

Construction Fact Sheet



Building a new runway

Melbourne Airport's Third Runway is a large multidisciplinary engineering project that involves the design and construction of a parallel runway system to meet future demand at Melbourne Airport.

Construction includes building a new north-south runway and shortening the existing east-west runway, along with the supporting taxiway network and navigation aids required to operate the runway system.

All of this construction work will take place while maintaining Melbourne Airport's 24/7 operation.

What are we building?

Melbourne Airport is seeking approval through the Major Development Plan process for the full build of the third runway.

Full build includes shortening the existing east-west runway to 1940m and building a new, 3000m (with a 200m starter extension) parallel north-south runway and associated infrastructure.

This is the most balanced solution to meet demand and has many operational benefits.

What is the design process?

Design for the third runway (north-south) commenced in 2019 and will be finalised once the Commonwealth Government approves the Major Development Plan. Part of the design process for the new runway system is consulting with airlines and undertaking a construction feasibility study.

Can the design change?

The north-south orientation of the new runway and runway shortening to the existing east-west runway is consistent with the 2022 Draft Master Plan.

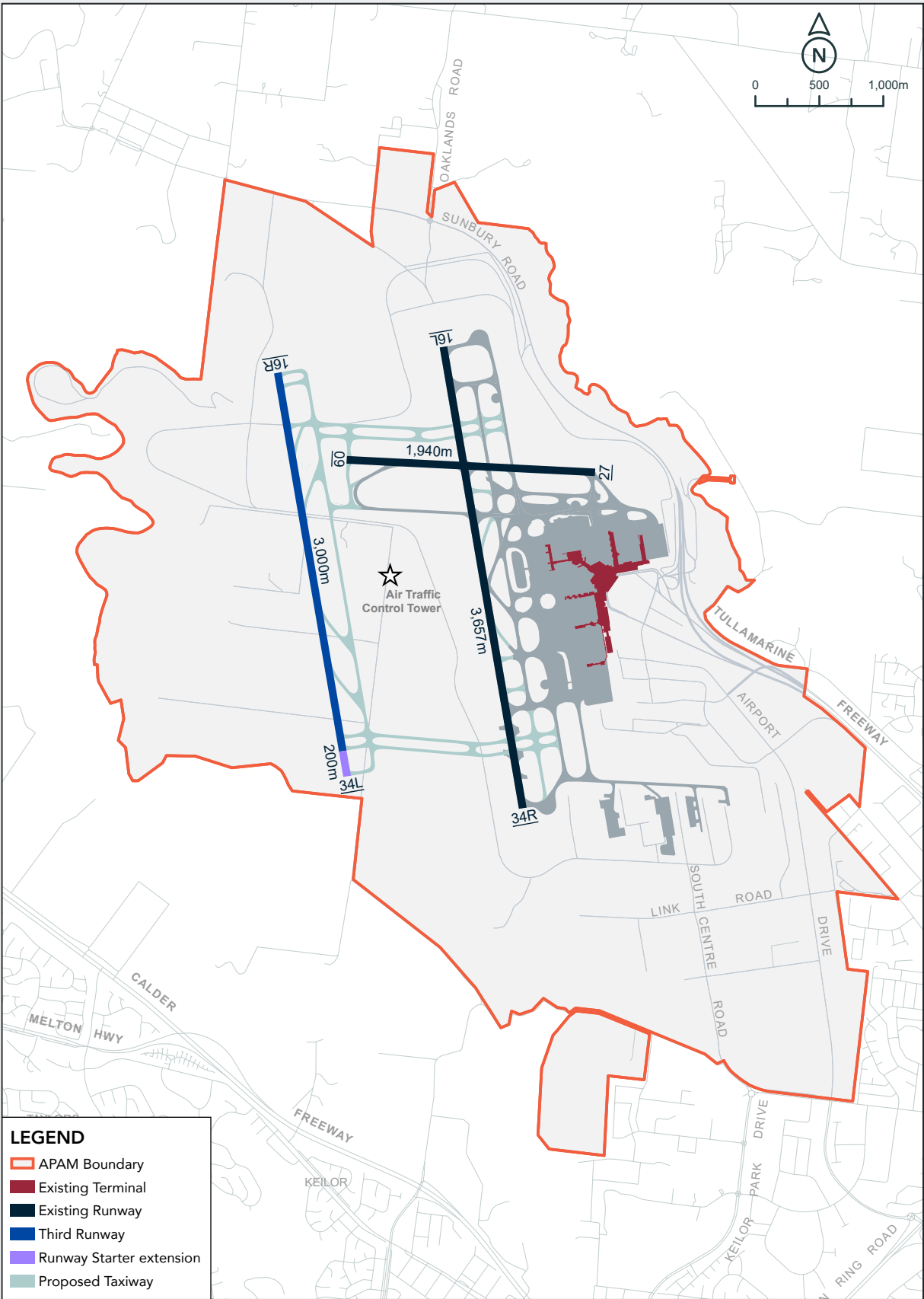
There may be minor changes to the design and location of some elements, such as taxiways, to optimise the airport's efficiency and functionality.

How long will it take to build?

Construction will commence once the Third Runway Major Development Plan is approved and is expected to take four to five years to complete. Construction will be staged to limit the impact on current airport operations.

During some stages, the construction site will be operational 18 to 24 hours a day, seven days a week.

Construction



PHASE 1 **PRELIMINARY WORKS**

All the preparatory works required to commence construction of the project. Installation of access roads, mobilisation and set up of contractor compounds relocation of airside perimeter fencing, installation of construction fencing, site clearance, establishment of stockpile locations and temporary facilities.

PHASE 2 **MAJOR EARTHWORKS, CIVIL WORKS AND MASTER GRADING OF NEW NORTH-SOUTH RUNWAY**

Major earthworks and civil engineering associated with the earthworks platform and supporting infrastructure for new north-south runway 16R/34L, includes the extraction of source material.

PHASE 3 **NEW ENTRIES AND TIE-INTO EXISTING NORTH-SOUTH RUNWAY**

Construction of runway entry and crossing points, requiring some night-time closures of existing north-south runway 16L/34R.

PHASE 4 **MODIFICATIONS TO EXISTING EAST-WEST RUNWAY**

Shortening of existing east-west runway 09/27, including the construction of new entry/exit taxiway to serve the western end of the runway. These works will require a number of closures of existing east-west runway 09/27.

PHASE 5 **FINAL EARTHWORKS, PAVEMENTS AND ASSOCIATED INFRASTRUCTURE NEW NORTH-SOUTH RUNWAY**

Complete earthworks for new north-south runway (16R/34L) and associated taxiways before completing construction of pavements, Aeronautical Ground Lighting (AGL), NAVAIDS and services.

PHASE 6 **COMMISSIONING NEW NORTH-SOUTH RUNWAY AND ASSOCIATED TAXIWAYS**

Transition to operation of new north-south runway 16R/34L and the associated navigational aids and taxiway networks.

PHASE 7 **COMPLETE REMAINING TAXIWAY WORKS AND WORKS ASSOCIATED WITH RUNWAY 09/27**

Construction and commissioning of remaining taxiway work and works on existing east-west runway 09/27. This phase will require closures of existing east-west runway 09/27 for between 9-12 months.



How will construction impacts be managed?

A large construction project like the third runway is required to have a Construction Environment Management Plan (CEMP).

The CEMP ensures compliance with the airport's environmental standards and all legislative requirements and helps Melbourne Airport reduce impacts on the environment. Monthly site inspections of the construction activity area ensure the CEMP is followed, and no environmental harm is being caused.

Annual inspections are also carried out to ensure that all environmental practices are being followed.

Potential risks during the construction phase have been identified through the application of the Melbourne Airport risk management methodology.

Risk management practices during construction will be implemented in relation to:

1

High level technical supervision and sign off procedures

2

Detailed works specifications and quality assurance processes

3

Detailed assessment of airport operational interdependencies

4

On-site Occupational Health and Safety

5

Environmental management

6

Traffic management

7

Airside works safety and security



Major construction activities include:



Earthworks, including
haulage of materials



Construction
of drainage



Lighting installation and
upgrades, including airfield
lighting equipment rooms



Construction
of access roads.



Pavement
construction



Installation of
navigational aids



Utility installation,
and future proofing of
new services corridors

How will PFAS be managed during construction?

A project specific PFAS Management Strategy is proposed. Confirmation of management and remediation options including detailed feasibility will be completed as part of detailed design works. A project specific human health and ecological risk assessment will also be prepared to support the management and remediation options assessment and PFAS Management Strategy. The project will also make use of the on-site water treatment and stockpile facility which was established for the Taxiway Zulu construction project.

Construction transport

The main impact on traffic will be the movement of additional trucks travelling to and from the site. As the truck traffic is spread across multiple access routes over a period of some time, the additional trucks represent only a small increase in the current volumes on the road network.

The construction traffic will distribute between the Calder Freeway and the M80 Ring Road and all access is via interchange ramps, so the increased truck flows are expected to have little effect on the operation of either freeway.

Based on the concept design, it is estimated that approximately six million cubic metres of general or high-quality fill will be required for the third runway. Currently it is expected that between 70 and 90 per cent of this volume could be sourced on site, and as such between 0.6 and 2.0 million cubic metres of imported fill will need to be imported from off site. In addition, a further 0.7 million cubic metres of pavement or engineered material will be required to be imported from off site.

It is proposed that access to the on-airport construction zone will be via two routes:

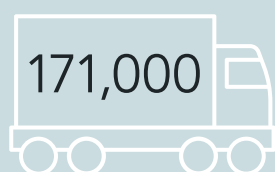
- From the north, connecting to Sunbury Road
- From the south, primarily via Operations Road

The location and configuration of the connection to Sunbury Road will be guided by a traffic impact assessment undertaken during the detailed design stage of the third runway.

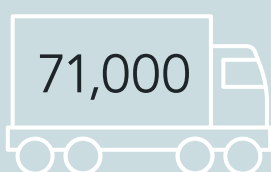
The route via Operations Road will use the on-airport road network and connect via Sharps Road and/or Keilor Park Drive.

Expected truck trips during construction:

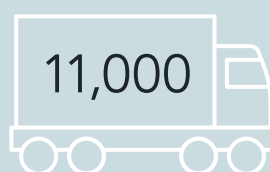
A Construction Traffic Management Plan will be implemented to manage the flow of construction traffic and to ensure that Melbourne Airport informs and engages with impacted residences early.



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MIX CONCRETE**



**DELIVERING BOX CULVERTS FOR
THE ARUNDEL CREEK DIVERSION**