Australian Government

Department of Defence

CAMPBELL BARRACKS REDEVELOPMENT

Swanbourne, Western Australia

STATEMENT OF EVIDENCE TO THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

Canberra, Australian Capital Territory

June 2015

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Identification of the Need

Enhanced Special Forces Capability

1. Operating under the motto 'Who Dares Wins' the Special Air Service Regiment (SASR) is a Special Forces unit of the Australian Army and is a direct command unit of the Australian Army's Special Operations Command. The SASR is tasked to provide special operations capabilities in support of the Australian Defence Force (ADF). This includes providing unique capabilities to support sensitive strategic operations, special recovery operations, advisory and training assistance, special reconnaissance, precision strike and direct action.
2. The SASR is primarily structured to conduct clandestine long-range reconnaissance and surveillance in small teams in enemy-controlled territory. In addition to 'warfighting' during conventional conflicts, the SASR is also tasked with maintaining a specialist counter-terrorist capability. Other capabilities include training local or indigenous forces, recovery of Australian citizens and humanitarian assistance. The SASR is also trained in counter-insurgency operations.
3. In their long-range reconnaissance role, the SASR typically operates in small patrols of between five and six operators with the task of infiltrating enemy-held territory and providing intelligence on enemy activities and capabilities. During such tasks the SASR seeks to evade rather than confront the enemy. SASR soldiers also direct fire support missions, including air strikes to destroy enemy installations and disrupt or kill enemy forces whenever possible. SASR reconnaissance patrols can be inserted by air (either by helicopter, standard parachute or high altitude / low opening), by land (on foot or by vehicle) or by sea (including by submarine, small boats, canoes or closed-circuit breathing apparatus) and have a proven capability of covering large distances and staying concealed in jungle, desert and mountain terrain. SASR patrols may also conduct sabotage and short-duration raids on high-value targets, including headquarters, airfields and communications nodes.
4. One of the other primary roles of the SASR is to provide a counter-terrorist capability, with an element of the SASR forming Australia's domestic Tactical Assault Group

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(TAG)-West, while the 2nd Commando Regiment provides TAG - East. TAG West maintains a short-notice capability to conduct military operations beyond the scope of state and federal police special response groups. Offensive counter-terrorist operations may include direct action and hostage recovery. A capability to board ships whilst underway and off-shore oil platforms is also maintained. TAG West is kept at high readiness for a period of 12 months, before being replaced by another SASR squadron in this role.

5. Members of the SASR are specially selected and highly trained at Campbell Barracks and other places to act with discretion and discipline in situations that may have national and strategic consequences. Personnel are required to work in small teams for extended periods without support.

Background

6. The SASR had its beginnings from the Australian Z Special Unit and Independent Commando Companies that fought during World War II. On 25 July 1957, the 1st Special Air Service Company, Royal Australian Infantry was raised in Campbell Barracks. In 1964 the Company was expanded to a regiment to become the 'Special Air Service Regiment', however at the time only consisted of two 'Sabre' Squadrons with a total of approximately 160 personnel.

7. Much of the infrastructure and engineering services within Campbell Barracks were installed as part of the initial Barracks development in the 1960s. Since then the SASR's Unit Establishment has almost more than doubled in size from approximately 300 personnel in the mid 1960's to approximately 700 personnel today. Significantly, the SASR's role and capability have also expanded exponentially without a commensurate facilities upgrade, consolidation or increase. Since the late 1990's, SASR added complexity of operations, expanded roles and increased capability have also resulted in significant growth in associated support staff and equipment holdings. Previous developments at Campbell Barracks have been insufficient to address the enduring problems associated with aging and obsolete working accommodation, a dysfunctional layout, inadequate storage and poor 'in ground' and 'above ground' infrastructure.

8. Additionally, by the mid 2000's it became apparent that Campbell Barrack's in ground and above ground infrastructure was approaching its end of life and would

need to be substantially upgraded and/or replaced to meet the capability requirements of the SASR. Collectively, most existing facilities and working accommodation at Campbell Barracks are outdated and obsolete, and not to a standard that can ensure the SASR can efficiently maintain a high level of operational readiness in order to meet directed Defence preparedness requirements. Many of the facilities have surpassed their design life and have inherent building/fire compliance and Work Health and Safety issues. These issues present ongoing management and maintenance obligations to both the SASR and the Defence Support and Reform Group.

9. In August 2009, Defence endorsed the Corporate Services and Infrastructure Requirement Part 2 (CSIR2) for the Campbell Barracks Redevelopment Project. The endorsed CSIR2 recommended further investigation to refurbishing existing facilities and constructing new facilities for the SASR at an estimated value of $168.4 million pre-Expenditure Review Committee (ERC) 2009–10 out-turned dollars (±50% cost confidence). The works were to be funded from Defence's Major Capital Facilities Program (MCFP).

10. In June 2012, Defence approved the Project's Strategic Business Case at an estimated capital cost of $175 million, with an additional $25 million to develop a Combined Mess, subject to a cost benefit analysis. In May 2014 the Project received an additional $23.5 million as a result of savings in MCFP and federal budget adjustment. In September 2014 Defence approved the Project's Detailed Business Case at a capital cost of $223.6 million that included the Combined Mess option.

Need for the Works

11. The marked growth in the size of the unit since the 1960's and the extended period since most existing facilities were delivered has led to an incoherent and inefficient Barracks site layout. Many of the 'like' SASR functions have become dislocated around the base, with some elements being forced to adopt temporary and adhoc facilities solutions. Within those constraints, the SASR has continued to improvise in order to meet operational and capability requirements. In recent years however, an increase in the Regiment's operational tempo and associated specialist training requirements, manning levels and equipment holdings – without a commensurate facilities solution – has rendered the existing Campbell Barracks facilities and infrastructure inadequate for SASR needs.

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12. In response to the facilities and infrastructure conditions outlined above, the Project will provide functional and flexible purpose-built facilities and improved infrastructure at Campbell Barracks. This will enable the SASR to maintain and develop its operational capability efficiently and effectively. It will also deliver a sustainable outcome for the Defence Estate by maximising adaptive reuse of existing facilities, consolidating buildings and functions, demolishing redundant buildings and refurbishing and upgrading existing infrastructure.
13. The progressive deterioration of engineering services and the continued use of aging and ineffective facilities make the proposed redevelopment a high priority for Defence.
14. In June 2015, the Government approved the Project, inclusive of funding.

Project Location

15. The proposed works will be constructed at Campbell Barracks, which is located at Swanbourne, a coastal suburb approximately 10km west of Perth's central business district. A Locality Plan and Regional Plans are included at Attachments 1 and 2.

Description of the Proposal

Scope Element 1 - Operations Precinct

16. This scope element proposes the creation of a new Operations Precinct through the construction of a new combined working accommodation building for the SASR Regimental Headquarters and the four Squadrons.
17. The SASR Regimental Headquarters provides regimental command and control elements, operational management and administration elements for the SASR. There are four Squadrons within the SASR, which are currently housed in separate buildings spread across the Barracks. The buildings are in various states of disrepair and have insufficient space for SASR activities. The SASR's current working accommodation footprint results in inefficient and less effective operations and training.
18. The SASR requires a new facility that houses the Regimental Headquarters and the four squadrons within one building complex. The building must have sufficient space for the current and future operational requirements including the Regimental Headquarters and each squadron's working accommodation, Sensitive

Compartmented Information Facility areas, storage, armoury, personal lockers and storage, meeting and training facilities and ablutions.

Scope Element 2 - Operational Support Squadron

19. This scope element proposes the creation of a new Operational Support Squadron Precinct through the adaptive reuse of existing facilities and the construction of new facilities.

20. The role of the Operational Support Squadron is to provide operational training and force generation to the SASR through the provision of individual and specialist training and force projection capability. These roles enable the SASR to maintain primacy of operational capacity. The Operational Support Squadron is currently housed in a diverse range of buildings of varying age and condition. The majority of the buildings are now inadequate for their intended use, particularly in relation to storage requirements.

21. The Operational Support Squadron buildings are mostly located in a single precinct in the northwest corner of the Barracks, however, the fragmented layout of the Operational Support Squadron creates command and control issues, reducing operational efficiency. The majority of the existing building stock is too small and reaching the end of its design life.

22. The SASR requires updated and consolidated facilities to meet the complex training needs of the Operational Support Squadron. Where possible this is to be achieved by adaptive reuse of existing buildings which will be vacated as part of the broader Campbell Barracks Redevelopment Project.

Scope Element 3 - Main Quartermaster Store (Q Store)

23. This scope element proposes the creation of a new Main Q store through the adaptive reuse and extension of existing facilities.

24. The primary role of the Main Q Store is to provide, hold, issue and distribute all Regimental and unit pooled stores. This includes clothing, field and specialist equipment as well as Logistics Support Squadron specific equipment. The Main Q Store is located in the south eastern corner of Campbell Barracks (adjacent to the Transport Yard and the Workshops). The Main Q Store is made up of seven buildings. These are inadequate in terms of size, capacity, functionality and flexibility for the required functions. The current buildings require upgrading/replacement as they are

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nearing the end of their design life. In addition, they are not compliant with current Building Code of Australia and Work Health and Safety Regulations.

25. The SASR requires a new larger and more functional facility. This will allow the Main Q Store to conduct its core business of managing unit pooled equipment, clothing and personal stores as well as the Logistics Support Squadron stores. Where possible this is to be achieved by adaptive reuse of existing buildings which have been vacated as part of the broader Campbell Barracks Redevelopment Project.

Scope Element 4 - 152 Signals Squadron

26. This scope element proposes the relocation of 152 Signals Squadron and the adaptive reuse of existing facilities.

27. The primary role of the 152 Signals Squadron is to provide Communication Information Systems and Electronic Warfare support and training to the SASR. 152 Signals Squadron currently is housed in a diverse range of buildings of varying age, functionality and condition. The 152 Signals Squadron buildings are located over a wide area of the Barracks. The majority of the existing building stock is too small and is reaching the end of its design life.

28. The 152 Signals Squadron requires updated working accommodation for command, training and administrative elements. This is proposed to be achieved by adaptive reuse of existing buildings which have been vacated as part of the broader Campbell Barracks Redevelopment Project.

Scope Element 5 - Soldier Training and Recovery Centre

29. This scope element proposes to upgrade the existing Soldier Training and Recovery Centre through the adaptive reuse of existing facilities and the construction of new facilities.

30. The operational success of the SASR is dependant on the physical capacity of unit personnel, at the individual and collective levels, to perform at their peak performance. The primary role of the Soldier Training and Recovery Centre is to provide rehabilitation, training and recreation facilities to the SASR in order to allow them to maximise their human capital.

31. The existing Soldier Training and Recovery Centre is currently located near the centre of the Barracks in a convenient position to serve the entire Barracks. The Soldier Training and Recovery Centre is made up of four structures including the gymnasium,

swimming pool, squash courts and tennis courts. The building envelope of the gymnasium and swimming pool are adequate; however, the gymnasium is too small for the number of personnel in the unit and has significant Work Health and Safety issues inherent to its sub-optimal capacity, layout and fitout. The SASR has confirmed that the tennis and squash courts are not used and are no longer required.

32. The requirement is to provide a mixture of new and adaptively reused facilities to develop the Soldier Training and Recovery Centre to an acceptable standard. The key functions for the refurbished Soldier Training and Recovery Centre will be to providing efficient and flexible facilities for SASR physical training, rehabilitation programmes, dive training, and adequate storage.

Scope Element 6 - Combined Mess

33. This scope element proposes to construct a new Combined Mess building.

34. The primary role of the mess facilities is to provide catering, dining and recreation facilities to the SASR. Currently, catering at Campbell Barracks is provided by three messes each in different locations. Each mess has its own kitchen and all are supplied from one store located in the Main Q Store area. Operating three mess facilities – with separate storage areas – on one barracks is inefficient. The current buildings are of varying standards but all are nearing the end of their design life and require upgrading/replacement. The existing facilities are not compliant with the current Australian Defence Force policy and the guiding principles of the Hospitality and Catering review. These principles are based on consideration of the needs of members living on base, access to nutritious food, facility requirements and catering skills for domestic and overseas operations. They are not compliant with Work Health and Safety Regulations.

35. A Cost Benefit Analysis was undertaken to determine whether there were potential savings if the three messes were combined into a single facility. The Cost Benefit Analysis used a discounted cash flow analysis with a 7% discount rate to assess the Whole of Life costs. The analysis was conducted over a 30 year period appropriate for a non-revenue generating infrastructure asset. It indicated that there are potential qualitative and quantitative savings across that timeframe – approximately $21 million, in present day terms (2014-15) – if the Combined Mess is developed.

36. The requirement is to provide a new Combined Mess incorporating Officers, Senior Non-Commissioned Officers and Other Ranks areas serviced by a single kitchen and serving areas. The existing mess facilities are to be demolished.

Scope Element 7 - Entry Precinct

37. This scope element proposes to upgrade the existing Entry Precinct including the construction of a new Visitor Reception Centre.

38. The Entry Precinct is the primary point of access and egress for Campbell Barracks. Its key functions are to administer access control protocols, monitor alarms on the Barracks, provide surveillance and response, and act as a blast containment area. The current Entry Precinct is inadequately positioned and poorly designed to effectively act as the security hub for the Barracks as well as the main point of control for all base traffic. There are no blast walls around the precinct and the existing Regimental Headquarters and other buildings are susceptible to damage should an explosive device be detonated vicinity the Entry Precinct.

39. The new Entry Precinct must be capable of providing an efficient, flexible and secure main point of entry to Campbell Barracks. It shall incorporate a Visitors Reception Centre, car parking, Sentry House and boom gates. There must be sufficient space for turning circles (including allowance for trucks which may have unintentionally entered the Precinct to turn around and exit without entering the Barracks). The design of the precinct must provide blast protection measures in accordance with the Defence Business Importance Level requirements and Base Security Improvement Program principles.

Scope Element 8 - Fibre Transmission Facility

40. This scope element proposes to refurbish the existing Fibre Transmission facility.

41. The purpose of the Fibre Transmission facility is to manage the distribution of radio signals from the Antenna Farm throughout the Barracks. This function is currently occurring within the Abbott Building (A4065) and will remain there as part of this proposed scope (to be collocated in the proposed Operational Support Squadron facilities as detailed above).

42. The project also proposes that 152 Signals Squadron, currently in the Abbott Building, will relocate to Building A4002 as part of the redevelopment. As such a small Network Termination Building is also proposed to be constructed within the

Antenna Farm to enable the functioning of the refurbished Fibre Transmission facility.

Scope Element 9 - Infrastructure

43. This scope element proposes to upgrade aging and obsolete trunk infrastructure to support the ongoing long-term operation of the Barracks and all new proposed developments.

44. The barracks-wide infrastructure is aging and obsolete. It needs to be refurbished and extended to meet current requirements, support the proposed works as part of the redevelopment project and other related projects (see paragraph 124 for details), and ensure the long-term capacity for the development of the Barracks. Some of the issues with the key infrastructure elements at Campbell Barracks are as follows:

a. **Electrical Network**. The low voltage and high voltage power supply infrastructure is generally in fair condition. Much of the high voltage equipment was upgraded in 1997 and meets Australian Standards but not the requirements of the Defence Manual of Infrastructure Engineering - Electrical. However, the low voltage switchboards date back to the original installation and do not meet either the current Australian Standards or the Manual of Infrastructure Engineering - Electrical.

b. **Information Communication Technology Infrastructure**. The existing pit and pipe network is considered non-compliant as it is in poor condition and key segments have no capacity for any future expansion. There are also some asbestos pits and some plastic pits that have collapsed.

c. **Civil Roads and Pavements**. Much of the road network and pavements were constructed when the Barracks was built in the 1960s. There is widespread surface cracking ranging in severity from slight to severe throughout the internal area. This type of cracking is consistent with the age of the pavements and oxidation of the asphalt.

d. **Civil Stormwater**. All the stormwater basins are undersized; however, there are no known flooding issues. There are no stormwater quality management systems in place. A number of the existing stormwater pipes are undersized and non-compliant.

e. **Fire Services**. The reticulation network and existing fire hydrants are generally in poor condition and are not compliant with current Australian Standards or Defence policy requirements. The required pressure and flow rates recommended by the Australian Standards are not achieved.

f. **Potable Water Supply**. Much of the potable water reticulation network and the supply points are compliant, but there are sections of asbestos cement pipes in the network. These asbestos cement pipes are not compliant and must be demolished and replaced.

g. **Sewer System**. Sections of the existing wastewater network pipework are cracked and have misaligned jointing. The two existing connection points to the main Claremont Sewer are inadequate for the requirements of Campbell Barracks.

h. **Irrigation Network**. Two of the existing bores have been impacted by salinity in the water supply and are considered unsuitable for irrigation use. One of the existing bores is also damaged and requires repair.

i. **Gas**. The current supply is inadequate for the additional load associated with the Campbell Barracks Redevelopment Project.

45. As a result of delivery of the above scope elements, 34 existing facilities are proposed to be demolished, some of which require demolition to make way for the proposed new building and some of which are deemed to be redundant subsequent to the construction of the proposed new buildings.

46. The following 'below the line' scope elements have also been approved by Government for delivery should funds become available through competitive tendering during construction, and subject to Department of Finance agreement:

a. **Workshop Facilities**. New and refurbished facilities to support vehicle maintenance.

b. **Transport Yard**. New and refurbished facilities to support logistical management and movement.

47. A Site Plan detailing the proposed scope of works (less infrastructure) is included in Attachment 3.

Options Considered to Fulfil the Identified Need

48. Alternative options for both the procurement methodology and proposed facility solutions have been considered at every stage of development and are as detailed as follows.

Procurement Options

49. Defence considered procurement options for delivery of the proposed facilities, including via:
    a. a public-private partnership; or
    b. a traditional contracting methodology.

50. The option analysis concluded that a traditional contracting methodology would offer a better outcome than a public private partnership agreement. This is due to the required facilities to be delivered by this project are classified 'core operational assets' that will require significant Defence resources to manage and operate.

Adaptive Reuse Options

51. Defence considered the viability of adaptively reusing existing facilities to meet the needs of the Campbell Barracks Redevelopment Project. In some cases adaptive reuse was considered the most appropriate option, however, a number of the facilities were constructed in the 1960s and are functionally inefficient and non-code compliant (e.g Building Code of Australia, Defence's Manual of Fire Protection and the Work Health and Safety Act).

52. Adaptive reuse was not considered feasible for the Operations Precinct, Combined Mess facilities, the Entry Precinct and elements of the Operational Support Squadron for the following reasons:
    a. functional inefficiencies associated with the location of the associated existing facilities throughout Campbell Barracks,
    b. technical difficulties associated with the upgrade of the existing aging and obsolete buildings to meet the current requirement,
    c. existing building size and configuration does not correlate with modern requirements,
    d. security implications associated with the locations of select buildings is incompatible, and

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e. the extent of works required to meet statutory requirements does not represent a cost benefit.

53. Adaptive reuse was considered feasible for:

a. The Operational Support Squadron Facilities (Buildings A1005 and A4065). These facilities were constructed in the 1980s and are in reasonable condition. They are located in close proximity to each other. These buildings will be vacated on completion of the new Operations Precinct and will accommodate two elements of Operational Support Squadron.

b. The 152 Signals Squadron (Building A4002). The existing Regimental Headquarters is in reasonable condition and has been extended and refurbished on a number of occasions (most recently in 2010). With minor modifications the building will house 152 Signals Squadron. The building will also accommodate the Operational Support Squadron - Languages Other Than English Cell and the unit Padre.

c. The Quartermaster's Store (Buildings A4083 and A4084 – the 'The Link Building'). These buildings will be vacated when the Sabre Squadrons relocate to the new Operations Precinct. The facility was completed in 2010, is in good condition and will be repurposed for use as the Quartermaster's Store.

d. The Soldier Training and Recovery Centre (Building A2025). Structurally this building is in good condition; however, the functionality of the building does not allow the SASR to maximise the operational capacity of its human capital. With significant modifications the building will be able to meet the unit's physical training and rehabilitation needs.

e. The Fibre Transmission Facility (Building A4065). Through refurbishment and extension of the existing building, an enhanced Fibre Transmission Facility can be delivered.

Environment and Heritage Assessment

Environmental Impact of the Proposed Works

54. The proposed works were considered against the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999* (Cth). It was determined that a referral under the Act is not required for this project.

55. An Initial Environmental Review for the proposed works associated with this project was prepared in 2013. The assessment was carried out in accordance with the Defence Guidance on the Preparation of an Initial Environmental Review.

56. The design of the proposed works has specifically considered the outcomes and recommendations of the Initial Environmental Review and has incorporated features to mitigate environmental impacts. This includes siting facilities to maximise passive solar design, the appropriate use of insulation and the use of energy efficient equipment to minimise energy consumption. In addition, the conclusion of the Initial Environmental Review was that environment risks associated with the project are minor and manageable through the development of a Construction Environmental Management Plan.

Indigenous and Non Indigenous Heritage Considerations

57. The conclusion of the Initial Environment Review was that heritage risks associated with the project are minor and manageable through the development of a Construction Environmental Management Plan. Further investigations undertaken during design development have confirmed that heritage risks, both European and Indigenous, are minor and manageable through the Construction Environmental Management Plan.

Key Legislation

58. The following key legislation is relevant to this project:

a. *Defence Act* 1903 (Cth);
b. *Environment Protection and Biodiversity Conservation Act* 1999 (Cth);
c. *Fair Work (Building Industry) Act* 2012 (Cth);
d. *Work Health and Safety Act (WH&S)* 2011 (Cth);
e. *Occupational Safety and Health Act* 1984 (WA);
f. *Disability Discrimination Act* 1992 (Cth); and
g. *Fair Work Act* 2009 (Cth).

Applicable Codes and Standards

59. The design of the proposed works will comply with all relevant and current Defence standards, Australian standards, codes and guidelines including, but not limited to:

a. National Construction Code - Building Code of Australia;
b. Defence Manual of Fire Protection Engineering; and

c. Defence Estate Quality Management System.

Consultation with Key Stakeholders

60. 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 Campbell Barracks Redevelopment Project.

61. Defence has engaged with a variety of internal and external stakeholders during project development, and further consultations will be conducted following the referral of this project to the Parliamentary Standing Committee on Public Works. These groups include:

a. the Hon Ms Julie Bishop MP, Federal Member for Curtin;

b. the Hon Mr Colin Barnett MP, State Member for Cottesloe;

c. the City of Nedlands;

d. Western Power;

e. Water Corporation;

f. Main Roads Western Australia; and

g. the Department of Fire and Emergency Services.

62. Defence has also developed a community consultation and communications strategy that recognises the importance of providing local residents and other interested stakeholders an opportunity to provide input into, or raise concerns relating to the Project.

Purpose of the Works

Project Objective

63. The project objective is to provide functional and flexible purpose-built facilities and improved infrastructure at Campbell Barracks. This will ensure SASR is accommodated in secure contemporary working and support accommodation to enable generation of capability and support execution of operations. It will also deliver a sustainable outcome for the Defence Estate by maximising the adaptive reuse of existing facilities where possible, consolidating buildings and functions, demolishing redundant buildings, and extending and upgrading existing infrastructure.

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Detailed Description of the Proposal

Scope Element 1 - Operation Precinct

64. The proposed Operations Precinct is a mixed use facility that will predominately provide purpose designed working accommodation and consolidate the Regimental Headquarters and four Squadrons into one interconnected secure complex. The facility will allow the SASR to optimise efficiency and effectiveness of operations and communication. A floor plan for the proposed facility is included in Attachment 4. Each facility will provide for command, control, operational office areas, open office space, Sensitive Compartmentalised Information Facility areas, briefing rooms in a security environment that is commensurate with the security operational environment, conference rooms, personal storage and amenities. Key specific aspects of the individual facilities include:

a. **Regimental Headquarters**. Working accommodation constructed over three levels that provides a shared theatrette for 450 people, mission planning rooms and laundry.

b. **Squadron Facilities.** The facilities for the squadrons will be constructed over two levels that includes an armoury, Quartermaster Store, wash down area, weapons cleaning area, loading bay and training rooms. The facilities for one of the squadrons includes workshops and laboratories.

Scope Element 2 - Operational Support Squadron Facilities

65. The proposed Operational Support Squadron facilities provide for consolidation of the Operational Support Squadron Headquarters, Quartermaster Store, Marine Support Centre, Battle Troop, Skills Troop and Force Projection Troop in one precinct that also allow for future expansion of the Operational Support Squadron and the REDFIN 1B Facilities. Floor plans for the proposed facilities are included in Attachment 5. Key aspects of the facilities include:

a. Operational Support Squadron facilities spread over three buildings including the two existing buildings A1005 and A4065 and new construction for the Force Projection Support Centre.

b. Adaptive reuse of Building A1005 to house the Operational Support Squadron Headquarters, Q Store, common facilities, Skills Troop, Battle Troop, Force

Projection Troop and associated building services. This will include working accommodation, training and development room, planning areas, conference room for 30 personnel, Q store, armoury, loading bay and workshops.

c. Adaptive reuse of Building A4065 to house elements of the Skills Troop including the Reinforcement Cell and the Climbing and Survival Cell. The facility will include office accommodation, planning room, specialty store areas, equipment cleaning area and a loading dock.

d. New Force Projection Support Centre. This facility provides operation storage for each of the three Sabre Squadrons and for the Operational Support Squadron. It includes zodiac and dive storage area, weapon cleaning areas, store areas, conference and training room, office space, Q store, pump and tank filling rooms, and workshop.

Scope Element 3 - Main Q Store

66. The proposed new Main Q Store facilities will be delivered by the extension and adaptive reuse of the Link Building (Buildings A4083 and A4084). The Link Building is significantly closer to the Entry Precinct than the existing Main Q Store. Accordingly, it will allow for a simple loop movement for delivery trucks. This will minimise the distance they would have to travel within the Barracks, which is in accordance with base security layering principles. Floor plans for the proposed facilities are included in Attachment 6. Key aspects of the facilities include:

a. a new headquarters which provides offices and common facilities for personnel and will include the reception area, briefing and conference room, reproduction area, archive room and storage;

b. a Main Q Store which consolidates freight receipt and dispatch and storage in one location and includes delivery area, chain wire mesh store areas, office spaces, communications room, armoury, pallet store, and 14 external access squadron store areas; and

c. a commodity store area with general storage area, office space, customer service area, fitting rooms and returns area.

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Scope Element 4 - Signals Squadron

67. The proposed option for the 152 Signals Squadron provides a refurbished facility with the adaptive reuse of Building A4002. This building has many of the fundamental requirements of the 152 Signals Squadron and with relatively minor refurbishment it can provide an almost fully functional outcome. Floor Plans for this option are included at Attachment 7. It is a two storey building and the proposed refurbishment will provide:

a. a ground level containing working accommodation, common facilities, armoury, vehicle workshop including radio frequency shielding room, Q Store, and vehicle bays; and

b. level one with training, briefing and conference rooms, office accommodation, and common facilities.

Scope Element 5 - Soldier Training and Recovery Centre

68. The proposed new physical fitness facilities will be delivered by adaptive reuse and extension of the existing building, including re-lining of the swimming pool. Key aspects of the facilities include new flexible office space, rock climbing facilities, extended training areas, and new storage areas. Floor plans for the proposed facility are included at Attachment 8.

Scope Element 6 - Combined Mess

69. The proposed Combined Mess consolidates all mess facilities into one building that addresses the current operational inefficiencies. It will cater for 430 diners across three dining zones and allow for the three zones to be opened into one continuous space catering for up to 620 diners. It will provide a social hub for recreation, support and transit accommodation for the Officers and Senior Non-Commissioned Officer ranks. It will cater for collocated bulk food storage (both dry and refrigerated), field catering equipment store, and field ration pack/stores within the centralised loading and delivery compound. A floor plan for the proposed facility is included in Attachment 9. Key aspects of the facility include:

a. three dining areas consisting of Other Ranks Mess to cater for 300 personnel, Senior Non-Commissioned Officers Mess to cater for 80 personnel, and an Officers Mess to cater for 50 Personnel;

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b. the Officers Mess and the Senior Non-Commissioned Officers Messes will have two levels and include transit areas, private dining areas, wet mess, ante rooms and ablutions;

c. Catering Troop working accommodation including office space, training room with the capacity for 14 personnel and ablution and break out facilities; and

d. kitchen facilities, preparation areas, store rooms, cold rooms and wash areas.

Scope Element 7 - Entry Precinct

70. The proposed new Entry Precinct will provide an efficient, flexible and secure main point of entry to Campbell Barracks. It will be capable of adapting to a range of scalable security responses, including heightened levels of SAFE BASE alert, capacity to cater for special events held at the Barracks and sufficient space for turning circles allowing trucks that may have unintentionally entered the Precinct to turn around and exit without entering the Barracks. A floor plan for the proposed facility is included in Attachment 10. Key aspects of the facility include:

a. a New Visitor Reception Centre designed to mitigate against a potential blast event; and

b. an office space, guard room, sleeping quarters for one person, interview room, reception area, a separate Sentry House, locker room, amenities, communication rooms and secure storage areas; and

c. supporting infrastructure consisting of expanded parking areas to cater for 120 vehicles including an allowance for a large truck turning circle, heavy vehicle stop and search area, realigned smart fence and crash rated sliding gate and blast walls.

Scope Element 8 - Fibre Transmission Facility

71. The proposed facility will be an extension and refurbishment of the existing Fibre Transmission Facility that will incorporate a network monitoring room. A floor plan for the proposed facility is included in Attachment 11.

Scope Element 9 – Infrastructure

72. The barracks-wide infrastructure is aging and obsolete. This infrastructure needs to be refurbished and extended to meet current requirements, support the proposed works as part of the redevelopment project and other related projects, and ensure the long-term

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capacity for the development of the Barracks. Some of the issues with the key infrastructure elements at Campbell Barracks are as follows:

a. **Electrical Network**. The existing 11 kilovolt high voltage incoming power supply is insufficient for the anticipated demands of Campbell Barracks. Currently measured at approximately 1265 kilovolt-amp, it is anticipated that this will increase to a maximum peak demand of up to 2836 kilovolt-amp. The high voltage ring main consists of approximately 1300 metres of in-ground buried cable connected via a single intake sub-station to eleven sub-stations. The proposed works provides an additional 3000 metres of cable to the high voltage ring main, replaces three existing sub-stations and installs and three additional sub-stations. Supporting low voltage power cables and distribution pillars are provided to all new and refurbished buildings.

b. **Information Communication Technology Infrastructure**. The existing pit and pipe network has a number of unserviceable major pathways and less than 30% spare capacity available for future expansion. The proposed works will upgrade reline and improve the existing infrastructure while adding significant capacity for future expansion.

c. **Civil Roads and Pavements**. Much of the existing road network is required to handle approximately 8000 vehicle movements per week, or an average of approximately 1600 per day. The proposed works require a total of approximately 13330 metres squared of pavements (unsealed, light and heavy pavements) for roads and car parking, with an additional allowance of approximate 6350 metres squared for hardstands in high use loading areas.

d. **Civil Stormwater**. All five stormwater basins are undersized. Two existing basins will be impacted by the proposed works, one will remain and the other replaced with a new 5000 cubic metres volume basin. Approximately 650 metres of supporting stormwater drainage concrete pipe work is also being laid with 36 new grated gully and side entry pits.

e. **Fire Services**. The reticulation network and existing fire hydrants are generally in poor condition and are not compliant with current Australian Standards or Defence policy requirements. The proposed remediation includes installation of approximately 1800 metres of new pipe for the creation of a new fire ring main, supplying a minimum 700 kilopascals pressure. Three new booster pumps (two

diesel and one electrical) are also to be installed to supply adequate water pressure across the site, with approximately 120 metres of new pipe to connect into the upgraded pipe network. Two new 153 kilolitre fire water storage tanks are also proposed to supply the pumps and sprinkler systems.

f. **Potable Water Supply**. Removal of approximately 1100 metres of aging pipes and the installation of approximately 820 metres of new polyethylene pipe extending the existing potable water network to the new buildings are proposed. Installation of approximately 1750 metres of new polyethylene pipe and commissioning of an existing ground water bore to support base irrigation and landscaping requirements is also proposed.

g. **Sewer System**. Site inspections have assessed that the large portions of the sewer system is in poor condition and non-compliant with current standards. Works will require approximately 360 metres of new pipe laid and approximately 290 metres of existing pipe relined and upgraded to adequately support proposed development wastewater loads. This includes two new outfall points that will support the new works, with one upgraded outfall connection into the existing Claremont sewer main for the eastern site network and one new outfall connection into a branch sewer at the western site network.

h. **Irrigation Network**. Two of the existing bores have been impacted by salinity in the water supply and are considered unsuitable for irrigation use. A large portion of the existing network needs to be demolished to service the expected growth.

i. **Gas.** The current supply is inadequate for the additional load associated with the Campbell Barracks Redevelopment Project. Approximately 1620m of existing two kilopascal pipeline is proposed to be replaced with new and upgraded pipeline to an elevated pressure of seven kilopascals to supply gas to buildings, inclusive of an upgrade to the site mains inlet and meter.

Details and Reasons for Siting Selection

73. Where adaptive reuse was not considered viable, siting options for new facilities have been considered for the following project scope elements.

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Scope Element 1 - Operations Precinct

74. Four options have been considered for the Operations Precinct (three of which use the sports ovals located in the western portion of the Barracks). The ovals are bisected by a sewer easement which is a significant siting constraint. The Operations Precinct options are:

a. A new building utilising the space available to the south of the sewer easement and located on the southern sports oval. This preferred option involves the demolition of the Senior Non-Commissioned Officers mess. It represented the best operational, master planning and security outcome, minimising the impact of construction on the remainder of the Barracks. It was also the cheapest option in terms of capital and whole of life costs.

b. A new building utilising the space available on the northern sports oval between the ranges and the sewer easement. This option was not pursued as it:

(1) does not address key SASR functional relationships as effectively as other options,

(2) is positioned over a second easement for a rising main sewer which would require relocation and potential upgrade at significant expense and risk,

(3) is on a natural rise and will be more prominent that other options which poses an additional security risk, and

(4) is located closer to the range and associated noise emissions.

c. A new building utilising the space available to the west of the Recovery Building (A1005) bridging the easement incorporating portions of both sports ovals. This option was not pursued as it requires a significantly more complex and expensive structure. It would also expose Defence to operational risk should the Water Corporation require access to the easement.

d. New buildings and adaptive reuse of existing facilities in the location of the existing working accommodation precinct requiring significant demolition and temporary accommodation to maintain capability. This option was not pursued as it is failed to address a number of functional requirements. This option:

(1) would result in extensive disruption to SASR operations during construction;

(2) represents a higher security risk due to its proximity to the Entry Precinct;

(3) fails to house the Regimental Headquarters, three four Squadron in one complex; and

(4) cannot satisfy the requirements for floor space within the constraints of the existing facilities.

Scope Element 2 - Operational Support Squadron

75. The Operational Support Squadron precinct consolidates a number of key functions of the Operational Support Squadron. Various options were considered to accommodate Operational Support Squadron elements. The proposed solution includes:

a. adaptive reuse of Building A1005 for their Headquarters;

b. adaptive reuse of Building A4065 for use by Skills Troop; and

c. a new building for use by Force Projection Support Centre to provide operational storage for other unit elements.

76. Three options were considered for the Force Projection Support Centre. The are as follows:

a. A new building located immediately to the north of Building A1005 was determined to be the preferred option for the following reasons:

(1) its relative proximity enables all key functional elements of Operational Support Squadron to be located within a defined precinct;

(2) the solution allows sufficient space for future expansion and development of the Operational Support Squadron if necessary; and

(3) the location maximises the functional relationships between Operational Support Squadron and the four Squadrons that are located immediately adjacent in the Operations Precinct.

b. A new building on the site currently occupied by these Units. This option was not pursued as it is failed to address a number of key functional requirements. It would also result in substantial and extensive disruption to SASR operations during construction.

c. Adaptive reuse of the existing facilities was not pursued for the Force Projection Support Centre. It was determined that there is insufficient space in the current buildings to make refurbishment practical. Additionally, it would not allow sufficient flexibility to address the needs of future expansion. Further, the existing

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buildings are in poor condition and would require significant refurbishment to meet current standards and codes.

Scope Element 6 - Combined Mess

77. The proposed new Combined Mess will consolidate all mess facilities into one building. Collocation will address current operational inefficiencies and maximise saving in relation to capital cost, operating and Whole of Life costs. It was determined that adaptive reuse was not viable for this project element as that option would not achieve the key requirements stated above. The two options considered for the proposed Combined Mess were:

a. A new building located between the existing Officers and Senior Non Commissioned Officers messes. Although this Combined Mess option met most key user requirements, it was not pursued because it was considered too close to the proposed Operations Precinct location. By having the Combined Mess overlooking the Operations Precinct there is the possibility for an increased security risk and it also restricts the possible future expansion of the Operations Precinct if required.

b. A new building on the existing Officers Mess site was determined to be the preferred option as it provided the best fit against key user requirements. Additionally, this preferred Combined Mess option will:

(1) allow for future expansion of the Operations Precinct if required; and

(2) generate a strong functional relationships between:

i. the adjacent working accommodation located in the Operations Precinct and Operational Support Squadron; and

ii. the on-base living in accommodation and new Combined Mess.

Scope Element 7 - Entry Precinct

78. A security assessment of Campbell Barracks determined that the site of the existing Entry Precinct remained the optimal location for an upgraded main gate and associated security works. The option of relocating the entry point to another area of the Barracks was considered unfeasible due to potential inconsistencies with user requirements elsewhere in the Project. Additionally, the proximity of the West Coast Highway posed a high risk of delay if the main entry point was moved, due to the associated requirement to seek State Government approvals in that circumstance.

Accordingly, in the vicinity of the existing main gate, three options for the Entry Precinct were considered as follows:

a. Retention of the current main gate/guardhouse/office and road orientation. This Entry Precinct option was not pursued as it did not:
   (1) facilitate direct access to the Operations Precinct and other operational areas that will be upgraded as part of the redevelopment project;
   (2) provide adequate traffic control, waiting, inspection and queuing areas;
   (3) provide sufficient space to manoeuvre heavy vehicles; and
   (4) provide sufficient vehicle parking.

b. A new orientation and access point, retaining existing main gate/guardhouse/office. This Entry Precinct option was not pursued as it failed to address key functional requirements for the Entry Precinct. In particular, the physical separation between the reoriented entry point and the existing Guardhouse would significantly reduce the ability of security personnel to monitor and control vehicles entering the Barracks.

c. New orientation and access points with a new Visitor Reception Centre. This preferred option represented the best operational, master planning and security outcome for the base. The advantages of this option are that it provides for:
   (1) direct road access to the Operations Precinct and other work elements of the redevelopment project;
   (2) the ability to manage vehicle movements, waiting and inspection areas, heavy vehicle needs and queues into the Barracks;
   (3) increased vehicle parking and holding areas;
   (4) security measures designed into the building and surrounding areas;
   (5) realisation of strong functional relationships and alignment with the Operations Precinct, Operational Support Squadron and the proposed community precinct; and
   (6) minimal impact to SASR activities during construction.

Scope Element 9 - Infrastructure

79. The Barracks has aging and obsolete in ground and above ground infrastructure that are proposed to be replaced and refurbished as part of the Project. The works will meet current requirements, support delivery of redevelopment works and other related

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projects, while ensuring the long term viability of the Barracks. The development of infrastructure options and solutions is based on the following principles:

a. defined project scope and user requirements that clearly state the objectives and design criteria for each infrastructure element;
b. allowances for design to support the longer term operations of the Barracks including future development, growth and known projects;
c. assessment of the condition, compliance and capacity;
d. assessment and development of options including do nothing, refurbish, extend or replace; and
e. selection of an infrastructure option that achieves the project requirements whilst best suiting the longer term plan and Defence compliance requirements. The option assessment included assessment of the whole of life costs for implementation of an option.

Layout and Orientation of New Buildings

Scope Element 1 - Operations Precinct

80. The layout and orientation of the Operations Precinct building was selected from a range of options. The preferred option:

a. achieves all of the functional requirements within the available space,
b. avoids the major Water Corporation easement that bisects Campbell Barracks,
c. maximises visual amenity while addressing low sun angles and prevailing winds,
d. uses the natural topography of the site,
e. uses a predominately brownfield site and minimises the demolition of significant structures to commence construction,
f. simplifies the delineation of the construction site from operational activities, and
g. provides flexibility for future expansion.

Scope Element 2 - Operational Support Squadron – Force Projection Support Centre

81. The layout and orientation of the Force Projection Support Centre building was selected from a range of options. The preferred option:

a. is sized and orientated to consolidate key elements of the Operational Support Squadron into a precinct,
b. allows for future expansion of the Operational Support Squadron, and

c. includes an allowance for the scope requirements of the concurrent Defence Project REDFIN 1B.

Scope Element 6 - Combined Mess

82. The layout and orientation of the Combined Mess building was selected from a range of options. The preferred option:

a. achieves all of the functional requirements within the available space,

b. maximises visual amenity while addressing low sun angles and prevailing winds,

c. uses the natural topography of the site, and

d. simplifies the delineation of the construction site from operational activities.

Scope Element 7 - Entry Precinct

83. The layout and orientation of the new buildings within in the Entry Precinct were selected from a range of options. The preferred option:

a. addresses the realigned entry road that creates a direct link to the Operations Precinct;

b. is consistent with the future community precinct;

c. provides sufficient pavement area to better cater for special event parking, areas to stop and search trucks and the ability for large trucks to be turned around without entering the base; and

d. minimises impact on SASR operations during construction.

Internal Layouts of Buildings

84. Numerous options were developed for the internal layouts of the buildings. The preferred layouts were selected on the basis of functional efficiency, ability to facilitate information security, minimisation of building footprint, and costs.

Demolition and Reuse of Existing Structures

85. A key Defence project requirement is to deliver a sustainable outcome for the Defence Estate by maximising adaptive reuse of existing facilities where possible and cost effective, consolidating buildings and functions, demolishing redundant buildings, and refurbishing, extending and upgrading existing infrastructure. Accordingly, where possible, demolitions should be undertaken as part of the Project.

86. The following structures are proposed to be reused by the Project:

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a. Building A1005 will be vacated on completion of the Operations Precinct and it is proposed to be refurbished and reused for the Operational Support Squadron,
b. Building A4065 will be vacated when 152 Signals Squadron relocate to their new facilities and it is proposed to reuse A4065 for elements of the Operational Support Squadron and for the Fibre Transmission Facility,
c. Building A4002 will be vacated on completion of the Operations Precinct and it is proposed to be refurbished and reused for the 152 Signals Squadron,
d. Buildings A4083 and A4084 will be vacated on completion of the Operations Precinct and it is proposed to be refurbished and reused for the new Q Store, and
e. Building A2025 will be refurbished and extended for the new Solider Training and Recovery Centre.

87. There are also 34 existing facilities that are proposed to be demolished, some of which require to be demolished to make way for proposed new buildings and some of which are deemed to be redundant subsequent to the construction of proposed new buildings. These redundant facilities are also generally at the end of their design life and are in a dilapidated state. The proposed Demolition Plan is included at Attachment 12.

Reasons for Adopting the Proposed Course of Action

88. The reasons for adopting the proposed options as outlined above are that they all:
a. meet SASR functional requirements and addresses the current shortfalls in infrastructure in a cost effective manner;
b. address SASR security requirements;
c. create effective streamlined interaction between related functions in consolidated precincts which will improve efficiency of regimental operations;
d. deliver a sustainable outcome for the Defence Estate by maximising adaptive reuse of existing facilities, consolidating buildings and functions, allowing for demolition of redundant buildings and refurbishment, and extending and upgrading existing infrastructure;
e. meet the minimum requirements that satisfy the current Building Code of Australia, Defence's Manual of Fire Protection Engineering, and other statutory requirements;

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f. maximise opportunities to achieve optimised Ecologically Sustainable Development and Green Building opportunities;

g. minimise the requirement for temporary facilities and decanting, which in turn minimises disruption to ongoing operations;

h. minimise the need to conduct extensive construction activities within the operational areas of the Barracks, which mitigates disruption to SASR operations and work health and safety risks; and

i. minimise whole of life costs.

Land Acquisition, Zoning and Approvals

89. All elements of the Project are located within the boundaries of Commonwealth owned and Defence controlled land. Accordingly, no civilian authority or design approvals are required, although the works will comply with the relevant standards and regulations (where applicable).

90. The proposed redevelopment provides for future developments on barracks and has been developed in accordance with the approved Campbell Barracks Zone Plan.

Childcare Provisions

91. This project will not significantly increase the base population or affect the requirement for childcare places. No additional childcare facilities are being provided under this project.

Impact on Local Community

92. The proposal will generate significant short-term employment opportunities predominantly in the building, construction and labour markets in the Perth area. Significant numbers of personnel will be directly employed for the duration of the construction activities, which will also generate some off-site job opportunities through the manufacture and distribution of materials over the construction period. Defence anticipates that local building sub-contractors will be employed on a large proportion of the construction works generating further employment opportunities.

93. The building contractor will be required to manage construction traffic routes in accordance with the Site Management Plan to minimise any disruption to the local community during the construction period. The construction sites are generally located well within the base boundary and construction activities are not expected to

cause noticeable disruption to businesses and residences adjacent to Campbell Barracks. There are two entrances to Campbell Barracks, both of which connect onto West Coast Highway. It is anticipated that construction traffic will have limited impact on the local community.

Planning and Design Concepts

94. The general design philosophy for the proposed facilities incorporates the following considerations:

a. provision of cost effective and functional facilities of energy efficient design suitable for the climate of the site and of a style compatible with the existing base aesthetics;

b. adoption, where possible, of conventional construction techniques and materials, in particular those commonly used by the construction industry and consistent with those already utilised on the Base;

c. maximum use of existing infrastructure and facilities to minimise capital costs;

d. use of readily available and durable materials that combine long life while minimising maintenance;

e. infrastructure services planning and structure design taking into account future flexibility, projected demand and Defence policies for reliability and redundancy;

f. recognition of site constraints, security requirements, the established Zone Plan, functional relationships to existing facilities; and

g. planning services and structural design to accommodate flexibility.

Structural Design

95. The new buildings at Campbell Barracks will be predominately steel framed structures with concrete floor slabs and metal deck roofs. In some cases external load bearing masonry and precast panel walls will be used. Where possible, internal walls will be non-load bearing frames lined with plasterboard to provide maximum flexibility for future layout.

Materials

96. External walls for new and extended buildings will be a mixture of precast concrete, metal cladding, masonry and glazing. Metal deck roofing will be used on all new

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buildings. The materials have been selected for their resilience to the harsh coastal environment.

Mechanical Services

97. The mechanical services for each proposed new building have been designed according to the function and needs of each building. The purpose of the mechanical service system is to provide mandatory ventilation, thermal comfort, and air quality conditions in accordance with specific user needs and the requirements of the Building Code of Australia.

98. For the buildings that are proposed to be refurbished, an assessment has been undertaken to determine the condition and performance of existing heating, ventilation and air-conditioning systems. Where possible, the existing units will retained, otherwise the systems will be upgraded to extend the life of the facilities and improve the environmental performance.

Hydraulic Services

99. The proposed works to the trunk sewer include the upgrade of pipes through refurbishment or replacement and extension of the network to the proposed new works. One of the discharge points into the Claremont main sewer is proposed to be abandoned. The sewage will be redirected south into a branch sewer heading west from outside the Barracks. A second connection will be refurbished and retained as it has the capacity to cater for the anticipated additional flows.

100. The existing potable water supply has sufficient capacity to cater for the additional new buildings to be developed under the Campbell Barracks Redevelopment Project. The network will be extended to the new facilities as required.

101. The irrigation system will be extended from bores to the new landscaped areas. New irrigation water supply pipes will be provided to suit the new buildings and new road alignment. The existing bores will be retained, decommissioned, repaired or relocated as required.

102. Stormwater will continue to be managed via infiltration basins. This has the advantage of recharging the ground water lens located beneath Campbell Barracks which will assist in improving the quality of the groundwater by reducing salinity.

Electrical Services

103. Lighting, power and lightening protection will be provided in accordance with Australian Standards and Defence engineering requirements.

104. Electrical infrastructure and switchboards will have spare capacity to allow for future growth. Sub-metering will be included to each reused and new building. The meters will be monitored through a new Building Management System, which will support an active management program on site.

105. The existing high voltage supply to Campbell Barracks has been determined as adequate to support the redevelopment. A number of substations throughout the Barracks will be relocated or replaced, and new substations will be installed for the proposed new buildings. To supplement the supply, Local Emergency Generators will be installed at key locations to support critical facilities.

Acoustics

106. The new facilities will comply with the Building Code of Australia and Australian Standards for noise and acoustics. Acoustic separation has been considered between rooms and walls and partitions are being designed to meet user requirements and building function.

107. The application of AS2021:2000 Acoustic Intrusion – Building Siting and Construction is used as a design standard in buildings close to aerodromes. Although Campbell Barracks is not an Aerodrome or Airfield, it does experience infrequent movements of helicopters associated with SASR activities. Accordingly, a review of the likely maximum noise levels emitted by the helicopter movements and their impact on users has been undertaken and the building envelope design has been developed to address the outcomes of this assessment.

Fire Protection

108. All construction and fire protection requirements will, as a minimum, be in accordance with the provisions of the Building Code of Australia, the Defence Manual of Fire Protection Engineering, and all other applicable Codes and Standards.

109. The existing dedicated fire main will be extended to form a dedicated fire service ring main. The fire services ring main will connect to two new fire water storage tanks and booster pumps sized to satisfy combined hydrant and sprinkler demand.

Security Measures

110. Advice from designated security authorities has been incorporated in the design solutions for the proposed facilities when appropriate. The Campbell Barracks Threat Assessment has been reviewed during the design stage. The facilities will be secured as appropriate to the classification level required for the activities conducted.

Environmental Sustainability of the Project

111. The Commonwealth is committed to Ecologically Sustainable Development and the reduction in greenhouse gas emissions. Defence reports annually to Parliament on the energy efficiency targets, established by 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.

112. The Ecologically Sustainable Development targets and requirements shall comply with the Defence Building Performance Manual. The Ecologically Sustainable Development targets and measures for this project have been balanced with other requirements for Defence buildings such as functional and security requirements, heritage considerations and Work Health and Safety. Defence Ecologically Sustainable Development policies have been addressed by adopting cost effectiveness and Ecologically Sustainable Development as key objectives in the design development and delivery of new facilities.

Energy Targets

113. The requirements of the Defence Building Energy and Performance Manual Defence have been adopted for the proposed buildings. Each building shall achieve a National Australian Built Environment Rating System (NABERS) energy performance of at least 4.5 stars or equivalent in the case of buildings that cannot be assessed under the NABRES rules.

Details of Compliance with Local, State / Territory and Commonwealth Water and Energy Policies

114. All buildings will be designed, constructed, operated and maintained in order to use energy and water as efficiently as possible and comply with the following statutory and Defence Requirements:

a. Section J of the Building Code of Australia;

b. Commonwealth Energy Efficiency in Government Operations Policy 2007;

c. Department of Defence Building Energy and Performance Manual, Version 4 – December 2012;

d. Department of Defence Water Management Strategy 2006-2009; and

e. Department of Defence Waste Minimisation Policy 2007.

Measures to Reduce Energy and Water Use

115. Ecologically Sustainable Development objectives and solutions are considered in the design to reduce the impact on the wider environment. This occurs through the use of sustainable design and construction techniques and management systems that will reduce energy consumption and natural resources by:

a. **Energy and Greenhouse Gas Emissions Minimisation**. Strategies to address this include adopting passive building design principles for new facilities, use of energy efficient Heating, Ventilation and Air Conditioning, lighting and control systems, natural ventilation, and energy management systems.

b. **Water Use Reduction**. The overall aim is to reduce potable water use by specifying water efficient fixtures and fittings, water sensitive landscaping, recharging of groundwater aquifer, and water management systems.

c. **Indoor Environment to Maximise Occupant Comfort**. This will be achieved by adopting a number of strategies including provision of daylight to occupied spaces, shading for privacy and glare control, building orientation, and provision of outdoor air to large meeting rooms and the like.

d. **Renewable Energy**. Photovoltaic systems are proposed to be installed on the Combined Mess to supplement mains power supply.

e. **Cyclist and Pedestrian Access**. Such access will be encouraged through the construction of footpaths and bicycle parking facilities.

Landscaping

116. The landscape design will introduce a higher proportion of planted areas to reflect the character of surrounding ocean front landscapes. Where possible, existing valuable landscape elements are to be retained and enhanced. Plant selection will comprise of predominately indigenous vegetation (native and endemic) to minimise water use and to be durable, sustainable, and low maintenance.

Workplace Health and Safety Measures

117. The proposed facilities will comply with the requirements of the *Work Health and Safety Act 2011(Cth)*, the Department of Defence Work Health and Safety Manual and operate in accordance with and approved Work Health and Safety Plan.

118. The Australian Government is committed to improving work health and safety outcomes in the building and construction industry. The Head Contractor will be required to hold Work Health and Safety accreditation from the Office of the Federal Safety Commissioner under the Australian Government Building and Construction Occupational Health and Safety Accreditation Scheme.

119. The design for the works has been developed in accordance with the safety in design provisions of the *Work Health and Safety Act 2011 (Cth)*.

120. The construction of the works will be managed in accordance with the *Work Health and Safety Act 2011 (Cth)*.

121. All construction sites will be secured appropriately to prevent public access, or access by unapproved Defence personnel, during the construction period. No special or unusual public safety risks have been identified.

Provisions for People with Disabilities

122. Universal access should be provided to all facilities in accordance with the access and mobility provisions of the Building Code of Australia, Australian Standard AS1428.1 (Parts 1 to 4) and the Defence Policy 'Disabled Access and other Facilities for Disabled Persons'.

123. Access to, and connections between building and facilities on site, including car parking, will also be designed in accordance with relevant access standards.

Related Projects

124. The following proposed projects will deliver facilities or infrastructure at Campbell Barracks during a similar period of delivery for this project. Each related project has been taken into consideration when developing this project proposal.

a. JP2097 REDFIN Phase 1B will enhance the Australian Defence Force's Special Operations capability through the provision of a range of specialised vehicles. A8954 REDFIN Phase 1B Facilities Project will support JP2097 by delivering the associated maintenance and support facilities within Campbell Barracks and other sites across Australia within which the vehicles will be based and operated.

b. LAND 121 (Overlander) will provide field vehicles and trailers as a replacement for existing stock and will provide vehicle shelters and a fuel point within Campbell Barracks.

c. JP2047 Defence Terrestrial Communications Network Facilities Project provides Information Communication Technology transformation to the Defence Estate. It includes the replacement of Defence Restricted Network and Defence Secret Network passive and active network components within Campbell Barracks, along with specific server infrastructure and elements of the passive infrastructure.

d. JP0087 Joint Health Command Garrison Health Facilities Upgrade. The SASR Regimental Aid Post will be incorporated into the Campbell Barracks Health Centre which is to be delivered through Project JP0087 Joint Health Command Garrison Health Facilities Upgrade. The Campbell Barracks Redevelopment Project will provide engineering services in support of JP0087. This is an unapproved project.

e. Explosive Ordnance Magazine Upgrade seeks to provide improved facilities for the existing EO magazine.

f. Department of Agriculture, Fisheries and Forestry is providing new quarantine facilities for the SASR.

g. Extension of canine facilities is providing additional kennelling and day yard facilities for the Regimental dogs.

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Cost Effectiveness and Public Value

Outline of Project Costs

125. The estimated out-turned cost of this project is $223.6million, excluding Goods and Service Tax. The cost estimate includes the construction costs, management and design fees, furniture, information communications technology, fitting and equipment, contingencies, and escalation allowance.

126. An increase in the net operating costs is anticipated due to the addition of new facilities and infrastructure. This will increase the associated facilities maintenance, cleaning and utilities expenses.

Details of the Project Delivery System

127. A Project Manager / Contract Administrator has been appointed by the Commonwealth to manage the project works and the associated administration of contracts in the planning phase. A Design Services Consultant has also been appointed using the Department of Defence – Design Services Consultant form of contract, to manage design development to meet the needs of Defence user groups in the development phase of the Project.

128. Subject to Parliamentary approval of the Project, a Head Contractor will be appointed to construct the works in the delivery phase. The Head Contractor will be engaged using the Department of Defence Head Contractor form of contract.

Construction Schedule

129. Subject to Parliamentary approval of the project, construction is expected to commence in early 2016 and be completed in late 2018.

Public Value

130. The proposed redevelopment will contribute significantly to both Defence preparedness requirements and Australian Army capability outputs by providing fit for purpose and operational effective facilities for the SASR at Campbell Barracks.

131. Existing facilities have been re-used where they feasibly meet the operational needs of the SASR and to minimise operating costs and environmental impacts. The proposed redevelopment of facilities includes the renewal of engineering services infrastructure to ensure these services will be adequate for the next 30 years.

132. The Project will also employ a diverse range of skilled consultants, contractors and construction workers that could also include opportunities for up-skilling and job training to improve individual skills and employability on future projects.

Revenue

133. No revenue is expected to be derived from this project.

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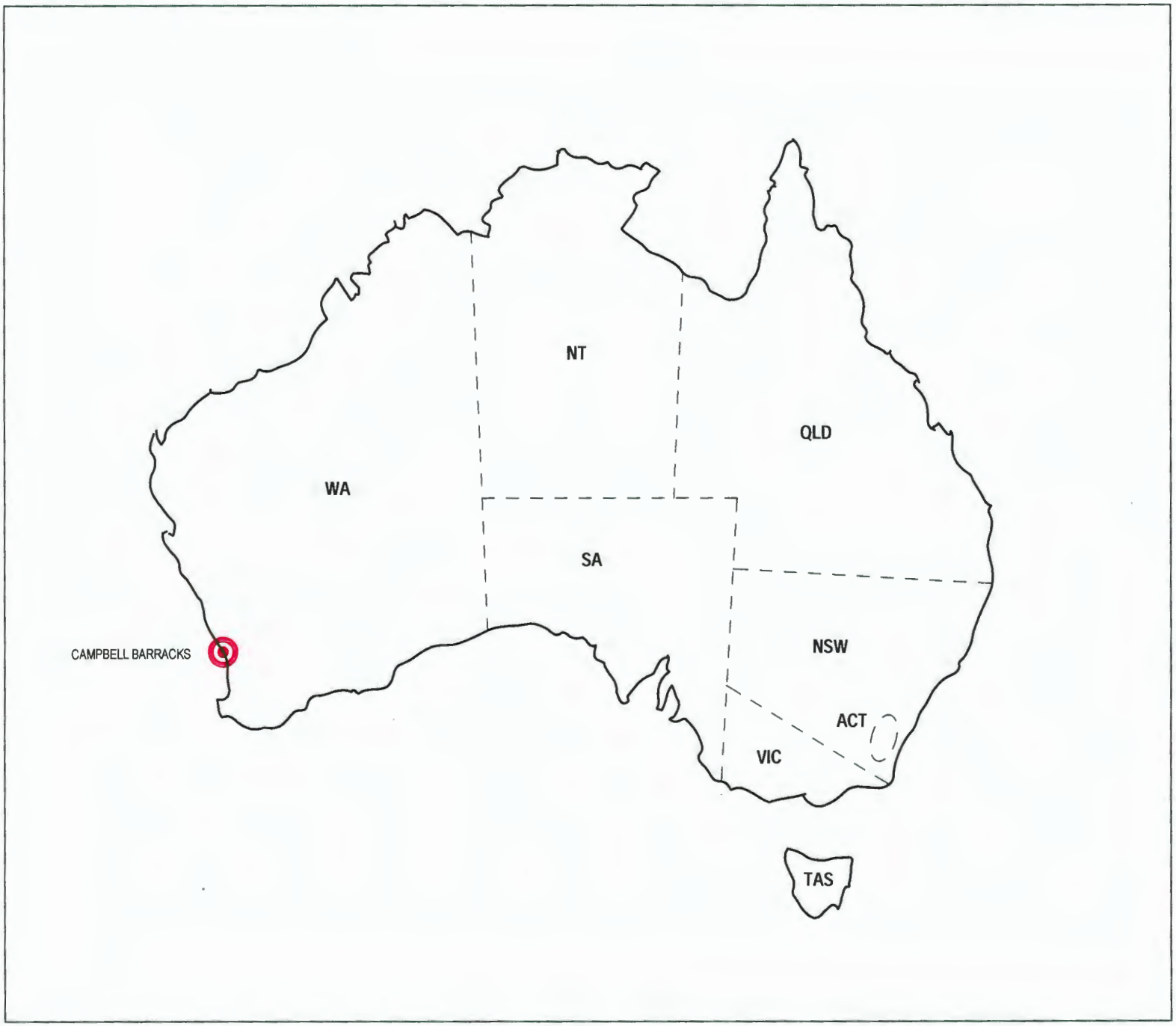
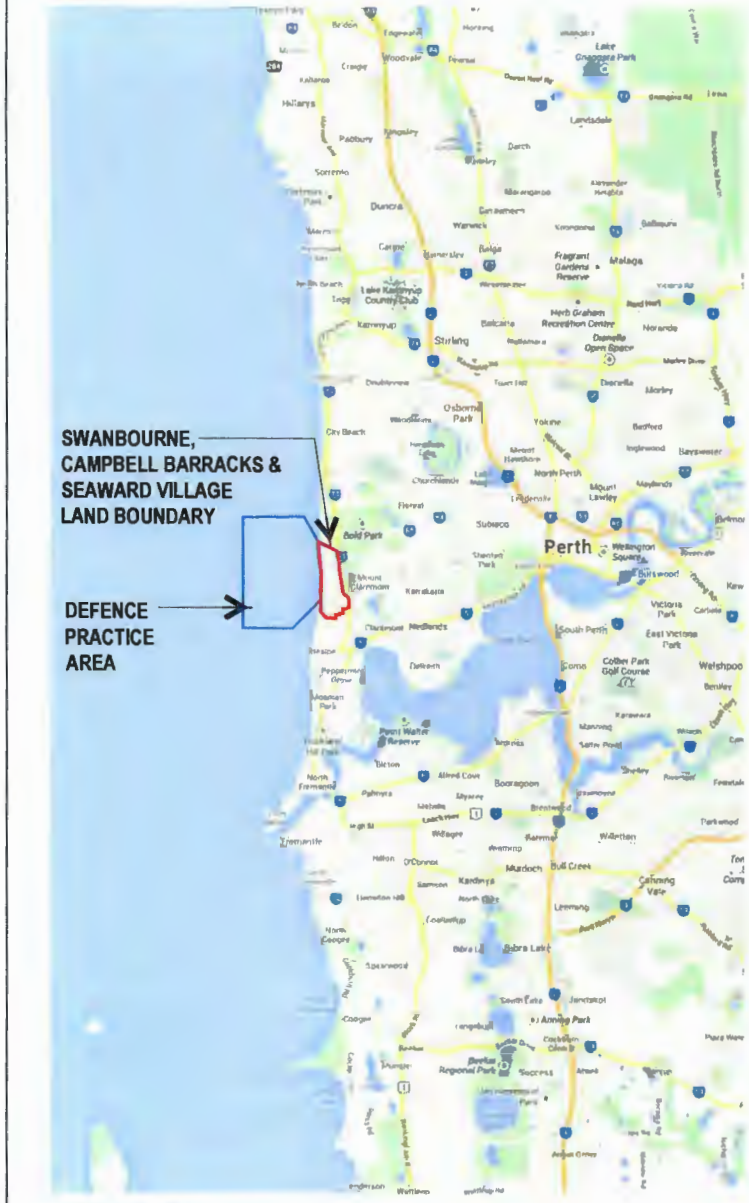


ATTACHMENT 01 | CAMPBELL BARRACKS SITE LOCATION



GREATER PERTH

SWANBOURNE

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ATTACHMENT 02 | CAMPBELL BARRACKS REGIONAL PLAN

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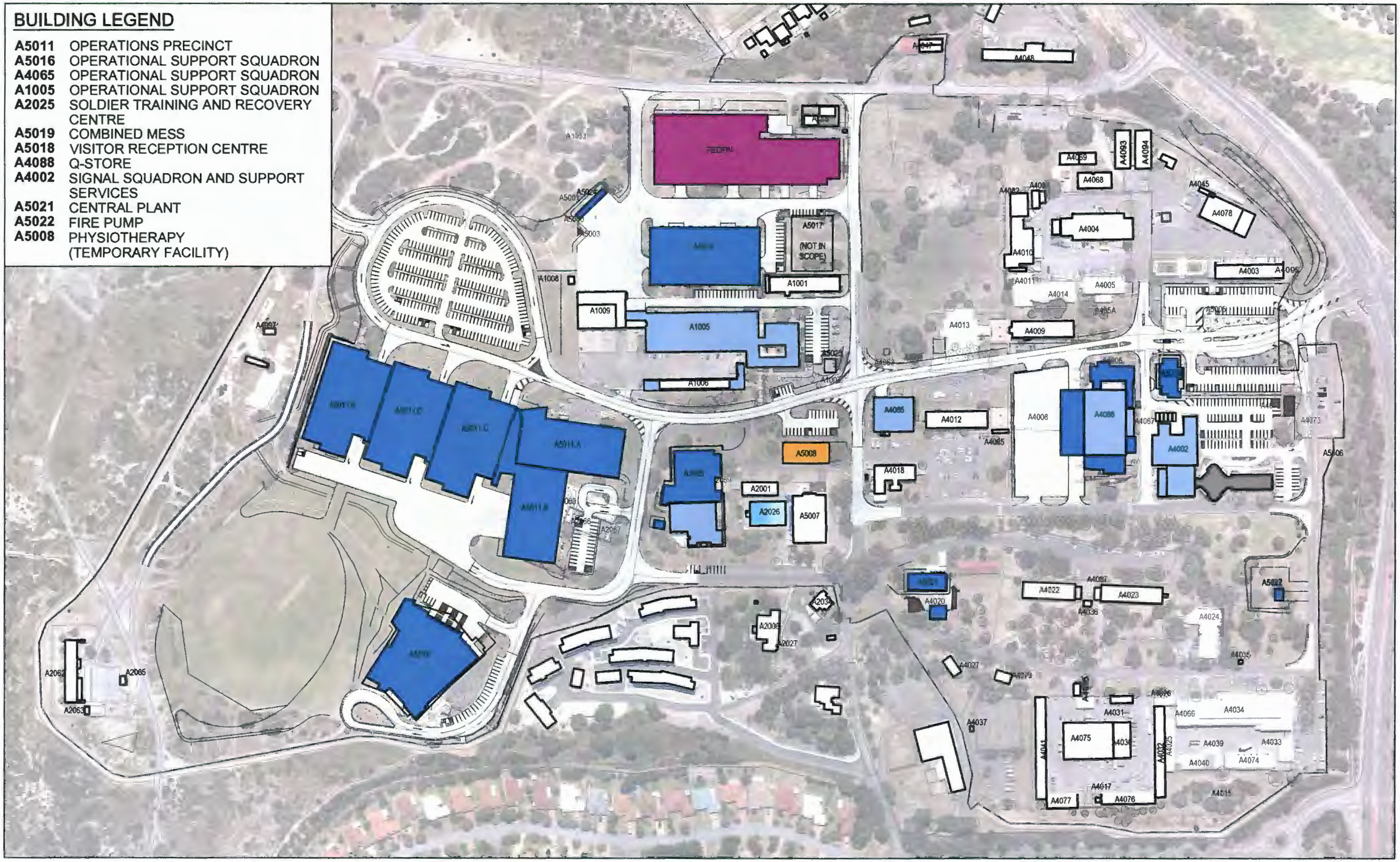

LEGEND

- EXISTING BUILDING RETAINED
- EXISTING BUILDING REDEVELOPED
- EXISTING BUILDING RELOCATED
- NEW BUILDING
- PROJECT REDFIN
- FENCE

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ATTACHMENT 03-01 | CAMPBELL BARRACKS SITE PLAN - PROPOSED SCOPE OF WORKS - BUILDINGS

ATTACHMENT 03-02 | CAMPBELL BARRACKS SITE PLAN - PROPOSED SCOPE OF WORKS - BUILDINGS 3D

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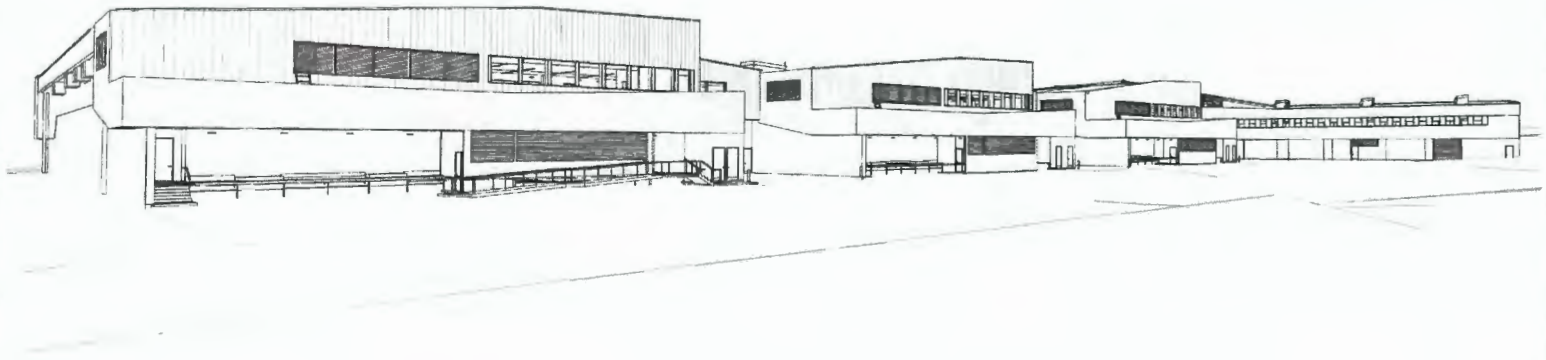
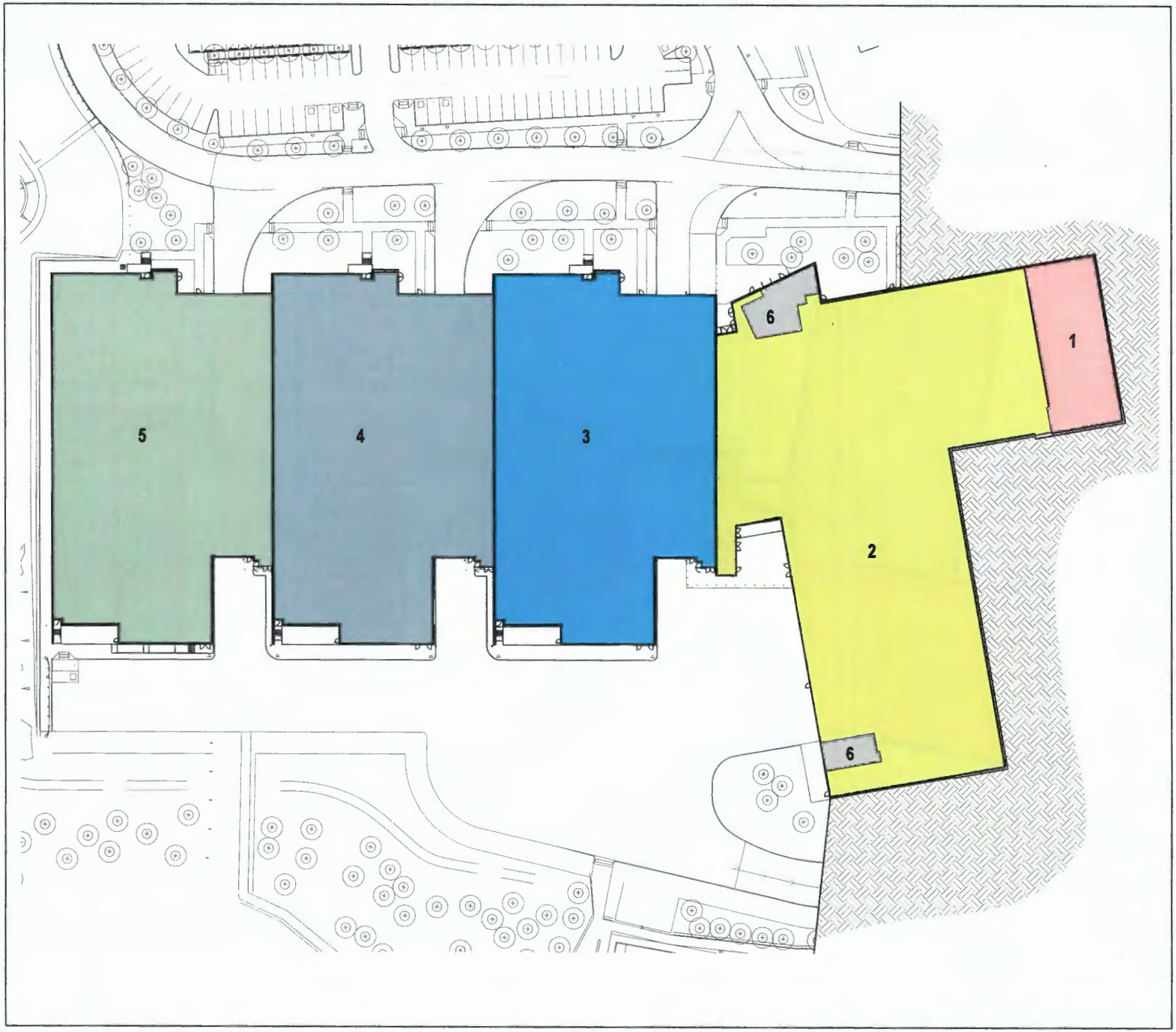
Submission 1



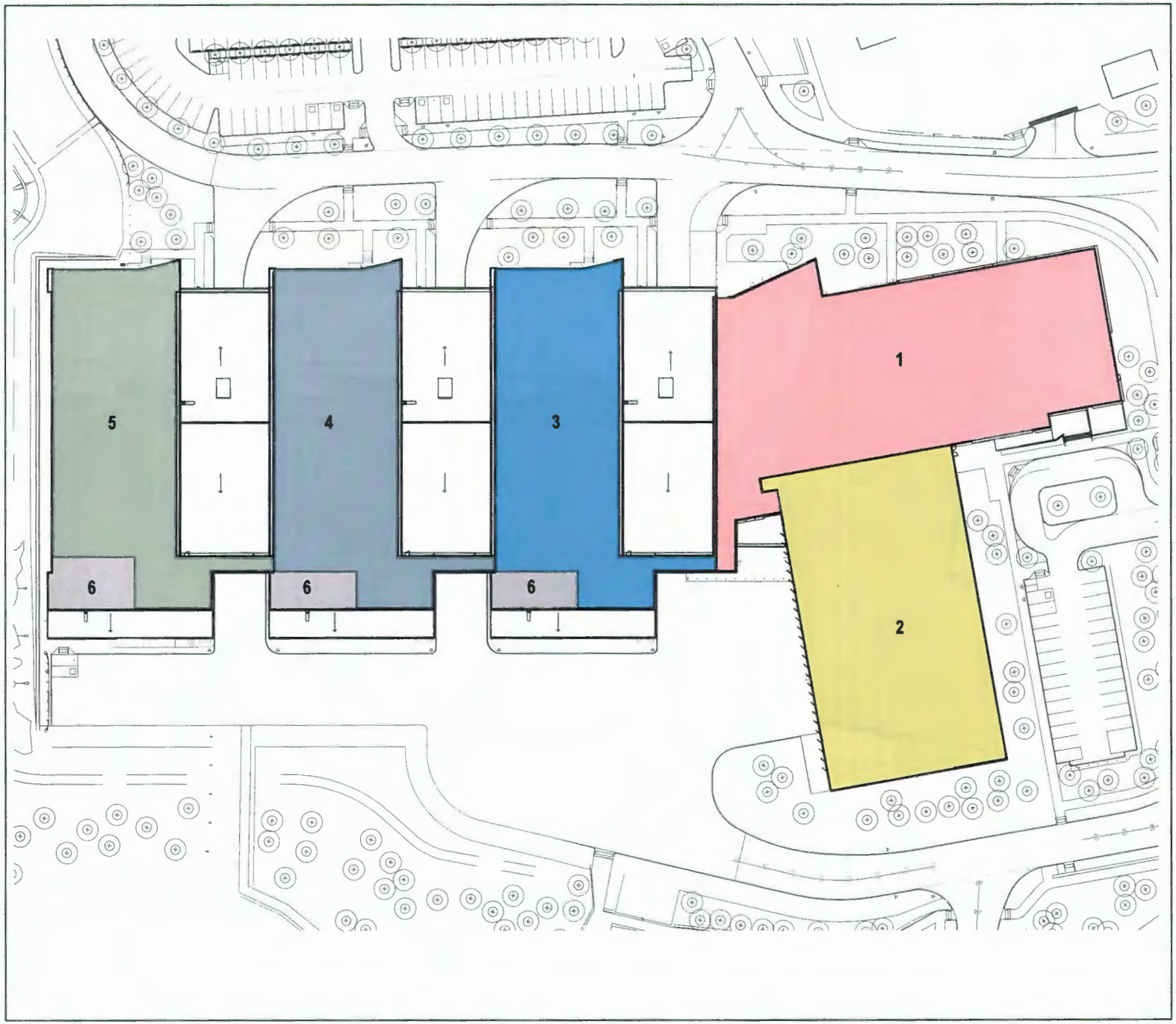
3D PERSPECTIVE - VIEW FROM SOUTH WEST

ATTACHMENT 04-01 | 3D PERSPECTIVE - OPERATIONS PRECINCT

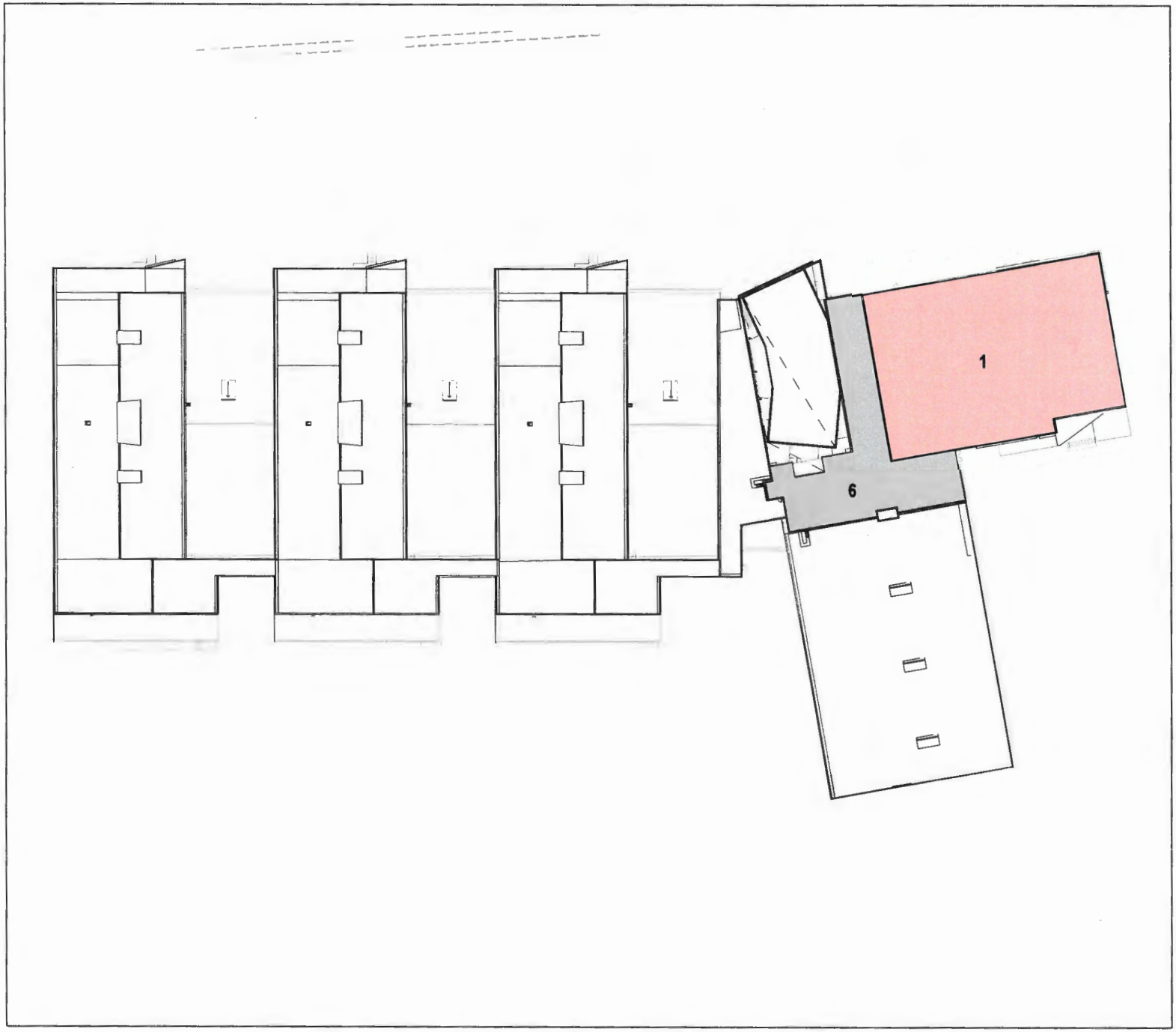


ATTACHMENT 04-02 | FLOOR PLANS - OPERATIONS PRECINCT - LOWER GROUND FLOOR

Campbell Barracks Redevelopment Project, Swanbourne, Western Australia
Submission 1

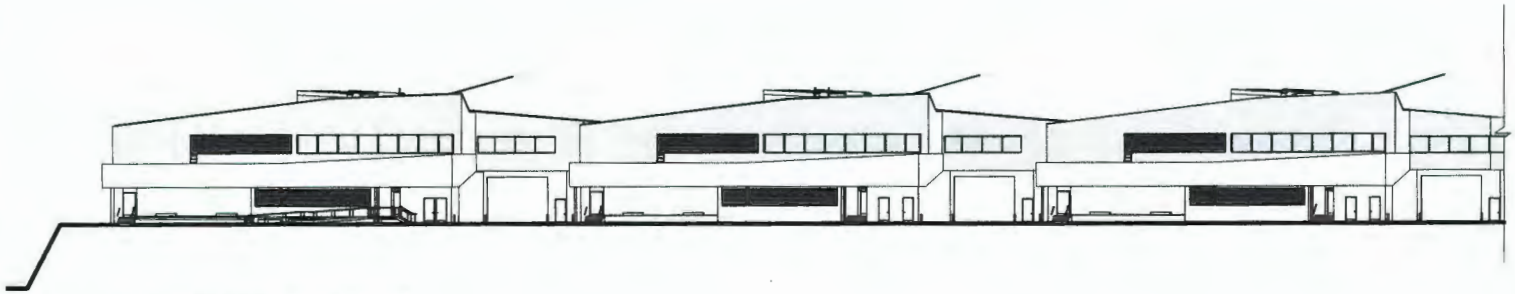


ATTACHMENT 04-03 | FLOOR PLANS - OPERATIONS PRECINCT - GROUND FLOOR

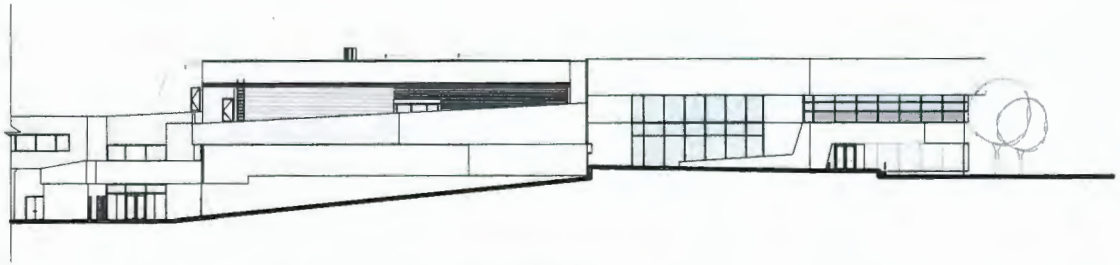


ATTACHMENT 04-04 | FLOOR PLANS - OPERATIONS PRECINCT - FIRST FLOOR

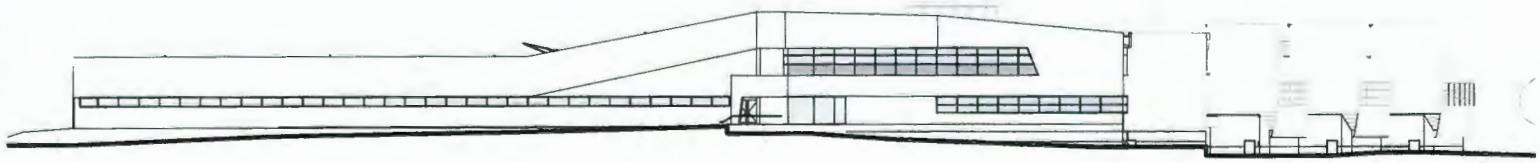
Campbell Barracks Redevelopment Project, Swanbourne, Western Australia
Submission 1



SOUTH ELEVATION - SQUADRONS



SOUTH ELEVATION - SQUADRON / REGIMENTAL HEADQUARTERS



EAST ELEVATION

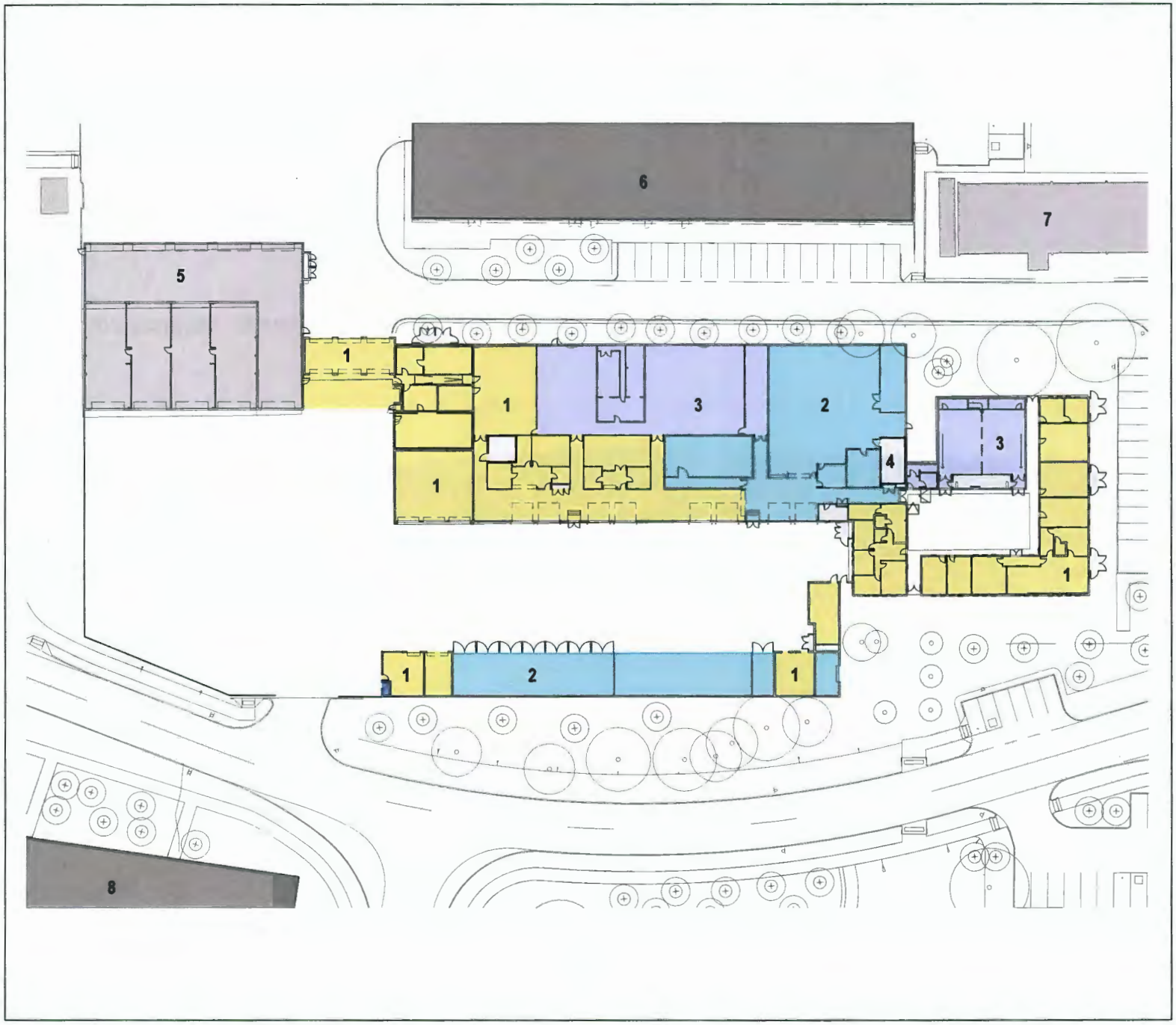
0 25

ATTACHMENT 04-05 | ELEVATIONS - OPERATIONS PRECINCT

3D PERSPECTIVE - VIEW FROM SOUTH EAST

ATTACHMENT 05-01 | 3D PERSPECTIVE - OPERATIONAL SUPPORT SQUADRON - A1005

Campbell Barracks Redevelopment Project, Swanbourne, Western Australia
Submission 1



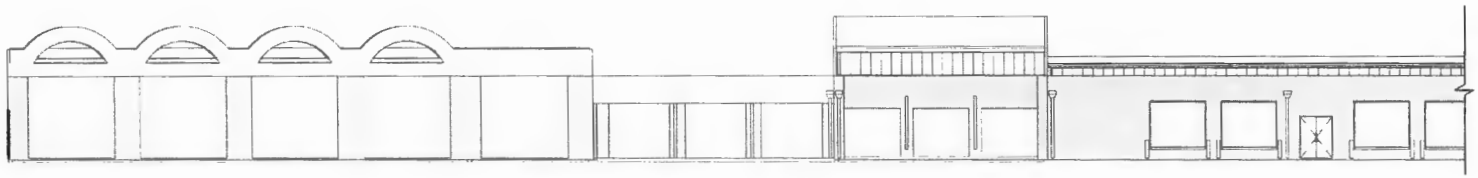
LEGEND

- 1. OPERATIONAL SUPPORT SQUADRON HEADQUARTERS AND WORKING ACCOMMODATION
- 2. OPERATIONAL SUPPORT SQUADRON Q-STORE
- 3. SHARED FACILITIES AND ABLUTIONS
- 4. PLANT AND SERVICES
- 5. EXISTING BUILDING A1009 - NO WORKS
- 6. NEW BUILDING A5016
- 7. EXISTING BUILDING A1001 - NO WORKS
- 8. NEW BUILDING A5011 - OPERATIONS SECTOR

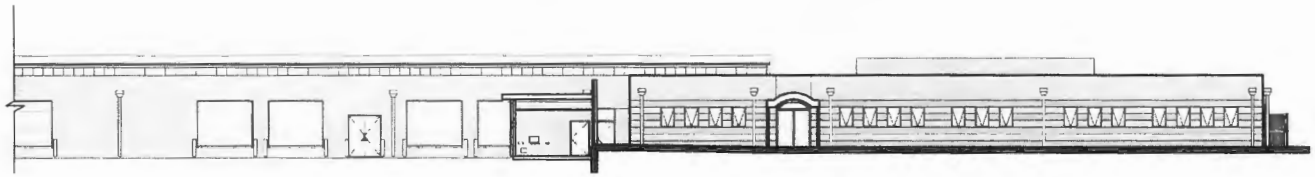
N

0 30

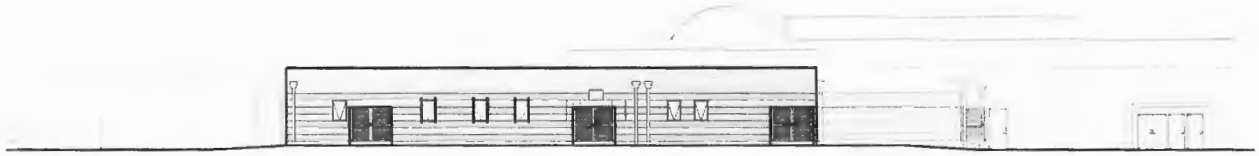
ATTACHMENT 05-02 | FLOOR PLANS - OPERATIONAL SUPPORT SQUADRON - A1005



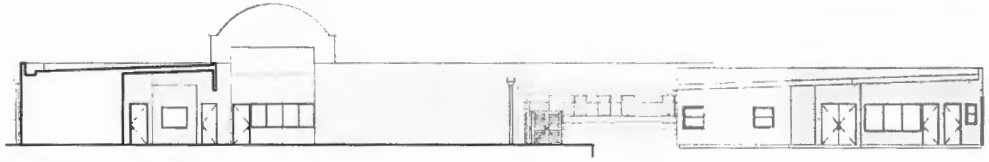
SOUTH ELEVATION - PART A



SOUTH ELEVATION - PART B



EAST ELEVATION

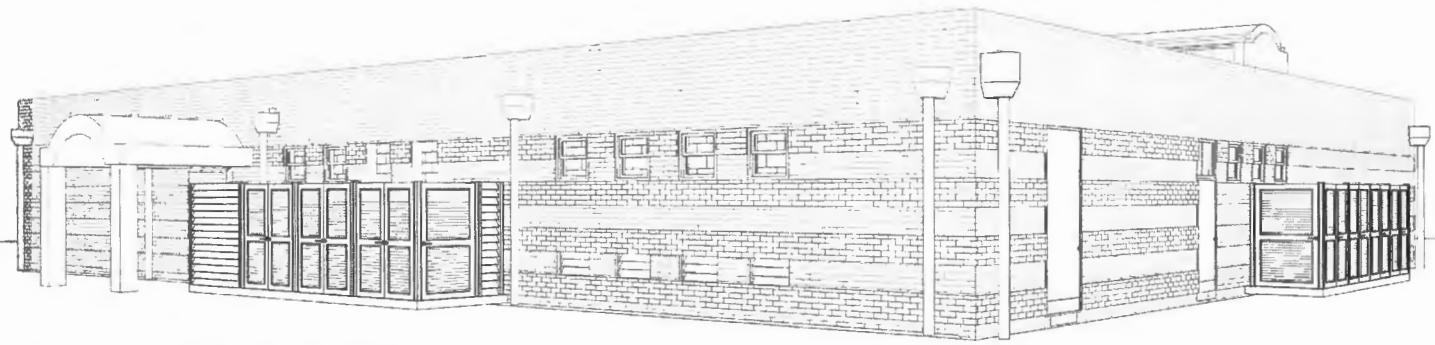


WEST ELEVATION

0 15

ATTACHMENT 05-03 | ELEVATIONS - OPERATIONAL SUPPORT SQUADRON - A1005

Campbell Barracks Redevelopment Project, Swanbourne, Western Australia
Submission 1

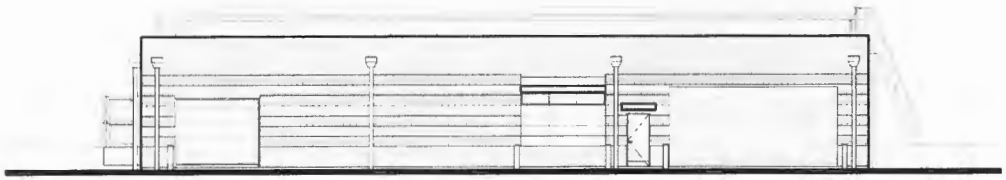


3D PERSPECTIVE - VIEW FROM SOUTH EAST

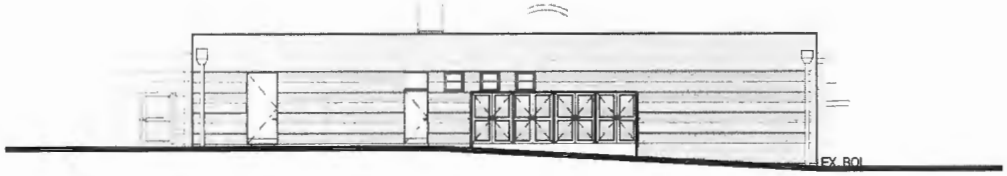
ATTACHMENT 05-04 | 3D PERSPECTIVE - OPERATIONAL SUPPORT SQUADRON - A4065

ATTACHMENT 05-05 | FLOOR PLANS - OPERATIONAL SUPPORT SQUADRON - A4065

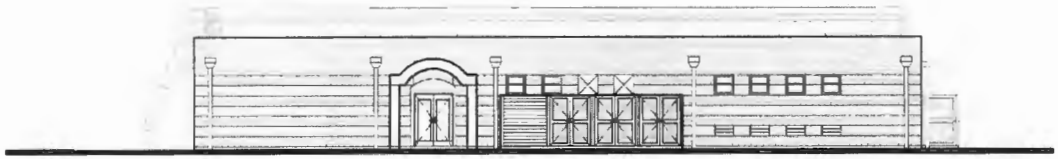
Campbell Barracks Redevelopment Project, Swanbourne, Western Australia
Submission 1



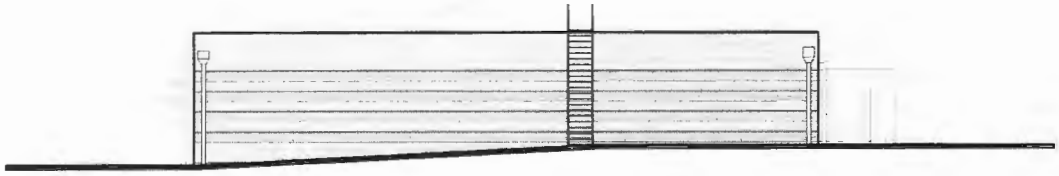
NORTH ELEVATION



EAST ELEVATION



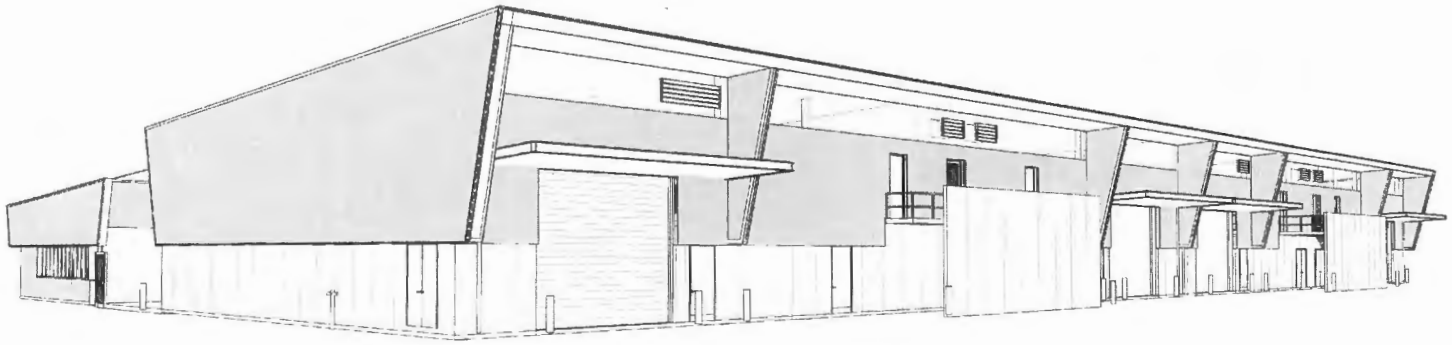
SOUTH ELEVATION



WEST ELEVATION

0 10

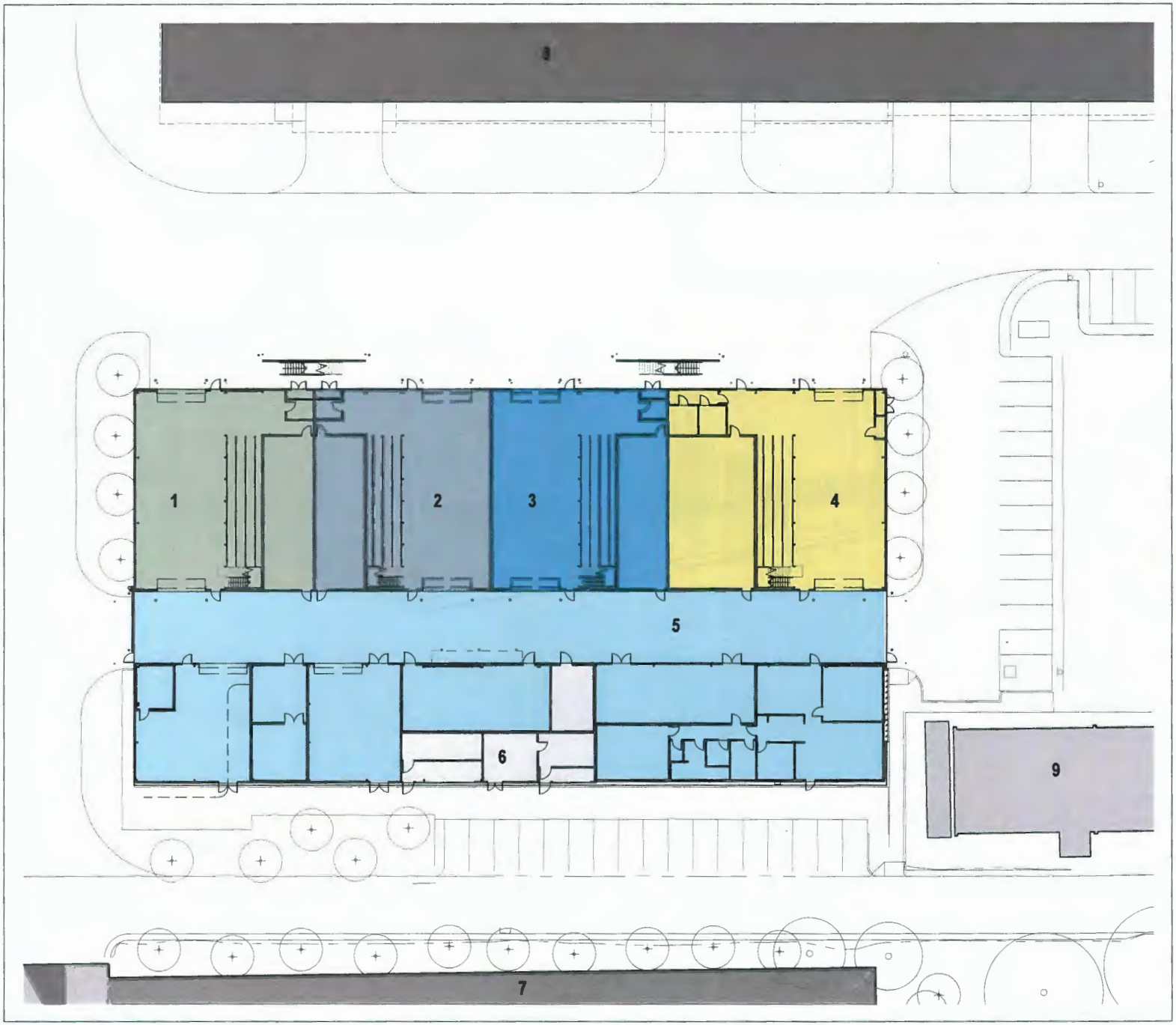
ATTACHMENT 05-06 | ELEVATIONS - OPERATIONAL SUPPORT SQUADRON - A4065



3D PERSPECTIVE - VIEW FROM NORTH EAST

ATTACHMENT 05-07 | 3D PERSPECTIVE - OPERATIONAL SUPPORT SQUADRON - A5016

Campbell Barracks Redevelopment Project, Swanbourne, Western Australia
Submission 1



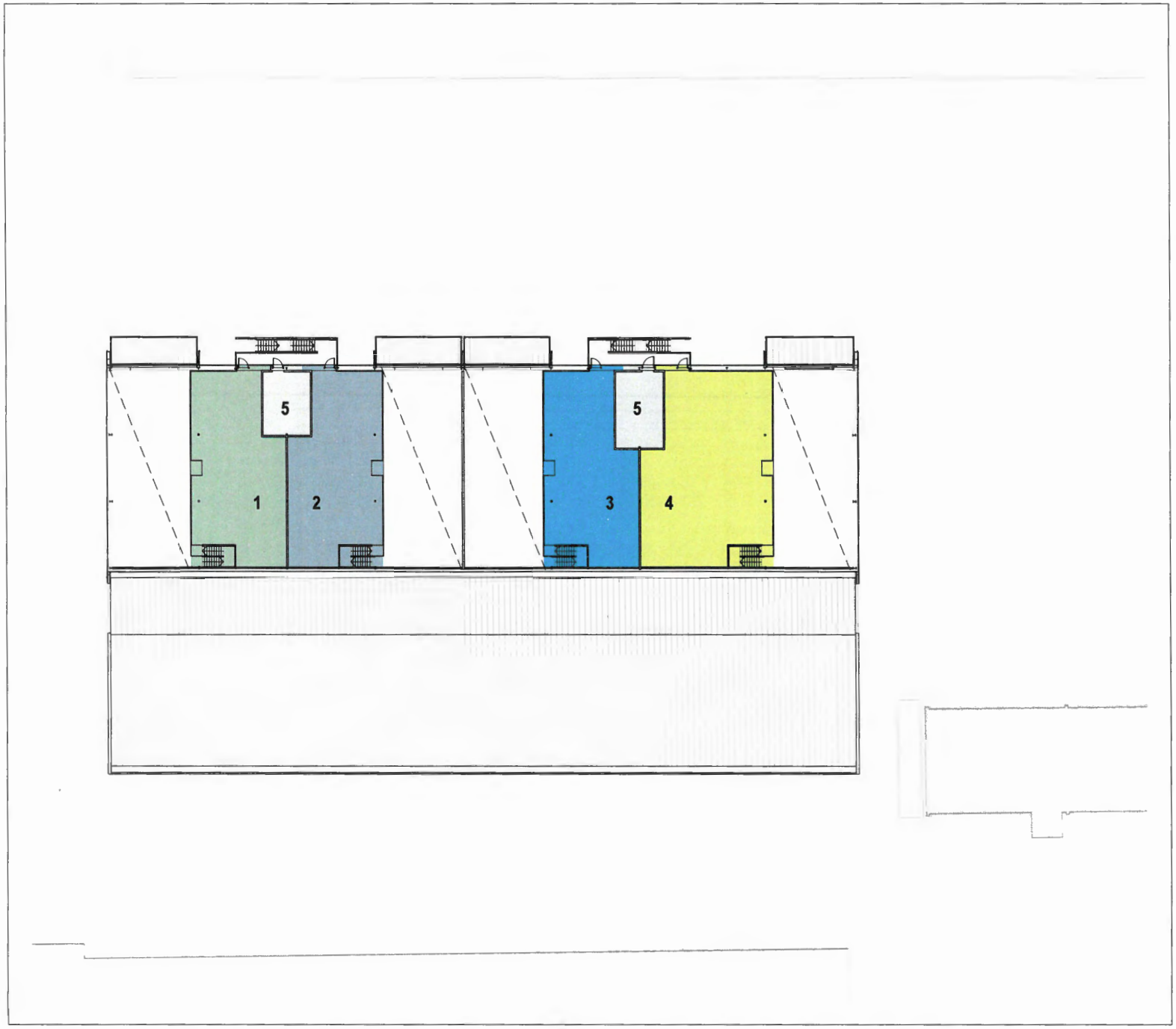
LEGEND

- 1. SQUADRON STORAGE
- 2. SQUADRON STORAGE
- 3. SQUADRON STORAGE
- 4. OPERATIONAL SUPPORT SQUADRON STORAGE
- 5. OPERATIONAL SUPPORT SQUADRON WORKING ACCOMMODATION / STORE / DRIVEWAY
- 6. PLANT AND SERVICES
- 7. EXISTING BUILDING A1005
- 8. NEW REDFIN PROJECT A5023 BUILDING
- 9. EXISTING BUILDING A1001

N

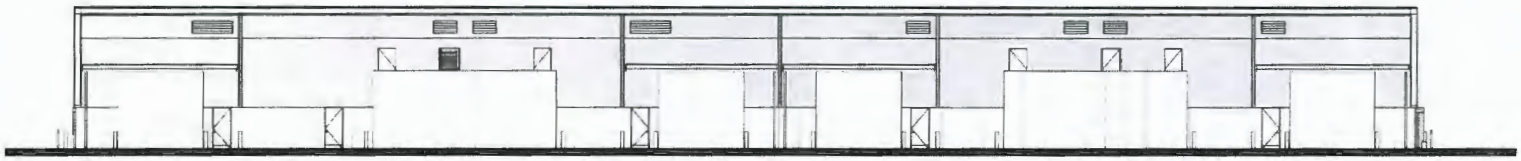
0 20

ATTACHMENT 05-08 | FLOOR PLANS - OPERATIONAL SUPPORT SQUADRON - A5016 - GROUND FLOOR

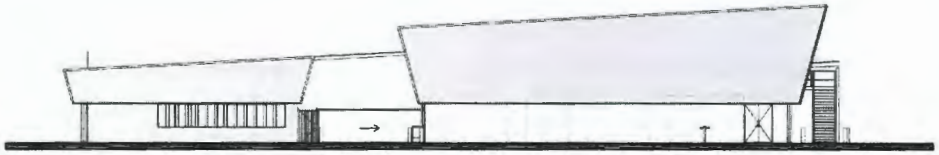


ATTACHMENT 05-09 | FLOOR PLANS - OPERATIONAL SUPPORT SQUADRON - A5016 - FIRST FLOOR

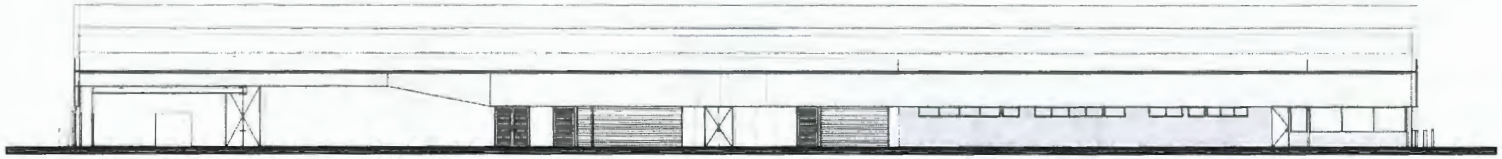
Campbell Barracks Redevelopment Project, Swanbourne, Western Australia
Submission 1



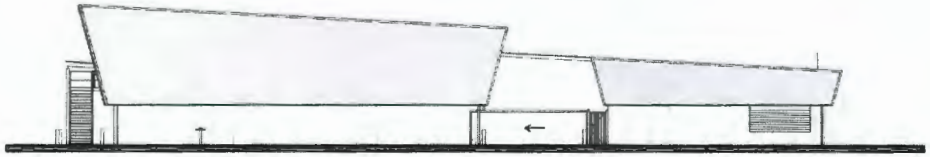
NORTH ELEVATION



EAST ELEVATION



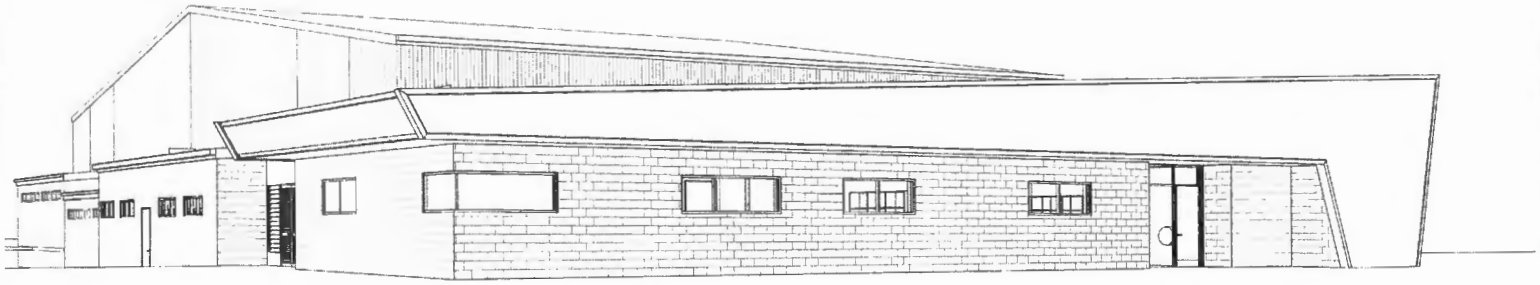
SOUTH ELEVATION



WEST ELEVATION

0 15

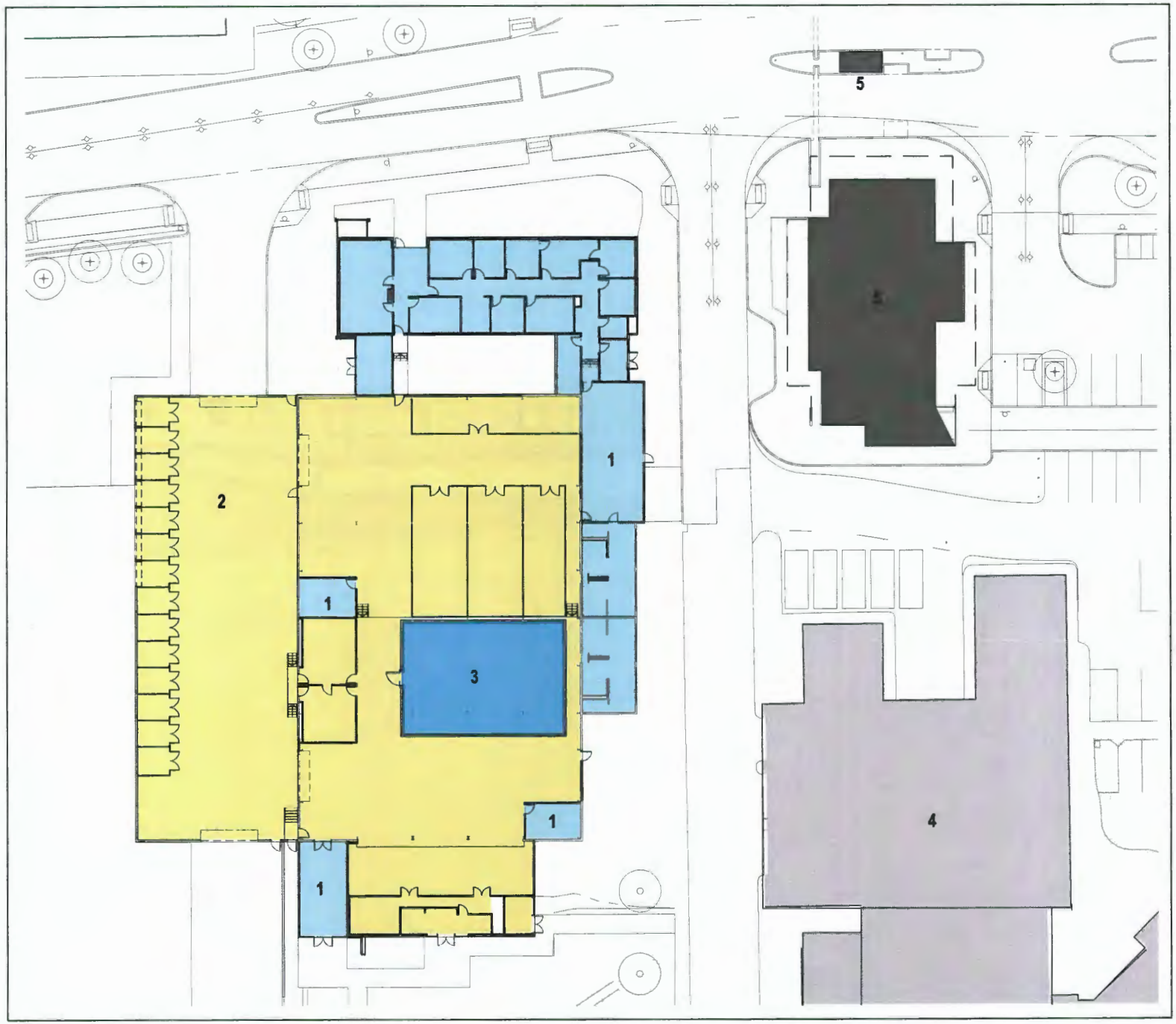
ATTACHMENT 05-10 | ELEVATIONS - OPERATIONAL SUPPORT SQUADRON - A5016



3D PERSPECTIVE - VIEW FROM NORTH EAST

ATTACHMENT 06-01 | 3D PERSPECTIVE - Q-STORE

Campbell Barracks Redevelopment Project, Swanbourne, Western Australia
Submission 1



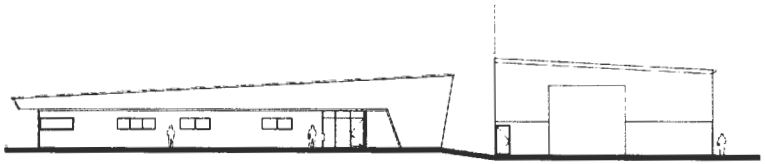
LEGEND

- 1. Q-STORE WORKING ACCOMMODATION
- 2. Q-STORE STORAGE AREA AND FREIGHT
- 3. Q-STORE ARMORY
- 4. EXISTING BUILDING A4002
- 5. NEW BUILDING A5018

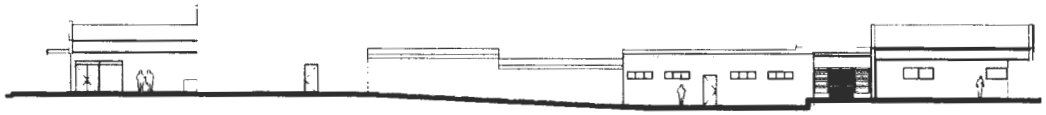
N

0 20

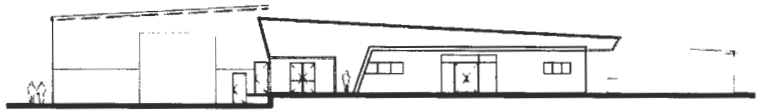
ATTACHMENT 06-02 | FLOOR PLANS - Q-STORE



NORTH ELEVATION



EAST ELEVATION



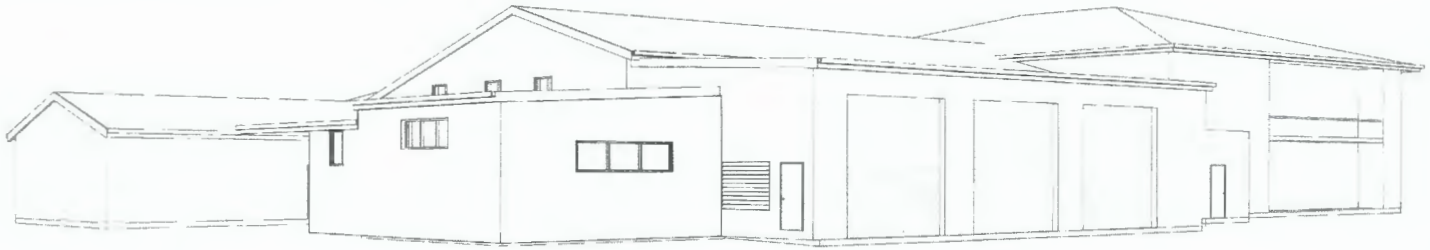
SOUTH ELEVATION

WEST ELEVATION

0 20

ATTACHMENT 06-03 | ELEVATIONS - Q-STORE

Campbell Barracks Redevelopment Project, Swanbourne, Western Australia
Submission 1



3D PERSPECTIVE - NORTH WEST ELEVATION

ATTACHMENT 07-01 | 3D PERSPECTIVE - 152 SIGNAL SQUADRON

LEGEND

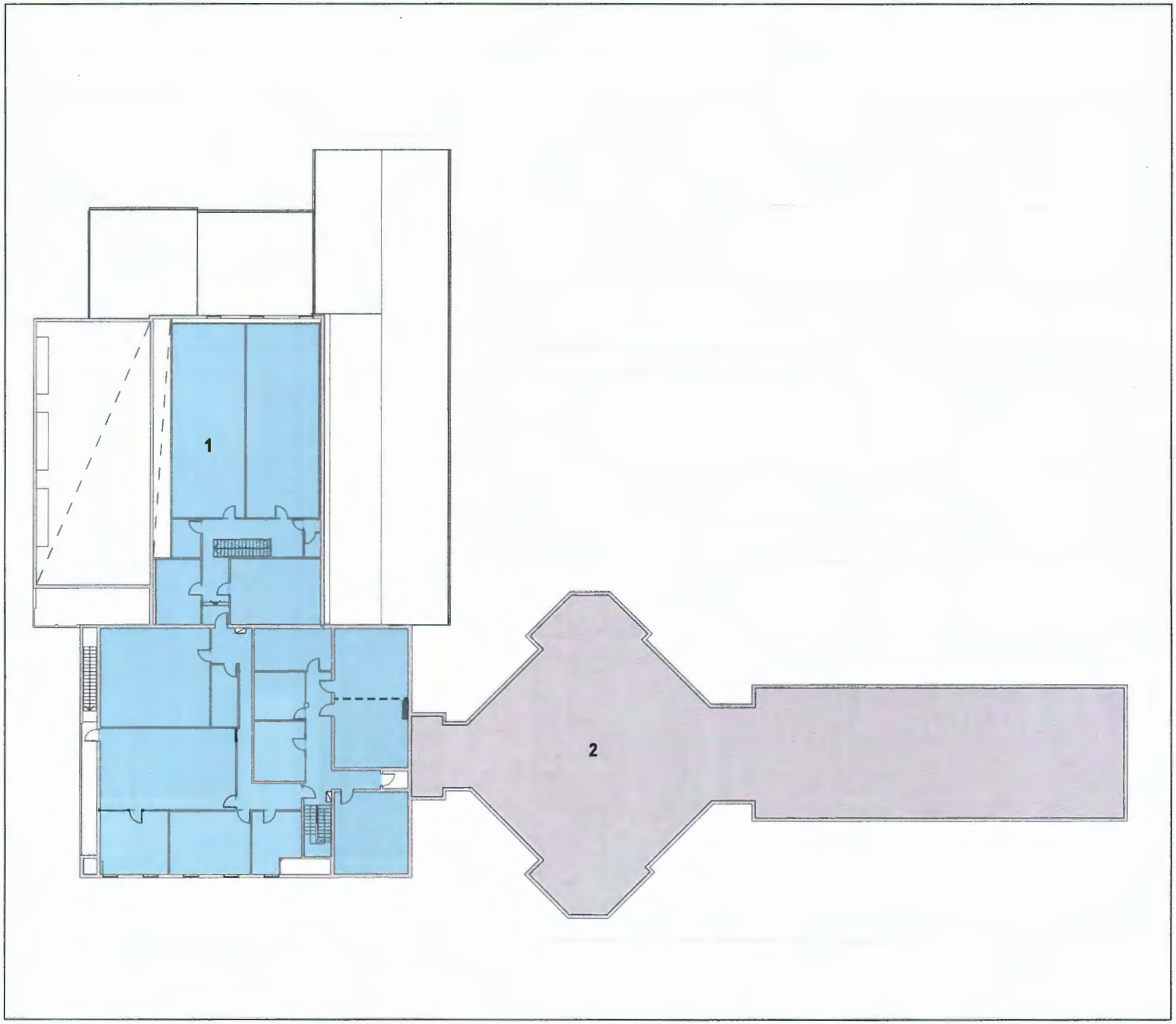
- 1. 152 SIGNALS SQUADRON GENERAL / SHARED FACILITIES
- 2. 152 SIGNALS SQUADRON WORKING ACCOMMODATION
- 3. 152 SIGNALS SQUADRON Q-STORE
- 4. ENGINEERING SERVICES NETWORK ROOM

N

0 15

ATTACHMENT 07-02 | FLOOR PLANS - 152 SIGNAL SQUADRON - GROUND FLOOR

Campbell Barracks Redevelopment Project, Swanbourne, Western Australia
Submission 1



LEGEND

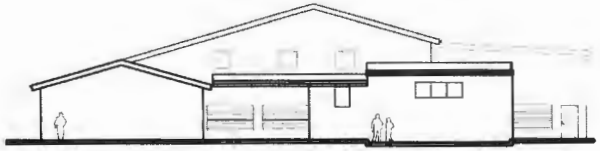
1. 152 SIGNALS SQUADRON WORKING ACCOMMODATION

2. EXISTING BUILDING A4002 RETAINED

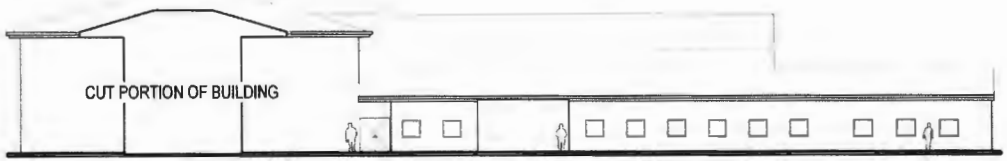
N

0 15

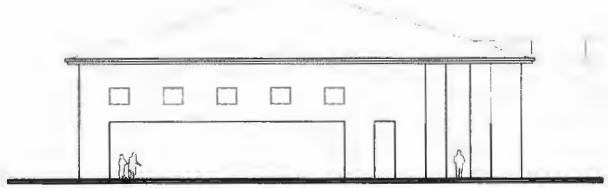
ATTACHMENT 07-03 | FLOOR PLANS - 152 SIGNAL SQUADRON - FIRST FLOOR



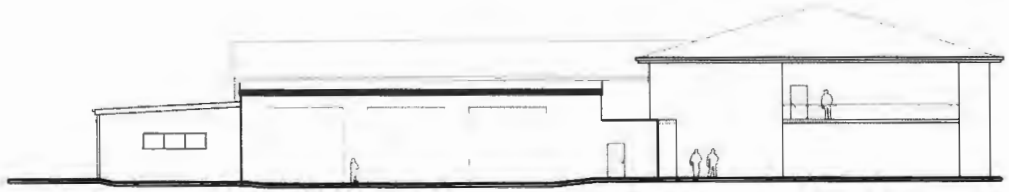
NORTH ELEVATION



EAST ELEVATION



SOUTH ELEVATION

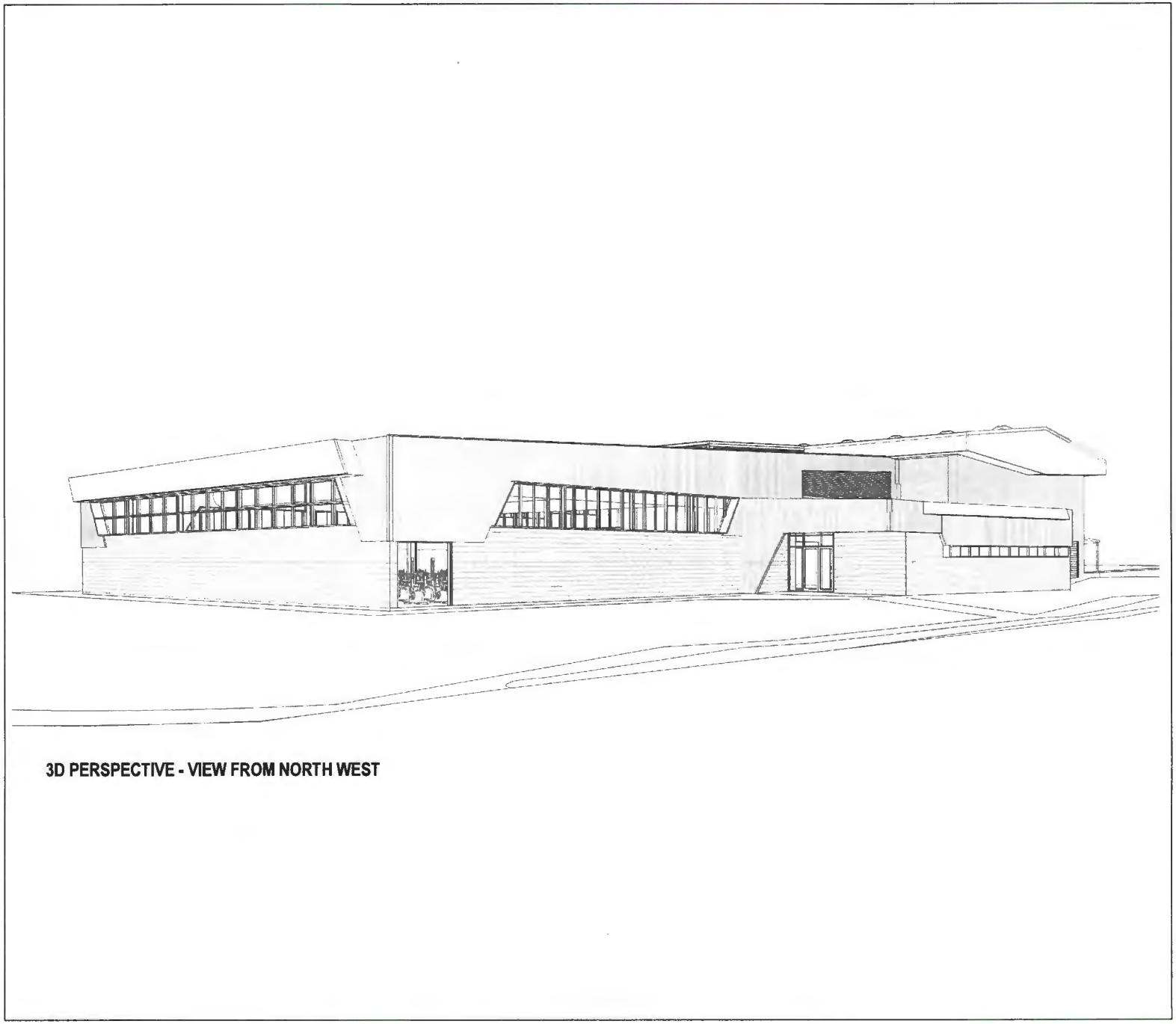


WEST ELEVATION

0 15

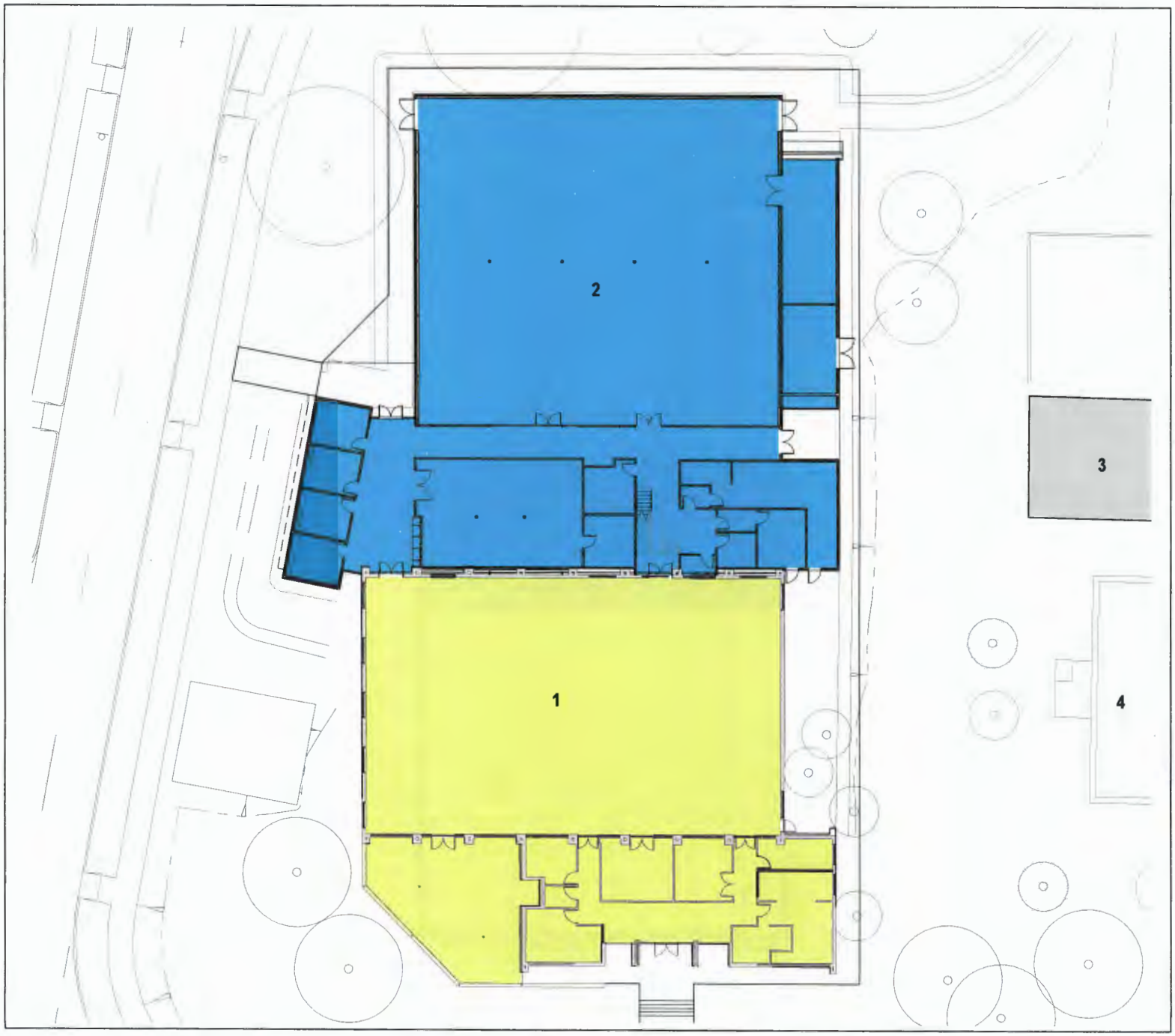
ATTACHMENT 07-04 | ELEVATIONS - 152 SIGNAL SQUADRON

Campbell Barracks Redevelopment Project, Swanbourne, Western Australia
Submission 1



3D PERSPECTIVE - VIEW FROM NORTH WEST

ATTACHMENT 08-01 | 3D PERSPECTIVE - SOLDIER TRAINING AND RECOVERY CENTRE



LEGEND

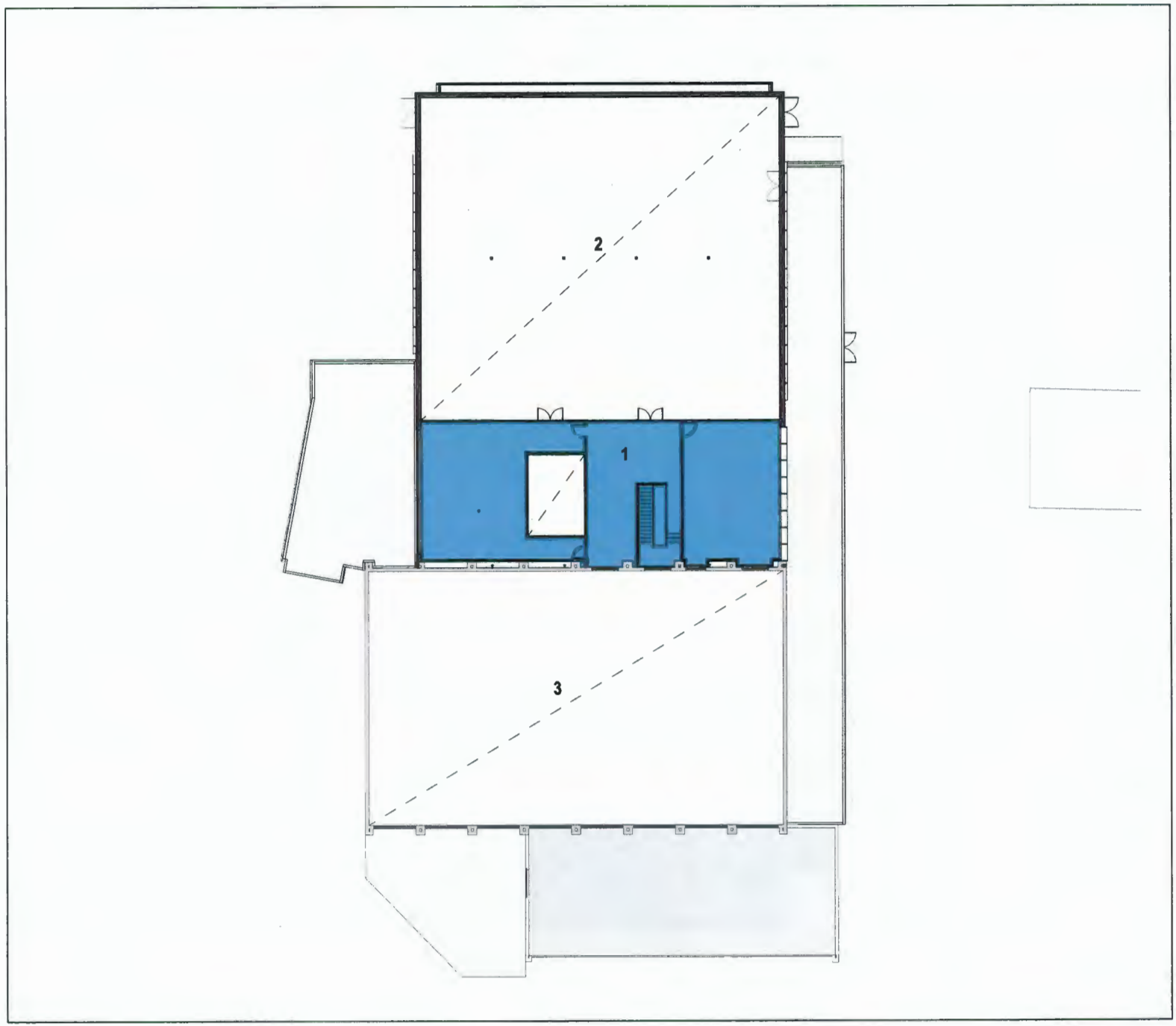
1. EXISTING GYM REFURBISHED
2. NEW GYM EXTENSION
3. EXISTING BUILDING A2001
4. EXISTING POOL A2026

N

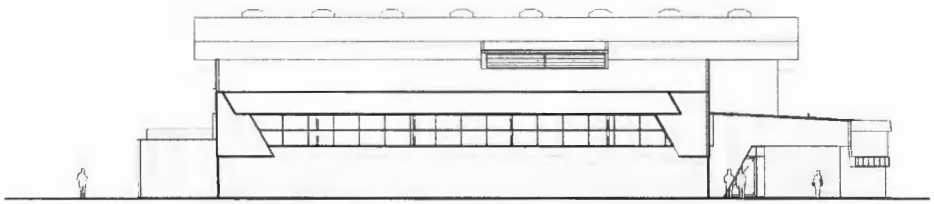
0 15

ATTACHMENT 08-02 | FLOOR PLANS - SOLDIER TRAINING AND RECOVERY CENTRE - GROUND FLOOR

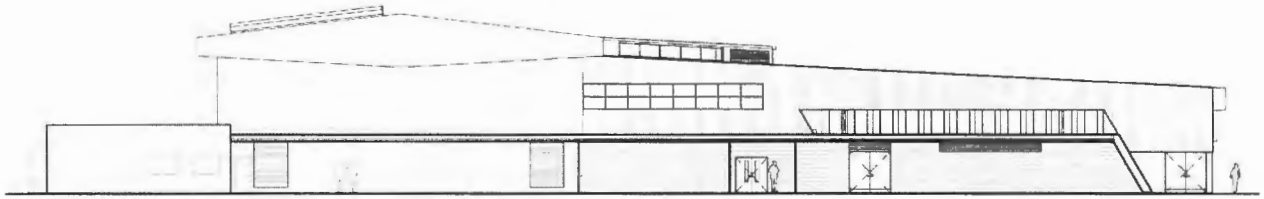
Campbell Barracks Redevelopment Project, Swanbourne, Western Australia
Submission 1



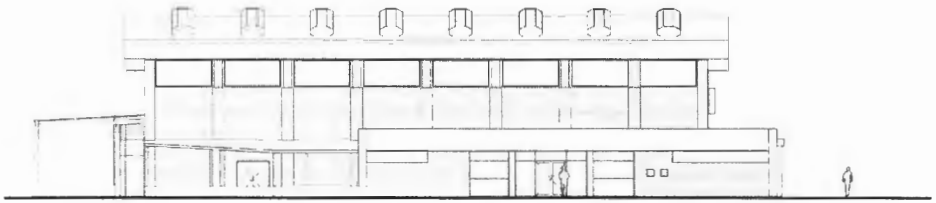
ATTACHMENT 08-03 | FLOOR PLANS - SOLDIER TRAINING AND RECOVERY CENTRE - FIRST FLOOR



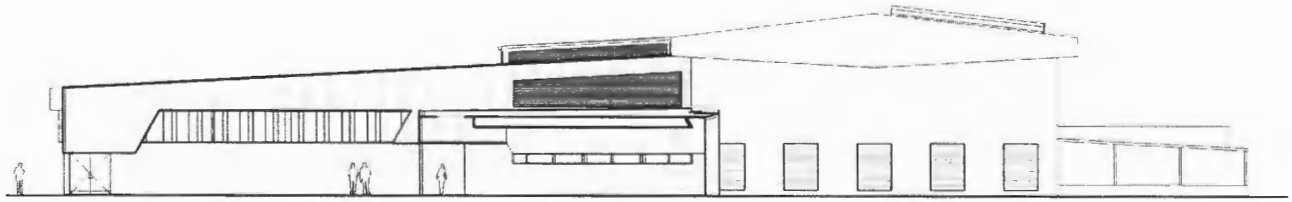
NORTH ELEVATION



EAST ELEVATION



SOUTH ELEVATION

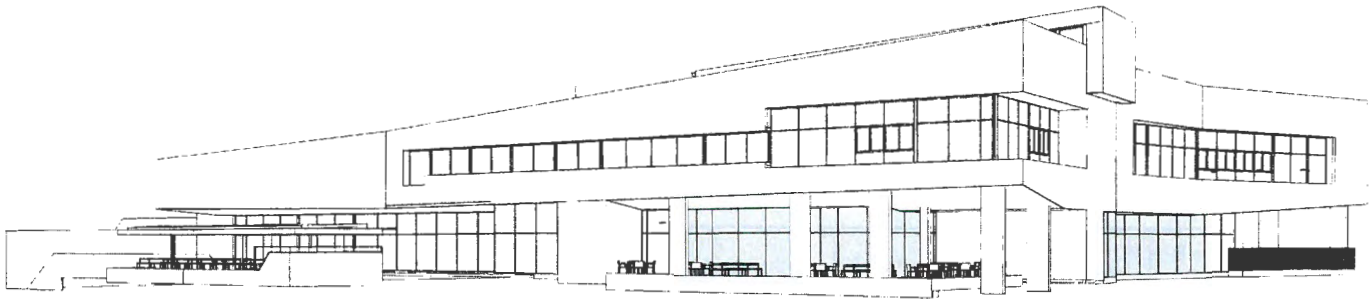


WEST ELEVATION

0 15

ATTACHMENT 08-04 | ELEVATIONS - SOLDIER TRAINING AND RECOVERY CENTRE

Campbell Barracks Redevelopment Project, Swanbourne, Western Australia
Submission 1



3D PERSPECTIVE - VIEW FROM SOUTH EAST

ATTACHMENT 09-01 | 3D PERSPECTIVE - COMBINED MESS

LEGEND

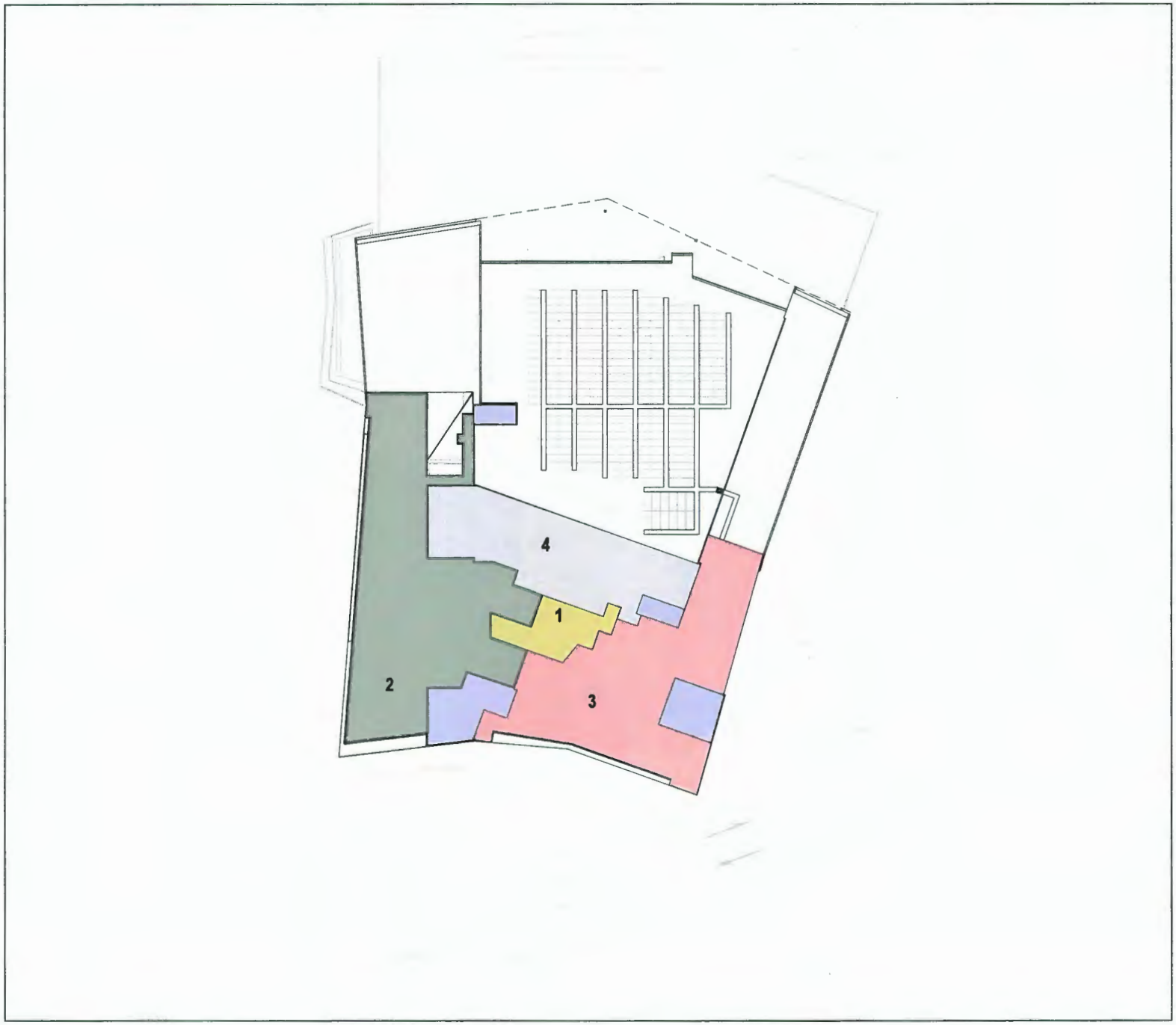
- 1. KITCHEN
- 2. ADMINISTRATION / STORE
- 3. OTHER RANKS MESS
- 4. OFFICERS MESS
- 5. SENIOR NON-COMISSIONED OFFICERS MESS
- 6. SHARED / CIRCULATION

N

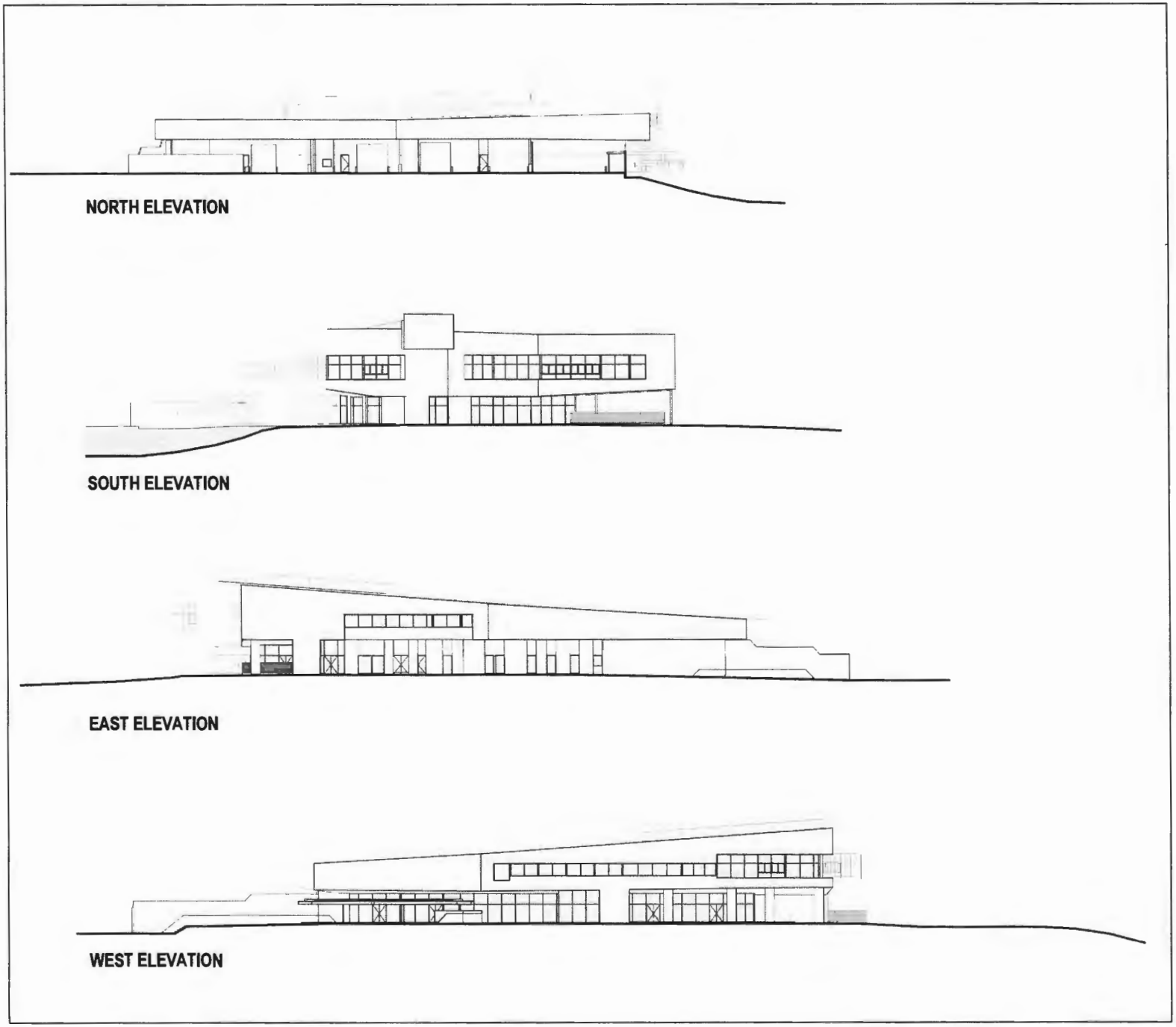
0 25

ATTACHMENT 09-02 | FLOOR PLANS - COMBINED MESS - GROUND FLOOR

Campbell Barracks Redevelopment Project, Swanbourne, Western Australia
Submission 1

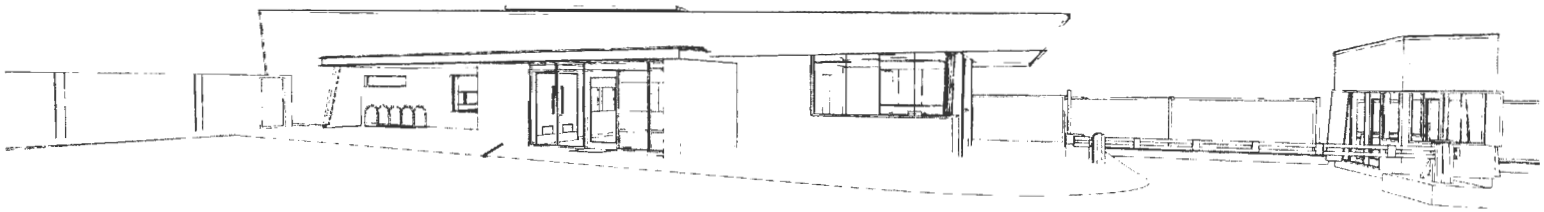


ATTACHMENT 09-03 | FLOOR PLANS - COMBINED MESS - FIRST FLOOR



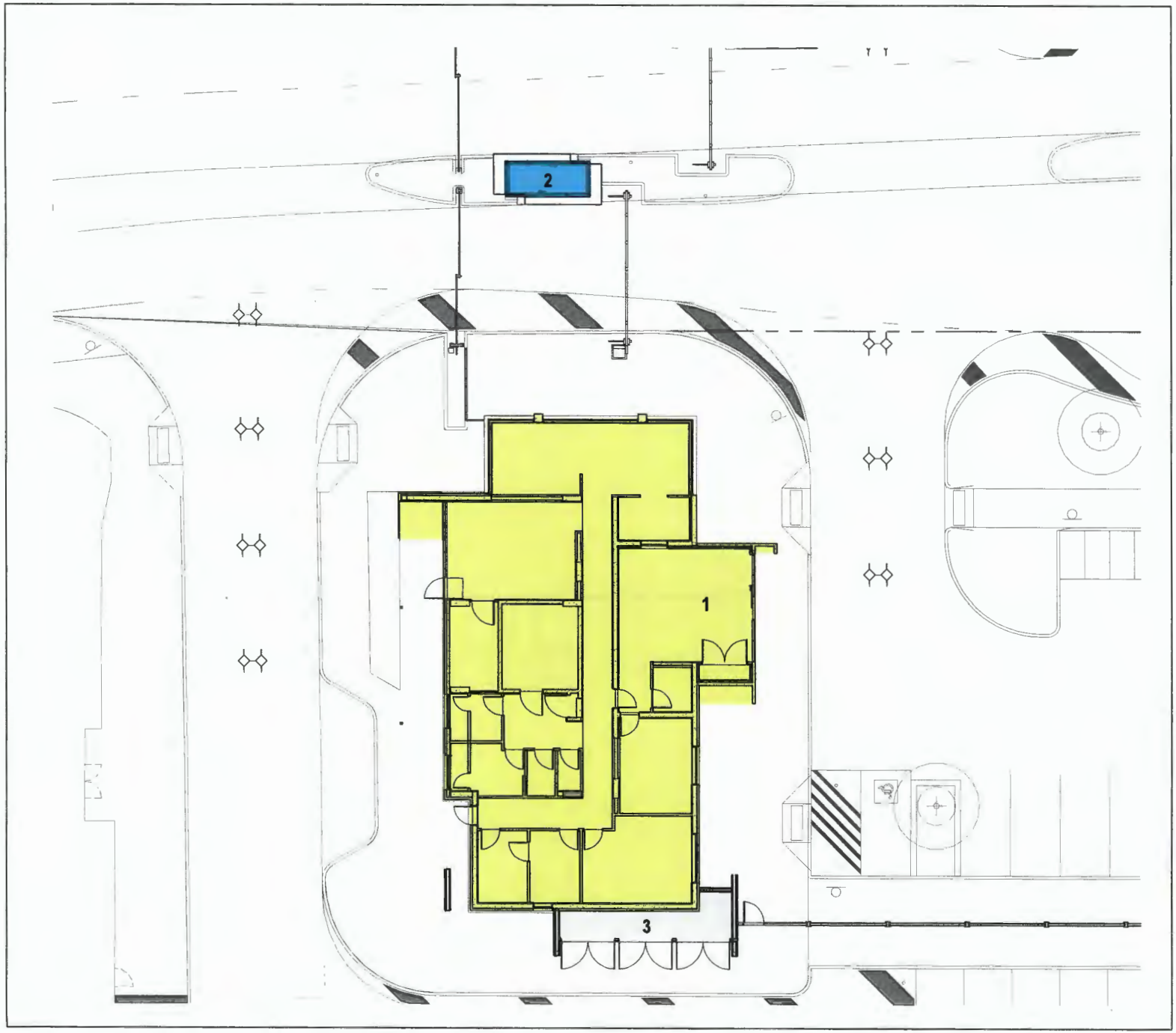
ATTACHMENT 09-04 | ELEVATIONS - COMBINED MESS

Campbell Barracks Redevelopment Project, Swanbourne, Western Australia
Submission 1



3D PERSPECTIVE - VIEW FROM EAST

ATTACHMENT 10-01 | 3D PERSPECTIVE - ENTRY PRECINCT



LEGEND

1. VISITOR RECEPTION CENTRE
2. SENTRY BOX
3. PLANT / SERVICES

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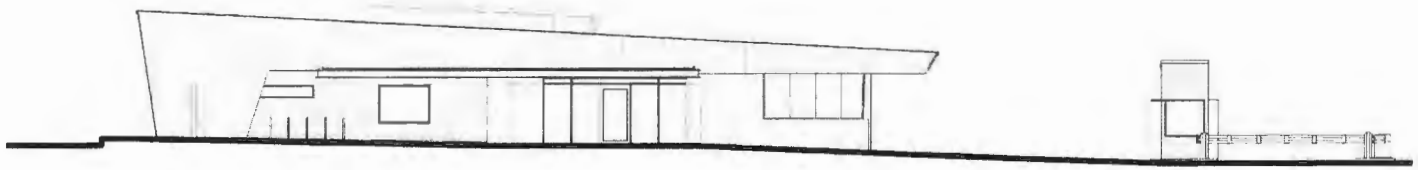
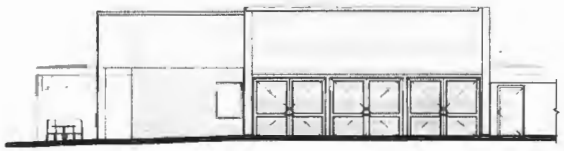
ATTACHMENT 10-02 | FLOOR PLANS - ENTRY PRECINCT

Campbell Barracks Redevelopment Project, Swanbourne, Western Australia
Submission 1

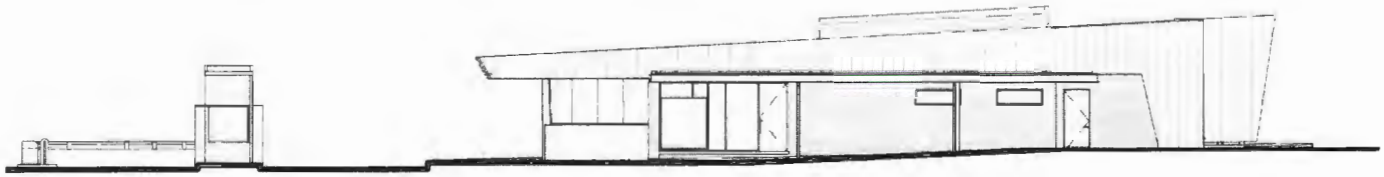
NORTH ELEVATION



EAST ELEVATION



SOUTH ELEVATION



WEST ELEVATION

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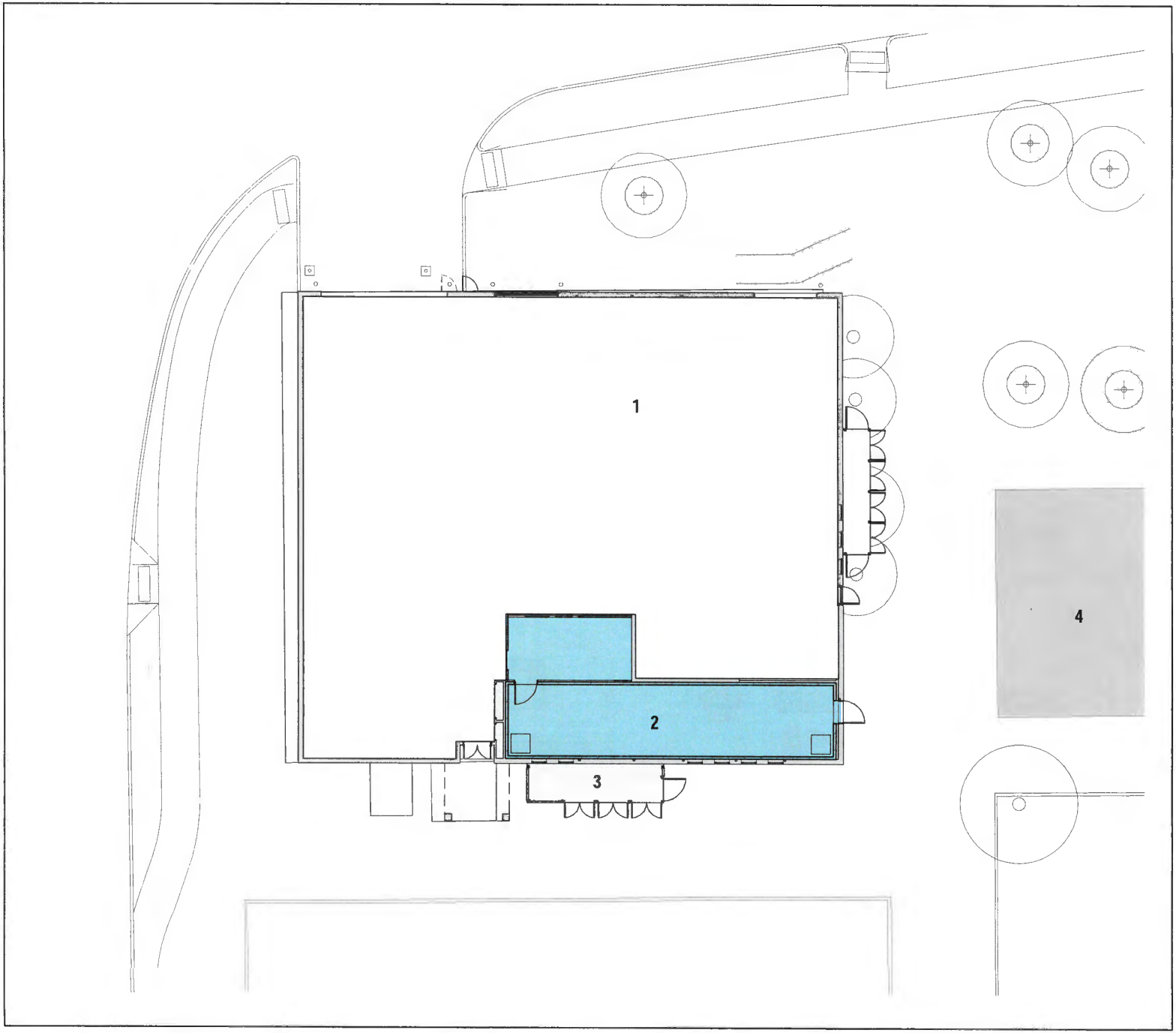
ATTACHMENT 10-03 | ELEVATIONS - ENTRY PRECINCT



LEGEND

- 1. OPERATIONAL SUPPORT SQUADRON SKILLS TROOP (REFER TO ATTACHMENT 05 FOR DETAILS)
- 2. FIBRE TRANSMISSION FACILITY
- 3. PLANT AND SERVICES
- 4. EXISTING BUILDING A4012

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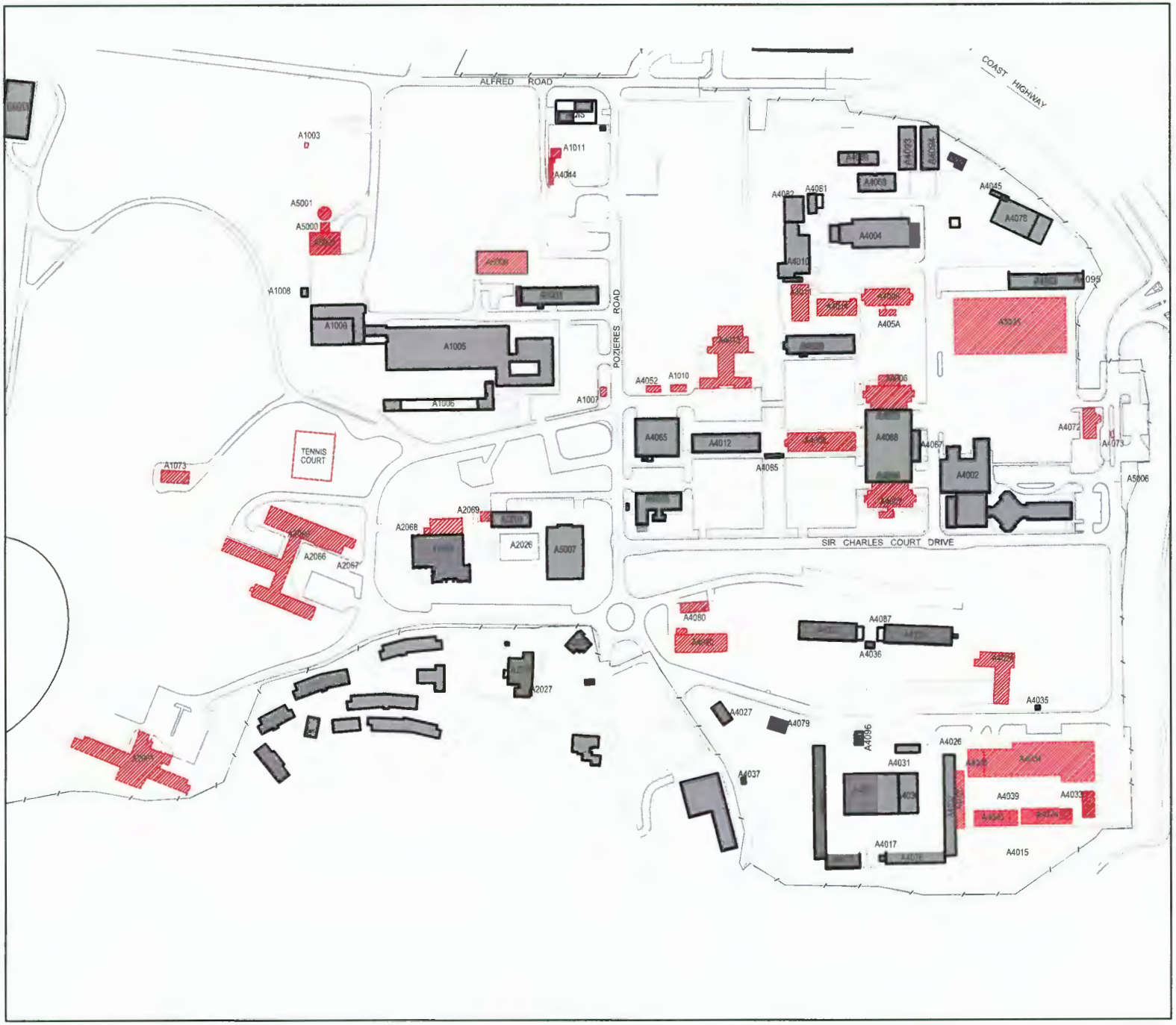
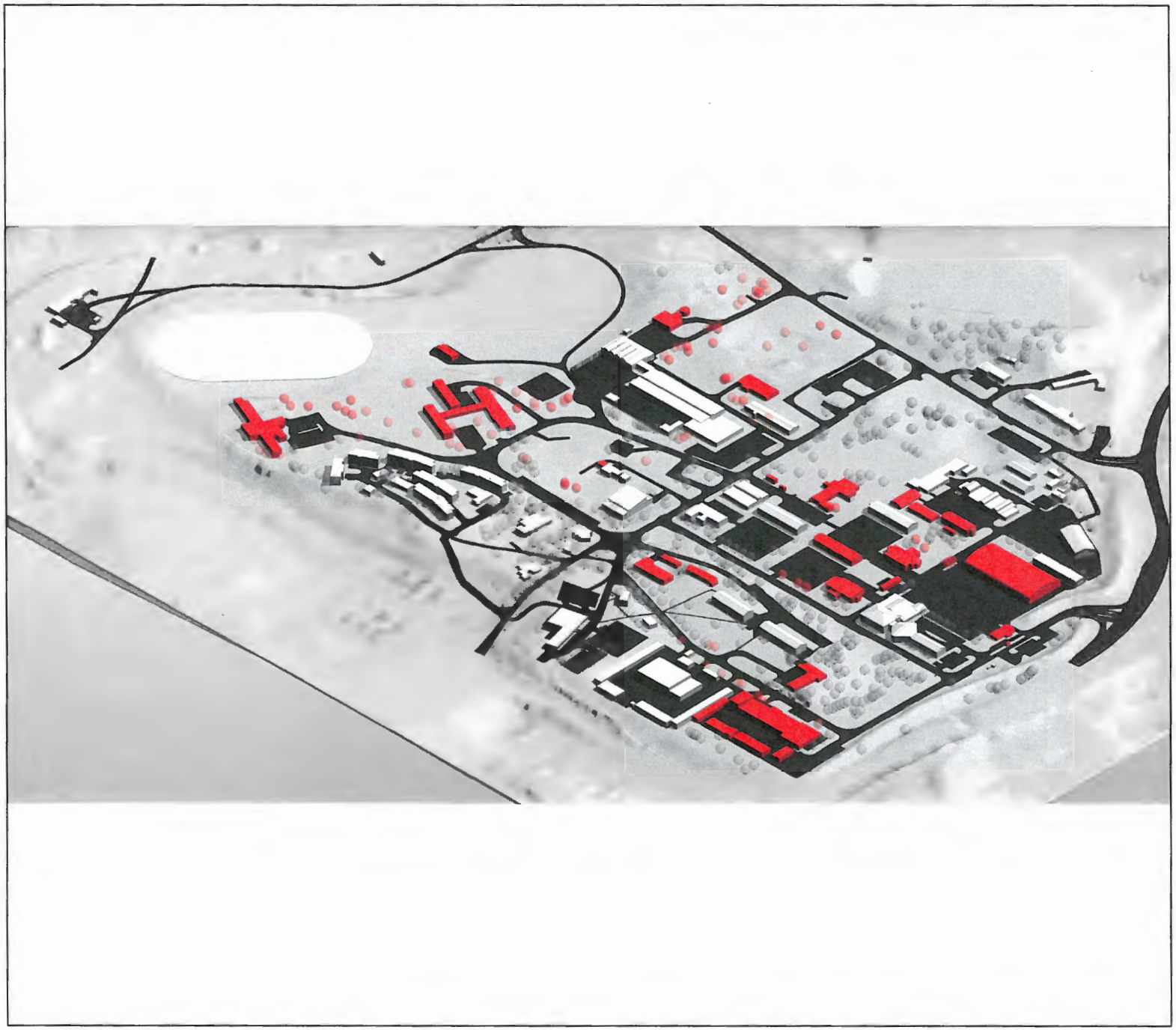
ATTACHMENT 11 | FLOOR PLANS - FIBRE TRANSMISSION FACILITY

Campbell Barracks Redevelopment Project, Swanbourne, Western Australia
Submission 1



ATTACHMENT 12-01 | DEMOLITION PLAN

Campbell Barracks Redevelopment Project, Swanbourne, Western Australia
Submission 1



PROPOSED DEMOLITION

ATTACHMENT 12-02 | DEMOLITION PLAN 3D