Airservices Australia

Cairns Airport

Preliminary Site Investigation

March 2019

Executive summary

Airservices Australia (Airservices) engaged GHD Pty Ltd (GHD) to conduct a Preliminary Site Investigation (PSI) at the Cairns Airport with particular regard to the potential for contamination from per- and poly-fluorinated alkyl substances (PFAS).

Based on the review of available site history information, site inspection and site interviews, the following potential sources of PFAS have been identified:

- Areas in which fire fighting services operate or have historically operated including:
  - The Fire Training Ground (FTG)
  - The ARFF fire station – AFFF storage, wash down of fire fighting equipment and trucks, emptying of waste foams/liquids following training (on site and in soil mound to the south of the fire station)
  - ARFF workshop
  - Former fire station
  - Historical training areas (in north west and north east sections of Cairns Airport)
- Other possible sources:
  - Surface water drainage channels around the site
  - Discharge of foam to extinguish vehicle fire to the south west of the airport, near Tom Macdonald Drive
  - The [redacted]
  - Potential foam extinguishers at the [redacted] and [redacted] in the GA area
  - Foam extinguishers in hangars
  - Waste water treatment plant (WWTP)

Based on the data obtained in the preliminary and targeted soil, surface water and groundwater sampling, the following summary is made:

- The primary source (use of AFFF containing PFAS) no longer exists. Secondary sources include residual soil and groundwater contamination, notably at the fire station, workshop, training ground and former foam release area (north of fire station).
- The total soil results were all reported within the adopted assessment criteria. However, the leachate concentrations exceeded the adopted criteria for fish consumption, drinking water and recreational water guideline and the EISLs for aquatic organisms. Soil results have reported the highest PFOS concentrations at the fire station workshop (GW01) and near the fire station area (GW02).
- Six of the groundwater samples have reported PFOS+PFHxS concentrations greater than the adopted drinking water criteria, two of which were fresh groundwater. Groundwater results reported the highest PFOS concentrations near the fire station, workshop and the training ground. As the site is located in an urbanised setting where council water supply is available, it is unlikely that groundwater onsite or in the vicinity is extracted for potable purposes. Therefore, the likelihood of human health exposure via drinking water is considered low.

- Two of the groundwater monitoring wells were reported with PFOS results greater than the EISL (toxicity for aquatic organisms). These are located near the fire station and at the workshop. The remaining groundwater samples collected near the northern and eastern boundaries (near Barron River and mangroves area) were all less than the adopted EISLs.
- The PFAS concentrations in the surface water samples were less than laboratory LOR except for one surface water sample which reported a detectable level of PFOS. Low levels of PFOS were also reported in sediment samples, but these were less than the adopted assessment criteria. It should be noted that the adopted HSLs for fish consumption (fresh and marine water) have assessment criteria that are lower than the laboratory limit of reporting for some PFAS.

A test result higher than a guideline value does not mean the exposure or risk is above unacceptable levels. Rather, it indicates that further investigation is warranted.

This report should be read in accordance with the limitations set out in Section 10.

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Appendices

1. Introduction

Airservices Australia (Airservices) engaged GHD Pty Ltd (GHD) to conduct a Preliminary Site Investigation (PSI) at the Cairns Airport with particular regard to the potential for contamination from per- and poly-fluorinated alkyl substances (PFAS).

1.1 Background

Aqueous film-forming foam (AFFF) has been used for fire-fighting purposes around Australia for decades. On airports, AFFF has been used at fuel depots, hangars and for operational and fire training purposes.

AFFF has not been used in the provision of aviation rescue and fire-fighting (ARFF) services by Airservices since 2010 but continues to be used by others around fuel depots, hangars etc, at many airports, including the Cairns Airport. AFFF products historically used on airport sites contained PFAS. Depending on the type of AFFF used, the principal PFAS constituents could have included perfluorooctane sulfonate (PFOS), perfluorooctanoic acid (PFOA) or fluorotelomers such as 6:2 fluorotelomer sulfonate (6:2FtS) and 8:2 fluorotelomer sulfonate (8:2FtS).

1.2 Objectives

The objective of this PSI is to identify where there is potential for PFAS contamination to be present at the Cairns Airport as a result of previous activities by ARFF and other AFFF users. The report also seeks to identify potential sensitive receptors and stakeholders that may be impacted by possible PFAS contamination originating from the Cairns Airport.

1.3 Scope

The scope of work for the PSI included:

- Review of historical aerial photographs to gain an understanding of site development over time and identify potential areas where AFFF may have been used.
- Review of current certificates of title and key lessees to identify site activities that may have included the use of AFFF.
- Review of published data on geology, hydrology and hydrogeology to gain an understanding of site conditions and identify sensitive receptors.
- Search of the groundwater bore database to understand beneficial uses for groundwater in the area.
- Review of historical reports provided by Airservices to provide some background to previous investigations and site conditions.
- A detailed site inspection to gain an understanding of site condition and inspect areas where there is potential for AFFF to have been used.
- Interviews with personnel who have an understanding of current and historical site activities to identify areas where AFFF may have been used.
- Preliminary, targeted soil, surface water and groundwater sample collection.
- Development of a Conceptual Site Model (CSM) and potential source, pathway, receptor linkages.
- Conclusions

2. Data quality objectives

The Data Quality Objective (DQO) process was applied to the PSI as described below, to ensure that data collection activities were appropriate and achieved the stated objectives. The DQO steps defined above have been addressed as follows.

Table 1 Data quality objectives

Step	
Step 1: State the problem.	Where was AFFF historically used on Cairns Airport? Do possible source, pathway, receptor linkages present an unacceptable risk?
Step 2: Identify the decision.	To address the problem set out in Step 1, the following decisions are required to achieve the task objective and to identify data gaps and additional information that may be required: • What activities have occurred at the site which may have used AFFF (PFAS containing foam)? • Where was AFFF stored on site? • What is the nature of the contaminant migration pathways? • What sensitive receptors are present at and surrounding the site?
Step 3: Identify inputs to the decision.	To inform the decisions and identify key data gaps and needs, the following information is considered necessary: • Review of site conditions • Review of available history information • Interviews with site personnel • Detailed site inspection • Development of a Conceptual Site Model
Step 4: Define the study boundaries.	The Cairns Airport property boundaries.
Step 5: Develop a decision rule.	The key decision rules are: Are there areas of the site, outside the known fire station, former, and current fire training grounds, where PFAS may be present and does this present a potential unacceptable risk? • If NO – further investigations can be targeted in these known areas • If YES – more extensive investigations may be required
Step 6: Specify limits on decision error	There is potential for anecdotal information to not always be accurate or to be limited in nature, and it is also difficult to assess site activities from historical aerial photographs based on poor resolution. Where possible any possible sources of PFAS contamination will be cross checked through multiple lines of evidence. The two decision errors that exist include: • False positive – an area identified as potentially containing PFAS does not • False negative – Areas containing PFAS are not identified These can be managed through the implementation of a sampling program to confirm the PSI findings.

Step	
Step 7: Optimise the design for obtaining data.	The CSM design will be optimised through: • Identification of potential PFAS sources from existing information and investigations conducted by others. • A preliminary and high level review of the likely hydraulic characteristics of the upper aquifer to estimate the groundwater flow direction and seepage velocities at various locations of the site. • A review of the surface water pathways across and leaving the site.

3. Site information

3.1 Site location

The Cairns Airport is located to the north of the Cairns CBD and is bound by the Barron River along its northern boundary, which discharges into Trinity Bay. The site location is shown in Figure 1 in Appendix A and location details are provided in Table 2.

Table 2 Site identification

Street Address	Airport Avenue, Cairns, Queensland
Site Area	128.54 ha
Title Identifiers	Lot 5 SP146888 Lot 1 RP736304 Lot 4 SP146888 Lot 1 RP 736303
Parish	**Queensland** Tallebudgera
Current Land Use	Transport and communication , airports/aerodromes

3.2 Lease information review

The current and historical lessees within Cairns Airport are summarised in Table 3 and current certificates of title are provided in Appendix B. The lessees identified are those that are considered to have a major presence on site and/or the potential to undertake activities that could cause contamination. Others are also included on the certificate of title which are not identified here based on their lesser relevance to this investigation.

Airservices currently occupy the fire station, fire training ground (FTG) and mechanical workshop (former fire station) sites within Cairns Airport but these are not subject to registered leases.

Table 3 Certificate of title lessee summary

Owner	Lot/ Plan	Lessee / Date
Queensland Government	Lot 5 SP146888	Queensland Airport Holdings (Cairns) Pty Ltd. Lease commencing: 28 August 2004
		Cairns Airport Pty Ltd. Term: 1 Oct 2008 – 30 Sep 2108
Queensland Airport Holdings (Cairns) Pty Ltd	Lot 1 RP736304	Caterair Airport Services Pty Ltd Commencing 24 Jan 1991 – 23 Jan 2016
		MAS Properties Pty Ltd. Term 28 Feb 2006 – 30 Oct 2017
		Cairns Airport Hangars Pty Ltd. Term: 1 Nov 1992 – 31 Oct 2010
		Aircraft Turnaround Engineering Pty Ltd
		Air Niugunu Pty Limited
		QANTAS Airways Limited

Owner	Lot/ Plan	Lessee / Date
		Civil Aviation Safety Authority
		Civil Aviation Skills Centre Limited
		Budget Rent A Car Australia Pty Ltd
		Hawker Pacific Pty Ltd. Term: 1 Apr 2005 – 31 Mar 2025
		WTH Pty Ltd
		Waterloo Car Centre Pty Ltd
		Toll Transport Pty Limited. Term 1 July 2007 – 30 June 2012
		Cathay Pacific Airways Limited. Term 1 Mar 2007 – 28 Feb 2012
		North Queensland Airports No. 1 Pty Ltd. Term: 14 Jan 2009 – 13 Jan 2108
		CLA Trading Pty Ltd. Term: 1 April 2009 – 31 Mar 2019
		Commonwealth of Australia. Term: 1 Dec 1999 – 30 Nov 2009
Queensland Airport Holdings (Cairns) Pty Ltd	Lot 4 SP146888	North Queensland Airports No. 1 Pty Limited. Term: 14 Jan 2009 – 13 Jan 2108
		(Sub lease) Cairns Airport Pty Ltd. Term: 14 Jan 2009 – 12 Jan 2108
Queensland Airport Holdings (Cairns) Pty Ltd	Lot 1 RP 736303	Janlin Pty Ltd. Term: 16 Nov 1989 to 31 Dec 2008
		Cape York Airlines Pty Ltd
		Hawker Pacific Pty Ltd. Term: 1 Apr 2005 – 31 Mar 2025
		BP Australia Pty Limited. Term: 1 Jan 2007 to 31 Dec 2021
		Holdstone Pty Ltd. Term 1 July 2007 to 30 June 2027
		Royal Flying Doctor Service of Australia (Queensland Section). Term 1 Jan 2008 – 30 Dec 2032
		Toll Transport Pty Limited. Term: 1 July 2007 – 30 June 2012
		North Queensland Airports No. 1 Pty Limited. Term: 14 Jan 2009 – 13 Jan 2108
		Sub Lease: Cairns Airport Pty Ltd. Term: 14 Jan 2009 – 12 Jan 2108

3.3 Site description

A site inspection was completed by GHD (accompanied by Airservices) on 19 and 20 July 2016. A summary of the findings are provided below and site photographs are included in Appendix C.

Key site features are outlined on Figure 2 in Appendix A. They included:

- Runway, in a north west/south east orientation through the Cairns Airport
- Domestic and international terminals, in the eastern section of the Cairns Airport
- General aviation (GA) area, in the western section of the Cairns Airport
- ARFF fire station
- Mechanical workshop and former fire station in the General Aviation area
- ARFF FTG in the north western section of the Cairns Airport
- Waste water treatment plant, to the north of the FTG
- Aircraft hangars
- Surface water drainage channels

The areas surrounding the major infrastructure on the site are characterised by grass and a series of surface water drainage channels. Mangroves extend from the east of the airport to the ocean and the Barron River flows along the site's northern boundary.

Runway

Cairns Airport contains one major runway running north west to south east and roughly through the centre of the site. A series of taxiways are located between the runway and the terminal.

Terminal

The terminal is located in the eastern section of the airport and contains both domestic and international terminals. Short term parking areas are located to the east of the terminal along with car hire services and vehicles.

General Aviation area and ARFF Workshop

A General Aviation area is located in the western section of the site which includes a series of aircraft hangars occupied by light aircraft and helicopter operators, including the Australian Air Force Cadets, the Royal Flying Doctor Service and Heli Charters Australia. An ARFF workshop is located landside, adjacent to this area of the site. An inspection of the workshop was undertaken, though the remainder of this area was not inspected in detail. Photos are provided in Appendix C.

The former fire station was located airside among the hangars of the General Aviation area, across the road from the workshop, prior to the construction of the current fire station (late 1980s). The former fire station building remains extant and is in use by a helicopter operator (Heli Tours).

ARFF Fire station

The ARFF fire station is located in the western section of Cairns Airport, to the north of the General Aviation area. The fire station was built in the late 1980s and comprises a single storey building with fire truck area, offices, gym, storage rooms and recreation areas. A bunded chemical storage area (including foams) is located to the rear of the fire station, along with a hose drying rack and car park. A smoke hut building is also situated behind the fire station (to the west).

An open drainage channel is located to the west of the fire station, beyond which is a Shell Aviation Fuel Depot. The drainage channel feeds into open drains leading north from the fire station.

Fire training ground (FTG)

The FTG is located in the north western section of Cairns Airport and contains the following:

- A concrete training pad with large mock up unit (LMU) – a replica airplane.
- The area surrounding the training pad was encapsulated beneath bitumen and contained a number of old cars used in training and a small aircraft.
- Prior to the construction of the training pad and placement of the bitumen hard standing, the ground surface comprised compacted roadbase.
- Kerosene above ground storage tank (AST).
- Waste water underground storage tanks (USTs) which collect waste water discharged during training exercises.

An open stormwater drain is located to the immediate east of the FTG which flows to the north and discharges to the Barron River.

Surface water drainage channels

There is a series of surface water drainage channels that transect the site. Drainage pipes, stormwater pits and the stormwater flow direction is shown in plans provided by North Queensland Airports (NQA) – reproduced in this report as Figures 3, 4 and 5 in Appendix A.

Waste water treatment plant

The northern waste water treatment plant (WWTP) for Cairns is located adjacent to the airport, to the north west of the FTG. There have been discussions between Airservices, Cairns City Council, Department of Environment and Heritage Protection (DEHP) and North Queensland Airports (NQA) regarding a sewer connection between the FTG and the WWTP. Although approval for disposal of FTG waste runoff to the WWTP was given, in order to reduce potential foaming, instead of a direct connection between the neighbouring FTG and WWTP, a sewer line connection across the airport to the main trunk line leading to the WWTP would need to be constructed. Currently, the waste runoff from the FTG is pumped out and taken elsewhere for treatment.

The WWTP discharges to the stormwater drain running alongside the FTG and ultimately discharging to the Barron River.

3.4 Surrounding land uses

Land uses immediately surrounding the airport are summarised as follows:

- **North** – The Barron River is located to the north of the Airport and flows east into Trinity Bay.
- **South** – Medium density commercial and industrial development along Captain Cook Highway, bordering on undeveloped coastal forest. The confluence between Trinity Bay and Chinaman Creek is located approximately 1.2 km to the south east.
- **East** – Undeveloped coastal forest including mangroves with Trinity Bay located approximately 2 km east.

- **West** – Light and medium density residential development to the south west. Captain Cook Highway separates the Airport from Mount Whitfield Conservation Park to the west. Light to medium density industrial and commercial activities are located to the north west.

3.5 Key stakeholders

The following key stakeholders have been identified at the site:

- NQA
- Site lessees
- Commercial and recreational fisherman operating along Barron River and Trinity Bay

4. Site conditions

4.1 Topography

The Cairns Airport is located on a coastal plain with generally flat topography and low elevation (less than 4 metres above Australian Height Datum (mAHD)). A portion of the site has been built up compared to the natural ground level to establish a relatively consistent, flat site.

The airport is located on a low lying plain between Mount Whitfield (294 m elevation) 0.8 km to the west and a ridge (16 m elevation) to the east, between the airport and the Coral Sea.

4.2 Geology

4.2.1 Regional geology

The Queensland Government Minesonlinemap (https://minesonlinemaps.business.qld.gov.au/) Map Sheet 8064, Cairns, indicated that the geology in the vicinity of Cairns Airport is classified as Holocene-aged beach ridges, cheinier ridges and river mouth spits and bars characterised by sand and gravelly sand. A geological and hydrogeological map is provided in Figure 6 in Appendix A.

4.2.2 Soil profile

Bore logs from previous reports indicated soils at the site are characterised by well-washed coarse grained sand and sandy clay lenses with high moisture content (GHD, 2008). Fill of varying thicknesses has also been identified in areas, with depth dependent upon location within the site contours (GHD, 2008). These observations are consistent with the published geological maps.

4.3 Hydrology

Water in the northern section of the airport is directed to the Barron River through a series of drainage channels, the largest of which run north south along the western edge of the runway. Drainage for the southern half of the site is directed to the south east towards coastal wetlands through a series of open water channels. Mangroves and tidal areas are located approximately 300 m to the south east.

4.4 Hydrogeology

A search of the Department of Natural Resources and Mines 2015, *Groundwater Database – Bore Reports*, Queensland State Government, Brisbane, identified several bores within a 2 km radius of the Cairns Airport. These were all located to the west of the site with the nearest well approximately 600 m away. Locations of the registered bores are presented in Figure 6 in Appendix A and Figure D1 in Appendix D.

The Groundwater Database information pertaining to these wells was largely incomplete. One bore (RN148430) was identified with a relatively complete record and was located approximately 0.6 km to the west of the north western boundary of the Cairns Airport. The bore is listed as having a depth of 30.0 m below ground level (bgl) in a sub-artesian aquifer, characterised by a coarse, grey sand between 18.0 and 20.0 mbgl underlying clay from 8.0 to 18.0 mbgl. Fine to coarse sand was identified from the surface to 7.0 mbgl with mud from 7.0 to 8.0 mbgl.

Groundwater bore data and search results are provided in Appendix D.

Previous groundwater investigations undertaken at the Cairns Airport have identified groundwater levels between approximately 0.9 m to 1.7 mbgl. Groundwater flow is anticipated in a north easterly direction toward the Barron River and Trinity Bay.

5. Site history

5.1 Aerial photographs

A review of historical aerial photographs between 1952 and 2015 was completed. A summary of the key findings is outlined in Table 4 and a copy of the photographs is provided in Appendix E.

Table 4 Historical aerial photograph summary

Date	Description
1952	In the 1952 historical aerial imagery, aircrafts hangars and terminal buildings are apparent on the western side of the main runway. In 1952 the runway was comparatively shorter than that currently, and appeared to be undergoing upgrade works. The area at the northern end of the airstrip appeared to be un-vegetated, which could be associated with runway upgrade extension works. To the west of the airstrip, two taxiways run diagonally to the northern end and southern end of the main runway. The taxiways appeared unsealed, and some clearing of vegetation was also noted along the runway and taxiways. The fire training ground (FTG) area appeared to be vegetated with what is probably mangrove forest, no visible structure or vehicle track was observed in the vicinity of the fire training ground area. The area of the current terminal buildings and car parks appeared to be a swamp area in 1952. The location of the current fire station was at this time vegetated. The Barron River is located north of the airport site and there was another creek (unnamed) meandering along the eastern side of the airport, where several open drains on site can be seen discharging to. A smaller creek was also noted at the southern end of the airport site, running towards east into the ocean.
1971	By 1971 the main (current) runway had been built. In the western section of the airport, hangars, terminals and apron areas have been upgraded since 1952. Some clearing of vegetation was noted at the northern end of the aircraft apron. The former fire station and workshop appear to be evident among the hangars. The fire training ground appeared to have been cleared of vegetation since 1952 and vehicle tracks can be seen at both sides of the FTG. An open drain can be seen located east to the FTG, running towards north, into Barron River. The current fire station area remained vegetated at this stage.
1982	In the 1982 historical aerial image, the main runway was undergoing further extension works. The aircraft apron area has been expanded, and one of the taxiways (north) has been sealed. Construction activities for the new terminal buildings can be seen at the north-east of the runway and taxiway, and Airport Avenue Road can be seen built along the eastern boundary of the airport from the new terminal building construction site. At the fire training ground, the surface has remained un-vegetated, however, due to the poor resolution of the photograph the structures on site cannot be clearly identified. The location of the current fire station is cleared of vegetation although no buildings are yet present.

Date	Description
1990	In the 1990 historical aerial photograph, the new terminal buildings, hangars and aprons have been constructed to the east of the main runway, just south of the Barron River oxbow. Some parts of the land appeared to be non-vegetated. The runway was further extended towards north, and next to it, a taxiway has been constructed in parallel. Surface drains can be seen between the taxiway and apron, and running towards south-east into the unnamed creek which eventually discharges into the ocean. An above ground storage tank (AST) was noted at the aviation fuel terminal, located south of the terminal building. The fire station building can be seen built west of the runway, and north of the small aircraft apron. At the FTG, a large square area had been cleared and levelled around the large mock up unit (LMU) (mock-up aircraft structure) in the centre. The access road that passed to the south of the FTG no longer runs across the main runway.
2004	In the 2004 aerial imagery, more upgrades were obvious around the aprons at the terminal buildings. The apron area located north of the international terminal has been upgraded. At the east of the apron, a small access road was seen leading into the helipad training ground located within the mangroves forest. At the fire station, some vegetation clearance can be seen at the south and west of the fire station. The fire training ground appeared to be sealed with bitumen and the mock up plane appeared to be on a concrete pad. The southern portion of the site appeared semi-vegetated around the former taxiway compared to the 2000 aerial image.
2009	In the 2009 aerial imagery, the site appeared similar to that in the 2004 aerial imagery. Some further upgrades were noted at the new terminal buildings at the western portion, where the aircraft apron area been expanded towards the east. The land located west of the fire station has now been upgraded with concreted ground and presence of unknown structures were noted. The area south of the fire station has been covered by asphalt and has become an aircraft parking area.
2015	In the 2015 aerial imagery, upgrades to the apron around the north eastern corner of the terminals appear complete. No other changes are apparent.

5.2 Previous reports

A number of reports were provided by Airservices for review. These are outlined below with a summary of the key points.

5.2.1 CMPS&F Environmental (1996)

Report to Rescue Fire Fighting Services (RFFS) for Environmental Audit of Operations at Cairns International Airport

CMPS&F Environmental was engaged by RFFS (later referred to as ARFF) to conduct an environmental audit for their operational sites including the fire station and FTG at Cairns Airport. A site inspection and intrusive contamination assessment was conducted for the audit, but no analysis of PFAS was undertaken at that time. The following summarises the main findings in relation to the fire station and training ground sites:

- There was one 4800 L AST for AFFF. The AST was located within a bunded area with gate valves intercepting drainage to the stormwater.
- The drainage at the wash down bay for fire trucks is controlled with a gate-valve closing off flow to stormwater during the wash down. The gate valve connects to an interceptor below a semi-permanent building adjacent to the fire station (used as classrooms and storage of breathing apparatus).

- At the FTG, weekly fire training involved using AFFF for fire extinguisher training. The training originally took place across the whole training ground area, but was confined to the concrete bund area approximately 18 months before the environmental audit was undertaken.
- Approximately 4000 L of water is used at each training event. The water mixed with fuel and AFFF then drains into a sump followed by an interceptor prior to being discharged to sewer. The wastewater in the sump was then removed offsite by contractor.

5.2.2 Golder Associates (2005)

Contamination Remediation Plan, Fire Training Area, Cairns Airport, Queensland

This report was prepared on behalf of Airservices by Golder for remediation works conducted at the Cairns Airport during upgrade works at the fire training area. The remediation program details actions to be undertaken alongside decommissioning and construction activities at the facility. No analysis of PFAS was undertaken at that time. Relevant report findings include:

- Hydrocarbon contamination was identified at three locations across the site, according to a 2003 report by Natural Resource Assessments (NRA), titled *Land Contamination Assessment, Cairns Airport Fire Fighting Training Facility*. (Note: GHD has not viewed this report).
- Contamination was identified in soil; no groundwater contamination was identified in the NRA report.
- Hydrocarbon contamination was identified as the only potential source of contamination at the site.

5.2.3 Golder Associates (2008)

Contamination Testing – Stormwater Runoff – Fire Training Ground, Cairns Airport

Golder was engaged by RFFS to collect samples of the stormwater runoff from the ARFF FTG. The assessment did not include testing for PFAS. The following is a summary of the key findings:

- Water from a fire training event was stored in an underground holding tank over a period of three days.
- Water released from the tank is directed through an interceptor and travels through underground piping to an open drain on the east side of the training ground.
- Two water samples were collected: one (SW1) from the direct discharge point and one (SW2) from an open drain 10 m downstream of the discharge point.
- Samples were analysed for petroleum hydrocarbons and derivatives.
- Results indicated that SW1 contained concentrations of TPH above the adopted criteria while concentrations of all analytes in SW2 were below the adopted criteria.

5.2.4 GHD (2008)

Preliminary Site Contamination Assessment - Cairns ARFF Drill Ground, Cairns Airport

GHD was commissioned by Airservices to undertake a Preliminary Site Contamination Assessment at the Cairns Airport ARFF FTG to assess preliminary information regarding potential contamination and determine whether soil and/or groundwater contamination exists. The following summarises the main findings in relation to the ARFF FTG:

- The investigation included analysis of TPH, PAH, PFOS and PFOA (only).
- The area beneath the concrete training pad at the FTG was not included in the investigation to maintain pad integrity.
- Soil was found to be impacted by TPH, PFOS and PFOA in the bitumen area surrounding the concrete training pad. This was considered likely to be the result of site activities.
- The report identified a potential risk to the environment due to the reported soil and groundwater contaminant concentrations.
- The separator system treating waste water from the bunded concrete training pad had not been functioning properly and was not in operation, resulting in waste water not being suitably treated.
- Stormwater from the bunded concrete training pad area was previously discharged to the northern grassed area without treatment.

5.2.5 SLR Global Environmental Solutions (2013)

Airservices Cairns Fire Station, Water and Soil Quality Assessment, Cairns Airport

SLR was requested by Airservices to conduct an investigation into potential contamination of surface water and soil at the ARFF FTG at the Cairns Airport caused through training activities, including the use of fluorosurfactant containing fire fighting foams. A summary of the main findings are as follows:

- Four surface water, one groundwater, and six soil samples were collected from across the site.
- All samples were tested for the presence of PFOS, PFOA, 6:2FtS, TRH, BTEXN, PAH, and MBAS. Selected samples were also analysed for metals.
- PFOS, PFOA, TRH, MBAS, and heavy metals (As, Cr, Cu, Pb, and Zn) were detected in concentrations above the adopted screening criteria in all surface samples.
- Heavy metals (Cr, Ni, Pb, and Zn) and PFOS were detected at concentrations above the adopted screening criteria in the groundwater samples.

5.2.6 GHD (2014)

AFFF Soil and Groundwater Assessment, Cairns ARFF Drill Ground, Cairns Airport

GHD was engaged by Airservices to carry out a limited soil and groundwater assessment at the ARFF FTG located at Cairns Airport in order to gain a better understanding of potential onsite impacts from historical use of AFFF. Key findings of the report are summarised below:

- The scope of intrusive works comprised:
  - Drilling five soil bores
  - Conversion of two of the soil bores to groundwater wells
  - Collection of soil, sediment and groundwater samples for analysis
- All groundwater samples contained concentrations of PFOS and PFOA greater than applicable standards, excluding PFOA in one sample. PFOS/PFOA concentrations increased across the site from west to east, indicating possible migration through groundwater.
- PFOS/PFOA concentrations varied in groundwater bore CA3 between the 2008, 2012 and 2014 sampling events. The cause of the variation was not established.

- Discharge of residual contamination was occurring due to overflow from the wastewater tanks based on hydrocarbon odours and a sheen observed on the surface water in the vicinity of the Stormwater Outlet.
- PFOS/PFOA concentrations in the adjacent open stormwater drain were notably lower upstream than downstream of the ARFF drill ground.
- Impacts of PFAS identified in soil, groundwater and sediments were considered to be due to historical use of AFFF at the FTG.
- PFAS concentrations in soils were considered to have the potential to act as an ongoing source of groundwater contamination. Concentrations in groundwater were also considered to have the potential to migrate off-site and discharge to the Barron River. The Barron River was not assessed in the investigation.

5.2.7 Beca Consultants Pty Ltd (Beca) (2014)

Cairns HFTG – Review of Proposed Wastewater Discharge to Cairns Northern WWTP, Cairns Airport

Beca undertook an assessment of the environmental effect of discharge of PFAS impacted wastewater to the Northern WWTP. This study was conducted to assist in obtaining a Trade Waste Agreement (TWA) with the DEHP and Cairns Regional Council for discharge to the Northern WWTP. A summary of key findings is as follows:

- PFAS was not detected in samples up or downstream of the Barron River discharge point.
- The report indicated that discharge from the WWTP had no observable effect on the Barron River.
- The report concluded that waste discharge from the Cairns FTG via the WWTP would have no observable effect on the Barron River environment.

5.2.8 Golder Associates (2016)

Cairns Airport Air Traffic Control Tower Refurbishment Works – Contamination and Acid Sulphate Soil Assessment, Cairns Airport

Golder was commissioned by Badge Construction (QLD) Pty Ltd (Badge), who was engaged by Airservices, to conduct an environmental investigation prior to refurbishment work at the Cairns Airport Air Traffic Control Tower (ATCT). The study was designed to investigate the risks of encountering Acid Sulphate Soils (ASS) and contamination in soil and groundwater adjacent to the ATCT, where construction of a chiller/plantroom is proposed. The following is a summary of main findings of the report:

- Two ASTs were planned to be removed as part of the proposed construction program
- The study assessed the potential for the following contaminants:
  - PFAS, in particular PFOS, PFOA and 6:2 FTS
  - TRH
  - BTEXN
  - PAH
  - Select metals (As, Cd, Cr, Co, Pb, Ni, Zn and Hg)
- A total of three boreholes were advanced to 3 mbgl, with a temporary standpipe installed in one soil bore for groundwater sampling purposes

- Field screening and laboratory assessment indicate the absence of ASS at the site
- Concentrations of PFOS, PFOA and 6:2FtS in groundwater from the single well sampled exceeded the adopted screening levels

5.3 Operational responses system outputs

Airservices provided GHD with a copy of the ARFF operational response system (ORS) outputs for Cairns Airport. The ORS is used to document incidents and includes details of materials used, vehicles involved and actions taken. The recorded incidents and summary of the ORS outputs is provided in Table 5.

Table 5 ORS output summary

Incident date	Incident location and description	Materials used	Actions taken
19 August 1997	Aircraft crash: fuel and oil spill at Machans Beach Access Road	3,333 L water 220 L foam[1]	Fuel and oil spills covered with foam, aircraft electrical system de-energised, fuel management system disconnected. Wing tip dismantled to address leaking AV GAS tank vent. Surrounding gutter bunded with earth to contain AV GAS oil and foam.
27 November 2003	Large bush fire on Aeroglen Drive (offsite, to the west of Cairns Airport)	5.5 L water 50 L foam[2]	Incident attended by Queensland Fire and Rescue Service (QFRS) and ARFF. Fire was threatening homes. Foam applied at scene and also to fences of three adjacent properties
23 May 2005	Ship Fire at Trinity Inlet (Wharf 7, Cairns Port (offsite, to the south of Cairns Airport)	25,000 L water 1,900 litres foam[2]	QFRS requested ARFF attend a ship fire. ARFF used foam from the vehicle monitor to apply to the ship funnel.
9 November 2005	Fuel spill beneath aircraft at Bay 21 – domestic apron at Cairns Airport	7,000 L water 90 L foam[2]	ARFF attended incident and observes a spill of approximately 150 L of under starboard wing – foam blanket applied. Another fuel spill of approximately 50 L was also noted under the port wing for which further foam was deployed.
3 November 2006	Non aircraft fire: Smoke issuing from generator room in domestic terminal at Cairns Airport	500 L foam[2] 9 kg CO_2	Investigated area, used ladder to access roof, removed flashing around exhaust tank and lagging that was in a state of combustion. Flooded area with CO_2 and subsequently water.
7 January 2007	Non aircraft fire: Vehicle fire on corner of Sheridan Street and Airport Drive (off site, to the south of Cairns Airport)	200 L water 20 L foam[2]	QFRS requested ARFF assistance to deal with campervan fire – used monitor and high pressure hose reel to extinguish fire.

Incident date	Incident location and description	Materials used	Actions taken
23 April 2007	Fuel spill from vehicle at Barron River Towing company (offsite, to the immediate north west, at Arnold Street, Stratford)	1,000 L water 130 L foam[2]	ARFF called to incident where a large quantity of fuel had saturated an area surrounding an overturned vehicle taken to the towing yard following an accident. Foam blanket applied over and surrounding the vehicle as the battery could not be accessed for isolation. Once vehicle was returned upright, ARFF crew cut the battery cable to isolate ignition source.
19 November 2009	Aircraft crash: fuel spill from aircraft wing on Runway 15 at Cairns Airport	7,000 L water 76 L foam[2]	Foam blanket applied and maintained while putty was used to stop fuel leak. ARFF cleaned runway of foam following incident resolution.

[1] – Based on Airservices foam use dates, foam used is likely to be 3M Lightwater

[2] – Based on Airservices foam use dates, foam used is likely to be Ansulite

5.4 Interviews

Interviews were conducted with ARFF and Airport personnel on 20 and 21 July 2016. The main objective of the interviews was to gather information relating to areas of the airport where AFFF was used and stored in order to identify potential areas of PFAS contamination within the Airport. The following personnel were interviewed:

- [redacted], General Manager – People, Communications and Compliance, North Queensland Airports (NQA)
- [redacted], General Manager Property Development, NQA
- [redacted], Environmental Coordinator, NQA
- [redacted], Acting Fire Station Manager – Cairns ARFF, Airservices
- [redacted], Fire Fighter – Cairns ARFF, Airservices

The key information obtained from the interviews is summarised in Sections 5.4.1 and 5.4.2. The questions asked and a transcript of the interview is provided in Appendix F.

5.4.1 NQA interview

NQA has operated Cairns and Mackay Airports since 2008. At the time of the interview, [redacted], [redacted] and [redacted] held regional roles responsible for operations at Mackay and Cairns Airports (based at Cairns Airport). The interviewees were aware of three investigations into PFAS contamination conducted by Airservices and had seen copies of these reports (two at the FTG and one at the Air Control Tower).

Key information obtained during the interview included:

- NQA do not hold records of incidents (such as fires and fuel spills) which have been attended by ARFF.
- Circa 2009/10, an incident occurred where an aircraft wing was dragged on the runway but no spillage was reported.
- No inventory of AFFF storage within Airport (held by NQA).

- Most airport emergency planning (AEP) training including foam use had been conducted by ARFF at the FTG. However, following training exercises, NQA noted that ARFF trucks emptied their lines of foam on either side of the road onto the grass, between the FTG and the fire station.
- ARFF has sprayed foam onto a grassed earth mound in an area to the south of the fire station (following training).
- AEP training has been undertaken using lit fires.
- NQA consider there to be seven areas on Cairns Airport that have been impacted by PFAS.
- The FTG formerly drained to the adjacent stormwater drain prior to construction of the WWTP.
- The waterways across the airport are tidally influenced and linked to the Barron River.
- Grassed areas across the airport are often waterlogged during wet weather.
- Stormwater is not harvested at Cairns Airport and groundwater is not abstracted for purposes other than testing or dewatering (NQA are not aware of any dewatering having been undertaken in ARFF areas).

5.4.2 Airservices ARFF interview

[redacted] has worked at the Cairns ARFF fire station since 1984 and [redacted] has been based there since 2000. Salient information provided by [redacted] and [redacted] comprised:

- There was a light aircraft crash on the runway in the 1990s in close proximity to the fire station where AFFF was used to extinguish the fire.
- There was a vehicle fire near Tom Macdonald Drive in the last ten years where ARFF attended and foam was used to extinguish the fire (likely to correlate with the January 2007 campervan fire documented in the ORS output in Table 5).
- There was a major fuel spill from a Boeing 767 aircraft in the 1990s when a wing valve failed. It could not be recalled whether foam was used at this incident (likely to coincide with the 2005 item recorded in the ORS summary in Table 5).
- There is no inventory of AFFF storage within the Airport. ARFF AFFF was originally stored in 200 L drums before being supplied in totes at the ARFF fire station.
- AFFF used by Cairns ARFF was originally (start date not provided) 3M Lightwater which was phased out circa 2001 – 2003 and Ansulite foam was used up until the transition to Solberg RF6 foam in 2010.
- Other AFFF uses outside of the ARFF area includes:
  - The [redacted] will store foam – a deluge (water and foam) system is needed for tanks in the event of fire. ARFF has not seen foam used in this area – water only may be used for testing.
  - Foam extinguishers are also likely to be present at the [redacted], as well as at [redacted] in the GA area.
  - Foam and dry chemical powder (DCP) extinguishers are present in many of the hangars.
  - The extinguishers present at Cairns Airport (including those at the ARFF fire station and air traffic control tower) are not maintained by ARFF.

- ARFF has conducted training, including participation in airport emergency planning (AEP) training at a number of locations across Cairns Airport (as outlined on Figures 2 and 8). These comprise:
  - The FTG.
  - The north west section of the airport, near Gate V16.
  - Two areas in the north/north east section of the airport.
- Water from monitors used in training was historically sprayed onto a soil mound located to the south of the fire station (near emergency gate V13).
- The current fire station was built in approximately 1990 (prior to which this area was undeveloped).
- The former fire station was located in the General Aviation area at Unit 83, opposite the current ARFF workshop (Unit 83 is currently occupied by Heli Tours).
- Wash down of fire trucks after training was historically undertaken on the grassed areas to the rear of the fire station (west) and run off would lead to the open drainage channel. Trucks are now washed down in the hardstanding area near a triple interceptor trap.
- Hoses are washed down near the hose drying rack at the rear of the fire station, or at the FTG.
- Historically there were no restrictions on the volume of aerial dispersion of foams during training though more recently training has been confined to the FTG.
- Run off from the concrete pad at the FTG is collected in two underground storage tanks (USTs) which are emptied prior to and following each training exercise – 8,900 L used for training (though Peter noted a discrepancy in that 20,000 L of waste water was reported as collected from the USTs by the contractor each time). All stormwater drains into a concrete drainage channel (drainage channel was concreted in the last three to five years) to the south and east of the FTG.
- In terms of disposal, historically (pre 2003) AFFF drums (3M Lightwater) were not disposed of but reused in fire training exercises (they would be cut in half and filled with Kerosene to start fires). Spent AFFF totes (Ansulite) were collected and removed from site.

6. Preliminary and targeted sampling

6.1 Scope of work

Based on the outcomes of the PSI, a Sample Analysis and Quality Plan (SAQP) was developed for the investigation (GHD, 2016).

The SAQP was prepared so that the field investigations and analyses were undertaken in a way that enabled the collection and reporting of reliable data on which to base any further soil, groundwater and surface water monitoring programs for specific areas of the site.

The GHD SAQP described drilling methods, sampling equipment, well development strategy, sample collection protocols, sample processing, field and laboratory sample analysis, equipment decontamination and quality-assurance and quality-control (QA / QC) procedures.

The scope of work undertaken, methodology adopted and results of the sampling program are provided in a Preliminary Sampling report (GHD, 2017).

6.2 Results summary

The reported PFAS (total) soil results were either less than laboratory LOR or less than the adopted assessment criteria. The highest PFOS concentrations were reported at the fire station workshop (GW01) and near the fire station area (GW02). The PFAS leachate data (based on the limited soil samples analysed in this Preliminary Sampling) indicated that the soils collected at the workshop and near the western boundary of the airport (former foam testing release area) were reported with the highest PFOS+PFHxS results, exceeding the adopted assessment criteria.

Groundwater results show the highest PFOS concentrations were reported near the fire station, workshop and the training ground. Six of the groundwater samples have reported PFOS+PFHxS concentrations greater than the adopted drinking water criteria, two of which were fresh groundwater. However, it is unlikely that groundwater is extracted on site or in the vicinity for drinking purposes due to its urbanised setting and the availability of reticulated water supply. Therefore, the human health risk via drinking water is considered low. Samples from two of the groundwater monitoring wells reported PFOS results greater than the EISL (toxicity for aquatic organisms) – these were located near the fire station and at the workshop. The remaining groundwater samples collected near the northern and eastern boundaries (near Barron River and mangroves area) were less than the adopted EILs.

The PFAS concentrations in the surface water samples were generally less than laboratory LOR. Only one surface water sample was reported with a detectable level of PFOS. Low levels of PFOS were also reported in sediment samples, but these were less than the adopted assessment criteria. It should be noted that the adopted HSLs for fish consumption (fresh and marine water) have assessment criteria that is lower than the laboratory limit of reporting for some PFAS.

7. Conceptual site model

Based on our understanding of the contamination issues and site setting a conceptual site model (CSM) has been generated to identify the potential contamination *sources, pathways and receptor*s, and the potential linkages (or pollutant linkages) between these.

A CSM is a critical element of any PSI and forms the basis for the assessment of contamination risk and prioritisation of any further investigations. As it is based only on limited information at the PSI stage, it is regarded as being preliminary only at this point and as the foundation for the development of a more detailed CSM as site investigations progress. Cross sectional CSMs are provided as Figures 7A and 7B and CSM Pathways are shown in Figure 8 in Appendix A. A representation is also included in Chart 1.

Different land use scenarios have different contamination risk profiles depending on the sensitivity of receptors and the nature and likelihood of potential exposure mechanisms. This CSM assumes a commercial/industrial land use scenario consistent with the site's current and anticipated future use as an airport.

7.1 Sources

The focus of this assessment is on the potential sources of PFAS on the Cairns Airport which are identified as the following:

- Areas in which fire fighting services operate or have historically operated including:
  - The Fire Training Ground (FTG)
  - The ARFF fire station – AFFF storage, wash down of fire fighting equipment and trucks, emptying of waste foams/liquids following training (on site and in soil mound to the south of the fire station)
  - ARFF workshop
  - Former fire station
  - Historical training areas (in north west and north east sections of Cairns Airport)
- Other possible sources:
  - Surface water drainage channels around the site
  - Discharge of foam to extinguish vehicle fire to the south west of the airport, near Tom Macdonald Drive
  - The [redacted]
  - Potential foam extinguishers at the [redacted] and [redacted] in the GA area
  - Foam extinguishers in hangars
  - Waste water treatment plant (WWTP)

7.2 Pathways

7.2.1 Contaminant transport mechanisms

The key mechanisms for contaminant transport at the site have been identified as:

- *Surface water overland flow* – lateral overland flow and migration of contaminants via stormwater during rain events, causing re-deposition of contaminants on other areas of Cairns Airport, or off-site. There is the potential for migration of contaminated surface water / storm water from the source areas in open drainage channels, particularly near the fire station and the FTG.
- *Groundwater advection/dispersion* - horizontal and vertical migration of contaminants from Cairns Airport soils into the underlying aquifer and through groundwater to the point of surface water discharge.

The sandy geology and shallow water table are conducive of conditions that would be expected to promote surface water and groundwater interactions. This has the potential to increase the contaminant flux both within and off the site.

7.2.2 Potential exposure mechanisms

Based on the identified receptors and the release and fate and transport characteristics of the contaminants of potential concern, contaminant uptake pathways through which receptors may become exposed to contamination include ingestion and dermal absorption.

- *Ingestion exposure pathway* - Ingestion of contaminants by site workers could occur during site works involving excavation and handling of site soils, stormwater, or groundwater. This is not considered to be of a concern for indoor site workers.

  Terrestrial and aquatic fauna may ingest contaminants potentially migrating off-site and discharging to the down gradient surface water receiving environment including the Barron River and Trinity Bay.
- *Dermal exposure pathway* - Exposure of PFAS may occur via sorption through biological membranes such as skin, based on animal studies. While this has not been confirmed for humans and despite PFOS having a low skin permeability constant, the exposure pathway may be complete as illustrated on the CSM.
- *Inhalation exposure pathway* – PFAS are not considered to be volatile so inhalation is not considered to be a viable exposure route.

7.3 Receptors

The site is located in a highly modified commercial/industrial site setting. The following are the key potential human health and ecological contamination receptors considered to be relevant in the context of the site's setting:

- Site workers whose activities may result in exposure to impacted site soils, surface water and groundwater.
- Consumers of potentially impacted seafood from the down gradient surface water receiving environment of the Barron River and Trinity Bay (in proximity of the coast) who may ingest contaminants.
- Recreational users of the potentially impacted Barron River and Trinity Bay (in proximity of the coast) that may ingest contaminants or have dermal exposure to contaminants.
- Flora and fauna in the potentially impacted hydraulically down-gradient surface water receiving environment of the Barron River and Trinity Bay (in proximity of the coast).

- Terrestrial flora and fauna consuming potentially impacted plant material e.g. grasses. This in turn may impact their predators.

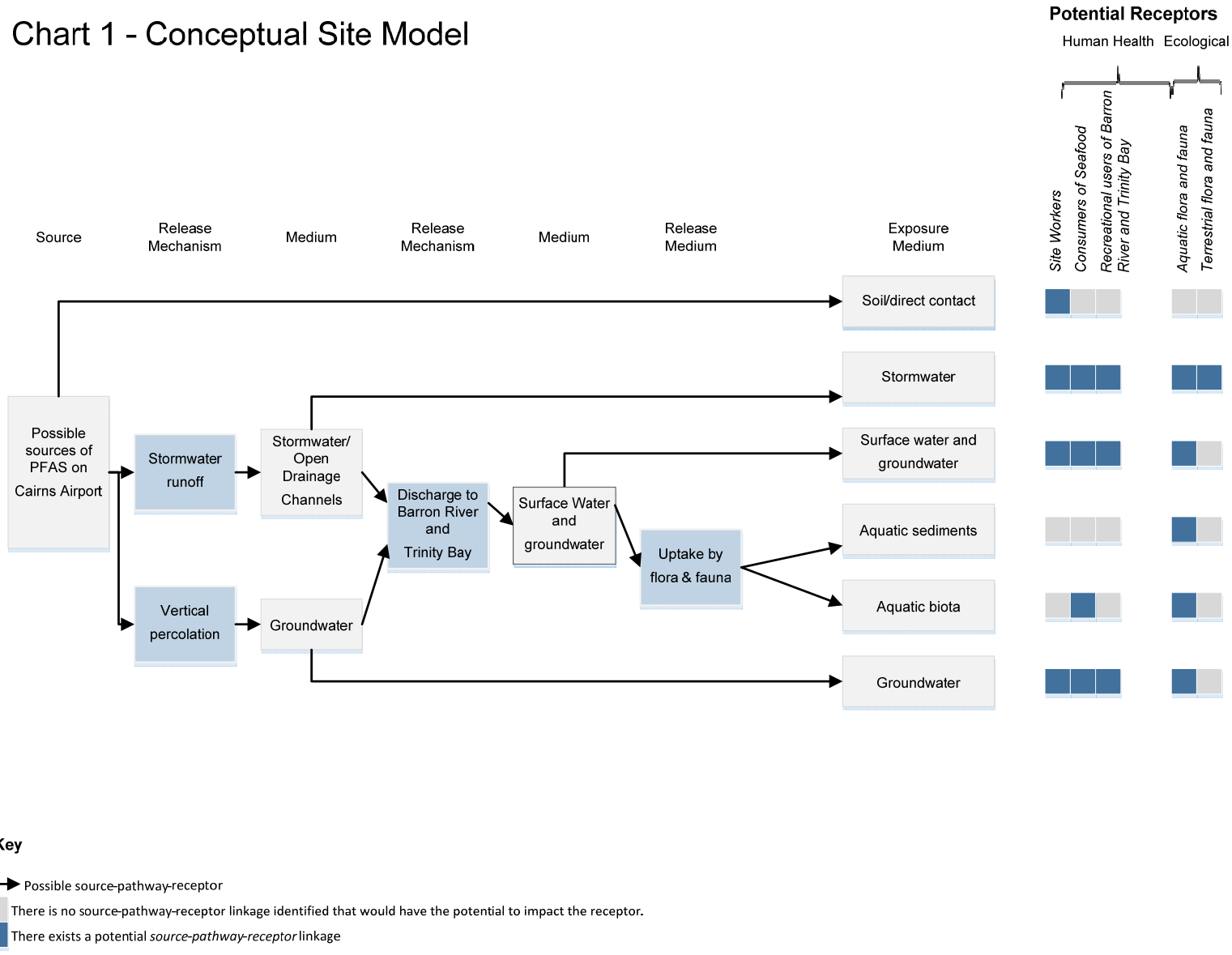
7.4 Potential source-pathway receptor linkages

The CSM has identified a number of potential source-pathway-receptor pollutant linkages which are highlighted in Table 6. These are discussed below in the context of the Cairns Airport setting.

Table 6 PFAS contamination – potential pollutant linkages

Potential pollutant linkages	Key exposure routes and risks
Potential human health risks	
Health risks to site workers who may come into contact with contaminated site media	Day to day activities are not likely to expose site personnel to these media. However, it remains a possibility where workers are involved with excavation and handling of contaminated soil, surface water or groundwater. It is expected that this can be managed through good hygiene practices and task-specific management plans.
Health risks to consumers of contaminated seafood arising from migration of contaminants through surface water and groundwater to the Barron River and Trinity Bay and bioaccumulation of contaminants in biota.	As PFAS are highly persistent and have a high propensity to bio-accumulate through the food-chain, human exposure to PFAS from consumption of potentially contaminated seafood is of a particular concern.
Migration of contaminants through surface water and groundwater to the Barron River and Trinity Bay resulting in human health impacts to recreational users of these surface waters.	The main risk is through incidental ingestion of contaminated water. Dermal exposure has not been identified as a dominant exposure pathway for PFAS.
Potential ecological risks	
Impacts to the off-site marine ecosystem (flora and fauna) of the Barron River and Trinity Bay from migration of contaminants through surface water and groundwater	There is the potential for PFAS contaminated surface water and groundwater to discharge to the adjacent marine ecosystem where marine biota (invertebrates and macrofauna) may be exposed. Predation of species can lead to a wider distribution of PFAS in the marine environment due to bioaccumulation.
Terrestrial ecology – take up of PFAS in plants and subsequent consumption by fauna plus impact to invertebrates via impacted soil	There is potential for prey species to ingest potentially impacted flora or soil and then be predated by larger animals e.g. eagles, snakes, foxes.

Chart 1 - Conceptual Site Model



8. Conclusions

8.1 Conclusions

Based on the review of available site history information, site inspection and site interviews, the following potential sources of PFAS have been identified:

- Areas in which fire fighting services operate or have historically operated including:
  - The Fire Training Ground (FTG)
  - The ARFF fire station – AFFF storage, wash down of fire fighting equipment and trucks, emptying of waste foams/liquids following training (on site and in soil mound to the south of the fire station)
  - ARFF workshop
  - Former fire station
  - Historical training areas (in north west and north east sections of Cairns Airport)
- Other possible sources:
  - Surface water drainage channels around the site
  - Discharge of foam to extinguish vehicle fire to the south west of the airport, near Tom Macdonald Drive (see Table 5)
  - The [redacted]
  - Potential foam extinguishers at the [redacted] and [redacted] in the GA area
  - Foam extinguishers in hangars
  - Waste water treatment plant (WWTP)

The sandy geology and shallow water table are conducive of conditions that would be expected to promote surface water and groundwater interactions, indicating a higher risk for contaminant migration via surface water and groundwater flow.

The following potential sensitive receptors have been identified:

- Site workers whose activities may result in exposure to impacted site soils, surface water and groundwater.
- Consumers of potentially impacted seafood from the down gradient surface water receiving environment of the Barron River and Trinity Bay (in proximity of the coast) who may ingest contaminants.
- Recreational users of the potentially impacted Barron River and Trinity Bay (in proximity of the coast) that may ingest contaminants or have dermal exposure to contaminants.
- Flora and fauna in the potentially impacted hydraulically down-gradient surface water receiving environment of the Barron River and Trinity Bay (in proximity of the coast).
- Terrestrial flora and fauna consuming potentially impacted plant material e.g. grasses. This in turn may impact their predators.

8.2 Summary of preliminary sampling program

Based on the data reviewed in this study, the following summary is made:

- The primary source (use of AFFF containing PFAS) no longer exists. Secondary sources include residual soil and groundwater contamination, notably at the fire station, workshop, training ground and former foam release area (north of fire station).
- The total soil results were all reported within the adopted assessment criteria. However, the leachate concentrations exceeded the adopted criteria for fish consumption, drinking water and recreational water guideline and the EISLs for aquatic organisms. Soil results have reported the highest PFOS concentrations at the fire station workshop (GW01) and near the fire station area (GW02).
- Six of the groundwater samples have reported PFOS+PFHxS concentrations greater than the adopted drinking water criteria, two of which were fresh groundwater. Groundwater results reported the highest PFOS concentrations near the fire station, workshop and the training ground. As the site is located in an urbanised setting where council water supply is available, it is unlikely that groundwater onsite or in the vicinity is extracted for potable purposes. Therefore, the likelihood of human health exposure via drinking water is considered low.
- Two of the groundwater monitoring wells were reported with PFOS results greater than the EISL (toxicity for aquatic organisms). These are located near the fire station and at the workshop. The remaining groundwater samples collected near the northern and eastern boundaries (near Barron River and mangroves area) were all less than the adopted EISLs.
- The PFAS concentrations in the surface water samples were less than laboratory LOR except for one surface water sample which reported a detectable level of PFOS. Low levels of PFOS were also reported in sediment samples, but these were less than the adopted assessment criteria. It should be noted that the adopted HSLs for fish consumption (fresh and marine water) have assessment criteria that is lower than the laboratory limit of reporting for some PFAS.

9. References

Airports Act 1996

Airports (Environment Protection) Regulations 1997

Australian Standard AS 4482.1:2005: Guide to the Investigation and Sampling of Sites with Potentially Contaminated Soil

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Golder, 2008: Contamination Testing – Stormwater Runoff – Fire Training Ground, Cairns Airport

NEPC, 1999: National Environment Protection (Assessment of Site Contamination) Measure 1999 (the ASC NEPM)

SLR Global Environmental Solutions, 2013: Airservices Cairns Fire Station, Water and Soil Quality Assessment, Cairns Airport

10. Limitations

This report has been prepared by GHD for Airservices Australia (Airservices) and may only be used and relied on by Airservices for the purpose agreed between GHD and Airservices.

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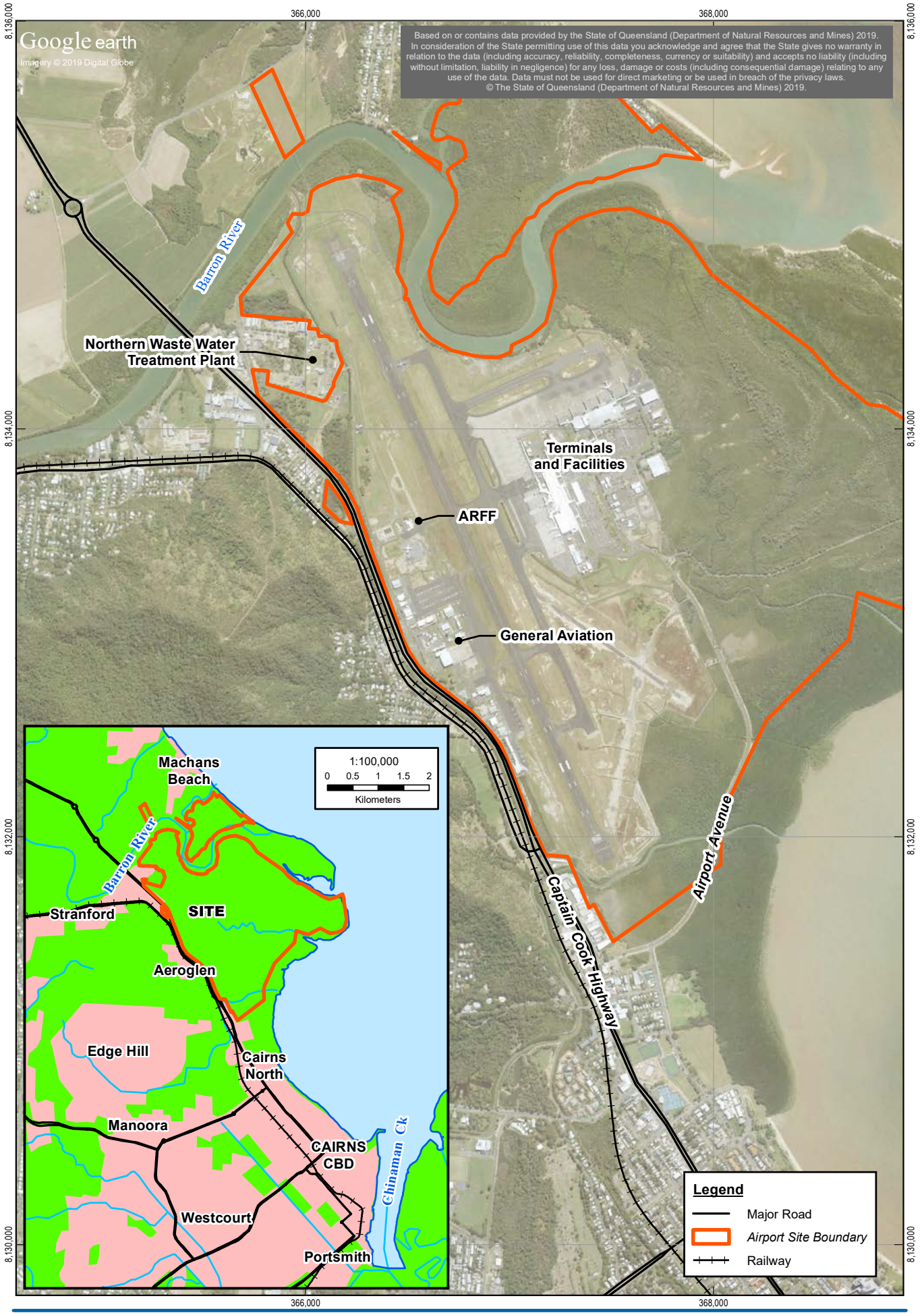
The opinions, conclusions and any recommendations in this report are based on information obtained from, and testing undertaken at or in connection with, specific sample points. Site conditions at other parts of the site may be different from the site conditions found at the specific sample points.

Investigations undertaken in respect of this report are constrained by the particular site conditions, such as the location of buildings, services and vegetation. As a result, not all relevant site features and conditions may have been identified in this report.

Site conditions (including the presence of hazardous substances and/or site contamination) may change after the date of this Report. GHD does not accept responsibility arising from, or in connection with, any change to the site conditions. GHD is also not responsible for updating this report if the site conditions change.

Appendices

Appendix A – Figures



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Metres

Map Projection: Universal Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

Airservices Australia Pty Ltd
Cairns Airport
Preliminary Site Investigation

Job Number	31-34249
Revision	B
Date	21 Feb 2019

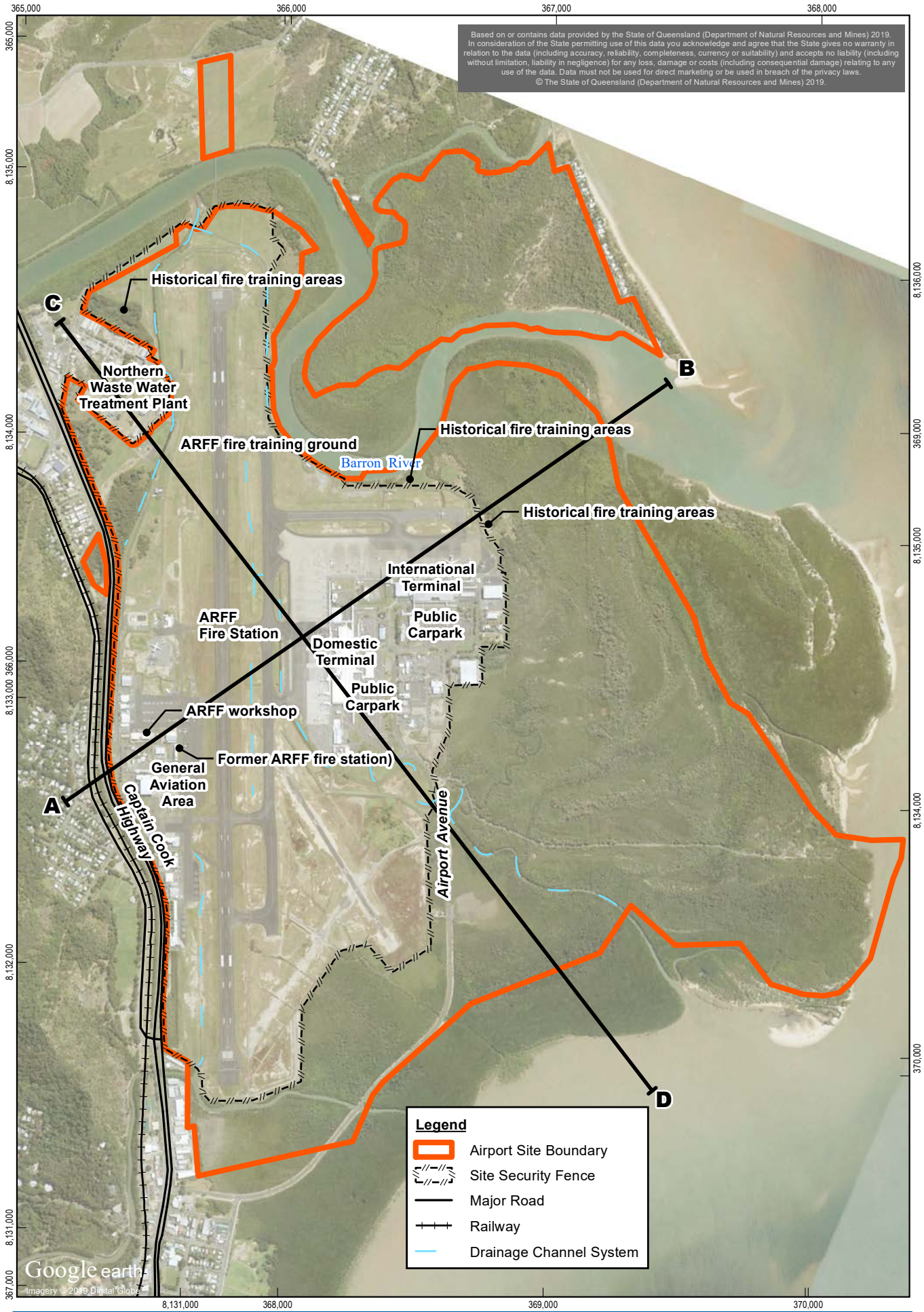
Locality Map

Figure 1

G:\31\34249\GIS\Maps\Working\Cairns\2019 Airport Boundary Revision\31-34249-201_cairnsLocalityFeb2019_revB.mxd

145 Ann Street Brisbane QLD 4000 T 61 7 3316 3000 F 61 7 3316 3333 E bnemail@ghd.com.au W www.ghd.com

Data Source: Site Boundary, Airservices, 2019; DMRM: cadastre (2016); Google Earth: imagery (May 2015, extracted Jul 2016). Created : jvc



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Metres

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Grid: GDA 1994 MGA Zone 55

Airservices Australia Pty Ltd
Cairns Airport
Preliminary Site Investigation

Job Number	31-34249
Revision	C
Date	21 Feb 2019

Site Details

Figure 2

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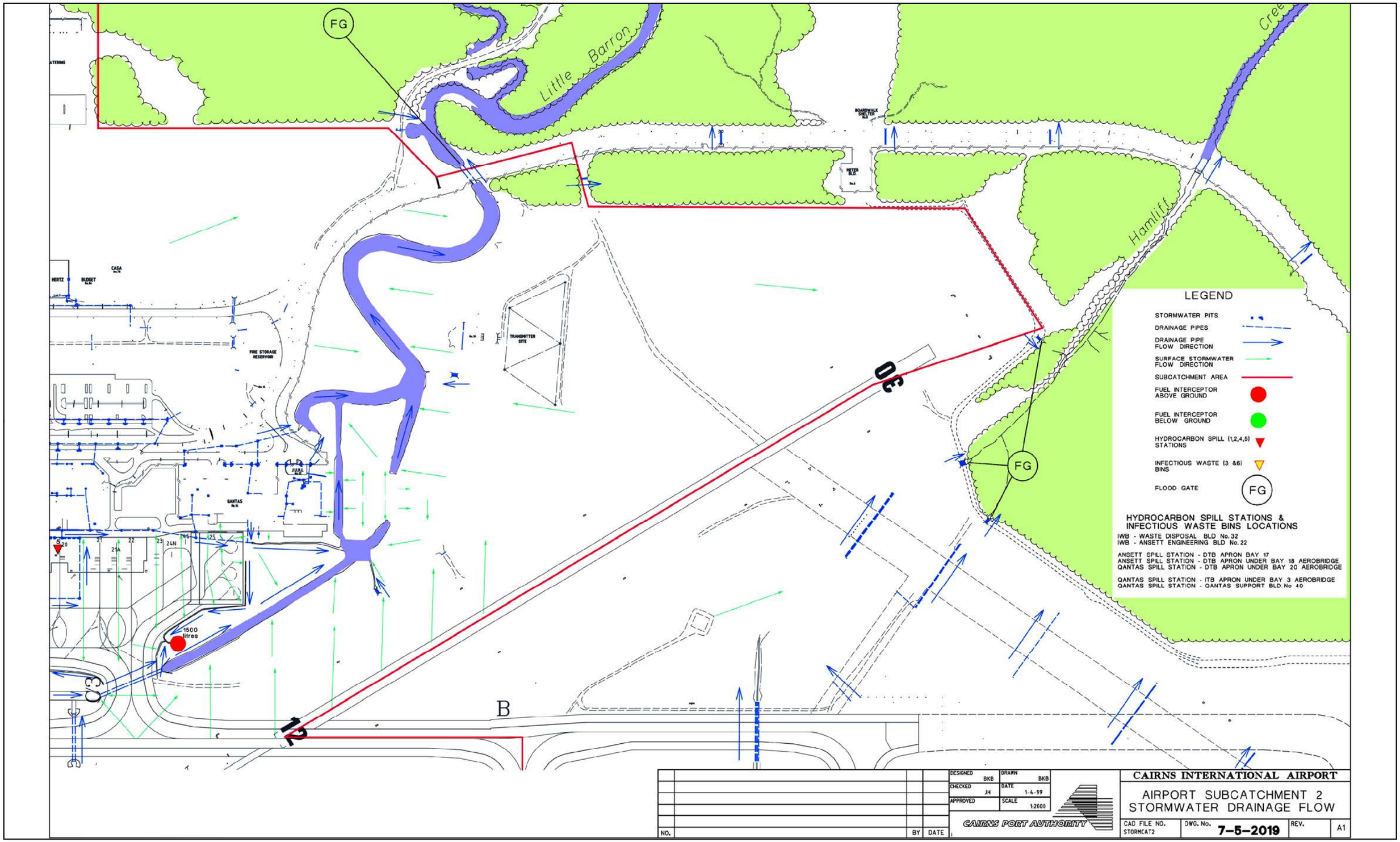
145 Ann Street Brisbane QLD 4000 T 61 7 3316 3000 F 61 7 3316 3333 E bnemail@ghd.com.au W www.ghd.com

Data Source: Site Boundary, Airservices, 2019; DNRM: cadastre (2016); Google Earth: imagery (May 2015, extracted Jul 2016), GHD: Drainage Channel System (2016). Created : jvc



Not to scale

Map Projection: Transverse Mercator
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Grid: GDA 1994 MGA Zone 55

LEGEND

Airservices Australia
Preliminary Site Investigation

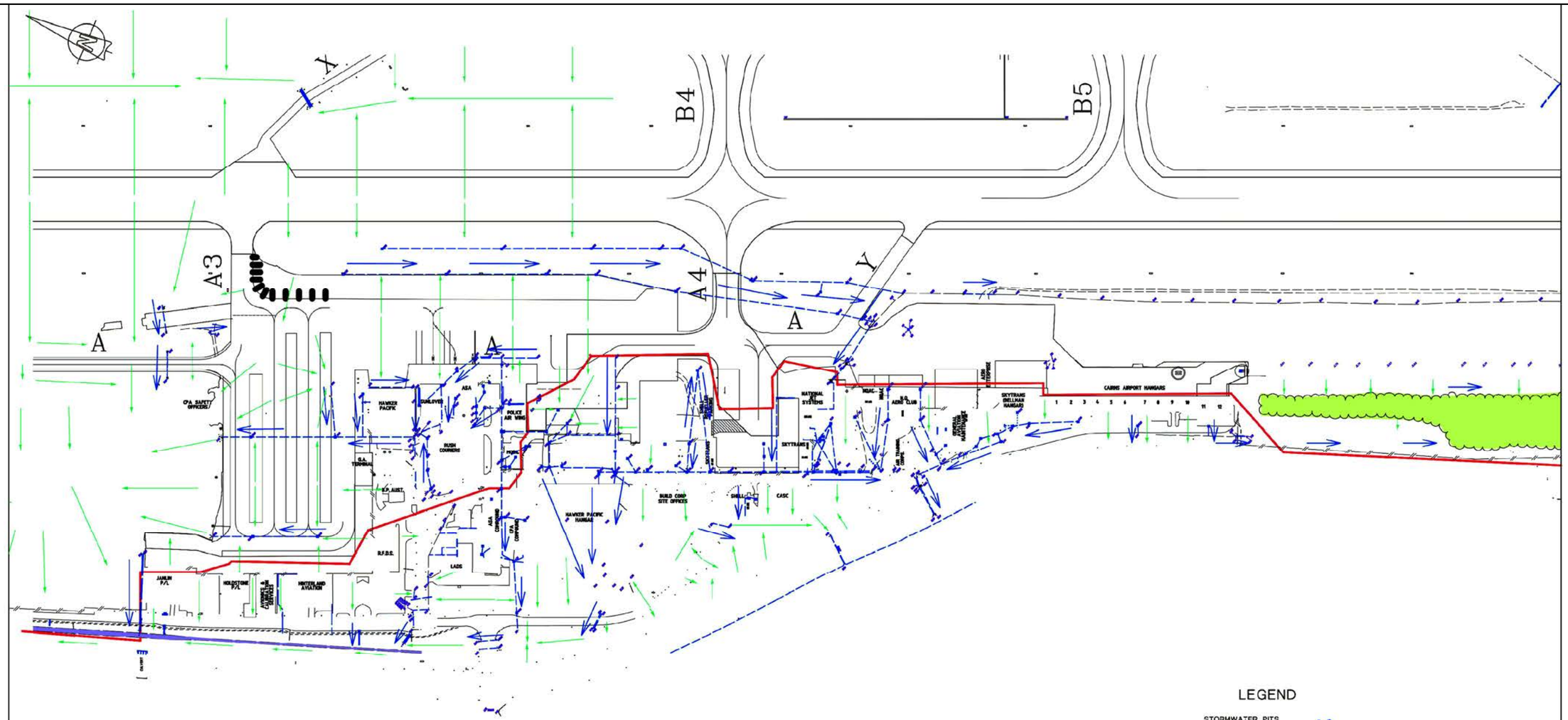
Job Number 31-34249
Revision A
Date 02/09/2016

Cairns Airport
Stormwater drainage flow

Figure 3

Data source: Image supplied by NQA. Created by: sbismire

180 Lonsdale Street Melbourne VIC 3000 **T** 61 3 8687 8000 **F** 61 3 8687 8111 **E** melmail@ghd.com.au **W** www.ghd.com.au



LEGEND

- STORMWATER PITS
- DRAINAGE PIPES
- DRAINAGE PIPE FLOW DIRECTION
- SURFACE STORMWATER FLOW DIRECTION
- SUBCATCHMENT AREA
- FLOOD GATE (FG)

NO.		BY	DATE
A	SUBCATCHMENT 6 ADDED	BKB	12-7-00

DESIGNED BKB | DRAWN BKB | CHECKED | DATE 1-6-99 | APPROVED JH | SCALE 1:2000

CAIRNS PORT AUTHORITY

CAIRNS INTERNATIONAL AIRPORT

AIRPORT SUBCATCHMENT 5
STORMWATER DRAINAGE FLOW

CAD FILE NO. STORMCATS | DWG. No. 7-5-2020 | REV. A | A1

LEGEND

Not to scale

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Airservices Australia
Preliminary Site Investigation

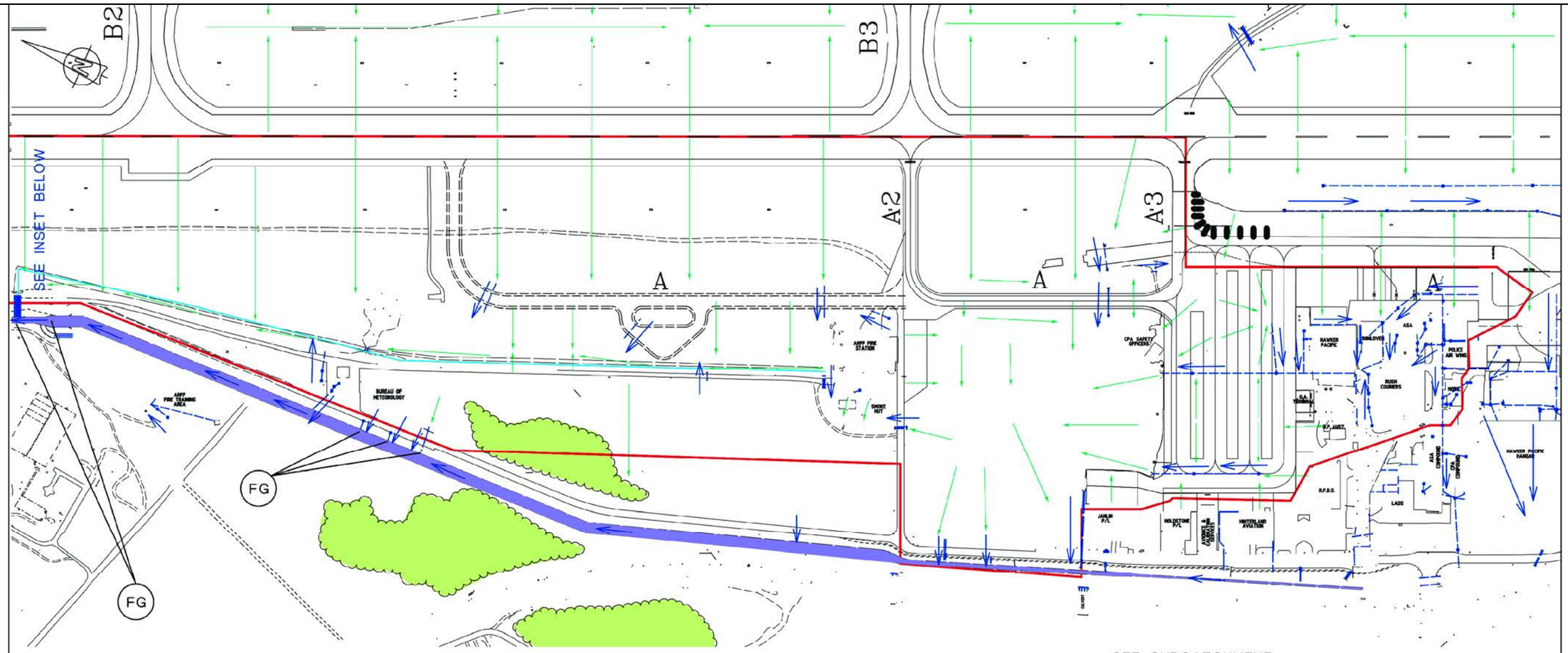
Job Number 31-34249
Revision A
Date 02/09/2016

Cairns Airport
Stormwater drainage flow

Figure 4

Data source: Image supplied by NQA Created by: sbismire

180 Lonsdale Street Melbourne VIC 3000 **T** 61 3 8687 8000 **F** 61 3 8687 8111 **E** melmail@ghd.com.au **W** www.ghd.com.au



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Map Projection: Transverse Mercator
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LEGEND

Airservices Australia
Preliminary Site Investigation

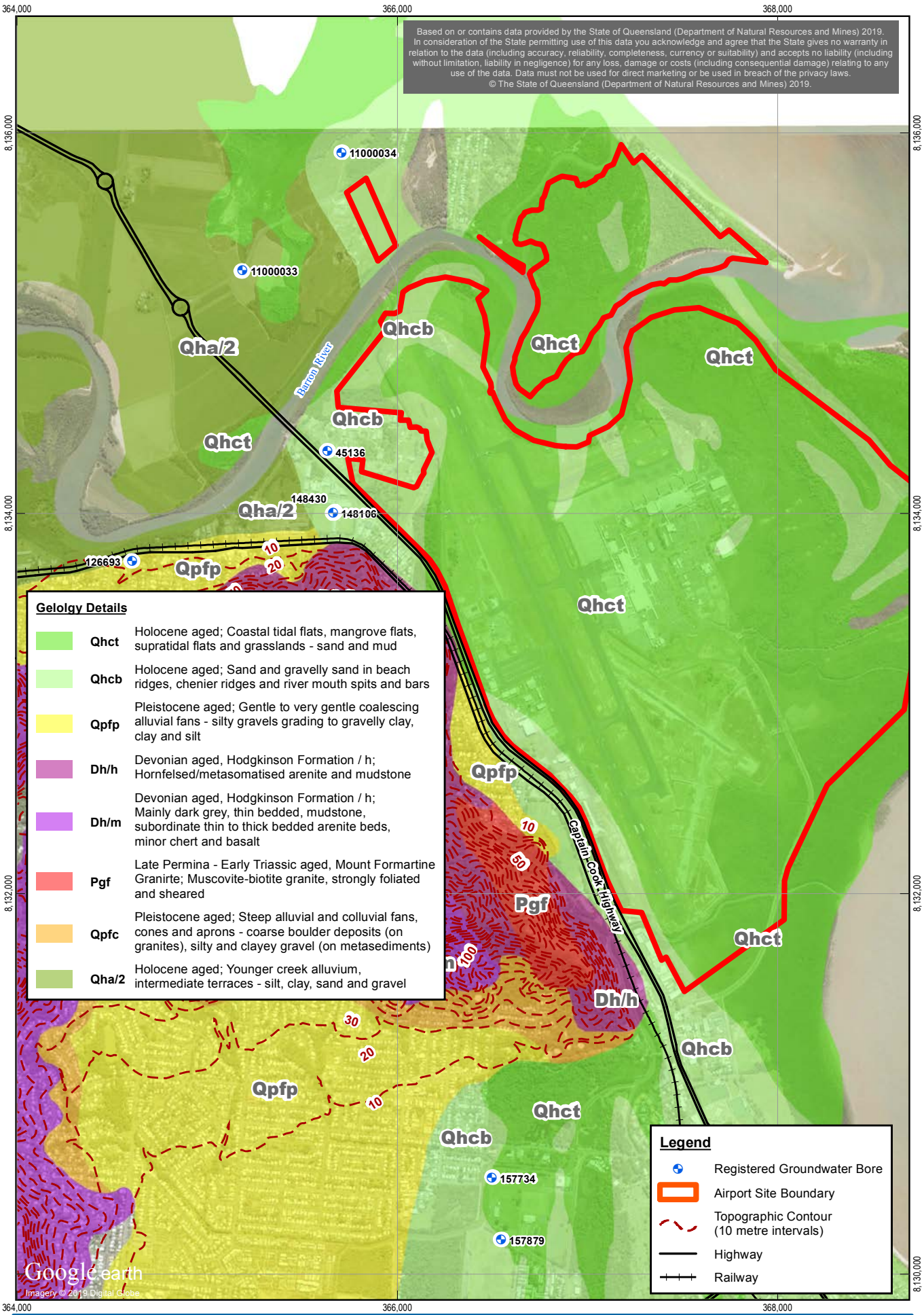
Job Number	31-34249
Revision	A
Date	102/09/2016

Cairns Airport
Stormwater drainage flow

Figure 5

Data source: Image supplied by NQA Created by: sbismire

180 Lonsdale Street Melbourne VIC 3000 **T** 61 3 8687 8000 **F** 61 3 8687 8111 **E** melmail@ghd.com.au **W** www.ghd.com.au



1:27,000 (at A4)

0 200 400 600 800

Metres

Map Projection: Universal Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

GHD airservices

Airservices Australia Pty Ltd
Cairns Airport
Preliminary Site Investigation

Job Number 31-34249
Revision A
Date 19 Feb 2019

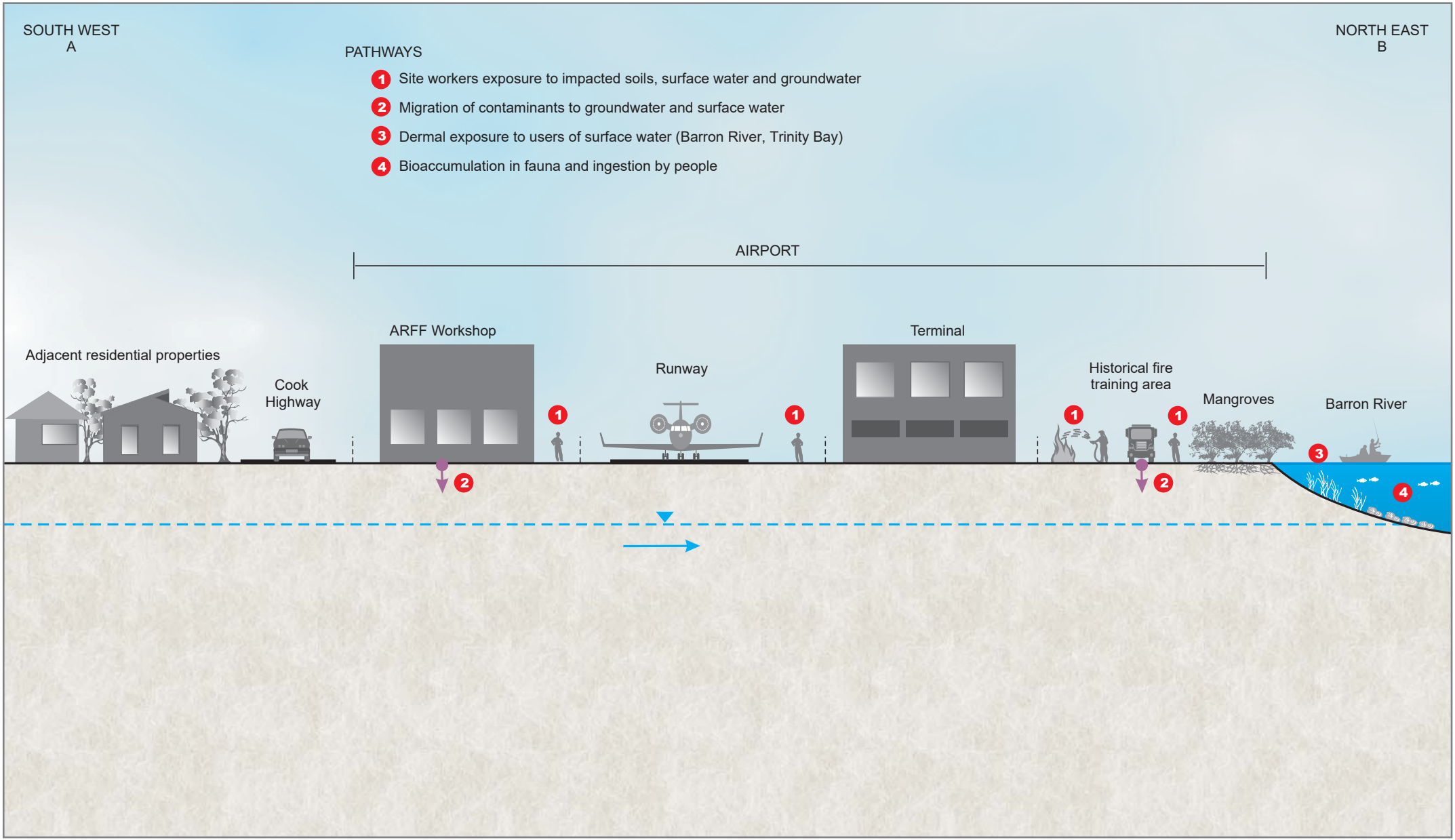
Geology and Hydrogeology

Figure 6

G:\31\34249\GIS\Maps\Working\Cairns\2019 Airport Boundary Revision\31-34249-112_cairnsGeology_revA.mxd

145 Ann Street Brisbane QLD 4000 T 61 7 3316 3000 F 61 7 3316 3333 E bnemail@ghd.com.au W www.ghd.com

Data Source: DMRM: cadastre (2016); Google Earth: imagery (May 2015, extracted Jul 2016). Created : jvc



LEGEND

- Sandy fill/sand
- Anticipated groundwater flow direction
- Possible sources of PFAS
- Migration of contaminants
- Groundwater table

NOTE

Conceptual diagram only - not to scale

Airservices Australia
Preliminary Site Investigation

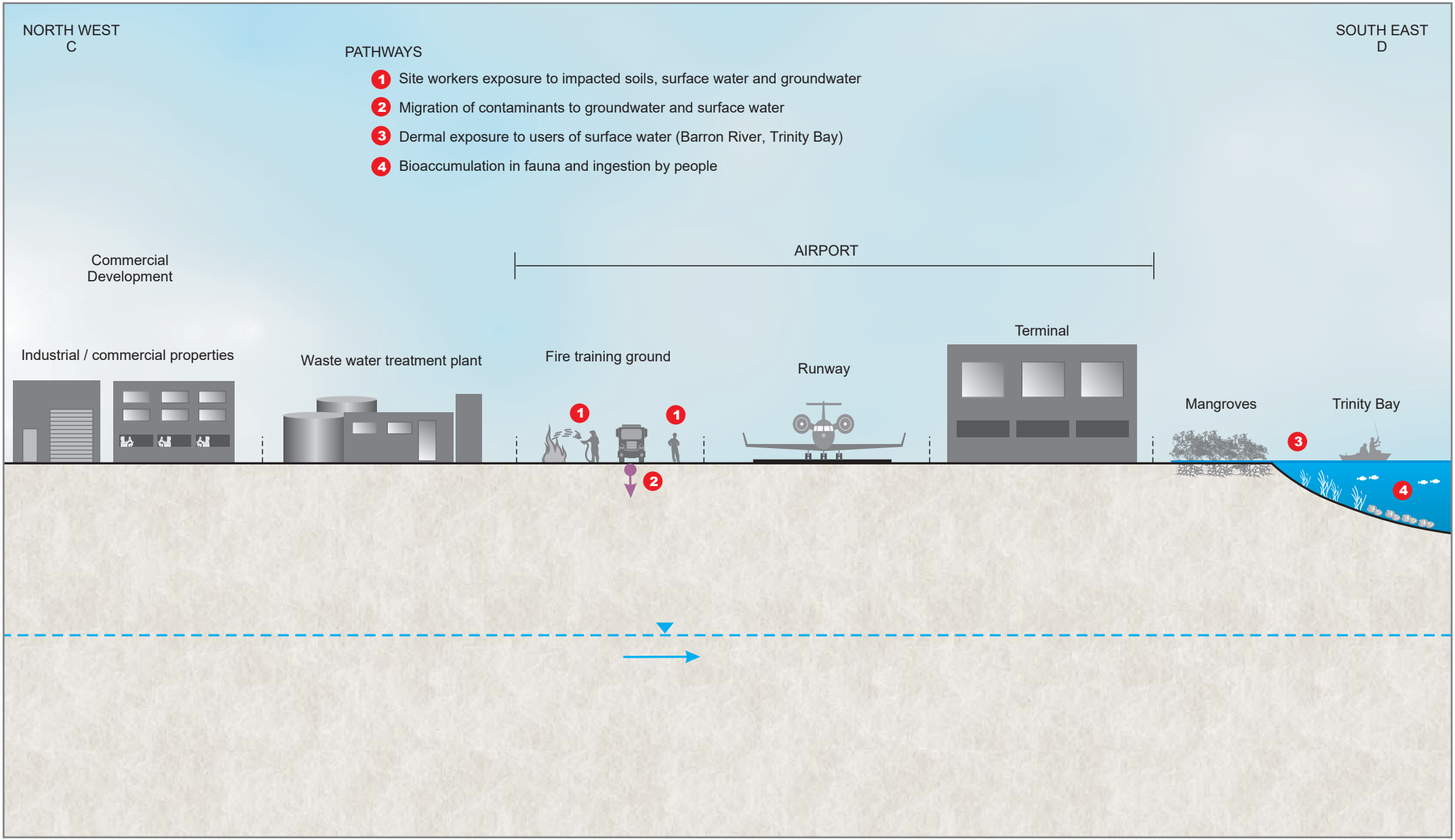
Cairns Airport Conceptual Site Model

Job Number 31-34249
Revision A
Date 6 SEP 2016

Figure 7A

AU\Launceston\Projects\31\34249\3134249_LTN_02.cdr

8/180 Lonsdale Street Melbourne VIC 3000 Australia **T** 61 3 8687 8000 **F** 61 3 8687 8111 **E** melmail@ghd.com **W** www.ghd.com



LEGEND

- Sandy fill/sand
- Anticipated groundwater flow direction
- Possible sources of PFAS
- Migration of contaminants
- Groundwater table

NOTE

Conceptual diagram only - not to scale

Airservices Australia
Preliminary Site Investigation

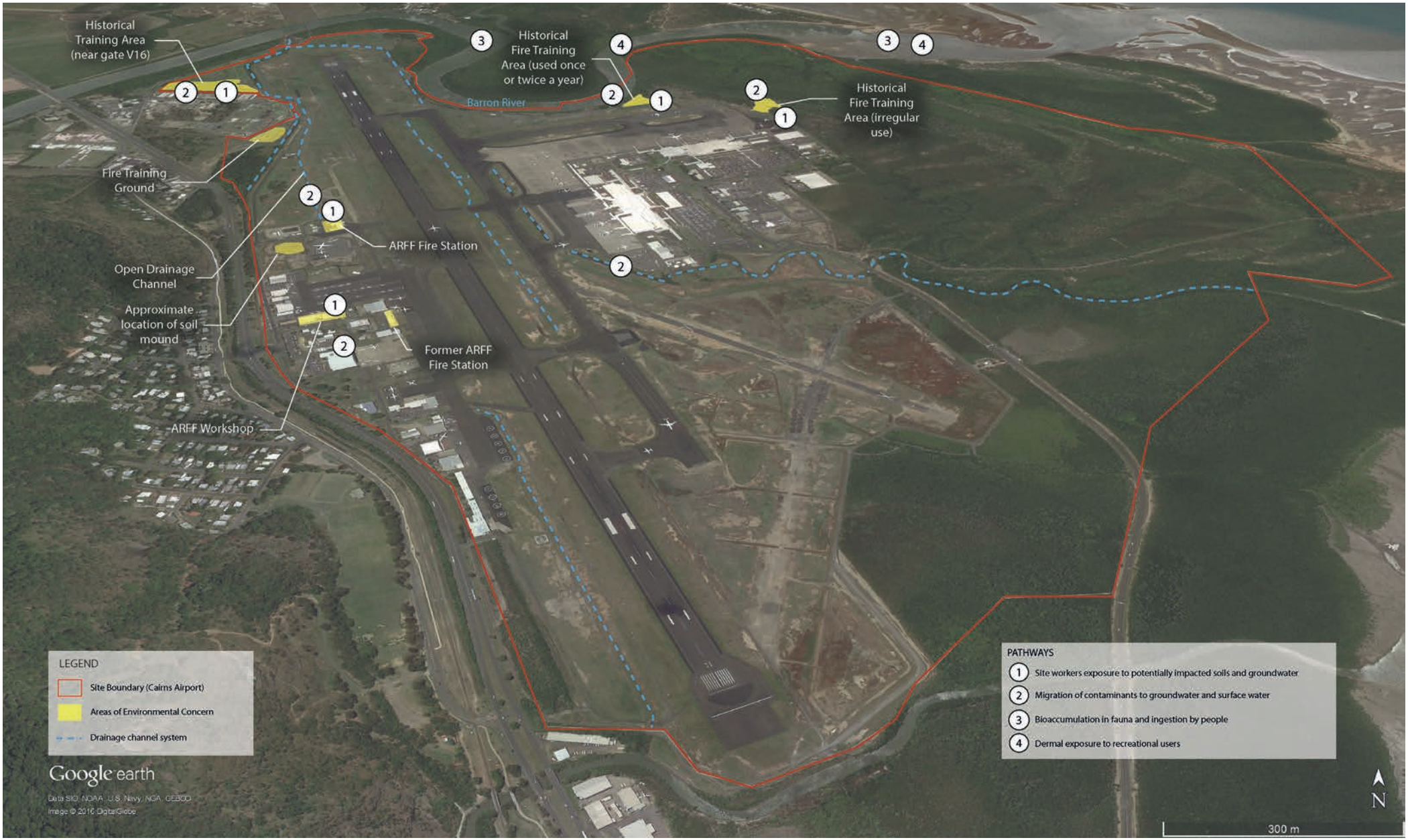
Cairns Airport Conceptual Site Model

Job Number 31-34249
Revision A
Date 6 SEP 2016

Figure 7B

AU\Launceston\Projects\31\34249\3134249_LTN_03.cdr

8/180 Lonsdale Street Melbourne VIC 3000 Australia T 61 3 8687 8000 F 61 3 8687 8111 E melmail@ghd.com W www.ghd.com



Paper Size A4

N

Airservices Australia
Cairns Airport
Preliminary Site Investigation

Job Number	31-34249
Revision	B
Date	21 Oct 2016

Conceptual Site Model Pathways Figure: 8

S:\GIS\Projects\31-34249\maps\Conceptual_Diagrams\Cairns\ 31_34249_Cairns_CSM_Pathways_rev_a.indd

145 Ann Street Brisbane QLD 4000 | T 61 7 3316 3000 | F 61 7 3316 3333 | E bnemail@ghd.com | W www.ghd.com

Appendix B – Certificates of Title

CURRENT STATE TENURE SEARCH

ENVIRONMENT AND RESOURCE MANAGEMENT, QUEENSLAND

Request No: 8535259
Search Date: 08/02/2010 10:07 **Title Reference: 40046999**
Date Created: 23/04/2005

DESCRIPTION OF LAND

Tenure Reference: PPL 0/221878

LOT 5 SURVEY PLAN 146888
County of NARES Parish of CAIRNS
Local Government: CAIRNS

Area: 5.231000 Ha. (SURVEYED)

No Land Description

No Forestry Entitlement Area

No Future Conservation Area

Purpose for which granted:
PORT AND TRANSPORT RELATED

TERM OF LEASE

Day of beginning of lease

Lease in perpetuity commencing on 28/08/2004

REGISTERED LESSEE

Dealing No: 711979890 10/10/2008

QUEENSLAND AIRPORT HOLDINGS (CAIRNS) PTY LTD
A.C.N. 132 228 570

CONDITIONS

CONDITIONS

A66 (1) The lessee must use the leased land for port and transport related purposes .

(2) This lease may be forfeited if not used for the purpose stated above.

(3) The annual rent must be paid and will be the minimum amount payable in accordance with the Land Act 1994.

(4) The Parties acknowledge that GST may be payable in respect of a supply made under this lease. Where GST becomes payable in respect of a supply made under this lease, the State (lessor) may recover the GST from the lessee by increasing the consideration payable by the lessee to the State by an amount equal to that which the State is obliged to remit to the Commonwealth as GST on the supply and that amount may be recovered from the lessee as part of the money payable to the State under this lease. The State will upon request by the lessee, issue to the lessee a valid GST tax invoice in respect of any taxable supply made under this lease. (NOTE: For the purpose of this condition "GST" means the goods and services tax which results from the enactment of A New Tax System (Goods and Services Tax) Act 1999 and the related Acts which constitute the Commonwealth taxation reform (as amended from time to time)).

(5) The lessee must pay the cost of any required survey or re-survey of the leased land.

(6) The lessee must control pest plants and animals, on the leased land, in accordance with the Land Protection (Pest and Stock Route Management) Act 2002 and the Local Laws and requirements of the Cairns City Council , binding on the lessee.

(7) The lessee has the responsibility for a duty of care, to take all reasonable and practicable measures to sustainably manage the leased land by conserving the physical, biological, productive and cultural values, either on the leased land or in areas affected by the management of the leased land.

(8) The lessee indemnifies and agrees to keep the State of Queensland, Crown Instrumentalities, local governments and other statutory bodies (the Indemnified) against all actions, suits, proceedings, claims, demands, costs, losses, damages and expenses (Claim) arising out of or in any way connected to or resulting from the State of Queensland granting this lease to the lessee and which is connected to or resulting from the lessee's use and occupation of the leased land (all referred to as the indemnified acts or omissions) save to the extent that the Claim arises as a result of any negligent act or omission of the State of Queensland. The lessee hereby releases and discharges the Indemnified from any Claim relating to the indemnified acts or omissions which may be made against the Indemnified.

(9) The lessee must ensure that the use and development of the leased land conforms to the Planning Scheme, Local Laws and

CONDITIONS

requirements of the Cairns City Council, binding on the lessee.

(10) The lessee must give the Minister administering the Land Act 1994, information about the lease, when requested.

(11) The lessee must not clear any vegetation on the leased land, unless in accordance with the Integrated Planning Act 1997.

(12) No compensation for improvements or developmental work is payable by the State at the forfeiture, surrender or expiry of the lease, but the lessee has the right to remove the lessee's moveable improvements within a period of three (3) months from the forfeiture, surrender or expiry of the lease, provided all money due by the lessee to the State on any account whatsoever has been paid, or be required to remove those improvements as specified in any further condition of lease.

(13) This lease is subject to the Land Act 1994 and all other relevant State and Commonwealth Acts.

H123 The provision of access to the leased land will not be the responsibility of the Local Government or the State.

CURRENT STATE TENURE SEARCH

ENVIRONMENT AND RESOURCE MANAGEMENT, QUEENSLAND

Request No: 8535259
Search Date: 08/02/2010 10:07

Title Reference: 40046999
Date Created: 23/04/2005

CONDITIONS

I64 (1) The lessee must effect a public liability insurance policy with an insurer authorised under the Insurance Act 1973 (Commonwealth) or, in any other case, to the satisfaction of the Minister administering the Land Act 1994, naming the lessee as the insured covering legal liability for any loss of, or damage to any property and for the injury (including death) to any person arising out of anything done or omitted on or about the leased land or any improvements thereon and against all claims, demands, proceedings, costs, charges and expenses whatsoever in respect thereof. Such policy must:

(a) be for an amount of not less than TEN MILLION DOLLARS $10,000,000.00 in respect of all claims arising out of a single event or such higher amounts as the Minister may reasonably require:

(b) be effected on a "claims occurring" basis so that any claim made by the lessee under the policy after expiration of the period of policy cover but relating to an event occurring during the currency of the policy will be covered by the policy subject to the claim meeting the policy's other terms and conditions;

(c) be effected on such other reasonable terms and conditions as may be required by the Minister; and

(d) be maintained at all times during the currency of the lease .

(2) The lessee must, as soon as practicable, inform the Minister , in writing, of the occurrence of any event that the lessee considers is likely to give rise to a claim under the policy of insurance effected and must ensure that the Minister kept fully informed of subsequent actions and developments concerning the claim.

(3) The lessee must renew such policy, at the lessees' expense, each year during the currency of this lease and forward a certificate of currency to the Minister within 14 days of the commmencement of each respective renewal period.

(4) Upon receipt of a Notice of Cancellation, the lessee must immediately effect another public liability policy in accordance with the provisions of this condition.

(5) Clause (1) of this condition will be satisfied if the lessee is the State of Queensland or a statutory authority eligible for cover under the Queensland Government Insurance Fund and is insured and continues to be insured by the Queensland Government Insurance Fund.

(6) Clause (1) of this condition will be satisfied if the lessee is the Commonwealth of Australia or a statutory authority eligible for cover under the Comcover Insurance Fund and is insured and continues to be insured by Comcover.

CURRENT STATE TENURE SEARCH

ENVIRONMENT AND RESOURCE MANAGEMENT, QUEENSLAND

Request No: 8535259
Search Date: 08/02/2010 10:07

Title Reference: 40046999
Date Created: 23/04/2005

ENCUMBRANCES AND INTERESTS

1. Rights and interests reserved to the Crown by
   Lease No. 40046999

2. SUB LEASE No 712802986 19/10/2009 at 11:52
   CAIRNS AIRPORT PTY LTD A.C.N. 132 228 221
   THE WHOLE OF THE LAND
   TERM: 01/10/2008 TO 30/09/2108 OPTION NIL

3. AMENDMENT OF LEASE No 712812027 22/10/2009 at 11:37
   SUB LEASE: 712802986
   TERM: 01/10/2008 TO 30/09/2108 OPTION NIL

4. MORTGAGE No 712812030 22/10/2009 at 11:37
   WESTPAC BANKING CORPORATION A.B.N. 33 007 457 141
   over
   SUB LEASE: 712802986

ADMINISTRATIVE ADVICES - NIL
UNREGISTERED DEALINGS - NIL

Caution - Charges do not necessarily appear in order of priority

** End of Current State Tenure Search **

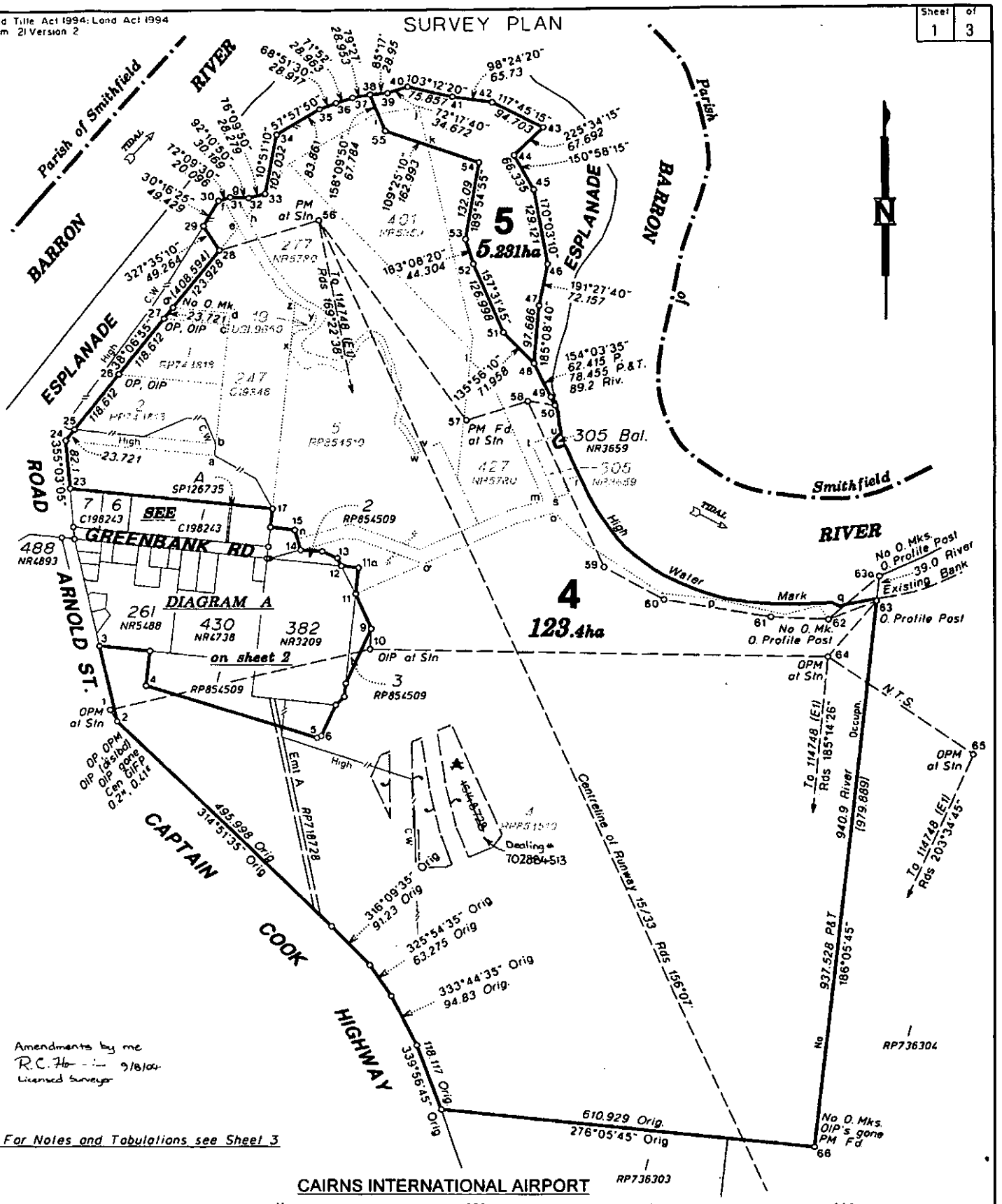
Information provided under section 34 Land Title Act(1994) or
section 281 Land Act(1994)

Requested By: D APPLICATIONS CITEC CONFIRM

Land Title Act 1994: Land Act 1994
Form 21 Version 2

SURVEY PLAN

Sheet 1 of 3



I, Robert Charles HARRIS hereby certify that I have surveyed the land comprised in this plan personally and that the plan is accurate, that the said survey was performed in accordance with the Surveyors Act 1977 and the Surveyors Regulation 1992 and that the said survey was completed on 09/05/02

R.C. Harris
Licensed Surveyor

Date 14/05/02

Metres 0 300 600 900
50|mm 100|mm 150|mm

State copyright reserved.

Plan of Lots 4 & 5

Cancelling Lots 4 & 5 on RP854510, Lots 1 & 2 on RP743818, Lots 277 & 427 on NR5780, Lot 401 on NR5959, USL (being Lot 19 on USL9650, Lot 247 on C19846 & Part of Lot 305 on NR3659), Part of USL (being part of Ah-Bow's Creek) and Part of USL (being Closed Roads).

PARISH CAIRNS COUNTY Nares

Meridian: MGA '94 ZONE 55

F/N's: Yes

Scale: 1:6000

Format: STANDARD

SP146888

Plan Status:

...\RPPlans\airport\SP146888.dgn 31/05/2002 09:31:27 AM

707926950

NO FEE
27/07/2004 16:35

CS 495

WARNING: Folded or Mutilated Plans will not be accepted. Plans may be rolled. Information may not be placed in the outer margins.

Registered

5. Lodged by 495
DEANNA HOLDER
NRM+E
PO BOX 94
INNISFAIL Q 4860
PH. 40611446
REF. CNS/009151

(Include address, phone number, reference, and Lodger Code)

1. Certificate of Registered Owners ~~or Lessees.~~

I/We CAIRNS PORT AUTHORITY

(Names in full)

* as Registered Owners of this land agree to this plan and dedicate the Public Use Land as shown hereon in accordance with Section 50 of the Land Title Act 1994.

~~* as Lessees of this land agree to this plan.~~

Signature of *Registered Owners ~~*Lessees~~

8/5/04

Clive Henry SKAROTT
Chairman

~~Neil Patrick QUINN~~ Bradley William GEATCHES
Chief Executive Officer ~~Acting~~

Who certify they are the proper officers to affix the seal. Date 2/4/04

Approved
Q Danley
Susan Ashley
A/Senior Land Officer
Delegate of the Minister for
Natural Resources and Minister
Mines and Energy
30/4/2004

*Rule out whichever is inapplicable

2. Local Government Approval.

hereby approves this plan in accordance with the :
%

Dated this ..... day of .....

.....#

.....#

* insert the name of the Local Government. % Insert Integrated Planning Act 1997 or # Insert designation of signatory or delegation Local Government (Planning & Environment) Act 1990

3. Plans with Community Management Statement:

CMS Number :

Name :

4. References

Dept. File : CNS/009151, CNS/008938, CNS/010524
Local Govt :
Surveyor : FB 19/69-117

6.

Existing			Created		
Title Reference	Lot	Plan	Lots	Emts	Road
50117235	4	RP854510	4		
50117236	5	RP854510	4		
21403138	1	RP743818	4		
21403137	2	RP743818	4		
20931242	277	NR5780	4		
49019149	401	NR5959	485		
49001684	427	NR5780	4		
USL (Closed Road)	Undescribed	Area	485		
USL (Part of - Ah-Bow's Creek)	Undescribed	Area	4		
USL	19	USL9650	4		
USL	247	CI9846	4		
USL	305pt.	NR3659	4		
USL (Closed Road)			485		
USL (Ah-Bow's Creek)			4		
USL (Lot 305pt. on NR3659)			4		
USL (Lot 247 on CI9846)			4		
USL (Lot 19 on USL9650)			4		
Por 550 on NR5951			4		
Por 487 on NR4749			4		
Por 427 on NR5780			4		
Por 401 on NR5959			485		
Por 277 on NR5780			4		
Por 248 on NR5616			4		
Por 86 on NR3511			4		
Allot. 4 of Sec 151 on CI9846			4		
Allot. 3 of Sec 151 on CI9846			4		

Note: Reserve 666 over Lot 427 on NR5780 and Reserve 2060 over Lot 401 on NR5959 are to be revoked prior to issue of deed.

EASEMENT ALLOCATION

Easement	Lots to be burdened
601408785	4

EXISTING LEASE ALLOCATION

Lease	Lots to be Encumbered
702884513	4

Orig	Lots

7. Portion Allocation :

8. Map Reference :
8064 - 31222
8064 - 32111

9. Locality :
CAIRNS AIRPORT
(STRATFORD & AEROGLEN)

10. Local Government :
CAIRNS CITY COUNCIL

12. Passed & Endorsed :

By : Dept. of Natural Resources & Mines
Date : 31 May 2002
Signed :
Designation : Registered Surveyor

FB No.: Initials: SCN

CPA DRG No.: SP146888.dgn

12. Building Format Plans only.

I certify that :
* As far as it is practical to determine, no part of the building shown on this plan encroaches onto adjacent lots or road:
* Part of the building shown on this plan encroaches onto adjoining* lots and road

Licensed Surveyor/Director * Date

* delete words not required

13. Lodgement Fees :

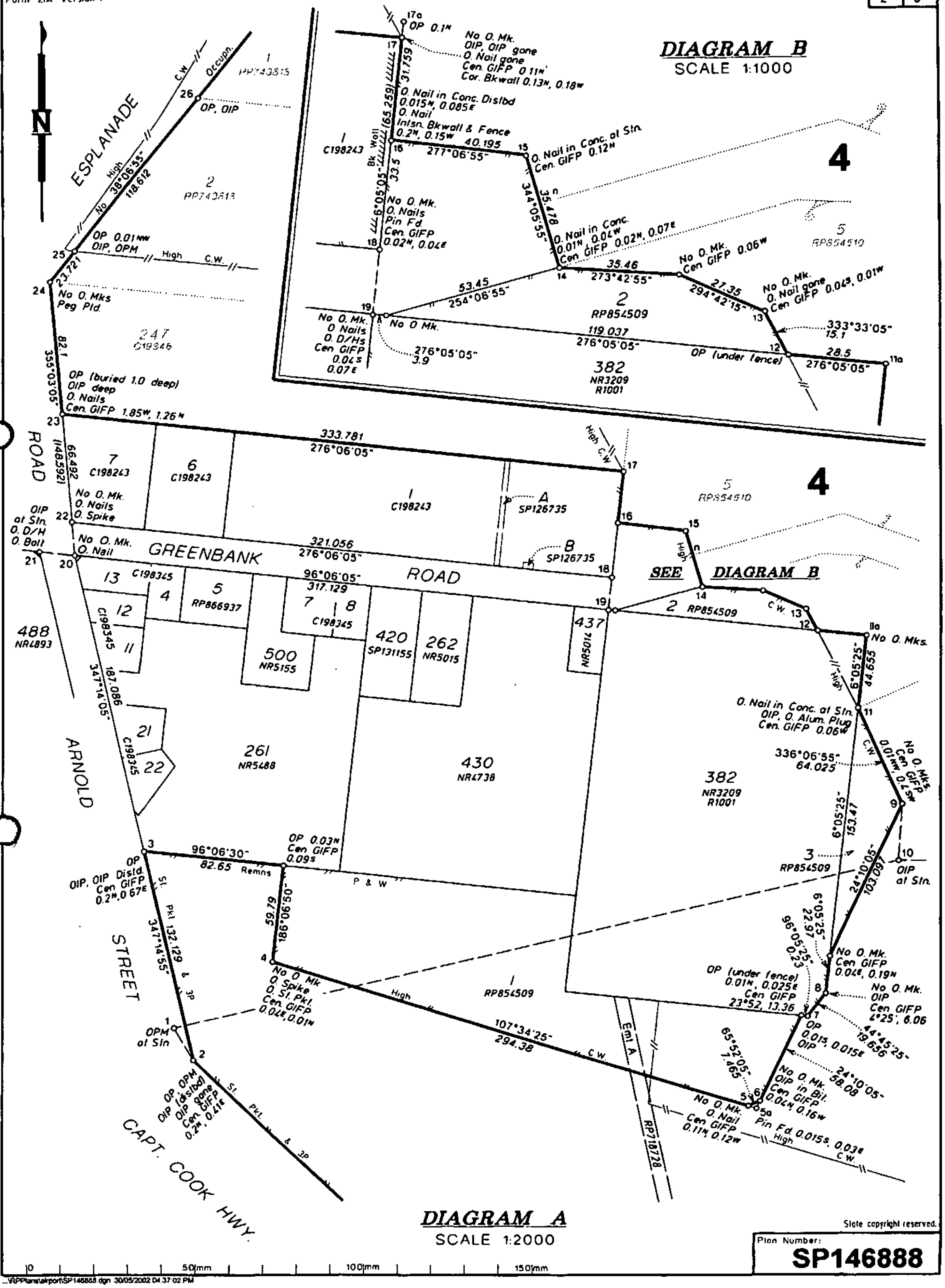
Survey Deposit	$
Lodgement	$
New Titles	$
Photocopy	$
Postage	$
TOTAL	$

14. Insert Plan Number **SP146888**

...\RPPlans\airport\SP146888.dgn 31/05/2002 09:33:52 AM

Land Title Act 1994; Land Act 1994
Form 21A Version 1

ADDITIONAL SHEET



Plan Number: **SP146888**

Land Title Act 1994; Land Act 1994
Form 21A Version 1

ADDITIONAL SHEET

PERMANENT MARKS

PM	ORIGIN	BEARING	DISTANCE	NUMBER	
1-OPM	SP126735	At	Stn	90179	
2-OPM	IS148741	341°14'50"	34.715	90179	Rec. C
25-OPM	RP743818	306°17'55"	1.066	54859	
56-PM		At	Stn	145356	
57-PM Fd		At	Stn	89774	
64-OPM	IS148732	At	Stn	89810	
65-OPM	CPA 6-1-6003	At	Stn	110177	
66-PM Fd		336°07'20"	62.132	85290	

M.G.A. CO-ORDINATES (GDA-94)

STATION	EASTING	NORTHING	ZONE	ORDER	CLASS
OPM 90179	365 744.263	8134 188.761	55	1	A
OPM 110177	367 651.995	8134 007.769	55	2	B

TRAVERSES, ETC.

LINE	BEARING	DISTANCE
1-2	149°57'20"	22.99
1-10	76°20'20"	438.217
5-5a	107°34'25"	5.0
5a-6	24°10'05"	5.0
9-10	183°42'50"	35.297
10-64	91°02'46"	747.078
11-12	333°33'05"	52.976
17-17a	6°05'05"	10.0
18-19	186°05'05"	20.117
20-21	276°06'05"	21.284
20-22	355°03'05"	20.499
28-56	72°35'30"	171.187
50-58	279°14'	45.155
56-57	144°30'40"	417.32
57-58	72°15'55"	105.263
58-59	156°07'	309.016
59-60	119°25'	112.313
60-61	99°39'15"	175.962
61-62	93°03'05"	92.498
62-63	68°30'	83.685
62-63a	48°31'45"	109.918
63-64	219°58'10"	122.014
64-65	110°13'25"	783.613

LINE PEGS

STN	BEARING	DISTANCE
49-Post	At	Stn
50-LP	At	Stn
63-LP	At	Stn

REFERENCE MARKS

STN	TO	ORIGIN	BEARING	DISTANCE	
2	OIP (0.03E, 0.05N)	RP731798	347°14'55"	1.0	
2	OIP gone	IS148741	167°14'55"	1.0	
3	OIP	C198345	347°14'05"	1.006	
3	OIP Disld.	RP854509	273°18'30"	1.0	New Ref.
3	Spike in bitumen		260°08'20"	7.512	
4	O. Spike in bitumen	IS148741	189°42'	6.806	
4	O. S.Pkt in Conc. Collar	IS148741	133°47'10"	62.627	
5	O. Nail in bitumen	IS148728	151°08'	15.567	
6	OIP in bitumen	IS148728	133°0'	30.814	
7	OIP	RP854509	159°33'	1.215	New Ref.
8	OIP	RP854509	185°44'	1.05	New Ref
9	Pin		81°59'	0.97	
10	OIP (flush) "APC 6"	IS148728	At	Stn.	
11	OIP	RP854509	6°05'25"	0.96	
11	O. Alum. Plug in Conc.	IS148728	350°47'	14.245	
13	O. Nail in Conc. gone	RP854509	331°39'55"	15.9	
13	Pin		305°27'	1.03	
14	Pin		37°01'	1.447	
15	Pin		117°13'	2.115	
16	O. Nail in kerb	RP854509	120°02'	19.639	New Ref.
17	OIP	NR6495	6°05'05"	1.483	
17	Pin		88°10'	2.064	
17	Cor. Brick Wall		312°45'	0.223	
17	OIP gone	SP126735	270°38'05"	0.666	
17	O. Nail in Conc. gone	SP126735	225°19'45"	17.27	
18	O. Nail in bitumen	SP126735	75°52'05"	25.18	
18	O. Nail in Bitumen	SP131155	185°56'30"	7.457	New Conn.
18	Pin Fd. in bitumen		167°29'	9.15	
19	O. D/Hole in Conc.	SP131155	262°15'05"	3.995	
19	O. D/Hole in Kerb	SP131155	338°59'05"	4.35	
19	O. Nail in bitumen	IS148741	348°15'	8.488	
19	O. Nail in bitumen	SP131155	6°10'05"	12.66	
19	Spike in bitumen		8°49'20"	7.34	
20	O. Nail in bitumen	IS148741	320°24'30"	18.122	
21	OIP (0.5 deep)	NR4893	At	Stn	
21	O. D/Hole in Kerb	SP131155	79°00'05"	2.625	
21	O. Bolt in bitumen	CP869454	48°00'05"	15.495	
22	O. Nail in bitumen	IS148741	280°42'	13.616	
22	O. Nail in bitumen	SP126735	258°07'05"	15.81	
22	O. Spike in bitumen	SP126735	249°50'05"	18.205	
22	Spike in bitumen		233°35'30"	12.513	
23	OIP (1.3m deep)	NR6495	175°03'05"	1.0	
23	O. Nail in bitumen	SP126735	275°28'	16.945	New Ref.
23	O. Nail in bitumen	SP126735	285°44'	17.862	New Ref.
23	Spike in bitumen		283°06'30"	13.763	
24	Pin		42°33'	0.99	
24	Spike in bitumen		240°36'	16.803	
25	OIP	RP743818	218°06'55"	1.179	
26	OIP	RP743818	308°06'55"	1.0	
26	Spike in bitumen		293°30'45"	17.011	
27	OIP	RP743818	38°06'55"	1.179	
27	Spike in bitumen		306°06'	24.452	
28	Pin		327°35'10"	0.887	
28	Spike in bitumen		253°04'	54.5	
29	Spike in bitumen		147°35'10"	4.032	
30	Pin		146°16'	1.04	
33	Spike in bitumen		191°17'40"	7.9	
34	Alum. Plug in Conc.		99°20'	3.745	
35	Pin		152°02'	1.54	
38	Pin		172°48'	1.46	
40	Pin		152°51'	0.93	
41	Pin		180°44'	0.882	
42	Pin		193°47'	1.537	
43	Pin		257°24'	1.836	
48	Pin		320°14'	1.93	
51	Spike in bitumen		249°15'	7.483	
51	Alum. Plug in Conc		257°59'	18.605	
52	Spike in bitumen		249°35'	7.79	
53	Spike in bitumen		187°17'10"	24.518	
54	Pin		258°23'	1.797	
58	Spike in bitumen		At	Stn.	
58	Spike in bitumen	"BM167"	126°25'	7.14	
59	Spike in bitumen		At	Stn.	
59	Bank Profile Post "SEC 10"		107°11'45"	53.15	
59	Pin Fd. in Rock		86°05'10"	66.352	
60	Spike in bitumen		At	Stn.	
60	Bank Profile Post		0°09'	9.89	
61	Spike in bitumen		At	Stn.	
61	Bank Profile Post		3°24'	9.22	
62	O. Bank Profile Post "SEC 05"	IS148732	42°0'	21.583	
62	Alum. Plug in Rock		22°40'30"	31.152	
63	O. Bank Profile Post "SEC 04"	IS148732	197°57'45"	34.72	New Conn.
63	Spike in bitumen		186°05'45"	47.018	
63a	O. Bank Profile Post "SEC 04"	IS148732	191°26'20"	76.671	
66	OIP gone	NR2617	6°05'45"	2.012	
66	OIP gone	NR2617	276°05'45"	2.012	

Road to be closed and added to Lot 4 on RP854510

(24-25-b-a-24)	4796m²
(27-d'-d-c-27)	2014m²
(28-30-f-e-28)	2687m²
(h-g-32-33-38-i-h)	1.084 ha
(k-54-48-Riv-u-t-s-r-Riv-q-62-p-o-o'-14-n-m-l-k)	5.429 ha

Area to be added to Lot 4 on RP854510

Lot 5 on RP854510	7.8354 ha
Lot 1 on RP743818	1.384 ha
Lot 2 on RP743818	2.018 ha
Lot 277 on NR5780	6.981 ha
Lot 427 on NR5780	2.106 ha
Lot 401 (pt) on NR5959	4.878 ha

USL to be added to Lot 4 on RP854510

Lot 247 on C19846	Abt. 6.891 ha
Part of Lot 305 on NR3659	Abt. 4060m²
Lot 19 on USL9650	Abt. 1800m²
Part of Ah-Bow's Creek (g-h-v-w-x-y-z-e-f-g)	Abt. 1.15 ha

Total Area to be added to Lot 4 on RP854510

(11-11a-12-13-14-15-17-23-28-30-33-38-54-48-Riv-q-62-p-o-o'-11) Abt. 41.23 ha

Road to be closed

(38-43-48-53-k-j-i-38) 4.915 ha

Area to be excised from Lot 4 on RP854510

(q-63a-HWM-q) 986m²

MGA-94 derived by connection from OPM 90179 to OPM 110177 bearing 95°25'11" for 1916.645.

Branded peg placed at stns 24,28,29,41-43,48 & 51-55.
Survey Post branded (Δ5) placed at stns 44-47.
Cen GIFP at stns 30-40.

Original information compiled from RP731798 in the Department of Natural Resources and Mines.

Plan Number: SP146888

0 50mm 100mm 150mm

CURRENT TITLE SEARCH

ENVIRONMENT AND RESOURCE MANAGEMENT, QUEENSLAND

Request No: 8535261
Search Date: 08/02/2010 10:07

Title Reference: 21252190
Date Created: 27/07/1984

Previous Title: 21233162

REGISTERED OWNER

Dealing No: 711979884 10/10/2008

QUEENSLAND AIRPORT HOLDINGS (CAIRNS) PTY LTD
A.C.N. 132 228 570

ESTATE AND LAND

Estate in Fee Simple

LOT 1 REGISTERED PLAN 736304
County of NARES Parish of CAIRNS
Local Government: CAIRNS

EASEMENTS, ENCUMBRANCES AND INTERESTS

1. Rights and interests reserved to the Commonwealth by Conveyance No. 601073104 (T146594) (Lot 1 on CP 736304)

2. LEASE No 601073098 (T645382P) 11/12/1992
   OF PART OF THE LAND
   TO CATERAIR AIRPORT SERVICES PTY LTD
   COMMENCING 24 JAN 1991
   TERMINATING 23 JAN 2016

3. TRANSFER No 601073099 (T645384V) 11/12/1992
   IN LEASE NO T645382P
   TO AIRPORT INFRASTRUCTURE FINANCE PTY LTD

4. MORTGAGE No 601073100 (T645386B) 11/12/1992
   TO NIPPON CREDIT AUSTRALIA LIMITED
   OVER LEASE NO T645382P

5. TRANSFER No 702449226 14/01/1998 at 11:16
   MORTGAGE: 601073100 (T645386B)
   BANK OF WESTERN AUSTRALIA LTD A.C.N. 050 494 454

6. LEASE No 601006512 (T755293E) 15/04/1994 at 09:02
   TO
   CAIRNS AIRPORT HANGARS PTY. LTD.
   OF PART OF THE LAND (LEASE A)
   TERM: 01/11/1992 TO 31/10/2010 OPTION NIL

7. AMENDMENT No 702904886 17/09/1998 at 12:42
   LEASE: 601006512 (T755293E)

CURRENT TITLE SEARCH

ENVIRONMENT AND RESOURCE MANAGEMENT, QUEENSLAND

Request No: 8535261
Search Date: 08/02/2010 10:07 **Title Reference: 21252190**
Date Created: 27/07/1984

EASEMENTS, ENCUMBRANCES AND INTERESTS

8. AMENDMENT No 708909519 19/08/2005 at 10:40
   LEASE: 601006512 (T755293E)

9. AMENDMENT OF LEASE No 709394560 27/02/2006 at 10:27
   LEASE: 601006512 (T755293E)
   TERM: 01/11/1992 TO 31/10/2017 OPTION NIL

10. SUB LEASE No 709662768 07/06/2006 at 14:20
    LEASE: 601006512 (T755293E)
    LEASE: 702957082
    MAS PROPERTIES PTY LTD A.C.N. 116 155 081 TRUSTEE
    UNDER INSTRUMENT NO.709662768
    OF PART OF THE LAND [LEASE A9]
    TERM: 28/02/2006 TO 30/10/2017 OPTION NIL

11. TRANSFER No 712684876 25/08/2009 at 13:22
    SUB LEASE: 709662768
    SUB LEASE: 709662812
    STEVEN EDWIN SPINAZE TRUSTEE
    UNDER INSTRUMENT 712684876

12. MORTGAGE No 712684877 25/08/2009 at 13:22
    NATIONAL AUSTRALIA BANK LIMITED A.B.N. 12 004 044 937
    over
    SUB LEASE: 709662768
    SUB LEASE: 709662812

13. SUB LEASE No 709662812 07/06/2006 at 14:24
    LEASE: 601006512 (T755293E)
    LEASE: 702957082
    MAS PROPERTIES PTY LTD A.C.N. 116 155 081 TRUSTEE
    UNDER INSTRUMENT NO.709662812
    OF PART OF THE LAND [LEASE A8]
    TERM: 28/02/2006 TO 30/10/2017 OPTION NIL

14. SUB LEASE No 711022141 24/09/2007 at 09:10
    LEASE: 601006512 (T755293E)
    LEASE: 702957082
    MAS PROPERTIES PTY LTD A.C.N. 116 155 081 TRUSTEE
    UNDER INSTRUMENT 711022141
    OF LEASE A101 AND A103 ON SP196707 AND OF PART OF THE
    BUILDING (LEASE A102)
    TERM: 22/11/2006 TO 30/10/2017 OPTION NIL

15. LEASE No 702177101 27/08/1997 at 11:09
    TELSTRA CORPORATION LIMITED A.C.N. 051 775 556
    OF PART OF THE LAND AS SHOWN IN SKETCH

CURRENT TITLE SEARCH

ENVIRONMENT AND RESOURCE MANAGEMENT, QUEENSLAND

Request No: 8535261
Search Date: 08/02/2010 10:07

Title Reference: 21252190
Date Created: 27/07/1984

EASEMENTS, ENCUMBRANCES AND INTERESTS

16. AMENDMENT No 703972462 03/04/2000 at 12:23
LEASE: 702177101

17. LEASE No 702835992 11/08/1998 at 11:48
CAIRNS AIRPORT HANGARS PTY LTD A.C.N. 057 166 202
OVER PART OF THE LAND

18. TRANSFER No 703044115 03/12/1998 at 15:17
LEASE: 702835992
STATE OF QUEENSLAND (REPRESENTED BY THE DEPARTMENT OF POLICE)

19. AMENDMENT No 703233048 18/03/1999 at 11:58
LEASE: 702835992
TO INCLUDE A FIVE YEAR OPTION.

20. LEASE No 702957082 16/10/1998 at 12:52
CAIRNS AIRPORT HANGARS PTY LTD A.C.N. 057 166 202
OVER PART OF THE LAND.

21. LEASE No 702957086 16/10/1998 at 12:54
CAIRNS AIRPORT HANGARS PTY LTD A.C.N. 057 166 202
OVER PART OF THE LAND.

22. LEASE No 704117994 20/06/2000 at 12:24
COMMONWEALTH OF AUSTRALIA
OVER LEASE D ON SP122856

23. LEASE No 704737023 03/05/2001 at 08:24
AIRCRAFT TURNAROUND ENGINEERING PTY LTD A.C.N. 062 287 870

OVER LEASE K ON SP132573

24. MORTGAGE No 712726600 14/09/2009 at 11:27
NATIONAL AUSTRALIA BANK LIMITED A.B.N. 12 004 044 937
over
LEASE: 704737023

25. LEASE No 705185869 14/11/2001 at 11:10
COMMONWEALTH OF AUSTRALIA
OVER LEASE E ON SP122857

26. AMENDMENT No 708301328 16/12/2004 at 16:04
LEASE: 705185869

27. LEASE No 705382449 06/02/2002 at 15:37
AIR NIUGINI PTY LIMITED A.C.N. 076 725 034
OF PART OF THE SECOND FLOOR.(

CURRENT TITLE SEARCH

ENVIRONMENT AND RESOURCE MANAGEMENT, QUEENSLAND

Request No: 8535261
Search Date: 08/02/2010 10:07

Title Reference: 21252190
Date Created: 27/07/1984

EASEMENTS, ENCUMBRANCES AND INTERESTS

28. LEASE No 705908109 28/08/2002 at 15:53
QANTAS AIRWAYS LIMITED A.C.N. 009 661 901
OF PARTS OF THE SECOND FLOOR

29. LEASE No 706160889 29/11/2002 at 16:04
CIVIL AVIATION SAFETY AUTHORITY
OVER LEASE P ON SP146887

30. LEASE No 707088889 15/10/2003 at 15:28
CAIRNS AVIATION SKILLS CENTRE LIMITED A.C.N. 102 332 883
OVER LEASE U ON SP154887

31. LEASE No 707492953 19/02/2004 at 15:29
BUDGET RENT A CAR AUSTRALIA PTY LTD A.C.N. 007 348 021
OVER LEASE Q ON SP146895

32. LEASE No 708738508 15/06/2005 at 16:10
HAWKER PACIFIC PTY LTD A.C.N. 001 540 316
OF LEASE AX ON SP154889

33. MORTGAGE No 710591907 17/05/2007 at 09:06
AUSTRALIA AND NEW ZEALAND BANKING GROUP LIMITED A.C.N. 005 357 522
over
LEASE: 708738508
IDENTIFYING MORTGAGE 710563572 RECORDED 14 MAY 2007

34. LEASE No 709026681 04/10/2005 at 11:13
WTH PTY LTD A.C.N. 000 165 855
OVER LEASE BG ON SP154891

35. AMENDMENT OF LEASE No 710172004 11/12/2006 at 10:39
LEASE: 709026681
TERM: 01/09/2004 TO 30/06/2017 OPTION NIL

36. LEASE No 709721327 28/06/2006 at 10:34
CAIRNS AIRPORT HANGARS PTY LTD A.C.N. 057 166 202
OVER LEASE AZ ON SP154897
TERM: 01/12/2005 TO 31/10/2017 OPTION NIL

37. LEASE No 709839205 09/08/2006 at 10:42
WATERLOO CAR CENTRE PTY LTD A.C.N. 003 616 420
OVER LEASE BC ON SP154895.
TERM: 1 MAY 2006 TO 30 APRIL 2016 OPTION 1 X 5 YEARS

CURRENT TITLE SEARCH

ENVIRONMENT AND RESOURCE MANAGEMENT, QUEENSLAND

Request No: 8535261
Search Date: 08/02/2010 10:07

Title Reference: 21252190
Date Created: 27/07/1984

EASEMENTS, ENCUMBRANCES AND INTERESTS

38. LEASE No 711797858 17/07/2008 at 08:15
TOLL TRANSPORT PTY LIMITED A.C.N. 006 604 191
OF LEASE XA ON SP199199
TERM: 01/07/2007 TO 30/06/2012 OPTION 5 YEARS

39. LEASE No 711954724 30/09/2008 at 14:12
CATHAY PACIFIC AIRWAYS LIMITED A.C.N. 000 479 514
OF PART OF THE GROUND FLOOR (LEASE U)
TERM: 01/03/2007 TO 28/02/2012 OPTION NIL

40. LEASE No 712292486 20/03/2009 at 13:06
NORTH QUEENSLAND AIRPORTS NO.1 PTY LIMITED A.C.N. 134 137 232 TRUSTEE
UNDER INSTRUMENT NO. 712292486
THE WHOLE OF THE LAND
TERM: 14/01/2009 TO 13/01/2108 OPTION NIL
THIS LEASE IS CONCURRENT WITH ALL PRIOR REGISTERED LEASES

41. SUB LEASE No 712292490 20/03/2009 at 13:08
LEASE: 712292486
CAIRNS AIRPORT PTY LTD A.C.N. 132 228 221
THE WHOLE OF THE LAND
TERM: 14/01/2009 TO 12/01/2108 OPTION NIL
THIS SUB-LEASE IS CONCURRENT WITH ALL PRIOR REGISTERED LEASES

42. MORTGAGE No 712292499 20/03/2009 at 13:12
WESTPAC BANKING CORPORATION A.B.N. 33 007 457 141
over
SUB LEASE: 712292490

43. SUB LEASE No 712821540 27/10/2009 at 10:41
SUB LEASE: 712292490
CLA TRADING PTY LTD A.C.N. 082 220 399
OF LEASE BA ON SP154895
TERM: 01/04/2009 TO 31/03/2019 OPTION NIL

44. MORTGAGE No 712605272 20/07/2009 at 11:47
WESTPAC BANKING CORPORATION A.B.N. 33 007 457 141
over
LEASE: 712292486

ADMINISTRATIVE ADVICES - NIL

UNREGISTERED DEALINGS

Dealing	Type	Lodgement Date	Status
712770794	SUB LEASE	05/10/2009 10:21	UNVERIFIED
713017792	AMEND LEASE	27/01/2010 10:34	UNVERIFIED

CURRENT TITLE SEARCH

ENVIRONMENT AND RESOURCE MANAGEMENT, QUEENSLAND

Request No: 8535261
Search Date: 08/02/2010 10:07

Title Reference: 21252190
Date Created: 27/07/1984

CERTIFICATE OF TITLE ISSUED - No

Caution - Charges do not necessarily appear in order of priority

** End of Current Title Search **

Requested By: D APPLICATIONS CITEC CONFIRM

77 K1/438
W.D.K. 15·2·82

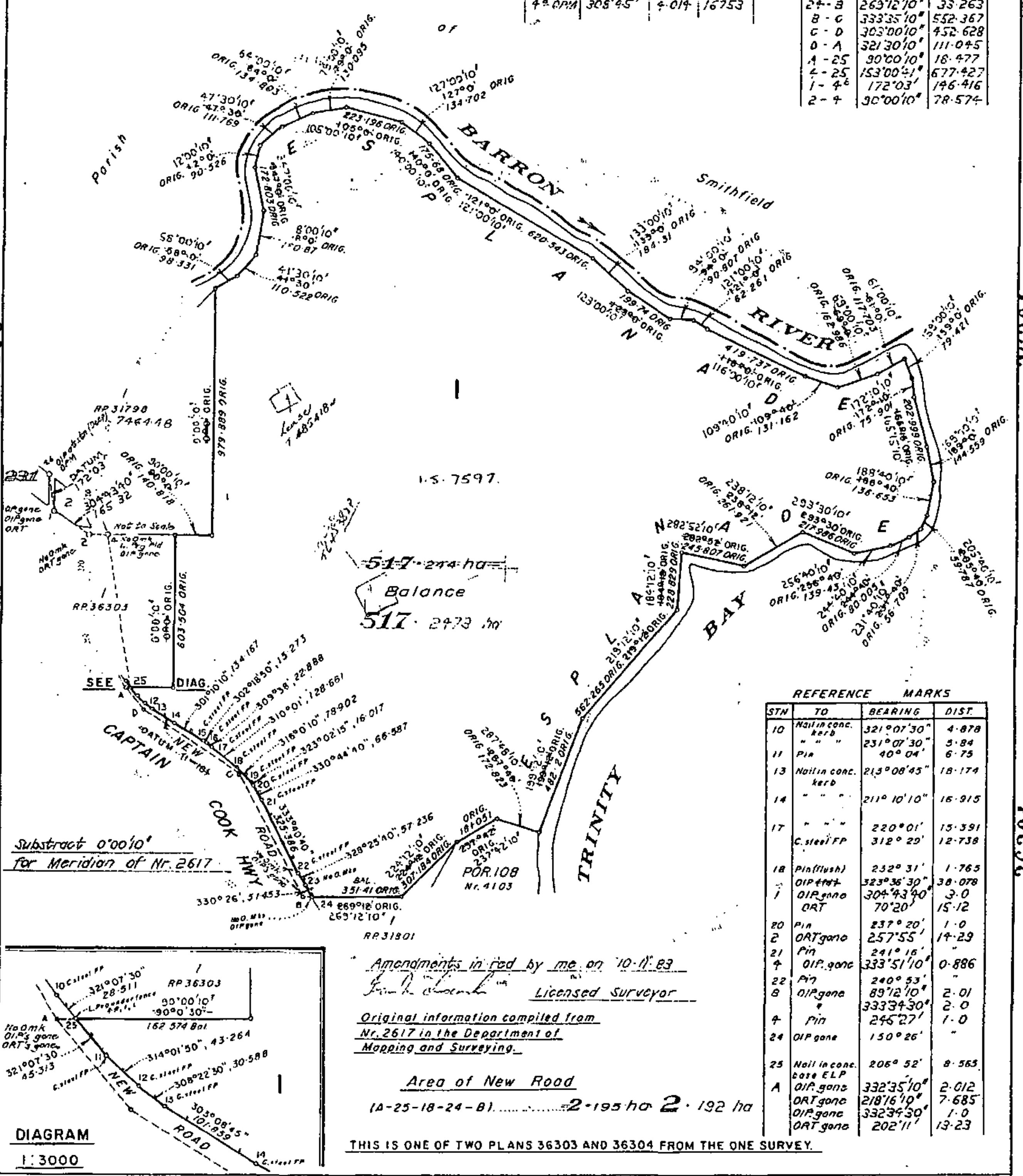
WARNING—FOLDING OR MUTILATING WILL LEAD TO REJECTION—PLAN MAY BE ROLLED

PERMANENT MARKS

4⁶ OPM	308°45'	4·014	16753

TRAVERSES

24 - B	263°12'10"	33·263
B - C	333°35'10"	552·367
C - D	303°00'10"	452·628
D - A	321°30'10"	111·045
A - 25	90°00'10"	16·477
4 - 25	153°00'41"	677·427
1 - 4⁶	172°03'	146·416
2 - 4	90°00'10"	78·574



Amendments in red by me on 10·11·83

Licensed Surveyor

Original information compiled from Nr. 2617 in the Department of Mapping and Surveying.

Area of New Road

(A-25-18-24-B) .... ~~2·195 ha~~ 2·192 ha

REFERENCE MARKS

STN	TO	BEARING	DIST.
10	Nail in conc. kerb	321°07'30"	4·878
	" " "	231°07'30"	5·84
11	Pin	40°04'	6·75
13	Nail in conc. kerb	213°08'45"	18·174
14	" " "	211°10'10"	16·915
17	" " "	220°01'	15·391
	C. steel FP	312°29'	12·738
18	Pin (flush)	232°31'	1·765
	OIP ~~flat~~	323°36'30"	38·078
1	OIP gone	304°43'40"	3·0
	ORT	70°20'	15·12
20	Pin	237°20'	1·0
2	ORT gone	257°55'	14·29
21	Pin	241°16'	"
4	OIP gone	333°51'10"	0·886
22	Pin	240°53'	"
B	OIP gone	89°12'10"	2·01
	"	333°34'30"	2·0
4	Pin	245°27'	1·0
24	OIP gone	150°26'	"
25	Nail in conc. base ELP	206°52'	8·565
A	OIP gone	332°35'10"	2·012
	ORT gone	218°16'10"	7·685
	OIP gone	332°34'30"	1·0
	ORT gone	202°11'	13·23

THIS IS ONE OF TWO PLANS 36303 AND 36304 FROM THE ONE SURVEY.

FIELD NOTES LODGED 36304

LINES NOT SURVEYED | STNS

CORNERS NOT MARKED | STNS

ORIGINAL PORTION 81

ORIGINAL GRANT N 51739 Vol 345 Fol 39

PLAN OF Lot 1

Cancelling Portion 81 on Nr. 2617.

TOWN

PARISH CAIRNS

COUNTY Nares

MAP REF. 1:2500 8064-3211

PROCLAIMED SURVEY AREA

SURVEYED BY D.R. MICHAEL 4.11.81

MERIDIAN

SCALE 1:12 500

REGISTERED PLAN 36304

M.R.D. File No. 154/20A/134

CISP

PLAN MUST BE DRAWN WITHIN BLUE LINES

36304

WARNING—FOLDING OR MUTILATING WILL LEAD TO REJECTION—PLAN MAY BE ROLLED

Nº 75531

CERTIFICATE

I, Donald Robert MICHAEL hereby certify that I have surveyed the land comprised in this plan personally

that the plan is accurate, that the said survey was performed in accordance with the 'Surveyors Act 1977' and the 'Surveyors Regulations 1978' and that the said survey was completed on 9.11.81

Signature of Licensed Surveyor.

Date 31-5-82

Council of the CITY of CAIRNS certifies that all the requirements of this Council, the Local Government Acts of 1936 to 1982 and all By-Laws have been complied with and approves the Plan of Subdivision.

Dated this 9th day of November 1982

Mayor or Chairman

A/Town or Shire Clerk

I/We THE COMMONWEALTH OF AUSTRALIA (Names in full) as proprietor/s of this land, agree to this Plan and dedicate the new roads shown hereon to public use.

Signature of Proprietor/s

Council of the CITY of CAIRNS certifies that all the requirements of this Council, the Local Government Acts of 1936 to 1983 and all By-Laws have complied with and re-approves this Plan of Subdivision.

DATED this 6th day of JUNE, 1983.

A/ MAYOR

TOWN CLERK

FOR TITLES OFFICE USE ONLY

Previous Title

New C.T. Ref.

(Ref Sub.	Vol.	Fol.
1		

For Additional Plan & Document Notings Refer to CISP

NEW TITLE Vol. Fol.

Lodged by

Deputy Crown Solicitor

Fees Payable

Postal fee and Postage
Lodgt, Exam. & Ass.
Entd. on Docs.
New Title
Entd. on Deeds
Photo Fee
Total
Short Fees Paid

Received Registrar of Titles

Journal No. T102222

Receipt No. 18885

TITLES RECEIVED AUG 5 3 55 PM '83

Calc. Bk. No. 142/176
Examined 13/12/83
Passed 19/12/83
Charted / /
Map Ref.

3 JAN 1984

Particulars entered in Register Book Vol. 3145 Folio 37

at 11.26 am

22 DEC 1983

REGISTRAR OF TITLES

REGISTERED PLAN 36304

CURRENT TITLE SEARCH

ENVIRONMENT AND RESOURCE MANAGEMENT, QUEENSLAND

Request No: 8535262
Search Date: 08/02/2010 10:07

Title Reference: 50526064
Date Created: 09/11/2004

Previous Title: 40045353

REGISTERED OWNER

Dealing No: 711979884 10/10/2008

QUEENSLAND AIRPORT HOLDINGS (CAIRNS) PTY LTD
A.C.N. 132 228 570

ESTATE AND LAND

Estate in Fee Simple

LOT 4 SURVEY PLAN 146888
County of NARES Parish of CAIRNS
Local Government: CAIRNS

EASEMENTS, ENCUMBRANCES AND INTERESTS

1. Rights and interests reserved to the Crown by
   Deed of Grant No. 20104156 (ALLOT 4 SUBN SEC 151)
   Deed of Grant No. 20104157 (ALLOT 3 SUBN SEC 151)
   Deed of Grant No. 20726080 (POR 487)
   Deed of Grant No. 20889121 (POR 248)
   Deed of Grant No. 20931242 (POR 277)

2. Rights and interests reserved to the Commonwealth by
   Conveyance No. 601073104 (T146594) (Lot 1 on RP 746448)

3. EASEMENT IN GROSS No 601408785 (N491501) 03/05/1963
   BURDENING THE LAND
   TO COUNCIL OF THE CITY OF CAIRNS
   OVER EASEMENT A ON RP718728
   UNDER SECTION 285 OF THE LAND ACT

4. LEASE No 702884513 07/09/1998 at 14:56
   THE COMMONWEALTH OF AUSTRALIA
   OVER PART OF THE LAND.

5. LEASE No 711169846 12/11/2007 at 10:41
   BP AUSTRALIA PTY LIMITED A.C.N. 004 085 616
   OF LEASE D ON SP154902
   TERM: 01/01/2007 TO 31/12/2021 OPTION 5 YEARS

CURRENT TITLE SEARCH

ENVIRONMENT AND RESOURCE MANAGEMENT, QUEENSLAND

Request No: 8535262
Search Date: 08/02/2010 10:07 **Title Reference: 50526064**
Date Created: 09/11/2004

EASEMENTS, ENCUMBRANCES AND INTERESTS

6. LEASE No 712292486 20/03/2009 at 13:06
   NORTH QUEENSLAND AIRPORTS NO.1 PTY LIMITED A.C.N. 134 137 232 TRUSTEE
   UNDER INSTRUMENT NO. 712292486
   THE WHOLE OF THE LAND
   TERM: 14/01/2009 TO 13/01/2108 OPTION NIL
   THIS LEASE IS CONCURRENT WITH ALL PRIOR REGISTERED LEASES

7. SUB LEASE No 712292490 20/03/2009 at 13:08
   LEASE: 712292486
   CAIRNS AIRPORT PTY LTD A.C.N. 132 228 221
   THE WHOLE OF THE LAND
   TERM: 14/01/2009 TO 12/01/2108 OPTION NIL
   THIS SUB-LEASE IS CONCURRENT WITH ALL PRIOR REGISTERED LEASES

8. MORTGAGE No 712292499 20/03/2009 at 13:12
   WESTPAC BANKING CORPORATION A.B.N. 33 007 457 141
   over
   SUB LEASE: 712292490

9. MORTGAGE No 712605272 20/07/2009 at 11:47
   WESTPAC BANKING CORPORATION A.B.N. 33 007 457 141
   over
   LEASE: 712292486

ADMINISTRATIVE ADVICES - NIL
UNREGISTERED DEALINGS - NIL

CERTIFICATE OF TITLE ISSUED - No

Caution - Charges do not necessarily appear in order of priority

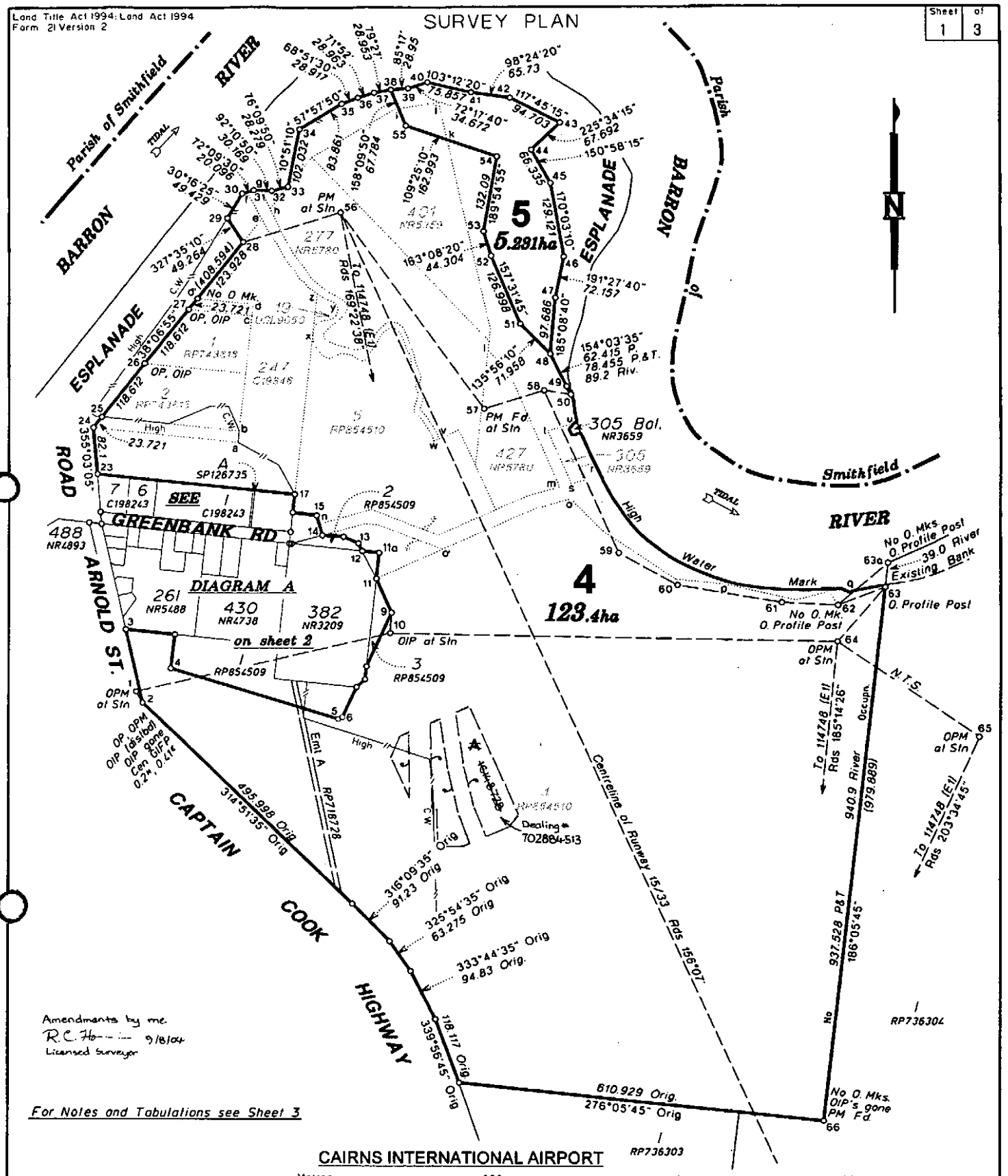
** End of Current Title Search **

Requested By: D APPLICATIONS CITEC CONFIRM

Land Title Act 1994: Land Act 1994
Form 21 Version 2

SURVEY PLAN

Sheet 1 of 3



Amendments by me.
R.C. Harris 9/8/04
Licensed Surveyor

I, Robert Charles HARRIS hereby certify that I have surveyed the land comprised in this plan personally and that the plan is accurate, that the said survey was performed in accordance with the Surveyors Act 1977 and the Surveyors Regulation 1992 and that the said survey was completed on 09/05/02.

R.C. Harris
Licensed Surveyor

Date 14/05/02

Metres 0 300 600 900

Plan of Lots 4 & 5

Cancelling Lots 4 & 5 on RP854510, Lots 1 & 2 on RP743818, Lots 277 & 427 on NR5780, Lot 401 on NR5959, USL (being Lot 19 on USL9650, Lot 247 on C19846 & Part of Lot 305 on NR3659), Part of USL (being part of Ah-Bow's Creek) and Part of USL (being Closed Roads).

PARISH CAIRNS COUNTY Nares

Meridian: MGA '94 ZONE 55

F/N's: Yes

Scale: 1:6000

Format: STANDARD

SP146888

Plan Status:

...\RPPlans\airport\SP146888.dgn 31/05/2002 09:31:27 AM

707926950

NO FEE
27/07/2004 16:35

CS 495

WARNING: Folded or Mutilated Plans will not be accepted.
Plans may be rolled.
Information may not be placed in the outer margins.

Registered

5. Lodged by
DEANNA HOLDER
NRM+E
PO BOX 94
INNISFAIL Q 4860
PH: 40611446
REF. CNS/009151

495

(Include address, phone number, reference, and Lodger Code)

1. Certificate of Registered Owners ~~or Lessees.~~

I/We CAIRNS PORT AUTHORITY

(Names in full)

* as Registered Owners of this land agree to this plan and dedicate the Public Use Land as shown hereon in accordance with Section 50 of the Land Title Act 1994.

~~* as Lessees of this land agree to this plan.~~

Signature of *Registered Owners ~~*Lessees~~

8/5/04

Clive Henry SKAROTT
Chairman

~~Neil Patrick QUINN~~ Bradley William GEATCHES
Chief Executive Officer ~~Acting~~

Who certify they are the proper officers to affix the seal. Date 2/4/04

Approved
Q Ashley
Susan Ashley
A/Senior Land Officer
Delegate of the Minister for
Natural Resources and Minister
Mines and Energy
30/4/2004

*Rule out whichever is inapplicable

2. Local Government Approval.

hereby approves this plan in accordance with the :
%

Dated this ..... day of .....

.....#

.....#

* insert the name of the Local Government. % Insert Integrated Planning Act 1997 or
# insert designation of signatory or delegation Local Government (Planning & Environment) Act 1990

3. Plans with Community Management Statement:
CMS Number :
Name :

4. References
Dept. File : CNS/009151, CNS/008938, CNS/010524
Local Govt :
Surveyor : FB 19/69-117

6.

Existing			Created		
Title Reference	Lot	Plan	Lots	Emts	Road
50117235	4	RP854510	4		
50117236	5	RP854510	4		
21403138	1	RP743818	4		
21403137	2	RP743818	4		
20931242	277	NR5780	4		
49019149	401	NR5959	485		
49001684	427	NR5780	4		
USL (Closed Road)	Undescribed	Area	485		
USL (Part of - Ah-Bow's Creek)	Undescribed	Area	4		
USL	19	USL9650	4		
USL	247	CI9846	4		
USL	305pt.	NR3659	4		

Note: Reserve 666 over Lot 427 on NR5780 and Reserve 2060 over Lot 401 on NR5959 are to be revoked prior to issue of deed.

EASEMENT ALLOCATION

Easement	Lots to be burdened
601408785	4

EXISTING LEASE ALLOCATION

Lease	Lots to be Encumbered
702884513	4

Orig	Lots
USL (Closed Road)	485
USL (Ah-Bow's Creek)	4
USL (Lot 305pt. on NR3659)	4
USL (Lot 247 on CI9846)	4
USL (Lot 19 on USL9650)	4
Por 550 on NR595	4
Por 487 on NR4749	4
Por 427 on NR5780	4
Por 401 on NR5959	485
Por 277 on NR5780	4
Por248 on NR5616	4
Por 86 on NR3511	4
Allot. 4 of Sec 151 on CI9846	4
Allot. 3 of Sec 151 on CI9846	4

7. Portion Allocation :

8. Map Reference :
8064 - 31222
8064 - 32111

9. Locality :
CAIRNS AIRPORT
(STRATFORD & AEROGLEN)

10. Local Government :
CAIRNS CITY COUNCIL

11. Passed & Endorsed :
By : Dept. of Natural Resources & Mines
Date : 31 May 2002
Signed :
Designation : Registered Surveyor

FB No.: | Initials: SCN
CPA DRG No.: SP146888.dgn

12. Building Format Plans only.
I certify that :
* As far as it is practical to determine, no part of the building shown on this plan encroaches onto adjacent lots or road:
* Part of the building shown on this plan encroaches onto adjoining* lots and road

Licensed Surveyor/Director * Date
* delete words not required

13. Lodgement Fees :

Survey Deposit	$
Lodgement	$
New Titles	$
Photocopy	$
Postage	$
TOTAL	$

14. Insert Plan Number **SP146888**

...\RPPlans\airport\SP146888.dgn 31/05/2002 09:33:52 AM

Land Title Act 1994; Land Act 1994
Form 21A Version 1

ADDITIONAL SHEET

Sheet 2 of 3

DIAGRAM B
SCALE 1:1000

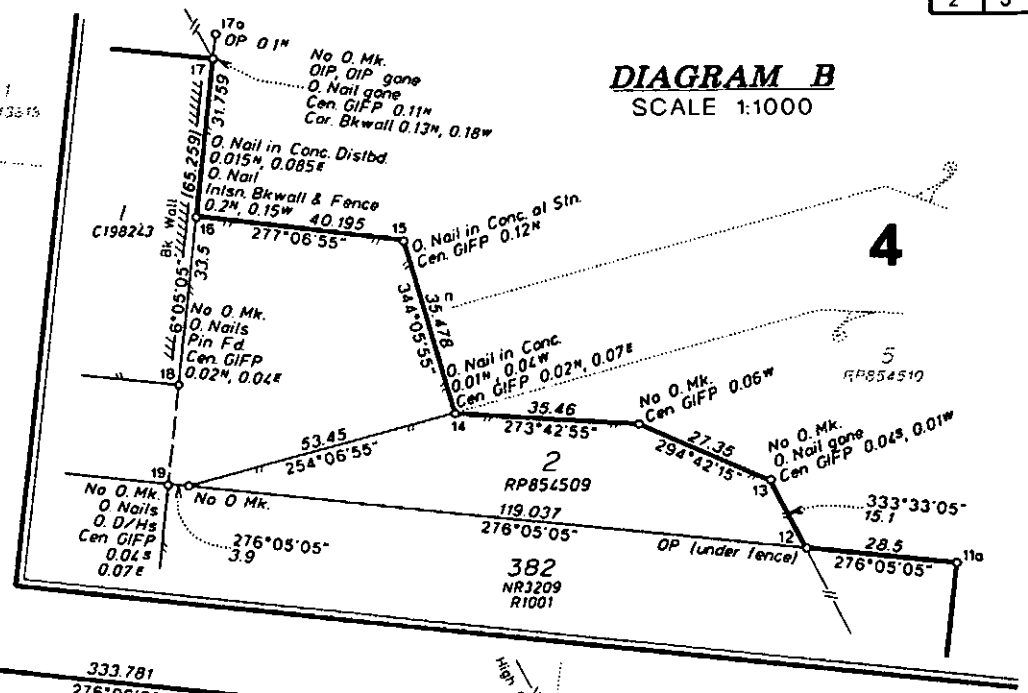


DIAGRAM A
SCALE 1:2000

0 50mm 100mm 150mm

Plan Number:
SP146888

\RPPlans\eliport\SP146888.dgn 30/05/2002 04:37:02 PM

Land Title Act 1994; Land Act 1994
Form 21A Version 1

ADDITIONAL SHEET

Sheet 3 of 3

PERMANENT MARKS

PM	ORIGIN	BEARING	DISTANCE	NUMBER	
1-OPM	SP126735	At	Stn	90179	
2-OPM	IS148741	341°14'50"	34.715	90179	Rec. C
25-OPM	RP743818	306°17'55"	1.066	54859	
56-PM		At	Stn	145356	
57-PM Fd		At	Stn	89774	
64-OPM	IS148732	At	Stn	89810	
65-OPM	CPA 6-1-6003	At	Stn	110177	
66-PM Fd		336°07'20"	62.132	85290	

M.G.A. CO-ORDINATES (GDA-94)

STATION	EASTING	NORTHING	ZONE	ORDER	CLASS
OPM 90179	365 744.263	8134 188.761	55	1	A
OPM 110177	367 651.995	8134 007.769	55	2	B

TRAVERSES, ETC.

LINE	BEARING	DISTANCE
1-2	149°57'20"	22.99
1-10	76°20'20"	438.217
5-5a	107°34'25"	5.0
5a-6	24°10'05"	5.0
9-10	183°42'50"	35.297
10-64	91°02'46"	747.078
11-12	333°33'05"	52.976
17-17a	6°05'05"	10.0
18-19	186°05'05"	20.117
20-21	276°06'05"	21.284
20-22	355°03'05"	20.499
28-56	72°35'30"	171.187
50-58	279°14'	45.155
56-57	144°30'40"	417.32
57-58	72°15'55"	105.263
58-59	156°07'	309.016
59-60	119°25'	112.313
60-61	99°39'15"	175.962
61-62	93°03'05"	92.498
62-63	68°30'	83.685
62-63a	48°31'45"	109.918
63-64	219°58'10"	122.014
64-65	110°13'25"	783.613

LINE PEGS

STN	BEARING	DISTANCE
49-Post	At	Stn
50-LP	At	Stn
63-LP	At	Stn

REFERENCE MARKS

STN	TO	ORIGIN	BEARING	DISTANCE	
2	OIP (0.03E, 0.05N)	RP731798	347°14'55"	1.0	
2	OIP gone	IS148741	167°14'55"	1.0	
3	OIP	C198345	347°14'05"	1.006	
3	OIP Distd.	RP854509	273°18'30"	1.0	New Ref.
3	Spike in bitumen		260°08'20"	7.512	
4	O. Spike in bitumen	IS148741	189°42'	6.806	
4	O. S.Pkt in Conc. Collar	IS148741	133°47'10"	62.627	
5	O. Nail in bitumen	IS148728	151°08'	15.567	
6	OIP in bitumen	IS148728	133°0'	30.814	
7	OIP	RP854509	159°33'	1.215	New Ref.
8	OIP	RP854509	185°44'	1.05	New Ref.
9	Pin		81°59'	0.97	
10	OIP (flush) "APC 6"	IS148728	At	Stn.	
11	OIP	RP854509	6°05'25"	0.96	
11	O. Alum. Plug in Conc.	IS148728	350°47'	14.245	
13	O. Nail in Conc. gone	RP854509	331°39'55"	15.9	
13	Pin		305°27'	1.03	
14	Pin		37°01'	1.447	
15	Pin		117°13'	2.115	
16	O. Nail in kerb	RP854509	120°02'	19.639	New Ref.
17	OIP	NR6495	6°05'05"	1.483	
17	Pin		88°10'	2.064	
17	Cor. Brick Wall		312°45'	0.223	
17	OIP gone	SP126735	270°38'05"	0.666	
17	O. Nail in Conc. gone	SP126735	225°19'45"	17.27	
18	O. Nail in bitumen	SP126735	75°52'05"	25.18	
18	O. Nail in Bitumen	SP131155	185°56'30"	7.457	New Conn.
18	Pin Fd. in bitumen		167°29'	9.15	
19	O. D/Hole in Conc.	SP131155	262°15'05"	3.995	
19	O. D/Hole in Kerb	SP131155	338°59'05"	4.35	
19	O. Nail in bitumen	IS148741	348°15'	8.488	
19	O. Nail in bitumen	SP131155	6°10'05"	12.66	
19	Spike in bitumen		8°49'20"	7.34	
20	O. Nail in bitumen	IS148741	320°24'30"	18.122	
21	OIP (0.5 deep)	NR4893	At	Stn.	
21	O. D/Hole in Kerb	SP131155	79°00'05"	2.625	
21	O. Bolt in bitumen	CP869454	48°00'05"	15.495	
22	O. Nail in bitumen	IS148741	280°42'	13.616	
22	O. Nail in bitumen	SP126735	258°07'05"	15.81	
22	O. Spike in bitumen	SP126735	249°50'05"	18.205	
22	Spike in bitumen		233°35'30"	12.513	
23	OIP (1.3m deep)	NR6495	175°03'05"	1.0	
23	O. Nail in bitumen	SP126735	275°28'	16.945	New Ref.
23	O. Nail in bitumen	SP126735	285°44'	17.862	New Ref.
23	Spike in bitumen		283°06'30"	13.763	
24	Pin		42°33'	0.99	
24	Spike in bitumen		240°36'	16.803	
25	OIP	RP743818	218°06'55"	1.179	
26	OIP	RP743818	308°06'55"	1.0	
26	Spike in bitumen		293°30'45"	17.011	
27	OIP	RP743818	38°06'55"	1.179	
27	Spike in bitumen		306°06'	24.452	
28	Pin		327°35'10"	0.887	
28	Spike in bitumen		253°04'	54.5	
29	Spike in bitumen		147°35'10"	4.032	
30	Pin		146°16'	1.04	
33	Spike in bitumen		191°17'40"	7.9	
34	Alum. Plug in Conc.		99°20'	3.745	
35	Pin		152°02'	1.54	
38	Pin		172°48'	1.46	
40	Pin		152°51'	0.93	
41	Pin		180°44'	0.882	
42	Pin		193°47'	1.537	
43	Pin		257°24'	1.836	
48	Pin		320°14'	1.93	
51	Spike in bitumen		249°15'	7.483	
51	Alum. Plug in Conc.		257°59'	18.605	
52	Spike in bitumen		249°35'	7.79	
53	Spike in bitumen		187°17'10"	24.518	
54	Pin		258°23'	1.797	
58	Spike in bitumen		At	Stn.	
58	Spike in bitumen	"BM167"	126°25'	7.14	
59	Spike in bitumen		At	Stn.	
59	Bank Profile Post "SEC 10"		107°11'45"	53.15	
59	Pin Fd. in Rock		86°05'10"	66.352	
60	Spike in bitumen		At	Stn.	
60	Bank Profile Post		0°09'	9.89	
61	Spike in bitumen		At	Stn.	
61	Bank Profile Post		3°24'	9.22	
62	O. Bank Profile Post "SEC 05"	IS148732	42°0'	21.583	
62	Alum. Plug in Rock		22°40'30"	31.152	
63	O. Bank Profile Post "SEC 04"	IS148732	197°57'45"	34.72	New Conn.
63	Spike in bitumen		186°05'45"	47.018	
63a	O. Bank Profile Post "SEC 04"	IS148732	191°26'20"	76.671	
66	OIP gone	NR2617	6°05'45"	2.012	
66	OIP gone	NR2617	276°05'45"	2.012	

Road to be closed and added to Lot 4 on RP854510

(24-25-b-a-24)	4796m²
(27-d'-d-c-27)	2014m²
(28-30-f-e-28)	2667m²
(h-g-32-33-38-i-h)	1.084 ha
(k-54-48-Riv-u-l-s-r-Riv-q-62-p-o-o'-14-n-m-l-k)	5.423 ha

Area to be added to Lot 4 on RP854510

Lot 5 on RP854510	7.9554 ha
Lot 1 on RP743818	1.886 ha
Lot 2 on RP743818	2.018 ha
Lot 277 on NR5780	6.981 ha
Lot 427 on NR5780	2.106 ha
Lot 401 (pt) on NR5959	4.878 ha

USL to be added to Lot 4 on RP854510

Lot 247 on C19846	Abt. 6.881 ha
Part of Lot 305 on NR3659	Abt. 4060m²
Lot 19 on USL9650	Abt. 1300m²
Part of Ah-Bow's Creek (q-h-v-w-x-y-z-e-f-q)	Abt. 1.18 ha

Total Area to be added to Lot 4 on RP854510

(11-11a-12-13-14-15-17-23-28-30-33-38-54-48-Riv-q-62-p-o-o'-11)	Abt. 41.23 ha

Road to be closed

(38-43-48-53-k-j-i-38)	4.015 ha

Area to be excised from Lot 4 on RP854510

(q-63a-HWM-q)	936m²

MGA-94 derived by connection from OPM 90179 to OPM 110177 bearing 95°25'11" for 1916.645.

Branded peg placed at stns 24,28,29,41-43,48 & 51-55. Survey Post branded (*5) placed at stns 44-47.

New Conn. Cen GIFP at stns 30-40.

Original information compiled from RP731798 in the Department of Natural Resources and Mines.

Plan Number: **SP146888**

0 50mm 100mm 150mm

...\RPPlans\airport\SP146888.dgn 31/05/2002 09:29:27 AM

CURRENT TITLE SEARCH

ENVIRONMENT AND RESOURCE MANAGEMENT, QUEENSLAND

Request No: 8535263
Search Date: 08/02/2010 10:07

Title Reference: 21252189
Date Created: 27/07/1984

Previous Title: 21233161

REGISTERED OWNER

Dealing No: 711979884 10/10/2008

QUEENSLAND AIRPORT HOLDINGS (CAIRNS) PTY LTD
A.C.N. 132 228 570

ESTATE AND LAND

Estate in Fee Simple

LOT 1 REGISTERED PLAN 736303
County of NARES Parish of CAIRNS
Local Government: CAIRNS

EASEMENTS, ENCUMBRANCES AND INTERESTS

1. Rights and interests reserved to the Commonwealth by Conveyance No. 601073104 (T146594) (Lot 1 on RP 736303)

2. LEASE No 602786641 (T491523D) 27/07/1990
   OF PART OF THE LAND
   TO JANLIN PTY LTD
   COMMENCING 16 NOV 1989
   TERMINATING 31 DEC 2008

3. CHANGE OF NAME No 705785459 11/07/2002 at 11:34
   LEASE: 602786641 (T491523D)
   CAPE YORK AIRLINES PTY LTD A.C.N. 000 627 010

4. MORTGAGE No 705791910 15/07/2002 at 10:02
   COLLINS & LEAHY FAR EAST LIMITED
   over
   LEASE: 602786641 (T491523D)

5. LEASE No 708738508 15/06/2005 at 16:10
   HAWKER PACIFIC PTY LTD A.C.N. 001 540 316
   OF LEASE Q ON SP154889

6. MORTGAGE No 710591907 17/05/2007 at 09:06
   AUSTRALIA AND NEW ZEALAND BANKING GROUP LIMITED A.C.N. 005 357 522
   over
   LEASE: 708738508
   IDENTIFYING MORTGAGE 710563572 RECORDED 14 MAY 2007

CURRENT TITLE SEARCH

ENVIRONMENT AND RESOURCE MANAGEMENT, QUEENSLAND

Request No: 8535263
Search Date: 08/02/2010 10:07

Title Reference: 21252189
Date Created: 27/07/1984

EASEMENTS, ENCUMBRANCES AND INTERESTS

7. LEASE No 711169846 12/11/2007 at 10:41
   BP AUSTRALIA PTY LIMITED A.C.N. 004 085 616
   OF LEASE S ON SP154902
   TERM: 01/01/2007 TO 31/12/2021 OPTION 5 YEARS

8. LEASE No 711373146 24/01/2008 at 15:25
   HOLDSTONE PTY LTD A.C.N. 010 694 416
   OF LEASE F ON SP154901
   TERM: 01/07/2007 TO 30/06/2027 OPTION NIL

9. LEASE No 711683089 29/05/2008 at 10:33
   ROYAL FLYING DOCTOR SERVICE OF AUSTRALIA (QUEENSLAND SECTION) A.C.N. 009 663 478
   OF LEASE B ON SP199196
   TERM: 01/01/2008 TO 31/12/2032 OPTION 5 YEARS

10. LEASE No 711797858 17/07/2008 at 08:15
    TOLL TRANSPORT PTY LIMITED A.C.N. 006 604 191
    OF LEASE A ON SP199199
    TERM: 01/07/2007 TO 30/06/2012 OPTION 5 YEARS

11. LEASE No 712292486 20/03/2009 at 13:06
    NORTH QUEENSLAND AIRPORTS NO.1 PTY LIMITED A.C.N. 134 137 232 TRUSTEE
    UNDER INSTRUMENT NO. 712292486
    THE WHOLE OF THE LAND
    TERM: 14/01/2009 TO 13/01/2108 OPTION NIL
    THIS LEASE IS CONCURRENT WITH ALL PRIOR REGISTERED LEASES

12. SUB LEASE No 712292490 20/03/2009 at 13:08
    LEASE: 712292486
    CAIRNS AIRPORT PTY LTD A.C.N. 132 228 221
    THE WHOLE OF THE LAND
    TERM: 14/01/2009 TO 12/01/2108 OPTION NIL
    THIS SUB-LEASE IS CONCURRENT WITH ALL PRIOR REGISTERED LEASES

13. MORTGAGE No 712292499 20/03/2009 at 13:12
    WESTPAC BANKING CORPORATION A.B.N. 33 007 457 141
    over
    SUB LEASE: 712292490

14. MORTGAGE No 712605272 20/07/2009 at 11:47
    WESTPAC BANKING CORPORATION A.B.N. 33 007 457 141
    over
    LEASE: 712292486

ADMINISTRATIVE ADVICES - NIL

CURRENT TITLE SEARCH

ENVIRONMENT AND RESOURCE MANAGEMENT, QUEENSLAND

Request No: 8535263
Search Date: 08/02/2010 10:07

Title Reference: 21252189
Date Created: 27/07/1984

UNREGISTERED DEALINGS - NIL

CERTIFICATE OF TITLE ISSUED - No

Caution - Charges do not necessarily appear in order of priority

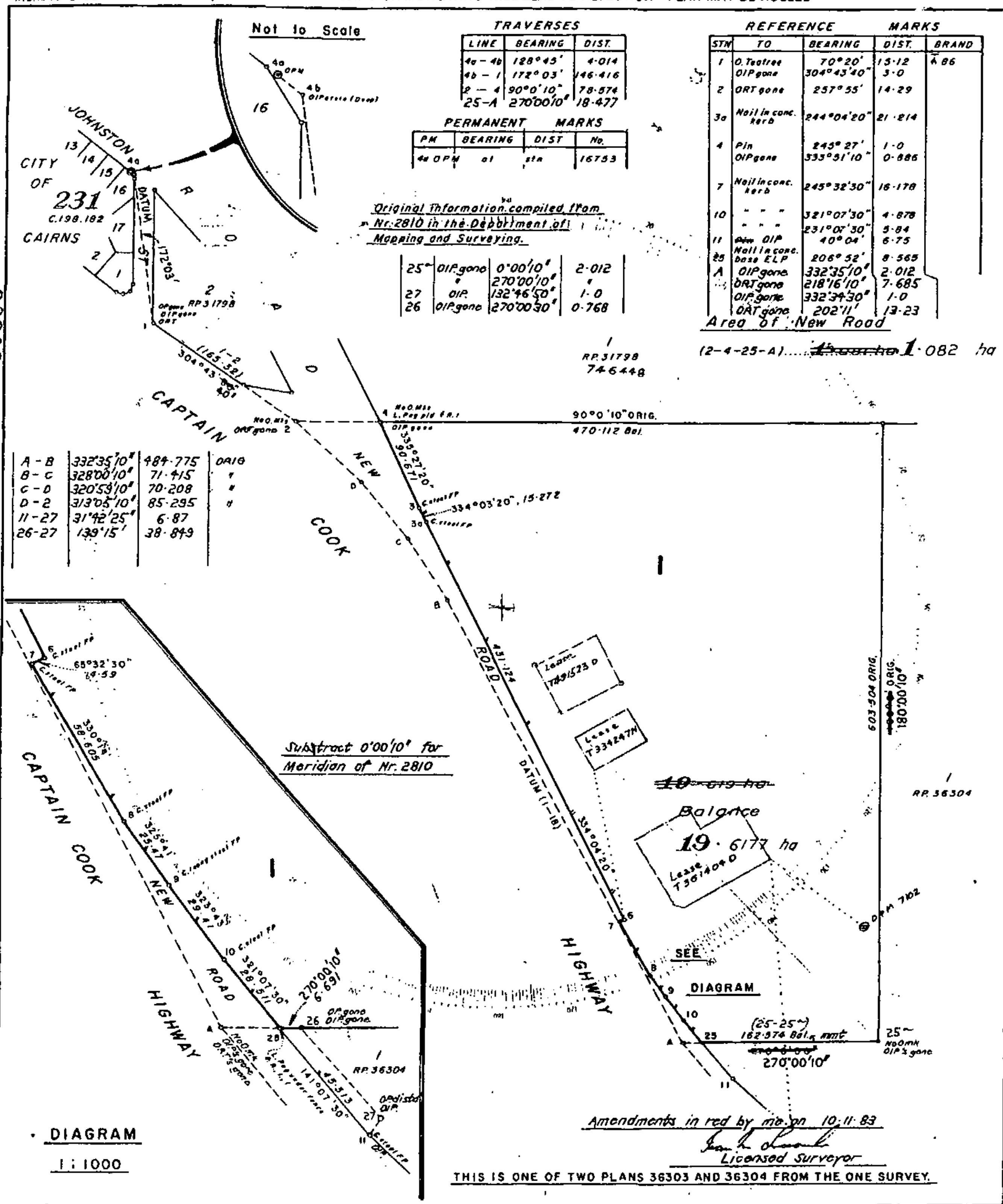
** End of Current Title Search **

Requested By: D APPLICATIONS CITEC CONFIRM

77 K)/438
W.O.K. 16·2·82

WARNING—FOLDING OR MUTILATING WILL LEAD TO REJECTION—PLAN MAY BE ROLLED

PLAN MUST BE DRAWN WITHIN BLUE LINES



TRAVERSES

LINE	BEARING	DIST.
4a – 4b	128°45'	4·014
4b – 1	172°03'	46·416
2 – 4	90°0'10"	78·574
25–A	270°00'10"	18·477

PERMANENT MARKS

PM	BEARING	DIST	No.
4a OPM	at	stn	16753

REFERENCE MARKS

STN	TO	BEARING	DIST.	BRAND
1	O. Teatree	70°20'	15·12	4 86
	OIP gone	304°43'40"	3·0	
2	ORT gone	237°55'	14·29	
3a	Nail in conc. kerb	244°04'20"	21·214	
4	Pin	245°27'	1·0	
	OIP gone	333°51'10"	0·886	
7	Nail in conc. kerb	245°32'30"	16·178	
10	" " "	321°07'30"	4·878	
	" " "	231°07'30"	5·84	
11	OIP	40°04'	6·75	
25	Nail in conc. base ELP	206°52'	8·565	
A	OIP gone	332°35'10"	2·012	
	ORT gone	218°16'10"	7·685	
	OIP gone	332°34'30"	1·0	
	ORT gone	202°11'	13·23	

Area of New Road (2-4-25-A) ~~.......~~ 1·082 ha

Original Information compiled from Nr.2810 in the Department of Mapping and Surveying.

25~	OIP gone	0°00'10"	2·012
	"	270°00'10"	"
27	OIP	132°46'50"	1·0
26	OIP gone	270°00'30"	0·768

A – B	332°35'10"	484·775	ORIG
B – C	328°00'10"	71·415	"
C – D	320°53'10"	70·208	"
D – 2	313°05'10"	85·295	"
11 – 27	31°42'25"	6·87	
26 – 27	139°15'	38·849	

Amendments in red by me on 10:11:83

Licensed Surveyor

THIS IS ONE OF TWO PLANS 36303 AND 36304 FROM THE ONE SURVEY.

FIELD NOTES LODGED 36303

LINES NOT SURVEYED STNS

CORNERS NOT MARKED STNS

ORIGINAL PORTION 329

ORIGINAL GRANT N54993 Vol 362 Fol 43

PLAN OF Lot 1

Cancelling Portion 329 on Nr.2810.

TOWN

PARISH CAIRNS

COUNTY Nares

MAP REF.

PROCLAIMED SURVEY AREA

SURVEYED BY D.R.MICHAEL ...4.../...11.../.81...

MERIDIAN

SCALE 1:3000

REGISTERED PLAN 36303

M.R.D. File No. 154/20A/134

CISP

WARNING—FOLDING OR MUTILATING WILL LEAD TO REJECTION.—PLAN MAY BE ROLLED 154/304/17

No 75530

CERTIFICATE

I, Donald Robert MICHAEL

hereby certify that I have surveyed the land comprised in this plan personally

that the plan is accurate, that the said survey was performed in accordance with the 'Surveyors Act 1977' and the 'Surveyors Regulations 1978' and that the said survey was completed on 4.11.81

Signature of Licensed Surveyor.

Date 31-5-82

Council of the City of Cairns certifies that all the requirements of this Council, the Local Government Acts of 1936 to 1982 and all By-Laws have been complied with and approves this Plan of Subdivision.

Dated this 9th day of November 1982

Mayor or Chairman

Town or Shire Clerk

We The Commonwealth of Australia

(Names in full)

as proprietor/s

of this land, agree to this Plan and dedicate the new roads shown hereon to public use.

For and on behalf of The Commonwealth of Australia

Signature of Proprietor/s

Principal Legal Officer, Townsville;
Deputy Crown Solicitor's Office, Queensland
and Delegate of the Attorney-General

Witness: B Matthews

Council of the CITY of CAIRNS certifies that all the requirements of this Council, the Local Government Acts of 1936 to 1983 and all By-Laws have been complied with and re-approves this Plan of Subdivision.

DATED this 6th day of JUNE, 1983

M.C. Cassin MAYOR

TOWN CLERK

FOR TITLES OFFICE USE ONLY

Previous Title C.T. N.S.A993 Vol.362 Fol.43 Por.329 DNS Plan Nr.2810
N.I.R. 693 Satisfied as far as relates to Por.329
Ref. Letter 12229 19/12/83 for authority to amend

New C.T. Ref.

(Re) Sub.	Vol.	Fol.
	NI233	161

For Additional Plan & Document Notings Refer to CISP

NEW TITLE
Vol. Fol.

Lodged by

Deputy Crown Solicitor

Fees Payable

Postal fee and Postage	
12.00 Lodgt.Exam.&Ass.	
Entd. on Docs.	
17.00 New Title	
8.00 Entd. on Deeds	
1.00 Photo Fee	
102.00 Total	
Short Fees Paid	

F.D. + dues.

Received
Registrar of Titles
Journal No. T102221
Receipt No. 18885
DEC 5 3 55 PM '83
RECEIVED
TITLES OFFICE

Calc. Bk. No. 143/175
Examined 12/83
Passed 12/83
Charted / /
Map Ref.

3 JAN 1984

Particulars entered in Register Book
Vol. 362 Folio 43
at 11.02 a.m.
22 DEC 1983
REGISTRAR OF TITLES
(DISTRICT)

REGISTERED PLAN 36303

Freehills

1 July 2009
Matter 81512063

M G Locke
Registrar of Titles
Department of Environment and Resource Management
Level 11, 53 Albert Street
Brisbane Qld 4000

Dear Mr Locke

Requisition Notice No. 3 - Sublease 712292490

We act for North Queensland Airports No. 1 Pty Limited ACN 134 137 232, the sublessor.

We request that you consider the following information in relation to the registration of Sublease Dealing No 712292490 between North Queensland Airports No. 1 Pty Limited ACN 134 137 232 in its capacity as trustee of the Cairns Airport Property Trust as sublessor and Cairns Airport Pty Ltd ACN 132 228 221 as sublessee.

The trust deed of the Cairns Airport Property Trust dated 12 November 2008 (formerly named the North Queensland Airports No. 1 Trust) and the Amending Deed No. 1 which changed the name of the Trust on 19 December 2008 were deposited under Dealing No. 712289277.

The basis of the requisition as stated in the 'Issues Requiring Attention' is that:

"As the sublessor is a trustee, the term including options should not exceed 21 years unless the trust deed authorizes a greater term".

This reflects section 32 (1)(e)(ii)of the *Trusts Act 1973* (Qld) (the Act).

Section 4(2) of the Act states that:

"Nothing in this Act shall preclude a settlor from conferring on a trustee or other person exercising the powers of a trustee under this Act any powers additional to or larger than those conferred by this Act."

Section 4(2) provides for the settlor of a trust through the trust deed to enlarge or increase a trustee's powers from those conferred by the Act.

Clause 6.1(a) (2) of the trust deed of the Cairns Airport Property Trust grants the trustee all the powers that are incidental to ownership of the Fund as though it were the absolute and beneficial owner of the Fund. The 'Fund' is defined as all the cash, investments, rights and other property of the Trust including income. This includes all the real property assets of the Fund.

Therefore, the trust deed expressly enlarges the powers of the trustee from those conferred by the Act because there is no limitation on a legal owner's power to lease.

Accordingly, section 4(2) of the Act does applies as the settlor of the trust has conferred on the trustee powers that are additional or larger than those conferred by the Act. Therefore, section 32(1)(e)(ii)of the Act does not apply in this circumstance as the trust deed authorizes the trustee with the power to lease for a greater term than 21 years.

Doc 2256480_2

Freehills

In consideration of the above information, we request that the Department register Sublease Dealing No. 712292490.

If you have any queries in this matter please contact Rachel Tyquin at the contact details below.

Yours sincerely

Nicole Campbell
Senior Associate
Freehills
+61 7 3258 6479
+61 0447 384 531
nicole.campbell@freehills.com

Rachel Tyquin
Solicitor
Freehills
+61 7 3258 6505
rachel.tyquin@freehills.com

Attached

1 Requisition Notice No. 3
2 Sublease 712292490
3 Extract of Trust Deed

5.3 Taxes and unpaid amounts

(a) On any redemption of Units, the Trustee may deduct from any amount to be paid to the Unitholder:

(1) Taxes payable by the Trustee in respect of the redemption of the Units; and

(2) unpaid amounts due by the Unitholder to the Trustee.

(b) The Trustee may redeem any Units in order to satisfy Taxes payable by the Trustee in respect of a Unitholder's Unit Holding or unpaid amounts due by the Unitholder to the Trustee.

5.4 Suspension

The redemption of Units may be suspended by the Trustee. The period of suspension is as determined by the Trustee.

6 Trustee's Powers

6.1 General powers of Trustee

(a) Subject to this deed, the Trustee has all the powers that:

(1) it is possible to confer on a trustee; and

(2) are incidental to ownership of the Fund as though it were the absolute and beneficial owner of the Fund.

(b) In the exercise of its powers the Trustee may, without limitation, acquire or dispose of any real or personal property and borrow or raise money, encumber any asset of the Fund, incur any liability, guarantee any obligations of any person, enter into joint venture arrangements or fetter any power.

6.2 Delegation by Trustee

(a) The Trustee may appoint a person, including an associate of the Trustee, as its delegate, attorney or agent to exercise its powers and perform its obligations.

(b) The Trustee may appoint an agent, custodian or other person, including an associate of the Trustee (each of whom may, with the approval of the Trustee, sub-delegate to any person any of its functions as it thinks fit), to acquire, hold title to, dispose of or otherwise deal with any asset of the Fund on behalf of the Trustee and perform any action incidental or ancillary thereto or otherwise approved by the Trustee.

Term	Meaning
Distribution Date	means for a Distribution Calculation Date the date determined by the Trustee.
Distribution Entitlement	the entitlement to any Distributable Amount determined in accordance with clause 9.3(b)
Distributable Income	for a Distribution Period means the amount (if any) determined in accordance with clause 9.2
Distribution Period	• for the first Distribution Period, the period from the date of establishment of the Trust to the next Distribution Calculation Date; • for the last Distribution Period, the period beginning on the day after the preceding Distribution Calculation Date to the date of termination of the Trust; and • in all other circumstances, the period beginning on the day after the preceding Distribution Calculation Date to the next occuring Distribution Calculation Date
Financial Year	• for the first Financial Year, the period beginning on the date of establishment of the Trust to the next 30 June; • for the last Financial Year, the period beginning on 1 July before the date the Trust terminates to the date the Trust terminates; and • in all other circumstances, the 12 month period ending on 30 June in each year, or such other period as the Trustee determines from time to time
Fund	all the cash, investments, rights and other property of the Trust including income
Government Agency	any government or governmental, semi-governmental, administrative, fiscal or judicial body, department, commission, authority, bureau, tribunal, agency or entity in any part of the world
Gross Asset Value	means at any time: • the value of the Fund; and • any other amounts which, in the opinion of the Trustee should be included or excluded for the purpose of making a fair and reasonable determination of the value of the Fund on an undiscounted basis, but not including assets of the Fund that relate to derivative instruments used for hedging
Income Year	as defined in section 995-1 of the *Income Tax Assessment Act 1997*
Issue Price	in relation to a Unit means the dollar value of the total consideration payable at any time in respect of the issue of that Unit determined in accordance with clause 4 pursuant to which the Unit was issued

QUEENSLAND LAND REGISTRY
Land Title Act 1994, Land Act 1994 and Water Act 2000

LEASE/SUB LEASE

FORM 7 Version 6
Page 1 of 77

712292486

$120.50
20/03/2009 13:06

BE 500

Land Act 1994 and the Water Act 2000 and its searchable registers in the land registry and the water register. For more information about privacy in NR&W see the department's website.

Duty Imprint
Client No: 1 006611 Duties Act 2001
Assessment No. 000-201-458
Duty Paid $ 27,011,205.00 ☐ Exempt
UTI: NIL
Date: 10/02/09 Signed:

1. Lessor

QUEENSLAND AIRPORT HOLDINGS (CAIRNS) PTY LTD ACN 132 228 570

Lodger (Name, address, E-mail & phone number)

~~MINTER ELLISON~~ PETER ATKINSON & COMPANY
Waterfront Place, 1 Eagle Street, BRISBANE
~~cameron.charlton@minterellison.com~~
(07) 3119 6168 CC 40-5800873

Lodger Code ~~821~~ 006

2. Lot on Plan Description | **County** | **Parish** | **Title Reference**

See Form 20 Enlarged Panel

Lessee Given names | Surname/Company name and number (include tenancy if more than one)

NORTH QUEENSLAND AIRPORTS NO.1 PTY LIMITED ACN 134 137 232 IN ITS CAPACITY AS TRUSTEE OF THE CAIRNS AIRPORT PROPERTY TRUST first deed deposited with dealing No. 712289277

4. Interest being leased

Fee simple

5. Description of premises being leased

The whole of the land and concurrent with all prior leases

6. Term of lease

Commencement date/event: 14/01/2009
Expiry date: and/or Event: 99 years - 13/01/2108
*Options: Nil

*insert *nil* if no option or insert option period (eg 3 years or 2 x 3 years)

7. Rental/Consideration

8. Grant/Execution

The Lessor leases the premises described in item 5 to the Lessee for the term stated in item 6 subject to the covenants and conditions contained in: ~~document no.~~ attached schedule ; ~~*Option in registered Lease no. has not been exercised~~.

Witnessing officer must be aware of his/her obligations under section 162 of the Land Title Act 1994

signature
Deanna Bryant full name
SOLICITOR qualification

14/1/09

Witnessing Officer | **Execution Date**

(Witnessing officer must be in accordance with Schedule 1 of Land Title Act 1994 eg Legal Practitioner, JP, C Dec)

QUEENSLAND AIRPORT HOLDINGS (CAIRNS) PTY LTD ACN 132 228 570 in accordance with Section 127 of the Corporations Act 2001 in the presence of

Director

~~Director~~/Secretary

Lessor's Signature

9. Acceptance

The Lessee accepts the lease and acknowledges the amount payable or other considerations for the lease.

see enlarged panel

Title Reference 21335056 .

9. Acceptance

The Lessee accepts the lease and acknowledges the amount payable or other considerations for the lease.

NORTH QUEENSLAND AIRPORTS NO.1 PTY LIMITED ACN 134 137 232 IN ITS CAPACITY AS TRUSTEE OF THE CAIRNS AIRPORT PROPERTY TRUST ~~in accordance with Section 127 of the Corporations Act 2001~~ by its authorised attorney in the presence of

signature
TARA PAGE full name
SOLICITOR qualification

~~Director~~ Attorney

14 / 1 / 09 BEN TRICKETT
~~Director/Secretary~~

Witnessing Officer **Execution Date** NAME OF ATTORNEY under Power of Attorney No. 7122892777 **Lessee's Signature**
(Witnessing officer must be in accordance with Schedule 1 of Land Title Act 1994 eg Legal Practitioner, JP, C Dec)

Appendix C – Site photographs

Photo 1	Photograph
Waste water treatment plant adjacent to the fire training ground in the north western section of the airport	
Photo 2	**Photo**
Fire training ground	

Photo 3	Photo
Fire training ground – receptacle recently used in fire training exercises	
Photo 4	**Photo**
ARFF workshop in the landside General Aviation area in the western section of Cairns Airport	

Photo 5	Photo
Large disused aircraft in the aircraft parking area adjacent to and south of the fire station	
Photo 6	**Photo**
Chemical storage area at the rear of the ARFF workshop	

Photo 7	Photo
Triple interceptor trap at the workshop	
Photo 8	**Photo**
ARFF fire station in the central western section of Cairns Airport	

Photo 9	Photo
Foam storage compound at the ARFF fire station	
Photo 10	**Photo**
Hose drying rack at the ARFF fire station	

Photo 11	Photo
View looking east towards the rear of the ARFF fire station	

Appendix D – Groundwater data search results

1:15,000 (at A3)

0 70 140 280 420 560

Metres

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

N

LEGEND

Site boundary

Groundwater well

Airservices Australia
Preliminary Site Investigation

Job Number 31-34249
Revision A
Date 15/07/2016

Cairns Airport Groundwater database search

Figure D1

180 Lonsdale Street Melbourne VIC 3000 **T** 61 3 8687 8000 **F** 61 3 8687 8111 **E** melmail@ghd.com.au **W** www.ghd.com.au

Data source: Image retreieved from Google Earth Pro 08/07/2016. Data custodian: DigitalGlobe, Imagery Date: 12/05/2016; Site boundary from title information, GHD 2016. Created by: sbismire

GROUNDWATER DATABASE

BORE REPORT

REG NUMBER 148106

REGISTRATION DETAILS

		BASIN	1100	**LATITUDE**	16-52-25	**MAP-SCALE**	
OFFICE	Mareeba	**SUB-AREA**		**LONGITUDE**	145-44-20	**MAP-SERIES**	
DATE LOG RECD		**SHIRE**	2080-CAIRNS REGIONAL	**EASTING**	365662	**MAP-NO**	
D/O FILE NO.	515/0005193	**LOT**	268	**NORTHING**	8134008	**MAP NAME**	
R/O FILE NO.		**PLAN**	NR6139	**ZONE**	55	**PROG SECTION**	
H/O FILE NO.		**ORIGINAL DESCRIPTION**		**ACCURACY**	GPS	**PRES EQUIPMENT**	
				GPS ACC	30		
GIS LAT	-16.8735159	**PARISH NAME**	879-CAIRNS			**ORIGINAL BORE NO**	
GIS LNG	145.7388659	**COUNTY**	NARES			**BORE LINE**	-
CHECKED	Y						
						POLYGON	
						RN OF BORE REPLACED	
FACILITY TYPE	Sub-Artesian Facility	**DATE DRILLED**				**DATA OWNER**	
STATUS	Abandoned but Still Usable	**DRILLERS NAME**					
ROLES	WS	**DRILL COMPANY**					
		METHOD OF CONST.					

CASING DETAILS

****** NO RECORDS FOUND ******

STRATA LOG DETAILS

****** NO RECORDS FOUND ******

STRATIGRAPHY DETAILS

****** NO RECORDS FOUND ******

AQUIFER DETAILS

****** NO RECORDS FOUND ******

PUMP TEST DETAILS PART 1

****** NO RECORDS FOUND ******

PUMP TEST DETAILS PART 2

****** NO RECORDS FOUND ******

BORE REPORT

REG NUMBER 148106

BORE CONDITION

**** NO RECORDS FOUND ****

ELEVATION DETAILS

**** NO RECORDS FOUND ****

WATER ANALYSIS PART1

**** NO RECORDS FOUND ****

WATER ANALYSIS PART 2

**** NO RECORDS FOUND ****

WATER LEVEL DETAILS

**** NO RECORDS FOUND ****

WIRE LINE LOG DETAILS

**** NO RECORDS FOUND ****

FIELD MEASUREMENTS

**** NO RECORDS FOUND ****

SPECIAL WATER ANALYSIS

**** NO RECORDS FOUND ****

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GROUNDWATER DATABASE

BORE REPORT

REG NUMBER 148430

REGISTRATION DETAILS

		BASIN	1100	**LATITUDE**	16-52-24	**MAP-SCALE**	
OFFICE	Mareeba	**SUB-AREA**		**LONGITUDE**	145-44-20	**MAP-SERIES**	
DATE LOG RECD	26-MAY-10	**SHIRE**	2080-CAIRNS REGIONAL	**EASTING**	365669	**MAP-NO**	
D/O FILE NO.	515/5193	**LOT**	267	**NORTHING**	8134014	**MAP NAME**	
R/O FILE NO.		**PLAN**	NR6139	**ZONE**	55	**PROG SECTION**	
H/O FILE NO.		**ORIGINAL DESCRIPTION**	BORE LOG 00273	**ACCURACY**	GPS	**PRES EQUIPMENT**	
				GPS ACC	100		
GIS LAT	-16.873462	**PARISH NAME**	879-CAIRNS			**ORIGINAL BORE NO**	
GIS LNG	145.7389319	**COUNTY**	NARES			**BORE LINE**	-
CHECKED	Y						
						POLYGON	
						RN OF BORE REPLACED	
FACILITY TYPE	Sub-Artesian Facility	**DATE DRILLED**	20/05/2010			**DATA OWNER**	
STATUS	Existing	**DRILLERS NAME**	GOUGE, CONRAD				
ROLES	WS	**DRILL COMPANY**	INGHAM DRILLING PTY LTD				
		METHOD OF CONST.	ROTARY MUD				

CASING DETAILS

PIPE	DATE	RECORD NUMBER	MATERIAL DESCRIPTION	MAT SIZE (mm)	SIZE DESC	OUTSIDE DIAM (mm)	TOP (m)	BOTTOM (m)
A	20/05/2010	1	Polyvinyl Chloride	7.200	WT	177	0.50	22.00
A	20/05/2010	2	Polyvinyl Chloride	2.700	WT	42	0.50	22.00
A	20/05/2010	3	Perforated or Slotted Casing	2.500	AP	177	18.00	22.00
A	20/05/2010	4	Perforated or Slotted Casing	1.000	AP	42	21.00	21.10
A	20/05/2010	5	Gravel Pack	8.000	GR	220	10.00	30.00
A	20/05/2010	6	Grout			220	0.00	10.00

STRATA LOG DETAILS

RECORD NUMBER	STRATA TOP (m)	STRATA BOT (m)	STRATA DESCRIPTION
1	0.00	7.00	SAND, FINE- COARSE, GREY/BROWN *
2	7.00	8.00	MUD, GREY
3	8.00	10.00	CLAY, GRAVELY, GREY

BORE REPORT

REG NUMBER 148430

RECORD NUMBER	STRATA TOP (m)	STRATA BOT (m)	STRATA DESCRIPTION
4	10.00	16.00	CLAY, STICKY, BROWN/GREY
5	16.00	18.00	CLAY, SILTY, BROWN
6	18.00	20.00	SAND, COARSE, GREY ***
7	20.00	30.00	CLAY, CRUMBLY, BROWN

STRATIGRAPHY DETAILS

****** NO RECORDS FOUND ******

AQUIFER DETAILS

****** NO RECORDS FOUND ******

PUMP TEST DETAILS PART 1

****** NO RECORDS FOUND ******

PUMP TEST DETAILS PART 2

****** NO RECORDS FOUND ******

BORE CONDITION

****** NO RECORDS FOUND ******

ELEVATION DETAILS

****** NO RECORDS FOUND ******

WATER ANALYSIS PART1

****** NO RECORDS FOUND ******

WATER ANALYSIS PART 2

****** NO RECORDS FOUND ******

WATER LEVEL DETAILS

PIPE	DATE	MEASURE (m)	N/R	RMK	MEAS TYPE	PIPE	DATE	MEASURE (m)	N/R	RMK	MEAS TYPE	PIPE	DATE	MEASURE (m)	N/R	RMK	MEAS TYPE
A	20/05/2010	-2.90	N		NR												

BORE REPORT

REG NUMBER 148430

WIRE LINE LOG DETAILS

**** NO RECORDS FOUND ****

FIELD MEASUREMENTS

**** NO RECORDS FOUND ****

SPECIAL WATER ANALYSIS

**** NO RECORDS FOUND ****

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GROUNDWATER DATABASE

BORE REPORT

REG NUMBER 45136

REGISTRATION DETAILS

		BASIN	1100	**LATITUDE**	16-52-14	**MAP-SCALE**	253
OFFICE	Mareeba	**SUB-AREA**	000	**LONGITUDE**	145-44-19	**MAP-SERIES**	M
DATE LOG RECD		**SHIRE**	2080-CAIRNS REGIONAL	**EASTING**	365634	**MAP-NO**	8064-31
D/O FILE NO.	2509	**LOT**	2	**NORTHING**	8134332	**MAP NAME**	
R/O FILE NO.		**PLAN**	CP904537	**ZONE**	55	**PROG SECTION**	
H/O FILE NO.	L46800B	**ORIGINAL DESCRIPTION**	P536	**ACCURACY**	SKET	**PRES EQUIPMENT**	NE
				GPS ACC			
GIS LAT	-16.870586579	**PARISH NAME**	879-CAIRNS			**ORIGINAL BORE NO**	
GIS LNG	145.738615747	**COUNTY**	NARES			**BORE LINE**	-
CHECKED	Y						
						POLYGON	
						RN OF BORE REPLACED	
FACILITY TYPE	Sub-Artesian Facility	**DATE DRILLED**	28/02/1978			**DATA OWNER**	
STATUS	Abandoned and Destroyed	**DRILLERS NAME**					
ROLES	WS	**DRILL COMPANY**					
		METHOD OF CONST.	ROTARY RIG				

CASING DETAILS

PIPE	DATE	RECORD NUMBER	MATERIAL DESCRIPTION	MAT SIZE (mm)	SIZE DESC	OUTSIDE DIAM (mm)	TOP (m)	BOTTOM (m)
A	28/02/1978	1	Steel Casing		WT	152	0.00	7.50
A	28/02/1978	2	Screen		AP	114	7.30	12.00

STRATA LOG DETAILS

RECORD NUMBER	STRATA TOP (m)	STRATA BOT (m)	STRATA DESCRIPTION
1	0.00	0.90	TOPSOIL
2	0.90	4.30	GREY SANDY CLAY
3	4.30	5.50	FINE RIVER SAND *
4	5.50	7.90	GREY CLAY
5	7.90	10.40	RIVER SAND GREY CLAY BANDS *
6	10.40	11.90	MEDIUM/FINE SAND SOME SEASHELLS *
7	11.90	17.10	SILTY CLAY HARD FINE YELLOW

BORE REPORT

REG NUMBER 45136

RECORD NUMBER	STRATA TOP (m)	STRATA BOT (m)	STRATA DESCRIPTION
8	17.10	18.00	YELLOW SANDY CLAY SOME STONES
9	18.00	23.20	HARD WHITE FINE SILTY CLAY
10	23.20	25.30	LIGHT YELLOW SILTY CLAY
11	25.30	29.30	HARD YELLOW SILTY CLAY
12			DRILLER - K.BROWN
13			115MM PILOT HOLE TO 29.3M
14			216MM REAMED HOLE TO 12.04M
15			HOLE BACKFILLED WITH METAL TO 12.04M
16			HOLE DEVELOPED WITH AIR & WATER
902			29.02.1978 SWL -4.05M
910	8.00	10.00	QUALITY DESCRIP/CONDUCT: 79

STRATIGRAPHY DETAILS

SOURCE	RECORD NUMBER	STRATA TOP (m)	STRATA BOT (m)	STRATA DESCRIPTION
DNR	1			UNKNOWN
DNR	2			UNKNOWN
DNR	3			UNKNOWN

AQUIFER DETAILS

REC	TOP BED(M)	BOTTOM BED(M)	BED LITHOLOGY	DATE	SWL (m)	FLOW	QUALITY	YIELD (l/s)	CTR	CONDIT	FORMATION NAME
1	4.00	5.00	SAND							UC	UNKNOWN
2	8.00	10.00	SAND							UC	UNKNOWN
3	11.00	15.00	SAND							UC	UNKNOWN

PUMP TEST DETAILS PART 1

PIPE	DATE	REC NO.	RN OF PUMP-BORE	TOP (m)	BOTTOM (m)	DIST (m)	METH	TEST TYPES	PUMP TYPE	SUCTION SET (m)	Q PRIOR TO TEST (l/s)	DUR OF Q PR (min)	PRES ON ARRIV (m)	Q ON ARRIV (l/s)
A	24/05/1978	1	45136	7.90	12.00	0.10	PUM	CD						

BORE REPORT

REG NUMBER 45136

PUMP TEST DETAILS PART 2

PIPE	DATE	REC	TEST DUR (mins)	SWL (m)	RECOV. TIME (mins)	RESID. DD (m)	MAX DD or P RED (m)	Q at MAX DD (l/s)	TIME TO MAX DD (mins)	Max Q (l/s)	CALC STAT HD (m)	DESIGN YIELD (l/s)	DESIGN BP (m)	SUCT. SET (m)	TMSY (m2/DAY)	STOR
A	24/05/1978	1	<1380	-4.10			3.40	1.39				0.41			17	

BORE CONDITION

****** NO RECORDS FOUND ******

ELEVATION DETAILS

****** NO RECORDS FOUND ******

WATER ANALYSIS PART1

PIPE	DATE	RD	ANALYST	QAN	DEPTH (m)	RMK	SRC	COND (uS/cm)	pH	Si (mg/L)	TOTAL IONS (mg/L)	TOTAL SOLIDS (mg/L)	HARD	ALK	FIG. OF MERIT	SAR	RAH
A	23/05/1978	1	GCL	076721		PU	GB	100	7.2	17	74.30	76.05	26	25	1.7	0.6	
A	23/05/1978	2	GCL	076722		PU	GB	79	7.3	16	62.90	60.09	19	30	1.2	0.7	0.23
A	23/05/1978	3	GCL	076723		PU	GB	79	7.2	17	61.40	59.59	16	30	1.1	0.7	0.28
A	24/05/1978	1	GCL	076724		PU	GB	81	7.1	17	62.50	60.69	16	30	1.0	0.8	0.28

WATER ANALYSIS PART 2

PIPE	DATE	RD	Na	K	Ca	Mg	Mn	HCO3	Fe	CO3	Cl	F	NO3	SO4	Zn	Al	B	Cu
A	23/05/1978	1	7.0	1.8	7.0	2.1		30.0		0.0	10.0	0.20	6.2	10.0				
A	23/05/1978	2	7.0	2.0	5.0	1.5		37.0		0.0	2.0	0.20	8.2	0.0				
A	23/05/1978	3	6.7	1.6	4.0	1.5		37.0		0.0	2.0	0.20	8.4	0.0				
A	24/05/1978	1	7.4	1.7	4.0	1.5		37.0		0.0	2.0	0.20	8.7	0.0				

WATER LEVEL DETAILS

PIPE	DATE	MEASURE (m)	N/R	RMK	MEAS TYPE	PIPE	DATE	MEASURE (m)	N/R	RMK	MEAS TYPE	PIPE	DATE	MEASURE (m)	N/R	RMK	MEAS TYPE
X	23/05/1978	-4.10	N		NR												

WIRE LINE LOG DETAILS

****** NO RECORDS FOUND ******

BORE REPORT

REG NUMBER 45136

FIELD MEASUREMENTS

**** NO RECORDS FOUND ****

SPECIAL WATER ANALYSIS

**** NO RECORDS FOUND ****

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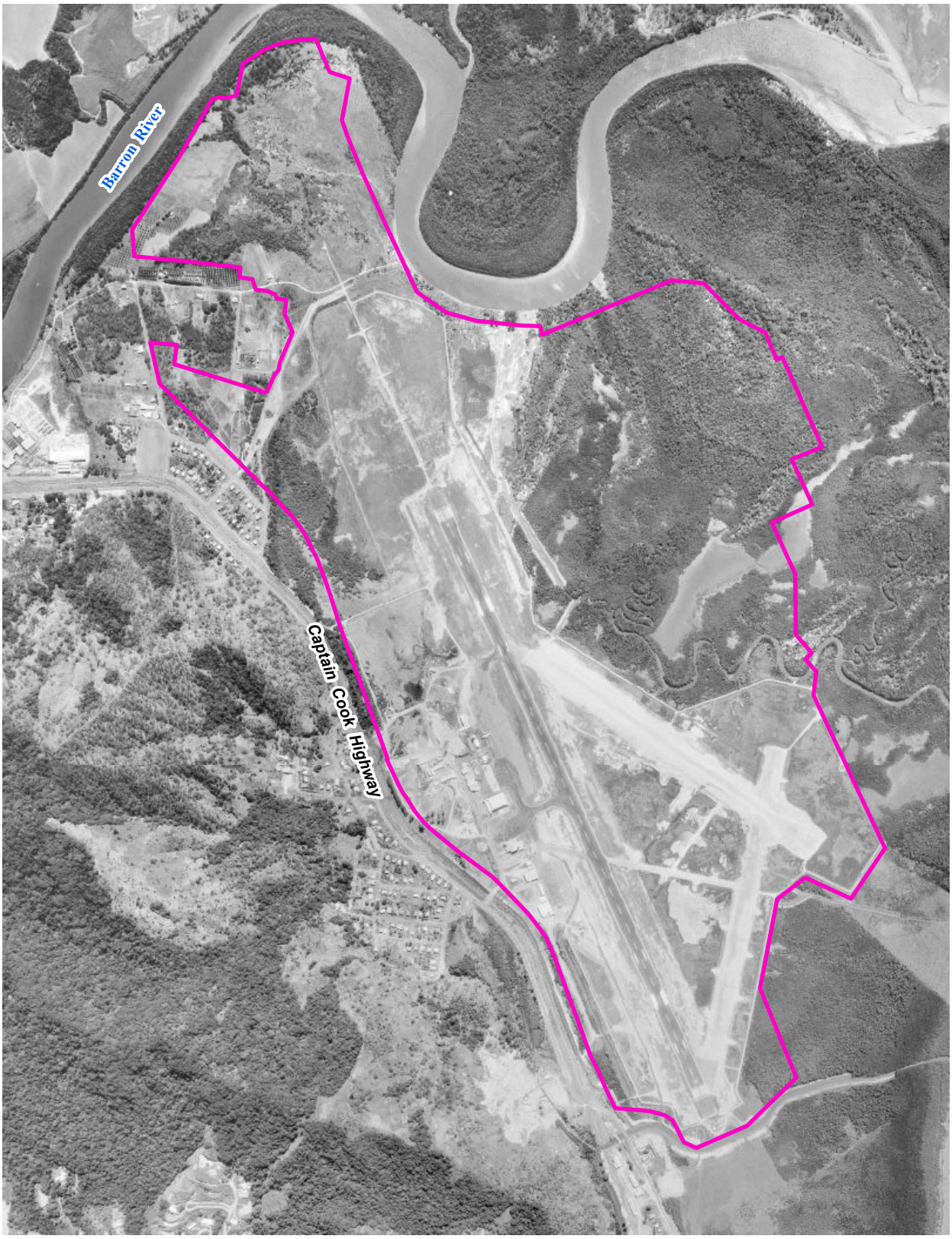
**** End of Report. Produced:** 08/07/2016 11:48:49 AM ******

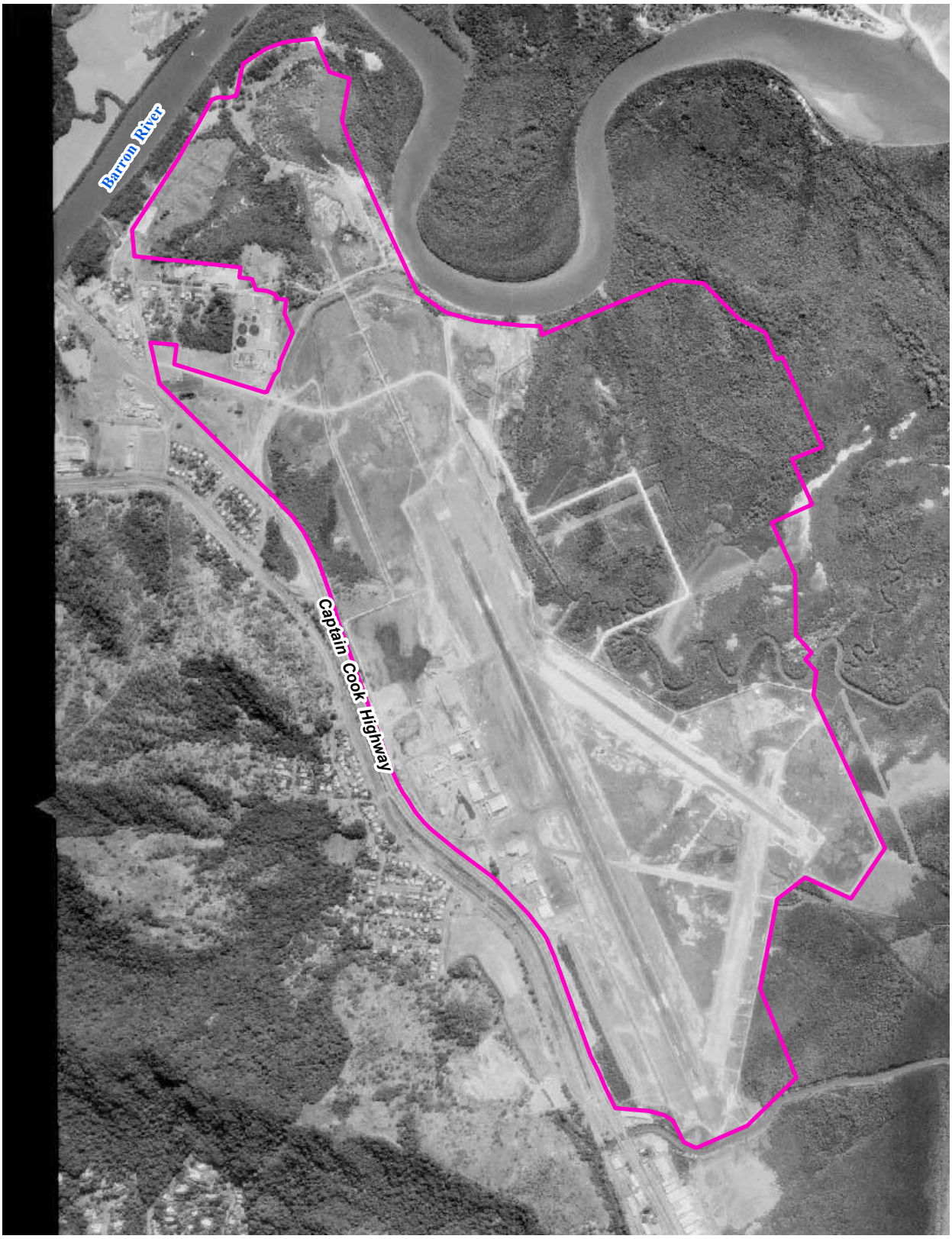
Appendix E – Historical aerial photographs

Document Identification	Run: 5 Film: Q747 Frame: 121 Scale: 1 : 27,000 (Black & White)
Photograph Date	Date: 30 June 1952

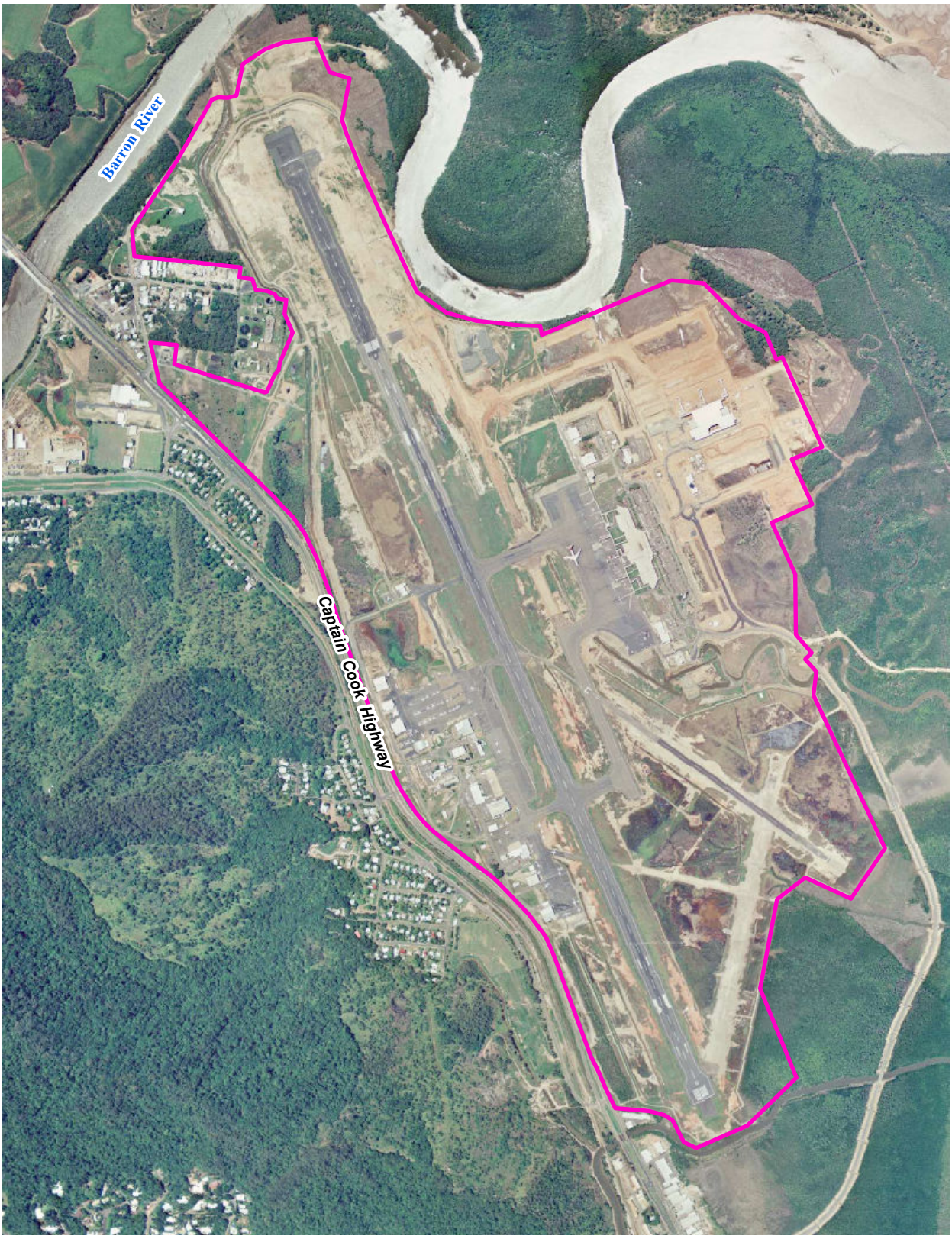
Document Identification	**Run: 5 Film: Q2342 Frame: 90 Scale: 1 : 28,000 (Black & White)**
Photograph Date	**Date: 16 August 1971**



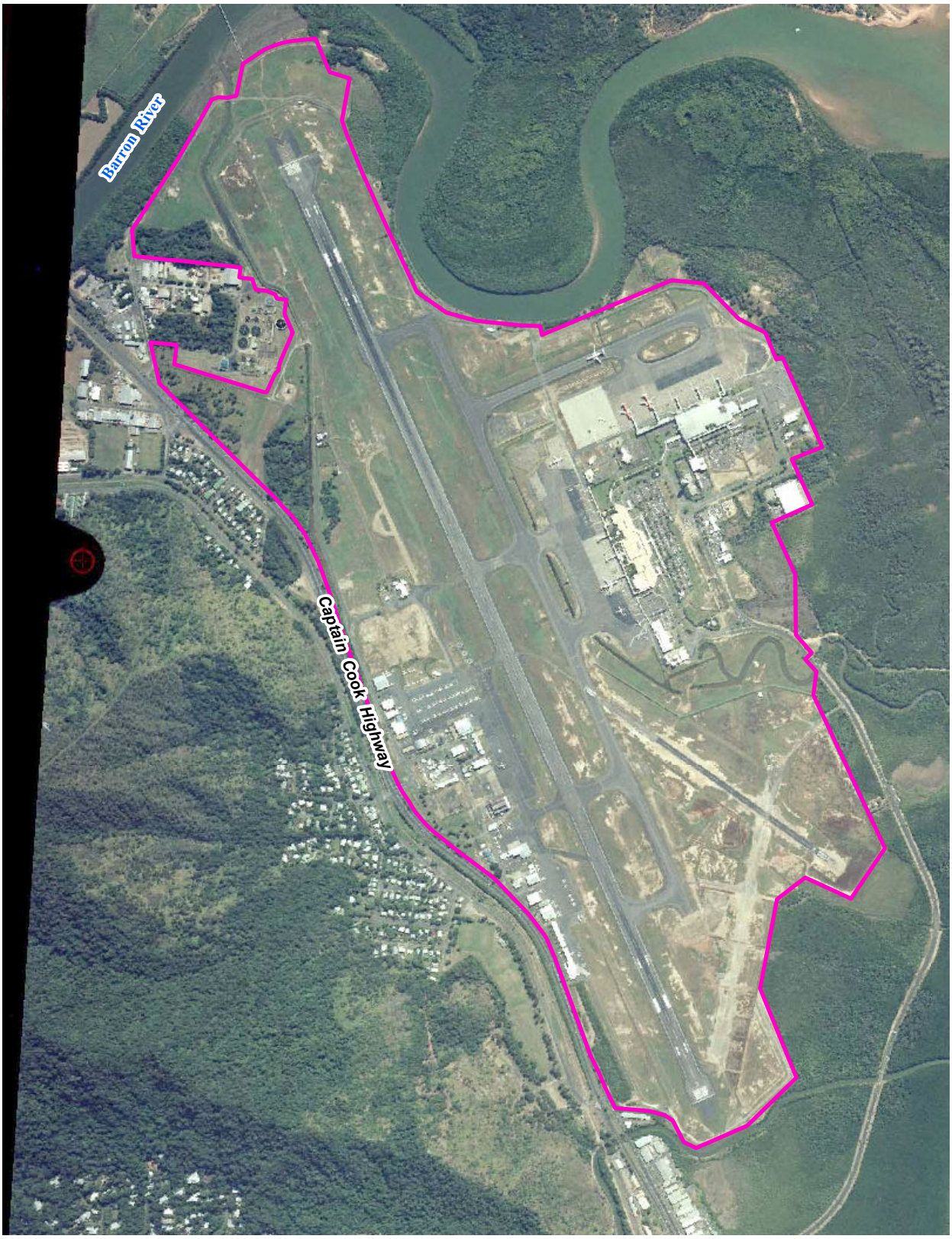
Document Identification	Run: 5 Film: Q4089 Frame: 6585 Scale: 1 : 38,000 (Black & White)
Photograph Date	Date: 18 July 1982



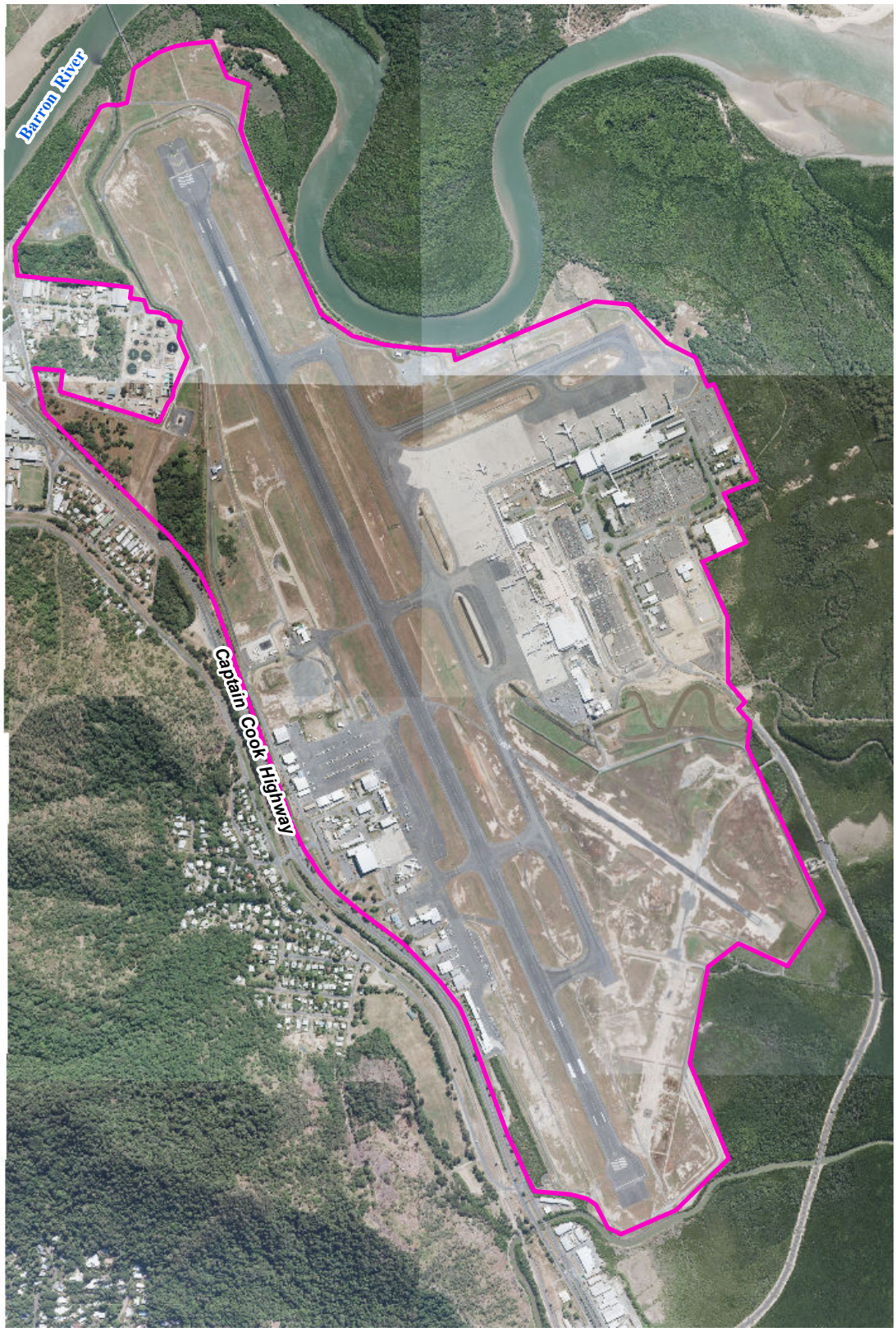
Document Identification	Run: 3 Film: Qc4874 Frame: 151 Scale: 1 : 25,000 (Colour)
Photograph Date	Date: 12 March 1990



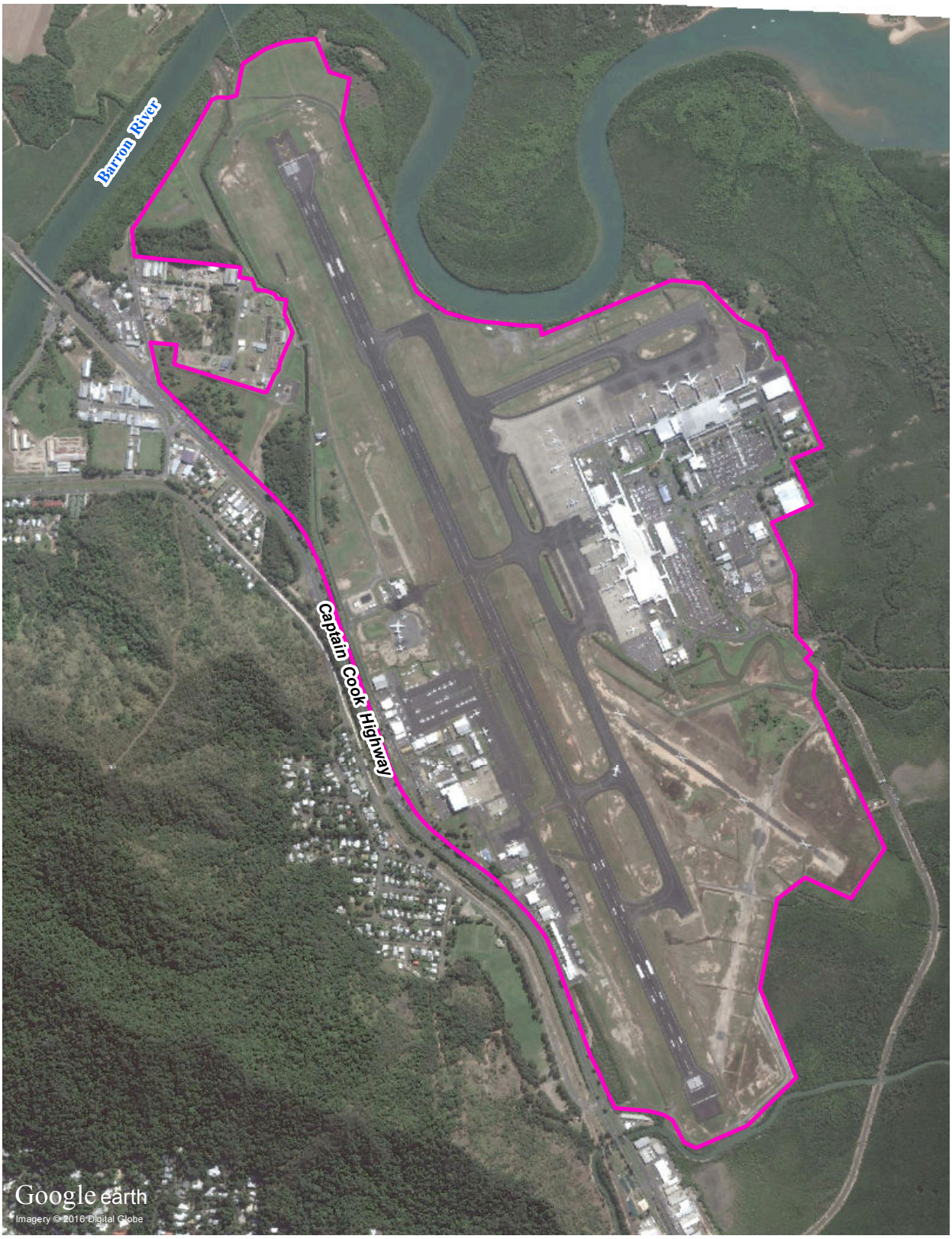
Document Identification	**Run: 5 Film: QAP6118 Frame: 53 Scale: 1 : 37,500 (Colour)**
Photograph Date	**Date: 20 June 2004**



Document Identification	Run: 9 Film: DIG7011 Frames: 45132, 45135, 45138 & 45141 Run: 10 Film: DIG7011 Frames: 45190, 45193, 45196 & 45199 Scale: 1 : 8,000 (Colour)
Photograph Date	Date: July 2009



Document Identification	Google Earth (Colour)
Photograph Date	Date: May 2015



Appendix F – Interview transcripts

Cairns Interview Summary – 20 July 2016

Interviewees – NQA

- [redacted], General Manager – People, Communications and Compliance, North Queensland Airports (NQA).
- [redacted], General Manager Property Development, NQA.
- [redacted] , Environmental Coordinator , NQA.

	Questions and Answers
1	Are you aware of any PFAS investigations and testing that have been undertaken across the wider Airport (i.e. outside of ARFF site)? • Yes, NQA is aware of three investigations that have been undertaken by Airservices, including an investigation at the fire training ground in 2008 and 2005 and at the Control Tower in 2016. • A recent investigation undertaken near the Control Tower identified PFAS contamination in soil and groundwater.
2	Is there an incident log that details where actual fires and fuel spills have been attended that required the use of firefighting foams? • No.
3	If there is not an inventory, can you recall any fires or fuel spills at the Airport? Dates? • No. In 2009/2010, there was an incident where a plane wing was dragged on the runway but there was no reported spillage.
4	Is there an inventory of AFFF storage within the Airport? • No.
5	Are you aware of any AFFF use outside of the Airport but within the general vicinity? • No.
6	Is there any AFFF still stored within the Airport? If so, where and for what purpose? • No. • No known use or storage of AFFF within hangars.
7	Has training involving AFFF (e.g. extinguishers, Airport Emergency Planning (AEP) exercises) been undertaken in areas outside of the current fire station and/or training ground? If so, where? • The majority of training has been undertaken at the fire training ground though it was noted that the following training exercises, Airservices trucks emptied lines of foam on either side of the road onto the grass, in the area between the fire training ground and the fire station.

	Questions and Answers
	• AEP training has been undertaken using lit fires but NQA is not aware that AEP training has involved the use of AFFF in any areas outside of the fire training ground. Any fire fighting associated with AEP training was undertaken by ASA. • It was also noted that foam has been sprayed into a grassed earth mound in an area to the south of the fire station by ASA. • There are seven areas within the Airport that are known to be impacted by PFAS.
8	What is the age of the current fire station and fire training ground? What was the previous use of these sites? • Refer to Airservices.
9	When AFFF was used in training, how often and for how long did this occur? • Refer to Airservices.
10	When AFFF was used in training, what volumes were used and what was the methodology for wash down of waste and equipment? • Refer to Airservices.
11	How widely was the AFFF dispersed aerially? Photos? • No photos.
12	Was wash down of fire fighting equipment restricted to the fire training areas? • Refer to Airservices.
13	Where did the wash down water end up? Do any drains discharge off-site and, if so, where? • The fire training ground used to drain to the adjacent stormwater drain (prior to construction of the water treatment plant). • The numerous waterways across the site are tidally influenced and linked to the Barron River. • NQA to provide a drainage plan.
14	Has there been any significant bulk earth works (relevant to AFFF use) on the site that resulted in soil being relocated from one area of the airport to another? • No.
16	How were spent drums or excess product disposed of? • Refer to Airservices.
17	Does groundwater ‘daylight’ in areas of the site? • Grassed areas across the airport are waterlogged in wet weather
18	What was the location of ARFF sites? • Current and former fire station.

	Questions and Answers
	• Fire training ground.
19	Is stormwater harvested within the Airport and if so, for what purposes and where? • No.
20	Is groundwater abstracted within the Airport and if so, for what purposes and where? • No, other than for testing or dewatering purposes. (only dewatering processes we are aware of are not in ASA areas)

Cairns ARFF Interview – 21 July 2016

Interviewees:

- [redacted] – Acting Fire Station Manager (based at Cairns ARFF since 2000)
- [redacted] – Fire Fighter (based at Cairns ARFF since 1984).

	Questions and Answers
1	Are you aware of any PFAS investigations and testing that have been undertaken across the wider Airport (i.e. outside of ARFF site)? • No.
2	Is there an incident log that details where actual fires and fuel spills have been attended that required the use of firefighting foams? • No. An operational response system (ORS) does exist – this records operational response only, not investigation of incidents.
3	If there is not an inventory, can you recall any fires or fuel spills at the Airport? Dates? • Light aircraft crash on runway in the 1990s close to the fire station (foam not used). • Car fire to south west of the fire station near Tom Macdonald Drive (in the last ten years) where foam was used to extinguish the fire. • Major fuel spill from Boeing 767 when wing fill valve failed (ORS records indicate this occurred in 2005). Unaware if foam was used.
4	Is there an inventory of AFFF storage within the Airport? • No. • ARFF AFFF was originally stored in 200 L drums before being stored in totes within the ARFF site at the Airport. • AFFF used was originally 3M Lightwater (phased out between 2001 to 2003), then Ansulite (before the transition to Solberg RF6 in 2010).
5	Are you aware of any AFFF use outside of the Airport but within the general vicinity? • [redacted] will store foam. Deluge system (water/foam) needed for fuel tanks in the event of fire though ARFF not seen activities with foam (may use water only for testing purposes). • Foam extinguishers likely to be present at [redacted] and potentially at [redacted]. • Foam and DCP extinguishers present in hangars. • The extinguishers on the Airport (including those at the Airservices fire station and the control tower) are not maintained by ARFF.
6	Is there any AFFF still stored within the Airport? If so, where and for what purpose?

	Questions and Answers
	• As above.
7	Has training involving AFFF (e.g. extinguishers, Airport Emergency Planning (AEP) exercises) been undertaken in areas outside of the current fire station and/or training ground? If so, where? • NW section of Airport (near Gate V16). • Two areas in the N/NE section of the Airport historically used for training on an irregular basis. • Water from monitors used in training was sprayed onto soil mound near emergency gate V13 (south of fire station). • One AEP training exercise undertaken on the fire training ground used AFFF to extinguish a fire (though AEP training did not usually incorporate the use of foam).
8	What is the age of the current fire station and fire training ground? What was the previous use of these sites? • Current fire station was built circa 1990 (this location was previously undeveloped). • Former fire station was located in the General Aviation (GA) area (under the old control tower).
9	When AFFF was used in training, how often and for how long did this occur? • Depended on requirements. Originally (before contamination issues understood) there were no restrictions on foam use.
10	When AFFF was used in training, what volumes were used and what was the methodology for wash down of waste and equipment? • Wash down generally undertaken at the fire station or training ground. Hoses washed using small hose washer near the drying rack at the fire station. Waste water went onto grass and into the drain. • Trucks washed near the separator at the fire station. Historically, trucks were hosed down on the grass at the back of the fire station.
11	How widely was the AFFF dispersed aerially? Photos? • No restrictions historically. More recently, contained to fire training ground.
12	Was wash down of fire fighting equipment restricted to the fire training areas? • Generally, yes.
13	Where did the wash down water end up? Do any drains discharge off-site and, if so, where? • The fire training area run off is collected in two tanks which are emptied prior to and following each training exercise (20,000 L collected each time though only 8,900 L used for training purposes).

	Questions and Answers
	• All stormwater drains into the new concrete drain (constructed in the last 3 to 5 years – approximately).
14	Has there been any significant bulk earth works (relevant to AFFF use) on the site that resulted in soil being relocated from one area of the airport to another? • No.
16	How were spent drums or excess product disposed of? • Old foam drums were cut in half and used for training (to light isolated fires using kerosene).
17	Does groundwater 'daylight' in areas of the site? • No.
18	What was the location of ARFF sites? • As Q8 and also an ARFF workshop is location with the GA area. • The former fire station was located at Unit 83 within the GA area, currently occupied by Heli Tours.
19	Is stormwater harvested within the Airport and if so, for what purposes and where? • No.
20	Is groundwater abstracted within the Airport and if so, for what purposes and where? • No.

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