



Australian Government
Department of Defence

EXPLOSIVE ORDNANCE LOGISTICS REFORM PROGRAM (EOLRP) PROJECT

Explosive Ordnance Depot Amberley, Ipswich QLD
Explosive Ordnance Depot Mt Stuart, Townsville QLD
Explosive Ordnance Depot Darwin, Darwin NT
Explosive Ordnance Depot Myambat, Denman NSW
Explosive Ordnance Depot Williamtown, Williamtown NSW
Explosive Ordnance Depot Twofold Bay, Eden NSW
Explosive Ordnance Depot Mangalore, Seymour VIC
Explosive Ordnance Depot Cerberus, Hastings VIC
Point Wilson Explosives Area, Avalon VIC
Explosive Ordnance Depot Fort Direction, South Arm TAS
Explosive Ordnance Depot Edinburgh, Edinburgh SA
Explosive Ordnance Depot Stirling, Rockingham WA

STATEMENT OF EVIDENCE TO THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

Canberra, Australian Capital Territory

June 2017

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EXPLOSIVE ORDNANCE LOGISTICS REFORM PROGRAM

IDENTIFICATION OF THE NEED

1. Defence's Explosive Ordnance (EO) supply chain network is a critical enabler to Navy, Army and Air Force operations and training. This network provides direct support to multiple Defence capabilities (including troops, combat vehicles, aircraft and naval vessels) through the acquisition, transportation, storage, distribution, handling, maintenance, return and disposal of EO products.
2. The EO network historically comprised a collection of depots developed and operated by the individual Services in isolation to meet specific storage and handling requirements. In the late 1990s, these EO depots were amalgamated into a national network under the stewardship of Joint Logistics Command.
3. Since that amalgamation, there has been limited investment in EO logistic infrastructure and the facilities have not evolved to meet changing storage and processing requirements of new weapons platforms. These legacy issues have culminated in a shortfall in national EO storage and handling capacity, and logistics support being delivered from aging facilities. Both factors are contributing to inefficiencies in service delivery and increased operating costs.
4. The requirement to rectify current network inefficiencies to support and ensure the ongoing effectiveness of Australia's broader Defence capability provided the basis for the proposed infrastructure works. The proposed works will therefore deliver increased storage and handling capacity to the national EO network.

Historical Background

5. The 2009 Defence White Paper identified a need to enhance constrained physical and logistics EO infrastructure; this was reiterated through the 2013 and 2016 Defence White Papers, the latter of which also identified an increase in investment in EO infrastructure as critical to ongoing Defence operational effectiveness.

6. Following the 2009 and 2013 Defence White Papers, Joint Logistics Command undertook a strategic review of the EO network and a facilities requirements study to articulate a future network operating model. The endorsed model provided for sea importation infrastructure and national wholesale EO storage depots, supported by a network of smaller regional retail EO storage depots. The proposed investment under the Explosive Ordnance Logistics Reform Program will deliver the future EO network model.

Purpose of the Works

7. The purpose of the proposed infrastructure works is to deliver new purpose-built logistics infrastructure to increase the EO storage and handling capability of Joint Logistics Command to rectify existing network deficiencies. The proposed facilities will deliver a consolidated EO network with defined importation, wholesale and retail sites to ensure the ongoing operational effectiveness of the Australian Defence Force (ADF). The objectives of the proposed works are:

- a. Rectification of existing network deficiencies, through provision of increased EO storage and handling capacity;
- b. Network rationalisation, delivering a more optimal EO network with logistics support delivered through modern, fit-for-purpose facilities;
- c. Modernisation of the EO network, provided through new facilities delivering more optimal EO storage, processing, administration, and control and distribution capabilities and outcomes;
- d. Greater efficiencies and enhanced service levels, delivered through improved facilities and enabling technology for optimised support to the ADF; and
- e. Improved support to operations and training, through the addition of fit-for-purpose facilities and updated storage and processing technologies.

Options Considered to Fulfil the Need

8. **Network Options.** Joint Logistics Command undertook an options analysis as part of its 2013 strategic review of the EO network to identify the various methodologies for addressing the deficiencies in the network. Six options were identified that delivered to varying degrees a consolidated, functional and optimised network. The option that led to this submission was deemed to best balance cost and

capacity, and was seen to achieve a value for money solution for increased EO network capability. A do nothing option was not appropriate given the importance of the EO network to ADF operations and training.

9. **Siting Options.** Consistent with Defence planning policy, Defence has considered various siting options for the proposed facilities at each site, guided by existing base zone plans. Within the approved sites, various site layout options have been tested to ensure that the site layout is functional, cost effective and allows sufficient capacity for future expansion where possible.

10. **Adaptive Reuse and Refurbishment Options.** There is minimal opportunity for adaptive reuse and refurbishment given the project aims to deliver additional network storage and processing capacity through new facilities.

Description of the Proposal

11. The Explosive Ordnance Logistics Reform Program project proposes to construct new EO storage facilities (comprising Earth Covered Buildings and Light Frangible Buildings), ammunition process buildings, non-EO storage facilities, hardstands and administration buildings that are fit-for-purpose, compliant and provide value for money. The project also proposes civil works, infrastructure and essential service works, and landscaping. The proposed facilities are to be located on 'brownfield' sites within 12 existing EO depots around Australia.

12. Key requirements include:

a. **Administration Building.** A standard office facility to provide modern and fit-for-purpose working accommodation for EO Depot personnel. The Administration Building will be sized to house the working population of the relevant depot. The Administration Building will be a fully climate controlled environment and includes:

- (1) Car parking for depot personnel and visitors;
- (2) A visitor entry for depot security control and dedicated area for visitor inductions;
- (3) Ablutions, kitchenette and lockers for staff amenity;

- (4) Working accommodation for depot personnel (ranging from 5 - 30 people, depending on the Depot), including meeting rooms, and a mix of standard offices and open-plan workstations; and
 - (5) Communications rooms to the relevant standards to accommodate Defence and contractor ICT networks.
- b. **Ammunition Process Building.** A specialist workshop to provide for the safe inspection, testing and maintenance of various EO holdings. The Ammunition Process Building will be a fully climate controlled environment and includes:
 - (1) Covered areas for the all-weather receipt and dispatch of goods;
 - (2) Workrooms and paint booth for the safe and efficient conduct of explosive ordnance processing activities;
 - (3) Plant and storage areas; and
 - (4) Administration and staff amenity facilities.
- c. **EO Storage Facilities.** These facilities provide for the safe storage of all classes of ordnance in the Defence inventory to the relevant policy and safety standards. The EO storage facility types to be provided are:
 - (1) Earth Covered Buildings. A reinforced concrete warehouse-type structure for storage of pallets and containers, with an external earth covering, and a hardstand to assist with receipt and dispatch activities;
 - (2) Light Frangible Buildings (Small Arms Ammunition / Flares). A logistics warehouse for storage of pallets, with an external hardstand to assist with receipt and dispatch activities; and
 - (3) Light Frangible Buildings (White Phosphorous). A reinforced concrete logistics warehouse for storage of pallets, with an external hardstand to assist with receipt and dispatch activities.
- d. **Non-EO Storage Building.** A basic warehouse structure for the palletised storage of non-EO goods, with an external canopy and hardstand to facilitate all-weather activities.
- e. **Hardstands.** Rigid pavement hardstands for temporary containerised EO storage and handling.

- f. **Quarantine Inspection Facility.** A facility suitable for the Department of Agriculture and Water Resources' 'Point of entry' inspection, quarantine and treatment of imported goods.
- g. **Materials Handling Equipment (MHE) store.** A basic weatherproof structure for the storage of MHE and facilities for centralised depot receipt and dispatch.
- h. **Civil Infrastructure.** Vehicle and pedestrian pavements will be provided to achieve access to new facilities. Pavement types are designed to the relevant traffic and operations, with main roads and hardstands rated for B-Double heavy vehicles and MHE; flexible pavement is provided to areas of light vehicular traffic.

Project Location

- 13. The Explosive Ordnance Logistics Reform Program project proposes to construct EO logistics infrastructure at 12 key depots across Australia. These sites are:
 - a. Explosive Ordnance Depot Amberley, Ipswich, QLD;
 - b. Explosive Ordnance Depot Mt Stuart, Townsville, QLD;
 - c. Explosive Ordnance Depot Darwin, Darwin, NT;
 - d. Explosive Ordnance Depot Myambat, Denman, NSW;
 - e. Explosive Ordnance Depot Williamtown, Williamtown, NSW;
 - f. Explosive Ordnance Depot Twofold Bay, Eden, NSW;
 - g. Explosive Ordnance Depot Mangalore, Seymour, VIC;
 - h. Explosive Ordnance Depot Cerberus, Hastings, VIC;
 - i. Point Wilson Explosives Area, Avalon, VIC;
 - j. Explosive Ordnance Depot Fort Direction, South Arm, TAS;
 - k. Explosive Ordnance Depot Edinburgh, Edinburgh, SA; and
 - l. Explosive Ordnance Depot Stirling, Rockingham, WA.
- 14. All sites exist on Commonwealth-owned and Defence controlled land. A national location plan is provided at Attachment 1.

Environment and Heritage Assessment

15. Consistent with established Defence policies, Defence engaged a specialist environmental consultant to undertake an Initial Environmental Review of the proposed works. The purpose of the Initial Environmental Review was to assist Defence in determining whether a more substantive environmental impact assessment is required under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth), or whether the project can proceed via the Defence's internal process of environmental clearance certificates subject to specified controls or mitigation measures being employed.

16. The Initial Environmental Review identified three areas of high environmental risk. These risk areas related to contamination, ecology and Indigenous heritage. To mitigate these risks, Defence has undertaken additional site investigations to quantify whether these presented a legitimate risk within the proposed sites and to fully characterise the nature of the impact. These investigations are discussed in more detail below under 'Environmental Impact'.

17. The remaining environment and heritage risks identified in the Initial Environmental Review were defined as minor. These will be effectively managed through the preparation of a comprehensive Construction Environmental Management Plan, Operational Environmental Management Plan, and implementation of existing site environmental management frameworks (environmental management system).

18. Based on the outcomes of the Initial Environmental Review, it is anticipated that a referral will not be required under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth).

Heritage Impact

19. The Initial Environmental Review noted that:

- a. HMAS Cerberus and HMAS Stirling have listings on the Commonwealth Heritage List and Register of the National Estate for their natural and historic heritage values. However, the proposed works are located away from these areas and do not adversely impact the heritage value of Bases.
- b. RAAF Amberley, RAAF Williamstown and RAAF Darwin have listings on the Commonwealth Heritage List and Register of the National Estate. However, the

proposed works are located away from areas of built heritage significance and have no adverse impacts.

- c. Point Wilson Explosives Area is cited on the Commonwealth Heritage List and Register of the National Estate for natural heritage values. As the proposed works require minimal clearance, the proposed works will not impact existing natural heritage, and management and mitigation measures will be employed.

20. The Initial Environmental Review also identified the possibility of uncovering Indigenous heritage sites at EO Depots Cerberus, Mangalore, Edinburgh and Williamtown. Further site investigations have revealed no Indigenous artefacts, however, as mitigation measures, specific site induction material will include details relating to Indigenous heritage sites, instructions for stop work orders, and a 'do's and don'ts' checklist. The Construction Environmental Management Plans at all sites will include 'chance find' procedures to mitigate any potential disturbance of as yet undiscovered Indigenous sites during construction.

Environmental Impact

21. **Contamination.** Detailed site investigations have been completed at each site following completion of the Initial Environmental Review. These detailed investigations have identified the following contaminated material:

- a. Asbestos Containing Material – Sporadic deposits of bonded asbestos containing material and fragments were observed at Point Wilson Explosives Area and EO Depots Fort Direction, Stirling, Edinburgh and Mt Stuart. Despite these deposits being located away from the proposed works, soil management plans will be developed prior to works commencing on site as part of site-specific Construction Environmental Management Plan to mitigate potential impacts.
- b. Poly-fluoroalkyl Substances (PFAS) – Minor concentrations of PFAS compounds were detected in shallow soil samples at RAAF Edinburgh, RAAF Amberley and RAAF Darwin, however compounds from the samples reported concentrations well below the adopted Defence Human Health (Residential) screening criteria. The risk to human health and the environment is considered low.

22. In each case, the contamination is as a result of past practices at the sites. The project cost plan includes as applicable provision to remove or remediate relevant contaminated material.

23. There is the possibility that other areas of contamination will be discovered during the course of constructing the works. The site-specific Construction Environmental Management Plans will incorporate appropriate environmental control measures to ensure that any contaminated material is handled in accordance with the relevant legislation, codes or standards. Development of these site-specific Construction Environmental Management Plans is the contractual responsibility of the construction contractor. Compliance with the approved plans will be periodically audited through the course of the project.

24. **Ecology.** Significant Impact Assessments were undertaken at EO Depots Myambat and Mangalore to determine the impact of required clearances on listed species. The proposed works have been designed and sited to avoid to the greatest extent possible those areas where listed species are considered present; for each of these sites, the impact was not considered significant and permits to clear under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) have been sought.

25. Consistent with established Defence policy and procedures, an Environmental Clearance Certificate will be issued prior to any construction works commencing on any site. Approval of the Construction Environmental Management Plans is a necessary precursor to any Environmental Clearance Certificates being issued.

Key Legislation

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

- a. *Defence Act 1903* (Cth);
- b. *Native Title Act 1992* (Cth);
- c. *Environment Protection and Biodiversity Conservation Act 1999* (Cth); and
- d. *Building and Construction Industry Improvement Amendment (Transition to Fair Work) Act 2012* (Cth).

27. The design will comply with all relevant and current Defence Standards, Australian Standards, Codes and Guidelines including (but not limited to) the following:

- a. Building Code of Australia;
- b. *Work Health and Safety Act 2011* (Cth);
- c. *Disability Discrimination Act 1992* (Cth);
- d. *Fair Work Act 2009* (Cth);
- e. eDEOP 101 – Department of Defence Explosives Regulations
- f. Manual of Fire Protection Engineering; and
- g. Defence Infrastructure Management policies and processes.

Impacts on Local Communities

28. Similar to other major Defence infrastructure projects, the Explosive Ordnance Logistics Reform Program project will generate employment opportunities in the construction sector (and related sectors) in regional areas surrounding each EO Depot. These include Ipswich, Townsville, Newcastle, Upper Hunter Valley, NSW South Coast and Hastings. The proposed works also generate employment opportunities in Hobart, Melbourne, Adelaide, Perth and Darwin.

Consultation with Key Stakeholders

29. 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, the Explosive Ordnance Logistics Reform Program.

30. Defence has engaged with a variety of internal and external stakeholders in each of the key regions impacted by this proposal. Consultation has been undertaken in accordance with the site-specific consultation plans developed for each region.

31. The people and groups currently identified for consultation are listed below.

32. **Amberley:**

- a. Federal Member for Blair, Hon Shayne Neumann MP;
- b. State Member for Ipswich West, Mr Jim Madden;

- c. Ipswich City Council Mayor, Paul Pisasale;
- d. Utilities Suppliers Ipswich Water (Water) and Energex (Electricity); and
- e. Queensland Department of Transport and Main Roads;
- f. Local environmental groups; and
- g. Local community.

33. **Mt Stuart:**

- a. Federal Member for Kennedy, Mr Bob Katter, MP;
- b. Federal Member for Herbert, Ms Cathy O'Toole MP;
- c. State member for Burdekin, Mr Dale Last;
- d. Townsville City Council Mayor, Cr Jenny Hill;
- e. Utilities Suppliers Townsville Water (Water) and Ergon (Electricity);
- f. Queensland Department of Transport and Main Roads; and
- g. Local community.

34. **Darwin:**

- a. Federal Member for Solomon, Mr Luke Gosling OAM MP;
- b. State member for Spillett, Mrs Lia Finocchiaro;
- c. Darwin City Council Lord Mayor, Katrina Fong Lim;
- d. Utilities Supplier NT Power and Water Corporation;
- e. Northern Territory Department of Transport;
- f. Save Rapid Creek and other local environmental groups; and
- g. Local community.

35. **Myambat:**

- a. Federal Member for Hunter, Hon Joel Fitzgibbon MP;
- b. State member for Spillett, Mrs Lia Finocchiaro;
- c. Muswellbrook Shire Council Mayor, Cr Martin Rush;

- d. Utilities Suppliers Muswellbrook Shire Council (Water) and Ausgrid (Electricity);
- e. New South Wales Roads and Maritime Services; and
- f. Local community.

36. Williamtown:

- a. Federal Member for Paterson, Ms Meryl Swanson MP;
- b. State member for Port Stephens, Ms Kate Washington;
- c. Port Stephens Council Mayor, Bruce MacKenzie;
- d. Utilities Suppliers Hunter Water Corporation (Water) and Energy Australia (Electricity);
- e. New South Wales Roads and Maritime Services; and
- f. Local community.

37. Twofold Bay:

- a. Federal Member for Eden-Monaro, Hon Dr Mike Kelly AM, MP;
- b. State member for Bega, Hon Andrew Constance MP;
- c. Bega Valley Shire Council Mayor, Michael Britten;
- d. Utilities Suppliers Bega Valley Shire Council (Water) and Essential Energy (Electricity);
- e. New South Wales Roads and Maritime Services;
- f. NSW National Parks and Wildlife Service; and
- g. Local community.

38. Mangalore:

- a. Federal Member for Murray, Hon Damian Drum MP;
- b. State member for Euroa, Ms Steph Ryan;
- c. Strathbogie Shire Council Mayor, Colleen Furlanetto;
- d. Utilities Supplier Ausnet Services (Electricity);
- e. VicRoads; and

- f. Local community.

39. **Cerberus:**

- a. Federal Member for Flinders, Hon Greg Hunt MP;
- b. State member for Hastings, Mr Neale Burgess;
- c. Mornington Peninsula Shire Council Mayor, Bev Colomb;
- d. Utilities Supplier United Energy (Electricity);
- e. VicRoads; and
- f. Local community.

40. **Point Wilson:**

- a. Federal Member for Corio, Hon Richard Marles MP;
- b. State member for Lara, Hon John Eren;
- c. Administrators of Greater Geelong City Council;
- d. Utilities Supplier Powercor (Electricity);
- e. VicRoads; and
- f. Local community.

41. **Fort Direction:**

- a. Federal Member for Franklin, Hon Julie Collins MP;
- b. State members for Franklin;
- c. Clarence City Council Mayor, Doug Chipman;
- d. Utilities Supplier TasNetworks (Electricity);
- e. Tasmanian Department of State Growth; and
- f. Local community.

42. **Edinburgh:**

- a. Federal Member for Wakefield, Mr Nick Champion MP;
- b. State member for Taylor, Mrs Leesa Vlahos;
- c. Salisbury City Council Mayor, Gillian Aldridge;

- d. South Australian Department of Planning, Transport, and Infrastructure; and
- e. Local community.

43. Stirling:

- a. Federal Member for Brand, Ms Madeleine King MP;
- b. State member for Rockingham, Hon Mark McGowan;
- c. Rockingham City Council Mayor, Barry Sammels;
- d. Main Roads Western Australia; and
- e. Local community.

PURPOSE OF THE WORKS

Project Objectives

44. The purpose of the proposed infrastructure works is to deliver new purpose-built and fully compliant logistics infrastructure to increase the EO storage and handling capability of Joint Logistics Command and rectify existing network deficiencies.

Site Selection

45. The selection of sites for each project element has been undertaken in accordance with Infrastructure Division planning policy requirements as set out on the Defence Estate Quality Management System.¹ The reviews conducted by site selection boards during the period July to August 2016 considered Defence policy, environment, heritage and operational considerations and existing planning guidance under the relevant zone plan or master plan for each site (where available).

Scope of Works

46. To meet the project objectives, the proposed scope of works for each of the 12 sites is outlined below.

Project Element 1 – EO Depot Amberley, Ipswich QLD

47. **Location of the Proposed Works.** EO Depot Amberley is located within the northern portion of RAAF Base Amberley, which itself is located 40 kilometres south-west of Brisbane on the outskirts of Ipswich. A Location Plan is provided at

¹ Available at www.defence.gov.au/estatemangement

Attachment 2, and a Site Plan depicting the location of the proposed facilities is at Attachment 3.

48. **Description of the Proposed Works.** The following facilities are proposed to be delivered at the depot:

- a. **Administration Building.** One Administration Building is proposed. The facility will accommodate up to 15 depot personnel, includes the areas described at paragraph 12(a) above, and has been designed to achieve acoustic dampening to the relevant safe working levels in light of the proximity of the facility to the RAAF Base Amberley runway. A Floor Plan of the proposed facility is at Attachment 4.
- b. **Ammunition Process Building.** One Ammunition Process Building is proposed. The building includes the areas described at paragraph 12(b) above. A Floor Plan of the proposed facility is at Attachment 5.
- c. **Earth Covered Buildings.** Two Earth Covered Buildings are proposed. The buildings include the areas described at paragraph 12(c) above. A Floor Plan of the proposed facility is at Attachment 6.
- d. **Light Frangible Buildings.** One Small Arms Ammunition building and one Flares building are proposed. The buildings include the areas described at paragraph 12(c) above. Floor Plans of the proposed facilities are at Attachments 7 and 8.
- e. **Non-EO Storage Building.** One Non-EO Storage building is proposed. The building includes the areas described at paragraph 12(d) above. A Floor Plan of the proposed facility is at Attachment 9.
- f. **Civil and Engineering Services.** Relevant services will be provided to support these facilities, including pavements, traverses, electrical, hydraulic (including potable, water for fire-fighting purposes, sewerage and stormwater drainage), communications and security services.

Project Element 2 – EO Depot Mt Stuart, Townsville QLD

49. **Location of the Proposed Works.** EO Depot Mt Stuart exists within an 8,100 hectare training area and range complex located on Townsville's southern urban edge in close proximity to Lavarack Barracks. A Location Plan is provided at Attachment

10, and a Site Plan depicting the location of the proposed facilities is at Attachment 11.

50. Description of the Proposed Works. The following facilities are proposed to be delivered at the depot:

- a. Administration Building. One Administration Building is proposed. The facility will accommodate up to 15 depot personnel and includes the areas described at paragraph 12(a) above. A Floor Plan of the proposed facility is at Attachment 12.
- b. Earth Covered Building. One Earth Covered Building is proposed. The building includes the areas described at paragraph 12(c) above. A Floor Plan of the proposed facility is at Attachment 13.
- c. Light Frangible Building. One White Phosphorous building is proposed. The building includes the areas described at paragraph 12(c) above. A Floor Plan of the proposed facility is at Attachment 14.
- d. Civil and Engineering Services. Relevant services will be provided to support these facilities, including pavements, traverses, electrical, hydraulic (including potable, water for fire-fighting purposes, sewerage and stormwater drainage), communications and security services.

Project Element 3 – EO Depot Darwin, Darwin NT

51. Location of the Proposed Works. EO Depot Darwin is located within the north-eastern portion of RAAF Base Darwin, which itself is 9 kilometres north-east of the Darwin Central Business District. A Location Plan is provided at Attachment 15, and a Site Plan depicting the location of the proposed facilities is at Attachment 16.

52. Description of the Proposed Works. The following facilities are proposed to be delivered at the depot:

- a. Administration Building. One Administration Building is proposed. The facility will accommodate up to 15 depot personnel, includes the areas described at paragraph 12(a) above, and has been designed to achieve acoustic dampening to the relevant safe working levels in light of the proximity of the facility to the RAAF Base Darwin runway. A Floor Plan of the proposed facility is at Attachment 17.

- b. **Ammunition Process Building.** One Ammunition Process Building is proposed. The building includes the areas described at paragraph 12(b) above. A Floor Plan of the proposed facility is at Attachment 18.
- c. **Light Frangible Buildings.** One Small Arms Ammunition and one White Phosphorous building is proposed. The buildings include the areas described at paragraph 12(c) above. Floor Plans of the proposed facilities are at Attachments 19 and 20.
- d. **Non-EO Storage Building.** One Non-EO Storage building is proposed. The building includes the areas described at paragraph 12(d) above. A Floor Plan of the proposed facility is at Attachment 21.
- e. **Civil and Engineering Services.** Relevant services will be provided to support these facilities, including pavements, traverses, electrical, hydraulic (including potable, water for fire-fighting purposes, sewerage and stormwater drainage), communications and security services.

Project Element 4 – EO Depot Myambat, Denman NSW

53. **Location of the Proposed Works.** EO Depot Myambat is located in the Hunter Valley, 150 kilometres west of Newcastle and 10 kilometres from Denman. A Location Plan is provided at Attachment 22, and a Site Plan depicting the location of the proposed facilities is at Attachment 23.

54. **Description of the Proposed Works.** The following facilities are proposed to be delivered at the depot:

- a. **Earth Covered Buildings.** Seven Earth Covered Buildings are proposed. The buildings include the areas described at paragraph 12(c) above. A Floor Plan of the proposed facility is at Attachment 24.
- b. **Light Frangible Buildings.** Three Small Arms Ammunition buildings are proposed. The buildings include the areas described at paragraph 12(c) above. A Floor Plan of the proposed facility is at Attachment 25.
- c. **Materials Handling Equipment (MHE) store.** One MHE store with centralised receipt and dispatch facilities is proposed. The building includes the areas described at paragraph 12(g) above. A Floor Plan of the proposed facility is at Attachment 26.

- d. Depot Gatehouse. One Depot Gatehouse is proposed. The facility will consolidate security and access control functions and enable increased monitoring. It includes a reception area, working accommodation for security personnel, an ablution, kitchenette and ICT area. A Floor Plan of the proposed facility is at Attachment 27.
- e. Civil and Engineering Services. Relevant services will be provided to support these facilities, including pavements, traverses, electrical, hydraulic (including potable, water for fire-fighting purposes, sewerage and stormwater drainage), communications and security services.

Project Element 5 – EO Depot Williamtown, Williamtown NSW

55. **Location of the Proposed Works.** EO Depot Williamtown is located within the north-west portion of RAAF Base Williamtown, which itself is approximately 30 kilometres north of Newcastle and 30 kilometres west of Nelson Bay. A Location Plan is provided at Attachment 28, and a Site Plan depicting the location of the proposed facility is at Attachment 29.

56. **Description of the Proposed Works.** The following facilities are proposed to be delivered at the depot:

- a. Earth Covered Building. One Earth Covered Building is proposed. The building includes the areas described at paragraph 12(c) above. A Floor Plan of the proposed facility is at Attachment 30.
- b. Civil and Engineering Services. Relevant services will be provided to support this facility, including pavements, traverses, electrical, hydraulic (including potable, water for fire-fighting purposes, sewerage and stormwater drainage), communications and security services.

Project Element 6 – EO Depot Twofold Bay, Eden NSW

57. **Location of the Proposed Works.** EO Depot Twofold Bay is located approximately 20 kilometres south of Eden on the NSW South Coast. A Location Plan is provided at Attachment 31, and a Site Plan depicting the location of the proposed facilities is at Attachment 32.

58. **Description of the Proposed Works.** The following facilities are proposed to be delivered at the depot:

- a. Earth Covered Buildings. Two Earth Covered Buildings are proposed. The buildings include the areas described at paragraph 12(c) above. A Floor Plan of the proposed facility is at Attachment 33.
- b. Civil and Engineering Services. Relevant services will be provided to support this facility, including pavements, traverses, electrical, hydraulic (including potable, water for fire-fighting purposes, sewerage and stormwater drainage), communications and security services.

Project Element 7 – EO Depot Mangalore, Seymour VIC

59. **Location of the Proposed Works.** EO Depot Mangalore is located 12 kilometres north of Seymour in central Victoria. A Location Plan is provided at Attachment 34, and a Site Plan depicting the location of the proposed facilities is at Attachment 35.

60. **Description of the Proposed Works.** The following facilities are proposed to be delivered at the depot:

- a. Administration Building. One Administration Building is proposed. The facility will accommodate up to 25 depot personnel and includes the areas described at paragraph 12(a) above. A Floor Plan of the proposed facility is at Attachment 36.
- b. Earth Covered Buildings. Two Earth Covered Buildings are proposed. The buildings include the areas described at paragraph 12(c) above. A Floor Plan of the proposed facility is at Attachment 37.
- c. Light Frangible Building. One Small Arms Ammunition building is proposed. The building includes the areas described at paragraph 12(c) above. A Floor Plan of the proposed facility is at Attachment 38.
- d. Hardstand. One hardstand for the handling of EO is proposed. The hardstand includes the area described at paragraph 12(e) above. A Floor Plan of the proposed hardstand is at Attachment 39.
- e. Civil and Engineering Services. Relevant services will be provided to support these facilities, including pavements, traverses, electrical, hydraulic (including potable, water for fire-fighting purposes, sewerage and stormwater drainage), communications and security services.

Project Element 8 – EO Depot Cerberus, Hastings VIC

61. **Location of the Proposed Works.** EO Depot Cerberus is located within the south-eastern portion of HMAS Cerberus, which itself is located 30 kilometres south of Frankston and 80 kilometres south of Melbourne. A Location Plan is provided at Attachment 40, and a Site Plan depicting the location of the proposed facilities is at Attachment 41.

62. **Description of the Proposed Works.** The following facilities are proposed to be delivered at the depot:

- a. **Administration Building.** One Administration Building is proposed. The facility will accommodate up to 7 depot personnel and includes the areas described at paragraph 12(a) above. A Floor Plan of the proposed facility is at Attachment 42.
- b. **Ammunition Process Building.** One Ammunition Process Building is proposed. The building includes the areas described at paragraph 12(b) above. A Floor Plan of the proposed facility is at Attachment 43.
- c. **Earth Covered Buildings.** One Earth Covered Building is proposed. The building includes the areas described at paragraph 12(c) above. A Floor Plan of the proposed facility is at Attachment 44.
- d. **Non-EO Storage Building.** One Non-EO Storage building is proposed. The building includes the areas described at paragraph 12(d) above. A Floor Plan of the proposed facility is at Attachment 45.
- e. **Civil and Engineering Services.** Relevant services will be provided to support these facilities, including pavements, traverses, electrical, hydraulic (including potable, water for fire-fighting purposes, sewerage and stormwater drainage), communications and security services.

Project Element 9 – Point Wilson Explosives Area, Avalon VIC

63. **Location of the Proposed Works.** Point Wilson Explosives Area is located on the northern shore of the Geelong arm of Port Philip, 60 kilometres south of Melbourne. A Location Plan is provided at Attachment 46, and a Site Plan depicting the location of the proposed facilities is at Attachment 47.

64. **Description of the Proposed Works.** The following facilities are proposed to be delivered at the depot:

- a. **Administration Building.** One Administration Building is proposed. The facility will accommodate up to 15 depot personnel, includes the areas described at paragraph 12(a) above, and includes an additional external guardhouse to achieve site security and traffic control. A Floor Plan of the proposed facility is at Attachment 48.
- b. **Container Storage Hardstand.** One Container Storage Hardstand is proposed. The hardstand provides for the temporary storage of up to 400 standard shipping containers, and includes the areas described at paragraph 12(e) above. A Floor Plan of the proposed hardstand is at Attachment 49.
- c. **Handling Hardstand.** One Handling Hardstand is proposed. The hardstand provides for the handling of goods, and includes the areas described at paragraph 12(e) above together with a container wash bay. A Floor Plan of the proposed hardstand is at Attachment 50.
- d. **Quarantine Inspection Facility.** One Quarantine Inspection Facility is proposed. The facility provides for the inspection, quarantine and treatment of shipping containers by the Department of Agriculture and Water Resources in line with Australia's bio-security measures. The facility includes an external fumigation area, and a covered hardstand with an amenity area (including an ablution, store, and potable water), inspection area, an unloading area, and external car parking. A Floor Plan of the proposed facility is at Attachment 51.
- e. **Civil and Engineering Services.** Relevant services will be provided to support these facilities, including pavements, traverses, electrical, hydraulic (including potable, water for fire-fighting purposes, sewerage and stormwater drainage), communications and security services.

Project Element 10 – EO Depot Fort Direction, South Arm TAS

65. **Location of the Proposed Works.** EO Depot Fort Direction is located 46 kilometres south-east of Hobart on the South Arm Peninsula. A Location Plan is provided at Attachment 52, and a Site Plan depicting the location of the proposed facilities is at Attachment 53.

66. **Description of the Proposed Works.** The following facilities are proposed to be delivered at the depot:

- a. Administration Building. One Administration Building is proposed. The facility will accommodate up to 5 depot personnel, includes the areas described at paragraph 12(a) above, and has been designed to collocate the functions and personnel responsible for depot security. A Floor Plan of the proposed facility is at Attachment 54.
- b. Civil and Engineering Services. Relevant services will be provided to support these facilities, including pavements, traverses, electrical, hydraulic (including potable, water for fire-fighting purposes, sewerage and stormwater drainage), communications and security services.

Project Element 11 – EO Depot Edinburgh, Edinburgh SA

67. **Location of the Proposed Works.** EO Depot Edinburgh is located within the north-eastern portion of RAAF Base Edinburgh, which itself is located 25 kilometres north of Adelaide. A Location Plan is provided at Attachment 55, and a Site Plan depicting the location of the proposed facilities is at Attachment 56.

68. **Description of the Proposed Works.** The following facilities are proposed to be delivered at the depot:

- a. Administration Building. One Administration Building is proposed. The facility will accommodate up to 15 depot personnel and includes the areas described at paragraph 12(a) above. A Floor Plan of the proposed facility is at Attachment 57.
- b. Ammunition Process Building. One Ammunition Process Building is proposed. The building includes the areas described at paragraph 12(b) above. A Floor Plan of the proposed facility is at Attachment 58.
- c. Non-EO Storage Building. One Non-EO Storage building is proposed. The building includes the areas described at paragraph 12(d) above. A Floor Plan of the proposed facility is at Attachment 59.
- d. Civil and Engineering Services. Relevant services will be provided to support these facilities, including pavements, traverses, electrical, hydraulic (including

potable, water for fire-fighting purposes, sewerage and stormwater drainage), communications and security services.

Project Element 12 – EO Depot Stirling, Rockingham WA

69. **Location of the Proposed Works.** EO Depot Stirling is located within the northern portion of HMAS Stirling, which itself is located 40 kilometres south of Perth. A Location Plan is provided at Attachment 60, and a Site Plan depicting the location of the proposed facilities is at Attachment 61.

70. **Description of the Proposed Works.** The following facilities are proposed to be delivered at the depot:

- a. **Administration Building.** One Administration Building is proposed. The facility will accommodate up to 20 depot personnel and includes the areas described at paragraph 12(a) above. A Floor Plan of the proposed facility is at Attachment 62.
- b. **Ammunition Process Building.** One Ammunition Process Building is proposed. The building includes the areas described at paragraph 12(b) above. A Floor Plan of the proposed facility is at Attachment 63.
- c. **Earth Covered Buildings.** One Earth Covered Building is proposed. The building includes the areas described at paragraph 12(c) above. A Floor Plan of the proposed facility is at Attachment 64.
- d. **Non-EO Storage Building.** One Non-EO Storage Building is proposed. The building includes the areas described at paragraph 12(d) above. A Floor Plan of the proposed facility is at Attachment 65.
- e. **Civil and Engineering Services.** Relevant services will be provided to support these facilities, including pavements, electrical, hydraulic (including potable, water for fire-fighting purposes, sewerage and stormwater drainage), communications and security services.

Public Transport

71. There are no public transport services available at any of the sites due to both their relatively remote location and the secure nature of these depots. Accordingly,

there is a high reliance on the use of private vehicles for transport to and from the sites.

72. Adequate parking is proposed at all sites with scope for new administration buildings to address the lack of public transport. All other sites will continue as per current transport procedures.

Local Impact on Community, Roads and Traffic Concerns

73. It is anticipated that impacts on the local communities has the potential to be very positive for supply of local services, resources and material during construction. This may include demand for local accommodation, patronage of Cafés, Restaurants and other community resources to support the work force during construction.

74. The potential negatives that may impact on local communities during construction include long lead time for local trades and construction material supplies, shortage of accommodation in motel and hotel for other industries within the area. To ensure that the local communities are aware of the potential positive and negative impacts during the construction period a series of stakeholder engagement sessions will be conducted covering the community and industry prior to commencement of construction. Stakeholder engagement sessions will be via the following:

- a. Community stakeholder briefs,
- b. Industry briefs,
- c. Media releases, and
- d. Appointment of local liaison officers for the construction period.

75. There is no forecast increase in the working population of any site that will occur as a result of this project. Accordingly, the existing traffic load on road networks in and around project sites is not expected to increase after delivery of the project scope.

76. During construction there will be an increase in the number of large vehicles around each site as construction materials are delivered. Construction management controls will be implemented to mitigate the effects of this increased traffic on local road networks. These measures may include the use of dedicated construction access

gates to prevent delays to traffic using main roads. Given the remote location of most depots, it is anticipated that congestion on major roads will be largely avoided.

Zoning, Local Approvals and Land Acquisition

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

78. No land acquisitions are associated with this proposal, although two minor expansions to property interests are required should Defence wish to maximise permissible EO storage and handling. The two expansions are as follows.

- a. **EO Depot Twofold Bay.** The Commonwealth currently holds restrictions on permissible land uses to a small portion of NSW State Forest surrounding the depot. To comply with Defence EO policy of controlling access around depots, a minor extension of existing land use restrictions is required. Defence has initiated the process to extend these Commonwealth restrictions.
- b. **Point Wilson Explosives Area.** There are currently Declared Naval Waters around the immediate vicinity of wharf infrastructure at Point Wilson. To comply with Defence EO policy of controlling access around depots, a minor extension to the existing Declared Naval Waters boundary is required. Defence has initiated the process to extend these Commonwealth restrictions.

Planning and Design Concepts

79. Due to both the utilitarian nature of EO storage and processing infrastructure and physical storage specifications of explosive ordnance, there is limited opportunity to apply aesthetic design concepts to facilities.

80. Despite this, a number of planning concepts have informed facility design including physical layouts to enable work flow and functional efficiency, interaction between various elements that are interdependent in a depot, and security and safety requirements of people and equipment. Furthermore, facilities have been planned to harmonise with any existing base and depot typologies and precincts, and the proposed designs have considered the performance of materials, equipment, finishes and construction techniques in local climates.

Structural Design

81. During the Planning Phase, Defence commissioned detailed geotechnical investigations at each site to inform the building foundation designs.
82. Across the Explosive Ordnance Logistics Reform Program project, the proposed facilities will generally be steel framed structures with metal sheet wall and roof cladding, or reinforced concrete structures. Floors are generally traditional reinforced concrete slabs, finished to a high degree of flatness to enable safe and efficient operation of any materials handling equipment.
83. Each of the storage facilities have clear-span spaces to maximise the available area for storage.

Materials and Furnishings

84. Materials and furnishings will be selected from those readily available locally for their functionality, durability, low maintenance and ecologically sustainable design properties.

Mechanical Services

85. The mechanical services works involve a number of systems. Air-conditioning will be provided to areas where climate and usage dictates a need. The selection of building services and associated equipment to new air-conditioned facilities has targeted an economic balance between capital cost, operation and maintenance costs. System selection has been based on lifecycle costing analysis, and particular consideration has been given to energy efficient design solutions and natural ventilation where appropriate.

Hydraulic Services

86. The hydraulic services will conform to the requirements of all applicable Australian legislation, regulations, codes of practice and guidance publications relevant to the works.
87. Where available, existing sewer and water supply infrastructure will be extended to accommodate the proposed works at each site. For Point Wilson

Explosives Area and EO Depots Cerberus, Fort Direction, Edinburgh and Stirling, where no sewer mains exist, new septic sewage installations will be provided.

Electrical Services

88. Generally there is sufficient capacity in the high voltage supply to each site to support the proposed developments; facilities will be connected to these mains. In the case of EO Depots Darwin and Edinburgh, new building substations will be provided and connected to the existing site high voltage network to support the increase in demand associated with the new buildings.

89. Lighting, power, lightning protection and fire detection will be provided in accordance with the relevant Australian Standards and any additional Defence requirements. Electrical infrastructure and switchboards will have modest spare capacity to allow for some future growth or demand. Fire detection systems, indication panels, emergency and exit lighting will be provided as necessary to suit the existing site systems.

Fire Protection

90. All construction and fire protection requirements will, as a minimum, be in accordance with the provisions of the Building Code of Australia, the Manual of Fire Protection Engineering (MFPE), and all other applicable codes and standards. The MFPE details Defence fire protection policies for asset protection and building function protection.

91. The MFPE notes that direct attack on EO storage buildings involved in fire presents an unacceptable risk to staff and fire-fighters. Dispensations to the Building Code of Australia will be sought to either reduce or omit the provision of fire hydrants and reels to EO storage buildings.

92. Where required, bushfire assessments have been completed for sites to ensure the designs achieve the required minimum bushfire protection measures, satisfy legislative requirements for the assessment of development in bushfire prone land, address the assessment and reporting requirements in the MFPE, and ensure compliance with any required Asset Protection Zone building setbacks to bushland, building construction standards for bushfire protection, fire access and water supply requirements.

Acoustics

93. All proposed facilities that are deemed ‘inhabitable’ under the relevant Defence EO policy (e.g. Administration Buildings) will comply with the relevant acoustics codes and standards, including:

- a. National Construction Code 2016 (NCC);
- b. Defence Construction Security Reference Manual 2nd Edition, 2007 (DCSRM);
- c. National Standard for Occupational Noise (NOHSC:1007(2000));
- d. National Code of Practice for Noise Management and Protection of Hearing at Work (NOHSc:2009 (2004));
- e. AS/NZS ISO 717.1:2004 Acoustics – Rating of sound insulation in buildings and of building elements –Airborne sound insulation;
- f. Australian Standard AS2021:2015 Acoustics – Aircraft noise intrusion – Building siting and construction;
- g. Australian Standard AS2107:2016 Acoustics – Recommended design sound levels and reverberation times for building interiors; and
- h. Australian Standard AS2670.2:1990 Evaluation of human exposure to whole-body vibration – Continuous and shock-induced vibration in buildings (1-80 kHz).

94. For EO Depots Amberley, Darwin and Edinburgh, aircraft noise is the dominant noise source. Acoustic attenuation measures have been incorporated into the design of relevant facilities at these sites to mitigate the impacts of aircraft noise on building occupants to the relevant work health and safety levels.

Landscaping

95. Landscaping works will restore areas disturbed during construction. Precautions will be taken to avoid compromising existing environmental sensitivities by adopting landscaping practices in keeping with local environmental conditions. Landscaping design will have regard to minimising potable water usage.

Other Civil Works

96. The proposed works include significant pavements for the storage, movement, and handling of explosive ordnance; the extent of new pavement works varies between sites. At each site, the pavement type has been selected to balance the capital construction cost and ongoing maintenance liability having regard to the climatic and geotechnical conditions and the types of vehicles and other equipment to be stored or operated on the hardstand.

Water and Energy Conservation Measures

97. The Commonwealth is committed to Ecologically Sustainable Development and the reduction of greenhouse gas emissions. Defence reports annually to Parliament on its energy management performance and on its progress in meeting the energy efficiency targets established by the Government as part of its commitment to improve Ecologically Sustainable Development. Defence also implements policies and strategies in energy, water and waste to improve natural resource efficiency and to support its commitment in the reduction of energy consumption, potable water consumption and waste diversion to landfill. This project has addressed this policy by adopting cost effective Ecologically Sustainable Development as a key objective in the design development and delivery of new facilities.

98. The ecologically sustainable development targets and measures for the project have been balanced with other requirements for Defence buildings (e.g. security, heritage considerations and workplace health and safety) to ensure that, first and foremost, Defence's operational capability is not compromised. Due to the functional and technical nature of EO storage facilities, some requirements will not apply.

99. All relevant buildings included in this project will be designed, constructed, operated and maintained to ensure that they use energy efficiently. To achieve this, as a minimum, the buildings will comply with:

- a. Section J of Volume One of the Building Code of Australia, National Construction code 2015 Energy Efficiency;
- b. Part 3.12 of Volume Two of the Building Code of Australia, National Construction Code 2015 Energy Efficiency;
- c. the Energy Efficiency in Government Operations (EEGO) policy; and

- d. Smart Infrastructure Manual; Design and Construction v1.0 (April 2015),
Department of Defence.

100. Energy use at all buildings will be monitored through whole building energy meters, and office spaces will have lighting, general power and major switchboards sub-metered and connected to monitoring systems where available to allow Defence to better manage and monitor environmental performance. .

101. Efficient water usage will be encouraged through water saving measures where practical. This may include installation of water ‘smart meters’ to monitor total water facility consumption, specified appliances and equipment that meets the minimum Water Efficiency Labelling Scheme ratings nominated in the Smart Infrastructure Manual, and incorporating water sensitive urban design practices through landscaping designs.

Demolition and Disposal of Existing Structures

102. The proposed works provide for minimal demolitions, and includes only those facilities that are being replaced and are beyond their useful life, or are beyond their useful life and exist on footprints required for the new scope.

Provisions for People with Disabilities

103. Disabled access and facilities will be provided to all proposed Administration Buildings in accordance with the Building Code of Australia, Australian Standard AS1428 and Defence’s policy ‘Disabled Access and Other Facilities for Disabled Persons’.

104. Dispensations have been sought for all other proposed buildings on the basis that the facilities’ operational requirements are inconsistent with the Building Code of Australia requirements; Defence EO policy mandates, for safety reasons, a level of physical ability for personnel operating within an active EO depot.

Childcare Provisions

105. There is no requirement for additional childcare facilities as a result of this project, as there will be no net increase in personnel. Existing childcare facilities are deemed to meet the current needs of each site.

Security

106. No public access is provided to the proposed facilities, and entry will be controlled through either Depot security controls (for standalone sites) or existing controlled access points (for sites existing within the bounds of Defence Bases). The proposed buildings have been designed for the security classification stipulated by Defence requirements.

Work Health and Safety Measures

107. The proposed facilities to be provided under this project will comply with the Department of Defence's Work Health and Safety Policy, the *Work Health and Safety Act 2011*, Work Health and Safety (Commonwealth Employment - National Standards) Regulations and the Defence Work Health and Safety Manual.

108. The Australian Government is committed to improving work health and safety outcomes in the building and construction industry. In accordance with Section 35(4) of the *Building and Construction Industry Improvement Act 2005*, contractors will therefore be required to hold full work health and safety accreditation from the Office of the Federal Safety Commissioner under the Australian Government Building and Construction Work Health and Safety Accreditation Scheme.

109. Safety aspects of this proposal have been addressed during the design process and have been documented in a Safety in Design Report completed by each contractor and through Hazardous Areas workshops. No special or unusual public safety risks have been identified in this process. Prior to construction commencing, the contractor will be required to negotiate a tri-partite (Defence, depot operator and construction contractor) *Explosive Ordnance Cooperation, Consultation and Coordination Plan*. This plan identifies all relevant risks and safety, mitigation, access and evacuation plans for the Delivery Phase. All construction sites will be appropriately secured to prevent public access during the construction period, and each contractor will be required to submit a Work Health and Safety Plan prior to the commencement of any construction activities.

COST EFFECTIVENESS AND PUBLIC VALUE

Outline of Project Costs

110. The estimated out-turn cost of this project is \$230.9 million, excluding Goods and Services Tax. This cost estimate includes construction costs, management and design fees, furniture, fittings and equipment, contingencies and an escalation allowance.

111. An estimated total cost of ownership of \$4.0 million per year has been estimated for the proposed works. This cost estimate provides the basis for funding the ongoing operation and support services required by this proposal.

Details of Project Delivery System

112. The proposed delivery system comprises three works packages, utilising both the Defence suite of Contracts Head Contractor and Medium Works Contracts as follows:

- a. Works Package 1 (EO Depots Amberley, Mt Stuart and Darwin) – Design Services Contract (DSC-1-2003) and Head Contract (HC-1-2003).
- b. Works Package 2 (EO Depots Myambat, Williamtown, Twofold Bay, Mangalore, Cerberus and Fort Direction, and Point Wilson Explosives Area) – Design Services Contract (DSC-1-2003), Head Contract (HC-1-2003) and Medium Works (MW-2-2004).
- c. Works Package 3 (EO Depots Edinburgh and Stirling) – Design Services Contract (DSC-1-2003) and Head Contract (HC-1-2003).

113. The delivery mechanism for each site was selected on the basis of the scope, risk of disruption of operational activities at the site locations, the value of the works, interdependencies with other concurrent projects and capacity of industry at each location.

114. Each Works Package will be administered by a Project Manager / Contract Administrator engaged under Defence's Infrastructure Panel arrangements.

Construction Program

115. Subject to Parliamentary approval of the Project, construction is expected to commence in early 2018 and be complete by late 2020 for all sites.

Public Value

116. The proposed facilities will contribute to the ongoing effectiveness of Australian Defence Force capability by directly supporting operations and training.

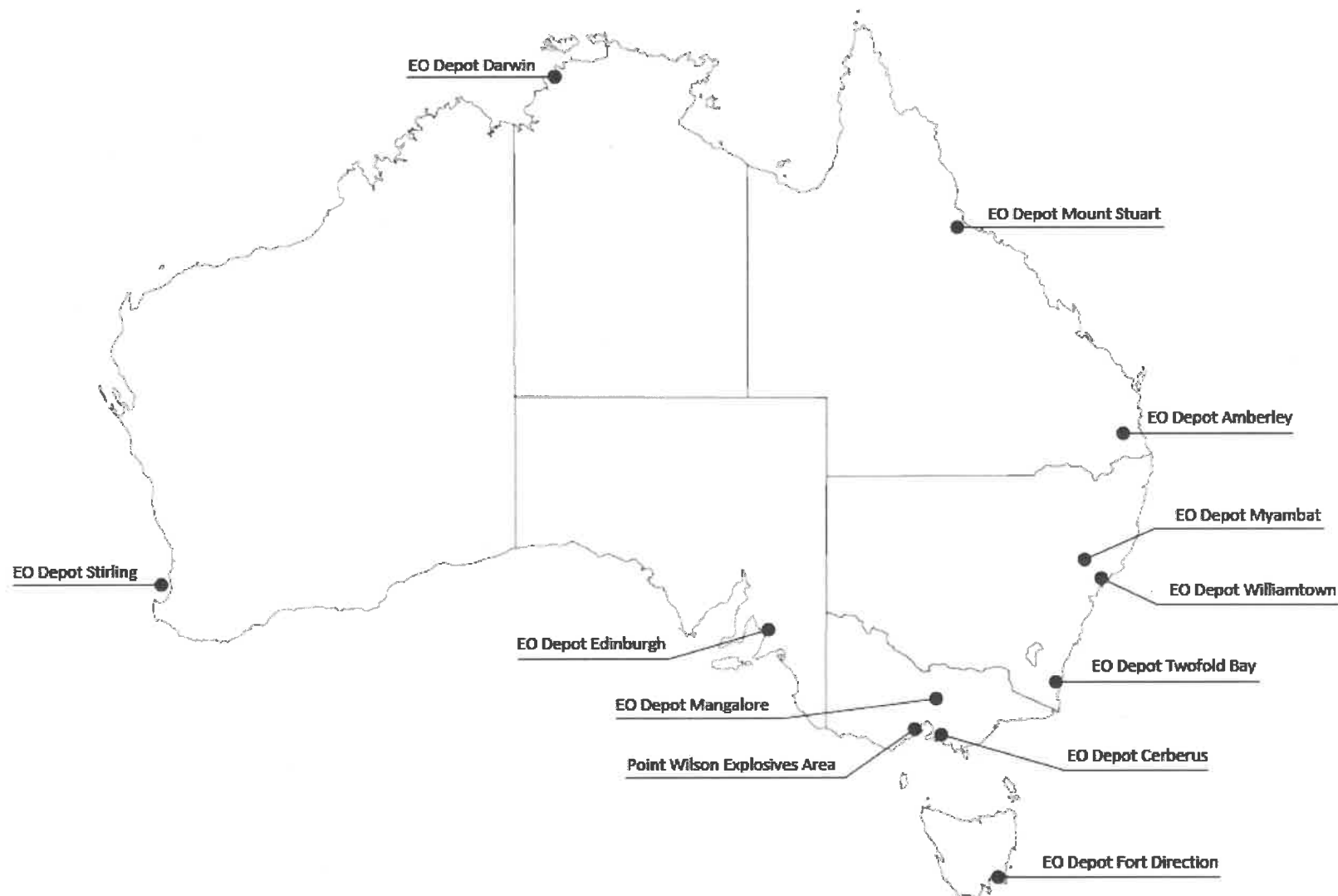
117. The proposal will also employ a diverse range of skilled consultants, contractors and construction workers. The level of industry engagement to deliver the project will provide opportunities for the up-skilling of industry, and improvement of individual skills and employability on future EO projects.

118. Furthermore, the proposal will stimulate business in regional Australia given the remote location of project sites. The potential to utilise local suppliers of construction materials and labour presents an opportunity to boost activity in regional economies.

Revenue

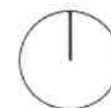
119. No revenue will be derived from this project.

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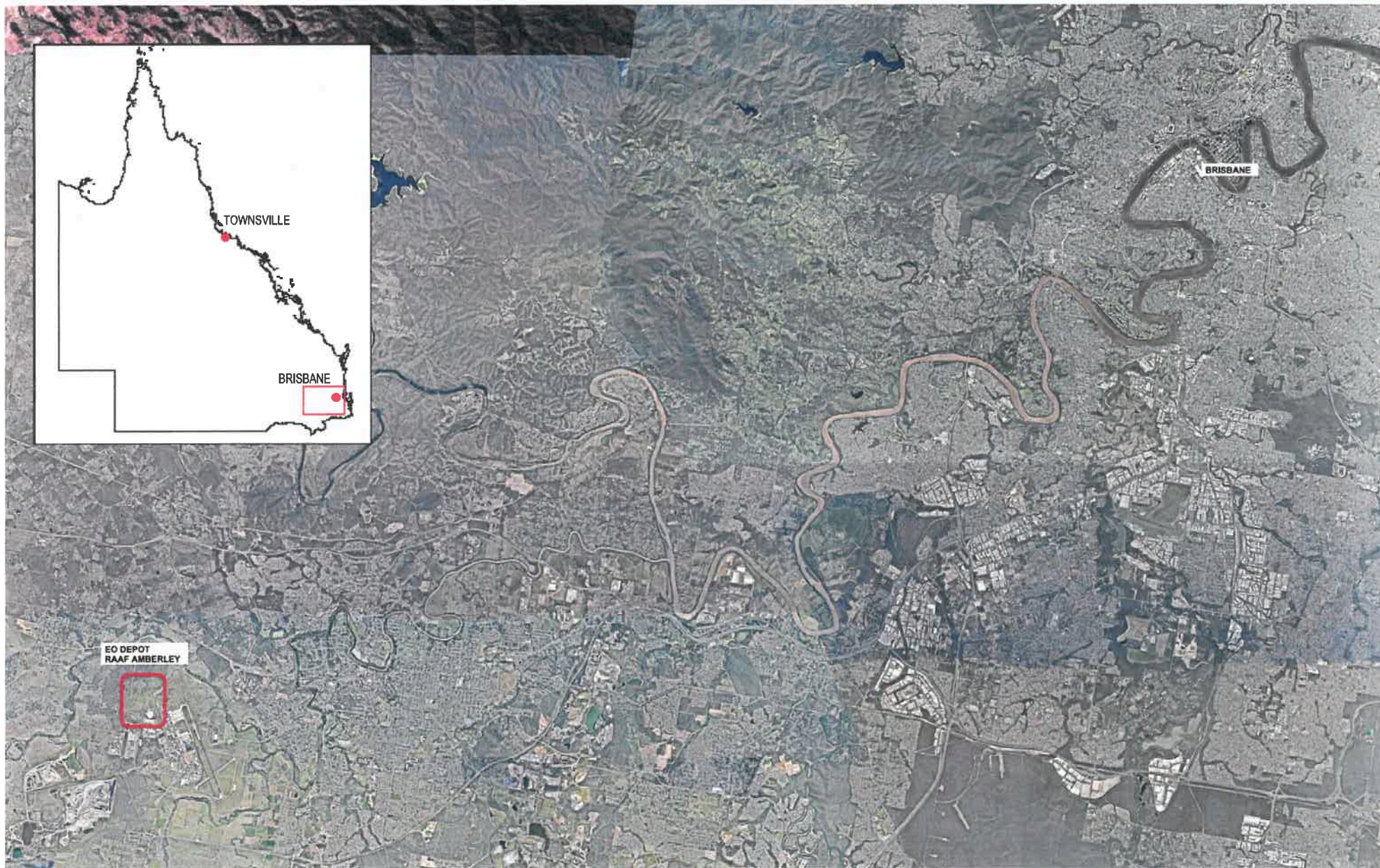


Explosive Ordnance Logistics Reform Program

National Location Plan



Attachment 1



Explosive Ordnance Depot Amberley, Ipswich QLD
Location Plan





Explosive Ordnance Depot Amberley, Ipswich QLD

Site Plan

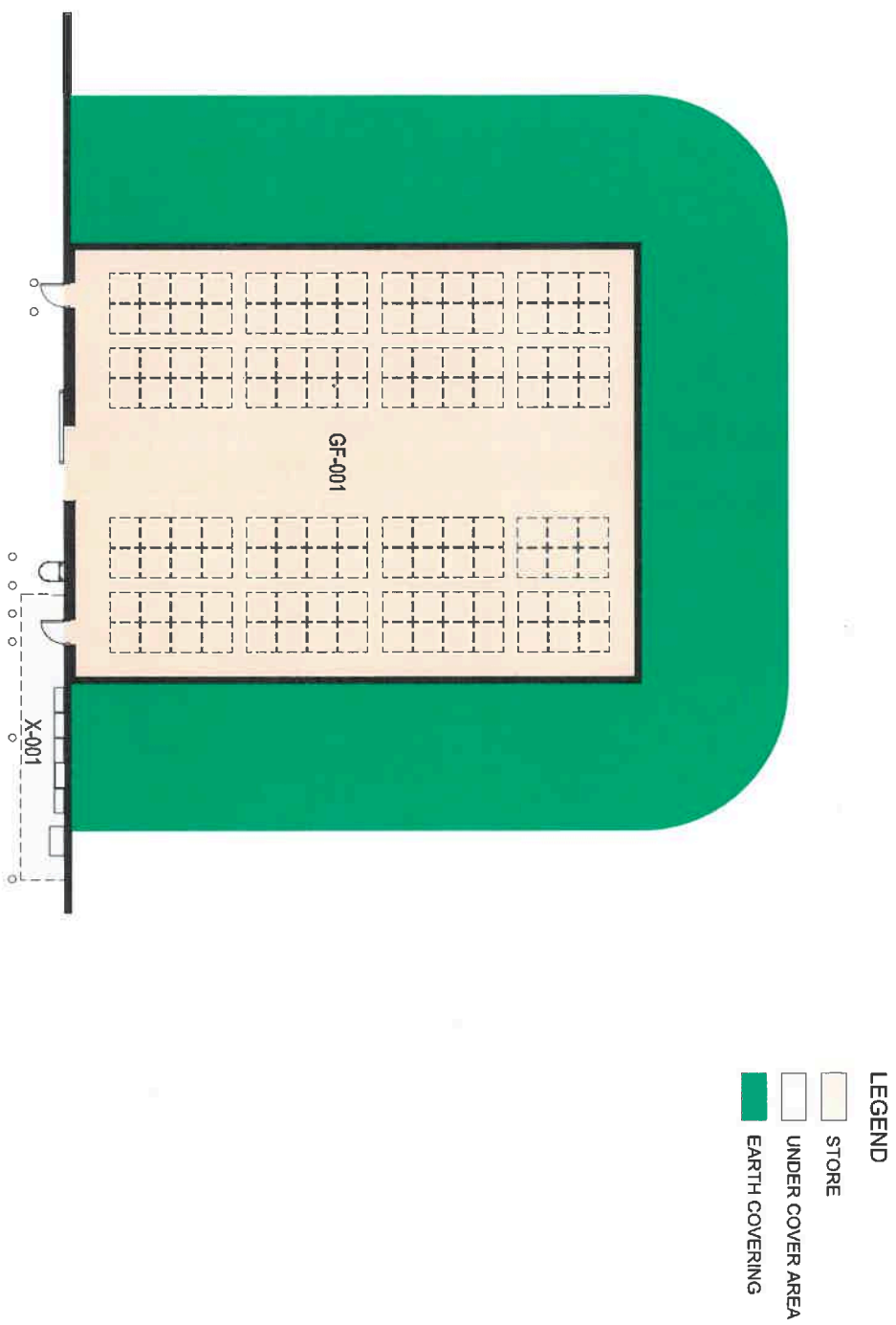
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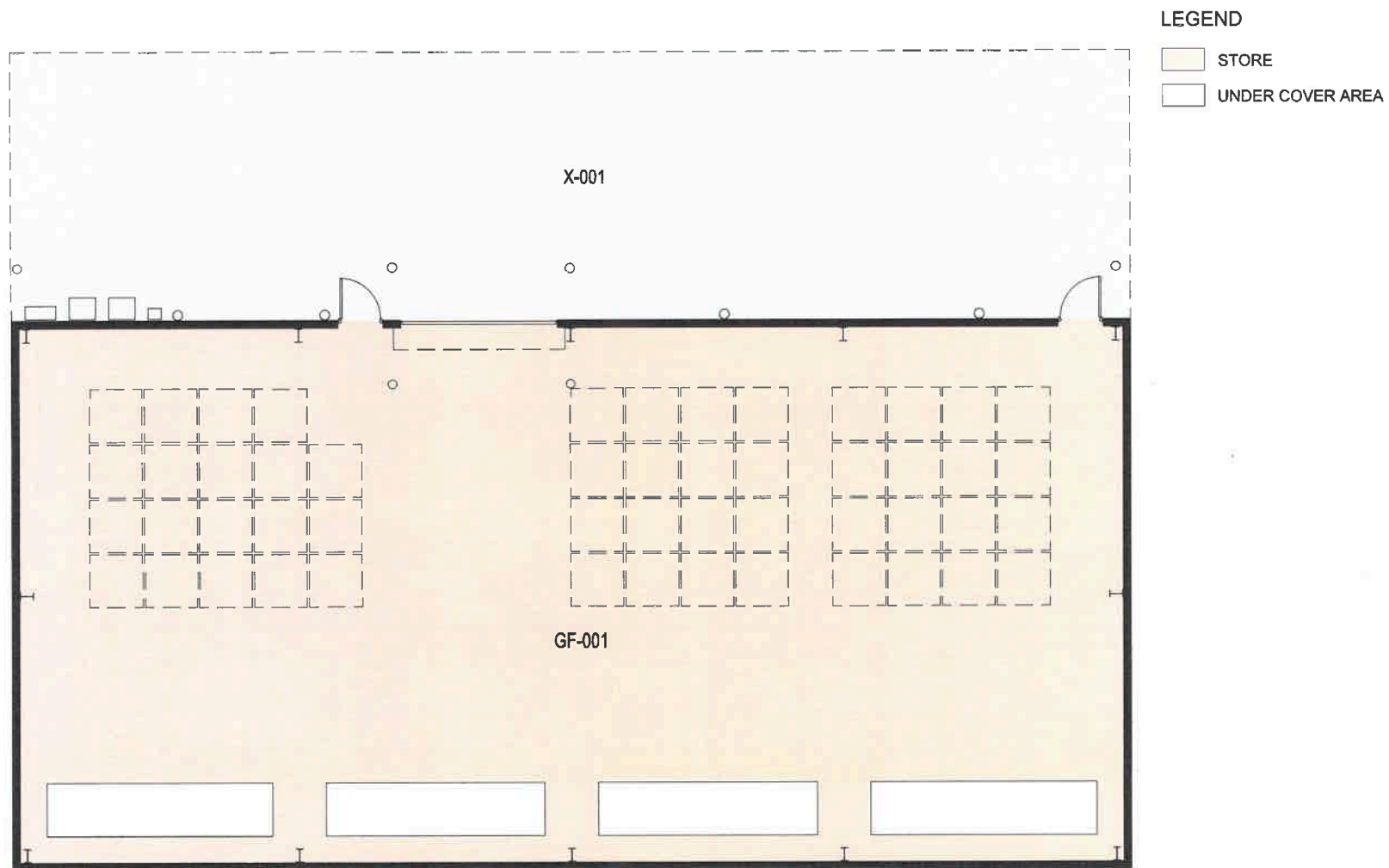
Attachment 3







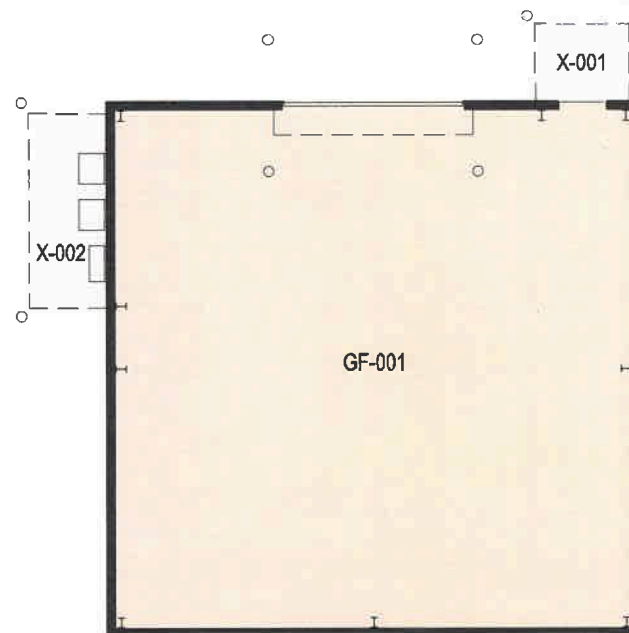
Explosive Ordnance Depot Amberley, Ipswich QLD
Earth Covered Building Floor Plan



LEGEND

STORE

UNDER COVER AREA



Explosive Ordnance Depot Amberley, Ipswich QLD

Light Frangible Building (Flares) Floor Plan

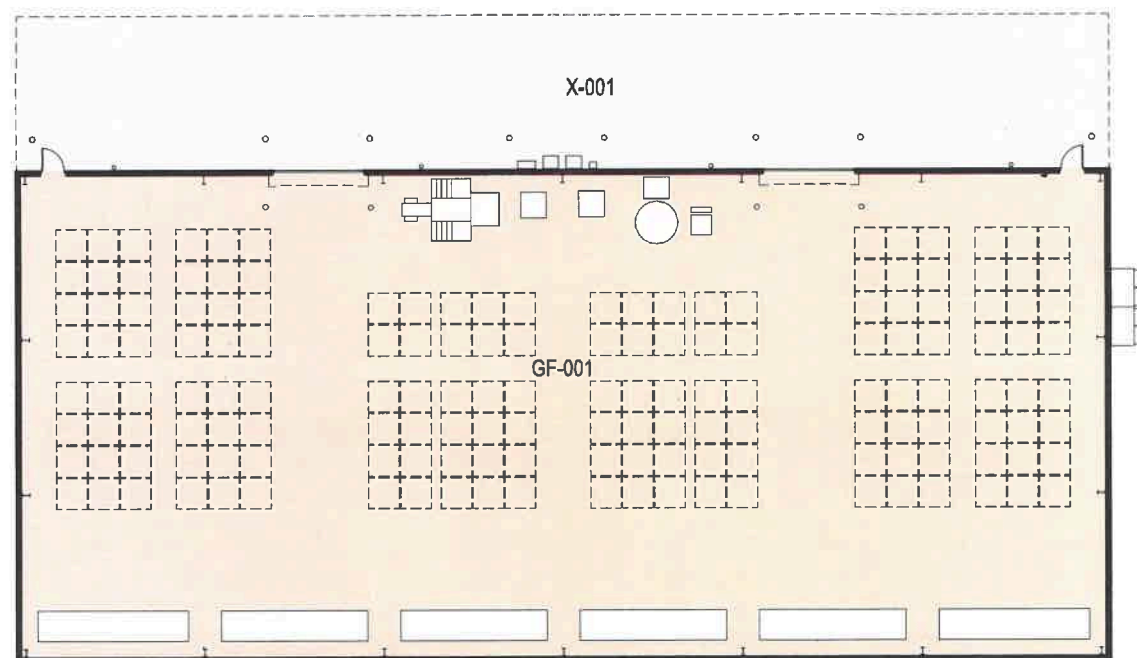
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Attachment 8

LEGEND

- STORE
- UNDER COVER AREA



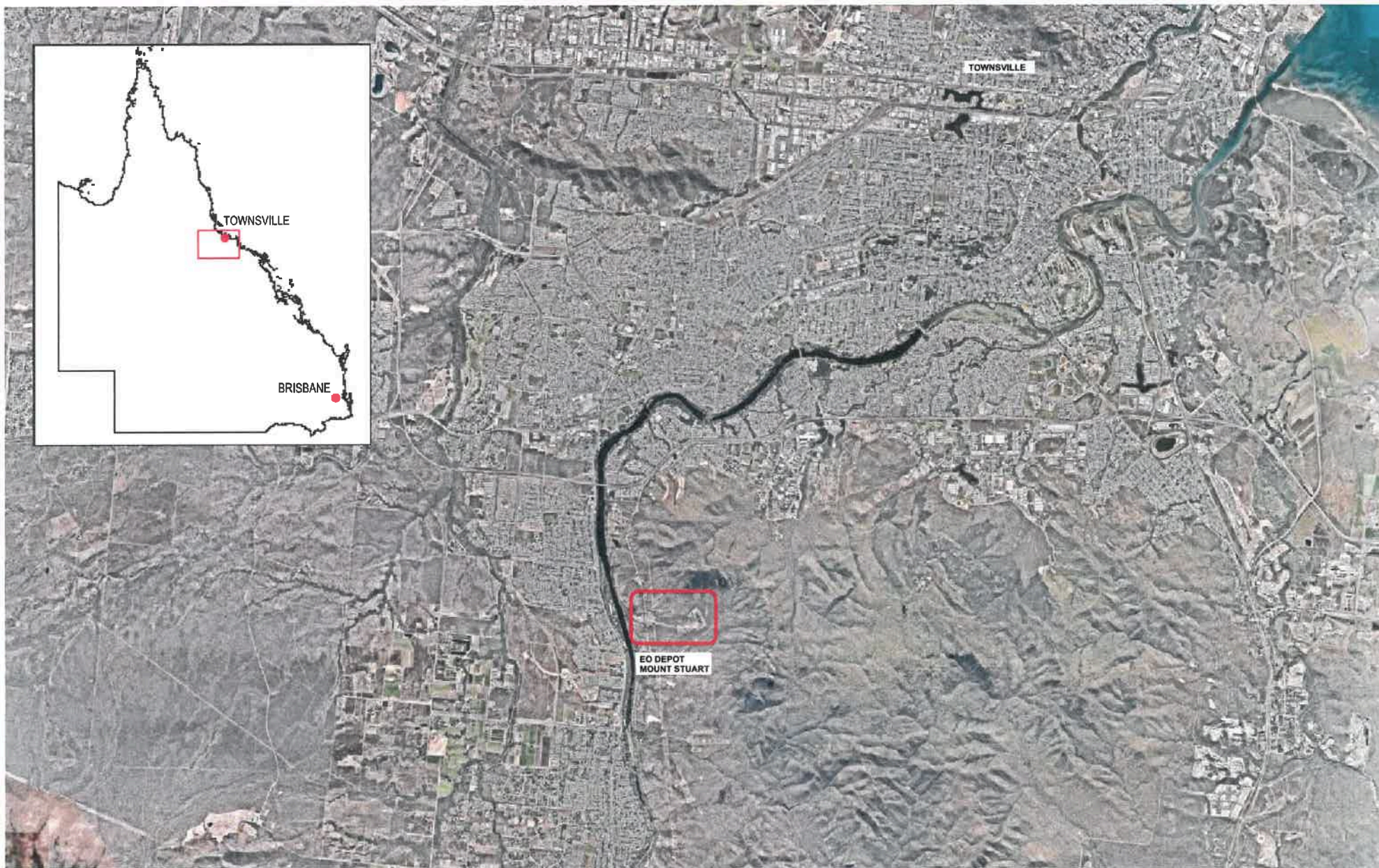
Explosive Ordnance Depot Amberley, Ipswich QLD

Non-Explosive Ordnance Store Floor Plan

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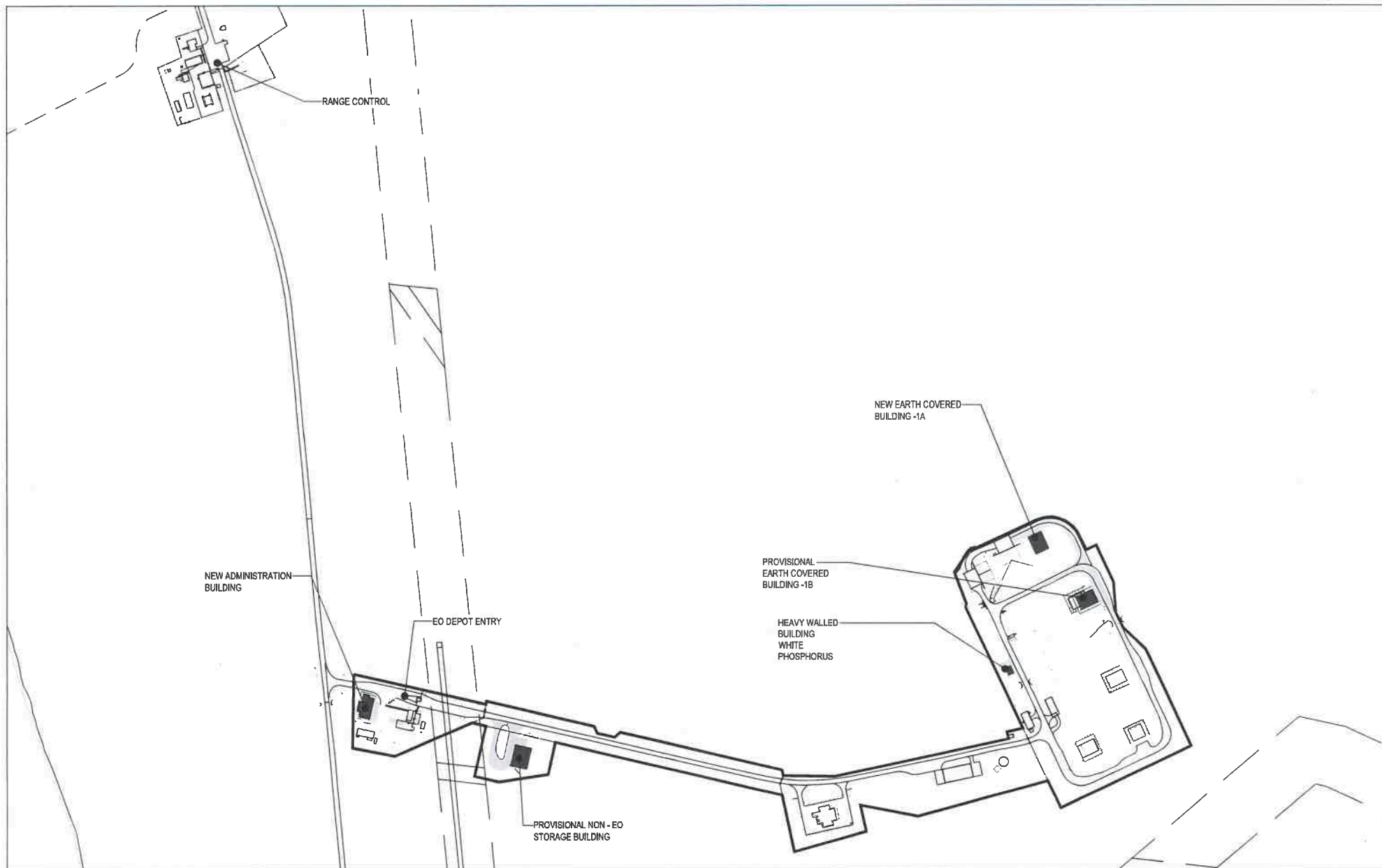


Attachment 9

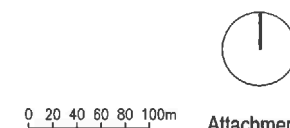


Explosive Ordnance Depot Mount Stuart, Townsville QLD
Location Plan





Explosive Ordnance Depot Mount Stuart, Townsville QLD
Site Plan

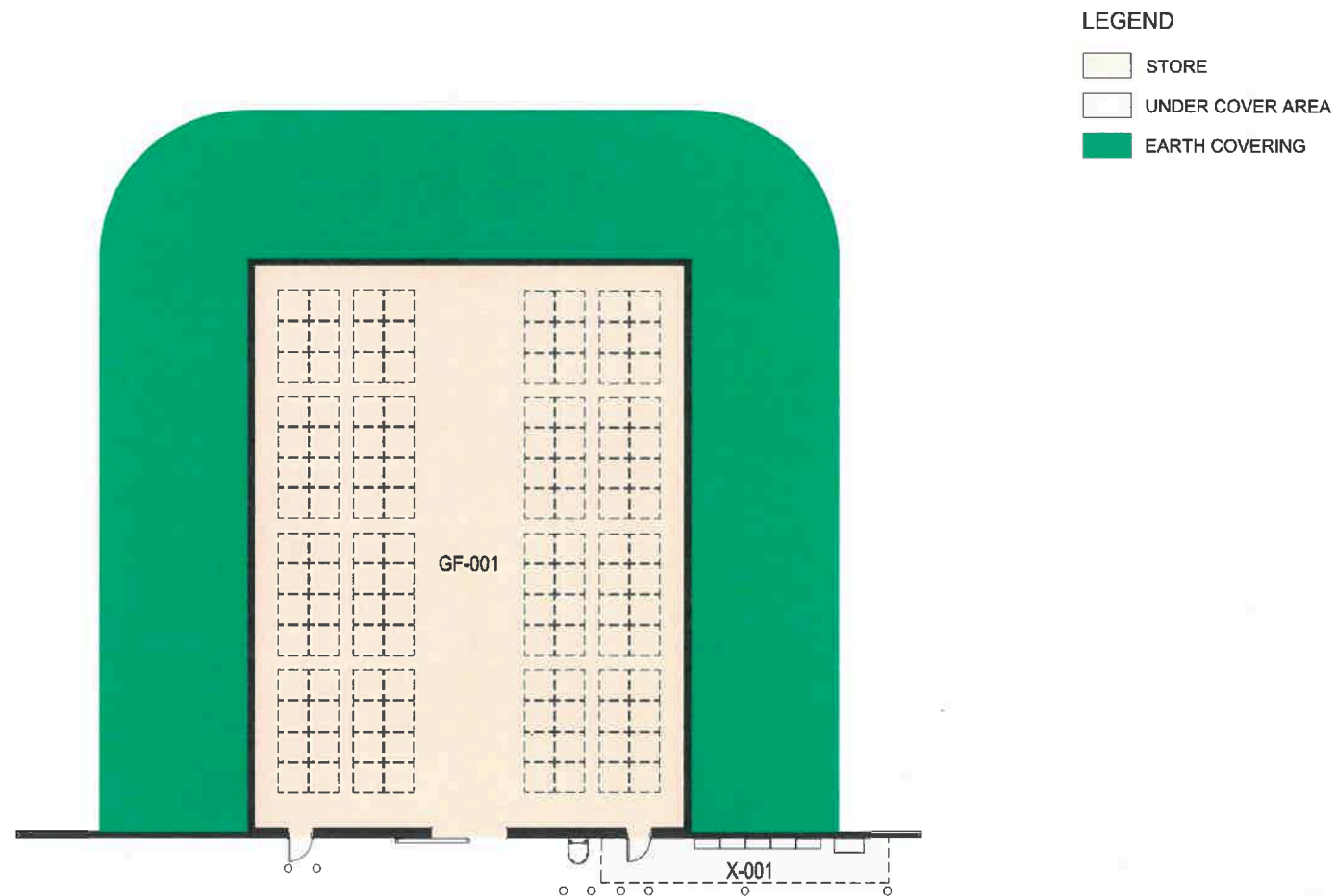




Explosive Ordnance Depot Mount Stuart, Townsville QLD
Administration Building Floor Plan

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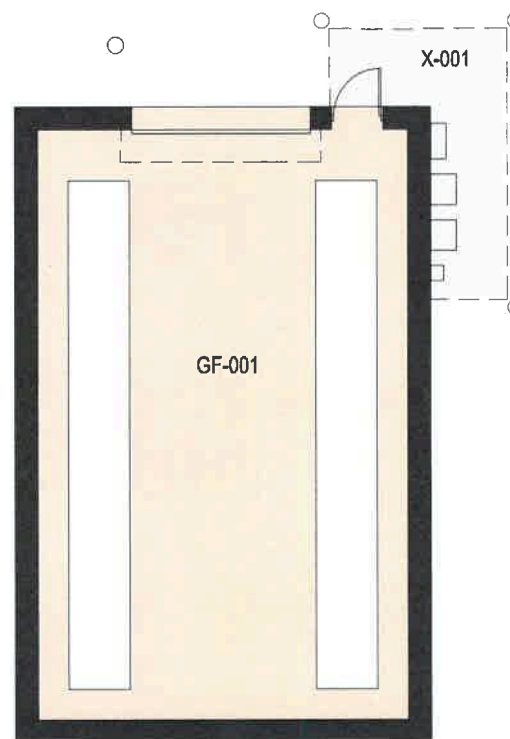




LEGEND

STORE

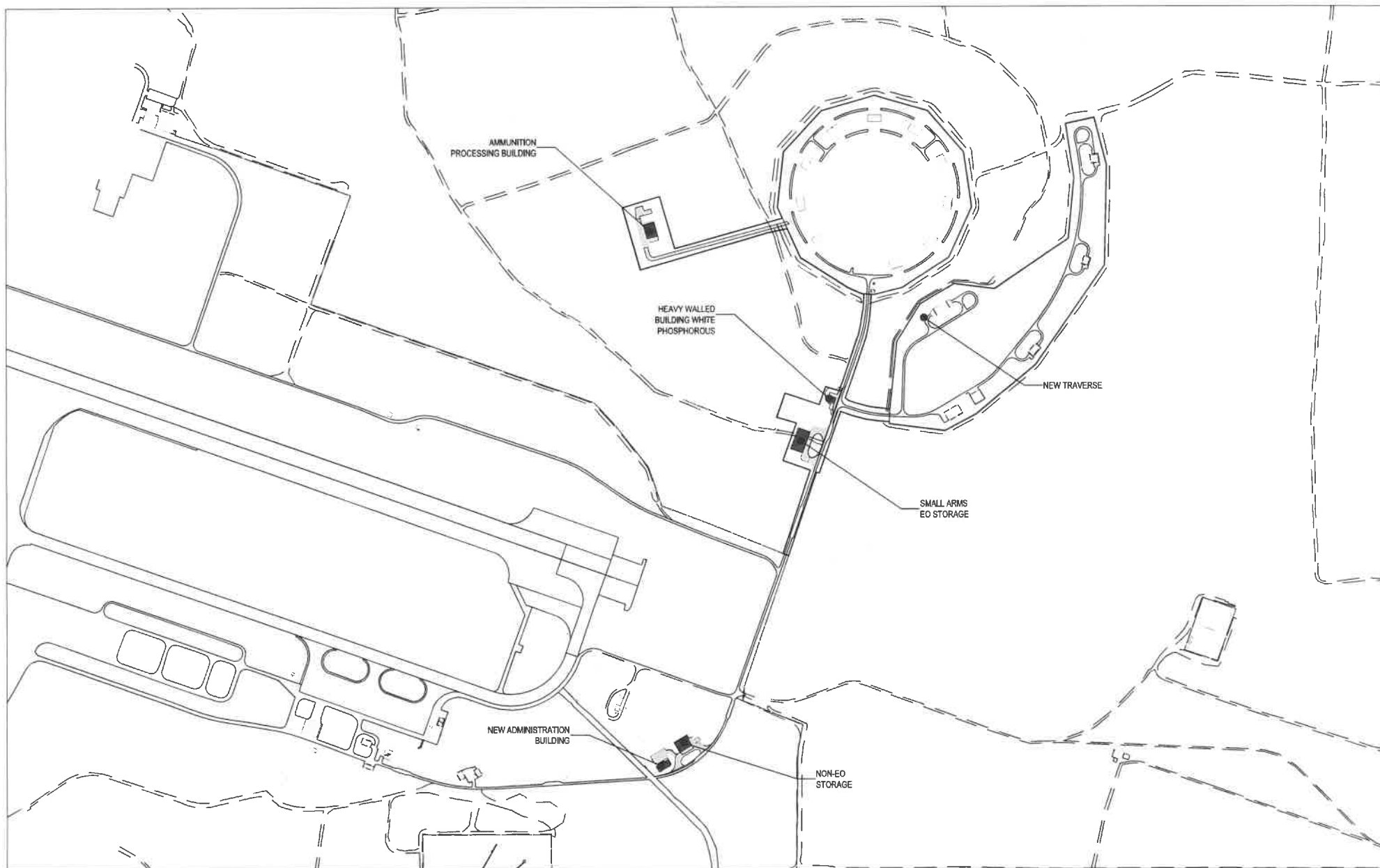
UNDER COVER AREA





Explosive Ordnance Depot Darwin, Darwin NT
Location Plan





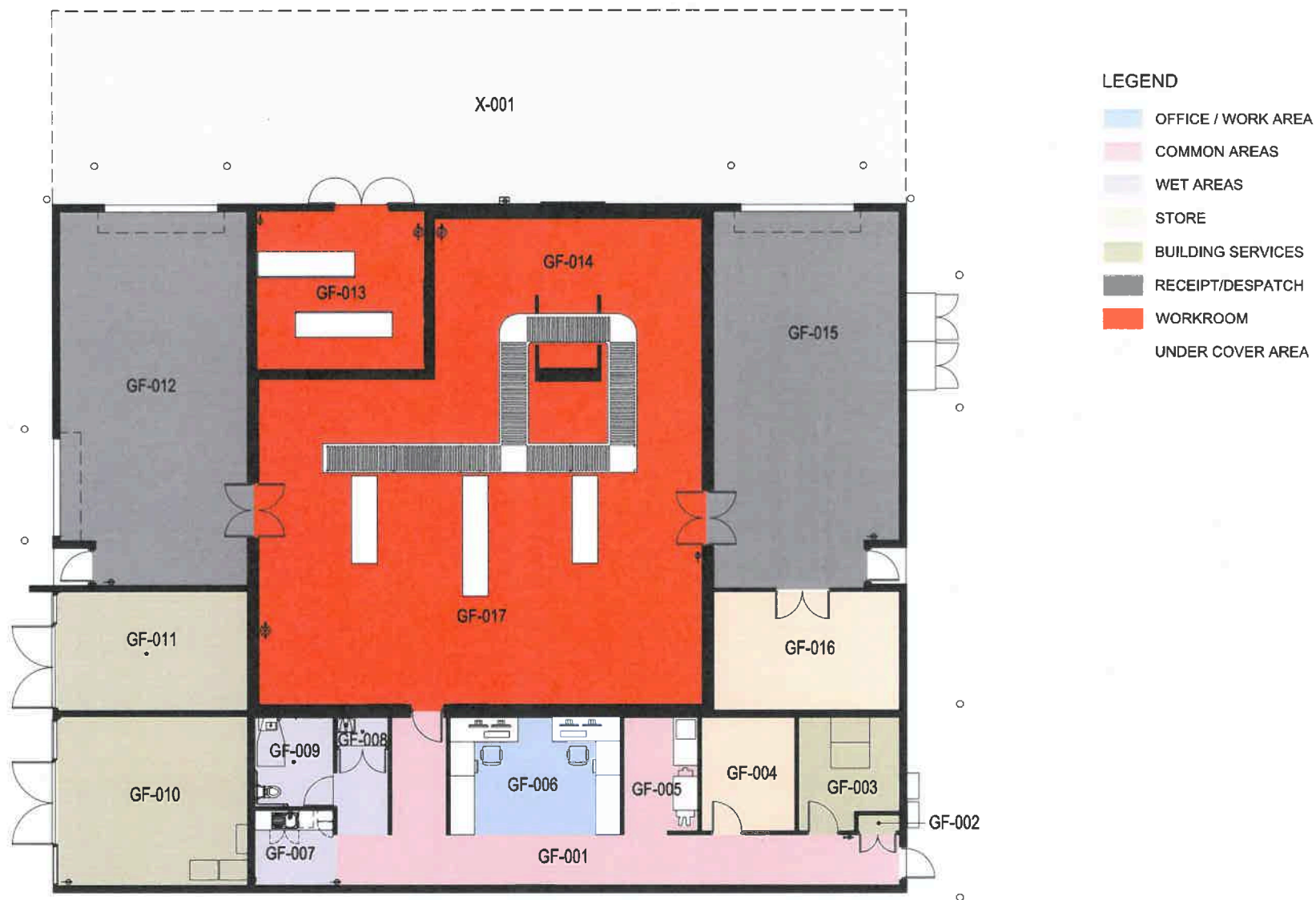
Explosive Ordnance Depot Darwin, Darwin NT
Site Plan

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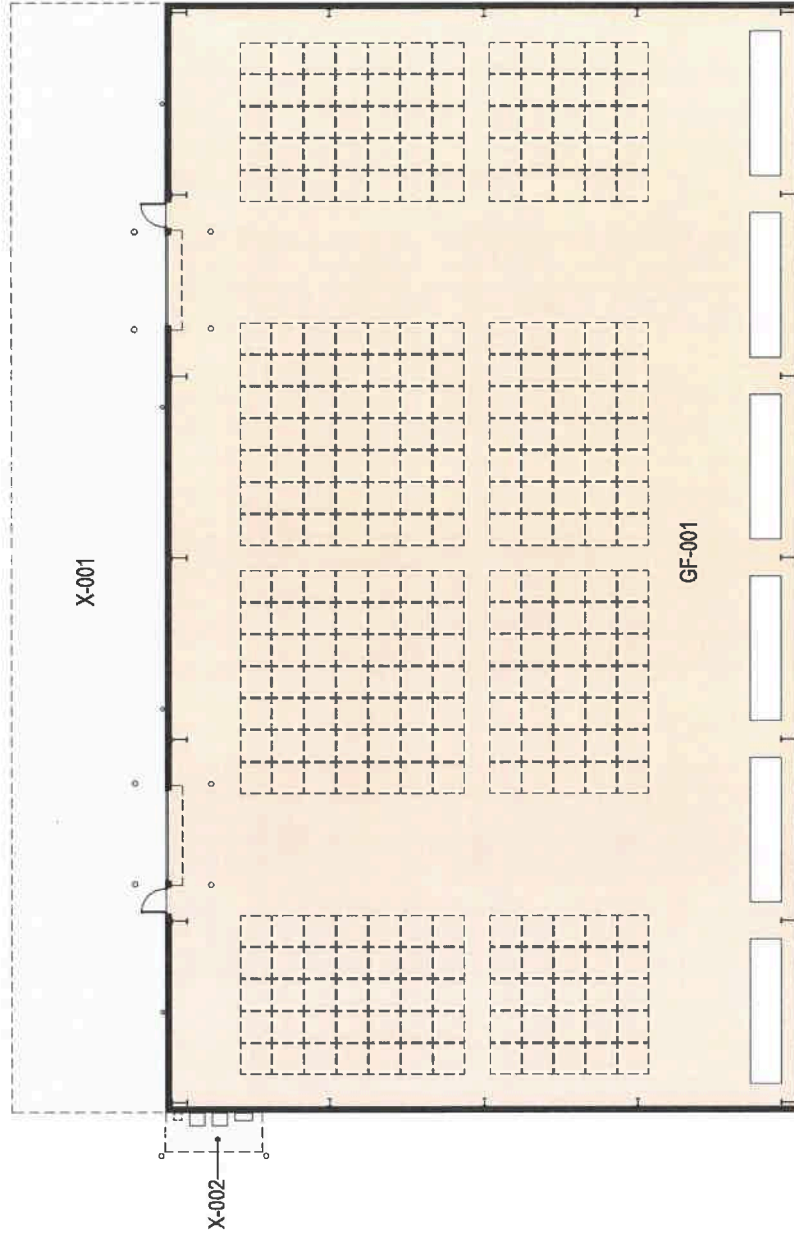


Attachment 16





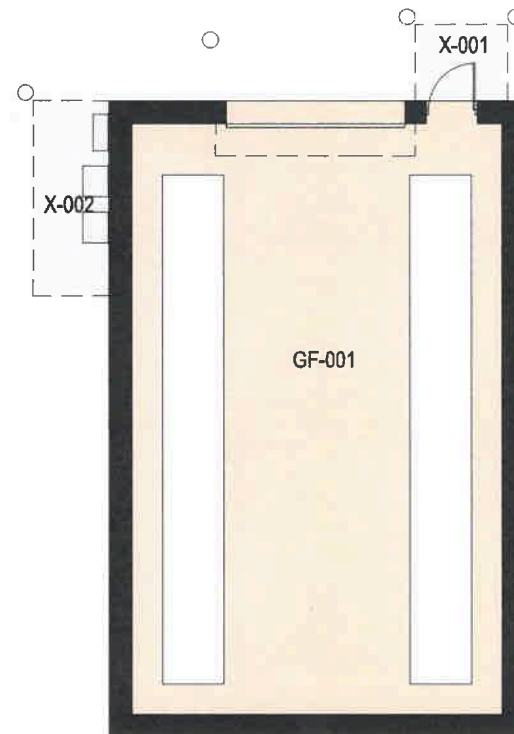
Explosive Ordnance Depot Darwin, Darwin NT
Ammunition Process Building Floor Plan



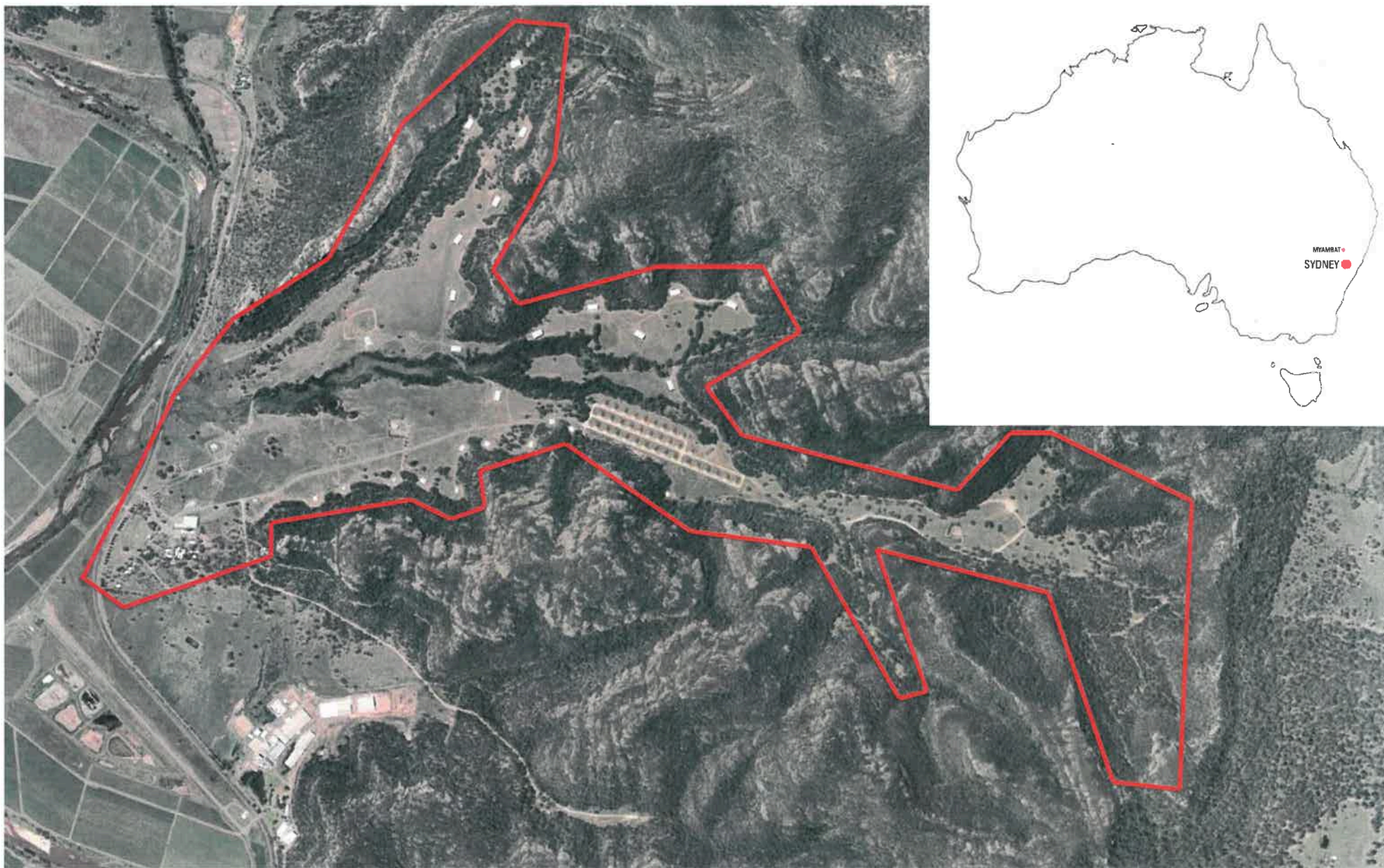
LEGEND

 STORE

 UNDER COVER AREA







Explosive Ordnance Depot Myambat, Denman NSW
Location Plan

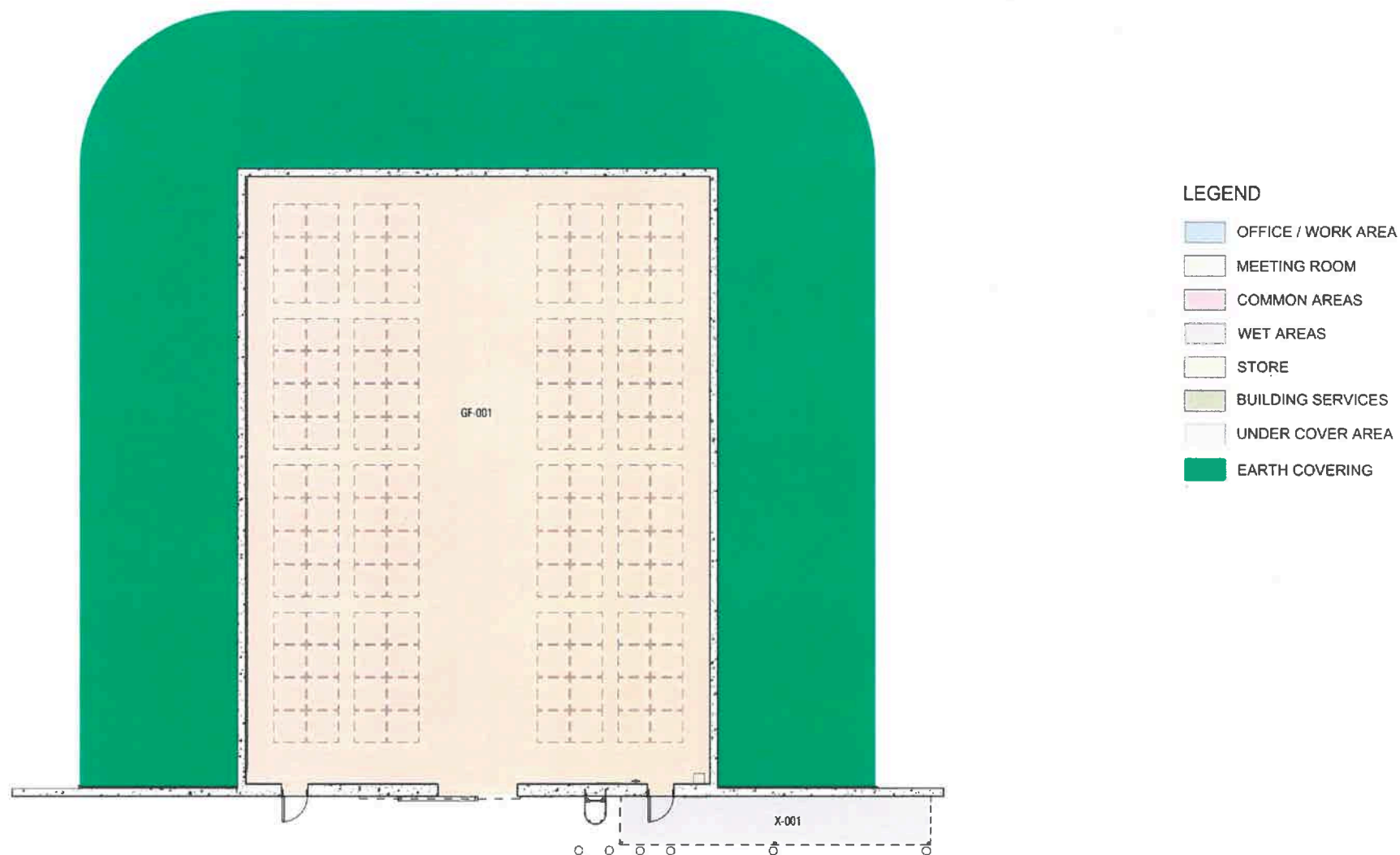


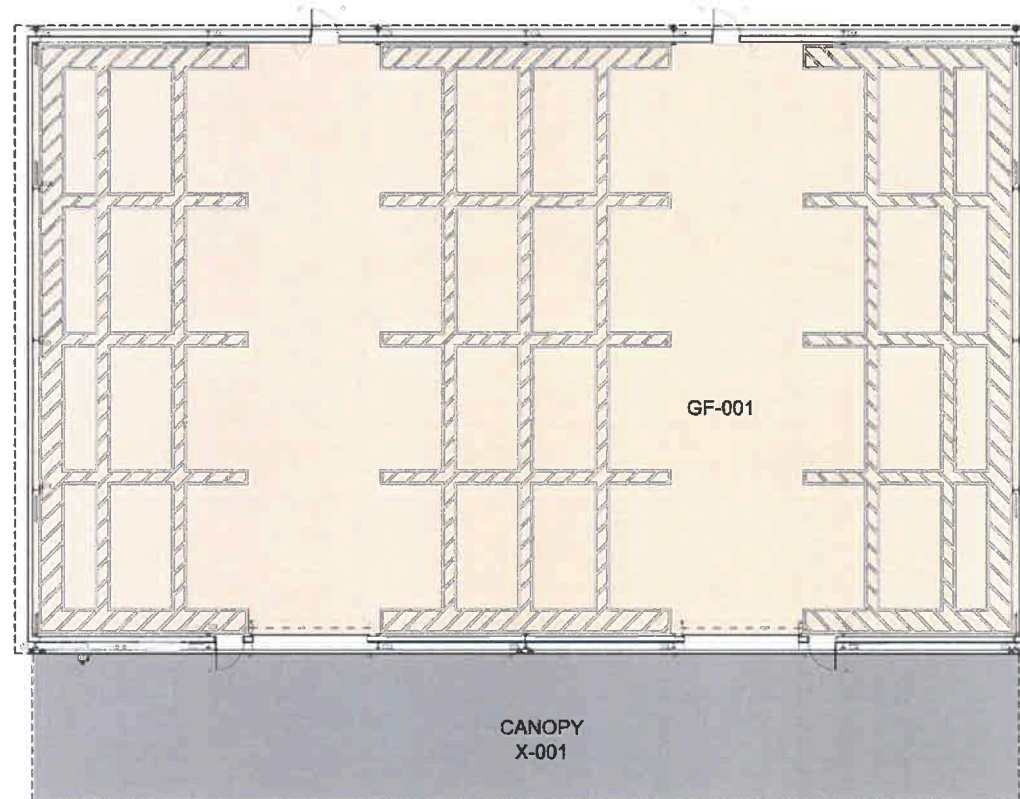


Explosive Ordnance Depot Myambat, Denman NSW


Site Plan

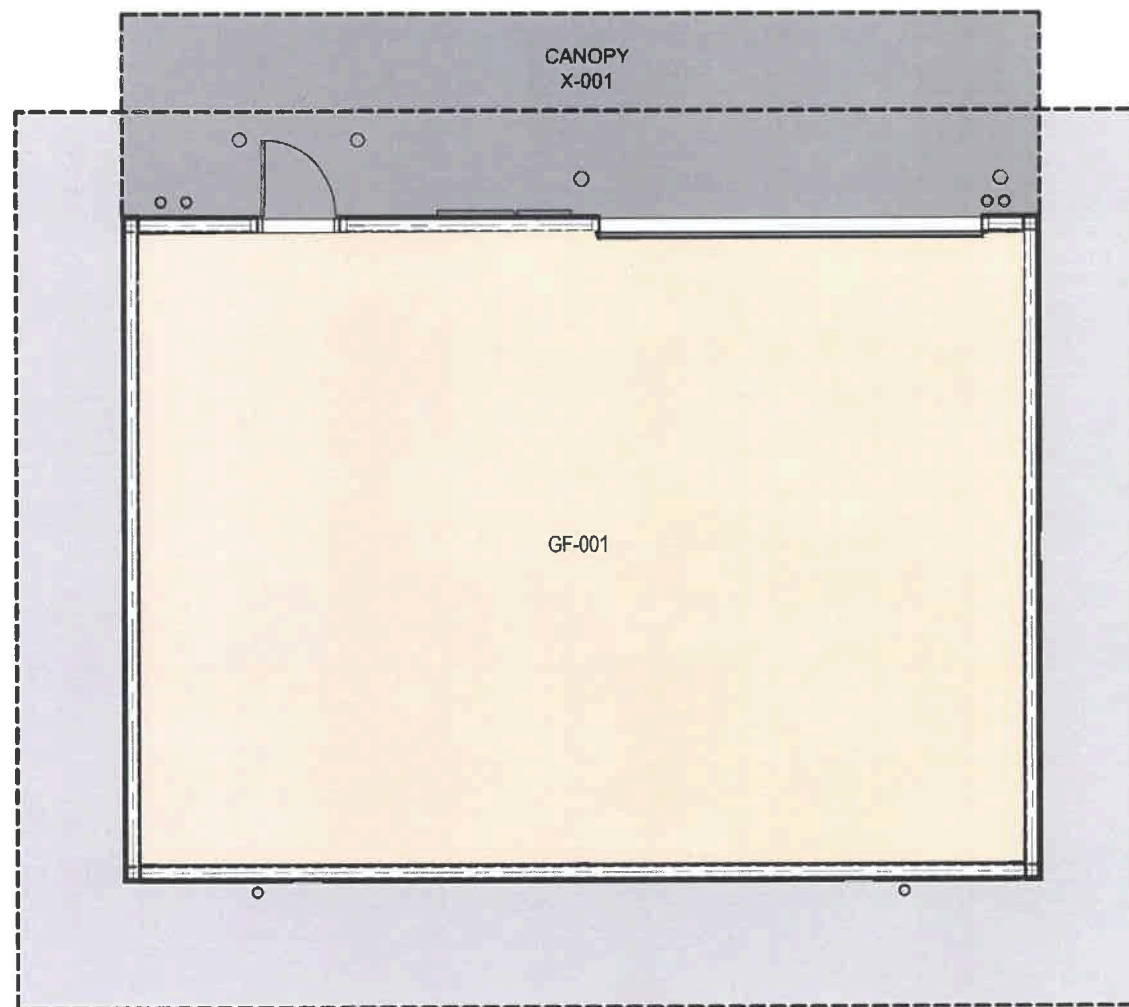






LEGEND

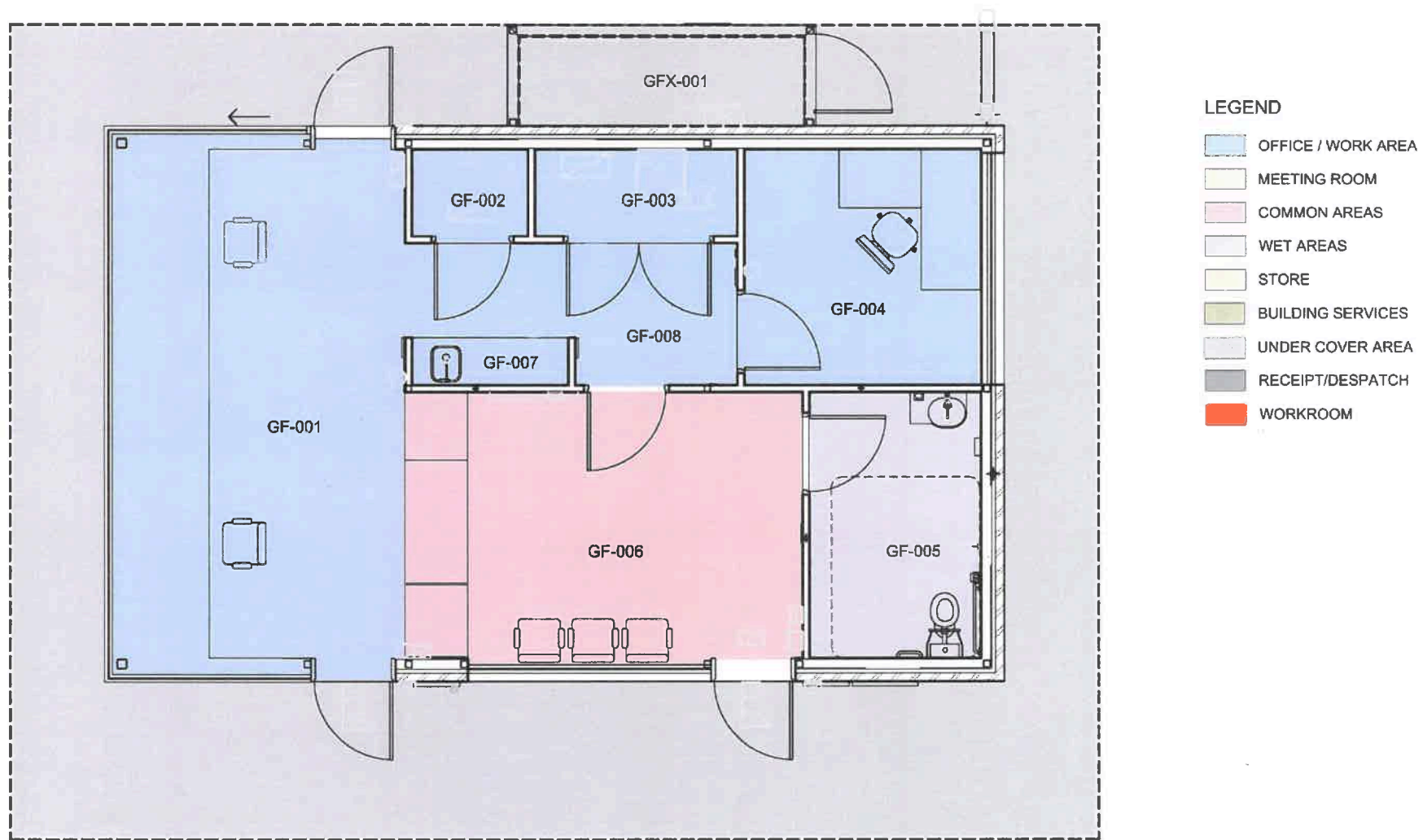
-  OFFICE / WORK AREA
-  MEETING ROOM
-  COMMON AREAS
-  WET AREAS
-  STORE
-  BUILDING SERVICES
-  UNDER COVER AREA
-  RECEIPT/DESPATCH
-  WORKROOM



LEGEND

- OFFICE / WORK AREA
- MEETING ROOM
- COMMON AREAS
- WET AREAS
- STORE
- BUILDING SERVICES
- UNDER COVER AREA
- RECEIPT/DESPATCH
- WORKROOM



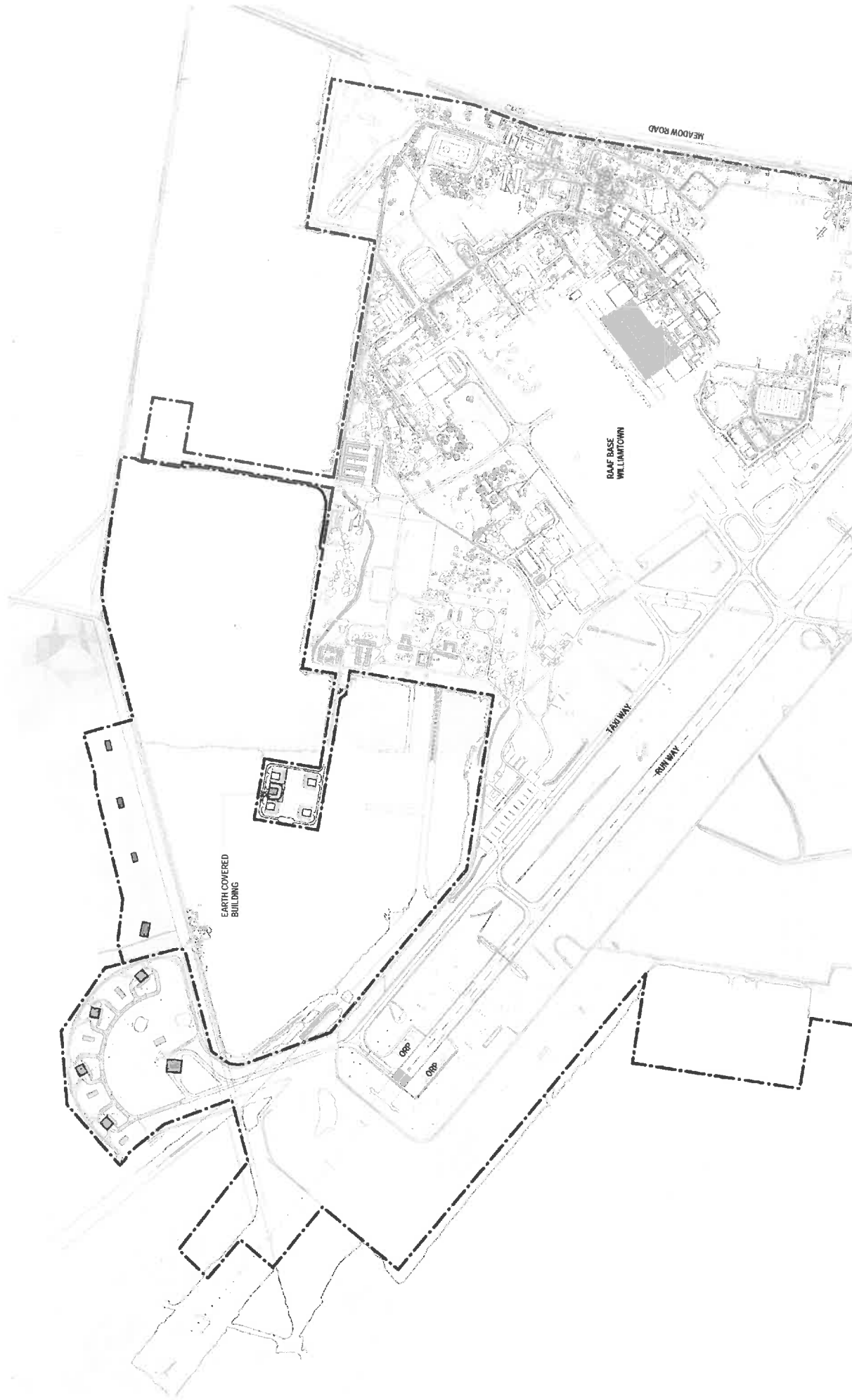


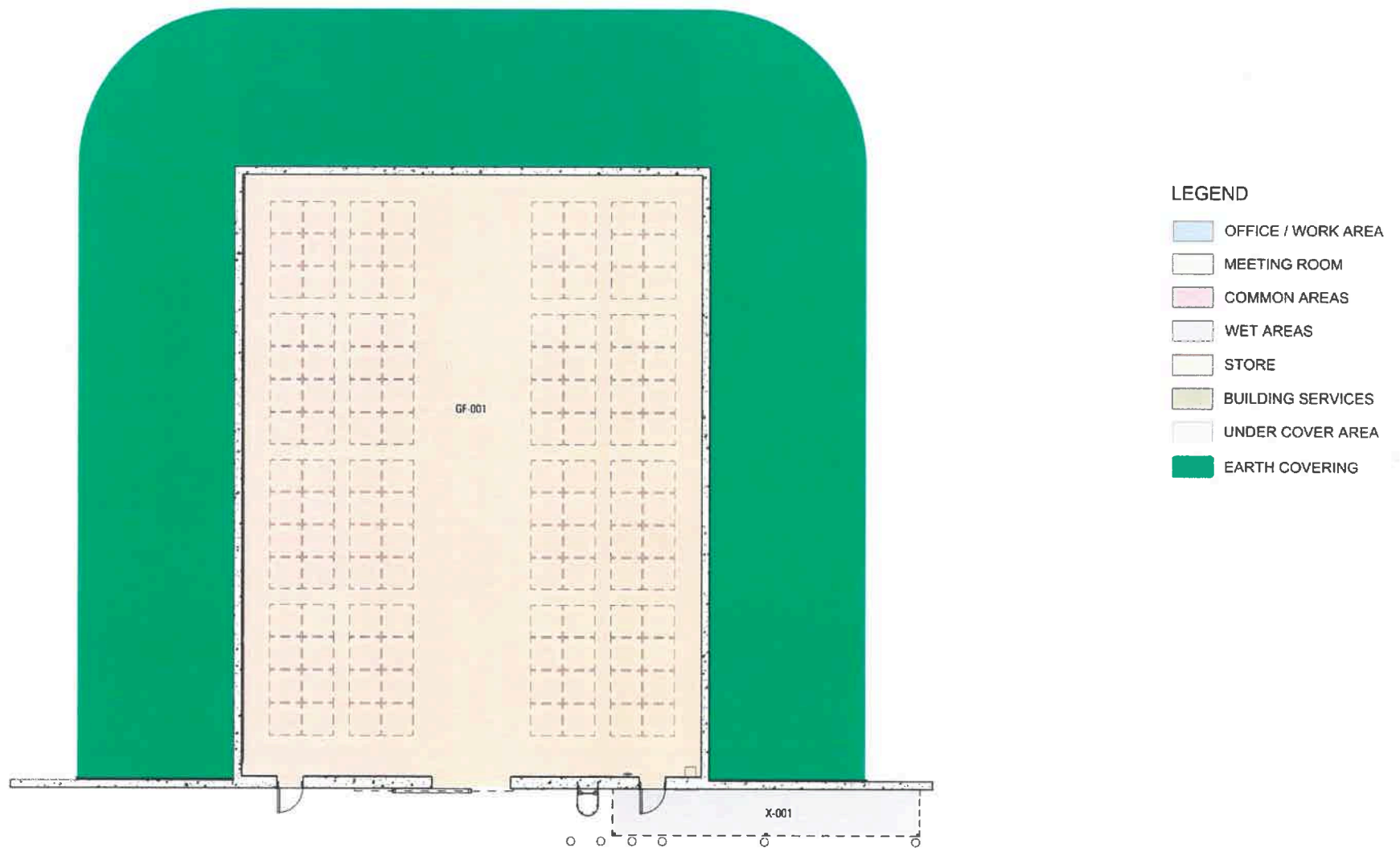


Explosive Ordnance Depot Williamtown, Williamtown NSW

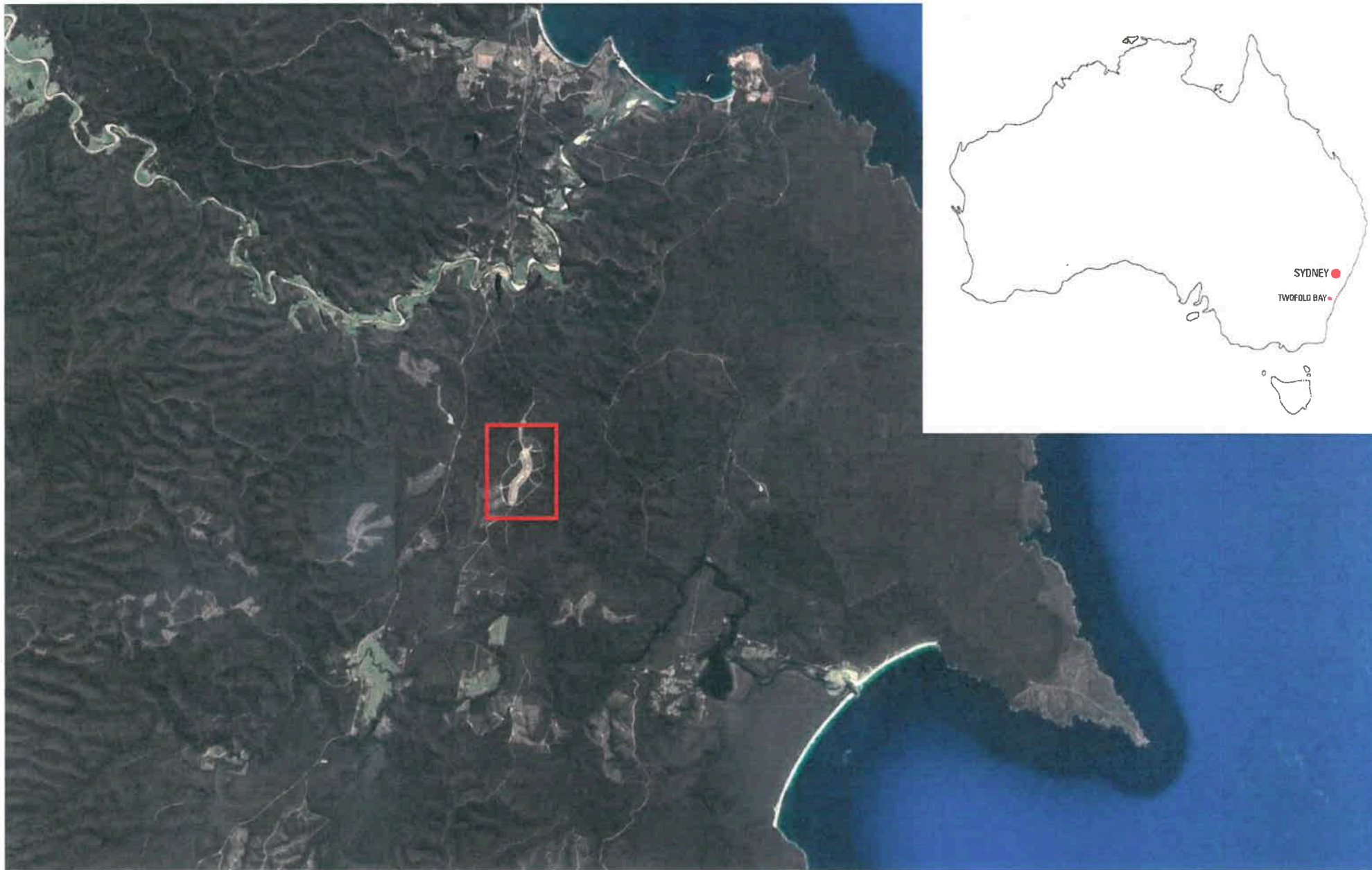
Location Plan







Explosive Ordnance Depot Williamtown, Williamtown NSW
Earth Covered Building Floor Plan



Explosive Ordnance Depot Twofold Bay, Eden NSW
Location Plan

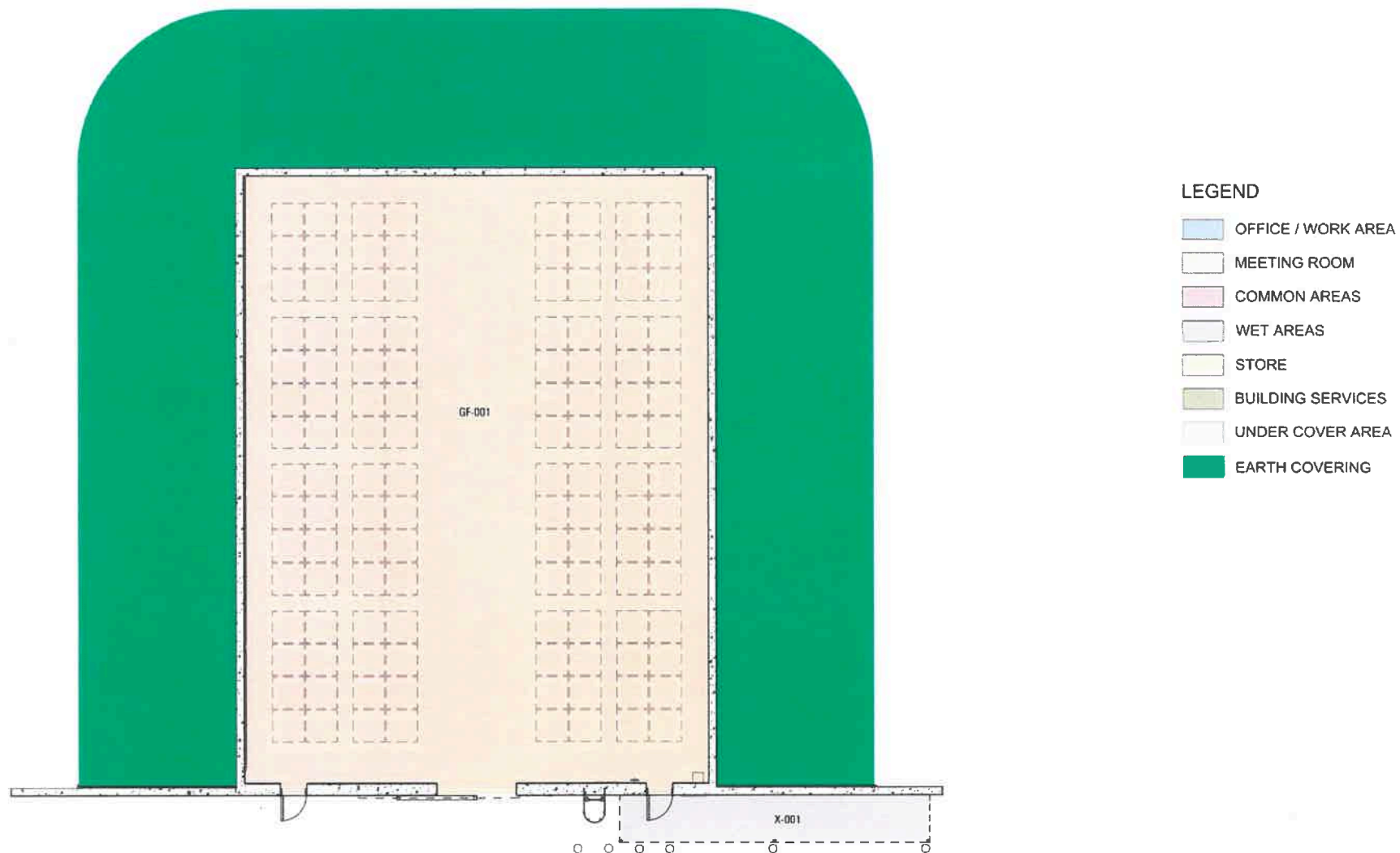


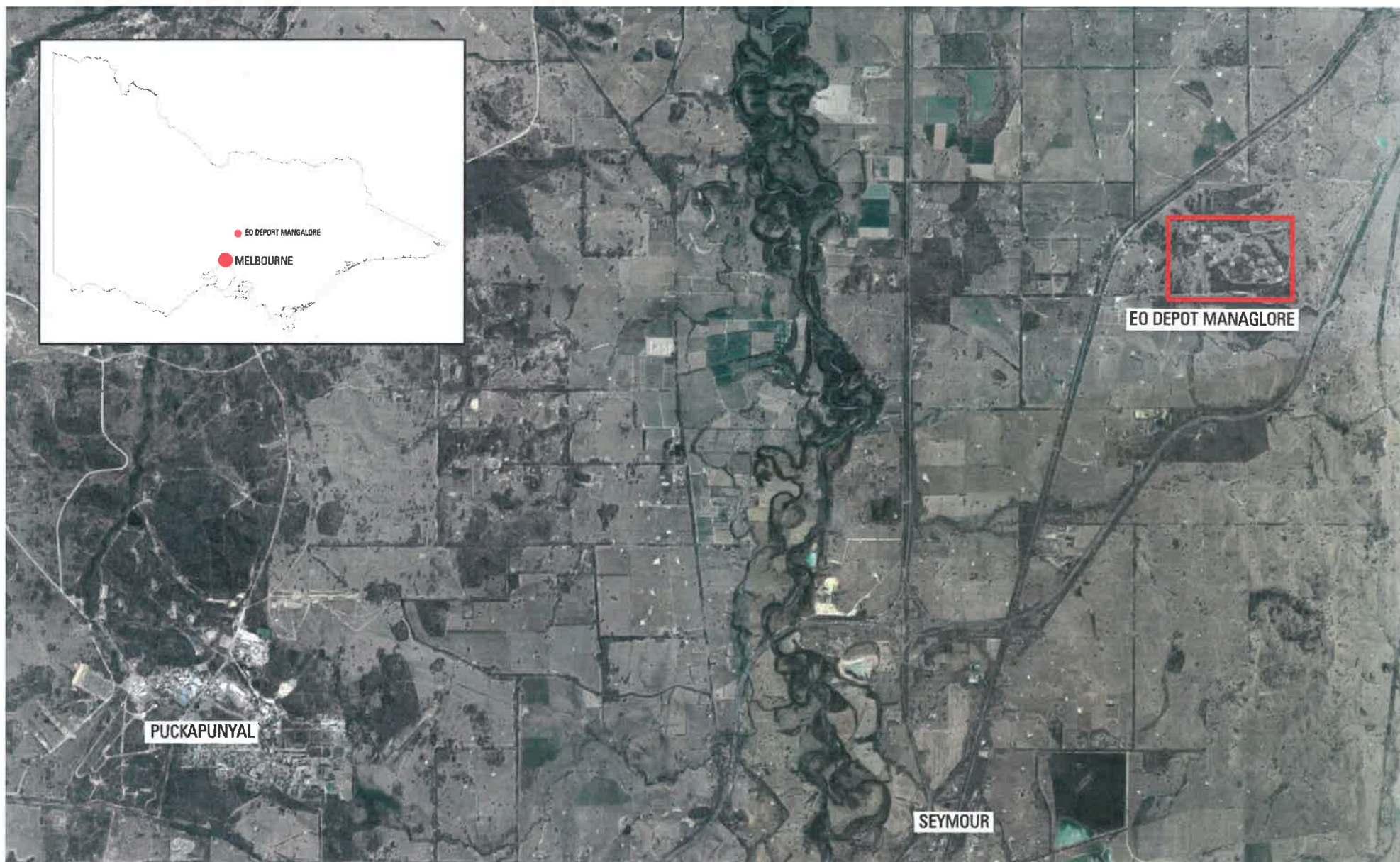


Explosive Ordnance Depot Twofold Bay, Eden NSW

Site Plan

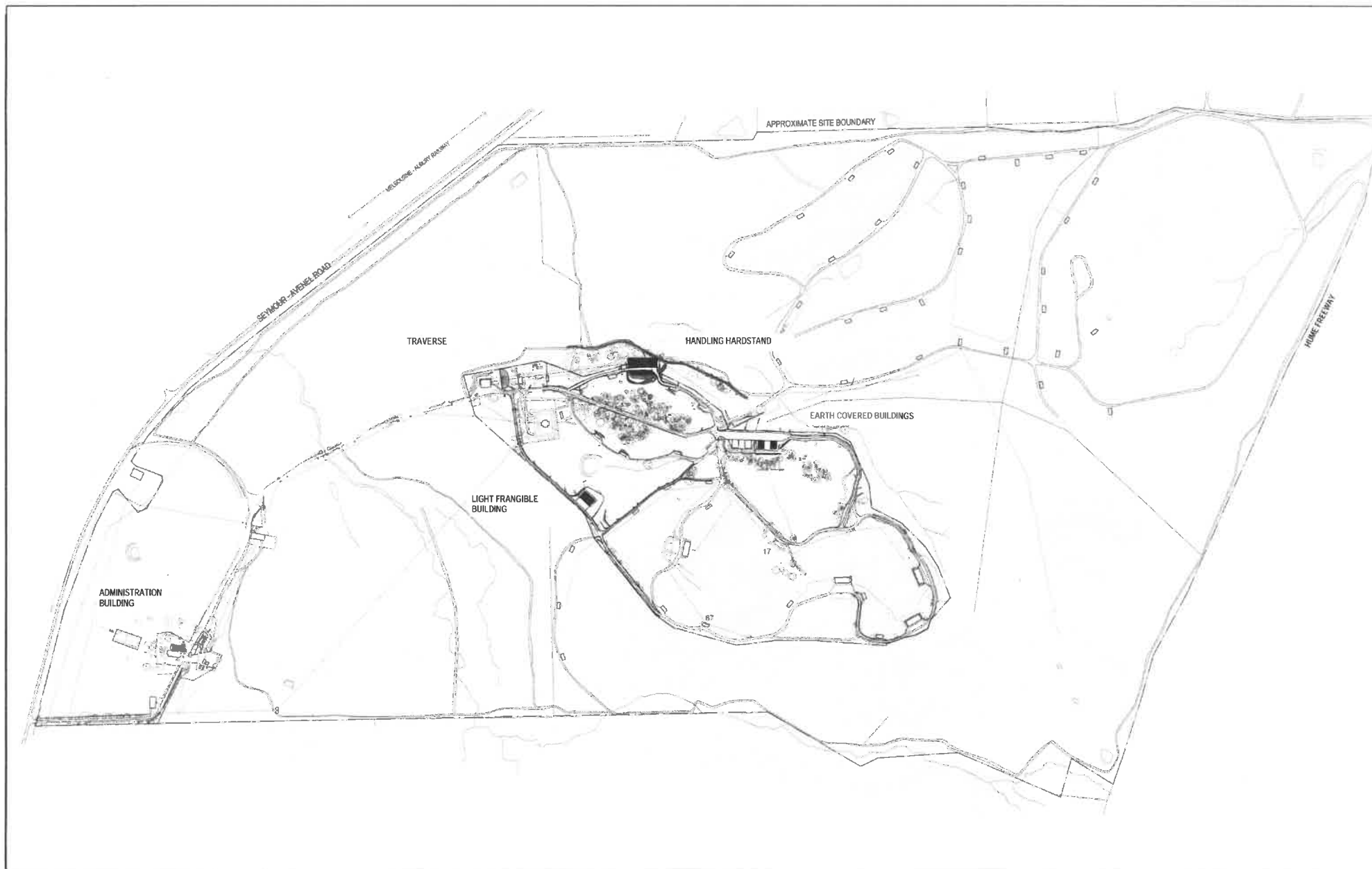






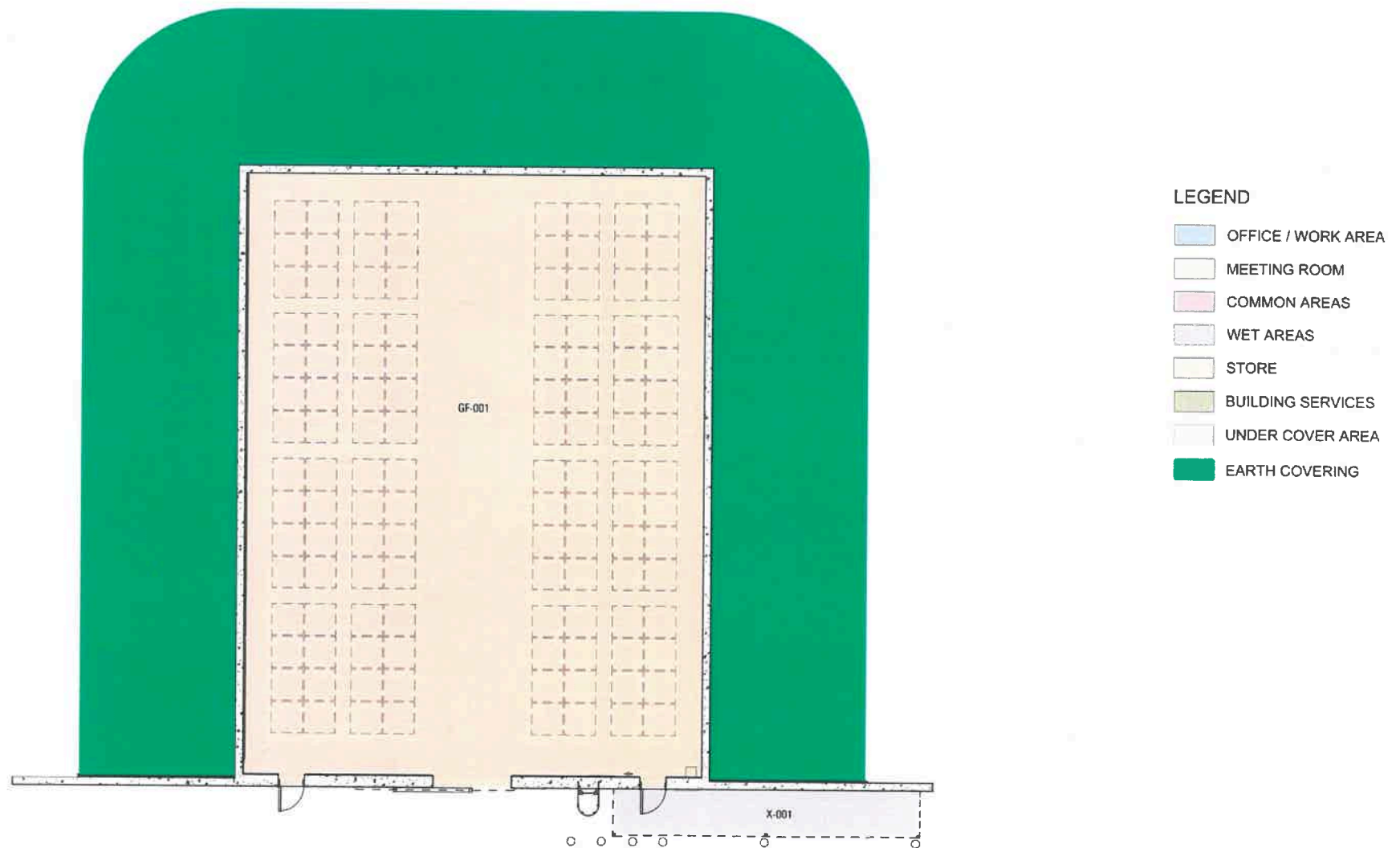
Explosive Ordnance Depot Mangalore, Seymour VIC
Location Plan

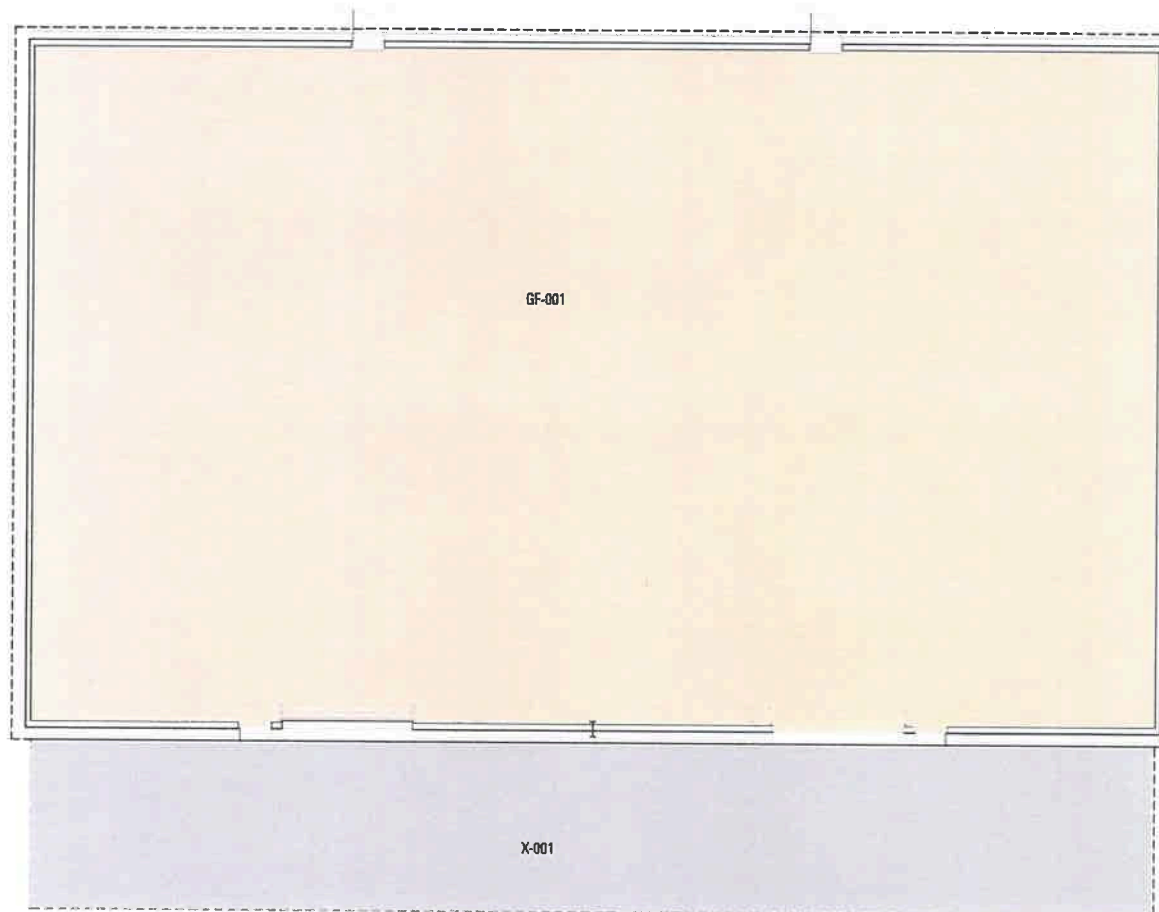




Explosive Ordnance Depot Mangalore, Seymour VIC
Site Plan



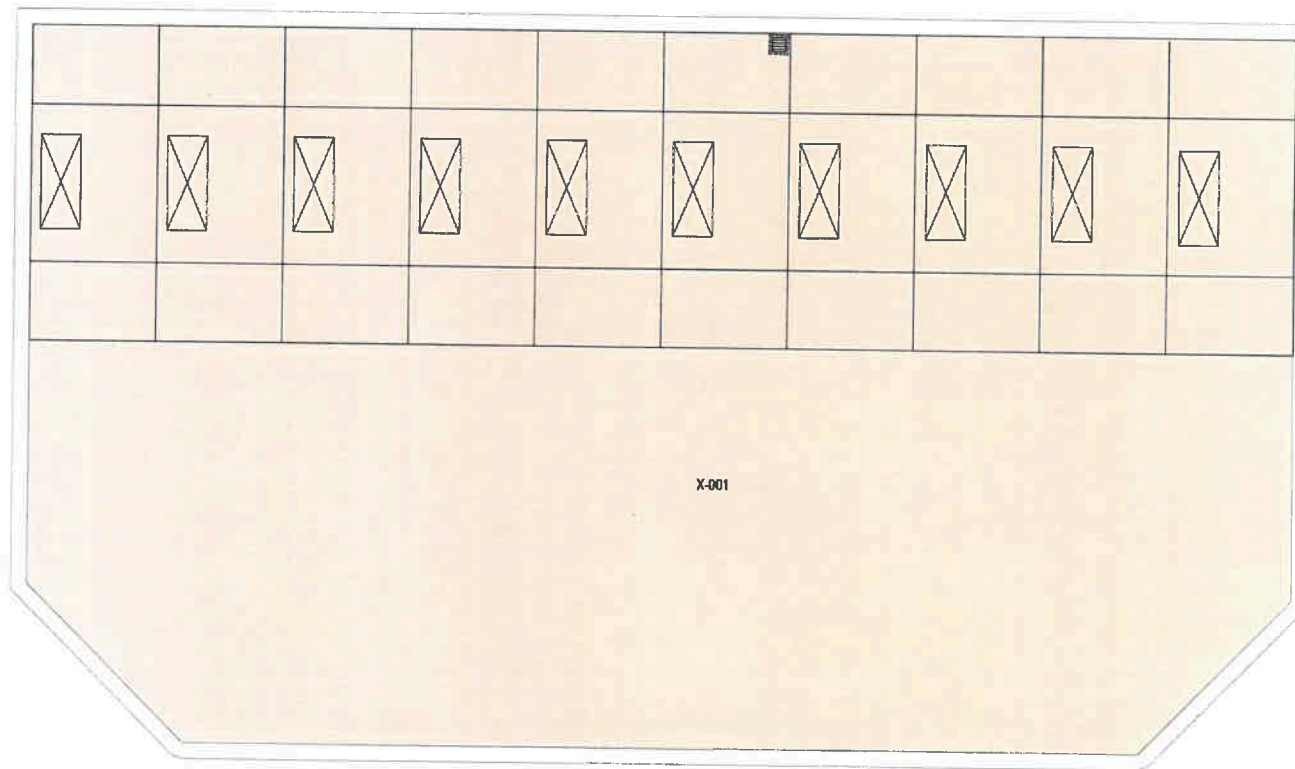








LEGEND

-  OFFICE / WORK AREA
-  MEETING ROOM
-  COMMON AREAS
-  WET AREAS
-  STORE
-  BUILDING SERVICES
-  UNDER COVER AREA
-  RECEIPT/DESPATCH
-  WORKROOM





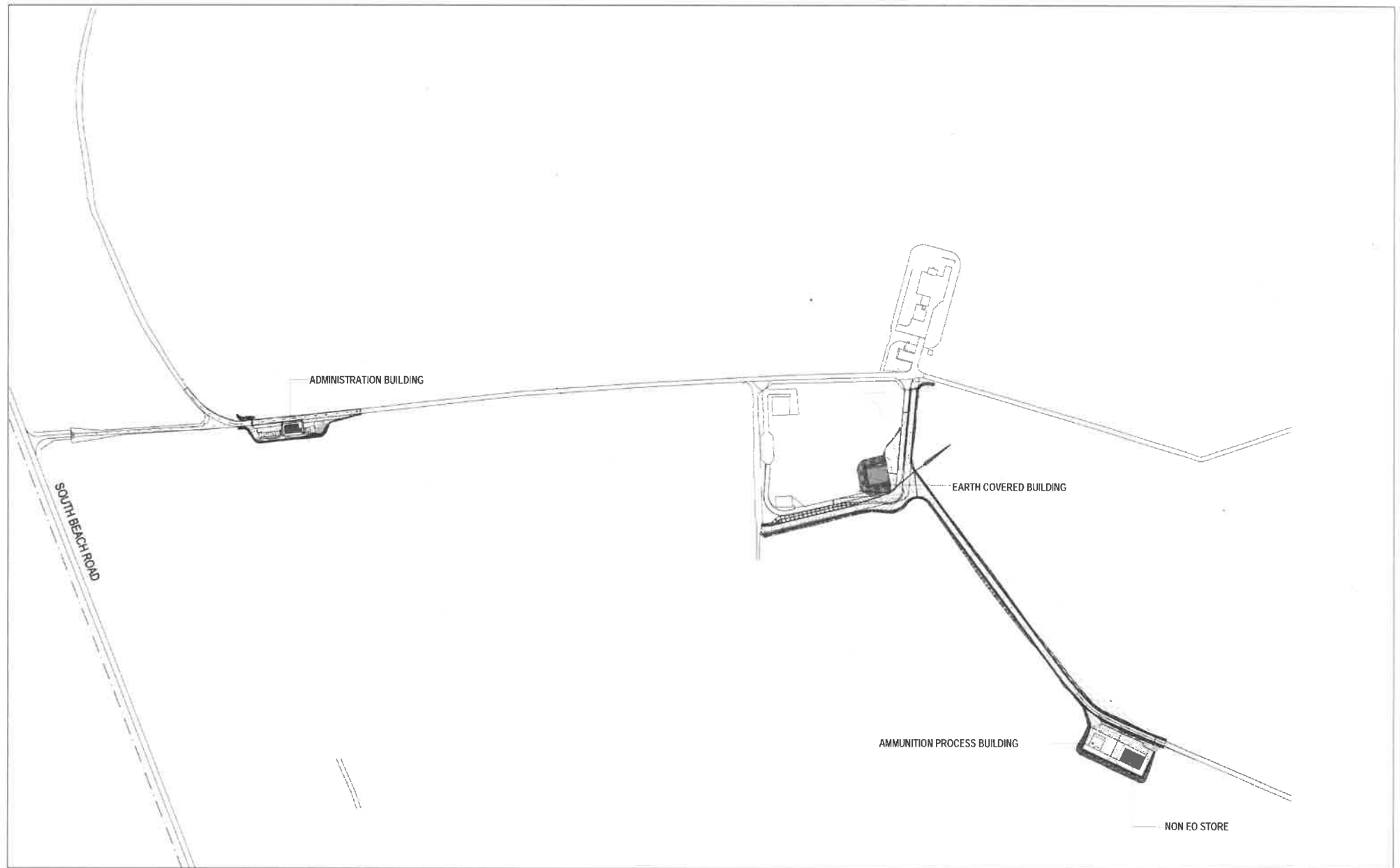
LEGEND

-  OFFICE / WORK AREA
-  MEETING ROOM
-  COMMON AREAS
-  WET AREAS
-  STORAGE AREA
-  BUILDING SERVICES
-  UNDER COVER AREA
-  RECEIPT/DESPATCH
-  WORKROOM
-  20' ISO CONTAINER



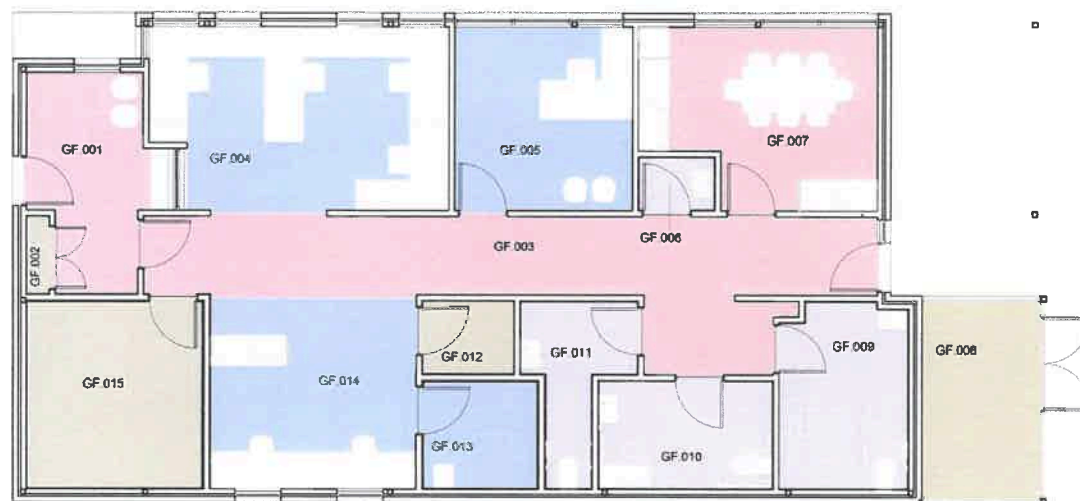
Explosive Ordnance Depot Cerberus, Hastings VIC
Location Plan





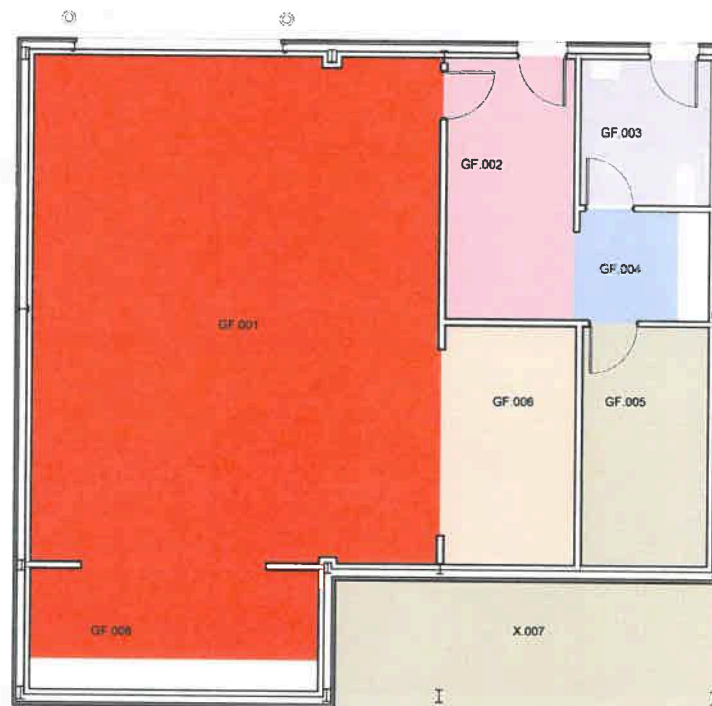
Explosive Ordnance Depot Cerberus, Hastings VIC

Site Plan



LEGEND

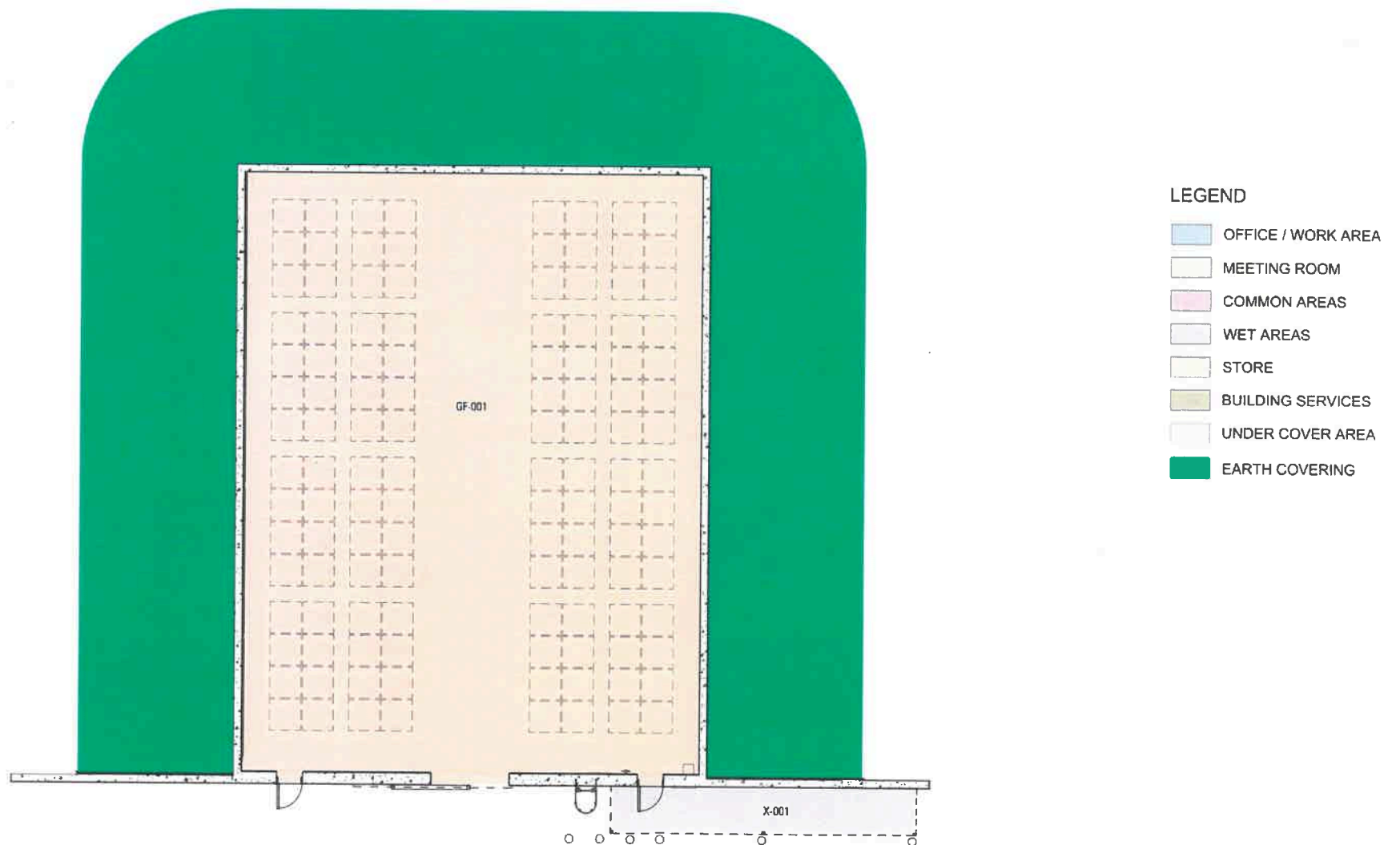
- OFFICE / WORK AREA
- MEETING ROOM
- COMMON AREAS
- WET AREAS
- STORE
- BUILDING SERVICES
- UNDER COVER AREA
- RECEIPT/DESPATCH
- WORKROOM



LEGEND

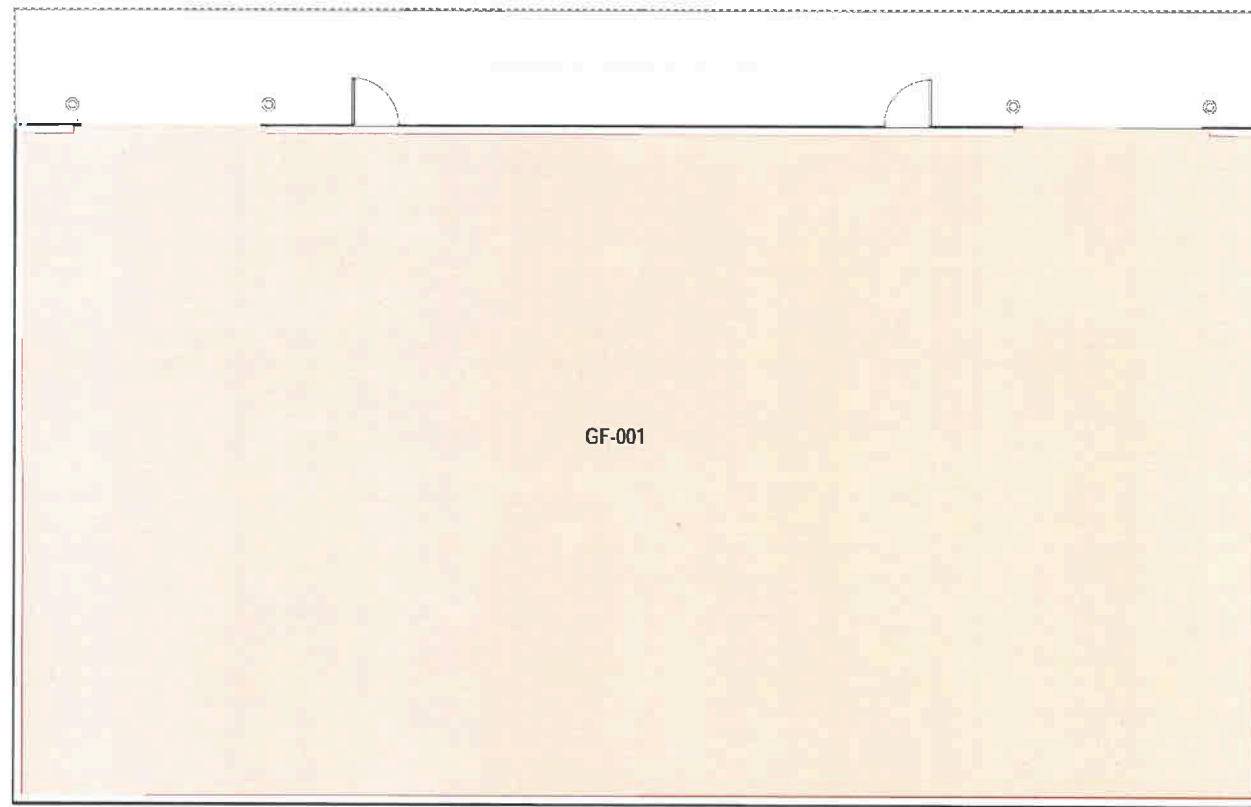
-  OFFICE / WORK AREA
-  MEETING ROOM
-  COMMON AREAS
-  WET AREAS
-  STORE
-  BUILDING SERVICES
-  UNDER COVER AREA
-  RECEIPT/DESPATCH
-  WORKROOM














Explosive Ordnance Depot Cerberus, Hastings VIC
Earth Covered Building Floor Plan





LEGEND

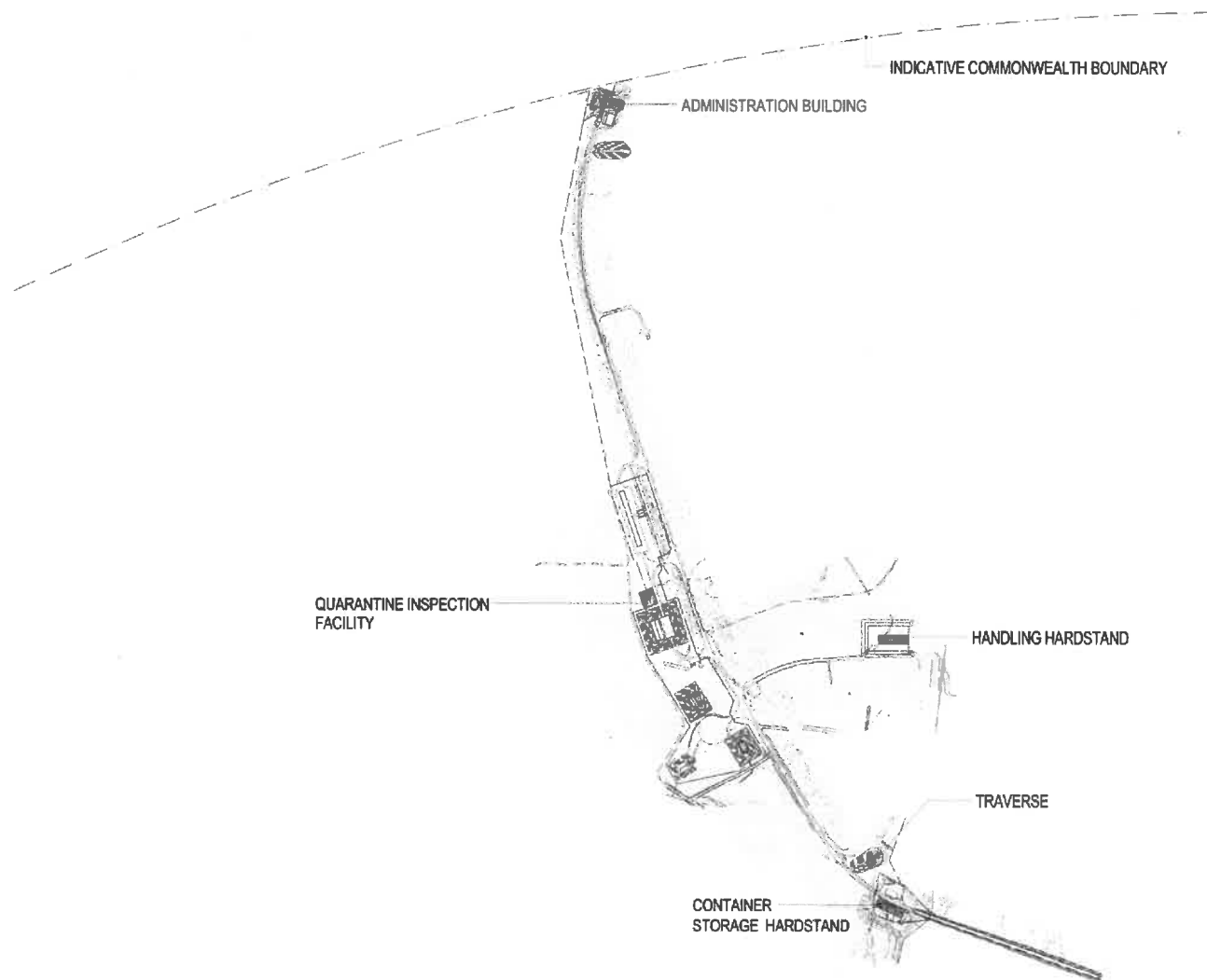
-  OFFICE / WORK AREA
-  MEETING ROOM
-  COMMON AREAS
-  WET AREAS
-  STORE
-  BUILDING SERVICES
-  UNDER COVER AREA
-  RECEIPT/DESPATCH
-  WORKROOM





Point Wilson Explosives Area, Avalon VIC
Location Plan












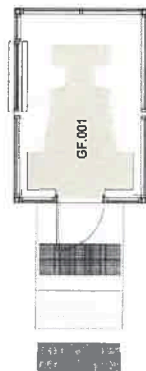


Point Wilson Explosives Area, Avalon VIC

Site Plan

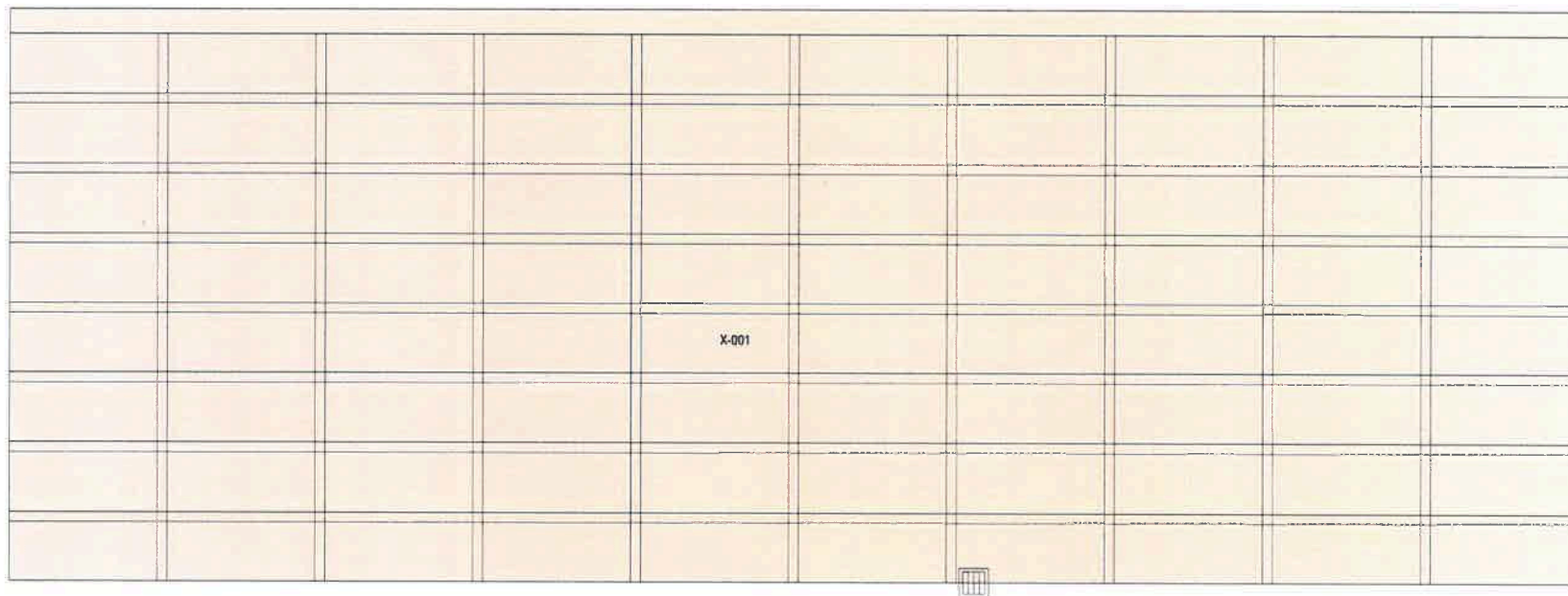
LEGEND

-  OFFICE / WORK AREA
-  MEETING ROOM
-  COMMON AREAS
-  WET AREAS
-  STORE
-  BUILDING SERVICES
-  UNDER COVER AREA
-  RECEIPT/DESPATCH
-  WORKROOM



LEGEND

- OFFICE / WORK AREA
- MEETING ROOM
- COMMON AREAS
- WET AREAS
- STORE
- BUILDING SERVICES
- UNDER COVER AREA
- RECEIPT/DESPATCH
- WORKROOM
- 20' ISO CONTAINER

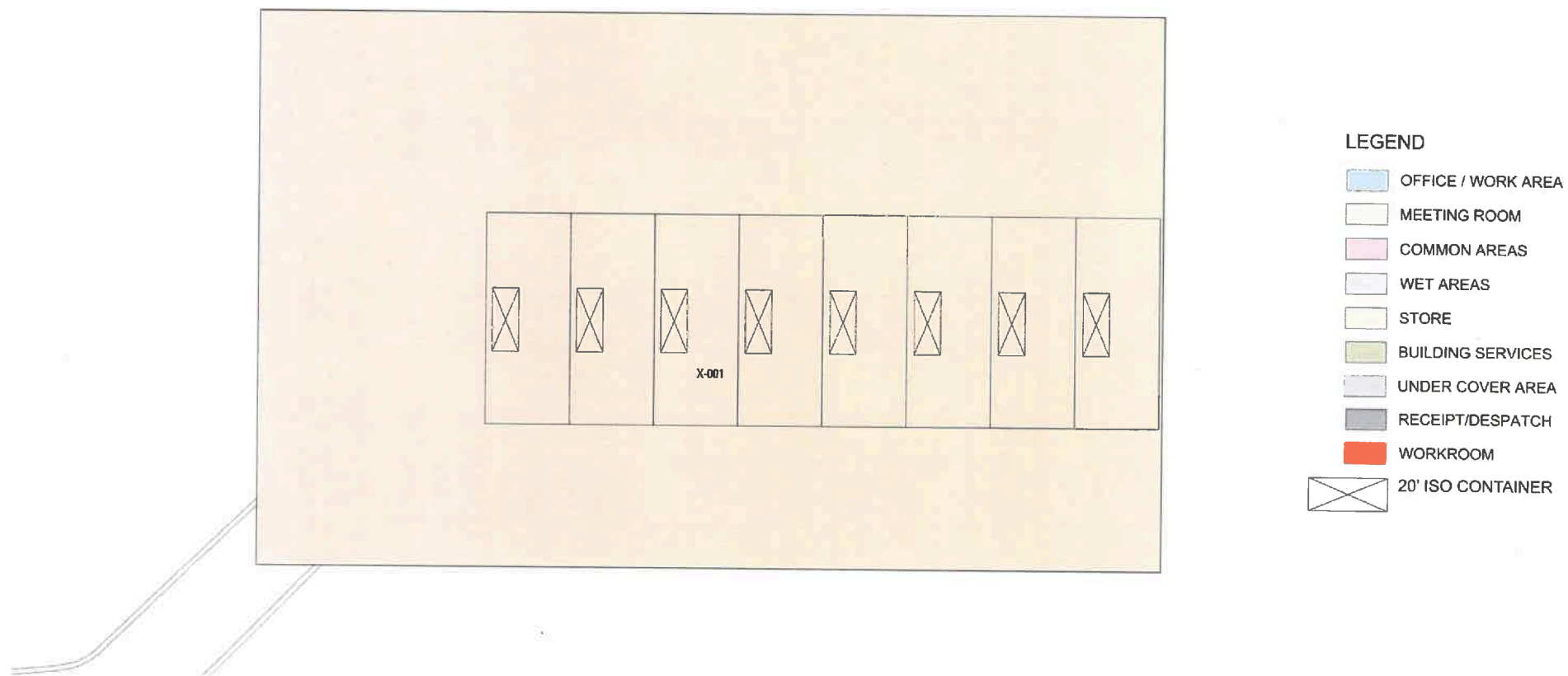


Point Wilson Explosives Area, Avalon VIC
Container Storage Hardstand Floor Plan

0 1 2 m



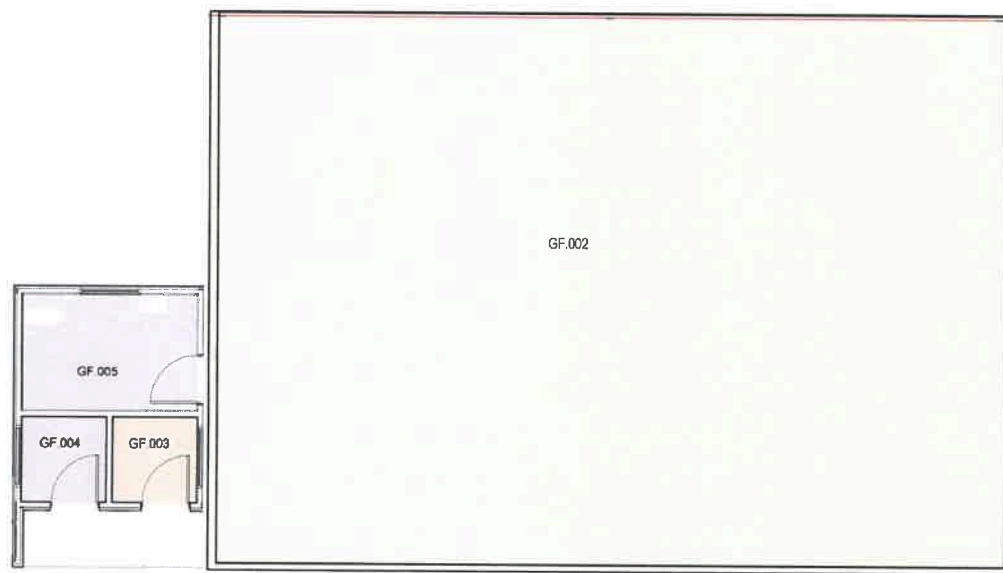
Attachment 49







Point Wilson Explosives Area, Avalon VIC
Handling Hardstand Floor Plan

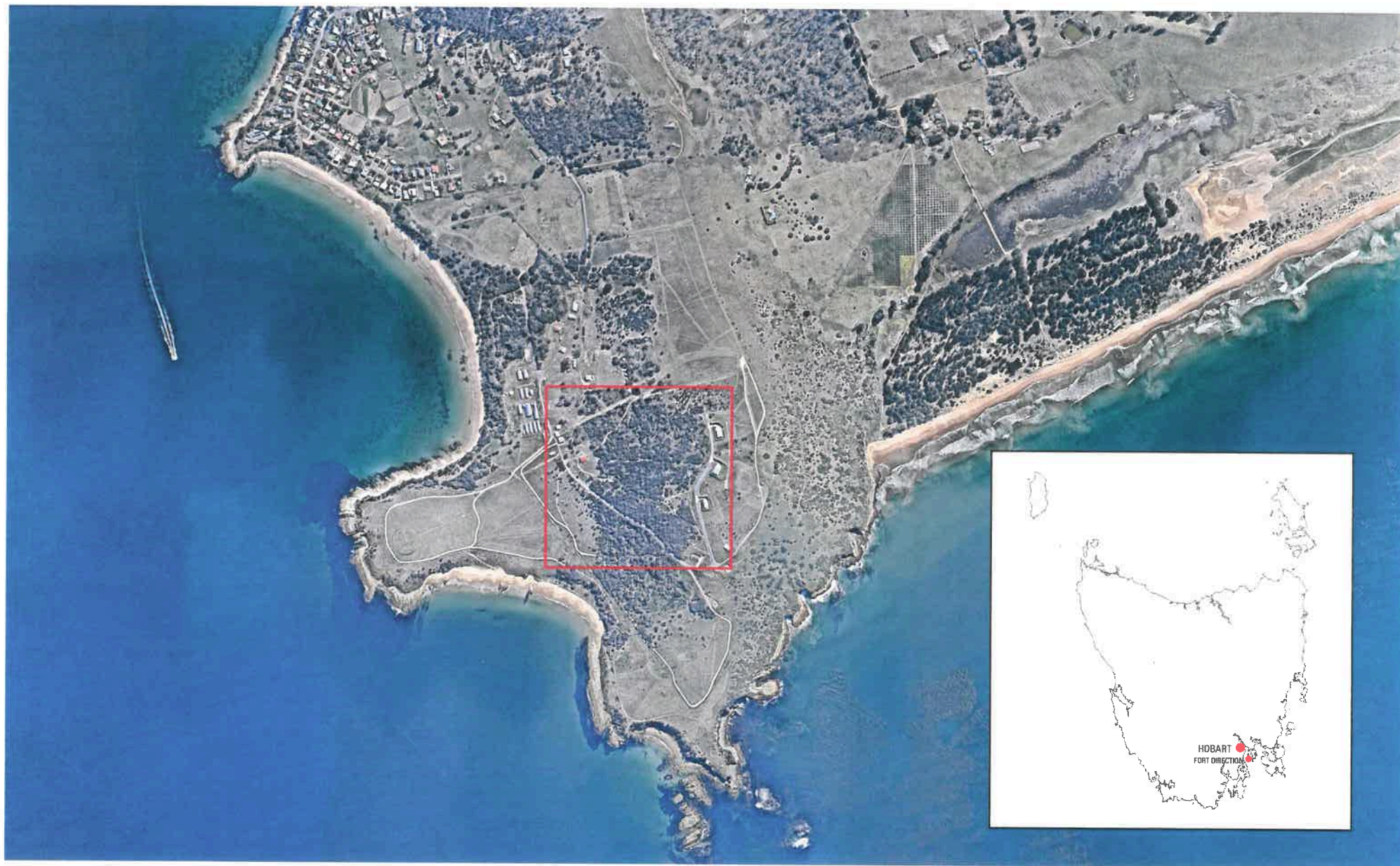
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LEGEND

-  OFFICE / WORK AREA
-  MEETING ROOM
-  COMMON AREAS
-  WET AREAS
-  STORE
-  BUILDING SERVICES
-  UNDER COVER AREA
-  RECEIPT/DESPATCH
-  WORKROOM
-  INSPECTION AREA



Explosive Ordnance Depot Fort Direction, South Arm TAS
Location Plan





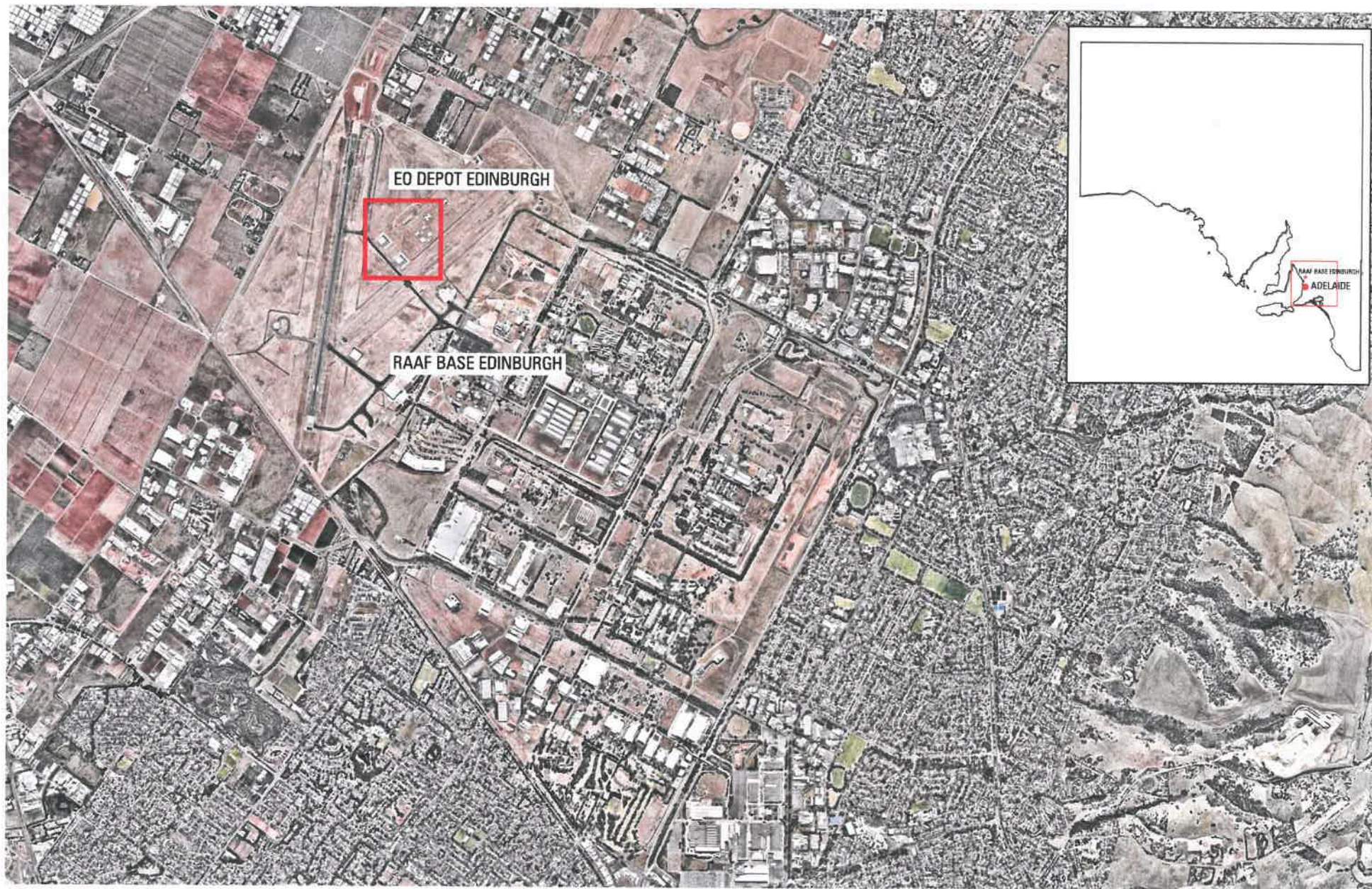
Explosive Ordnance Depot Fort Direction, South Arm TAS
Site Plan



LEGEND

- OFFICE / WORK AREA
- MEETING ROOM
- COMMON AREAS
- WET AREAS
- STORE
- BUILDING SERVICES
- UNDER COVER AREA
- RECEIPT/DESPATCH
- WORKROOM

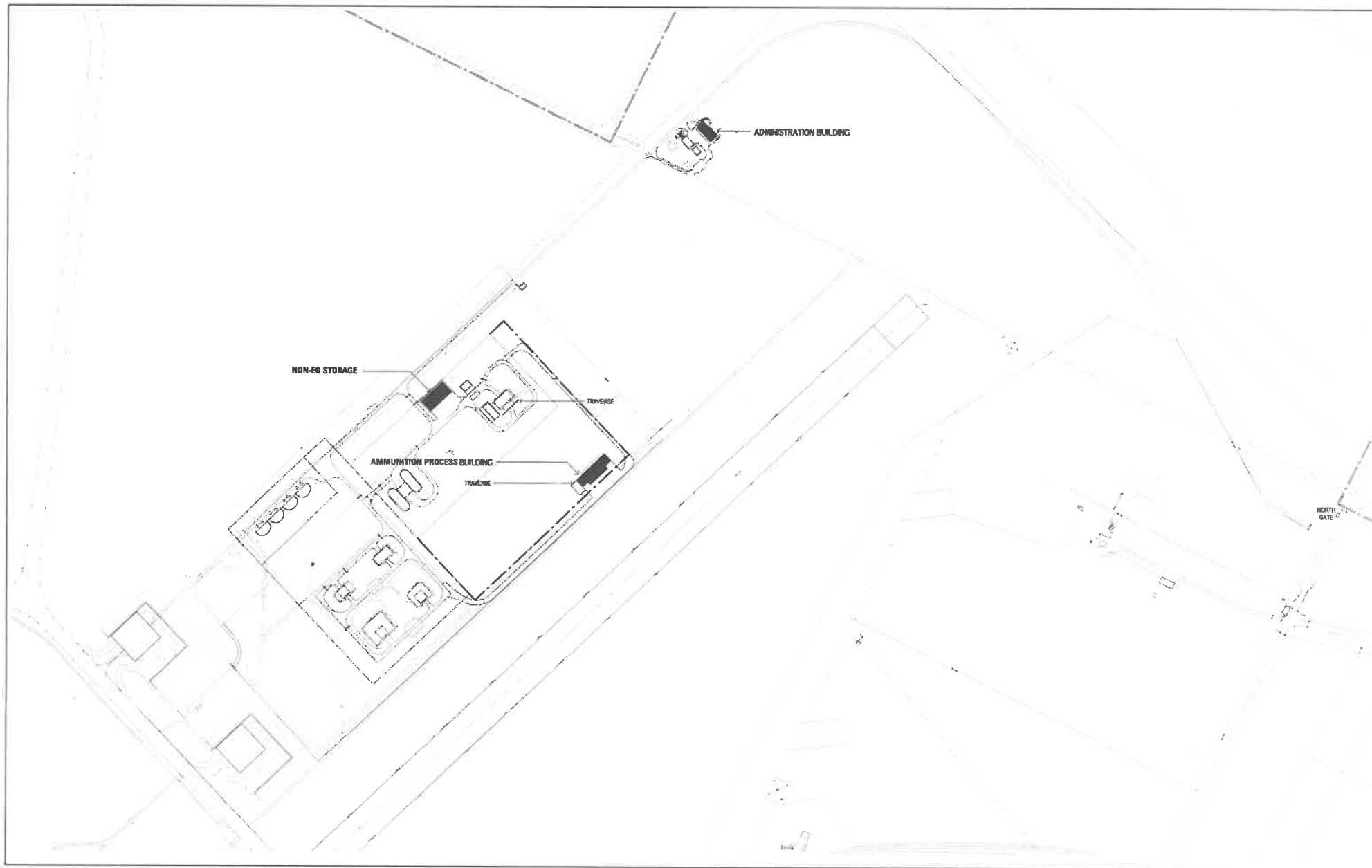




Explosive Ordnance Depot Edinburgh, Edinburgh SA

Location Plan





Explosive Ordnance Depot Edinburgh, Edinburgh SA
Site Plan

0 20 40 60 80 100m





LEGEND

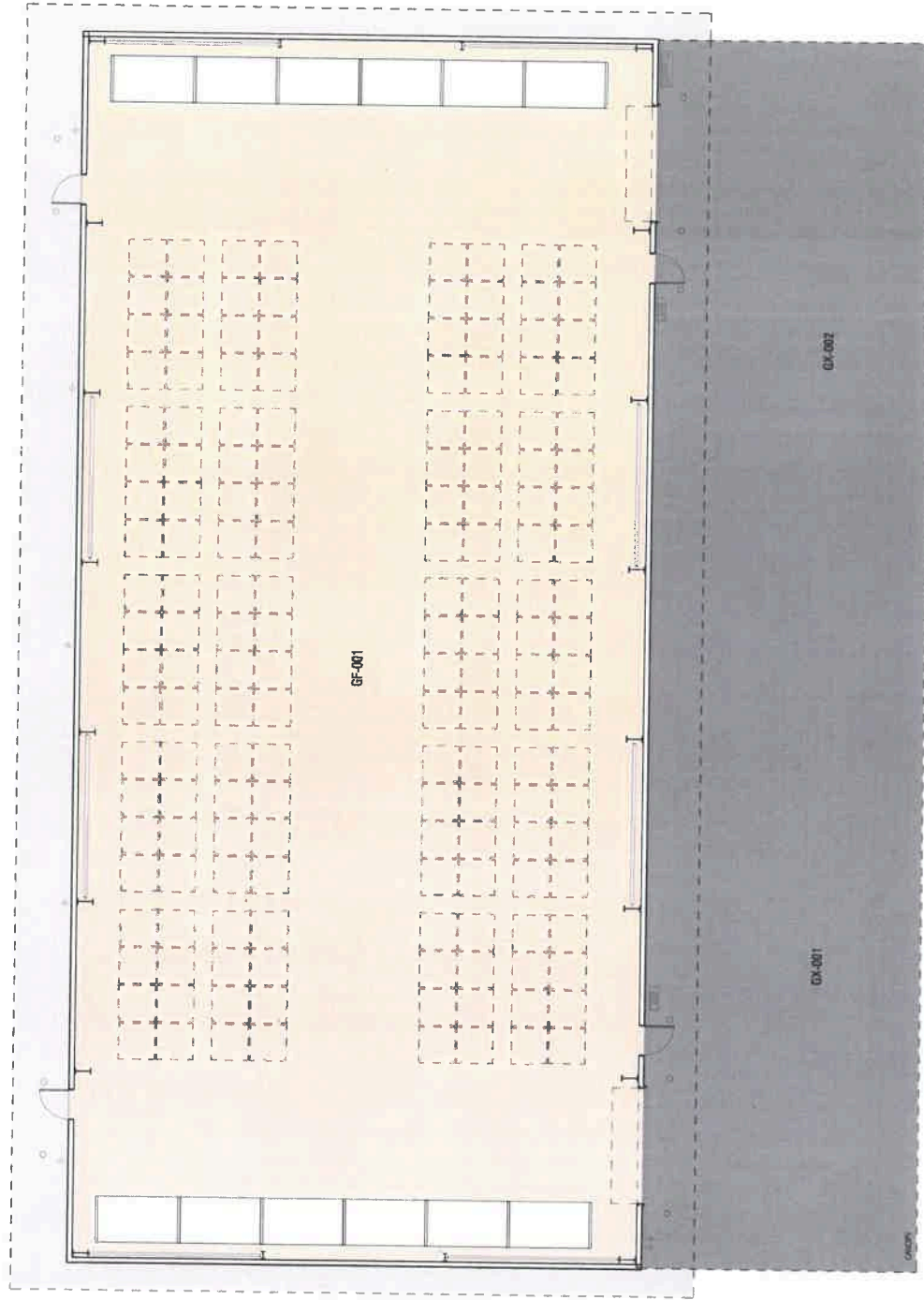
- OFFICE / WORK AREA
- MEETING ROOM
- COMMON AREAS
- WET AREAS
- STORE
- BUILDING SERVICES
- UNDER COVER AREA





LEGEND

- OFFICE / WORK AREA
- MEETING ROOM
- COMMON AREAS
- WET AREAS
- STORE
- BUILDING SERVICES
- UNDER COVER AREA
- RECEIPT/DESPATCH
- WORKROOM



LEGEND

- OFFICE / WORK AREA
- MEETING ROOM
- COMMON AREAS
- WET AREAS
- STORE
- BUILDING SERVICES
- UNDER COVER AREA
- RECEIPT/DESPATCH

Explosive Ordnance Depot Edinburgh, Edinburgh SA
Non-Explosive Ordnance Store Floor Plan

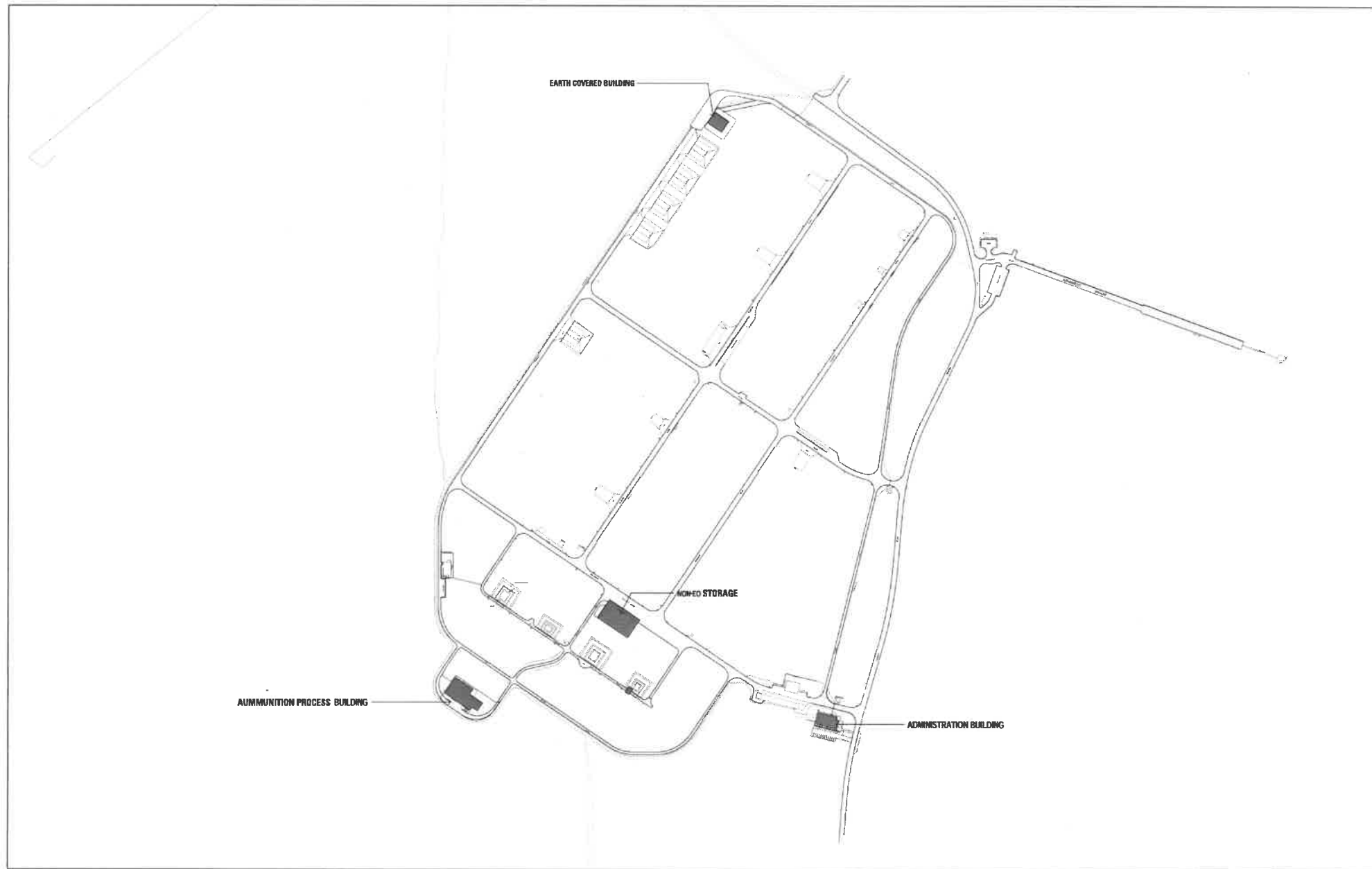




Explosive Ordnance Depot Stirling, Rockingham WA

Location Plan





Explosive Ordnance Depot Stirling, Rockingham WA

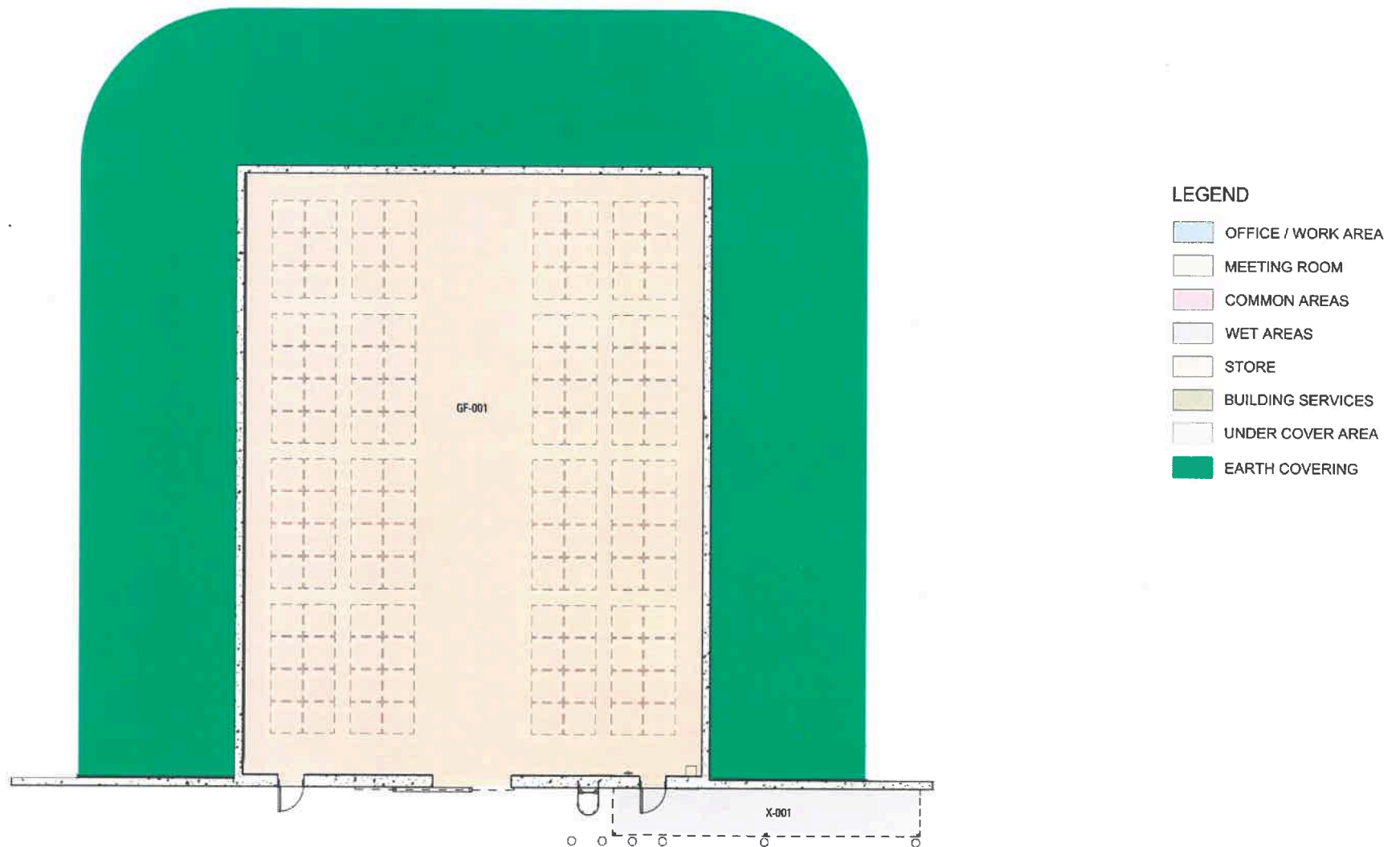
Site Plan



Explosive Ordnance Depot Stirling, Rockingham WA

Administration Building Floor Plan

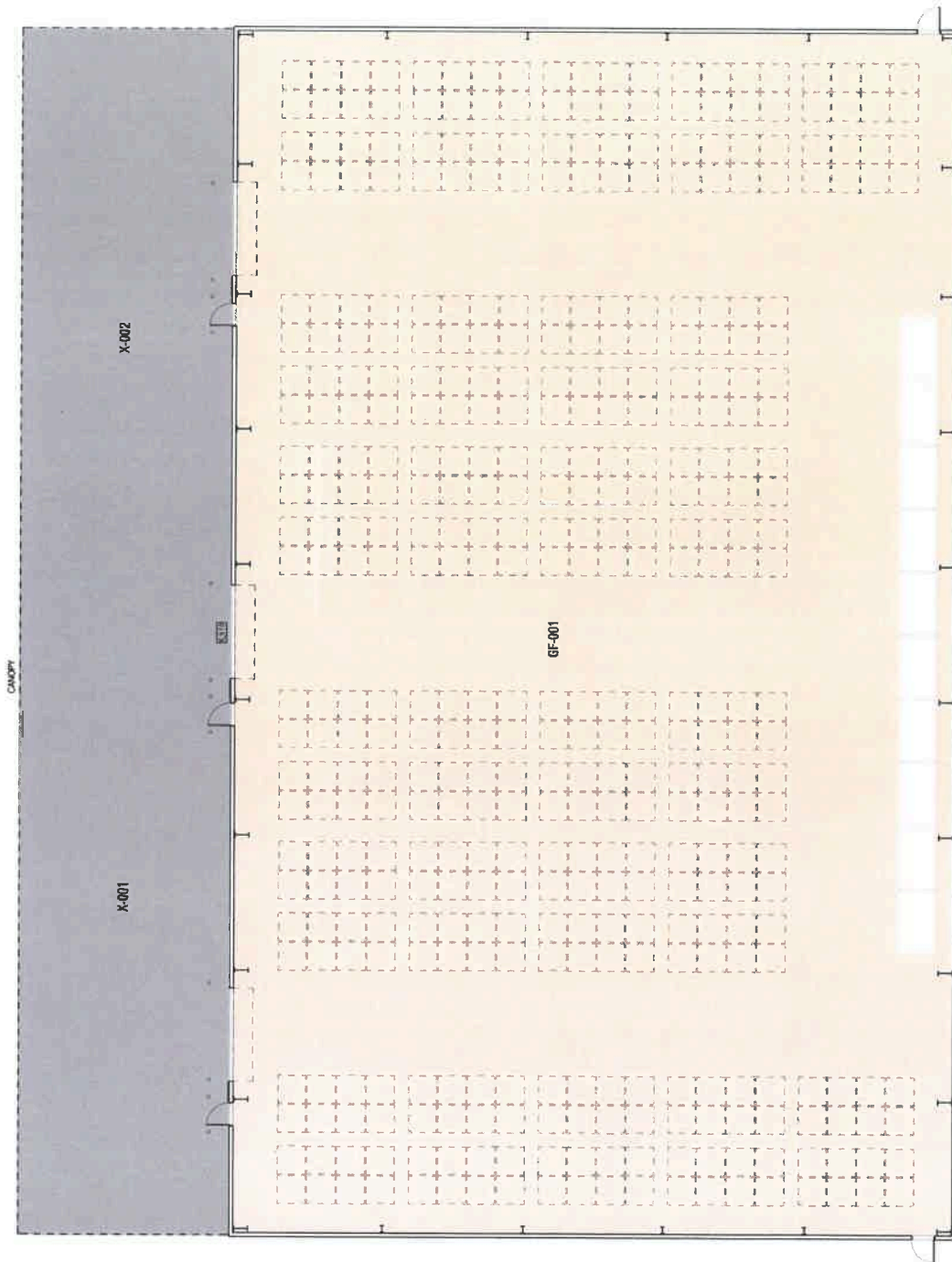




Explosive Ordnance Depot Stirling, Rockingham WA

Earth Covered Building Floor Plan





LEGEND

OFFICE / WORK AREA
MEETING ROOM
COMMON AREAS
WET AREAS
STORE
BUILDING SERVICES
UNDER COVER AREA
RECEIPT/DESPATCH

Explosive Ordnance Depot Stirling, Rockingham WA
Non-Explosive Ordnance Store Floor Plan

