

# AIR 8000 PHASE 2 - BATTLEFIELD AIRLIFTER FACILITIES

**RAAF Base Amberley, Queensland** 

# STATEMENT OF EVIDENCE TO THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

Canberra, Australian Capital Territory
September 2015

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### **Battlefield Airlifter Facilities Project**

#### **Identification of the Need**

- 1. In May 2012, Government approved the Defence Capability Plan Project AIR8000 Phase 2 to proceed with the procurement of ten US-military configuration C-27J Battlefield Airlifter aircraft. The procurement included associated role equipment, support and test equipment, initial spares and training, aircrew and maintenance training devices, publications and technical data, a structural life substantiation program and the establishment of in-service support.
- 2. The C-27J Battlefield Airlifter aircraft is a light tactical fixed-wing aircraft with greater speed, range and payload capabilities than the retired Caribou transport aircraft it replaces. The C-27J Battlefield Airlifter capability is intended to enhance the Australian Defence Force's intra-theatre and regional airlift capability. The C-27J Battlefield Airlifter aircraft will be able to operate from a wide range of rudimentary airstrips with useful payload, range and in-theatre survivability.
- 3. In June 2009, the Chief of Air Force formally advised that RAAF Base Amberley is the Air Force's preferred option for the C-27J Battlefield Airlifter Main Operating Base facilities. On 9 July 2013, the Minister for Defence agreed that RAAF Base Amberley would be developed as the Main Operating Base for the C-27J Battlefield Airlifter fleet.

#### **Background**

- 4. The C-27J Transition Team and No 35 Squadron (35SQN) will oversee the introduction into service and operate the C-27J Battlefield Airlifter aircraft. The responsibility for the command and control of 35SQN will transfer from the C-27J Transition Team to No. 84 Wing in December 2016.
- 5. Forming in March 1942 in Western Australia, 35SQN operated an assortment of aircraft in support of its courier and supply operations before disbanding in June 1946. On 1 June 1966, the RAAF Transport Flight in Vietnam was re-titled 35SQN and began operating the DHC-4 Caribou aircraft. 35SQN returned to Australia on 19 February 1972 and was relocated to Townsville in 1974 where it undertook Army tactical support tasks and civil aid operations, including search and rescue, medical

evacuations and flood relief work. This role was further enhanced when 35SQN was equipped with four UH-1 Iroquois, becoming the first RAAF Squadron to simultaneously fly both rotary and fixed wing aircraft. In November 1989, the Iroquois were transferred to the Australian Army and 35SQN continued to provide tactical transport until the squadron was again disbanded in 2000. 35SQN was re-raised in January 2013 to oversee the introduction into service of the C-27J Battlefield Airlifter aircraft.

- 6. On 27 June 2015, the first C-27J Battlefield Airlifter aircraft landed in Australia, with the second scheduled to arrive in early September 2015. The remaining C-27J Battlefield Airlifter aircraft are scheduled to arrive progressively in Australia from the third quarter in 2016. To meet the introduction into service timeframes, the C-27J Battlefield Airlifter aircraft will initially be based at RAAF Base Richmond, until the Main Operating Base facilities are completed at RAAF Base Amberley in mid 2018.
- 7. Suitable land with direct access to the airfield is a limited resource at RAAF Base Amberley. A Flight Line Master Plan has been developed to facilitate the long-term strategic planning for the RAAF Base Amberley flight line to ensure the best use of available land as individual projects are brought forward.
- 8. The RAAF Base Amberley Flight Line Master Plan anticipates the removal of heritage buildings at RAAF Base Amberley to facilitate the redevelopment of land adjacent to the airfield. The siting of the Battlefield Airlifter Facilities Project is within an area of the Flight Line Master Plan that contains some heritage buildings.
- 9. In January 2014, Defence undertook a referral under the Environmental Protection Biodiversity Conservation Act for the removal of heritage buildings as envisaged within the RAAF Base Amberley Flight Line Master Plan. On 9 June 2015, the Department of Environment approved the removal of all redundant facilities subject to a number of conditions including the archival recording of all heritage buildings and the relocation of one Bellman Hangar, two P-1 Huts and one explosive locker to another appropriate on-Base site.

#### Supporting C-27J Battlefield Airlifter Operations at RAAF Base Amberley

- 10. The 2012 Australian Defence Force Posture Review identified that RAAF Base Amberley is to become one of two designated joint-user 'super-bases'. The 2013 decision by the Minister for Defence to locate 35SQN at RAAF Base Amberley supports the objectives of the 2012 Australian Defence Force Posture Review.
- 11. The basing of the C-27J Battlefield Airlifter capability at RAAF Base Amberley will provide opportunities and operating efficiencies for the Air Force's Air Mobility Group. Locating the C-27J Battlefield Airlifter capability at RAAF Base Amberley also provides immediate access to national level logistics support and sustainment though Joint Logistics Command's Joint Logistic Unit South Queensland, which re-located to RAAF Base Amberley from Bulimba under the Defence Logistics Transformation Program.
- 12. In order to meet the capability needs of the C27J Battlefield Airlifter and RAAF Base Amberley the following requirements were identified:
  - a. provide Operational Facilities (working accommodation, maintenance facilities and aircraft parking apron);
  - b. provide a Training System Facility; and
  - c. provide replacement facilities and infrastructure for functions displaced by the
     C-27J Battlefield Airlifter Operational Facilities.
- 13. In August 2015, the Government approved the main operating base facilities component for the AIR 8000 Phase 2 Battlefield Airlifter Project.

#### **Description of Proposal**

- 14. The Project proposes to provide fit for purpose facilities at RAAF Base Amberley to maintain, operate and sustain ten new C-27J Battlefield Airlifter aircraft being acquired under Project AIR 8000 Phase 2. The Project also involves demolition works, civil works, infrastructure / essential service works and landscaping to associated and affected areas and buildings.
- 15. The facilities proposed to meet the C-27J Battlefield Airlifter capability and the RAAF Base Amberley Flight Line Master Plan requirements will impact existing

facilities and infrastructure. The project therefore includes the provision of fit for purpose facilities at RAAF Base Amberley to replace existing functions that are displaced by the final siting of the C-27J Battlefield Airlifter operational facilities. The provision of replacement facilities for those that are displaced also requires additional demolition works, civil works, infrastructure / essential service works and landscaping to affected areas and buildings.

- 16. The proposed facilities are to be located on a combination of 'brownfield' and 'greenfield' sites across RAAF Base Amberley.
- 17. The proposal involves three elements of work with a number of sub-elements as follows:
  - a. Training System Facilities:
    - (1) administration area, training classrooms, C-27J flight simulator, C-27J fuselage trainer, and maintenance training areas;
    - (2) marshalling yard; and
    - (3) car parking.
  - b. C-27J Battlefield Airlifter Operational Facilities:
    - (1) working accommodation;
    - (2) maintenance facilities;
    - (3) aircraft parking apron;
    - (4) ancillary building;
    - (5) associated site infrastructure; and
    - (6) Canberra Drive Extension (to Hudson Road).
  - c. Displaced Facilities:
    - (1) fire station;
    - (2) Bureau of Meteorology working accommodation;

- (3) No 23 Squadron (23SQN) working accommodation;
- (4) transit accommodation (200 rooms);
- (5) bedding store;
- (6) Base briefing room;
- (7) court room;
- (8) storage for ceremonial equipment;
- (9) car parking;
- (10) Australian Air Force Cadet facilities;
- (11) Canberra Drive extension (Hudson Road to Lincoln Avenue); and
- (12) relocation of heritage buildings.

#### **Project Location**

18. RAAF Base Amberley is located six kilometres southwest of the Ipswich CBD and 35 kilometres southwest of the Brisbane CBD, in South East Queensland. A Locality Plan depicting RAAF Base Amberley is at Attachment 1. A Site Plan showing the location of all of the proposed facilities is at Attachment 2.

#### **Options Considered to Fulfil the Identified Need**

- 19. The adaptive re-use of existing facilities for the Training element and C-27J Battlefield Airlifter Operational Facilities was not considered to be a feasible as there are no existing facilities that could be adaptively re-used to meet the C-27J functional requirements. The preferred option for the Training and Operational Facilities elements is new construction in the locations shown in Attachments 3 and 4 respectively.
- 20. The adaptive re-use of existing facilities at RAAF Base Amberley to achieve the functionality of the remaining displaced facilities was not considered to be feasible, as no other suitable facilities are available on-Base to meet the functional

- requirements. The preferred option for the displaced facilities is new construction in the locations shown in Attachments 5 to 8.
- 21. Defence is considering the viability of adaptively re-using the Bellman Hangar and the two P-1 Huts that have been identified for retention under the RAAF Base Amberley Flight Line Master Plan Environmental Protection and Biodiversity Conservation Referral Decision. Relocation of the Bellman Hangar and the two P-1 Huts to the new Australian Air Force Cadet precinct may be a viable solution for the Australian Air Force Cadet's functional requirements. This option will be further developed as the design progresses.

#### **Environment and Heritage Assessment**

#### **Overview of Assessment Process**

- During the Planning Phase of the Project an Environmental Report was completed that identified a number of minor risks associated with the local environment and indigenous heritage at the sites, and recommended appropriate mitigation measures for inclusion into the Environmental Assessment Report. The Environmental Report recognised the significant impact that the implementation of the Flight Line Master Plan would have on the built heritage for the Operational Facilities site and noted that this was covered under the Environmental Protection Biodiversity Conservation Act Referral Decision. The Environmental Assessment Report will inform the Construction Environmental Management Plan and the Environmental Clearance Certificates, both of which will be used to manage environmental impacts during construction. Mitigation measures proposed in the Environmental Assessment Report include:
  - a. the provision of offset planting to mitigate vegetation clearing, occurring as a result of the proposed development;
  - b. strict adherence to Defence's existing Weed Management Control Program to prevent the spread of weeds through mishandling of removed vegetation;
  - c. the natural dispersal of local fauna and provision of a suitably qualified 'wildlife spotter' during any land clearing activities;
  - d. a testing regime for contaminated soil during all excavation activities;

- e. the washing of construction vehicles, plant and equipment during construction to minimise the spread of fire ants;
- f. the implementation of anti-bird nesting measures during construction;
- g. the completion of all required soil contamination assessments and if required, the removal or treatment of contaminated soil; and
- h. trapping surface run-off from the construction site areas and preventing run-off from entering the existing stormwater drains and local catchments.
- 23. During the Planning Phase of the Project, a series of associated investigations were also undertaken. These investigations included:
  - a. a Contamination Assessment of the proposed site; and
  - b. a Flora and Fauna Survey and Species Assessment.
- 24. Each of these investigations assessed their relative risks in relation to the Project and made practical and cost effective recommendations for mitigating the risks and meeting all legislative and policy requirements.
- 25. Investigations have been conducted on all sites and have identified a range of contaminants. Further exploratory investigations and testing will be undertaken in the Design Phase of the Project to better identify these contaminants and to enable appropriate remediation strategies to be identified and implemented.
- A Construction Environmental Management Plan will be developed for the Project that will identify soil testing requirements and the process for dealing with any potential contaminated ground, including but not limited to asbestos, hydrocarbons, heavy metals, other chemicals and unexploded ordnance.
- 27. RAAF Base Amberley is within a Fire Ant Restricted Area and restrictions apply to the methods of excavation, spoil handling and movement of spoil. In accordance with the Queensland Government requirements, the Contractor will be required to attend Fire Ant General Awareness Training, develop and obtain approval of a risk management plan and demonstrate their competency before commencing any earth works.

- Ongoing human impacts, airfield operations and past pastoral activities have limited the biodiversity and quality of the area. Furthermore, the proposed C-27J Battlefield Airlifter and displaced facilities development sites are in previously established areas of the Base. No threatened ecological communities have been identified in the development areas and no resultant impacts are likely. While no koalas were observed during the investigations, evidence of their presence was found. Although, it is not anticipated that they would enter a work site during construction, appropriate management regimes will be employed throughout the construction activity. Other than the Koala, no rare or threatened fauna species were identified in development areas surveyed. Likewise, no rare or threatened flora species were identified in the proposed development sites surveyed. Any requirement to remove trees will be done in accordance with Defence policy and will comply with the offsetting requirements.
- 29. Following the completion of the Flight Line Master Plan Environmental Protection and Biodiversity Conservation Act Referral, an updated Environmental Report and supplementary assessments, Defence will produce a final Environmental Assessment Report for the Project that will outline a series of recommendations to ensure compliance with the Environmental Protection and Biodiversity Conservation Act and associated Defence environmental policies and procedures.
- 30. To mitigate any potential environmental impacts as identified in both the Environmental Report and Environmental Assessment Report, and any future investigations, the Project will be managed in accordance with:
  - a. the Defence Environmental Management Framework, including compliance with the Regional Environmental Management System;
  - b. a Construction Environmental Management Plan (to be developed by the construction contractor and to include all environmental procedures for construction activities); and
  - c. Environmental Clearance Certificates, which will be issued by Defence following submission of the Construction Environmental Management Plan and prior to any construction related activities being undertaken on site.

#### **Indigenous and Non Indigenous Heritage**

- 31. The RAAF Base Amberley Revised Heritage Management Plan identified the proposed Base Briefing Room/Court House and Transit Accommodation sites as having moderate sensitivity and will require consultation with a heritage consultant. The remaining sites that will be under development have been extensively modified and do not require further assessment. Defence has existing procedures in place at RAAF Base Amberley for the chance discovery of potential heritage material that will guide the response to the discovery of any items that could be of indigenous or non-indigenous heritage value.
- 32. In order to achieve the strategic outcomes of the Flight Line Master Plan a number of heritage listed facilities and structures that demonstrate the design and operation of pre- and early World War Two (WWΠ) Air Bases will be removed. Defence submitted an Environmental Protection and Biodiversity Conservation Referral, which resulted in a 'controlled action' decision from the Department of Environment (Environmental Protection and Biodiversity Conservation Reference No. 2014/7123). The Department of Environment notified Defence of the assessment on 9 June 2015, and has approved (with conditions) the removal of heritage buildings at RAAF Base Amberley.

#### **Key Legislation**

- 33. The following key legislation is relevant to this project:
  - a. Environmental Protection Biodiversity Conservation Act 1999 (Cth);
  - b. Building and Construction Industry Improvement Amendment (Transition to Fair Work) Act 2012 (Cth);
  - c. Work Health and Safety Act 2011 (Cth);
  - d. Disability Discrimination Act 1992 (Cth);
  - e. Fair Work Act 2009 (Cth); and
  - f. Fair Work (Building Industry) Act 2012 (Cth).
- 34. The design of all proposed project facilities also complies with all relevant Australian Standards, Codes and Guidelines including National Construction Code 2013 (inclusive of the Building Code of Australia).

#### **Consultation with Key Stakeholders**

- 35. Consultation has been undertaken with the following key Defence stakeholders:
  - a. Air Force Headquarters Advice on project scope, operational / user requirements and unit entitlement planning;
  - b. Capability Development Group Advice on project scope, options and scheduling;
  - c. Defence Materiel Organisation AIR 8000 Phase 2 Project Office Advice on User requirements, options and scheduling issues for the Training System Facility;
  - d. Air Mobility Group (C-27J Transition Team and 35SQN) Advice on user requirements, transition arrangements and relocation / decanting issues for the Operational Facilities;
  - e. 23SQN, RAAF Base Amberley Advice on Base operations, user requirements, transition arrangements and relocation / decanting issues for the displaced facilities;
  - f. Infrastructure Division Advice on Zone and Precinct Planning requirements and site selection and environment, heritage and engineering policy / compliance;
  - g. Defence Support Queensland Consideration of Base and regional issues;
  - h. Defence Security Agency Advice on physical security policy; and
  - i. Chief Information Officer Group Advice on Information Communications
     Technology policy and costing.
- 36. Defence recognises the importance of providing local residents, statutory authorities and other interested stakeholders an opportunity to provide input into, or raise concerns relating to, major projects such as the Battlefield Airlifter Facilities Project.
- 37. Defence has developed a community consultation and communications strategy to engage with internal and external stakeholders during project development, and

further consultation will be conducted following the referral of this project to the Parliamentary Standing Committee on Public Works. External stakeholders include:

- a. The Hon Mr Shayne Neumann MP, Federal Member for Blair;
- b. The Hon Jim Madden, State Member for Ipswich West;
- c. Ipswich City Council;
- d. Queensland Department of Transport and Main Roads;
- e. Local Environmental Groups, including the Australian Koala Foundation;
- f. Industry Information Forums; and
- g. Community Information Forums.

#### **Purpose of the Works**

#### **Project Objectives**

- 38. The Project objective is to provide fit for purpose facilities at RAAF Base Amberley to maintain, operate and sustain the ten new C-27J Battlefield Airlifter aircraft being acquired under Project AIR 8000 Phase 2. The Project also includes demolition works, civil works, infrastructure / essential service works and landscaping to associated areas and buildings.
- 39. In addition, the Project proposes to provide fit for purpose facilities at RAAF Base Amberley to replace existing functions that are displaced by the siting of the C-27J Battlefield Airlifter Operational facilities. The provision of these replacement facilities also includes demolition works, civil works, infrastructure / essential service works and landscaping to associated areas and buildings.

#### **Details and Reasons for Site Selection**

40. The Flight Line Master Plan provides ongoing guidance for the longer term development of land adjacent to the airfield at RAAF Base Amberley. The Flight Line Master Plan envisaged a future Medium Airlift precinct at the southern end of the flight line, which guided the site selection for the C-27J Battlefield Airlifter Operational Facilities.

- 41. The RAAF Base Amberley Strategic Analysis and Zone Options Report provided guidance to the Project on the site selection of Training System Facilities and the replacement of those facilities displaced as a result of this project.
- 42. At a Site Selection Board held on 4 to 5 November 2014, Defence delegates considered and agreed to the proposed siting of all project facilities. The Site Selection Board Report recommendation was subsequently approved by the Defence Estate Planning delegate on 12 June 2015. A Site Plan showing the location of all of the proposed facilities is at Attachment 2.
- 43. The Training System Facilities will be located adjacent to the existing C-17 Cargo Compartment Training facility on the Northern Perimeter Road. A Site Plan of the proposed new Training facility site is shown at Attachment 3.
- 44. The C-27J Battlefield Airlifter Operational Facilities are located on the northern boundary of the Flight Line Master Plan zone reserved for the future Medium Airlift precinct. This site is toward the southern end of the flight line and overlies some existing RAAF Base Amberley facilities. A Site Plan of the proposed C-27J Battlefield Airlifter Operational Facilities is shown at Attachment 4.
- The displaced facilities that currently lay within the construction envelope of the C-27J Battlefield Airlifter Operational Facilities site will require relocation. The sites identified for the displaced facilities are in accordance with the RAAF Base Amberley Zone Plan and the Flight Line Master Plan. The sites are as follows:
  - a. Fire Station and Bureau of Meteorology. The Fire Station and Bureau of Meteorology requirements will be combined into a single building located to the north of the C-27J Battlefield Airlifter Operational facilities, as shown in Attachment 5. The site is defined by Phantom Drive to the north, taxiway Alpha to the east and 23SQN Headquarters to the west.
  - b. 23SQN Working Accommodation. Part of the existing 23SQN working accommodation is currently located inside the C-27J Battlefield Airlifter Operations construction envelope. This office accommodation will be reconstructed adjacent the existing 23SQN Headquarter building, as shown in Attachment 5.

- c. Transit Accommodation. The proposed transit accommodation will be constructed north of Rosewood Road in the vicinity of existing accommodation and combined mess precinct as shown in Attachment 6. A car park to accommodate the requirements of both the transit accommodation and the Base Briefing Room and Court House will be constructed adjacent to both facilities.
- d. Base Briefing Room and Court House. The Base Briefing Room, Court House and Ceremonial Store requirements will be combined into a single facility located on the north side of the Rosewood Road opposite the existing combined mess facility, as shown in Attachment 6.
- e. Australian Air Force Cadets. The proposed Australian Air Force Cadet facilities will be located north of the existing bomb replenishment area, as shown in Attachment 7. The site is defined by open areas to the north and south, the southern entry gate to the east and a taxiway to the west.
- f. Canberra Drive Extension. The realignment of the key Base roads and services has resulted in an extension southwards of the existing road as shown in Attachment 8.
- g. Relocation of Heritage Buildings. A heritage listed Bellman Hangar will be dismantled and moved to another site at RAAF Base Amberley as part of this project. However, it is noted that the outcomes of the Environmental Protection and Biodiversity Conservation Referral also required the relocation of two P-1 Huts and one explosive locker, which will be completed under a separate Defence project as these facilities are related to the proposed Growler Airborne Electronic Attack Capability Facilities.

#### **Detailed Description of the Proposed Scope of Works**

- 46. The facilities for this project fall in to three distinct functional groups. The first is the Training Systems facilities, which consist of an administration area, training classrooms, C-27J flight simulator, C-27J fuselage trainer, maintenance training area, marshalling yard and car parking.
- 47. The second functional group is the Battlefield Airlifter Operational facilities, which consist of working accommodation, logistics facilities, hangar, workshops facilities,

- aircraft parking apron, ancillary buildings and associated site infrastructure, which need to be located for operational purposes adjacent to the airfield.
- 48. The third functional group consists of the buildings and facilities displaced by the proposed Battlefield Airlifter Operational facilities. These displaced facilities include the Fire Station and Bureau of Meteorology facilities, 23SQN facilities, transit accommodation, bedding store, car parking, Base Briefing Room, Court Room, Ceremonial Store and Australian Air Force Cadet facilities. The siting of the Battlefield Airlifter Operational facilities will also necessitate a realignment of Canberra Drive.
- 49. This functional group also addresses the Environmental Protection and Biodiversity Conservation Heritage impacts. The outcomes of the referral to the Department of Environment requires Defence to retain and relocate one Bellman hangar, two P-1 Huts and an explosives locker to a location deemed suitable on Base. All buildings demolished will require archival recording to be undertaken such as photographic and video recording.

#### **Training System Facilities**

#### **Element 1 - Training System Facilities**

- 50. The proposed Training System Facilities will provide new facilities for dedicated C-27J Battlefield Airlifter training for aircrew, loadmaster, trade/maintenance and other support trade categories. The objective is to provide a single fit-for purpose and compliant Training System Facility to accommodate all training functions. The floor plan is illustrated in Attachment 9.
- 51. The proposed Training System Facility includes areas for:
  - a. working accommodation comprising open plan and private offices, storage areas, workshops, meeting rooms and resource areas;
  - b. training classrooms;
  - c. C-27J flight simulator;
  - d. C-27J fuselage trainer;
  - e. maintenance training;

- f. general amenities including kitchen facilities, ablutions, shower facilities and lockers; and
- g. site infrastructure and services.

#### C-27J Battlefield Airlifter Operational Facilities

52. The proposed C-27J Battlefield Airlifter Operational Facilities will provide new facilities to support and sustain 35SQN operations of ten C-27J Battlefield Airlifter aircraft. This scope element consists of seven sub elements to achieve the working requirements of 35SQN.

#### **Element 2 - 35SQN Working Accommodation**

- 53. The new facilities will provide the main working accommodation for 35SQN personnel required to support C-27J Battlefield Airlifter capability. The floor plan is illustrated in Attachments 10 and 11.
- 54. The proposed working accommodation includes areas for squadron executives, administration, operations, aircrew flight planning, aircrew working areas, maintenance personnel administration areas, flight line office and aircraft life support equipment section.
- 55. The working accommodation will include open plan and private offices, storage areas, which are complimented by appropriate archive, meeting and resource areas.
- 56. The facility includes appropriate general amenities including kitchen facilities, ablutions, shower facilities and lockers.

#### **Element 3 - 35SQN Logistics**

- 57. The logistics area will provide working accommodation and general storage and warehousing in support of 35SQN maintenance and operations. The logistics area is located immediately adjacent to the apron and 35SQN Working Accommodation.
- 58. The proposed logistics area to meet 35SQN functional requirements includes general warehousing, aircraft parts storage and management, and a maintenance tool store.
- 59. The area includes appropriate general ablutions, which are shared with the working accommodation.

#### Element 4 - 35SQN Hangar

- 60. Hangar facilities will provide the main working accommodation for 35SQN maintenance personnel to conduct a range of aircraft and equipment maintenance activities. The facilities are to be located immediately adjacent to the 35SQN Working Accommodation with direct connection to the flight line. The floor plan is illustrated in Attachments 12.
- 61. The hangar will be configured for three C-27J Battlefield Airlifter aircraft. Two aircraft positions within the hangar will be fitted with aircraft docking.
- 62. General ablutions for personnel working in this facility are shared with the working accommodation.

#### **Element 5 - 35SQN Workshops**

- 63. The workshops will provide working accommodation for 35SQN maintenance personnel to conduct a range of aircraft and equipment maintenance activities. The facilities are to be located immediately adjacent to the Hangar. The floor plan is illustrated in Attachment 13.
- 64. The workshops proposed to meet functional requirements include an avionics workshop, structural repair workshops, surface finishing workshops, propulsion workshops, aircraft life support equipment workshops and general purpose workshops.
- 65. The facility includes appropriate general amenities including a kitchenette, ablutions, shower facilities and lockers.

#### Element 6 - 35SQN Apron

- 66. The apron and airfield infrastructure will provide the necessary infrastructure to safely operate, maintain and manoeuvre the C-27J Battlefield Airlifter aircraft. The apron is located immediately adjacent the hangar, flight line control office and maintenance facilities. The design for the Apron is illustrated in Attachment 4.
- 67. The apron and airfield infrastructure proposed to meet functional requirements include parking spaces for ten C-27J Battlefield Airlifter aircraft including one position that is under cover, in-ground hydrant refuelling, aeronautical ground

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lighting, undercover parking/storage for ground support equipment and high mast apron lighting.

#### **Element 7 - 35SQN Ancillary Buildings**

- 68. The proposed ancillary buildings include a dangerous goods store, ground support equipment shelters, communications node, fire tanks and fire pumps. The floor plans are illustrated in Attachment 14.
- 69. These facilities provide essential functions that are not included in the main 35SQN building. These facilities are dispersed due to safety separation and design efficiency requirements.

#### **Element 8 - Site Infrastructure**

70. Essential engineering services and infrastructure will be provided to support the proposed facilities.

#### Element 9 - Canberra Drive Extension to Hudson Road

- 71. The Canberra Drive extension to Hudson Road is required to provide realignment of the road and services networks to enhance the movement of Base emergency vehicles and connect to the Base road network to support traffic flow. The site plan is illustrated in Attachment 8.
- 72. The extension of Canberra Drive comprises civil works, new road pavements, relocation of existing storm water drainage and services to within the proposed new road reserve corridor. The civil work will also include appropriate pedestrian access routes to and from adjacent facilities.

#### **Displaced Facilities**

73. The Displaced Facilities are required to replace existing functions that are impacted by the siting of the C-27J Battlefield Airlifter Main Operating Base facilities. This scope element consists of seven sub elements to achieve the Displaced Facilities requirements.

#### Element 10 - Fire Station and Bureau of Meteorology Facility

74. The base fire fighting capability and Bureau of Meteorology functions will be consolidated into a single new-build Fire Station / Bureau of Meteorology Facility.

The facility will combine the accommodation requirements of both users and is to be

- located immediately adjacent to the main taxiway. The floor plans are illustrated in Attachments 15 and 16.
- 75. The Fire Station facilities proposed to meet the functional requirements include dedicated working accommodation for the Fire Section staff; fire training classrooms; shift and support facilities (recreation room, gymnasium, individual recline rooms and crew room); observation tower; ready use fire fighting vehicle parking for three large and one medium fire fighting vehicles; annex for spare fire fighting vehicles and equipment storage.
- 76. The Bureau of Meteorology area comprises working accommodation for the Bureau of Meteorology staff together with an observation room.
- 77. The combined facility includes appropriate general amenities including a kitchenette and ablutions.

#### **Element 11 - 23SQN Working Accommodation**

- 78. The proposed 23SQN working accommodation facility will provide working and office accommodation as an extension to the existing 23SQN headquarters building. The floor plan is illustrated in Attachment 17.
- 79. The 23SQN facilities proposed to meet functional requirements include open plan and private offices, archive storage areas, meeting rooms and resource areas.
- 80. The facility includes appropriate general amenities including kitchenette and ablutions.

#### **Element 12 - Transit Accommodation**

- 81. The proposed Transit Accommodation will provide new and dedicated accommodation facilities to support the requirement to accommodate personnel transiting through RAAF Base Amberley. The floor plans are illustrated in Attachments 18 to 21.
- 82. The Transit Accommodation proposed to meet the functional requirements includes the provision of 200 rooms, with a capacity for 400 beds, working accommodation for management personnel, and a dedicated bedding store.
- 83. The Transit Accommodation will also include shared amenities including kitchenette, common rooms, ablutions, showers, laundry and dryers.

#### Element 13 – Transit Accommodation and Base Briefing Room/Court House Car Park

- 84. The combined car park is proposed to provide car parking to both the Transit Accommodation and Base Briefing Room/Court House facilities. The car-park will provide 174 individual car-parks to meet the requirements of the Transit Accommodation and the Base Briefing Room/Court House personnel. The site plan is illustrated in Attachment 6.
- 85. The car park will include civil works, new pavements, and pedestrian access routes to and from adjacent facilities.

#### **Element 14 - Base Briefing Room/Court House Facility**

- 86. The proposed Base Briefing Room/Court House Facility is a new facility to accommodate the requirements of a Base briefing room, court house and storage of ceremonial equipment. The floor plan is illustrated in Attachment 22 and 23.
- 87. The Base Briefing Room includes tiered seating for 275 people in a lecture theatre arrangement. The ADF Military Court room is designed to meet the functional requirements of the ADF Military Justice system and includes a dedicated Court Room, working accommodation for the Defence Force Magistrate and support staff, and meeting/consultation rooms.
- 88. The ceremonial store facilities proposed to meet the functional requirements includes storage for large and valuable ceremonial (parade) equipment.
- 89. Common support amenities will be provided including ablutions, kitchenette, covered arrival and breakout area, working accommodation, issue counter and covered loading bay.

#### **Element 15 - Australian Air Force Cadet Facilities**

- 90. The Australian Air Force Cadet Facilities will provide new and adaptively re-used facilities to support and sustain No. 2 Wing Australian Air Force Cadets, who deliver air and ground training courses to Australian Air Force Cadets and staff throughout the year. The floor plan is illustrated in Attachment 24.
- 91. The facilities will combine the training, flight line and working accommodation with the aircraft shelter and hangar elements which are to be located immediately adjacent the apron, north of the Bomb Replenishment Area.

#### Element 16 - Canberra Drive Extension from Hudson Road to Lincoln Avenue

- 92. The Canberra Drive extension from Hudson Road to Lincoln Avenue is required to provide realignment of the Base road and services networks to support traffic flow, to assist in the movement of Base emergency vehicles and to prepare for future development in accordance with the Flight Line Master Plan. The site plan is illustrated in Attachment 8.
- 93. The extension of Canberra Drive comprises civil works, new road pavements, relocation of existing storm water drainage and services to within the proposed new road reserve corridor. The civil works also include appropriate pedestrian access routes to and from adjacent facilities.

## Element 17 - Environmental Protection and Biodiversity Conservation Heritage Impacts

- 94. The conditions associated with the Flight Line Master Plan Environmental Protection and Biodiversity Conservation referral require the relocation of at least one Bellman Hangar, two P-1 Huts and one explosive locker to a suitable location on RAAF Base Amberley. This project will address the relocation of one Bellmen Hangar. The facilities project to support the introduction of the Growler Airborne Electronic Attack Capability will relocate the two P-1 Huts and the Explosive Locker as these heritage buildings are within that project's proposed site.
- 95. Structural steelwork and hangar doors from other suitable Bellman Hangers may be transported to other Defence Bases where an existing hangar requires rectification work. However, this rectification work will not be undertaken by this project.

#### **Public Transport, Local Road and Traffic Concerns**

- 96. As a result of this project, 35SQN will be relocating from RAAF Base Richmond in New South Wales to RAAF Base Amberley, which will see a small increase to the Base and local population. The increase in Base population is not expected to adversely impact local roads, public transport arrangements or traffic congestion.
- 97. During construction there will be an increase to the number of large vehicles that enter the Base to deliver material to site. Construction management arrangements will mitigate the effects of construction traffic on the local road network. Mitigation

measures include the use of a dedicated construction access gate off Hansens Rd to prevent delays to the area around the main gate of RAAF Base Amberley.

#### **Zoning and Local Approvals**

98. All project elements are to be constructed on existing Defence land. The sites approved for all project scope elements are all located within the appropriate zone as defined within the RAAF Base Amberley Strategic Analysis and Zone Options Report and the Flight Line Master Plan. The intended function and use of all project elements are consistent with this zoning.

#### **Childcare Provisions**

99. Childcare facilities are currently available on RAAF Base Amberley and in the local Ipswich area. There are no requirements for additional childcare facilities as part of this project, with the existing facilities meeting the current and known future needs of the Base.

#### **Impact on Local Community**

- 100. 35SQN personnel consist of a mix of single and married personnel. Within RAAF Base Amberley, there is on-Base accommodation available for military personnel. Those personnel who do not obtain on-Base accommodation will be required to find accommodation in the local area. Accommodation for both married and single personnel will be managed through the 35SQN Relocation Working Group and Defence Housing Australia.
- 101. RAAF Base Amberley has a long standing and good relationship with the local community. It is expected that the relocation of 35SQN personnel to RAAF Base Amberley will have a positive effect on the overall community through the enhancement of the local area economy.
- 102. The construction of the Project will provide opportunities for local small and medium size enterprises to provide services as suppliers and sub-contractors to the managing contractor, and the potential for employment stimulation.

#### **Planning and Design Concepts**

103. The development of the design has sought to incorporate end user requirements whilst meeting the following objectives:

- a. planning the facility to maximise connectivity between buildings within the site as well as connecting to other facilities on Base;
- b. generally orientating the building primarily along its east-west axis, with the façade facing north to optimise passive solar control;
- c. siting the facility to allow for appropriate future expansion;
- d. providing simple, rectilinear building forms, typically with a mono-pitched roof falling to the north to match the existing urban design of the Base;
- e. compact planning to reduce the land area required by the building footprint;
- f. emphasising the building entry to permit ease of pedestrian traffic; and
- g. utilising sun shading (both vertical and horizontal) to shade the north and south facades;
- 104. Access and facilities for the disabled will be provided in accordance with the Building Code of Australia, Australian Standard AS1428 *Design for Access and Mobility* and the Defence policy *Disabled Access and Other Facilities for Disabled Persons.* The facilities will include accessible kitchens, toilets and showers.

#### **Structural Design**

- 105. The key considerations taken into account in carrying out the structural design are:
  - a. maintaining and enhancing the operational effectiveness of each facility;
  - b. ensuring the design for each building is fit for purpose;
  - c. cost-effectiveness over the whole of life of the Project;
  - d. minimisation of in-service maintenance requirements;
  - e. minimisation of risks inherent in the design (both safety and economic risks); and
  - f. maintaining flexibility of the use of internal spaces where appropriate.

106. The structural design of the facilities and associated works has taken into account local geotechnical conditions and are in accordance with all relevant Australian Standards and Codes. Appropriately qualified and experienced geotechnical and structural engineers have been engaged in the design of the proposed facility.

#### **Hydraulic Services**

- 107. Hydraulic Services on Defence establishments will conform to the requirements of all applicable legislation, regulations, codes of practice and guidance publications (Regulations) relevant to Queensland, and all relevant standards (Standards).
- 108. Hydraulic Services installations will comply with relevant Australian standards, for the type of the installation or equipment to be used. Where Australian Standards are not available, recognised international or overseas national standards will be used where they are relevant to the type of installation or equipment and to the installation conditions in Australia.
- 109. The design employed will seek to ensure hydraulic equipment will be readily and adequately supported in Australia and where possible, in the local Defence Region. Spare parts will be readily available in Australia for major hydraulic equipment.
- 110. Hydraulic installations will allow for suitable and easy access for the purpose of operation, maintenance, repair and replacement. Allowance for plant layouts and equipment space must address associated Building Code of Australia and Work Health Safety legislation requirements. Designs will incorporate safe means of access to hydraulic equipment including items mounted in roof voids and ceiling voids, in high spaces or above operational equipment.
- Water will be supplied to the proposed facilities from existing water mains on RAAF Base Amberley.

#### **Electrical Services**

The electrical supply to the proposed facilities will be from the existing electrical network on RAAF Base Amberley. The new C-27J Battlefield Airlifter Main Operating Base facilities will require modification works to the existing high voltage ring network at RAAF Base Amberley.

The electrical design has been undertaken in accordance with all relevant Australian Standards, all applicable Legislation, Regulations, Codes of Practice and Guidance Publications relevant in Queensland and Defence requirements.

#### **Communications**

114. RAAF Base Amberley is serviced by a well developed communications infrastructure network. However, some works will be required as a result of this project to enhance the site wide communications infrastructure network.

#### **Fire Protection**

- 115. RAAF Base Amberley Fire Services personnel have been consulted in developing this proposal to ensure fire fighting capabilities are not adversely impacted in an emergency and that their training and accreditation are not affected.
- Where required, the new facilities will be connected to the existing Base wide fire alarm network. The fire engineering design has been undertaken in accordance with all relevant Australian Standards, all applicable Legislation, Regulations, Codes of Practice and Guidance Publications relevant in Queensland and Defence requirements.

#### **Acoustics**

- 117. The principal standard governing acoustics for this project is the Australian Standard AS 2021– 2000 Acoustics Aircraft noise intrusion Building Siting and Construction. Due to the functional requirements for the Project such as direct access to the flight line, sightlines along the aircraft apron and the desire for natural light, it will not be possible to meet all of the requirements of the Australian Standard.
- Building orientation and construction methods for the building envelope have been designed to provide an acceptable level of noise attenuation amenity. The Acoustic Design strikes a balance between adherence to all facets of AS 2021–2000 Acoustics Aircraft noise intrusion Building Siting and Construction and functional requirements including:
  - a. noise criteria for maintenance areas (e.g Operational Facilities hangar spaces) have been relaxed in order to permit direct connectivity to the aircraft apron; and

- b. noise criteria for some private offices (e.g. Training Facilities, 23SQN working accommodation, Fire Station, open plan areas in Operational Facilities, Australian Air Force Cadets) will align with the open office criteria of 65dBA rather than the typical 55dBA value in order to permit the location of these rooms closer to the facades whilst allowing the integration of vision glazing into the building façade.
- 119. Within the proposed buildings, acoustic privacy of partitioning is provided in accordance with AS/NZS ISO 717.1 *Acoustics Rating of sound insulation in buildings and of building elements*. Acoustic privacy has been determined based on the function within each of the spaces and the level of privacy required.

#### **Security**

120. There is no public access to the proposed facilities and entry to the proposed facilities will be through controlled access points. The individual buildings on site have been designed for the appropriate security classification.

#### **Environmental Sustainability of the Project**

- The Commonwealth is committed to Ecologically Sustainable Development and the reduction of greenhouse gas emissions. Defence reports annually to Parliament on its energy management performance and on its progress in meeting the energy efficiency targets established by the Government as part of its commitment to improve Ecologically Sustainable Development. Defence also implements policies and strategies in energy, water and waste to improve natural resource efficiency and to support its commitment to the reduction of energy consumption, potable water consumption and waste diversion to landfill.
- 122. This project has addressed Commonwealth policy by adopting cost-effective and Ecologically Sustainable Development practices as a key objective in the design of the new facilities.
- The ecologically sustainable measures for the Project are balanced with other requirements for Defence buildings, including security and Work Health Safety considerations to ensure that Defence's operational capability is not compromised. All buildings are designed and will be constructed, operated and maintained to ensure that they use energy efficiently considering their required use.

- 124. To achieve this, buildings will comply with:
  - a. Section J of Volume One of the Building Code of Australia, National Construction Code 2013; Energy Efficiency
  - b. Part 3.12 of Volume Two of the Building Code of Australia, National Construction Code 2013; Energy Efficiency
  - c. Energy Efficiency in Government Operations Policy; and
  - d. Defence Green Building Requirements Policy.
- 125. The goal will be to maximise return on upfront investment while also aiming to minimise ongoing maintenance and operational requirements. The Design Team has conducted an Ecologically Sustainable Development Workshop with Defence stakeholders to determine what opportunities were available to the Project. A Whole of Life Costing has also been considered and built into the Design.
- All energy sources supplying the buildings will be individually metered and linked to a control and monitoring system allowing Defence to better manage and monitor environmental performance. Sub-metering will be provided in accordance with the Defence Energy Management Strategy, and the requirements of the Commonwealth Energy Policy.
- 127. The Ecologically Sustainable Development initiatives identified for consideration in the designs associated with the Project include:
  - a. energy and water metering for ongoing monitoring and management purposes;
  - b. zoning and control methodology for air-conditioned areas e.g. carbon dioxide monitoring, economy cycle;
  - c. localised air-conditioning plant in combination with high-efficiency equipment and variable speed drives to ensure output matches demand;
  - d. energy efficient lighting used in conjunction with tighter zoning and control methodology e.g. daylight or motion sensing;
  - e. heat pump hot water systems for amenities;

- f. rainwater harvesting and water efficiency labelling and standards scheme rated fixtures to reduce potable water consumption;
- g. energy efficient building fabric construction to achieve thermal and acoustic insulation requirements;
- h. use of mechanically-assisted or natural ventilation and natural lighting wherever practical;
- i. specification of sustainable internal and external finishes e.g. plantation timber, low-volatile organic compound paints; and
- j. specification of high star-rated appliances available from Australian manufacturers where the Project is providing such items.

#### Landscaping

- 128. Landscaping design has been included in all new building elements, where appropriate and functional. Landscaping works will also be completed to restore areas disturbed during construction and provide general improvement to the built environment.
- 129. Landscaping design will focus on a functional, low maintenance and water sensitive approach using plants that are indigenous to the area. A contractual establishment period will be included in the landscaping contract to ensure the landscaping elements are maintained and to ensure effective and efficient propagation.
- 130. Landscaping practices will be adopted to be sympathetic with local environmental and operational conditions.
- Planting will be undertaken to compensate for trees removed as part of the construction activities at RAAF Base Amberley at a ratio of five new trees for each mature tree removed. Appropriate plantings will be undertaken in consultation with Defence's Regional Environmental Officer who has assisted in identifying appropriate species and locations. Furthermore, it is envisaged that the compensatory planting will enhance the green corridor to the Bremer River and for wildlife transiting through the Base.

#### **Energy Targets**

132. There are no applicable energy targets for this proposal.

#### **Work Health and Safety Measures**

- The proposed facilities to be provided under this project will comply with Department of Defence's Work Health Safety Policy, the *Work Health and Safety Act (WHS) 2011 (Cth), Work Health and Safety (Commonwealth Employment National Standards) Regulations* and the Defence Work Health Safety Manual.
- In accordance with Section 35(4) of the *Building and Construction Industry*Improvement Act 2005 (Cth), contractors will also be required to hold full work health and safety accreditation from the Office of the Federal Safety Commissioner under the Australian Government Building and Construction Work Health and Safety Accreditation Scheme.
- 135. Safety aspects of this proposal have been addressed during the design process and have been documented in a Safety in Design Report completed by the Managing Contractor. No special or unusual public safety risks have been identified in this process. The successful construction contractor will also be required to submit a Safety Plan for the construction phase and prior to the start of any construction activities.

#### **Cost Effectiveness and Public Value**

#### **Outline of Project Costs**

- The estimated out-turn cost of the Project is \$370.4 million, excluding Goods and Services Tax. This estimate includes construction costs, escalation allowances, professional service fees, design, construction and Defence contingencies and information technology equipment.
- 137. Ecologically Sustainable Development and Whole of Life principles have been incorporated into the design of the proposed facilities, resulting in greater efficiencies and reduced costs over the design life.
- 138. Under this project, the Net Personnel Operating Costs have been estimated for the new facilities. Net Personnel Operating Costs analysis provides an estimate to the regional Defence Support representatives of the mature annual cost of operating new

or refurbished facilities. The cost estimate becomes the basis of an ongoing, indexed budget transfer for the operation of the facilities to be delivered by the Battlefield Airlifter Facilities Project.

#### **Details of Project Delivery System**

- 139. A Project Manager / Contract Administrator has been appointed by the Commonwealth to manage the project works and associated administration of the contracts during the Planning Phase. Subject to Parliamentary approval, value for money assessments and satisfactory performance of the Project Manager / Contract Administrator, the Commonwealth may extend the Project Manager / Contract Administrator Contract into the Delivery Phase of the Project.
- A Managing Contractor has been engaged to undertake the Development Phase (planning and design) of the Project. Subject to Parliamentary Approval of the Project, value for money assessments and satisfactory performance, the Commonwealth may extend the Managing Contractors Contract into the Delivery Phase of the Project.

#### **Construction Program**

Subject to Parliamentary approval of the Project, construction is expected to commence in early 2016 with all construction completed by mid 2018.

#### **Public Value**

- 142. The proposed facilities will meet an important Defence capability requirement at RAAF Base Amberley and the broader Defence capability objectives.
- 143. The Project will employ a diverse range of skilled consultants, contractors and construction workers that could include opportunities for up-skilling and job training to improve individual skills and employability on future projects.

#### Revenue

144. No revenue will be derived from this Project.

#### **Attachments**

- 1. Locality Plan
- 2. RAAF Base Amberley Site Plan
- 3. Site Plan Training System Facility
- 4. Site Plan 35SQN Operational Facilities
- 5. Site Plan Fire Station and Bureau of Meteorology and 23 SQN
- 6. Site Plan Base Briefing, Court and Ceremonial Store And Transit

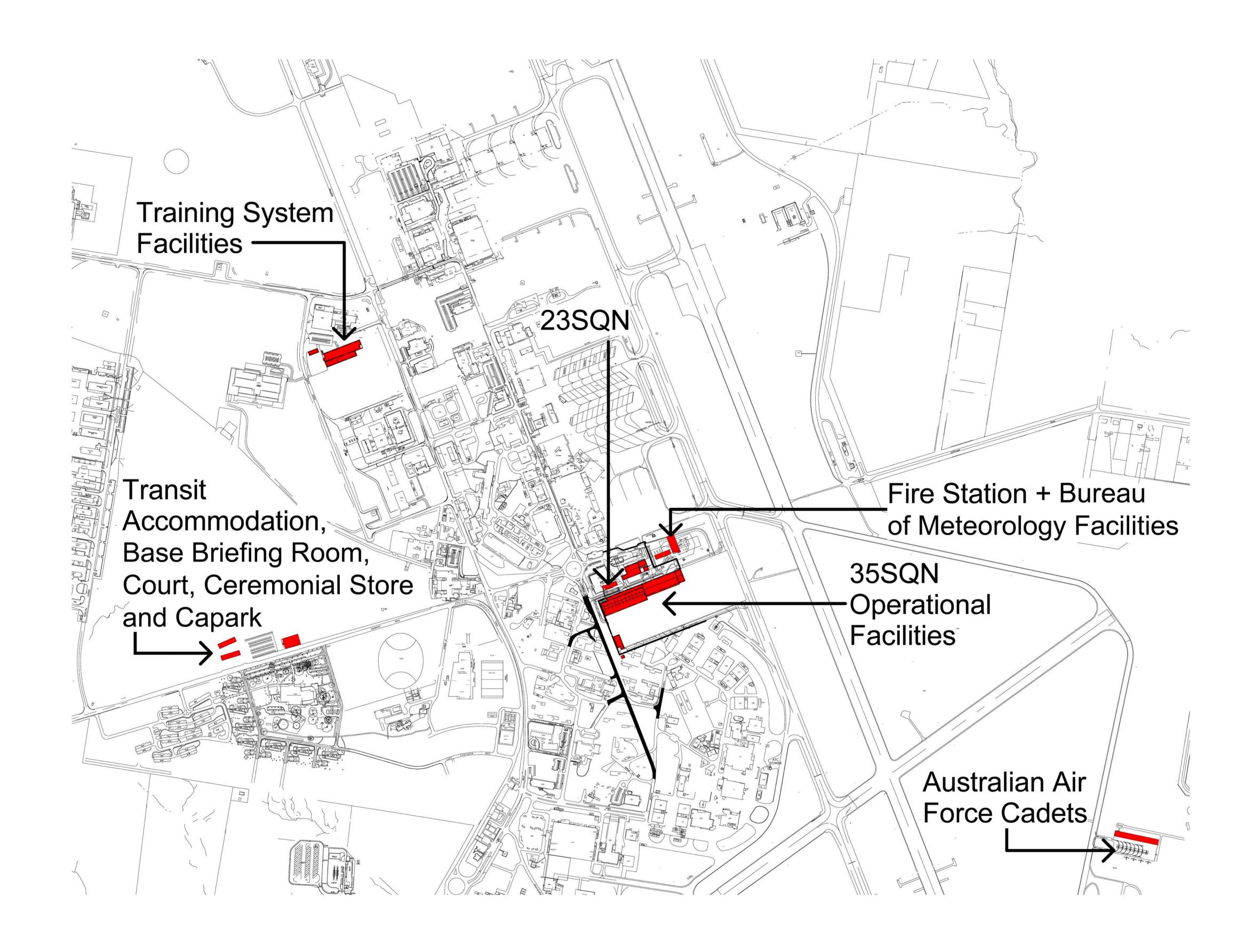
#### Accommodation

- 7. Site Plan Australian Air Force Cadet Facilities
- 8. Site Plan Canberra Drive Extension
- 9. Floor Plan Training System Facility Ground Floor
- 10. Floor Plan 35SQN Operational Facilities Working Accommodation Ground Floor
- 11. Floor Plan 35SQN Operational Facilities Working Accommodation Level 1
- 12. Floor Plan 35SQN Operational Facilities Hangar Ground Floor
- 13. Floor Plan 35SQN Operational Facilities Workshops
- 14. Floor Plan 35SQN Operational Facilities Ancillary Building
- 15. Floor Plan Fire Station and Bureau of Meteorology
- 16. Floor Plan Fire Station and Bureau of Meteorology Annex
- 17. Floor Plan 23SQN Facility
- 18. Floor Plan Transit Accommodation Block 1 Ground Floor
- 19. Floor Plan Transit Accommodation Block 1 Level 1 to 5
- 20. Floor Plan Transit Accommodation Block 2 Ground Floor
- 21. Floor Plan Transit Accommodation Block 2 Level 1 to 5
- 22. Floor Plan Base Briefing, Court And Ceremonial Store Ground Floor
- 23. Floor Plan Base Briefing, Court And Ceremonial Store Mezzanine
- 24. Floor Plan Australian Air Force Cadets

Battlefield Airlifter Facilities Project, Royal Australian Air Force Base Amberley, Queensland Submission 1



Battlefield Airlifter Facilities Project, Royal Australian Air Force Base Amberley, Queensland Submission 1



Attachment 2 RAAF Base Amberley Site Map



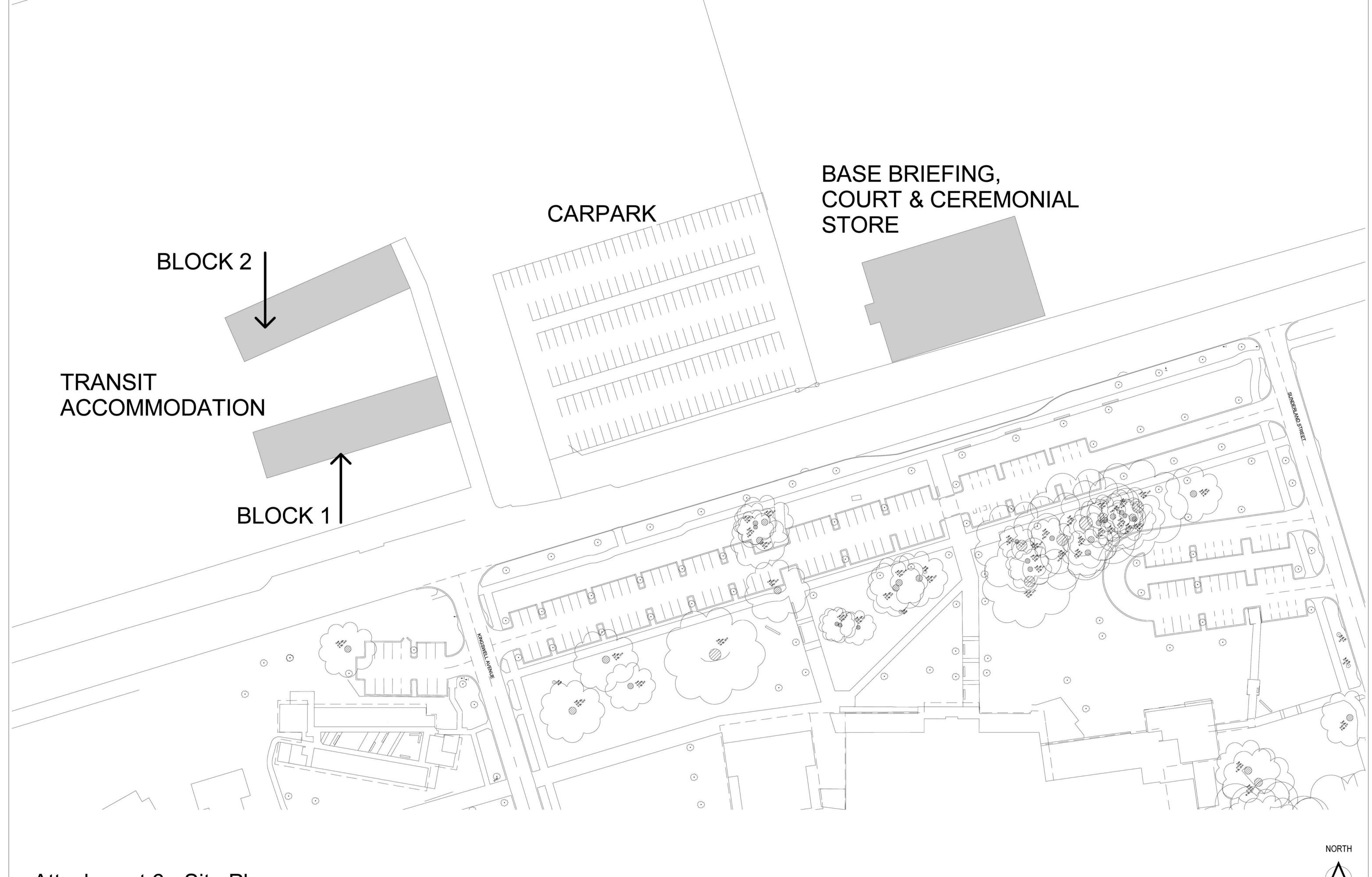
Attachment 4 - Site Plan 35SQN Operational Facilities NORTH

SCALE 0 2 4 6 8 10

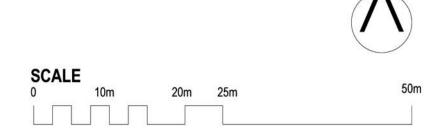


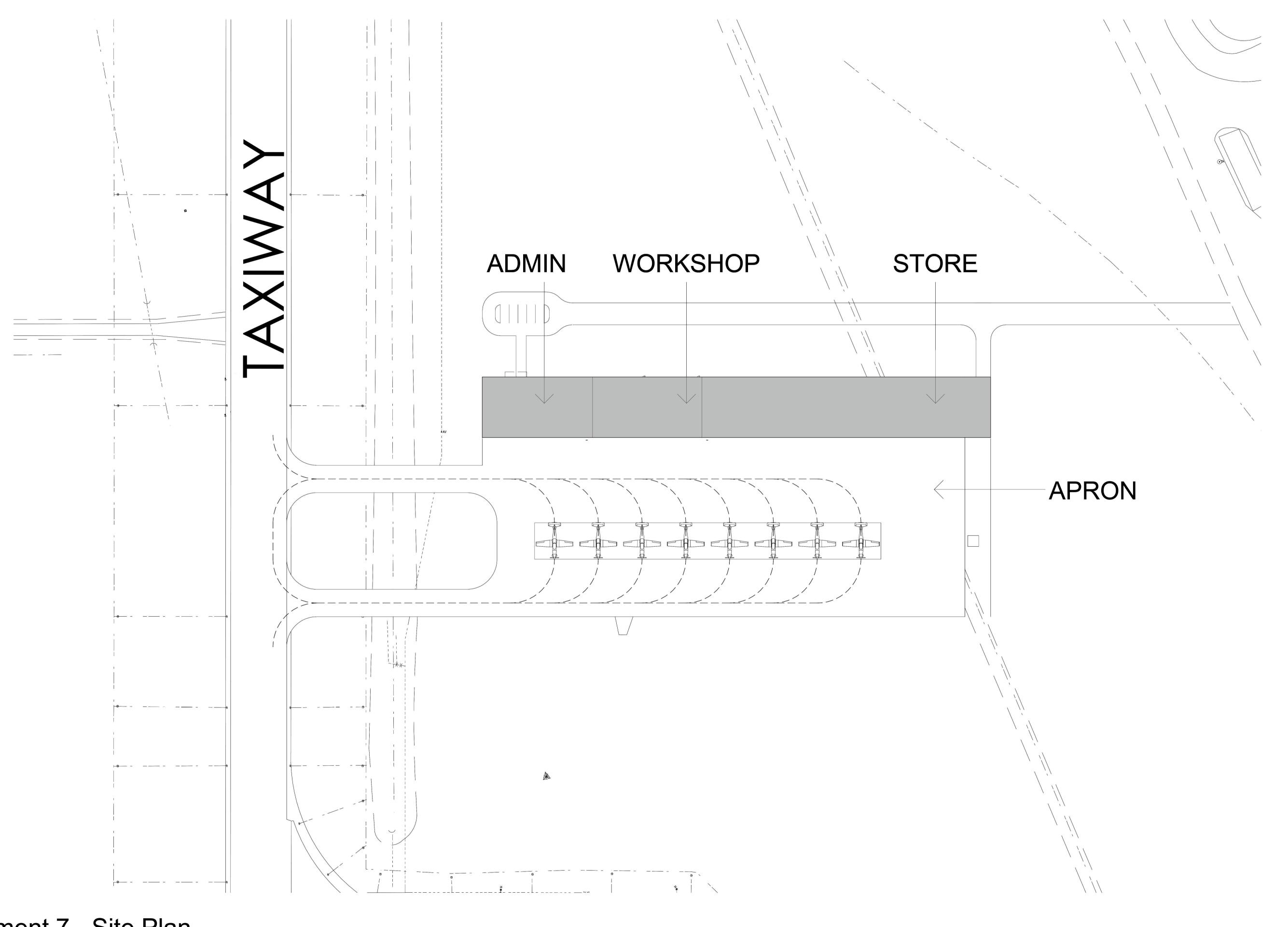
Attachment 4 - Site Plan 35SQN Operational Facilities NORTH

SCALE 0 2 4 6 8 10



Attachment 6 - Site Plan
Base Briefing, Court and Ceremonial Store And Transit Accomodation

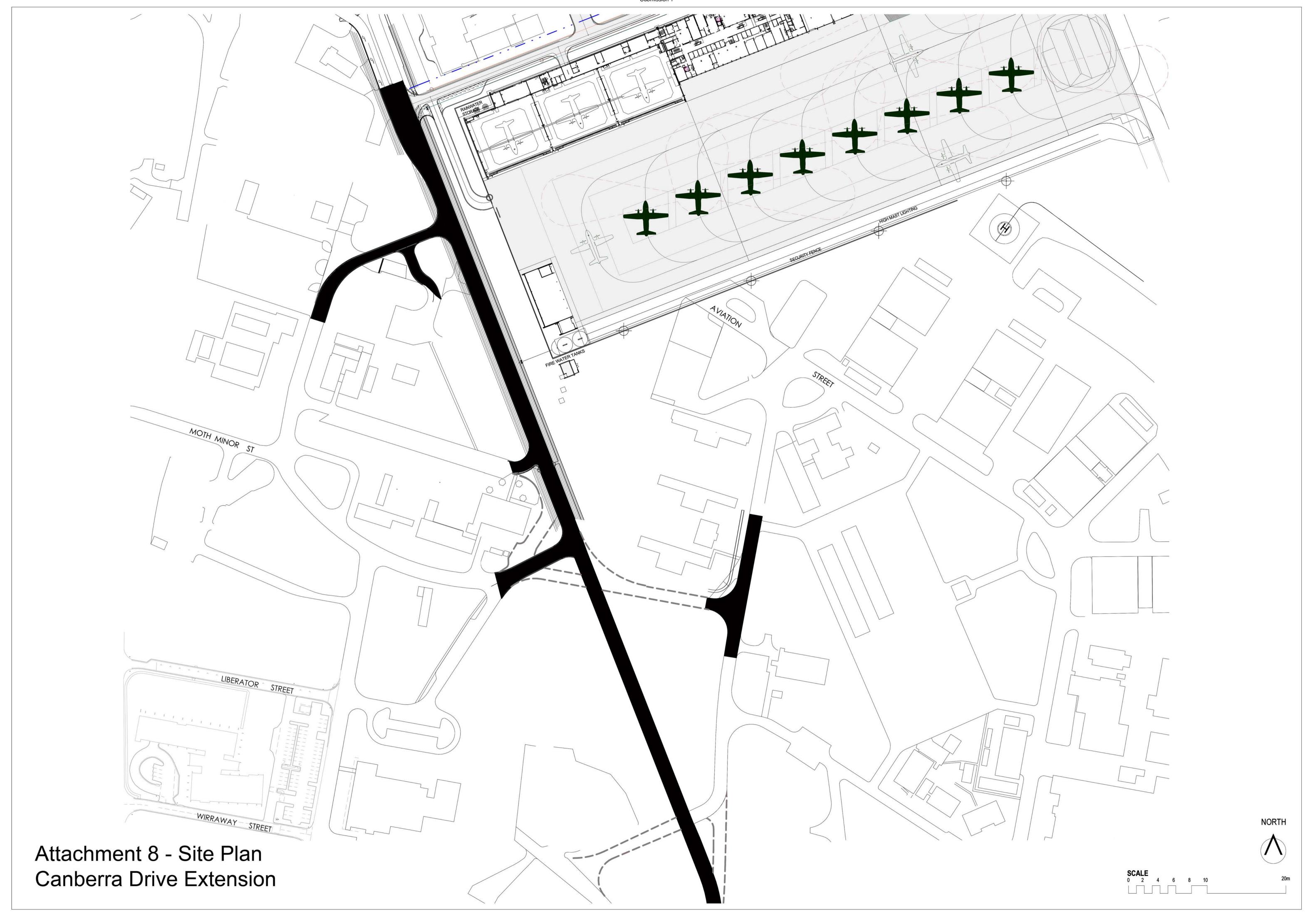


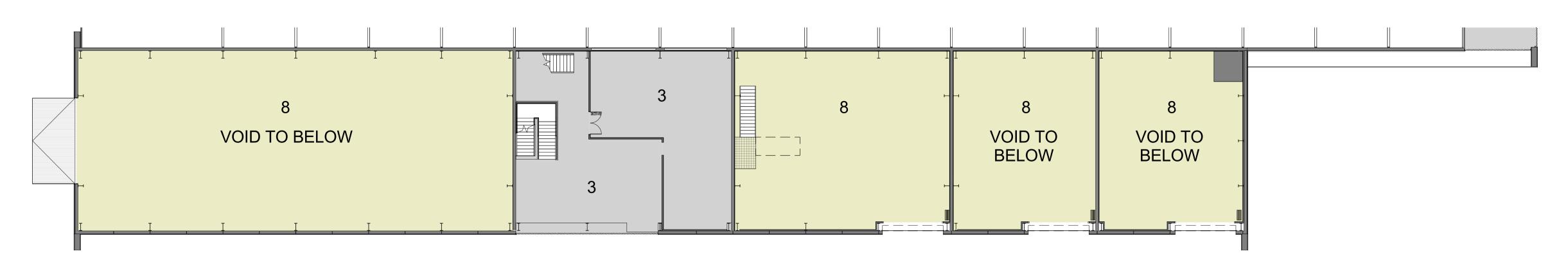


Attachment 7 - Site Plan Australian Air Force Cadets

SCALE
0 2 4 6 8 10 2

NORTH





Mezzanine Floor

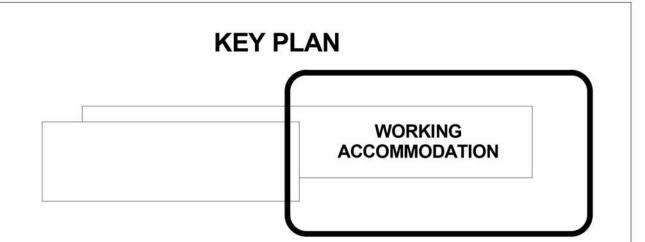


Ground Floor

Attachment 9 - Floor Plan Training System Facility

NORTH

SCALE
0 2 4 6 8 10 20m





Attachment 10 - Floor Plan 35SQN Operational Facilities Working Accommodation BUILDING WORKS LEGEND

CIRCULATION

OFFICE

PLANT STORE

WORKSHOP AMENITIES

1 CIRCULATION

2 OFFICE

3 PLANT

4 STORE

5 WORKSHOP6 AMENITIES

7 ENTRY

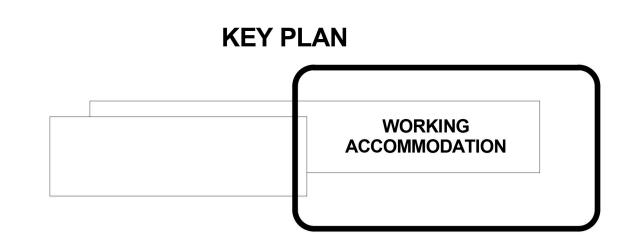
8 CREW ROOM

V KOOW



**NORTH** 

SCALE
0 2 4 6 8 10





First Floor

**BUILDING WORKS LEGEND** 

CIRCULATION

OFFICE

PLANT

STORE

AMENITIES

1 CIRCULATION

2 OFFICE

3 PLANT

4 STORE

5 AMENITIES

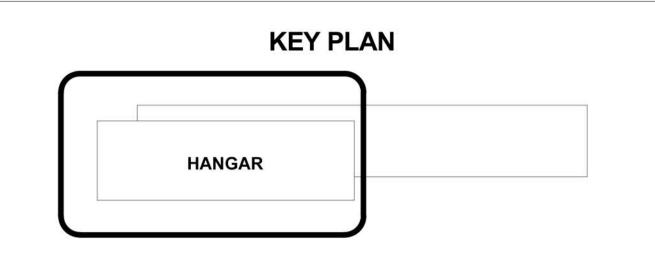
6 ROOF

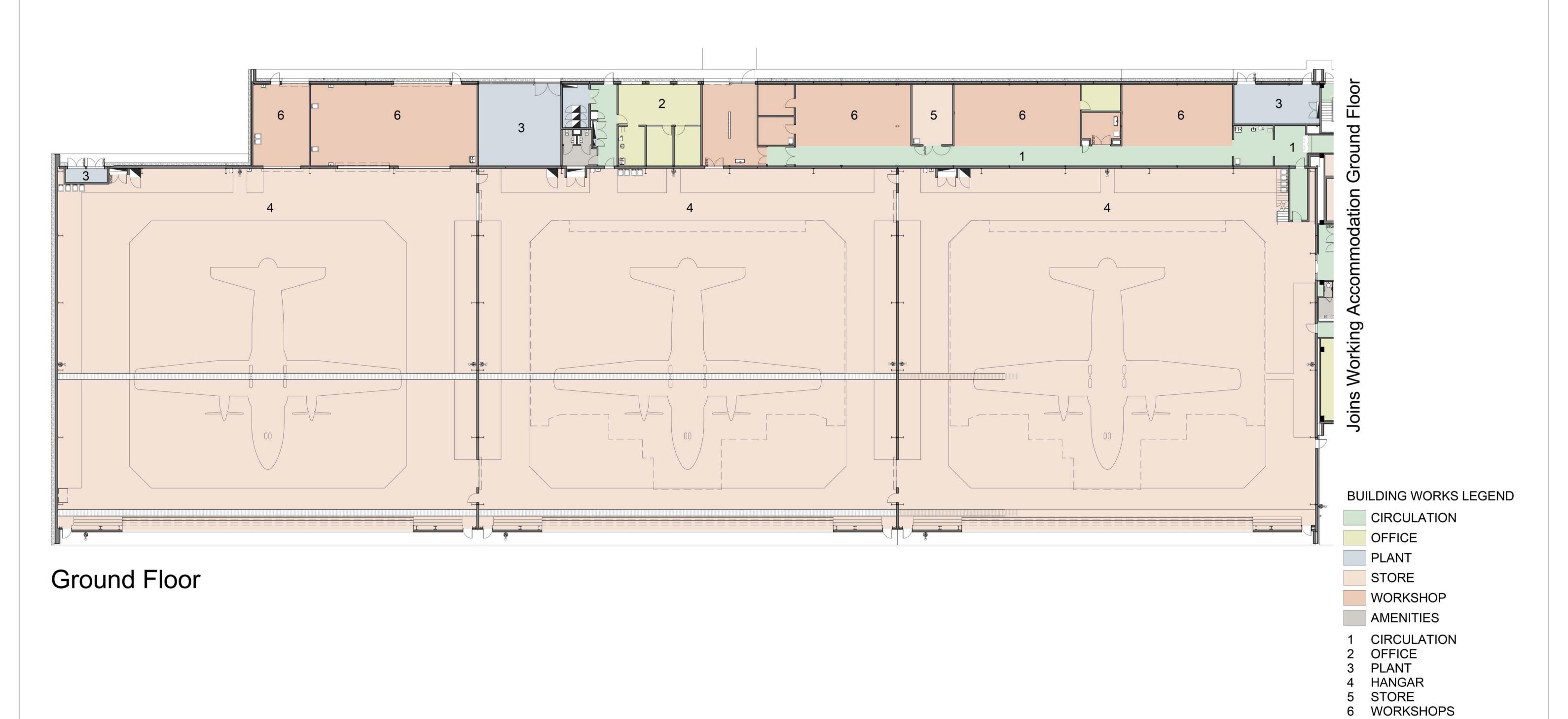
7 VOID TO GROUND LEVEL

NORTH



Attachment 11 - Floor Plan 35SQN Operational Facilities Working Accommodation





Attachment 12 - Floor Plan 35SQN Operational Facilities Hangar NORTH

4 6 8 10 20r

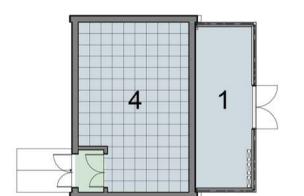


**Ground Floor** 

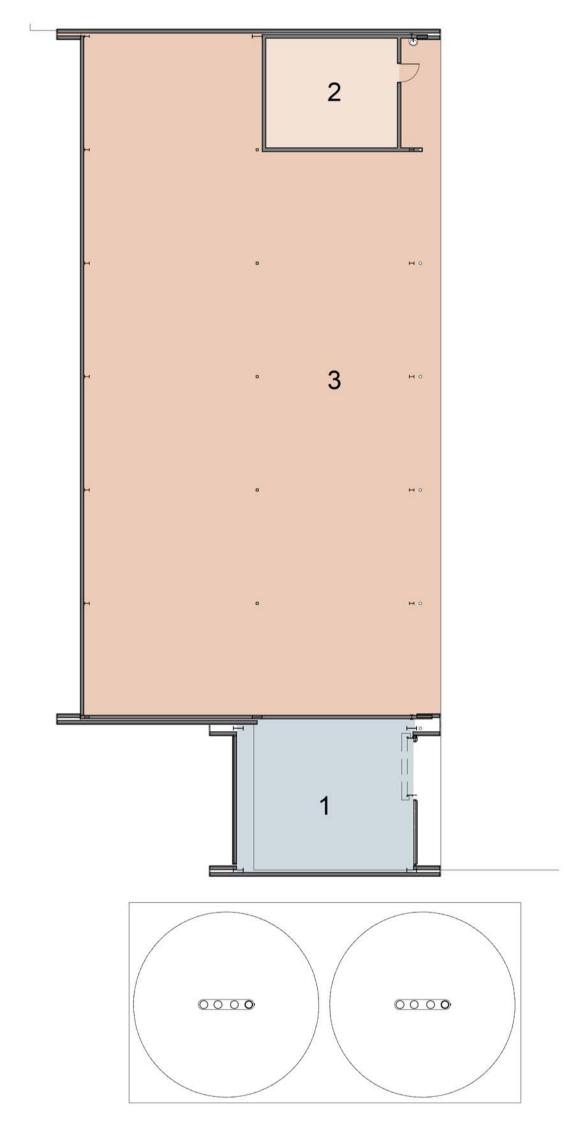


**SCALE**0 2 4 6 8 10

Attachment 13 - Floor Plan 35SQN Operational Facilities Workshops



Southern Flightline Communications Node Ground Floor



Ground Support Equipment /
Dangerous Good Store
Ground Floor

BUILDING WORKS LEGEND

PLANT
STORE

WORKSHOP

CIRCULATION

1 PLANT

2 DG STORE

3 GROUND SUPPORT EQUIPMENT

4 SERVER ROOM

NORTH



Attachment 14 - Floor Plan Ancillary Building

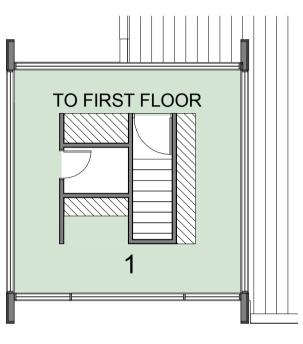


First Floor



Ground Floor

Attachment 15 - Floor Plan Fire Station and Bureau of Meteorology



Second Floor



CIRCULATION

OFFICE

PLANT

STORE

WORKSHOP

AMENITIES

ACCOMMODATION

CIRCULATION

LIFT/STAIR

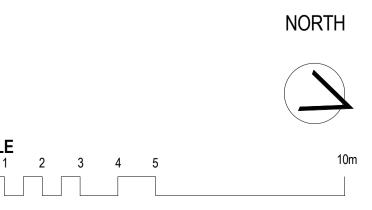
OFFICE

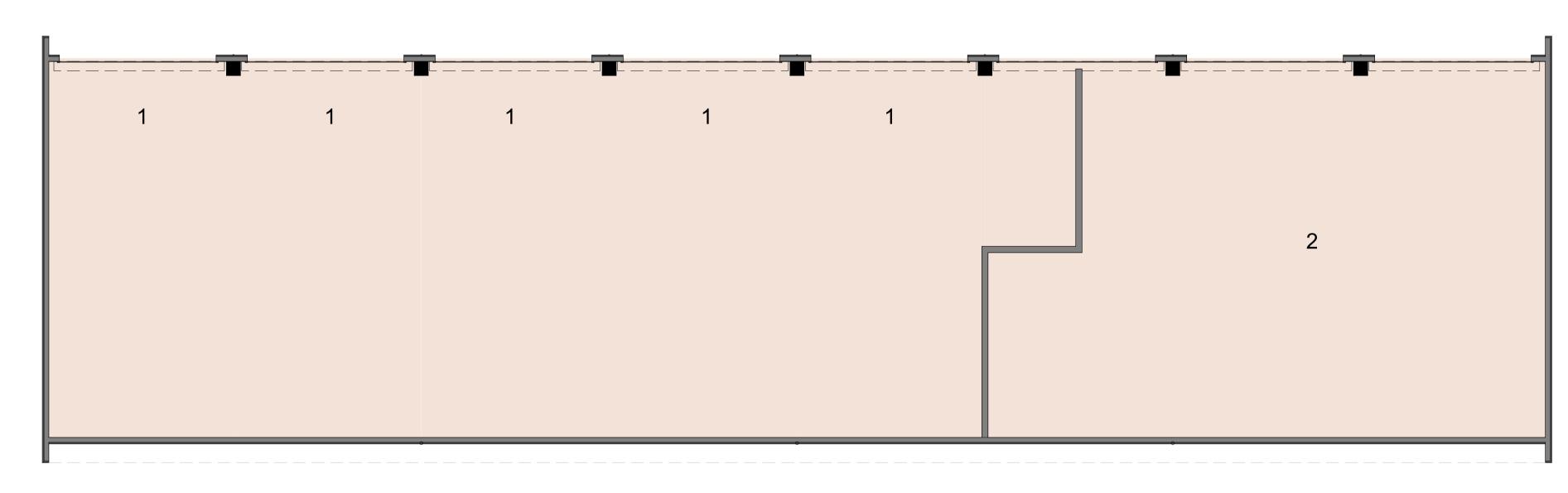
PLANT

STORE

WORKSHOP

AMENITIES ACCOMMODATION





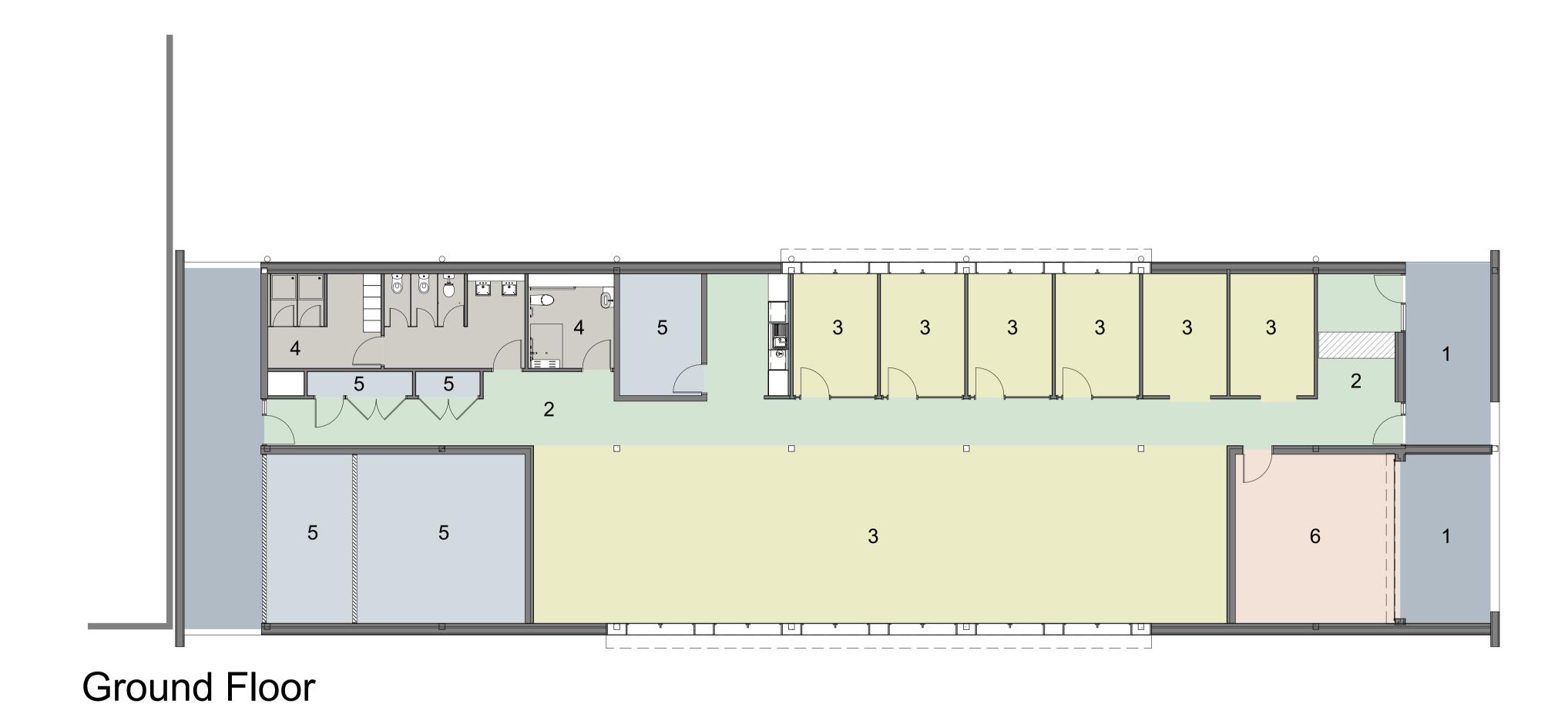
**Ground Floor** 

**BUILDING WORKS LEGEND** 

STORE

1 TRUCK BAY2 STORE

Attachment 16 - Floor Plan Fire Station and Bureau of Meteorology Annex NORTH



**BUILDING WORKS LEGEND** 

AMENITIES OFFICE

PLANT

STORE

CIRCULATION BREEZEWAY

BREEZWAY

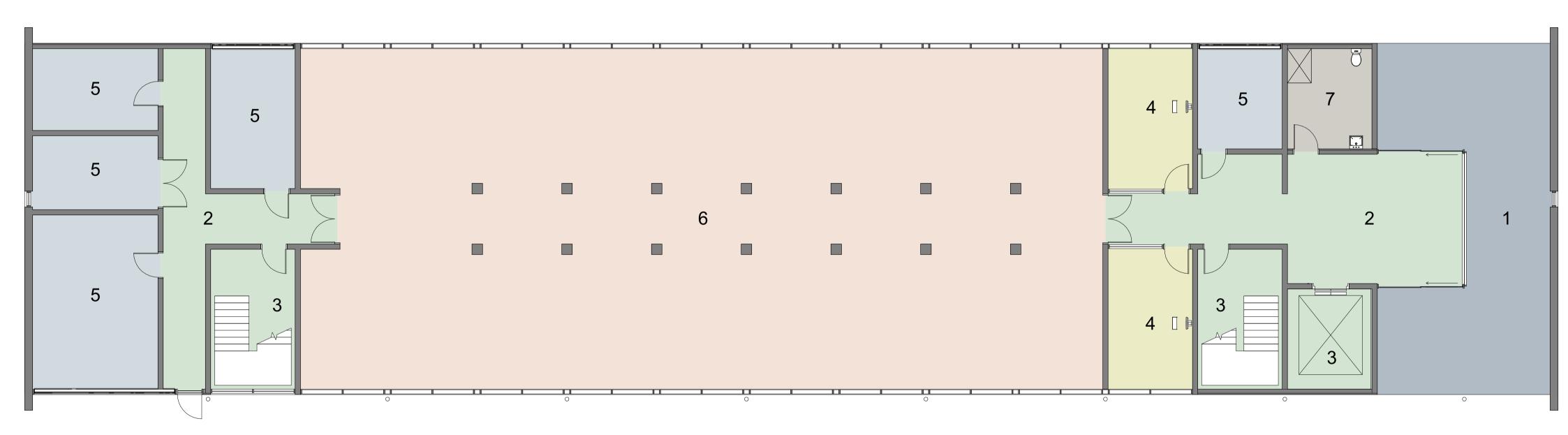
CIRCULATION OFFICE

**AMENITIES** 

5 PLANT 6 STORE

NORTH **SCALE**0 1 2 3 4 5

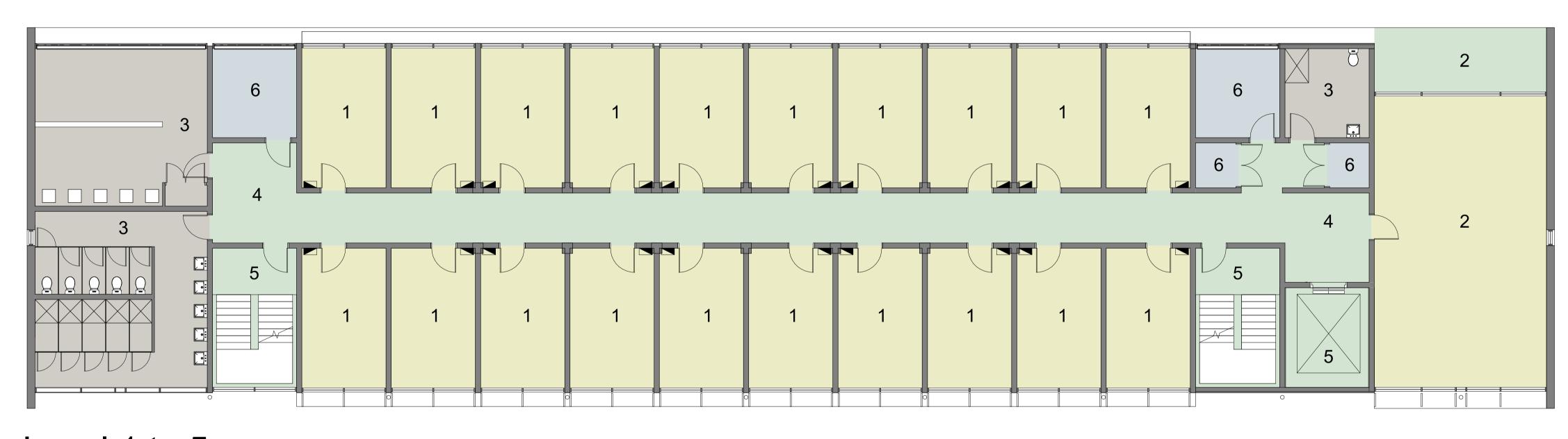
Attachment 17 - Floor Plan 23SQN Facility



Ground Floor



**SCALE**0 1 2 3 4 5



Level 1 to 5



ACCOMMODATION

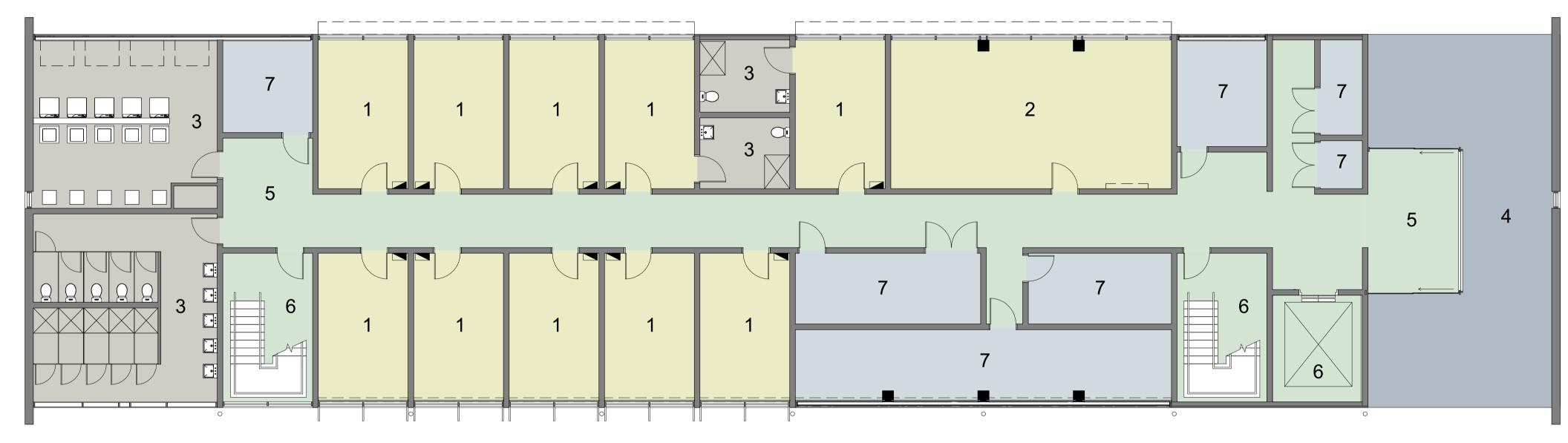
AMENITIES CIRCULATION

PLANT

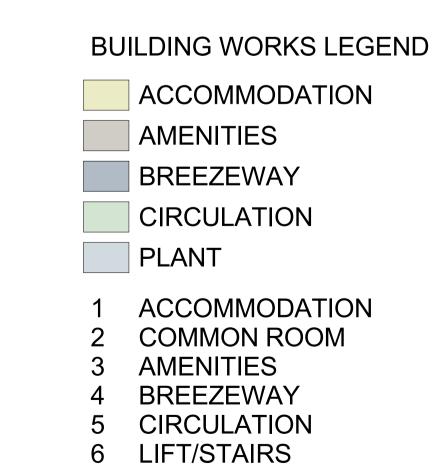
- ACCOMMODATION
- **COMMON ROOM**
- **AMENITIES**
- 4 CIRCULATION
  5 LIFT/STAIRS
  6 PLANT

NORTH

**SCALE**0 1 2 3 4 5



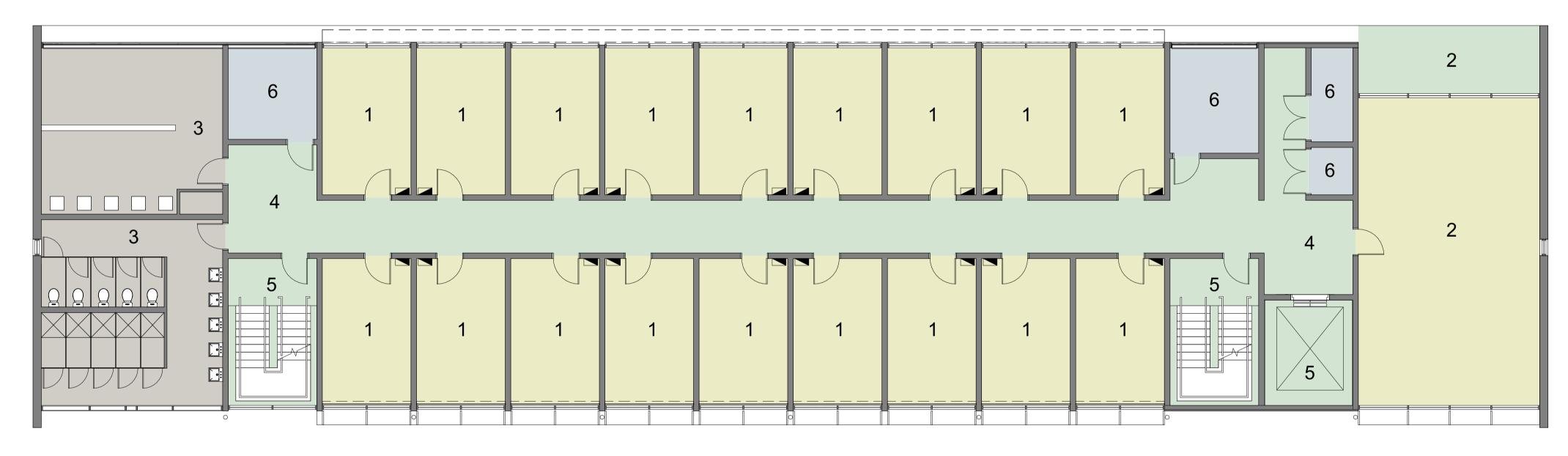
Ground Floor



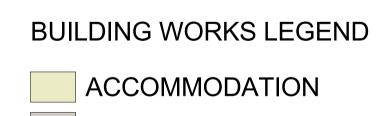
7 PLANT

NORTH

SCALE
0 1 2 3 4 5 10m



Level 1 to 5



AMENITIES CIRCULATION

PLANT

ACCOMMODATION

**COMMON ROOM** 

**AMENITIES** 

4 CIRCULATION 5 LIFT/STAIRS 6 PLANT

NORTH

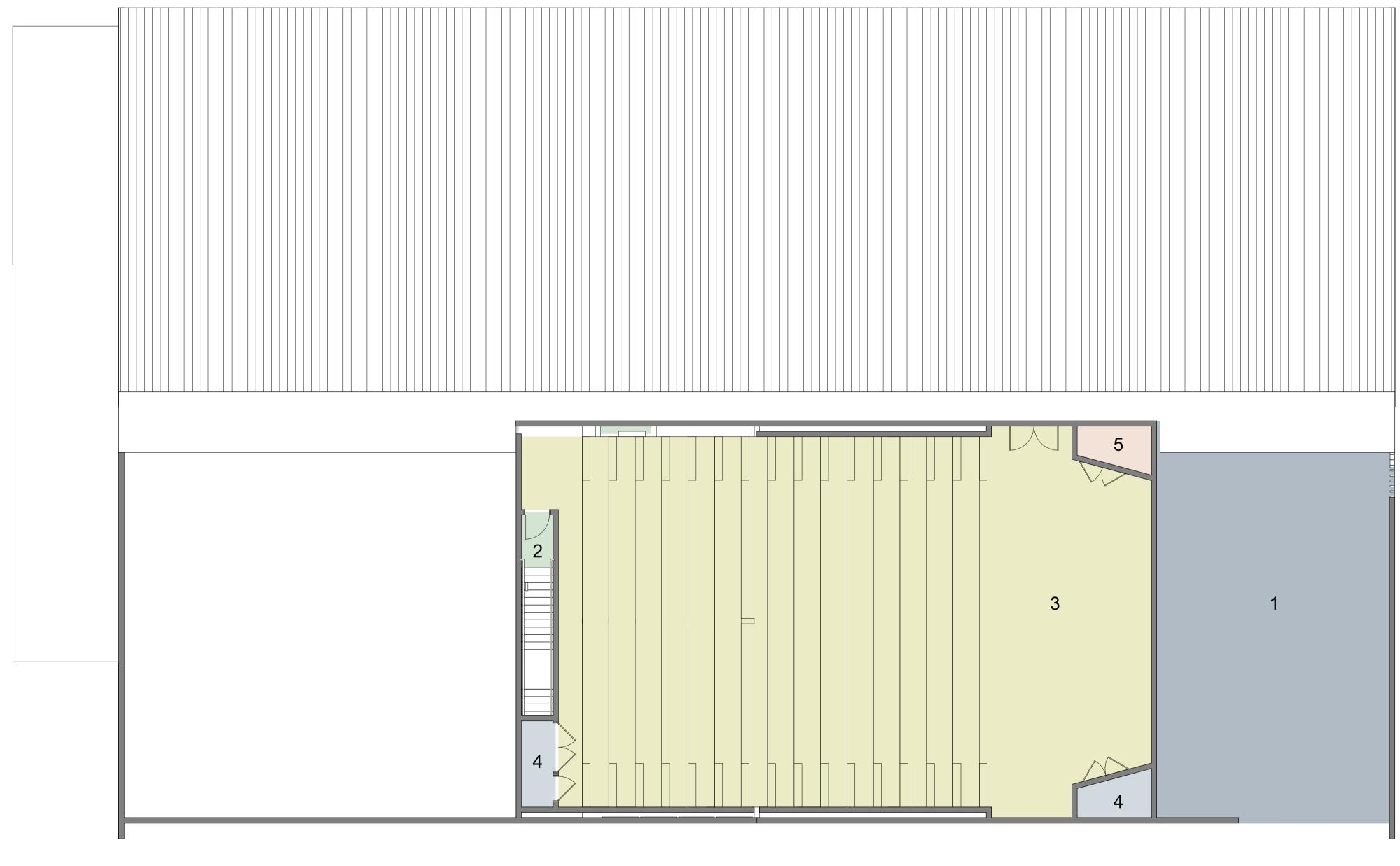
**SCALE**0 1 2 3 4 5



**Ground Floor** 

Attachment 22 - Floor Plan Base Briefing, Court And Ceremonial Store





Mezzanine

**BUILDING WORKS LEGEND** 

BREEZEWAY

CIRCULATION

OFFICE

PLANT

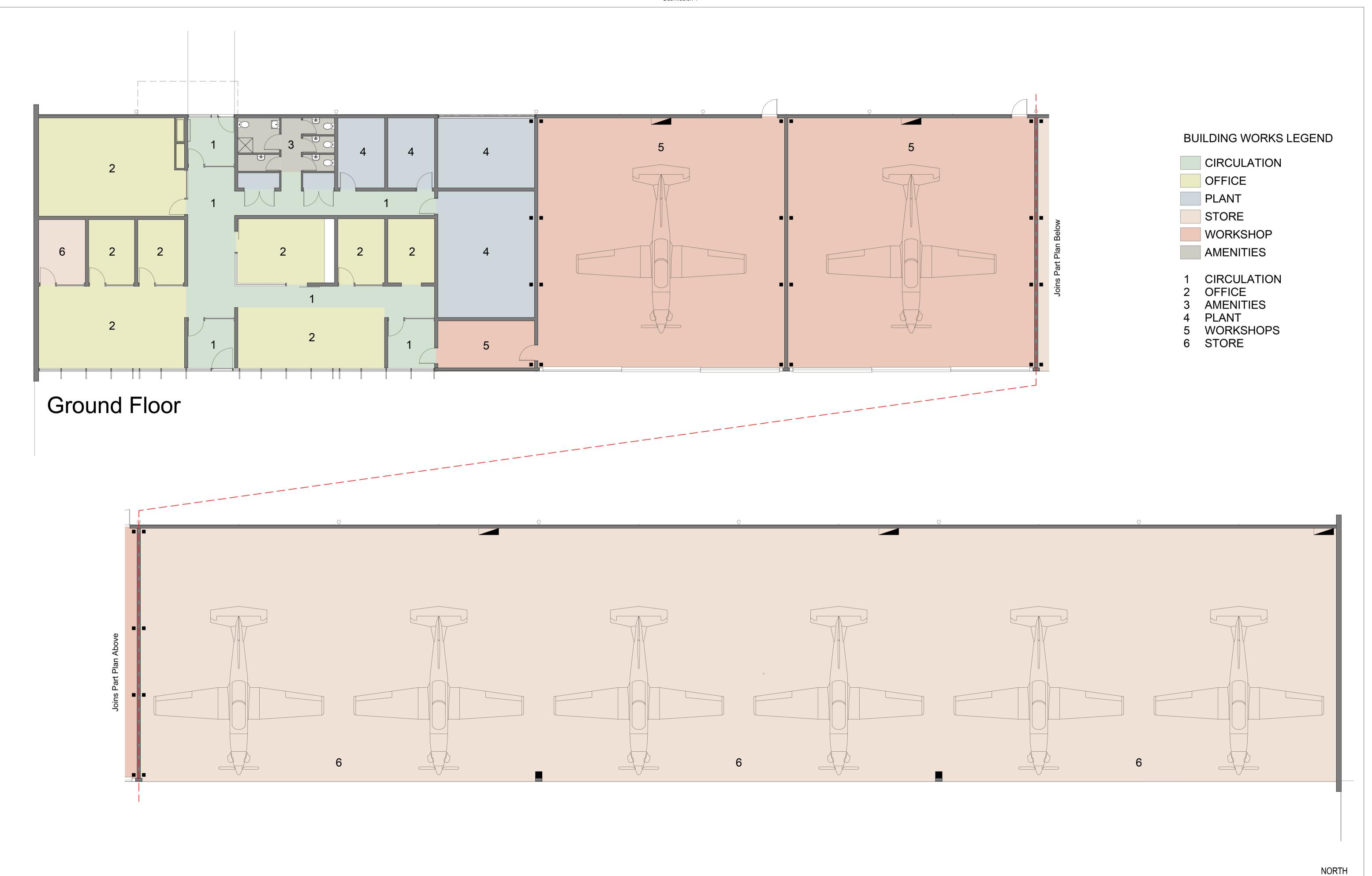
BREEZEWAY

STORE

2 CIRCULATION

3 BASE BRIEFING 4 PLANT 5 STORE

Attachment 23 - Floor Plan Base Briefing, Court And Ceremonial Store NORTH



Attachment 24 - Floor Plan Australian Air Force Cadets SCALE
0 1 2 3 4 5 10m