

# CONSTRUCTION TIMELINE



## OVERVIEW

- Project phases, timing and contracts
- Phase 1 Ground
  Improvement Works
- Ground settlement
- Phase 2 Airfield construction

#### PROJECT UPDATE JULY 2017

## BRISBANE'S NEW RUNWAY PHASE 1 — GROUND IMPROVEMENT WORKS (2012 – 2015) — COMPLETE



Brisbane's new runway is being built in two distinct phases: Phase 1 includes the works necessary to effect the required ground improvements while Phase 2 represents the visible components like the runway and taxiway pavements and other airfield infrastructure.

The Ground Improvement Works were delivered in two main contracts: the Early Enabling Civil Works by BMD and the Dredging and Reclamation Works by Jan De Nul (Australia). It involved the following main components:

- New construction access roads
- · 360ha site footprint vegetation clearing
- · Major new drainage
- 330,000 vertical wick drains driven into the poor underlying soils to fast track ground consolidation and improve soil strength.
- 11 million cubic metres of sand extracted from Middle Banks, Moreton Bay and placed at different heights across the site to achieve the required consistent ground settlement.
- More than 1,000 settlement monitoring plates installed to measure the performance of ground settlement.

- Sand platforms treated with stabilising agent to prevent windblown erosion.
- Temporary dredge mooring constructed in the Brisbane River (now dismantled).
- Temporary sand pipeline laid between Luggage Point and the new runway site to pump sand ashore (now dismantled).

Following completion of the Ground Improvement Works its performance is monitored against the predictive modelling to track progress for suitability for pavement construction:

- Sand and wick drains are left in place to consolidate underlying soils for up to four years.
- Some of the areas will be available to commence construction by 2017 while the softest parts of the site will not achieve the desired settlement until later in 2018/19.

See overleaf for Phase 2 information

About Brisbane Airport: Brisbane Airport is the third busiest airport in Australia and operates 24 hours a day, seven days a week. It is Australia's largest capital city airport (by land size) and has two major terminals providing services to 31 airlines flying to 80 international and domestic destinations. In FY17 Brisbane Airport welcomed more than 22.7 million passengers through its facilities.



## BRISBANE'S NEW RUNWAY PHASE 2 — PAVEMENT AND AIRFIELD CONSTRUCTION (2016 – 2020) — UNDERWAY

Phase 2 is being delivered in three main contracts:

## 1. SEAWALL AND SITE ACCESS WORKS (AUG 2016 – EARLY 2017):

- Construction access from Moreton Drive onto the new runway site
- Upgrade existing dumped rock wall to an engineered seawall along Moreton Bay foreshore frontage

#### 2. DRYANDRA ROAD WORKS (JAN 2017 - MID 2018):

- Construction of a four lane underpass to allow vehicular traffic to pass under the taxiways that link Brisbane's new runway system to the existing system and terminals to an aircraft design weight of 710t
- 1.1km of roadway for airside and landside traffic (four lanes) for access between the north and south of the link taxiways

## 3. AIRFIELD WORKS (MID 2017 - 2020)

The Airfield Works contains the bulk of the works to construct the airfield pavements and all other necessary infrastructure including key elements such as:

- Rehandling of approx. 4.5 million cubic metres of sand to be pushed off the existing platforms once required ground settlement has been achieved
- · Construct the runway 3,3km x 60m
- Construct the taxiway system up to 12km x 25m of taxiway pavements
- Install airfield infrastructure including navigational aids, lighting, multiple utilities, signage, operations roads, airfield drainage and landscaping, security fencing and control systems
- Conduct flight testing and commissioning protocols
- Commence parallel runway operations in 2020