

Freedom of Information Publication Coversheet

The following information is provided pursuant to section 28 of the *Freedom of Information Act 2016*.

FOI Reference: CMTEDDFOI 2022-328

Information to be published	Status
1. Access application	Published
2. Decision notice	Published
3. Documents and schedule	Published
4. Additional information identified	No
5. Fees	Waived
6. Processing time (in working days)	24 working days
7. Decision made by Ombudsman	N/A
8. Additional information identified by Ombudsman	N/A
9. Decision made by ACAT	N/A
10. Additional information identified by ACAT	N/A

Good Afternoon,

RE: FOI REQUEST – CANBERRA STADIUM & MANUKA OVAL MASTER PLAN STUDY

I write to request under the *Freedom of Information Act 2016* a copy of the *Canberra Stadium & Manuka Oval Master Plan Study,* undertaken by *Populous* in 2009.

I ask that my request is forwarded to the relevant directorates, should they hold the relevant documents.

Should you require any further information or clarification about my request, please contact my office on ______.

Best,



Our ref: CMTEDDFOI 2022-328



_

FREEDOM OF INFORMATION REQUEST

I refer to your application under section 30 of the *Freedom of Information Act 2016* (the Act), received by the Chief Minister, Treasury and Economic Development Directorate (CMTEDD) on 20 October 2022.

Specifically, you are seeking: "A copy of the Canberra Stadium & Manuka Oval Master Plan Study, undertaken by Populous in 2009."

Authority

As an appointed Information Officer under section 18 of the Act, I am authorised to make a decision on access or amendment to government information in the possession or control of CMTEDD.

Timeframes

In accordance with section 40 of the Act, CMTEDD is required to provide a decision on your access application by 17 November 2022 however, following on from an extension and third party consultations, the due date is now 4 January 2023.

Decision on access

Searches were completed for relevant documents and one document was identified that falls within the scope of your request.

I have included as **Attachment A** to this decision the schedule which provides a description of the document and the access decisions for that document.

I have decided to grant partial access to the document.

My access decisions are detailed further in the following statement of reasons and the document released to you is provided as **Attachment B** to this letter.

In accordance with section 54(2) of the Act a statement of reasons outlining my decisions is below.

Statement of Reasons

In reaching my access decisions, I have taken the following into account:

- the Act;
- the views of the consulted third parties;
- the Human Rights Act 2004.

Exemption claimed

Public Interest

The Act has a presumption in favour of disclosure. As a decision maker I am required to decide where, on balance, public interest lies. As part of this process, I must consider factors favouring disclosure and nondisclosure.

In *Hogan v Hinch* (2011) 243 CLR 506, [31] French CJ stated that when 'used in a statute, the term [public interest] derives its content from "the subject matter and the scope and purpose" of the enactment in which it appears'. Section 17(1) of the Act sets out the test, to be applied to determine whether disclosure of information would be contrary to the public interest. These factors are found in subsection 17(2) and Schedule 2 of the Act.

Taking into consideration the information contained in the document found to be within the scope of your request, I have identified that the following public interest factors are relevant to determine if release of the information contained within this document is within the 'public interest'.

Factors favouring disclosure in the public interest under Schedule 2, section 1:

- (a) disclosure of the information could reasonably be expected to do any of the following:
 - (ii) Contribute to positive and informed debate on important issues or matters of public interest.

I consider that disclosing the contents of the information sought would significantly contribute to open discussion and informed debate on the matters contained in the report. The release of this information would help to create positive and informed debate on issues of importance to the public including planning decisions regarding sporting and event stadiums and associated infrastructure.

I am satisfied that these are relevant considerations favouring disclosure in this case, and in the interests of enhancing transparency and accountability, I afford them significant weight.

I also note the FOI Act has an express pro-disclosure bias which reflects the importance of public access to government information for the proper working of a representative democracy. This concept is promoted through the objects of the FOI Act. I have considered this overarching concept in making my decision in relation to access.

Factors favouring nondisclosure in the public interest under Schedule 2, section 2:

- (b) disclosure of the information could reasonably be expected to do any of the following:
 - (jj) Prejudice the protection of an individual's right to privacy or other rights under the Human Rights Act 2004.
 - (xi) Prejudice trade secrets, business affairs or research of an agency or person.

Having reviewed the documents, I consider that the protection of an individual's right to privacy, especially in the course of dealings with the ACT Government is a significant factor as the parties involved have provided their personal information for the purposes of working with the ACT Government. This, in my opinion, outweighs the benefit which may be derived from releasing the personal information of the individual's involved in this matter.

Individuals are entitled to expect that the personal information they have supplied as part of this process will be dealt with in a manner that protects their privacy. Considering the type of information to be withheld from release, I am satisfied that the factors in favour of release can still be met while protecting the personal information of the individuals involved. I therefore weight the factor for nondisclosure more highly than the factor in favour of release in this instance. As a result, I have decided that release of this information (names, signatures and identifying details) could prejudice their right to privacy under the *Human Rights Act 2004* and will be withheld.

I have also considered the impact of disclosing information which relates to business affairs. In the case of *Re Mangan and The Treasury* [2005] AATA 898 the term 'business affairs' was interpreted as meaning 'the totality of the money-making affairs of an organisation or undertaking as distinct from its private or internal affairs'. Schedule 2 section 2.2(a)(xi) allows for government information to be withheld from release if disclosure of the information could reasonably be expected to prejudice the trade secrets, business affairs or research of an agency or person. There are a number of examples contained in the information you have requested involving methodologies that are intrinsic to the business affairs of the companies involved and would consequently undermine their business competitiveness. I am satisfied that release of this information would have significant impact on the business affairs of the entities identified as this information is not publicly available.

Having applied the test outlined in section 17 of the Act and deciding that release of personal information contained in the document is not in the public interest to release, I have chosen to redact this specific information in accordance with section 50(2). Noting the pro-disclosure intent of the Act, I am satisfied that redacting only the information that I believe is not in the public interest to release will ensure that the intent of the Act is met and will provide you with access to the majority of the information held by CMTEDD within the scope of your request.

Charges

Pursuant to *Freedom of Information (Fees) Determination 2017 (No 2)* processing charges are applicable for this request because the total number of pages to be released to you exceeds the charging threshold of 50 pages. However, the charges have been waived in accordance with section 107 (2)(e) of the Act.

Online publishing – Disclosure Log

Under section 28 of the Act, CMTEDD maintains an online record of access applications called a disclosure log. Your original access application, my decision and documents released to you in response to your access application will be published on the CMTEDD disclosure log after 3 days after the date of my decision. Your personal contact details will not be published.

You may view CMTEDD disclosure log at https://www.cmtedd.act.gov.au/functions/foi.

Ombudsman Review

My decision on your access request is a reviewable decision as identified in Schedule 3 of the Act. You have the right to seek Ombudsman review of this outcome under section 73 of the Act within 20 working days from the day of my decision, or a longer period allowed by the Ombudsman.

We recommend using this form *Applying for an Ombudsman Review* to ensure you provide all of the required information. Alternatively, you may write to the Ombudsman at:

The ACT Ombudsman GPO Box 442 CANBERRA ACT 2601

Via email: actfoi@ombudsman.gov.au

ACT Civil and Administrative Tribunal (ACAT) Review

Under section 84 of the Act, if a decision is made under section 82(1) on an Ombudsman review, you may apply to the ACAT for review of the Ombudsman decision. Further information may be obtained from the ACAT at:

ACT Civil and Administrative Tribunal Level 4, 1 Moore St GPO Box 370 Canberra City ACT 2601 Telephone: (02) 6207 1740 <u>http://www.acat.act.gov.au/</u>

Should you have any queries in relation to your request please contact me by telephone on 6207 7754 or email <u>CMTEDDFOI@act.gov.au</u>.

Yours sincerely

DJW

Katharine Stuart Information Officer Information Access Team Chief Minister, Treasury and Economic Development Directorate

4 January 2023



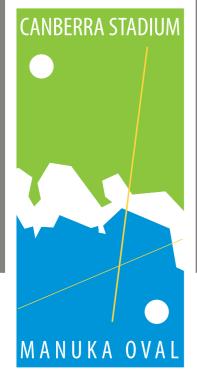
FREEDOM OF INFORMATION REQUEST SCHEDULE

WHAT ARE THE PARAMETERS OF THE REQUEST A copy of the Canberra Stadium & Manuka Oval Master Plan Study, undertaken by Populous in 2009				Reference NO. CMTEDDFOI 2022-328		
Ref No	Page number	Description	Date	Status	Reason for Exemption	Online Release Status
1	1-280	Canberra Stadium & Manuka Oval – Master Plan Report	Jul 2009	Partial release	Sch 2 s2.2 (a)(ii) Sch 2 s2.2 (a)(xi)	Yes
Fotal No of Docs						
1						

CANBERRA STADIUM & MANUKA OVAL

MASTER PLAN REPORT July 2009

DRAFT



Creating Sporting Places



territory venues &events









CANBERRA STADIUM & MANUKA OVAL MASTER PLAN REPORT



Cardno Young Cardno Level 2 Young 14 Womald Street **Shaping the Future** Symonston ACT 2609 Australia

Sch 2.2(a)(ii)

Level 10

ARUP 201 Kent Street Sydney NSW 2000 Australia

Sch 2.2(a)(ii)

Sydney NSW 2001 Australia

PΒ Level 27, Ernst & Young Centre 680 George Street GPO Box 5394

Canberra ACT 2601 Australia Sch 2.2(a)(ii) WT Partnership

8-10 Hobart Place

390 St Kilda Road

Sch 2.2(a)(ii)

Level 4

Melbourne 3004 Australia

Sch 2.2(a)(ii

Project Director KPMG **Riparian** Plaza 71 Eagle Street Brisbane QLD 4000 Australia

Brisbane QLD 4000 Australia

Sch 2.2(a)(ii) peckvonhartel

Level 6

Populous

Sch 2.2(a)(ii)

418 Adelaide Street,

Project Director



Sch 2.2(a)(ii) Associate Director Purdon Associates Pty Ltd 3/9 McKay Street, Turner ACT 2612, Australia





peckvonhartel **und**

PARTNERSHIP

B

100 YEARS @

ARUP

POPULOUS^{**}

DRAWING PEOPLE TOGETHER



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APPENDIX

1.0

Sch 2.2(a)(xi)

2.0	Planning	J
	2.1	Canberra Stadium

- Manuka Oval 2.2
- 2.3 Planning Implications
- 3.0 Consultation Matrix
- 4.0 Consultant Notes and Advice
 - 4.1 Structure
 - 4.2 Services
- 5.0 Architectural Drawings



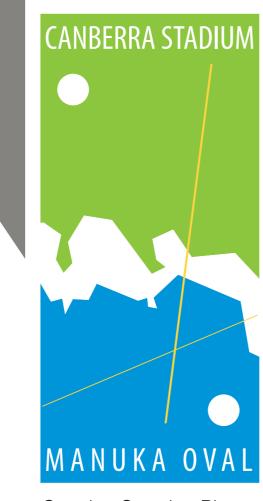




REVISIONS

Rev.	Date	Description		
А	16/06/2009	Draft Issue for Comment		
В	09/07/2009	Final Draft Issue for Comment		
С	29/07/2009	Final Final Draft Issue	Final Final Draft Issue	
D	14/08/2009	Final Issue Following Client Sign Off	Final Issue Following Client Sign Off	
Document Checked for Issue				
			Populous™	







Creating Sporting Places

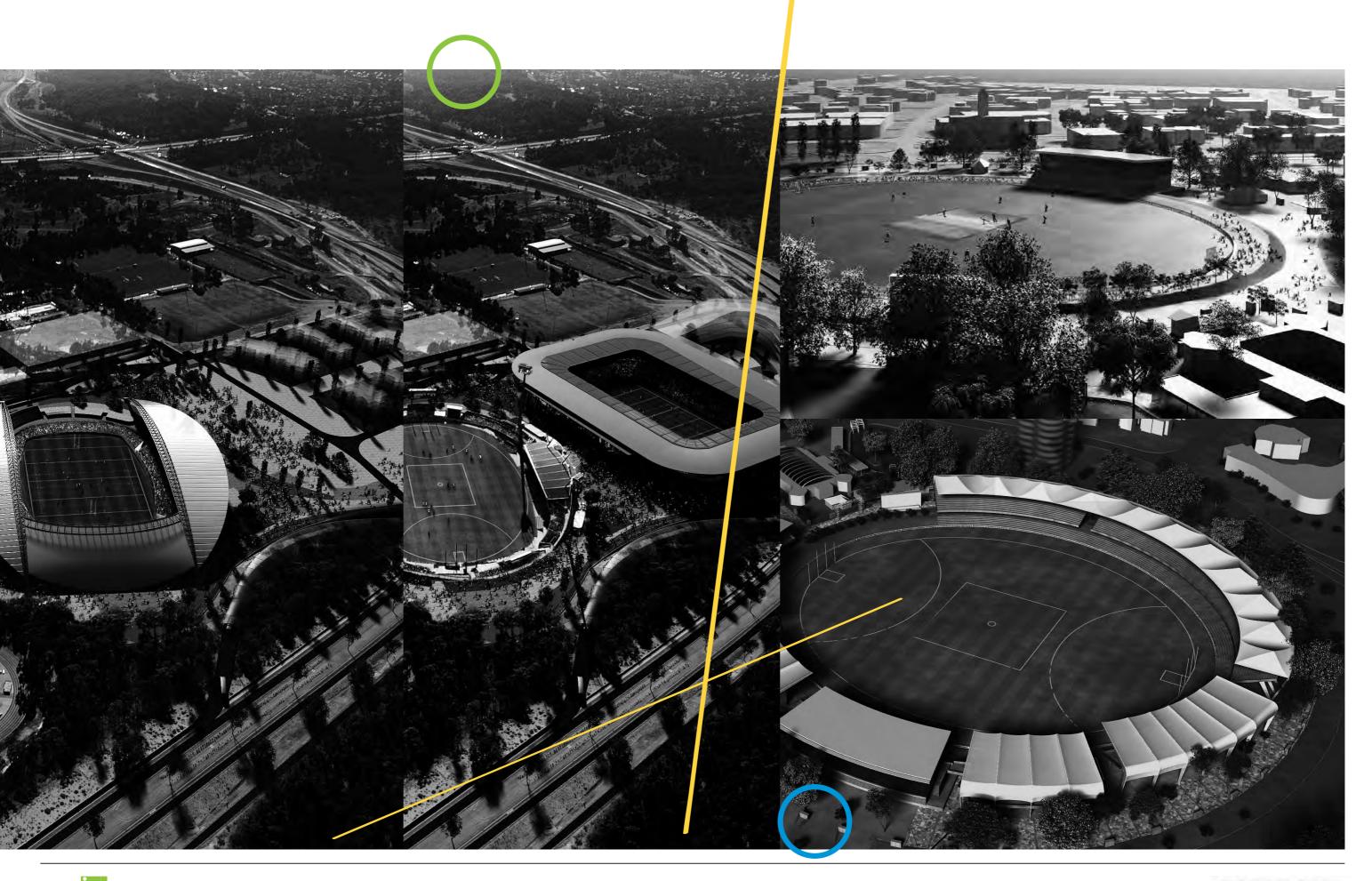




EXECUTIVE SUMMARY









This report has been prepared in conjunction with the business case on behalf of the ACT Government through Territory Venues and Events to investigate master planning options for the redevelopment of the existing Canberra Stadium at Bruce and Manuka Oval at Manuka.

Canberra, named after the aboriginal word for "meeting place" and the ACT enjoys the unique national and international position of being the National Capital. This provides a real opportunity to establish the ACT and Canberra at the forefront of innovation in terms of national sporting, environmental and community initiatives. Canberra is located between Sydney and Melbourne which both vie for the title of the sporting and tourism capitals of Australia. Both cities have established communities based around, industries which have strong links with their sporting heritage. They have hosted Olympic Games (Sydney in 2000 and Melbourne in 1956) and grown robust and strong followings for all sports, especially in Melbourne. Stadia have become places of religious fervour where one can forget the ills of the world for a short period of time and live young again.

The ACT Government has taken firm steps in the direction of promoting elite sport. In a city of politicians and political intrigue the essence and honesty of sport should be celebrated and applauded. Today Canberra has two major sporting venues, being Manuka Oval and Canberra Stadium. These venues and venues like them all over the world are the ultimate meeting places, where people of all denominations and creeds come together in friendship to support their teams.

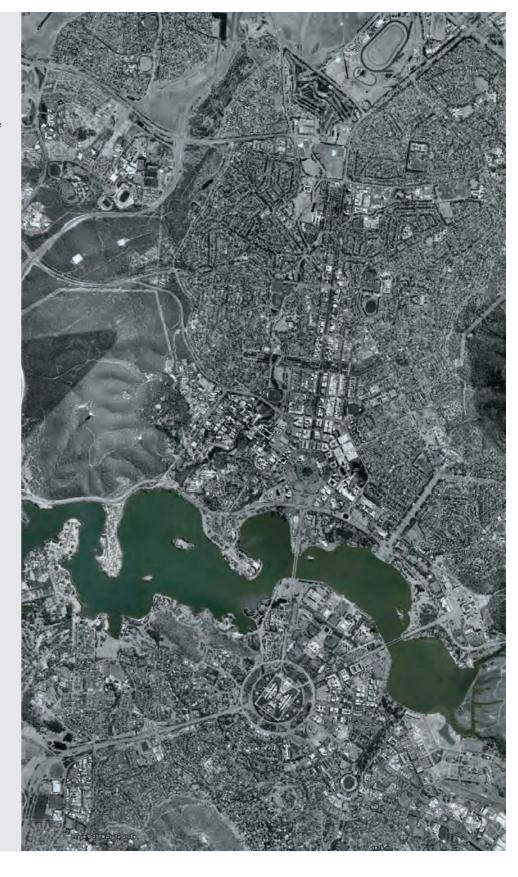
Canberra Stadium is nearly 40 years old and Manuka Oval is over 80 years old and both are beginning to show their age.

The basis of the master plan options for both sites has been to build on the identity of the existing venues and expand where necessary. At the Canberra Stadium site the basis is to provide for a multi-purpose dedicated rectangular based stadium with a permanent capacity of approximately 26,500, which has the flexibility to allow for an increase of the capacity (through temporary facilities) to up to 45,000 for a FIFA World Cup pool game. At the Manuka Oval site the basis is to provide an oval based venue with a permanent capacity of approximately 19,000 with the flexibility to increase this capacity (through temporary facilities) to 20,000 for larger games. This strategy follows the confirmation of a two stadium policy established in Canberra. The upgraded venues will utilise, where possible and dependent on the specific option, the existing infrastructure and will be capable of hosting AFL, Cricket, Rugby League, Rugby Union, Football and concerts and other events, such as festivals. The options will endeavour to address the issues established within the briefing document and also those raised by the stakeholders through consultation.

This master plan report has been prepared by Populous in consultation with KPMG (lead consultant and business case analysts), WT Partnership (cost planners), ARUP Engineering (structural services), Cardno Young (civils and hydraulics), Purdon Associates (planning), Parsons Brinkerhoff (traffic and transport planning) and Peckvonhartel (local architect). Consultations have also been held with the major stakeholders in

developing the master plan design principles and outline briefs for the redevelopment options. Please refer to Appendix A for a full list of consultations.

The following report endeavours to suggest mechanisms by which the ACT Government may promote all that is positive through sport, as well as establishing its venues' credentials in order to be more competitive in the national and global event market, while creating enjoyable and active "Sporting places to be".







The existing **Canberra Stadium** (originally called Bruce Stadium) was initially constructed for the Pacific Conference Games in 1977 and was based around an oval field of play. Canberra Stadium at this time had a capacity of 8,000 persons, accommodated in a single West Stand. This venue has hosted a multitude of varied events including Athletics, AFL, Cricket, Rugby League, Rugby Union and Football. Canberra Stadium has undergone a number of modifications throughout its colourful life, with the most significant being the transformation from an oval field to a dedicated rectangular stadium following the selection of the stadium as one of the venues to hold some of the preliminary football games of the 2000 Olympics. The existing Canberra Stadium has a capacity of approximately 25,000 accommodated in a lower bowl and two serviced stands on the West and East sides of the field of play. Currently, of the 25,000 capacity only about 4,000 are covered (16% cover). The existing stadium has started to show all the signs of age and has not kept up with stadium trends or the minimum standards of the sporting codes. The existing stadium is viewed as providing a less than satisfactory outcome for:

The sports

- o Falling short of many of the minimum standards set by each sporting code.
- o Lack of clear segregation of membership and corporate seating locations and packages.

The spectators

- o Limited roof cover, as most modern stadia look to provide up to 80% roof cover.
- o Lack of atmosphere due to the distance from the action for the majority of the spectators.
- o Lack of continuity and clarity.

The venue management

- o Lack of corporate variety or of particular "points of difference".
- o Poor media facilities.
- o Poor traffic management around the adjacent areas. Poor public transport infrastructure and uptake. Poor car park surfacing.
- o Limited segregation between back of house and front of house operations.
- o Poor and aged facilities, which need constant maintenance and upkeep.
- There are no measures in place within the existing facility or precinct for environmental sustainability, such as water, solar or heat harvesting. An expectation exists for modern stadia to incorporate environmentally sustainable design initiatives into their infrastructure.
- o Precinct has not been used to create better leverage for elite sports or to highlight the AIS.





Manuka Oval holds a very special place in the psyche and hearts of Canberrans and Australians alike. It was first established as a specific cricket oval ground and fenced in 1929. The Oval has hosted Cricket, AFL, Rugby, Football and a number of more eclectic events such as military tattoos and sheepdog trials. The main sporting hirers currently are AFL NSW/ACT and ACT Cricket. The existing capacity is 13,550 accommodated in the Bradman Stand, Hawke and Menzies stands, two further covered stands a grass berm and uncovered seats. Currently of the 13,550 capacity only 4,000 are covered (29% cover). This venue is, as Canberra Stadium, showing its age and in particular the Hawke and Menzies Stands, the external concourse areas and the spectator facilities are sadly lacking. The existing venue is also viewed as providing a less than satisfactory outcome for:

The sports

- o AFL have made clear and aspirational expectation of having approximately 19,000 permanent capacity, with the ability to go to 20,000 pax for larger games. Therefore the current maxiumum capacity is less than ideal.
- o There is currently no permanent commentary facility behind the bowlers arm (in cricket).
- o Security for the teams is less than satisfactory for both cricket and AFL.

The spectators

- o Lack of an expected levels of cover/shade, as most modern stadia look to provide up to 80% cover.
- o Lack of public amenities.
- o Poor signage.
- o Poor quality of public concourse.

The venue management

- o Poor and aged facilities (in particular the Hawke and Menzies Stands), which are coming to the end of their functional lives.
- o Lack of corporate variety or of "points of difference". Presently the Bradman Room is well used, but further use of the existing Bradman Pavilion is limited by the existing facilities and current tenant uses.
- o Poor media facilities. No media facilities are located behind the
- bowlers arm for cricket. o Limited public transport connections.
- o On street parking only.
- o Limited clarity/segregation between back of house and front of house operations.
- o There are limited measures in place within the existing facility or precinct for environmental sustainability. An expectation exists for modern venues to incorporate environmentally sustainable design initiatives into their infrastructure.







Following consultation with the client body and the relevant stakeholders a preliminary set of key drivers was established including:

- Create a sense of "place" for the precinct.
- Establish venues which can operate all year round.
- Reuse, recycle and refurbish if possible.
- Provide a staged development plan that can be implemented as funding permits.
- Enhance the revenue generating opportunity for the stadia when hosting events by providing an increased mix of corporate, sponsor and members' accommodation.
- Improve back of house circulation.
- Meet the minimum facility requirements for all the relevant sporting codes.
- Provide a state of the art high definition digital video replay screen and stadium sound system to provide a unique event day experience for all patrons.
- Provide cost effective master plan design options that consider the project brief and enhances the Canberra Stadium precinct.

The following options endeavour to capture the essence of these drivers in order to establish and enhance not only Canberra Stadium and the precinct, but also the adjacent neighbours and neighbourhoods.

















A refurbishment of the existing West Stand (Mal Meninga Stand) and plaza including

- New East and West turnstile, ticketing entrances and precinct security and crowd safety barriers and fencing.
- New perimeter fencing relocated to allow access around the stadium perimeter to invite people onto the perimeter public plaza, which it is envisaged will provide greater allround connection for the public with the stadium, while ensuring the security of the venue.
- Upgrade to the entry plaza including hard and soft landscaping and street furniture.
- Use as much of the existing stadium infrastructure as possible.
- Minimal upgrade of the existing lower bowl to allow for increase of permanent stadium capacity to approximately 25,751 with the flexibility to increase to a maximum capacity of approximately 45,000 patrons (for games of significance) comprising of:

Seating	23,397	
Dine and View Seating	930	
Corporate Suite Seating	756	
Corporate Loge/Box Seating	478	
Venue Membership	190	
Temporary Seating	approxim <mark>a</mark> t	ely 19,250.

(These figures are indicative and will be further finalised through the next phases of design).

- Upgrade and add to the existing F&B and wc facilities to service the additional capacity in the lower bowl.
- Upgrade and rationalisation of existing team and back of house facilities to achieve the relevant sporting codes' minimum facilities requirements.
- Retain location and surface of field of play.

CS1

- Upgrade vehicular field of play access at the South-West corner to allow easier access for the maintenance and event vehicles, whch are currently compromised by the lack of height and dual gradient of the current field of play access vomitory.
- Upgrade West Stand to present a front door to Battye Street approach.
- Upgrade roof cover for patrons from 16% to 80% for the West Stand only.
- Rationalise and enlarge the corporate lounges in the West Stand.
- Provide greater and more understandable seat level/type segregation. It is proposed that the West Stand become a dedicated corporate and members stand above the lower bowl, similar to other venues around Australia and the world, such as Skilled Park on the Gold Coast. This will enable the West Stand to establish a significant point of difference for the corporate patrons and members.
- Provide the stadium with an identity and a sense of "place", including the development of the idea of an entertainment precinct to attract patrons to arrive early and leave late from the precinct.
- Sports lighting located on the front edge of the new roofs over the West Stand to lessen light spill to future Transit Oriented Development and AIS. Western lighting towers could be removed.
- Include Environmentally Sustainable Design (ESD) initiatives, such as water and solar harvesting on site.
- Locate a transport hub to the South-East edge of the site, adjacent to the GDE to maximise, enhance and segregate coach and bus accessibility to precinct. The transport hub comprises the following elements in establishing the cost.
 - Accommodation for up to 12 buses, two platforms of 6 buses each (120m • x 2m), shelter for passengers, grade-separated pedestrian access across bus



CCTV cameras, landscaping,

- for the large crowds.
- months construction time to complete.

Additional options explored but not costed above are set out below:

- as part of this master planning project.

roadways, two 3-lane bus roadways (10m wide x 120m long), passenger queuing areas, identification and wayfinding signage, pedestrian fencing, driver amenities and security building including toilets, power and water, lighting and

Bus priority roadways including two dedicated on-ramps onto the GDE (East and West), a dedicated off-ramp from the GDE (West side only), two lane road underpass (to accommodate breakdowns and growth) beneath the GDE to access the east on-ramp. (This component could be undertaken as a section of the proposed Belconnen to Civic Transitway)

• Walk of Legends: The extension of Battye Street across the northern edge of the precinct to meet Masterman Street to the East, as a wide boulevard to ease access across and around the precinct. This boulevard is envisaged to visually connect the AIS facilities to the stadium precinct, providing a frontage for both, as well as bringing clarity to the traffic movement across the whole AIS and Stadium precinct. When the stadium precinct is being fully utilised this boulevard will be closed to cater

· Provide additional seating, public amenity and revenue options for the ACT Government for games of significance in particular potential FIFA World Cup pool games where approximately a 45,000 capacity is required.

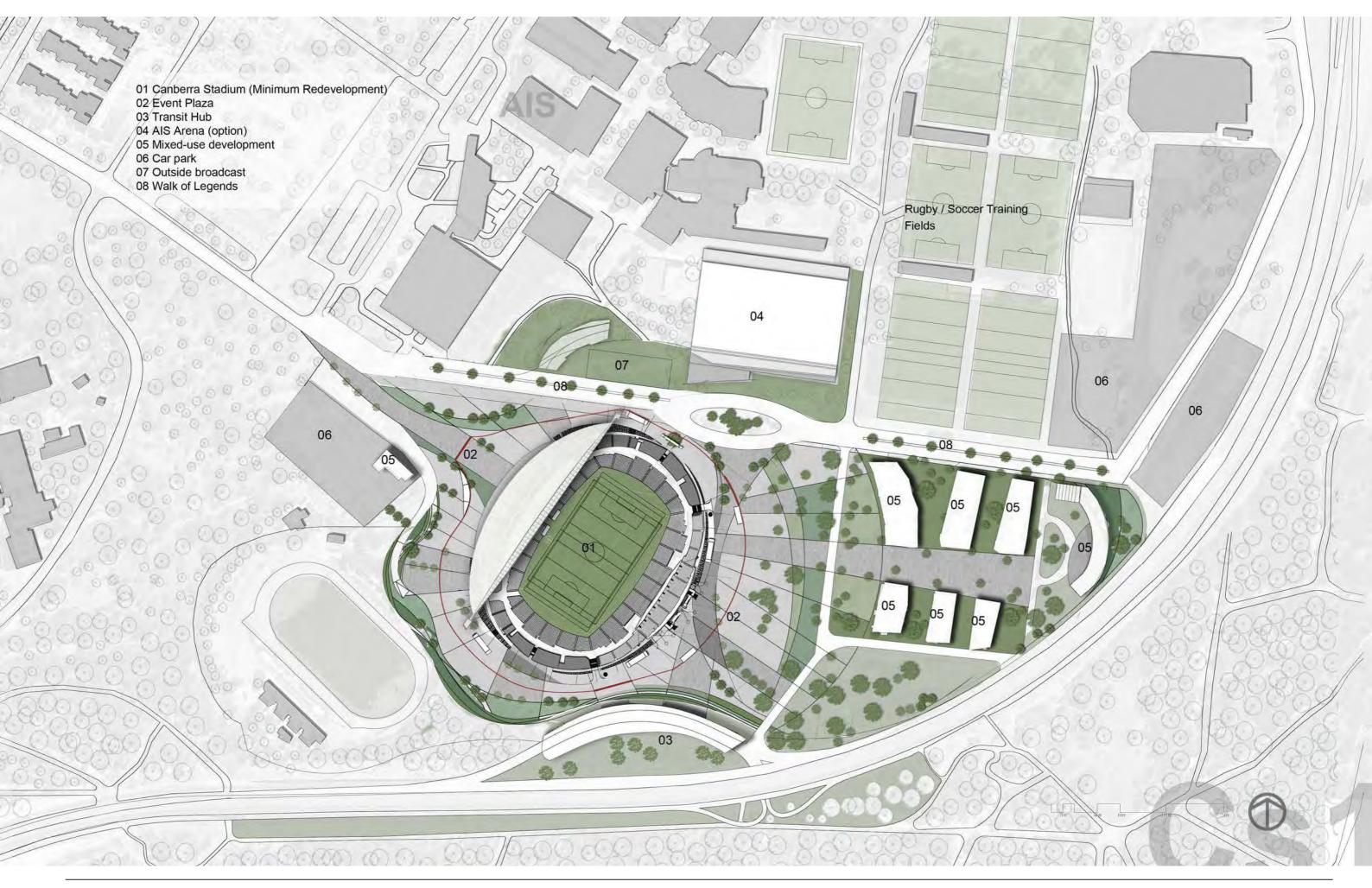
• This development is proposed to be a single stage and will take approximately 18

• Estimated total development cost: \$72.5million (incl. surrounding infrastructure).

• A possible new arena development to replace existing AIS Arena.

 A transport oriented development to the East and West of the stadium precinct is envisaged to attract mixed use developments and further establish precinct activity for 365 days a year. This design aspect is provided as a possible indication as to the massing on the Canberra Stadium precinct over the next 25 years and is not costed











A refurbishment of the existing Stadium and plaza including

- New East and West turnstile, ticketing entrances and precinct security and crowd safety barriers and fencing.
- New perimeter fencing relocated to allow access around the stadium perimeter to invite people onto the perimeter public plaza, which it is envisaged will provide greater allround connection for the public with the stadium, while ensuring the security of the venue.
- Upgrade to the entry plaza including hard and soft landscaping and street furniture.
- Use as much of the existing stadium infrastructure as possible.
- Minimal upgrade of the existing lower bowl to allow for increase of permanent stadium capacity to 26,341 with the flexibility to increase to a maximum capacity of approximately 45,000 patrons using temporary seats (for games of significance) comprising of:

GA Seating	23,987
Dine and View Seating	930
Corporate Suite Seating	756
Corporate Loge/Box Seating	478
Venue Membership	190
Temporary Seating	approximately 18,660
(These figures are indicative and will be	further finalised
through the next phases of design).	

- Upgrade and add to the existing F&B and wc facilities to service the additional capacity in the lower bowl.
- Upgrade and rationalisation of existing team and back of house facilities to achieve the relevant sporting codes' minimum facilities requirements.
- Retain location and surface of field of play.
- Upgrade vehicular field of play access at the South-West corner.
- Upgrade West and East Stands to present a coherent front door aspect.



- Upgrade roof cover for patrons from 0-16% to 60%
- point of difference for the corporate patrons and members.
- Provide the stadium with an identity and a sense of "place", including the and leave late from the precinct.
- lighting towers are proposed to be removed.
- harvesting on site.
- large crowds.
- details refer to option Cs1.
- games where approximately a 45,000 capacity is required.
- years construction time to realise.
- the South Stand roof would be completed.

Additional options explored but not costed above are set out below:

- as part of this master planning project.

• Rationalise and enlarge the corporate lounges in the West Stand.

• Provide greater and more understandable seat level/type segregation. It is proposed that the West Stand become a dedicated corporate and members stand above the lower bowl, similar to other venues around Australia and the world, such as Skilled Park on the Gold Coast. This will enable the West Stand to establish a significant

development of the idea of an entertainment precinct to attract patrons to arrive early

• Sports lighting located on the front edge of the new roofs over the East and West Stands to minimise light spill to future Transit Oriented Development and AIS. All

• Include Environmentally Sustainable Design (ESD) initiatives, such as water and solar

• Walk of Legends: The extension of Battye Street across the northern edge of the precinct to meet Masterman Street to the East, as a wide boulevard to ease access across and around the precinct. This boulevard is envisaged to visually connect the AIS facilities to the stadium precinct, providing a frontage for both, as well as bringing clarity to the traffic movement across the whole AIS and Stadium precinct. When the stadium precinct is being fully utilised this boulevard will be closed to cater for the

• Locate a transport hub to the South-East edge of the site, adjacent to the GDE to maximise, enhance and segregate coach and bus accessibility to precinct. For the

 Provide additional seating, public amenity and revenue options for the ACT Government for games of significance in particular potential FIFA World Cup pool

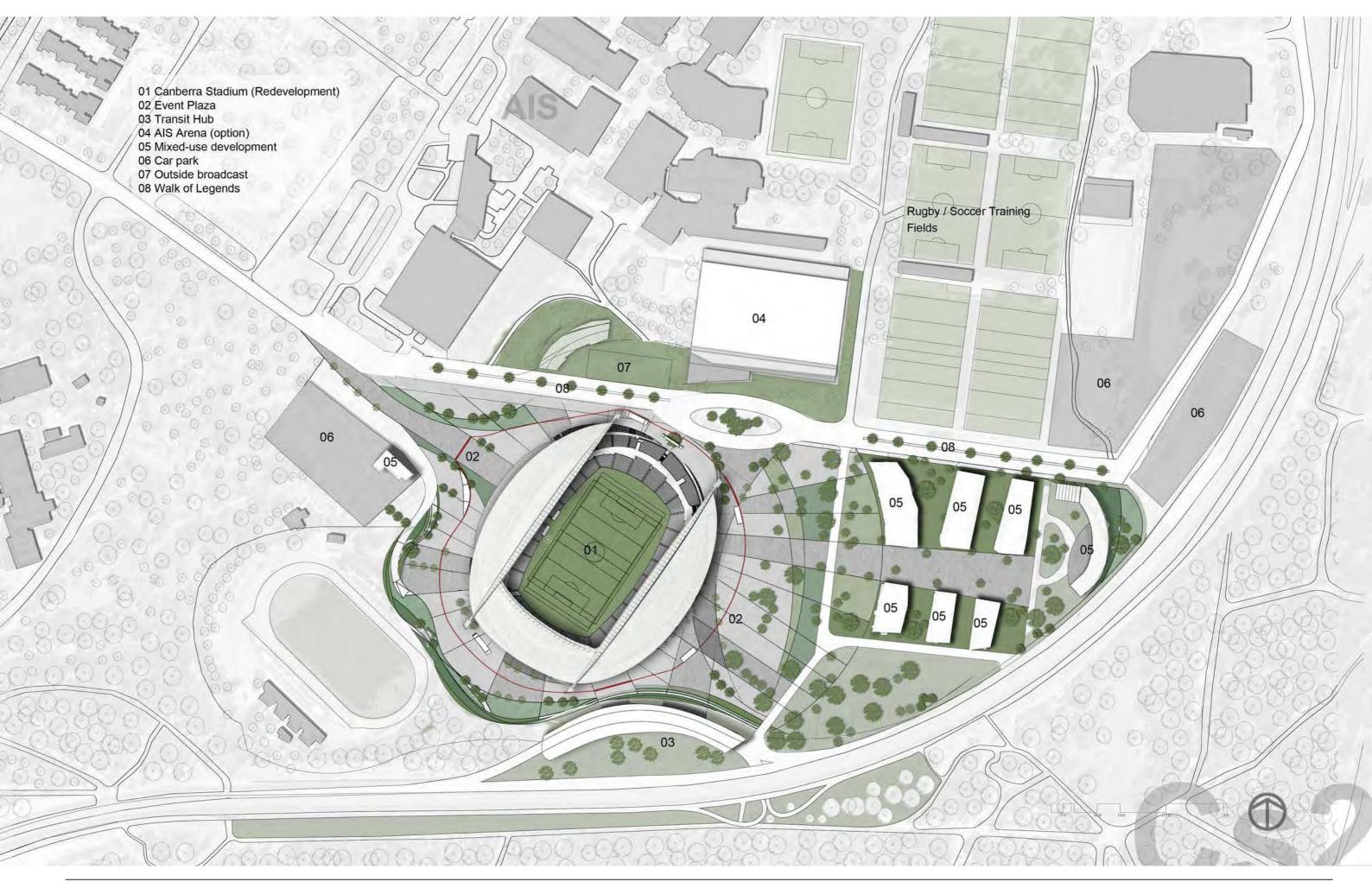
This development is proposed to be a three stage and will take approximately three

• This development is proposed to be three stages and will take approximately three years construction time to complete. The staging of the construction has been indicatively developed to minimise the impact of the building works on the existing sporting event calendar for the main stakeholders. Therefore it is proposed that in the first stage the existing West Stand would be refurbished with a new roof, with the team and media facilities relocated into temporary accommodation or the East Stand for the duration of this stage. In the second stage the existing East Stand is proposed to be minimally refurbished and the roof built over, then in the third stage

• Estimated total development cost: \$102 million (incl. surrounding infrastructure).

• A possible new arena development is mooted to replace existing AIS Arena. • A transport oriented development to the East and West of the stadium precinct is envisaged to attract mixed use developments and further establish precinct activity for 365 days a year. This design aspect is provided as a possible indication as to the massing on the Canberra Stadium precinct over the next 25 years and is not costed













Progressive dedicated rectangular stadium rebuild on the same footprint of the existing stadium and precinct including

 Provide a new dedicated rectangular stadium with a permanent (legacy) capacity of 26,500 with the flexibility to increase to a maximum capacity of approximately 45,000 patrons using temporary seats (for games of significance) comprising of:

GA Seating	23,142
Dine and View Seating	1,000
Corporate Suite Seating	880
Corporate Loge/Box Seating	478
Venue Mambership	1,000
Temporary Seating	approximately 18,500
(These figures are indicative and	will be further finalised
through the next phases of desig	gn)

- The new dedicated rectangular field of play and seating bowl has been designed to provide the maximum efficiency whilst providing the flexibility for future extension to facilitate the reconfiguration of the stadium to host other major events, such as the FIFA World Cup pool games and allow the ACT Government to successfully bid for these events. The field of play and stadium is oriented as close to north south as possible, bearing in mind site constraints to better fulfil the relevant sporting code requirements.
- A new dedicated rectangular stadium to accommodate up to date team and back of house facilities to achieve the relevant sporting codes' minimum facilities requirements (Rugby Union, Rugby League and Football (soccer)).



- New dedicated rectangular stadium to provide a greater level of comfort and atmosphere for all patron levels from general admission to corporate.
- The new stadium and precinct to celebrate the sporting and geographical heritage of the site.
- outdoor entertainment and refreshments.
- large crowds.
- The master plan provides for distinctive and recognisable entrances
- Increase roof cover for patrons from the current 16% to 80%
 - details refer to option Cs1.
 - and enjoy what the precinct has to offer for longer.
 - and AIS.
 - harvesting on site.
 - developed concurrently with each stage.

Additional options explored but not costed above are set out below:

- A possible new arena development is mooted to replace existing AIS Arena.
- as part of this master planning project.

• Upgrade to plazas to provide for a greater level of patron interaction and sense of "place". New hard and soft landscaping is envisaged to enhance the bushland aesthetic across the precinct. The landscape will provide areas to relax and enjoy

• Walk of Legends: The extension of Battye Street across the northern edge of the precinct to meet Masterman Street to the East, as a wide boulevard to ease access across and around the precinct. This boulevard is envisaged to visually connect the AIS facilities to the stadium precinct, providing a frontage for both, as well as bringing clarity to the traffic movement across the whole AIS and stadium precinct. When the stadium precinct is being fully utilised this boulevard will be closed to cater for the

• Consideration given to allowing for a robust and healthy natural turf field of play. • Locate a transport hub to the South-East edge of the site, adjacent to the GDE to maximise, enhance and segregate coach and bus accessibility to precinct. Fort

• Provide the stadium precinct with an identity and a sense of "place", including the development of the idea of an entertainment precinct to attract patrons to arrive early

• In the new dedicated rectangular stadium the sports lighting is located on the front edge of the new roof to minimise light spill to future transport oriented development

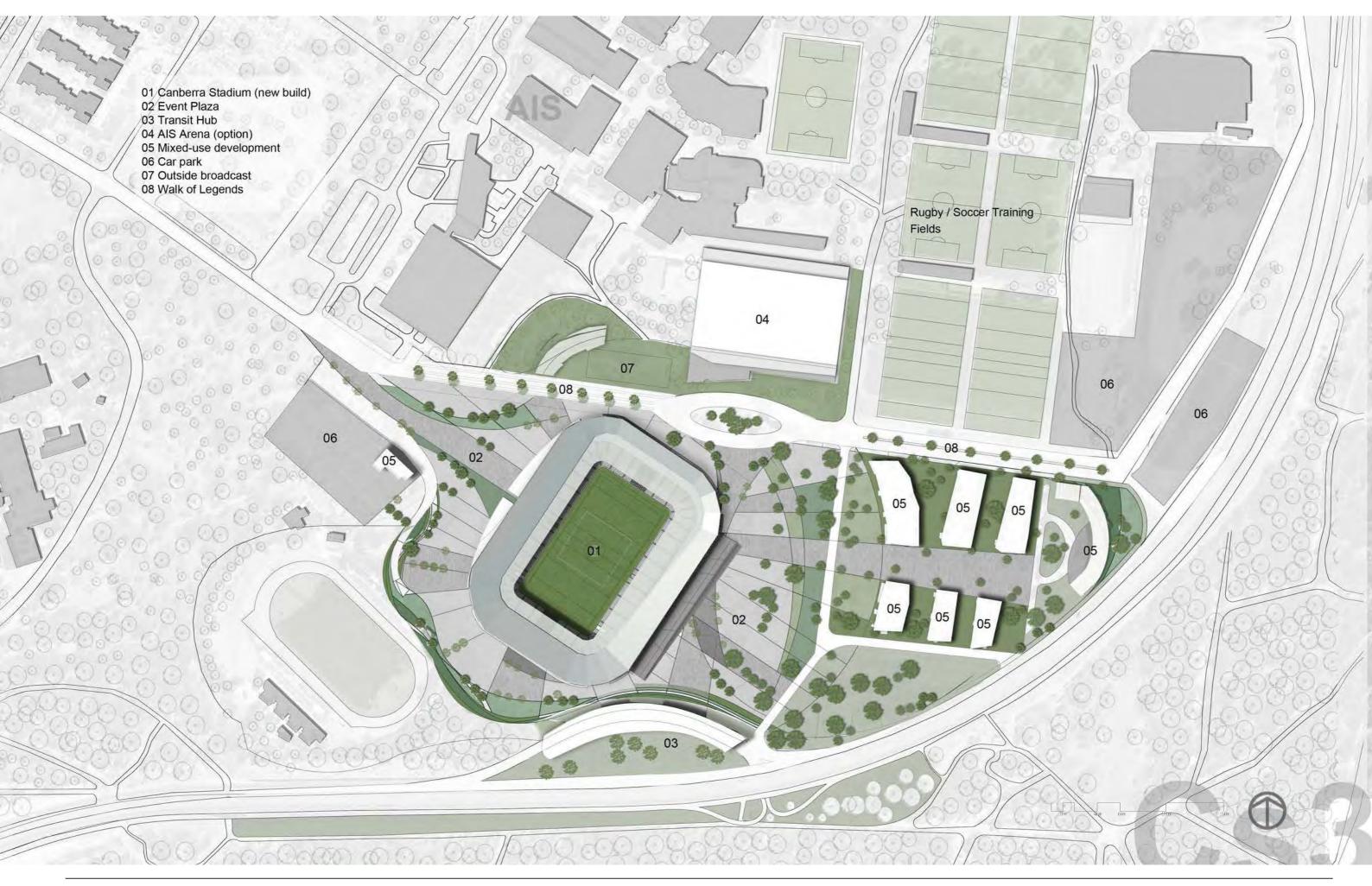
Include Environmentally Sustainable Design (ESD) initiatives, such as water and solar

• This development is proposed to be four stages and will take approximately five years construction time to complete. The staging of the construction has been indicatively developed to minimise the impact of the building works on the existing sporting event calendar for the main stakeholders. Therefore it is proposed that in the first stage the existing West Stand would be demolished, with the team and media facilities relocated into temporary accommodation or the East Stand for the duration of this stage. In the second stage the existing South Stand is proposed to be demolished and rebuilt, then in the third stage the East Stand would be completed. Finally in the fourth stage the North Stand would be built. The plaza would be

• Estimated total development cost: \$222 million (incl. surrounding infrastructure).

• A transport oriented development to the East and West of the stadium precinct is envisaged to attract mixed use developments and further establish precinct activity for 365 days a year. This design aspect is provided as a possible indication as to the massing on the Canberra Stadium precinct over the next 25 years and is not costed













The Sports Capital - The creation and enhancement of an accessible and open elite sporting and entertainment precinct, which will include a new dedicated rectangular stadium located on the existing Eastern car park. This option includes

- Provide a new dedicated rectangular stadium with a permanent capacity of 26,500 with the flexibility to increase to a maximum capacity of approximately 45,000 patrons using temporary seating (for games of significance) comprising of:
- GA Seating 23,142 Dine and View Seating 1,000 Corporate Suite Seating 880 478 Corporate Loge/Box Seating Venue Mambership 1,000 Temporary Seating approximately 18,500 (These figures are indicative and will be further finalised

through the next phases of design)

- The new dedicated rectangular field of play and seating bowl has been designed to provide the maximum efficiency whilst providing the flexibility for future extension to facilitate the reconfiguration of the stadium to host other major events, such as the FIFA World Cup Pool Games and allow the ACT Government to successfully bid for these events. The field of play and stadium is oriented as close to north south as possible, bearing in mind site constraints to better fulfil the relevant sporting code requirements.
- New dedicated rectangular stadium to accommodate up to date team and back of house facilities to achieve the relevant sporting codes' minimum facilities requirements (Rugby Union, Rugby League and Football (soccer)).
- New dedicated rectangular stadium to provide a greater level of comfort and atmosphere for all patron levels from general admission to corporate.
- The new stadium and precinct to celebrate the sporting and geographical heritage of the site.
- Reduced secure area around the existing Canberra Stadium in order to open up more of the plaza to the public and provide significantly more circulation across the stadium precinct.
- · Upgrade plazas to provide for a greater level of patron interaction and sense of "place". New hard and soft landscaping is envisaged to enhance the bushland aesthetic across the precinct. The landscape will provide areas to relax and enjoy outdoor entertainment and refreshments.
- Walk of Legends: The extension of Battye Street across the northern edge of the precinct to meet Masterman Street to the East, as a wide boulevard to ease access across and around the precinct. This boulevard is envisaged to visually connect the AIS facilities to the stadium precinct, providing a frontage for both, as well as bringing clarity to the traffic movement across the whole AIS and Stadium precinct. When the stadium precinct is being fully utilised this boulevard will be closed to cater for the large crowds.
- The master plan provides for distinctive and recognisable entrances
- Increase roof cover for patrons from the current 16% to 80%
- Consideration given to allowing for a robust and healthy natural turf field of play.
- In the new dedicated rectangular stadium the sports lighting is located on the front edge of the new roof to minimise light spill to future transport oriented development and AIS. The light towers remain for the existing Canberra Stadium.
- Include Environmentally Sustainable Design (ESD) initiatives, such as water and solar harvesting on site.

- details refer to option Cs1.
- and enjoy what the precinct has to offer for longer.
- construction time to complete.

Additional options explored but not costed above are set out below:

- located to achieve the AFL requirement of 19,000 permanent capacity.
- months construction time to complete.
- Manuka Oval costs).
- adjacent to the converted Canberra Stadium.
- as part of this master planning project.



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• Locate a transport hub to the South-East edge of the site, adjacent to the GDE to maximise, enhance and segregate coach and bus accessibility to precinct. Fort

• Provide the stadium precinct with an identity and a sense of "place", including the development of the idea of an entertainment precinct to attract patrons to arrive early

• This development is proposed to be one stage and will take approximately 2 years

• Estimated total development cost: \$210.5 million (incl. surrounding infrastructure)

• Revert the existing Canberra Stadium back to its pre-1998 format. This is to be done by raising the level of the field of play to the same level as the existing lateral aisle. The existing facilities are retained, with the addition of new player routes to the relocated field of play from the team change facilities and more seats strategically

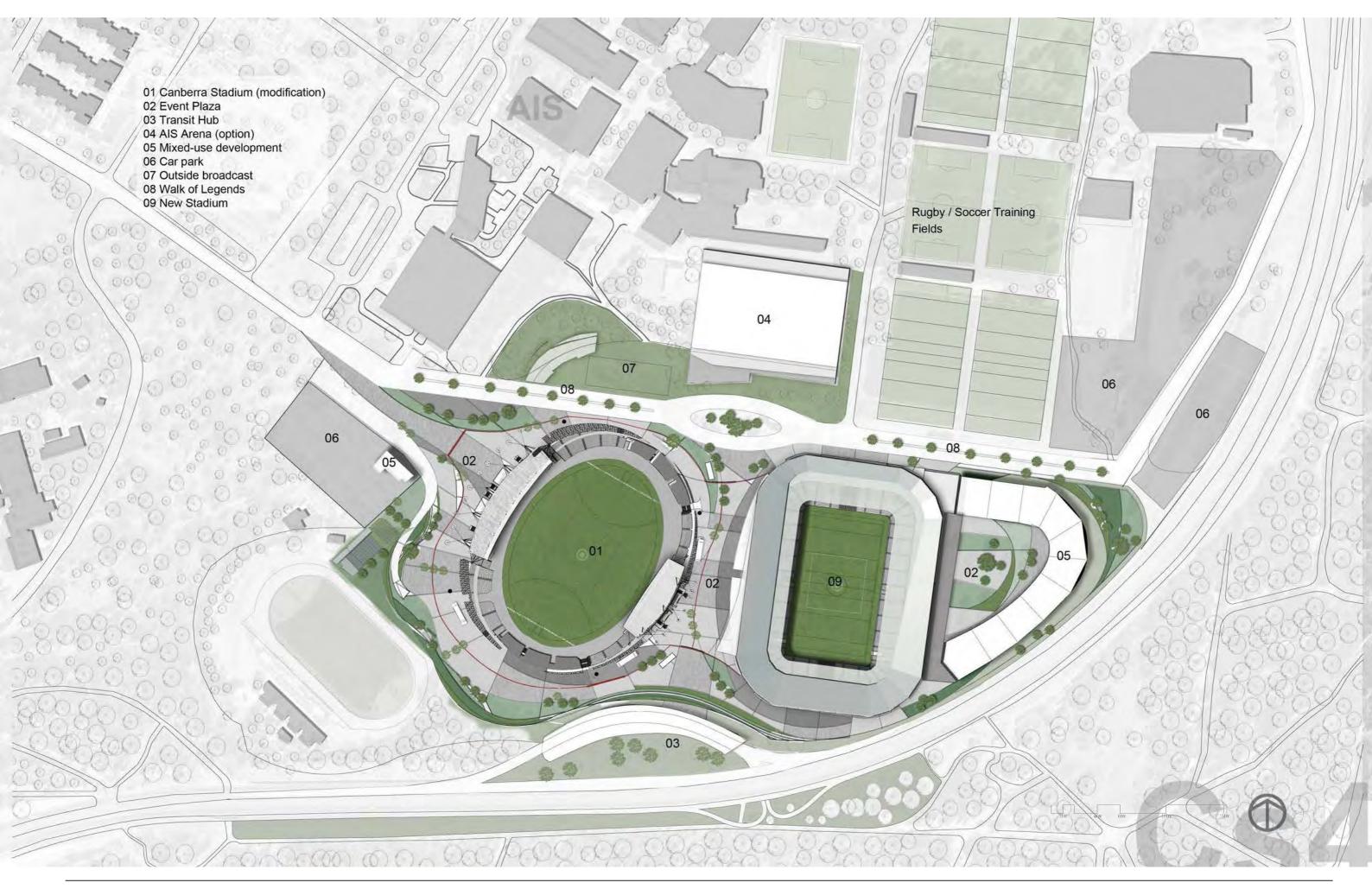
• This development is proposed to be one stage and will take approximately 18

• Estimated Canberra Stadium modification total budget costs: \$112.3 million (excl.

• A new high performance training centre for ACT cricket, including multi-use gymnasium/indoor cricket school, sports house office space for both the ACT Cricket and AFL NSW/ACT. This facility is considered to be flexible enough for both the AFL and ACT cricket to use as a high performance centre, and is located

• A possible new arena development is mooted to replace existing AIS Arena. • A transport oriented development to the East and West of the stadium precinct is envisaged to attract mixed use developments and further establish precinct activity for 365 days a year. This design aspect is provided as a possible indication as to the massing on the Canberra Stadium precinct over the next 25 years and is not costed









MANUKA OVAL

Following consultation with the client body and the relevant stakeholders a preliminary set of key drivers was established including:

- Provide a staged development plan that can be implemented as funding permits.
- Enhance the revenue generating opportunity for the stadia when hosting events by providing an increased mix of corporate, sponsor and members' accommodation.
- Improve back of house circulation.
- Meet the Minimum Facility Requirements for the relevant sporting codes.
- Provide a state of the art high definition digital video replay screen and stadium sound system to provide a unique event day experience for all patrons.
- Provide cost effective master plan design options that considers the project brief and enhances the Manuka Oval precinct.

The following options endeavour to capture the essence of these drivers in order to establish and enhance not only Manuka Oval and the precinct, but also the adjacent neighbours and neighbourhoods.



















M01

MANUKA OVAL





Rebuild of the Hawke and Menzies Stands on the same footprints and upgrade of external concourse, entrances and fence

- Upgrade plazas, fences and perimeter concourse.
- The new Hawke and Menzies Stands seating tiers to match that of the Bradman Stand
- The new Hawke and Menzies Stands to accommodate two 250-500 person lounges and ten 20 person corporate suites.
- Permanent capacity of 13,077, with the opportunity of increasing this to 14,000 (if the licensing allows), comprising of:

Seating	8,537
Dine and View Seating	1,260
Corporate Suite Seating	200
Corporate Loge/Box Seating	280
Grass Berm	2,800
Temporary Seating	up to 1,000
(These figures are indicative and v	vill be further finalised through

- the next phases of design)
- Current roof cover retained • New ornamental, clearly distinguishable entrances (including a new north entrance), parkland type fencing and clear signage.
- Include ESD initiatives, such as water and solar harvesting on site.
- · Existing trees retained wherever possible.
- New hard and soft landscaping to the precinct.
- This development is proposed to a single stage and will take approximately one year construction time to complete.
- Estimated total development cost: \$27.38 million (stadium only costs).

Additional options explored but not costed above are set out below:

- · New high performance sports centre which will include indoor cricket net space and gymnasium and allow for the existing outdoor nets to be relocated and reduced in size and amended in orientation.
- · Existing Arts Centre possibly integrated into new mixed use development.
- New dedicated offices for the AFL NSW/ACT and ACT Cricket included in the new high performance sports centre.
- New mixed use development on the west car park, adjacent to and with possible synergies with the Canberra Services Club on the corner of Manuka Circle and Canberra Avenue.
- New mixed use development on the East car park.
- Temporary lighting towers have been assessed and are deemed unviable due to cost and potential community issues. However if sport lighting at Manuka Oval is adopted, then further assessment will be required.
- Locate a transport hub to the north end of the site on New South Wales Crescent to maximise and enhance bus accessibility to precinct.
- Field of play upgraded with a modern sand based system.



01 - New Hawke & Menzies Stands

CAMBERRA PAIEMUE

FITTROYST

12

13

07

02

01

15

09

MANUKA CIRCLE

06

03

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11

10

05

- 02 Bradman Pavilion
- 03 Upgraded and landscaped plaza and concourse
- 04 Grass berm
- 05 End-on media facility
- 06 Cricket and AFL high performance Centre
- 07 Mixed-use development

- 07 Mixed-use development 08 Coach/Bus drop-off 09 Optimised Entry point to Oval 10 Upgrade field of play 11 Existing stands retained 12 Team coach and VIP drop off
- 13 Car park
- 14 New North entrance
- 15 Outside broadcast compound
- 16 MCG scoreboard retained 17 - Mixed-use development with Arts Centre



07

17

03

04





M02

MANUKA OVAL





Progressive rebuild and expansion on the same footprint of the existing oval and precinct

- Upgrade plazas, fences and perimeter concourse.
- The new Hawke and Menzies Stands seating tiers to match that of the Bradman Stand
- The new Hawke and Menzies Stands to accommodate two 250-500 person lounges and
- ten 20 person corporate suites.
- Upgrade of bowl to allow for increase of permanent venue capacity to 19,124 20,000 patrons comprising of: Seating 15,084 Dine and View Seating 1,260 Corporate Suite Seating 200 280 Corporate Loge/Box Seating
- Grass Berm 2,300 Temporary Seating 1,000

(These figures are indicative and will be further finalised through the next phases of design)

- The new venue seating bowl has been designed to provide the maximum efficiency whilst providing the flexibility for future extension to facilitate the reconfiguration of the venue to host other major events.
- The new stadium field of play and seating bowl has been designed to follow the traditions of cricket and AFL Ovals where the seating bowl is made up of separate stands and pavilions.
- The Grass berm is relocated to the Northern end of the ground
- Roof cover for patrons from 25% to 50%
- · New split tier stands to the north-west, south-west and East provide significant shade and cover to all patrons while retaining a view of the field of play.
- Field of play upgraded with a modern sand based system.
- New ornamental, clearly distinguishable entrances (including a new north entrance), parkland type fencing and clear signage.
- MCG scoreboard retained and relocated.
- · Existing trees retained wherever possible.
- New hard and soft landscaping to the precinct.
- This development is proposed to a single stage and will take approximately two years construction time to complete.
- Include ESD initiatives, such as water and solar harvesting on site.
- Estimated total development cost: \$79.5 million (stadium only cost).

Additional options explored but not costed above are set out below:

- Locate a transport hub to the north end of the site on New South Wales Crescent to maximise and enhance bus accessibility to precinct.
- New high performance centre for ACT Cricket and AFL NSW/ACT, with indoor cricket net space and gymnasium.
- Existing outdoor nets possibly relocated and reduced in size and amended in orientation.
- Existing Arts Centre possibly integrated into new mixed use development on its current site.
 - New dedicated offices for the AFL NSW/ACT and ACT Cricket.
- New mixed use development on the west car park, adjacent to and with possible synergies with the Canberra Service Club on the corner of Manuka Circle and Canberra Avenue.
- Temporary lighting towers have been assessed and are deemed unviable due to cost and potential community issues. However if sport lighting at Manuka Oval is adopted, then further assessment will be required.
- · New mixed use development on the East car park.
- · Provide indicative massing principles for mixed use developments for the Manuka Oval precinct over the next 25 years.

24





POPULOUS DRAWING PEOPLE TOGETHER



M03

MANUKA OVAL



Return Manuka Oval to an enclosed oval in a parkland setting, last realised in 1955. Relocate AFL season and pre-season and PMXIs to the upgraded Canberra Stadium (only feasible if Option Cs4 at Canberra Stadium is adopted)

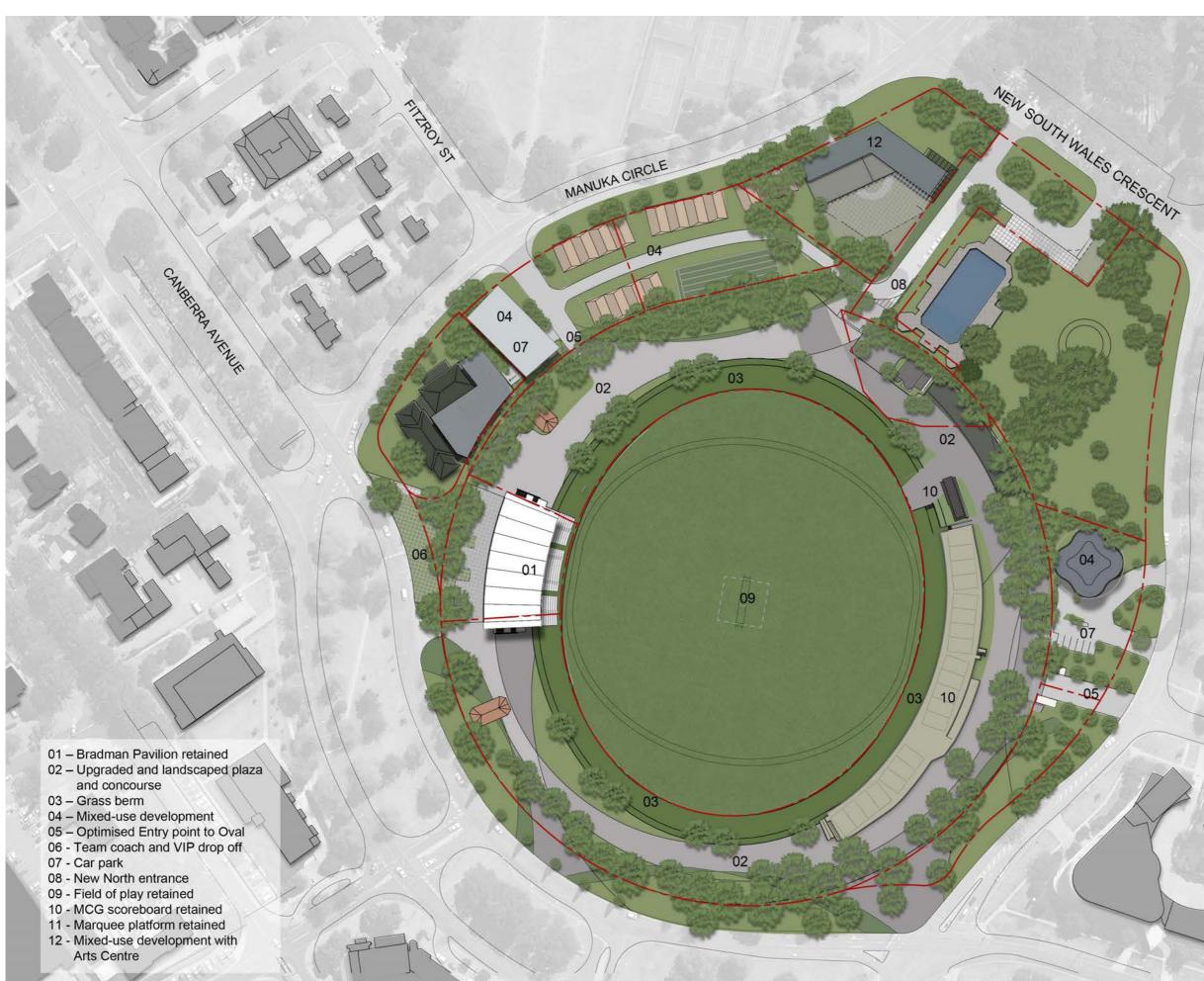
- Enclosed oval to be used by club cricket and club AFL.
- Relocate AFL, and cricket to modified Canberra Stadium site to produce a sports precinct as proposed in Option C of the Canberra Stadium master plan.
- Demolish all stands except the Bradman and retain the hard standing to the East.
- Demolished stands to be replaced by a grass berm all around the oval.
- MCG scoreboard retained as an integral part of the history of cricket in Australia and Canberra .
- Reduction of the extent of seating bowl to decrease the permanent venue capacity to approximately 10,000, with 1,151 people in the Bradman Stand and the rest located on the new grass berms. The patrons located on the grass berms are envisaged to sit on the grass.
- Retain location, orientation and surface of field of play.
- New ornamental, clearly distinguishable entrances, parkland fencing and clear signage.
- Return the oval to the community by allowing free access to the berms and paths around the enclosed oval. The paths are envisaged to be used by dog walkers and joggers alike.
- · Shade structures are to be strategically located off paths to complement the existing shade created by the existing trees.
- The park gates are proposed to be open all day and closed at night to prevent misuse of the fields and the surrounding paths and trees.
- This development is proposed to a single stage and will take approximately 6 months construction time to complete.
- Estimated total development cost: \$7 million.

Additional options explored but not costed above are set out below:

- Provide indicative massing principles for mixed use developments for the Manuka Oval precinct over the next 25 years.
- Existing Arts Centre possibly integrated into new mixed use development on its current site.
- New mixed use development on the west car park, adjacent to and with possible synergies with the Service Club on the corner of Manuka Circle and Canberra Avenue.
- · New mixed use development north the west car park, along Manuka Circle towards New South Wales Crescent.
- New mixed use development on the East car park.







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CONCLUSION

As outlined above a number of options have been developed for this report following client instruction and stakeholder input. These options provide various master plan solutions from the minimal required to achieve compliance with the relevant sporting codes and terms of reference to an option which endeavour to establish an integrated sporting and entertainment "place" (the Sporting Capital) right in the heart of elite sport in Australia.

Currently the sports "meeting places" are inadequate in terms of both spectator and player experience and also in terms of commercial viability due to the fact that they have not kept pace with the expectations of the public or private sector. This report, to be read in conjuction with the business case for each venue, sets out a number of strategies for redefining Canberra's sporting and entertainment "**meeting places**" and indicates possible ways forward.











GLOSSARY OF TERMS and ABBREVIATIONS

Glossary of Terms		
Term	Description	
Back of House	Private service areas, such as event offices, team facilities, kitchen areas, where the public are prevented from accessing.	
Bowl	Banked spectator areas around the field of play.	
Corporate hospitality	Event and dining packages offered by hirers to corporate clients.	
Circulation	Free movement of spectators within a sports ground.	
Concourse	Circulation area providing direct access to and from spectator accommodation, via stairways, ramps, vomitories. Serve as milling space for patrons for the purposes of refreshment and entertainment.	
Front of House	Public areas where event patrons circulate.	
GA Seating	General Admission seating	
General admission seating	General Admission refers to seating or standing areas that are not assigned or reserved, and are occupied on a first-come, first-served basis.	
Hirer	An individual or entity which presents an event.	
Lateral Aisle	Channel for the passage of spectators through the viewing accommodation running parallel with the terrace steps or seat rows.	
Massing principles	The use of simple blocks to establish indicative locations and forms for future developments.	
Master plan	Concept development for a new / redeveloped stadium and its immediate surrounds.	
Multi-purpose	Designed or used for several purposes (i.e. events) particularly in regard to accommodating both oval and rectangular based sports from an optimal spectator perspective.	
Public seating	Seating not sold to the hirer's members or corporate clients or sold on a whole season basis.	
Seating Tier	An area of steps providing seating accommodation for spectators	
Signage	Commercial signs / advertising of sponsors in exchange for financial consideration.	
Sightline	The ability of a spectator to see a predetermined point of focus over the top of the head of the spectator sitting immediately in front	
Sponsorship	An exchange between two parties whereby the hirer receives cash and/or benefits in kind while the sponsor secures a right of association with an activity or some other aspect of the hirer's event.	
Stakeholder	An organisation that has an interest in the development of a stadium / stadia.	
State of the art	The highest degree of development available.	
Terrace	An area of steps providing standing accommodation for spectators	
Transport Oriented Development	Mixed-use developments established around and due to the location of a transport hub.	
Venue manager	An organisation with relevant industry experience which is retained by the Government to manage the day to day operations of the venue. Alternatively, the venue could be managed by a Government entity.	
Venue membership	Sale of membership to the stadium which affords the holder access to all events staged at the venue utilising dedicated seating.	
Venue owner	The holder of the freehold title and the stadium / stadia assets built on the title i.e. the ACT Government (upon completion of land swap agreement).	

Glossary of Terms	
Term	Description
Vomitory	An access route built into the gradient of a stand accommodation to concourses, and/or routes for evacuation.

Abbreviations	\$	
Abbreviation	Description	
ACT	Australian Capital Territory	
ACTPLA	Australian Capital Territory Planning and Land Authority	
AFL	Australian Football League	
AFP	Australian Federal Police	
AIS	Australian Institute of Sport	
ASC	Australian Sports Commission	
CBD	Central Business District	
CIT	Canberra Institute of Technology	
CSC	Canberra Services Club	
ESD	Environmentally Sustainable Development	
ETFE	Ethylene Tetrafluoroethylene, a transparent polymer that plastic in some modern buildings	
F&B	Food and Beverage	
FF&E	Furniture, Fixtures and Equipment	
FIFA	Federation Internationale de Football Association	
GA	General Admission	
Gabba	Brisbane Cricket Ground	
GDE	Gungahlin Drive Extension	
Government	The Government of the Australian Capital Territory	
MCG	Melbourne Cricket Ground	
NCA	National Capital Authority	
NSW	New South Wales	
OB	Outside Broadcast	
ODI	One Day International	
PM	Prime Minister	
QLD	Queensland	
TV	Television	
TVE	Territory, Venues and Events	
TWG	Technical Working Group	
UC	University of Canberra	
UV	Ultra-Violet	
UK	United Kingdom	
VIC	Victoria	
VIP	Very Important Person	
VVIP	Very Very Important Person, such as the Prime Minister	
WC	Water Closet	

d which directly links spectator for ingress, egress or emergency

is used instead of glass and

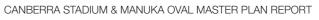


TERMS OF REFERENCE

The Master Plans and written documentation will address current and future requirements as stated within the project brief and following subsequent consultations with the relevant stakeholders, including

- Opportunities to maximise the business and community uses of both stadia.
- Spectator amenity and seating.
- The recommendations of the business cases.
- The specific and future uses of both stadia.
- · Location context within their broader precincts.
- Links and or impacts with neighbouring developments.
- Current and proposed planning and land use issues and recommendations (ACTPLA and NCA).
- Potential environmental and heritage impacts relating to the site precinct.
- Design and siting issues relating to the venue and their defined precincts.
- Setting and character.
- Visual elements and impacts.
- Environmental sustainability and low carbon imprint development and operations.
- Transport planning and parking.
- Stadium entry and forecourt.
- Ticketing.
- Player and patron access, internal circulation and egress.
- Public safety, security and emergency management.
- Game day and event operations requirements.
- Players and officials facilities and playing preparation areas.
- Corporate and functions facilities.
- Catering and concessions.
- Media and broadcast facilities.
- Sports lighting.
- Advertising and sponsorship display.
- Sympathetic commercial opportunities; and community use of both stadia.
- Required capacity increases including temporary overlay.
- Allow for changing the playing surfaces.







INTRODUCTION

We are now standing at a point where stadia and the precincts serving them are considered as valuable attributes to a city, as parts of the makeup of the civic pride of a community, a building that reflects their aspirations and passions. They are the only building type that can evoke personal and community emotions and aspirations on a massive scale.

Stadia have moved a long way in terms of design and community standing over the past 20 years and are now recognised as one of the great pieces of civic architecture, one of the essential buildings for a modern city standing proudly alongside the more traditional civic buildings such as libraries, art galleries, theatres and museums. Stadia and Airport Terminals are the buildings that define the 21st Century City, they are the quintessential building of our modern popular culture, the building where the hopes and aspirations of the community are witnessed during every sporting event.

Stadia and precinct design needs to reflect the aspirations of the community they serve and as such every stadium and precinct represents the city and region it plays host to. These aspirations can be represented physically and allegorically in the development of an architectural language appropriate for the building.

The Changing Face of Stadia

Sports stadia have become the identifiable gathering places of our communities, the symbols of our contemporary culture, Civic Leaders and Sports Authorities face the dilemma of whether a city should develop new facilities or refurbish / redevelop existing stadia to cater for the developing needs of all sports. Within this dilemma a further debate rages as to the merits of building dedicated stadia for each sport against the ability to design a new state of the art multi-purpose stadium that can cater for a multitude of sports and the aspirations of their fan base.

The answer to this dilemma is not just about affordability, it is also a question of the strength of the individual sporting codes and that will vary from city to city, along with the ability of the design to cater for the needs of both rectangular and oval based sports. A further key issue in the development of modern stadia is the need for the facility to be seen by the community as an asset that can be used 365 days a year, not just on event days, and one that actively engages with the surrounding neighbourhood.

Sport is now a multi-billion dollar industry. Advances in technology have brought sport into our living rooms and made it come alive, every hour of the day, culminating in the extraordinary scale of an Olympic games beamed to billions of people everywhere in the world. Today, stadia, like Suncorp Stadium, or Skilled Park on the Gold Coast have become synonymous with the region or city where they are located.

This is the climate that we now find ourselves in when considering the design of new stadia and sport venues throughout the world. The audience and people who can experience these buildings are no longer just the local community but the national or even international community - the new international multi-media audience.

The key to all stadium design is the ability to create a unique atmosphere, one that creates a memorable experience and enhances the live event for spectators in the stands and through television and radio at home. The designer's skill is the ability to get people as close as possible to the action on the field and offer them value added enhancements off the field, with entertainment, a range of facilities, and food and beverage outlets.

The ability to offer dedicated stadia for the different codes of professional sports needs to be considered carefully in each city, and depends on the strength and appeal of the various sports in that city. In Brisbane, for example, the strength of Rugby League, Rugby Union and Australia Rules, has allowed for the development of two major stadia, Suncorp Stadium (for rugby codes and football (soccer)) and the Gabba (for AFL and cricket) that has created a unique set of venues.

Separate Sites vs a Sports and Entertainment Precinct

The redeveloped 100,000 seat MCG and the proposed rectangular stadium at Melbourne and Olympic Park (MOPT) provide a full range of facilities that can be justified by a city that never tires of its sport and claims to be "the Sporting Capital of Australia". Each venue will offer a unique experience and atmosphere to both the attending fans and the remote television audience. The fact that the venues are located so close to one another has to be carefully managed but the precinct is considered one of the best sports and entertainment precincts in the world. The proximity to the action for all sports, the closing roof, the proximity to the CBD and the level of F&B services has led to the development of a truly world class precinct.

The dilemma facing Canberra is the same facing many cities around the world. What are the drivers for a stadium's success? Undoubtedly, the decision to choose between dedicated sites and multi-sport and entertainment precinct is dependent on the ability of the individual sporting codes and future entertainment events to support a major precinct, and the success of each sporting code faces a unique set of variable.

Renovate or Build New

Once the key components of the stadia are defined, the next set of criteria is to decide whether to renovate or build new, and if a new stadium is to be built, where should it be built? The notion is now well established that the stadium works better if it is part of the core of a city and has been clearly articulated in the "Generations of Stadia" papers by Sch 2.2(a)(ii) . An existing facility can possibly be renovated if it can cater for the modern and future demands of the sports and the city. And the location? The questions that must be considered include: can the stadium and precinct be supported by the community in a particular location; is the public transport system able to cope with mass event transit; and can it cater for the future demands of spectator, community, media and sport requirements?

Each city is unique and each project evolves with time and robust discussion. A decade ago, there was much discussion about knocking down the Twin Towers at Wembley Stadium. Today the Wembley Arch is a part of London, and used by people all over the city as a point of reference, the new stadium has developed its own special identity.

As Civic Leaders and Sports Authorities ponder over what sports facilities will work best in their cities, the one factor that remains constant is the need to have facilities that are competitive in the national and international sports market. Stadia are one of the defining buildings of our time, a building of mass appeal and one that recognises the aspirations of a city. To be successful modern stadia and their precincts need to be right for the city in which they are built, satisfying a unique set of criteria that works for the local conditions, its sporting codes and its community.























CANBERRA STADIUM







CANBERRA STADIUM





History

Canberra Stadium, formerly known as "Bruce Stadium" was constructed in 1977 for the Pacific Conference Games at which stage it was an athletics track, with a West Stand accommodating 8,000 persons. It was also the venue for the 4th IAAF World Cup which was where Marita Koch ran the fastest 400m in the world (in 47.60 sec). This record still stands today.

In 1990 the athletics track was removed and the ground became the home of the Canberra Raiders and in 1996 the CA Brumbies (now the CA Brumbies). AFL was also played at this venue, however in 1997 the playing surface was reduced and the seating bowl increased to form a dedicated rectangular stadium, bringing the crowd closer to the action. This upgrade was carried out in preparation for staging a number of pool games for the football (soccer) at the 2000 Olympiad. The modification has meant that AFL could no longer be played at Canberra Stadium and moved to Manuka Oval.

The current capacity stands at 25,333 patrons, of which only approximately 4,000 are covered, which equates to approximately 16% of patrons being covered by roof.

Location and Context

Canberra Stadium is located 4km North West of Civic in the Bruce precinct, bounded by the Gungahlin Drive Expressway to the East and South, and the Australian Institute of Sport to the North and West. The recent development of the GDE has provided a much higher level of accessibility and visibility for the stadium precinct. However the stadium precinct does not enjoy the level of accessibility one might expect of a site so close to the CBD.

The Canberra Stadium site is in fact the same distance from the city as Manuka Oval (as the crow flies), but it feels much further away due to the fact that at this end of the city is made up of small areas of development and large areas of bush. Road access is good to and around the site, and the AIS is served by a bus route which then serves the greater area. However the site remains profoundly remote.

The overall site area is large and enjoys a bushland aspect. The Canberra Stadium, AIS and CIT precinct currently has a number of major developments planned or already underway which will see the transformation of the greater precinct into a potential greater density area than it is now. The development options provided in this report are complementary to the existing initiatives.

This remoteness is accentuated by the fact that the current stadium site is located at the end of Battye Street and Masterman Street and in

fact creates a significant physical blockage at the south-eastern corner of the AIS precinct. This in itself has the effect of significantly reducing the number of access locations onto the site and in some way lends its weight to the often witnessed potential for long queues at the East and West ends of the site.

The site, as with many stadia sites around the world is exposed to the elements and experiences searing heat in the summer and biting cold in the winter. Currently the stadium has very limited cover or even basic protection from the elements, which can detract from the enjoyment of all patrons. Protection from the elements is a major issue as most of the events are held in the winter months where temperatures can drop to below freezing, which feels much colder when the wind whistles in.

As stated earlier the site is set in a bushland setting, however without access to test bore holes an analysis of the ground conditions, whether capped, contaminated etc is impossible and we would strongly suggest that this information is obtained through the next phase of the design works. The result of these investigations and the former use of the site would indicate if the site presents any risks in terms of potential contamination and poor ground conditions. Whilst these aspects have not been an issue whilst the site has been in use predominately as a sports precinct they could become issues when and if construction were to commence.



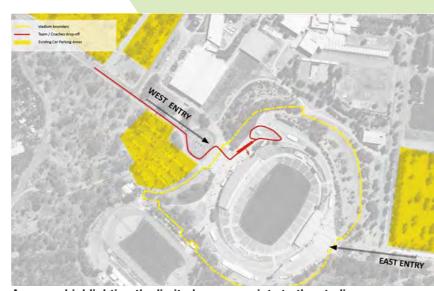


Location - showing the relatively small distances to main destinations.

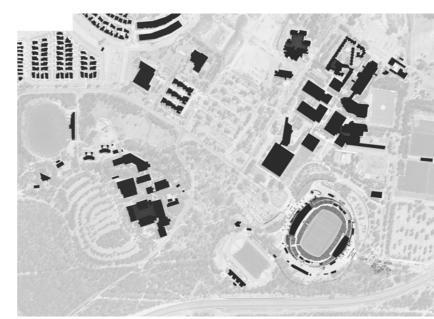
Approach - highlighting the isolated cul-de-sac location of the stadium.



Connectivity - - showing bus routes and major road connections.



Access - highlighting the limited access points to the stadium.

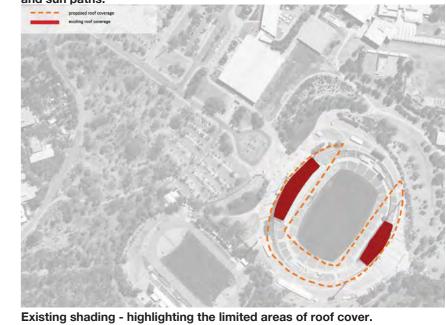


Existing structures - showing the massing on and around the stadium precinct





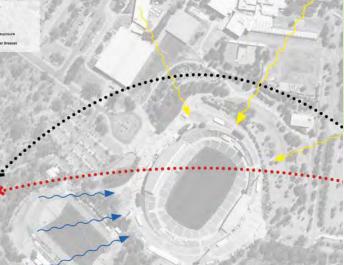
and sun paths.







Green space - highlighting the extent bushland around the stadium.



Environmental conditions - showing the direction of the prevailing wind



Condition Survey (SWOT)

Below is a SWOT analysis outlining the Strengths, Weaknesses, Opportunities and Threats for the site as established during this and previous reports:

Strengths

- Close proximity to supporting athletics field and AIS Arena.
- Field size appropriate for rugby (league and union) and football (soccer).
- Utilised with a full schedule of NRL and Super 14 matches.
- Proximity to the GDE.

Opportunities

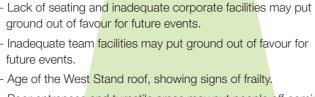
- Ability to enhance the design of a new or refurbished stadium, making use of the topography.
- Opportunity to create a singular grand axis to the stadium, enhancing the frontage of both the stadium and the AIS.
- Opportunity to create a world class rugby (league and union) and football (soccer) stadium to host international sporting events (such as a FIFA World Cup pool game).
- Opportunity to improve accessibility to the city from Bruce and the surrounding areas.
- Opportunity to present the stadium and precinct as a leader in ESD initiatives.
- Enhance the precinct for use on event and non-event days.



Weaknesses

Threats





- Inadequate and inefficient circulation through the main stands

- Not compliant with minimum standards for the relevant sports.

- Limited public transportation to the stadium.

- Large portion of the stadium is uncovered.

and a lack of sufficient level of corporate facilities.

- Poor entrances and turnstile areas may put people off coming to the stadium due to the length of processing time.
- Modern expectations of patrons, teams and the media are not being met and may put ground out of favour for future events.
- Stadium falls below modern stadia standards which may put ground out of favour for future events.



Canberra Stadium has enjoyed a varied development history throughout its 32 years and this has produced a unique venue with many of its facilities modified and developed along the way.

Below is a list of issues that were established following a visual and technical assessment of the existing facilities.

Infrastructure Issues:

- Roof over the Mal Meninga Stand leaks. • Concrete bleachers showing signs of age, with significant cracks noticeable.
- Service route onto field of play unworkable.
- Maintenance compounds not secure and are inadequate.
- Mal Meninga Stand serviced from the Gregan-Larkham Stand kitchen and the food is carried in secure carts across the outside concourse, which is less than ideal.
- Single service lift serves the Mal Meninga Stand which means that disabled patrons, corporates, injured players and service staff/vehicles etc share the same lift.
- Roof over Mal Meninga Stand, according to a recent structural audit carried out on behalf of the Territory Venues and Events, is structurally showing signs of the fact that it is over 30 years old.

Spectator Facilities:

- Entry sequence compromised by poor ticketing and turnstiles systems.
- Entrances are poorly presented and do not offer a proper frontage.
- Turnstiles insufficient for Canberrans' propensity for arriving late.
- Turnstiles are at the end of their useful lives.
- No distinctive front door.
- Merchandise stores insufficient.
- Food and beverage outlets are dated and in the north and south stands concessions are in temporary and dilapidated structures.
- Some congestion experienced on lateral aisle around food and beverage outlets.
- Signage insufficient.
- Lack of specific segregation of seat types.
- Mal Meninga Stand upper tier capacity compromised by access through the members lounges.
- · Some seating aisles (north bowl) lead to stairs of differing widths which is contrary to the Green Guide (Safety at Sports Grounds).
- Access to the lateral aisle through the Gregan-Larkham stand is convoluted and involves navigating stairs of differing widths.
- Ability to see high ball compromised in upper tiers of Mal Meninga and Gregan-Larkham Stands due to the roof front edge.
- Trip hazard and fall hazard on lateral aisle in the Mal Meninga Stand.
- Plaza is not sealed in many places and has trip hazards.



- Members lounge in Mal Meninga Stand not distinct enough and compromised by egress from the upper tier through these areas.
- Media conference area compromises the west lounge as it takes over the north section of the west lounge.
- Transport compromised by the number of private cars.
- Ramps to the rear of the seating bowl in the Gregan-Larkham Stand are dangerous for able bodied patrons and too steep for wheelchair patrons.
- Head height issues exist in the Gregan-Larkham Stand due to the roof structure.
- The low roof support structure in the Gregan-Larkham is a potential climb hazard as there are no preventative measures in place to stop patrons from climbing it.
- The corporate entry into the Gregan-Larkham Stand is insufficient and does not create a sufficient enough point of difference.
- The cables supporting the roof compromise the free flow of patrons around the site and create the necessity for a much larger and less personal concourse than would be achieved without the structure compromising it.
- The current stadium can only be accessed from the East or the West as the site secure line and topography creates a significant barrier to movement around it.
- Lack of roof cover. Currently only about 16% of the seating is covered. Table 1 illustrates how far behind current trends Canberra Stadium has fallen with regards to patron comfort.
- Lack of facilities for people with disabilities, particularly people in wheelchairs.

Team Facilities:

- Access for team buses is problematic, as there is no dedicated route. Buses currently enter through the Western Gates which means going through the massed crowds of spectators.
- Team buses park on the Western public concourse.
- Team facilities below minimum standards required by the sporting codes:
- No secure access to team facilities from the drop off area.



- No internal warm up.
- Inadequate first aid area.
- Inadequate locker numbers. Currently maximum 21 lockers and the minimum number is 28, based on minimum requirements for Rugby League (as this is the most onerous of the sports in question).
- Inadequate treatment and recovery areas.
- Inadequate washroom facilities.
- No match day officials' office.

Media Facilities:

- Fragmented with no written press or dedicated media area.
- OB compound not defined or secure.
- No designated media conference room (shares area of west lounge).
- Do not meet requirements for international events.

Table 1

	1
Stadium	Roof Coverage
Canberra Stadium, Canberra	16%
Skilled Park, Gold Coast	79%
Skilled Stadium, Geeling	70%
Energy Australia Stadium, Newcastle	40% (visual estimate)
Suncorp Stadium, Brisbane	82%
Emirates Stadium, London,UK	90%
ANZ Stadium, Sydney	82%



Heritage

Canberra Stadium is important to the lives of Canberrans who love sport. It is a stadium with a long history full of variety. It is however the design teams' understanding that there are no heritage registered (although the stadium is "nominated") structures on the site or precinct that would be impacted upon by the proposed options. Having said that it is important that any design which is adopted that adds to or amends another designers work the moral rights of the existing design need to be considered and negotiated where necessary.

Appendix 2.1.

Planning

Additional information about the planning provisions affecting the site is at Appendix 2.1.





Additional information about the heritage status of the facility is at

The site is zoned Community Facilities and sports related uses are permissible. If it was decided to develop parts of the land for other uses it would be necessary to vary the Territory Plan. This process takes about 12 months. Similarly proposals to expand the stadium could trigger a requirement to prepare an Environmental Impact Statement.



Benchmarks

Careful consideration has been given to all aspects of stadium operations to ensure that current trends are accessed and appropriate recommendations made.

The design of the spectator facilities for the stadium will create a facility comparable to Skilled Park on the Gold Coast and MK Dons Stadium in Milton Keynes, UK.

The ESD components envisaged for the stadium have been benchmarked against Stade Suisse in Bern, Switzerland and ANZ Stadium in Sydney

Topographical comparisons have been benchmarked against Braga Stadium in Portugal and Zentral Stadion in Leipzig, Germany.

Potential full roof configuration has been benchmarked against the Forsyth Barr Stadium in Dunedin, NZ and Commerzbank Arena in Frankfurt, Germany.

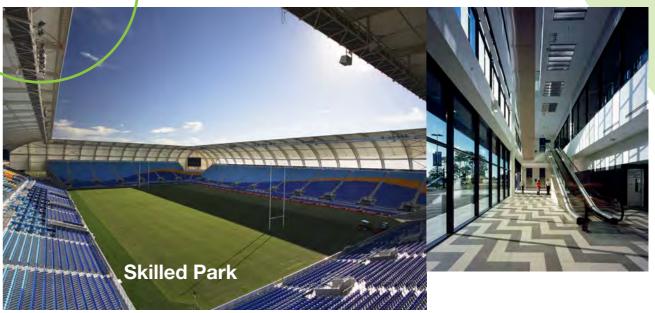
The increase of capacity using temporary seating was benchmarked against Klagenfurt Stadion in Wankdorf, Germany





Klagenfurt Stadion, Austria, where a capacity of 32,000 was needed for Euro 2008 but only 12,000 seats were needed in post event mode. 20,000 additional temporary seats were built on three sides.

spectator facilities



Robina AUS | 2008 | cap 27400 Owner: Queensland Government Surface: Grass Cost: \$160 million Architect: Populous Events: 2008 Rugby League World Cup uses the subtropical climate to its full advantage.



Milton Keynes GBR | 2007 | cap 32000 Owner: Inter MK Surface: Desso GrassMaster Cost: £50 million Architect: Populous

The initial configuration of the stadium uses only the lower tier to hold 22,000, but using the upper tier there is provision to increase the capacity to 32,000. However, should it be needed there is also an option to increase the maximum capacity to 45,000 with the introduction of a new tier. When complete the design will comply with UEFA's Elite Stadium specifications and includes a Desso GrassMaster playing surface.

Situated to the north of Robina Town centre, 500m from the train station and eight kilometres from the coast, Skilled Park is built on a greenfield site and marks the first stage of a new urban centre for the Gold Coast. The 27,500 seat stadium, will act as a catalyst for the future commercial, retail and entertainment development of the area. The rectangular stadium has been designed to reflect the identity of the Gold Coast - the architectural form of the building as a simple facade wrap of PTFE fabric enclosing open naturally ventilated concourses







_topography





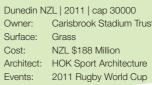
Bern CHE	2005 cap 32000
Owner:	Stade de Suisse Wankdorf
	Nationalstadion AG
Surface:	FIFA 2-Star Synthetic:
	Polytan Ligaturf 240
Cost:	CHF 350 million
Architect:	Marazzi Generalunternehmung A
Events:	EURO 2008

The Stade de Suisse was built on the grounds of the former Wankdorf Stadium, which had been demolished in 2001. The new stadium has a capacity of 32,000 spectators, all covered seats. Integrated into the roof are solar panels with a yearly production of 700,000 kWh. It is the home ground of the Swiss football team BSC Young Boys, and is currently the second biggest all-seater football stadium in Switzerland.



Braga PRT | 2003 | cap 30154 Owner: Municipality of Braga Surface: Grass \$83.1 million Cost: Architect: Eduardo Souto de Moura EURO 2004 Events:

The stadium is often considered one the most original and beautiful stadiums in the world. The Financial Times, in an article about Britain's stadiums, refers to AXA as one of the four examples of "beautiful grounds". It states that: "There has been nothing in this country to match the architectural delight of Eduardo Souto de Moura's stadium for Braga in Portugal, a breathtaking arena carved into the side of a rock face on the site of a former quarry"





ANZ Stadium |1998 | cap 80,000 Owner: Stadium Australia Trust Surface: Grass Cost: \$680 million Architect: Populous Events: 2000 olympics | afl | rugby union | rugby league | cricket | soccer

POPULOUS

AWING PEOPLE TOGETHER

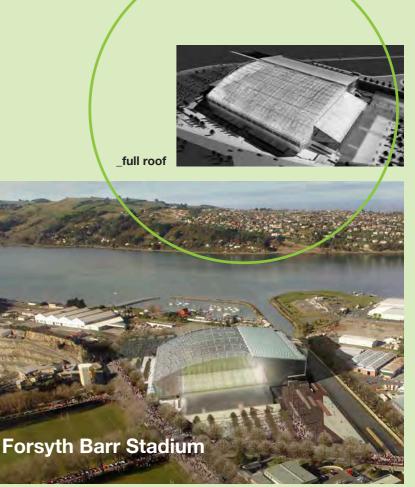


Leipzig GER | 2004 | cap 44345 Owner: Zentralstadion (Central Stadium) Surface: Grass Events: 2006 FIFA World Cup 2005 FIFA Confederations Cup

In 1956, the first Zentralstadion opened, at the time it was the biggest stadium in Germany being able to hold 100,000 spectators. However, over the years it fell in to disuse and was costing the city too much to maintain. In 1997, the city of Leipzig decided to build a new stadium within the old stadium, a modern state of the art stadium only for football. The new stadium was built from December 2000 till March 2004.



Inter MK Owner: Surface: Desso GrassMaster Cost: £50 million Architect: HOK SVE



Carisbrook Stadium Trust

NZL \$188 Million

HOK Sport is engaged to design the new Forsyth Barr Stadium at University Plaza in Dunedin New Zealand to replace the legendary Carisbrook House of Pain. Therectangular stadium incorporates a flexible seating arrangementwhich provides 20,000 permanent seats, 5,000 relocatable seats and 5,000 studentreserves all located under a transparent fixed roof that also covers the field. The revolutionary design provides a natural turf playing field growing under a fixed roof, a feature that has been made possible by advances in roofing and material technology

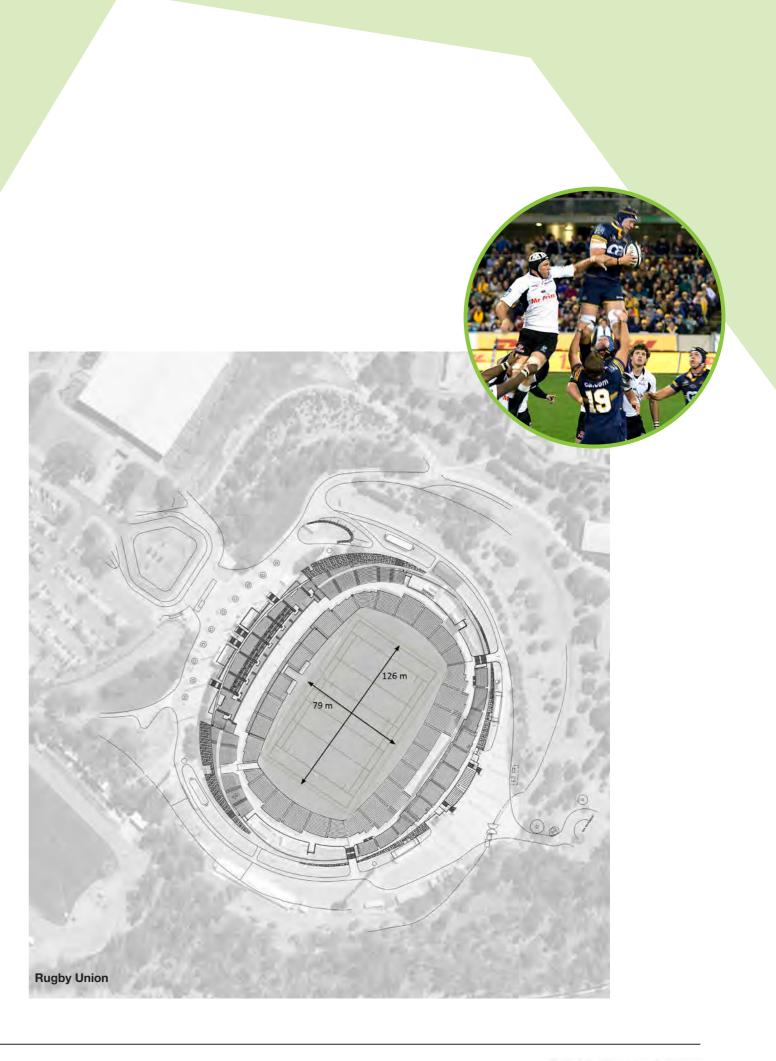
The initial configuration of the stadium uses only the lower tier to hold 22,000, but using the upper tier there is provision to increase the capacity to 32,000. However, should it be needed there is also an option to increase the maximum capacity to 45,000 with the introduction of a new tier. When complete the design will comply with UEFA's Elite Stadium specifications and includes a Desso GrassMaster playing surface.



Fields of Play

Canberra Stadium currently hosts a number of sports, however the primary hirers of the stadium are the rugby league team the Canberra Raiders and the rugby union team the CA Brumbies, both utilising rectangular fields of play. Therefore the bowl has been configured around a rectangular format, and in particular the rugby sports, rather than the football (soccer) code. The following diagrams establish the existing footprints for the fields of play and the ones that the master plans and concepts have been based on.

Rugby League

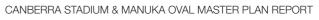


124 m











DESIGN CONCEPTS

The Refurbished Canberra Stadium Concept in Option Cs1 and Cs2

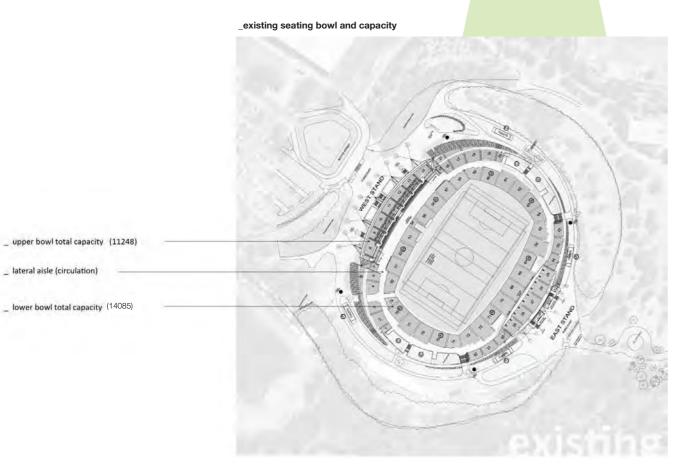
The Bowl:

The existing bowl has been modified to increase the capacity from approximately 25,333 seats to 25,751 seats in option Cs1 and 26,341 seats in option Cs2.

This is achieved by the addition of 3 rows located on the western lateral aisle at the back of the lower bowl and extending the lower bowl between the 22 meter lines in the East Stand to the level of the corporate suites in this stand.

Option Cs1 allows for only the 3 rows being added in the West Stand. Cs2 allows for the additional rows in both the West Stand and the East Stand, as described above. _ additional seating on lateral aisle (418)

Cs2_increased seating capacity



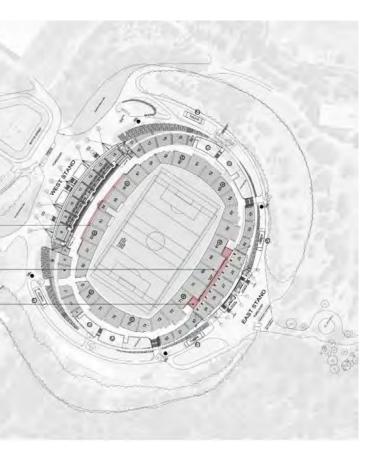
_ additional seating on lateral aisle (418)

_ additional seating on lateral aisle (590)

CANBERRA STADIUM & MANUKA OVAL MASTER PLAN REPORT

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Indicative FIFA World Cup Overlay:

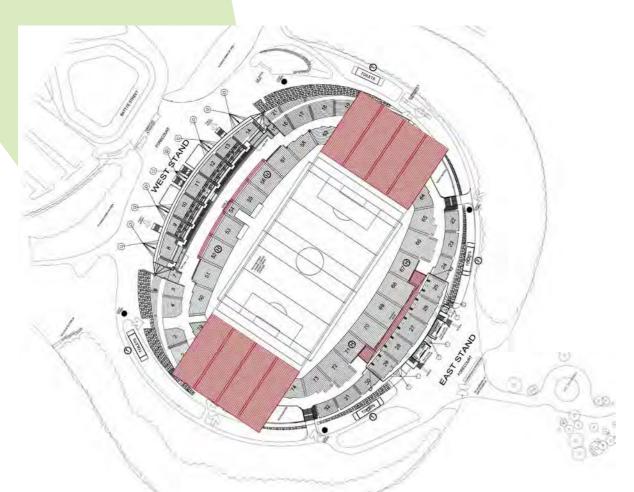
The bowl has been designed to accommodate a likely requirement to increase the capacity substantially to approximately 45,000 patrons should a FIFA World Cup bid be successful. This can be achieved by locating temporary tiers behind the goals at each end of the bowl (shown in red on the images below), similar to the strategy used at Stadium Australia to accommodate the vast temporary crowds at the 2000 Sydney Olympic Games. The spectator facilities, being concessions and toilets would need to be further analysed in the next design phases against future FIFA requirements and the increase of capacity to approximately 45,000 spectators.

In both of these options Cs1 and Cs2 the temporary seats should be able to be accommodated, but they are both compromised by their size and the fact that in both options a very large number of patrons are located in less than optimum seating positions for the sport in question.

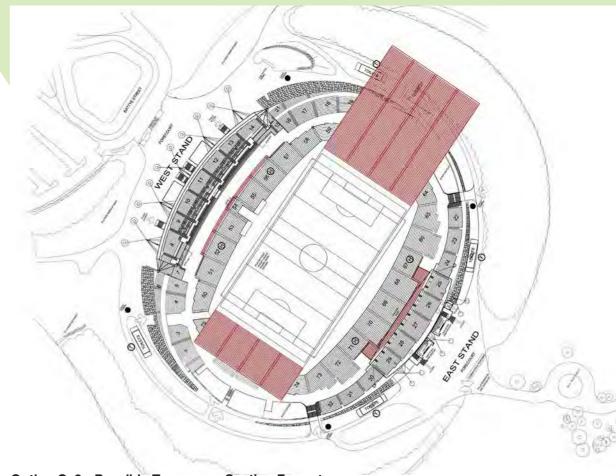
It should be noted that the maximum FIFA overlay gross capacity for the stadium may vary, dependent on the design of the stadium, by as much as 1,500 from approximately 43,500 to 45,000 people. The net capacity required by FIFA is set at 40,000 people. This number is exclusive of media and VIP requirements. The reduction in the gross capacity from 45,000 to 43,500 is possible through the way a stadium is designed with the flexibility to accommodate the number and location of the media and VIPs involved in and invited to a FIFA World Cup, without impacting on the seating bowl capacity. Therefore it is possible to achieve the FIFA specified 40,000 net capacity, based on a gross capacity of 43,500, rather than 45,000. This should be further analysed with the design team in the next design phases if this option is adopted by the ACT Government.

It should be noted that the locations and sizes of the temporary tiers, as dictated by the existing and retained structure is not ideal for the FIFA World Cup as a large number of patrons are located behind the goal and without cover. This would need to be discussed with FIFA and the FFA if either option Cs1 or Cs2 were adopted and Australia were successful in its bid to host the FIFA World Cup.

be further developed.



Option Cs1 - Possible Temporary Seating Format



Option Cs2 - Possible Temporary Seating Format



The diagrams below provide an indication of the two strategies that could



Floor Plans for Options Cs1 and Cs2:

The amended floor plans are established as follows

Level 01 (Mal Meninga Stand)

This level comprises the team and back of house facilities. The team change areas are proposed to be significantly modified to align with the minimum standards of the relevant sporting codes and also with modern trends in stadia design where applicable. A new medical facility is to be built and existing spaces reused for alternative uses, such as the current medical facility used for matchday officials and existing star dressing rooms to be used for staff change etc. It should be noted that a number of existing infrastructure items, such as storm water access and sewerage pumps will need to considered carefully in the next phases of work.

P

C^S1 and C^S2







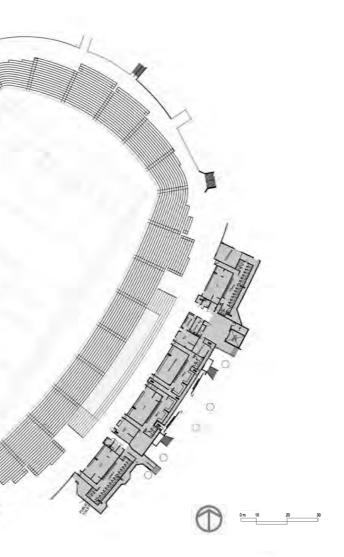


Level 02 (Mal Meninga Stand)

Minimal amendments and additions to this floor except for the upgrade of the toilet numbers and food and beverage and bar counter lengths to accommodate the increase in capacity. All the existing facilities are retained in their current locations at the rear of the lateral aisle. The lateral aisle is envisaged to function better due to the reduction of the direct view to the field of play form the lateral aisle as three rows of seats have been located at the top end of the lower tier. This will mean that patrons will not be tempted to stand at the back of the lower bowl and block the aisle.











Level 03 (Mal Meninga Stand)

This level occurs in the West and East Stands and accommodates corporate suites and corporate lounges. In both the East and West Stands it is proposed to provide a distinguishable and dedicated entry lobby for VIPs, Corporate and Media patrons. The West Stand, as the front door to the stadium includes an extensive triple height atrium lounge, enclosed around the existing central stairs and two new passenger lifts.

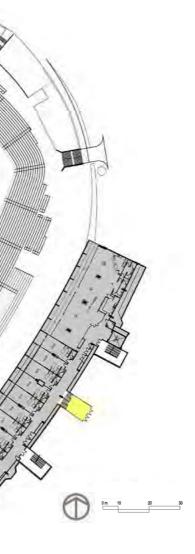
It is proposed that the existing kitchen is enlarged so as to create a main production kitchen for the West Stand in order to reduce the inefficiencies of moving foodstuffs in sealed trolleys along the external public concourse from the East Stand to the West Stand, as is currently the case.

It is proposed that the two stairs located towards the North and South of the West Stand are to be removed and relocated at the southern and northern edges of the West Stand.

A players' lounge and stadium shop/museum are also proposed at this level in the West Stand.

It is also proposed that an upgraded entrance sequence is established in the Gregan/Larkham Stand for the corporate suite level off the concourse. This is envisaged to be a classic glass box, which protrudes slightly from the existing stand to give the entrance a degree of subtle presence and noticeable distinction.

C^S1 and C^S2







Level 04 (Mal Meninga Stand)

This level and the seats above in the upper tier are proposed to be members and corporate areas. Currently the lounges located at this level can become thoroughfares for the general admission patrons located in the upper tier, which creates logistical and operational issues. The corporate guests also need to leave their corporate lounge at this level to access toilets on the adjacent small general admission concourse.

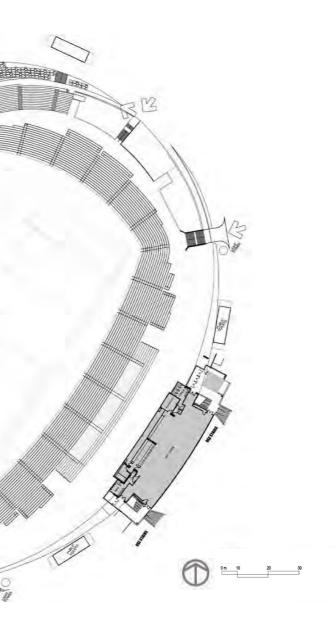
The design team have endeavoured to provide solutions for this situation. Firstly we would suggest that the seats in the upper tier are specified as members and corporate seats to help establish that "point of difference" and create a mystique about the West stand. We would then suggest that a members concourse is established between the corporate lounges and the seating bowl to clarify patron movement and remove the need to go through the lucrative corporate areas. This concourse is proposed to be properly finished (paint and carpet) to span the whole length of the West Stadium in order to provide a more salubrious environment. The location of this members concourse required the proposed lounges to move west.

The corporate lounges enjoy views to the western concourse and Battye Street, are served by dedicated finishing kitchens and bars and have access to dedicated seating in the mid and upper tier of the Mal Meninga Stand. They still share toilets with the members concourse, but as they are located off the new members concourse the corporate patrons will no longer feel as if they need to walk outside to access the toilets.

The media are also located at this level in dedicated facilities, straddling the centre line.

C^S1 and C^S2

POPULOUS"







Roof

The design team confirm that in principle the roofs over the East and West Stands will require being replaced in order to achieve up to 60% coverage with this roof on 3 sides. The roof shape and type is indicative and subject to change.

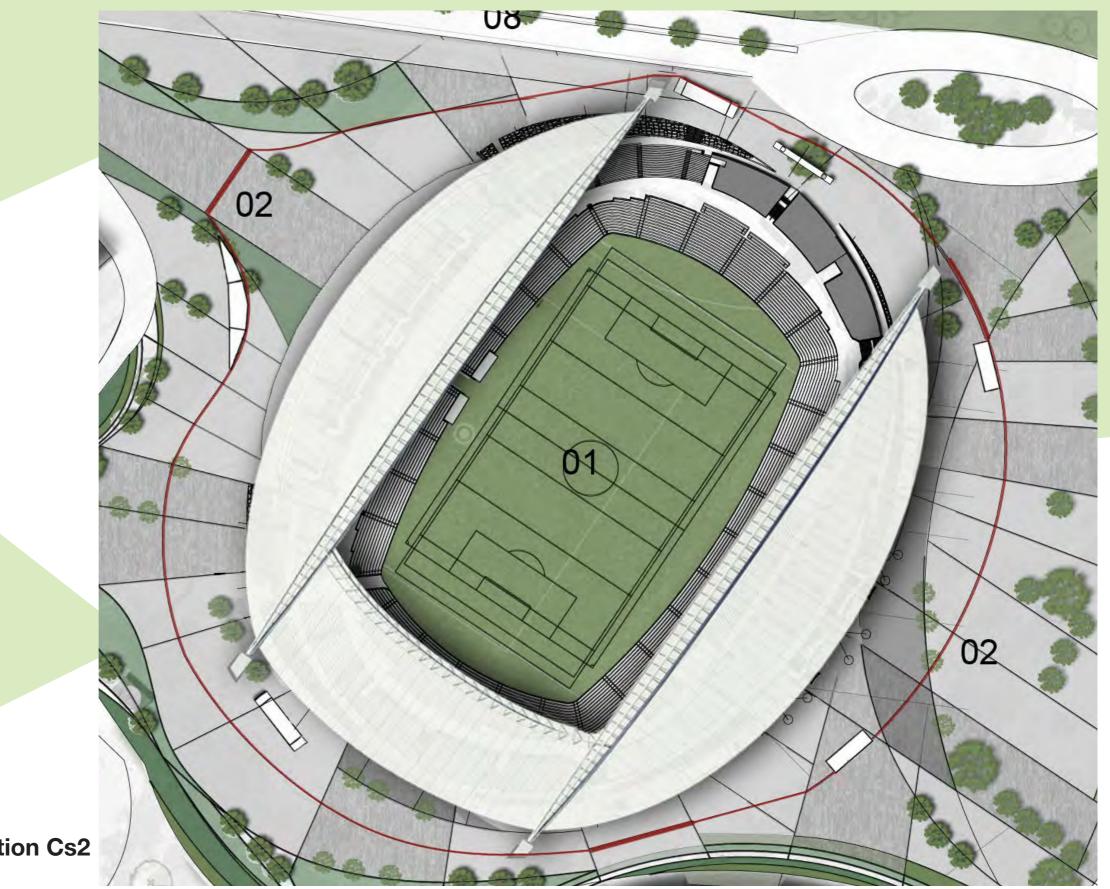
In option Cs1 only the roof element over the West stand is proposed to be completed, but in option Cs2 the roof cover will be increased over the East and South Stands, as a staged development.

The principles are that the roof would be of solid construction and would aid with the ESD initiatives proposed for all options, being solar, heat and water harvesting.



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Plan showing option Cs2





The New Dedicated Stadium Concept -**Options Cs3 and Cs4**

The conceptual designs shown in this report for the dedicated rectangular stadium have been developed by Populous. The designs are indicative only at this stage and have been developed to allow an understanding of the simplicity of the facility. The designs show one of many approaches to the resolution of what the facility may look like.

The following text relates to the conceptual designs developed by Populous as a basis for the interpretation of an allegorical meaning for the stadium which ties the design to its physical and emotional context. Although the bowl and required facilities dictate the basic form of a building of this type, it also provides an opportunity for significant expression and recognition which will be viewed not only state wide, but nationally and internationally. Canberra, the seat of Federal and Territory Government, has been established in a bushland setting. This location was deliberate and was considered as an important element in the identity of Canberra and the strength of the Canberrans which could see it create a unique building rooted to place and time. It is considered important to celebrate the history and industry of the Territory and the new stadium provides a canvas by which this can be achieved. This is a major civic building that can define the city as well as the Territory and should be endorsed as such.

The conceptual design shown in the renderings of the sites has been developed as a indication of a possible approach to the creation of a unique stadium. The envelope shown in each of the masterplan images has been developed to create a design, specific to the ACT and Canberra. The importance of the bush to both aboriginal and European settlement has informed the creation of an open, light weight building that engages with the environment and allows for many interpretations of its form and texture. The skin of the facades is based on the oxymoronic complex patterning seen in the regimented formations of the flora in the bush. This is humbly considered a clear reference and homage to the continuous springing of life in the bush and the strength and robustness of the flora and of those who have forged lives in this harsh environment.

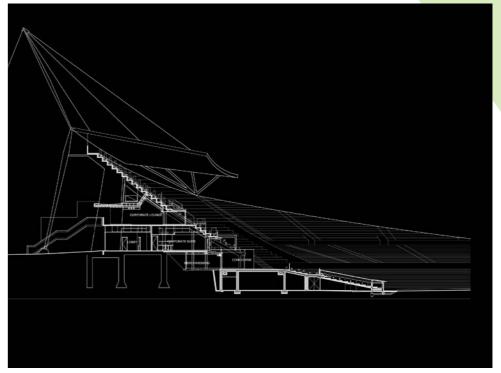
The conceptual design has set out to develop a unique stadium for the city and Territory, one that can identify with the aspirations of the community and the teams they support. A new civic landmark that clearly defines the city as a national leader in the 21st Century. It is felt also that, wherever possible the stadium design should not isolate the activity within and the community without, but should connect locally and citywide.

Each site has an important historical, cultural or ideological role within the city of Canberra. The stadia designs documented provide an opportunity to allow the immediate environment into the stadia visually and through it so that the stadia acts as a window rather than a wall.

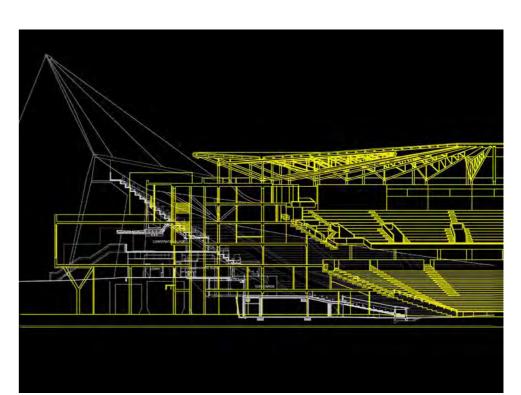
Proximity:

The capacity of the existing capacity is about 25,333 which should provide a stadium with an intimate/boutique feel, however Canberra Stadium is very open, with a very flat bowl. Modern stadia endeavour to locate spectators as close to the action as possible to increase the gladiatorial aesthetic of the colosseum and thus enhance spectator enjoyment.

The current stadium bowl, having been initially built to accommodate oval sports and athletics is inadequate in terms of proximity to the rectangular fields of play that are presently established. This inadequacy has been further exacerbated by the modification of the oval bowl to the rectangular format, as it took the field of play further away from the paying public. A number of sectional comparative studies against the existing stadium section have been carried out to confirm this state of play. The proposed stadium has been designed to follow examples of some of the most intimate spectator bowls in the world today.

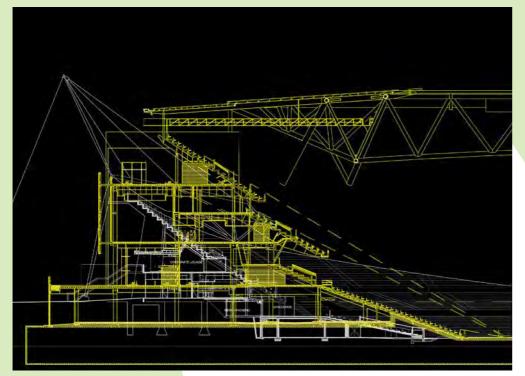


Existing Section

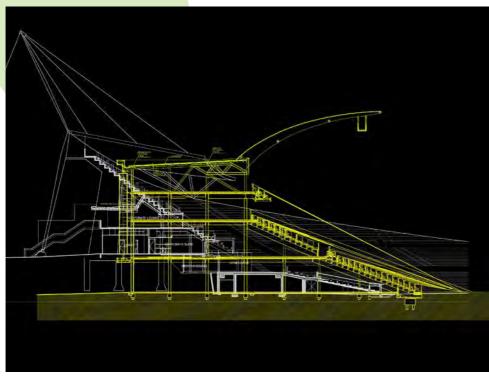


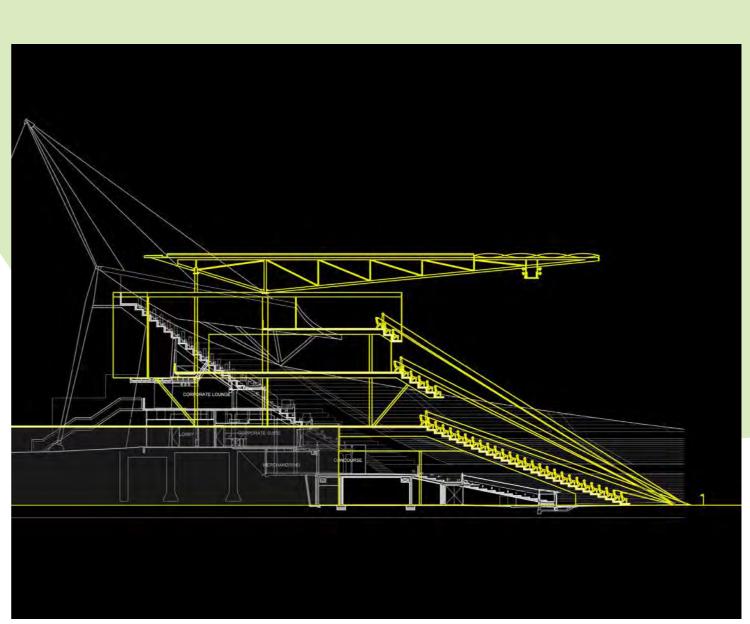
Existing vs Milton Keynes Stadium, UK (Milton Keynes section shown yellow)





Existing vs Suncorp Stadium, Brisbane (Suncorp section shown yellow)



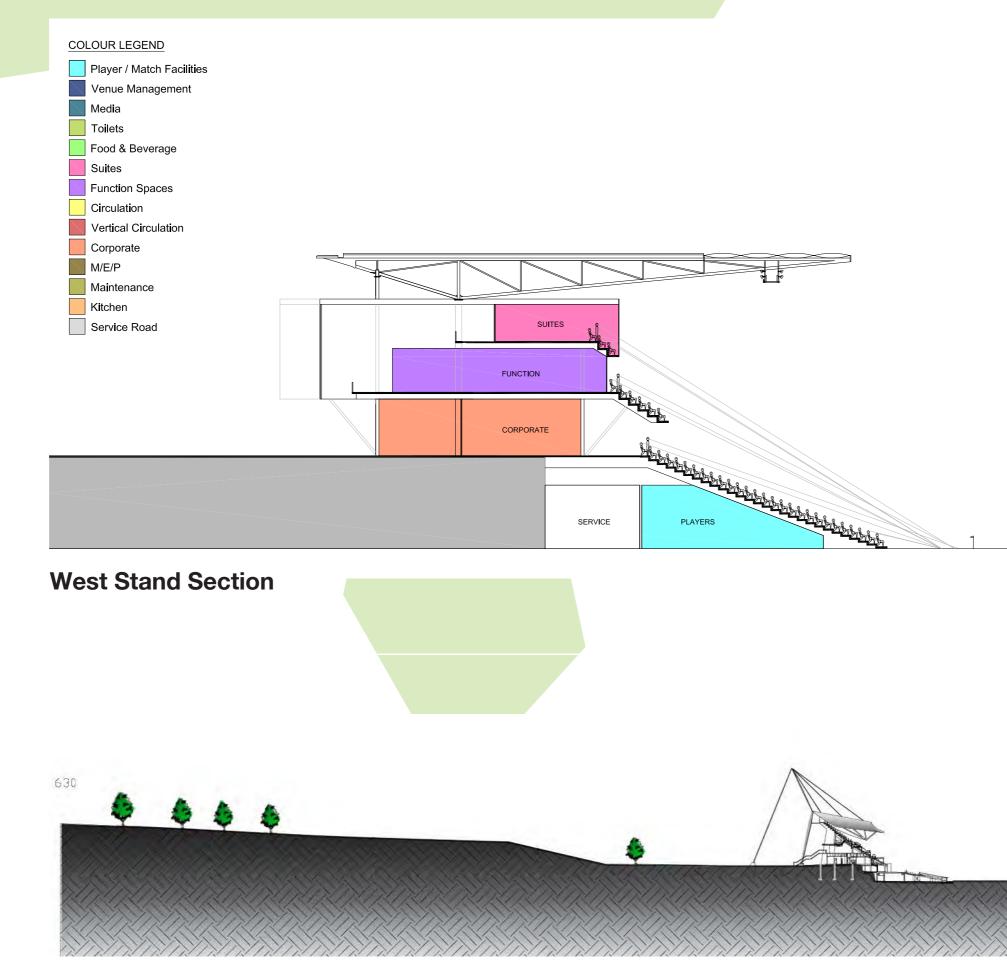


Existing vs Proposed Concept (Proposed Concept section shown yellow)

Existing vs Skilled Park, Gold Coast (Skilled Park section shown yellow)



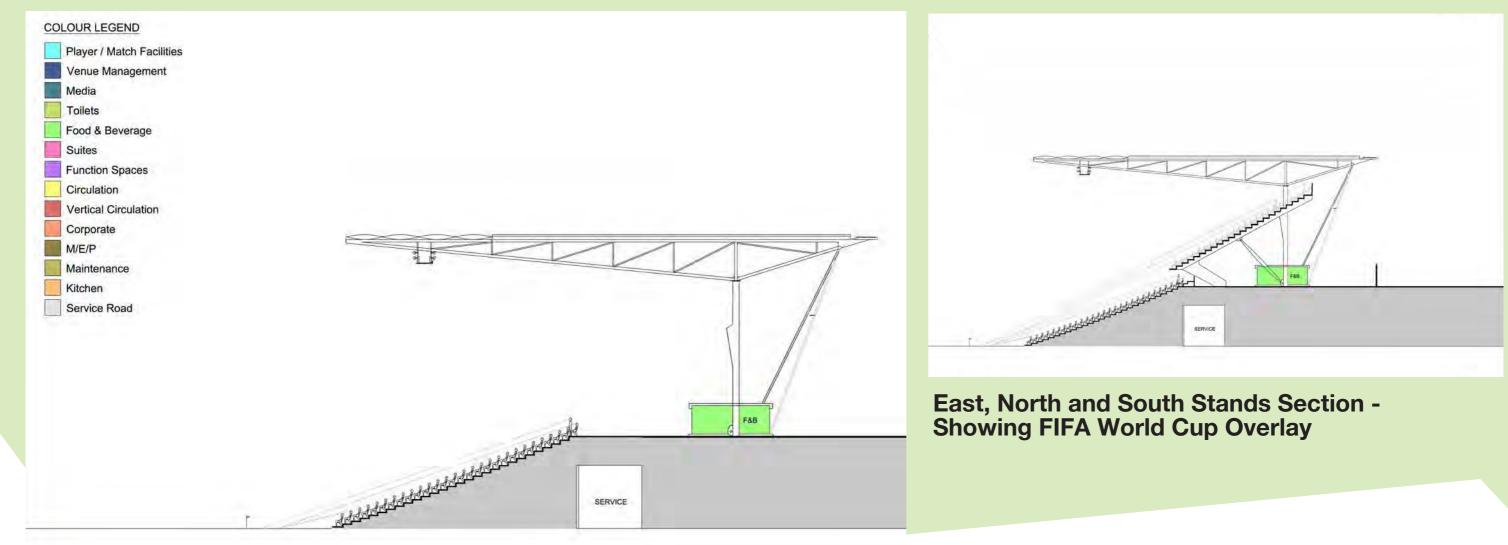




Indicative Long Site Section







East, North and South Stands Section







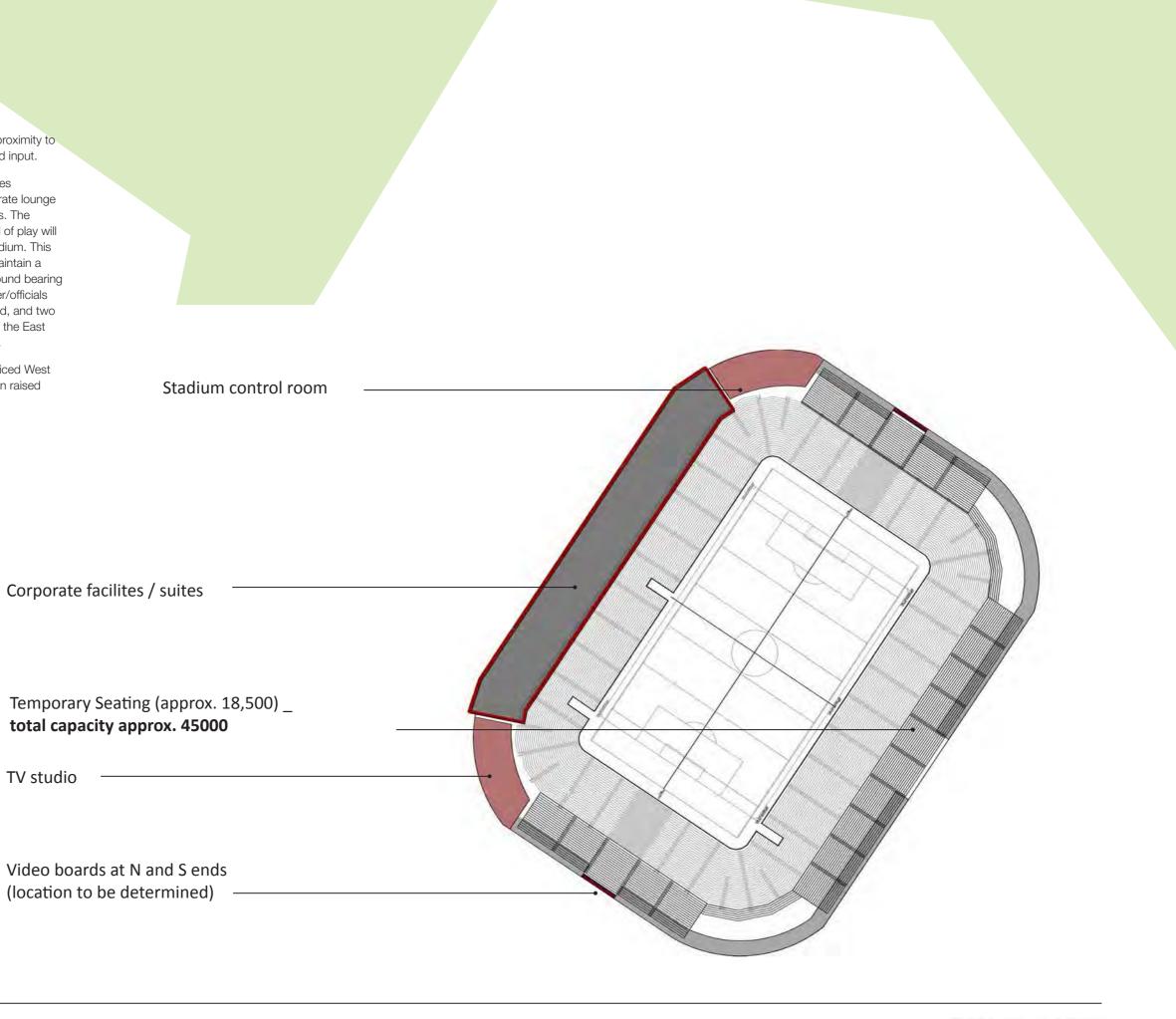


The Bowl

The generic bowl has been designed to champion a greater proximity to the field of play and therefore greater customer enjoyment and input.

The lower tier surrounds the field of play on all sides. It provides permanent accommodation for the general admission, corporate lounge and open corporate box patrons, constituting 25,142 persons. The sheer number of patrons in this single tier so close to the field of play will increase the gladiatorial amphitheatre aesthetic within the stadium. This bowl is accessed from a concourse at the back, which will maintain a view of the field all around. The lower tier is considered as ground bearing on the North, East and south sides of the field of play. A player/officials access vomitory is located on the centre line in the West stand, and two vehicle access vomitories are located at the southern ends of the East and West tiers for groundsmen and concert bump in and out.

The permanent middle and upper tiers are located in the serviced West Stand and serve the corporate suites, operations and media in raised positions along the sideline.





Indicative FIFA World Cup Overlay

The bowl has been designed to accommodate a likely requirement to increase the capacity substantially to approximately 45,000 patrons should a FIFA World Cup bid be successful. This is achieved by locating temporary tiers on the large concourse that runs at the back of the lower bowl (similar to the Klagenfurt system, refer to Benchmark section). This concourse would provide an area large enough for the requisite seats. The spectator facilities, being wcs and food and beverage are being considered permanent for the permanent 26,500 capacity, but space is provided to accommodate the extra facilities required for the increased capacity. This would have to be further analysed in the next design phases against future FIFA requirements.

The following diagrams provide an indication of the strategy being proposed.

Note

It should be noted that the maximum FIFA overlay gross capacity for the stadium may vary, dependent on the design of the stadium, by as much as 1,500 from approximately 43,500 to 45,000 people. The net capacity required by FIFA is set at 40,000 people. This number is exclusive of media and VIP requirements. The reduction in the gross capacity from 45,000 to 43,500 is possible through the way a stadium is designed with the flexibility to accommodate the number and location of the media and VIPs involved in and invited to a FIFA World Cup, without impacting on the seating bowl capacity. Therefore it is possible to achieve the FIFA specified 40,000 net capacity, based on a gross capacity of 43,500, rather than 45,000. This should be further analysed with the design team in the next design phases if this option is adopted by the ACT Government.









Floor Plans

The generic floor plans are established as follows.

Level 01

This level, located beneath and behind the lower tier will accommodate team, operations, main production kitchen, groundsman's stores and permanent and casual staff facilities.

This level includes four team change facilities (home, away and two auxiliary), the medical facilities required to serve the teams. A single field of play access vomitory is located between the home and away change rooms on the centre line to provide level access to the field of play. Indoor warm up areas are provided for the players following the guidelines set out by the relevant sporting codes. A service route is proposed which runs around the bowl at the same level to provide access for buses, ambulances, VVIPs and service vehicles. Parking is considered located off this service road for staff, VVIPs, buses and emergency services, as are stores.



C^S3 and C^S4

COLOUR LEGEND
Player / Match Facilities
Venue Management
Media
Toilets
Food & Beverage
Suites
Function Spaces
Circulation
Vertical Circulation
Corporate
M/E/P
Maintenance
Kitchen
Service Road



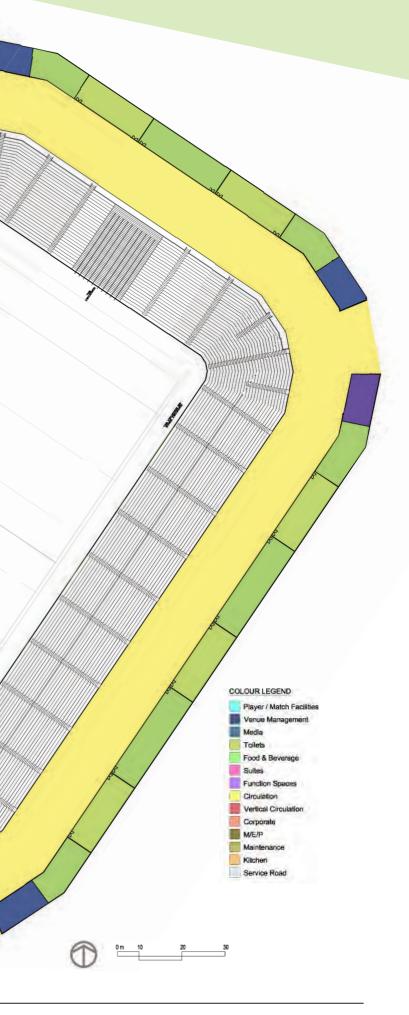
Level 02

This level is located at the top and back of the lower tier and provides accommodation on a 360 degree concourse for the permanent facilities (wcs, bar and food and beverage concessions) to serve the permanent GA capacity at this level and space/area allocation for the future inclusion of facilities to cater for the games of significance capacity (at approximately 43,000). This level is the level at which all patrons (excluding WIPs) enter the stadium. The entrances are located at strategic locations around the stadium, providing a clear geographical understanding for the patron. There are 4 proposed entrances around the stadium for general admission and members patrons and 1 for VIP and corporate patrons. The corporate entrance is located in the serviced West stand and provides access to a double height lobby which clearly directs patrons to their designated areas. This lobby is located between a lounge bar and a dining lounge and is flexible enough to be used as a pre-function area on event and non event days.

The lounges cater for 500 persons each, one as a sit down dining package and the other as a lounge bar scenario. These are served by dedicated toilets and two finishing kitchens, which also serve adjacent general admission concessions, therefore achieving an economy of scale. The lounges are envisioned to be active 365 days a year as function rooms and can be subdivided to provide more intimate dining experiences as found in destination restaurants. The lounges provide uninterrupted views into the arena and have direct access to dedicated seating within the lower bowl.



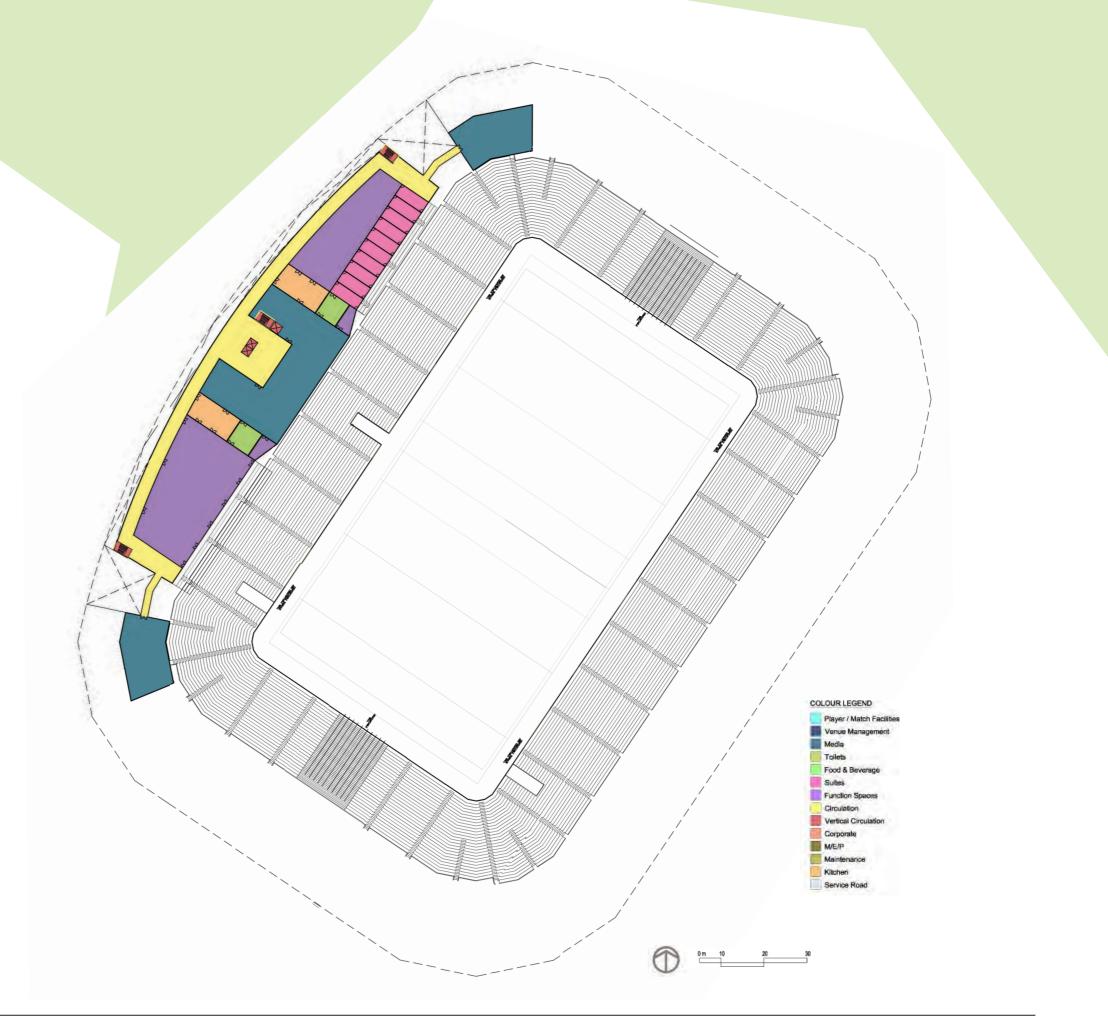
MA





Level 03

This level only occurs in the West Stand and accommodates corporate suites, corporate loges, operations and media. This level provides unrivalled and uninterrupted views for the corporate patrons and media enclosed within a glazed (operable) façade. The loges are served by dedicated lounge and bar, serveries and toilets. The corporate suites are served within each by a small servery and have communal toilets nearby.



C^S3 and **C^S4**

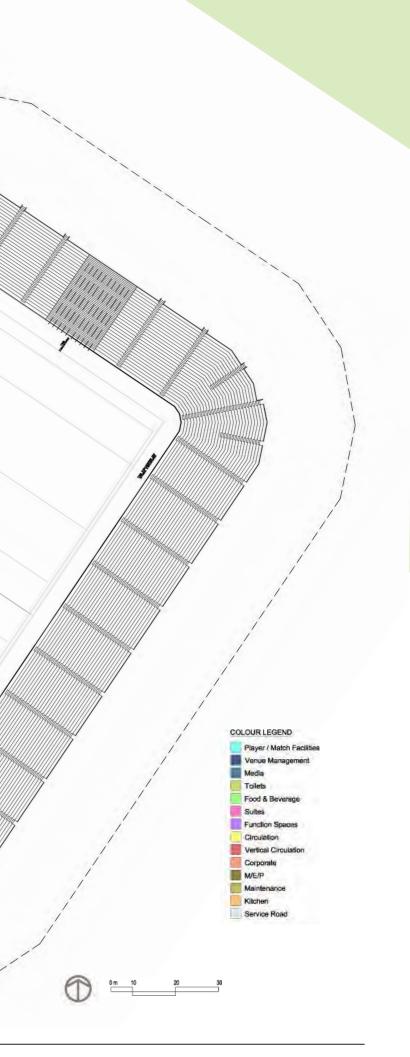


Level 04

This level only occurs in the West Stand and accommodates corporate suites and requisite kitchens and toilets. This level provides unrivalled and uninterrupted views for the corporate patrons within a glazed (operable) façade.









Roof:

Main roof is designed to actively harvest the natural resources with the use of solar panels, water harvesting and heat transfer through the opaque section of roof. It will respond to the issues of shade by permitting the correct level of UV through its ETFE areas, which will be defined by the location of the sun during the day. The roof will be supported by goal post trusses and then simply supported by a lightweight façade treatment at its extremities.

The sports lighting will be supported from the front edge of the roof, minimising lightspill to adjacent current and future developments.

The roof will shelter up to 80% of spectators.

It is proposed that the roof will form one of the main canvasses for ESD initiatives, being a large flat span it is envisaged that much of it's surface will be covered in photovoltaics and heat harvesting elements, as well as being used to capture all or most of the rain that falls on it.

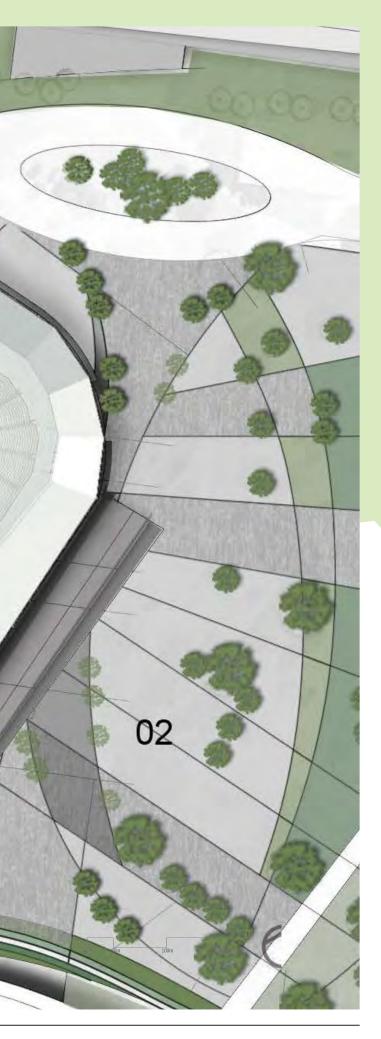
Indicative perspective showing option Cs3 (similar roof form in option Cs4)





Plan showing option Cs3 (similar roof form in option Cs4)







Event Plaza

Currently the event plaza at Canberra Stadium is a barren, unwelcoming area between parking your car and entering the stadium. It does not invite dialogue and understanding. It promotes the desire to cross it as fast as possible, either on entry or exit.

The event plaza in all options is envisaged to be the catalyst for entertainment and one of the main reasons why the precinct will be a place to enjoy and interact with. The concept is to open the plaza up to the public as much as possible, while retaining the security of the stadium. The stadium and its precinct are considered elements to which people will migrate and want to stay.

It is proposed that the external plaza area be a mix of sweeping landscaped elements and directional hard surfaces. The soft landscape elements will invite people to relax and stop. They will be gently banked to enable people to potentially watch street performers entertain.

The event plaza and entry sequence should be as much a part of the event as actually viewing the sporting triumphs of your team. People enjoy celebrating victories and commiserating losses, but presently there is nowhere for the spectators to carry out this basic requirement next to the stadium. Spectators arrive, watch the event and leave. We invite people to stay a little longer and enjoy the whole precinct. This is practical as well as meaning that the normal mass exodus and its inherent traffic issues can be mitigated.

Around the plaza it is proposed that shade structures would be located to provide welcome shelter from the sun or rain for patrons and visitors alike.

















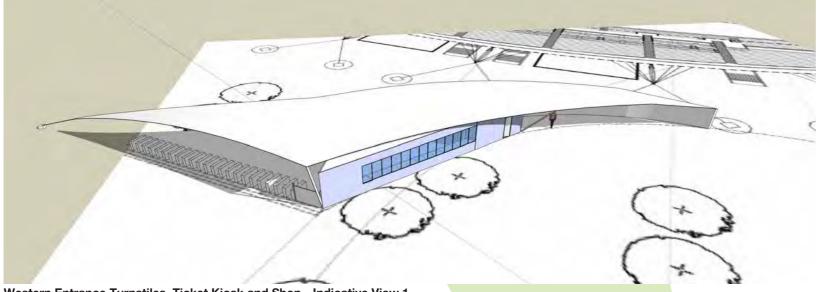


Turnstile and Ticket/Shop Kiosks (Option Cs1 and Cs2)

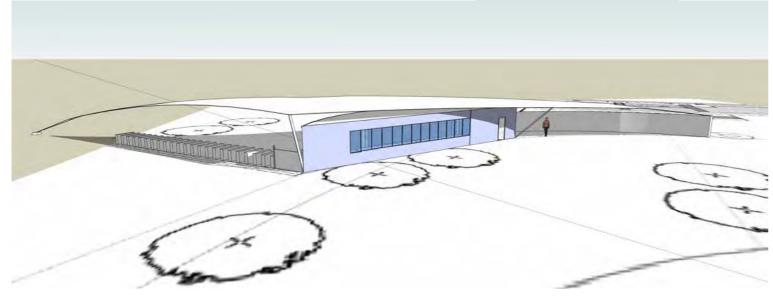
The existing turnstile and ticketing infrastructure is indaequate and does not promote a proper front door or welcome to the stadium precinct.

The design team proposes lightweight structures with fabric oversailing cover to mimic the main roof form proposed for the stadium redevelopment. The number of turnstiles will be considered at one turnstile per 660 patrons to provide a better flowthrough for late arriving spectators.

The following sketch images are indicative and for guidance purposes only.

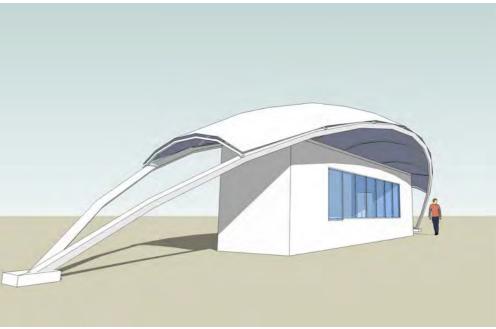








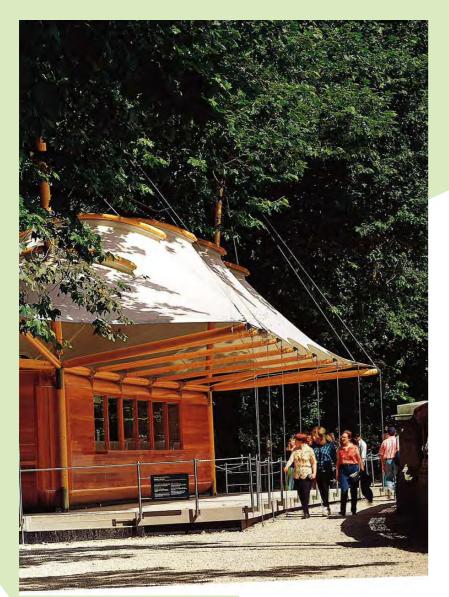
Eastern Entrance Ticket Kiosk - Indicative View 1



Eastern Entrance Ticket Kiosk - Indicative View 2

Western Entrance Turnstiles, Ticket Kiosk and Shop - Indicative View 2

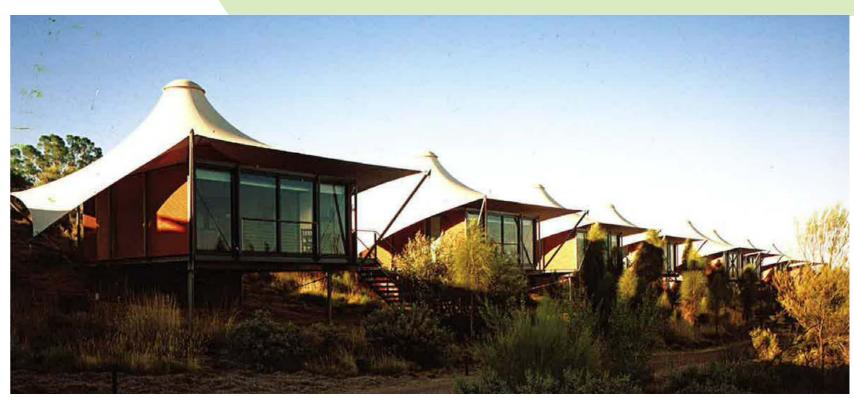




Indicative Image 1 - Buckingham Palace Ticket Office, London Hopkins Architects, London



Indicative Image 2 - Buckingham Palace Ticket Office, London Hopkins Architects, London



Precedent Image 3 - Longitude 131, Australia - Cox Richardsons Architects, Sydney





Masterplan Options Cs1, Cs2, Cs3, Cs4

A refurbishment of the existing Mal Meninga Stand and precinct

This option embodies the design strategy of stage 1 of option Cs2 which includes for a substantial upgrade of the existing west stand and surrounding plaza to include new entrance gates, turnstiles and ticketing kiosks and fence line.

The Plaza

The fence line has been relocated closer to the stadium in order to provide a public area all around the stadium site, allowing the public greater access across the precinct, which allows for access and views to the site all around it rather than simply from the East and West ends. Properly lit it is envisaged that this will provide the stadium and its neighbours with a greater level of security than it has at present. The plaza, inside and outside the stadium is envisaged to be landscaped and street scaped to provide areas for rest and contemplation, as well as performance and art.

New entrances and ticketing kiosks are proposed to provide greater clarity and understanding for the patron and an improved front door aspect for the stadium.

Battye Street is proposed to be extended to meet Masterman Street with a double width, shared surface boulevard ("Walk of Legends"), giving the stadium precinct a more open feel and providing both the stadium and the AIS (to the north) a new significant frontage.

The Stadium

The West (Mal Meninga) Stand is proposed to undergo a significant upgrade to achieve compliance with not only national stadium trends and spectator expectations, but more importantly to comply with the minimum required standards of the relevant sporting codes, being Rugby Union, Rugby League and Football. In this option the effort is concentrated in the West (Mal Meninga) Stand, which will undergo a full refurbishment of the team facilities, the corporate lounge level (increased capacity from 480 persons to 800) and the media facilities. The West Stand upper level is proposed to become members and corporate patrons only to better establish the desired segregation that does not exist at the moment. As part of this refurbishment a new corporate entry, main production kitchen and stadium shop/museum are also proposed. The new corporate/members entry will enclose the two central stairs in a triple height atrium and include two passenger lifts, which will relieve the pressure on the single service lift currently located in the West (Mal Meninga) Stand. This new corporate entry will also present a front door to the western plaza rather than the back door aspect that is presently presented. This option also increases the capacity from 25,333 to 25,751 and includes for the upgrade and additional F&B and WC facilities to cater for the increased capacity.

One of the overreaching issues at the current stadium is the lack of cover for the patrons, and protection from the south westerlies that roar in during the winter months. The design proposes a new roof over 80%

of the patrons in the West Stand, which amounts to a 64% increase on what is currently provided in the West Stand. However the East, North and South Stands retain the same level of cover, somewhere between 16% and none. On average Canberra Stadium would have a roof coverage of approximately 40%.

The new West Stand roof will also accommodate sports lights along the front edge, which will also help reduce the light spill to neighbouring areas. It is proposed that the existing West light towers will be removed as part of this development. However those located on the East side of the stadium will be retained.

This scheme will provide the Territory with a much improved facility for the sports and patrons, but it should be understood that some of the facilities will still be somewhat compromised as they are being developed within an existing fabric, and therefore certain limitations and unforeseen complications will exist.

This and all other options have Included ESD initiatives, such as water and solar harvesting on site. Refer to the ESD statement in the business case.

It is envisaged that this would cause significant disruption to the sporting and event calendar currently hosted by Canberra Stadium.

An event and non-event day bus transport hub for public bus drop off and pick up is located at the South-East corner of the site to provide greater public transport accessibility to the site on event and non-event days. The location, adjacent to the GDE has been specifically chosen to maximise the efficiency of the transport hub, by enabling direct access to the expressway and also to minimise public and private transport cross-over on event days. The transport hub is made up of the following elements.

Accommodation for up to 12 buses, two platforms of 6 buses each (120m x 2m), shelter for passengers, grade-separated pedestrian access across bus roadways, two 3-lane bus roadways (10m wide x 120m long), passenger queuing areas, identification and wayfinding signage, pedestrian fencing, driver amenities and security building including toilets,

power and water, lighting and CCTV cameras and landscaping.

Bus priority roadways including two dedicated on-ramps onto the GDE (East and West), a dedicated off-ramp from the GDE (West side only), two lane road underpass (to accommodate breakdowns and growth) beneath the GDE to access the east on-ramp. (This component could be undertaken as a section of the proposed Belconnen to Civic Transitway).

Indicative Staging and Programme:

It is proposed that development would be in one stage that would take approximately two years to construct. The construction strategy aims to minimise the impact of the building works on the existing sporting event calendar for the main stakeholders.

Master Planning Opportunities:

It is envisaged that the development areas would be released (once land swap deals have been agreed and planning issues resolved) to future developers to provide possible funding options for the development. The areas shown on the master plan to the East and West of the stadium are such opportunities.

Pros

- Improved spectator facilities.
- Increased covered seating in the West Stand.
- Expanded corporate lounge areas.
- relevant sports.
- Better access to the site from extended Battye Street. • Clearly defined entrance to Battye Street.
- Improved external plaza area, entrances and signage.
- Includes the latest technologies in environmentally friendly design and construction.

Cons

- Additional cost of temporary seating.
- Replacement of ageing infrastructure.
- Need to increase seating capacity.
- Need to increase covered seating.
- Spectator remoteness from action and atmosphere. • Need to upgrade field of play access.
- International code requirements.

- Represents a short term upgrade to an ageing facility.





• Improved team facilities to achieve the minimum standards for the

• Difficult to increase seating to approximately 45,000 seats in the future.









A staged refurbishment of the existing stadium and precinct

As option Cs1, with the addition of 80% roof cover to the South and East Stands. This will amount to 60% cover for the stadium. In this option all of the light towers are removed and a new front door is provided in the East Stand for the corporate patrons. The master planning and development options remain the same as Cs1. The existing field of play is to be retained during construction.

Indicative Staging and Programme:

It is proposed that development would be in three stages that would take approximately three years to construct. The staging of the construction aims to minimise the impact of the building works on the existing sporting event calendar for the main stakeholders. Therefore it is proposed that in the first stage the existing West Stand would be refurbished with a new roof, with the team and media facilities relocated into temporary accommodation or the East Stand for the duration of this stage. In the second stage the existing East Stand is proposed to be minimally refurbished and the roof built over, then in the third stage the South Stand roof would be completed.

However it is envisaged that this would cause significant disrupiton to the sporting and event calendar currently hosted by Canberra Stadium.

Master Planning Elements:

The master planning and development principles remain the same as Cs1.

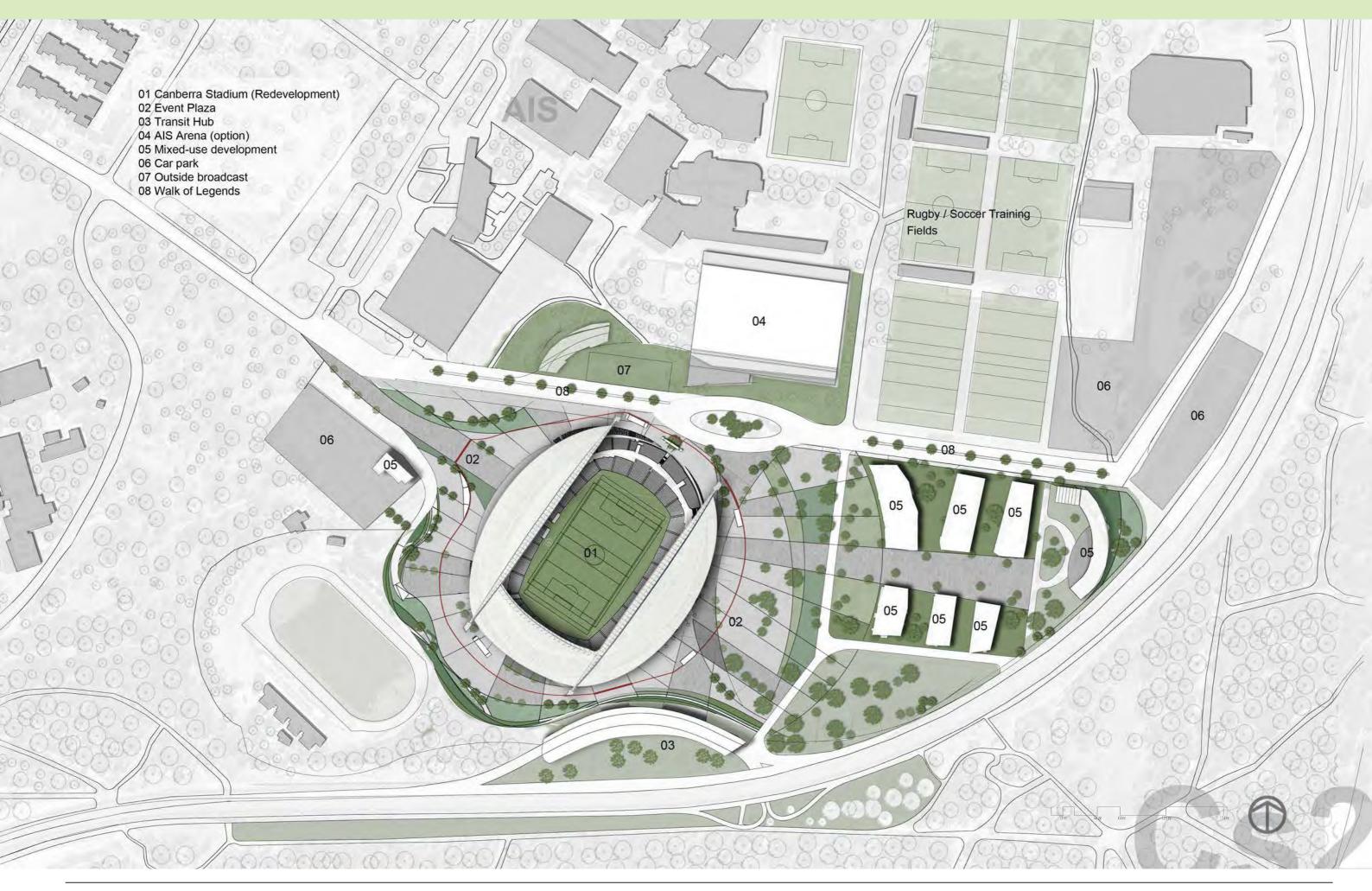
Pros

- Improved team facilities to meet the relevant sports minimum standards.
- Clearly defined and articulated entrances.
- Upgrade to external plaza area, entrances and ticketing kiosks.
- Clear and understandable signage.
- New road from the north.
- Improved address and identity.
- New transport hub.
- Seating capacity increased from 25,000 to 26,341.
- Increased percentage of covered seating.
- Expanded and improved corporate areas.
- Includes the latest technologies in environmentally friendly design and construction.
- .



- Cons
- Additional cost of temporary seating.
- Refurbishment of ageing infrastructure.
- Spectator remoteness from action and atmosphere unchanged.
- No upgrade field of play access.
- Difficult to increase seating to approximately 45,000 seats in the future.
- Represents a short term upgrade to an ageing facility.









This option provides a new dedicated rectangular stadium on the same footprint as the existing stadium and precinct. The stadium is proposed to be progressively developed.

The Plaza

The fence line is proposed to be relocated to the stadium itself to provide a public area all around the stadium site, allowing the public greater access across the precinct, which allows for access and views to the site all around it rather than simply from the East and West ends. Properly lit it is envisaged that this will provide the stadium and its neighbours with a greater level of security than it has at present. The new landscaped and street scaped plaza is envisaged to provide areas for rest and contemplation, as well as performance and art.

Battye Street is proposed to be extended to meet Masterman Street with a double width, shared surface boulevard ("Walk of Legends"), giving the stadium precinct a more open feel and providing both the stadium and the AIS (to the north) a new significant frontage.

The Stadium

This option provides for a new dedicated rectangular stadium located on the same footprint as the existing Canberra Stadium. The stadium is designed to accommodate a permanent capacity of approximately 26,500 which could be increased up to approximately 45,000 (through temporary facilities) for a FIFA World Cup pool game. This facility will provide a range of spectator experiences for all levels from general admission patrons to the corporate patron in a modern environment. The facility simply comprises a large single lower tier for all general admission, dine and view and open box patrons, and a serviced West Stand which accommodates function rooms, venue management team facilities, corporate suites and media. The team facilities and media facilities will comply with the relevant minimum standards. A service road runs all around the stadium beneath the lower tier to provide ease of access for service vehicles around the whole stadium, which has parking for around 150 cars for staff and VIPs off it. The upper levels of the West Stand accommodate the new corporate suite and loge (enclosed open boxes) levels, as well as the media and venue security, timekeepers etc.

At the back of the lower seating bowl a wide concourse is located, which allows patrons to walk around the stadium, while never losing site of the action on the field of play. This is an important aspect of the current stadium, which was felt important to retain.

The roof is envisaged to be a single plane, with a front edge of ETFE, allowing for natural sunlight light to reach playing surface. The solid elements of the roof are proposed to be profiled metal sheeting, giving a good base for solar panels in line with a number of ESD initiatives being considered, along with water and heat harvesting.

MAGE ONLY

> The roof will also accommodate sports lights along the front edge, which will also help reduce the light spill to neighbouring areas. It is proposed that the existing light towers will be removed as part of this development.

The roof will provide 80% cover for patrons from the elements.

The facade treatment is proposed as a celebration of the bushland setting of the stadium and Canberra.

The existing field of play is to be retained during construction.

It is proposed that development would be in four stages that would take approximately five years to construct. The staging of the construction aims to minimise the impact of the building works on the existing sporting event calendar for the main stakeholders. Therefore it is proposed that in the first stage the existing West Stand would be demolished, with the team and media facilities relocated into temporary accommodation or the East Stand for the duration of this stage. In the second stage the existing South Stand is proposed to be demolished and rebuilt, then in the third stage the East Stand would be completed. Finally in the fourth stage the North Stand would be built. The plaza would be developed concurrently with each stage.

The master planning and development options remain the same as Cs1and Cs2.

The transport hub is similar to that described in option Cs1.

Pros

- New state of the art stadium.
- Enhances and promotes the elite sporting history of the precinct.
- New state of the art playing field.
- temporary capacity.
- Seating closer to the action and with better atmosphere.
- Larger public spaces.
- Better external plaza area, entrances and signage.
- New road access from the north.
- New transport hub.
- Better connections to public transport and the city.
- construction.
- Meets needs for 40 years.

Cons

· Construction will have a significant impact on current usage with this option.

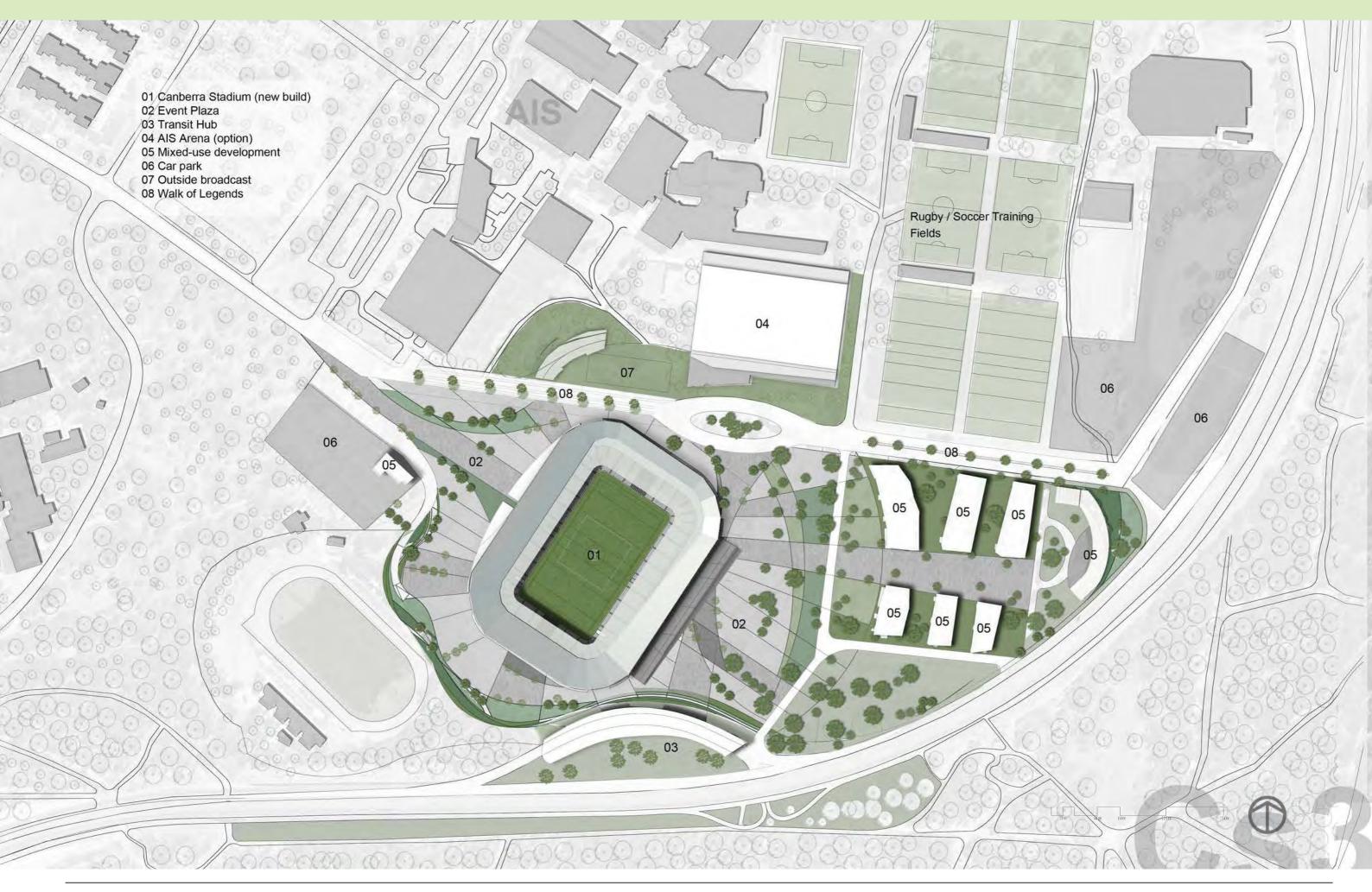


• New stadium with 26,500 permanent capacity to approximately 45,000

• Includes the latest technologies in environmentally friendly design and











The creation and enhancement of an accessible and open elite sporting and entertainment precinct, which will include a new dedicated rectangular stadium located on the existing Eastern car park.

The Plaza

The plaza is a public realm in this option and a specific activity zone to act as a pre-function space for the entertainment venues on the site. This area is landscaped and street scaped to enhance the spectator experience with clear signage and areas of relaxed contemplation to orientate. The fence line relocation for the modified Canberra Stadium proposal is similar to that of options Cs1 and Cs2. This fence line then is proposed to connect across the open street between the old Canberra Stadium and the new dedicated rectangular stadium to produce a secure area. This area between the two stadia on the site is the heart of the precinct with shops and cafés being located along the plinth line of the new stadium to activate the space on event and non-event days.

Battye Street is proposed to be extended to meet Masterman Street with a double width, shared surface boulevard ("Walk of Legends"), giving the stadium precinct a more open feel and providing both the stadium and the AIS (to the north) a new significant frontage.

The Stadium:

The new dedicated rectangular stadium is as in option Cs3, with the exception of the fact of it being developed in the Eastern car park.

However the most important exception to option Cs3 is that the event schedules of the incumbent sports at the existing Canberra Stadium are envisaged not to be affected by the construction of the new stadium.

The transport hub is similar to that described in option Cs1.

Indicative Staging and Programme:

It is proposed that development would be in one stage that would take approximately two years to construct.

Additional options explored but not included in the venue only costs above are set out below. It should be noted that the excluded elements have been removed from the base capital expenses as a direct result of community feedback, following the community consultation period.

The conversion of the existing Canberra Stadium back to the pre-1998 facility Oval format, which will enable the Manuka Oval professional sporting codes to relocate to the converted Canberra Stadium. This option endeavours to establish a sports and entertainment precinct to compete with the likes of Moore Park in Sydney, creating a "sense of place" and of "pride" and of future successes.

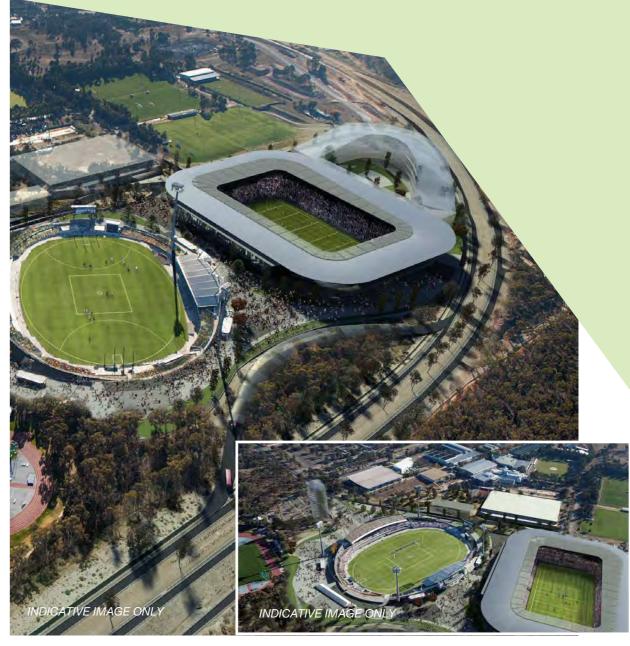
The existing Canberra Stadium will be significantly modified to return it to its Oval format days with a view of relocating the professional event calendar from Manuka Oval to the modified Canberra Stadium. This will

require a number of modifications to the existing facilities, not least the team facilities, which will need to adhere to the minimum standards of the relocated sports, being cricket and AFL and the increased field area from a rectangular form to an oval form. The existing corporate facilities and spectator facilities are not envisaged to undergo significant changes in this scheme, except for the loss of the entire lower seating tier to accommodate the new oval field of play. Both the existing stadium and the new stadium will include new state of the art playing fields. The one at the existing stadium will be established on a suspended slab over a new car park (similar to Etihad Stadium in Melbourne) to replace a percentage of the cars (approximately 750 cars) lost from the Eastern car park due to the new dedicated rectangular stadium being developed over it. The re-use of the existing Canberra Stadium as a home for ACT Cricket and AFL NSW/ACT will potentially enable each sport to increase their events schedule by accommodating day/night and night games through the use of the existing light towers. The design team has been informed that it would be considered highly unpopular to install light towers at Manuka; therefore this provides an ideal solution for both the community and the sports. Manuka Oval is returned to a enclosed community oval in a park setting, with either just the Bradman Stand or three corporate facilities, being the Bradman, Hawke and Menzies Stands still located on the Oval (option Mo3).

The advantages of this site are that it is a more suitable site to host a major sporting event than Manuka Oval based on the amount of area available to enable ease of access and egress to and from the precinct. The fact that sports have become significantly orchestrated by the requirements of television and advertising revenue many events now need to be held in the evening or night in order to attract and service the global audience. Canberra Stadium has sports lights and very few neighbours who would be adversely affected by them (at present). Canberra Stadium currently holds most of its event schedule at night and therefore a precedent has been established. The site is large and bearing in mind a possible land swap agreement with the AIS would become significantly larger. This would enable the site to bid for major events, such as a Commonwealth Games or FIFA World Cup football. This major event capability could offer a focus for the redevelopment of the precinct and for the development of the stadia.

Although not considered as part of the capital cost assessment for the conversion of the existing Canberra Stadium new roofs similar to option Cs2 can be allowed for at any time, budget permitting.

The opportunity to develop the stadium on this site could allow the Government to provide a broader legacy in terms of the development by remediating the site to provide an improved environment as well as opening the site more fully to its neighbours (the AIS and CIT). The precinct establishes and builds on the ideals of the AIS as a centre of sporting excellence by combining the professional sports in a single location with access to the nearby AIS, CIT and UC, and all the expertise that these facilities have to offer.



However the opportunity is also there for the ACT Government to realise the benefit of the Canberra Stadium site by demolishing the existing stadium and levelling the ground to create a very large event plaza where preliminary events could be held, such as a world cup 5 a-side competition, as was held at the most recent FIFA World Cup in Germany. This extensive area could also be released to a developer, as a revenue earning opportunity. It should be noted that these scenarios have not been fully analysed within this report.

The various master plan iterations have indicated development areas East of the stadia sites. This allows the future release of the existing site for a continuation of the western mixed use developments and creates a buffer to the site from the GDE.

Pros

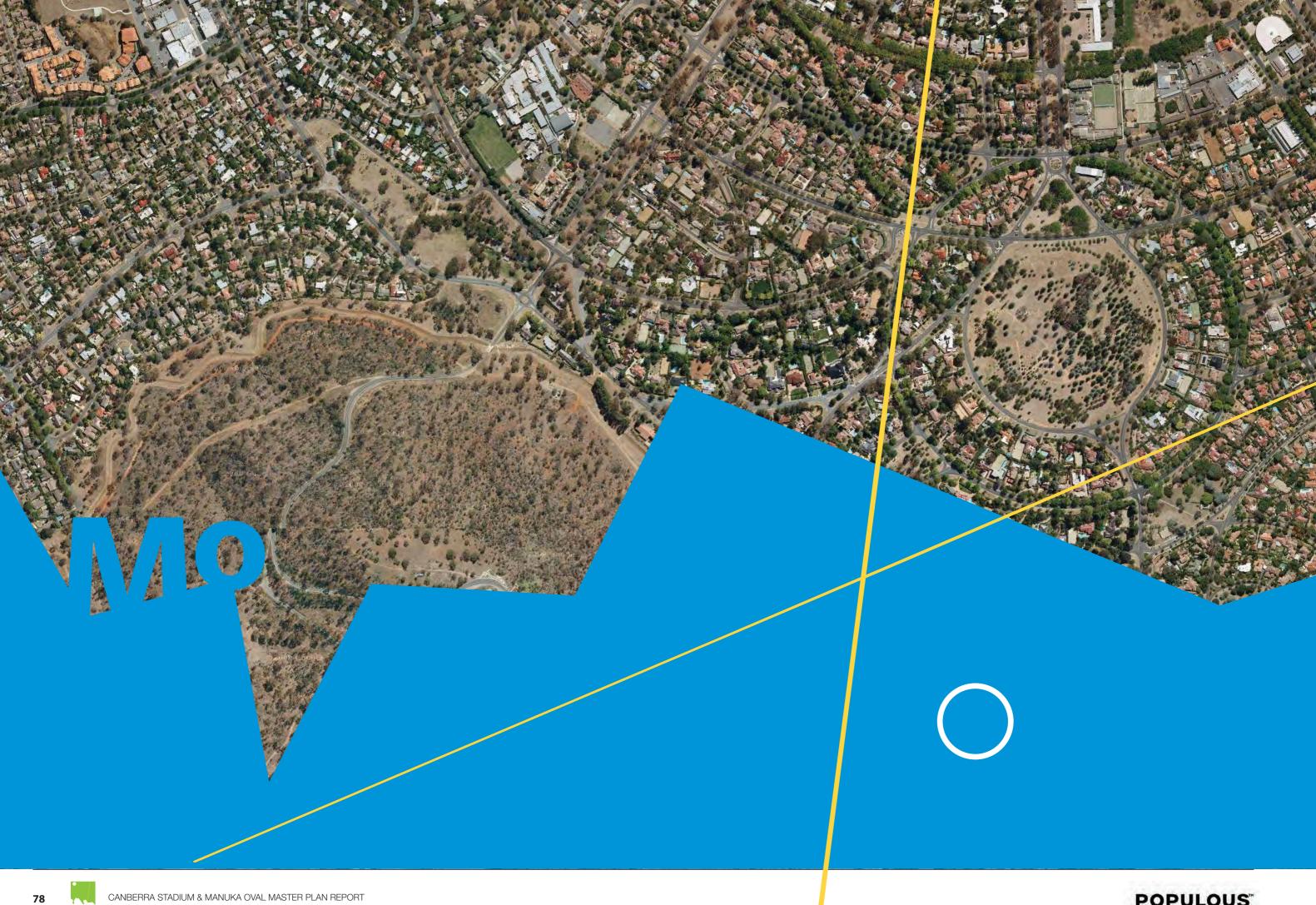
- New state of the art stadium and field
- Flexibility for future expansion to host major events.
- Master plan for growth of precinct over 25 years.
- Enhances and promotes the elite spor history of the precinct, with the co-loca major sports.
- Opportunity for cricket and AFL night
- Potential for mixed use development.
- Greater sense of "place" and entertain
- Better spectator and player facilities.
- New stadium with 26,500 permanent

	to approximately 45,000 temporary capacity.	
of play.	• Better proximity to the action and atmosphere.	
various	 Improved access to the precinct. 	
	 Better public transport connections to the city. 	
er next	 New transport hub, new road access from the 	
	north and a strong address to precinct.	
rting	 Enhanced external plaza area, entrances and 	
ation of	signage.	
	 Includes the latest ESD technologies. 	
games.	 Long term legacy solution. 	
	 Creates a significant sporting destination. 	
nment.	 Meets major sports needs into the future. 	
	Cons	
capacity	 Possible traffic impact on surrounding areas. 	

















MANUKA OVAL

History

The oval was first used as a venue for cricket on the 13th April 1930 from then on all major cricket matches have been played in Canberra at Manuka Oval .The Prime Minister's XI is played at the oval each year, and a number of test matches have also been held at the venue, most notably in 1992 the ground hosted a One Day International between South Africa and Zimbabwe, as part of the 1992 Cricket World Cup. Also on the 10th of December 2002 the Prime Ministers XI played England, seeing the Prime Ministers XI team win by 4 wickets. Manuka also plays host to club cricket matches.

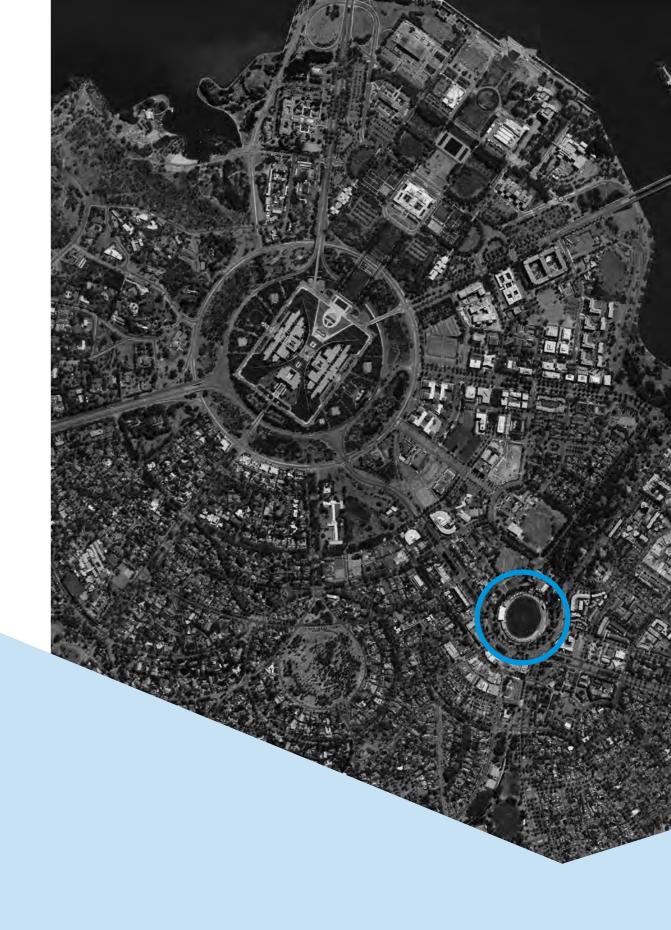
The venue is looking to host a test match in the year 2013 to celebrate Canberra's 100th anniversary against either South Africa or New Zealand.

The venue has been the home venue to the Kangaroos, a Melbourne based club in the Australian Football League. A record crowd was set in 2006 when 14,922 people came to watch the Kangaroos play the Sydney Swans. Manuka also hosts games in the AFL Canberra club competition including all finals.

Manuka has also played host to Rugby League with the Canberra Raiders, playing a home game there in 2001, Rugby Union with the Canberra Kookaburras playing their home games at Manuka Oval when they competed in the Sydney competition from 1995 until 2000. As a significant point of interest the All Blacks played against Canberra at Manuka Oval in August 1938.

Hockey has also been played at Manuka Oval. A number of more eclectic events have also been held at Manuka Oval, such as sheepdog trials.

Manuka Oval is widely regarded as an integral part of Canberra's history and is valued for its unique atmosphere and its low-key 'country feel', It is very strongly associated with cricket and generally accepted as the home of the Prime Minister's XI cricket match







Location and Context

Manuka Oval is located in Griffith adjacent to Barton and Kingston, and forms part of the Manuka centre precinct. The Oval forms a nodal anomaly in the original Burley Griffin master plan at the end of a green connection to the Lake Burley Griffin, however it is bounded on all side by Canberra Avenue and Manuka Circle, which forms a physical and visual separation from the adjacent communities.

It is close to both Civic and also the airport, being 4km and 5km respectively, which makes it ideally located to attract sport tourism, however it is located on a constrained site, with limited access to off street parking and regularly experiences significant congestion pre and post event.

Being in a suburban area the Oval forms a prized green asset for the community, however the community is visually separated from this asset by stands and raised platforms.

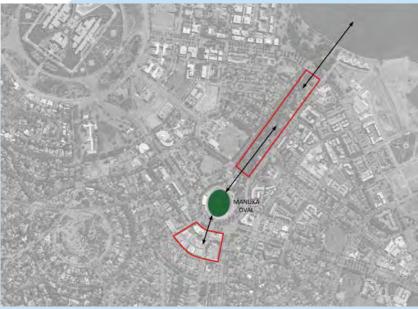
As will be discussed later there is a limited bus service to the area, as most Canberrans are dependent on private transport.



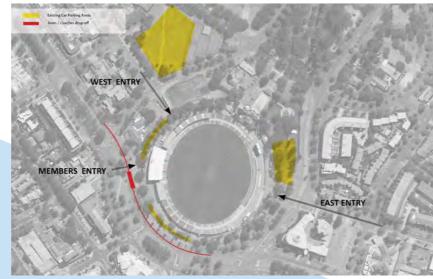
Connectivity - showing bus routes and major road connections.



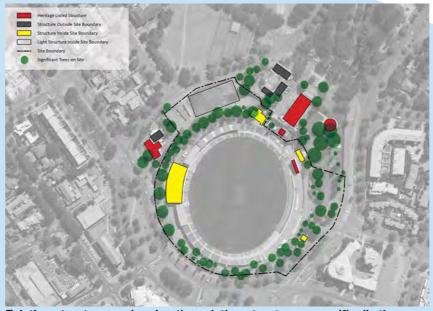
Location - highlighting the relatively small distances to Civic and the airport.



Approach - highlighting the Manuka to foreshore approach corridor.



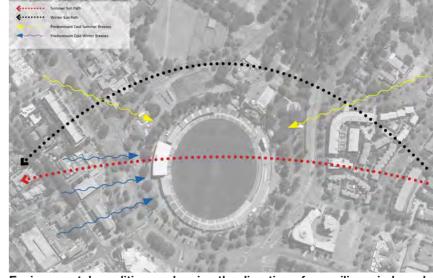
Access - showing the limited parking and bus drop off areas.



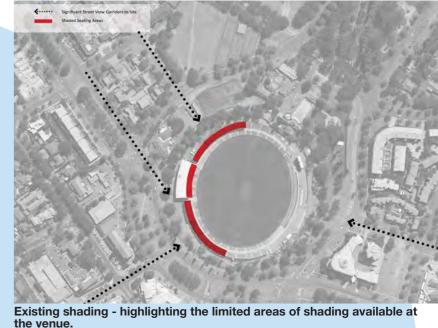
Existing structures - showing the existing structures, specifically those which are actually on the register, which are shown in red.



green spaces.



sun paths.



Green space - highlighting the extent and formalisation of the Canberra

Environmental conditions - showing the direction of prevailing winds and



Condition Survey (SWOT)

Below is an image outlining the Strengths, Weaknesses, Opportunities and Threats for the site as established during this and previous reports:

Below is a list of issues that were established following a visual and technical assessment of the existing facilities.

Strengths

- Close to CBD and nearby commercial area.
- Field size appropriate for cricket and AFL.
- Curent events, such as the PM's XI and the heritage value of the Oval contributes to the status of the venue and its value to the community.

Opportunities

- Members stand position is optimal for AFL.
- Potential to develop connections with Telopea and Bowen Park that may enhance the operation and identity of the stadium.
- Established history and contectual cues from the location elude to the potential for extensive "boutique" style development.
- Overall, there is an opportunity to turn around the disadvantage of low population and focus on attracting travellers with desirable facilities.

Weaknesses

- Members stand position sub-optimal for cricket viewing.
- Lack of shade and cover.
- No field lights, limits the event opportunities.
- Lack of site definition, such as no celebrated front door, public entrances are obscure and team drop off is inconvenient.
- Media facilities are poor for cricket.
- Limited capacity.

Threats

- Lack of seating under cover and facilities may put ground out of favour for future events.
- Inadequate media facilities may put ground out of favour for future events.
- Age of the Hawke and Menzies Stands, showing signs of frailty.
- Limited car parking on site.
- Tree protection orders limit to extent of expansion.
- Lack of events.







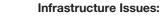












- Hawke and Menzies Stands are at the end of their useful lives. They will need to be decommissioned in the next few years according to a recent structural report.
- Maintenance sheds at the northern end are dilapidated.
- Concrete bleachers showing signs of age, with significant cracks noticeable.
- Maintenance compounds not secure.

Spectator Facilities:

- Entry sequence compromised
- o Entrances are poorly presented. o No distinctive front door.
- Permanent food and beverage outlets are dated and insufficient.
- Kitchen serving the existing Bradman Room is inadequate.
- External concourse is not sealed and is hazardous due to the uneven surface.
- Signage insufficient and confusing.
- Lack of specific segregation of seat types.
- Lack of shade and cover from the elements. Refer to the benchmark Table 2 below for comparative roof coverage.
- No visual connection to the bowl from the external concourse.
- Catering, refrigeration and storage are insecure and inadequate.
- Transport compromised by the number of private cars.

Team Facilities:

- Access for team buses problematic, as there is no dedicated route. Buses currently drop teams off directly on Canberra Avenue.
- Teams then walk to Bradman Pavilion through the massed crowds of supporters.

Media Facilities:

- Insufficient for AFL and cricket.
- No media facilities behind the bowlers arm for cricket.
- OB compound not defined or secure and poor access.
- No designated media conference room.

Table 2

Venue	Roof Coverage
Manuka Oval, Canberra	29%
Skilled Park, Gold Coast	79%
MCG North Stand, Melbourne	81%
The Gabba, Brisbane	80%
ANZ Stadium, Sydney	82%
Bellerive Oval, Hobart	60% (visual estimate)
Aurora Stadium, Launceston	75% (visual estimate)





Heritage

Additional information about the heritage provisions is at Appendix 2.2.

Planning

Additional information about the planning provisions affecting the site is at Appendix 2.2.

Several sites within the Manuka Oval precinct are either listed on or nominated for the ACT Heritage Register. The Manuka Swimming Pool and the Canberra Services Club are listed and the Manuka Oval, the Caretakers Cottage and part of the arts centre are nominated. Therefore heritage requirements will affect the future development in the precinct.

Manuka Oval is primarily zoned Restricted Access Recreation with a small area zoned Urban Open Space. The uses permissible within these zones are relatively limited and essentially related to recreation and open space activities. The Territory Plan would have to be varied if a wider range of activities was to be located on the site. Expansion of the capacity of Manuka Oval would trigger a requirement to prepare an Environmental Impact Statement.



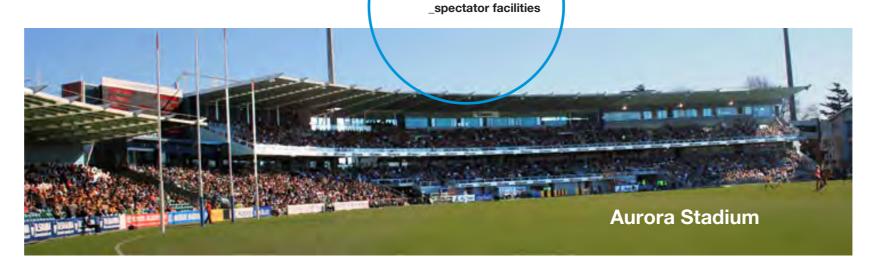
Benchmarks

Careful consideration has been given to all aspects of stadium operations to ensure that current trends are accessed and appropriate recommendations made.

The design of the spectator facilities for the stadium will create a facility comparable to Bellerive Oval in Hobart, Aurora Stadium in Launceston and Harrup Park Country Club in Mackay.

The ESD components envisaged for the stadium have been benchmarked against Stade Suisse in Bern, Switzerland and ANZ Stadium in Sydney.

Aesthetic comparisons have been benchmarked against Goodwood Racecourse, UK ,Harrup Park Country Club, Mackay and Lords Cricket Ground in London, UK.







Launceston Aus | 2006 | cap 20000 Owner: Launceston City Council Surface: Grass AFL and occasionally rugby union, Events: concerts and show events



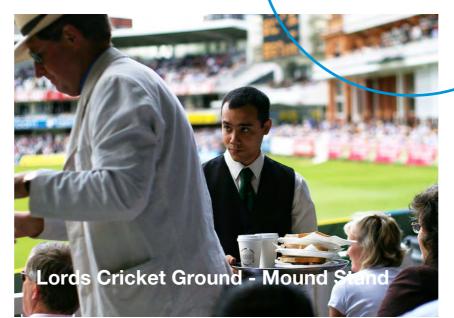
_ESD





Bern CHE | 2005 | cap 32000 Owner: Stade de Suisse Wankdorf Nationalstadion AG Surface: FIFA 2-Star Synthetic: Polytan Ligaturf 240 CHF 350 million Cost: Architect: Marazzi Generalunternehmung AG Events: EURO 2008

The Stade de Suisse was built on the grounds of the former Wankdorf Stadium, which had been demolished in 2001. The new stadium has a capacity of 32,000 spectators, all covered seats. Integrated into the roof are solar panels with a yearly production of 700,000 kWh. It is the home ground of the Swiss football team BSC Young Boys, and is currently the second biggest all-seater football stadium in Switzerland.

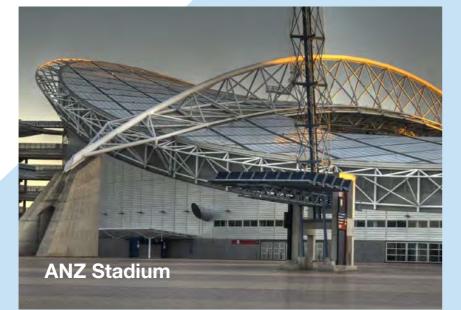


_aesthetic

Lords Cricket Ground, Mound Stand UK 1987 Client: Marylebone Cricket Club Surface: Grass Cost: GBP 4.5 million Architect: Hopkins Architects, UK Events: Cricket:



Goodwood UK (2001) Client: Goodwood Estate Co Ltd Surface: Grass Cost: GBP 4 million Architect: Hopkins Architects, UK Events: Horse Racing:



ANZ Stadium |1998 | cap 80,000 Owner: Stadium Australia Trust Surface: Grass Cost: \$680 million Architect: Populous Events: 2000 olympics | afl | rugby union | rugby league | cricket | soccer





Owner: Harrup Park Country Club Surface: Grass Cost: \$11.5 million Architect: Populous Events: Local cricket





Goodwood Raceco urse

Fabric covered function areas overloooking th eparade ring.

Mackay Aus |future | cap 10000





Field of Play

Manuka Oval currently hosts a number of sports, however the primary hirers of the stadium are ACT Cricket and AFL NSW/ACT, both utilising an oval fields of play. Therefore the bowl has been configured around an oval format. The following diagrams establish the existing footprints for the fields of play and the ones that the master plans and concepts have been based on.













Indicative Floor Plans for Options Mo1 and Mo2

The indicative plans depicting the Hawke and Menzies Stands and the new media facility at the northern end of the oval should be read with both option Mo1 and Mo2.

All other indicative plans pertain only to option Mo2

Level 01

This level is the main access and egress level for the entire oval and is made up primarily by a 360 degree external, uncovered concourse. It is proposed to landscape this dusty track and present a more endearing image of the venue.

This plan shows the full redevelopment as proposed in option Mo2, but the redevleopment of the external concourse and the Hawke and menzies stands also form the basis of option Mo1 (being stage 1 of option Mo2).

The Hawke and Menzies stands are developed into new function pavilions, similar to the Bradman stand adjacent. At this level concessions and toilets are located behind the new lower bowl in the Hawke and Menzies stands to provide a sheltered area to stand out of the blazing sun or freezing wind. Minimal modifications are proposed to the Bradman stand.

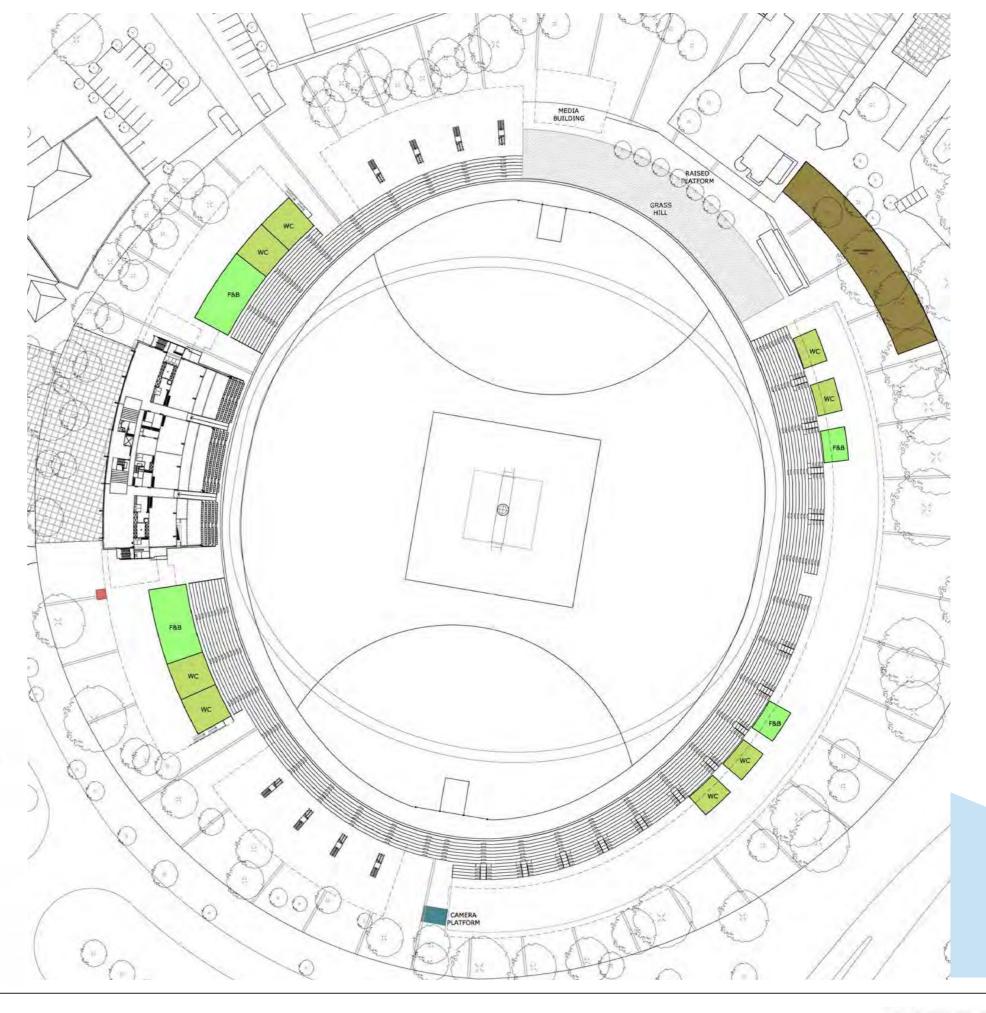
New stands are proposed to the north and south of the Hawke and Menzies stands and to the east of the oval to accommodate the increased capacity, comprising a split tier, allowing views through from the street into the oval, increasing the community connection with the venue.

A new media facility is proposed to be located at the northern end, behind the bowler's arm. This level provides access to this facility.

Permanent concessions and toilets are located on this level.

The grass berm is relocated to the north of the ground.







Level 02

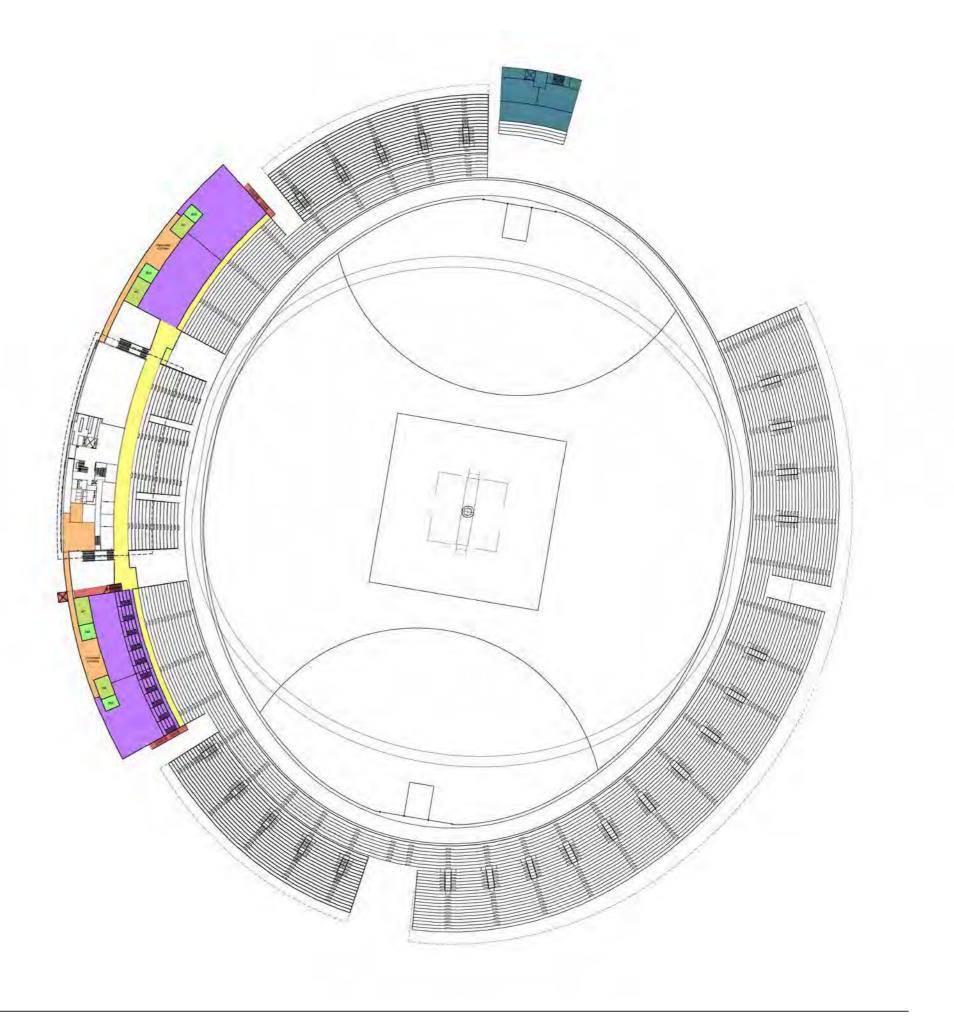
This plan shows the full redevelopment as proposed in option Mo2, but the redevleopment of the external concourse and the Hawke and Menzies Stands also form the basis of option Mo1 (being stage 1 of option Mo2).

This level provides function rooms in the Hawke and Menzies stands, similar to the Bradman Room, served by finishing kitchens and toilets. Each function room has direct, uninterrupted views into the bowl and direct access to dedicated seating in the bowl. The new function room in the Hawke Stand is double height to provide a point of difference and variety. The function room in the Menzies Stand is single height and has corporate suites above They are accessed either direct from the external concourse or via the Bradman Pavilion.

This level provides for the main TV broadcast suite in the new media facility.

This level also provides for the majority of covered seating in the raised section of the split tier to the new stands North and South of the Hawke and Menzies Stands and to the East of the Oval.







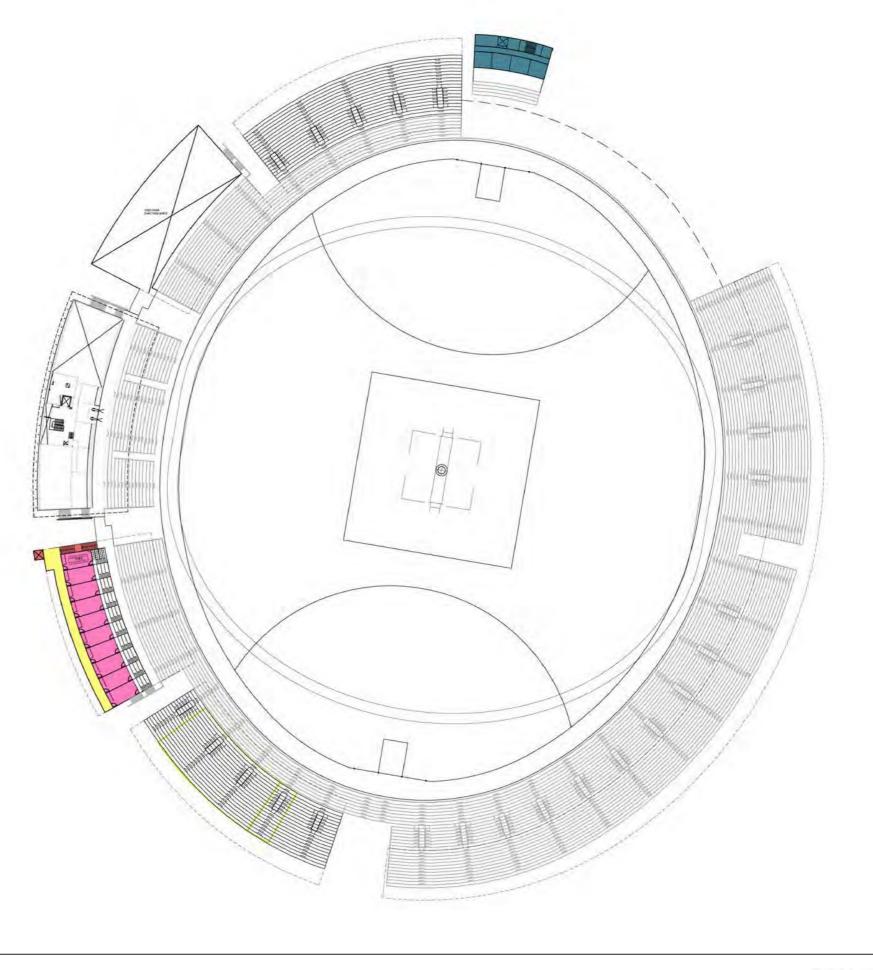
Level 03

This plan shows the full redevelopment as proposed in option Mo2, but the redevleopment of the external concourse and the Hawke and Menzies Stands also form the basis of option Mo1 (being stage 1 of option Mo2).

This level provides corporate suites in the Menzies Stand. These afford direct views into the bowl and dedicated seating accessed directly from the suites. They are accessed either direct from the external concourse or via the Bradman Pavilion.

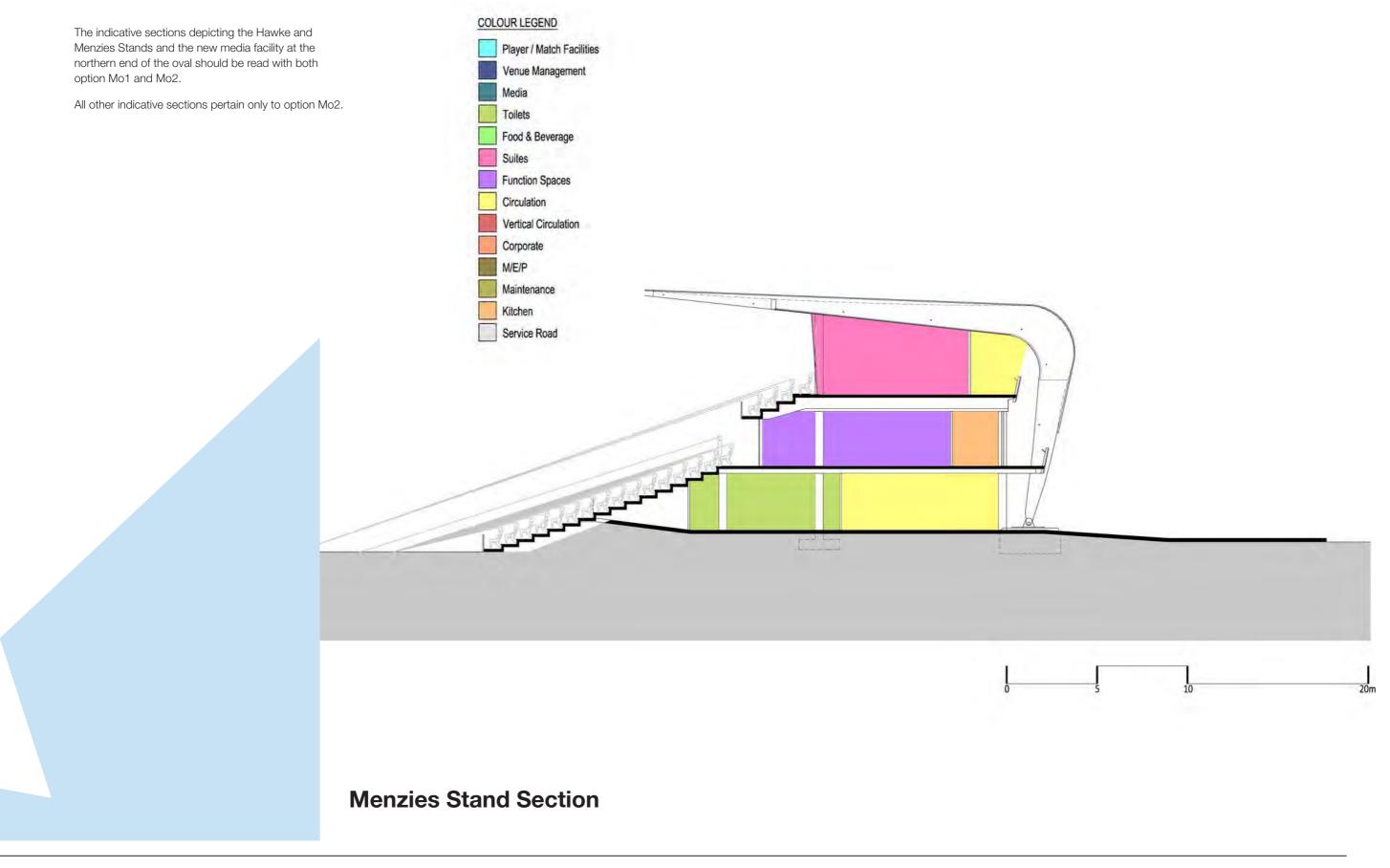
This level provides for the main TV written press and other media areas in the new media facility.





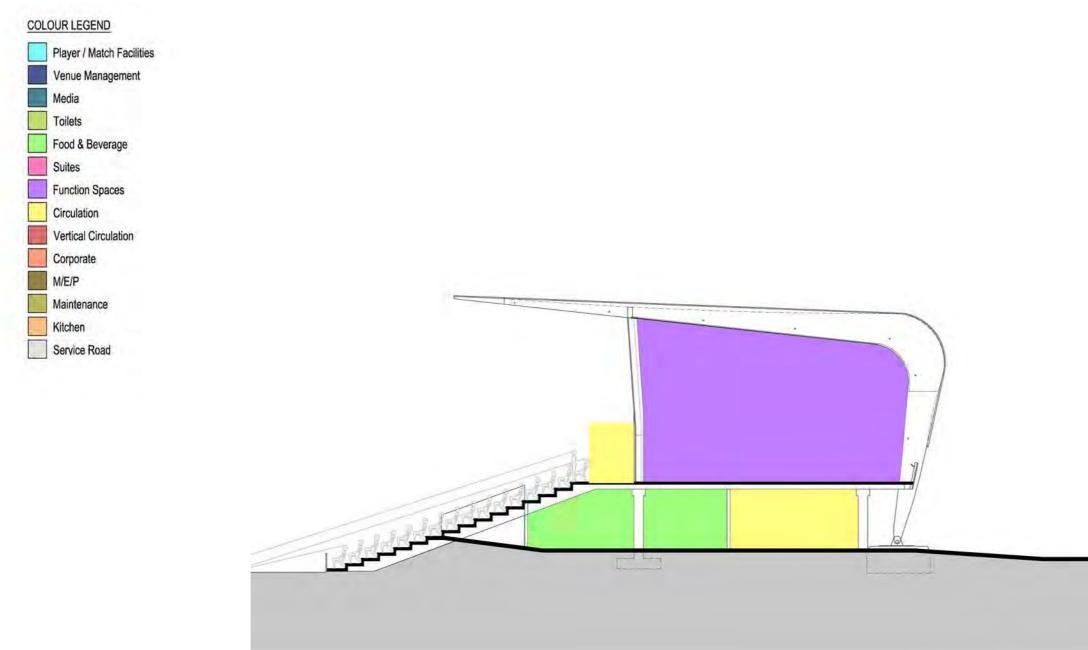


Indicative Sections for Option Mo1 and Mo2

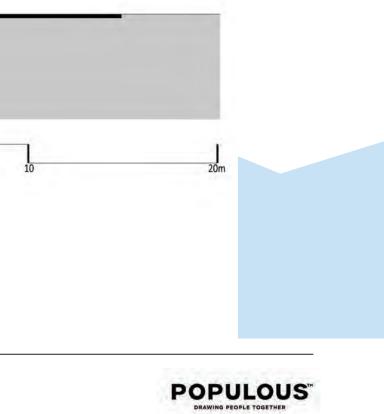


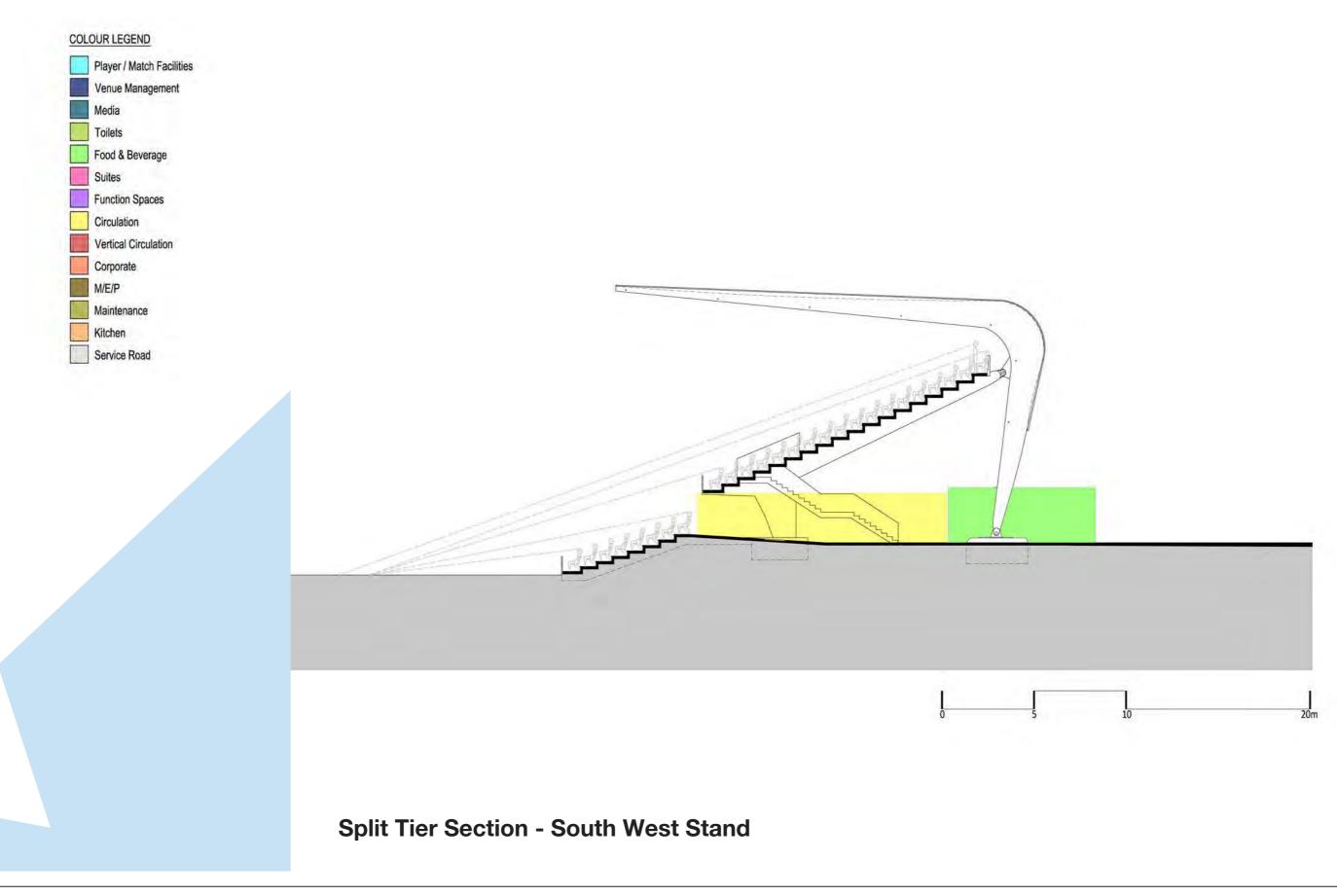






Hawke Stand Section



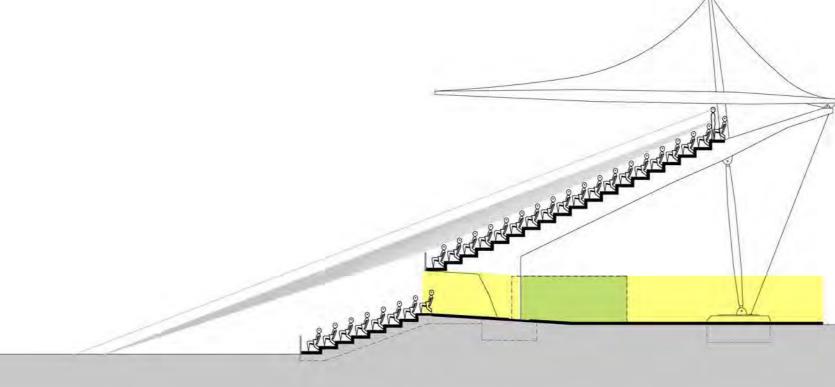




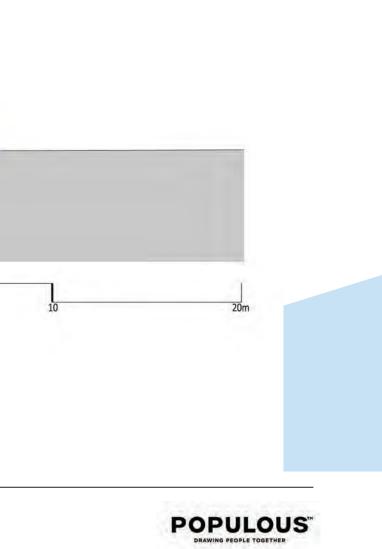


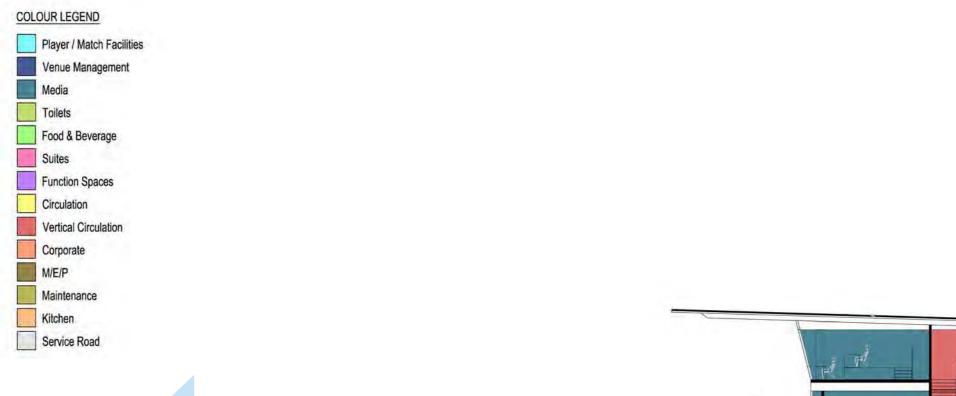


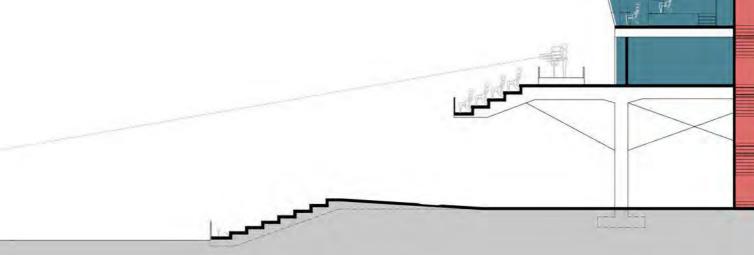




Split Tier Section - East Stand

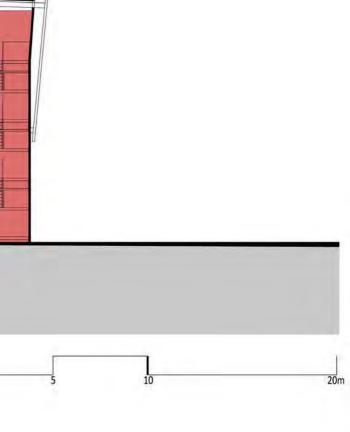






Media Facility Section



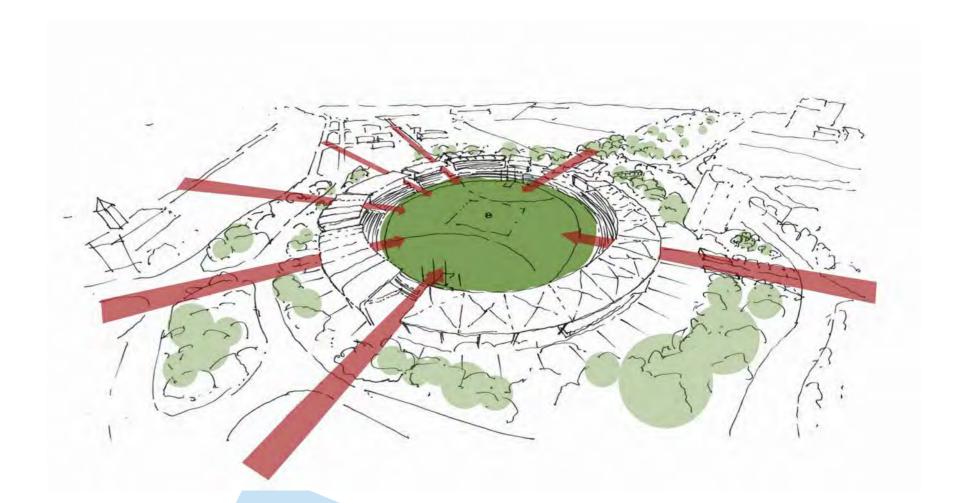


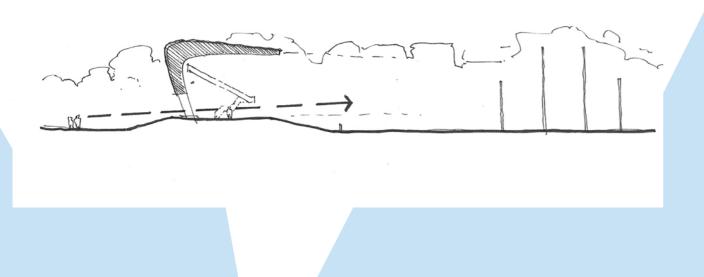


View Corridor Principle

Manuka Oval professes to be a community asset, and yet it hides the oval behind walls of seating and raised platforms, only allowing the community glimpses of the jewel within. It is with this in mind that it is proposed to unveil the oval and present it again to the community.

We either achieve this by demolishing all the stands, except the Bradman Pavilion, and the design the new stands is done in such a way as to provide views into the bowl, through and around the stands. This has been achieved by incorporating a split tier, which provides unrivalled views into and out of the bowl. The design has also embrased the traditional forms of a cricket oval, being a selection of stands around an oval. This division of the buildings into separate stands allows views around them into the bowl.



















Master Plan Options Mo1, Mo2 and Mo3

The master plan options developed in conjunction with the business case are detailed in the following sections. All options have been considered with a view to maximise patron enjoyment at any particular event by maximising comfort and embellishing the established principles of the Oval in the park, while creating a venue that can compete with similar suburban stadia for events. Each option is distinctly unique and is considered to be an element of a journey for the Oval, giving flexibility to the ACT Government as to which direction it should take.

Each option has been clearly defined within the traditions and hiistory of the Oval and aim to celebrate the unique character of this special community place. This is achieved through, either enhancing the existing infrastructure (including stands, pavilions, facilities and seating) with a view to greater consideration for the venue's heritage and prominence as the home of the PM XIs cricket match, or to promote the community aspect by returning the oval to it's parkland beginnings and fully opening its use as a recreational area for the Canberra community sports.

In all options the local and wider community has been considered and local planning issues addressed (refer to Appendix 2.0 for detail).

All options are envisaged to celebrate the history and community importance of this venue and endeavour to establish a better place to be.

Option Mo1

Rebuild of the Hawke and Menzies Stands on the same footprints and upgrade of external concourse, entrances and fence

This option embodies the design strategy of stage 1 of option Mo2, which includes for the rebuilding of the Hawke and Menzies Stands on the same footprints and upgrade of external concourse, entrances and fence.

This option provides for a permanent capacity of 13,077, with the opportunity of increasing this to approximately14,000 (if the licensing allows).

The Plaza

This option proposes that the external concourse and plaza is sealed and landscaped to provide a proposer identity and clarity for patrons and the public at large. The external plazas and concourse will provide subtle shelter from the elements and places to reflect and relax. Proper entrances and ticketing kiosks are proposed which clearly present a number of front doors for the venue, which are currently lacking. The perimeter fence is proposed to be upgraded to establish a warmer parkland aesthetic similar to the brick and wrought iron found around public Parks in England. Signage will be developed to clearly direct patrons to and through the new entrances located around the enclosed oval. A new team coach and VIP drop off is proposed to be located off Canberra Avenue adjacent to the Bradman Stand to allow for safe and secure access to the venue.

The Venue

The proposal presents an option to rebuild the Hawke and Menzies stands, following the Bradman Pavilion profile to give greater revenue potential for the venue and at the same time properly flanking the existing Bradman Stand. These new stands will accommodate further function rooms, corporate suites and open boxes and the requisite finishing kitchens. A new media facility has been located behind the bowlers arm, as currently the media facilities are inadequate for cricket, which requires facilities behind the bowlers arm. The capacity in this option has increased by approximately 500 patrons as compared to the existing. Minor refurbishment work, including the use of the existing boardroom as a preparation kitchen to supplement the existing Bradman Room kitchen is proposed for the Bradman Stand.

The playing surface is proposed to be fully upgraded in option Mo2, but the costs have been included as a below the line item in this option should it be required as part of the stage 1 (option Mo1) works.

Indicative Staging and Programme

This development is proposed to a single stage and will take approximately one year construction time to complete.

Precinct Opportunities

A transport hub is proposed for the North end of the site, along New South Wales Crescent to assist with and encourage a greater use of public transport on event days. It is however part of the proposal to continue using the West and East car parks for staff and VIP parking.

The master planning and development principles include a number of development zones to the North, East and West of the venue. The opportunities established around the site include mixed use developments including a possible high performance indoor cricket and AFL facility with dedicated offices for these sports. The existing arts facilities could be relocated (if viable) into a new mixed use development at the North end of the site. These are indicative and propose areas outside the budget indicated above. These development opportunities would require planning consideration and should be reviewed on application.

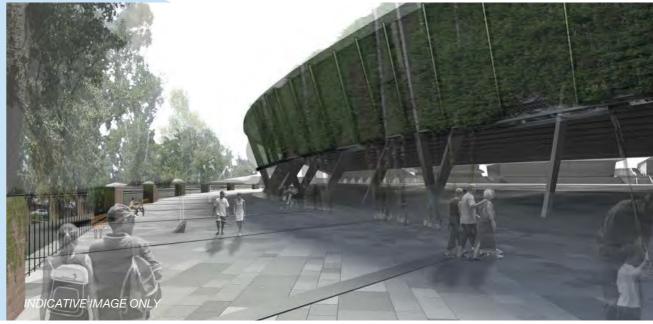
Pros

- Design is sensitive to the history and assets of Manuka Oval.
- Improved spectator facilities in the Hawke and Menzies Stands and external concourse.
- Improved player and media facilities in line with sporting requirements.
 Latest technologies in environmentally friendly construction and
- materials.
- Increased covered seating.

Cons

- Traffic and parking issues reduced but remain.
- Sports lighting is not considered possible as this would potentially be a large risk for community approval, as well as not being commercially or practically viable.









CAMBERRA NIENUE

- 01 New Hawke & Menzies Stands
- 02 Bradman Pavilion
- 03 Upgraded and landscaped plaza and concourse
- 04 Grass berm

2

- 05 End-on media facility
- 06 Cricket and AFL high performance Centre
- 07 Mixed-use development
- 08 Coach/Bus drop-off 09 Optimised Entry point to Oval
- 10 Upgrade field of play
- 11 Existing stands retained 12 Team coach and VIP drop off
- 13 Car park
- 14 New North entrance
- 15 Outside broadcast compound
- 16 MCG scoreboard retained
- 17 Mixed-use development with Arts Centre

FITTROVST

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MANUKA CIRCLE

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Option Mo2

Rebuild of the facilities on the same footprint of the existing Oval and precinct

The Plaza

The plaza, landscape, security and entrance principles remain the same as Mo1, except for an additional entrance at the North end of the site, connecting with the main influx of people from around Telopea Park.

The Venue

The Hawke and Menzies Stands are redeveloped as described in option Mo1. In this option a capacity of 19,000 permanent patrons is proposed with the opportunity to include for 1000 temporary seats to take the maximum capacity to 20,000 patrons. It is proposed that all the viewing areas are redeveloped with the inclusion of split tier stands to the North-West, South-West and East and the grass berm relocated to the North of the field of play, further enhancing the green corridor through Telopea Park to the foreshore of Burley Griffin Lake. The split tiered stands are specifically designed to visually connect the neighbouring areas to the Oval and also to maximise areas of shade and cover with a view of the field of play. Each of these stands are separated to provide the traditional cricket venue aesthetic of stands and pavilions around and oval and also to provide further view corridors into the venue. Each stand is proposed to be covered with lightweight fabric roofs of varying design to further enhance the distinctive characters of each of the pavilions and stands. The grass berm is a historical and traditional element of cricket ovals around the world, and therefore it is proposed to be retained as an aesthetic. The MCG scoreboard is relocated just North of its current location and a large multi-media board is proposed next to the scoreboard. At present most of the food and beverage outlets are temporary and with the increase of the capacity the number of permanent toilets needs to be increased. Minor refurbishment work is proposed for the Bradman Stand.

In this option the opportunity to develop a possible high performance indoor cricket and AFL facility with dedicated offices for these sports has been established on the site of the old outdoor cricket nets. This facility will include for a multi-use gymnasium and outdoor nets (on the same orientation as the current ones).

Indicative Staging and Programme:

This development is proposed to a single stage and will take approximately 18 months construction time to complete. This construction and timeframe will have an impact on the event calendar as the event calendar is all year round.

Precinct Opportunities

A transport hub is proposed for the North end of the site, along New South Wales Crescent to assist with and encourage a greater use of public transport on event days. It is however part of the proposal to continue using the West and East car parks for staff and VIP parking.

The master planning and development principles include a number of development zones to the North, East and West of the venue. The opportunities established around the site include mixed use developments including a possible high performance indoor cricket and AFL facility with dedicated offices for these sports.

The existing arts facilities could be relocated (if viable) into a new mixed use development at the North end of the site. These are indicative and propose areas outside the budget indicated above. These development opportunities would require planning consideration and should be reviewed on application.

Pros

- Manuka oval upgraded.
- Improved entrances and signage.
- Upgraded external concourse.
- Improved player facilities.
- Seating capacity increased (13,550 to 19,000-20,000).
- New Hawke and Menzies Stands.
- Seating closer to the action and increased atmosphere.
- lincreased roof cover and shade protection.
- Improved and expanded corporate lounges.
- New transport hub.
- Better connections to public transport.
- Use of latest technologies in environmentally friendly construction and materials.
- Opportunities for mixed use development in precinct.
- Potential increase of business at Manuka.

Cons

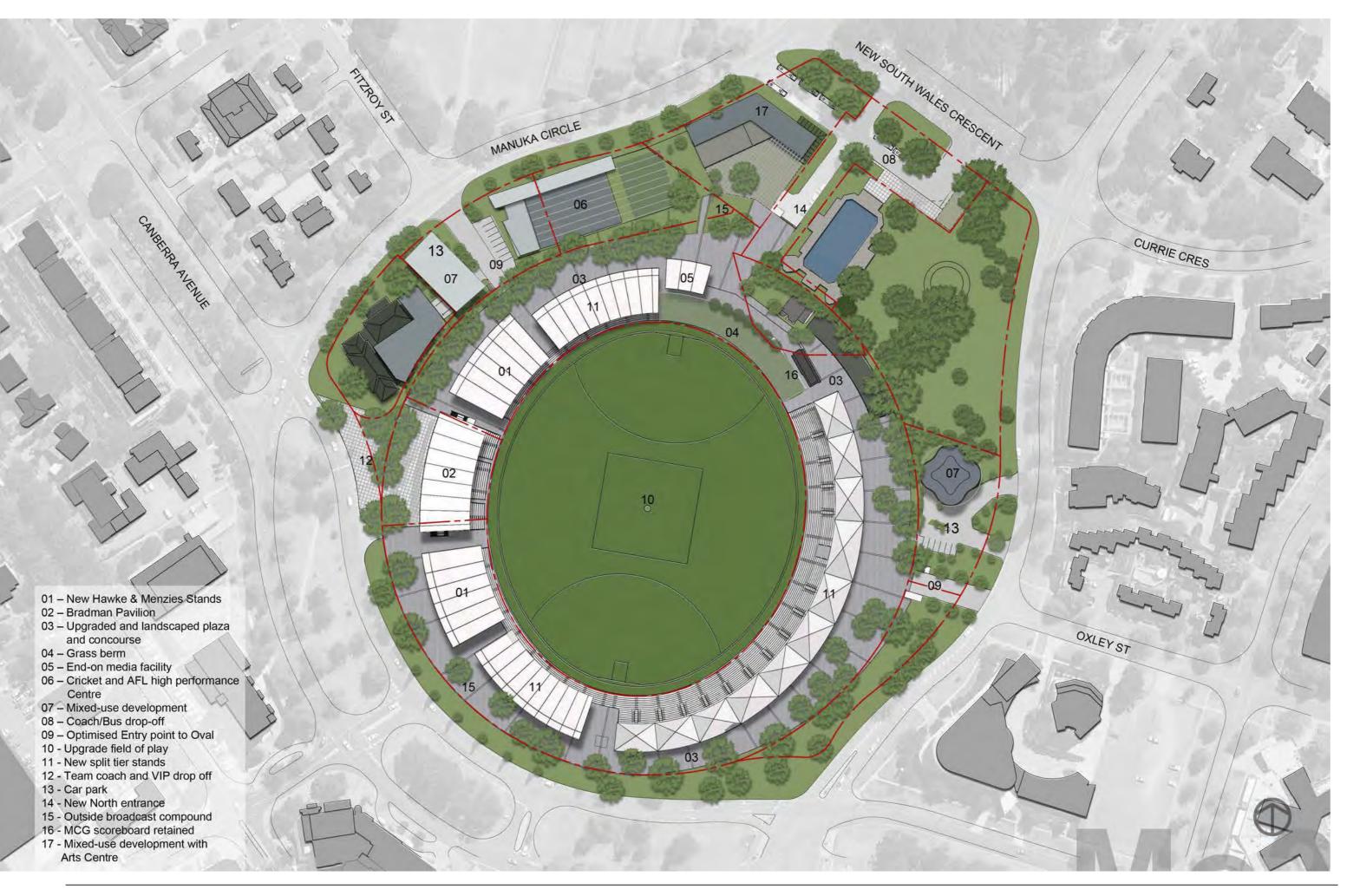
- Increased traffic and parking issues.
- impacts of additional noise on surrounding areas.
- Sports lighting is not considered possible as this would potentially be a large risk for community approval, as well as not being commercially or practically viable.















Option Mo3

Revise Manuka Oval to revert to an enclosed oval, accessible for club cricket, club AFL and general community use. Relocate AFL season and pre-season and PMXIs to upgraded Canberra Stadium (only feasible if Option Cs4 Canberra Stadium is adopted)

The Plaza

The master plaza, landscape, security and entrance principles remain the same as Mo1.

The Venue

In this option the oval is returned to its historic roots and most of the existing and aging structures are proposed to be demolished, except the Bradman Stand (and possibly the redeveloped Hawke and Menzies Stands, if redeveloped in the interim before this option is adopted). The demolished stands and seating bowl are proposed to be replaced by grass berms all around the oval to provide a parkland setting. The existing toilet facilities and surface of the field of play will remain.

There is a opportunity with this option to establish a tangible community link with the oval, while giving the sports a properly appointed new home at Canberra Stadium, which, following modifications (outline in option Cs4) should provide for a much more expansive event calendar due to the already existing lighting towers enabling night and day/night games.

Indicative Staging and Programme

This development is proposed to a single stage and will take approximately 6 months construction time to complete.

Precinct Opportunities

The master planning and development principles remain the same as Mo1.

Pros

- Returns Manuka Oval to the community.
- Relocates professional AFL and cricket to Canberra Stadium site to create a sports precinct.
- Enhances the landscape setting of the precinct.
- Creates a 'village oval' in the park.
- Traffic & parking issues reduced.

Cons

- Possible loss of revenue for local trades due to the relocation of major AFL games and the PM's XI match.
- Community concerned that the facility would not be maintained in the future to its current standard

Note

This option and costs should be considered with the costs attributed to option Cs4 of Canberra Stadium, depending on the combination adopted by the Territory.

Across all options environmentally sustainable design initiatives (such as,







- 01 Bradman Pavilion retained 02 Upgraded and landscaped plaza and concourse

CAMBERRA NIEMUE

FITTRONST

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MANUKA CIRCLE

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- 03 Grass berm
- 04 Mixed-use development
- 05 Optimised Entry point to Oval 06 Team coach and VIP drop off

- 07 Car park 08 New North entrance 09 Field of play retained 10 MCG scoreboard retained
- 11 Marquee platform retained12 Mixed-use development with
- Arts Centre







Master Plan Expansion – Telopea Park

Telopea Park is located to the north of the Oval and connects the Oval to the foreshore of Burley Griffin Lake via a green strip. The park is part of the original Griffin Plan.

Telopea Park could be a significant and attractive approach to Manuka Oval on match days, especially for spectators parking in nearby areas including Kingston Foreshore. There is considerable potential to improve the connectivity and interaction between Manuka Oval, Telopea Park and the Lake. All options therefore envisage that improved connectivity will be developed and each option for the future development of Manuka Oval includes the proposal to establish a north gate into the Oval. This is intended to enable improved connections.

The park is a sensitive community asset and will therefore require further investigation if a master plan is to be developed.













Sports Lighting Assessment

As global sport has evolved it has done so hand in glove with global television networks and the acheivable revenue. It is now possible to view a live game which is taking place 1000s of kilometres away The global appetite for sport is growing and with it the possibilities for revenue streams and brand recognition for both the advertisers and the sports. The sports have understood and taken advantage of this fundamental shift of audience attitude and location.

Australia, being the biggest island in the world contains a number of timezones, which means that the Western seaboard is at certain times through the year 2 hours behind the Eastern seaboard. This further increases the desire by the sports and the television broadcasters to embrace evening/night games even for national sporting competitions.

Sport attracts significant numbers of virtual (television) and physical (attendees to the event) viewers and therefore broadcasters can capture a large audience for its advertisers, specifically at peak times such as 6pm-9pm, which lends further weight to the decision to televise evening events.

The nature of the global audience has changed, more noticeably in cricket than other sports, with the appetite for the quick fix 20/20 competition becoming ever more voracious. This is a global phenomena with a majority of spectators overseas. If a venue is to be able to compete in this lucrative market then sports lighting is becoming a necessity.

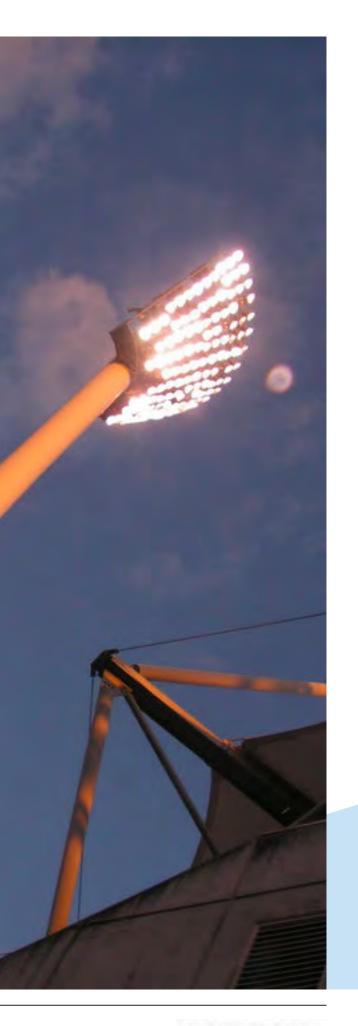
It should also be noted that with modern state of the art broadcasting techniques (super slow motion etc) and an ever more discerning viewing public the lighting level required at cricket and AFL venues has needed to increase, and that lighting movement (due to environmental conditions, such as wind) on the field of play is not acceptable.

Sports lighting takes a number of forms, specifically tower lighting or roof edge lighting. Lighting towers vary in height, but average between 50m and 80m high. The MCG lighting towers for example are approximately 80m high, and even Carrara Stadium on the Gold Coast has lighting towers which dominate the skyline at approximately 50m high. Light spill from lighting towers is significant and causes issues for neighbouring areas, especially residential. Roof edge lighting is mounted on the front edge of the venu roof to provide a less obtrusive lighting solution, which minimises lightspill. These lights can be mounted as low as 28m above the ground (Skilled Park, Gold Coast), but this is only possible for rectangular sports as the playing area is smaller than an oval and therefore the angle for the lights is more controlled. An example where roof edge lighting is used at an oval venue is Etihad Stadium in Melbourne, but in this situation the lights are fixed at approximately 35m above the field, which equates to a 10 storey building.

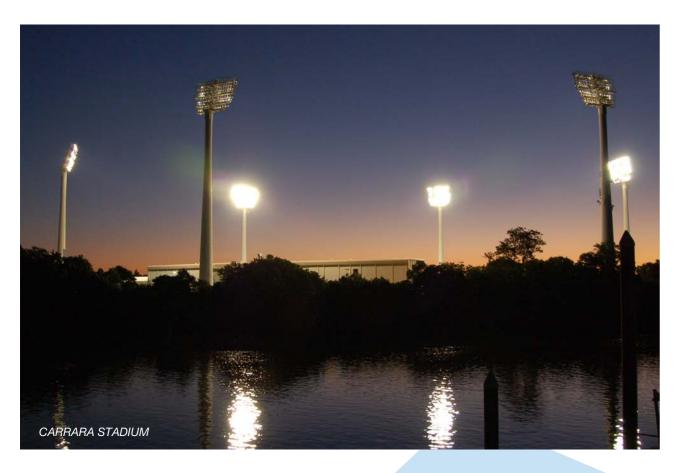
However Manuka Oval is a small boutique venue in a prestigious and well established area of Canberra. It does not have sports lights at present and therefore the event calender for cricket and AFL is limited to day games. As explained above the sports lighting solutions available at the moment require height, either in the building mass or in the form of lighting towers. The proposed building mass in all options has been limited to around 4-5 storeys in order to retain the scale of the oval and be cogniscent of planning or heritage issues that pertain to it. Therefore it is considered ill advised to propose an Etihad Stadium solution at Manuka Oval. The other option is the lighting tower solution, which is problematic due to scale and, more pertinent, the light spill, which could offend the local residents.

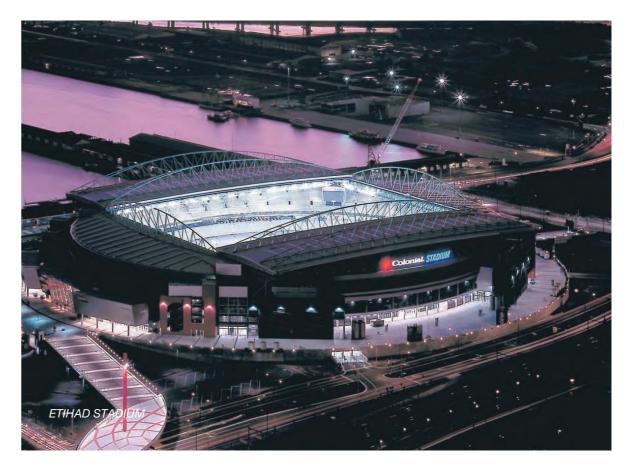
As part of this assessment an analysis of whether temporary lighting rigs are available has been carried out. We have been reliably informed that currently temporary lighting towers of the scale required for a cricket and AFL venue are not commercially viable or practical. A nominal cost of approximately AU\$5 million has been allowed for by WT Partnership for the installation of lighting towers at Manuka Oval.

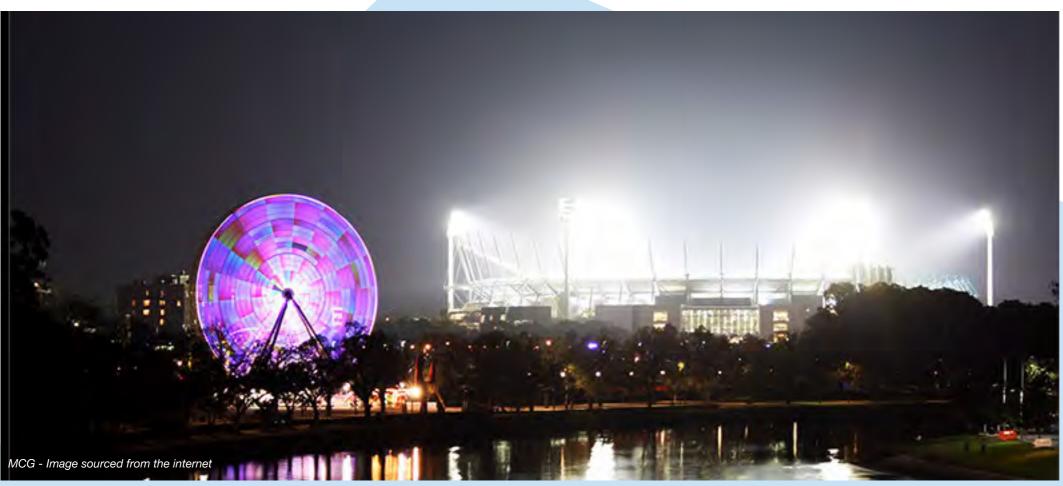
Therefore, as a summary of this assessment, sports lighting at Manuka Oval could be seen as a potentially large risk for community approval, as well as not being commercially or practically viable. An option that could potentially enable Canberra to increase its market share of national and international cricket matches and national AFL games would be to relocate to Canberra Stadium (as proposed in option Mo3), where sports lighting is already established.











CANBERRA STADIUM & MANUKA OVAL MASTER PLAN REPORT



TRAFFIC AND TRANSPORT



Introduction

The first and final impression of a stadium is usually shaped on the transport journey to or from an event. Whilst being external to the stadium building itself, the planning and provision of transport infrastructure and services is vital to the efficient operation and the overall event experience.

Transport to modern stadia has evolved from being solely focussed on a car park located next to a facility or exploiting all on-street parking in adjacent residential neighbourhoods to being part of the entire event experience, a shared journey with fellow supporters whose emotions are either on a high with expectation and success or subdued in the event of a loss.

As in the past, when private vehicle transport was only available to the upper class and thousands of people arrived at stadia on trams, buses or on foot, public transport is again undergoing a revival as the preferred access mode to stadia. High capacity transport modes such as rail, bus and coach are an essential component of the system required to move large crowds of people to and from a stadium over a short space of time. The "rights holders" of major world sporting events such as the FIFA World Cup demand efficient public transport access as part of an event's operations plan. These same plans are now regularly implemented on a weekly basis at stadia around the world.

For a modern stadium to be considered for world class events it must deliver a transport solution that benefits not only the stadium's patrons and operators but reduces the impact on the adjacent communities and transport networks. It must also be convenient to use and understandable for first time users and / or visiting team spectators not familiar with the city.

The objective of transporting up to 50% of patrons to and from a new stadium on public transport has been established as a goal. This target has been set in an attempt to address a range of existing problems related to car use such as precinct parking and public safety. This target is in line with mode share to public transport at recently developed stadia such as Suncorp Stadium in Brisbane (80%) and ANZ Stadium in Sydney (70%). The mode share target (50-70%) represents some 13,000 to 19,000 spectators by public transport for a 26,500 capacity stadium.

The opportunity to develop a new stadium in Canberra should be supported through the delivery of a world class event transport system. The opportunity to develop a new stadium is also an opportunity to further develop the basic elements of the system that is currently in place for events staged in Canberra. However they will have to be developed up from existing levels and supported by further funding to deliver a sustainable transport solution that benefits, and not inhibit, the operation of the Canberra metropolitan area.



Canberra Stadium

Existing operations

Existing capacity

Ticketing information for the existing Canberra Stadium list a capacity of 25,150 for CA Brumbies matches in 2007.

Event Buses

Event bus services are operated by Action transport from the main Town Centres and Civic for CA Brumbies Super 14 rugby matches and Canberra Raiders NRL matches (6 buses):

- Gungahlin
- Woden
- Tuggeranong
- Belconnen
- Civic

Based upon the maximum seating capacity of the services (6 for Canberra Raiders), a total of 300 persons (50 passengers per bus) would access the stadium using these services.

These services operate from the eastern side of the stadium.

Charter buses

For Super 14 rugby matches at the stadium, Action operates charter services from the following major clubs:

- Tuggeranong Rugby Club, Erindale
- Chisholm Sports Club/Town Centre Club
- Lanyon Sports Club, Lanyon
- Filthy McFadden's, Civic
- ACT Rugby Club, Barton
- Tuggeranong Southern Cross Club
- Yamba Sports Club, Phillip
- CA Brumbies Club, Griffith
- Canberra Irish Club, Weston
- West's Rugby Club, Jamison
- Debacle, Braddon
- Belconnen Labour Club
- Ginninderra Labour Club
- All Bar Nun. O'Connor
- PJ O'Reilly's, Civic

For NRL matches at the stadium, Action operates charter services from the following major clubs:

- Tuggeranong Southern Cross Club/Yamba Sports Club, Phillip
- Labour Club, Charnwood
- Labour Club, Belconnen
- West Belconnen Leagues Club
- Raiders Club, Gungahlin

Based upon the maximum seating capacity of the services (15 for CA Brumbies), a total of 750 persons (50 passengers per bus) would access the stadium using these services.

These services operate from the eastern side of the stadium.

Local bus services

Local bus services are operated by Action. The services that operate to the suburb of Bruce are as follows:

- Route 3 Belconnen to Woden via Calvary Hospital (Weekday)
- Route 934 Belconnen to Woden (Weekend)
- Route 7 Belconnen to City via AIS (Weekday)

• Route 980 - Belconnen to Fyshwick via AIS (Weekend) Only Routes 7 / 980 directly serve the stadium and the adjacent AIS precinct. The nearest bus stops are located in Leverrier Street (outside AIS Arena) and Battye Street near western car park. The nearest bus stops for Routes 3 / 934 are located in Watkin Street.

Car Parking

Car parking operates both on street and off-street. The location and capacities of off-street spaces (5,835 total spaces) are as follows:

- Eastern car park 800 spaces
- Western car park 1000 spaces
- West VIP car park 330 spaces
- West overflow 1200 spaces
- Northern overflow 1200 spaces
- Leverrier Street car park (55 spaces)
- Canberra Institute of Technology ((1250 spaces) informal parking)

Based on a typical car occupancy rate for events in Australia of 2.8 persons per car, an estimated 16,338 spectators could be accommodated in formal and informal off-street car parks with a total capacity of 5,835 vehicles.

An estimated 2,730 cars have been estimated to park in informal car parks or on-street within walking distance of the stadium for capacity events.

Taxis

stadium.

Mode share

Mode		Vehicles	Passengers	% mode split
Cars	Off-street	5,835 cars	16,338*	64.5%
	On-Street@	2,730 cars	7,645*	30.1%
Car Total		8,565 cars	23,983	94.6%
Event Bus		6 buses	300#	1.2%
Charter		15 buses	750#	3.0%
buses				
Taxis		100 taxis	300^	1.2%
Non-Car Total			1,350	5.4%
Grand Total			25,333	100%

POPULOUS

Taxis drop-off in Battye Street on the western side of the station and pick-up passengers in front of the AIS Arena on the western side of the

Based on the capacities outlined above the following approximate event transport mode share splits can be derived for the existing situation.

Table 0-1 Approximate existing Event Transport mode share

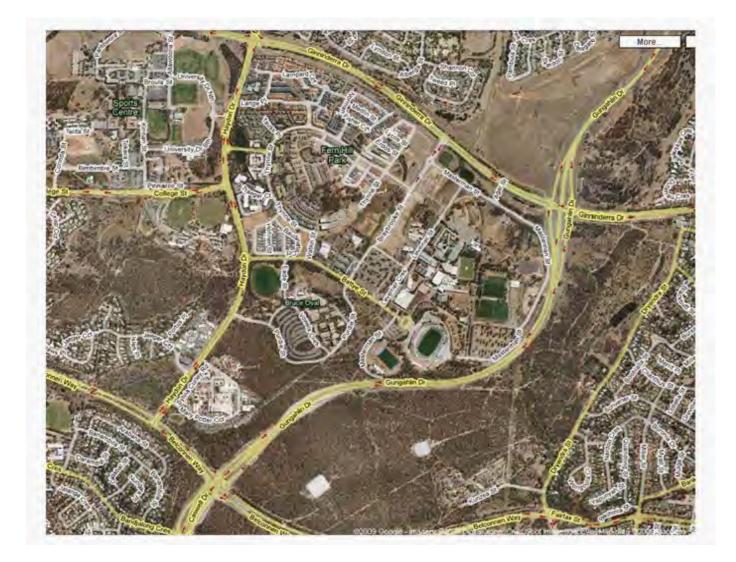
Notes: * 2.8 persons per car

50 passengers per bus

^ 3 passengers per taxi

@ on-street vehicles derived from residual demand for transport

















Manuka Oval

Existing operations

Existing capacity

Crowd records for the existing Manuka Oval list a capacity of 14,992 for an AFL match in 2006.

Event Buses

Event services are operated by Action from the main Town Centres and Civic for AFL matches:

- Gungahlin
- Woden
- Tuggeranong
- Belconnen
- Civic

Charter buses

No specific operations are in place for charter buses at Manuka Oval.

Local bus services

Local bus services are operated by Action. The services that operate to the suburb of Bruce are as follows:

- Route 4 Narrabundah to City via Manuka (Weekday)
- Route 938 City to Woden (Weekend)
- Route 5 Gungahlin to Woden (Weekday)
- Route 935 Narrabundah to City via Manuka (Weekend)
- Route 6 Woden to Dickson via Manuka (Weekday)

Car Parking

Car parking operates both on street and off-street. The location of offstreet car parks which support events at the venue are as follows:

- Main Gate disabled parking
- Eastern Gate Corporate Car Park
- Telopea Park School
- Manuka Shopping Centre
- Kingston Shopping Centre
- Kingston Oval

For capacity events, cars park on-street in the suburbs in the immediate vicinity of Manuka Oval.

Taxis

Taxis are permitted to drop-off passengers at both the main gate and the eastern gate prior to an event. Taxis depart post-match from the Manuka Shopping Centre taxi rank.

Bicycles

Bicycle parking is provided at both the main gate and the eastern gate.

Mode share

Based on the capacities outlined above the following approximate event transport mode share splits can be derived for the existing situation.

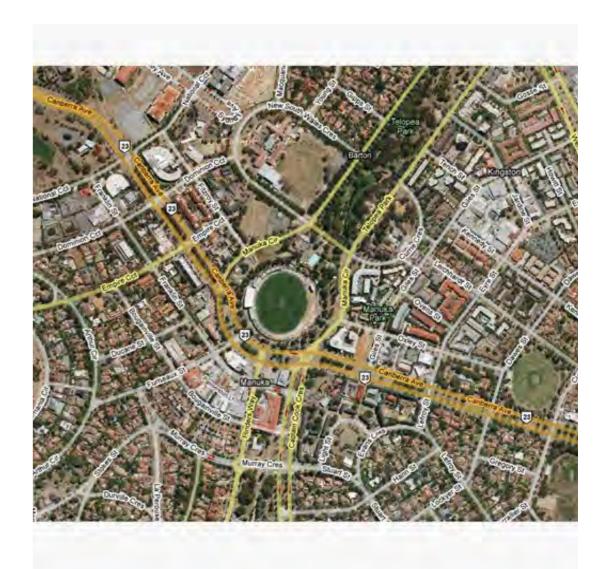
Table 0-1 Approximate existing Event Transport mode share

Mode	Vehicles	Passengers	% mode split
Car@	5,097 cars	14,272	95.6%
Event Bus	4 buses	200#	1.3%
Charter	3 buses	150#	1.0%
buses			
Taxis	100 taxis	300^	2.1%
Non-Car Total		650	4.4%
Grand Total		14,922	100%
Non-Car Total		1,350	5.4%
Grand Total		25,150	100%

Notes: * 2.8 persons per car

- # 50 passengers per bus
- ^ 3 passengers per taxi

@ on-street vehicles derived from residual demand for transport















Transport Objectives And Strategies

The development of the options illustrated within this report will require multi-modal transport systems to deliver patrons to and from the grounds in a safe and efficient manner. One of the drivers of the ACT Government is to maximise the number of patrons who use public transport and limit the number of private vehicles. The development of new stadia in other Australian cities has incorporated new event transport services and the appropriate infrastructure to support them. To be successful, the cost, guality and convenience of public transport must be competitive with the private vehicle.

Stadium Proposals and Event Transport Mode Share Targets

This transport masterplan outlines the key elements required at each site, together with the challenges which will need to be overcome to make a stadium successful. It also presents successful examples of transport from other stadia in Australia with which a new Canberra Stadium would compete for hallmark events of national and international importance.

The transport masterplans and review of transport requirements have been based upon the following stadium/venue configurations and sites:

- A 26,500 capacity multi-purpose dedicated rectangular stadium for rugby union, rugby league and football (soccer) on Canberra Stadium site.
- A 13,550 19,000 capacity oval venue for AFL and cricket at Manuka Oval
- A combined sports precinct at the Canberra Stadium site. including a 26,500 capacity multi-purpose dedicated rectangular stadium for rugby union, rugby league and football (soccer) and a 19,000 capacity oval venue for AFL and cricket.

Event Transport Strategies

The redevelopment of the ACT's major sporting venues will require a progressive approach to promoting public transport and reducing reliance on the use of private vehicles to access events in line with other major stadiums throughout Australia.

For a stadium/venue to be considered "nationally significant" from a transport perspective it must be able to achieve non-car mode shares of at least 50%. A detailed event transport plan based on a variety of strategies covering all transport modes needs to be implemented to achieve such targets. The key transport planning strategies that are available include:

- a multi-modal approach (e.g. bus, parking, walk, cycling) to share the loads across different networks whilst also maximising the patronage potential of public transport
- provide quality facilities and services to allow public transport to compete with private vehicles as a mode of access to events in terms of comfort and convenience
- focusing on maximising the transport capacity of high capacity

transit such as Light Rail (LRT) or Bus Rapid Transit (BRT) as it is the most efficient mode of moving large numbers of patrons in the shortest period of time in a city such as Canberra

- using buses as the primary mode to maximise the passenger catchment and providing operational flexibility (e.g. the ability to substitute or supplement buses in a short space of time)
- separating (and prioritising) bus movements accessing a ٠ stadium/venue from those of general vehicle traffic (particularly event traffic) to maximise the movement of patrons and provide a visual reinforcement of the efficiency of public transport
- providing adequate bus storage in close vicinity of the stadium/ • venue to meet end of event demand
- separating vehicle and pedestrian movements for safety and traffic management efficiency
- pricing the parking in the vicinity of the stadium/venue to patrons who are prepared to pay a premium through corporate support or membership
- provide adequate supply of off-street parking within walking distance of the stadium/venue to reduce the overflow of parking into neighbouring residential and retail areas
- restrict on-street parking in the vicinity of the stadium/venue to improve traffic circulation and reduce the impact on the adjacent community
- manage the extent of road closures in the vicinity of a stadium/ venue to minimise impact on the local community and regional traffic movements
- maximise the legacy benefits of an improved transport and ٠ access network for the benefit of existing local communities and potential new development opportunities created through the development of a stadium/venue.

The event transport task for redeveloped venues in Canberra will be unique to the city and shaped by the following key elements:

- the car dominated nature of existing event travel behaviour
- the levels of high road capacity when compared to demand
- relatively cheap car parking at the venue (Canberra Stadium); free on-street parking (Manuka Oval)
- the favourable trip journey times for cars in comparison to public transport "door to door" therefore limiting the impact of park-and-ride services
- the dominance of bus as the main public transport mode (lack of a high capacity public transport mode, such as rail)
- a bus network with limited capacity to meet commuter travel demand and event travel demand simultaneously at future mode share targets
- weather conditions for winter sporting codes which are not conducive to long waiting periods for public transport post match, particularly for night matches
- the lack of post match entertainment venues in close proximity to Canberra Stadium which requires shuttle services to other centres throughout the City (e.g. clubs and Civic)

The specific measures that should be considered at Canberra Stadium include:

- encourage the use of public transport to events through: providing integrated transport and event ticketing for regular
- events providing road access priority for all buses
- introducing strict enforcement of event parking in residential level where they discourage repeat behaviour
- review the price of car parking and introduce stepped fees which reflect the number of occupants of the vehicle (to encourage car sharing)
- introduce a high capacity transit mode to serve Canberra Stadium such as Bus Rapid Transit or Light Rail Transit as proposed in the Belconnen to Civic Transitway. Such a new the target mode shares in the medium to long term
- address and plan event public transport bus services accordingly
- on weekday nights and weekends when events are staged
- provide adequate and safe levels of bicycle parking

The specific measures that should be considered at Manuka Oval include:

- encourage the use of public transport to events through: providing integrated transport and event ticketing for regular events
- providing road access priority for all buses
- discourage repeat behaviour
- that can be used by several facilities (i.e. not dedicated for events but dual use)
- introduce consistent event shuttle bus services from the town maior venues)
- public transport bus services accordingly
- review local bus service frequencies in the vicinity of the Oval on weekdays and weekends when major events are staged
- encourage walking and cycling routes to Manuka Oval
- provide adequate and safe levels of bicycle parking

To achieve the transport objectives of the Canberra Stadium and Manuka Oval Master Plans, there will need to be an acknowledgement that

areas in a 1.5km area around the stadium with fines at such a

piece of transport infrastructure would be required to achieve review the membership and patron details for the Canberra Raiders and CA Brumbies supporters to understand their home

review local bus service frequencies in the vicinity of the stadium encourage walking and cycling routes to Canberra Stadium

introducing strict enforcement of event parking in residential and retail areas around the immediate venue and on the Canberra Avenue central reservation, with fines at such a level where they

providing adequate amounts of parking in vicinity of the Oval

centres and Civic that operate for events at Canberra Stadium (e.g. a Canberra event bus network which is consistent for all

review ticketing data and patron details for Cricket and AFL supporters to understand their home address and plan event



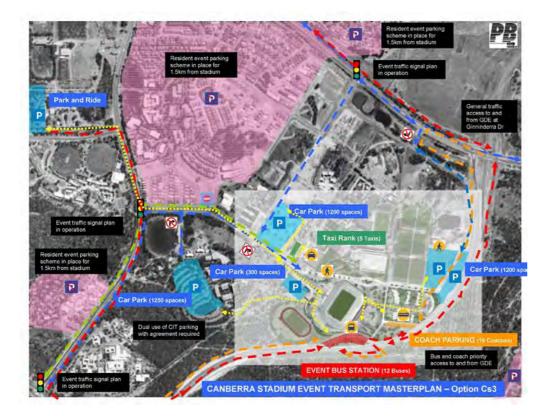
investment is required into transport infrastructure, transport services and encouragement programs to achieve the levels of non-car based event transport that are considered appropriate for a nationally significant venue in terms of event transport.

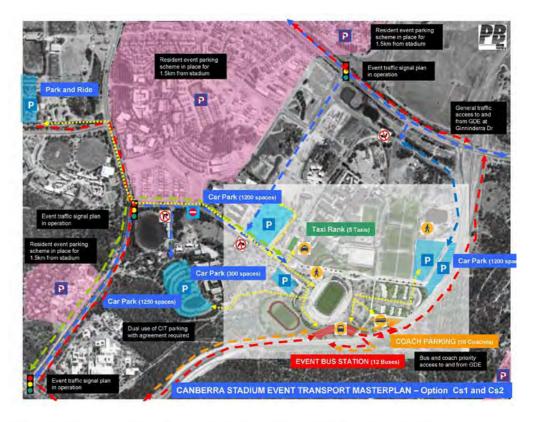
Traffic Management Plan Indicative Models:

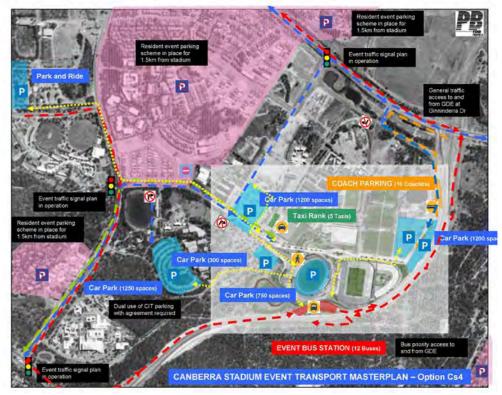
Canberra Stadium

Canberra Stadium Master Plan - Transportation Mode Shares - May 2009 - Rev A

Mode	Mode - Detailed	Occupancy		- NRL 5000 ople %	Vehicl	Rugby - NRL 26500 es People	%	Vehicles	Football 40000 People	%
Bus	Event & Park-and-Ride Local Bus Total Bus	60 50	0	650 44% 0 0% 650 44%	200 0 200	12000 0 12000	45% 0% 45%	239 0 239	14350 0 14350	36% 0% 36%
Coach	In Precinct Total Coach	50		500 3% 500 3%	16 16	800 800	3% 3%	<mark>100</mark> 100	5000 5000	13% 13%
Walk	Total Walk	1	50	<mark>50</mark> 0%	50	50	0%	50	50	0%
Cycling	Total Cycling	1	100 1	100 1%	100	100	0%	100	100	0%
Taxi	Total Taxi	3	67 2	200 1%	100	300	1%	167	500	1%
Car	Corporate suites Sponsors Total Car - Parked on site	2 2	50 1	204 1% 100 1% 304 2%	102 50 152	204 100 304	1% 0% 1%	102 50 152	204 100 304	1% 0% 1%
Car - Park & Walk	Total Car - Park & Walk	2.8	2570 7	196 48%	4624	12947	49%	7035	19698	49%
Crowd Non-Car Mode Share	9			5000 100% 500 50%		26501 13250	100% 50%		40002 20000	100% 50%







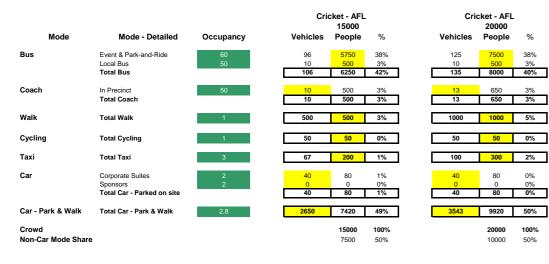




Traffic Management Plan Indicative Models:

Manuka Oval

Manuka Oval Master Plan - Transportation Mode Shares - May 2009 - Rev A



20000

People

650

80

20000

10000

%

38%

3%

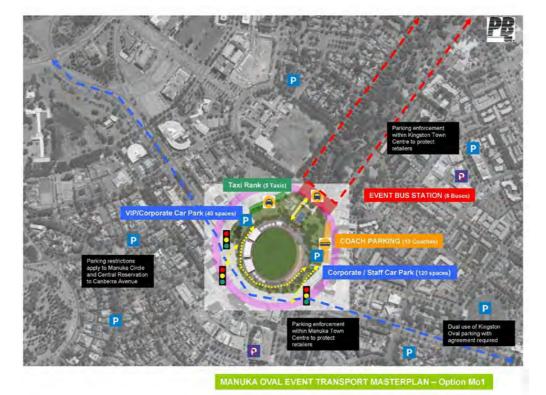
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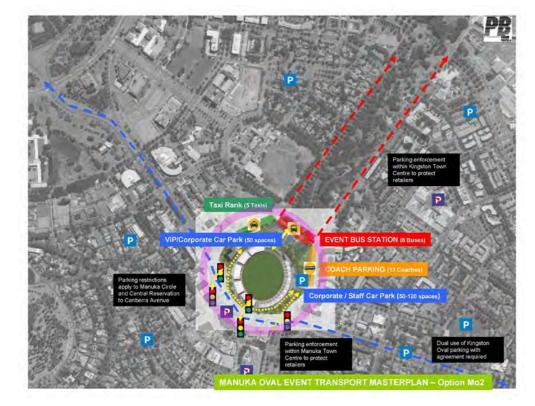
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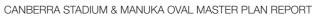




Summary

The redevelopment of the ACT's major venues provides a unique opportunity to change the travel behaviour of patrons in line with an improved "total event" experience. The strategies outlined in these master plans provides the transport planning mechanisms to place Canberra's venues on an equal level with major stadia in other states which may compete for the staging of events. It also provides a consistent level of comfort to those supporters who support teams in national and international sporting competitions. The non-car mode share targets outlined (40-70%) are a significant shift from existing travel behaviour and it should be recognised that the improvement of transport infrastructure and services will not be achievable without the ongoing support of Government and venue operators. The strategies outlined in these plans are well tested and can be refined to reduce the amount of recurrent operating expenditure over time without a decrease in quality of service for the event patron. The redevelopment plans for the venues provide the platform to allow the ACT to develop and provide world class event transport facilities and services.







ENVIRONMENTAL / ESD REQUIREMENTS

The design and construction of the stadia master plan options will incorporate principles of Ecologically Sustainable Development. This will appropriately incorporate environmentally responsible materials and processes at the time of design/construction and to reduce energy consumption and adverse effects on the environment in both construction and operation which are financially viable.

The eventual aim of the proposed stadia master plan options is to develop a zero or low 'carbon' facility that acts as a show case for environmental sustainability and Government policy regarding sustainability. The following key aspects have been considered in the development of the master plan and concept studies which would warrant further investigation should the Government develop one of the stadium/venue master plan option proposals.

- Rain water harvesting from roofs and hard landscape for irrigation and water reticulation inside the stadium/venue for toilets and non potable water.
- Grey water recycling and storage
- Black water treatment and recycling.
- Solar hot water
- Photovoltaic cells and collectors for plaza lighting and lighting to permanent occupied portions of the building.
- Natural ventilation to internal spaces in building.
- Natural light to internal spaces.
- Building orientation.
- Solar protection to glazed facades.
- Low energy mechanical and electrical plant.
- Low energy lighting.
- Recycling of building and construction waste.
- Public transport initiatives.
- Low embodied energy material selection.
- Avoidance of pvc and oil based products.
- Use of timber from sustainable resources.
- Minimisation of transportation of raw materials.
- Local sourcing of materials and labour.
- Use of recycled or reclaimed building components.
- Offset carbon trading for embodied energy.
- Purchase of 'green' energy in stadium/venue operations.

Should the Government develop a stadium/venue an assessment should be done of the Environmental Credentials of the facility using either a modified Green Building Council of Australia Star Rating assessment or the internationally recognised US Green Building Council Leader in Energy and Environmental Design (LEED) accreditation system.

Should the above ESD initiatives be adopted in the eventual design of the stadium/venue it is the belief of the Consultants that the stadium/ venue should be able to achieve a zero carbon rating and a 4 star Green Building Council of Australia rating or a Silver LEED rating.

Some further environmental guidelines that have been incorporated into the masterplan options are as follows:

Developing the Site as a Livable Community

Integral to the planning is the idea of the landscape being a responsive layer. The manipulation of the landscape helps achieve humanistic scale and the opportunity to introduce a sensitive response of managing a large environment precinct and the way in which the community is able to enjoy the spaces.

Develop Building Design that Enhance Building Longevity

Flexibility is a key design consideration in the planning of individual buildings to allow for future modification and expansion to suit the changing needs of the marketplace. Selection of materials

Using Natural Strategies to Protect and Restore Water Resources

Our planning has allowed for the use of natural storm water collection points for storage and re-use or dispersal at low peak times. The design layout attempts to limit the need to disrupt the natural water table or rely on costly basement construction in order to meet facility programming requirements. Storm water can be directed into bio retention ponds and water canals.

Improve the Energy Efficiency while Improving Thermal Comfort in Buildings

Explore the options for orientation and improvements in the building envelope. Develop solar strategies to improve comfort and reduce energy demand in the first instant, then optimize energy efficiency of building operational systems. The screen element will reduce and moderate direct solar gain, thus improving the indoor environment and reducing energy usage.

Reduce Environmental Impacts Related to Energy Use

Develop design strategies to reduce reliance on fossil fuels and to use cleaner sources of power. Incorporate co-generation, fuel cells, photo-voltaic cells, solar hot water, geo-thermal heat stores, biomass generation and other renewable energy sources.

Promote Occupant Health and Well-Being in Indoor Environments

Enhance the indoor environment by providing a connection to nature and daylight, improved lighting and acoustics, and improved indoor air quality. Use natural ventilation systems to promote effective ventilation and introduce systems that allow occupancy control of their immediate working environment.

Conserve Water and Consider Water Reuse Systems

Conserve water with the use of low flow plumbing fixtures and water efficient appliances. Where possible, include the collection of grey water reticulation for non-potable use.

Use environmentally Preferable Building Systems

Evaluate the environmental impact, resource efficiency and performance of proposed building materials over the full life cycle of the building. Investigate non toxic materials from local, renewable resources and sustainable acquired resources that minimize waste and pollution from manufacturing, installation and maintenance.

Use appropriate Landscape and Planning Material

Use native vegetation to the Canberra region to ensure survival while reducing maintenance and irrigation requirements. Use native species to the greatest extent possible and explore opportunities to provide habitat for wildlife and to restore degraded areas.

Plan for Recycling During Construction, Demolition and Occupation.

During the construction phase, allow for a recycling management system by the contractor and building teams. Require contractors to develop a waste management plan prior to construction that identifies methods of recycling materials and waste.



INDICATIVE COSTS

The following Indicative cost estimate report has been prepared by WT Partnership on behalf of the ACT Government through Territory Venues and Events and in conjunction with the business cases and the master plan options.

RE: CANBERRA STADIUM AND MANUKA OVAL REDEVELOPMENT OPTIONS **MASTERPLAN ESTIMATE NO 1**

We are pleased to confirm our current day Preliminary Masterplan Design & Construction Cost Estimate No 1 as part of the Business Case analysis for the following current "live" options for Manuka Oval and Canberra Stadium.

BASE STADIUM COSTS

In summary, the following table outlines the Base Stadium Costs for each Option. A detailed breakdown of each option follows in this Report:

	TOTAL CAPACITY	STADIUM ONLY COSTS [AT JUNE 2009] \$*
Option Mo1: Minimal Manuka Oval Redevelopment	13,077	27,380,000
Option Mo2: Manuka Oval Redevelopment	19,124	79,500,000
Option Mo3: Conversion to Community Oval	1,151	7,000,000
Option Cs1: Minimal Refurbished Canberra Stadium	25,751	60,500,000
Option Cs2: Refurbished Canberra Stadium	26,341	90,000,000
Option Cs3: Redeveloped Canberra Stadium	26,500	210,000,000
Option Cs4: New Canberra Stadium & Redeveloped AFL Stadium	26,500 [CS] + 19,000 [AFL]	310,800,000

* Excludes for Indoor Cricket School, Transport Hub [Canberra], and Temporary / Permanent Lighting [Manuka], which are reported separately below.

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CANBERRA STADIUM AND MANUKA OVAL REDEVELOPMENT OPTIONS MASTERPLAN ESTIMATE NO 1

OPTION MO1 – MINIMAL STADIUM REDEVELOPMENT [13,077 SEAT CAPACITY]

	Option Mo1 [At June 2009] \$
Demolition	830,000
Stadium [Including Landscaping]	26,550,000
BASE STADIUM TOTAL COST	27,380,000
Transport Hub	700,000
Indoor Cricket School	10,000,000
Option for Temporary and Permanent Lighting	5,000,000
TOTAL [AT JUNE 2009 COSTS]	\$43,080,000
OPTIONS	
Upgrade Pitch	3,000,000

INCLUSIONS

- Demolition
- Total redevelopment of Manuka Oval to provide final capacity of 13,077
- Minor modifications only to existing Bradman Stand
- New Hawke and Menzies Stands including open concourse below, upper tier and 2 levels of . corporate facilities and suites
- New media building .
- New food and beverage facilities and bathrooms
- New team coach drop off and VIP Entrance Plaza including paving and soft landscaping to . Bradman Stand
- New landscaping to oval surrounds [hard and soft] .
- New ticket booths and turnstiles to all entries .
- New fence and ornamental gates
- Re-landscaped bus / coach drop off
- Transport Hub [allowance as advised by Graeme Steverson]
- Includes option of \$10 million for Indoor Cricket School
- Includes option of \$5 million for temporary and permanent lighting

OPTIONS [AT JUNE 2009 COSTS INCLUSIVE OF ON-COSTS]

Cost to upgrade the pitch including new irrigation and fencing.

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CANBERRA STADIUM AND MANUKA OVAL REDEVELOPMENT (OPTIONS
MASTERPLAN ESTIMATE NO 1	

8 JULY 2009

OPTION MO2 - STADIUM REDEVELOPMENT [19,124 SEAT CAPACITY]

	Option Mo2 [At June 2009] \$
Demolition	2,500,000
Stadium [Including Landscaping]	77,000,000
BASE STADIUM TOTAL COST	\$79,500,000
Transport Hub	700,000
Indoor Cricket School	10,000,000
Option for Temporary and Permanent Lighting	5,000,000
TOTAL [AT JUNE 2009 COSTS]	\$95,200,000

INCLUSIONS

- Demolition
- Total redevelopment of Manuka Oval to provide final capacity of 19,124
- Minor modifications only to existing Bradman Stand
- New Hawke and Menzies Stands including open concourse below, upper tier and 2 levels of corporate facilities and suites
- New non serviced split tier stands including open concourse below upper tier [retain lower tier only]
- New non serviced south east stand 15 row single tier stand
- New grass berm
- Upgrade Manuka Oval Field of Play / Pitch
- New media building
- New food and beverage facilities and bathrooms
- New team coach drop off and VIP Entrance Plaza including paving and soft landscaping to Bradman Stand
- New landscaping to oval surrounds [hard and soft]
- New ticket booths and turnstiles to all entries
- New fence and ornamental gates

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CANBERRA STADIUM AND MANUKA OVAL REDEVELOPMENT OPTIONS MASTERPLAN ESTIMATE NO 1

INCLUSIONS [CONT'D]

- Re-landscaped bus / coach drop off
- Allowance for ESD Initiatives [eg solar cells, water harvesting]
- Transport Hub
- Includes option of \$10 million for Indoor Cricket School
- Includes option of \$5 million for temporary and permanent lighting

OPTION MO3 - CONVERSION TO COMMUNITY OVAL [1,151 SEAT CAPACITY]

	OPTION MO3 [AT JUNE 2 \$
Demolition	2,000,00
Stadium [Including Landscaping]	5,000,00
BASE STADIUM TOTAL COST [AT JUNE 2009 COSTS]	\$7,000,00

INCLUSIONS

- Demolition
- No change to existing Bradman Stand
- Retain existing grass berm and platform and extend grass berm to Bradman Stand
- New boundary fence to Field of Play
- New landscaping to oval surrounds [hard and soft]
- New fence and ornamental gates

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CANBERRA STADIUM AND MANUKA OVAL REDEVELOPMENT OPTIONS	
MASTERPLAN ESTIMATE NO 1	

EXCLUSIONS FROM OPTIONS MO1, MO2 AND MO3

The following have been excluded from Options Mo1, Mo2 and Mo3:

	Option Mo1	Option Mo2	OPTION MO3
All development not directly related to the Stadium unless specified above	Х	Х	Х
Transport Hub	-	-	x
Manuka Pool	Х	х	X
Maintenance Office / Buildings	Х	x	х
Arts Precinct Buildings to North	х	х	х
New Mixed Use Development [Eco Hotel, Commercial]	Х	Х	Х
Outdoor Practice Nets	Х	-	х
RSL Building	Х	-	Х
Upgrade existing roads, infrastructure surrounding Stadium	Х	Х	Х
Contaminated soil and asbestos removal	х	х	х
Headworks and Authority fees	х	х	x
Cost Escalation beyond June 2009 base date	х	х	х
Construction Staging	Х	Х	х

CANBERRA STADIUM AND MANUKA OVAL REDEVELOPMENT OPTIONS MASTERPLAN ESTIMATE NO 1

OPTION Cs1 - MINIMAL REFURBISHED CANBERRA STADIUM [25,751 SEAT CAPACITY]

	OPTION Cs1 [AT JUNE 2009 COSTS] \$
Demolition	3,000,000
Stadium [Including Landscaping]	57,500,000
BASE STADIUM TOTAL COST	\$60,500,000
Transport Hub	12,000,000
TOTAL [AT JUNE 2009 COSTS]	\$72,500,000

INCLUSIONS

- Refurbished Stadium Increase capacity from 25,333 to 25,751
- Extension of lower bowl, minimal upgrade to corporate areas, minor upgrade elsewhere
- New tensile fabric roof to 80% West Stand
- Upgrade and increase F&B's and WCs
- New Scoreboard and Media Screen
- New Perimeter Fence
- New Entrances to East and West including ticket offices and turnstiles
- Security Upgrade to Refurbished Stadium
- Entry Plaza and Concourse Upgrade
- PA Upgrade to Refurbished Stadium
- New Stadium Lighting
- New Transport Hub [allowance as advised by Graeme Steverson]
- New East West Road

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CANBERRA STADIUM AND MANUKA OVAL REDEVELOPMENT OPTIONS MASTERPLAN ESTIMATE NO 1

8 JULY 2009

OPTION CS2 - REFURBISHED CANBERRA STADIUM [26,341 SEAT CAPACITY]

	OPTION CS2 [AT JUNE 2009] \$
Demolition	3,000,000
Stadium [Including Landscaping]	81,000,000
Allowance for Staging	6,000,000
BASE STADIUM TOTAL COST	\$90,000,000
Transport Hub	12,000,000
TOTAL [AT JUNE 2009 COSTS]	\$102,000,000
OPTIONS	
World Cup Upgrade [Temporary Seating]	17,700,000

INCLUSIONS

- Refurbished Stadium Increase capacity from 25,333 to 26,341
- Extension of lower bowl, minimal upgrade to corporate areas, minor upgrade elsewhere
- New horseshow tensile fabric roof East, West and South
- Upgrade and increase F&Bs and WCs
- New Scoreboard and Media Screen
- Allowance for ESD Initiatives [Solar cells, water harvesting]
- New perimeter fence
- New Entrances to East and West including ticket offices and turnstiles
- Security Upgrade to Refurbished Stadium
- Entry Plaza and Concourse Upgrade
- PA Upgrade to Refurbished Stadium
- New Stadium Lighting
- New Transport Hub
- New East West Road
- Staging

OPTIONS [AT JUNE 2009 COSTS INCLUSIVE OF ON-COSTS]

Provisional allowance for temporary seating to increase capacity to 45,000 [18,500 temporary seats]

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CANBERRA STADIUM AND MANUKA OVAL REDEVELOPMENT OPTIONS MASTERPLAN ESTIMATE NO 1

OPTION Cs3 - REDEVELOPED CANBERRA STADIUM [26,500 SEAT CAPACITY]

	OPTION C [AT JUNE 20 \$
Demolition	5,000,00
Stadium [Including Landscaping]	193,000,00
Allowance for Staging	12,000,00
BASE STADIUM TOTAL COST	\$210,000,00
Transport Hub	12,000,00
TOTAL [AT JUNE 2009 COSTS]	\$222,000,00
OPTIONS	
World Cup Upgrade [Temporary Seating]	17,700,00
Roof over Field of Play	41,000,00
Arena	96,000,00

INCLUSIONS

- Redeveloped Stadium with 26,500 seat capacity
- New Scoreboard and Media Screen
- Allowance for ESD Initiatives [Solar cells, water harvesting]
- New perimeter fence
- New Entrances to East and West including ticket offices and turnstiles
- Entry Plaza and Concourse Upgrade
- New Stadium Lighting
- New Transport Hub
- New East West Road
- Staging

OPTIONS [AT JUNE 2009 COSTS INCLUSIVE OF ON-COSTS]

- Provisional allowance for temporary seating to increase capacity to 45,000 [18,500 temporary seats]
- Roof over Field of Play
- Provisional allowance for new arena with 8,000 seat capacity

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CANBERRA STADIUM REDEVELOPMENT OPTIONS	
MASTERPLAN ESTIMATE NO 1	

OPTION Cs4 - New CANBERRA STADIUM [26,500 SEAT CAPACITY] & REDEVELOPED AFL STADIUM [19,000 SEAT CAPACITY]

	OPTION Cs4 [AT JUNE 2009] \$
CANBERRA STADIUM	
Demolition	1,500,000
Stadium [Including Landscaping]	197,000,000
BASE STADIUM TOTAL COST	\$198,500,000
AFL STADIUM	
Demolition	3,500,000
Stadium [Including Landscaping]	80,800,000
Car Park Below Field of Play	28,000,000
BASE STADIUM TOTAL COST	\$112,300,000
COMBINED STADIUMS TOTAL COST	\$310,800,000
Transport Hub	12,000,000
Indoor Cricket School and Nets	10,000,000
TOTAL [AT JUNE 2009 COSTS]	\$332,800,000
Options	
World Cup Upgrade [Temporary Seating]	17,700,000
Roof over Field of Play	41,000,000
Arena	96,000,000

INCLUSIONS

- New Stadium with 26,500 seat capacity
- Conversion of Canberra Stadium to AFL stadium with 19,000 seat capacity
- New Scoreboard and Media Screen to new stadium
- New below pitch car parking single level

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CANBERRA STADIUM REDEVELOPMENT OPTIONS MASTERPLAN ESTIMATE NO 1

OPTION CS4 - NEW CANBERRA STADIUM [26,500 SEAT CAPACITY] & REDEVELOPED AFL STADIUM [19,000 SEAT CAPACITY] [CONT'D]

INCLUSIONS [CONT'D]

- Allowance for ESD Initiatives [Solar cells, water harvesting]
- New perimeter fence
- New Entrances to East and West including ticket offices and turnstiles to AFL Stadium
- Entry Plaza and Concourse Upgrade
- PA Upgrade to Refurbished Athletics Stadium
- New Transport Hub
- New East West Road
- Indoor Cricket School and Nets

OPTIONS [AT JUNE 2009 COSTS INCLUSIVE OF ON-COSTS]

- Provisional allowance for temporary seating to increase capacity to 45,000 [18,500 temporary seats]
- Roof over Field of Play
- Provisional allowance for new arena with 8,000 seat capacity

EXISTING CANBERRA STADIUM - DEMOLITION OPTION

The cost to demolish Canberra Stadium and level the area for future development, in lieu of redeveloping it into an AFL Stadium, excluding landscaping but including on-costs is **\$6,200,000**. This cost is based on the assumption excavated material from the new stadium can be stockpiled and used as fill.

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CANBERRA STADIUM AND MANUKA OVAL REDEVELOPMENT OF	TIONS
MASTERPLAN ESTIMATE NO 1	

8 JULY 2009

EXCLUSIONS FROM OPTIONS Cs1, Cs2, Cs3 AND Cs4

The following have been excluded from Options Cs1, Cs2, Cs3 and Cs4:

	OPTION Cs1	OPTION CS2	OPTION CS3	OPTION CS4
All development not directly related to the Stadium unless specified above	х	Х	X	x
Transport Oriented Development	Х	Х	x	X
New Entry Roundabout / Junction	Х	Х	x	х
Subterranean Coach Drop Off and parking including turning	x	Х	-	-
Work to Upper Bowl [retain existing]	-	Х		-
New Seats to East and West Upper Bowl [existing to remain] - to AFL Stadium	-	-	-	х
New Roof to AFL Stadium [retain existing]	-	-	-	х
Below grade service route to existing Canberra Stadium	x	х	-	х
Corporate Facility Upgrade to AFL Stadium	-	-	-	х
New AFL Stadium FF&E	-	-	-	x
Tenancy fitouts	х	х	х	x
Contaminated soil / asbestos removal	х	х	х	х
Headworks and authority fees	х	х	х	x
Cost Escalation beyond June 2009 base date	X	Х	Х	х
Construction Staging	Х	-	-	X

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CANBERRA STADIUM AND MANUKA OVAL REDEVELOPMENT OPTIONS MASTERPLAN ESTIMATE NO 1

COMBINED OPTIONS

As requested we have combined various Manuka and Canberra Options to create the following combined options as follows:

OPTION 1 - OPTION CS1 [MINIMAL REFURBISHED CANBERRA STADIUM] AND OPTION MO1 [MINIMAL MANUKA STADIUM REDEVELOPMENT]

	Option 1 [At June 2009] \$
CANBERRA STADIUM OPTION Cs1 [STADIUM ONLY]	60,500,000
MANUKA STADIUM OPTION MO1 [STADIUM ONLY]	27,380,000
TOTAL LEGACY MODE	\$87,880,000
Allowance for Indoor Cricket School & Nets - Manuka	10,000,000
Allowance for Temporary & Permanent Lighting – Manuka	5,000,000
Transport Hub – Canberra	12,000,000
Transport Hub - Manuka	700,000
TOTAL LEGACY MODE [INCL CRICKET SCHOOL] [AT JUNE 2009]	\$115,580,000

STAGING / PROGRAMME

- 2 year pre-construction including 1 year of design and documentation
- 18 month construction period
 - 1 stage 18 month construction period for Canberra Stadium
 - 1 stage 1 year construction period for Manuka Oval

NOTES

- All costs current at June 2009 thus cost escalation excluded
- Allowance for transport hub to Canberra [\$8m + on-costs] and Manuka [\$500,000 + oncosts] as per advice from Graeme Steverson
- Allowance for indoor cricket school

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CANBERRA STADIUM AND MANUKA OVAL REDEVELOPMENT OPTIONS MASTERPLAN ESTIMATE NO 1

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OPTION 2 - OPTION CS2 [REFURBISHED CANBERRA STADIUM] AND OPTION MO2 [MANUKA OVAL REDEVELOPMENT]

	OPTION 2 [AT JUNE 2009] \$
CANBERRA STADIUM OPTION Cs2 [STADIUM ONLY]	84,000,000
CANBERRA STAGING ALLOWANCE	6,000,000
MANUKA STADIUM OPTION MO2 [STADIUM ONLY]	79,500,000
TOTAL LEGACY MODE	\$169,500,000
Allowance for Indoor Cricket School & Nets - Manuka	10,000,000
Allowance for Temporary & Permanent Lighting – Manuka	5,000,000
Transport Hub – Canberra	12,000,000
Transport Hub – Manuka	700,000
TOTAL LEGACY MODE [INCL CRICKET SCHOOL] [AT JUNE 2009 COSTS]	\$197,200,000
World Cup Upgrade [Temporary Seating]	17,700,000

STAGING / PROGRAMME

- 2 year pre-construction including 1 year of design and documentation
- 3 year construction period
 - 3 stage 3 year construction period for Canberra Stadium
 - 1 stage 18 month construction period for Manuka Oval

NOTES

- All costs current at June 2009 thus cost escalation excluded
- Allowance for transport hub to Canberra [\$8m + on-costs] and Manuka [\$500,000 + on-cost] as per advice from Graeme Steverson
- Allowance for indoor cricket school
- World Cup Mode Upgrade [18,500 temporary seats]

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CANBERRA STADIUM AND MANUKA OVAL REDEVELOPMENT OPTIONS MASTERPLAN ESTIMATE NO 1

OPTION 3 - OPTION CS3 [REFURBISHED CANBERRA STADIUM] AND OPTION MO2 [MANUKA OVAL REDEVELOPMENT]

	OPTION 3 [AT JUNE 2009] \$
CANBERRA STADIUM OPTION CS3 [STADIUM ONLY]	198,000,000
CANBERRA STAGING ALLOWANCE	12,000,000
MANUKA STADIUM OPTION MO3 [STADIUM ONLY]	79,500,000
TOTAL LEGACY MODE	\$289,500,000
Allowance for Indoor Cricket School & Nets - Manuka	10,000,000
Allowance for Temporary & Permanent Lighting – Manuka	5,000,000
Transport Hub – Canberra	12,000,000
Transport Hub – Manuka	700,000
TOTAL LEGACY MODE [INCL CRICKET SCHOOL] [AT JUNE 2009 COSTS]	\$317,200,000
World Cup Upgrade [Temporary Seating]	17,700,000
Roof over Field of Play	41,000,000
Arena	96,000,000

STAGING / PROGRAMME

- 2 year pre-construction including 1 year of design and documentation
- 5 year construction period
- 4 stage 5 year construction period for Canberra Stadium
- 1 stage 18 month construction period for Manuka Oval

NOTES

- All costs current at June 2009 thus cost escalation excluded
- Allowance for transport hub to Canberra [\$8m + on-costs] and Manuka [\$500,000 + on-costs] as per advice from Graeme Steverson
- Allowance for indoor cricket school
- World Cup Mode Upgrade [18,500 temporary seats]

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CANBERRA STADIUM AND MANUKA OVAL REDEVELOPMENT OPTIONS
MASTERPLAN ESTIMATE NO 1

8 JULY 2009

OPTION 4 - OPTION Cs4 [New CANBERRA STADIUM + REDEVELOPMENT AFL STADIUM] AND OPTION MO3 [MANUKA CONVERSION TO COMMUNITY OVAL]

	OPTION 4 [AT JUNE 2009] \$
CANBERRA STADIUM OPTION CS4 [STADIUM ONLY]	198,500,000
AFL STADIUM [CANBERRA STADIUM CONVERSION INCL CARPARK]	112,300,000
MANUKA – CONVERSION TO COMMUNITY OVAL	7,000,000
TOTAL LEGACY MODE	\$317,800,000
Allowance for Indoor Cricket School & Nets - Manuka	10,000,000
Transport Hub – Canberra	12,000,000
TOTAL LEGACY MODE [INCL CRICKET SCHOOL] [AT JUNE 2009 COSTS]	\$339,800,000
World Cup Upgrade [Temporary Seating]	17,700,000
Roof over Field of Play	41,000,000
Arena	96,000,000

STAGING / PROGRAMME

- 2 year pre-construction including 1 year of design and documentation
- 4 year construction period
 - 1 stage 2 year construction period for Canberra Stadium
 - 1 stage 18 month construction period for AFL Stadium
 - 1 stage 6 month construction period for Manuka Oval

NOTES

- All costs current at June 2009 thus cost escalation excluded
- Allowance for transport hub to Canberra as per advice from Graeme Steverson [\$8m + on-costs]
- Allowance for indoor cricket school
- World Cup Mode Upgrade [18,500 temporary seats]

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CANBERRA STADIUM AND MANUKA OVAL REDEVELOPMENT OPTIONS MASTERPLAN ESTIMATE NO 1

SPECIFIC INCLUSIONS

The estimates include allowances for:

- Builder's Preliminaries 15%
- Builder's Margins 4%
- Design Contingency 7%
- Construction Contingency 2.5%
- Consultant Fees 12%

SUMMARY

Given the preliminary nature of the Client Brief and Design Response, we would expect the order of accuracy of this preliminary advice in the order of +15% - 5%.

We recommend annual construction cost increases in order of 4 to 4.5% p.a. to the total cost for each year construction is delayed beyond June 2009 cost base.

The estimates assume procurement by competitive lump sum novated design and construction tender from minimum three contractors experienced in stadia construction. The estimate makes no allowance for a negotiated, GMP or other contract delivery not predicated in strict price competition.

We have assumed the ultimate design solution will achieve a value for money outcome through cost effective design as the scope for significant design enhancement or increased building areas outside approved budget parameters exists as a key risk management issue in stadia design after budget commitment.

Please refer to Appendixes 1 to 3, for a detailed breakdown for each of the Options.

Appendix 4 refers to indicative construction cashflow for each of the Options [for Base Stadium Only].

Appendix 5 refers to indicative construction cashflow for each of the Options [for 'All In' Costs excluding temporary seating, roof over field of play and arena additional options].

Please refer to Appendix 6 for a cost per seat benchmark analysis for Canberra Stadium Options Cs1 to Cs4 and Manuka Option Mo2.

This Estimate has been prepared expressly for Populous for the purpose of a comparative Masterplan Estimate No 1 for various stadia options at Manuka Oval and Canberra Stadium.

Please note all costs stated in this estimate exclude cost escalation beyond June 2009 and GST.

We accept no liability in the event this Estimate is used for any other purpose, or used by any other party without the express written consent of WT Partnership.

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CANBERRA STADIUM AND MANUKA OVAL REDEVELOPMENT OPTIONS MASTERPLAN ESTIMATE NO 1

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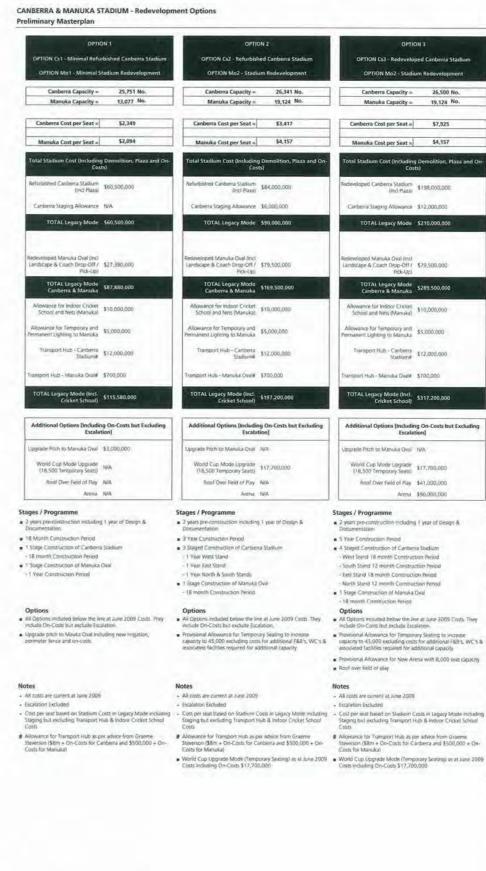
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We trust the enclosed is self-explanatory and in accordance with your current requirements. If you have any queries regarding this matter, please do not hesitate to contact the undersigned.

Yours faithfully WT PARTNERSHIP



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CONTRACTOR NO.25 - Contract Gamma V (E-standor 6) via



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OPTIC	ON 3	OPTIN	ON 4
	ped Canberra Stadium	OPTION Cs4 - New Canberra & Redeveloper	d AFL Stadium
ON MOZ - Stadi	um Redevelopment	OPTION Mo3 - Conversi	on to Community Oval
erra Capacity =	26,500 No.	Canberra Capacity =	25,500 No.
uka Capacity =	19,124 No.	AFL Total Capacity =	19,000 No.
		Manuka Capacity =	1,151 No.
Cost per Seat =	\$7,925	Canberra Cost per Seat =	\$7,491
		AFL Cost per Seat =	\$5,911
Cost per Seat =	\$4,157	Manuka Cost per Seat =	\$368
n Cost (Including Cos	g Demolition, Plaza and On- ts)	Total Stadium Cost (includin Cos	
anberra Stadium (incl Plaza)	\$198,000,000	New Canberta Stadium (Incl Plaza)	\$198,500,000
iging Allowance	\$12,000,000	Canberra Staging Allowanon	N/A.
Legacy Mode	\$210,000,000	TOTAL Legacy Mode	\$198,500,000
		AFL Stadium (Carlberna Stadium Conversion Including Carpark)	\$112,300,000
Canuka Oval (Incl Coach Drop-Off / Pick-Up)		Manuka Community Oval (Incl Landscape)	\$7,000,000
L Legacy Mode erra & Manuka	\$289,500,000	TOTAL Legacy Mode Canberra & Manuka (incl. AFL Conversion)	5317.800,000
r Indoor Cricket 8 Néts (Manuka)	\$10,000,000	Allowance for Indoor Cricket School and Nets (Canberra)*	\$10,000,000
Temporary and ting to Manuka	\$5,000,000	Allowance for Temporary and Permanent Lighting to Manuka	N/A
Hub - Cariberra Stadium#	\$12,000,000	Transport Hub - Canberra Stadium#	\$12,000,000
Martuka Oval#	3700,000	Transport Hub - Manuka Ovalle	14/A
ocy Mode (Incl. Cricket School)	\$317,200,000	TOTAL Legary Mode (Incl. Cricket School)	\$339.800,000
Options (Includir Escala	ng On-Costs but Excluding tion]	Additional Options (Includin Escala	

Jograde Pitch to Manuka Oval NPA World Cup Mode Upgrade (18,500 Temporary Seets) \$17,700,000

Temporary Seats)	21111000100
Dver Field of Play	\$41,000,000
Arena	\$96,000,000

2 years pre-construction including 1 year of Design & Documentation

· 4 Staged Construction of Canberra Stadium

- West Stand 18 month Construction Period

All Options included below the line at lune 2009 Costs. They include Ov-Costs but exclude Escalation.

Provisional Albovanci for Temporary Seating to increase capacity of 45,000 excluding costs for additional F&B's, WC's & associated facilities required for additional capacity

Allowance for Transport Hub as per advice from Graeme Stewerson (S8m + On-Costs for Canberra and \$500,000 + On-Costs for Manuka)

Stages / Programme

2 years pre-construction including 1 year of Design & Documentation

- · 4 Year Construction Penod

Upgrade Pitch to Manuka Oval N/A

World Cup Mode Upgrade (18,500 Temporary Seats) \$17,700,000

Roof Over Field of Play \$41,000,000

Arena \$95,000,000

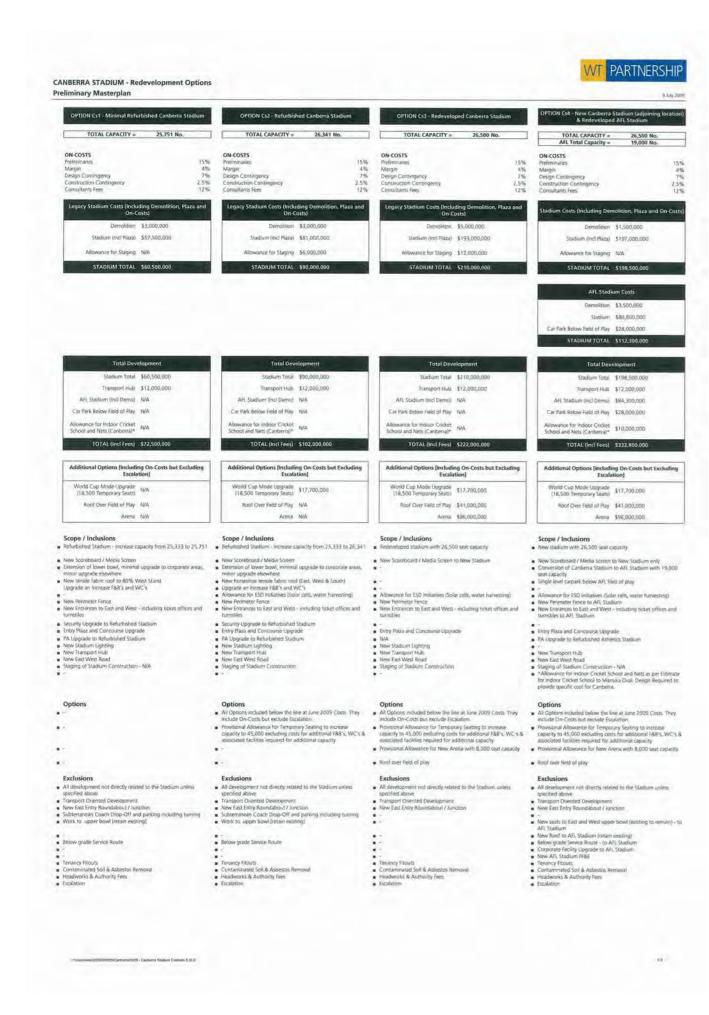
- 1 Stage Construction of Canberra Stadium
 2 Year Construction Period
- · 1 Stage Construction of AFL Statium
- 18 month Construction Period
- 1 Stage Construction of Manuka Dval
- 6 month Construction Period

- Options. All Options included below the line at June 2009 Costs, They include On-Costs but exclude Escalation.
- Provisional Allowance for temporary Seating to increase capacity to 45,000 including costs for additional F&B's, WC's & associated facilities required for additional capacity.
- Provisional Allowance for New Arena with 8,000 seat capacity
 Provisional Allowance for New Arena with 8,000 seat capacity

· Roof over field of play

- Notes
 All costs are current at June 2009
- Cost per seat based on Stadium Costs In Legacy Mode including Staging but including Transport Hub & Index? Endet School Costs
- # Allowance for Transport Hub as per advice from Graeme Steverson (\$8m + On-Costs)
- World Cup Upgrade Mode (Temporary Seating) as at June 2009 Costs including On-Costs \$17,700,000 Allowance fer Indoor Cricket School and Nets as per Estimate for Indoor Cricket School to Manuka Oval. Design Required to provide specific cost for Canterra.







OPTION Mo1 - Mini	mal Stadium Redevelopment	OPTION Mo2 - St	adium Redevel
Seats		Seats =	16,1
Berm Capacity TOTAL CAPACITY		Berm Capacity = TOTAL CAPACITY =	2, 19,1
ON-COSTS Preliminaries	100	ON-COSTS	
Margin	15% 4%	Margin	
Design Contingency Construction Contingency	7% 2.5%		
Consultants Fees	12%		
Stadium Costs (Inlcuding	Demolition, Plaza and On-Costs)	Stadium Costs (Inlcuding I	Demolition, Pla
Demolitio	n \$830,000	Demolition	\$2,500,000
Stadium (Incl Landscape	\$26,550,000	Stadium (Incl Landscape)	\$77,000,000
Allowance for Stagin	g Excl	Allowance for Staging	Excl
STADIUM TOTA	L \$27,380,000	STADIUM TOTAL	\$79,500,000
-			
	Development	Total D	Development
Demolitio	n \$830,000	Demolition	\$2,500,000
Stadium (Incl Landscape & Coac Drop-Of	h \$26,550,000	Stadium (Incl Landscape & Coach Drop-Off)	\$77.000,000
Transport Hu	b \$700,000	Transport Hub	\$700,000
Indoor Cricket Schoo	\$10,000,000	Indoor Cricket School	\$10,000,000
Option for Temporary an	d \$5,000,000	Option for Temporary and	\$5,000,000
Permanent Lightin	9	Permanent Lighting	
TOTAL (Incl Lighting & Fees) \$43,080,000	TOTAL (Incl Lighting & Fees)	\$95,200,000
Additional Options [Includin	g On-Costs but Excluding Escalation)	Additional Options (Including	On-Costs but
Upgrade Pitch to Manuka Ovi	il \$3,000,000	Upgrade Pitch to Manuka Ovai	N/A.
	and 2 levels of corporate facilities/suites	upper tier (retain lower tier only) a New Non-Serviced Splt Tier Stands upper tier (retain lower tier only) New Non-Serviced South-East Star	(GA) including
		 New grass berm 	
- New Media Building		 Upgrade Manuka Oval Field of Pla New Media Building 	y/Pitch
New Food & Beverage Facilities a		 New Food & Beverage Facilities an New Team Coach Drop off and VII 	
soft landscaping - to Bradman St		soft landscaping - to Bradman Star	nd
New landscaping to oval surroun New Ticket booths and turnstiles		 New landscaping to oval surround: New Ticket booths and turnstiles to 	
New Fence and Ornamental Gate Re-landscaped Bus / Coach Drop		 New Fence and Ornamental Gates Re-landscaped Bus / Coach Drop G 	
5		Allowance for ESD Initiatives (Solar New Indoor Cricket School Complete	
in the second		 Staging of Stadium Construction 	ex Truchdung obi
New Transport Hub Option for temporary and perma	nent lighting	 New Transport Hub Option for temporary and perman 	ent lighting
Options		Options	
	ne at June 2009 Costs. They inloude On-	N/A	
	luding new irrigation, perimeter fence		
clusions		Exclusions	
All development not directly rela	ed to the Stadium unless specified above	· All development not directly relate	d to the Stadium
Manuka Pool Maintenance Office/Buildings		Manuka Pool Maintenance Office/Buildings	
Arts Precinct buildings to North New Mixed Use development (Ec	a Hatel Commercial	 Arts Precinct buildings to North 	Hotel Common
Outdoor Practice Nets	a more (commercial)	 New Mixed Use development (Eco - 	Hotel, Commer
RSL Building Upgrade existing roads & infrastr		 Upgrade existing roads & infrastruit 	
Contaminated Soil & Asbestos Re Headworks & Authority Fees	moval	 Contaminated Soil & Asbestos Rem Headworks & Authority Fees 	
Escalation		 Escalation 	
Staging		 Staging 	
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CANBERRA & MANUKA Preliminary Masterplan														VVI	PARTN	8 July 200	
Stadium Only Costs							_	_									
Year			2009			20	010			2	011		2012				
Quarter		Jun-09	Sep-09	Dec-09	Mar-10	Jun-10	Sep-10	Dec-10	Mar-11	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	
CANBERRA STADIUM	TOTAL															-	
OPTION Cs1 Fees Pre-Construction Fees During Construction Construction Cost	4,861,607 1,620,536 54,017,857					1,215,402	1,215,402	1,215,402	1,215,402	270,089 4,591,518	270,089 5,671,875	270,089 9,453,125	270,089 12,154,018	270,089 13,234,375	270,089 8,912,946	-	
Expenditure per Annum				-				3,646,205				21,742,188				35,111,607	
Cumulative Expenditure	60,500,000					-		3,646,205				25,388,393				60,500,000	
OPTION Cs2 Fees Pre-Construction Fees During Construction Construction Cost Expenditure per Annum	7,714,286 2,571,429 79,714,286					1,928,571	1,928,571	1,928,571	1,928,571	214,286 3,188,571	214,286 3,587,143	214,286 3,985,714	214,286 4,384,286	214,286 5,978,571	214,286 7,971,429	214,286 8,370,000	
Cumulative Expenditure	90,000,000							5,785,714 5,785,714				13,332,857 19,118,571				27,561,429 46,680,000	
OPTION Cs3 Fees Pre-Construction Fees During Construction Construction Cost Expenditure per Annum	16,875,000 5,625,000 187,500,000					4,218,750	4,218,750	4,218,750 12,656,250	4,218,750	281,250 3,750,000	281,250 5,625,000	281,250 4,218,750 18,656,250	281,250 7,031,250	281,250 4,687,500	281,250 7,500,000	281,250 5,625,000 25,968,750	
Cumulative Expenditure	210,000,000			7				12,656,250				31,312,500				57,281,250	
OPTION Cs4 Fees Pre-Construction - excl AFL	17,062,564					4,265,641	4,265,641	4,265,641	4,265,641								
Fees During Construction - excl AFL Construction Cost (Excl AFL) Fees Pre-Construction - AFL Fees During Construction - AFL Construction Cost (AFL Stadium)	5,687,521 175,749,915 9,653,027 3,217,676 99,429,297									710,940 10,720,745	710,940 13,005,494	710,940	710,940 24,604,988	710,940 28,998,736 2,413,257	710,940 34,271,233 2,413,257	710,940 26,362,487 2,413,257	
Expenditure per Annum								12,796,923				45,942,192				124,320,976	
Cumulative Expenditure	310,800,000							12,796,923				58,739,115				183,060,091	
MANUKA OVAL	TOTAL					_		12,7 50,525		_		30,733,113				185,000,091	
	TOTAL	all and the second															
OPTION Mo1 Fees Pre-Construction Fees During Construction Construction Cost	2,200,179 733,393 24,446,429					550,045	550,045	550,045	550,045	183,348 3,300,268	183,348 5,622,679	183,348 8,800,714	183,348 6,722,768	-	1	:	
Expenditure per Annum				-				1,650,134				18,823,750				6,906,116	
Cumulative Expenditure	27,380,000							1,650,134				20,473,884				27,380,000	
OPTION Mo2 Fees Pre-Construction Fees During Construction Construction Cost	7,191,964 2,397,321 69,910,714					1,797,991	1,797,991	1,797,991	1,797,991	399,554 5,942,411	399,554 7,340,625	399,554 12,234,375	399,554 15,729,911	399,554 17,128,125	399,554 11,535,268	-	
Expenditure per Annum	70 500 000			-				5,393,973				28,514,063				45,591,964	
Cumulative Expenditure OPTION Mo3	79,500,000				<u> </u>			5,393,973				33,908,036				79,500,000	
Fees Pre-Construction Fees During Construction Construction Cost	562,500 187,500 6,250,000																
Expenditure per Annum	100000			-								-				-	
Cumulative Expenditure	7,000,000			+								-				-	



CANBERRA & MANUKA Preliminary Masterplan Stadium Only Costs



Year		2	013			2	014			2	015			
Quarter	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16	Jun
CANBERRA STADIUM								200						
OPTION Cs1 Fees Pre-Construction Fees During Construction Construction Cost														
Expenditure per Annum														
Cumulative Expenditure														
OPTION Cs2														
Fees Pre-Construction Fees During Construction Construction Cost	214,286 9,565,714	214,286 10,761,429	214,286 8,768,571	214,286 6,377,143	214,286 6,775,714	-	:	2						
Expenditure per Annum				36,330,000				6,990,000						
Cumulative Expenditure				83,010,000				90,000,000	_					
OPTION Cs3 Fees Pre-Construction Fees During Construction	281,250	281,250	281,250	281,250	281,250	281,250	281,250	281,250	281,250	281,250	281,250	281,250	281,250	
Construction Cost	11,250,000	7,500,000	11,250,000	9,375,000	15,937,500	11,250,000	17,812,500	13,125,000	16,875,000	7,500,000	11,250,000	7,500,000	8,437,500	
Expenditure per Annum				40,500,000				59,250,000				44,250,000		
Cumulative Expenditure				97,781,250				157,031,250				201,281,250		
OPTION Cs4 Fees Pre-Construction - excl AFL														
Fees During Construction - excl AFL	710,940													
Construction Cost (Excl AFL) Fees Pre-Construction - AFL Fees During Construction - AFL Construction Cost (AFL Stadium)	21,968,739 2,413,257	536,279	536,279	536,279	536,279	536,279	536,279							
		8,451,490	10,440,076	17,400,127	22,371,592	24,360,178	16,405,834							
Expenditure per Annum Cumulative Expenditure				62,993,468 246,053,559				64,746,441						
	_		_	240,053,555				310,800,000						
MANUKA OVAL						and the second se		t an ar an a						
OPTION Mo1 Fees Pre-Construction Fees During Construction Construction Cost														
Expenditure per Annum														
Cumulative Expenditure														
OPTION Mo2 Fees Pre-Construction Fees During Construction Construction Cost														
Expenditure per Annum														
Cumulative Expenditure													_	
OPTION Mo3														
Fees Pre-Construction Fees During Construction Construction Cost						281,250	281,250	- 93,750 2,281,250	- 93,750 3,968,750	-	1	1		
Expenditure per Annum								2,937,500				4,062,500		
Cumulative Expenditure								2,937,500				7,000,000		



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Jun-16	2016		16	
Juli-10	Sep-16	Dec	:-16	
			1	
-			-	
			18,750	
		210,00	00,000	



CANBERRA & MANUKA STADIUM - Redevelopment Options Preliminary Masterplan Cashflow EXCLUDING ESCALATION 'All In Costs'

Year			2009			2	010			2	011		2012			
Quarter		Jun-09	Sep-09	Dec-09	Mar-10	Jun-10	Sep-10	Dec-10	Mar-11	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12
CANBERRA STADIUM	TOTAL			-						-	-					-
OPTION Cs1 Fees Pre-Construction Fees During Construction Construction Cost	4,861,607 1,620,536 54,017,857					1,215,402	1,215,402	1,215,402	1,215,402	270,089 4,591,518	270,089 5,671,875	270,089 9,453,125	270,089 12,154,018	270,089 13,234,375	270,089 8,912,946	
Transport Hub	12,000,000										-	2,400,000	3,960,000	3,960,000	1,680,000	-
Expenditure per Annum				-				3,646,205				24,142,188				44,711,607
Cumulative Expenditure	72,500,000							3,646,205				27,788,393				72,500,000
OPTION Cs2 Fees Pre-Construction Fees During Construction Construction Cost	7,714,286 2,571,429 79,714,286					1,928,571	1,928,571	1,928,571	1,928,571	214,286 3,188,571	214,286 3,587,143	214,286 3,985,714	214,286 4,384,286	214,286 5,978,571	214,286 7,971,429	214,286 8,370,000
Transport Hub	12,000,000									2,100,571		3,965,714	4,364,260		7,971,429	8,570,000
Expenditure per Annum				-				5,785,714				13,332,857				27,561,429
Cumulative Expenditure	102,000,000							5,785,714				19,118,571				46,680,000
OPTION Cs3 Fees Pre-Construction Fees During Construction Construction Cost Transport Hub	16,875,000 5,625,000 187,500,000 12,000,000					4,218,750	4,218,750	4,218,750	4,218,750	281,250 3,750,000	281,250 5,625,000	281,250 4,218,750 -	281,250 7,031,250 -	281,250 4,687,500 -	281,250 7,500,000 -	281,250 5,625,000 -
Expenditure per Annum				-				12,656,250				18,656,250				25,968,750
Cumulative Expenditure	222,000,000							12,656,250				31,312,500				57,281,250
OPTION Cs4																
Fees Pre-Construction - excl AFL	17,062,564					4,265,641	4,265,641	4,265,641	4,265,641							
Fees During Construction - excl AFL	5,687,521									710,940	710,940	710,940	710,940	710,940	710,940	710,940
Construction Cost (Excl AFL)	175,749,915									10,720,745	13,005,494	15,817,492	24,604,988	28,998,736	34,271,233	26,362,487
Fees Pre-Construction - AFL	9,653,027													2,413,257	2,413,257	2,413,257
Fees During Construction - AFL	3,217,676															
Construction Cost (AFL Stadium) Transport Hub Indoor Practice Facility	99,429,297 12,000,000 10,000,000									1	1	-	1	2,400,000 2,000,000	3,960,000 3,300,000	3,960,000 3,300,000
Expenditure per Annum								12,796,923				45,942,192				143,240,976
Cumulative Expenditure	332,800,000							12,796,923				58,739,115				201,980,091

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WT PARTNERSHIP

8 July 2009



CANBERRA & MANUKA STADIUM - Redevelopment Options Preliminary Masterplan Cashflow EXCLUDING ESCALATION 'All In Costs'

Year			2009			20	010			20	011		2012				
Quarter		Jun-09	Sep-09	Dec-09	Mar-10	Jun-10	Sep-10	Dec-10	Mar-11	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	
MANUKA OVAL	TOTAL																
OPTION Mo1																	
Fees Pre-Construction	2,200,179					550,045	550,045	550,045	550,045								
Fees During Construction	733,393					a contractor				183,348	183,348	183,348	183,348	-			
Construction Cost	24,446,429									3,300,268	5,622,679	8,800,714	6,722,768	-	-	-	
Transport Hub	700,000									140,000	231,000	231,000	98,000	-		_	
Indoor Practice Facility	10,000,000									2,000,000	3,300,000	3,300,000	1,400,000				
Temp / Perm Lighting	5,000,000									500,000	1,000,000	2,000,000	1,500,000	-	-	-	
Expenditure per Annum				-				1,650,134				31,525,750				9,904,116	
Cumulative Expenditure	43,080,000							1,650,134				33,175,884				43,080,000	
OPTION Mo2																	
Fees Pre-Construction	7,191,964					1,797,991	1,797,991	1,797,991	1,797,991								
Fees During Construction	2,397,321							1.000	an so the set	399,554	399,554	399,554	399,554	399,554	399,554		
Construction Cost	69,910,714									5,942,411	7,340,625	12,234,375	15,729,911	17,128,125	11,535,268		
Transport Hub	700,000									140,000	231,000	231,000	98,000	-	-		
Indoor Practice Facility	10,000,000									-	-	2,000,000	3,300,000	3,300,000	1,400,000		
Temp / Perm Lighting	5,000,000									300,000	300,000	300,000	1,000,000	2,000,000	1,100,000	-	
Expenditure per Annum				-				5,393,973				32,016,063				57,789,964	
Cumulative Expenditure	95,200,000			-				5,393,973				37,410,036				95,200,000	
OPTION Mo3																	
Fees Pre-Construction	562,500																
Fees During Construction	187,500																
Construction Cost	6,250,000																
Expenditure per Annum				140				-								-	
Cumulative Expenditure	7,000,000																

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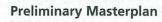
WT PARTNERSHIP

8 July 2009

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CANBERRA & MANUKA



'All In Costs'

Year		2	013			2	014			2	015			
Quarter	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16	Jun
CANBERRA STADIUM											- and			
OPTION Cs1 Fees Pre-Construction Fees During Construction Construction Cost Transport Hub														
Expenditure per Annum														
Cumulative Expenditure														
OPTION Cs2 Fees Pre-Construction Fees During Construction Construction Cost Transport Hub	214,286 9,565,714	214,286 10,761,429 2,400,000	214,286 8,768,571 3,960,000	214,286 6,377,143 3,960,000	214,286 6,775,714 1,680,000	-								
Expenditure per Annum				46,650,000				8,670,000						
Cumulative Expenditure			_	93,330,000				102,000,000						
OPTION Cs3 Fees Pre-Construction Fees During Construction Construction Cost Transport Hub	281,250 11,250,000 -	281,250 7,500,000 -	281,250 11,250,000	281,250 9,375,000 -	281,250 15,937,500 -	281,250 11,250,000 -	281,250 17,812,500	281,250 13,125,000 -	281,250 16,875,000 -	281,250 7,500,000 2,400,000	281,250 11,250,000 3,960,000	281,250 7,500,000 3,960,000	281,250 8,437,500 1,680,000	
Expenditure per Annum				40,500,000				59,250,000				54,570,000		
Cumulative Expenditure				97,781,250			_	157,031,250				211,601,250		
OPTION Cs4 Fees Pre-Construction - excl AFL										_				
Fees During Construction - excl AFL	710,940							-						
Construction Cost (Excl AFL)	21,968,739													
Fees Pre-Construction - AFL	2,413,257													
Fees During Construction - AFL		536,279	536,279	536,279	536,279	536,279	536,279							
Construction Cost (AFL Stadium) Transport Hub Indoor Practice Facility	1,680,000 1,400,000	8,451,490	10,440,076	17,400,127	22,371,592	24,360,178	16,405,834							
Expenditure per Annum				66,073,468				64,746,441						
Cumulative Expenditure				268,053,559				332,800,000						

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201 n-16	6 Sep-16	Dec-16	
		10,398,7 222,000,0	
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CANBERRA & MANUKA

Preliminary Masterplan 'All In Costs'

Year		2	2013			2	014			2	2015		
Quarter	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	N
MANUKA OVAL													5.5
OPTION Mo1 Fees Pre-Construction Fees During Construction Construction Cost Transport Hub Indoor Practice Facility Temp / Perm Lighting Expenditure per Annum Cumulative Expenditure								:					
OPTION Mo2 Fees Pre-Construction Fees During Construction Construction Cost Transport Hub Indoor Practice Facility													
Temp / Perm Lighting Expenditure per Annum								-					
Cumulative Expenditure													
OPTION Mo3 Fees Pre-Construction Fees During Construction Construction Cost						281,250	281,250	93,750 2,281,250	- 93,750 3,968,750		-	-	
Expenditure per Annum								2,937,500	5,500,.50			4,062,500	
Cumulative Expenditure								2,937,500				7,000,000	

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			8 July 2009
		2016	
ar-16	Jun-16	Sep-16	Dec-16
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CANBERRA STADIUM - Benchmark Comparisons **Preliminary Masterplan**

	Telstra Dome Melbourne (adjusted)	Telstra Stadium Sydney	MCG Northern Stand Melbourne	Melbourne Rectangular Stadium	Skilled Park Gold Coast	OPTION Cs1 Minimal Refurbished Canberra Stadium	OPTION Cs2 Refurbished Canberra Stadium	OPTION Cs3 Redevelop Canberra Stadium
Construction Cost (including On-Costs)	\$290,000,000	\$425,000,000	\$434,000,000	\$250,000,000	\$164,058,733	\$55,355,000	\$84,855,000	\$204,561,000
Capacity	52,205	84,250	54,780	27,775	25,200	25,751	25,369	26,500
Year Contract Executed	1998	1997	2001	2008	ТВА	N/A	N/A	N/A
Year Complete	2000	1999	2006	2010 Scheduled	2006	N/A	N/A	N/A
Cost per Seat (Year Contract Executed)	\$5,555	\$5,045	\$7,923	\$9,000	\$6,510	\$2,150	\$3,345	\$7,719
Current Day Cost per Seat - June 2009	\$9,195	\$8,770	\$11,326	\$9,000	\$7,206	\$2,150	\$3,345	\$7,719

Scope / Inclusions Stadium Costs Only

 On-Costs (including Consultants Fees)

Scope / Inclusions Stadium Costs Only
 On-Costs (including Consultants Fees)

Scope / Inclusions

Stadium Costs Only On-Costs (including Consultants Fees)

- Stadium Costs Only On-Costs (including Consultants Fees)
- All costs are current at June 2009

Scope / Inclusions

Scope / Inclusions

2009

Stadium Costs Only Stadium Costs Only On-Costs (including On-Costs (including)

Consultants Fees)
All costs are current at June Consultants Fees) 2009

Consultants Fees) All costs are current at June All costs are current at June 2009 ■ New tensile fabric roof to 80% ■ New horseshoe tensile fabric

West Stand Staging of Stadium Construction - N/A

Scope / Inclusions

Scope / Inclusions Stadium Costs Only
 On-Costs (including

- Stadium Costs Only
 On-Costs (including Consultants Fees)
 - All costs are current at June 2009 Roof over 80% seats

Scope / Inclusions

 Staging of Stadium Construction



roof (East, West & South) Staging of Stadium Construction

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WT PARTNERSHIP

8 July 2009

ped 1	OPTION Cs4 New Canberra Stadium (adjoining location)
	\$193,061,000
	26,500
	N/A
	N/A
	\$7,285
	\$7,285

Scope / Inclusions

- Stadium Costs Only
 On-Costs (including
- Consultants Fees)
- All costs are current at June 2009

1/1

- Roof over 80% seats
- Staging of Stadium Construction N/A



MANUKA OVAL - Benchmark Comparisons **Preliminary Masterplan**

10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Telstra Dome Melbourne (adjusted)	Telstra Stadium Sydney	MCG Northern Stand Melbourne	Melbourne Rectangular Stadium	Skilled Park Gold Coast	Mo2 - Stadium Redevelopment
Construction Cost (including On-Costs)	\$290,000,000	\$425,000,000	\$434,000,000	\$250,000,000	\$164,058,733	\$77,743,493
Capacity	52,205	84,250	54,780	27,775	25,200	19,124
Year Contract Executed	1998	1997	2001	2008	ТВА	N/A
Year Complete	2000	1999	2006	2010 Scheduled	2006	N/A
Cost per Seat (Year Contract Executed)	\$5,555	\$5,045	\$7,923	\$9,000	\$6,510	\$4,065
Current Day Cost per Seat - June 2009	\$9,195	\$8,770	\$11,326	\$9,000	\$7,206	\$4,065

Scope / Inclusions

- Staduim Costs Only
- On-Costs (including) Consultants Fees)
- Scope / Inclusions
- Staduim Costs Only
- On-Costs (including)
 - Consultants Fees)
- Scope / Inclusions
- Staduim Costs Only
- On-Costs (including)
- Consultants Fees)

Scope / Inclusions

2009

- Staduim Costs Only
- On-Costs (including
- Consultants Fees)
- All costs are current at June 2009

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WT PARTNERSHIP

8 July 2009

Scope / Inclusions

 Staduim Costs Only On-Costs (including) Consultants Fees) All costs are current at June

Scope / Inclusions

- Staduim Costs Only
- On-Costs (including) Consultants Fees)
- All costs are current at June 2009
- Roof over approx 60% seats
- Capacity includes berm 2,300



CANBERRA & MANUKA Preliminary Masterplan Stadium Only Costs

-1733-1248A				
$\Lambda \Lambda \Gamma$	D/	AVE	NEE	S-HD
S.V.S.V.S		ATATI	INER	

15 June 2009

Year		7	013			2	014	1			015				2016	7
Quarter	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16	Sep-16	Dec-16
														501110		
CANBERRA STADIUM																
OPTION Cs1 Fees Pre-Construction Fees During Construction Construction Cost Transport Hub																
Expendture per Annum																
Cumulative Expendture																
OPTION Cs2		·														
Fees Pre-Construction Fees During Construction Construction Cost Transport Hub	214,286 9,565,714	214,286 10,761,429	214,286 8,768,571	214,286 6,377,143	214,286 6,775,714	:	-	-								
Expendture per Annum				36,330,000				6,990,000								
Cumulative Expendture			·	83,010,000				90,000,000								
OPTION Cs3 Fees Pre-Construction Fees During Construction Construction Cost Transport Hub	281,250 11,250,000	281,250 7,500,000	281,250 11,250,000	281,250 9,375,000	281,250 15,937,500	281,250 11,250,000	281,250 17,812,500	281,250 13,125,000	281,250 16,875,000	281,250 7,500,000	281,250 11,250,000	281,250 7,500,000	281,250 8,437,500		-	-
Expendture per Annum				40,500,000				59,250,000				44,250,000				8,718,750
Cumulative Expendture				97,781,250				157,031,250				201,281,250				210,000,000
OPTION Cs4 Fees Pre-Construction - excl AFL	···															
Fees During Construction - excl AFL Construction Cost (Excl AFL) Fees Pre-Construction - AFL Fees During Construction - AFL Construction Cost (AFL Stadium) Transport Hub Indoor Practice Facility	710,940 21,968,739 2,514,257	533,414 8,818,112	533,414 10,892,961	533,414 18,154,935	533,414 23,342,060	533,414 25,416,910	533,414 17,117,511									
Expendture per Annum				CA CCA 497				CT 476 733								
Cumulative Expendture				64,660,187 248,023,278				67,476,722								
				240,023,270				315,500,000								
MANUKA OVAL																
OPTION Mo1 Fees Pre-Construction Fees During Construction Construction Cost Transit Hub Indoor Practice Facility Temp / Perm Lighting																
Expendture per Annum																
Cumulative Expendture																
OPTION Mo2 Fees Pre-Construction Fees During Construction Construction Cost Transit Hub Indoor Practice Facility Temp / Perm Lighting																
Expendture per Annum																
Cumulative Expendture																
OPTION Mo3 Fees Pre-Construction Fees During Construction Construction Cost						281,250	281,250	93,750 2,463,750	93,750 4,286,250							
Expendture per Annum				-				3 ,120,0 00				4,380,000				
Cumulative Expendture				-				3,120,000				7,500,000				

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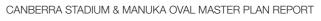
CANBERRA & MANUKA Preliminary Masterplan



															M	
Year			2013				2014				015				2016	
Quarter	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16	Sep-16	Dec-10
CANBERRA STADIUM																
OPTION Cs1																
Fees Pre-Construction Fees During Construction																
Construction Cost																
Transport Hub																
Expendture per Annum																
Cumulative Expendture																
OPTION Cs2																
Fees Pre-Construction																
Fees During Construction Construction Cost	214,286 9,565,714	214,286 10,761,429	214,286 8,768,571	214,286 6,377,143	214,286 6,775,714	-	-	-								
Transport Hub		2,400,000	3,960,000	3,960,000	1,680,000	-	-									
Expendture per Annum				46,650,000				8,670,000								
Cumulative Expendture				93,330,000				102,000,000								
Fees Pre-Construction																
Fees During Construction	281,250	281,250	281,250	281,250	281,250	281,250	281,250	281,250	281,250	281,250	281,250	281,250	281,250	-		
Construction Cost Transport Hub	11,250,000	7,500,000	11,250,000	9,375,000	15,937,500	11,250,000	17,812,500	13,125,000	16,875,000	7,500,000 2,400,000	11,250,000 3,960,000	7,500,000 3,960,000	8,437,500 1,680,000	-	-	
Expendture per Annum				40,500,000				59,250,000		2,400,000	3,900,000	54,570,000	1,080,000	-	-	40.000
Cumulative Expendture				97,781,250				157,031,250								10,398,3
				57,701,230				137,031,230				211,601,250				222,000,0
OPTION Cs4 Fees Pre-Construction - excl AFL																
Fees During Construction - excl AFL	710,940															
Construction Cost (Excl AFL)	21,968,739															
Fees Pre-Construction - AFL	2,514,257															
Fees During Construction - AFL		533,414	533,414	533,414	533,414	533,414	533,414									
Construction Cost (AFL Stadium)			10,892,961		23,342,060											
Transport Hub	1,680,000	0,010,112	10,052,501	,0,134,555	23,342,000	23,410,510	17,117,211									
Indoor Practice Facility	1,400,000															
Expendture per Annum				67,740,187				67,476,722								
Cumulative Expendture				270,023,278				337,500,000								
MANUKA OVAL																dreese base
OPTION Mo1																
Fees Pre-Construction																
Fees During Construction																
Construction Cost Indoor Practice Facility																
Temp / Perm Lighting								-								
Expendture per Annum																
Cumulative Expendture																
OPTION Moz								~~~								
ees Pre-Construction																
ees During Construction																
Construction Cost ndoor Practice Facility																
Temp / Perm Lighting								-								
Expendture per Annum																
Cumulative Expendture																
OPTION Mo3															**	
Fees Pre-Construction						281,250	281,250									
Fees During Construction							,	93,750	93,750		-	-				
Construction Cost								2,463,750	4,286,250	-	-	-				
Expendture per Annum				-				3,120,000				4,380,000				

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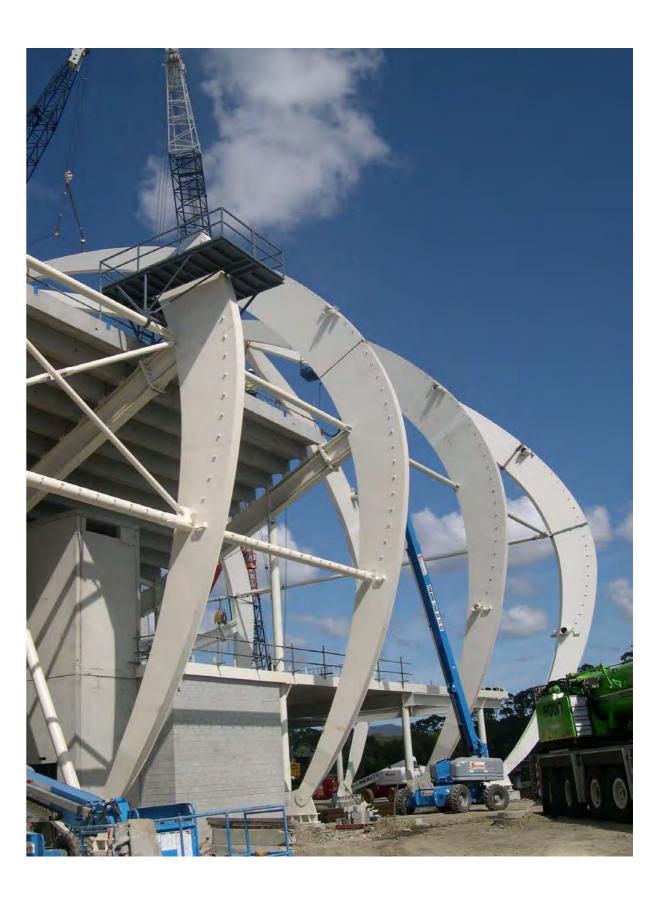




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INDICATIVE DEVELOPMENT TIMEFRAMES

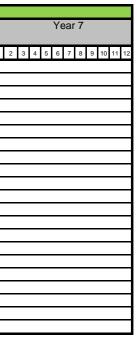






COMBINED REDEVELOPMENT OPTION 1 - Cs1 and Mo1

mulca	tive Development Timeframe - Option				1	1		_
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
	- .	<u> </u>			<u> </u>			-
Item	Task	1 2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5 6 7 8 9 10 11 12	1 2
	Appoint Consultant							
	Brief							
3	Concept Design							
4	Scheme Design							
	Detailed Design							
6	Site Consolidation							
7	DA Process							
8	EIS							
9	Tender							
	Detailed Design							
	Confirmation of Tender							
12	Construction Documentation							
13	Start on Site							
14	Construction							
15	Practical Completion							
16	Handover							
17	Pre-Opening							
18	First Event				1			





COMBINED REDEVELOPMENT OPTION 2 - Cs2 and Mo2

Indica	tive Development Timeframe - Option 2	2 - Combining Cs2 and Mo2 - ba	used on a 2 stage D&C tender					
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Item	Task	1 2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5 6 7 8 9 10 11 12
1	Appoint Consultant							
	Brief							
3	Concept Design							
4	Scheme Design							
5	Detailed Design							
6	Site Consolidation							
7	DA Process							
	EIS							
9	Tender							
10	Detailed Design							
11	Confirmation of Tender							
	Construction Documentation							
13	Start on Site							
14	Construction							
	Practical Completion							
	Handover							
	Pre-Opening							
18	First Event							
							_	



COMBINED REDEVELOPMENT OPTION 3 - Cs3 and Mo2

Appoint Consultant Brief Concept Design Scheme Design Detailed Design Site Consolidation DA Process	1 2 3 4 4	5 6 7 8 9 10 11 12 1	2 3 4 5 6 7	8 9 10 11 12	1 2 3 4 5 6	7 8 9 10 11 12	1 2 3 4 5 6 7 8	9 10 11 12 1 2 3 4	5 6 7 8 9 10 11 12	1 2 3 4 5 8 7 8 9 10 11		11 12 1 2 3 4 5 6	7 8 9 10 11 1:	12 1 2 3 4 5 6 7 8 9 10 1
Brief Concept Design Scheme Design Detailed Design Site Consolidation														
Brief Concept Design Scheme Design Detailed Design Site Consolidation											-			
Brief Concept Design Scheme Design Detailed Design Site Consolidation											1			
Concept Design Scheme Design Detailed Design Site Consolidation														11 C.
Scheme Design Detailed Design Site Consolidation				10			5 m	2			a 5	-		
Site Consolidation				· · · · · · · · · · · · · · · · · · ·										
DA Process														
												[] [] [] [] [] [] [] [] [
EIS														
Tender				-										
Detailed Design				1	11		2				F - 1			
Confirmation of Tende	er													
2 Construction Documer	ntation			(1				1			14
Start on Site									1					
Construction				-			2				1			
Practical Completion	Construction of the second													1.4
Handover														
Pre-Opening					1.00									
First Event							1	1	1					



COMBINED REDEVELOPMENT OPTION 4 - Cs4 and Mo3

		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
tem	Task	1 2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5 6 7 8 9 10 11 12	2 1 2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5 6 7 8 9 10 11 12	1 2 3 4 5 6 7 8 9 10 11
1	Appoint Consultant								
2	Brief				1				
3	Concept Design						1	h	
4	Scheme Design							C	
5	Detailed Design								
6	Site Consolidation								
	DA Process			0.00		C			
8									
	Tender								
10	Detailed Design								
	Confirmation of Tender								
12	Construction Documentation								
	Start on Site								
	Construction			1					
	Practical Completion								
16	Handover								
	Pre-Opening								
18	First Event								







CONCLUSION

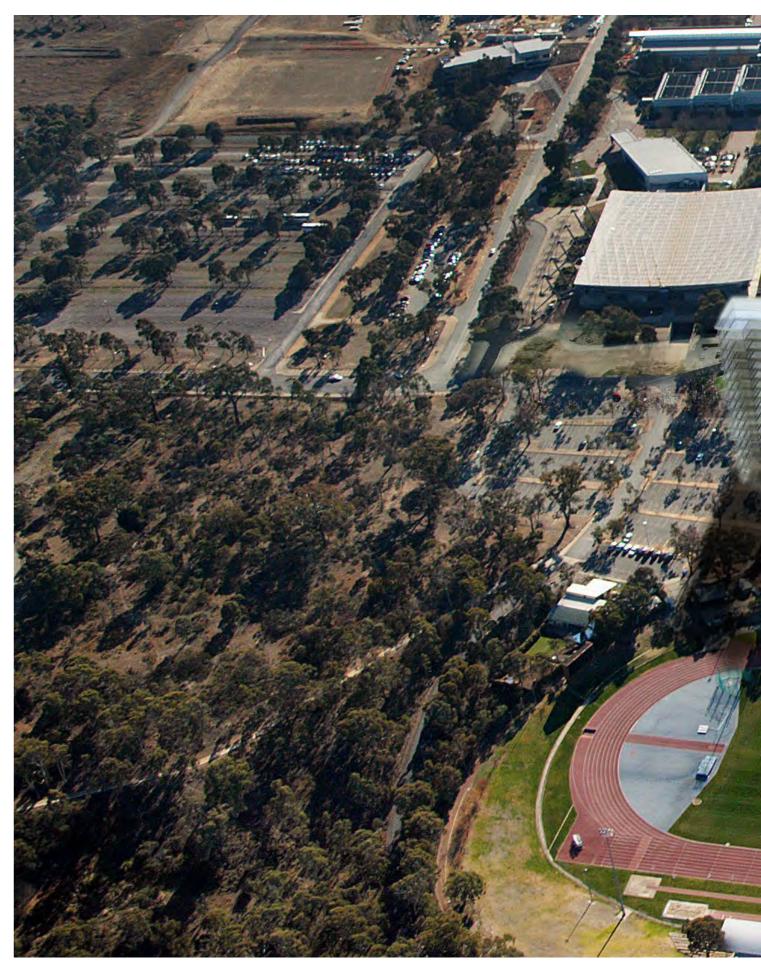
As outlined in the report a number of options have been developed for this report following client instruction and stakeholder input. These options provide various master plan solutions from the minimal required to achieve compliance with the relevant sporting codes and terms of reference to an option which endeavours to establish an integrated sporting and entertainment "place" (the Sporting Capital) right in the heart of elite sport in Australia.

The ACT Government has an opportunity to establish a defining sports precinct at Canberra Stadium, while returning a valuable community asset back to the community at Manuka Oval.

Currently the sports "meeting places" are inadequate in terms of both spectator and player experience and also in terms of commercial viability due to the fact that they have not kept pace with the expectations of the public or private sector. This report, to be read in conjuction with the business cases, has endeavoured to set out a number of strategies for redefining Canberra's sporting and entertainment "meeting places" and indicates possible ways forward for the exciting years ahead.

The options provide either immediate opportunities to provide modern standards or long term aspirational goals for the entire city and Territory to embrace. All the options have their challenges. It should be noted that, although the individual options assessed within this report achieve final outcomes (considered as part of the business case) they are made up of a variety of smaller packages of works, which the ACT Government may wish to develop in a timely fashion. For example in option Cs1 at Canberra Stadium the team facilities and perimeter fencing may be considered necessary to progress first, and retain the existing corporate facilities. At Manuka Oval in option Mo1 it may be decided that the new media facilities to the North and works to the new perimter plaza are to be developed first. These decisions can be accommodated within each of the proposed options. However careful consideration should be given by the ACT Government and the design team as to the potential for abortive works, dependant on the adopted future legacy options.

The ACT Government is in a unique situation where there is a real opportunity to embrace the idea of a truly world class sporting centre of excellence with the location of all the major professional sporting codes to one location at the Canberra Stadium site. This report does not recommend a single course of action, but merely suggests measures to achieve certain goals. From the basic requirements of aligning the current venues with modern minimum standards both in the sports and the spectator facilities all the way to really promoting Canberra as a place to come and be, to position itself in the global sporting world as a leader in innovation, not only in terms of sporting prowess, but also as a leader in sustainability. This is an opportunity for Australia's National Capital to set a new standard.











DISCLAIMER

Populous do not take any responsibility for the veracity of the cost or program information contained herein and advise the TVE that all costs and programming decisions associated with the adopted design scenario should be validated by a cost consultant and project manager appointed by the TVE should this report be used as justification for a particular development scenario.

The impact of ground conditions on any master plan options can be substantial and as such, we strongly recommend that geotechnical surveys of the site are carried out prior to finalisation of the assessment process to avoid any substantial cost risks associated with adverse ground conditions.

The design team has made every effort to incorporate the flexibility in the design of the generic 26,500 capacity stadium in order to accommodate the FIFA World Cup overlay requirements. However it should be noted that the generic stadium footprint has been developed around the main sports users, being Rugby Union, Rugby League and an 'A' League football (soccer) team, which have less onerous media and advertising requirements than a FIFA World Cup. Further analysis will be required in the next design phases to understand the impact of these requirements.

It should also be noted, as stated earlier in the report, that the maximum FIFA overlay gross capacity for the stadium may vary, dependent on the design of the stadium, by as much as 1,500 from approximately 43,500 to 45,000 people. The net capacity required by FIFA is set at 40,000 people. This number is exclusive of media and VIP requirements. The reduction in the gross capacity from 45,000 to 43,500 is possible through the way the generic stadium can be designed with the flexibility to accommodate the number and location of the media and VIPs involved in and invited to a FIFA World Cup, without impacting on the seating bowl capacity. Therefore it is possible to achieve the FIFA specified 40,000 net capacity, based on a gross capacity of 43,500, rather than 45,000. However this should be further analysed with the design team in the next design phases if this option is adopted by the ACT Government.

ACKNOWLEDGEMENTS

Images and text are from a variety of sources, being Populous, Manuka Oval website, Canberra Stadium website, Hopkins Architects website, Flickr website and Wikipedia website and publications such as the Guide to Safety at Sports Grounds (fifth edition), the relevant sporting codes minimum standards and New Tent Architecture.

























































































































































































































































Sch 2.2(a)(xi)



Sch 2.2(a)(Xi)

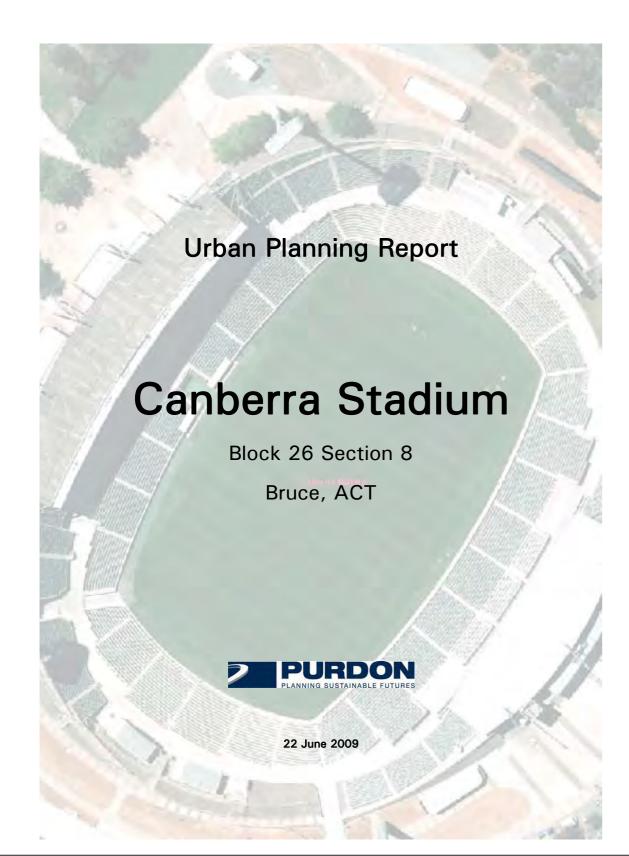






2.0 PLANNING AND HERITAGE

Canberra Stadium 2.1





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REVISION No.	DATE	COMMENT	REVISED BY	CHECKED BY
0	040309	Initial Template	SC	
1	120309	Collation of data	TF	
2	120309	1 st Working draft	KC	
3	180409	Further Edits	TF	
4	300409	Review	KC	RP
5	120509	Further Review	KC	RP
6	250509	Working Draft - Issue to Client	TF	
7	170609	Final Report	TF	
8	210609	Final Report QA		RP

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Canberra Stadium – Urban Planning Context 2



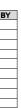






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nberra Stadium Option 2 (Cs2)	11
nberra Stadium Option 3 (Cs3)	
nberra Stadium Option 4 (Cs4)	23
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1 INTRODUCTION

Canberra Stadium and Manuka Oval are two of the major sporting facilities in the ACT. The authority responsible for management of each stadium, Territory Venues and Events Corporation (TVE), has identified the need to upgrade and expand both facilities. Business cases and master plans are being prepared for both facilities to ensure that the stadia meet the future needs of the ACT.

Four master plan options have been identified for the Canberra Stadium site in Bruce.

The purpose of this report is twofold, namely to:

- outline the urban planning provisions applying to the subject site and adjacent areas that provide a context for the Canberra Stadium master plan; and
- review the implications of the proposed development options in terms of statutory planning requirements.

Canberra Stadium (the site) is located on the southern part of Block 26 Section 8 Bruce. Block 26 Section 8 is 71.4 ha of which the Canberra Stadium site occupies approximately18.3 ha. However, the larger area being considered as part of the Master Plan also includes Blocks 36 & 41 Section 8 plus Block 2 Section 3 Bruce. Figures 1 to 3 refer.

The land is currently leased to the Australian Sports Commission (ASC) and sub-leased by the ACT government (operated by ACT TVE, a division of the Department of Territory & Municipal Services).

The site is situated in the suburb of Bruce centrally located in the North of Canberra close to Belconnen Town Centre and the city centre and to the main transport routes. The site occupies the southern part of Section 8. There are undeveloped areas within the site around the boundary of the stadium. Section 8 includes all of the Australian Institute of Sport (AIS) facilities.

The site is bounded by Gungahlin Drive to the east and Masterman Street to the west and is accessible by road from Ginninderra Drive (north) and Battye Street (west).

The surrounding land uses include other sporting facilities (AIS; Raiders training ground), education (CIT: Radford College; University of Canberra), medical (Calvary Hospital), residential (north and south Bruce), and public open space (Bruce Ridge). The Belconnen Town Centre including Westfield Plaza and Lake Ginninderra are within 3km of the site.

Canberra Stadium –Urban Planning Context 3 Canberra Stadium – Urban Planning Context 1









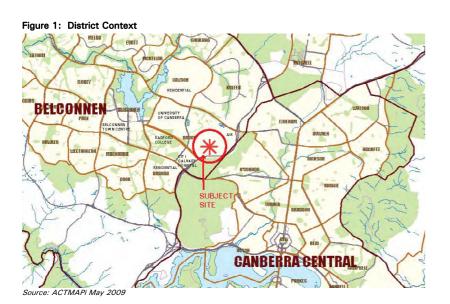


Figure 2: Location



Canberra Stadium –Urban Planning Context 2





Source: ACTMAPi May 2009

2 PLANNING CONTEXT

The two statutory plans influencing the future development of the city, including the subject site are the National Capital Plan and the Territory Plan. The principal statutory $\ensuremath{\mathsf{planning}}$ controls are exercised through the Planning and Development Act 2007 and the Territory Plan 2008 administered by the ACT Planning and Land Authority (ACTPLA). The Canberra Spatial Plan (2004) provides strategic direction for future development in the Territory.

2.1 National Capital Plan

The site of the Canberra Stadium is currently National Land and will remain so until agreement is reached regarding land transfers between the Commonwealth and the Territory. The site is not within a *Designated Area* in the National Capital Plan.

The National Capital Plan (NCP), which is administered by the National Capital Authority (NCA), provides that development proposals for National Land which is not Designated Land are to conform to a Development Control Plan which is to reflect the relevant provisions of the Territory Plan and is agreed by the NCA. ACTPLA is the consent authority but any development proposals on National Land are to be referred to the NCA which will assess that they are not inconsistent with the NCP.

Redevelopment of the Canberra Stadium to enhance the provision of sporting facilities and ancillary uses would not be inconsistent with the National Capital Plan.

Canberra Stadium – Urban Planning Context 3







2.2 Canberra Spatial Plan

The Canberra Spatial Plan (2004) outlines a strategic direction to achieve the social, environmental and economic sustainability of Canberra as part of The Canberra Plan. The key principles underpinning the Canberra Spatial Plan are to:

- Contain growth within 15kms of the city centre to reduce sprawl and protect biodiversity.
- Increase the number of residential dwellings within 7.5kms of the city centre to • provide a wider range of housing close to employment and services.
- Locate new residential areas close to town centres and transport routes.
- Provide good travel connections to minimise journey times and trip length.

Canberra Stadium is within the 7.5km radius around the city centre. An expansion of sporting facilities at Canberra Stadium is consistent with the principles of the Spatial Plan.

Redevelopment of the Canberra Stadium to enhance the provision of sporting facilities and ancillary uses would not be inconsistent with the Canberra Spatial Plan

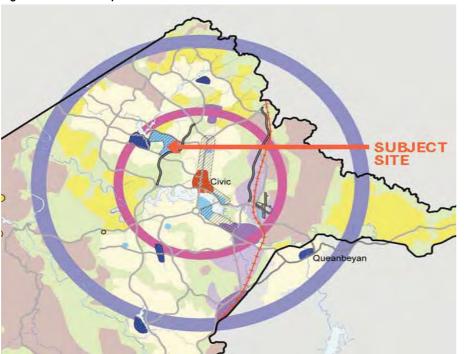


Figure 4: Canberra Spatial Plan

2.3 Territory Plan

The Territory Plan is administered by the ACT Planning and Land Authority (ACTPLA) under the Planning and Land Development Act 2007. The Territory Plan provides for permissible uses within zones and urban planning controls which are established by way of a Development Code for each land use zone. In addition, the Territory Plan includes a number of General Codes, which outline requirements for particular aspects of development (e.g. Parking and Vehicular Access Code) and in some cases Precinct Codes, which prescribe requirements for a particular geographic area.

The subject site falls under the Community Facility Zone in the Territory Plan, and the Community Facility Development Code outlines the relevant planning, design and environmental controls that apply to development.

There are no Precinct Codes applicable to the subject site.

In addition several General Codes apply to the site, including:

- Parking and Vehicular Access General Code;
- Access and Mobility General Code; .
- Crime Prevention through Environmental Design; and
- Community and Recreation Facilities Location Guidelines.

Relevant matters raised in these Codes have to be addressed as part of a development application (DA) for works on site.

2.3.1 Zone Objectives

The site is within a CFZ Community Facilities Zone (Refer Figure 5).

- The objectives of the Community Facility Zone are to: a) Ensure that adequate sites are available to meet community needs for community services and facilities in appropriate and convenient locations, close to public transport routes and other community facilities
- b) Protect community facility land from competition from other land uses
 - c) Enable the efficient use of land by allowing the grouping, co-location and multi-use
 - of community facilities d) Provide sites for adaptable and affordable housing for people in need of supportive
 - housing and residential care
 - adverse impacts due to the operation of community facilities, such as traffic, parking, noise, or loss of privacy

Redevelopment of the Canberra Stadium to enhance the provision of sporting facilities and ancillary uses would be consistent with the Community Facility Zone objectives of the Territory Plan.

Canberra Stadium – Urban Planning Context 4 Canberra Stadium – Urban Planning Context 5

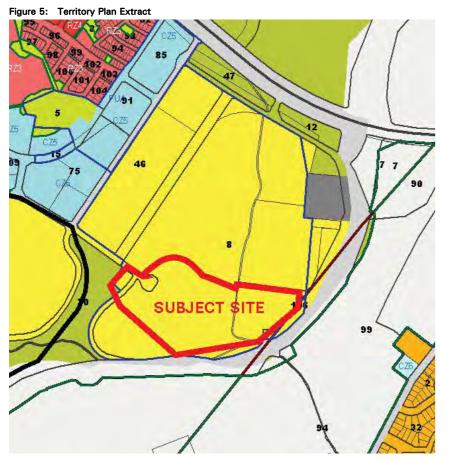




e) Safeguard the amenity of surrounding residential areas against unacceptable







Legend:

Designated Areas	Commercial - CZ2 - Business
Residential - RZ1 - Suburban	Commercial - CZ3 - Services
Residential - RZ2 - Suburban Core	Commercial - CZ4 - Local Centre
Residential - RZ3 - Urban Residential	Commercial - CZ5 - Mixed Use
Residential - RZ4 - Medium Density Residential	Commercial - CZ6 - Leisure and Accommodation
Residential - RZ5 - High Density Residential	Urban Parks & Recreation - PRZ1 - Urban Open Spaces
Community Facilities	Urban Parks & Recreation - PRZ2 - Restricted Access Recreatio
Commercial - CZ1 - Core	
Source: Territory Plan, ACTPLA May 2009	

2.3.2 Permissible Development

In general, the following uses are permissible under the Territory Plan for the subject site:

- Business agency *
- Child care centre
- Community activity centre
- Community theatre
- Consolidation
- . Cultural facility
- Educational establishment
- Emergency services facility *
- Funeral parlour *
- Health facility
- Hospital

Public agency * Religious associated use .

Place of worship

Indoor recreation facility *

Outdoor recreation facility *

Office *

Parkland

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- Residential care accommodation .
- Retirement complex
- Subdivision •
- Supportive housing *

NOTE: Uses marked * are only permitted subject to special land use restrictions. In most cases this limits such uses to being associated with another permissible use e.g. an 'office' associated with a recreation facility.

A number of land uses are prohibited developments under the Community Facility Zone unless considered as 'ancillary' to the main land use. Under the Territory Plan 'ancillary' means associated with and directly related to, but incidental and subordinate to the predominant use.

Some of the key prohibited uses include:

- Car park Playing field Club Public transport facility COMMERCIAL ACCOMMODATION USE Restaurant . Drink establishment Road . Financial establishment • Serviced apartment Multi-unit housing

 - SHOP

Note: The terms in CAPITAL letters are "umbrella" terms, meaning that they are a collective title for a number of other land uses (e.g. Commercial Accommodation Use includes hotel; motel; serviced apartments, guest house etc, all of which also have their own definition).

There are a number of circumstances where prohibited uses may be permissible. For example: a development that is listed as prohibited may be permissible under the "Impact Track" if it is permitted under the existing lease (although an EIS would be required). The Canberra Stadium lease allows for a broad range of uses (some of which are not defined in the Territory Plan) such as: Sport, sports administration, sports training, ancillary accommodation, ancillary retailing, ancillary restaurant, concerts, exhibitions, community events (and such other purposes as may be approved by the Minister).

In addition, the definitions of individual terms need to be examined to show the full extent of potential uses. (e.g. Community activity centre is a permissible use and means the use of land by a public authority or a body of persons associated for the purpose of providing for the social well being of the community). This possibly could permit a very broad range of land uses.

A proposal to widen the range of permitted uses under the CFZ may require a formal variation to the Territory Plan.

Canberra Stadium – Urban Planning Context 6

Canberra Stadium – Urban Planning Context 7







2.3.3 Community Facility Zone Development Code Provisions

The Code is divided into two parts: general development controls and site specific controls. There are no site specific controls that apply to the subject site.

The general the development code is divided into a number of *elements* that describe the matters that have to be considered as part of a development application. Each element in turn is divided into "Intents", "Rules", and "Criteria". The elements include:

Amenity

Restrictions on use

Built form

.

- . Building and site controls
 - Environment Services
- Parking and site access

2.3.4 Development Assessment

Any proposed new buildings, changes to the current lease and/or significant change to the external facade of structures will trigger the requirement for a development application (DA) under the legislation. A development application is assessed by ACTPLA in either of three assessment tracks being Code, Merit or Impact track, depending on its characteristics. There are no 'Code' track development proposals under the Community Facility Zone so all applications would be either Merit or Impact track applications. These are described below.

Merit Track Assessment

Development Applications considered within the Merit assessment track may either comply with the rules of the relevant Development Code or the applicable criteria for the particular element of the Code, unless a rule is mandatory. Where it is proposed to meet the criteria, the onus is on the applicant to demonstrate, by supporting plans and written documentation, that the proposed development satisfies the criteria and therefore the intent of the element.

Under the Merit Track, development applications have to be publicly notified and address several matters including:

- the zone objectives:
- the suitability of the land for the proposed use;
- representations received during the public notification period; and
- the probable impact of the development, including the nature, extent and significance of probable environmental impacts

These matters would have to be addressed in preparing a development application for possible changes to the Canberra Stadium.

Most Development Applications lodged with ACTPLA are considered in the merit track.

Impact Tract Assessment

Where a development proposal cannot be considered in the Merit track (and is not Exempt development), the application would need to be considered under the Impact track. This assessment track requires a significantly greater level of environment assessment and statutory processes than Merit track applications.

Schedule 4 of the Planning and Development Act 2007 identifies development proposals that require an Environmental Impact Statement to be submitted before a DA is submitted and for this reason are considered within the impact track.

8

Canberra Stadium –Urban Planning Context

Schedule 4 states that any proposal for the construction of a permanent public entertainment or sporting venue will require impact tract assessment if the venue will hold:

- a) at least 2,000 people or
- b) less than 2,000 people and be within 1.5 km of a residential zone.

Further, any proposal for a linear transport system corridor including construction of new corridor or realignment outside an existing corridor for different transport modes including a major road or bus way, and that is likely to have a significant impact on air quality or ambient noise or cause a significant level of vibration, significant visual intrusion or significant impact on a residential area would also be subject to impact track assessment.

While some clarification would be required when detailed proposals were being developed. proposals to increase the Stadium seating or build a new stadium would generate an EIS since the facility accommodates more than 2,000 people and is within 1.5km of a residential zone. Similarly if a transit way or alterations to the arterial road network were to be included in any Master Plan it may also require an EIS.

As part of the EIS process the proponent is required to request a Scoping Document from ACTPLA, followed by preparation and lodgement of a draft EIS, notification of the draft EIS, consideration of comments and determination by the Minister or delegate. Following this process a DA can be lodged and then assessed by ACTPLA.

Under Section 211 of the Act, the Minister for Planning may exempt a development proposal from a requirement to include an EIS if satisfied that the expected environmental impact of a development proposal has already been sufficiently addressed by another study, irrespective of whether or not the study relates to the particular development proposal. Arguably the master planning process could provide a basis from which to seek an exemption from the requirement for an EIS.

2.4 Heritage

The ACT Heritage Register lists buildings and/or sites which are either 'registered' as a Heritage item (notated as '3' on the heritage register) or buildings and/or sites which are 'nominated' on the heritage register (notated as '1' on the register). Development proposals involving buildings and/or sites which are registered must address the specific heritage citation prepared as part of the registration process. Whereas buildings which are nominated to the register have not been the subject of the same level of consideration by the ACT Heritage Council.

Canberra Stadium is currently *nominated* for heritage status. Therefore, it is likely that ACT heritage would require any development application to include an assessment of the heritage significance to be carried out as part of the analysis for the site.

2.5 Summary

Several planning and other provisions could affect the proposed master plan for the site and could be triggered in the event that a DA is to be lodged. The main provisions that would apply to the proposed site include:

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- Control Plan would need to be prepared and agreed by the National Capital Authority. All subsequent development must be consistent with this Plan.
- require a "Statement against Criteria" based on the requirements of the Community Facilities Development Code.
- An assessment of environmental effects would be required for development proposals that fall within the 'merit' track. In undertaking the site assessment

Canberra Stadium – Urban Planning Context





If the site continues to be National Land (i.e. is not degazetted), a Development Any development application lodged in the Merit track for assessment would





and detailed site investigations it would be desirable to consult ACTPLA to ensure that all relevant matters are considered.

- The Assessment of Environmental Effects would have to address various issues including possible impact of or on:
- traffic generation, movement and parking
- existing public transport services
- likely accessibility to facilities and services for users and customers
- the amenity of the surrounding area
- the surrounding landscape
- the environment

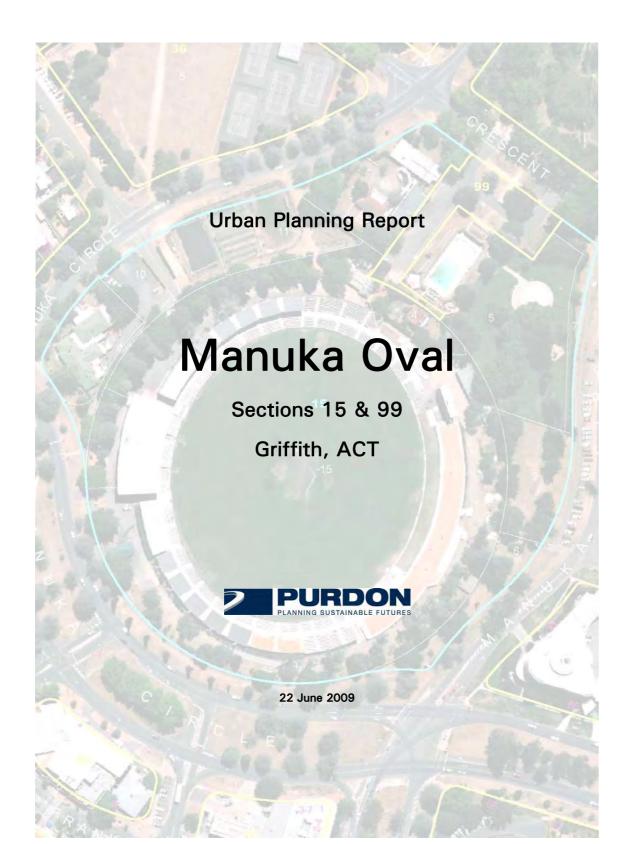
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- the existing character of Bruce
- the character and appearance of any building, area of architectural, historic, aesthetic or scientific interest, or otherwise of special cultural or heritage value
- noise and night light spillage from the proposed facilities
- existing services including watercourses
- drainage and water quality
- amenity of surrounding land uses, including air quality overshadowing, privacy and the level of wind turbulence generated
- public health and safety including crime prevention
- existing significant trees and impact of potential demolition and redevelopment on site.
- Proposals to increase the Stadium seating and/or a construct a transit station, are likely to trigger a requirement to prepare an Environmental Impact Statement before submitting a DA. The specific requirements for an EIS would have to be determined by ACTPLA through a 'Scoping Document' process prior to preparation of the EIS.
- The Community Facility Zone Code applying to the site includes a mandatory rule that subdivision is only permitted where it is part of a development application for another assessable development and/or it is demonstrated that any residual block can accommodate another assessable development designed in accordance with the relevant section of this Code.
- Some potential development (such as a hotel or commercial offices) would only be consistent with Community Facility Zoning only if they are ancillary to the main use of the site.
- It may be possible to seek a Variation to the Territory Plan to permit a wider range of uses on the site. This issue would have to be discussed with ACTPLA.
- Within the Community Facility Zone, height restrictions only apply to development on land that is within 30 metres of a residential zone. In these areas the maximum height is 2 storeys. This will not be problematic for development on this site.
- Many of the trees on the site will be defined as protected trees under the relevant legislation. If it is proposed to remove any of these any development application would have to be accompanied by a Tree Management Plan. The DA may also have to demonstrate that all possible options to retain the trees were examined and were not feasible.
- A traffic and parking management plan will be required by the consent authorities to assess the impact of the proposed master plan on the surrounding context.
- The heritage nomination applying to the site requires further investigated.

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2.2 Manuka Oval



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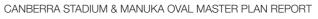






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Attachments

Attachment A: Heritage Citations

WORKING DRAFT REPORT



1 INTRODUCTION

Manuka Oval and Canberra Stadium are two of the major sporting facilities in the ACT. The authority responsible for management of each stadium, Territory Venues and Events Corporation (TVE), has identified the need to upgrade and expand both facilities. Business cases and master plans are being prepared for both facilities to ensure that the stadia meet the future needs of the ACT.

Three master plan options have been identified for the Manuka Oval.

The purpose of this report is twofold namely to:

- outline the urban planning provisions applying to the subject site and adjacent areas that provide a context for the Manuka Oval master plan; and
- review the implications of the proposed development options in terms of statutory planning requirements.

Manuka Oval is located in the northern corner of Griffith in Central Canberra, adjacent to Kingston, Barton and Forrest (Figure 1).

The master plans apply to the area bounded by Manuka Circle referred to in this document as the Manuka Oval precinct. The precinct includes several separate parcels of land, as follows (refer Figure 2):

•	Playing Oval	Block 15 Section 15
•	Bradman Stand	Block 14 Section 15
•	Cricket practice nets	Part Block 10 and 11 Section 15
•	Car park	Part Block 10 Section 15
•	Manuka Pool	Block 5 Section 15
•	Canberra Services Club	Block 1 Section 15
•	Caretakers Cottage	Block 4 Section 15
•	Vacant	Blocks 2, 6 & 7 Section 15
•	Photo Access, Art Sound studios	Block 16 Section 15
•	Northern access	Block 1 Section 99
e sub	ject site (Sections 15 and 99) has an are	a of approximately 4.8 ha.

The su

Manuka Oval and associated activities occupy the majority of the site. Community arts facilities and the Service Club are located on the western side of the Oval and the Pool is located to the north east.

The precinct is bounded by Manuka Circle. The surrounding land uses include a mixture of housing, education (Telopea Park School), religious uses (St Christopher's; St Pauls; Baptist Church), and public open space (Telopea Park). Manuka Shops are located within 100 metres of the site. Kingston shops are located within walking distance to the east of the site. The site is close to Parliament House and the Parliamentary Triangle, and Civic and Woden Town Centre are within 4-5 km of the site.

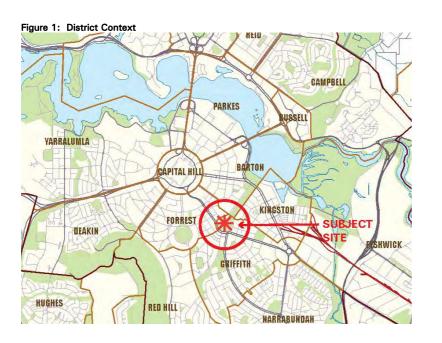
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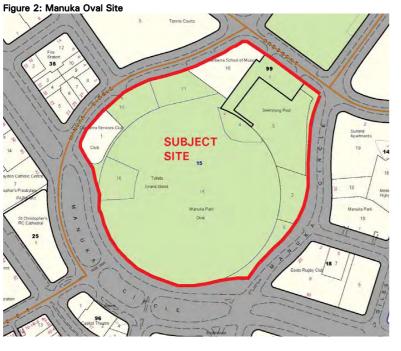
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2 PLANNING CONTEXT

The ACT has a twofold planning system administered by both the Commonwealth through the National Capital Authority (NCA) and the Territory through the ACT planning and Land Authority (ACTPLA). The key planning instruments administered by the NCA include a planning strategy (The Griffin Legacy) and a statutory plan (The National Capital Plan). The Territory administers a planning strategy (The Spatial Plan) and a statutory plan (The Territory Plan). These are described below.

2.1 National Capital Plan

Manuka Oval fronts Canberra Avenue, a Main Avenue in the National Capital Plan (NCP) and also part of Griffin's original plan. Main Avenues are identified as 'Areas of Special National Concern' and are 'Designated Areas' in the NCP.

Development on land fronting Main Avenues is required to conform to a Development Control Plan that is approved by the National Capital Authority (NCA). Development Control Plans for this part of Canberra Avenue aim to protect the integrity of the Main Avenues as approaches to the Parliamentary Zone and ensure that the setting, buildings and purposes of development enhance that function.

The general planning provisions for Main Avenues aim to establish and enhance the identity of the approaches to the Central National Area as roads of national significance. They also provide for buildings fronting roads to enhance the National Capital function and for the roads to serve as corridors for a possible future inter-town public transport system.

The objectives of the Main Avenues are:

- To create an identifiable approach, which increases in formality as the Central National Area is neared, and which clearly signifies the symbolic and functional roles of the National Capital
- Buildings which enhance the approach route function should front these . roadways
- The main avenues are to be enhanced in their formal character and maintained to the highest standards.

There are requirements for building height and length of building line along Canberra Avenue. Development Controls Plans must incorporate the following where Main Avenues are the final approaches to the Parliamentary Zone:

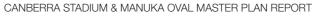
- Building height controls, to ensure that buildings are at least 3 storeys in height
- Building lines to be 10 metres from the lease boundary unless specifically shown . otherwise in an agreed Development Control Plan. The area in front of the building line is to be landscaped, and exclusive of parking
- For main Avenues having predominantly landscaped frontages, generally provide for buildings to not exceed the height of the established tree canopy (typically 3-4 storevs)
- Consider parking, vehicle access, and the traffic impacts of development. Access from and to the Avenues shall be permitted where practicable and where traffic safety will not be affected adversely.

An expansion of sporting and other facilities at the Manuka Oval Site is not inconsistent with the principles of the National Capital Plan.

Manuka Oval Planning Study











2.2 Griffin Legacy

The Griffin Legacy, produced by the National Capital Authority in 2004, responds to and furthers the principles of the Griffin Plan within the National Capital Area. The Griffin Legacy project assesses the ongoing relevance, vitality and potential of the original design for the National Capital in the 21st century.

The relevant principles in the Griffin Plan are to:

- Emphasise the intended role of the main avenues as "primary corridors for public transport and dense mixed use development with the vibrancy elegance and pedestrian character of the boulevard"
- Improve the urban design and streetscape qualities of the main avenues as approaches to the Central National Area.

An expansion of sporting and other facilities at the Manuka Oval Site is not inconsistent with the principles of the Griffin Legacy.

2.3 Spatial Plan

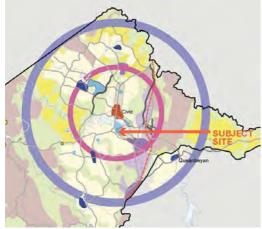
The Canberra Spatial Plan (2004) outlines a strategic direction to achieve the social, environmental and economic sustainability of Canberra as part of The Canberra Plan. Figure 3 refers.

The key principles underpinning The Canberra Spatial Plan are to:

- . Contain growth within 15kms of the city centre to reduce sprawl and protect biodiversity.
- Increase the number of homes within 7.5kms of the city centre to provide a wider range of housing close to employment and services.
- Locate new residential areas close to town centres and transport routes.
- Provide good travel connections to minimise journey times and trip length.

Manuka Oval is within the 7.5 km radius around the city centre. An expansion of sporting and other facilities at the Manuka Oval Site is not inconsistent with the principles of the Spatial Plan.

Figure 3: Spatial Plan



Manuka Oval Planning Study



2.4 Territory Plan

The Territory Plan is administered by the ACT Planning and Land Authority (ACTPLA) under the Planning and Land Development Act 2007. The Territory Plan provides for permissible uses within zones and urban planning controls which are established by way of a Development Code for each land use zone. In addition, the Territory Plan includes a number of General Codes, which outline requirements for particular aspects of development (e.g. Parking and Vehicular Access Code) and in some cases Precinct Codes, which prescribe requirements for a particular geographic area.

The site falls within a number of zones under the Territory Plan (refer Figure 4). These are summarised in Table 1 and discussed below.

T - 1 - 1 - 1		0.1		
Iable	1:	Site	and	Zoninas

arks and Recreation - PRZ1 - Urban Open Spac				
arks and Recreation - PRZ2 - Restricted Access				
arks and Recreation - PRZ2 - Restricted Access				
nity Facility Zone CFZ				
cial - CZ6 - Leisure and Accommodation Zone.				

The applicable Development Codes (Parks and Recreation Zones Development Code, Community Facility Zone Development Code and Leisure and Accommodation Zone Development Code) outline the relevant planning, design and environmental controls that apply to development.

There are no Precinct Codes applicable to the subject site.

In addition several General Codes apply to the site, including:

- Parking and Vehicular Access General Code;
- Access and Mobility General Code;
- Crime Prevention through Environmental Design; and
- Community and Recreation Facilities Location Guidelines.

Relevant matters raised in these Codes have to be addressed as part of a development application (DA) for works on site.

Where a proponent seeks to use the land for a purpose inconsistent with the lease and the territory Plan, a variation to the Territory Plan (rezoning) would be required. This process requires justification by a planning report or Environmental Impact Statement and would generally be subject to public notification and consideration by the ACT Legislative Assembly.

An expansion of sporting and other facilities at the Manuka Oval Site is not inconsistent with the objectives of the Territory Plan.

Manuka Oval Planning Study

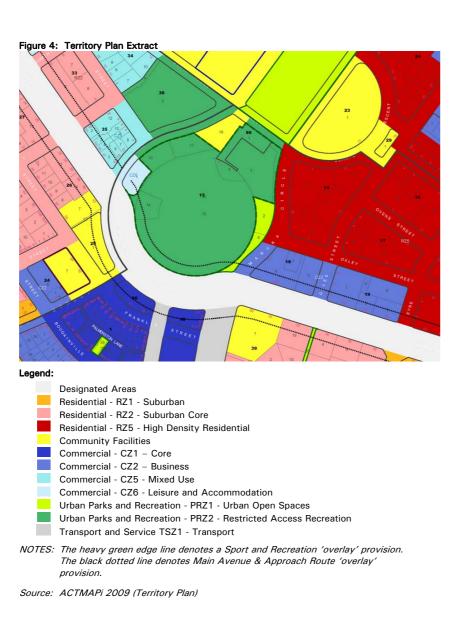


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Recreation.
Recreation.





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2.4.1 Zone Objectives

Block 2 and 6 of Section 15 are within the Urban Parks and Recreation - PRZ1 - Urban Open Spaces. The objectives for this zone are to:

- Provide an appropriate quality, quantity and distribution of parks and open spaces a) that will contribute to the recreational and social needs of the community
- b) Establish a variety of settings that will support a range of recreational and leisure activities as well as protect flora and fauna habitats and corridors, natural and cultural features and landscape character
- c) Allow for storm water drainage and the protection of water quality, stream flows and stream environs in a sustainable, environmentally responsible manner and which provides opportunities for the community to interact with and interpret the natural environment
- d) Allow for ancillary uses that support the care, management and enjoyment of these open spaces including park maintenance depots, small-scale community activity centres
- e) Ensure that development does not unacceptable affect the landscape or scenic quality of the area, adequacy of open space for other purposes, access to open space, or amenity of adjoining residents
- f) Provide for integrated land and water planning and management.

Block 1 Section 99 and Blocks 4,5,10,11,14,15 of Section 15 are within the Urban Parks and Recreation - PRZ2 - Restricted Access Recreation. The objectives for this zone are to:

- Accommodate facilities that will meet the recreational needs and demands of the a) community and are appropriately located for the potential users of the facility
- b) Make provision for a range of sport and recreation facilities, whether in public or private ownership that may be commercial in nature
- c) Ensure the amenity of adjoining development is not unacceptable affected by the operation of sport and recreation facilities, particularly in terms of noise, traffic, parking, privacy and outside lighting at night
- d) Design and landscaping of development is to be compatible with the surrounding landscape.

Block 16 of Section 15 is within the Community Facility Zone CFZ. The objectives of the CFZ Community Facility zone are to:

- Ensure that adequate sites are available to meet community needs for community a) services and facilities in appropriate and convenient locations, close to public transport routes and other community facilities
- b) Protect community facility land from competition from other land uses
- c) Enable the efficient use of land by allowing the grouping, co-location and multiuse of community facilities

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- d) Provide sites for adaptable and affordable housing for people in need of supportive housing and residential care
- e) Safeguard the amenity of surrounding residential areas against unacceptable adverse impacts due to the operation of community facilities, such as traffic, parking, noise, or loss of privacy.

Block 1 Section 15 is within the Commercial - CZ6 - Leisure and Accommodation Zone. The objectives of this zone are to:

- a) Provide for the development of entertainment, accommodation and leisure facilities for residents of and visitors to the ACT and surrounding region
- b) Protect leisure and accommodation uses from competition from higher order commercial uses, and encourage activities that enhance the region's economic diversity and employment prospects
- c) Ensure leisure and accommodation facilities have convenient access to public transport
- d) Protect the amenity of nearby residential areas, with regard to noise, traffic, parking and privacy
- e) Ensure the location of facilities and their design and landscaping is compatible with environmental values
- f) Ensure that the bulk, scale, size, design and landscaping is compatible with environmental values
- g) Encourage activity at street frontage level and provide an appropriate level of surveillance of the public realm.

2.4.2 Permissible Development

In general, the following uses are permissible under the Territory Plan for the subject site:

Urban Parks and Recreation -PRZ1- Urban Open Spaces Zone:

- Outdoor Recreation Facility Parkland
- Aquatic recreation facility Community activity centre
- Playing field
- Sign
 - Subdivision
- Minor Use

Manuka Oval Planning Study

Municipal Depot

Consolidation

Ancillary use

The key prohibited development for Urban Parks and Recreation -PRZ1- Urban Open Spaces zone includes:

 Club Drink Establishment

.

Demolition

- Indoor recreation facility
- Commercial Accommodation Use .
 - Non-Retail Commercial Use
- Indoor entertainment facility

- Residential use.

 Emergency services facility * Funeral parlour *

 Health facility Hospital

Some of the key prohibited development for the Community Facility Zone include:

Car park

Recreation include:

Ancillary use

Child care centre

Consolidation

Demolition

land use

Club

Car park

Aquatic recreation facility *

Communications facility

Access Recreation include:

Drink Establishment

Business agency *

Child care centre

Consolidation

Cultural facility

Community theatre

Community activity centre

Educational establishment

Community activity centre

- Club
- COMMERCIAL ACCOMMODATION USE

The permissible uses for Commercial - CZ6 - Leisure and Accommodation Zone include:

- Outdoor recreation facility
 - Overnight camping area
- Parkland .
 - Pedestrian Plaza
 - Place of Assembly
 - Public Agency
 - Public Transport Facility Restaurant
 - .
 - Shop .
 - Sign .
 - Subdivision Temporary use .
 - Tourist facility
 - Zoological facility.

Manuka Oval Planning Study

CANBERRA STADIUM & MANUKA OVAL MASTER PLAN REPORT

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The permissible uses for Urban Parks and Recreation - PRZ2 - Restricted Access

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The key prohibited development for Urban Parks and Recreation - PRZ2 - Restricted

- Office * Outdoor recreation facility *
 - Parkland

Indoor recreation facility *

Indoor Recreation facility

Outdoor recreation facility

Commercial Accommodation Use

Non-Retail Commercial Use.

Minor use

Parkland

Playing field

Subdivision

Temporary Use

- Place of worship
- Public agency *

Playing field

Road

Restaurant

- Religious associated use
- Residential care accommodation
- . Retirement complex

Public transport facility

- Subdivision
- Supportive housing.*

- Drink establishment
- Financial establishment
- Multi-unit housing

Serviced apartment SHOP

Ancillary use Minor Use

- Aquatic recreation facility
- Car park
- Caravan park/camping ground
- Club
- Commercial Accommodation Use Community Use
- Consolidation
- Craft Workshop
- . Demolition
- Drink Establishment
- Drive-in Cinema . .
- Group or organised camp
- Indoor entertainment facility Indoor recreation facility

Temporary Use.







The key prohibited development for Commercial - CZ6 - Leisure and Accommodation Zone Office include

Residential Use.

NOTES: The terms in CAPITAL letters are "umbrella" terms, meaning that they are a collective title for a number of other land uses (e.g. Commercial Accommodation Use includes hotel; motel; serviced apartments, guest house etc, all of which also have their own definition).

Uses marked * are only permitted subject to special land use restrictions. In most cases this limits such uses to being associated with another permissible use e.g. an 'office' associated with a health facility.

There are a number of circumstances where prohibited uses may be permissible. For example: a development that is listed as prohibited may be permissible under the "Impact Track" if it is permitted under the existing lease (although an EIS would be required).

In addition, the definitions of individual terms need to be examined to show the full extent of potential uses, (e.g. Community activity centre is a permissible use and means the use of land by a public authority or a body of persons associated for the purpose of providing for the social well being of the community). This possibly could permit a very broad range of land uses.

If a development is permissible under the National Capital Plan, but is identified as prohibited development under the Development Table for the specified zone then the development must be assessed under Impact Track. If the proposed use is not listed in the Development Tables then it must also be assessed under the Impact Track

A proposal to widen the range of permissible uses may require a formal variation to the Territory Plan.

2.4.3 Development Code Provisions

As there are a range of zones applying to the site, similarly there are a range of Development Codes applying to each part of the site in respect of the particular zone.

The applicable Development Codes include the Parks and Recreation Zones Development Code, Community Facility Zone Development Code and Leisure and Accommodation Zone Development Code. The Codes are generally divided into three main parts:

- Zone specific controls,
- General Development Controls
- Site Specific Controls

There are no site specific controls that apply to the subject site and therefore this part of the Code is not considered further.

The Zone Specific and General Development Controls within each Code are divided into a number of *elements* that describe the matters that have to be considered as part of a development application. Each element in turn is divided into "Intents", "Rules", and "Criteria". The elements include:

- restrictions on use
- building and site controls
- built form
- parking and site access
- amenity
- environment
- services.

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2.4.4 Development Assessment

Any proposed new buildings, changes to the current lease and/or significant change to the external facade of structures will trigger the requirement for a development application (DA) under the legislation. A development application is assessed by ACTPLA in either of three assessment tracks being Code, Merit or Impact track, depending on its characteristics. There are no 'Code' track development proposals under any of the zones applying to the site so all applications would be either Merit or Impact track applications. These are described below.

Merit Track Assessment

Development Applications considered within the Merit Track may either comply with the rules of the relevant Development Code or the applicable criteria for the particular element of the Code, unless a rule is mandatory. Where it is proposed to meet the criteria, the onus is on the applicant to demonstrate, by supporting plans and written documentation, that the proposed development satisfies the criteria and therefore the intent of the element

Under the Merit Track, development applications have to be publicly notified and address several matters including:

- the zone objectives
- the suitability of the land for the proposed use
- representations received during the public notification period
- the probable impact of the development, including the nature, extent and significance of probable environmental impacts
- a plan of management where the land is public land i.e. Urban Parks and Recreation PRZ1 - Urban Open Space.

Section 315 of the Act prescribes the purposes for which public land may be reserved. The land falls within the "urban open space" reservation category. Section 317 provides for 'management objectives for each of the categories of public land. The management objectives for urban open space are as follows (from Schedule 3 of the Act):

- To provide for public and community use of the area
- To develop the area for public and community use

These above matters would have to be addressed in preparing a Development Application (DA) for possible changes to the Manuka Oval site.

Impact Track Assessment

Where a development proposal cannot be considered in the Merit Track (and is not an Exempt development), the application would need to be considered under the Impact Track. This assessment track requires a significantly greater level of environment assessment and statutory processes than Merit Track applications

Schedule 4 of the Planning and Development Act 2007 identifies development proposals that require an Environmental Impact Statement to be submitted before a DA is submitted and for this reason are considered within the Impact Track.

Schedule 4 states that any proposal for the construction of a permanent public entertainment or sporting venue will require impact tract assessment if the venue will hold:

- a) at least 2,000 people or
- b) less than 2,000 people and be within 1.5 km of a residential zone.

Manuka Oval Planning Study











While some clarification would be required when detailed proposals were being developed, proposals to increase the stadium seating or build a new stadium would generate an EIS since the facility accommodates more than 2,000 people and is within 1.5km of a residential zone.

As part of the EIS process the proponent is required to request a Scoping Document from ACTPLA, followed by preparation and lodgement of a draft EIS, notification of the draft EIS, consideration of comments and determination by the Minister or delegate. Following this process a DA can be lodged and then assessed by ACTPLA.

Under Section 211 of the Act, the Minister for Planning may exempt a development proposal from a requirement to undertake an EIS if satisfied that the expected environmental impact of a development proposal has already been sufficiently addressed by another study, irrespective of whether or not the study relates to the particular development proposal. Arguably the master planning process could provide a basis from which to seek an exemption from the requirement for an EIS.

2.5 Heritage

The ACT Heritage Register lists buildings and/or sites which are either 'registered' as a Heritage item (notated as '3' on the Heritage Register) or buildings and/or sites which are 'nominated' on the Heritage Register (notated as '1' on the register). Development proposals involving buildings and/or sites which are *registered* must address the specific heritage citation prepared as part of the registration process. Buildings or places which are nominated to the Register have not been the subject of the same level of consideration by the ACT Heritage Council, but are still required to be considered in the DA process.

The following sites within the Manuka Oval Precinct are nominated to the Heritage Register

- Block 14 and 15 of Section 15 (Manuka Oval),
- Block 16 of Section 15 (Photo Access) and
- Block 4 of Section 15 (The Caretaker's Cottage).

The following sites within the Manuka Oval Precinct are registered heritage items:

- Block 1 of Section 15 (Canberra Service's Club) and
- Block 5 of Section 15 (Manuka Pool).

The heritage statements for the Canberra Services Club and Manuka Pool are summarised as follows:

Canberra Services Club Features Intrinsic to the Heritage Significance of the Place -The features intrinsic to the heritage significance of the place are.

a) the Canberra Services Club building; and

b) the landscaped setting.

Canberra Services Club Statement of Significance - Canberra Services Club is Canberra's only surviving, purpose-built, wartime services recreation facility. It is historically significant for its association with the provision of hospitality to service personnel by Canberra volunteers during World War II. The building is also directly associated with the then Governor-General's wife, Lady Gowrie, who played a major role in raising finance for construction of the building.

Canberra Services Club Specific Requirements - The significance of the Canberra Services Club is to be retained by conserving the building in its landscape setting.

Manuka Oval Planning Study

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Alteration and additions may be made to the building provided the proposed works reflect the architectural style, scale and finish of the original building and do not adversely affect the heritage values of the place.

Manuka Swimming Pool Features Intrinsic to the Heritage Significance of the Place -The place comprises.

- a) the swimming pool building with its contained pool
- b) the wading pool; and
- c) Associated landscaped grounds comprising spacious lawns, trees and vegetated boundary fencing.

Manuka Swimming Pool Club Statement of Significance - The Manuka Swimming Pool is an important component of the body of 'Federal Capital' style public buildings associated with the establishment of Canberra as the National Capital. The building design is an outstanding architectural achievement, which continues to retain its integrity. Since its completion in 1930, and particularly up to the 1960's, the Pool was an important social focus for the Canberra community. This position continues today through the re-emergence of community activities associated with the Pool.

Manuka Swimming Pool Specific Requirements - In accordance with s54 (1) of the Land (planning and Environment) Act 1991 the following requirements are identified as essential to the conservation of the heritage significance of this place.

The Pool building, pools and grounds are to be conserved and appropriately maintained consistent with their heritage significance.

2.6 Summarv

This report has outlined the planning provisions for the proposed site. Blocks 1,2,4,5,6,7,10,11,14,15,16, Section 15 and Block 1 Section 19 Griffith ACT. These provisions may be indicative of those elements which could impact on the proposed master plan for the site.

The main provisions that would apply to the proposed development the Manuka Oval Site include:

- Any Development Application for sites currently nominated to the heritage register (Manuka Oval, Photo Access, Caretakers Cottage) would require an assessment of the heritage significance to be carried out as part of the analysis for the site. This assessment would need to be considered within the context of the overall Manuka Oval Site and other registered Heritage items.
- Those sites which are registered Heritage Items (Canberra Services Club and Manuka Pool) would require ACT Heritage approval for any development proposal
- The supporting information for a DA would need to include plans of the proposed development, a "Statement against Criteria (which is an assessment of the proposal against the applicable development code" and other relevant codes) and an Assessment of Environmental Effects.
- The Assessment of Environmental Effects would need to address a range of issues including possible impact of or on:
 - traffic generation, movement and parking
 - existing public transport services
 - likely accessibility to facilities and services for users and customers
 - amenity of the surrounding area



POPULOUS

Manuka Oval Planning Study



- impact on the surrounding landscape
- impact on the environment
- visual impact on the main avenues
- impact on the existing character of Griffith and Barton
- impact on the character and appearance of any building
- area of architectural, historic, aesthetic or scientific interest, or otherwise of special cultural or heritage value
- noise and night light spillage from the proposed facilities
- existing services including watercourses, drainage and water quality
- amenity of surrounding land uses, including impacts on air quality
- the level of noise generated
- overshadowing, privacy and the level of wind turbulence generated
- public health and safety including crime prevention
- existing significant trees
- potential demolition and redevelopment on site.
- ACTPLA may also specify additional matters to be addressed.
- Some of the applicable Codes prescribe a mandatory rule that subdivision is only permitted where it is part of a development application for another assessable development and/or it is demonstrated that any residual block can accommodate another assessable development designed in accordance with the relevant section of the Code.
- The National Capital Plan requires buildings along the main Avenues (i.e. Canberra Avenue / Manuka Circle) do not exceed the height of the established tree canopy (typically 3-4 storeys).
- It will be necessary to produce shadow diagrams for future development proposals, in particular for Block 2 and 6 Section 16 Griffith to ensure that development does not overshadow Manuka Oval, Manuka Pool and the surrounding residential area.
- Many of the trees on the site will be defined as protected trees and if it is proposed to remove any of these any development application would have to be accompanied by a Tree Management Plan.
- Any significant redevelopment of Manuka Oval may have to be submitted under Impact Track. If the development is submitted under impact track it would be necessary to undertake an Environmental Impact Statement prior to submitting a DA. However, the Minister for Planning may exempt a development proposal from a requirement to undertake an EIS if satisfied that the expected environmental impact of a development proposal has already been sufficiently addressed by another study.

Attachment A: Heritage Citations





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CANBERRA STADIUM & MANUKA OVAL MASTER PLAN REPORT



42. Manuka Swimming Pool, Griffith [V79]¹

Location

District of Canberra Central, Division of Griffith, Section 15, Block 5 as identified in Figure 42 and indicated on the Territory Plan Map by the Heritage Places Register Overlay H42.

Features Intrinsic To The Heritage Significance Of The Place

The place comprises:

- a) the swimming pool building with its contained pool;
- $b) \quad \text{the wading pool; and} \quad$
- c) associated landscaped grounds comprising spacious lawns, trees and vegetated boundary fencing.

Statement Of Significance

The Manuka Swimming Pool is an important component of the body of 'Federal Capital' style public buildings associated with the establishment of Canberra as the National Capital. The building design is an outstanding architectural achievement, which continues to retain its integrity. Since its completion in 1930, and particularly up to the 1960's, the Pool was an important social focus for the Canberra community. This position continues today through the re-emergence of community activities associated with the Pool.

Specific Requirements

In accordance with s54(1) of the *Land (Planning and Environment) Act 1991* the following requirements are identified as essential to the conservation of the heritage significance of this place. These requirements are prepared to implement the following conservation policy for the place:

The pool building, pools and grounds are to be conserved and appropriately maintained consistent with their heritage significance.

i) Building including alterations and additions

- a) External alterations or additions may be permitted to the existing building, only if it can be demonstrated that the additions or alterations do not detract from the heritage significance of the place.
- b) Minor external alterations and changes may be made to the building where the Heritage Council is satisfied that the proposed works will not adversely affect the heritage significance of the place.
- c) External alterations and additions to the existing building, including alterations to external finishes shall reflect and complement its original architectural style and historical development.
- d) Changes to the pools, internal facades of the buildings, seating, paving and tiles may be permitted only if it can be demonstrated that they do not detract from the heritage significance of the place.
- e) Construction of new buildings and pools in the place shall only be permitted where the Heritage Council is satisfied that any new building would not adversely affect the heritage significance of the place.
- f) The main swimming pool within the internal space of the existing building and the wading pool shall be retained as presently configured.

ii) Demolition

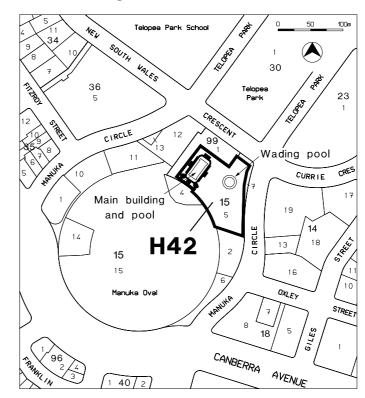
- a) Subject to (ii)(b), demolition of the existing building, internal building facades, pools, seating, paving and tiles shall not be permitted, other than in exceptional circumstances, including circumstances in which the buildings and structures are unsound and beyond economic repair or where there are significant public health and safety reasons to warrant demolition.
- b) The demolition of original fabric shall only be allowed in the context of sympathetic alteration and additions.

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a) The existing setting, with its established landscape character comprising spacious lawns, trees and vegetated boundary fencing, shall be retained.

Figure 42: Manuka Swimming Pool, Griffith





[[]V79: Added to Heritage Places Register 30/10/1998 (Variation Number 79)]



Entry to the ACT Heritage Register

Heritage Act 2004



This document has been prepared by the ACT Heritage Council.

This entry which was previously part of the old heritage places or the old heritage objects registers (as defined in the Heritage Act 2004), as the case may be, is taken to be registered under the Heritage Act 2004.

Conservation Requirements (including Specific Requirements), as defined under the *Heritage Act* 2004, that are contained within this document are taken to be Heritage Guidelines applying to this place or object, as the case may be.

Information restricted under the old heritage places register or old heritage objects register is restricted under the Heritage Act 2004.

Contact: Enquiries:

ACT Heritage Council c/o SecretaryPO Box 144 Lyneham ACT 2602 phone 02 6207 2164fax 02 6207 5715 e-mail heritage@act.gov.au



environment ACT

Helpline: 02 6207 9777 Website : <u>www.cmd.act.gov.au</u> E-mail: <u>EnvironmentACT@act.gov.au</u>



For the purposes of s. 54(1) of the Land (Planning and Environment) Act 1991, a citation for:

CANBERRA SERVICES CLUB, GRIFFITH

has been prepared by the ACT Heritage Council, and included in an interim Heritage Places Register. This is pursuant to the ACT Heritage Council Resolution No. 47/7 made on 31 August 1998.

Date of Gazettal: 30 September 1998

Background material about this place and copies of this citation are available from:

The Secretary ACT Heritage Council PO Box 1036 TUGGERANONG ACT 2901

Telephone: (02) 6207 2166 Facsimile: (02) 6207 2200







INTERIM HERITAGE PLACES REGISTER

CITATION

CANBERRA SERVICES CLUB, GRIFFITH

LOCATION OF PLACE:

Block 1, Section 15, Griffith

FEATURES INTRINSIC TO THE HERITAGE SIGNIFICANCE OF THE PLACE:

The features intrinsic to the heritage significance of the place are:

(a) the Canberra Services Club building; and (b) the landscape setting.

STATEMENT OF SIGNIFICANCE:

Canberra Services Club is Canberra's only surviving, purpose-built, wartime services recreation facility. It is historically significant for its association with the provision of hospitality to service personnel by Canberra volunteers during World War II. The building is also directly associated with the then Governor-General's wife, Lady Gowrie, who played a major role in raising finance for construction of the buildina.

Reflecting the characteristics of Inter-war Georgian Revival architecture, the building and landscape setting is an important element of the Canberra Avenue streetscape in Manuka.

The Club is socially important to the ex-service community for it has provided an important recreational venue for over fifty years in Canberra.

SPECIFIC REQUIREMENTS:

In accordance with s.54 (1) of the Land (Planning and Environment) Act 1991, the following requirements are identified as essential to the conservation of the heritage significance of this place. These requirements are prepared to implement the following conservation policy for the place:

The significance of the Canberra Services Club is to be retained by conserving the building in its landscape setting.

Any action relating to these requirements is development for the purposes of the Act and will require approval prior to undertaking the activity. To undertake development without such approval may be an offence.

(i) Requirements Relating to the Building

(a) Alteration and additions may be made to the building provided the proposed works reflect the architectural style, scale and finish of the original building and do not adversely affect the heritage values of the place.

(b) Demolition of the building shall not be permitted, other than in exceptional circumstances in which the building is structurally unsound and beyond economic repair, or where there are significant public health and safety reasons to warrant demolition. Demolition shall not be permitted unless it can be demonstrated that there is no prudent and feasible alternative. The demolition of original fabric shall only be allowed in the context of approved sympathetic alterations and additions.

(ii) Requirements Relating to the Setting

(a) The existing character of the landscape setting shall be retained.

MANAGEMENT RECOMMENDATIONS:

In assessing this place for the interim Heritage Places Register, the Council recommends that the following actions and activities should be undertaken which will enhance the heritage values of the place. They are made as recommendations and have no legal effect.

A conservation and management plan should be prepared for the place in consultation with the (i) ACT Heritage Council to guide future conservation and maintenance of the place.



2.3 **Planning Imlications**



3 PLANING ADVICE ON IMPLICATIONS OF MASTER PLAN OPTIONS

The following tables provide an assessment of the statutory planning implications of individual development elements in each of the three (3) master plans options for Canberra Stadium.

Many of the elements in the master plan options need further detail / resolution to determine the specific planning implications of the proposal (outlined in the "Planning Implications" column).

3.1 Canberra Stadium Option 1 (Cs1)

Refurbishment of the West Stand of the Existing Stadium and Precinct refer Figure 6.

	Master Plan Element	Planning Implications
1.	Canberra Stadium (Minimum Redevelopment)	 If land is retained as 'National Land', NCA approval is required for any works. Development Control Plan required.
		 If 'de-gazetted' then a DA with ACTPLA is required (Merit or Impact Track – refer Planning Report).
		 DA issues to address: parking, traffic, access, tree loss, and heritage.
		 Permissible within zone, 'Statement against Criteria' required.
		 Traffic study likely required due to patronage increase.
		Conservator for Flora and Fauna approval for any tree removal.
		 Whole site is nominated as a heritage item. DA would be referred to Govt Agencies for comment.
		 May need to be consistent with a Plan of Management (Public Land).
2.	Event plaza	 DA required (Merit Track), assuming some construction (e.g. entry gates, ticketing facility) is proposed.
		 Permissible within zone, 'Statement against Criteria' required.
		 Need to be consistent with National Capital Plan. Development Control Plan required.
		 Pedestrian movement assessment likely (queuing area, bus pick-up waiting facilities).
3.		 DA required (Merit or Impact Track).
	Development near GDE	 More detail required to assess implications
		 Most likely an EIS would be required, or at least a substantial assessment of environmental impacts as part of a 'Statement against Criteria'.
4.	AIS Arena (option)	 DA required (Merit or Impact Track).
		More detail required to assess implications

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Canberra	Stadium	-Urban	Planning	Context	
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			mixed use develo
		•	Sites currently zo
		•	Particular uses ne consistency with
		•	Traffic & parking
		•	Conservator for F tree removal invo
		•	Heritage issues. Agencies for com
6.	Car park	•	DA not likely to b maintenance of e
		•	DA would be requ facilities
		•	Traffic & parking
		•	Conservator for F tree removal invo
		•	Heritage issues. Agencies for com
7.	Outside broadcast	•	Temporary use no permanent struct
8.	Walk of Legends	•	Not likely to requi structures involve
9.	Upgrade player and spectator facilities in the West Stand only	-	No details provide required if externa
10	Minimal upgrade of the lower bowl to increase seating to approx 26,000	•	No details provide required if externa
11	New East and West entrances, entry plazas and ticketing	•	DA required (Meri construction (e.g. proposed.
	C C	•	Permissible withir required
		•	Pedestrian moven pick-up waiting fa
12	More clearly defined front door to Battye Street	•	DA required (Meri construction is pr
		•	Permissible withir required.
13	Improve corporate lounges in the West Stand	•	No details provide required if externa
14	Could be adapted to provide 40,000 capacity with temporary seats	•	No details provide seating, but DA re with EIS required.
15	Remove western lighting towers. New sports	•	DA required. (Mer Permissible withir
		•	

Master Plan Element

Mixed-use development

5.

Canberra Stadium – Urban Planning Context 12





- Territory Plan Variation (rezoning) required for various mixed use development sites. oned Community Facilities.
 - eed to be nominated to determine n Territory Plan.
 - study likely to be required.

Planning Implications

.

- Flora and Fauna approval required if olved.
- DA would be referred to Govt nment.
- be required if proposal only involves existing car park.
- quired for re-arrangement of parking
- study likely to be required.
- Flora and Fauna approval required if olved.
- DA would be referred to Govt nment.
- not likely to require a DA, unless tures involved.
- uire a DA, unless permanent /ed.
- ded on upgrading, but DA likely to be nal changes to facade are involved.
- ded on upgrading, but DA likely to be hal changes to facade are involved.
- erit Track), assuming some g. entry gates, ticketing facility) is
- in zone, 'Statement against Criteria'
- ment assessment (queuing area, bus facilities) likely
- erit Track), assuming some
- proposed.
- nin zone, 'Statement against Criteria'
- ded on upgrading, but DA likely to be
- hal changes to facade are involved. led on measures for temporary
- required (potentially Impact Track
- erit Track).
- in zone, 'Statement against Criteria'





	Master Plan Element	Planning Implications
	lighting on the front edge of new roof to the West Stand to minimise light spill	required.
16	New transport hub improve public transport access and segregate buses from cars	 DA required (Merit or Impact Track). More detail required to assess implications. Most likely an EIS would be required, or at least a substantial assessment of environmental impacts as part of a 'Statement against Criteria'.
17	Create a sense of 'place,' with an entertainment precinct so patrons can arrive early and leave late from the precinct	 No separate details provided but planning implications incorporated into above comments for specific aspects of Master Plan option. Possible need for Territory Plan Variation to establish 'entertainment' facilities.



Figure 6: Canberra Stadium Master Plan Option 1



Canberra Stadium – Urban Planning Context 14

Canberra Stadium – Urban Planning Context 13









3.2 Canberra Stadium Option 2 (Cs2)

Refurbishment of the Existing Stadium and Precinct - refer Figure 7

	Master Plan Element	Planning Implications
1.	Canberra Stadium (Redevelopment)	 If land is retained as 'National Land', NCA approval is required for any works. Development Control Plan required. If 'de-gazetted' then a DA with ACTPLA is required (Merit or Impact Track – refer Planning Report). DA issues to address: parking, traffic, access, tree loss, and heritage. Permissible within zone, 'Statement against Criteria' required. Traffic study likely required due to patronage increase. Conservator for Flora and Fauna approval for any tree removal. Whole site is nominated as a heritage item. DA would be referred to Govt Agencies for comment.
		 May need to be consistent with a Plan of Management (Public Land).
2.	Event Plaza	 DA required (Merit Track), assuming some construction (e.g. entry gates, ticketing facility) is proposed. Permissible within zone, 'Statement against Criteria' required. Need to be consistent with National Capital Plan.
		 Development Control Plan required. Pedestrian movement assessment likely (queuing area, bus pick-up waiting facilities).
3.	Transit Hub	 DA required (Merit or Impact Track). More detail required to assess implications. Most likely an EIS would be required, or at least a substantial assessment of environmental impacts as part of a 'Statement against Criteria'.
4.	AIS Arena	 DA required (Merit or Impact Track). More detail required to assess implications.
5.	Mixed-use development	 Territory Plan Variation (rezoning) required for various mixed use development sites. Sites currently zoned Community Facilities Particular uses need to be nominated to determine consistency with Territory Plan. Traffic & parking study likely to be required. Conservator for Flora and Fauna approval required if tree removal involved. Heritage issues. DA would be referred to Govt

6.	Car park	• • •	DA not likely to be required if proposal only involves maintenance of existing car park. DA would be required for re-arrangement of parking facilities. Traffic & parking study likely to be required. Conservator for Flora and Fauna approval required if tree removal involved. Heritage issues. DA would be referred to Govt Agencies for comment.
7.	Outside broadcast	•	Temporary use not likely to require a DA, unless permanent structures involved.
8.	Walk of Legends	•	Not likely to require a DA, unless permanent structures involved.
9.	Minimal upgrade to increase permanent seating to 26,500	•	No details provided on upgrading, but DA likely to be required if external changes to facade are involved.
10.	Improved roof cover – from 20% to 80% of spectators	•	No details provided on upgrading, but DA likely to be required if external changes to facade are involved.
11.	Temporary minimum seating of 40,000 capacity when required	•	No details provided on measures for temporary seating, but DA required (potentially Impact Track with EIS required.
12.	Upgrade West and East Stands	•	No details provided on upgrading, but DA likely to be required if external changes to facade are involved.
13.	New East and West entrances, plazas and ticketing	•	DA required (Merit Track), assuming some construction (e.g. entry gates, ticketing facility) is proposed. Permissible within zone, 'Statement against Criteria' required. Pedestrian movement assessment (queuing area, bu
14.	Upgrade to player and spectator facilities in the West Stand	•	pick-up waiting facilities) likely. No details provided on upgrading, but DA likely to be required if external changes to facade are involved.
15.	New sports lighting on the front edge of new roofs to the East and West Stands to minimise light spill	•	DA required (Merit Track). Permissible within zone, 'Statement against Criteria' required.
16.	New transport hub adjacent to the GDE to improve public transport access and segregate bus traffic from cars	•	DA required (Merit or Impact Track). More detail required to assess implications. Most likely an EIS would be required, or at least a substantial assessment of environmental impacts as part of a 'Statement against Criteria'.
17.	Improve corporate lounges in the West Stand	•	No details provided on upgrading, but DA likely to be required if external changes to facade are involved.
18.	Create an identity and a sense of 'place,' including	•	No separate details provided but planning implications incorporated into above comments for

Master Plan Element

Canberra Stadium – Urban Planning Context 15

Canberra Stadium – Urban Planning Context 16





Planning Implications

- to be required if proposal only involves f existing car park.
- required for re-arrangement of parking
- ng study likely to be required.
- or Flora and Fauna approval required if nvolved.
- s. DA would be referred to Govt omment.
- not likely to require a DA, unless uctures involved.
- equire a DA, unless permanent olved.
- vided on upgrading, but DA likely to be ernal changes to facade are involved.
- vided on upgrading, but DA likely to be ernal changes to facade are involved.
- vided on measures for temporary A required (potentially Impact Track red.
- vided on upgrading, but DA likely to be ernal changes to facade are involved.
- Nerit Track), assuming some e.g. entry gates, ticketing facility) is missible within zone, 'Statement a' required.
- vement assessment (queuing area, bus g facilities) likely.
- vided on upgrading, but DA likely to be ernal changes to facade are involved.
- Ierit Track). Permissible within zone, ainst Criteria' required.
- lerit or Impact Track).
- quired to assess implications.
- EIS would be required, or at least a sessment of environmental impacts as ement against Criteria'.
- vided on upgrading, but DA likely to be ernal changes to facade are involved.
- etails provided but planning





	Master Plan Element	Planning Implications		
	an entertainment precinct to attract patrons to arrive early and leave late.	 specific aspects of Master Plan option. Possible need for Territory Plan Variation to establish 'entertainment' facilities. 		
19.	Future mixed-use development to introduce year-round activity in precinct	 Territory Plan Variation (rezoning) required for various mixed use development sites. Sites currently zoned Community Facilities Particular uses need to be nominated to determine 		
		 consistency with Territory Plan. Traffic & parking study likely to be required. Conservator for Flore and Faure conservation if it 		
		 Conservator for Flora and Fauna approval required if tree removal involved Heritage issues. DA would be referred to Govt Agencies for comment. 		

Figure 7: Canberra Stadium Master Plan Option 2



Canberra Stadium – Urban Planning Context 18

Canberra Stadium – Urban Planning Context 17









3.3 Canberra Stadium Option 3 (Cs3)

New Dedicated Rectangular Stadium on the same footprint of the existing stadium and precinct – refer Figure 8

	Master Plan Element	Planning Implications
1	Canberra Stadium (new build)	 If land is retained as 'National Land', NCA approval is required for any works. Development Control Plan required.
		 If 'de-gazetted' then a DA with ACTPLA is required (Impact Track – refer Planning Report).
		 Permissible within zone, 'EIS' required.
		 DA issues to address: parking, traffic, access, tree loss, and heritage.
		 Traffic study likely required due to patronage increase.
		 Conservator for Flora and Fauna approval for any tree removal.
		 Whole site is nominated as a heritage item. DA would be referred to Govt Agencies for comment.
		 May need to be consistent with a Plan of Management (Public Land).
2.	Event Plaza	 DA required (Merit Track), assuming some construction (e.g. entry gates, ticketing facility) is proposed. Permissible within zone, 'Statement against Criteria' required.
		 Need to be consistent with National Capital Plan. Development Control Plan required.
		 Pedestrian movement assessment likely (queuing area, bus pick-up waiting facilities).
3.	Transit Hub	 DA required (Merit or Impact Track).
		 More detail required to assess implications.
		 Most likely an EIS would be required, or at least a substantial assessment of environmental impacts as part of a 'Statement against Criteria'.
4.	AIS Arena (option)	 DA required (Merit or Impact Track).
		 More detail required to assess implications
5.	Mixed-use development	Territory Plan Variation (rezoning) required for various mixed use development sites.
		Sites currently zoned Community Facilities
		 Particular uses need to be nominated to determine consistency with Territory Plan.
		 Traffic & parking study likely to be required.
		 Conservator for Flora and Fauna approval required if tree removal involved.
		 Heritage issues. DA would be referred to Govt Agencies for comment.
6.	Car park	 DA not likely to be required if proposal only involves maintenance of existing car park

		-	DA would be required facilities.
		•	Traffic & parking
		•	Conservator for F tree removal invo
		•	Heritage issues. Agencies for com
7.	Outside broadcast	•	Temporary use no permanent struct
8.	Walk of Legends	•	Not likely to requ structures involve
9.	New rectangular stadium built on current site	•	If land is retained required for any v required.
		•	lf 'de-gazetted' th (Impact Track – r
		•	Permissible within
		•	DA issues to add loss, and heritage
		•	Traffic study likel increase.
		•	Conservator for F removal.
		•	Whole site is non would be referred
		•	May need to be c Management (Pul
10.	New accessible pedestrian plaza	•	DA required (Mer construction (e.g. proposed. Permis against Criteria' r
		•	Need to be consis Development Cor
		•	Pedestrian mover area, bus pick-up
11.	Permanent seating capacity of 26,500 with temporary capacity of 40,000	•	No details provide seating, but DA r with EIS required
12.	Provides distinctive and welcoming entrances	•	DA required (Mer construction is pr 'Statement agains
13.	Roof cover for 80% of spectators	•	If land is retained required for any v required.
		-	lf 'de-gazetted' tl (Impact Track – r
			Permissible within

Master Plan Element

Canberra Stadium – Urban Planning Context 19

Canberra Stadium – Urban Planning Context 20





Planning Implications				
•	DA would be required for re-arrangement of parking facilities.			
•	Traffic & parking study likely to be required.			
•	Conservator for Flora and Fauna approval required if tree removal involved.			
•	Heritage issues. DA would be referred to Govt Agencies for comment.			
•	Temporary use not likely to require a DA, unless permanent structures involved.			
•	Not likely to require a DA, unless permanent structures involved.			
•	If land is retained as 'National Land', NCA approval is required for any works. Development Control Plan required.			
•	If 'de-gazetted' then a DA with ACTPLA is required (Impact Track – refer Planning Report).			
•	Permissible within zone, 'EIS' required.			
•	DA issues to address: parking, traffic, access, tree loss, and heritage.			
•	Traffic study likely required due to patronage increase.			
•	Conservator for Flora and Fauna approval for any tree removal.			
•	Whole site is nominated as a heritage item. DA would be referred to Govt Agencies for comment.			
•	May need to be consistent with a Plan of Management (Public Land).			
•	DA required (Merit Track), assuming some construction (e.g. entry gates, ticketing facility) is proposed. Permissible within zone, 'Statement against Criteria' required.			
•	Need to be consistent with National Capital Plan. Development Control Plan required.			
•	Pedestrian movement assessment likely (queuing area, bus pick-up waiting facilities).			
•	No details provided on measures for temporary seating, but DA required (potentially Impact Track with EIS required.			
•	DA required (Merit Track), assuming some construction is proposed. Permissible within zone, 'Statement against Criteria' required.			
•	If land is retained as 'National Land', NCA approval is required for any works. Development Control Plan required.			
•	If 'de-gazetted' then a DA with ACTPLA is required (Impact Track – refer Planning Report).			
•	Permissible within zone, 'EIS' required.			





	Master Plan Element	Planning Implications
14.	Transport hub adjacent to the GDE to improve public transport access and segregate buses from cars	 DA required (Merit or Impact Track). More detail required to assess implications. Most likely an EIS would be required, or at least a substantial assessment of environmental impacts as part of a 'Statement against Criteria'.
15.	Establish a park and ride facility for city community	 DA required (Merit or Impact Track). More detail required to assess implications Most likely an EIS would be required, or at least a substantial assessment of environmental impacts as part of a 'Statement against Criteria'.
16.	Create a sense of 'place' with the development of an entertainment precinct to attract patrons to arrive early and leave late	 No separate details provided but planning implications incorporated into above comments for specific aspects of Master Plan option. Possible need for Territory Plan Variation to establish 'entertainment' facilities.
17.	Future mixed-use developments to the East and West of the stadium precinct to increase year-round activity in the precinct	 Territory Plan Variation (rezoning) required for variou mixed use development sites. Sites currently zoned Community Facilities Particular uses need to be nominated to determine consistency with Territory Plan. Traffic & parking study likely to be required. Conservator for Flora and Fauna approval required if tree removal involved. Heritage issues. DA would be referred to Govt Agencies for comment.
18.	Sports lighting located on the front edge of the new roof to minimise light spill	 DA required. (Merit Track). Permissible within zone, 'Statement against Criteria' required.
19.	Include Environmentally Sustainable Design initiatives.	 Considered as part of specific Das for various elements of Master Plan options

Figure 8: Canberra Stadium Master Plan Option 3



Canberra Stadium – Urban Planning Context 22

Canberra Stadium – Urban Planning Context 21









3.4 Canberra Stadium Option 4 (Cs4)

THE SPORTS CAPITAL - refer Figure 9

	Master Plan Element	Planning Implications
1.	Canberra Stadium (new build)	 If land is retained as 'National Land', NCA approval is required for any works. Development Control Plan required.
		 If 'de-gazetted' then a DA with ACTPLA is required (Impact Track – refer Planning Report).
		 Permissible within zone, 'EIS' required.
		 DA issues to address: parking, traffic, access, tree loss, and heritage.
		 Traffic study likely required due to patronage increase.
		 Conservator for Flora and Fauna approval for any tree removal.
		 Whole site is nominated as a heritage item. DA would be referred to Govt Agencies for comment.
		 May need to be consistent with a Plan of Management (Public Land).
2.	Event Plaza	 DA required. (Merit Track), assuming some construction (e.g. entry gates, ticketing facility) is proposed.
		 Permissible within zone, 'Statement against Criteria' required.
		 Need to be consistent with National Capital Plan. Development Control Plan required.
		 Pedestrian movement assessment likely (queuing area, bus pick-up waiting facilities).
3.	Transit Hub	 DA required (Merit or Impact Track).
		 More detail required to assess implications.
		 Most likely an EIS would be required, or at least a substantial assessment of environmental impacts as part of a 'Statement against Criteria'.
4.	AIS Arena (option)	 DA required (Merit or Impact Track).
		 More detail required to assess implications
5.	Mixed-use development	 Territory Plan Variation (rezoning) required for various mixed use development sites.
		 Sites currently zoned Community Facilities.
		 Particular uses need to be nominated to determine consistency with Territory Plan.
		 Traffic & parking study likely to be required.
		 Conservator for Flora and Fauna approval required if tree removal involved.
		 Heritage issues. DA would be referred to Govt Agencies for comment.

Car park	 DA not likely to maintenance of DA would be red facilities.
	 Traffic & parking Conservator for tree removal inv
	 Heritage issues. Agencies for cor
Outside broadcast	 Temporary use r permanent struc
Walk of Legends	 Not likely to require structures involved
New Stadium	 If land is retained required for any required.
	 If 'de-gazetted' f (Impact Track –
	 Permissible with
	 DA issues to add loss, and heritag
	 Traffic study like increase.
	 Conservator for removal.
	 Whole site is not would be referred
	 May need to be Management (Put)
Provide a new dedicated rectangular stadium with a permanent capacity of	 If land is retained required for any required.
26,500 with the flexibility to increase to a maximum	 If 'de-gazetted' t (Impact Track –
capacity of 40,000 patrons	 Permissible with
	 DA issues to add loss, and heritag
	 Traffic study like increase.
	 Conservator for removal.
	 Whole site is not would be referred
	 May need to be Management (Put)
Revise the existing Canberra Stadium to its pre-1985 format, by raising	 If land is retained required for any required.
	Outside broadcast Walk of Legends New Stadium Provide a new dedicated rectangular stadium with a permanent capacity of 26,500 with the flexibility to increase to a maximum capacity of 40,000 patrons Revise the existing Canberra Stadium to its

Master Plan Element

Canberra Stadium – Urban Planning Context 23

Canberra Stadium – Urban Planning Context 24





Planning Implications

- be required if proposal only involves f existing car park.
- equired for re-arrangement of parking
- ng study likely to be required.
- r Flora and Fauna approval required if volved.
- DA would be referred to Govt omment.
- not likely to require a DA, unless ctures involved.
- quire a DA, unless permanent lved
- ed as 'National Land', NCA approval is works. Development Control Plan
- ' then a DA with ACTPLA is required
- refer Planning Report). thin zone, 'EIS' required.
- ddress: parking, traffic, access, tree age.
- kely required due to patronage
- r Flora and Fauna approval for any tree
- ominated as a heritage item. DA red to Govt Agencies for comment. e consistent with a Plan of Public Land).
- ed as 'National Land', NCA approval is works. Development Control Plan
- ' then a DA with ACTPLA is required refer Planning Report).
- thin zone, 'EIS' required.
- ddress: parking, traffic, access, tree age.
- kely required due to patronage
- r Flora and Fauna approval for any tree
- ominated as a heritage item. DA red to Govt Agencies for comment. e consistent with a Plan of Public Land).
- ed as 'National Land', NCA approval is works. Development Control Plan





	Master Plan Element	Planning Implications
	the level of the field of play to the same level as the existing lateral aisle. The existing facilities are retained, with the addition of new routes to the relocated field of play from the team change facilities and more seats strategically located to achieve the AFL requirement of 19,000 permanent capacity	 If 'de-gazetted' then a DA with ACTPLA is required. May need to be consistent with a Plan of Management (Public Land).
12	Convert Canberra Stadium to accommodate AFL and cricket	 If land is retained as 'National Land', NCA approval is required for any works. Development Control Plan required. If 'de-gazetted' then a DA with ACTPLA is required. May need to be consistent with a Plan of Management (Public Land).
13	Provide distinctive entrances and plazas	 DA required. (Merit Track), assuming some construction (e.g. entry gates, ticketing facility) is proposed. Permissible within zone, 'Statement against Criteria' required. Need to be consistent with National Capital Plan. Development Control Plan required. Pedestrian movement assessment likely (queuing area, bus pick-up waiting facilities).
14	Upgrade plazas to provide for a greater level of patron interaction and sense of "place"	 No details provided on measures for 'plaza' upgrading, but DA likely to be required (if external changes to building facade are proposed.
15	Permanent seating capacity of 26,500 with temporary capacity of 40,000	 No details provided on measures for temporary seating, but DA required (potentially Impact Track with EIS required.
16	Provides distinctive and welcoming entrances	 DA required. (Merit Track), assuming some construction is proposed. Permissible within zone, 'Statement against Criteria' required.
17	New rectangular stadium provides roof cover to 80% of patrons	 If land is retained as 'National Land', NCA approval is required for any works. Development Control Plan required. If 'de-gazetted' then a DA with ACTPLA is required (Impact Track – refer Planning Report). Permissible within zone, 'EIS' required.
18	Locate a transport hub, adjacent to the GDE to maximise public transport access, segregate buses from cars	 DA required (Merit or Impact Track). More detail required to assess implications. Most likely an EIS would be required, or at least a substantial assessment of environmental impacts as part of a 'Statement against Criteria'.
19	Provide park and ride	 DA required (Merit or Impact Track).

	Master Plan Element	Planning Implications
	facility	 More detail required to assess implications. Most likely an EIS would be required, or at lea substantial assessment of environmental impa part of a 'Statement against Criteria'.
20	Create an identity and a sense of "place", including development of an entertainment precinct to	 No separate details provided but planning implications incorporated into above comment specific aspects of Master Plan option. Possible need for Territory Plan Variation to estimate the second second
	attract patrons to arrive early and leave late	'entertainment' facilities.
21	Transport oriented development to the East and West of the stadium precinct with mixed uses to increase precinct activity year round	 Territory Plan Variation (rezoning) required for mixed use development sites. Sites currently zoned Community Facilities Particular uses need to be nominated to deterr consistency with Territory Plan. Traffic & parking study likely to be required. Conservator for Flora and Fauna approval requ tree removal involved. Heritage issues. DA would be referred to Gov Agencies for comment.
22	Sports lighting located on the front edge of the new roof to minimise light spill	 DA required. (Merit Track). Permissible within 'Statement against Criteria' required.
23	Include Environmentally Sustainable Design initiatives.	 Considered as part of specific DAs for various elements of Master Plan options
24	Create corporate facilities	 No details provided on corporate facilities, but likely to be required (if external changes to but facade are proposed).

Canberra Stadium – Urban Planning Context 25

Canberra Stadium – Urban Planning Context 26





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Figure 9: Canberra Stadium Master Plan Option 4



Canberra Stadium – Urban Planning Context 27









3 REVIEW OF MASTERPLAN OPTIONS FOR MANUKA OVAL

The following tables provide an assessment of the statutory planning implications of individual development elements in each of the three (3) master plans options for Manuka Oval.

Many of the elements in the master plan options need further detail / resolution to determine the specific planning implications of the proposal (outlined in the "Planning Implications" column).

3.1 Manuka Oval Option 1 (Mo1)

Minimum Redevelopment of Existing Oval and Precinct - Refer Figure 5

	Master Plan Element	Planning Implications	
1.	New Hawke & Menzies stands	 Proposal requires a Development Application (Merit or Impact Track – refer Planning Report). 	
		 DA issues to address: building height, setbacks, parking, traffic, access, tree loss, heritage 	
		 Permissible within zone, 'Statement against Criteria' required. 	
		 Need to be consistent with National Capital Plan. Development Control Plan required. 	
		 Traffic study likely required due to patronage increase. 	
		 Tree removal required. Conservator for Flora and Fauna approval. 	
		 Heritage issues. DA to be referred to Govt Agencies for comment. 	
		 Confirmation of infrastructure capability required (ActewAGL). 	
		 May need to be consistent with a Plan of Management (Public Open space). 	
2.	Bradman Pavilion	 No details provided on upgrading, but DA likely to be required if external changes to facade are involved. 	
3.	Upgraded and landscaped plaza and concourse	 DA required (Merit Track). Permissible within zone, 'Statement against Criteria' required. 	
4.	Grass berm	 DA likely required if facilitates increase spectator capacity. Otherwise may be able to be considered as 'maintenance' or 'landscaping'. 	
5.	End-on media facility	 DA required. (Merit Track) Permissible in zone, no major issues, although adjacent to listed heritage item. 'Statement against Criteria' required. 	
6.	Cricket and AFL high performance Centre	 DA required (Merit Track). Permissible within zone, but may needed to be considered as an ancillary use to the recreation 	

	Master Plan Element	Planning Implications
		facilities rather than a 'stand-alone' facility. 'Statement against Criteria' required.
		Land may need to be consolidated with Oval
7.	Mixed-used development	 Territory Plan Variation (rezoning) required for mixed use development sites. Site adjacent t entrance currently zoned Urban Open Space; adjacent to north entrance currently zoned Community Facilities (occupied by ArtSound Photo Access studios; Site adjacent to west currently zoned Restricted Access Recreation
		 Master Plan also indicates extension to Servic as Mixed Use. This site is zoned Leisure & Accommodation; some uses typically found in use developments may be permissible. Howe is Heritage listed.
		 Heritage issues. DA would be referred to Go Agencies for comment.
		 Particular uses need to be nominated to deter consistency with Territory Plan.
		 Need to be consistent with National Capital P Development Control Plan required.
		Traffic & parking study likely to be required.
		 Conservator for Flora and Fauna approval req tree removal involved.
		 Confirmation of infrastructure capability requi (ActewAGL).
8.	Coach/Bus drop-off	 No DA required if component does not involv development. However, if a constructed 'bus station' is proposed at entry to Heritage listed swimming pool, then a DA would be required
9.	Optimised Entry point to Oval	 DA likely required (Merit Track). Permissible zone, 'Statement against Criteria' required.
10.	Upgrade field of play	 DA not likely to be required if upgrade is cons as 'maintenance'.
11.	Retain existing stands	 No DA required if retaining stands as is.
12.	Team Coach & VIP drop off	 DA required (Merit Track). Permissible within 'Statement against Criteria' required Involves access to Canberra Avenue.
		TaMS approval (traffic assessment) required.
		 Need to be consistent with National Capital P Development Control Plan required.
13.	Car park	 DA required (Merit Track).
		 Permissible within zone as an ancillary use to recreation facilities, 'Statement against Criter required.

Manuka Oval Planning Study



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	Master Plan Element	Pla	nning Implications
		•	Land may need to be consolidated with Oval block.
		•	Need to be consistent with National Capital Plan. Development Control Plan required.
		•	Traffic study likely, however plans show major vehicle entry and exit driveways for only 7 car parking spaces.
14.	New North entrance	•	DA required (Merit Track), assuming some construction (e.g. entry gates, ticketing facility) is proposed.
		•	Permissible within zone, 'Statement against Criteria' required.
		•	Need to be consistent with National Capital Plan. Development Control Plan required.
		•	Pedestrian movement assessment (queuing area, bus pick-up; waiting facilities) likely.
15.	Outside broadcast compound	•	Temporary use not likely to require a DA, unless permanent structures involved.
16.	Retain MCG scoreboard	•	DA not required if only maintaining scoreboard in current location.
	New entrances, fencing, signage and ticketing	•	DA required (Merit Track), assuming some construction (e.g. entry gates, ticketing facility) is proposed. Permissible within zone, 'Statement against Criteria' required.
		•	Need to be consistent with National Capital Plan. Development Control Plan required.
		•	Pedestrian movement assessment (queuing area, bus pick-up waiting facilities) likely.
	New north and west public entrances	•	DA required (Merit Track), assuming some construction (e.g. entry gates, ticketing facility) is proposed.
		•	Permissible within zone, 'Statement against Criteria' required.
		•	Need to be consistent with National Capital Plan. Development Control Plan required.
		•	Pedestrian movement assessment (queuing area, bus pick-up waiting facilities) likely.
	Retain existing roof cover	•	DA not required if maintenance only is proposed.
	Retain Existing trees	•	Removal of protected trees requires TaMS (Conservator of Flora & Fauna) approval.
	New landscaping	•	No DA required unless construction works involved. May affect existing protected trees and TaMS (Conservator of Flora & Fauna) approval required. May need to be in accordance with a Plan of Management (Public Open Space).

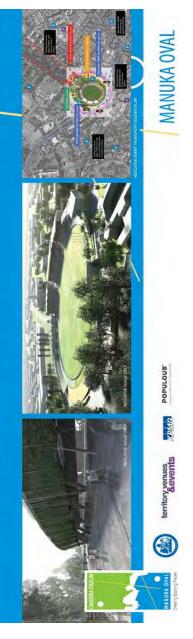


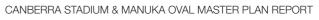
Manuka Oval Planning Study

Manuka Oval Planning Study













3.2 Manuka Oval Option 2 (Mo2)

Full Development on the Same Footprint of the Existing Oval and Precinct - refer Figure 6

	Master Plan Element	Planning Implications		
1.	New Hawke & Menzies stand	 Proposal requires a Development Application (Merit or Impact Track – refer Planning Report). 		
		 DA issues to address: building height, setbacks, parking, traffic, access, tree loss, and heritage. 		
		 Permissible within zone, 'Statement against Criteria' required. 		
		 Need to be consistent with National Capital Plan. Development Control Plan required. 		
		 Traffic study likely required due to patronage increase. 		
		 Tree removal required. Conservator for Flora and Fauna approval. 		
		Heritage issues. DA to be referred to Govt Agencies for comment.		
		 May need to be consistent with a Plan of Management (Public Open space). 		
2.	Bradman Pavilion	 No details provided on upgrading, but DA likely to be required if external changes to facade are involved. 		
3.	Upgraded and landscaped plaza and concourse	DA required (Merit Track) (Merit Track).		
pl		 Permissible within zone, 'Statement against Criteria' required. 		
4.	Grass berm	 DA likely required, if facilitates increase spectator capacity. Otherwise may be able to be considered as 'maintenance' or 'landscaping'. 		
5.	End-on media facility	 DA required (Merit Track) 		
		 Permissible in zone, no major issues, although adjacent to listed heritage item. 'Statement against Criteria' required. 		
6.	Cricket and AFL high	DA required. Merit Track).		
	performance Centre	 Permissible within zone, but may needed to be considered as an ancillary use to the recreation facilities rather than a 'stand-alone' facility. 'Statement against Criteria' required. 		
		Land may need to be consolidated with Oval block.		
7.	New indoor cricket facility	DA required (Merit Track).		
	and gymnasium	 Permissible within zone, but may need to be considered as an ancillary use to the recreation facilities rather than a 'stand-alone' facility. 'Statement against Criteria' required. 		

	Master Plan Element	Planning Implications
		Land may need to be consolidated with Ova
8.	Mixed-used development	 Territory Plan Variation (rezoning) required f mixed use development sites. Site adjacent entrance currently zoned Urban Open Space adjacent to north entrance currently zoned Community Facilities (occupied by ArtSound Photo Access studios; Site adjacent to wes currently zoned Restricted Access Recreation
		 Master Plan also indicates extension to Servas Mixed Use indicates mixed use. This situle isure & Accommodation; some uses typic in mixed use developments may be permiss However, site is Heritage listed.
		 Particular uses need to be nominated to det consistency with Territory Plan.
		 Need to be consistent with National Capital Development Control Plan required.
		Traffic & parking study likely to be required
		 Conservator for Flora and Fauna approval re tree removal involved.
		 Heritage issues. DA would be referred to G Agencies for comment.
		 Confirmation of infrastructure capability req (ActewAGL).
9.	Coach/Bus drop-off	 No DA required if component does not invo development. However, if a constructed 'b station' is proposed at entry to Heritage list swimming pool, then a DA would be required
		 More detail required (e.g. does this only inv marking etc).
10.	Optimised Entry point to	DA likely required. (Merit Track).
	Oval	 Permissible within zone, 'Statement against required.
11.	Upgrade field of play	 DA not likely to be required if upgrade is co as 'maintenance'.
12.	New split tier stands	 Proposal requires a Development Application Impact Track – refer Planning Report).
		 Permissible within zone, 'Statement against required.
		 DA issues to address: building height, setba parking, traffic, access, tree loss, and herita
		 Need to be consistent with National Capital Development Control Plan required.
		 Traffic study likely required due to patronag increase.

Manuka Oval Planning Study

Manuka Oval Planning Study



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	Master Plan Element	Planning Implications
	Master Plan Element	• •
		 Tree removal required. Conservator for Flora and Fauna approval.
		 Heritage issues. DA to be referred to Govt Agencies for comment.
13.	Enhance visual connectivity	 Positive planning implication.
14.	Increased permanent food	 DA required. Merit Track).
	beverage and toilet facilities	 Permissible within zone, but may needed to be considered as an ancillary use to the recreation facilities rather than a 'stand-alone' facility. 'Statement against Criteria' required.
		 Depending on siting, land may need to be consolidated with Oval block.
15.	Team coach and VIP drop off	 DA required (Merit Track). Permissible within zone, 'Statement against Criteria' required Involves direct access to Canberra Avenue.
		 TaMS approval (traffic assessment) required.
		 Need to be consistent with National Capital Plan. Development Control Plan required.
16.	Car park	 DA required (Merit Track). Permissible within zone as an ancillary use to the recreation facilities, 'Statement against Criteria' required.
		 Land may need to be consolidated with Oval block.
		 Need to be consistent with National Capital Plan. Development Control Plan required.
		 Traffic study likely, however plans show major vehicle entry and exit driveways for 7 car parking spaces.
17.	New North and west public entrances	 DA required (Merit Track), assuming some construction (e.g. entry gates, ticketing facility) is proposed. Permissible within zone, 'Statement against Criteria' required.
		 Need to be consistent with National Capital Plan. Development Control Plan required.
		 Pedestrian movement assessment (queuing area, bus pick-up waiting facilities) likely.
18.	Outside broadcast compound	 Temporary use not likely to require a DA, unless permanent structures involved.
19.	MCG scoreboard retained	 DA required as scoreboard to be relocated to new site.
20.	New entrances, fencing, signage and ticketing	 DA required (Merit Track), assuming some construction (e.g. entry gates, ticketing facility) is proposed.
		 Permissible within zone, 'Statement against Criteria' required.

	Master Plan Element	Pla	nning Implications
		•	Need to be consis Development Cor
		•	Pedestrian mover pick-up waiting fa
21.	Roof cover increased to 50% of seats (currently	•	DA required (Mer 'Statement again
	28%)	•	Need to be consis Development Cor
22.	Outdoor nets relocated	•	Details of new sit 'landscaping' may of overall redevel (Merit Track).
		•	Permissible withir considered as an facilities rather th 'Statement agains
		•	Land may need to
23.	Arts Centre integrated into mixed use development	•	Occupation of pa DA if identified of Development.
		•	Territory Plan Var currently zoned C
		•	Need to be consis Development Cor
		•	Traffic & parking
		•	Conservator for F tree removal invo
		•	Heritage issues. Agencies for com
		•	Confirmation of in (ActewAGL).
24.	New dedicated offices for the AFL NSW/ACT and ACT	•	Details of new sit be required (Meri
	Cricket	•	Permissible within ancillary use to th 'stand-alone' faci required.
		•	Land may need to
25.	New mixed use development on current car park	•	Territory Plan Var currently zoned U
		•	Need to be consis Development Cor
		•	Traffic & parking
		•	Conservator for F

Manuka Oval Planning Study

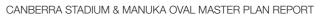
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Manuka Oval Planning Study





istent with National Capital Plan. ontrol Plan required.
ement assessment (queuing area, bus facilities) likely.
rit Track). Permissible within zone, nst Criteria' required.
istent with National Capital Plan. ontrol Plan required.
iting not provided, but if part of ay not require a DA. However, if part elopment, a DA would be required
in zone, but may need to be n ancillary use to the recreation han a 'stand-alone' facility. nst Criteria' required.
to be consolidated with Oval block.
art of new building would not need a on DA for construction of Mixed Use
ariation (rezoning) required as site Community Facilities.
istent with National Capital Plan. ontrol Plan required.
g study likely to be required.
Flora and Fauna approval required if olved.
DA would be referred to Govt mment.
infrastructure capability required
iting not provided, but a DA would it Track).
in zone only if considered as an the recreation facilities rather than a cility. 'Statement against Criteria'
to be consolidated with Oval block.
ariation (rezoning) required. Site Urban Open Space.
istent with National Capital Plan. Introl Plan required.
g study likely to be required.
Flora and Fauna approval required if







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	Master Plan Element	Planning Implications
		tree removal involved.Confirmation of infrastructure capability required (ActewAGL).
26.	Existing trees retained wherever possible	 Removal of protected trees requires TaMS (Conservator of Flora & Fauna) approval.
27.	New landscaping to the precinct	 No DA required unless construction works involved. May affect existing protected trees and TaMS (Conservator of Flora & Fauna) approval required. May need to be in accordance with a Plan of Management (Public Open Space)
28.	Transport hub at north end of the site	 No DA required if component does not involve any development. However, if a constructed 'bus station' is proposed at entry to Heritage listed swimming pool, then a DA would be required.
		 More detail required (e.g. does this only involve line marking).



Figure 6: Manuka Oval Master Plan Option 2



Manuka Oval Planning Study

Manuka Oval Planning Study

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3.3 Manuka Oval Option 3 (Mo3)

Return Manuka Oval to a Village Oval - refer Figure 7

	Master Plan Element	Planning Implications
1.	Bradman Pavilion retained	 No details provided on upgrading, but DA likely to be required if external changes to facade are involved.
2.	Upgraded and landscaped plaza and concourse	 DA required (Merit Track). Permissible within zone, 'Statement against Criteria' required.
3.	Grass berm	 DA likely to be required but may be able to be considered as 'maintenance' or 'landscaping'.
4.	Mixed-used development	 Territory Plan Variation (rezoning) required for various mixed use development sites. Site adjacent to north entrance currently zoned Community Facilities (occupied by ArtSound and Photo Access studios); Site adjacent to west entrance currently zoned Restricted Access Recreation.
		 Master Plan also indicates extension to Services Club as Mixed Use indicates mixed use. This site is zoned Leisure & Accommodation; some uses typically found in mixed use developments may be permissible. However, site is Heritage listed.
		 Particular uses need to be nominated to determine consistency with Territory Plan.
		 Need to be consistent with National Capital Plan. Development Control Plan required.
		 Traffic & parking study likely to be required.
		 Conservator for Flora and Fauna approval required if tree removal involved.
		 Heritage issues. DA would be referred to Govt Agencies for comment.
		 Confirmation of infrastructure capability required (ActewAGL).
5.	Optimised Entry point to Oval	 DA likely required. (Merit Track).
		 Permissible within zone, 'Statement against Criteria' required.
6.	Team coach and VIP drop off	 DA required (Merit Track).
		 Permissible within zone, 'Statement against Criteria' required Involves direct access to Canberra Avenue.
		 TaMS approval (traffic assessment) required.
		 Need to be consistent with National Capital Plan. Development Control Plan required.
7.	Car park	 DA required (Merit Track).
		 Permissible within zone as an ancillary use to the recreation facilities, 'Statement against Criteria' required.

	Master Plan Element	Pla	Planning Implications	
		•	Land may need to	
		•	Need to be consis Development Cor	
		•	Traffic study likel vehicle entry and spaces.	
		•	Site adjacent to e Open Space, not	
8.	New north entrance	•	DA required. (Me construction (e.g. proposed. Permis against Criteria' r	
		•	Need to be consis Development Cor	
9.	Field of play retained	•	DA not required i	
10.	MCG scoreboard retained	•	DA not required i current location.	
11.	Marquee platform retained	•	DA not required i	
12.	Development adjacent Manuka Oval possible	•	Territory Plan Var mixed use develo	
		•	Particular uses ne consistency with	
		•	Need to be consis Development Cor	
		•	Traffic & parking	
		•	Conservator for F tree removal invo	
		•	Heritage issues. Agencies for com	
		•	Confirmation of in (ActewAGL).	

Manuka Oval Planning Study

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Manuka Oval Planning Study





- to be consolidated with Oval block.
- nsistent with National Capital Plan. Control Plan required.
- kely, however plans show major nd exit driveways for 7 car parking
- east entrance currently zoned Urban ot clearly shown as to whether a car.
- Merit Track), assuming some e.g. entry gates, ticketing facility) is missible within zone, 'Statement required.
- nsistent with National Capital Plan. Control Plan required.
- d if only maintaining surface.
- d if only maintaining scoreboard in
- d if maintaining existing facilities.
- Variation (rezoning) required for various elopment sites.
- need to be nominated to determine ith Territory Plan.
- nsistent with National Capital Plan. Control Plan required.
- ng study likely to be required.
- r Flora and Fauna approval required if volved.
- DA would be referred to Govt omment.
- f infrastructure capability required



3.0 CONSULTATION MATRIX

S



anberra Stadium - Overview	of Consulted Stakeholders
akeholder	Organisation
ch 2.2(a)(ii)	3
	CA Brumbies
	Canberra Raiders
	Capital Football
	A-League for Canberra Consortium
	National Rugby League
	Australian Rugby League
	Australian Rugby Union
	Football Federation Australia
	Australian Sports Commission
	Canberra Institute of Technology
	University of Canberra
	Calvary Hospital
	Chief Minister's Department
	ACT Treasury

Manuka Oval Planning Study

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Sch 2.2(a)(ii)	
	Territory, Venues and Events
	Department of Territory and Municipal Services
	Parks, Conservation and Land
	ACT Planning and Land Authority
	Action Buses
	Roads ACT
	All Leisure Hospitality
	Ticketek

Manuka Oval - Overview of Consulted Stakeholders				
Sch 2.2(a)(ii)	Organisation			
	ACT Cricket			
	AFL NSW / ACT			
	Cricket Australia			
	Australian Football League			
	Canberra Services Club			
	PhotoAccess			
	ArtsSound			
	Manuka Swimming Pool			
	Telopea Park School			
	Chief Minister's Department			
	ACT Treasury			
	Territory, Venues and Events			

<u>Sch</u> 2.2(a)(i



Department of Territory and Municipal Services
Parks, Conservation and Land
ACT Planning and Land Authority
Arts ACT
Action Buses
Roads ACT
Department of Education and Training
GEMA Group

CONSULTANT ADVICE 4.0

4.1 Structural

ARUP

Canberra Stadium & Manuka Oval Masterplan & Business Case Structural Engineering Commentary 3 June 2009

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1 Introduction

This document provides a brief structural commentary regarding the existing condition and proposed master plan options for Canberra Stadium and Manuka Oval as prepared by Populous.

Our comments regarding condition are based on documentation for Manuka Oval provided by the ACT government, and a photographic survey of each facility by Populous.

Canberra Stadium 2

2.1 Existing Grandstands

2.1.1 Tiered Seating & Bowl

The seating bowl and seating tier primary structure is generally in good condition, with minimal sign of structural durability problems although there are some areas of visible staining from corrosion of reinforcement in walls and parapets - from what appears primarily due to shrinkage cracking allowing ingress of air and moisture to the reinforcement. Seating, mass concrete steps, handrails/barriers, and other finishes are exhibiting signs of wear and tear consistent with their age and exposure. Minimal protection is offered by the relatively small roof structures including none of the lower seating bowl, and the seating areas routinely suffer from consistent and repetitive washing down both following and often prior to events (even where this has changed to air blowing in recent years) which contributes to deterioration of joints, joint sealants, membranes, and concrete quality.

The sealant (and joint fillers) providing the watertight barrier between precast tread units has reached the end of its serviceable life with loss of flexibility, (hardening) cracking, and debonding from the concrete substrate, and there is evidence of water ingress into the corporate facilities areas.

Shrinkage and thermal cracking of mass concrete steps is evident. Whilst superficial these steps will eventually require replacement to remain serviceable and safe

Galvanised handrails indicate some evidence of corrosion in areas of wear however this is minimal and not an immediate concern

2.1.2 Roof Structures

The cable stay supported concrete deck roofs cover a relatively small proportion of seating, but are generally in good condition. Steelwork finishes appear generally sound and there is little sign of distress to the insitu concrete decks.

There is evidence of corrosion of the metal deck permanent formwork, and efflorescence from the concrete deck most likely to have penetrated through fixing locations for decking and lighting, but could be through sheeting laps or any areas where corrosion may have penetrated the depth of the decking.

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Canberra Stadium & Manuka Oval Masterplan & Business Case Structural Engineering Commentary 3 June 2009

2.2 Refurbishment Options Cs1 & Cs2

2.2.1 Seating Bowl

Minimum structural works. Modifications generally limited to stairs, vomitories, concourse areas, and handrails/barriers in locations of extra seating aisles and to resolve any compliance issues where existing elements require modification to meet the requirements of the brief. Replace mass concrete steps as required.

2.2.2 Superstructure

Maintain primary bowl structure and provide maintenance and repair as appropriate including:

- Concrete patch repair at local locations of spalling or staining.
- Replace mass concrete steps
- · Replace sealant at all joint locations including those between both precast and insitu elements
- · Replace membranes and review waterproofing provision of all exposed concourse and roof areas

New two level extension to rear of west stand founded at existing external ground level (Level 3)

2.2.3 Roof

Demolish existing roofs and masts.

The provision of a leading edge arch-truss spanning the length of the stadium is likely to be the most economical solution to achieving maximum coverage of the existing bowl arrangement. This solution will minimise impact and works on and behind the existing grandstand, allowing freedom for extension and an unobstructed external concourse. New foundations and vertical structure for the roof will be limited to the primary abutments and support for the rear edge, with the capacity of the existing grandstands maximised.

As indicated in the comparative section by Populous, the shallow seating bowl form and exposed lower concourse defines a significant overall width of seating in the existing arrangement, and whilst a cable stayed cantilever roof providing the same coverage of the lower tier is structurally feasible it is considered that the length of span and constraints of the existing grandstand superstructure would render this solution more expensive than the leading edge arch-truss solution. In addition, the spatial requirement and implications of a new mast and backstay arrangement behind the existing bowl and extending laterally outside of the extent of the existing roof to the corners requires consideration.

2.3 New Rectangular Stadium Options Cs3 & Cs4

2.3.1 Seating Bowl

Suspended on western side and at grade for remainder. Suspended structure may be precast concrete plats on steel, precast concrete, or insitu concrete raking beams, however insitu concrete may be considered for improved watertightness due to increased exposure.

2.3.2 Grandstand

Seating tiers would be constructed from precast concrete plats on steel, precast concrete, or insitu concrete raking beams.



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Canberra Stadium & Manuka Oval Masterplan & Business Case Structural Engineering Commentary 3 June 2009

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Structural options for the western grandstand suspended concourse, corporate, and function levels include post-tensioned concrete, post-tensioned/precast hybrid, precast with insitu topping, steel and precast plank, and steel composite frames. Post-tensioned insitu concrete or post-tensioned beams with precast planks and insitu topping would be considered the most economical solutions for the Canberra market in the current environment however this may be influenced by the choice of raking beam material for the tiered seating support.

2.3.3 Roof

The improved efficiency and narrower overall width of the bowl and grandstand tiered seating allows an economical cantilever roof solution (typically <35m from rear of grandstand to roof leading edge for rectangular pitch stadia). A cable stayed option is not necessary to achieve this cantilever, and numerous structural geometries, materials, and forms have been demonstrated as economical within this range including steel, concrete, and timber primary framing with steel, fabric, and ETFE roofing. The steel truss form indicated with metal deck roofing and transparent ETFE at the leading edge is an economical solution.

3 Manuka Oval

3.1 Existing Grandstands

An asset review of Manuka Oval was undertaken by Howell Facilities with associated report dated September 2004. This report included a visual condition rating of all facilities including existing grandstands; however this report was primarily focused on items such as seating, floor coverings, access, and handrails as opposed to primary structure.

The Hawke Stand, Menzies Stands, and the seating bowl where all considered to be in poor condition with general wear and tear and superficial items such as mass concrete steps and steel handrails requiring repair, reinstatement or corrosion protection systems, or replacement.

Detailed investigation regarding the condition of the primary structure was not undertaken, however was recommended in this report on the basis of some visible spalling of concrete and staining from reinforcement corrosion. It is assumed that this investigation has not been undertaken. Subject to further investigation and implementation of a suitable maintenance regime the Hawke and Menzies Stands were estimated to be within 5-10 years of their remaining useful life, and the seating bowl 10-20 years.

The newer Bradman Stand is exhibiting signs of poor concrete cover and subsequent staining from corrosion of reinforcement

It is considered overall that the primary structure of the grandstands and seating bowls at Manuka oval is in reasonable condition and that the useful life assessed by Howell facilities may be a conservative assessment; however the actual life of the structures will depend directly on the suitability, methodology, and integrity of ongoing maintenance regimes.

3.2 Option Mo1

3.2.1 Provision of New Hawke and Menzies Stands

Demolish existing stands.

New tiered seating would most likely be constructed from insitu concrete partially on grade at bowl level. The curved geometry, and low volume and repetition is likely to render precast solutions uneconomical for the suspended areas

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> Structural options for the suspended concourse, corporate, and function levels include posttensioned concrete, post-tensioned/precast hybrid, precast with insitu topping, steel and precast plank, and steel composite frames. Given the curved geometry and relatively small size of these stands post-tensioned insitu concrete banded slabs would be considered the most economical solutions for the Canberra market in the current environment.

> The roof cantilever length supports a steel cantilever rafter form as indicated, with metal deck or fabric roof options both viable.

3.2.2 Retain Existing Seating Bowl Investigate condition of primary concrete structure, provide repairs, and implement ongoing inspection and maintenance regime.

Option Mo2 3.3

3.3.1 Provision of New Hawke & Menzies Stands Refer Section 3.2.1.

3.3.2 New Split Tier Stands Demolish existing seating bowl.

Seating tiers would be constructed from precast concrete plats on steel, precast concrete, or insitu concrete raking beams.

3.3.2.1 Cantilever Roof Type 1

3.3.2.2 Cantilever Roof Type 2 Modular fabric roof formed by central mast and perimeter frames. Elegant economical solution at proposed cantilever length provided geometry selected to minimise roof uplift. Roof structural system to be carefully designed for uplift condition to avoid vertical or inclined tie-down elements within spectator sightlines.

3.4 Option Mo3

Demolish existing Hawke and Menzies Stands and reinforced concrete seating bowl.

Retain marguee platform structure. Investigate condition of primary concrete structure, provide repairs, and implement ongoing inspection and maintenance regime

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Form similar proposed Hawke & Menzies Stands. Refer Section 3.2.1.

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4.2 **Civil and Hydraulic**



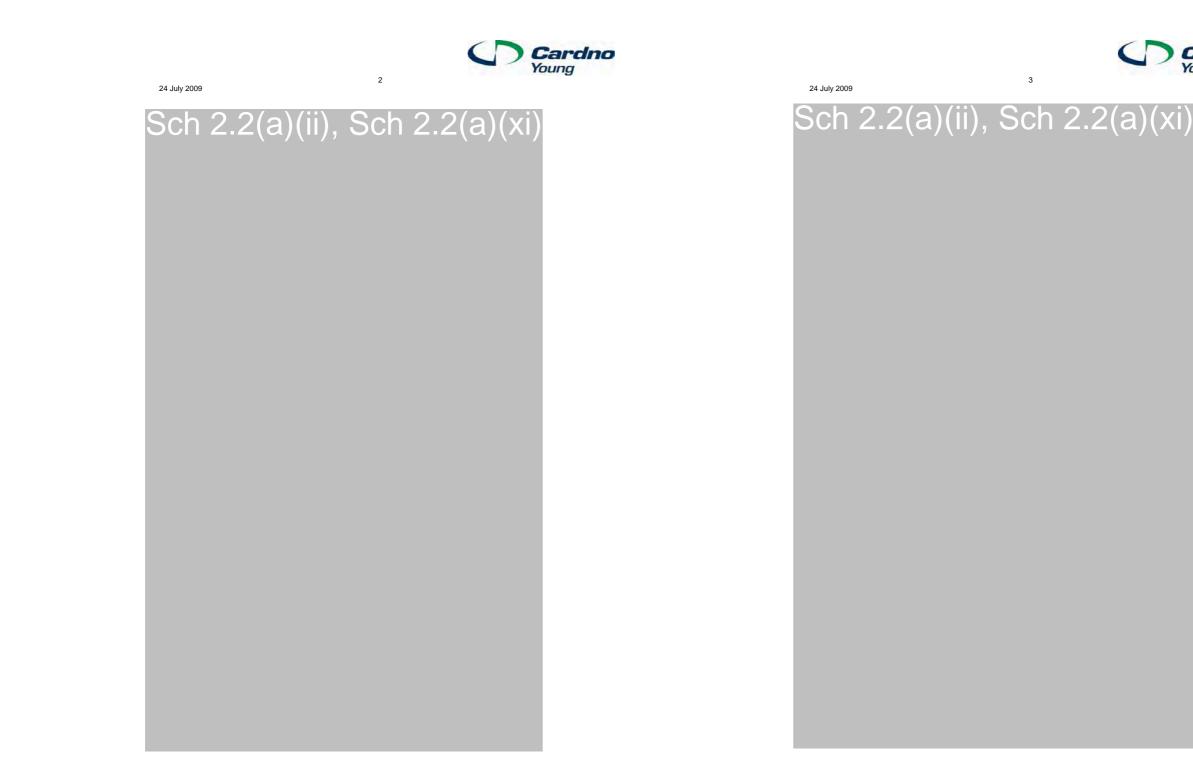
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al 2, 14 Wormald Street onston ACT 2609 Box 7217 CPBC 2610 Australia phone: 02 6112 4500 simile: 02 6112 4599 national: +61 2 6112 4500 il: canberra@ cardno.com.au : www.cardno.com.au











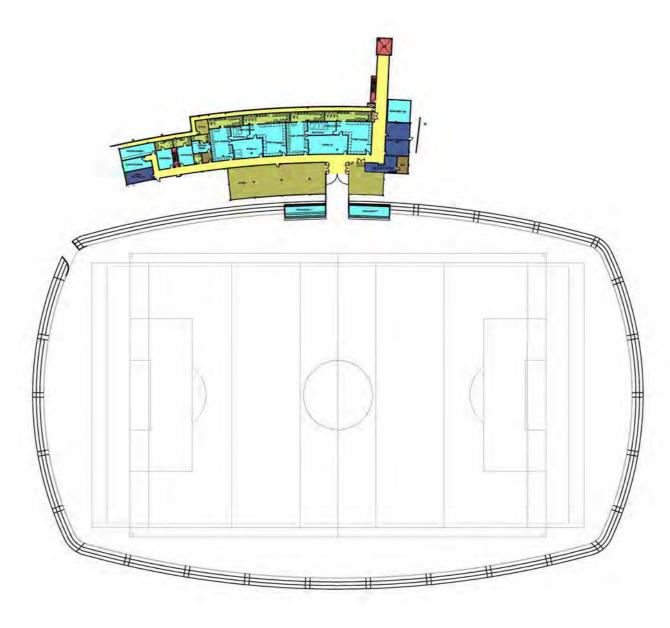




5.0 ARCHITECTURAL DRAWINGS



Player / Match Facilities Venue Management Media Toilets Food & Beverage Suites **Function Spaces** Circulation Vertical Circulation Corporate M/E/P Maintenance Kitchen Service Road





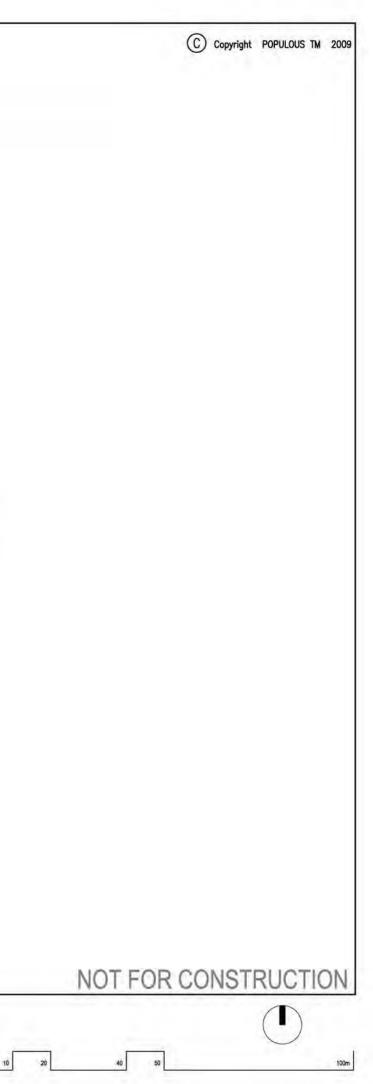
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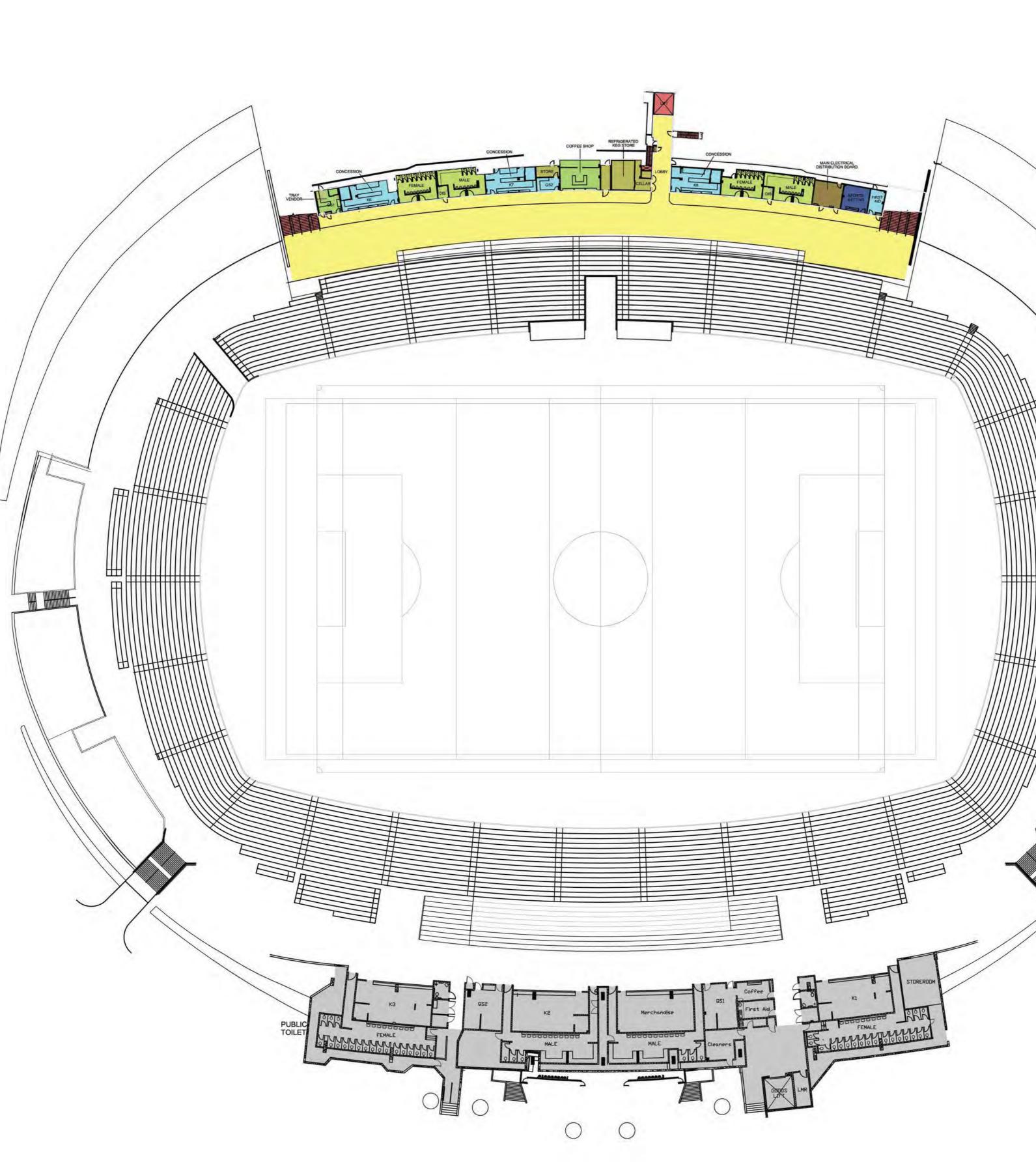


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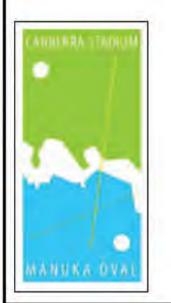
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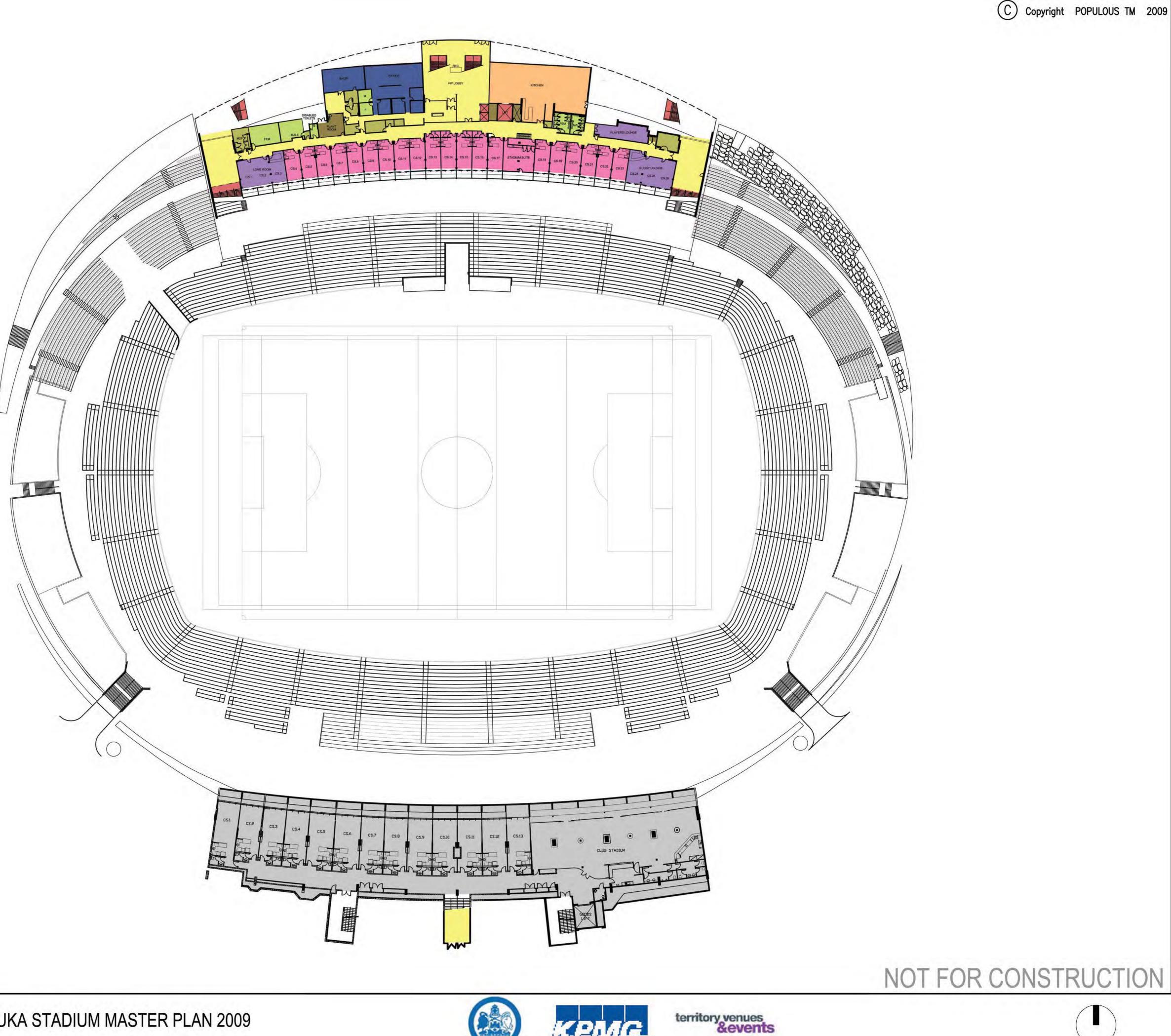
territory venues &events

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Player / Match Facilities
Venue Management
Media
Toilets
Food & Beverage
Suites
Function Spaces
Circulation
Vertical Circulation
Corporate
M/E/P
Maintenance
Kitchen
Service Road





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PROJECT NO: 09-7075-00

DRAWING TITLE: CS1 & CS2 - Level 03 Floor Plan

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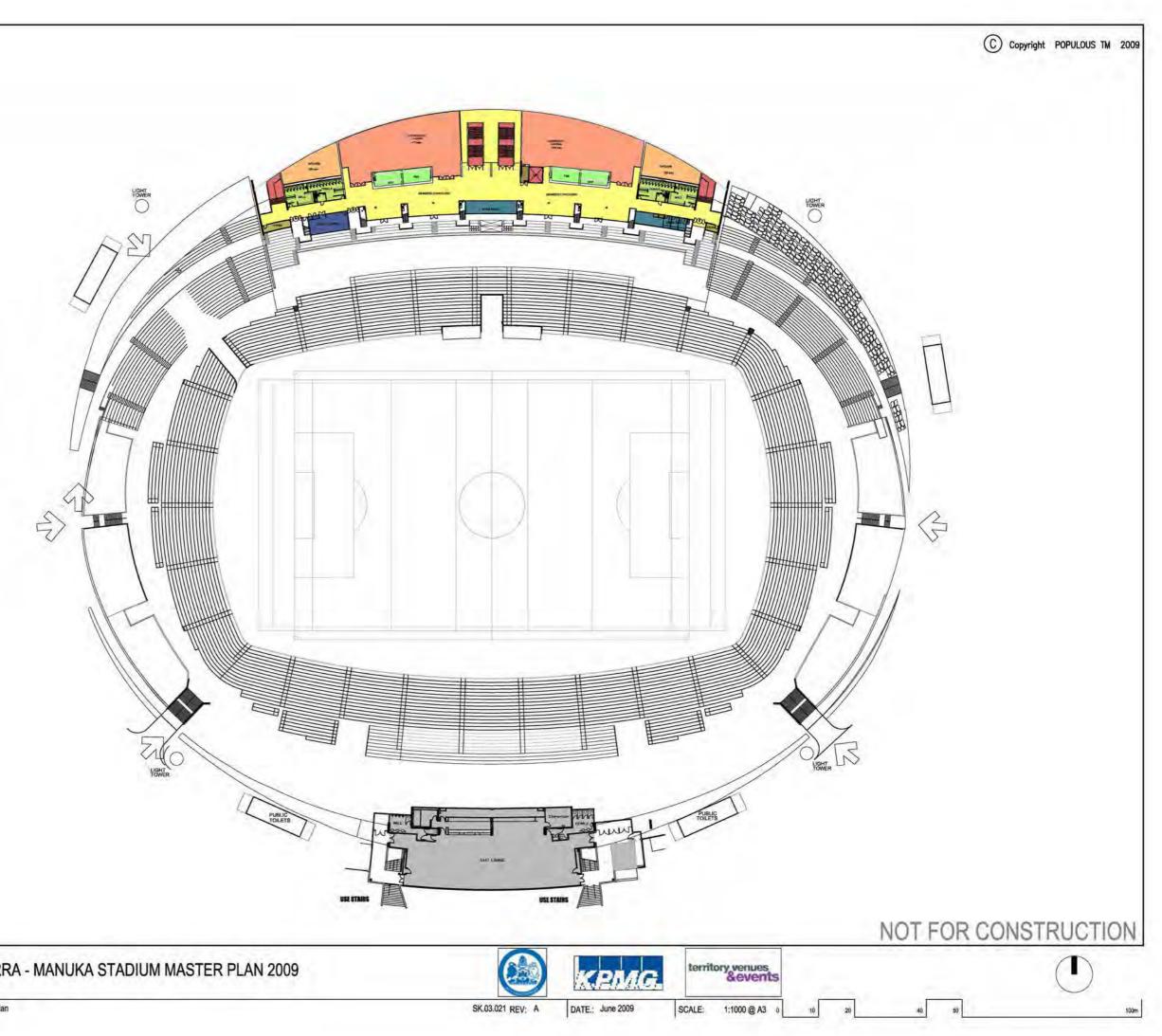
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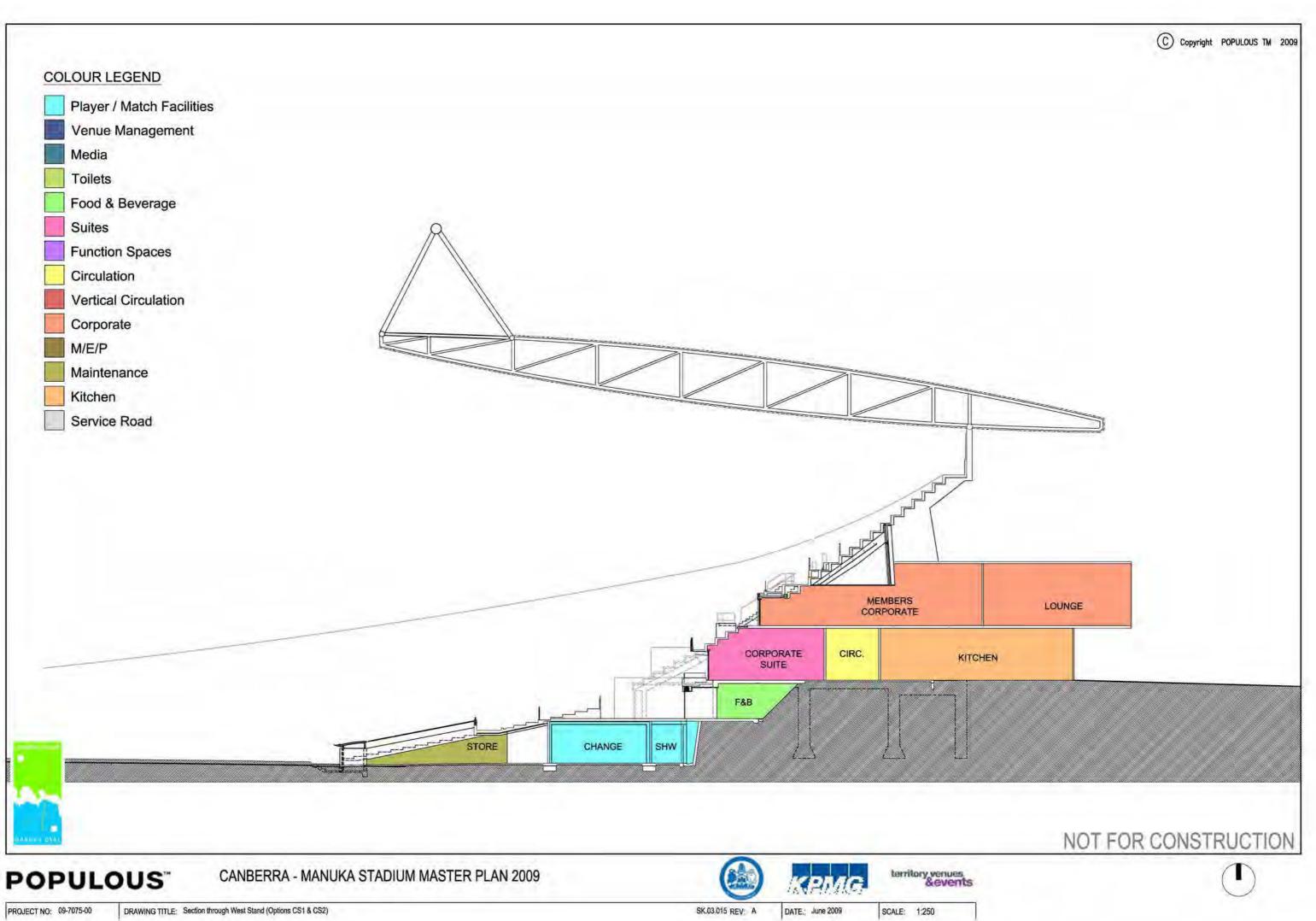




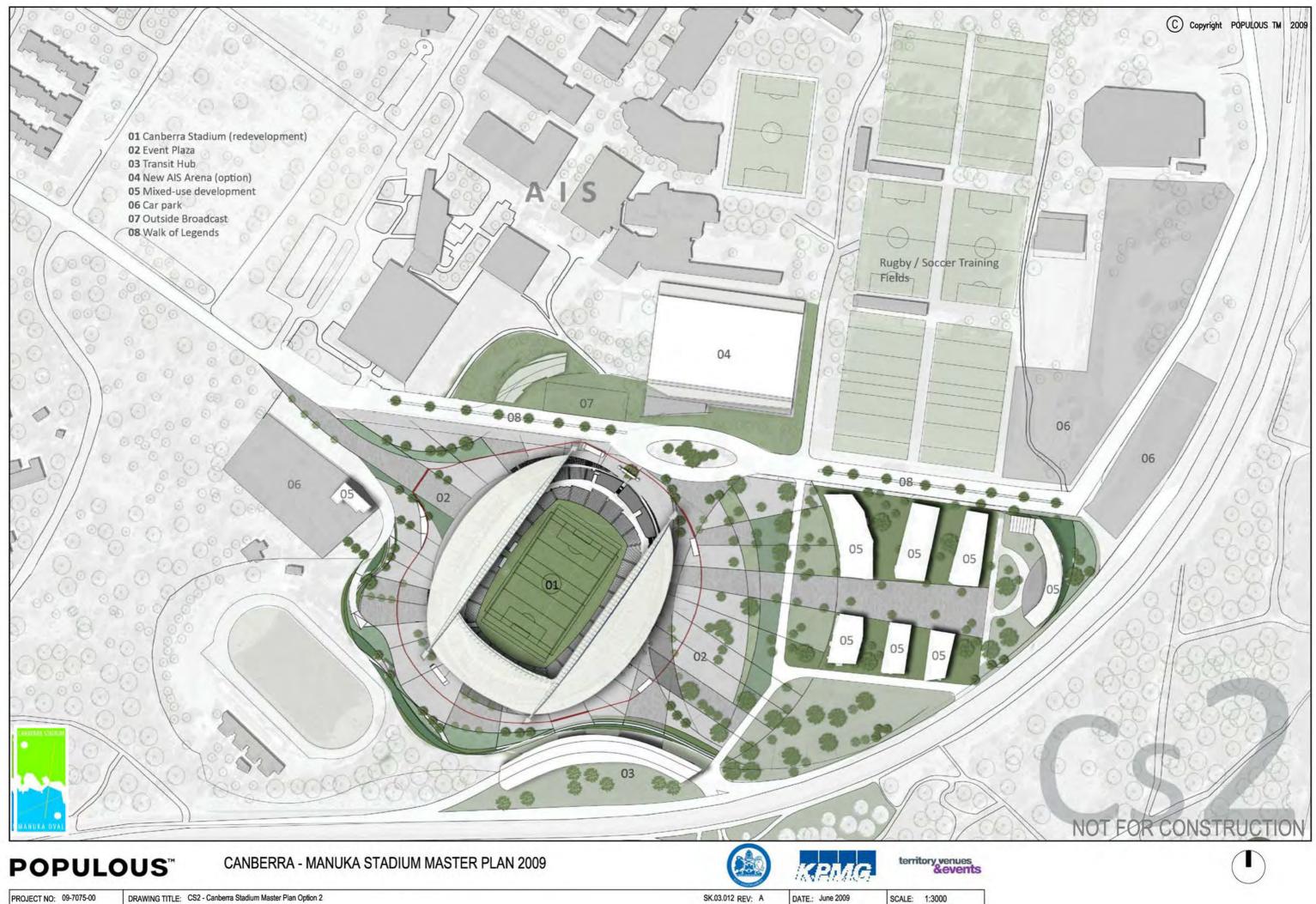
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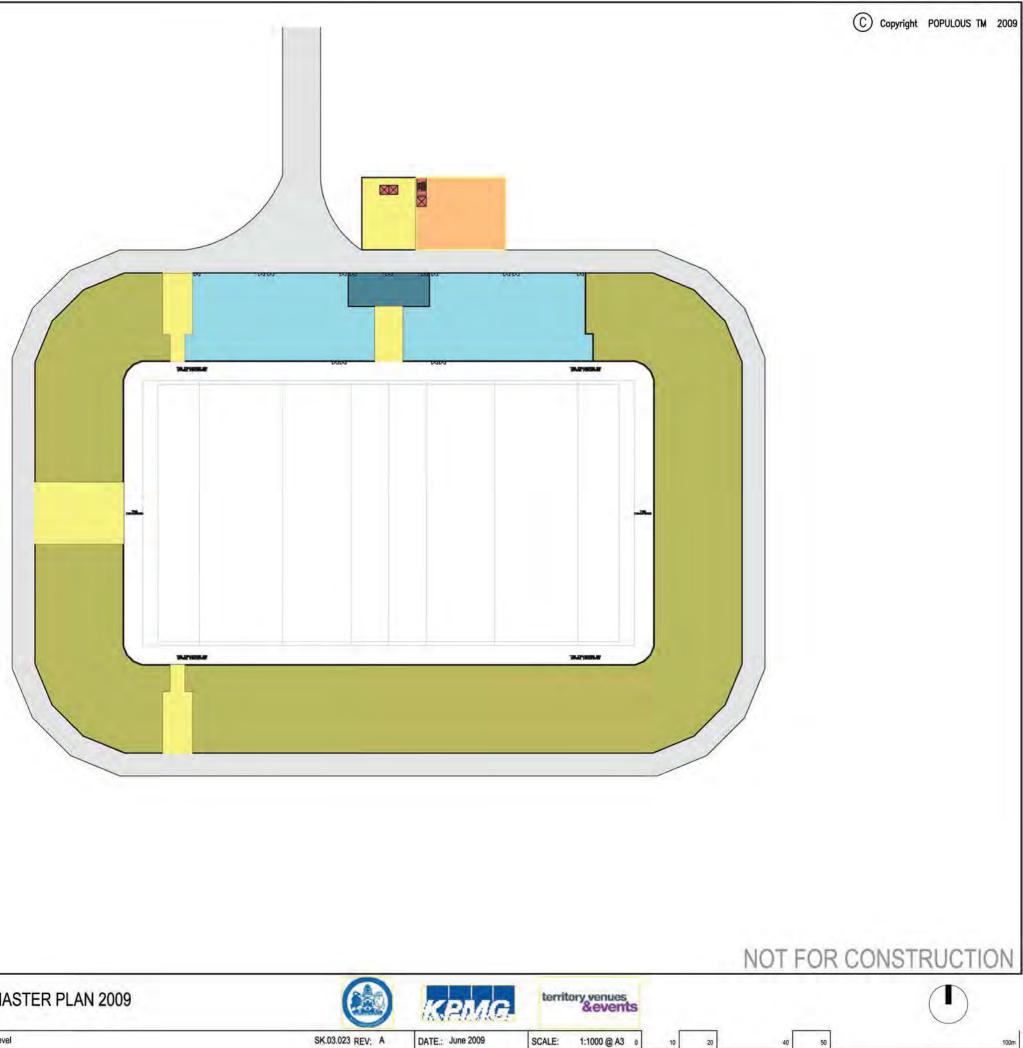








Player / Match Facilities Venue Management Media Toilets Food & Beverage Suites **Function Spaces** Circulation Vertical Circulation Corporate M/E/P Maintenance Kitchen Service Road

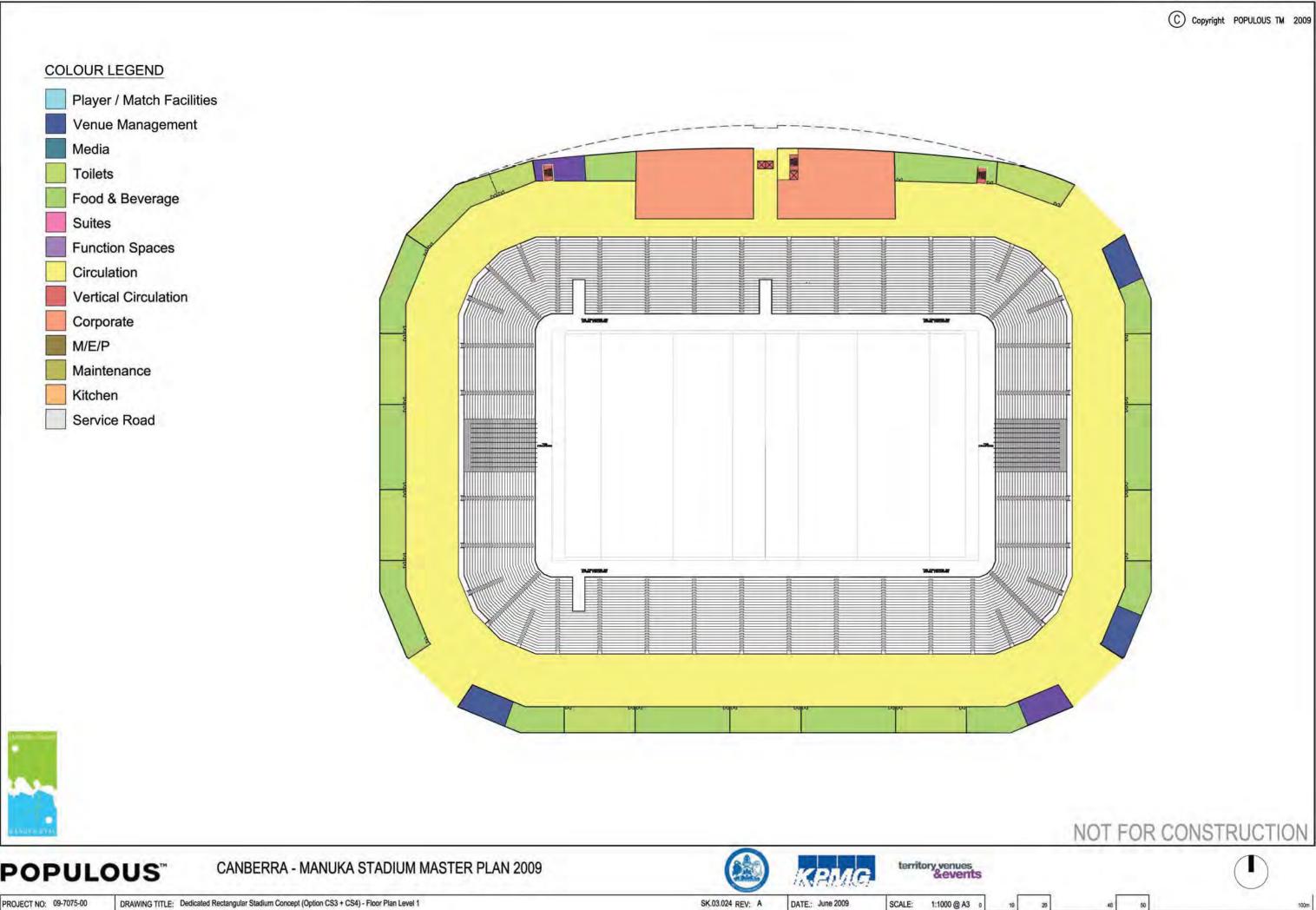




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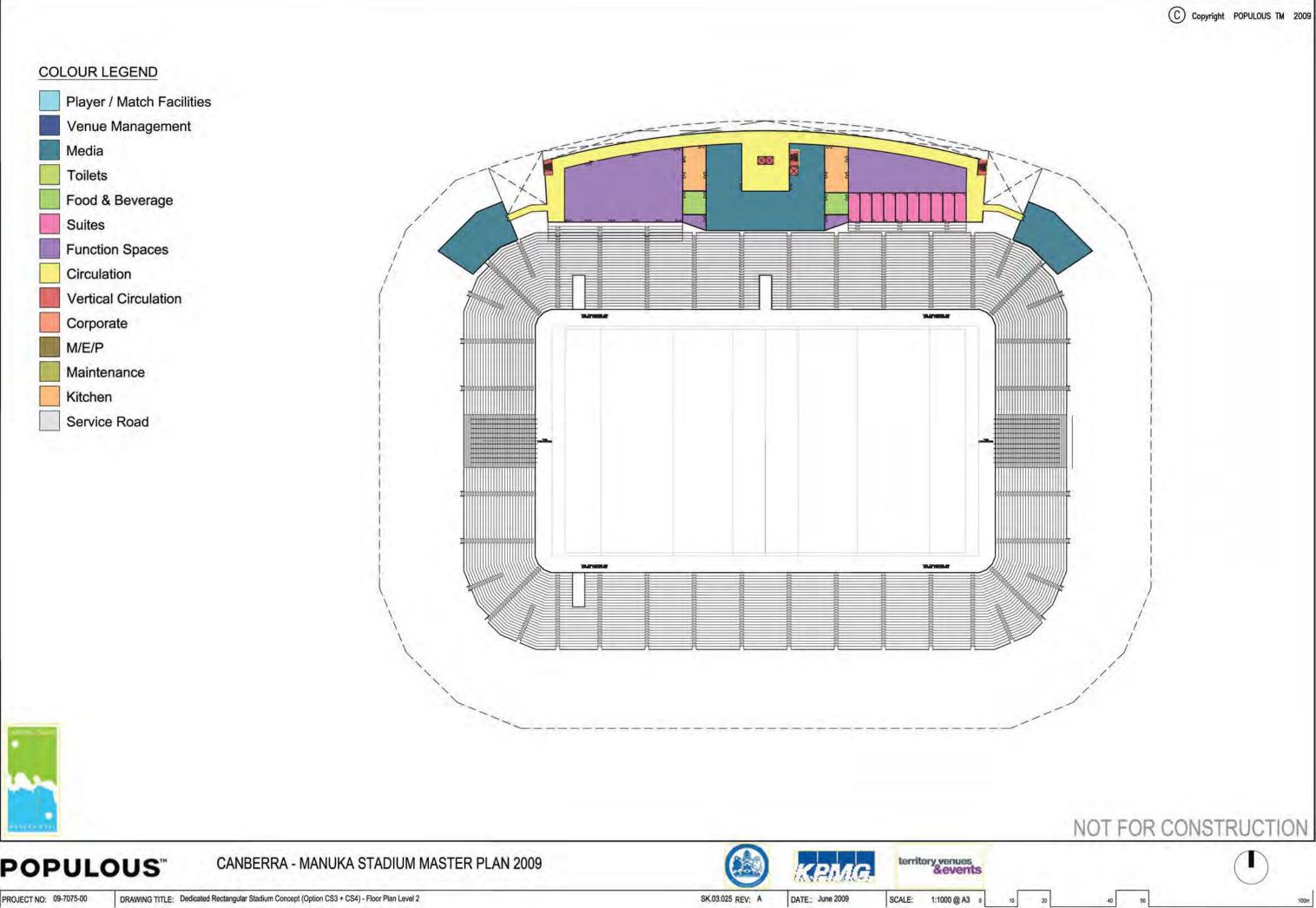




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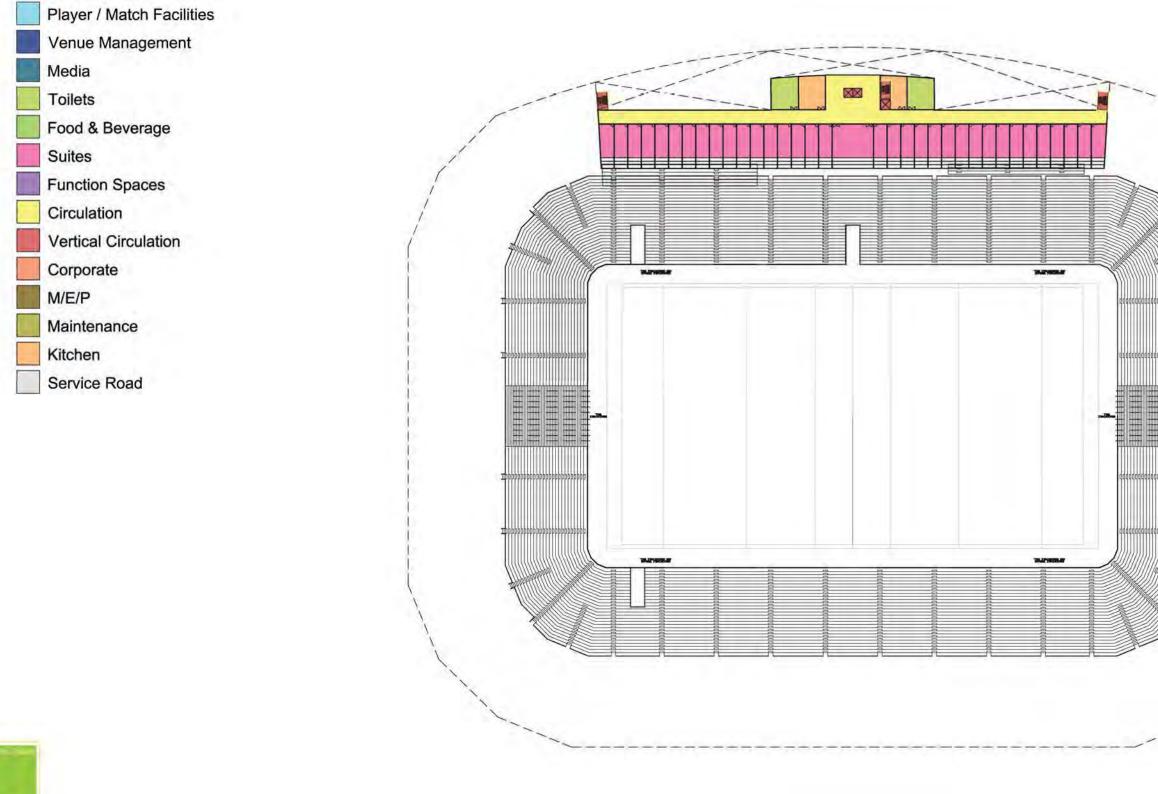
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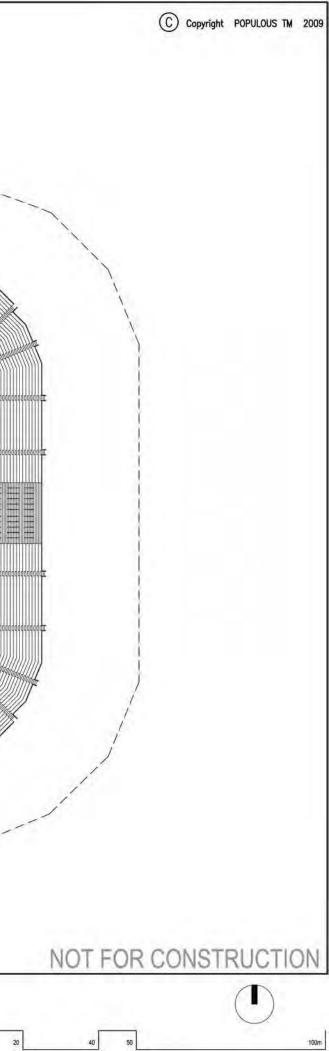
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PROJECT NO: 09-7075-00 DRAWING TITLE: Dedicated Rectangular Stadium Concept (Option CS3 + CS4) - Floor Plan Level 3

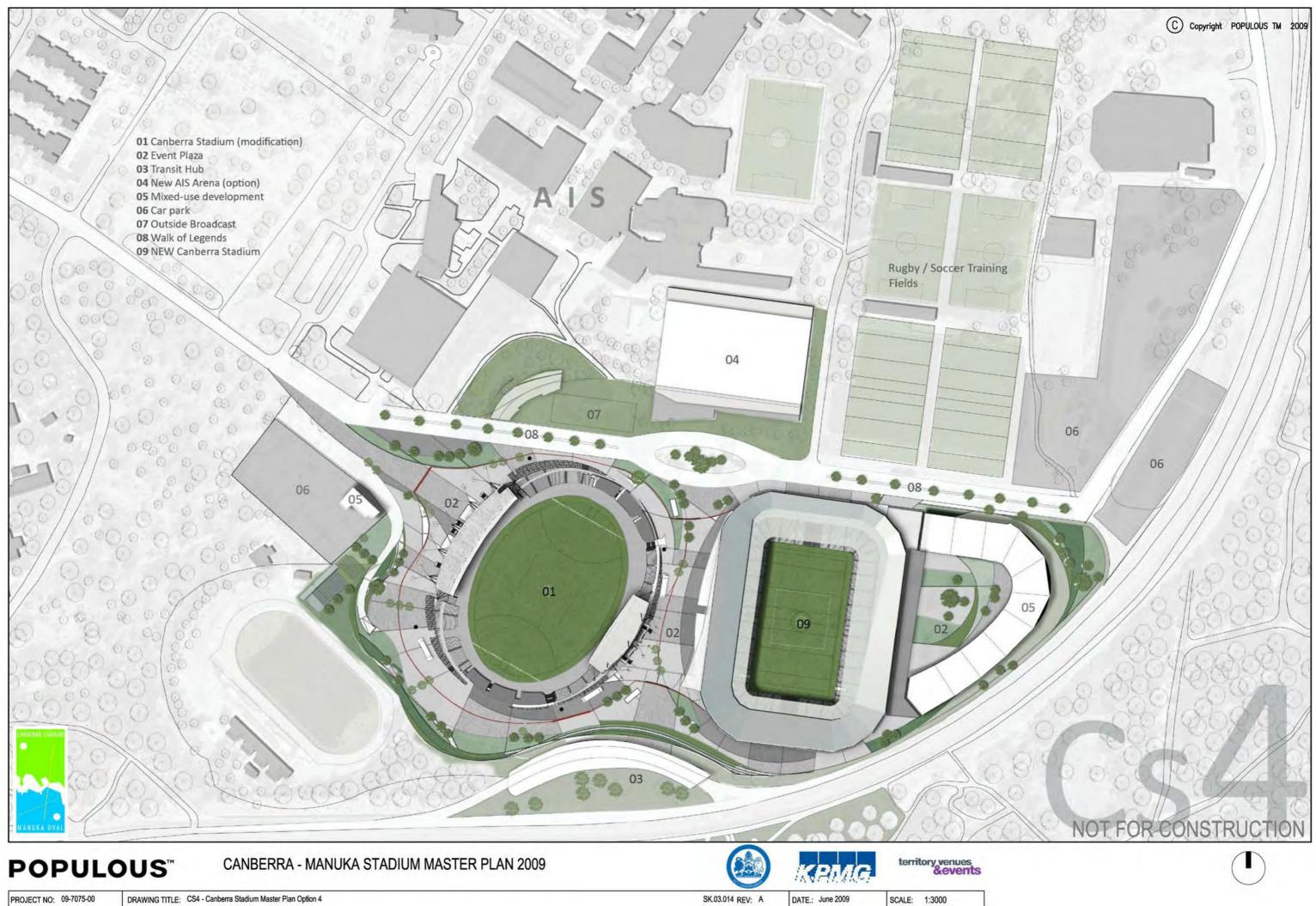
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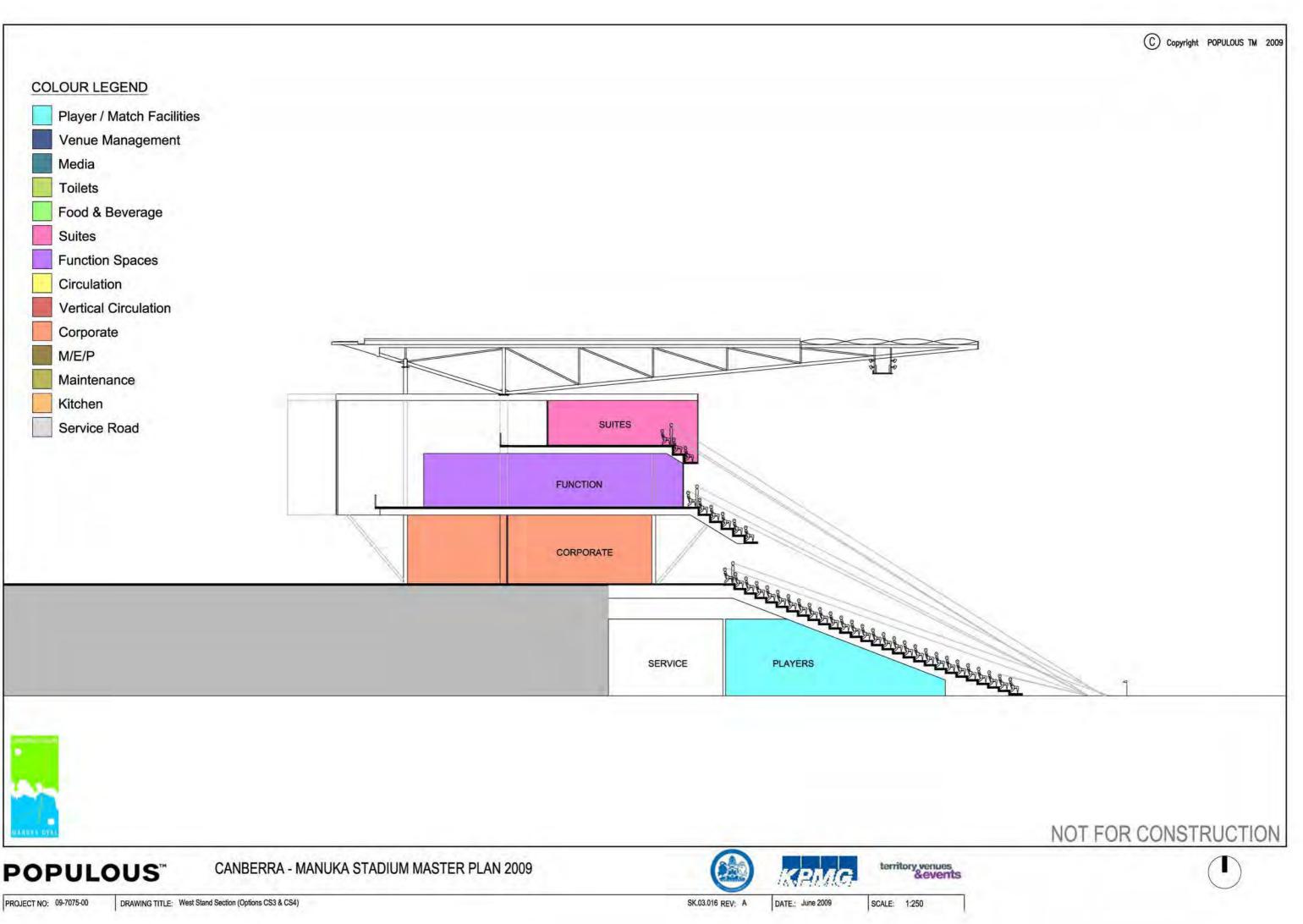
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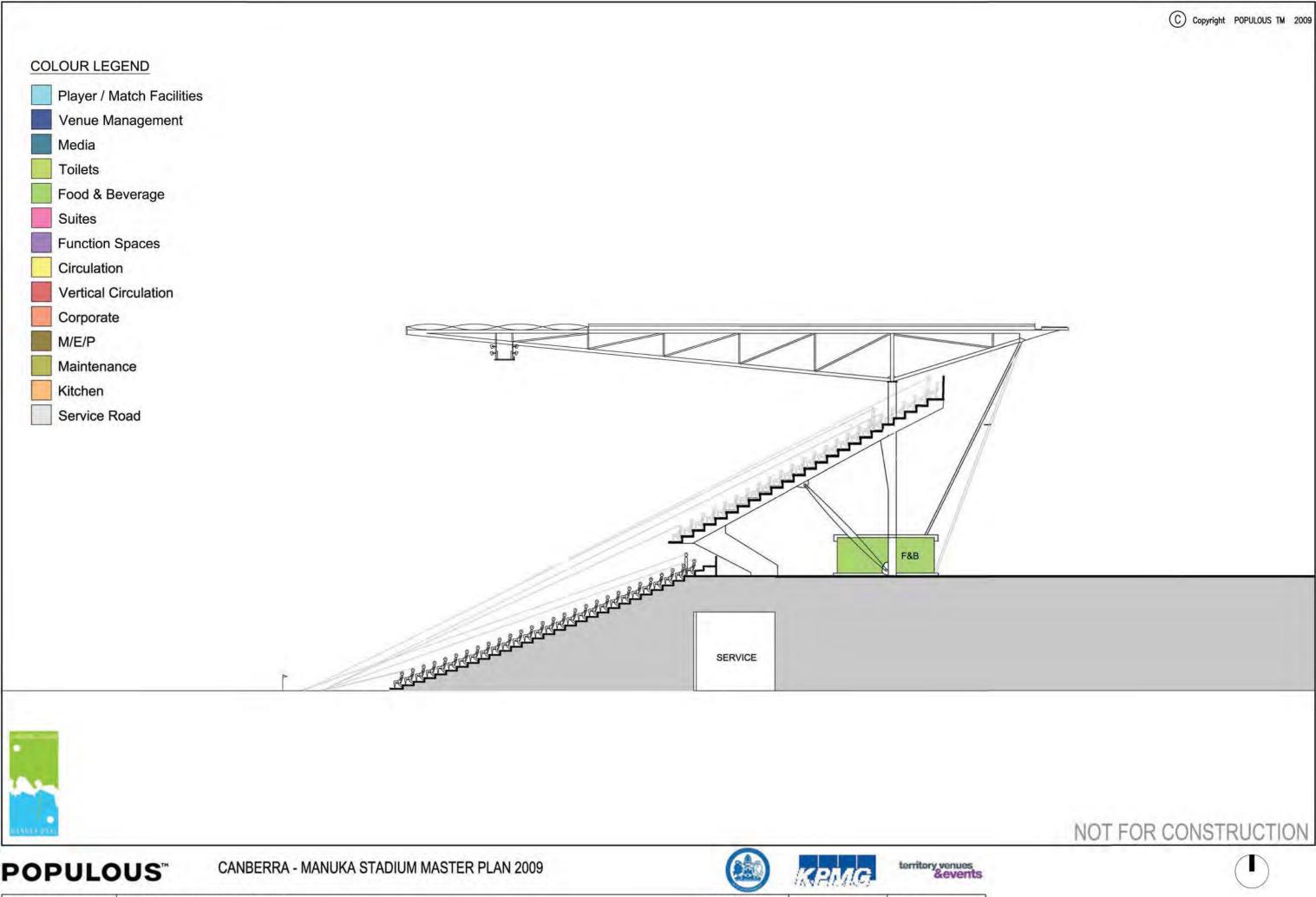






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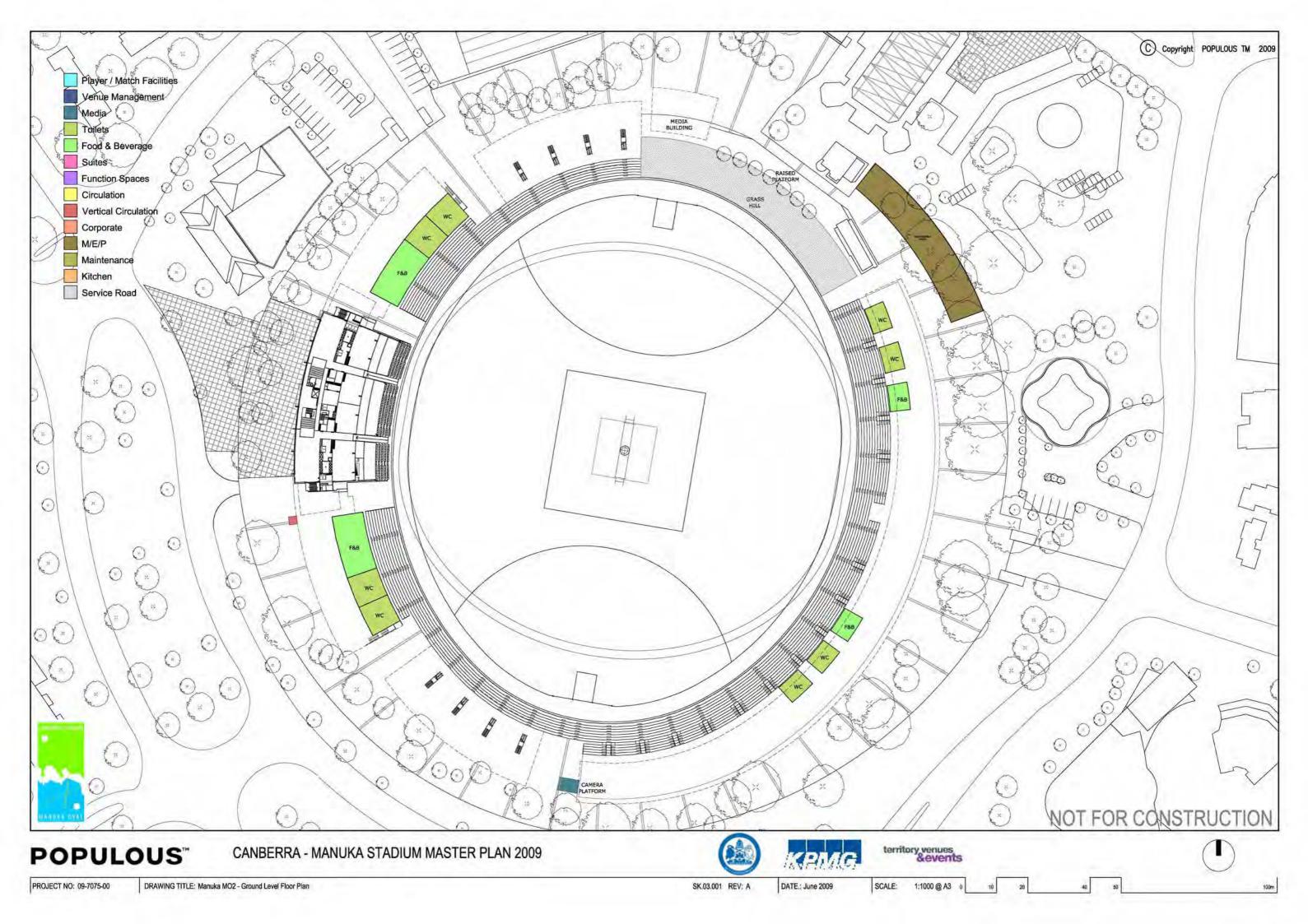


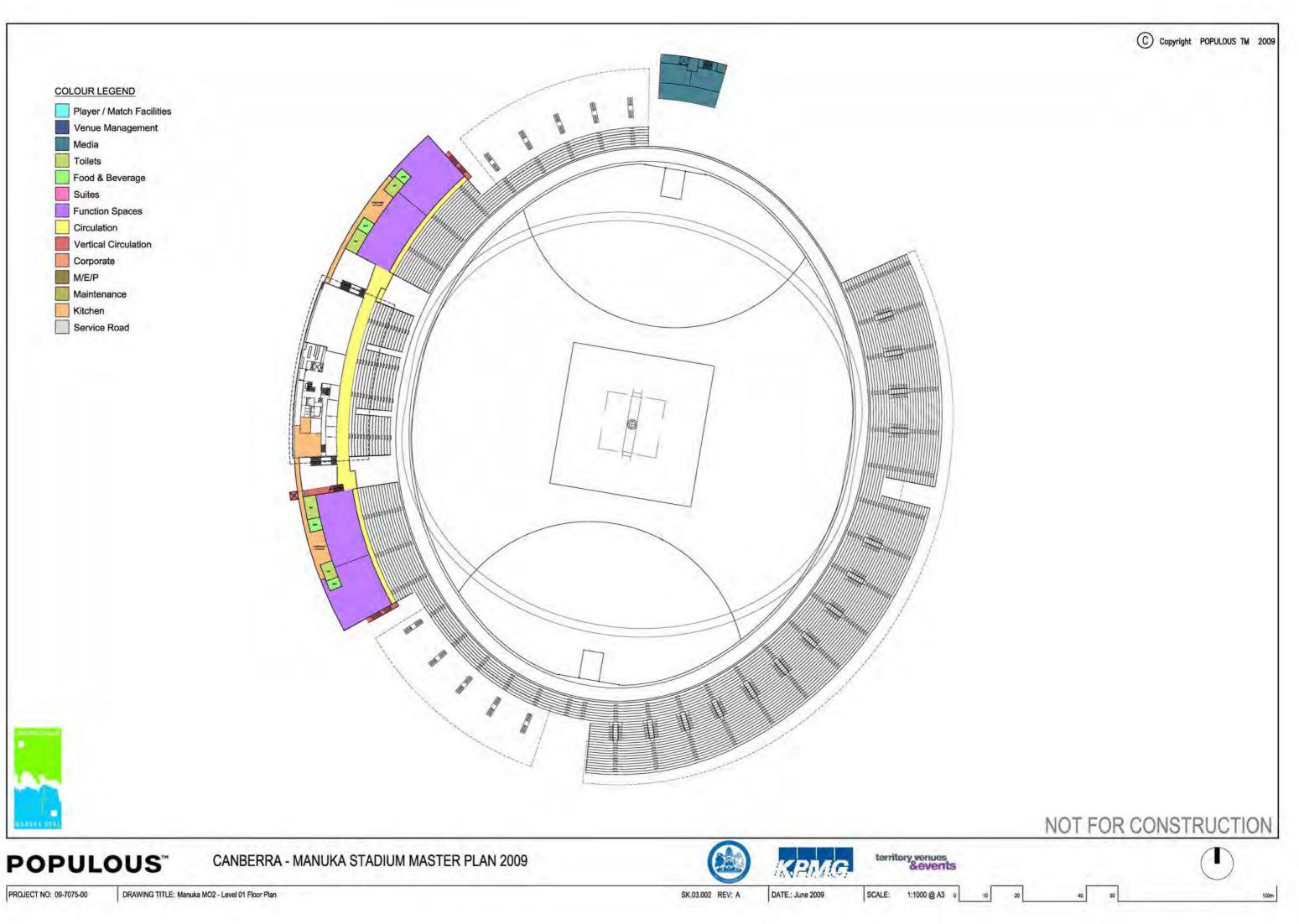




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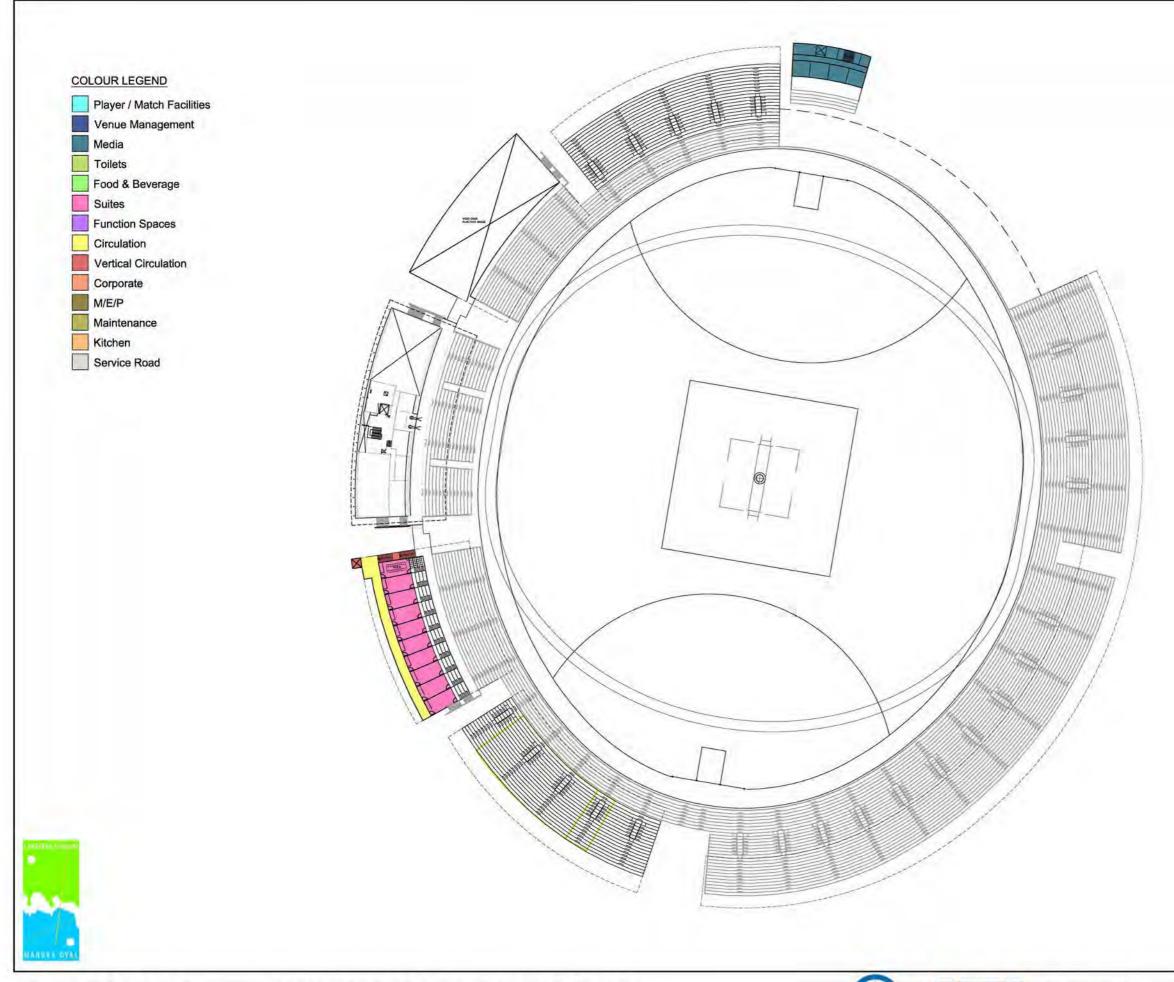
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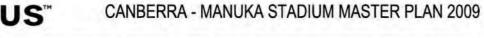








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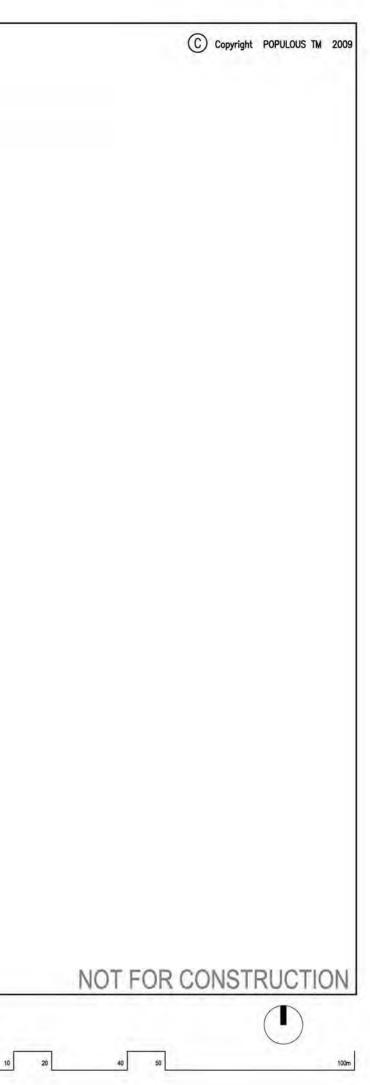


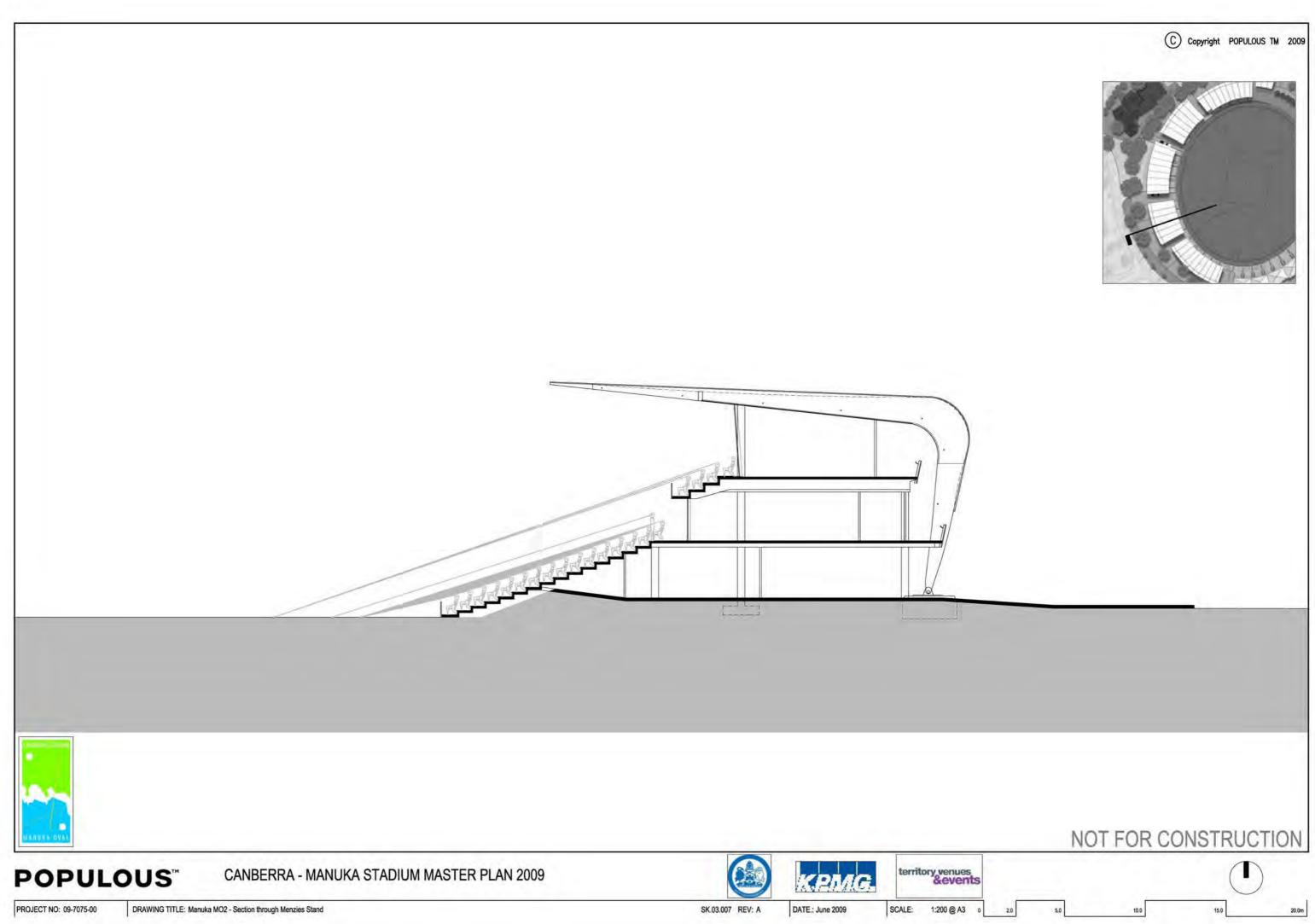
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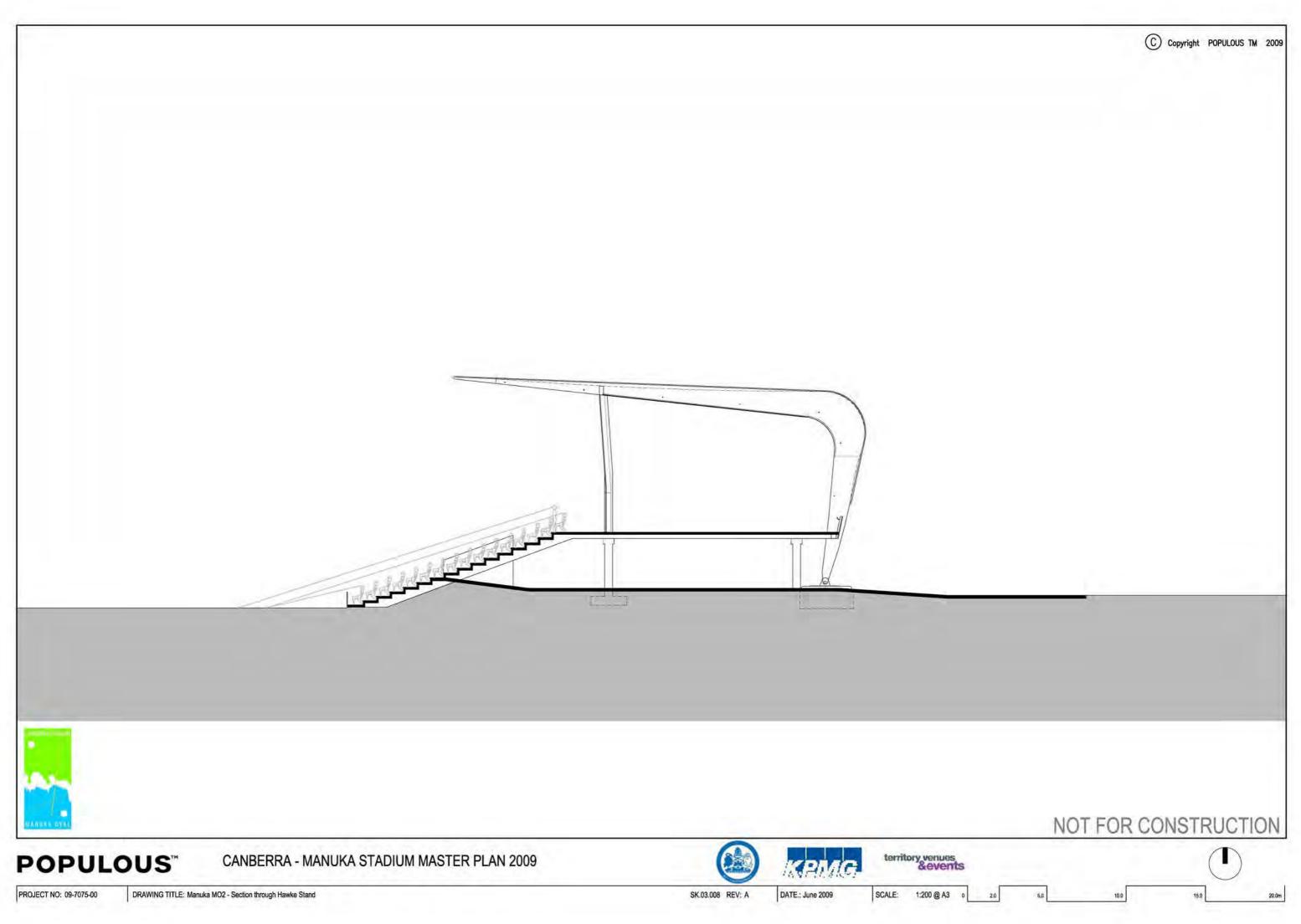
territory venues &events

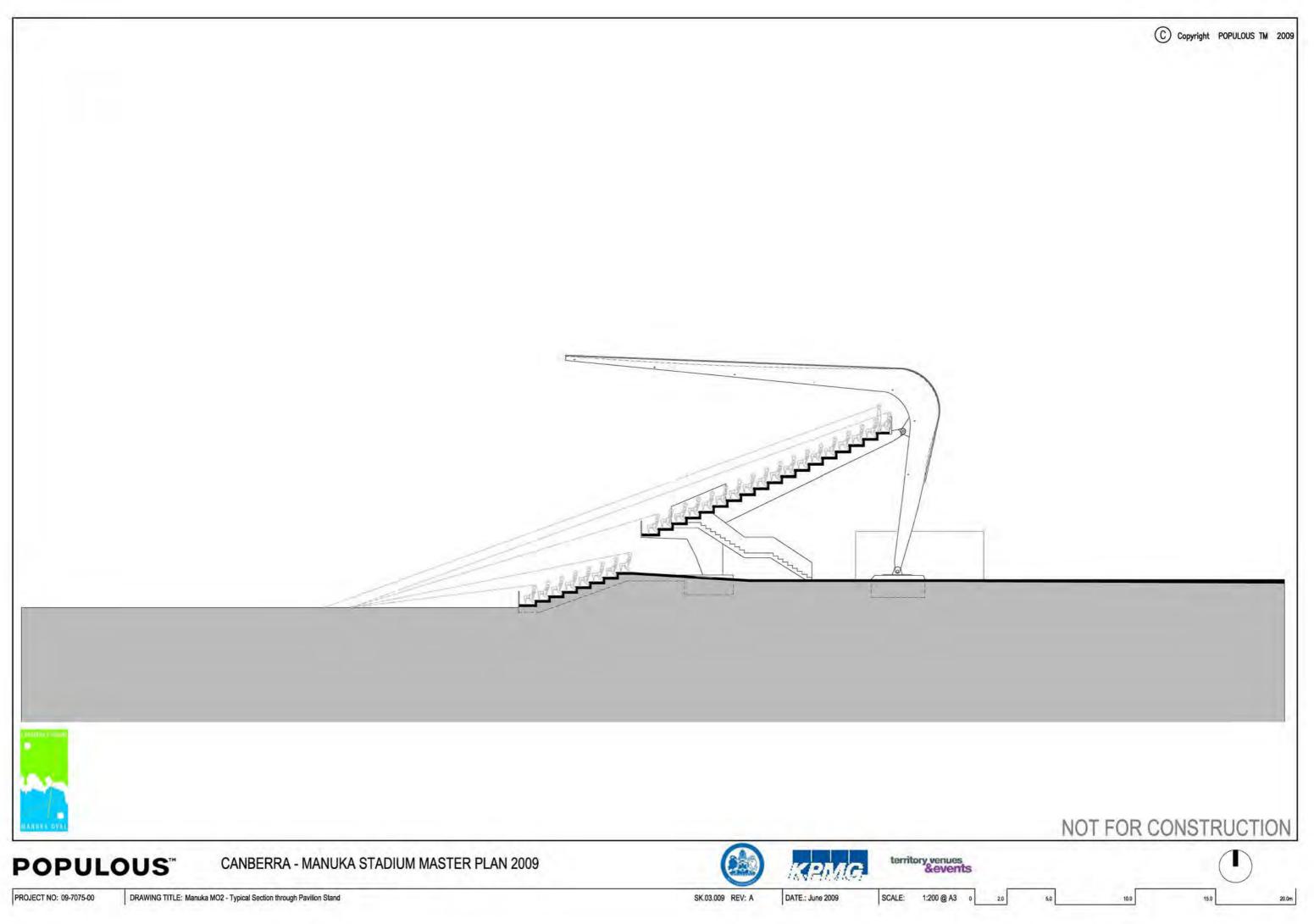
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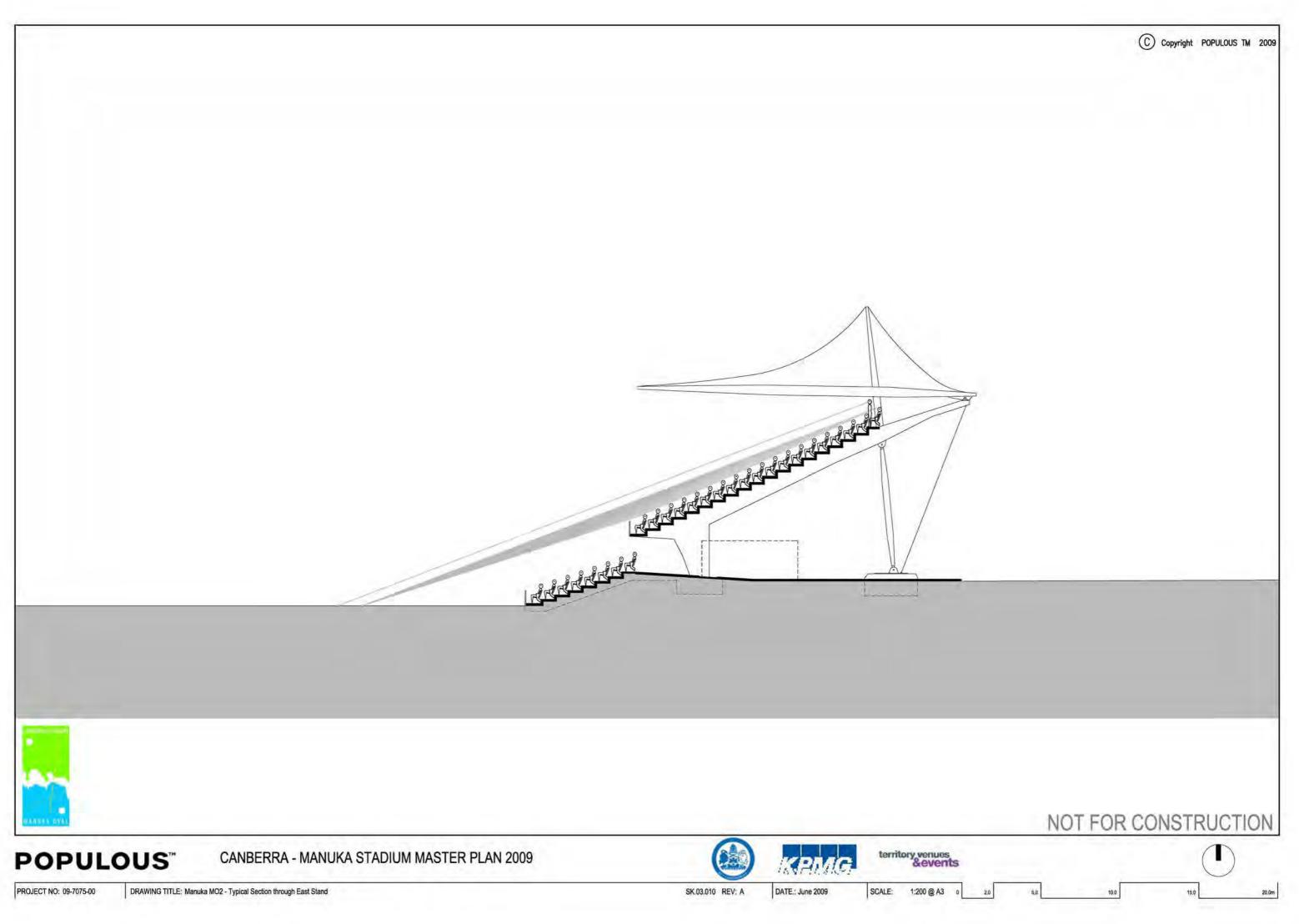
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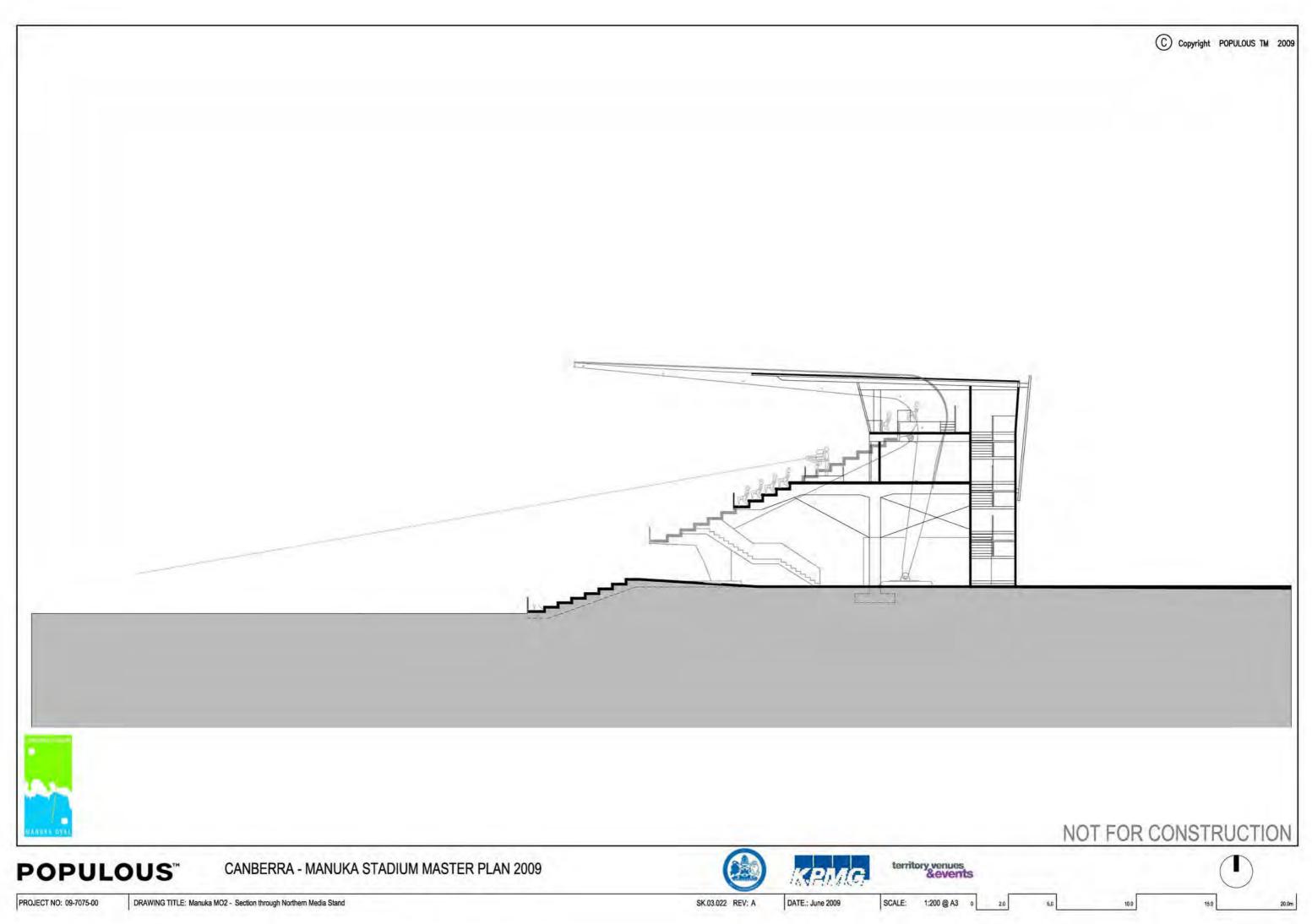


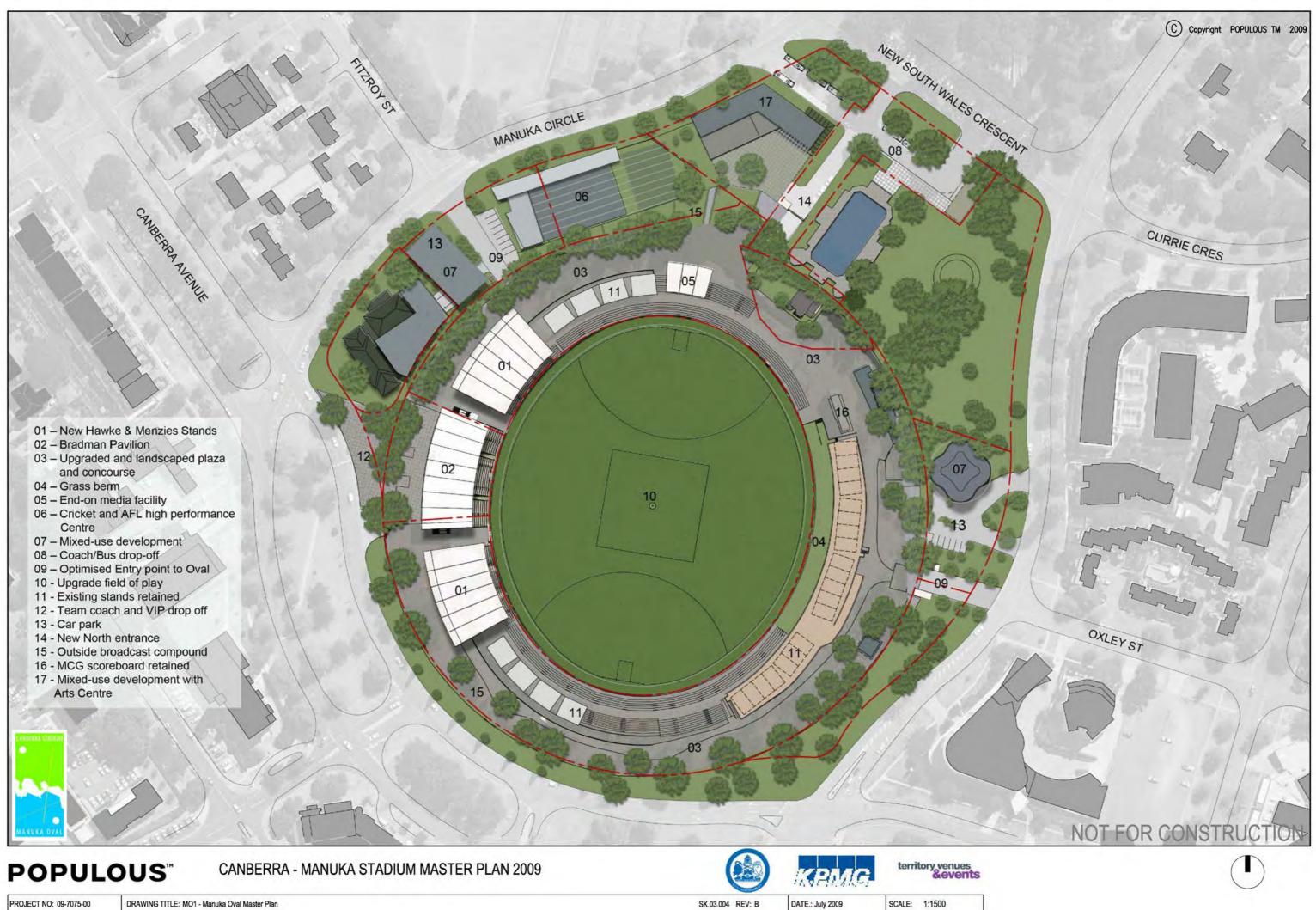
















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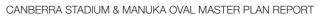
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