

Project Details

AMS has two Civil Engineers, an Electrical Consultant/Electrician and a Design Draftsperson providing Engineering Consultancy services. The engineering team are fully conversant in the requirements of CASA's Manual of Standards 139 (MOS 139), CAAP 92-1 (Aeroplane Landing Areas), CAAP 92A-1 (Aerodromes for Small RPT Aircraft), CAAP 92-2 (Onshore Helicopter Landing Sites), ICAO Annex 14 and the Royal Flying Doctor Service (RFDS) for airside design. They are supported by other staff with a wealth of knowledge in airport management and operations, ensuring that design is practical as well as compliant with the regulations.



AMS provides the following consultancy services to our clients:

- New airport design – geometric design and pavement design;
- Extensions to existing runways and aprons;
- Apron marking design, to provide additional parking bays or for when the aircraft type changes;
- Electrical consultancy encompassing airfield ground lighting (AGL) design, apron floodlighting design and radio equipment;
- Supply of construction specifications and tender documentation;
- Tender evaluations;
- Obstacle Limitation Surface (OLS) drafting and Masterplanning;
- Carrying out third-party design checks; and
- General advice on all facets of airside construction and maintenance.

AMS works with clients in the public and private sectors on projects ranging from a gap analysis of existing facilities against regulations, through to greenfields design projects for large Code 4 aircraft (such as the design of a new runway at Geraldton in 2012).

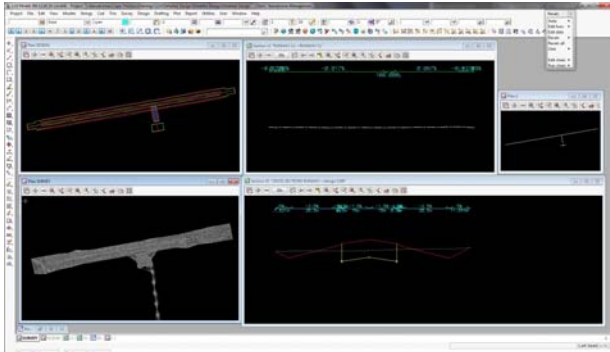
AMS has provided consultancy services in some form to the majority of airports in WA, as well as a number in the NT and Northern Queensland.

AMS uses AutoCad and 12D for drafting, as well as AviPlan for apron marking design.

Design Capabilities

- ✚ AMS can arrange or directly carry out surveying and geotechnical investigations.
- ✚ AMS can carry out pavement design using FAA software, and works closely with Golder Associates when specialist geotechnical knowledge is required.
- ✚ AMS is up to date with new technologies and methods.
- ✚ The AMS Engineering team has the benefit of operational input into design, to ensure that the design is workable once constructed.
- ✚ AMS works in many remote locations, and produces designs that are economical and constructible, especially when materials and plant are limited.





Cape Preston – April-May 2016 (\$300,000)

AMS first provided CITIC Pacific Mining design services in 2007. In 2014/15 we updated the concept drawings, and then won the tender to provide detailed design for a Code 3C airport including the terminal and refuelling infrastructure. The location had a very poor subgrade and AMS determined that a deeper pavement constructed with client-supplied material was more cost effective than carrying out stabilising of the subgrade. The client required a very high level of detail/accuracy in the quantities, and the work was completed in a six-week timeframe.

Boolardy Airstrip – March-April 2014 (\$90,000)

The CSIRO engaged AMS to upgrade a station airstrip to one that was suitable for flying their staff, working on the Murchison Radio-Astronomy Observatory, in and out of a remote part of WA. AMS carried out the geotechnical assessment and testing, survey, design and preparation of tender documents, and provided on-going support (on and off site) during the upgrade works.



Onslow Airport – April-September 2012 (\$130,000)

AMS designed a new Code 3C runway for Onslow Airport for the Shire of Ashburton, on behalf of Chevron, to support the Wheatstone Oil and Gas development near the town. The new runway was to be built across tidal salt flats presenting challenges for the pavement design, both in terms of foundation support and salt ingress. Additionally, AMS supported the Shire prior to and during the construction process such that the existing runway could remain in use.

