JANDAKOT
AIRPORT

LEASING & DEVELOPMENT GUIDELINES

Revised 14 April 2025

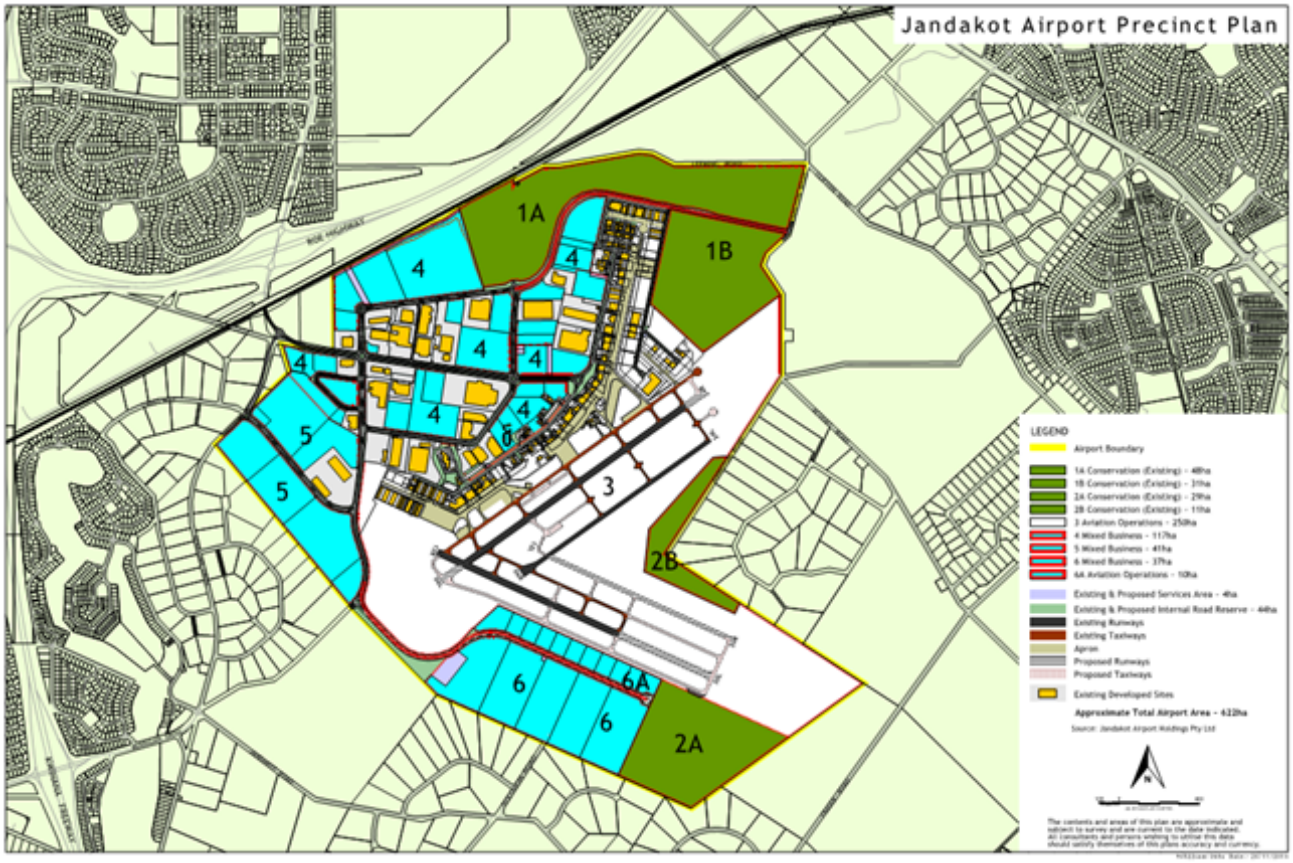
CONTENTS

1. PURPOSE AND SCOPE

The Leasing and Development Guidelines have been written to align with the Jandakot Airport Final Master Plan 2020 to assist contractors and developers to understand the development requirements.

2. JANDAKOT MASTER PLAN

The development of Jandakot Airport is guided by the Jandakot Airport Master Plan 2020.



3. DEVELOPMENT OBJECTIVES

The following objectives guide the planning and development of the airport site:

- **Maintain** Jandakot Airport as a leading General Aviation facility through investment in infrastructure necessary to satisfy the forecast operational requirements;
- **Enhance** the airport's contribution to WA employment and economic growth through appropriate aviation and non-aviation development;
- **Encourage** sustainable development of the airport land through consideration and integration of environmental, financial and social values and stakeholder interests;
- **Ensure** the long-term viability and sustainability of the airport and its stakeholders through effective planning, development and management; and
- **Provide** a safe, secure, reliable and efficient airport operating environment.

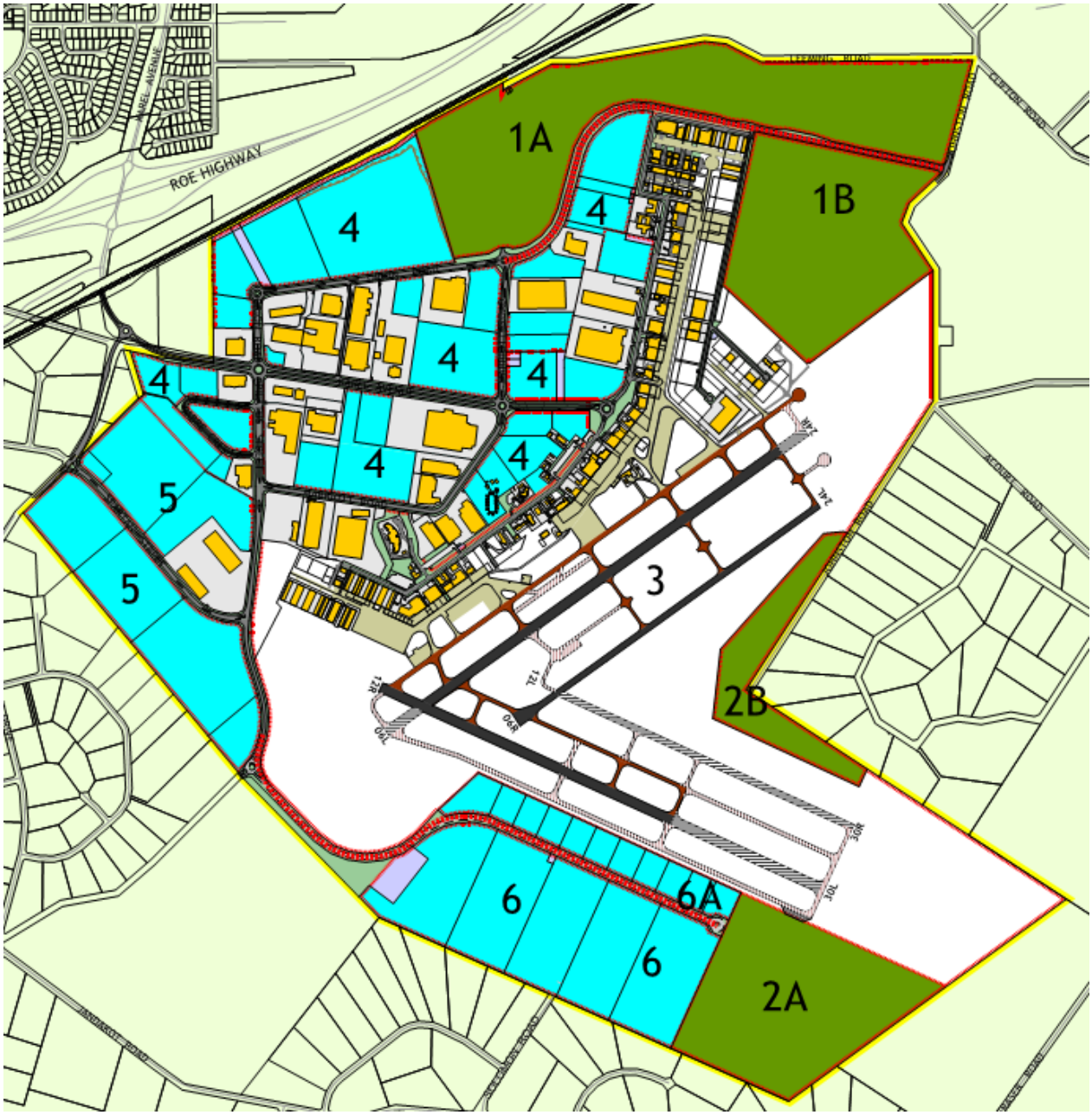
4. LAND USE

The land use identified for each precinct is as follows:

Precinct 1 (A&B)	Conservation
Precinct 2 (A&B)	Conservation
Precinct 3	Aviation Operations
Precinct 4.	Mixed Business
Precinct 5	Mixed use business*
Precinct 6	Mixed Business*
Precinct 6A	Aviation Operations*

* Portions of these Precincts are within the Jandakot Underground Waste Pollution Control Area (JUWPCA). Development and operations within the JUWPCA will be managed to prevent impacts on groundwater quality.

Land Use



5. DEVELOPMENT AND APPROVAL PROCESS

Jandakot Airport is situated on Commonwealth Government land under a long term lease arrangement to Jandakot Airport Holdings Pty Ltd (JAH). JAH has the responsibility to manage and operate Jandakot Airport and develop the surrounding land during their lease term.

5.1. Application and Approval Process

The Permit application process is generally a two step process. All major construction work at Jandakot Airport requires both:

Step 1: A **Development Approval** from Jandakot Airport Holdings (JAH) ***and also***

Step 2: A **Building *or* a Works approval** (depending upon the type of work involved) from the Airports Building Controller (ABC).

Major construction work includes but is not limited to the following:-

- Any new building or structure.
- Alterations and/or extensions to the internal space or external structure of a building.
- A change of land use.
- Any Hardstand areas.
- Fencing to boundaries.
- Constructing or altering earthworks (whether or not in relation to a building etc.)
- Constructing or altering engineering, electrical or hydraulic works;
- Demolishing , destroying, dismantling or removing: - Building, structure, earthworks, engineering works, electrical works and hydraulic works.
- Any Hardstand areas.
- Landscaping. (Refer to JAH landscaping guidelines.)
- Runways and taxiways

Structures include bridges, fences, towers, pylons and temporary structures such as tents. Some minor structures and works are not defined as 'development' and therefore do not require development approval, however they still require a Building or Works Approval from the Airport Building Controller (ABC), prior to any works being undertaken on Site.

Earth work or engineering works include runways, taxiways, aprons, roads, car parks, retaining walls, dams, railways pipelines, road surfaces, car park surfaces and tunnels.

The Development and Building Approval Process is detailed in the Appendix A flowchart.

STEP 1 - Development Application.

A Development Application, (available from the JAH Website > Building Approvals) must be lodged directly with JAH for:

- Any new development including a building or structure
- Alterations or additions to an existing facility
- A change in use of an existing facility

Development Applications must ***always*** be lodged ***directly*** with JAH and must include the information as detailed in Appendix E. The ABC ***does not*** *require a copy of the Development Application*.

Development Application approval is binding and is based on the information provided to JAH. Any variation to the proposed building or works will require a new submission to JAH.

STEP 2 - Application for Building Permit, Works Permit or Demolition Authorisation.

The Department of Infrastructure and Regional Development (DIRD), represented by the ABC, are the approving authority for the issue of Building Permits, Works Permits and Demolition Authorisation.

JAH and DIRD are essentially the “Local Government” authority for all development on Jandakot Airport land. Other local government approval is not required except for food and accommodation facilities. This is to be arranged by the applicant and JAH will require a copy. For full details, refer Appendix F.

6. BUILDING DESIGN CRITERIA

JAH is committed to environmental sustainability and as such will require Developers (or their appointed contractors) to demonstrate their commitment to the design and implementation of sustainable building technology, including minimisation of building waste, recycling, energy and water efficiencies and improved environmental outcomes.

As a minimum, design criteria for all buildings are to conform to the energy efficiency requirements of the Building Code of Australia.

6.1. Environmentally Sustainable Design

The consideration of sound environmental design parameters can significantly reduce every day running costs of buildings without significant additional building costs.

Building envelopes and internal layouts should be designed to minimise energy consumed for heating, cooling and light where:

- Window design and shading facilitates good thermal and daytime performance.
- Building materials and insulation minimise the thermal transfer.
- Building materials and energy sources are selected to minimise energy requirements and greenhouse gas emissions.

Building services shall be designed to minimise energy and resource use through:

- Maximising the use of natural light and ventilation.
- Selection of energy efficient lighting control systems, fittings and appliances.
- Design for the use and management of natural ventilation.
- Utilise energy efficient mechanical ventilation and air-conditioning equipment and controls.
- Minimise water use via water efficient fixtures and fittings and maximise water re-use and recycling where possible.
- Minimise waste through product and material choice and recycling and re-use of materials if possible.
- Mitigation of wind shear effect (if applicable).

6.2. Architectural Character

The following principles will form part of the assessment of any new development.

- Contribution to streetscape.
- Buildings should be sited to take advantage of views, provide a positive presentation to road and to provide a strong corporate image and an inviting entrance.
- The main entrance to the building is to be clearly visible or close to the front of the building.
- Generally, architectural form and character should avoid large unrelieved expanses of wall.
- Where more than one building is planned for a site, the design should result in the creation of a group of integrated buildings clearly expressing their inter-relationship.
- Massing and building form should be of a contemporary nature, based on simple bold and strong forms using the selection of various materials, texture and colour to highlight the design, develop the corporate image within the overall design vision of the precinct.

6.3. Materials, Colours and Finishes

The use of texture and colour should reflect adjoining and existing developments. In general neutral shades of grey’s, creams and earth colours are encouraged for the major areas of walling with features expressed in panels of strong, bold corporate colours with integrated signage.

Roof cladding shall be non-reflective. Zincalume or similar finishes will not be approved.

All mechanical/electrical plant and equipment shall be hidden from view from public areas including public roads. Any screening should be designed as an integral part of the building form and character.

Any plant required to be roof mounted will require special screening or design treatments. The presentation of the roof is an important part of the total design. Car Parking Requirements and Vehicular Movements

The design of car parking and vehicular manoeuvring areas should address:

- The separation of car parking from truck manoeuvring and service areas.
- Safe pedestrian access.
- Limited and practical crossover placement.
- Disabled parking and access shall comply with AS 1428:2002 and the BCA.

Car park design and function shall conform to Australian Standards for Parking Facilities (AS 2890.2 and AS 2890.3).

As a guide, the number of car bays should comply with the following table:

Hangar	1 space for each plane to be accommodated.
Workshop	1 space for every 50m² of open space used for industrial purposes, plus 1 space for every 50m² of GFA; or 1 space for each employee, whichever is the greater.
Office	1 space for every 20m² of NLA or 1 space for every employee, whichever is the greater.
Any Other Use	To be determined by JAH.

6.4. Storm Water Catchment, Control and Drainage

Water sensitive urban design strategies are to be applied to storm water management.

The use of drainage swales and recharge basins can be incorporated in the on-site landscape areas. Rainwater tanks for storage and re-use on site are encouraged.

No polluted or contaminated storm water may be discharged into the soakwell system. Where necessary, pollution control equipment such as oil and grit traps and gross pollution traps shall be installed to applicable BCA standards, certified and properly serviced and maintained as part of the environmental management of the site. Collection and disposals of all pollutants produced within any site will be the responsibility of the lessee.

Generally, Stormwater design should allow for the following:-

- Retention of a 10 year ARI storm event without ponding on the site.
- Ensure that 100 year ARI storm events are retained on site.
- The developed areas to be designed to cater internally for storm events of the major 1:100yr/24hr ARI storm event.
- Where possible, design of the runoff from the building roofs to be captured and stored for re-use within the facility.
- Provide for 300mm freeboard from building floor levels to the 100 year ARI storm event.

6.4.1. Additional Guidelines for Development Areas within Groundwater Pollution Control Zone

The lots within the Priority 1 Source Protection Area of the Jandakot Groundwater Mound (JUWPCA), require additional guidelines for the treatment and disposal of stormwater from the site. These sites cannot dispose of runoff directly into the ground

via infiltration due to the risk of pollution of the groundwater within the Priority 1 Source Protection Area.

As stated within Jandakot Airport Master Plan 2014, Supplementary Services Report the recommended revised stormwater disposal guidelines for these development areas/lots are:

- Where possible, the runoff from building roofs is to be trapped and stored for re-use within the facility. Clean roof runoff not re-used within the facility shall be infiltrated on site without any discharge onto the impervious hardstand areas.
- Impervious hardstand areas shall be graded to capture the runoff for piping into the precinct piped drainage network connection.
- Internal piped drainage network shall be designed to cater for a 10 year ARI storm event as defined in Australian Rainfall and Runoff.
- The internal hardstand areas shall be designed to provide overland flow paths to the precinct road network for storm events greater than 10 year ARI and up to 100yr ARI.
- The stormwater connection management conditions will require the development areas to treat stormwater runoff from their site to remove total suspended solids (TSS) and hydrocarbons. It is anticipated that the development areas will provide treatment via propriety oil and sediment separators (such as the Humes Humeceptor). The stormwater runoff treatment used for the development site must be designed to achieve;

  – Treatment of 80% minimum of the average annual runoff volume

  – Removal and retention of 80% of total suspended solids

  – Reduction in hydrocarbons by 80%
- Design calculations or manufacturer certification must be provided for any oil and sediment separator (such as the Humeceptor) or other proposed stormwater treatment measure to demonstrate that the proposed treatment levels are achievable.
- JAH approval is required of the drainage flow calculations for each development prior to connection to the precinct road drainage system, with the lot connection criteria;

  – Maximum connection flows based on 120 L/sec/Ha of site

  – Major storms compensated within the lot
- All water quality devices shall be inspected and cleaned out as per manufacturers, and site condition requirements. Records of all maintenance and monitoring/test results are to be maintained and presented to JAH should an event occur that warrants maintenance record inspection.
- Prior to connection to the precinct road stormwater drainage system, JAH is to inspect the constructed stormwater drainage system and provide confirmation that it conforms to the approved design.

- The design of the adjacent precinct road piped drainage network, abutting these development lots, shall cater for following catchment areas of the development lots:

6.4.1.1. Large Internal Lots (Non-Aviation Use)

Impervious Hardstand Areas; Assume 70% of the total development lot (with 0.9 impervious factor).

Roof Areas; Assume 25% of the total development lot (stormwater re-used on site)

Landscaping Area; Assume 5% of the total development lot (stormwater retained on site)

The runoff from the landscaping and roof runoff areas are to be retained onsite, whilst the impervious hardstand area is to be discharged into the precinct road network as per the connection conditions described above.

6.4.1.2. Small Aviation Use Lots

Impervious Hardstand Areas; Assume 45% of the total development lot (with 0.9 impervious factor).

Roof Areas; Assume 50% of the total development lot (stormwater re-used on site)

Landscaping Area; Assume 5% of the total development lot (stormwater retained on site)

The runoff from the landscaping and roof runoff areas are to be retained onsite, whilst the impervious hardstand area is to be discharged into the precinct road network as per the connection conditions described above.

Summary (Storm Water Catchment, Control and Drainage)

The development lots within the JUWPCA have connections into the precinct road drainage, with the peak discharge capacities from the lots to be governed at 120 L/sec/ha of effective catchment area, with the impervious catchment area based on 50% of the overall lease area. This essentially equates to 60l/sec/Ha of the overall lease area.

These discharge conditions will typically require internal lot compensated stored in the order of 150 to 200 m3 per effective hardstand areas or 75 to 100 m3 per overall lease area.

The precinct basin capacities have been designed to cater for 50% of the lease area to discharge into the basin network (via compensated peak flows).

The water quality initiatives are also a key component within the developments to ensure that only clean stormwater is discharged into the precinct basins.

This design criteria is similar to all the JAH development lots within the JUWPCA.

6.5. Signage and External Display

The JAH signage policy requires a consistent approach be undertaken for all street, tenant and directional signage.

JAH's overall objective is to meet the signage needs of all tenants while maximizing and standardizing the design aesthetics of the precinct. Refer Appendix D.

6.6. Fencing

Fencing is to be constructed in accordance with JAH requirements and as a guide should consist of the following:

- Post and rail chain wire (black PVC coated) security fence 1.8m high with three rows of barbed wire to airside boundaries. Support poles and standards to be matt black finish.
- Fencing to road frontages to be 1800mm (2100mm if the fence is a secure airside boundary) high “Bolt’’ W Profile Palisade fencing with “Dulux Metropolis Storm Pearl Satin” powder coat finish.
- All pedestrian access gates must be electronically controlled and self-closing using JAH swipe card system. Installation, adjustment and removal of airside access gates must be approved by the JAH Operations Manager.
- All vehicle access gates must be of similar type electronically controlled using JAH swipe card system.

6.7. Street, Carpark and Apron Lighting

All JAH and Lessee Street and carpark lighting shall be constructed in accordance with JAH requirements, and comply with CASA MOS Part 139. The JAH Operations Manager is to be consulted prior to purchase/installation to confirm compliance.

As a general guide, lighting shall generally comply with the following (or equal approved):

- **Poles**:- Jandakot Park decorative single or double outreach column (as may be required). Poles to be powder coated Dulux matt black /Night Sky (Ref. No 19319 Matt) with anti-graffiti clear coat over.
- **Luminaires**:- Light fittings to meet specifications of the WE-EF PFL 500 LED series.

6.8. Site Services

Any services connections, permanent and temporary, shall be metered. Before meters are either installed or de-commissioned, contractors must provide notice to the JAH Infrastructure Manager. Developers (or their appointed contractors) are requested to outline any services requirements at the earliest stage in the development process to allow for timeous provision of services to the site boundary.

JAH will apply charges for the provision of water, sewer, gas and power services.

6.9. Power Connection

For information regarding power connection requirements, review Appendix G.

6.10. Embedded Generation (Solar PV) Connection

At present, embedded generation including Solar PV cannot be connected to the JAH electrical network. For more information regarding the connection of embedded generation (Solar PV) at Jandakot Airport, review Appendix J.

6.11. Water Connection

For information regarding water connection requirements, review Appendix H.

6.12. Fire Protection Requirements

All developments shall comply with the Building Code of Australia and Appendix H.

6.13. Gas

Natural gas is not currently available at the Jandakot Airport precinct. However, if a Developer proposes the use of LP gas, installations are subject to relevant standards and requirements. Certification of the installation must be supplied to ABC and JAH by the gas fitter prior to use.

6.14. Sewer

The majority of existing leasehold sites have managed wastewater disposal via septic tanks and Aerobic Treatment Units (ATU’s). At present, only a few buildings located on existing Jandakot

Airport leasehold sites are connected to reticulated sewer. It is however Jandakot Airport's intention to upgrade and improve the services infrastructure at the Airport, including the installation of deep sewers and the progressive connection of existing airport tenants who currently use onsite wastewater disposal systems. When available, JAH (the approving authority) will allow one point of connection for sewer drainage at each site boundary.

Trade Waste

For those sites that are serviced by a reticulated sewer connection:- before any construction commences, infrastructure to discharge industrial/trade waste to the reticulated sewer also requires a 'Permit to Construct' from the Water Corporation. This ensures that what is proposed to be built, is compliant with Water Corporation's requirements.

Once construction is complete, but before use of the facility, the Lessee or occupying tenant will need to liaise with Water Corp and apply for a Trade Waste Permit to discharge Trade Waste into the JAH Sewer system.

6.15. Telecommunications and data

For information regarding telecommunication requirements, refer to Appendix I.

6.16. Roads

Roads are designed to accommodate vehicle types and sizes that are appropriate to the land uses approved under the Airport Master Plan.

Developers (or their appointed contractors) are responsible for the construction of concrete crossovers at their cost.

6.17. Landscaping

Landscaping must be in accordance with the Jandakot Airport Landscape Design Guidelines, available from the JAH Website under Tenant Resources.

6.18. Roadside Verges

Generally, roadside verges within the Jandakot Airport precinct will nominally be 4.5 m wide (from the road edge/kerb to the site boundary). These verges shall be landscaped, reticulated and maintained by the Lessee.

On new developments, Developers (or their appointed contractors) shall allow for the supply and installation of a minimum of two 100mm dia pvc ducts under each crossover and also along the length of the verge to allow for future services by others (e.g. retic). Contractors are required to notify the JAH Infrastructure Manager before crossover construction commences to allow JAH to decommission any existing live services.

6.19. Landscape Strip and Building Setbacks (roadside boundaries)

A continuous 3.0 m wide landscaped setback from the roadside boundary must be provided and maintained along the road frontage. This landscape shall incorporate trees, shrubs and/or lawn planting in accordance with the Jandakot Airport Landscape Design Guidelines.

6.20. Aprons and Taxi Lanes

The design of aprons and taxiways is complex and requires particular attention. Detailed design requirements and data are available from JAH. It is the developer's (or their appointed contractor's) responsibility to connect to the nearest available apron or taxiway. The following items in particular should be noted:

a) Aprons, aircraft parking areas and sole user taxiways (e.g. taxiway crossovers) are to be designed and constructed by the Developer. In the case of joint user taxiways, the developer will be required to fund their respective portion by arrangement with JAH.

b) The apron width is to be designed to withstand existing and forecast aircraft type and service vehicle loading.

c) Pavements should be constructed to accommodate the maximum forecast aircraft that will use the apron.

d) Steel fibre reinforced concrete will not be permitted for use in aprons and/or taxiway crossovers

e) Apron and Pavement design should be discussed with the Operations Manager before submission. Development Approval plans must include a detailed drawing of the apron and crossover to taxiway, in particular drainage levels should be clearly shown

f) All services pits, stormwater drainage soakwells and/or washbay drainage collection pits which are to be located in aprons must be designed and installed to accommodate movement of aircraft (for which the apron was designed) up to a Maximum Take Off Weight (MTOW) of 10,000 kg. All designs must be certified by a qualified engineer and submitted to JAH for approval.

6.21. Sea Containers and Transportables

Sea Container: a shipping or similarly designed transportable container used for the purpose of transporting goods and/or storage.

Transportable Building: a portable building, demountable, donga or any other non-permanent structure brought to site for the purpose of storage, occupation and/or operations.

All sea containers and transportable buildings (including temporary use) are to comply with the Sea Container and Transportable Building Policy (PO301).

6.22. Building Generated Windshear

Buildings at airports can generate windshear that could pose a safety risk to aircraft. The proponent should first check with JAH whether a windshear assessment would need to be done on the proposed development site. If an assessment is deemed necessary, then all costs associated with the assessment will be for the developer.

6.23. Exhaust Plume Emissions

Should any proposed development include plant or equipment that may generate exhaust plumes, proponents are advised that the emission must be less than 4.3 m/s. If higher emissions are required, approval must first be sought from the Operations Manager.

7. CONSTRUCTION MANAGEMENT

JAH considers it essential that a healthy and safe workplace be provided for all staff, contractors and visitors.

7.1. Contractor

All contractors are required to comply with all applicable WHS Legislation including Acts, Regulations and Codes of Practice.

Contractors are obliged to ensure the following:

- all applicable licences are current.
- all plant is regularly maintained and guarded.
- insurances are current and adequate.
- compliance with WA WHS Legislation at all times.
- management of WHS systems.
- complete Risk Assessments and implement Safe Work Method Statements.
- co-operate with JAH in matters of WHS risk control.

JAH may, at their discretion, perform site inspections / audits to confirm compliance. If in the opinion of JAH, any employee of, or a person responsible to the Contractor contravenes the above, the Contractor may be directed to remove the person/s from the site. Any reasonable directions issued by JAH must be complied with.

7.2. Inductions

All contractors must complete the JAH online contractor induction. The JAH Manager responsible for engaging the Contractor will ensure that the JAH online induction has been assigned to and completed by the Contractor through OneReg prior to commencement of works.

7.3. Incident Reporting

The contractor must submit a hazard/incident report via the Jandakot Airport website for matters that may impact the safety of other airport users or the general public.

7.4. Contractor Insurances

Refer to the JAH Contract Approval Procedure.

Both JAH and the Commonwealth of Australia are to be noted as an insured party under the policy. The policy is to cover the period of works and any subsequent maintenance periods stipulated in the relevant contracts.

7.5. Contractor Compound

The proposed location of the contractor's temporary compound is to be agreed with JAH.

Contractor vehicles are to be parked in a location to be approved by JAH. The Contractor is to notify JAH of the number and type of vehicles used in connection with the works and ascertain if any restrictions will apply.

7.6. Excavation

No excavation is to commence without the approval of the JAH and the relevant approval from the ABC. All excavation is to be performed in accordance with the Excavation Code of Practice 2005.

The Contractor must contact the Infrastructure Manager prior to any excavation works being carried out for the construction of crossovers in any road verge at JAH. Upon completion of the crossover works, the Contractor must inspect the works with JAH, to check and ensure that damaged landscaping has been rectified and that there are no leaks in the landscaping irrigation reticulation in the vicinity of the crossover.

Dial before you dig for non-Jandakot Airport Assets is compulsory on all sites.

7.7. Traffic Management

When working on the road or within the road reserve, contractors must have adequate traffic management safety systems in place.

Traffic Management is to be performed by trained personnel and is to be compliant with the Traffic Management for Works on Roads Code of Practice.

7.8. Communications Equipment

The contractor must ensure that any two-way radio system or other forms of communication on the site, does not cause interference with airport or airline communications and equipment.

7.9. Electrical Safety

All electrical work must be performed by a licensed electrician as defined in the Electricity Act 1945 and Electricity (Licensing) Regulations 1991. Electrical services will be installed in accordance with AS 3000 Electrical Installations (also known as the "Wiring Rules").

Vicinity access permits and electrical access permits are to be arranged by the Contractor.

JAH and the ABC are to be given a copy of preliminary and completion notices.

All portable electrical equipment is to be tested and tagged in accordance with AS 3012:2003 Electrical Installations – Construction and Demolition Sites.

7.10. Housekeeping

Loose items (Foreign Object Debris) can get sucked into aircraft engines or propellers and cause serious incidents.

All areas including pavements that are affected as a consequence of carrying out the works, are to be kept clean at all times by the Contractor.

At the completion of the project the work area must be left clean and tidy and the area restored to the satisfaction of JAH.

7.11. Utilities and Structures

Where the contractor requires connections or disconnections to JAH's water, sewer or storm water drainage services or any other utility on the site, permission from JAH must be obtained prior to work commencing and all necessary approvals must be obtained from JAH and the owner of the utility.

The location of any known services and structures shown on any JAH drawings is approximate and it is the responsibility of the Contractor to verify exact locations.

Dial before you dig must be contacted prior to works for location of "other" services.

Where any service or structure is damaged, the Contractor is to immediately notify JAH and shall be responsible for the full cost of any repairs.

7.12. Alcohol and Other Drugs

In the interest of providing a safe workplace, JAH shall have the right to request a Contractor to remove any personnel from site if it is considered that they are suffering from the effect of alcohol or other drugs.

7.13. Height Restrictions, External Lighting, Emissions to Air

Under the Airport Act 1996: Airports (Protection Of Airspace) Regulations any activity that infringes protected airspace is called a "CONTROLLED ACTIVITY" and requires approval before it can be carried out.

Controlled activities include:

- Permanent structures (e.g. buildings, masts, antenna).
- Temporary structures (e.g. cranes, scaffolding).

- Any activity that causes intrusions into protected airspace (e.g. glare from artificial light or reflected sunlight, air turbulence, smoke, dust or steam).
- External lighting in the vicinity of the airport.

Carrying out a controlled activity without approval is an offence under section 183 of the AIRPORTS ACT with a fine up to 250 penalty points (currently $27,500).

JAH has details of allowable heights and 60 days is required for assessment of a proposed controlled activity. Copies of the Crane Use / Controlled Activity Application form are available in the Airspace Protection section of the JAH Website.

7.14. Construction Signage

Approval of any construction signage and its location is required before it is installed.

7.15. Temporary Buildings

Temporary buildings will not be allowed on site except with the approval of the Airports Building Controller.

7.16. Contractor Work Plan

The Contractor's work must not have an adverse effect on landside or airside activities or on any users of the Airport. This condition includes the requirement to maintain clear vehicular and pedestrian access to all areas of the airport and to ensure the safety of airport users. The Contractor's staging plan and detailed construction program is to make adequate provision to comply with this condition. A copy of the Contractor's work plan and detailed construction program is to be given to JAH prior to commencing work on site.

7.17. Site Security

Sites must remain secure at all times. Gates must remain closed and locked when the site is not active. Contractors must ensure that airside security is maintained at all times. For public protection, fencing or hoarding may be required where the works are in close proximity to occupied areas or buildings.

Discuss any security matters with the Duty Reporting Officer on 0417 827 557.

7.18. Environmental Requirements

All construction/civil works (including demolition) with the potential for environmental impacts require a Construction Environment Management Pan (CEMP), which must be reviewed and endorsed by the JAH Environmental Management team prior to works commencing. Where practicable, the CEMP should be submitted to JAH as a component of the building/works permit application. Refer Appendix B for CEMP guidelines. Additional information can be found in the document "Environmental Management Plans: Policy and Guidelines".

Where minor, short-term works are assessed as posing low or negligible environmental risk, the CEMP requirement may be waived by JAH.

Prior to a lessee occupying and commencing operations, a tenant Operational Environmental Management Plan (OEMP) is required unless the lessee is assessed as having a 'Low' environmental risk profile and JAH have issued an OEMP exemption.

7.19. Hazardous Substances

Where any hazardous substances are to be used by the Contractor, suitable information such as material safety data sheets must be provided at the work site. All hazardous substances are to be managed in accordance with the National code of Practice for the Control of Workplace Hazardous Substances [NOHSC:2007 (1994)].

Planning for adequate safeguards including, but not limited to, personal protective equipment must be completed prior to the works being undertaken. The Contractor must inform JAH of hazardous substances prior to them being used and these must be documented in the CEMP.

NOTE: Due to the restricted airside access on precinct 6 airside developments, Developers and Lessees should take note that all waste oil shall be collected from landside, not airside. As such, if Developers/Lessees require waste oil to be collected and removed from site, they will need to store it in a place where it can be collected via access from landside (and not airside).

7.20. On Completion of Construction – As Constructed documentation

"As constructed documentation" including all plans, specifications, Operations and Maintenance Manuals, all plumbing, mechanical and electrical certificates must be issued to JAH.

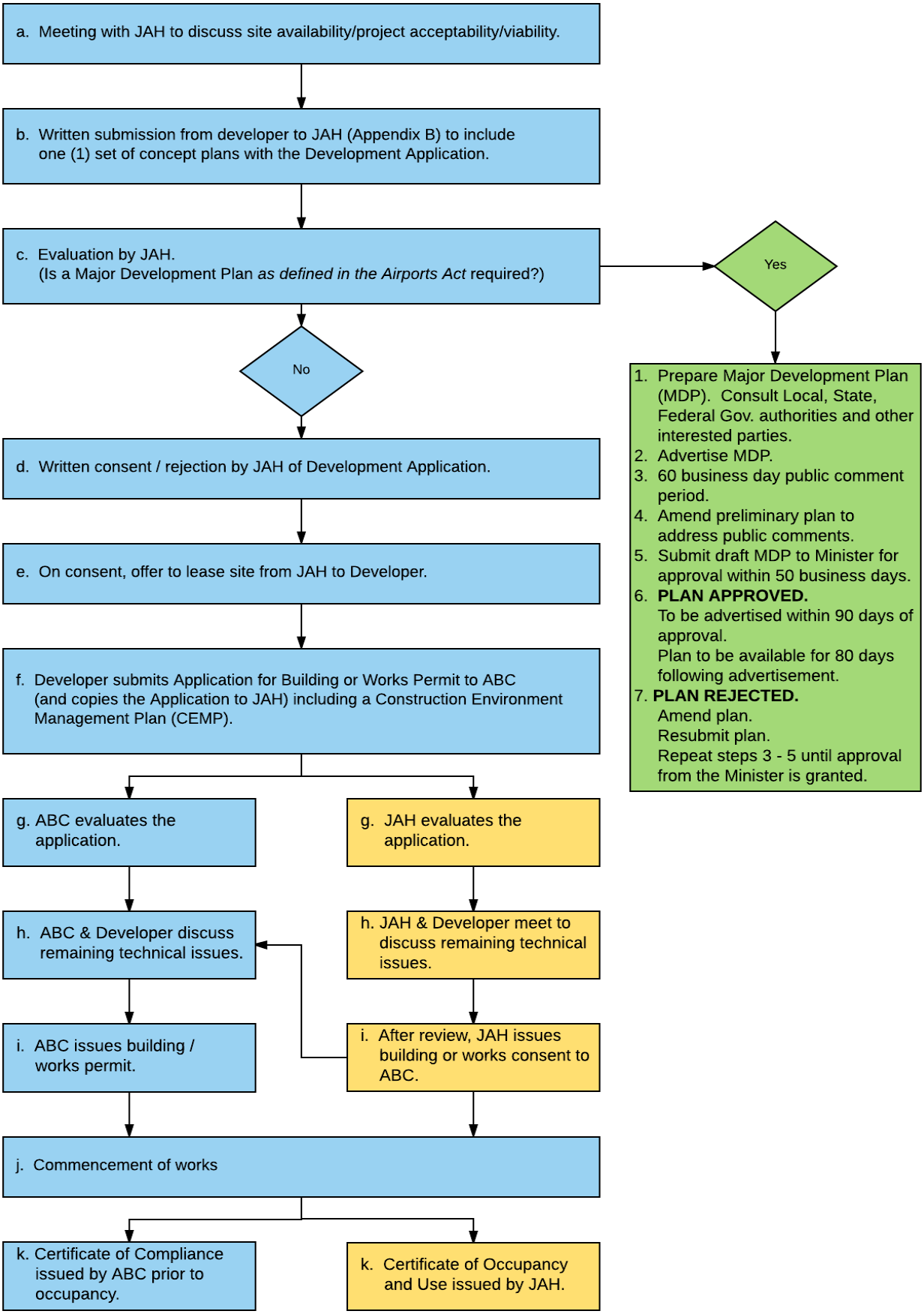
"as constructed" plans, manuals and specifications should be issued in the following formats: -

- One hard paper copy of all drawings, manuals and specifications and
- one electronic AutoCAD ".dwg" copy of all drawings on a data disk and
- one electronic ".PDF" copy of all drawings and specifications on a data disk

When underground services are installed, they must be surveyed by a licensed surveyor, to determine the position and depth of the service. An as constructed plan must be prepared and sent to JAH. Trenches must remain open until such time as JAH is in possession of these drawings. JAH will then give approval to cover the services.

On completion of the works, an "as constructed" survey signed by a qualified surveyor must be provided to JAH.

Appendix A – Development & Construction Approval Process



Appendix B – Construction Environment Management Plan

Developers (or their appointed contractors) must inform JAH what they want to develop, what they expect their environmental impacts to be and how they plan to minimise or negate these impacts.

Construction Environment Management Plans (CEMPs) are required by JAH to provide for management of construction projects so that the environment is protected.

It is the developer's responsibility to manage the environmental aspects of their project.

Requirements of a CEMP

Whilst CEMPs are prepared and developed by the Contractor, they must meet JAH guidelines to ensure that they are complementary and integrated with the overarching JAH Environmental Management System. As such, all CEMPs must be reviewed and endorsed by JAH prior to being implemented. The scope and content of a CEMP will be determined by the scope of the project and the significance of a project's potential environmental impacts.

CEMP Template

A CEMP template has been developed by JAH to assist in the preparation of a CEMP. The template includes the minimum information required to assess a project at Jandakot Airport, including the most commonly encountered environmental risks and controls on standard construction projects. Additional information may be required in order to capture all potential environmental risks associated with a project before the CEMP is approved by JAH.

The CEMP template can only be obtained by contacting the JAH Environment Manager on 9417 0900.

Pro Forma CEMPs

Developers (or their appointed contractors) may wish to use their own preferred style of documentation instead of the JAH CEMP Template. Developers should still seek guidance from the JAH CEMP template and the Jandakot Airport Environmental Management Plans Policy and Guidelines to ensure that the content meets the minimum expectations of JAH. Compliance with each of the items in the below table will assist in ensuring that the CEMP contains the necessary information. The Jandakot Airport Environmental Management Plans Policy and Guidelines provide greater detail on how to prepare a CEMP that will meet the minimum expectations of JAH.

Construction Environmental Management Plans	
Components of a CEMP	***Potential Environmental Impacts**
Background	• Waste (general and recycling) • Hazardous waste • Storage of fuels, oils and chemicals • Refuelling • Air quality and dust management • Noise and vibration • Stormwater, surface water and groundwater • Vegetation clearing • Landscaping • Dieback management • Weed control • Flora and fauna • Indigenous heritage • Acid Sulphate Soils • Contamination • Roads and public transport
Introduction	
Project location, description and site-specific conditions, including a detailed Site Plan	
Commitment to compliance with JAH EMS, policies and procedures, and legislative requirements	
CEMP objectives	
Company's Environment Policy (or commitment to comply with JAH's Environmental Policy)	
Environmental Management	
Environmental management structure and responsibilities (corporate and onsite)	
Approvals, permits and licensing requirements	
Environmental induction and training of staff/contractors	
Emergency Contacts and Response	
Implementation	
Site specific risk assessment	
Environmental impacts and controls *(refer to column on right)	
Reporting and Communication	
Environmental incident reporting – internally and to JAH	
Post Construction reporting to JAH	
Communication processes (with staff, subcontractors, neighbours, JAH, etc.)	
Monitoring and Review	
Environmental monitoring (checklists, inspections, audits etc.) and commitment to allow JAH and DIRD inspections	
CEMP review frequency	
Environmental schedules (e.g. copies of incident report form, inspection checklists, induction register etc.)	

Appendix D - Signage Guidelines

Signage should be designed to enhance the visual appeal of the built environment. It should be integrated with the design of buildings and a consistent approach is therefore required for all street, tenant and directional signage.

All signage requires approval. Signage requirements will be assessed on submission of Signage Application, available from the JAH website under Development > Building Approvals.

Road verge/ street signage

- One tenancy address sign will be allowed on the verge in the front of each tenancy. This sign will identify the street address and be designed within the overall theme of the precinct. No logos, slogans or promotional messages may be displayed on these signs.
- Only street numbers shall be allowed on street signage.
- Tenant names or additional directions will not be permitted on street signage.

Building Signage

- On-building signage may contain the business name and/or corporate logo.
- No building sign shall be larger than 10% of the total area of the wall onto which it is placed.
- Signs must be specified, installed and maintained to a high standard.
- All external building signage shall comprise three-dimensional raised lettering and logo (laser cut or similar, minimum of 20 mm depth).
- Building signage facing primary roads shall be illuminated to enhance the presentation of the precinct and it must be compliant with CASA MOS Part 139.
- Sub-tenants shall not place a sign on the building but may place their business name on or adjacent to the main entrance door to their premises.
- No advertising or promotional signs shall be placed on buildings.

Construction Site signage

Sites will require certain signage for the efficient and safe operation of their business. All such signage shall comply with the following:

- All signage is to be installed and maintained to a high standard.
- The only signs to be used in car parks or internal roadways are those for vehicle/pedestrian directions and OH&S standards.
- Site signage visibility from street frontage is to be minimised.
- No temporary signage is to be erected.

No promotional signage is to be erected.

Appendix E – Lodgement of Development Applications

Further to Section 5 step 1, development applications must always be lodged directly with JAH and must include the following:

- Completed JAH Development Application Form and fee Appendix B.
- A general description of the proposed development including operations to be conducted at the proposed facility.
- Overall site plan, including AHD levels (to Perth Coastal Grid coordinates), the location of adjoining buildings, landscaping areas, provision for parking and access, (minimum scale 1:500).
- Detailed floor plans and coloured elevations (all sides) showing window locations, doors etc, (minimum scale 1:200). All plans must be submitted both in hard copy and in an electronic (pdf) format.
- A schedule of external finishes including proposed materials, colours and features.
- The approximate value of the proposed development
- Details of any tenant specific fit-out items such as fire tanks, refrigeration units etc.
- Details of aprons and crossovers, in particular showing levels of tie-ins to other aprons and taxiways as well as levels showing drainage to soakwells.
- An indicative landscaping plan outlining the landscaping concept, types and size of plants and trees, existing landscaping or features, lawn areas etc, (minimum scale 1:200) Note: A fully detailed landscaping plan (in hard copy and electronic format) is required with the application for building permit.
- Details outlining any special requirements or conditions that may need to be addressed such as additional power, trade or noxious waste.
- Details of vehicular traffic that will be required to access the site.
- Floor areas must be shown for each use on a detailed sketch plan; i.e. 2500 sq. m warehouse space, 300 sq. m office space etc.
- An environmental statement detailing what activity will be undertaken on the site with comment on measures to be incorporated in the design and operation of the facility to achieve sustainable development and to address any regulatory requirements connected with the site's permitted use.
- Details of any food type, operations where the business either provides food to staff or is involved in preparation and distribution of food.

Fees payable to JAH when lodging a Development Application are:

TYPE OF ACTIVITY	JAH DA Fees (incl. GST) based on estimated cost of works
Hangar, office, training school or alterations and additions in excess of $100,000.	$500 up to value of $500,000 plus $300 for every additional $500,000 thereafter.
Minor building alterations and extensions, additional services or utilities up to a value of $100,000.	$250 per application

Appendix F – Applying for Permits or Authorisations

Further to Section 5 Step 2, the following is required for applying when a building permit, works permit or demolition authorisation.

An Application for a Building Permit, Works Permit or Demolition Authorisation can only be lodged once a Development Application (if required) has approval from JAH. **All permit applications must be submitted to the Airport Building controller through Jandakot Airport**

A Building Permit, Works Permit, or Demolition Authorisation must be obtained from the Airport Building Controller (ABC) ***before any*** building works can commence on site (whether or not the works involve minor structures or minor works, which do not require Development Approval).

The Department of Infrastructure & Regional Development (DIRD), represented by the Airports Building Controller (ABC) considers and issues all building permits, works permits or demolition authorisations. The ABC assesses the application for conformance to the Building Code of Australia and other statutory requirements.

Concurrently, Jandakot Airport assesses each application to satisfy itself that the proposed building activity is consistent with the Jandakot Airport Master Plan and or Environment Strategy. The ABC further seeks JAH's comment and incorporates any conditions required by JAH in the Building or Works Permit Approval or the Demolition Authorisation. The approval process involves obtaining the consent of the Airport Lessee Company (ALC) which is Jandakot Airport Holdings Pty Ltd.

JAH Work/Building Permit application forms are available from Jandakot Airport Website HERE

All buildings and site improvements are to be designed in accordance with the current Building Code of Australia (BCA).

The Regulations describe the things Jandakot Airport must be satisfied about before it gives its consent, such as whether the proposed building activity is consistent with the Jandakot Airport Master Plan and or Environment Strategy.

NB: Building and Works Permit Applications (including fee payments) are to be lodged with the Airport Building Controller (ABC), **through Jandakot airport Holdings** using the applicable JAH Building / Works Permit application form together with the following information:

- Detailed construction documentation including plans and specifications (in hard and electronic copy format).
- Details of all materials, colours and finishes.
- A Construction Environmental Management Plan (CEMP) to cover the works period. (Refer Appendix B for guidelines on this requirement).
- Detail showing intended building, signage and carpark lighting compliant with Civil Aviation Safety Authority Manual of Standards (MOS) 139, Chapter 9, Section 9.21.

When lodging a permit application through JAH, an electronic copy of the application must be submitted. In addition, (if requested), one hard copy of the permit application (including drawings) must also be lodged with JAH. A Jandakot Works / Building Application Form must also be completed and appended to the original permit application documentation being lodged with JAH

Building plans may also be required to be submitted to the Department of Fire and Emergency Services (DFES) of Western Australia for comment.

A Building Permit approval issued by the ABC is binding and will remain valid for three years from the date issued by the ABC. Any variation to that approval will require a new submission to the ABC and JAH.

Within 1 month of reaching Practical Completion of a building, Developers (or their appointed contractors) must provide JAH with a set of "as constructed" (to scale) plans and specifications in the following formats:-

- one hard/paper copy.

- one electronic AutoCAD ".dwg" copy of all drawings on a data disk.
- and one electronic ".PDF" copy of all drawings and specifications on a data disk.

Developers (or their appointed contractors) are to note that failure to submit the "as constructed" plans, specifications and Operations and Maintenance Manuals in a timely manner may result in JAH delaying the issue of the Certificate of Occupancy and Use.

Telephone: (08) 9479 5170
Facsimile: (08) 9477 2259
Mobile: 0417 010 468
e-mail: abcperth@iinet.net.au

All buildings and site improvements are to be designed in accordance with the current Building Code of Australia (BCA).

In considering any Building, Works or Demolition Authorisation applications, the ABC seeks JAH's comment and incorporates any conditions required by JAH in the Building or Works Permit Approval or the Demolition Authorisation.

Building and Works Permit Applications (including fee payments) are to be lodged with the ABC, using the applicable ABC Building or Works Permit application form:

- Application for Building Permit
- Application for a Works Permit
- Application for Demolition Authorisation

together with the following information:

- Detailed construction documentation including plans and specifications (in hard and electronic copy format).
- Details of all materials, colours and finishes.
- A Construction Environmental Management Plan (CEMP) to cover the works period. (Refer Appendix B for guidelines on this requirement).
- Detail showing intended building, signage and carpark lighting compliant with Civil Aviation Safety Authority Manual of Standards (MOS) 139, Chapter 9, Section 9.21.

When lodging an original (and one copy) permit application with the ABC, 1 (one) copy of the permit application (including drawings) must also be lodged with JAH. A Jandakot Works / Building Application Form must also be completed and appended to both the original and all copies of the permit application documentation being lodged with JAH. An electronic copy of the application must also be lodged with JAH.

Building plans may also be required to be submitted to the Department of Fire and Emergency Services (DFES) of Western Australia for comment.

A Building Permit approval issued by the ABC is binding and will remain valid for three years from the date issued by the ABC. Any variation to that approval will require a new application to the ABC and JAH.

An Application for a Building Permit, Works Permit or Demolition Authorisation can only be lodged once a Development Application has approval from JAH. For further details, refer to Appendix F.

Within 1 month of reaching Practical Completion Developers (or their appointed contractors) must provide JAH with a set of "as constructed" (to scale) plans and specifications in the following formats:-

- one hard/paper copy.
- one electronic AutoCAD ".dwg" copy of all drawings on a data disk.
- and one electronic ".PDF" copy of all drawings and specifications on a data disk.

Failure to submit the "as constructed" plans, specifications and Operations and Maintenance Manuals in a timely manner may result in JAH delaying the issue of the Certificate of Occupancy and Use.

Fees and Payment Options

Fees payable to DIRD for Building/ Works Permits are outlined in the Airport Building Controllers Fees.

Remittance advice notes for fees paid to the Department of Infrastructure should be sent to JAH who in turn, will update The ABCO records.

Fees payable to JAH when making an application for a Building or Works Permit are as follows:

TYPE OF ACTIVITY	PERMIT TYPE	JAH FEES (incl. GST)
Commercial, Retail, Showroom, Warehouse, hangar, training school and the like.	Building Permit	$ 500 for works valued between $10,000 and $100,000 $ 750 for works valued between $100,000 and $300,000 $1,000 for works valued between $300,000 and $500,000 $2,000 for works over $500,000 in value
Building alterations or extensions.	Building Permit	$ 500 for works valued between $10,000 and $100,000 $ 750 for works valued between $100,000 and $300,000 $1,000 for works valued between $300,000 and $500,000 $2,000 for works over $500,000 in value
External works, services or utilities	Works Permit	$ 500 for works valued between $10,000 and $100,000 $ 750 for works valued between $100,000 and $300,000 $1,000 for works valued between $300,000 and $500,000 $2,000 for works over $500,000 in value
Minor Works	Works Permit	$250 for works valued up to $10,000.00
Signage	Signage	$250 per application for works up to a value of $20,000

Electronic Fund Transfer (EFT) fee payments

When submitting a Development Application to JAH, or when lodging an application for a Building or Works Permit with the ABC, fee payments to JAH can be made either by cheque or by Electronic Fund Transfer (EFT).

It is important to note, that if an EFT fee payment is made to JAH, a site or JAH Development Reference Number must be provided with the payment detail. A Development Reference Number will be provided by JAH, upon request, when making EFT payments. JAH EFT payment details are as follows:-

Bank: Commonwealth Bank of Australia

Account name: Jandakot Airport Holdings Pty Ltd.

BSB No: 066-000

Acct No: 13321793

Please quote a Site number, a JAH Development Reference number, or details of the fee payment when making an EFT.

Appendix G – Power Connections

Further to Section 6.10, each site is nominally allocated with low voltage (415 volt 3 phase) power allocated as 200 Kva per hectare of site area to the front boundary. Power requirements in excess of this are to be agreed with JAH and may attract headworks charges.

Both permanent and temporary electrical connections shall be metered. When electrical meters are either installed or de-commissioned, contractors are to advise JAH Infrastructure Manager of the meter number and meter readings using a JAH Site Meter Detail Record Sheet.

Private metering

On new developments, Developers (or their appointed contractors) are to allow for the installation of a private metering system supplied by Energy-Tec.

The private metering system shall have the following facilities:

- Meters used for private metering shall be EDMI Genius MK6 / Mk6N. These meters, are to be purchased from Energy-Tec. and programmed with Energy-Tec. Standard Consumption Meter Program and equipped with necessary GSM communications equipment.
- All meters shall store up to 12 channels of load survey data at 15 minute or 30 minute intervals for a minimum of 300 days internally.
- All whole current (direct connect 10/100 Amp) meters shall be protected by 100 amp up-stream protection device/s either with sealable 100 amp fusible links or lockable circuit breakers. Generally meter panels shall be wired so as to allow isolation of each meter individually rather than having to isolate an entire board to replace or program a single meter. The easiest way to achieve this without additional cost is to place the tenancy breaker before the meter rather than after the meter.
- Each tenancy meter/logger shall be programmed to display on the LCD panel the tenancy number alongside of the current energy, cold water, hot water, gas and chilled water reading.

Whole Current (10/100 Amp Direct Connect) Meters

- Whole Current (10/100 Amp, direct connect) meters shall be EDMI ‘Genius’ MK6/MK6N meters or approved equivalent and shall be class 1S to IEC 61036 and shall be direct connecting 3x100 amp single phase and/or 1x100 amp 3 phases 4 wire for tenancies with three phase sub-mains.
- The meters shall have six (6) additional pulse inputs rated at 12 volts and shall be complete with a 4-wire RS485 communications port and a 12volt power supply for powering the pulse inputs.

CT Meters

Photographic evidence of CT Ring ratings must be supplied to JAH upon installation.

Check Meters for incoming mains supply

In addition, all check meters for the main incoming supplies will be installed on the main switchboard/s. These meters will be EDMI Mk6E Class 0.2S CT meters complete with Class 0.5S Metering grade extended range Current Transformers These meters will be NEMMCO type tested, 3 phase 4 wire kilowatt hour meters with monitoring of Wh, varh, VAh, Watt, Var, VA, Maximum Demand Current, True RMS Voltage and Current, Power Factor, Frequency, Phase angles, sag/swell capture, quality of supply features, waveform capture and THD measurement. The meters shall have an 8kV isolated 4-wire RS485 communications port, an isolated optical port (IEC 1107) and shall interface to the private metering system.

No additional Multi-Function meters shall be required on the mains supply as these meters will perform this task. In addition the meter/s shall keep 300 days of ½ hour load-profile data.

Clarifications

- The Contractor, or his Electrical Contractor is to source the electrical meters from Energy-Tek
- Installation of the meter shall be undertaken by the Contractor's Electrical Contractor.
- CT's and ancillary equipment shall be supplied and installed by the Contractor's Electrical Contractor or their switchboard manufacturer.
- Energy-Tek to commission each panel and connect to the data acquisition service.
- Once the supply is live, the Contractor or his Electrical Sub-Contractor must supply a JAH Meter Detail Record Sheet (FO905)

Meter Supplier Contact Details:

Energy-Tec Holdings PTY LTD
www.energy-tec.com.au
Phone – 08 9309 0000
Fax – 08 9309 0099
Email – service@energy-tec.com.au

Developers (or their appointed contractors) are to note that JAH are the service provider / Authority for the supply of mains power at Jandakot Airport.

The Contractor shall provide JAH with a completed *Site Meter Detail Record Sheet* when commissioning either temporary builders or permanent pulse metered electrical connections.

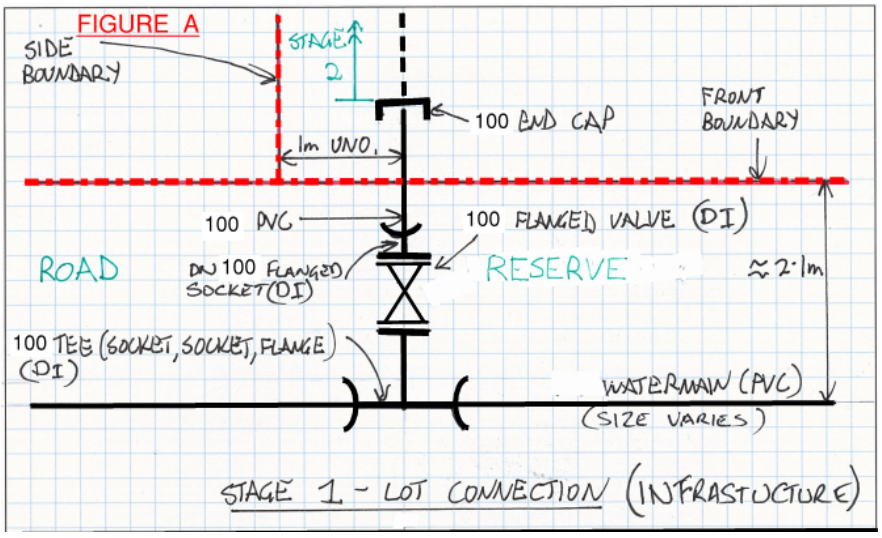
Appendix H - Water Connection

Further to Section 6.12 below contains details regarding the water connection requirements at Jandakot Airport.

As there is no independent fire water service at Jandakot Airport, JAH will allow one point of connection (located at the Lot boundary) for both domestic and fire requirements. Each Jandakot Airport site will be allowed a maximum 100 mm dia. water connection for both combined domestic and fire water services.

Developers (or their appointed contractors) are referred to the following sketches which typically show i) the Stage 1 Lot connection (Infrastructure) which JAH shall provide at each site boundary *(Figure A below)* and ii) the Stage 2 final pipe and fitting arrangement (Builder's Connection) Developers (or their appointed contractors) are expected to provide *(Figure B below).*

Developers (or their appointed contractors) will need to connect their domestic potable (25, 40 or 50mm) water line on the lessor's side of the 100mm metered common water connection. (*Figure C below*, is indicative of the separate metering arrangement for both fire and domestic connections).



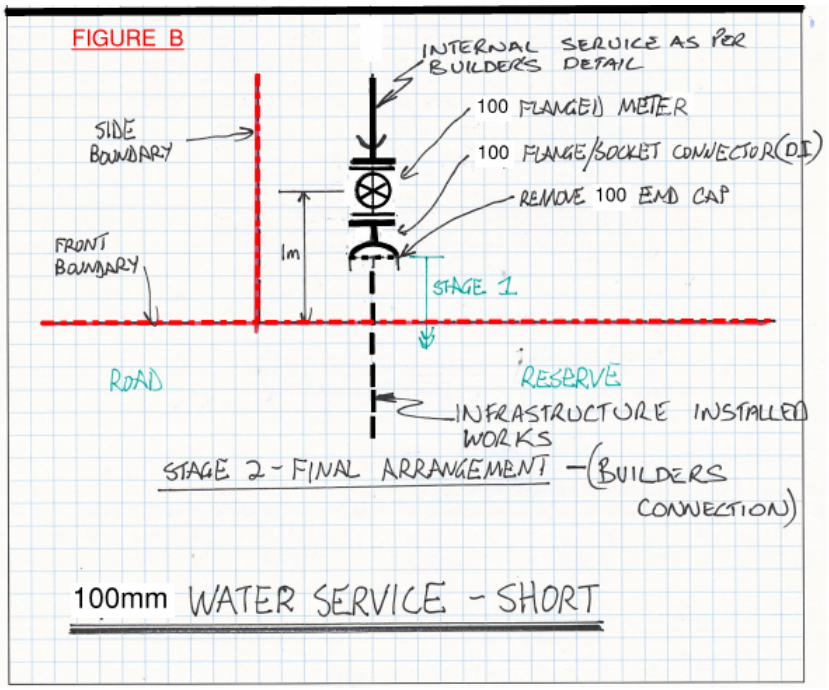
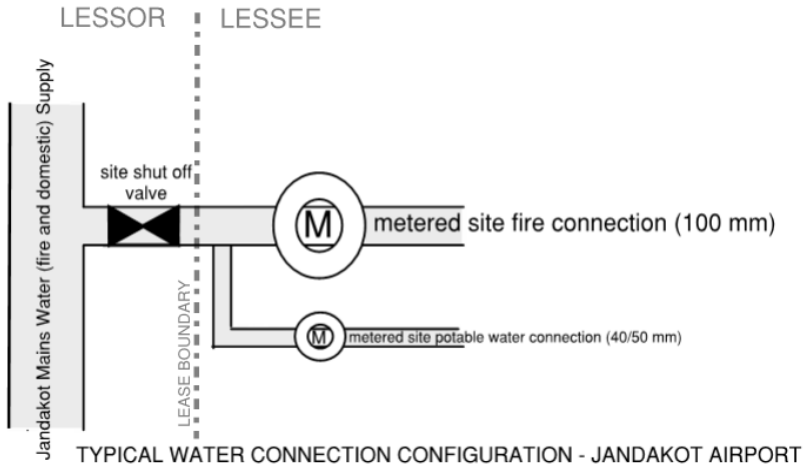


Figure C



TYPICAL WATER CONNECTION CONFIGURATION - JANDAKOT AIRPORT

Firefighting Performance Requirements

The JAH 'town' mains system (street fire hydrants) has been designed to provide and maintain a performance using the Deemed to Satisfy (DTS) provisions of the Building Code BCA Part E1.3 and performance requirements defined under Australian Standard 2419.1 Fire Hydrant Installations – System Design, Installation and Commissioning, as a guide. Jandakot Airport (as a minimum) generally provide a "towns mains" pressure at each street connection of 200kpa at a flowrate of 20L\sec (static mains pressure of approximately 470kpa).

The reticulated street mains system has been hydraulically engineered to provide and maintain a flow of 20 litres per second (Lt/s) with a minimum residual (flowing) pressure of 200 kPa from any part of the JAH reticulated system. Water requirements in excess of that provided are to be agreed with JAH and may attract additional headworks charges

Where a building requires multiple hydraulic system requirements (e.g. fire sprinkler systems, Wall-Wetting Drenchers etc) a higher supply performance is necessary and provisions must be made for the introduction of on-site firefighting storage tank systems, Electric and Diesel fire pumpsets, in line with design provisions defined under current contemporary design standards. Clarification of Manufacturer of Proposed Pump sets to be supplied to JAH with the Building Permit Application.

Developers (or their appointed contractors) are to note that Jandakot Airport Holdings is the service provider / Authority for the supply of domestic and fire mains water at Jandakot Airport.

Water meters

Both domestic and fire water shall be independently metered. Developers (or their appointed contractors) are responsible for the supply and installation of all water meters, which shall be a type approved by Water Corporation (Elster or similar approved). Figure C above, shows the final metering arrangement for fire and domestic water connections

The electrical contractor shall be responsible for the connection of all water meters to the AMR (Automatic Meter Reading) system (if available). The contractor shall be responsible for the installation of conduits and cabling between water meters and their respective electricity meter. Cabling shall be performed in stranded CAT5e or CAT6 cable.

Wherever possible water & weatherproof Scotch Loc™ devices shall be used between the pulse cables and the CAT5 cabling. It is permissible, where two water meters are sited adjacent to each other, to use a single cable from the water meters to the respective electricity meter or logger. Generally, the following conductor pairs shall be used:

SERVICE	CAT5 conductor pairs
COLD WATER	Blue & blue/white
HOT WATER	Orange & orange/white
CHILLED WATER	Green & green/white

The hydraulic contractor shall be responsible for ensuring any water meter supplied has pulsed output capability, and is supplied with the proprietary reed switch for connection to the AMR network.

Once the supply is live the Contractor must supply a JAH Meter Detail Record Sheet (FO905).

Backflow Prevention Devices

Commercial and industrial facilities within Jandakot Airport may be required to install backflow prevention devices internal to the property. Developers (or their appointed contractors) are therefore responsible for providing zone and individual backflow prevention protection from hazards within the property as specified in AS/NZ 3500.1 Plumbing and Drainage – Water Services.

Licenced plumbing contractors have obligations under the plumbing regulations to install the zone and individual backflow prevention protection devices where they are necessary. The plumbing regulations are administered by the Plumbers Licencing Board.

Backflow prevention devices are required to be compliant with Australian Standard AS2845.

The Metropolitan Water Supply, Sewerage and Drainage By-laws 1981 also require testable backflow prevention devices to be regularly tested and maintained in accordance with Australian Standard 2845.3 Water Supply – Backflow Prevention Devices – Field Testing and Maintenance of Testable Devices.

The cost of installing any backflow prevention device shall be borne by the Developer or his appointed contractor.

Appendix I – Telecommunications and Data

Further to Section 6.16, below contains requirements for telecommunications and data at Jandakot Airport.

For new developments, developers (or their appointed contractors) shall be responsible for an AFR (Application for Reticulation) through Telstra's Smart Community website (https://www.telstra.com.au/smart-community) including the lodgement of their site plans showing the lead in duct to the site boundary.

Telstra Lead-in duct and cable

1. The Contractor shall log an AFR (Application for Reticulation) with Telstra Smart Community as soon as the electrical plans are available.
2. The Contractor shall familiarise himself with Telstra's General Specifications and requirements.
3. Lead-Ins
    a) The AFR is generally a notification to Telstra that a new development will require a communication service and that either:-
        i. Telstra must supply and install a lead in duct and cable to an open trench (to be provided by the Contractor) at a future "trench open date" (date provided by the Contractor), **or**
        ii. The Contractor will be supplying and installing a lead-in duct and cable (minimal 10 pair copper cable) from the boundary pit to the MDF, **or**
        iii. The Contractor will only install the lead in duct and Telstra will be required to install the lead in cable. (**Note**:- Telstra require a minimum of 12 weeks' notice if they are notified by the Contractor to install the lead in)
4. Contractors at Jandakot Airport shall as a minimum, comply with item 3a)(ii) above whereby they shall supply and install the lead in duct (minimum 50mm), cable (minimum 5 pair copper) and pit (all to Telstra standards) from the site boundary to the building entry and MDF and further log an AFR to Telstra as noted under Item 1 above.
5. The Lessee is to apply for their own communication services at the earliest opportunity after the contractor has completed his site work.

The Contractor should be aware that Telstra will **not** visit the site unless the lead in duct and cable has been installed. It is the Contractor's responsibility to engage with Telstra's Smart Community.

Although a network of telecommunication pits, pipes and ducts presently services Jandakot Airport, lessees will still be required to make their own applications to their preferred service providers, for both copper or fibre and data service connections.

Appendix J – Embedded Generation (Solar PV) Connection

Further to Section 6.11, below contains details regarding the embedded generation connection requirements at Jandakot Airport.

At present, embedded generation including Solar PV cannot be connected to the JAH electrical network. Refer to the following Memorandum prepared by an independent consultant on the Limitations of the connection of Embedded Generation (Solar PV) at Jandakot Airport.

JANDAKOT AIRPORT

WOOD & GRIEVE ENGINEERS
NOW PART OF Stantec

Memo

Project No: 43559

To: Jandakot Airport Holdings

Date: 2 October 2019

Subject: Limitations of the Connection of Embedded Generation (Solar PV)

The Jandakot Airport Precinct is connected to Western Power's network as a high voltage customer. Even though tenant installed Solar PV systems are connected at low voltage, Western Power views the embedded generation capacity for the Jandakot Airport site as an aggregated system connected to their network at high voltage.

In order to protect Western Power's network stability the total inverter capacity for any embedded generation (solar PV) connection is limited to 30 kVA. Jandakot has some existing solar PV installed on site which has exhausted this allowance. Western Power do allow for the connection of embedded generation (solar PV) in excess of 30kVA, however additional requirements as defined by section 3.6 of Western Power's Technical Rules (WPTR) are needed.

The WPTR requires a higher level of protection functionality to maintain power system stability. This is in addition to the power system protection already required at the intake substation (point of grid connection). The additional protection requirements are detailed in section 3.6.10 of the WPTR, for small embedded generators (solar PV) up to 10MW.

The existing high voltage switchgear at the point of connection for the Jandakot Airport site does not have the additional protection requirements as defined by the WPTR for embedded generation (solar PV) in excess of 30 kVA. Therefore, the equipment at the intake substation is required to be upgraded if additional embedded generators (solar PV) are installed in the Jandakot Airport Precinct.

As such, JAH is not currently permitted by Western Power to connect additional Solar PV embedded generation solutions within its site limits.