

DRAFT AMENDED
AK RESERVE
REDEVELOPMENT PLAN
APRIL 2009



Department of
Sport and Recreation

GOVERNMENT OF
WESTERN AUSTRALIA

Building stronger, healthier, happier and safer communities



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1.0 Introduction

In December 2005, State Parliament passed the Perry Lakes Redevelopment Act (2005) (PLRA) which transferred responsibility for the replacement of the Perry Lakes sporting facilities in the AK redevelopment area (Figure 1) from the Town of Cambridge (TOC) to the AK Minister (Minister for Sport and Recreation). The AK Reserve Minister has responsibility for preparing the AK Redevelopment Plan and for constructing the facilities.

The AK Reserve Redevelopment Plan (hereafter referred to as the Approved Redevelopment Plan) was approved by the Minister for Planning on the 10 August 2007 and provides the key planning provisions to apply to development and subdivision in the AK redevelopment area.

This Draft Amended AK Reserve Redevelopment Plan (hereafter referred to as the Amended Redevelopment Plan) is to respond to a need to relocate the proposed rugby facility to an alternative site within the Redevelopment Plan area.

1.1 North-West Precinct development approval

A development application was approved by the WA Planning Commission (WAPC) on 21 November 2007 for the North-West Precinct of the AK redevelopment area (see Figure 2) consistent with the Approved Redevelopment Plan. The development of the basketball and athletics facilities in this precinct and associated infrastructure is currently under construction in accordance with this approval.

1.2 Proposed rugby facility

The rugby facility was proposed in the Approved Redevelopment Plan to be located on land in the Southern Precinct on the former Brockway tip site. Following detailed site investigations and value management exercises it has been decided that this site is not suitable for the proposed rugby facility, although community level playing fields could be developed on this site in the future. It is therefore proposed that a replacement rugby facility is to be located in AK Reserve (now Reserve 49382) on land fronting Underwood Avenue between the basketball and athletics stadiums.

1.3 Structure of the document

This Amended Redevelopment Plan updates the Approved Redevelopment Plan and has two sections. Part 1 describes the planning context for the proposed replacement rugby facility. Part 2 provides the planning provisions to guide future development within the AK redevelopment area.

1.4 Amended Redevelopment Plan purpose statement

The PLRA 2005 applies to the Perry Lakes Stadium site at Floreat within the TOC (“the Perry Lakes land”) and to nearby land on the southern side of Underwood Avenue (“the AK Reserve land”) also in the TOC, and is able to be applied to land outside the TOC.

The AK Reserve Minister has responsibility on behalf of the State to ensure that three sporting facilities (for basketball, athletics and rugby) are constructed “wholly or partly on the AK Reserve land or on land in the AK redevelopment area or on land outside the AK redevelopment area, as the Minister decides, but not on the Perry Lakes land”; see sections 12(1) and 12(2) of the PLRA 2005. Section 19(2) of the PLRA 2005 requires the AK Reserve Minister to prepare a draft redevelopment plan for the AK redevelopment area. The purpose of this Amended Redevelopment Plan is:

“To facilitate the orderly and proper planning and development of three sporting facilities and associated infrastructure in the AK redevelopment area, in accordance with the Perry Lakes Redevelopment Act 2005 and Perry Lakes Redevelopment Regulations 2006.”

2.0 The site

The proposals in this Amended Redevelopment Plan refer to two discrete precincts described hereafter as the “North-West” and “Southern” Precincts (see Figure 2).

The proposed replacement rugby facility is to be located on the AK Reserve (Lot 520 or Reserve 49382) which is in the North-West Precinct. The site formerly proposed for the rugby facility is in the Southern Precinct.

2.1 Tenure

A Tenure Plan has been completed by McMullen Nolan Surveyors and is contained in Figure 3.

North-West Precinct

The North-West Precinct includes four ownership groups:

1. Lot 520 (Reserve 49382) owned by State of Western Australia.
2. Portion of Lot 2103 previously owned by the University of Western Australia (UWA) but now incorporated into Lot 520.
3. Portions of the road verge of Stephenson Avenue and Underwood Avenue in the control of the Commissioner for Main Roads WA and Town of Cambridge.
4. Lot 14 previously owned by Main Roads WA now incorporated into Lot 520.

Lot 520 is vested in the Minister for Sport and Recreation under a management order for the purposes of the Perry Lakes Redevelopment Act (2005).

Lot 520 is also encumbered by an easement for a sewer for the benefit of the Water Corporation close to the Underwood Avenue boundary.

Southern Precinct

The Southern Precinct includes three ownership groups:

1. Reserve 33985 vested with the AK Reserve Minister for the purpose of the Perry Lakes Redevelopment Act (2005) and public services utilities.
2. Reserve 29320 controlled by the Electricity Corporation.
3. Reserve 41504 vested with the AK Reserve Minister for the purpose of the Perry Lakes Redevelopment Act (2005).

All three Reserves are encumbered by an easement for a drainage pipeline that traverses through the Southern Precinct for the benefit of lot 10629 on Deposited Plan 216298 (John XXIII College). Reserve 33985 is a Reserve for public utilities and has services in the ground, including the main ocean outfall sewer from the Subiaco Waste Water Treatment Plant (WWTP) as well as overhead electricity transmission lines. These services will need to be taken into account in the siting of any future development proposals.

Caveat F 629233 lodged by the Western Australian Sports Centre Trust (the Trust) claims an interest on the land by virtue of a Licence Agreement that initially expired on 7 January 2003, but with an option to renew for a further term of five years. This Licence Agreement will be clarified with the Trust.

Caveat H827682 lodged by the Landfill Gas and Power Pty Ltd claims an interest in the land by virtue of a deed granting a sub-licence to enter the land for a term that expired on 7 January 2003, but with an option to renew for a further term of five years. This Licence Agreement will be clarified with the Trust.

It is proposed that the Crown Reserves in this Precinct will be consolidated with appropriate Management Orders once the proposals have been confirmed and managers identified. Dedication of portions of Reserve 33985 and Lot 12 (owned by the Commissioner of Main Roads) should also occur.

3.0 Statutory context

3.1 Perry Lakes Redevelopment Act 2005

The Perry Lakes Redevelopment Act (PLRA 2005) came into operation on 19 December 2005 except for Part 3 which came into effect on 3 February 2006, and section 53 which came into operation on 9 April 2006. The aims of the PLRA 2005 include enabling the State Government to:

- resume ownership of the Perry Lakes land and AK Reserve land formerly owned by the TOC. (Resumption occurred on 3 February 2006 and compensation to the TOC of \$1.7 million for the AK Reserve land has been paid);
- construct, on the AK Reserve land and any other land added to the AK redevelopment area by the regulations, athletics, basketball and rugby facilities to replace those currently situated on the Perry Lakes land (to be undertaken by the “AK Reserve Minister”);
- subdivide and sell part, or all, of the Perry Lakes land (to be undertaken by the Western Australian Land Authority – WALA), with the proceeds of the sale to fund the construction of the three sporting facilities, less a State Government committed contribution to upgrading the regional athletics facility to a State level (a guarantee of \$50 million return to the TOC is specified in the Act);
- establish a Perry Lakes Trust Fund under section 41 of the PLRA 2005 for the benefit of the TOC, where surplus land development funds would be placed for return to TOC and where any undeveloped land can be returned to TOC in lieu of cash (DPI has established the trust fund);
- prepare separate “redevelopment plans” for the Perry Lakes redevelopment area (by WALA) and for the AK redevelopment area (by the AK Reserve Minister) following a process similar to that of a local planning scheme amendment (however, once these plans are approved by the Minister for Planning and Infrastructure, development control would be with the WAPC rather than with the Local Authorities, as would be the case with a local planning scheme, although normal subdivision approval requirements by the WAPC would otherwise apply).

This Amended Redevelopment Plan has been prepared to fulfill the requirements of the PLRA 2005. It forms the basis for determining development and subdivision applications for the three sporting facilities and associated infrastructure in the AK redevelopment area for the redevelopment period;

The PLRA 2005 requires that certain matters must be addressed or considered in this Amended Redevelopment Plan. In particular, subsection 12(2) of the PLRA 2005 states:

“The sporting facilities must be constructed wholly or partly on the AK Reserve land or on land in the AK redevelopment area or on land outside the AK redevelopment area, as the Minister decides, but not on the Perry Lakes land.”

Subsection 12(3) requires that the AK Reserve Minister must have regard to certain principles of environmental design and construction for the new sporting facilities.

Subsection 12(4) provides that the AK Reserve land must not be developed for a purpose that is inconsistent with the purpose (Parks and Recreation) for which it was reserved under the Metropolitan Region Scheme (MRS) immediately before coming into operation of that section.

Also, subsection 27(4) of the PLRA 2005 requires that the Planning Minister must not approve a draft redevelopment plan unless satisfied it contains provisions that ensure that:

- as much of the existing flora on the AK Reserve land as possible is conserved in a corridor running in a broadly east-west direction; and
- the corridor is enhanced with flora that is indigenous to the land so as to create a continuous belt of such flora.

References are made and footnotes are provided in this document to demonstrate where the above mentioned aspects of the PLRA 2005 have been incorporated or addressed.

3.2 Perry Lakes Redevelopment Regulations (2006)

On 31 October 2006, the Perry Lakes Redevelopment Regulations (as amended) were gazetted. The Regulations were prepared under section 51 of the PLRA 2005. The Perry Lakes Redevelopment Regulations 2006 (“the Regulations”) provide for:

- The extension of the AK redevelopment area southwards to include the land required to accommodate all three sporting facilities.
- The prescription of a form for applications for development approval to be made to the WAPC.
- The prescription of fees for the WAPC to charge applicants for development applications.

This Amended Redevelopment Plan is made for the AK redevelopment area as extended by the Regulations.

3.3 Responsible authority

3.3.1 Preparation

Section 12(1) of the PLRA 2005 provides that the AK Reserve Minister is responsible for ensuring the following sporting facilities are constructed:

- Facilities for athletics that will serve the people of the whole state;
- Facilities for basketball of such a size and standard as are determined by the Minister;
- Facilities for rugby of such a size and standard as are determined by the Minister.

To do this the AK Reserve Minister must prepare a draft redevelopment plan for the AK redevelopment area.

3.3.2 Endorsement

The Planning Minister is responsible for the approval of the Amended Redevelopment Plan in accordance with Part 3 Division 4 of the PLRA 2005.

This Amended Redevelopment Plan has been referred for comments and/or approvals to the relevant local governments, and state agencies including the Environmental Protection Authority (EPA) and WAPC, and from the public in accordance with the PLRA 2005. A simplified outline of the determination process of this Amended Redevelopment Plan is provided in Figure 4.

3.4 Relationship with related statutes and regulations

3.4.1 Environmental Protection Act 1986

As with a local planning scheme or a scheme amendment, the PLRA 2005 requires the Redevelopment Plan to be submitted to the EPA for a decision as to whether environmental review is required under the Environmental Protection Act 1986 (EP Act).

3.4.2 Local planning schemes and Metropolitan Region Scheme

On 3 February 2006 (resumption day), the existing TOC local planning scheme and the Metropolitan Region Scheme (MRS) ceased to apply to the Perry Lakes land and the AK Reserve land. The PLRA 2005 provides that any planning scheme that applies to land thereafter declared by the Regulations to be part of the AK redevelopment area, ceases to apply to that land and to any development on that land.

On 31 October 2006, the Regulations came into effect extending the boundaries of the AK redevelopment area onto land in the City of Nedlands, thereby suspending the affected portions of its local planning scheme as well as the MRS.

The AK redevelopment area is shown on Figure 1. The basis of planning control in the AK redevelopment area is set out in this Amended Redevelopment Plan.

The existing local planning schemes and the MRS will be re-instated on “completion day”, which is a date fixed under section 4(2) of the PLRA 2005.

4.0 Sports precinct vision

4.1 Planning background

The Mt Claremont precinct has been identified in many studies as suitable for the development of a sports precinct. Section 1.3 of the Approved Redevelopment Plan summarises the background studies that have contemplated how such a sport precinct could be developed at Mt Claremont. The proposals are illustrated in Figure 5.

4.2 Master Plan 2006

On behalf of the AK Reserve Minister and in conjunction with UWA, the Department of Sport and Recreation (DSR) completed a Master Plan for the wider sports precinct that consolidates a number of stakeholder aspirations into broad planning principles (see section 4.4). Although the PLRA 2005 did not specifically require it, the Master Plan provided a planning framework within which to develop proposals for the three sporting facilities and, in doing so, established a vision for the creation of a sporting precinct of regional, national and international significance. It also showed how, given various stakeholder aspirations, the three sporting facilities might integrate with Challenge Stadium, UWA Sport Park, school playing fields and potential future development to the south.

Section 2.1 and Volume 3 of that document provides details of the Master Plan 2006.

4.3 Vision

The vision statement for the wider sports precinct is to create:

“A sports hub of regional, national and international significance which builds social capital and bridges all levels of sport.”

4.4 Principles

The Master Plan identifies a number of principles for the planning of the Sports Precinct. The following principles have relevance to this Amended Redevelopment Plan and provide a context for the future planning of the wider Sports Precinct:

1. To retain and enhance an east-west flora corridor in a broadly east-west direction whilst locating as much sporting infrastructure as possible on the AK Reserve by:
 - identifying an existing east-west flora corridor;
 - proposing that this be enhanced and extended with additional planting; and
 - locating basketball and the majority of the athletics facilities on the AK Reserve land.
2. To provide clear and strong linkages to unify precinct activities by:
 - identifying a north-south “main street” to act as a focal point for precinct activities, with a robust built form linking as many sport uses as possible
 - proposing additional east-west vehicle, cycle and pedestrian linkages to assist in providing for permeability; and
 - providing a legible movement network to assist easy movement, link car parking areas and disperse traffic.
3. To provide for Challenge Stadium expansion by:
 - identifying future expansion paths to the north, south, east and west to allow for the upgrading and extension of Challenge Stadium to meet future sporting needs.

4. To make provision for public transport by:
 - maximising the potential for public transport and passenger coach penetration into the precinct to service sporting facilities; and
 - establishing a management structure to coordinate public transportation to major events.
5. To plan for well-distributed shared car parking by:
 - identifying “hard” bitumenised car parking for regular operational use close to facilities, and areas of “soft” grassed car parking towards the periphery for event parking;
 - distributing car parking areas evenly around the precinct to allow for reciprocal use;
 - providing for on-road parking to increase efficiency of infrastructure provision and increase visual surveillance and security for parking areas; and
 - establishing a management structure to coordinate car parking for events.
6. Provide for UWA's future needs by:
 - affording opportunities in the future for UWA to realise development value and so generate income to reinvest in the precinct; and
 - providing for UWA research and education needs to the east of the precinct on the CSIRO site, and on Brockway Road, and McGillivray Road.
7. To allow for the staged implementation of the Sports Precinct in accordance with these principles by:
 - the State contributing infrastructure necessary to meet the provisions of the PLRA 2005 for the three sporting facilities; and
 - other relevant landowners contributing to the necessary infrastructure as development proposals come forward.

5.0 Replacement rugby facility location

The proposed rugby facility is to be located on land between the basketball and athletics stadiums on Underwood Avenue (see Figure 6). The development is consistent with the precinct planning principles and the site is in a prominent location fronting Underwood Avenue forming a gateway into the sports precinct. It provides an opportunity for a development that is well integrated with the other sports facilities, and can share existing infrastructure.

5.1 The rugby facility site

The land

The rugby site comprises Part Lot 520 on deposited plan 59626 and is contained within the Certificate of Title Volume LR3154/839 (see Figure 3).

Lot 520 is vested in the Minister for Sport and Recreation under a management order for the purposes of the Perry Lakes Redevelopment Act (2005).

Lot 520 is also encumbered by an easement for a sewer for the benefit of the Water Corporation close to the Underwood Avenue boundary.

The proposed rugby facility site has an area of 9,212m².

Location

The site is bounded by Underwood Avenue to the north, the “north-south road” currently under construction to the east, and the flora corridor to the south and west.

Land use

The existing land use is vacant, and is temporarily occupied by contractors building the basketball and athletics facilities.

5.2 Precinct planning

The “open” land on the AK Reserve has long been recognised as having development potential to accommodate sports facilities.

The original intent of the TOC was to replace the existing Perry Lakes rugby facility on the AK Reserve. This was also reflected in the Mt Claremont Sports Precinct Structure Plan Draft Development Concept Option 1 which shows rugby located between athletics and basketball. Constraints included the need to protect and enhance a flora corridor, and also the inability to find sufficient land for a playing field to host community rugby matches and training activities.

This area was also identified as a potential development site for netball in the Master Plan 2006.

Land in the Southern Precinct was identified in the Master Plan 2006 for the rugby facility as it represented the only available land in government ownership in the precinct that could be considered suitable for the proposed rugby facility including a playing field.

5.3 Southern Precinct

As a former landfill site and service corridor it was acknowledged that significant issues would need to be overcome to develop a facility on this land including site remediation; geotechnical stability; landfill gas; management drainage; and services including the relocation of overhead powerlines. The introduction of the Contaminated Sites Act (2003) which came into force on 1 December 2006 after the Master Plan 2006 has also added to the project timeframe and cost uncertainties.

A consultant team was engaged and has undertaken detailed environmental and geotechnical investigations on the site. The complexity of these issues, rising costs, and time taken to progress the environmental approval processes required a reconsideration of this project as it could no longer be achieved under the Perry Lakes Redevelopment Act (2005) and overall project objectives.

5.4 Value management exercise

A value management exercise was undertaken in August and September 2008 including two workshops to review various site preparation strategies and potential alternative sites. This included a wide range of possibilities including separating the administration and training function from the playing field.

As a result the site between the athletics and basketball stadiums on Underwood Avenue was identified as the most suitable alternative site option.

This site was previously identified in the Approved Redevelopment Plan as an athletics warm-up area, that also provided for overflow car parking during events. This was taken into account in the value management exercise and solutions were identified to compensate for these activities elsewhere.

5.5 Proposed rugby facility

The replacement rugby facility will house Rugby WA administration as well as indoor training facilities (see Report 4 for a more detailed description of the proposals).

Opportunities for outdoor training activity will be available on the adjoining land to the south of the site, within the new athletics arena, or on other available existing playing fields. This space will also be available for event parking as part of the sports precinct parking strategy.

It is not proposed to provide a full rugby field and spectator stand on this site. Alternatives arrangements will be made to provide opportunities for other training and rugby events elsewhere at existing playing fields.

6.0 Design approach

6.1 Location

Underwood Avenue provides a strategic east-west link between Hay Street (Subiaco) and the West Coast Highway identified in the MRS as an Other Regional Road. Underwood Avenue is a four lane divided road with a wide, tree-lined median. The road acts as a boulevard with Bold Park to the north (see Report 2 - Traffic, Car Parking and Public Transport Report).

The site is served by the No.28 bus service linking the site with Claremont, Subiaco and Perth railway stations. A “shared path” network is currently being constructed (see section 8.1) that will provide excellent access throughout the North-West Precinct to the surrounding road network. The TOC and City of Nedlands will be constructing a shared path on the eastern side of Stephenson Avenue to connect with a shared path on Perry Lakes Drive. This will provide for commuter cyclists and assist with people movement during events.

The buildings on the south side of Underwood Avenue including the CSIRO building and the State Basketball Centre (under construction) are individual buildings in a bush setting.

The proposed site is at the entrance to the new sports precinct, on a prominent corner location, opposite the Basketball Centre.

6.2 Site planning

An options study was undertaken to explore alternative positioning of the building, parking and grass training areas on the selected site (See Figures 7A and 7B).

Key objectives in the site planning assessment included to:

- provide a gateway building element for the sports precinct;
- maximise solar orientation;
- maximise size and optimise shape of the grassed training area;
- provide for operational car parking needs, and maximise event car parking capacity;
- optimise traffic flow, especially at the intersection of the north-south road with Underwood Avenue; and
- provide appropriate landscaped zones.

Four options were reviewed. Following a traffic review by Cardno, and functional and urban planning review by the project team, it was determined that Option 1 (see Figure 7A) was the most efficient and preferred site arrangement.

7.0 Design proposal

7.1 Site plan

Site planning is consistent with the preferred site layout Option 1. The position of the building allows it to frame the entrance into the precinct on Underwood Avenue, but not compete visually with the much larger basketball centre to the east.

The setback from Underwood Avenue allows a landscape strip of equal dimension to that in front of the basketball parking area, and is consistent with the setback to the new north-south road of the basketball facility. Entry to the parking area is set back from Underwood Avenue and clear of other traffic intersections.

The grass training area allows the full width of a rugby pitch to be marked out for approximately one quarter of the length of a pitch for ancillary training activities.

7.2 Accommodation and use

The building area is approximately 2,750m² on two levels with car parking in an undercroft and at grade to the rear of the building. A description of the rugby facility is provided in Report 4 - Rugby Built Form Summary Paper.

7.3 Access and parking

Access to the site is provided from the North-South Precinct access road, with a bus parking bay in front of the main entrance.

The proposals provide for 100 permanent sealed parking bays for day-to-day use by Rugby WA and visitors, provided in the form of an undercroft car park (33 spaces), with the remainder of sealed parking at grade to the south of the building (67).

In addition to the parking for the building a further 100 parking bays can be accommodated on the grassed area to contribute to event parking.

7.4 Pedestrian movement

A pedestrian path is proposed to connect to the existing path network to the south along the west side of the north-south road to the main building entrance. A crossing location with "pram ramps" is to be provided to cater for east-west pedestrian movements between the rugby facility and the basketball centre.

7.5 Playing field

A grassed area of approximately 2,900m² for limited training will be provided to a standard equivalent to a high quality community level playing field. It is anticipated that full training will be undertaken elsewhere.

7.6 Ancillary facilities

External stores may be required adjacent to the outdoor training areas.

7.7 Building design

The new building will principally be viewed from passing traffic on Underwood Avenue, especially vehicles travelling west. It is therefore proposed that the quality of design and finishes be of a high standard, in particular to the facades facing the roads.

The building design will respond to the activities of the primary user and the nature of the precinct it is fronting. It will read as a sports facility even though much of the building's function is administration and office space. Expression of structure along with the use of glass and steel are seen as appropriate visual cues to the sporting nature of the building.

7.8 Landscaping

A landscaping plan for the AK redevelopment area has been completed by Urbis Consultants (Figure 8).

In the North-West Precinct landscaping has been approved consistent with the Approved Redevelopment Plan, North-West Precinct Development Application proposals for the athletics and basketball facilities, and the AK Reserve North-West Precinct Flora Management Strategy (August 2007).

In preparing the landscaping proposals (Figures 10 and 11), consideration has been given to the development of a design language for the road infrastructure that will unify the broader Sports Precinct, enhance the landscaped setting, and provide visual connectivity throughout the Sports Precinct.

8.0 Assessment

The composite proposals for the three sporting facilities are set out on two plans, the Plan Proposals for the North-West Precinct and the Plan Proposals for the Southern Precinct (Figures 6 and 9).

8.1 Traffic impact assessment

An assessment of the transport and traffic impacts of the proposal has been undertaken by Cardno consultants and is contained in Report 2 and summarised below.

Public transport

The site is well served by public transport on Underwood Avenue, and the north-south road has been designed to accommodate public transport services in the future when development in the wider sports precinct warrants additional services.

Traffic impact

Estimates of the trip generation from the rugby proposal have assigned the peak traffic on the local road network, and a SIDRA analysis has determined the level of service of access roads to the site (see Report 2).

The results indicate that the Underwood Avenue/north-south road junction, and the proposed access to the site from the north-south road will operate at acceptable levels.

Access

The site access has been located away from the Underwood Avenue/north-south road junction and the access into the basketball car park. The site access crossover will be in accordance with Australian Standard (AS2890.1).

A bus drop off layby has been provided at the front of the building for team coaches taking players to and from the facility.

Car parking

Car parking assessments have been undertaken to identify day-to-day car parking requirements and potential event parking needs within a 400m radius.

If all arrivals were single occupant private vehicles, analysis of the proposed use indicates a possible requirement of up to 124 bays. This parking requirement can be accommodated within the immediate vicinity of the site through on-site provision of 100 car parking spaces, and the use of shared parking between the athletics and basketball facilities.

No events are proposed to be held at the rugby facility.

Pedestrian/cycle network

An extensive pedestrian and cycle path network is currently either under construction or proposed for the North-West Precinct (see Figure 14).

Precinct roads provide a low speed environment suitable for cyclists, and a pedestrian (shared path) network is currently under construction linking Challenge Stadium through the athletics stadium forecourt to the basketball stadium.

The TOC has advised that they have proposals to construct a 3m shared path on the north side of Underwood Avenue from Meagher Drive to Perry Lakes Drive. A further shared path is also proposed on the south side of the road around the athletic stadium to be continued by the City of Nedlands along Stephenson Avenue to the entrance to Challenge Stadium.

To the south of the rugby site a section of the proposed shared path (see Figure 6) is to be realigned to follow the southern rugby site boundary, and be constructed in materials through the flora corridor that will accommodate sports footwear.

A 2.5m footpath is proposed to be constructed from this shared path along the eastern side of the north-south road to the building entrance, with provision made for a safe crossing point to the basketball stadium.

The building will include end of trip facilities to encourage cycling to work and to training.

The proposed movement network facilitates efficient and safe traffic movement and also encourages sustainable transport options including bus, cycle and pedestrian access.

8.2 Transport, Access and Parking Management Plan

The approval of the North-West Precinct Development Application was conditional upon the preparation and approval of a Transport, Access and Parking Management Plan to address the management of motor vehicle movement, car parking, public transport, cycling and pedestrian access and circulation for both day-to-day and event operations.

The approved Transport, Access and Parking Management Plan will be revised to incorporate the rugby facility into the North-West Precinct and will be submitted as part of the development application process (refer to Figures 13 and 14). Approval to the Plan was granted by the WAPC on 6 April 2009.

8.3 Environment

Consultants Coffey Environments has provided environmental advice on this Amended Redevelopment Plan (see Figure 12 and Report 1 - Environmental Assessment).

The proposed site for the rugby facility is cleared vacant land and has no significant vegetation or environmental issues to address.

The Southern Precinct is a former landfill site. Playing fields are presently operating within the landfill site and are proposed within Lot 816 to the south-west of the precinct.

A Site Management Plan (SMP) will be prepared in support of Development Applications for future playing fields which will be referred to the Environmental Protection Authority (EPA) and the Department of Environment and Conservation (DEC) for assessment. The SMP will address in detail the following factors:

- Proposed site layout and facilities.
- Earthworks strategy.
- Landfill cover and subsidence.
- Landfill gas management.
- Leachate generation and groundwater quality.
- Irrigation supply and application.
- Fertiliser and chemical application.
- Integration with adjacent and/or proposed facilities.

8.4 Servicing

An Infrastructure Study previously prepared by Sinclair Knight Merz has been revised to accommodate the engineering and service infrastructure necessary for the rugby facility within the AK redevelopment area (see Report 3- Infrastructure Study).

North-West Precinct

Figures 15-18 summarise the proposed servicing arrangements for the rugby site in the North-West Precinct. The rugby site is capable of being serviced by all necessary utility services including sewer and water reticulation, power, gas and communications. These services will be available as part of the athletics and basketball stadium developments.

There are no existing services to the site that will need to be relocated. The south-east corner of the site contains a rainwater tank that captures rainwater from the roof of the basketball stadium for reuse within the building. The tank is under the proposed grassed training area and can be accommodated in the rugby proposals.

Subsections 12 (h) and (j) of the PLRA 2005, identify principles that should be taken into account when considering infrastructure provision. These include the utilisation of grey water to minimise water consumption and the sharing of infrastructure amongst facilities.

The location of the rugby facility will allow service infrastructure and car parking to be shared between the three sports facilities consistent with precinct planning principles (see section 4.4).

The UWA Sports Park currently has access to recycled waste water from the Subiaco Waste Water Treatment Plant (SWWTP) located immediately to the east of Brockway Road. This service has been extended to serve the athletics stadium. Approval for the use of the recycled water has been obtained from the Department of Health.

This recycled water source will also service the rugby training area. Investigation will be undertaken to determine if the rugby development can access the rainwater source for the flushing of toilets and showers.

Southern Precinct

Investigations will be made to establish the viability of utilising the recycled waste water source for the proposed sporting fields.

8.5 Southern Precinct

The proposed Southern Precinct is identified in Figure 9. In the Approved Redevelopment Plan this included the proposed rugby site and access road. It is now proposed to extend the Southern Precinct to include all of the government land south of Challenge Stadium within the Redevelopment Area.

The Southern Precinct remains a preferred location for sports playing fields accessed by a new east-west road connection.

This area is expected to be used in the longer term for playing fields and associated infrastructure.

8.6 Ecologically sustainable design

Subsection 12(3) of the PLRA 2005 requires the AK Reserve Minister to have regard to a series of sustainable development principles in the construction of the sporting facilities. These sustainable development principles are being explored as the project proposals are progressing. Detailed reporting on the manner in which these have been addressed will be provided at the development application stage.

The following objectives indicate the range of initiatives that are being explored in consideration of subsection 12(3) of the PLRA 2005:

- (a) Minimise the consumption of non-renewable resources.¹

It is envisaged that works contract documentation will contain clauses stipulating a variety of controls for the minimisation of the consumption of non-renewable resources.

- (b) Maximise the use of recycled and recyclable construction materials.²

Opportunities will be explored to recycle some of the existing materials from the existing sporting facilities at Perry Lakes, together with the specification, where appropriate, of the use of recycled material from elsewhere.

¹ As required by section 12(3)(a) of the PLRA 2005

² As required by section 12(3)(b) of the PLRA 2005

- (c) Minimise the use of hazardous materials or substances during the construction and operation of the facilities.³

The design will seek to minimise the use of hazardous materials during the construction and operation of the facilities through a range of measures such as the use of low toxicity materials, selection of environmentally safe refrigerants, encapsulation of loose fibrous materials and high efficiency air filtration.

- (d) Maximise natural ventilation and light.⁴

Within the context of meeting the technical requirements of each of the sporting facilities, opportunities will be sought to take advantage of siting, building orientation and local climatic factors to maximise the natural light and ventilation. In regards to the rugby facility, mechanical and ESD consultants will review initiatives to maximise natural ventilation opportunities with mechanical systems based on review of room type, location and usage. The design solution will aim for the major habitable spaces to achieve natural cross ventilation and day lighting when conditions are conducive.

- (e) Minimise noise and light emitted from the facilities.⁵

The design and specification of the facilities and the selection of materials will be undertaken to minimise noise and light emittance. Careful placement of flood lighting and the selection and placement of sound reinforcement systems will be undertaken to ensure adequate separation distance between the facilities and residential properties to minimise noise and light emitted from the facilities.

- (f) Incorporate passive solar design principles.⁶

The siting restrictions within the precinct and the technical nature of the sporting requirements place limits on the potential to incorporate passive solar design principles. Within this context opportunities will be sought to take advantage of siting, building orientation and local climatic factors to incorporate passive solar design principles.

- (g) Minimise energy consumption.⁷

Opportunities will be taken for the use of fittings, fixtures, plant and equipment that address the minimisation of energy consumption. These may include low energy light fittings, equipment motor type, control and zoning of building services to reflect building usage and consideration of building fabric to complement the above. Client and user group involvement will be required to ensure that low energy efficiency appliances are selected.

- (h) Minimise water consumptions.⁸

A number of initiatives are currently under consideration to minimise water consumption. These initiatives include the installation of waterless urinals and water-efficient fixtures and appliances, capturing and collecting rainwater, collecting and recycling irrigation water, setting up shared collection and use of site stormwater and exploring options to recharge the subterranean aquifer. The availability of recycled waste water within the precinct also provides additional opportunities to utilise and extend this for irrigation purposes. Landscaping throughout the entire Sports Precinct will also maximise the use of native vegetation.

- (i) Minimise material disposed of in landfill sites during the construction process.⁹

The contracting procurement process will ensure contractors meet strict requirements with regard to the separation and recycling of waste materials to minimise disposal to landfill.

3 As required by section 12(3)(c) of the PLRA 2005

4 As required by section 12(3)(d) of the PLRA 2005

5 As required by section 12(3)(e) of the PLRA 2005

6 As required by section 12(3)(f) of the PLRA 2005

7 As required by section 12(3)(g) of the PLRA 2005

8 As required by section 12(3)(h) of the PLRA 2005

9 As required by section 12(3)(i) of the PLRA 2005

- j) Design the facilities in accordance with the Building Management and Works sustainability requirements.¹⁰

The contracting procurement process, as spelt out in the tender documentation, will require consultants and contractors to meet specified sustainability conditions across all of the above requirements in the PLRA 2005.

8.7 Consultation

Subsection 19(3) of PLRA 2005 states that the agency (DSR) preparing the Amended Redevelopment Plan must:

“(a) make reasonable endeavours to consult such public authorities and persons as appear to the agency would be likely to be affected by the plan (Redevelopment Plan) if it were approved.”

Estill and Associates were appointed to design and implement stakeholder and community consultation processes for the AK Reserve and Perry Lakes redevelopment. The consultation process followed state government community consultation guidelines and sustainability policy to assist in the development of the proposals (see Report 2.2 in Volume 2 of the Approved Redevelopment Plan).

In addition to the consultation processes set out in the Approved Redevelopment Plan, a further consultation has been undertaken with indigenous groups and the local community on the proposed rugby proposals.

9.0 AK redevelopment area development provisions

This Amended Redevelopment Plan provides the planning context for development and subdivision proposed in the AK redevelopment area as defined in Regulations. The provisions in section 9.0 of this Amended Redevelopment Plan are applicable to all developments and subdivision proposed in the AK redevelopment area.

In considering an application for a development approval made under section 32, subsection 34(1) of the PLRA 2005 states that the WAPC must have regard to:

- “(a) the approved redevelopment plan that relates to the land;
- (b) any submissions received from a person notified under section 33(1);
- (c) the requirements of orderly and proper planning; and
- (d) the preservation of the amenities of the area”.

9.1 Sustainable development

Development applications relevant to the three sporting facilities need to demonstrate how the proposed development has regard to the following sustainable development principles¹¹:

- The consumption of non-renewable resources in the construction and operation of the facilities should be minimised.
- The use of recycled and recyclable materials in the construction of the facilities should be maximised.
- The use of hazardous materials or substances in the construction and operation of the facilities should be minimised.
- The use of natural ventilation and natural light by the facilities should be maximised.
- The noise and light emitted from the constructed facilities should be minimised.
- The facilities should where possible incorporate passive solar design principles and be designed with regard to the local climate.

¹⁰ As required by Section 12(3)(J) of the PLRA 2005
¹¹ As required by subsection 12(2) of the PLRA 2005

- The consumption by the facilities of energy generated from non-renewable resources should be minimised by measures such as using appliances, plant and equipment that minimise energy consumption.
- The consumption by the facilities of water from the public water supply system and from underground should be minimised by measures such as reusing grey water, capturing rain water, and using appliances and landscaping with plants that minimise water consumption.
- The amount of material, resulting from the construction of the facilities, that is disposed of in landfill sites should be minimised.

Annotated plans and a report which demonstrates how proposals have regard to the above are required as part of a development application submission.

9.2 Landscaping

9.2.1 Development requirements

Landscaping treatment in the AK redevelopment area is to be generally consistent with Figures 10 and 11 and the following landscaping guidelines.

9.2.2 Landscaping guidelines

- Retain existing vegetation and rehabilitate with native vegetation represented on the site or found in close proximity.
- Strengthen the direct flora connection between Bold Park and the east-west Flora Corridor.¹²
- Incorporate Crime Prevention through Environmental Design (CEPTED) elements to ensure a safe environment.
- Control tree canopies and shrub heights to retain clear sightlines.
- Provide shaded walkways, recreation, viewing and parking areas.
- Minimise water usage by planting indigenous plants.¹³
- Where possible, utilise grey water to areas requiring irrigation.¹⁴
- Provide for multi-functional use of grassed areas.
- Reinvigorate the existing bushland by minimising access, controlling and eliminating weeds where possible.
- Keep supplementary planting to a minimum.
- Plant new bushland vegetation when conditions are most favourable (May–July).
- Plant vegetation over an extended period to provide the broadest possible range of plant ages and ensure a succession of trees throughout the area.
- To ensure planting minimises fire risk to built structure.

9.3 Movement

9.3.1 Development requirements

The movement network in the AK redevelopment area should be generally consistent with Figures 13 and 14 and the following transport guidelines.

9.3.2 Movement network guidelines

Car parking

- Encourage shared parking facilities whilst ensuring that each facility has the necessary parking in proximity to meet day-to-day needs.

¹² As required by subsection 27(4)(a)&(b) of the PLRA2005

¹³ As required by subsection 12(3)(H) of the PLRA2005

¹⁴ As required by subsection 12(3)(H) of the PLRA2005

Pedestrian/cycle

- Develop path networks between the basketball and athletics facilities.
- Permit on-street cycling where it is appropriate, i.e. where low traffic volumes and a slow speed environment exists.

Public transport

- Provide an internal road network infrastructure that will facilitate good penetration by public transport and passenger coaches.

Management

- Set up a Management Committee to coordinate major events including traffic management, car parking and suitable public transport access.

9.4 Infrastructure

9.4.1 Development requirements

Infrastructure provision in the AK redevelopment area should be generally consistent with Figures 13-18, Report 3 and the following infrastructure guidelines.

9.4.2 Infrastructure guidelines

Sharing

- Maximise the infrastructure shared by the facilities.¹⁵

Sustainability

- Apply sustainable development principles in the provision of infrastructure.

Staging

- Design infrastructure for the Sports Precinct which can be provided in a staged manner.

10.0 North-West Precinct guidelines

10.1 Statement of intent

It is envisaged that the North-West Precinct will include the basketball, athletics and rugby facilities which should be designed to meet the State's sporting requirements. It represents an important gateway to the wider Sports Precinct and development should therefore be visually appealing. The built form should be of high quality and be positioned within a landscaped setting. The sporting facilities should be located to allow for the retention and enhancement of the identified east-west Flora Corridor.

10.2 Plan proposals for the North-West Precinct

Development and subdivision proposals should generally be in accordance with the Plan Proposals for the North-West Precinct as identified in Figure 6.

10.3 Environment

10.3.1 Flora conservation and enhancement

Except where necessary for road works or other infrastructure, development should not occur on the land defined as the Flora Corridor in Figure 10, with the aim to ensure that as much of the existing flora on the AK Reserve land is retained as possible.¹⁶

¹⁵ As required by subsection 12(3)(j) of the PLRA 2005

¹⁶ As required by subsection 27(4)(a) of the PLRA 2005

10.3.2 Rehabilitation

The Flora Corridor is to be enhanced with flora indigenous to the land in general accordance with Figure 10 – Landscaping Plan.¹⁷

10.3.3 Environmental management

Whilst section 27(4) of the PLRA 2005 provides for the conservation and enhancement of a Flora Corridor, it is important that a Flora Corridor management strategy is in place prior to the development of the land.¹⁸

On completion of the rehabilitation of the site to the satisfaction of the WAPC, management control of the Flora Corridor will be determined.

10.4 Basketball facility

10.4.1 Building form and layout

Facilities for basketball must be of the size and standard determined by the AK Reserve Minister.¹⁹

Development application for the basketball stadium should be in general accordance with Figure 19.

10.5 Athletics facility

10.5.1 Building form and layout

The AK Reserve Minister must ensure that facilities for athletics be developed that can serve the people of the whole State.²⁰

Development application for the athletics stadium should be in general accordance with Figure 20.

10.6 Rugby facility

10.6.1 Building form and layout

Facilities for rugby must be of the size and standard determined by the AK Reserve Minister.²¹

Development application for the rugby facility should be in general accordance with Figure 21.

11.0 Southern Precinct guidelines

11.1 Statement of intent

Subject to the findings of detailed geotechnical investigations relative to the former tip site (Reserve 41504), it is envisaged that the Southern Precinct will be used for sports playing fields accessed via an east-west road linking Stephenson Avenue with Brockway Road.

11.2 Plan proposals for the Southern Precinct

Development and subdivision proposals should generally be in accordance with the plan proposals for the Southern Precinct as identified in Figure 9.

11.3 Reserve 41504

Development and/or subdivision proposed on land identified as the former Brockway tip site should not be implemented until such time as the EPA is satisfied that the environmental issues and the potential health risks have been addressed.

¹⁷ As required by subsection 27(4)(b) of the PLRA 2005

¹⁸ As required by subsection 19(3)(b) of the PLRA 2005

¹⁹ As required by subsection 12(1)(b) of the PLRA 2005

²⁰ As required by subsection 12(1)(a) of the PLRA 2005

²¹ As required by subsection 12(1)(c) of the PLRA 2005

12. Other areas

12.1 Statement of intent

The remaining areas within the AK redevelopment area outside of the North-West and Southern Precincts (Figure 22) should be developed in a manner that ensures orderly and proper planning, development and management. The intent is that developments in these areas complement the development proposals for the North-West and Southern Precincts contained within this Amended Redevelopment Plan.

12.2 Development requirements

Development proposed in the areas that fall within the AK redevelopment area, but outside of the North-West and Southern Precinct, should generally accord with the Amended Redevelopment Plan and are subject to the provisions of Division 5 of the PLRA 2005.

13.0 Implementation provisions

13.1 Development process

Development applications are subject to Division 5 – Development Control of PLRA 2005. In the AK redevelopment area, section 32 of PLRA 2005 requires:

- An application for a development approval must be made to the WAPC in the prescribed form with any fee prescribed by the Regulations.
- An application must be accompanied by plans and specifications of the proposed development.
- The applicant must provide any information or documents relating to the proposed development that the WAPC may reasonably require.
- An application cannot be made under that section on or after completion day.

13.2 Subdivision process

Subdivision applications are to be made to the WAPC in the usual way in accordance with Part 10 of the Planning and Development Act (PDA) 2006.

If any owner of land within the AK redevelopment area does not proceed with the subdivision and development of that owner's land in accordance with the provisions of the Amended Redevelopment Plan, and the owner's failure to do so will in the opinion of the AK Minister unduly delay or impede the implementation of the Redevelopment Plan or the subdivision or development of part of the AK redevelopment area, the AK Reserve Minister may acquire so much of that owner's land as is reasonably necessary to facilitate the development and subdivision of the AK redevelopment area in the manner contemplated by section 13.3 of the Redevelopment Plan.

13.3 Acquisition and purchase of land

The AK Reserve Minister may acquire land for the carrying out of the Amended Redevelopment Plan either by agreement or compulsorily under the powers conferred by section 191 of the Planning and Development Act 2005.

13.4 Management structure

A Sports Precinct Management Structure is proposed which will ensure that protocols are established with the WA Sports Centre Trust and UWA as landowners, and between key stakeholders concerning matters such as traffic management, shared parking facilities, event management and funding for public transport to the Sport Park. The aim of setting up this management structure is to encourage a collaborative approach to the operation of the precinct sporting facilities, resulting in economic, social and environmental benefits.²²

²² As required by subsection 19(3)(b) of the PLRA 2005

PREPARATION OF THE AK RESERVE DEVELOPMENT PLAN PURSUANT TO
SUBSECTION 19(2) PERRY LAKES REDEVELOPMENT ACT 2005

Adoption of the AK Reserve Amended Redevelopment Plan by the AK Reserve Minister for submission to the WAPC pursuant to subsection 22 of the Perry Lakes Redevelopment Act 2005

AK Reserve Minister

Date

Consent to the public notification of the AK Reserve Amended Redevelopment Plan pursuant to subsection 23(1) of the Perry Lakes Redevelopment Act 2005

AK Reserve Minister

Date

Adoption of the AK Reserve Amended Redevelopment Plan by the AK Reserve Minister for submission to the WAPC pursuant to subsection 26(1) of the Perry Lakes Redevelopment Act 2005

AK Reserve Minister

Date

Certification that the AK Reserve Amended Redevelopment Plan is approved by the Planning Minister pursuant to subsection 27(1) Perry Lakes Redevelopment Act 2005

Minister for Planning and Infrastructure

Date

Draft Amended AK Reserve Redevelopment Plan

Figures

1. AK Redevelopment Area
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3. Tenure Plan
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5. Mt Claremont Sporting Precinct Structure Plan
6. Plan Proposals for the North-West Precinct
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8. Sport Precinct Landscaping Plan
9. Plan Proposals for the Southern Precinct
10. Landscaping Plan (North-West Precinct)
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12. Environment
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15. Servicing Plan: Power Supply
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17. Servicing Plan: Portable Water and Stormwater
18. Servicing Plan: Natural Gas
19. Basketball Site: Built Form Plan
20. Athletics Site: Built Form Plan
21. Rugby Site: Built Form Plan
22. AK redevelopment plan showing remainder of precinct (outside of North-West and Southern Precincts)

