

## Schedule 5 - Design Development

### 1 DEFINITIONS

Capitalised terms used in this Schedule 5 which are not defined below or in Clause 1.1 of this Agreement are defined in Part G (Glossary) of Schedule 12 (Design Specifications) of this Agreement.

<b>Term</b>	<b>Meaning</b>
<b><i>Bid Design Development Plan</i></b>	means the version of the Design Development Plan agreed between Project Co and the State included at Attachment 3 (D&C Plans).
<b><i>Common Data Environment</i></b>	means the single information source that collects, manages and disseminates graphical and non-graphical Digital Data and other information to facilitate collaboration, including with the State, and to mitigate risk of duplication and mistakes.
<b><i>Contractual Close Design Documentation</i></b>	means the Bid Design Documentation as updated and amended by Project Co prior to Contractual Close as set out at Attachment 1 (Contractual Close Design Documentation).
<b><i>Delayed Design and Procurement Plan</i></b>	means the plan of that name as described in Section 5.2 of this Schedule 5 (Design Development).
<b><i>Design Deliverables</i></b>	means the Design Package deliverables to be prepared and submitted by Project Co for each of the Design Stages identified in the Design Deliverables Tables.
<b><i>Design Deliverables Schedule</i></b>	has the meaning given in Section 4.1(h) of this Schedule 5 (Design Development).
<b><i>Design Deliverables Tables</i></b>	means the tables included in Section 16 of this Schedule 5 (Design Development).
<b><i>Design Development Plan</i></b>	means the plan of that name setting out the process for managing the Design Development Process to be prepared by Project Co and containing the information and documentation required by this Agreement (including Schedule 19), as further developed, reviewed, amended and updated from time to time by Project Co in accordance with the terms of this Agreement.
<b><i>Design Development Presentations</i></b>	means the presentations conducted by Project Co during the Design Development Process in accordance with the Design Development Sub-Program at or around the conclusion of: <ul style="list-style-type: none"> <li>(a) Design Stage 1;</li> <li>(b) Design Stage 2; and</li> <li>(c) Design Stage 3.</li> </ul>
<b><i>Design Packages</i></b>	means the Technical Design Packages and the Functional Group Design Packages, to be prepared by Project Co in accordance with the requirements of this Schedule 5 (Design Development).
<b><i>Design Peer Review</i></b>	means the formal design review process undertaken by Project Co in accordance with Clause C20.3 (Design Review) of Schedule 12 (Design

<b>Term</b>	<b>Meaning</b>
	Specifications).
<b><i>Design Stage</i></b>	means the Design Stages relating to: (a) Design Stage 1; (b) Design Stage 2; and (c) Design Stage 3.
<b><i>Design Stage Report</i></b>	means the Design Stage 1 Report, the Design Stage 2 Report and the Design Stage 3 Report, or any of them as the context requires.
<b><i>Design Stage 1</i></b>	means for each Design Package, the stage during which Project Co prepares and submits to the State Representative the Stage 1 Design Deliverables including in general terms the developed schematic design for each Design Package including a Federated BIM Model which incorporates the Model Elements developed to the Level Of Development specified in the LOD Tables as applicable for Design Stage 1.
<b><i>Design Stage 1 Report</i></b>	means the report to be prepared by Project Co at the end of Design Stage 1 describing the schematic design for the Stadium, the Sports Precinct and the Off-Site Infrastructure.
<b><i>Design Stage 2</i></b>	means for each Design Package, the stage during which Project Co prepares and submits to the State Representative the Stage 2 Design Deliverables including in general terms the detailed design for each Design Package including a Federated BIM Model which incorporates the Model Elements developed to the Level Of Development specified in the LOD Tables as applicable for Design Stage 2.
<b><i>Design Stage 2 Report</i></b>	means the report to be prepared by Project Co at the end of Design Stage 2 describing the detailed design for the Stadium, the Sports Precinct and the Off-Site Infrastructure.
<b><i>Design Stage 3</i></b>	means for each Design Package, the stage during which Project Co prepares and submits to the State Representative the Stage 3 Design Deliverables including in general terms the final design For Pre-Fabrication Documentation and For Construction Documentation for each Design Package including a Federated BIM Model which incorporates the Model Elements developed to the Level Of Development specified in the LOD Tables as applicable for Design Stage 3.
<b><i>Design Stage 3 Report</i></b>	means the report to be prepared by Project Co at the end of Design Stage 3 describing the final design for the Stadium, the Sports Precinct and the Off-Site Infrastructure and including the For Pre-Fabrication Documentation and For Construction Documentation.
<b><i>Development Concept Plan</i></b>	has the meaning given to it in Part G (Glossary) of Schedule 12 (Design Specifications).
<b><i>Digital Data</i></b>	means all digital information incorporated in the BIM Models, including all metadata.
<b><i>File Transfer Protocol</i></b>	means an open protocol used to transfer files online.
<b><i>For Construction</i></b>	means the Design Stage 3 Design Documentation which includes all

<b>Term</b>	<b>Meaning</b>
<b><i>Documentation</i></b>	documentation created by Project Co for the design, construction, commissioning and completion of the DBFM Works developed to a level of detail which includes all information required for the purpose of constructing, commissioning and completing the DBFM Works, in accordance with this Agreement.
<b><i>For Fabrication Deliverables</i></b>	<p>means the deliverables to be prepared and submitted by Project Co describing the final design For Fabrication Documentation for elements of the DBFM Works which require fabrication prior to incorporation into the DBFM Works, comprising the:</p> <ul style="list-style-type: none"> <li>(a) Stadium façade;</li> <li>(b) Stadium roof;</li> <li>(c) Stadium precast concrete elements;</li> <li>(d) Vertical Transportation;</li> <li>(e) joinery;</li> <li>(f) Drop-In Seats;</li> <li>(g) Drop-In Cricket Wicket trays;</li> <li>(h) Pitch access stairs for Entertainment Events</li> <li>(i) arbour in the Sports Precinct;</li> <li>(j) playgrounds;</li> <li>(k) signage;</li> <li>(l) Public Art (as applicable); and</li> <li>(m) other Model Elements for the Stadium and Sports Precinct reasonably requested by the State,</li> </ul> <p>including a Federated BIM Model which incorporates the Model Elements developed to the Level Of Development specified in the LOD Tables as applicable For Fabrication Deliverables.</p>
<b><i>For Fabrication Documentation</i></b>	means the For Fabrication Deliverables Design Documentation, which includes all documentation (including shop drawings) created by Project Co for those elements of the DBFM Works which require fabrication prior to incorporation into the DBFM Works, developed to a level of detail which includes all information required for the purpose of fabricating those elements, in accordance with this Agreement.
<b><i>For Pre-Fabrication Documentation</i></b>	means the Design Stage 3 Design Documentation which includes all documentation created by Project Co for those elements of the DBFM Works which require fabrication prior to incorporation into the DBFM Works, developed to a level of detail which fully describes the design outcome and is suitable for the purpose of preparing For Fabrication Documentation for those elements, including shop drawings, in accordance with this Agreement.
<b><i>Functional Group</i></b>	means a collection of Functional Areas grouped together for the purposes of forming a Design Package.
<b><i>Functional Group Design Packages</i></b>	<p>means the Design Deliverables for each of the following Functional Groups and includes relevant extracts from the SOA, RDS and FF&amp;E List for the Functional Group:</p> <ul style="list-style-type: none"> <li>(a) Sports Precinct Design Package including the Event Overlay Plans</li> </ul>

<b>Term</b>	<b>Meaning</b>
	for the Sports Precinct;
	(b) Circulation Areas Design Package including the Traffic and Access Plan;
	(c) Team Facilities Design Package including the Event Overlay Plans for the Team Facilities;
	(d) Seating Bowl Design Package including the Seating Bowl Report including the Event Overlay Plans for the Seating Bowl;
	(e) General Admission Areas Design Package including the Event Overlay Plans for the General Admission Areas;
	(f) Premium Product Areas Design Package including the Event Overlay Plans for the Premium Product Areas;
	(g) Catering Facilities Design Package including the Catering Facilities Report including the Event Overlay Plans for the Catering Facilities;
	(h) Retail Facilities Design Package including the Event Overlay Plans for the Retail Facilities;
	(i) Waste Management Design Package including the Waste Management Plan;
	(j) Stadium Operations and Event Day Facilities Design Package including the Event Overlay Plans for the Stadium Operations and Event Day Facilities;
	(k) Media Facilities Design Package including the Event Overlay Plans for the Media Facilities;
	(l) Pitch and Associated Facilities Design Package including the Pitch Report including the Event Overlay Plans for the Pitch;
	(m) Commercial Facilities Design Package; and
	(n) Event Overlay Package including all Event Overlay Plans for the Stadium and Sports Precinct.

**LOD100** means the Level Of Development where Model Elements are developed to a conceptual level, such that overall building massing indicative of height, volume, location and orientation are able to be modelled in three dimensions or represented by other data.

**LOD200** means the Level Of Development where Model Elements are developed to their approximate geometry, such that the Model Elements are modelled as generalised systems or assemblies with approximate quantities, size, shape, location and orientation. Preliminary or generalised non-geometric information pertaining to the Model Elements including (as applicable to the Model Elements) make and model, materials, colour, finish, performance specification, construction and installation requirements including as set out in the LOD Tables, will be attached to the Model Elements.

**LOD300** means the Level Of Development where Model Elements are developed to their precise geometry, such that the Model Elements are modelled as specific assemblies accurate in terms of quantity, size, shape, location and orientation. Accurate non-geometric information pertaining to the Model Elements, including (as applicable to the Model Elements) make and model, materials, colour, finish, performance specification, controls, metering and interfaces with other building systems and construction and installation requirements including as set out in the LOD Tables and as reasonably required to undertake construction of those Model Elements,

<b>Term</b>	<b>Meaning</b>
	will be attached to the Model Elements.
<b><i>LOD350</i></b>	means the Level Of Development where Model Elements are developed to their precise geometry, such that the Model Elements are modelled as specific assemblies accurate in terms of quantity, size, shape, location and orientation, and interfaces with other building systems Accurate non-geometric information pertaining to the Model Elements, including (as applicable to the Model Elements) make and model, materials, colour, finish, performance specification, construction and installation requirements including as set out in the LOD Tables and as reasonably required to undertake construction of those Model Elements, will be attached to the Model Elements.
<b><i>LOD400</i></b>	means the Level Of Development where Model Elements are developed to a level suitable for fabrication, such that the Model Elements are modelled as specific assemblies accurate in terms of quantity, size, shape, location and orientation with complete fabrication, assembly and detailing information. Accurate non-geometric information pertaining to the Model Elements including (as applicable to the Model Elements) make and model, materials, colour, finish, performance specification, construction and installation requirements including as set out in the LOD Tables and as reasonably required to undertake fabrication of those Model Elements, will be attached to the Model Elements.
<b><i>LOD500</i></b>	means the Level Of Development where Model Elements are developed to reflect the as built element, such that the Model Elements are modelled as constructed assemblies actual and accurate in terms of quantity, size, shape, location and orientation. Actual and accurate non-geometric information pertaining to the Model Elements including (as applicable to the Model Elements) make and model, materials, colour, finish, performance specification, construction and installation requirements, installation date, testing and commissioning information, lifecycle, cleaning and maintenance information as reasonably required by Project Co for the performance of the Services or by the State and the Stadium Operator for conducting the Stadium Activities, will be attached to the Model Elements.
<b><i>LOD Tables</i></b>	means the table of that name incorporated in Appendix 1 to the BIM Management Plan included in Attachment 3 (D&C Plans), which sets out the Level Of Development for individual Model Elements at each Design Stage and at Technical Completion and Commercial Acceptance.
<b><i>Review Period</i></b>	has the meaning given to it in Schedule 3 (Review Procedures).
<b><i>Stage 1 Design Deliverables</i></b>	means for each of the Design Packages the Design Deliverables: <ul style="list-style-type: none"> <li>(a) listed under the heading Stage 1 Design Deliverables in the Design Deliverables Tables;</li> <li>(b) otherwise proposed by Project Co to be provided as Stage 1 Design Deliverables, as approved by the State Representative; and</li> <li>(c) that Project Co is required to submit to the State Representative during Design Stage 1, in accordance with the terms of this Agreement.</li> </ul>
<b><i>Stage 2 Design Deliverables</i></b>	means for each of the Design Packages the Design Deliverables: <ul style="list-style-type: none"> <li>(a) listed under the heading Stage 2 Design Deliverables in the Design</li> </ul>

Term	Meaning
	<p>Deliverables Tables;</p> <p>(b) otherwise proposed by Project Co to be provided as Stage 2 Design Deliverables, as approved by the State Representative; and</p> <p>(c) that Project Co is required to submit to the State Representative during Design Stage 2, in accordance with the terms of this Agreement.</p>
<b><i>Stage 3 Design Deliverables</i></b>	<p>means for each of the Design Packages the Design Deliverables:</p> <p>(a) listed under the heading Stage 3 Design Deliverables in the Design Deliverables Tables;</p> <p>(b) otherwise proposed by Project Co to be provided as Stage 3 Design Deliverables, as approved by the State Representative; and</p> <p>(c) that Project Co is required to submit to the State Representative during Design Stage 3, in accordance with the terms of this Agreement,</p> <p>which for the avoidance of doubt, will be developed to the status of For Construction Documentation, or For Pre-Fabrication Documentation in the case of those elements of the DBFM Works which require fabrication prior to incorporation into the DBFM Works, irrespective of the Level Of Development specified in the LOD Table for Design Stage 3.</p>
<b><i>Technical Design Packages</i></b>	<p>means the:</p> <p>(a) Urban Design Package;</p> <p>(b) Landscape Design Package;</p> <p>(c) Public Art Design Package;</p> <p>(d) Wayfinding and Signage Design Package;</p> <p>(e) Architectural Design Package;</p> <p>(f) Civil Works and Stormwater Design Package;</p> <p>(g) Structural Works Design Package;</p> <p>(h) Acoustic Design Package;</p> <p>(i) Fire Engineering and Fire Protection Systems Design Package;</p> <p>(j) Hydraulic Services Design Package;</p> <p>(k) Mechanical Services Design Package;</p> <p>(l) Electrical Services Design Package;</p> <p>(m) Lighting Systems Design Package;</p> <p>(n) ICT Systems Design Package;</p> <p>(o) AV Systems Design Package;</p> <p>(p) Security Systems Design Package;</p> <p>(q) Vertical Transportation Design Package;</p> <p>(r) Building Management System Design Package;</p> <p>(s) Safety in Design Package;</p> <p>(t) any other design packages identified as such in the Design Development Plan; and</p> <p>(u) any other design packages approved by the State Representative in accordance with this Schedule.</p>

Term	Meaning
<b>User Group</b>	<p>means the user groups established for the DBFM Project to input into the Design Development Process identified in the Design Development Plan but including as a minimum the following user groups:</p> <ul style="list-style-type: none"> <li>(a) peak user group;</li> <li>(b) football user group;</li> <li>(c) cricket user group;</li> <li>(d) rectangular user group;</li> <li>(e) sports fan user group;</li> <li>(f) access and inclusion user group;</li> <li>(g) media user group;</li> <li>(h) Emergency Services user group; and</li> <li>(i) Events user group.</li> </ul>

## 2 DESIGN DEVELOPMENT PROCESS

### 2.1 General

- (a) **(Design Development Process):** The Design Development Process is the process by which Project Co progressively develops the design of the Stadium, the Sports Precinct and the Off-Site Infrastructure from the Contractual Close Design Documentation (at Attachment 1 of this Agreement) to the For Construction Documentation and otherwise includes all other tasks identified in this Schedule 5 and this Agreement as forming part of the Design Development Process.
- (b) **(Design Packages):** To facilitate the conduct of the Design Development Process, the State has divided the design work for the Stadium, the Sports Precinct and the Off-Site Infrastructure into Design Packages, which relate to aspects of the Stadium, the Sports Precinct and the Off-Site Infrastructure or design elements (as applicable).
- (c) All Design Packages must be prepared in accordance with the requirements set out in clause 2.5 and Section 12 of this Schedule 5 (Design Development).
- (d) **(Design Stages):** The Design Deliverables for each Design Package are divided into the Design Stages consisting of:
  - (i) Design Stage 1, which, in general terms, requires Project Co to further develop the Contractual Close Design Documentation into a developed schematic design within a Federated BIM Model which incorporates the Model Elements developed to the Level Of Development specified in the LOD Tables;
  - (ii) Design Stage 2, which, in general terms, requires Project Co to develop the schematic design from Design Stage 1 into a detailed design within a Federated BIM Model which incorporates the Model Elements developed to the Level Of Development specified in the LOD Tables; and
  - (iii) Design Stage 3, which, in general terms, requires Project Co to develop the detailed design from Design Stage 2 into a final design as For Construction Documentation within a Federated BIM Model which incorporates the Model Elements developed to the Level Of Development specified in the LOD Tables.
- (e) **(Design Deliverables):** Project Co must for each Design Package submit the complete set of Design Deliverables for each Design Stage to the State for review in accordance with the timing set out in the Design Development Sub-Program.
- (f) **(Review Period):** Project Co must not submit Design Deliverables for a subsequent Design Stage to the State for review until the previous Design Stage

has been completed and the expiry of the Review Period for the previous Design Stage has expired.

- (g) **(Endorsement of Design Stage 3):** Subject to Section 2.6 of this Schedule 5 (Design Development), upon State endorsement of Design Stage 3 for a Design Package, Project Co may proceed to construct that part of the DBFM Works.
- (h) **(For Fabrication Deliverables):** Project Co must progressively submit the For Fabrication Deliverables to the State for information as they are developed, including in accordance with the timing set out in the Design Development Sub-Program.

## 2.2 Federated BIM Model

- (a) Except as set out in clause 2.3(a), Project Co must develop, maintain and update the Design Documentation as Digital Data in a Federated BIM Model in accordance with this Agreement, including the requirements set out in the BIM Management Plan included in Attachment 3 (D&C Plans).
- (b) Subject to the State's right to use the design in accordance with, and to the extent identified in, Clause 51 of this Agreement, Project Co must:
  - (i) notify the State Representative of the person nominated to act on its behalf to manage the development, maintenance and updating of the BIM Models, the Design Development Plan and the BIM Management Plan;
  - (ii) provide the Common Data Environment and File Transfer Protocol (or both) to enable the State to use the BIM Models;
  - (iii) select and remain solely responsible for the suitability and integrity of the selected software and any information, drawings, specifications or other information extracted from any BIM Models; and
  - (iv) at the completion of each Design Stage, archive the Digital Data for all Model Elements included in the Federated BIM Model, to maintain an accurate record of the status of the design at these milestones.

## 2.3 2D Supplementary Drawings

- (a) Project Co may develop limited aspects of the Design Documentation in 2D Supplementary Drawings as set out in the BIM Management Plan included in Attachment 3 (D&C Plans), provided that the information included in the 2D Supplementary Drawings is associated to relevant systems and assemblies in the Federated BIM Model at Technical Completion.
- (b) **(CADD Protocols)** to the extent that any Deliverable comprises 2D Supplementary Drawings and those drawings are prepared using computer aided drafting (as opposed to being derived from the BIM Models), such documentation must be prepared in accordance with the requirements and protocols for computer aided drafting and design set out in clause A15.1.6 (Building Records Policy) of Schedule 12 (Design Specifications), as further set out at the following website:

<http://www.bmw.wa.gov.au/CADD/index.html>

## 2.4 As Built BIM Model

Project Co must develop, maintain and update the Design Documentation as Digital Data in a Federated BIM Model in accordance with this Agreement, including the requirements set out in the BIM Management Plan included in Attachment 3 (D&C Plans) of this Agreement.

## 2.5 Sequence, concurrency and overlap of Design Packages

- (a) The outcome of the Development Concept Plan and Urban Design Package may impact on other Design Packages.
- (b) Project Co must complete and submit the Development Concept Plan and Urban Design Package for review by the State prior to submitting any other Design Packages for review by the State.
- (c) To the extent that Project Co elects to carry out design work for the Development Concept Plan and Urban Design Package and any other Design Packages concurrently, it does so at its own risk and it must amend all relevant Design Deliverables to address the outcome of the State's review of the Development Concept Plan and Urban Design Package.



- (d) Project Co must submit Design Packages that are related to, or reliant upon, each other for review at the same time in order to allow the State the opportunity to simultaneously review those aspects of the Design Packages that are interdependent. The State may defer review of a Design Package if an interdependent Design Package is not submitted for review at the same time and the State will provide notice of such deferral to Project Co.
- (e) Subject to Sections 2.1(f), 2.5(c) and 2.5(d), Project Co may submit Design Packages in any order so as to suit their design development or construction program.
- (f) Project Co must not submit Design Deliverables in respect of a Design Stage unless:
  - (i) Project Co has prepared all Design Deliverables in accordance with this Agreement; and
  - (ii) for Design Stages other than Design Stage 1:
    - (A) Project Co has submitted all Design Deliverables relating to the relevant Design Package and Design Stage for the previous Design Stage in accordance with Schedule 3 (Review Procedures);
    - (B) the Review Period has expired for the previous Design Stage;
    - (C) Project Co has addressed the actions arising from the previous Design Peer Review; and
    - (D) if the State has rejected or provided comments on the Design Deliverables in accordance with Schedule 3 (Review Procedures) for a previous Design Stage, Project Co has complied with its obligations in accordance with Schedule 3 (Review Procedures) in connection with such comments (including if necessary, to address particular comments or to re-submit Design Deliverables).

## 2.6 Proceed at risk

Without limiting Project Co's obligations under this Agreement, Project Co may not commence construction of any part of the DBFM Works that is the subject of a Design Package until:

- (a) Project Co has submitted all Stage 3 Design Deliverables to the State in accordance with the requirements of this Agreement; and
- (b) the State has reviewed (or has been deemed to have reviewed) the Stage 3 Design Deliverables in accordance with Schedule 3 (Review Procedures).

## 2.7 Additional Design Packages

- (a) Project Co may divide the design work for the Stadium, the Sports Precinct and the Off-Site Infrastructure into additional Design Packages subject to receiving the State Representative's prior written approval to do so.
- (b) Project Co must submit the following information to the State Representative as part of a request for approval to divide the design work for the Stadium, Sports Precinct and the Off-Site Infrastructure Works into additional Design Packages:
  - (i) details of the reasoning for additional Design Packages;
  - (ii) a proposed Design Deliverables Schedule for the proposed amended Design Package which complies with requirements set out in Section 4.2 of this Schedule 5 (Design Development); and
  - (iii) such other information concerning the proposed Design Package reasonably requested by the State Representative.

## 2.8 Design Stage Reports

- (a) The Design Stage Reports for each Design Stage are intended to establish the following:
  - (i) (**Design Stage 1 Report**): the general scope, design concept, scale, general arrangement and functional relationships between Functional

Areas and Functional Units of these including confirmation of compliance with Design Requirements (relevant to the Design Stage), and a clearly defined, feasible solution while also exploring suitable alternative design solutions with visualisations and illustrations to demonstrate the solutions;

- (ii) **(Design Stage 2 Report):** a detailed scope and developed design concept, including refined scale and arrangement, confirmation of compliance with Design Requirements (relevant to the Design Stage), major materials and finishes selections and developed schematic engineering design for these, including presenting a clearly defined, developed design solution with further developed visualisations and illustrations to demonstrate the solution; and
  - (iii) **(Design Stage 3 Report):** the final scope and design, including actual scale and arrangement, confirmation of compliance with Design Requirements, final materials and finishes selections and detailed engineering design for these, including presenting a clearly defined, fully detailed and co-ordinated design solution with advanced visualisations and illustrations to demonstrate the solution.
- (b) Each Design Stage Report must be prepared in accordance with the requirements of Section 13 of this Schedule 5 (Design Development).

## 2.9 Timing for submission of Design Deliverables

Without limiting its obligations as set out in Schedule 3 (Review Procedures), Project Co:

- (a) must submit the Design Deliverables for each Design Stage to which they relate as one complete package of information and not as individual documents (except in circumstances where Project Co is required to revise one or more Design Deliverables to address the State's comments, in which case Project Co may submit such documents individually);
- (b) acknowledges that the Review Period commences upon receipt by the State of all of the Design Deliverables for the relevant Design Stage which comply with the requirements of this Agreement; and
- (c) must submit other additional information reasonably requested by the State Representative to the State Representative for review in accordance with Schedule 3 (Review Procedures).

## 2.10 Form of Design Deliverables

- (a) Project Co must ensure that the Design Deliverables comply with the Design Deliverables Table and otherwise manage the preparation of the Design Deliverables so that the Design Deliverables are consistent and coordinated across different design and engineering disciplines.
- (b) **(Animations and visualisations):**  
When using animations and visualisations, Project Co should provide enhanced or photorealistic rendered images and animations. Project Co should consider providing the following visuals to support their Stage 1 Design Deliverables:
  - (i) contextual analysis of the relevant DBFM Works within the overall Site;
  - (ii) visualisations of the Sports Precinct in context with the approaches and surroundings outside the Site, including major landmarks such as Perth city, Crown Complex and the DBFM Transport Infrastructure Works and State Transport Infrastructure Works;
  - (iii) visualisations or animations of the journey's elevations and distances for Patrons attending Events from approaches and through Sports Precinct;
  - (iv) night-time visualisations of the Stadium and Sports Precinct; and
  - (v) solar and shade patterns for the Stadium and Sports Precinct.
- (c) Project Co must ensure that each of the Design Deliverables contain or identify the following information (unless otherwise agreed by the State Representative):
  - (i) the Design Package to which the Design Deliverable relates;
  - (ii) the Design Stage to which the Design Deliverable relates;

- (iii) if the Design Deliverable is a drawing:
    - (A) a drawing number;
    - (B) a revision number and date; and
    - (C) a grid reference to the location within the Stadium, the Sports Precinct or the Off-Site Infrastructure of the area drawn, including where this is a modification to a previously submitted Design Deliverable;
  - (iv) if the Design Deliverable is a document other than a drawing, a number and revision number and date or other equivalent coding system that readily differentiates the documentation from previous versions;
  - (v) the identity of the Functional Units to which the document relates (and to the extent that a Functional Unit sub-category exists that better defines the space, the identity of that Functional Unit sub-category);
  - (vi) details of any Modifications and FF&E Modifications that have arisen during the Design Development Process; and
  - (vii) any other information reasonably requested by the State Representative.
- (d) Project Co must highlight all amendments to the Design Deliverables and in doing so show all changes to the Design Deliverables from those submitted for the previous Design Stage. With respect to those Design Deliverable submitted for Design Stage 1, the changes from the Contractual Close Design Documentation must be highlighted.

### 3 INITIAL DESIGN MEETING

No later than ten (10) Business Days after Financial Close, Project Co must coordinate and attend an initial design meeting with the State Representative to:

- (a) assist in the effective commencement and management of the early stages of the Design Development Process;
- (b) discuss the updated Bid Design Development Plan; and
- (c) finalise a consultation plan for User Groups.

## 4 DESIGN DEVELOPMENT PLAN

### 4.1 Contents of the Design Development Plan

The Design Development Plan must contain the following information:

- (a) **(overarching strategy and approach):** Project Co's overarching strategy and approach to the Design Development Process;
- (b) **(design management strategy):** Project Co's design management strategy for allocating resources to the Design Development Process including:
  - (i) details of the proposed design team including their relevant experience;
  - (ii) the level of commitment and roles of each of the design team members; and
  - (iii) the proposed interface arrangements between Project Co, the Builder and the design team;
- (c) **(methodology for delivering sub-plans and Design Packages):**
  - (i) Project Co's proposed methodology for providing the following sub-plans of the Design Development Plan:
    - (A) Delayed Design and Procurement Plan;
    - (B) Traffic and Access Plan;
    - (C) Waste Management Plan; and
    - (D) Event Overlay Plans.
  - (ii) Project Co's proposed methodology for delivering the Design Packages, including timing and level of detail;

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- (d) **(methodology for interfacing with the State)**: Project Co's proposed methodology for interfacing with the State, the Whadjuk Working Party and other relevant parties during the Design Development Process including in accordance with Clause C20.2 (Collaboration and Consultation) of Schedule 12 (Design Specifications);
  - (e) **(methodology for managing User Groups)**: Project Co's proposed methodology for engaging with and managing User Groups including its methodology for:
    - (i) conducting meetings;
    - (ii) managing multiple User Groups;
    - (iii) ensuring that the User Groups and their respective members have sufficient information and understanding of the design to meaningfully review progressive Design Documentation;
    - (iv) taking into account User Group feedback where directed by the State to do so; and
    - (v) managing information flow with the User Groups;
  - (f) **(proposed User Groups)**: details of proposed additional User Groups including:
    - (i) the title and role of each User Group (including any sub-groups); and
    - (ii) the estimated number of meetings to be conducted with each of the User Groups during each of Design Stage 1, Design Stage 2 and Design Stage 3 and for Design Development Presentations;
  - (g) **(procedures regarding specific design related issues)**: procedures for addressing the following specific design related issues:
    - (i) compliance with Schedule 3 (Review Procedures);
    - (ii) compliance with Clause C20.3 (Design Review) of Schedule 12 (Design Specifications);
    - (iii) systems for managing information flow and collaboration between the Project Co Associates involved in the Design Development Process; and
    - (iv) FF&E selection and procurement;
  - (h) **(Design Deliverables Schedule)**: for each of the Design Packages, a Design Deliverables Schedule which must, for each Design Stage:
    - (i) identify the format of the main types of Design Deliverables (for example, specifications, reports, digital and physical models, drawings, workshop drawings, prototypes, mock ups and flow diagrams);
    - (ii) clearly identify any groupings of Functional Areas for joint submission as a single Functional Group Design Package;
    - (iii) if appropriate given the nature of the Design Deliverable, identify the different design disciplines that relate to that Design Deliverable (for example, architectural and engineering);
    - (iv) identify for each of those categories referred to in paragraphs (i) and (ii) above, the anticipated number of the different Design Deliverables that Project Co will submit to the State Representative by the conclusion of the Design Stage or Design Package (as applicable); and
    - (v) otherwise assist the State Representative in ensuring that it has sufficient and appropriate resources to review the Design Deliverables;
  - (i) **(other details)**: details for:
    - (i) document control, including digital models;
    - (ii) the coordination between different design disciplines and different design teams including sub-groups;
    - (iii) quality assurance processes;
    - (iv) managing inputs into the design;
    - (v) documenting design outputs;
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- (vi) maintaining records;
- (vii) value management; and
- (viii) preparing as-built documentation; and
- (j) **(proposed format of documents):** the proposed format of the following documents:
  - (i) Design Deliverables Schedule;
  - (ii) information packages to be provided to User Group members;
  - (iii) minutes of User Group meetings;
  - (iv) Design Stage Reports including key issues, innovation opportunities and for each stage and each discipline as a minimum; and
  - (v) any other reports to be issued to the State Representative as part of managing the Design Development Process.

#### 4.2 Further updates to Design Development Plan (including Design Deliverables Schedule)

- (a) Project Co must:
  - (i) submit to the State an updated Design Deliverables Schedule on a quarterly basis from Financial Close (or within such shorter time periods as reasonably requested by the State Representative) until the completion of the Design Development Process;
  - (ii) otherwise submit an updated Design Development Plan or a discrete component of the Design Development Plan (as applicable):
    - (A) if reasonably requested by the State Representative to do so;
    - (B) otherwise as it considers necessary to reflect any changes to the nature or the status of the DBFM Works; and
  - (iii) submit any revisions, modifications or updated versions of the Design Development Plan (including the Design Deliverables Schedule) to the State Representative for review in accordance with Schedule 3 (Review Procedures).
- (b) In so far as there is any inconsistency between the Design Development Plan and this Agreement, the requirements of this Agreement will prevail.

#### 4.3 Changes to Design Development Plan

- (a) Project Co must make all changes to the Design Development Plan that are reasonably directed by the State Representative.
- (b) Without limiting paragraph (a) above, Project Co must make changes to the Design Development Plan that are reasonably directed by the State Representative if the State Representative reasonably forms the view that the approved Design Development Plan does not:
  - (i) adequately reflect or take into account the scope of the Design Development Process;
  - (ii) adequately take into account the requirements of User Groups;
  - (iii) effectively or reliably result in the production of Design Documentation that complies with the requirements of this Agreement; or
  - (iv) allow the State Representative sufficient time in which to receive and review the Design Documentation in accordance with Schedule 3 (Review Procedures).

## 5 SUB-PLAN REQUIREMENTS

### 5.1 Sub-plans

The Design Development Plan includes the following sub-plans:

- (a) Delayed Design and Procurement Plan;
- (b) Traffic and Access Plan;

- (c) Waste Management Plan; and
- (d) Event Overlay Plans.

## 5.2 Delayed Design and Procurement Plan

- (a) The Delayed Design and Procurement Plan must detail Project Co's proposed approach to delaying the design and procurement of the following DD&P Areas and DD&P Items as late as possible within the D&C Phase without creating a risk of delay to Technical Completion:
  - (i) ICT Systems and AV Systems;
  - (ii) Catering Facilities;
  - (iii) Waste Management Facilities;
  - (iv) Fitout to Team Facilities and Retail Facilities;
  - (v) State Partner fitout and branding, as set out in section D16.4 (State Partners) of Schedule 12 (Design Specifications); and
  - (vi) Stadium Operator Facilities.
- (b) The Delayed Design and Procurement Plan must include the following details:
  - (i) **(risk management)**: Project Co's risk management methodology for the delayed design and procurement (which must comply with, and otherwise be prepared in accordance with, all applicable Quality Standards);
  - (ii) **(ICT Systems and AV Systems)**: Project Co's proposed strategy to take advantage of technologies which are evolving and emerging during the D&C Phase, including in particular for large value items of equipment and equipment which is subject to rapid change or a step change during the D&C Phase, including:
    - (A) the process for obtaining stakeholder requirements in respect of the functional and technical requirements for the ICT Systems and AV Systems and incorporating these into the design;
    - (B) provision of a detailed delayed design and procurement schedule detailing the ICT Systems and AV Systems which will be subject to delayed design and procurement in accordance with the requirements of Section 5.2(b)(vii) of this Schedule 5 (Design Development); and
    - (C) the provisions for and proposed method of integrating the ICT Systems and AV Systems with the architectural design and other Engineering Services including the Security Systems and BMS given the delayed design and procurement of certain equipment and components;
  - (iii) **(Catering Facilities)**: Project Co's proposed methodology for incorporation of the Stadium Operator's functional, technical and operational requirements for the Catering Facilities into the DBFM Works, including:
    - (A) the proposed strategy for ensuring the suitability and flexibility of the design for the Catering Facilities including ensuring appropriate travel distances for the Catering Operator's personnel, adequacy of overall room or area spatial allowances (as applicable), adequacy of spatial allowance and placement of storage, adequacy of provision and placement of Engineering Services, including to accommodate all FF&E within each Functional Unit;
    - (B) the process for obtaining User Group input in respect of the functional, technical and operational design of the Catering Facilities (including for all FF&E) and incorporating these into the design;
    - (C) provision of a detailed delayed design and procurement schedule detailing the Project Co FF&E for the Catering Facilities which will be subject to delayed design and

- procurement in accordance with the requirements of Section 5.2(b)(vii) of this Schedule 5 (Design Development); and
- (D) the process and timing for selection and procurement of State FF&E (including the timing for provision of the State FF&E List) and the proposed methodology for ensuring integration with the architectural and Engineering Services design;
- (iv) **(Waste Management Facilities):** Project Co's proposed methodology for incorporation of the Stadium Operator's functional, technical and operational requirements for the Waste Management Facilities into the DBFM Works, including:
- (A) the proposed strategy for ensuring the suitability and flexibility of the design for the Waste Management Facilities including ensuring appropriate travel distances for Stadium Personnel, adequacy of spatial allowance, quantities and placement of Waste Stores, Waste Chutes, Waste Enclosures and Loading Docks, suitability of provisions for green and industrial waste collection facilities associated with the delivery of the Services, adequacy of provision and placement of Engineering Services including power, grease and bucket traps, and to accommodate all FF&E within each Functional Unit;
- (B) the process for obtaining Stakeholder requirements in respect of the functional, technical and operational design of the Waste Management Facilities (including for all FF&E) and incorporating these into the design;
- (C) provision of a detailed delayed design and procurement schedule detailing the Project Co FF&E for the Waste Management Facilities which will be subject to delayed design and procurement in accordance with the requirements of Section 5.2(b)(vii) of this Schedule 5 (Design Development); and
- (D) the process and timing for selection and procurement of State FF&E (including the timing for provision of the State FF&E List) and the proposed methodology for ensuring integration with the architectural and Engineering Services design;
- (v) **(Fitout to Team Facilities and Retail Facilities):** Project Co's proposed methodology for delaying design and procurement to facilitate customisation of fitout (including input from Hirer or tenant) to areas of the Home Teams' Change Rooms and the Integrated Fitout of Sports Retail Store, as described in Chapter D6 (Team Facilities) and Sports in Chapter D11 (Retail Facilities) respectively;
- (vi) **(State Partners):** Project Co's proposed methodology for delayed design and procurement of the customised fitout and integration of State Partner branding to Premium Product Areas, General Admission Areas and key public spaces that are sponsored by State Partners;
- (vii) **(Stadium Operator Facilities):** Project Co's proposed methodology for delayed design and procurement of the:
- (A) internal layout of the Administration Facilities to incorporate the Stadium Operator's operational requirements; and
- (B) final design of the Ticket Control Points, Ticket Boxes and Patron Services Offices, to incorporate the ticketing systems and ticketing agent's other functional, technical and operational requirements.
- (viii) **(Delayed Design and Procurement Schedule requirements):** a comprehensive schedule must be provided which individually lists all items for which Project Co intends to delay the design and procurement, including for each item:
- (A) an initial selection and specification details or a generic performance specification;

- (B) quantities of each item to be provided;
  - (C) unit cost per item;
  - (D) design integration requirements, including architectural integration (including spatial allowances, Sightline Criteria and mounting, brackets and other supports) and Engineering Services integration (including Engineering Services provisions required for the item and interfaces with other Engineering Services systems); and
  - (E) the critical deadline for obtaining the input of the Stadium Operator, Hirer or tenant as applicable; and
- (ix) **(other information)**: such other information as is reasonably requested by the State Representative.

### 5.3 Traffic and Access Plan

A Traffic and Access Plan must be provided by Project Co following consultation with the State, PTA and MRWA, and must include the following elements as a minimum:

- (a) an outline of how Project Co will accommodate the transport strategy and address the requirements detailed in Chapter C8 (Access and Movement) and the Universal Access principles described in Chapter C10 (Universal Access) of Schedule 12 (Design Specifications);
- (b) reflect the fact that:
  - (i) everyone who enters the Sports Precinct becomes a pedestrian at some stage; and
  - (ii) some pedestrians are of limited agility or require Universal Access or both.
- (c) an outline as to how the requirements for the Sports Precinct described in D4.2 (Operational Principles) and D4.3 (General Design Requirements) of Schedule 12 (Design Specifications) will be accommodated on Event Days and Non-Event Days;
- (d) an outline as to how the requirements for the circulation described in D5.2 (Operational Principles) and D5.3 (General Design Requirements) of Schedule 12 (Design Specifications) will be accommodated on Event Days and Non-Event Days;
- (e) in developing the outlines described in Sections 5.3(c) and 5.3(d) of this Schedule 5 (Design Development), Project Co must address the following issues:
  - (i) safe pedestrian movement and access;
  - (ii) bicycle access, circulation and parking;
  - (iii) public transport integration;
  - (iv) vehicular movement integration;
  - (v) car parking and drop off;
  - (vi) coach and taxi drop off;
  - (vii) cricket wicket and turf delivery and movement vehicles including Drop-In Cricket Wicket Transporter;
  - (viii) media outside broadcast vehicles and Event production vehicles; and
  - (ix) Emergency Services vehicle movement and access.

### 5.4 Waste Management Plan

- (a) Project Co must prepare and implement a Waste Management Plan for the Stadium and Sports Precinct based on the framework in ISO/AS14001.
- (b) The Waste Management Plan must, as a minimum, include the following details:
  - (i) facility provisions for on-site waste storage, separation, recycling and removal;



- (ii) Patron access to waste recycling disposal facilities within the Stadium and Sports Precinct;
- (iii) an analysis of procurement initiatives which may support waste reduction and waste minimisation;
- (iv) waste management service requirements;
- (v) identification of public awareness opportunities to promote waste minimisation by Patrons;
- (vi) identification of education and training opportunities for Stadium Staff and Stadium Personnel to promote waste minimisation;
- (vii) a process for establishing baseline waste data, setting improvement targets and reporting on performance outcomes; and
- (viii) identification of roles, responsibilities, procedures and other requirements for achieving waste management objectives and targets.

## 5.5 Event Overlay Plans

- (a) Event Overlay Plans must be prepared by Project Co to demonstrate:
  - (i) how the Stadium and Sports Precinct is flexible to accommodate the unique requirements of a range of different Events, including as described in Part D (Functional Brief) of Schedule 12 (Design Specifications); and
  - (ii) the philosophy and approach to Event Overlay at the Stadium and Sports Precinct (including activation opportunities) for each Event type.
- (b) An Event Overlay Plan must be prepared for each Event type as follows:
  - (i) AFL Events;
  - (ii) Rectangular Events;
  - (iii) Cricket Events;
  - (iv) Athletics Events, including for Category 2 and Category 3 Events;
  - (v) Entertainment Events; and
  - (vi) Special Events.
- (c) Each Event Overlay Plan must be presented in a predominantly visual format (including layout plans and visualisations) with supporting explanation and a schedule of areas to convey the philosophy and approach (including implementation and operational impacts) and all assumptions.
- (d) The Event Overlay Plans must as a minimum address:
  - (i) **(for each Event type):**
    - (A) the Patron capacity, including the allocation to Fixed Seats, Drop-In Seats and the Pitch (each as applicable);
    - (B) seat kills within the Seating Bowl arising from the Event Overlay;
    - (C) impacts on ability to use Premium Product Areas arising from the Event Overlay; and
    - (D) access to Outlets and toilet amenities from the Drop-In Seats and the Pitch where these are in use by Patrons;
  - (ii) how Functional Areas and key Functional Units within the Stadium and Sports Precinct will be used for the Event, including:
    - (A) the functional use they will accommodate;
    - (B) the temporary fitout, signage and FF&E required to support the proposed functional use;
    - (C) the existing Engineering Services that are available to support the proposed functional use; and

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- (D) the supplementary engineering services required to support the proposed functional use;
  - (iii) what temporary facilities are required to support the Event, including for use by Media Personnel, the Catering Operator, retail use, ticketing and accreditation, and including details of:
    - (A) location, proximity and spatial requirements;
    - (B) capacity;
    - (C) the signage and FF&E required to support the temporary facilities;
    - (D) the existing Engineering Services that are available to support the temporary facilities; and
    - (E) the supplementary engineering services required to support the temporary facilities;
  - (iv) how the Pitch will be used for the Event, including;
    - (A) pre and post Event curation requirements to support the proposed use;
    - (B) setout of the Field of Play and Sporting Equipment;
    - (C) location, installation and access to staging;
    - (D) the existing Engineering Services that are available to support the proposed uses on the Pitch;
    - (E) the supplementary engineering services required to support the proposed uses on the Pitch;
    - (F) extent of Patron access; and
    - (G) extent and types of vehicle access required;
  - (v) how the Media Facilities will be used and supplemented (by use of other Functional Units and temporary facilities), including for international Events, and including consideration of:
    - (A) the expected media contingent;
    - (B) how the Outside Broadcast Compound is expanded with connection to the Stadium;
    - (C) camera positions; and
    - (D) cabling strategy;
  - (vi) Stadium and Sports Precinct activation opportunities, including locations for live stages, fan zones, Kids Zones and supplementary AV systems including video screens, and details of Engineering Services provisions to support these activations;
  - (vii) indicative requirements and locations for temporary Event storage, vehicle staging and boneyard facilities;
  - (viii) how the Event Overlay affects the Crisis or Major Incident Plan;
  - (ix) how the Event Overlay affects the Traffic and Access Plan; and
  - (x) potential community impacts including noise, light, traffic and anti-social behaviour and proposed mitigation strategies.
  - (xi) **(for Athletics Events)**, including for Category 2 and Category 3 Events:
    - (A) Athlete facilities including for accreditation, marshalling and warm-up;
    - (B) the integration of entry and exits for long distance events (e.g. marathon);
    - (C) IAAF requirements including for medical rooms and doping control, as set out in the relevant Sporting Standards;
    - (D) how opening and closing ceremonies may be accommodated;
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- (E) how supplementary lighting systems, PA Systems and AV Systems will be supported;
- (F) potential use of pyrotechnics; and
- (G) potential utilisation of the Stadium roof as part of the Event;
- (xii) **(for Cricket Events):**
  - (A) the extents and implementation of the PMOA;
  - (B) access to, and security of, the Outdoor Practice Cricket Wickets Area;
  - (C) Nursery activities;
  - (D) location of Cricket Sightcreens and associated seat kills; and
  - (E) use of pyrotechnics.
- (xiii) **(for Rectangular Events):**
  - (A) the methodology and timing for installation of the Drop-In Seats; and
  - (B) the additional facility provisions required to satisfy the relevant Sporting Codes, including Interchange Benches and supplementary medical facilities.
- (xiv) **(for Entertainment Events):**
  - (A) main stage bearing locations and structural provisions to accommodate the stages;
  - (B) Performer access to the stage;
  - (C) how Patrons will access the Pitch and overlay required for the Event level to accommodate the access by Patrons;
  - (D) temporary structures;
  - (E) how supplementary mixing towers for Performers' lighting and audiovisual systems will be supported;
  - (F) potential use of pyrotechnics; and
  - (G) potential utilisation of the Stadium roof as part of the Event.

## **6 USER GROUPS INVOLVEMENT IN THE DESIGN DEVELOPMENT PROCESS**

### **6.1 Establishment of User Groups**

- (a) To the extent that at any time, the State reasonably forms the view that Project Co has not proposed or defined a sufficient number of User Groups to provide input into the Design Development Process, the State may require the inclusion of additional User Groups to those proposed by Project Co.
- (b) The State will provide to Project Co the contact details of appointed User Group members, including representatives of the State, and use reasonable endeavours to ensure the User Group members attend meetings when requested by Project Co.
- (c) Project Co will be able to propose additional members and User Groups to the State.

### **6.2 Management of the User Group process**

Project Co must manage and document the entire User Group process, including the following:

- (a) liaise with the State with respect to coordinating User Group meetings so they may be conducted on days and at times that typically enable the User Group members to attend the meetings;
- (b) at least ten (10) Business Days prior to each User Group meeting prepare and distribute an agenda and all relevant design documentation and notes to all invitees;

- (c) after each User Group meeting, prepare minutes which at a minimum include details of:
  - (i) the date and time of the meeting;
  - (ii) persons in attendance and absentee User Group members;
  - (iii) items discussed at the meeting (including details of any drawing numbers discussed); and
  - (iv) proposed outcomes of the meetings;
- (d) provide copies of the proposed minutes of the User Group meetings to the invitees and the State Representative within three (3) Business Days of the meeting;
- (e) incorporate any changes or amendments to the proposed minutes of the User Group meetings (including with respect to the proposed outcome of the meetings) reasonably requested by the State Representative; and
- (f) create and retain electronic files on Aconex for each of the User Groups (including agendas, design documentation, minutes and any marked up or annotated drawings).

### 6.3 Project Co acknowledgement

- (a) Project Co acknowledges and agrees that it is not entitled to make any Claim against the State for Liabilities incurred by Project Co arising out of or in connection with the conduct of the User Group meetings including the time taken to arrange each of the User Group meetings and the number and duration of each of the User Group meetings, other than in accordance with the express terms of this Agreement.
- (b) Project Co acknowledges and agrees that the User Group meetings and process cannot give rise to a Modification or be deemed to constitute a State direction to request a Modification Quote. Any Modification requested by the State will be undertaken in accordance with Clause 33 of this Agreement.

## 7 DESIGN DEVELOPMENT PRESENTATIONS

### 7.1 Purpose of Design Development Presentations

The purpose of the Design Development Presentations for Design Stage 1, Design Stage 2 and Design Stage 3 are to:

- (a) **(demonstrate Stadium, Sports Precinct and Off-Site Infrastructure design)**: visually demonstrate the design of the Stadium, Sports Precinct and Off-Site Infrastructure (including the progressive development of the design);
- (b) **(present and explain samples and prototypes)**: when requested by the State Representative and in accordance with Clause C20.5 (Samples and prototypes) of Schedule 12 (Design Development), present and explain samples and prototypes of different components of the Stadium, the Sports Precinct and the Off-Site Infrastructure;
- (c) **(present and explain design quality Benchmarks)**: when requested by the State Representative and in accordance with Clause C20.4 (Design quality Benchmarks) of Schedule 12 (Design Development), present and explain design quality Benchmarks for different components of the Stadium and Sports Precinct;
- (d) **(key elevations and sections)**: demonstrate the design through key elevations and sections;
- (e) **(demonstrate consistency with Stadium Activities)**: demonstrate how the design of the various Functional Areas, Functional Units and design disciplines of the Stadium and Sports Precinct complements and is otherwise consistent with the Stadium Activities;
- (f) **(demonstrate consistency with Design Requirements)**: demonstrate how the design proposal of the various Functional Areas, Functional Units and design disciplines is such that the Stadium, Sports Precinct and Off-Site Infrastructure are consistent with the Design Requirements, will meet the Output Specifications and satisfy the FFP Warranty; and

- (g) **(issues identified by State Representative)**: address specific issues otherwise identified by the State Representative.

## 7.2 **Frequency, notice and attendance at Design Development Presentations for Design Stage 1, Design Stage 2 and Design Stage 3**

- (a) Project Co must undertake the Design Development Presentations generally in accordance with the Design Development Sub-Program and must give the State Representative and other proposed attendees approved by the State Representative ten (10) Business Days' notice of the conduct of a Design Development Presentation.
- (b) Project Co must ensure that as a minimum the Builder, lead architect Subcontractor and relevant lead engineer Subcontractor attend such Design Development Presentations to provide explanations concerning the design and any other relevant supporting information.

## 8 **DESIGN REVIEW**

- (a) **(Design Peer Review)**: Project Co must undertake a formal design review process at key milestones of the Design Development Process in accordance with the requirements set out in Clause C20.3 (Design Review) of Schedule 12 (Design Specifications).
- (b) **(Progressive Design Development Reviews)**: Project Co must release progressive design information on a fortnightly basis, or as agreed otherwise with the State, and provide an interactive review of the design utilising the BIM model. Project Co must ensure that as a minimum the Builder, lead architect Subcontractor and relevant lead engineer Subcontractor attend such Design Development Reviews to explain the design and any other relevant supporting information.
- (c) **(Design review record tracking system)**: Project Co must establish a design review recording system to track questions, comments and responses arising from the review process, including from the Design Development Presentations. Project Co should consider using BIM review software as part of this process.

## 9 **DESIGN DEVELOPMENT SUB-PROGRAM**

Project Co must submit Design Deliverables for review by the State in accordance with the Design Development Sub-Program as set out in Schedule 6 (Programming Requirements).

## 10 **FOR CONSTRUCTION DOCUMENTATION**

- (a) Project Co must only use the For Construction Documentation for the purposes of construction of the Stadium, the Sports Precinct and the Off-Site Infrastructure.
- (b) Project Co must not amend the For Construction Documentation that has been submitted for review to the State unless the proposed amendment has been submitted to the State Representative for review in accordance with Schedule 3 (Review Procedures).

## 11 **FOR FABRICATION DOCUMENTATION**

- (a) For each of the elements of the DBFM Works which require fabrication prior to incorporation into the DBFM Works, Project Co must develop For Fabrication Documentation consistent with the relevant Pre-Fabrication Documentation for each of those elements.
- (b) Project Co must only use the For Fabrication Documentation for the purposes of fabricating elements of the Stadium, the Sports Precinct and the Off-Site Infrastructure.
- (c) Project Co must not amend the For Fabrication Documentation that has been submitted for information to the State unless the proposed amendment has been submitted to the State Representative for review in accordance with Schedule 3 (Review Procedures) or is to ensure consistency with the relevant Pre-Fabrication Documentation.

## 12 DESIGN PACKAGES

The Design Packages are to be incrementally developed and submitted to the State for review in accordance with Schedule 3 (Review Procedures) during the Design Development Process. Each Design Package must be in a form approved by the State and must include the following (as it relates to the relevant Functional Group or technical design discipline):

- (a) an overview of the design philosophy and intent;
- (b) for the Functional Group Design Packages, an executive summary which summarises the design, including:
  - (i) an explanation (which may be diagrammatic) of the key functional relationships between Functional Areas and Functional Units (or both of them);
  - (ii) spatial characteristics and accommodation provisions, including level of appointment with FF&E;
  - (iii) an explanation (which may be diagrammatic) of all pedestrian and vehicular flows to, from and through the Functional Areas and Functional Units, for all relevant types of vehicles and for all relevant Stadium Users;
  - (iv) an explanation (which may be diagrammatic) of the security lines for access restrictions to Functional Areas and Functional Units considering each category of Stadium Users;
  - (v) Event Overlay Plans in accordance with the requirements set out in Chapter D17 (Event Overlay) of Schedule 12 (Design Specifications) and Clause 5.5 of this Schedule 5 (Design Development);
  - (vi) details of Universal Access features for IRUA incorporated in the design;
  - (vii) details of storage provisions incorporated in the design;
  - (viii) an overview of how the design satisfies the operational principles that are relevant to the Functional Group as set out in the Part D (Functional Brief) of Schedule 12 (Design Specifications);
  - (ix) an explanation of how the design will support efficient delivery of the Stadium Activities, including with respect to travel distances for Stadium Personnel and scalability of facilities to match the different demand profiles for Event Day and Non-Event Day uses;
  - (x) an explanation of how the design will support efficient delivery of the Services, including with consideration of provision and location of facilities; and
  - (xi) an explanation of how the design is flexible, including to accommodate Reconfiguration and Expansion;
- (c) for the Technical Design Packages, an executive summary which summarises the design, including:
  - (i) for those relating to Engineering Services technical design disciplines, the following (as applicable to the technical design discipline):
    - (A) the overall design philosophy or strategy for the relevant Engineering Service;
    - (B) a demonstration of Project Co's understanding of the Land Conditions and details of how the proposed design and construction for the relevant Engineering Service will address and accommodate the Land Conditions;
    - (C) details of how the proposed design and construction for the relevant Engineering Service will address and accommodate the interfaces with adjoining State Transport Infrastructure Works;
    - (D) the reticulation strategy for the services within the Site and to the Off-Site Infrastructure (as applicable) and the distribution strategy within the Stadium and Sports Precinct;

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- (E) an overall system description, including a description of all sub-systems, plant, equipment and components and details of system attributes, capacity, performance characteristics, distribution philosophy, redundancy and resilience;
  - (F) details of service cores, risers and plant areas;
  - (G) the appropriateness of the design and all plant and equipment for the purpose;
  - (H) confirmation of Design Life for systems, sub-systems, plant, equipment and components;
  - (I) manufacturer details for major plant, equipment, components and fixtures;
  - (J) alternative source reports, as required, for non-deemed to satisfy solutions or systems;
  - (K) all design assumptions and potential constraints and restrictions on the Stadium Activities and performance of the Services arising from the design;
  - (L) details of Universal Access features incorporated in the design for IRUA;
  - (M) details of Embedded ESD Initiatives and Enhanced ESD Initiatives incorporated in the design, construction and commissioning;
  - (N) the proposed extent of metering and monitoring of the Engineering Service and its respective sub-systems;
  - (O) details of the level of design integration and of any interface (as applicable) with landscape elements, architectural elements, signage, wayfinding, State FF&E and with other Engineering Services, including with the BMS;
  - (P) details of the access strategy for maintenance and replacement of plant and equipment, addressing OHS considerations;
  - (Q) typical coordinated services details, including risers and ceiling service zones;
  - (R) the deliverables for the relevant Design Package set out in the Design Deliverables Tables under Section 16 of this Schedule 5 (Design Development);
  - (S) an explanation of how the design will support efficient delivery of the Stadium Activities, including with consideration of scalability to match the different demand profiles for Event Day and Non-Event Day uses;
  - (T) an explanation of how the design will support efficient delivery of the Services, including with consideration of durability to limit maintenance requirements and provision of suitable access to facilitate maintenance and replacement; and
  - (U) an explanation of how the design is flexible, including to accommodate Reconfiguration and Expansion;
- (ii) for those relating to other technical design disciplines, the following (as applicable to the technical design discipline):
- (A) a description of the overall design strategy, including a description of all elements, interfaces, integration with other disciplines and Project Co FF&E, and including details of attributes, capacity, performance characteristics and quality;
  - (B) confirmation of Design Life for key components, materials, finishes and Project Co FF&E;
  - (C) a demonstration of Project Co's understanding of the Land Conditions and details of how the proposed design and
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- construction will address and accommodate the Land Conditions;
- (D) details of how the proposed design and construction will address and accommodate the interfaces with adjoining State Transport Infrastructure Works;
  - (E) all design assumptions and potential constraints and restrictions on the Stadium Activities and performance of the Services arising from the design;
  - (F) details of Universal Access features incorporated in the design;
  - (G) details of Embedded ESD Initiatives and Enhanced ESD Initiatives incorporated in the design, construction and commissioning;
  - (H) the deliverables for the relevant Design Package set out in the Design Deliverables Tables under Section 13 of this Schedule 5 (Design Development);
  - (I) an explanation of how the design will support efficient delivery of the Stadium Activities, including with consideration of scalability to match the different demand profiles for Event Day and Non-Event Day uses;
  - (J) an explanation of how the design will support efficient delivery of the Services, including with consideration of durability to limit maintenance requirements and provision of suitable access to facilitate maintenance and replacement; and
  - (K) an explanation of how the design is flexible, including to accommodate Reconfiguration and Expansion;
- (d) identification of changes to the design philosophy and intent since the last Design Package and provide justification for the alternate design approach;
  - (e) identification of material differences to the design since the previous submission of the relevant Design Package;
  - (f) confirmation of compliance with all Authorisations and the requirements of relevant Authorities;
  - (g) identification of all departures from Schedule 12 (Design Specifications) and justification for any departures;
  - (h) the deliverables set out for the Design Development Presentations under Section 7.1 of this Schedule 5 (Design Development);
  - (i) details of issues raised and a summary of actions from the User Groups, including demonstration of the close out of these actions;
  - (j) all Design Documentation relevant to the Design Stage and the Design Package including:
    - (i) all drawings developed for the Design Stage at an appropriate scale for the level of detail in the information to be conveyed including floor plans, furniture layouts, reflected ceiling plans, roof layouts, coloured elevations and perspectives, sections and details;
    - (ii) technical and trade specifications, material data sheets, product data sheets and reports to describe the scope and performance of elements of the works; and
    - (iii) samples, finishes boards and prototypes, including as set out in Clause C20.5 (Samples and Prototypes) of Schedule 12 (Design Specifications), as necessary to convey the extent and quality of provisions;
  - (k) for each Functional Group Design Package, an updated extract from the SOA for Functional Areas and Functional Units relevant to the Functional Group, which identifies all changes on the SOA for those Functional Areas and Functional Units since the last submission of the Functional Group Design Package;



- (l) updated RDS which identify all changes from the RDS included in the most recent Design Package;
- (m) an updated FF&E List which identifies all changes from the FF&E List included in the most recent Design Package;
- (n) printed versions of three dimensional representation of elements which will need to be resolved prior to proceeding with the For Construction Documentation;
- (o) details of any other material issues which will need to be resolved prior to preparation of the For Construction Documentation; and
- (p) such other information reasonably requested in writing from time to time by the State.

### **13 DESIGN STAGE REPORTS**

The Design Stage Reports are to be incrementally developed during the Design Development Process and submitted to the State for review in accordance with Schedule 3 (Review Procedures) at the end of each Design Stage in accordance with the Design Deliverables Tables. The Design Stage Reports must be in a form approved by the State and must include:

- (a) an executive summary of the status of the design;
- (b) a schedule of key issues to be resolved during the next Design Stage to progress the design to the next level of definition, including details of parties to be engaged in the resolution and proposed timing for resolution;
- (c) all Design Packages in accordance with Section 11 of this Schedule 5 (Design Development) and the Design Deliverables Tables, as updated to address comments provided by the State pursuant to Section 4 of Schedule 3 (Review Procedures);
- (d) updated design review records for each Design Package pursuant to Section 8(c) of this Schedule 5 (Design Development);
- (e) updated, consolidated and complete versions of the SOA, RDS and FF&E List;
- (f) all updated sub-plans of the Design Development Plan, as described at Section 5 of this Schedule 5 (Design Development);
- (g) the ESD Management Plan;
- (h) for the relevant Design Stage Report which is after the completion of the safety in design process described in Chapter C17 (Safety In Design) of Schedule 12 (Design Specifications), the Safety In Design Review Report, which fully documents the residual risks upon completion of the safety in design process undertaken in accordance with the requirements of that Chapter; and
- (i) such other information reasonably requested in writing from time to time by the State.

### **14 DESIGN DELIVERABLES TABLES**

To the extent that the Design Deliverables Tables include references to areas within the Stadium, the Sports Precinct or the Off-Site Infrastructure and those terms are not defined in Clause 1.1 of this Agreement or Section 1 of this Schedule 5 (Design Development), the meaning given to those terms in Part G (Glossary) of Schedule 12 (Design Specifications) will apply for the purposes of the Design Deliverables Tables.

### **15 DESIGN INTERFACES WITH STATE WORKS AND SURROUNDING WORKS**

- (a) Project Co commits to co-operating with, coordinating with and supplying relevant information to the State Associates, Utility Companies, design consultants and construction contractors associated with the design, construction and commissioning of the State Works for the purpose of facilitating the design, construction and commissioning of each of the:
  - (i) Scheduled State Works in accordance with the program for those Scheduled State Works;

- (ii) **Unscheduled State Works** in accordance with the timing for those **Unscheduled State Works** specified in the **Unscheduled State Works Notice**, having reasonable regard for the **unscheduled nature** of those works and the nature of any information that is requested; and
  - (iii) **Surrounding Works**, when requested by the party undertaking the **Surrounding Works**.
- (b) Project Co acknowledges that the design of the **State Works** may impact on the design of the **DBFM Works** at each of the physical interfaces to the **State Works**, and undertakes to finalise its design of the **DBFM Works** at each physical interface location to accommodate the approved 'for construction' design for the **State Works**.
- (c) Project Co must manage all interfaces between the **DBFM Works**, the **State Works** and the **Surrounding Works**, including by coordinating the design, construction and commissioning of the **DBFM Works** to ensure that the design of the **DBFM Works** integrates seamlessly with the design of the **State Transport Infrastructure Works** and the **Utility Infrastructure Works** including factoring the design assumptions, throughputs/outputs and constraints arising from the **State Transport Infrastructure Works** and the **Utility Infrastructure Works** into the design and construction of the **Stadium Sports Precinct** and **Off-Site Infrastructure**.

**16 DESIGN DELIVERABLES TABLES**

**16.1 Technical Design Packages**

**16.1.1 Urban Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>An <b>Urban Design Package</b> describing the schematic design for the Stadium and Sports Precinct which complies with Schedule 12 (Design Specifications) including the requirements set out in Chapter C5 (Sports Precinct Urban Design Principles) and includes all Design Documentation to describe:</p> <p>(a) a Development Concept Plan that indicates the locations of:</p> <ul style="list-style-type: none"> <li>(i) all structural elements situated in the Sports Precinct including the location of all structures, facilities and amenities;</li> <li>(ii) all pedestrian and vehicle movement paths, including the arrangement for the Bus Hub;</li> <li>(iii) all carparking and drop-off areas;</li> <li>(iv) all pedestrian assembly areas, including the Bus Passenger Assembly Area the Rail Passenger Assembly Areas and the pedestrian assembly areas for the Swan River Bridge and the Windan Bridge;</li> <li>(v) all Commercial Facilities; and</li> <li>(vi) all Sports Precinct interfaces including the interface with the Controlled Area and the interfaces with the State Transport Infrastructure Works (including the bridge landings) and adjoining sites;</li> </ul> <p>(b) an explanation of the structural elements on the Development Concept Plan and how they address the masterplan vision and principles and the Sports Precinct urban design requirements;</p>	<p>An updated <b>Urban Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all Design Documentation required to describe the developed urban design, including for the Design Stage 1 Design Deliverables (including a detailed Traffic and Access Plan).</p>	<p>A final <b>Urban Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all For Construction Documentation required to describe the final urban design including, including for the Design Stage 2 Design Deliverables (including a final Traffic and Access Plan).</p>

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>(c) an urban design strategy that sets out the conceptual approach to the urban design of the Sports Precinct and its integration with the conceptual approach for the design of the Stadium and the landscape design of the Sports Precinct;</p> <p>(d) relative levels and the integration of the urban design with built form across the site including transport infrastructure;</p> <p>(e) an explanation of how the design of the Stadium and Sports Precinct recognises and interprets the Aboriginal heritage and cultural significance of the Site and the Swan River; and</p> <p>(f) a preliminary Traffic and Access Plan that responds to the requirements set out in Chapter C8 (Access and Movement) and Clause D4 (Sports Precinct).</p>		

**16.1.2 Landscape Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>A <b>Landscape Design Package</b> describing the schematic design for the Stadium, the Sports Precinct and the Off-Site Infrastructure which complies with Schedule 12 (Design Specification) including the requirements set out in Chapters C6 (Landscape) and E3 (Landscape Architecture) and includes all Design Documentation required to describe:</p> <p>(a) the size, location and relative levels of the landscaped spaces;</p> <p>(b) the integration of landscape with all built form across the Site, including with urban design, wayfinding, signage, public art, CPTED, Security, Systems and lighting systems;</p> <p>(c) interpretation of local Aboriginal heritage and</p>	<p>An updated <b>Landscape Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all Design Documentation required to describe the developed landscape design, including for the Design Stage 1 Design Deliverables.</p>	<p>A final <b>Landscape Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all For Pre-Fabrication Documentation and For Construction Documentation (as applicable to the Model Elements) required to describe the final landscape design, including for the Design Stage 2 Design Deliverables.</p>

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>culture of the Site;</p> <p>(d) the relationship between the external and the internal environments;</p> <p>(e) the approach for key areas including hard and soft landscape elements to:</p> <ul style="list-style-type: none"> <li>(i) the Swan River Foreshore, including the Swan River Rehabilitation Plan;</li> <li>(ii) Sports Precinct and Controlled Area interface;</li> <li>(iii) River-Fed Lake;</li> <li>(iv) passive and active recreation zones, including the community harbour;</li> <li>(v) key pedestrian paths and zones;</li> <li>(vi) landscaped areas within the Stadium, the Sports Precinct and the Off-Site Infrastructure; and</li> <li>(vii) all DBFM Transport Infrastructure Works including interfaces with other components of the DBFM Works;</li> </ul> <p>(f) the quality, extent, proposed materials and level of finishes for all hard and soft landscaping including details of the quantities and sizes of trees and plants and quantities and quality of FF&amp;E; and</p> <p>(g) the irrigation system.</p>		

**16.1.3 Public Art Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>A <b>Public Art Design Package</b> describing the public art for the Stadium, the Sports Precinct and the Off-Site Infrastructure which complies with Schedule 12 (Design Specifications) including the requirements set out in Chapter C7 (Public Art) and includes all Design Documentation required to describe:</p> <ul style="list-style-type: none"> <li>(a) Project Co’s public art strategy including identification of public art opportunities and themes;</li> <li>(b) the proposed integration with public art strategies for the adjoining State Transport Infrastructure Works; and</li> <li>(c) confirmation of the artwork procurement and evaluation process.</li> </ul>	<p>A detailed <b>Public Art Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all Design Documentation required to describe:</p> <ul style="list-style-type: none"> <li>(a) the developed public art strategy, including for the Stage 1 Design Deliverables;</li> <li>(b) potential artists and the procurement process;</li> <li>(c) builder’s work in connection with public art including structural, landscape and Engineering Services;</li> <li>(d) maintenance requirements; and</li> <li>(e) 3D, night and day, representations of artwork in context, including indicating scale and location.</li> </ul>	<p>A final <b>Public Art Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all For Pre-Fabrication Documentation and For Construction Documentation (as applicable to the Model Elements) required to describe the final public art, including for the Design Stage 2 Design Deliverables.</p>

**16.1.4 Wayfinding and Signage Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>A <b>Wayfinding and Signage Design Package</b> describing the schematic design for the Stadium and Sports Precinct which complies with Schedule 12 (Design Specifications) including the requirements set out in Chapter C9 (Wayfinding and Signage) and Clause E2.14 (Signage) and includes all Design Documentation required to describe:</p> <ul style="list-style-type: none"> <li>(a) the wayfinding and signage strategy including design features to reduce reliance on signage and to assist IRUA;</li> <li>(b) all signage within the Stadium and Sports Precinct;</li> <li>(c) the approach to integration with the signage for adjoining State Transport Infrastructure Works, including on adjacent sites and public roads;</li> <li>(d) the approach to integration with architecture,</li> </ul>	<p>An updated <b>Wayfinding and Signage Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all Design Documentation required to describe:</p> <ul style="list-style-type: none"> <li>(a) the developed wayfinding and signage design, including for the Design Stage 1 Design Deliverables;</li> <li>(b) Engineering Services design to support signage;</li> <li>(c) signage servicing and maintenance requirements; and</li> <li>(d) a preliminary signage schedule.</li> </ul>	<p>A final <b>Wayfinding and Signage Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all For Pre-Fabrication Documentation and For Construction Documentation (as applicable to the Model Elements) required to describe the final wayfinding and signage design, including for the Design Stage 2 Design Deliverables.</p>

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>landscape, public art, lighting and the Stadium’s identity and branding;</p> <p>(e) use of technology in the signage solution, including as described in Chapter E14 (Audio Visual (AV) Systems); and</p> <p>(f) visualisations of the signage in the context of the schematic design of the Stadium and Sports Precinct, including day and night views.</p>		

**16.1.5 Architecture Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>An <b>Architecture Design Package</b> describing the schematic design for the Stadium and Sports Precinct which complies with Schedule 12 (Design Specifications) including the requirements set out in Chapters C11 (Architectural Design) and E2 (Architecture) and includes all Design Documentation required to describe:</p> <p>(a) how the design of the Stadium and Sports Precinct:</p> <p>(i) achieves the new Perth Stadium Project Aspirations and the DBFM Project Objectives;</p> <p>(ii) supports the achievement of the Operating Phase Objectives;</p> <p>(iii) reflects the good design principles in the OGA’s Better Places and Spaces Policy (as set out in clause C1.1 of Schedule 12 (Design Specifications)) and the OGA General Design Standards (as set out in Appendix H2 of Schedule 12 (Design Specifications)); and</p> <p>(iv) is consistent with the architectural design objectives set out in Schedule 12</p>	<p>An updated <b>Architecture Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all Design Documentation required to describe:</p> <p>(a) the developed architectural design, including for the Design Stage 1 Design Deliverables;</p> <p>(b) all door and door furniture, including provision of schedules;</p> <p>(c) provisions in the developed design for IRUA, including:</p> <p>(i) a clear indication of wheelchair pathways including clearances and surrounding structure;</p> <p>(ii) visibility of signage including when at peak usage times.</p> <p>(iii) journey to and from IRUA Positions within the Seating Bowl;</p> <p>(iv) access to toilets, Changing Places Toilets and Parenting Rooms;</p> <p>(v) accessing facilities including Outlets and Retail Facilities; and</p>	<p>A final <b>Architecture Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all For Pre-Fabrication Documentation and For Construction Documentation (as applicable to the Model Elements) required to describe:</p> <p>(a) the final architectural design, including for the Design Stage 2 Design Deliverables (with the exception of the design quality Benchmarking);</p> <p>(b) final visualisations and animations including:</p> <p>(i) enhanced visualisations for presentation purposes using photorealistic rendering software and photomontages of the Stadium and Sports Precinct in context;</p> <p>(ii) enhanced renderings and simulated animations of journey to interior areas and views from Premium Product Areas including the Chairman’s Club, the Field Club and all Suite types; and</p> <p>(iii) views and simulated videos for Event Overlay and Reconfiguration (as applicable) for Athletics Events, Rectangular Events, Cricket Events and Entertainment Events.</p>

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>(Design Specifications);</p> <p>(b) the character and built form, addressing requirements for:</p> <ul style="list-style-type: none"> <li>(i) Sports Precinct and Controlled Area interface;</li> <li>(ii) Stadium façade;</li> <li>(iii) Stadium roof;</li> <li>(iv) Circulation Areas;</li> <li>(v) Seating Bowl;</li> <li>(vi) Premium Product Areas;</li> <li>(vii) General Admission Areas; and</li> <li>(viii) Pedestrian Underpass;</li> </ul> <p>(c) the interior environment, including a clear indication of the quality of materials, finishes and FF&amp;E through qualitative benchmarks, samples and finishes boards;</p> <p>(d) all Functional Groups, Functional Areas and all key Functional Units within those Functional Areas and how the functional design supports the efficient delivery of the Stadium Activities and the Services;</p> <p>(e) an overview of Circulation Areas including the Vertical Transportation;</p> <p>(f) an overview of how the design ensures the safety and security of all Stadium Users;</p> <p>(g) the Schedule of Accommodation;</p> <p>(h) Room Data Sheets;</p> <p>(i) the FF&amp;E List;</p> <p>(j) all internal and external finishes including schedules and finishes boards to confirm extent and quality of provisions for all architectural</p>	<ul style="list-style-type: none"> <li>(vi) confirmation of compliance with relevant Quality Standards; and</li> <li>(d) the overall quality of the architectural design, including supporting visualisations and animations / simulated videos of key features (including those outlined in item (k) of the Design Stage 1 Design Deliverables) to demonstrate this. E.g. 'walk bys', 'fly overs', 'walk throughs', 'fly throughs'.</li> </ul>	



DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>design elements;</p> <p>(k) the overall quality of the architectural design, including supporting visualisations to demonstrate this, including:</p> <ul style="list-style-type: none"> <li>(i) views of the Stadium exterior from ground level on the Sports Precinct, Graham Farmer Freeway, Perth city and aerial views from above, including night time views;</li> <li>(ii) views of and from the Controlled Area towards the surrounding areas;</li> <li>(iii) views of and from Concourses towards the surrounding areas and wider context;</li> <li>(iv) views of the Pitch and Seating Bowl, including aerial views and night time views;</li> <li>(v) views of the interior Seating Bowl to communicate the character and overall aesthetic; and</li> <li>(vi) views of the interior of the Team Facilities, Premium Product Areas, General Admission Areas and views of and from Stadium Entry Points;</li> </ul> <p>(l) preliminary construction detail drawings through key areas, façade and structures of the Stadium and Sports Precinct, to illustrate consistency with architectural design intent and the approach for structural steelwork and Engineering Services; and</p> <p>(m) design quality Benchmarking in accordance with Appendix H3 of Schedule 12 (Design Specifications) and Clause C20.4 (Design Quality Benchmarking) and Chapter E2 (Architecture), Project Co must provide preliminary images which clearly communicate Project Co's approach to the key elements of</p>		

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>the Stadium, the Sports Precinct and the DBFM Transport Infrastructure, including the:</p> <ul style="list-style-type: none"> <li>(i) project vision, the new Perth Stadium Project Aspirations and the DBFM Project Objectives;</li> <li>(ii) Sports Precinct (urban design and landscape);</li> <li>(iii) Controlled Areas;</li> <li>(iv) Stadium façade;</li> <li>(v) Seating Bowl;</li> <li>(vi) Stadium roof;</li> <li>(vii) interior environments, access and Circulation Areas; and</li> <li>(viii) DBFM Transport Infrastructure Works.</li> </ul>		

**16.1.6 General Technical Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>A <b>General Technical Design Package</b> describing the schematic design for the Stadium, the Sports Precinct and the Off-Site Infrastructure (as applicable) which complies with Schedule 12 (Design Specifications) and addresses key requirements set out in Chapter E1 (General Requirements), and includes all Design Documentation required to describe:</p> <ul style="list-style-type: none"> <li>(a) Project Co's understanding of the existing Land Conditions and the scope and effect of the PCS Works, and a commentary on how this has influenced the Project Co's design proposal for the Stadium, the Sports Precinct and the Off-Site Infrastructure;</li> <li>(b) the approach to management of ground gases, including a description of any physical barriers</li> </ul>	<p>An updated <b>General Technical Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all Design Documentation required to describe:</p> <ul style="list-style-type: none"> <li>(a) the developed design for all Design Stage 1 Design Deliverables, including a detailed Dangerous Goods Risk Assessment which includes details of all mitigation measures to be incorporated in the design and details of all assumptions and any impacts of these on the Stadium Activities;</li> <li>(b) WOL estimates for equipment options considered, and justification of systems recommended;</li> <li>(c) equipment schedules for each Engineering</li> </ul>	<p>A final <b>General Technical Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all For Pre-Fabrication Documentation and For Construction Documentation (as applicable to the Model Elements) required to describe:</p> <ul style="list-style-type: none"> <li>(a) final design for all Design Stage 2 Design Deliverables;</li> <li>(b) compliance of all plant and equipment with relevant Quality Standards, Laws and Authorisations;</li> <li>(c) confirmation that coordination of Engineering Services has occurred for the spatial provisions in buildings and underground;</li> <li>(d) confirmation of major building equipment clearances for operation, repair, maintenance</li> </ul>

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>and Engineering Services provisions for this purpose;</p> <p>(c) the overall Site servicing strategy, providing details of all connections to Utilities Infrastructure to be undertaken by Project Co and the strategy for reticulation of each of the Engineering Services, including:</p> <ul style="list-style-type: none"> <li>(i) details of proposed capacity;</li> <li>(ii) identified single points of failure; and</li> <li>(iii) proposed redundancy measures;</li> </ul> <p>(d) a preliminary Dangerous Goods Risk Assessment as required under the <i>Dangerous Goods Safety Act 2004 (WA)</i>;</p> <p>(e) the strategy for flexibility, Reconfiguration and Expansion to satisfy the requirements set out in the Design Specifications, including Clauses C14 (Flexibility, Reconfiguration and Expansion) and E1.4.4 (Flexibility, Reconfiguration and Expansion), within a Flexibility, Reconfiguration and Expansion Report describing the following as a minimum:</p> <ul style="list-style-type: none"> <li>(i) how the architectural, landscape and Engineering Services designs of the Stadium and Sports Precinct support multipurpose use, sharing of facilities and flexibility in all Functional Areas and key Functional Units, and including: <ul style="list-style-type: none"> <li>(A) Seating Bowl;</li> <li>(B) Premium Product Areas;</li> <li>(C) General Admissions Areas;</li> <li>(D) Circulation Areas (including the Controlled Area);</li> <li>(E) Catering Facilities;</li> <li>(F) Waste Management Facilities;</li> </ul> </li> </ul>	<p>Services discipline detailing the systems and equipment to be installed, including type and location;</p> <p>(d) confirmation that the FEB has been applied to the development of all aspects of the Design Stage 2 Design Documentation;</p> <p>(e) where Authorisations are required to progress detailed design, confirmation that documents have been submitted to relevant Authorities and Authorisations have been received and complied with;</p> <p>(f) clash detection reports from the 3D model; and</p> <p>(g) technical submittals for major plant and equipment.</p>	<p>and replacement;</p> <p>(e) a final materials and finishes schedule to confirm extent and quality of provisions for all Engineering Services.</p>

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>(G) Team Facilities;</p> <p>(H) Retail Facilities;</p> <p>(I) Media Facilities;</p> <p>(J) Stadium Operations and Event Day Facilities;</p> <p>(K) Pitch and associated facilities;</p> <p>(L) Stadium roof; and</p> <p>(M) Engineering Services plant and distribution;</p> <p>(ii) how the design of the Stadium and Sports Precinct will accommodate future Expansion, including:</p> <p>(A) provisions within the proposed design to accommodate Expansion;</p> <p>(B) proposed construction access and methodology; and</p> <p>(C) operational integration of the Expansion with existing facilities;</p> <p>(iii) how the design of the Stadium and Sports Precinct will accommodate Reconfiguration, including:</p> <p>(A) Premium Product Areas Reconfiguration, Rectangular Reconfiguration and Athletics Reconfiguration;</p> <p>(B) for each of the above at (iii)(A), provisions within the proposed design to accommodate Reconfiguration; and</p> <p>(C) for each of the above at (iii)(A), proposed methodology and timing for implementation and removal; and</p> <p>(iv) Project Co's overall approach to the</p>		

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>accommodation of Flexibility, Reconfiguration and Expansion in its selection of FF&amp;E; and</p> <p>(f) the ESD strategy and ESD Initiatives that will be implemented by Project Co, within an ESD Management Plan, in accordance with the requirements set out in Schedule 19 (Plans).</p>		

**16.1.7 Civil Works and Stormwater Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p><b>A Civil Works and Stormwater Design Package</b> describing the schematic design for the Stadium, the Sports Precinct and the Off-Site Infrastructure which complies with Schedule 12 (Design Specifications), including the requirements set out in Chapter E4 (Civil Works) and Chapter E5 (Stormwater), and includes all Design Documentation to describe:</p> <p>(a) a description of the proposed geotechnical design for any ground improvement works and supporting schematic design drawings;</p> <p>(b) the integration with the landscape design and Sports Precinct elements;</p> <p>(c) pavement design parameters including number of equivalent axles (<b>ESAs</b>) over the Design Life;</p> <p>(d) the proposed approach for addressing the performance requirements and interface at the bridge landings identified in Clause A10.2 of Schedule 12 (Design Specifications);</p> <p>(e) the stormwater drainage design parameters adopted including overland flow;</p> <p>(f) the stormwater drainage system including any stormwater treatments proposed; and</p> <p>(g) WSUD initiatives incorporated in the</p>	<p>An updated <b>Civil Works and Stormwater Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all Design Documentation required to describe the developed civil works and stormwater design, including for the Stage 1 Design Deliverables.</p>	<p>A final <b>Civil Works and Stormwater Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all For Construction Documentation required to describe the final civil works and stormwater design, including for the Stage 2 Design Deliverables.</p>

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
stormwater design.		

**16.1.8 Structural Works Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>A <b>Structural Works Design Package</b> describing the schematic design for the Stadium, the Sports Precinct and the Off-Site Infrastructure which complies with Schedule 12 (Design Specifications), including the requirements set out in Chapter E6 (Structural Engineering), and includes all Design Documentation required to describe:</p> <ul style="list-style-type: none"> <li>(a) vertical and lateral load systems;</li> <li>(b) a loading report including load diagrams;</li> <li>(c) all design assumptions including applied actions attributable to the nature of the Stadium;</li> <li>(d) approach to achieving the required Service Life of 50 years as outlined in Schedule 12 (Design Specifications);</li> <li>(e) a description of the proposed structural systems and supporting schematic design drawings for substructure, superstructure and roof;</li> <li>(f) future flexibility provisions for the structure;</li> <li>(g) deflection limits and vibration; and</li> <li>(h) Project Co's understanding of the wind conditions at the Site and the results of the wind loading study.</li> </ul>	<p>An updated <b>Structural Works Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all Design Documentation required to describe the developed structural design, including for the Stage 1 Design Deliverables.</p>	<p>A final <b>Structural Works Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all For Pre-Fabrication Documentation and For Construction Documentation (as applicable to the Model Elements) required to describe:</p> <ul style="list-style-type: none"> <li>(a) the final structural design, including for the Stage 2 Design Deliverables; and</li> <li>(b) the evidence that an independent structural design check has been carried out.</li> </ul>

**16.1.9 Acoustic Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
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DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>An <b>Acoustic Design Package</b> (the <b>Acoustic Design Report</b>) describing the schematic design for the Stadium and Sports Precinct which complies with Schedule 12 (Design Specifications), including the requirements set out in Chapter E7 (Acoustics), and includes all Design Documentation required to describe:</p> <ul style="list-style-type: none"> <li>(a) confirmation of the design environment acoustic conditions (noise and vibration) at the Site, and the basis for any forecast values;</li> <li>(b) confirmation of the acoustic design criteria for the Stadium and Sports Precinct is in accordance with all relevant Quality Standards and Laws;</li> <li>(c) the proposed structural vibration isolation including vibration isolation mounts for equipment;</li> <li>(d) details of noisy equipment and proposed locations including plant, lifts, and other noise generating equipment, and the proposed acoustic treatment for such equipment;</li> <li>(e) building and mechanical services design and routing to avoid undermining sound insulation;</li> <li>(f) the proposed acoustically rated materials including sound attenuating façade materials, doors, walls and ceilings;</li> <li>(g) the acoustic treatment and location of toilet and plumbing components;</li> <li>(h) the approach to design of natural ventilation systems with respect to outdoor noise levels;</li> <li>(i) the noise flanking paths and associated acoustic treatment;</li> <li>(j) the specification based on a schematic level of detail, of the design details required to address the acoustic design criteria, with preliminary modelling analysis of key aspects to support</li> </ul>	<p>An updated <b>Acoustic Design Report</b> which complies with Schedule 12 (Design Specifications) and includes all Design Documentation required to describe the developed acoustic design, including for the Stage 1 Design Deliverables.</p>	<p>A final <b>Acoustic Design Report</b> which complies with Schedule 12 (Design Specifications) and includes all For Construction Documentation required to describe the final acoustic design, including for the Design Stage 2 Design Deliverables.</p>

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>performance claims; and</p> <p>(k) through reference to architectural and Engineering Services Design Documentation, that the level of insulation and construction methods proposed in Design Stage 1 will achieve the Design Requirements in respect of acoustics.</p>		

**16.1.10 Fire Engineering and Fire Protection Systems Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p><b>A Fire Engineering and Fire Protection Systems Design Package</b> describing the schematic design for the Stadium and Sports Precinct which complies with Schedule 12 (Design Specifications), including the requirements set out in Chapter E8 (Fire Engineering and Fire Protection Systems), and includes all Design Documentation required to describe:</p> <p>(a) the fire engineering strategy for the Stadium and Sports Precinct;</p> <p>(b) a Fire Engineering Brief (<b>FEB</b>), including all assumptions and limitations where alternative building solutions are proposed;</p> <p>(c) a Fire Engineering Report (<b>FER</b>), including all assumptions and limitations where alternative building solutions are proposed;</p> <p>(d) the preliminary Stadium evacuation plan (as part of the Crisis or Major Incident Plan);</p> <p>(e) the preliminary cause and effect matrix for fire events;</p> <p>(f) minutes of meetings with DFES indicating their acceptance of the proposed scheme;</p> <p>(g) confirmation that all aspects of the Design Stage 1 Design Documentation comply with the</p>	<p>An updated <b>Fire Engineering and Fire Protection Systems Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all Design Documentation required to describe:</p> <p>(a) the developed fire engineering strategy and fire protection systems design, including for the Design Stage 1 Design Deliverables;</p> <p>(b) how life safety services, ICT Systems and other Engineering Services systems are served by the fire protection system;</p> <p>(c) the colour coded plans identifying emergency evacuation routes for all Event scenarios; and</p> <p>(d) confirmation that all aspects of the Design Documentation as at the end of Design Stage 2 addresses the requirements of the FER.</p>	<p>A final <b>Fire Engineering and Fire Protection Systems Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all For Construction Documentation required to describe:</p> <p>(a) the final fire engineering strategy for the Stadium and Sports Precinct and the final fire protection systems design, including for the Design Stage 2 Design Deliverables; and</p> <p>(b) a demonstration of DFES acceptance of the fire engineering strategy and fire protection systems.</p>



DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>requirements of the FEB and FER;</p> <p>(h) the fire detection and alarm systems detailing interfaces to other Engineering Services;</p> <p>(i) the automatic fire sprinkler systems and fire hydrant systems, detailing major items of plant and reticulation routes;</p> <p>(j) the fire detection and suppression systems including cause and effect descriptions;</p> <p>(k) SSISEP provisions, in accordance with the FEB and FER;</p> <p>(l) the arrangement and interconnectivity of the fire indicator panel system and fire hydrant system; and</p> <p>(m) the safety services, risk management and back-up systems, fail safe provisions and redundancy measures for all applicable services including a description of the philosophy for essential and non-essential services arrangements.</p>		

**16.1.11 Hydraulic Services Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>A <b>Hydraulic Services Design Package</b> describing the schematic design for the Stadium, the Sports Precinct and the Off-Site Infrastructure which complies with Schedule 12 (Design Specifications), including the requirements set out in Chapter E9 (Hydraulic Services), and includes all Design Documentation required to describe:</p> <p>(a) lifecycle costing analysis for the hydraulic services options considered, and justification of the system recommended;</p> <p>(b) how innovation has been applied to the hydraulic services systems to address water</p>	<p>An updated <b>Hydraulic Services Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all Design Documentation required to describe the developed hydraulic services design, including for the Design Stage 1 Design Deliverables.</p>	<p>A final <b>Hydraulic Services Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all For Construction Documentation required to describe the final hydraulic services design, including for all Design Stage 2 Design Deliverables.</p>

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>efficiency, maintenance and replacement;</p> <p>(c) the approach to selection of fixtures for ease of carrying out maintenance to hydraulic services to minimise disruption to the Stadium Activities;</p> <p>(d) the approach for the maintenance of hydraulic services associated with public toilets to minimise disruption to the Stadium Activities;</p> <p>(e) a legionella risk assessment; and</p> <p>(f) sewer discharge calculations at each toilet stack with reference to pipe diameter/capacity.</p>		

**16.1.12 Mechanical Services Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>A <b>Mechanical Services Design Package</b> describing the schematic design for the Stadium and Sports Precinct which complies with Schedule 12 (Design Specifications), including the requirements set out in Chapter E10 (Mechanical Services), and including all Design Documentation required to describe:</p> <p>(a) the configuration for the mechanical air conditioning, ventilation system and smoke control;</p> <p>(b) all main air discharge locations including industrial exhaust, spill air and general exhaust, together with all air intake locations;</p> <p>(c) the methodology for the air conditioning of the critical Functional Units, including all energy saving provisions;</p> <p>(d) life-cycle costing estimates for the mechanical options considered, and justification of the system recommended;</p> <p>(e) the legionella risk assessment;</p> <p>(f) how innovation has been applied to the air</p>	<p>An updated <b>Mechanical Services Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all Design Documentation required to describe the developed mechanical services design, including for the Design Stage 1 Design Deliverables.</p>	<p>A final <b>Mechanical Services Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all For Construction Documentation required to describe the final mechanical services design, including for the Design Stage 2 Design Deliverables.</p>

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>conditioning systems to address energy efficiency, water efficiency, legionella minimisation, maintenance and replacement;</p> <p>(g) the approach taken to provision of reliability and backup within the system;</p> <p>(h) the planned operation of mechanical services in the event of an emergency evacuation;</p> <p>(i) the results of a risk assessment on the location of fresh air intakes and all air discharges;</p> <p>(j) the results of a risk assessment of heat loads from all services and equipment installations and capacities;</p> <p>(k) the assessment of solar gains and resulting ambient temperatures in enclosed areas exposed to sunlight; and</p> <p>(l) a plant maintenance and replacement strategy including a description of how the design proposal for Engineering Services will facilitate ease of access and maintenance to services without interruption to operations.</p>		

**16.1.13 Electrical Services Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>An <b>Electrical Services Design Package</b> describing the schematic design for the Stadium, the Sports Precinct and the Off-Site Infrastructure (as applicable) which complies with Schedule 12 (Design Specifications), including the requirements set out in Chapter E11 (Electrical Services) and includes all Design Documentation required to describe:</p> <p>(a) the safety services and back-up power supply provisions, including an analysis of which systems, including ICT Systems, are necessary to enable all safe evacuation of the Stadium</p>	<p>An updated <b>Electrical Services Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all Design Documentation required to describe the developed electrical services design, including for the Design Stage 1 Design Deliverables.</p>	<p>A final <b>Electrical Services Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all For Construction Documentation required to describe the final electrical services design, including for the Design Stage 2 Design Deliverables.</p>

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>and Sports Precinct in accordance with relevant Quality Standards and Laws;</p> <p>(b) the planned UPS, essential and non-essential power arrangements;</p> <p>(c) the supply of diesel fuel for the emergency generators;</p> <p>(d) the electrical services provisions distributed throughout the Stadium and Sports Precinct;</p> <p>(e) the proposed locations of the lightning protection measures; and</p> <p>(f) the energy management system (<b>EMS</b>), including remote operation and monitoring, extent of energy metering, all circuit breakers and of the main electrical equipment and BMS interfacing.</p>		

**16.1.14 Lighting Systems Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p><b>A Lighting Systems Design Package</b> (the <b>Lighting Systems Design Report</b>) describing the schematic design for the Stadium and Sports Precinct which complies with Schedule 12 (Design Specifications), including the requirements set out in Chapter E12 (Lighting Systems) and Appendix H8 (Lighting Criteria), and includes all Design Documentation required to describe:</p> <p>(a) the lighting systems design strategy for the Stadium and Sports Precinct addressing general, emergency and sports lighting;</p> <p>(b) the initial lighting systems cost benefit analysis to assess:</p> <p>(i) practical and aesthetic requirements;</p>	<p>An updated <b>Lighting Systems Design Report</b> which complies with Schedule 12 (Design Specifications) and includes all Design Documentation required to describe the developed design including all Design Stage 1 Design Deliverables.</p>	<p>A final <b>Lighting Systems Design Report</b> which complies with Schedule 12 (Design Specifications) and includes all For Construction Documentation required to describe the final lighting systems design, including for the Design Stage 2 Design Deliverables.</p>

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<ul style="list-style-type: none"> <li>(ii) mix of lighting and natural daylight (to achieve energy savings);</li> <li>(iii) the use of motion sensors;</li> <li>(iv) colour temperature selections;</li> <li>(v) energy consumption; and</li> <li>(vi) the basis for setting of the selected maintenance factors;</li> <li>(c) the lighting design software used for computer analysis;</li> <li>(d) photometric data information, verified by a NATA laboratory report certificate;</li> <li>(e) results and summaries from the computer analysis for each of the lighting modes described in Chapter E12 (Lighting Systems), including horizontal levels, vertical levels, glare ratings and spill light;</li> <li>(f) transitional analysis of lighting for twilight and overcast conditions;</li> <li>(g) a preliminary schedule of luminaires and lamps for general and sports lighting;</li> <li>(h) technical datasheets for proposed sports lighting luminaires and lamps with the photometric data information (usable IES format for computer simulations) for each fitting and accessory;</li> <li>(i) a compliance matrix for all required Sporting Events as per the relevant Quality Standards and Appendix H8 (Lighting Criteria), with specific reference to Design Stage 1;</li> <li>(j) night time visual representations of the Stadium and Sports Precinct that demonstrably address the requirements set out in Chapter C11.4 (Character and Built Form);</li> </ul>		

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>(k) illuminance diagrams for general lighting in the Stadium (Circulation and Functional Units) and Sports Precinct; and</p> <p>(l) illuminance diagrams (for broadcast mode lighting), including the Field Of Play, vertical grids and Patrons in the stands.</p>		

**16.1.15 ICT Systems Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>An <b>ICT Systems Design Package</b> describing the schematic design for the Stadium and Sports Precinct which complies with Schedule 12 (Design Specifications), including the requirements set out in Chapter E13 (Information Communications Technology (ICT) Systems), and includes all Design Documentation to describe:</p> <p>(a) the ICT Risk Assessment;</p> <p>(b) how the design and procurement of the ICT Systems will be integrated into the Delayed Design and Procurement Plan;</p> <p>(c) the proposed ICT network;</p> <p>(d) the wireless networking and cellular network, including coverage maps;</p> <p>(e) the communications carrier and mobile carrier connection arrangements and redundancies;</p> <p>(f) typical communications room / floor distributor room layouts;</p> <p>(g) associated services, interconnections and interfaces and any interdependencies with State and Stadium Operator systems;</p> <p>(h) the provisions made for State and Stadium Operator ICT systems, including racks within</p>	<p>An updated <b>ICT Services Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all Design Documentation required to describe:</p> <p>(a) the developed ICT Systems design, including for the Design Stage 1 Design Deliverables; and</p> <p>(b) in respect of the updated ICT Risk Assessment:</p> <p>(i) the findings and determinations that were adopted during Design Stage 2;</p> <p>(ii) the findings and determinations that were not adopted during Design Stage 2, including detailed justification as to why these were not adopted; and</p> <p>(iii) any amendments to the ICT Risk Assessment during Design Stage 2 and the approach for addressing these.</p>	<p>A final <b>ICT Systems Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all For Construction Documentation required to describe the final ICT Systems design, including for the Design Stage 2 Design Deliverables.</p>

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>communications rooms, power and cooling;</p> <p>(i) the draft Spectrum Frequency Management Policy;</p> <p>(j) how the ICT Systems will enhance the fan experience; and</p> <p>(k) any innovations proposed for the ICT Systems.</p>		

**16.1.16 AV Systems Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>An <b>AV Systems Design Package</b> describing the schematic design for the Stadium and Sports Precinct which complies with Schedule 12 (Design Specifications), including the requirements set out in Chapter E14 (Audio Visual (AV) Systems), and includes all Design Documentation required to describe:</p> <p>(a) how the design and procurement of the AV Systems will be integrated into the Delayed Design and Procurement Plan;</p> <p>(b) the integration of AV Systems with wayfinding and signage and Engineering Services systems including lighting systems, Security Systems and the BMS;</p> <p>(c) the LED Superscreens, LED Signage, the IPTV system;</p> <p>(d) the locations of equipment and cable routes;</p> <p>(e) the AV Systems configuration via a line diagrams showing each item of equipment;</p> <p>(f) Patron sightlines to AV Systems, supported by visualisation and calculations;</p> <p>(g) provisions for broadcast, including a schematic layout showing indicative camera positions and</p>	<p>An updated <b>AV Systems Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all Design Documentation required to describe:</p> <p>(a) the developed AV Systems design, including for the Design Stage 1 Design Deliverables;</p> <p>(b) broadcast provisions, including camera locations, patch panels and cable routes;</p> <p>(c) AV cabinet locations and cabinet layouts;</p> <p>(d) the patch point schedule;</p> <p>(e) the modelling or simulation to demonstrate that the PA System will achieve the performance requirements, including in relation to the acoustic requirements described in Chapter E7 (Acoustics) of Schedule 12 (Design Requirements) of this Agreement;</p> <p>(f) functional equipment layouts for the Production Suites and other control locations; and</p> <p>(g) draft user templates for each of the content management systems.</p>	<p>A final <b>AV Systems Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all For Construction Documentation required to describe the final AV Systems design, including for the Design Stage 2 Design Deliverables.</p>

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>patch panels;</p> <p>(h) the PA System and how the required performance will be achieved by design, modelling and testing;</p> <p>(i) how the AV Systems will enhance the fan experience; and</p> <p>(j) any innovations proposed for the AV Systems.</p>		

**16.1.17 Security Systems Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>A <b>Security Systems Design Package</b> describing the schematic design for the Stadium and Sports Precinct which complies with Schedule 12 (Design Specifications), including the requirements set out in Chapter E15 (Security Systems), and includes all Design Documentation required to describe:</p> <p>(a) the schematic CCTV system coverage plans;</p> <p>(b) the layout of manned security and operations positions, including the Main Security Office and the Event Control Room;</p> <p>(c) the layout and systems at Ticket Control Points, and method of securing the Controlled Area; and</p> <p>(d) all meetings of minutes with relevant third parties, including WAPOL.</p>	<p>An updated <b>Security Systems Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all Design Documentation required to describe:</p> <p>(a) the developed Security Systems design, including for the Design Stage 1 Design Deliverables;</p> <p>(b) functional equipment layouts for the Main Security Office, Event Control Room and other control locations;</p> <p>(c) a draft master key schedule; and</p> <p>(d) visualisations for supervision and security sightlines.</p>	<p>A final <b>Security Systems Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all For Construction Documentation required to describe:</p> <p>(a) the final design for Security Systems, including for the Design Stage 2 Design Deliverables;</p> <p>(b) the door hardware schedule; and</p> <p>(c) the functional specification and images for the Security Systems operator interfaces, including graphical user interface for command and control.</p>

**16.1.18 Vertical Transportation Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>A <b>Vertical Transportation Design Package</b> describing the schematic design for the Stadium and Sports Precinct which complies with Schedule 12</p>	<p>An updated <b>Vertical Transportation Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all Design</p>	<p>A final <b>Vertical Transportation Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all For Pre-Fabrication</p>



DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>(Design Specifications), including the requirements set out in Chapter E16 (Vertical Transportation), and includes all Design Documentation to describe:</p> <ul style="list-style-type: none"> <li>(a) the traffic study and diagrams to support the design proposal and the numbers of lifts and escalators to be provided, including maintenance access, and as described in Clause E16.5.7 (Traffic Study) of Schedule 12 (Design Specifications);</li> <li>(b) information on the location, number, type, size, capacity and quality of the Vertical Transportation services; and</li> <li>(c) the approach to safe egress, the FEB and FER, and the movement of goods, Stadium Staff and Patrons, including IRUA.</li> </ul>	<p>Documentation required to describe the developed Vertical Transportation design, including for the Design Stage 1 Design Deliverables.</p>	<p>Documentation and For Construction Documentation (as applicable to the Model Elements) required to describe the final Vertical Transportation design, including for the Design Stage 2 Design Deliverables.</p>

**16.1.19 BMS Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>A <b>BMS Design Package</b> describing the schematic design for the Stadium and Sports Precinct which complies with Schedule 12 (Design Specifications), including the requirements set out in Chapter E17 (Building Management System) and Clause E1.4.5 (Metering, Monitoring and Reporting), and includes all Design Documentation required to describe:</p> <ul style="list-style-type: none"> <li>(a) the BMS design strategy for the Stadium and Sports Precinct including confirmation of the open protocols and an overview of functionality and resilience; and</li> <li>(b) the extent of integration of the BMS with the other automatic systems on the Site, for example Security Systems, ICT Systems, electrical services, mechanical services, Utilities monitoring and ESD Initiatives, such as the rainwater harvesting system.</li> </ul>	<p>An updated <b>BMS Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all Design Documentation required to describe:</p> <ul style="list-style-type: none"> <li>(a) the developed BMS design, including for the Design Stage 1 Design Deliverables;</li> <li>(b) a draft schedule of all Engineering Services installations that will be connected to the BMS;</li> <li>(c) a full metering and monitoring schedule; and</li> <li>(d) points schedule and functional specification with GUI preliminary layouts.</li> </ul>	<p>A final <b>BMS Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all For Construction Documentation required to describe the final BMS design, including for the Design Stage 2 Design Deliverables.</p>

**16.1.20 Safety In Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>A <b>Safety In Design Package</b> (the <b>Safety In Design Review Report</b>) describing the Safety In Design process undertaken by Project Co for the Stadium, the Sports Precinct and the Off-Site Infrastructure in accordance with the requirements set out in Chapter C17 (Safety In Design), including in accordance with all OHS Laws.</p> <p>The Safety In Design Review Report must:</p> <ul style="list-style-type: none"> <li>(a) describe the Safety In Design process undertaken by Project Co, including details of all participants;</li> <li>(b) detail all safety hazards and risks identified;</li> <li>(c) detail full or partial risk management strategies for each hazard and risk;</li> <li>(d) detail the outcomes of the evaluation of all hazards and risks and their associated management strategies to identify what can be eliminated, reduced or controlled; and</li> <li>(e) fully document all residual risks upon completion of the Safety In Design process.</li> </ul>		

**16.2 Functional Group Design Packages**

**16.2.1 Circulation Areas Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>A <b>Circulation Areas Design Package</b> describing the schematic design for the Circulation Areas which complies with Schedule 12 (Design Specifications), including the requirements set out in Clause D5 (Circulation Areas), and includes all Design Documentation required to describe:</p> <ul style="list-style-type: none"> <li>(a) the hierarchy of the Circulation Areas, including</li> </ul>	<p>An updated <b>Circulation Areas Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all Design Documentation required to describe the developed design for Circulation Areas, including for the Design Stage 1 Design Deliverables.</p>	<p>A final <b>Circulation Areas Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all For Construction Documentation required to describe the final Circulation Areas design, including for the Design Stage 2 Design Deliverables.</p>

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>to convey the spatial qualities;</p> <p>(b) travel distances for Stadium Users between key Functional Areas and Functional Units (as applicable) for the Sports Precinct and the Stadium, including:</p> <ul style="list-style-type: none"> <li>(i) Stadium Entry Points to Seating Positions at each level;</li> <li>(ii) between IRUA Positions and amenities including Outlets, Retail Facilities and toilet facilities;</li> <li>(iii) between Catering Facilities and Point Of Service;</li> <li>(iv) between the Players' Viewing Rooms and the Field Of Play; and</li> <li>(v) between carpark and drop-off areas and key destinations within the Stadium and the Sports Precinct, including for Non-Event Days;</li> </ul> <p>(c) Stadium Entry Points for Non-Event Days and Event Days;</p> <p>(d) the proposed access for pedestrians and vehicular traffic, via the Traffic and Access Plan to be prepared in accordance with Clause 5.3 of this Schedule 5 (Design Development); and</p> <p>(e) the traffic study which complies with Schedule 12 (Design Specifications) including Clause E16.5.7 (Traffic Study), with commentary on how this supports the overall circulation solution.</p>		

**16.2.2 Team Facilities Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
A <b>Team Facilities Design Package</b> describing the	An updated <b>Team Facilities Design Package</b> which	A final <b>Team Facilities Design Package</b> which

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>schematic design for the Team Facilities which complies with Schedule 12 (Design Specifications), including the requirements set out in Chapter D6 (Team Facilities), and includes all Design Documentation required to describe:</p> <ul style="list-style-type: none"> <li>(a) the approach to the customisation of fitout for the Team Facilities and how this customisation and fitout will be integrated into the Delayed Design and Procurement Plan; and</li> <li>(b) views from the Coaches' Boxes, Umpire Observers' Box, Players' Viewing Room and other Team Facilities that overlook the Seating Bowl, including through provision of visualisation materials, to demonstrate the views.</li> </ul>	<p>complies with Schedule 12 (Design Specifications) and includes all Design Documentation required to describe the developed design for Team Facilities, including for the Design Stage 1 Design Deliverables.</p>	<p>complies with Schedule 12 (Design Specifications) and includes all For Construction Documentation required to describe the final Team Facilities design, including for the Design Stage 2 Design Deliverables.</p>

### 16.2.3 Seating Bowl Design Package

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>A <b>Seating Bowl Design Package</b> (the <b>Seating Bowl Report</b>) describing the schematic design for the Seating Bowl which complies with Schedule 12 (Design Specifications), including the requirements set out in Chapter D7 (Seating Bowl), and includes all Design Documentation required to describe:</p> <ul style="list-style-type: none"> <li>(a) the built form and character of the Seating Bowl, including details of Aisles and Gangways, Plats, seat types and roof coverage;</li> <li>(b) the Seating Bowl Plan, in accordance with the requirements of Clauses D7.3(a), D7.4.1 and D7.4.2 of Schedule 12 (Design Specifications), addressing: <ul style="list-style-type: none"> <li>(i) the Sightline Criteria and Athletics Sightline Criteria that will be achieved for the range of Event types and in the form of a contour map including a numerical</li> </ul> </li> </ul>	<p>An updated <b>Seating Bowl Report</b> which complies with Schedule 12 (Design Specifications) and includes all Design Documentation required to describe:</p> <ul style="list-style-type: none"> <li>(a) the developed design for the Seating Bowl, including for the Design Stage 1 Design Deliverables;</li> <li>(b) confirmation of the location and other requirements pertaining to the LED Superscreens and LED Signage;</li> <li>(c) light shading analysis for the Seating Bowl over the course of a full year including for all the alternate Event configurations;</li> <li>(d) wind analysis reports of the Seating Bowl for all the Event scenarios; and</li> <li>(e) rain prediction analysis indicating the Seating</li> </ul>	<p>A final <b>Seating Bowl Report</b> which complies with Schedule 12 (Design Specifications) and includes all For Construction Documentation required to describe the final Seating Bowl design, including for the Design Stage 2 Design Deliverables.</p>

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>value for the Viewing Quality for each Event type, including all assumptions and data used in determining the Viewing Quality;</p> <ul style="list-style-type: none"> <li>(ii) the extent of the Field Of Play that is viewable for AFL Events, Cricket Events, Rectangular Events and Athletics Events;</li> <li>(iii) the extent of the stage that is viewable for Entertainment Events for each stage location included in the Event Overlay Plan;</li> <li>(iv) the highest and lowest point on the Field of Play that is viewable for each Event type;</li> <li>(v) the extent to which the Key Viewing Elements are viewable as a pass or fail for AFL Events, Cricket Events, Rectangular Events and Athletics Events;</li> <li>(vi) Restricted View seat descriptions and numbers;</li> <li>(vii) the nature and extent of any obstructions causing Restricted View;</li> <li>(viii) the extent of provision of Supplementary Displays;</li> <li>(ix) the numerical value for the Viewing Quality of each Seating Position for each Event type in the required configuration for the Event (including Rectangular Reconfiguration and Athletics Reconfiguration (as applicable)), demonstrated by use of a colour-coding system; and</li> <li>(x) all assumptions and data used in determining the Viewing Quality;</li> </ul>	<p>Positions expected to be impacted by rain in the predominant or prevailing wind scenarios.</p>	

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>(c) the Drop-in Seats strategy including demonstrating how the strategy achieves being close to the action for AFL Events and Rectangular Events;</p> <p>(d) provisions for IRUA;</p> <p>(e) standing areas;</p> <p>(f) seating types including for Drop-in Seats;</p> <p>(g) proposed cross section and demonstration of sightline arrangements from each level and each of the Premium Product Areas;</p> <p>(h) outline approach for the location, sizing and specifications for the LED Superscreens as described in Clause D7.4.5 (LED Superscreens) and LED Signage and as described in Clause D7.4.6 (LED Signage in the Seating Bowl) of Schedule 12 (Design Specifications);</p> <p>(i) a preliminary Expansion Works Plan in accordance with Clause D7.4.13 (Expansion of Seating Bowl) of Schedule 12 (Design Specifications) demonstrating how the Expansion of the Seating Bowl can be implemented and the characteristics of the expanded bowl;</p> <p>(j) through provision of drawings and other visual representations from different perspectives:</p> <p style="padding-left: 20px;">(i) the form, character and key design features of the Seating Bowl, including views in context with the Pitch; and</p> <p style="padding-left: 20px;">(ii) the sightlines from all Stadium levels and Patron ticket categories for Sporting Events, including views for a night game for an AFL Event and a Rectangular Event; and</p> <p>(k) the fans-first features in the design of the</p>		

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
Seating Bowl.		

**16.2.4 General Admission Areas Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>A <b>General Admission Areas Design Package</b> describing the schematic design for the General Admission Areas which complies with Schedule 12 (Design Specifications), including the requirements set out in Chapter D8 (General Admission Areas) and includes all Design Documentation required to describe the views from key facilities within the General Admission Areas that overlook the Seating Bowl or have external views, including the A La Carte Restaurant, the Buffet Restaurant and General Admission Concourses, including through provision of visualisation materials, to demonstrate the views.</p>	<p>An updated <b>General Admission Areas Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all Design Documentation required to describe the developed design for the General Admission Areas, including for the Design Stage 1 Design Deliverables.</p>	<p>A final <b>General Admission Areas Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all For Construction Documentation required to describe the final General Admission Areas design, including for the Design Stage 2 Design Deliverables.</p>

**16.2.5 Premium Product Areas Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>A <b>Premium Product Areas Design Package</b> describing the schematic design for the Premium Product Areas which complies with Schedule 12 (Design Specifications), including the requirements set out in Chapter D9 (Premium Product Areas), and includes all Design Documentation required to describe:</p> <ul style="list-style-type: none"> <li>(a) the approach to the customisation of fitout for some Premium Product Areas (to accommodate State Partners) in accordance with the Delayed Design and Procurement Plan; and</li> <li>(b) the views from key facilities within the Premium Product Areas that overlook the Seating Bowl or have external views, including from within each Premium Product Area and Premium Concourses, including through provision of visualisation materials, to demonstrate the</li> </ul>	<p>An updated <b>Premium Product Areas Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all Design Documentation required to describe the developed design for Premium Product Areas, including for the Design Stage 1 Design Deliverables.</p>	<p>A final <b>Premium Product Areas Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all For Construction Documentation required to describe the final Premium Product Areas design, including for the Design Stage 2 Design Deliverables.</p>



DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
views.		

**16.2.6 Catering Facilities Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>A <b>Catering Facilities Design Package</b> describing the schematic design for the Catering Facilities which complies with Schedule 12 (Design Specifications), including the requirements set out in Chapter D10 (Catering Facilities), and includes all Design Documentation required to describe:</p> <p>(a) the strategy for the Catering Service, through provision of the Catering Strategy, including:</p> <ul style="list-style-type: none"> <li>(i) a plain English description of the Catering Product delivery philosophy, describing all elements of the anticipated Catering Service, including Catering Product delivery, transport and storage, cooking and delivery, Points of Service and cleaning;</li> <li>(ii) a description of the assumptions and calculations used to guide Project Co's design of the Catering Facilities to satisfy with Schedule 12 (Design Specifications), including queuing timeframes;</li> <li>(iii) strategy for movement of Catering Product, including prepared food, through the Stadium and commentary on adjacencies, journey distances, method of handling;</li> <li>(iv) sample menus for each of the Catering Facilities and associated Premium Product Areas (as applicable);</li> <li>(v) identification of the Engineering Services</li> </ul>	<p>An updated <b>Catering Facilities Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all Design Documentation required to describe:</p> <ul style="list-style-type: none"> <li>(a) the developed design for the Seating Bowl, including for the Design Stage 1 Design Deliverables;</li> <li>(b) how the Catering Facilities will accommodate State FF&amp;E, including loose catering equipment and point of sale devices;</li> <li>(c) a detailed FF&amp;E List, describing the proposed Project Co FF&amp;E to be provided in the Catering Facilities; and</li> <li>(d) all samples and prototypes, including as set out in Clause C20.5 (Samples and Prototypes) of Schedule 12 (Design Specifications).</li> </ul>	<p>A final <b>Catering Facilities Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all For Construction Documentation required to describe the final Catering Facilities design, including for the Design Stage 2 Design Deliverables.</p>

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>design strategy for all Catering Facilities;</p> <p>(vi) the proposed finishes within each of the Catering Facilities; and</p> <p>(vii) outline descriptions and general specifications for all proposed Project Co FF&amp;E to be provided in the Catering Facilities; and</p> <p>(b) how the design and procurement of the Catering Facilities will be integrated into the Delayed Design and Procurement Plan.</p>		

**16.2.7 Retail Facilities Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>A <b>Retail Facilities Design Package</b> describing the schematic design for the Retail Facilities which complies with Schedule 12 (Design Specifications), including the requirements set out in Chapter D11 (Retail Facilities), and includes all Design Documentation required to describe the approach to the customisation of fitout for the Retail Facilities and how this customisation and fitout will be integrated into the Delayed Design and Procurement Plan.</p>	<p>An updated <b>Retail Facilities Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all Design Documentation required to describe the developed design for Retail Facilities, including for the Design Stage 1 Design Deliverables.</p>	<p>A final <b>Retail Facilities Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all For Construction Documentation required to describe the final Retail Facilities design, including for the Design Stage 2 Design Deliverables.</p>

**16.2.8 Waste Management Facilities Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>A <b>Waste Management Facilities Design Package</b> describing the schematic design for the Waste Management Facilities which complies with Schedule 12 (Design Specifications), including the requirements set out in Chapter D12 (Waste Management Facilities), and includes all Design Documentation required to describe:</p> <p>(a) how waste will be stored, managed and</p>	<p>An updated <b>Waste Management Facilities Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all Design Documentation required to describe the developed design for Waste Management Facilities, including for the Design Stage 1 Design Deliverables.</p>	<p>A final <b>Waste Management Facilities Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all For Construction Documentation required to describe the final Waste Management Facilities design, including for the Design Stage 2 Design Deliverables.</p>

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>removed from the Stadium and Sports Precinct, through provision of the Waste Management Plan; and</p> <p>(b) how the design and procurement of the Waste Management Facilities will be integrated into the Delayed Design and Procurement Plan.</p>		

**16.2.9 Stadium Operations and Event Day Facilities Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>A <b>Stadium Operations and Event Day Facilities Design Package</b> describing the schematic design for the Stadium Operations and Event Day Facilities which complies with Schedule 12 (Design Specifications), including the requirements set out in Chapter D13 (Stadium Operations and Event Day Facilities) and includes all Design Documentation required to describe:</p> <p>(a) the views from the Event Control Room overlooking the Seating Bowl, including through provision of visualisation materials to demonstrate the views;</p> <p>(b) an overview of provisions to accommodate the functions of Emergency Services personnel;</p> <p>(c) an overview of provisions to accommodate the functions of Stadium Personnel; and</p> <p>(d) an overview of provisions to accommodate the functions of Services Personnel.</p>	<p>An updated <b>Stadium Operations and Event Day Facilities Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all Design Documentation required to describe the developed design for Event Day Facilities, including for the Design Stage 1 Design Deliverables.</p>	<p>A final <b>Stadium Operations and Event Day Facilities Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all For Construction Documentation required to describe the final Event Day Facilities design, including for the Design Stage 2 Design Deliverables.</p>

**16.2.10 Media Facilities Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>A <b>Media Facilities Design Package</b> describing the schematic design for the Media Facilities which complies with Schedule 12 (Design Specifications), including the requirements set out in Chapter D14 (Media Facilities), and includes all Design Documentation required to describe:</p> <ul style="list-style-type: none"> <li>(a) views from main broadcast camera positions including all Camera Decks, and from other Media Facilities that overlook the Seating Bowl, including through provision of visualisation materials to demonstrate the views; and</li> <li>(b) identification of the Engineering Services design strategy for all Media Facilities.</li> </ul>	<p>An updated <b>Media Facilities Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all Design Documentation required to describe the developed design for Media Facilities, including for the Design Stage 1 Design Deliverables.</p>	<p>A final <b>Media Facilities Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all For Construction Documentation required to describe the final Media Facilities design, including for the Design Stage 2 Design Deliverables.</p>

**16.2.11 Pitch and Associated Facilities Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>A <b>Pitch and Associated Facilities Design Package</b> (the <b>Pitch Report</b>) describing the schematic design for the Pitch and associated facilities which complies with Schedule 12 (Design Specifications), including the requirements set out in Chapter D15 (Pitch and Associated Facilities) and Chapter E18 (Pitch, Playing Surface and Associated Facilities), and includes all Design Documentation required to describe:</p> <ul style="list-style-type: none"> <li>(a) the overall strategy and system concept design solution for the Pitch and associated facilities adopted to satisfy the scope, functionality and performance requirements;</li> <li>(b) the likely microclimate within the Seating Bowl and the key issues arising from the Bookings Schedule, including consideration of humidity, temperatures, wind, rainfall, quantity and quality of light reaching the Playing Surface</li> </ul>	<p>An updated <b>Pitch Report</b> which complies with Schedule 12 (Design Specifications) and includes all Design Documentation required to describe:</p> <ul style="list-style-type: none"> <li>(a) the developed design for the Pitch and associated facilities, including for the Design Stage 1 Design Deliverables;</li> <li>(b) the provisions made to accommodate loadings and services for Entertainment Events and operations;</li> <li>(c) the detailed plans, specification and cross sections, including drainage, air systems if proposed, services, perimeter duct, edge treatments, and artificial coverings;</li> <li>(d) key levels, outfalls and connections for services;</li> <li>(e) the design levels for the Pitch surface;</li> </ul>	<p>A final <b>Pitch Report</b> which complies with Schedule 12 (Design Specifications) and includes all For Pre-Fabrication Documentation and For Construction Documentation (as applicable to the Model Elements) required to describe:</p> <ul style="list-style-type: none"> <li>(a) the final Pitch and associated facilities design, including for the Design Stage 2 Design Deliverables;</li> <li>(b) the final and complete description describing the process of the Drop-In Cricket Wicket Transporter transporting the Drop-In Cricket Wickets to and from the Nursery to the wicket location within the Pitch; and</li> <li>(c) a final and complete program describing the activities Project Co will undertake with the State and the Stadium Operator to develop the wickets within each Drop-In Cricket Wicket</li> </ul>

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>and wear and tear;</p> <p>(c) the assessment of the extent of shading and the need for use of grow lights to support growth of the Turf, including provision of the sun access modelling and stereographic images as described in Clause E18.5.3 (Sun Modelling) of Schedule 12 (Design Specifications);</p> <p>(d) the assessment and findings of the Performance Testing described in E18.5.6 (Maintainability) and E18.5.9 (Drop-In Cricket Wicket footings) of Schedule 12 (Design Specifications);</p> <p>(e) the assessment of suitability of existing sub-base and any proposed treatments or measures required;</p> <p>(f) the installation and testing methodology for the Pitch including:</p> <p>(i) the methodology and sequence for the placement of materials and elements in accordance with specified requirements and tolerances;</p> <p>(ii) testing procedures ensuring that all sampling and testing of materials is carried out in accordance with USGA method (<a href="http://www.usga.org/course_care/articles/construction/greens/Green-Section-Recommendations-For-A-Method-Of-Putting-Green-Construction">http://www.usga.org/course_care/articles/construction/greens/Green-Section-Recommendations-For-A-Method-Of-Putting-Green-Construction</a>);</p> <p>(iii) the methods used to produce the specified materials; and</p> <p>(iv) the process to ensure protection from Contamination and erosion whilst on stockpiles;</p> <p>(g) Project Co's outline specification, strategy,</p>	<p>(f) the light shading analysis of Seating Bowl and Pitch over the course of a full year with analysis reports showing hours of useful light for photosynthesis reaching all sections of the Pitch;</p> <p>(g) the proposed locations for weather stations;</p> <p>(h) detailed designs of the Drop-In Cricket Wicket transporter and Drop-In Cricket Wicket trays;</p> <p>(i) the materials testing and quality assurance regime Project Co will undertake in designing, constructing and commissioning the Pitch and associated facilities;</p> <p>(j) the final location and establishment regime (as required) for the Turf Farm; and</p> <p>(k) the final location and establishment regime for the Nursery.</p>	<p>tray.</p>

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>measures and methodology to be employed to maintain the Pitch to achieve optimal standards and the range of remedial measures available to rectify issues and control standards;</p> <p>(h) the proposed finish levels for the Playing Surface;</p> <p>(i) the turf specie to be used, including the strategy for transitioning turf specie;</p> <p>(j) the irrigation system, and of the ducted aeration system if proposed;</p> <p>(k) outlines descriptions and specifications for Sporting Equipment, the goal netting system and Cricket Sightscreen support system;</p> <p>(l) the Pitch capacity to accommodate and recover from localised loadings, in particular wear and tear from temporary structures, including for Entertainment Events;</p> <p>(m) Project Co's approach to meet the functional and performance requirements of the Nursery;</p> <p>(n) the Drop-In Cricket Wicket Transporter, including a description of how it will transport the Drop-In Cricket Wickets to and from the Nursery to the wicket location within the Pitch;</p> <p>(o) a concept design of the Drop-In Cricket Wicket trays, including a description of how it will interface with the Drop-In Cricket Wicket Transporter;</p> <p>(p) how Project Co will work with the State and the Stadium Operator, including proposed timeframes and locations of works, to develop the design of the Drop-In Cricket Wicket trays;</p> <p>(q) how Project Co will work with the State and the Stadium Operator, including proposed timeframes and locations of works, to develop the wickets within each Drop-In Cricket Wicket</p>		

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>tray;</p> <p>(r) the proposed location and development of the Turf Farm; and</p> <p>(s) in detail the materials testing and quality assurance regime Project Co will undertake in designing, constructing and commissioning the Pitch and associated facilities.</p>		

**16.2.12 Commercial Facilities Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>A <b>Commercial Facilities Design Package</b> describing the schematic design for the Commercial Facilities which complies with Schedule 12 (Design Specifications), including the requirements set out in Chapter D16 (Commercial Facilities) and includes all Design Documentation to describe the proposed Commercial Opportunities to be accommodated within the Commercial Facilities, including demonstration of compliance with requirements set out in Clauses D16.1 and D16.2 of Schedule 12 (Design Specifications).</p>	<p>An updated <b>Commercial Facilities Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all Design Documentation to describe the developed design for Commercial Facilities, including for the Design Stage 1 Design Deliverables.</p>	<p>A final <b>Commercial Facilities Design Package</b> which complies with Schedule 12 (Design Specifications) and includes all For Construction Documentation to describe the final Commercial Facilities design, including for the Design Stage 2 Design Deliverables.</p>

**16.2.13 Event Overlay Design Package**

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>An <b>Event Overlay Design Package (the Event Overlay Plans)</b> describing the philosophy and approach to Event Overlay at the Stadium and Sports Precinct (including activation opportunities) for each Event type, which complies with Schedule 12 (Design Specifications), including the requirements set out in Chapter D17 (Event Overlay).</p> <p>The Event Overlay Plans must address the requirements set out in Clause 5.5 of this Schedule 5</p>	<p>Updated <b>Event Overlay Plans</b> which comply with Schedule 12 (Design Specifications) and include all Design Documentation to describe the developed design for Event Overlays.</p> <p>For Design Stage 2 this must include sufficient Design Documentation to clearly define the developed philosophy and approach to Event Overlay, and must include:</p> <p>(a) developed layout plans and visualisations,</p>	<p>Final <b>Event Overlay Plans</b> which comply with Schedule 12 (Design Specifications) and include all For Pre-Fabrication Documentation and For Construction Documentation (as applicable to the Model Elements) to clearly define and demonstrate the fully detailed and co-ordinated approach to Event Overlay at the Stadium and Sports Precinct via the Event Overlay Plans, which must address all requirements set out in Clause 5.5 of this Schedule 5</p>

DESIGN STAGE 1	DESIGN STAGE 2	DESIGN STAGE 3
<p>(Design Development).</p> <p>For Design Stage 1 this must include sufficient Design Documentation to clearly define and demonstrate the feasibility of the proposed philosophy and approach to Event Overlay, and must include:</p> <ul style="list-style-type: none"> <li>(a) schematic layout plans and visualisations;</li> <li>(b) an outline explanation of the philosophy and approach (including implementation and operational impacts), addressing the requirements set out in Clause 5.5 of this Schedule 5 (Design Development) as relevant to the Design Stage; and</li> <li>(c) details of all assumptions.</li> </ul>	<ul style="list-style-type: none"> <li>including Engineering Services details;</li> <li>(b) a schedule of areas;</li> <li>(c) an more detailed explanation of the philosophy and approach (including implementation and operational impacts), addressing the requirements set out in Clause 5.5 of this Schedule 5 (Design Development) as relevant to the Design Stage; and</li> <li>(d) details of all assumptions.</li> </ul>	<p>(Design Development).</p>