$9,800/sqm
 DC rate for Group B2 (as of Sept 2021) :\$9,450/sqm
 Land value for Group A :\$14,000/sqm (derived from DC rates X 10/7)
 Land value for Group B2 :\$13,500/sqm (derived from DC rates X 10/7)

The final proposed GFA, inclusive of all bonus GFA, has to comply with the maximum allowable Commercial quantum of 40% (under Commercial & Residential zoning). The applicant decides to maximise the allowable bonus GFA for commercial (i.e 40% of allowable BE Transformation bonus GFA), with the remaining 60% for residential uses.

Allowable BE Transformation GFA of 3% = 10,000 sqm X 3% = 300 sqm

$$\begin{aligned}
 \text{Equivalent Market Value (EMV)} &= [\text{Land value (Comm rate)} \times \text{BE Bonus GFA (Use Quantum)}] \\
 &\quad + [\text{Land value (Resi rate)} \times \text{BE Bonus GFA (Use quantum)}] \\
 &= [\$14,000 \times 120 \text{ sqm}] + [\$13,500 \times 180 \text{ sqm}] \\
 &= \$4,110,000
 \end{aligned}$$

Security Deposit to be raised at 50% of EMV = \$2,055,000.

Example 3: Developments with Planning Restrictions

A Business Park development at Changi (Sector 98) on a site zoned Business Park in Master Plan 2019, with proposed GFA of 30,000sqm (Comprising 28,000sqm Business Park and 2,000sqm Commercial).

DC rate for Group A (as of Sept 2021)	:\$9,800/sqm
DC rate for Group D (as of Sept 2021)	:\$1,407/sqm
Land value for Group A	:\$14,000/sqm (derived from DC rates X 10/7)
Land value for Group D	:\$2,010/sqm (derived from DC rates X 10/7)

Due to site constraints, the site is assessed to be able to accommodate 1% BE Transformation GFA.

Allowable BE Transformation Bonus GFA = 30,000 sqm x 1% = 300sqm

The applicant decides to split usage of the BE Transformation GFA equally, at 0.5% for Business Park use and 0.5% for Commercial Use.

$$\begin{aligned}
 \text{Equivalent Market Value (EMV)} &= [\text{Land value (Comm rate)} \times \text{BE Bonus GFA (Use Quantum)}] + [\text{Land value (Business Park rate)} \times \text{BE Transformation Bonus GFA (Use Quantum)}] \\
 &= [\$14,000 \times 150 \text{ sqm}] + [\$2,010 \times 150 \text{ sqm}] \\
 &= \$2,401,500
 \end{aligned}$$

Security Deposit to be raised at 50% of EMV = \$1,200,750.