



Australian Government

Department of Defence

RAAF BASE WILLIAMTOWN REDEVELOPMENT STAGE 2

Williamtown, New South Wales

STATEMENT OF EVIDENCE TO THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

Canberra, Australian Capital Territory

June 2015

[This page intentionally blank]

TABLE OF CONTENTS

Identification of the Need	1
Enhanced Base Capability	1
Description of the Proposal	4
Options Considered to Fulfil the Identified Need	6
Environment and Heritage Assessment	9
Key Legislation	11
Applicable Codes and Standards	11
Consultation with Stakeholders	11
Purpose of the Works	12
Project Objective	12
Detailed Description of the Proposal	12
Details of Site Selection	15
Reasons for Adopting the Proposed Course of Action	16
Land Acquisition, Zoning and Approvals	18
Childcare Provisions	18
Impact on Local Community	18
Planning and Design Concepts	19
Structural	19
Materials and Furnishings	20
Mechanical Services	20
Hydraulic Services	21
Electrical Services	22
Acoustics	22
Fire Protection	22
Security Measures	22
Environmental Sustainability of the Project	23
Energy Targets	23
Water and Energy Conservation Measures	23
Landscaping	24
Work Health and Safety Measures	24
Provisions for People with Disabilities	25
Related Projects	25
Cost Effectiveness and Public Value	25
Outline of Project Costs	25
Details of the Project Delivery System	26
Construction Schedule	26
Public Value	27
Revenue	27

Attachments

1. Tenant Units on Base
2. RAAF Base Williamtown – Locality Plan
3. RAAF Base Williamtown – Existing Base Plan
4. Work Elements Plan
5. Stakeholder Consultation List
6. Schematic Plans – Flexible Office Accommodation Precinct
7. Schematic Plans – Engineering Services Upgrades
8. Schematic Plans – New Base Entries
9. Schematic Plans – No. 4 Squadron Facilities
10. Schematic Plans – Car Parking
11. Schematic Plans – Demolitions
12. Schematic Plans – Adaptive Reuse
13. Schematic Plans – Sporting Field

RAAF Base Williamtown Redevelopment

Stage 2

Identification of the Need

Enhanced Base Capability

1. Royal Australian Air Force (RAAF) Base Williamtown is located just north of Newcastle in New South Wales and is pivotal to the ongoing operational capability of the RAAF and is Australia's premier Fighter Base. It is home to approximately 60 per cent of Australia's fighter aircraft and over 3,000 military and civilian personnel. The Base is predominately used for control of the air flying operations and training, aircraft maintenance, air defence command and control, and operational, logistical and infrastructure support services.
2. The Department of Defence (Defence) has identified RAAF Base Williamtown as an enduring base to be retained for the long-term due to its strategic importance in generating air combat capability. The Australian Defence Force Posture Review, completed in March 2012, confirmed RAAF Base Williamtown as a Main Operating Base for the Joint Strike Fighter (JSF) capability. The Defence White Paper 2013 further noted the requirement for a number of RAAF bases to be upgraded to support the JSF capability and accordingly, to proceed with programmed airfield upgrades to support operations.

Background

3. RAAF Base Williamtown was established as a base for fighter aircraft, commencing operations on 15 February 1941. The base was used by the RAAF and the United States Army Air Force for training and as a base for fighter aircraft and bombers during World War II. Following World War II, RAAF Base Williamtown was retained as the main RAAF fighter wing and training base. It has been the home of a series of RAAF fighter capabilities, from World War II era Mustang fighters, through a series of jet aircraft, including the de Havilland Vampire, Gloster Meteor, F-86 Saber, Dassault Mirage, and most recently, the Classic Hornet.

4. RAAF Base Williamtown has played a central role in the delivery of RAAF operational capability and is the nation's primary fighter pilot training base. It is home to key components of the air combat capability led by Air Combat Group who are headquartered at the base.
5. Significant investment occurred in the early 1980s with the introduction of the F/A 18 A/B (Classic Hornet). Subsequent investment occurred in 1992 for logistics and supply facilities on base and then in 1998 for the development of the Eastern Region Operations Centre on base. A Stage 1 Redevelopment of the base was completed in 2004 that included a new precinct and home base for Surveillance and Response Group for the new Airborne Early Warning and Control (AEW&C) B737 aircraft of No 2 Squadron, in addition to some engineering services upgrades.
6. RAAF Base Williamtown will continue to be the nation's primary tactical fighter base with the decision to home the new JSF capability at RAAF Base Williamtown with the replacement of the current F/A-18 Hornets under the New Air Combat Capability (NACC) Project.
7. Key units based at RAAF Base Williamtown to support current Defence capabilities are provided in Attachment 1.

Need for the Works

8. Operations at RAAF Base Williamtown date back over 70 years and the age of infrastructure currently on the Base varies considerably. The Base has grown and continues to grow with changing and increasing roles and capabilities hosted there.
9. The Base requires the upgrade or replacement of critical ageing infrastructure to support capability and to improve functionality and operational flexibility as the Base. There is a current and enduring need for the Base and an urgent requirement to address deficiencies in capability, functionality, security and compliance of base facilities and infrastructure.
10. **Capability.** The supporting base facilities and infrastructure, particularly engineering services, have deteriorated over this time and in many cases now have insufficient capability and capacity to support current and planned demands. Engineering services failures are increasing, such that the base suffered three water main bursts in a six-week period during May-June 2014. Base engineering services including roads and parking, water, sewerage,

electrical, fire and telecommunications are all showing similar capability, capacity and condition issues which have follow on impacts on the Base's ability to support capability.

11. **Functionality.** The growth of the Base has been a gradual process over many years and the existing office and working accommodation is dispersed across the base reflective of changes over the years. The majority of office accommodation is no longer functionally suitable for its current purpose resulting in operational inefficiencies. Some units are in dispersed working accommodation reducing operational effectiveness and efficiency, as is the case with No 4 Squadron which currently occupies dispersed buildings that are deficient in size, functionality and amenity.
12. **Security.** The Base Security Improvement Program (BSIP) highlighted several issues to be addressed within the base to address security shortfalls. BSIP itself has addressed several of the issues but more substantial works remain. The project scope covers proposals to improve security in line with BSIP requirements including hardening of the base entry points, improving the vehicle search facilities, improving vehicle rejection and turn-around areas, and improving vehicle queuing to the base.
13. **Compliance.** Some of the older facilities and areas do not meet current building codes and standards, work health and safety, security or environmentally sustainable development requirements. Arising from the long history of the base and its gradual growth and development, many base facilities are located close to the airfield itself, within high aircraft noise impact areas. There are also a number of temporary and demountable buildings in these areas, which are no longer functionally suitable. Approximately 23 buildings are within high noise areas with offices and working accommodation for approximately 950 staff. This represents a work health and safety risk to employees and workers. The base auditorium and commercial facilities (including a cafeteria, credit unions, post office, drycleaner, hairdresser and retail outlet) are similarly in these high noise areas exposing staff and workers to the same risks. Similarly the base trade waste and stormwater infrastructure do not comply with current environmental discharge standards. The base's ageing sewer treatment plant is less efficient than modern larger plants and is an increasing overhead to management of the site.
14. In May 2015, the Government approved the Project, inclusive of funding.

Project Location

15. RAAF Base Williamtown is located in a semi-rural coastal area about 30 km north of the Newcastle central business district, 15 km east of Raymond Terrace and 32 km south west of Nelson Bay. A Location Plan and Existing Base Plan are included in Attachments 2 and 3.
16. The Base is approximately 986 hectares in area with a perimeter of approximately 14.5 km and is surrounded by rural residential areas, Crown land and water catchment areas with the Base close to the ocean. In recent years, Defence has acquired some surrounding areas of land from land-holders to provide a buffer against noise generated from the Base and remains vacant rural land.

Description of the Proposal

Scope Element 1 - New Flexible Office Accommodation

17. The largest proposed scope element is the Flexible Office Accommodation (FOA), which is intended to accommodate approximately 950 personnel to support the transition of new capability and other base functions. The FOA has been designed to be the first stage of a new command and administrative precinct and will address functionality and compliance needs. An auditorium for 250 personnel as well as the amenity and support functions of the Army & Air Force Canteen Services (AAFCANS) adjacent to the FOA will enable collocation of core functions and necessary amenity support to the concentration of Defence personnel on base to achieve better functionality and capability outcomes. Residual unit accommodation not satisfied by the FOA shall be accommodated in adaptively re-used buildings (as detailed at Scope Element 7 – Office Accommodation provided through Adaptive Reuse).

Scope Element 2 - Upgrade Base Engineering Services Infrastructure

18. The upgrade base engineering services infrastructure scope includes upgrading existing base infrastructure to comply with current Defence requirements and replacing existing aged infrastructure, addressing capability and compliance needs. The proposed works are as follows:
 - a. upgrade High Voltage System, including:

- (1) primary and secondary high voltage distribution network including new and upgraded sub-stations;
 - (2) upgrade Central Emergency Power Station (CEPS);
 - (3) Local Emergency Generator Sets (LEGS); and
 - (4) upgrade Power Control and Monitoring System (PCMS).
- b. decommission and demolish the Base Sewage Treatment Plant (STP);
 - c. upgrade communications;
 - d. upgrade fire water mains; and
 - e. upgrade domestic water valves.

Scope Element 3 – New Base Entries

19. A new northern entrance is proposed approximately 80m north of the existing northern entrance of Medowie Road as a hardened base entry point to operate continuously. This element also includes the upgrade of the existing southern entrance to provide additional security and access management, and hardening consistent with the new northern entrance to address functionality and security needs. The southern entrance is intended to operate in typical civilian working hours only.

Scope Element 4 - New No 4 Squadron Facilities

20. The proposed No 4 Squadron facilities incorporate adaptive re-use of collocated working accommodation, hangar space to accommodate at least four Pilatus PC-9A aircraft and ancillary areas. The collocation and proposed works for No 4 Squadron address functionality and capability needs.

Scope Element 5 - Car Parking

21. This scope element proposes to provide on grade car parking of up to 800 spaces supporting the proposed FOA. The car park sizing of up to 800 car spaces has been based on a detailed assessment of current parking and that existing parking displaced by new construction under the Project, and addresses functionality needs. The planning of this on grade parking enables future extension to support future expansion of the FOA precinct as anticipated by the Base Zone Plan.

Scope Element 6 – Demolition of Redundant Facilities

22. The proposed demolitions include various non-heritage and heritage buildings across the Base that are currently vacant, or that will be vacated, and are not suitable for adaptive re-use or are past their useful life. The heritage buildings are largely in the future aircraft maintenance precinct within the Base Zone Plan and are typically permanent or transient living accommodation that cannot be economically improved. The proposed demolitions will also remove accommodation in the high noise zone of the Base (above Australian Noise Exposure Forecast 40). A rigorous review of the proposed demolition scope occurred with Air Force during project planning to assess the requirement for retention of buildings and structures while considering the recurrent cost of retention within the Defence Estate, addressing functionality, capability and compliance needs.

Scope Element 7 – Office Accommodation provided through Adaptive Reuse

23. A number of existing facilities that will become vacant as a result of the Project have a significant remaining life and are suitable for adaptive reuse by base support personnel needing to functionally work closer to the Flight Lines. Such suitable facilities are proposed to be upgraded to comply with current construction codes and standards, with minor fit-out and noise attenuation works, including roof, ceiling and glazing enhancements where necessary.

‘Below the Line’ Scope Element

24. The following ‘below the line’ scope element has also been approved by Government for delivery should funds become available through competitive tendering during construction, and subject to Department of Finance agreement:
- a. A new playing field outside the high noise area and within the future living and recreation precinct in the north-east corner of the Base.
25. A Site Plan detailing the proposed scope of works (less infrastructure) is included in Attachment 4.

Options Considered to Fulfil the Identified Need

26. The Project considered a range of options for new build or adaptive re-use and various siting options as applicable for the works elements. This consideration balanced the Project budget

with the best delivery of facilities and infrastructure to support existing and upcoming capabilities for Defence.

Scope Element 1 - New Flexible Office Accommodation

27. Current and future acoustic considerations informed the FOA siting, principally constraining the availability of suitable sites with respect to the Australian Noise Exposure Forecast (ANEF). Four capacity options were considered for the FOA which included options at approximately 460, 680, 860 and 950 personnel. RAAF and Defence Materiel Organisation (DMO) sought to maximise this FOA to address WH&S obligations and to achieve improved functionality and working accommodation for base personnel. The tenant requirements within this facility were heavily interrogated for each capacity option and the Project worked closely with DMO in accommodating their working accommodation requirements.

Scope Element 2 - Upgrade Base Engineering Services Infrastructure

28. Site investigations were undertaken to ascertain the extent of work required to be undertaken for each engineering services. These investigations include services location, CCTV inspection of sewer pipework, review of load requirement and consultant on site investigations in determining the scope of works. Various options were considered for the infrastructure systems, particularly for the dedicated fire main systems.

Scope Element 3 – New Base Entries

29. The design options of the Base entries were generally limited by the existing southern entry location, the existing base road network and the new northern entrance location to reflect the siting of the proposed FOA and requirements of the approved Base Zone Plan. Detailed planning considered different traffic flow configurations. The design solution and set back were broadly pre-determined for security purposes consistent with BSIP requirements and similar to other RAAF Bases.

Scope Element 4 - New No 4 Squadron Facilities

30. The Project considered several new build and adaptive re-use options for No 4 Squadron on several sites across the Base. The options for No 4 Squadron considered included:
- a. a new build scenario;

- b. adaptive reuse of No 3 Squadron facilities with their decanting under the NACC Facilities Project;
- c. construction of a new Joint Terminal Attack Controller (JTAC) compound with No 4 Squadron remaining in their current dispersed facilities; and
- d. adaptive reuse of No 2 Operational Conversion Unit (OCU) facilities with their decanting under the NACC Facilities Project.

31. The proposed solution re-using No 2 OCU provides No 4 Squadron with an airside location with collocation of unit elements, that is remote from the NACC precinct as well as the domestic and working precincts, which suits their Special Forces interface.

Scope Element 5 - Car Parking

32. The proposed new car park is on-grade and is provided primarily for the FOA. Siting options are aligned with the acoustically-constrained siting of the FOA and the capacity options available for lineal expansion of the on grade parking. Multi-storied or structured car parking was also considered to increase parking density and unlock land on base for future alternate uses, but not adopted.

Scope Element 6 – Demolition of Redundant Facilities

33. A detailed review has occurred of discretionary demolition to align with zone planning intent, reduction in estate running costs and other Air Force interim requirements to optimise this scope of demolition within the Project.

Scope Element 7 – Office Accommodation provided through Adaptive Reuse

- 34. The options for residual unit working accommodation were driven largely by the relative capacity of the FOA options with the smaller capacity FOA options forcing more adaptive re-use of existing buildings to support the Base population.
- 35. Options considered for the Defence Community Organisation (DCO) included a new build on site, off-site leased and adaptive reuse. The recommended option incorporates DCO within the new AAFCANS precinct adjacent to the FOA (via an interim adaptive reuse solution).
- 36. Options for the Bureau of Meteorology (BOM) included a new build and adaptive re-use options. Specialised accommodation for BOM are proposed to be delivered under R8085

Air Traffic Control (ATC) Complex Infrastructure Project, which subject to Government and Parliamentary approvals, is scheduled for construction in FY16/17-19/20. As such, an interim solution was considered under this project, which considered new demountable construction, adaptive re-use of existing demountables and Building 163 as a temporary move until completion of the ATC Complex. The recommended option for the interim solution is the adaptive re-use of existing demountables and Building 163.

Environment and Heritage Assessment

Environmental Impact of the Proposed Works

37. An Initial Environmental Review (IER) was prepared for the proposed works in 2010 to inform Defence and the relevant stakeholders of the potential environmental, social and heritage issues relating to the Project. The IER identified environmental risks associated with the construction phase which can be managed and mitigated using a suite of standard management and mitigation approaches. As such, these risk and their construction activities are unlikely to have a significant impact on the environment.
38. The IER informed a focus in the planning phase on the following potential risks:
 - a. the potential loss of habitat for significant fauna due to clearing for buildings and underground infrastructure;
 - b. the demolition of heritage-listed buildings; and
 - c. redevelopment works that may affect the Indigenous cultural heritage landscape at the Base.
39. Defence prepared an assessment that concluded that the impact of the proposed works would not be significant with the exception of the demolition of heritage-listed buildings.
40. The proposed works will be managed in accordance with the Defence Environmental Management Framework. The Construction Environmental Management Plan for construction activities will need to comply with the requirements of the Project's Environmental Assessment Report prepared by the Defence Directorate of Environmental Protection and Assessments, and the associated Environmental Clearance Certificate.

Indigenous Heritage Considerations

41. Sites of Indigenous heritage significance are present at RAAF Base Williamtown, but are located away from the areas of the proposed works at the Base.
42. The Worimi Land Council will be consulted on the potential for impact on Indigenous heritage value in RAAF Base Williamtown and any appropriate mitigation measures shall be implemented during construction. Such mitigation measures will be included within the Construction Environmental Management Plan and addressed as part of the Site Induction process.

Non Indigenous Heritage Considerations

43. RAAF Base Williamtown is included on the Commonwealth Heritage List established under the *Environmental Protection and Biodiversity Conservation Act 1999* (Cth). It is described in the citation as being significant for ‘the operational and training focus for Australia’s jet fighter aircraft’, including the, ‘Vampire (1949 – 1964), Sabre (1955-1964), Mirage (1965-1982) and F/A18 Hornet (1983-present)’. The evolving landscape of RAAF Base Williamtown is also of Commonwealth Heritage significance, which is evident through the historic phases of development on the Base inclusive of:
 - a. World War II (1939-1945);
 - b. the ‘Birth of the Jet Age’ (1946-1964);
 - c. the ‘Age of the Mirage’ (1965-1982); and
 - d. the ‘F/A 18 Hornet Era’ (1983-present).
44. Each historic phase or deployment of new aircraft types on the Base is represented by purpose built structures for the aircraft. There are 50 individual buildings and other elements, including road layouts and sections of runways and taxiways that are cited for their historic contribution to the Base.
45. Nine Commonwealth Heritage Listed assets (Buildings 37, 172, 354, 355, 420, 447, 448, 539 and 817) are identified for demolition as part of the Project. An EPBC referral has been submitted to the Minister for the Environment, seeking approval to demolish the nine buildings under this project, plus an additional five heritage buildings at the Base by other Defence projects.

46. The Community will be consulted with respect to the proposed demolitions in accordance with the requirements of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth).
47. A decision by the Minister for Environment is expected in mid 2015.

Key Legislation

48. The following key legislation is relevant to this project:
 - a. *Defence Act 1903* (Cth);
 - b. *Native Title Act 1993* (Cth);
 - c. *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act);
 - d. *Building and Construction Industry Improvement Amendment (Transition to Fair Work) Act 2012* (Cth);
 - e. *Work Health and Safety Act (WH&S) 2011* (Cth);
 - f. *Disability Discrimination Act 1992* (Cth);
 - g. *Fair Work Act 2009* (Cth); and
 - h. *Fair Work (Building Industry) Act 2012* (Cth).

Applicable Codes and Standards

49. The design of the proposed works will comply with all relevant and current Defence standards, Australian standards, codes and guidelines including the following:
 - a. National Construction Code 2014 (includes the Building Code of Australia (BCA));
 - b. Defence Manual of Fire Engineering (MFPE);
 - c. Manual of Infrastructure Engineering Electrical (MIEE); and
 - d. Defence Estate quality Management System (DEQMS).

Consultation with Stakeholders

50. 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. A list of key stakeholders who have been, or will be, consulted in regard to this Project are provided in Attachment 5.

51. 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

52. The objective of the RAAF Base Williamtown Redevelopment Stage 2 Project is to upgrade and replace critical infrastructure and improve the functionality, capability, security and compliance of facilities at the Base in order to support existing base functions and future Defence capabilities.
53. The Project is to upgrade or replace critical ageing infrastructure, improve environmental compliance of base infrastructure, address WHS issues in the accommodation of personnel, including the consequential parking and internal configuration, improve base perimeter security, improve operational capability of No 4 Squadron and address the estate maintenance costs through discretionary demolitions.
54. The Project will also enhance the capacity of the Base and its services to support existing base functionality and future Defence capability. The Project will deliver base wide engineering systems that integrate with the new JSF facilities being delivered under a separately approved project (see paragraph 114).

Detailed Description of the Proposal

Scope Element 1 - New Flexible Office Accommodation

55. The FOA is in a 5-storey configuration for approximately 950 personnel with the blocking and stacking of functional areas to reflect synergies between Surveillance Response Group (SRG) and Ground Telecommunications Equipment Special Program Office (GTESPO), as well as Air Combat Group (ACG) and Tactical Fighter Special Program Office (TFSPPO).
56. Tenants of this building include:

- a. Air Combat Group including the Air Combat Systems Program Office and the Lockheed Martin National Operations Centre;
 - b. Tactical Fighter Systems Program Office;
 - c. Surveillance Response Group;
 - d. Ground Telecommunication Equipment Systems Program Office; and
 - e. Defence Support and Reform Group.
57. Within the FOA precinct are the AAFCANS and related commercial facilities that comprise a single storey space. This space is designed to facilitate a link to future office buildings potentially extending to the south. The FOA precinct also includes a Secure-rated 250-seat auditorium with a raked floor and presentation podium for use by base units and tenants.

Scope Element 2 - Upgrade Base Engineering Services Infrastructure

58. The Engineering Services Upgrades comprise:
- a. Upgrades to the site high voltage services including:
 - (1) Upgrade of the high voltage (HV) system including replacement of HV switchgear and transformers, balancing of the load by moving substations between the ring mains and provision of new ring main units, provision of new fault pass indicators, removal of load shedding contactors and some minor works to the lighting installation and replacement of overhead supplies to the former Married Quarter area with underground supplies.
 - (2) Upgrade of the CEPS, including replacement of two existing emergency generators with new capacity units, reorientation of two existing generators to allow for better ventilation, modification of the existing generator control system, replacement of ventilation systems to the existing units and replacement of cooling pipework.
 - (3) Upgrade of the HV PCMS with new network software and hardware to incorporate new equipment to the existing system and reconfiguration of the operation of the system.
 - b. Upgrade of communications including a new FOA private automatic branch exchange node and associated cabling, fibre optic cabling for security requirements,

minor works to the fire alarm monitoring system including new modules in existing fire indicator panels, replacement of light emitting diode transmitters with new laser unit and new mimic panels.

- c. Upgrade of fire water mains with associated valves and hydrants installed to serve selected buildings and minor replacement works to the Base fire pump station.
- d. Replacement of sections of the domestic water mains that were installed over 60 years ago and replacement of isolation valves on the potable water mains including new backflow prevention devices to the potable water system serving the storage tanks and supplies to the irrigation feeds.

Scope Element 3 – New Base Entries

- 59. A new base entry is provided to the north of the existing northern entrance from Medowie Road for continuous operation. The design incorporates a hardened base entry point with guard house, boom gates, rising vehicle barriers, turn around area, blast walls, a vehicle inspection point, segregated entry and exit lanes and separate motorcycle entry lane and pedestrian entry. The location supports the easy access to the FOA and supporting on grade car parking.
- 60. This new northern entrance scope includes the decommissioning and removal of a number of existing buildings, including the former Caltex service station close to the existing entry and will involve the removal of storage structures for petroleum products and consequent contamination.
- 61. This northern entrance requires a realignment and upgrade of Medowie Road to incorporate a signalised intersection as well as a full depth pavement works.
- 62. The existing southern base entry provides additional security and access management and hardening design consistent with the new northern entrance. It is intended for typical working hours' access and will retain the existing Pass Office.

Scope Element 4 - New No 4 Squadron Facilities

- 63. The new No 4 Squadron facilities comprise a headquarters and administration function with the adaptive re-use of Building 20. The scope also includes re-use of Building 19 as a hangar for aircraft and supporting workshops. Building 378 is used to accommodate one flight of No 4 Squadron as well as the JTAC function in addition to current uses. Vehicle

shelters are also provided within this precinct for Bushmasters and quad bikes of No 4 Squadron.

Scope Element 5 - Car Parking

64. On grade car parking for up to 800 spaces is provided immediately to the east of the office accommodation precinct running parallel with Medowie Road. The set backs from the perimeter fence and the adjacent buildings satisfy Defence Security Authority requirements and the on grade parking has appropriate lighting and surveillance cameras. The design enables growth to the south into the former Married Quarter area continuing parallel with Medowie Road.

Scope Element 6 – Demolition of Redundant Facilities

65. Demolition of buildings includes those currently vacant or which will be vacated and are not suitable for adaptive re-use or are past their useful life. This scope element intends to balance the capability requirements of the Base with controlling the recurrent cost of the estate in maintaining under-utilised facilities. This demolition scope includes under-utilised working accommodation, training areas, amenity facilities and non compliant transient and permanent living accommodation.

Scope Element 7 – Office Accommodation provided through Adaptive Reuse

66. Residual office and working accommodation requirements after the FOA tenant unit allocation will be addressed by the adaptive re-use of Building 631. This scope includes improvements to building fabric to address noise attenuation and improvements to internal layout within the existing constraints.

Details of Site Selection

67. Defence approved a Base Zone Plan in February 2013, which informs the planning and siting of the work elements of this project. This outlines the various zones of the Base, which provide an overarching spatial plan for the location of different types of land uses at the Base. The major building works elements are within the operational support zone in the eastern portion of the Base as is evident in the Existing Base Plan and Work Elements Plan (Attachments 3 and 4).
68. The type of activities are further refined in the Base Zone Plan by defining land use precincts, which are comprised of a grouping of complementary or functionally related land

uses. The precincts provide greater certainty with regard to spatial configuration of activities in the Base, while incorporating flexibility within the precincts to respond to site conditions, expansion, changing capability and user requirements. The siting of all permanent facilities is in accordance with the land use precincts defined in the approved Base Zone Plan.

69. The site selection for each project element has been undertaken in accordance with the Defence Estate Quality Management System (DEQMS). The reviews conducted by site selection boards during 2011 considered the advantages and disadvantages of various siting options in forming a decision on the siting of work elements. This process considered Defence policy, environment, heritage, operational considerations and existing planning guidance under the then draft Base Zone Plan.

Reasons for Adopting the Proposed Course of Action

Scope Element 1 - New Flexible Office Accommodation

70. The selected 5-storey FOA solution with a capacity of approximately 950 personnel maximises the number of base personnel within appropriate noise-attenuated office accommodation. It addresses the requirements of RAAF and DMO and co-locates key units within a modern fit-for-purpose building. This option, coupled with the siting of the FOA in a less noise sensitive area of the Base, has best addressed the WHS obligations of Defence for the Base personnel, and limits the amount of adaptive re-use of existing buildings for users not located within the new FOA precinct. The co-location of the commercial precinct and the 250-seat auditorium with the FOA precinct also provides working efficiencies and will reduce traffic on base in addition to addressing WHS obligations through siting this high density area of base personnel in a lower noise area of the Base.

Scope Element 2 - Upgrade Base Engineering Services Infrastructure

71. The scope of engineering services upgrades in this base redevelopment addresses the compromised base functionality and capability arising from a lack of investment in these ageing assets. It provides the necessary engineering platform for the Base to operate and support the resident capabilities.
72. The engineering services upgrades have also addressed environmental compliance matters and made improvements in the existing infrastructure to best accommodate and integrate the new JSF precinct delivered under the NACC Facilities Project. The scope of upgrades also

optimises the future estate management costs for this increased capability through de-commissioning and demolition of redundant elements of the infrastructure.

Scope Element 3 – New Base Entries

73. The configuration of the new northern entrance has satisfied the new internal base configuration intended under the approved Zone Plan with the new JSF precinct to the north and the concentration of base office accommodation and its supporting car parking adjacent to this new northern entry. This solution, with the primary 24-hour entry now at the new northern entrance, improves the traffic flow of the Base to minimise internal travel distances and consequent security aspects that arise. The solution for both north and southern base entries also address perimeter hardening and operational security requirements and address the needs of Port Stephens Council and the Road and Maritime Services in the treatment of Medowie Road and entry / exit from the Base onto Medowie Road.

Scope Element 4 - New No 4 Squadron Facilities

74. The adaptive re-use of No 2 OCU facilities, following their decanting to new facilities under the NACC Facilities Project, addresses the functionality and compliance issues for No 4 Squadron. The adaptive re-use addresses issues of size, functionality and amenity that currently constrain the functionality of No 4 Squadron without high expenditure for new flying squadron facilities. Further, the co-location with JTAC Troop and the siting adjacent to the future proposed JTAC simulator building provides a well coordinated precinct for No 4 Squadron with direct access to the flight line as required by this flying squadron.

Scope Element 5 - Car Parking

75. The on grade parking solution, with provision for lineal expansion to suit future expansion of the working accommodation precinct, provides the greatest working efficiencies, reduced traffic on base by virtue of its siting close to the new northern entrance and was the lowest cost solution. It addresses the current issues of dispersed and inadequate parking across the Base and provides for a simple low cost extension should increased parking capacity be necessary. Multi-storied or structured car parking was considered, however, was discounted due to excessive cost and visual impact. A multi-storied carpark remains an option to release land for future higher priority land use.

Scope Element 6 – Demolition of Redundant Facilities

76. The scope of demolition has best addressed the competing interests of preserving facilities for potential future use and the need to manage the recurrent costs of estate maintenance for under-utilised assets and facilities. The demolition of older building stock addresses their not being fit for purpose due to lack of acoustic and noise attenuation which mitigates WHS risk to base personnel.

Scope Element 7 – Office Accommodation provided through Adaptive Reuse

77. The scope of office accommodation provided through adaptive reuse has best addressed the required interim moves and the reuse of existing facilities with significant residual life, and proposed occupants being located in alignment with the Base Zone Plan.

Land Acquisition, Zoning and Approvals

78. Apart from remediation of the transpiration lagoons adjacent to Newcastle Airport and works on Medowie Road, the proposed works are contained wholly within Commonwealth owned and Defence controlled land. The works are consistent with the approved Zone Plan. No civilian authority design or construction approvals are required within the Base, however, where applicable, the works will comply with relevant standards and regulations.
79. The proposed works do not require acquisition of additional land.

Childcare Provisions

80. An existing Childcare centre is located at RAAF Base Williamtown. It is not proposed to provide additional facilities as part of this project.

Impact on Local Community

81. **Local Road and Traffic Concerns.** Construction traffic routes will be managed to minimise disruption to local communities with construction activities not expected to cause significant disruption to residents or businesses located in the vicinity of the Base. The proposed relocation and increase in car parking spaces to support the new FOA at the proposed new northern entrance, coupled with the new JSF precinct to the north and a related increase in personnel will act to significantly alter the distribution of ingress and egress movements in the future. The current distribution is 60% north gate and 40% south gate, it is apparent that this distribution could increase to 75%-85% at the north gate.

82. The peak ingress and egress movements for the Base are concentrated into relatively short time periods and the consequences of this will be exacerbated with the projected concentration of access movements to the northern gate. The magnitude of the projected right turn movements is such that ‘sea gull’ treatment would still require the provision of traffic signals for operational safety reasons. Due to the projected magnitude of the right turn ingress movement in the morning peak and the flow constraint of the Base security operations and speed hump devices, it will be necessary for two right turn lanes to be provided with signal control of the conflicting left turn ingress.
83. The access traffic volumes at the south gate intersection will be significantly reduced and the opening hours constrained. As such there will be no requirement for upgrade of the existing intersection apart from the works associated with the Base’s security upgrade and improved access for obtaining base passes.
84. **Public Transport.** There is currently a bus stop at RAAF Base Williamtown’s main gate on Medowie Road. The design has considered moving the bus stops closer to entry gates to promote the use of public transport by base personnel.

Planning and Design Concepts

85. The overall philosophy adopted for the design of the proposed facilities incorporates the following considerations:
- a. the facilities are to be functional and efficient to support required capability;
 - b. the facilities shall deliver contemporary workplaces and operational working environments;
 - c. the facilities shall comply with relevant codes, Defence practices and legislation;
 - d. the facilities shall meet environmental and building performance objectives; and
 - e. the facilities shall deliver buildings within their target budgets.

Structural

86. All proposed building structures have been designed to conform to the Building Code of Australia (2011), Australian Design Standards and any specific use requirements. None of the buildings components are classed as having a post disaster requirements under

Australian Standards for wind and earthquake loading and therefore do not have augmented structural capacity.

87. Except where specifically noted as a performance requirement, buildings designed in the Project will not be designed for any loads imparted from either improvised explosive devices, external fuel storage facilities or from vehicular borne impact loads. Explosive loads from nearby substations will be designed for where required.

Materials and Furnishings

88. As the key element subject to materials selection and furnishings, the FOA has been designed to address the following key design principles:
- a. provide a high level of amenity to personnel occupying the building including break out and commercial amenity;
 - b. comply with the requirements of the BSIP for security works;
 - c. incorporating tiered security layers to allow secure facilities up to Top Secret to be included in the building;
 - d. meeting the Defence Accommodation Guidelines for Open Plan Office Environments;
 - e. meeting the Commonwealth Property Management Guidelines; and
 - f. maximises opportunities for user groups to share functional areas.

Mechanical Services

89. The mechanical Heating, Ventilation and Air Conditioning (HVAC) design has adhered to the BCA 2011 requirements as well as a range of Defence requirements for HVAC selection and is based on the following criteria:
- a. plant has a minimum design life of 15 years, unless the Whole of Life analysis demonstrates that a shorter life is justified;
 - b. plant strictly adheres to the nominated acoustic criteria in each space;
 - c. plant has been selected which is appropriate for the environment in which it is located, including consideration of condensation and corrosion factors;

- d. general plant capacities have been based on the Defence standard for outdoor design temperatures;
- e. all computer rooms and communications rooms are provided with stand-alone plant and provided with appropriate redundancy;
- f. all systems selections have been analysed on the basis of Whole of Life processes as per the Defence requirements of an HVAC Selection Report;
- g. all electric motors are high efficiency selections;
- h. all fans and pumps are high efficiency selections; and
- i. all wall and ceiling mounted split systems are variable speed 'inverter' style compressors to maximise low load efficiencies.

Hydraulic Services

90. The hydraulic services systems have been designed to provide a service that meets the local authority requirements and represents a coordinated scheme to accepted industry standards. This requires the design and installation in accordance with:
- a. AS 3500 National Plumbing and Drainage Code;
 - b. NSW Code of Practice for Plumbing and Drainage;
 - c. Building Code of Australia;
 - d. Hunter Water Corporation;
 - e. Port Stephens Council Local Government Authority; and
 - f. Jemena requirements including AS 5601 Gas Installations.
91. The stormwater drainage design for each project element:
- a. maintains existing base stormwater design discharge as required by Port Stephens Shire Council and Defence;
 - b. provides environmental best practice in relation to mitigation of oil and fuel spills, sedimentation and Aqueous Film Forming Foam discharge management; and
 - c. returns clean stormwater water to the local aquifer wherever possible.

Electrical Services

92. The objective of the electrical engineering design for the Project is to:
- a. provide reliable systems to support base capability;
 - b. provide electrical system compliance with the respective installation standards;
 - c. facilitate suitable fault recovery performance;
 - d. adequately plan for additional load for this current project and make reasonable allowances for future base development, including the NACC Facilities project; and
 - e. ensure no harmful effect or interaction with other installed equipment.

Acoustics

93. The dominant noise concerns for this Project are the impacts of existing and new aircraft on the inadequately noise-attenuated working accommodation.
94. This Project has addressed this in the design process through noise attenuation strategies in the building envelope and building services design. Detailed acoustic reports have been prepared at each design stage to mitigate the impacts of aircraft noise on the building occupants. The Project, as guided by the Zone Plan, has considered siting options for working accommodation with respect to the Australian Noise Exposure Forecast.

Fire Protection

95. The design includes the installation of automatic fire alarm and detection systems as required by the Defence MFPE, the National Construction Code 2014 and the MIEE. The fire indicator panel in each of the buildings will be monitored centrally on base.

Security Measures

96. In accordance with Government initiatives to improve physical security arrangements, advice from designated security authorities has been incorporated in the design solutions for the proposed facilities as appropriate. Security protection will be provided in accordance with the Defence Security Manual and in some elements of the FOA, in accordance with project specific requirements.

Environmental Sustainability of the Project

97. The Commonwealth is committed to the Ecologically Sustainable Development (ESD) and the reduction of greenhouse gas emissions. Defence reports annually to Parliament on its energy efficiency targets established by the government as part of its commitment to improved ESD outcomes.
98. Defence also implements policies and strategies in energy, water and waste to improve natural resource efficiency and to supports its commitment to the reduction of energy consumption, potable water consumption and waste diversion to landfill.
99. The ESD targets and requirements for Defence projects shall comply with the Defence Building Energy Performance Manual. The ESD targets and measures for this project have been balanced with other requirement for Defence buildings such as functional and security requirements, heritage considerations and Work Health and Safety considerations.
100. Defence ESD 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

101. Defence has adopted the principles of the Energy Efficiency in Government Operations policy in relation to office accommodation.
102. For those building that have a floor area of greater than 2000m² where the office area comprises greater than 50 per cent of the total building area, the whole building will target 4.5 stars under the National Australian Built Environment Rating System. An energy management plan will be developed for each building for implementation by Defence.
103. For all other mixed-use buildings that have office floor area of less than 2,000m² or where the offices area does not comprise 50 per cent of the total building area, separate digital energy monitoring devices will be installed and office lighting will not exceed 10W/m².

Water and Energy Conservation Measures

104. The main conservation measures are driven by the Defence Building Performance Manual (BPM). The FOA building has been optimised through passive design features, to take advantage of the local climatic conditions in order to reduce energy consumption, and to

improve the comfort of building users. A detailed assessment of climate factors has been undertaken to understand solar exposure, prevailing wind direction and temperature.

105. Water use reduction targets will be achieved through use of appropriate fixtures and fittings and recharge of the Newcastle aquifer in place of the more traditional rainwater harvesting or grey water re-use.

Landscaping

106. Landscape design has considered and elaborated upon the principles established in the Base Landscape Master Plan. Landscaping on the project is largely limited to planting and associated treatments around each works element.
107. The use of regionally indigenous species is being investigated (i.e. being grown from local seed) with limited irrigation systems.

Work Health and Safety Measures

108. The proposed facilities to be provided under this project will comply with the Department of Defence Occupational Health and Safety policy, the Work Health and Safety Act (Cth), Occupational Health and Safety (Commonwealth Employment – National Standards) Regulations and the Defence Work Health and Safety manual.
109. In accordance with section 35(4) of the Building and Construction Industry Improvement Act 2005 (Cth), building contractors will be required to hold full occupational 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.
110. The design of the works has been developed in accordance with the safety in design provisions of the Work Health and Safety Act 2011 (Cth).
111. The construction of the works will be managed in accordance with the Work Health and Safety Act 2011 (Cth). All construction sites will be appropriately secured to prevent unauthorised access during the construction period. No special or unusual public safety risks have been identified.

Provisions for People with Disabilities

112. These works will comply with required provisions for disabled access detailed in the National Construction Code 2014, Australian Standard AS1428 and Defence's policy Disabled Access and Other Facilities for Disabled Persons.
113. Access to, and connections between buildings and facilities on the site, including car parking, will also be designed in accordance with relevant access standards.

Related Projects

114. The following proposed projects will deliver facilities or infrastructure at RAAF Base Williamtown during a similar period of delivery for this project. Each related project has been taken into consideration when developing this project proposal.
 - a. The NACC Facilities Project will provide new and upgraded facilities and infrastructure at ten Defence sites across Australia to support the JSF capability, inclusive of RAAF Base Williamtown. Works at RAAF Base Williamtown commenced in early 2015 and are on track for completion in late 2018.
 - b. The Williamtown Waster Water Treatment Project will allow Defence to connect RAAF Base Williamtown to the Hunter Water Corporation's Waster Water Transfer Scheme, enabling the existing Base STP to be demolished and the site remediated under this project.
 - c. The ATC Complex Infrastructure Project proposes to provide long term facilities for the BOM elements that are being displaced and provided with interim facilities under this project.

Cost Effectiveness and Public Value

Outline of Project Costs

115. The total estimated out-turn cost of this redevelopment Project is \$274.0 million excluding Goods and Services Tax. This cost estimate includes the construction costs, management and design fees, furniture, fittings and equipment, contingencies and escalation allowances.
116. Net operating costs associated with the proposed redevelopment are projected to increase due to an overall increase in the total gross floor area on the Base, primarily as a result of

enhanced security requirements to meet operational needs and compliance with current accommodation standards.

117. Additionally, plant maintenance costs will increase due to the new and adaptively re-used facilities being designed to a higher standard to comply with current building codes and standards. Savings generated through demolition of outdated facilities have been used to offset a portion of the additional operating costs.

Details of the Project Delivery System

118. The Project is being delivered using the Managing Contractor form of contract. This contracting methodology provides Defence with the benefit of a large construction firm managing design and construction, while promoting access for local small to medium enterprises through sub-contracting design and construction trade packages.
119. A Project Manager / Contract Administrator was appointed by Defence for the Planning Phase to manage the project works and the associated administration of contracts. Subject to Parliamentary approval, and the Project Manager / Contract Administrator fulfilling its obligations under the Planning Phase contract, the Project Manager / Contract Administrator will be engaged for the Delivery Phase to manage the project and administer the Managing Contractor contract.
120. A Managing Contractor was appointed by Defence for the Planning Phase to manage design development to meet the needs of Defence. Subject to Parliamentary approval, and the Managing Contractor fulfilling its obligations under the Planning Phase contract, the Managing Contractor will be engaged for the Delivery Phase to finalise the design, procure trade based work packages and manage the construction of the proposed works.

Construction Schedule

121. Subject to Parliamentary approval of the Project, design finalisation will commence in mid 2015, with construction expected to commence in early 2016. Works will be progressively completed, with all works expected to be completed by late 2021.

Public Value

122. The Project will generate a significant amount of short-term employment predominantly in the building, construction and unskilled labour markets in the Hunter Region and beyond. Significant numbers of personnel are expected to be directly employed on construction activities as well as off-site functions for manufacturing and distribution of materials, as well as additional ancillary services.
123. As a result of using the Managing Contractor form of delivery, Defence anticipates that local building sub-contractors will be employed on a large proportion of the construction works. The Managing Contractor will continue to engage with local industry groups to maximise opportunities for local businesses, providing a positive economic impact to small and medium enterprises in the region. Where the local market has insufficient capacity to manage the volume of the work, Defence anticipates employing building sub-contractors from the Sydney market, providing wider economic benefits from the Project.

Revenue

124. No revenue will be derived from the Project.

ATTACHMENT 1 – TENANT UNITS ON BASE

1. The units that are based at RAAF Base Williamtown to support the current capability are as follows:

a. **Air Combat Group (ACG):**

- (1) HQACG. Headquarters Air Combat Group
- (2) HQ81WG. Headquarters No. 81 Wing
- (3) 3SQN. No. 3 Squadron (F/A-18 Hornet)
- (4) 77SQN. No. 77 Squadron (F/A-18 Hornet)
- (5) 2OCU. No. 2 Operational Conversion Unit (F/A-18 Hornet)
- (6) HQ78WG. Headquarters No. 78 WG
- (7) 76SQN. No. 76 Squadron (Hawk 127 Lead In Fighter)
- (8) 278SQN. No. 278 Squadron
- (9) 4SQN. No. 4 Squadron (Pilatus PC9/A)

b. **Surveillance and Response Group (SRG):**

- (1) HQSRG Headquarters Surveillance and Response Group
- (2) HQ42WG Headquarters. No. 42 Wing
- (3) 2SQN No. 2 Squadron. (AEW&C Wedgetail)
- (4) HQ41WG Headquarters. No. 41 Wing
- (5) 3CRU No. 3. Control and Reporting Unit
- (6) HQ44WG. Headquarters No. 44 Wing
- (7) HQ453SQN. Headquarters No. 453 Squadron
- (8) 453 SQN WLM FLT. No. 453 Squadron Williamtown

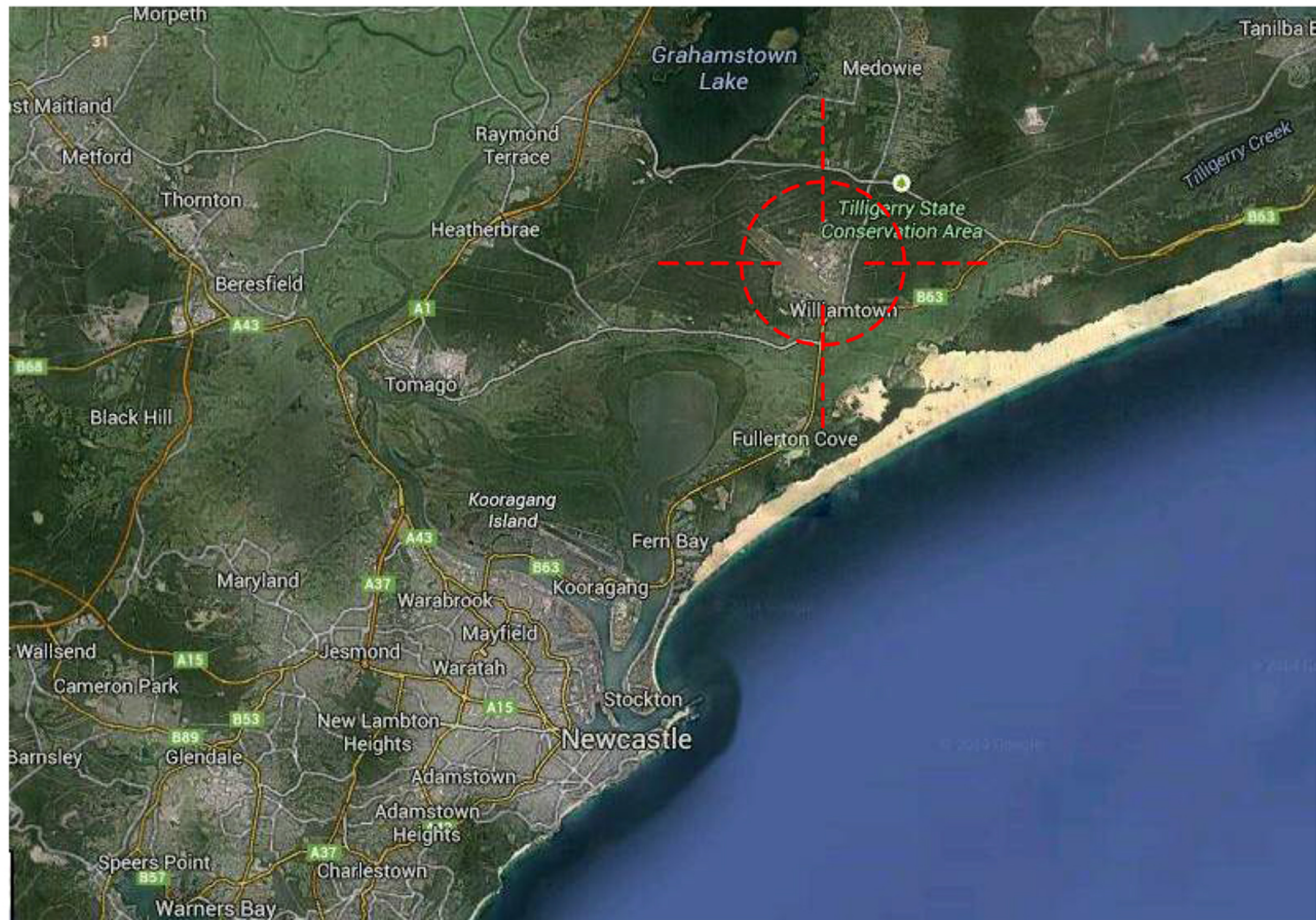
c. **Combat Support Group (CSG):**

- (1) 26SQN. No 26 (City of Newcastle) Squadron
- (2) 381ECSS. No. 381 Expeditionary Combat Support Squadron
- (3) 2EHS. No. 2 Expeditionary Health Squadron
- (4) Air Movements Section WLM.

d. **Air Force Training Group (AFTG):**

- (1) Air Force Band Detachment (AFBAND DET)

- e. **Air Force Headquarters (AFHQ):**
 - (1) AFI. Air Force Improvement
 - (2) 335SQN (CADET). No. 335 (CADET) Squadron
 - f. **Vice Chief of Defence Force Group (VCDF Group):**
 - (1) ADFWC. Joint Warfare, Doctrine and Training Centre
 - (2) DNSDC. Defence National Storage & Distribution Centre
 - (3) DEOS. Defence Explosive Ordnance Services
 - g. **Defence Materiel Organisation (DMO):**
 - (1) TFSPPO. Tactical Fighter Systems Program Office
 - (2) GTESPO. Ground Telecommunication Equipment Systems Program Office
 - (3) AEW&CSPO. Airborne Early Warning and Control Systems Program Office
 - h. **Defence Support and Reform Group (DSRG):**
 - (1) DSO-NNSW. Defence Support Operation Northern NSW
 - (2) DCO. Defence Community Organisation.
2. Other non Defence organisations located at RAAF Base Williamtown include:
- a. Newcastle Airport Ltd
 - b. Fighter World Museum / Café
 - c. Frontline Support Services
 - d. Helicopter Support Services Search and Rescue (SAR)
 - e. ABC Learning Child Care Centre
 - f. Bureau of Meteorology (BOM)

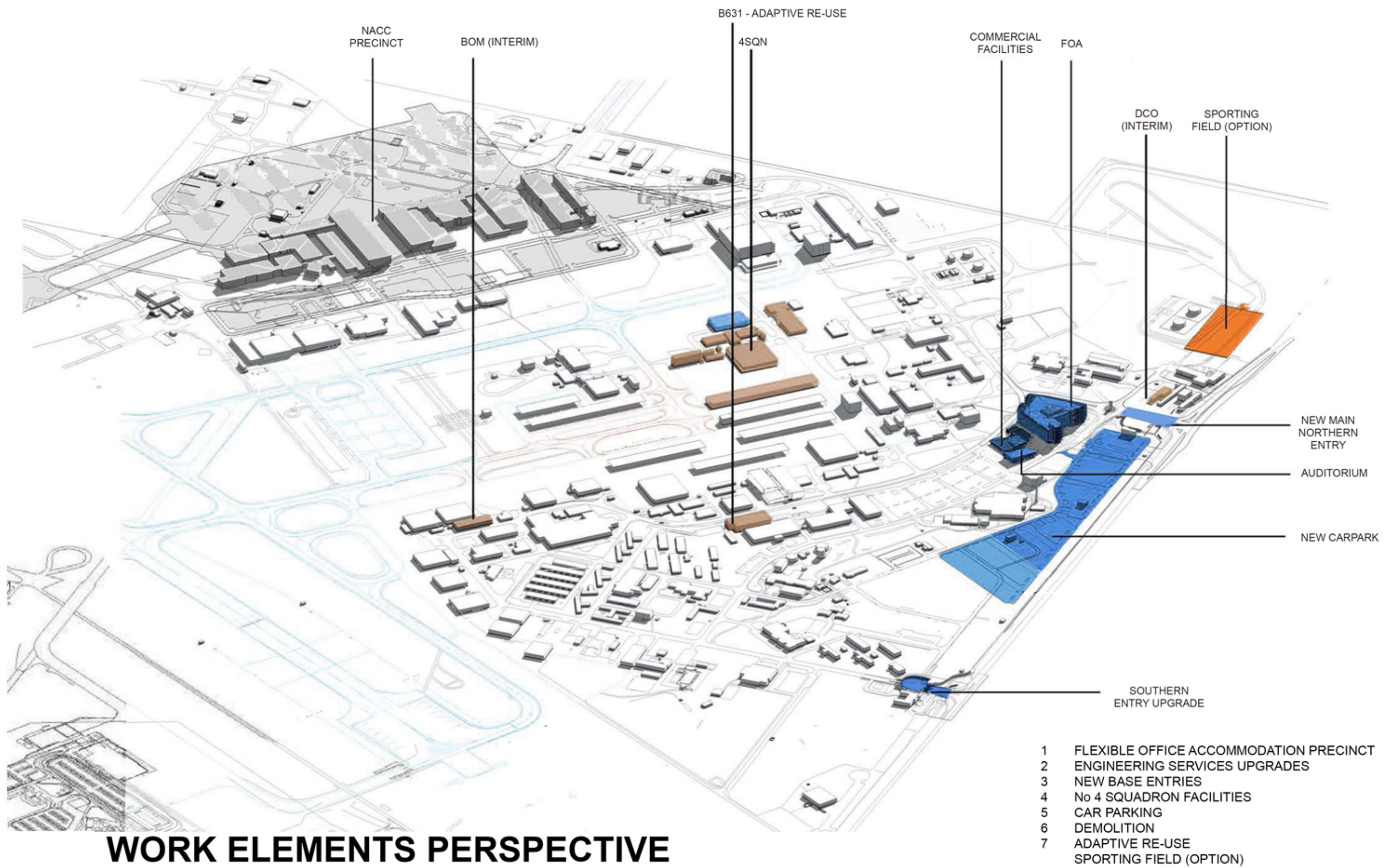


RAAF BASE WILLIAMTOWN

LOCALITY PLAN



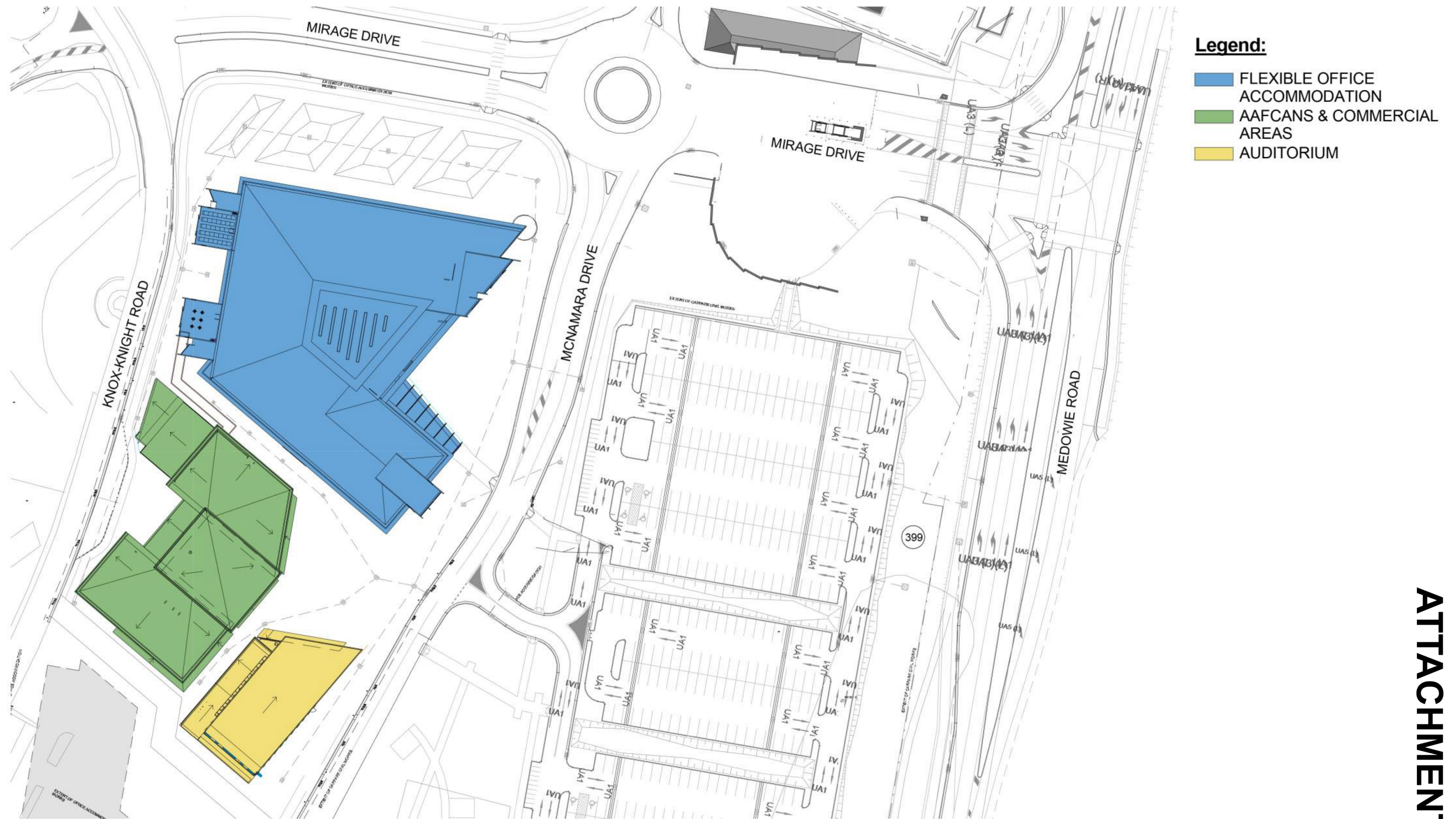
RAAF BASE WILLIAMTOWN
EXISTING BASE PLAN (PARTIAL)



ATTACHMENT 5 – STAKEHOLDER CONSULTATION LIST

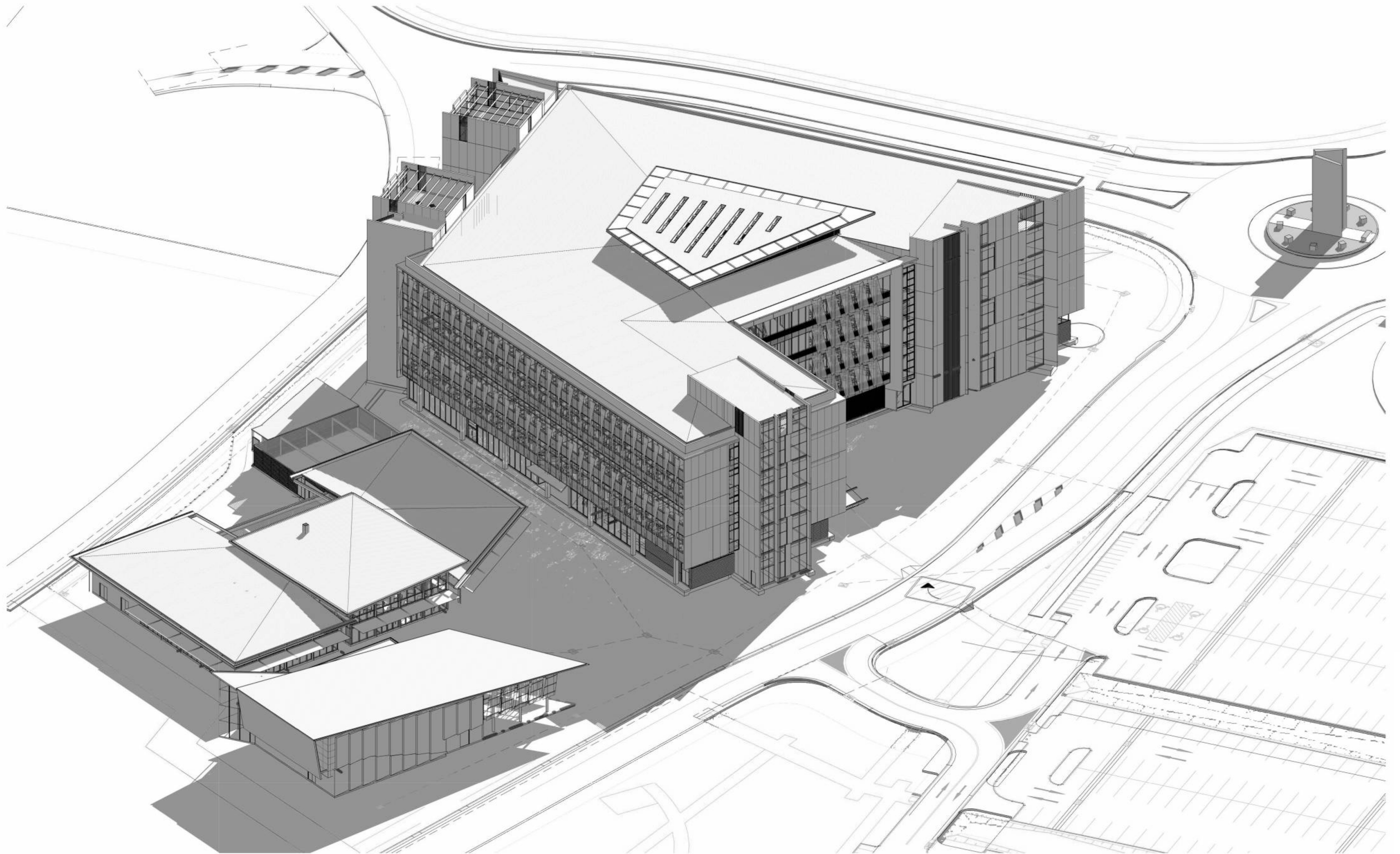
1. The key stakeholders for the Project who have been, or will be, engaged in the consultation process are as follows:

- a. Federal Member for Newcastle, Ms Sharon Claydon MP
- b. Federal Member for Paterson, Hon Bob Baldwin, MP
- c. State Member for Port Stephens, Ms Kate Washington MP
- d. Department of Environment
- e. Port Stephens Council, Mayor Mr Bruce MacKenzie
- f. Newcastle Chamber of Commerce
- g. AusGrid
- h. Hunter Water Board
- i. Roads and Maritime Services
- j. Hunter Water Corporation
- k. Telstra and Optus
- l. Jemena
- m. Newcastle Airport Limited
- n. Hunter Land Development
- o. Department of Finance
- p. Traditional Owners (Worimi Land Council)
- q. Local Community



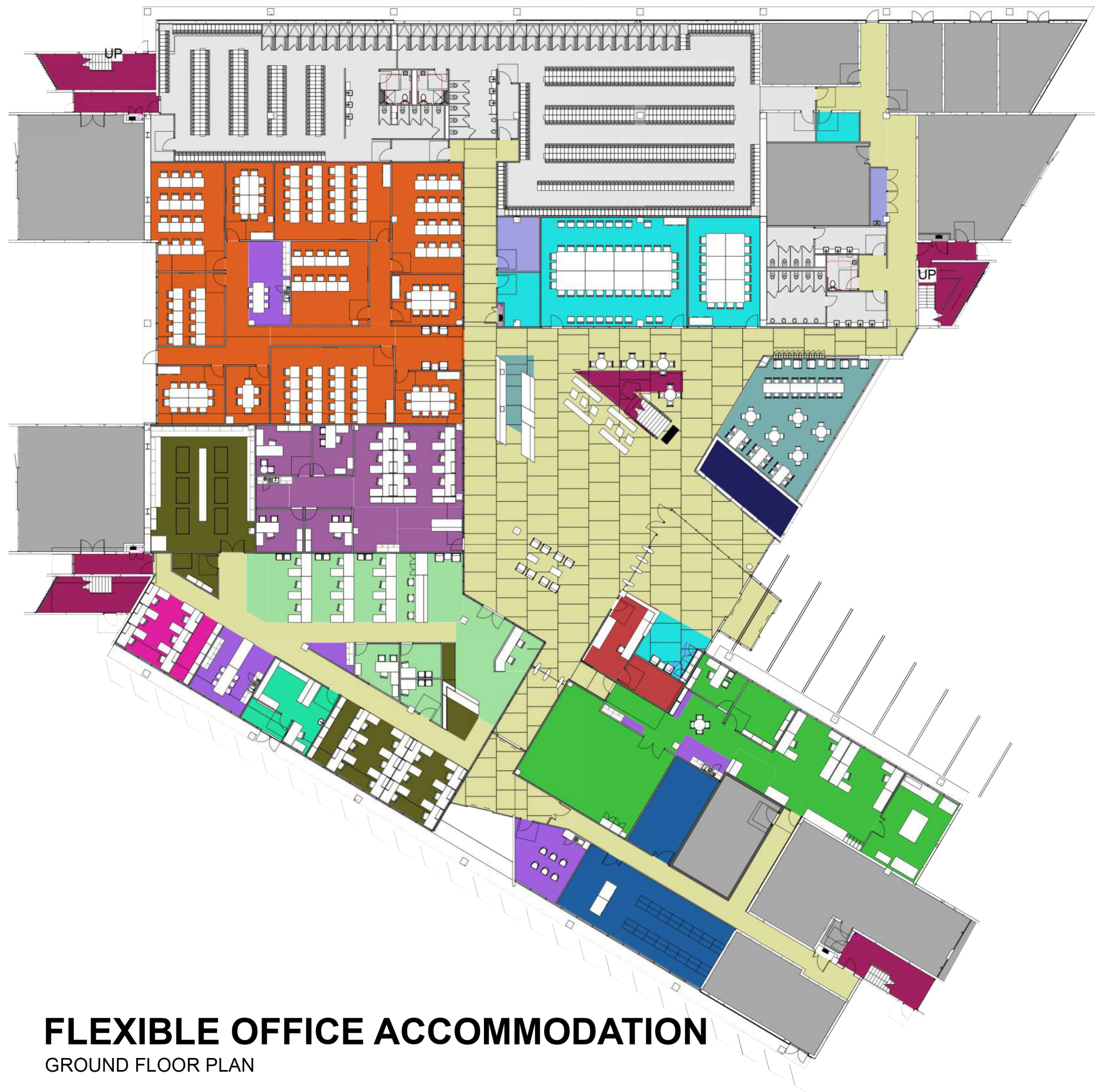
FLEXIBLE OFFICE ACCOMMODATION PRECINCT

SITE PLAN



FLEXIBLE OFFICE ACCOMMODATION

PERSPECTIVE 1

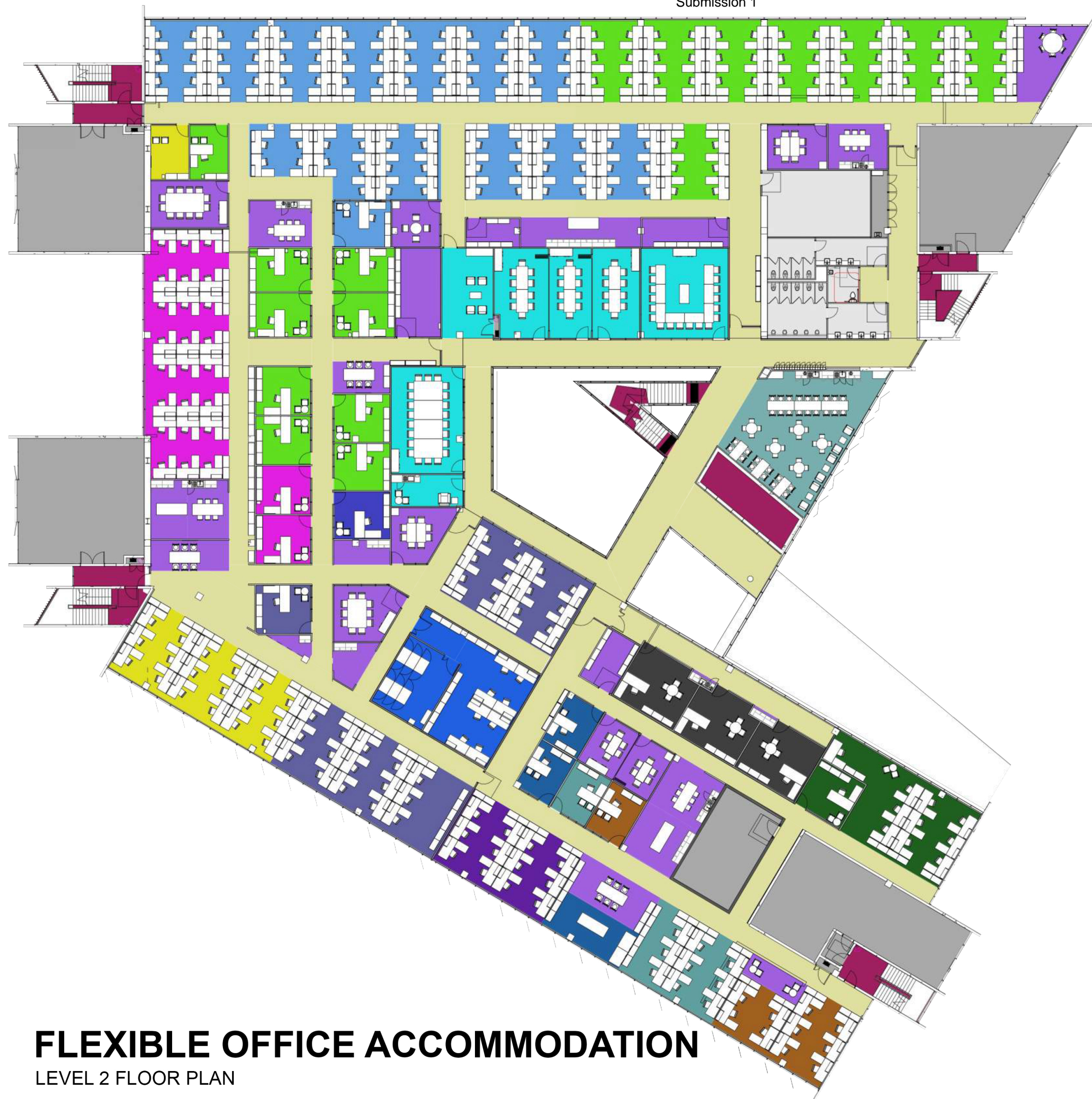


Legend:

- ABLUTIONS
- CIRCULATION
- CLEANER
- CREW ROOM
- DSRG ADMINISTRATION
- DSRG MAILROOM
- DSRG REPROGRAPHICS
- DSRG TRAINING
- ESTATE & FACILITIES - ADMIN
- EDUCATION, TRAINING & DEVELOPMENT/HOUSING & RELOCATIONS
- GARRISON SUPPORT
- LIFT
- PHOTOGRAPHIC
- BUILDING MANAGEMENT
- SERVICES
- SHARED EXT
- SHARED INT
- STAIR

FLEXIBLE OFFICE ACCOMMODATION

GROUND FLOOR PLAN



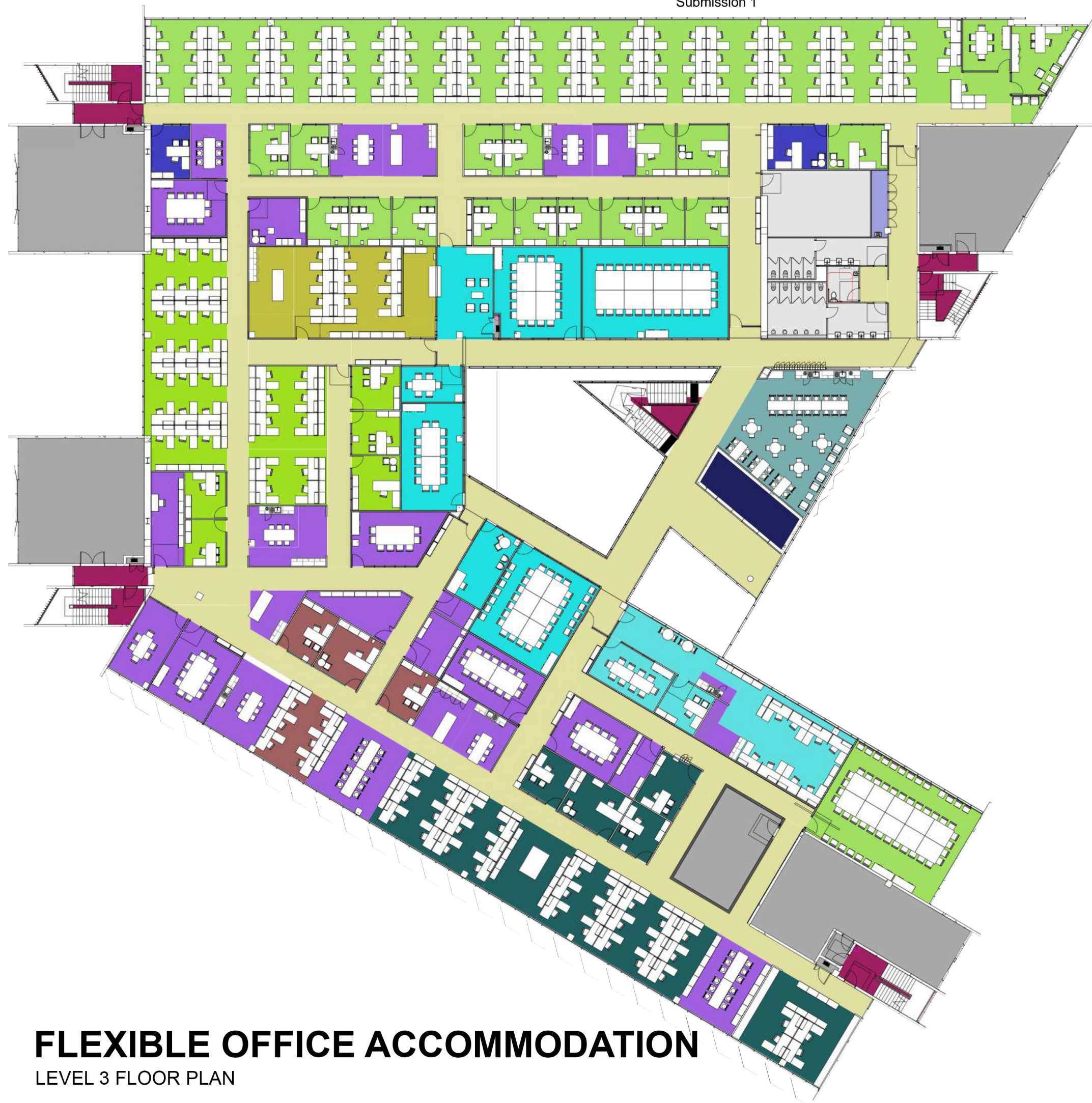
Legend:

- ABLUTIONS
- BUSINESS MANAGEMENT
- BUSINESS MANAGEMENT UNIT
- CIRCULATION
- CREW ROOM
- POST OFFICE
- DSRG CONTRACTS
- ESTATE & FACILITIES - ADMIN
- ESTATE & FACILITIES - ADMIN
- SYSTEMS PROGRAM OFFICE
- SYSTEMS PROGRAM OFFICE
- SYSTEMS PROGRAM OFFICE
- SYSTEMS PROGRAM OFFICE
- SYSTEMS PROGRAM OFFICE
- SERVICES
- EXECUTIVE OFFICES
- SHARED EXT
- SHARED INT
- SECURE AREA
- STAIR

FLEXIBLE OFFICE ACCOMMODATION

LEVEL 2 FLOOR PLAN

ATTACHMENT 6.4

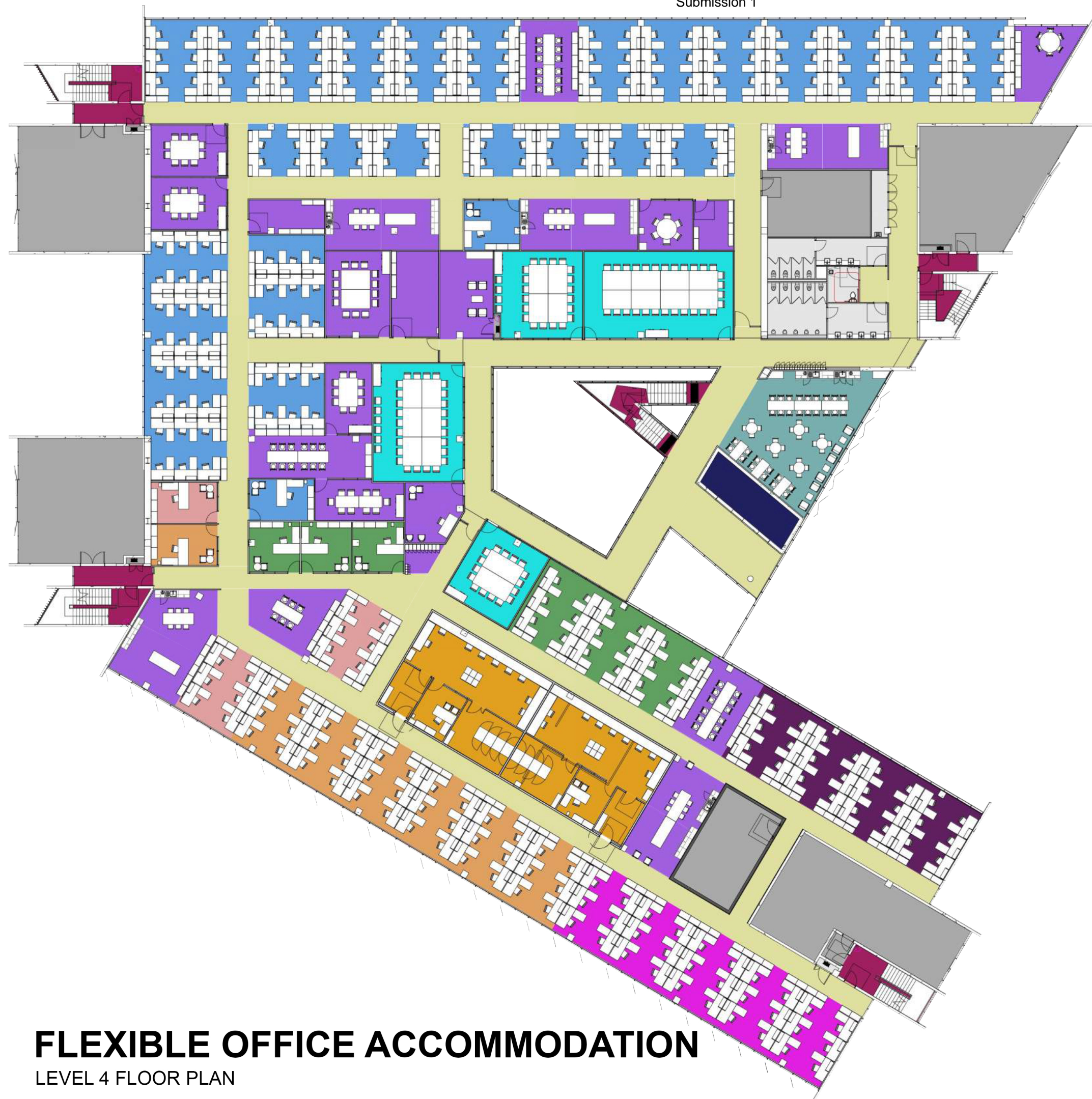


Legend:

- WING AREA
- WING AREA
- SQUADRON AREA
- ABLUTIONS
- AIRFORCE IMPROVEMENT
- CIRCULATION
- CLEANER
- CREW ROOM
- SYSTEMS PROGRAM OFFICE
- HEADQUARTERS AREA
- LIFT
- ORDERLY
- SERVICES
- SHARED EXT
- SHARED INT
- STAIR

FLEXIBLE OFFICE ACCOMMODATION

LEVEL 3 FLOOR PLAN

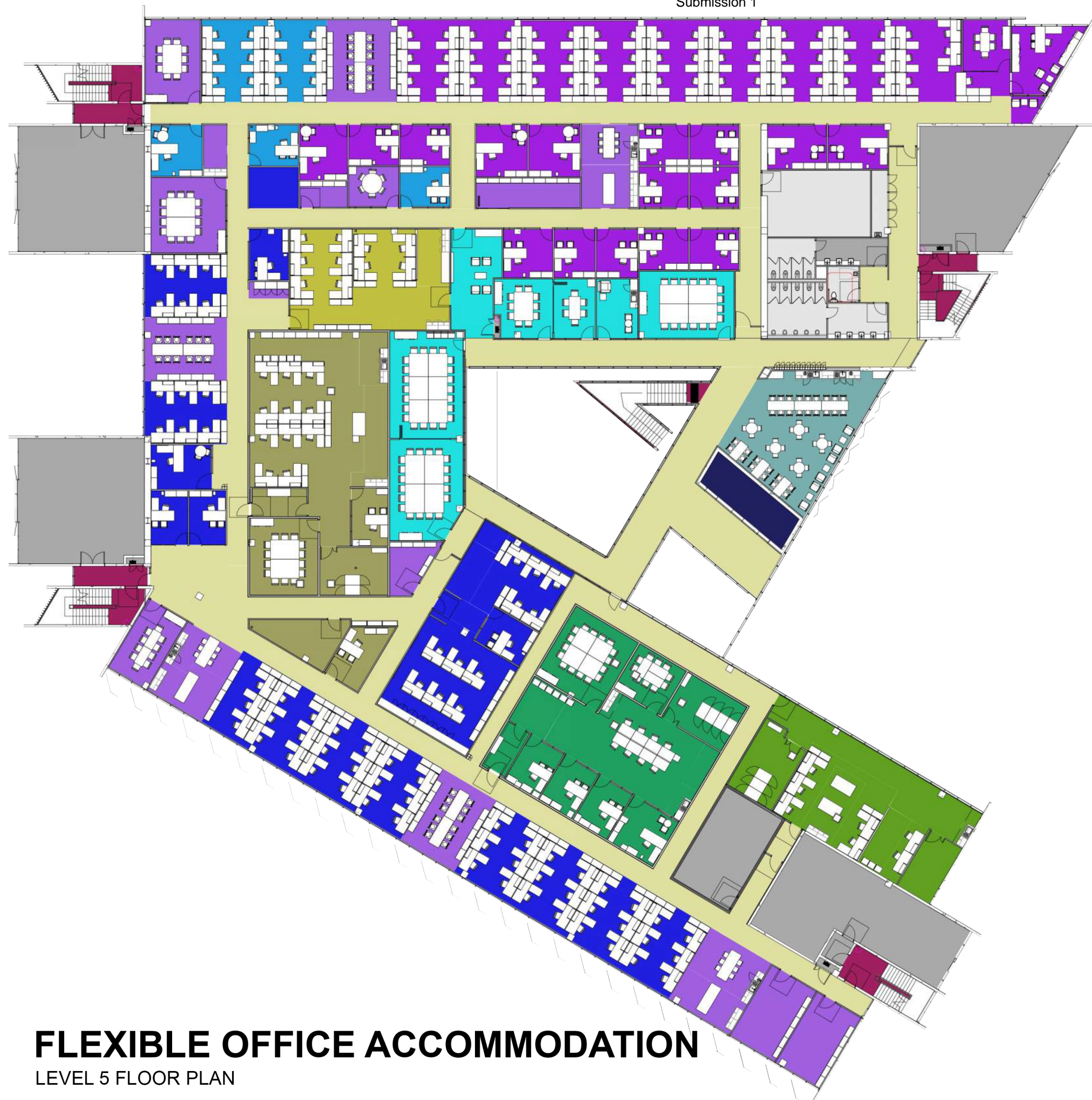


Legend:

- ABLUTIONS
- SYSTEMS PROGRAM OFFICE
- CIRCULATION
- CONTRACTING SERVICE BRANCH
- CREW ROOM
- SYSTEMS PROGRAM OFFICE
- SYSTEMS PROGRAM OFFICE
- LIFT
- SYSTEMS PROGRAM OFFICE
- SYSTEMS PROGRAM OFFICE
- SERVICES
- SHARED EXT
- SHARED INT
- SYSTEMS PROGRAM OFFICE
- STAIR

FLEXIBLE OFFICE ACCOMMODATION

LEVEL 4 FLOOR PLAN

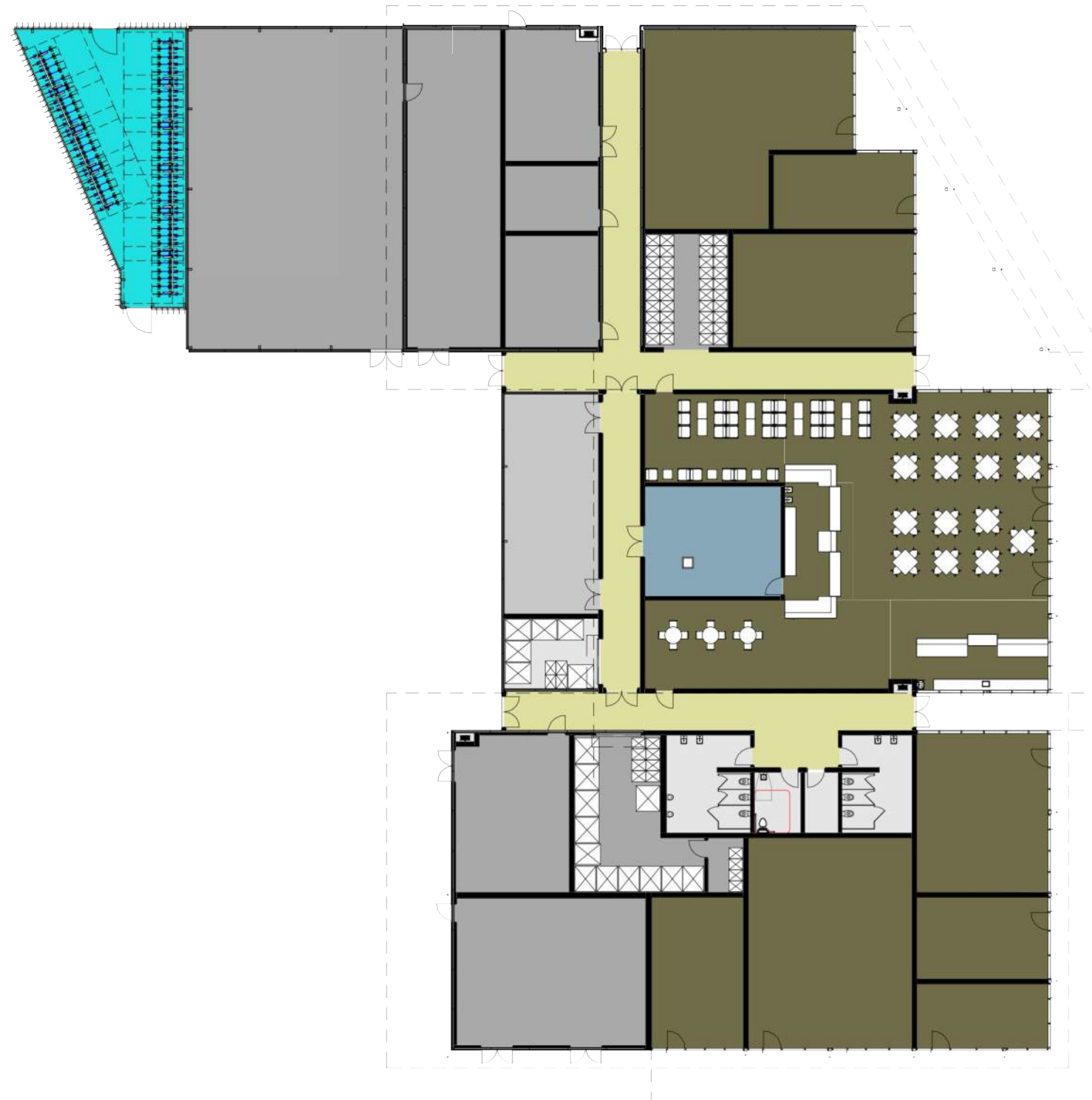


Legend:

- WING AREA
- WING AREA
- WING AREA
- WING AREA
- ABLUTIONS
- CIRCULATION
- CREW ROOM
- HEADQUARTERS AREA
- LIFT
- WING AREA
- ORDERLY
- SERVICES
- SHARED EXT
- SHARED INT
- STAIR

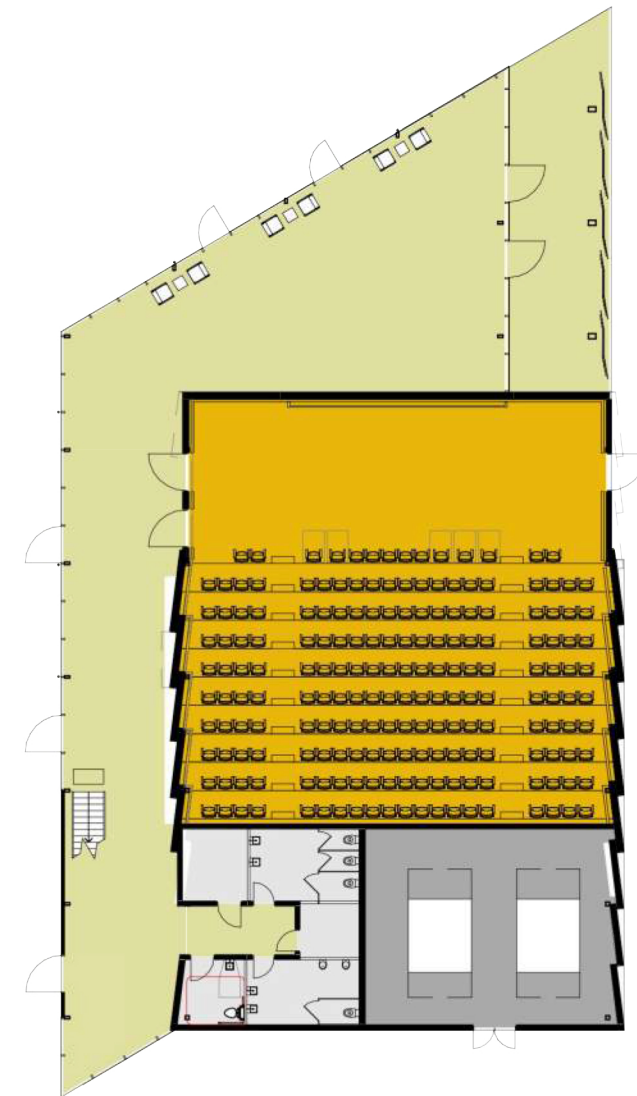
FLEXIBLE OFFICE ACCOMMODATION

LEVEL 5 FLOOR PLAN



Legend:

- AAFCANS & OTHER COMMERCIAL
- ABLUTIONS
- CIRCULATION
- KITCHEN
- PLANT ROOM
- SERVICES
- SHARED EXTERNAL FACILITIES
- AUDITORIUM

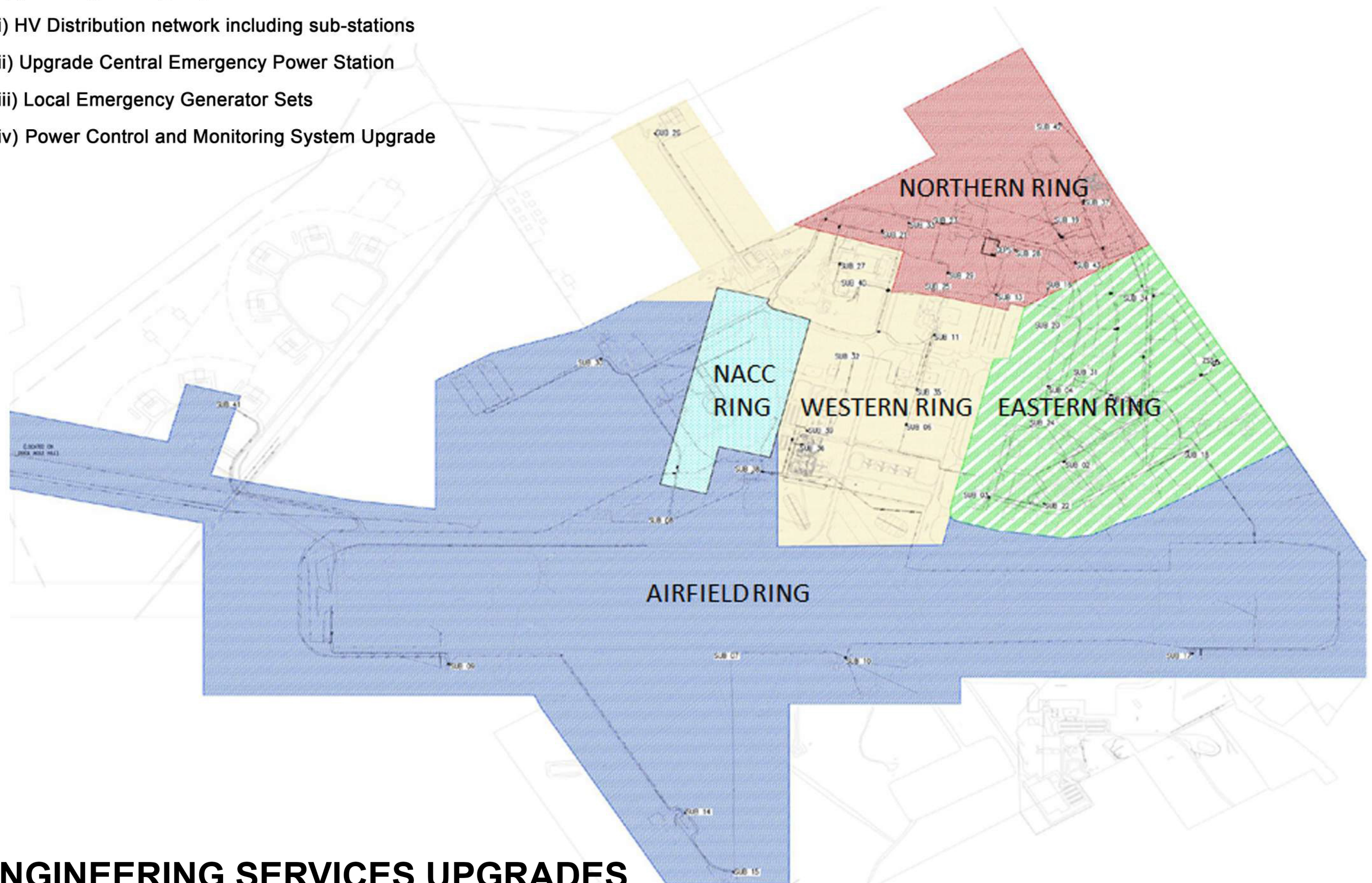


ATTACHMENT 6.8

AUDITORIUM, AAFCANS & COMMERCIAL
GROUND FLOOR PLAN

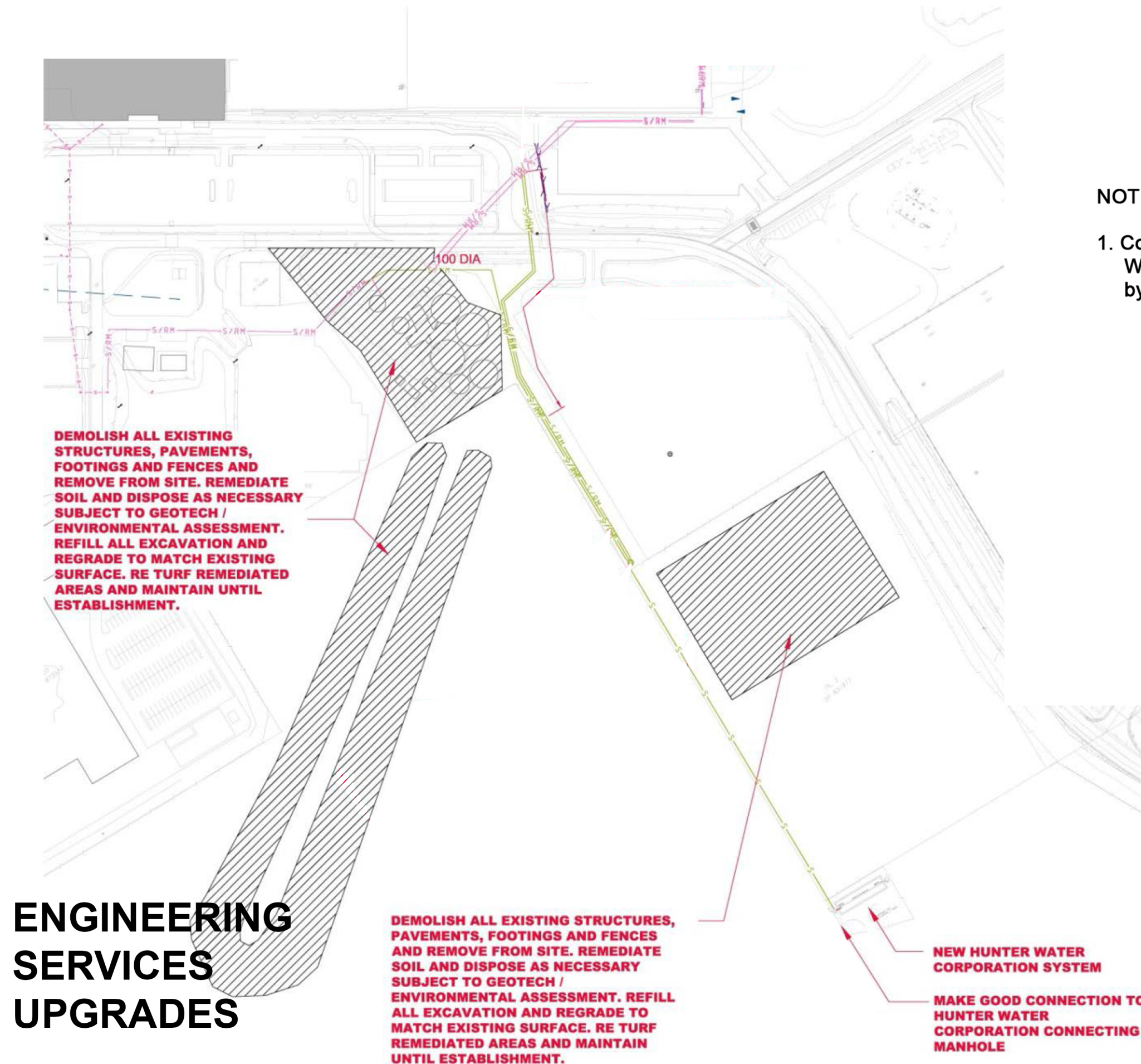
Upgrade High Voltage System:

- (i) HV Distribution network including sub-stations
- (ii) Upgrade Central Emergency Power Station
- (iii) Local Emergency Generator Sets
- (iv) Power Control and Monitoring System Upgrade



ENGINEERING SERVICES UPGRADES

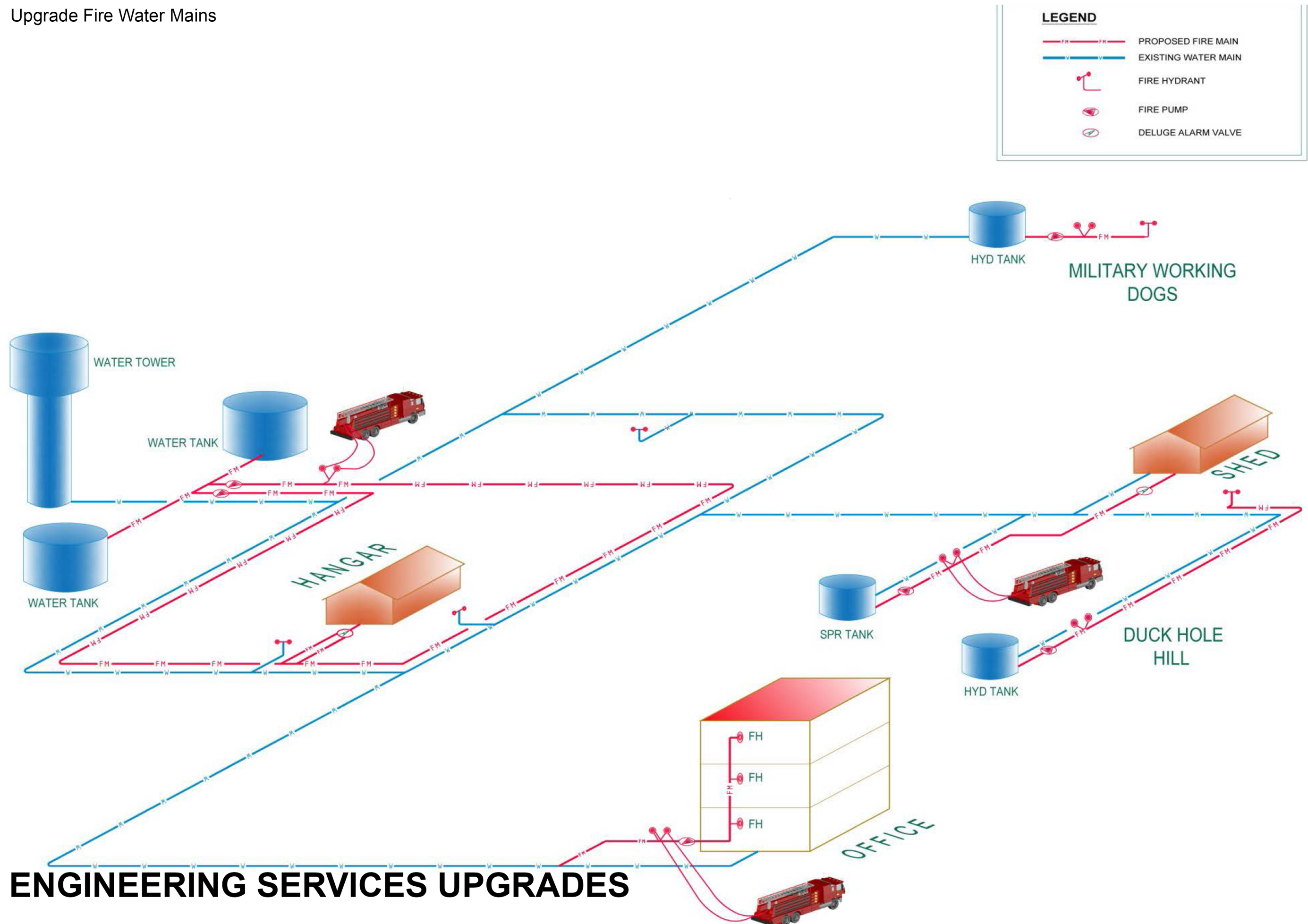
Decommissioning and demolition of the Sewage Treatment Plant



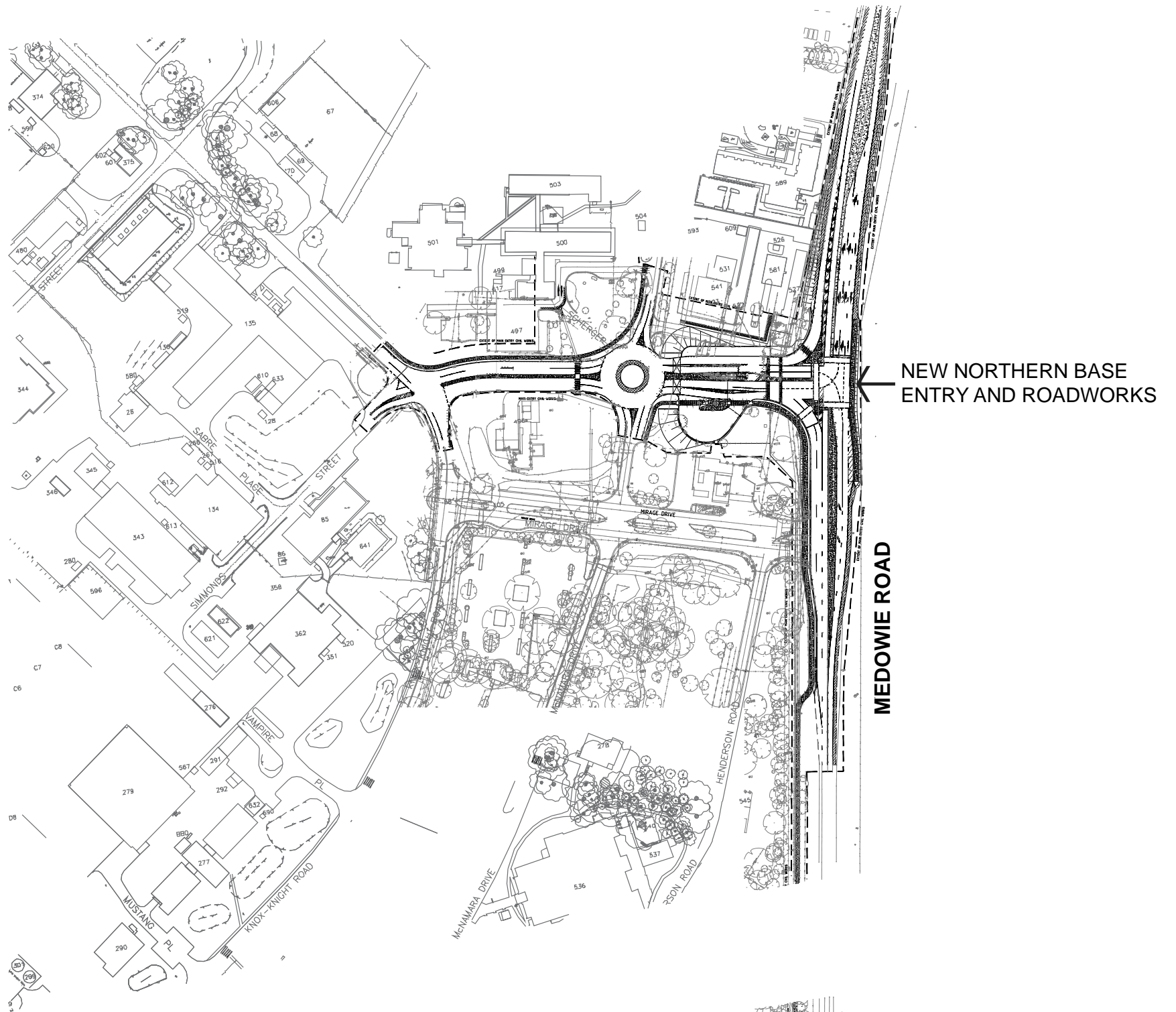
NOTES

1. Connection to the Hunter Water Waste Water Scheme delivered by a separate Defence Project

Upgrade Fire Water Mains

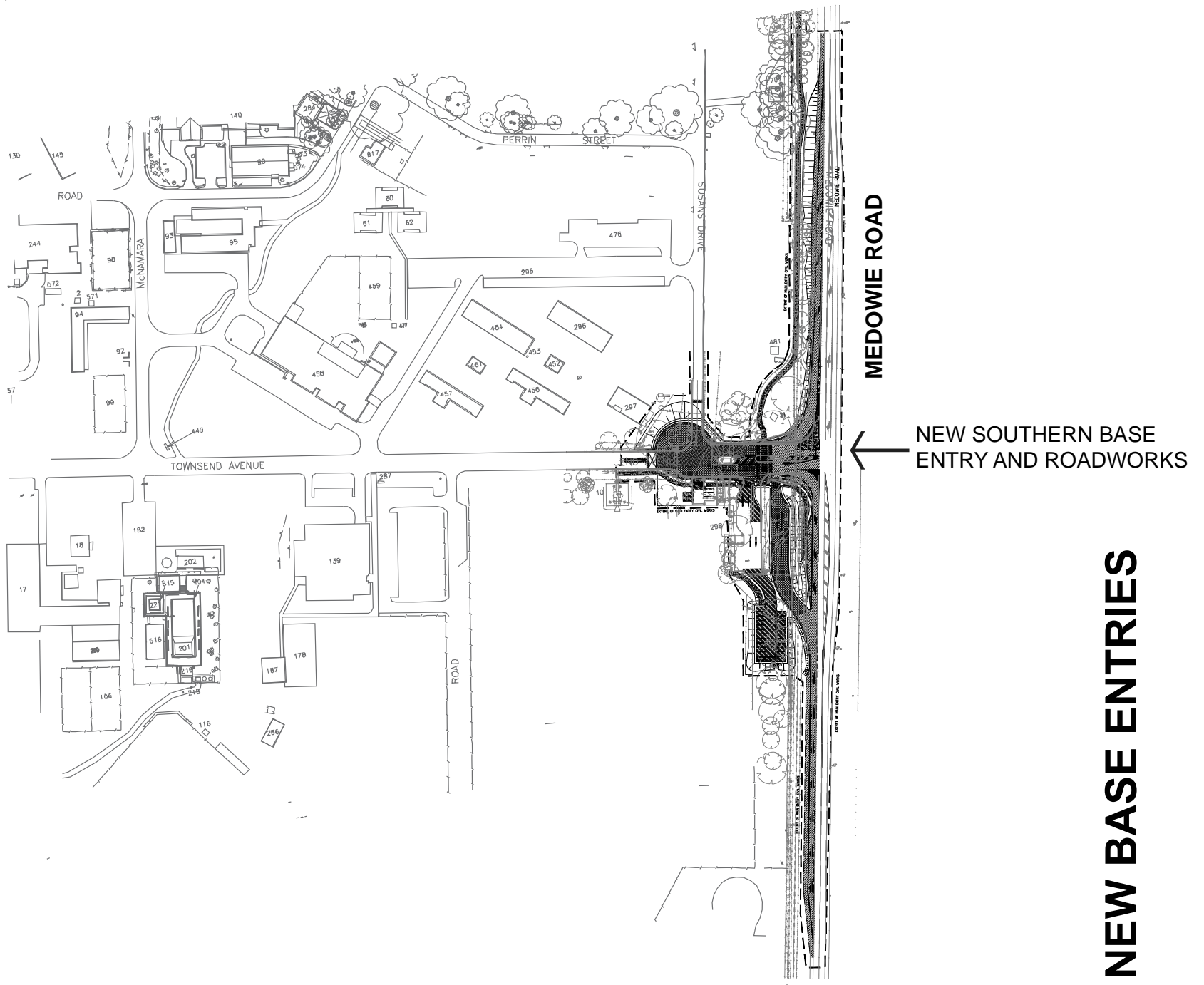


ATTACHMENT 8.1



NEW NORTHERN BASE
ENTRY AND ROADWORKS

MEDOWIE ROAD



NEW SOUTHERN BASE
ENTRY AND ROADWORKS

MEDOWIE ROAD

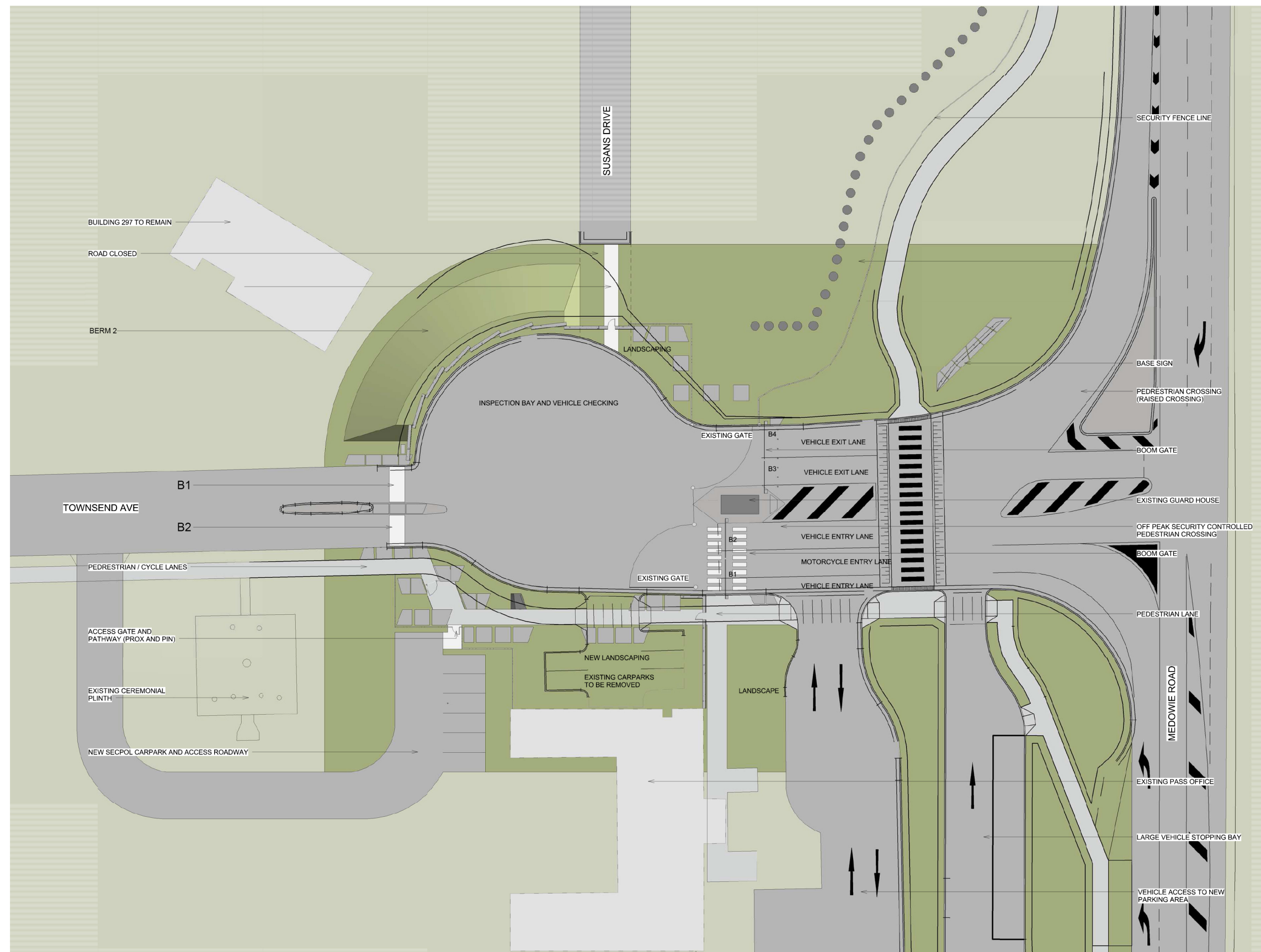
NEW BASE ENTRIES



NEW BASE ENTRIES NORTHERN ENTRANCE

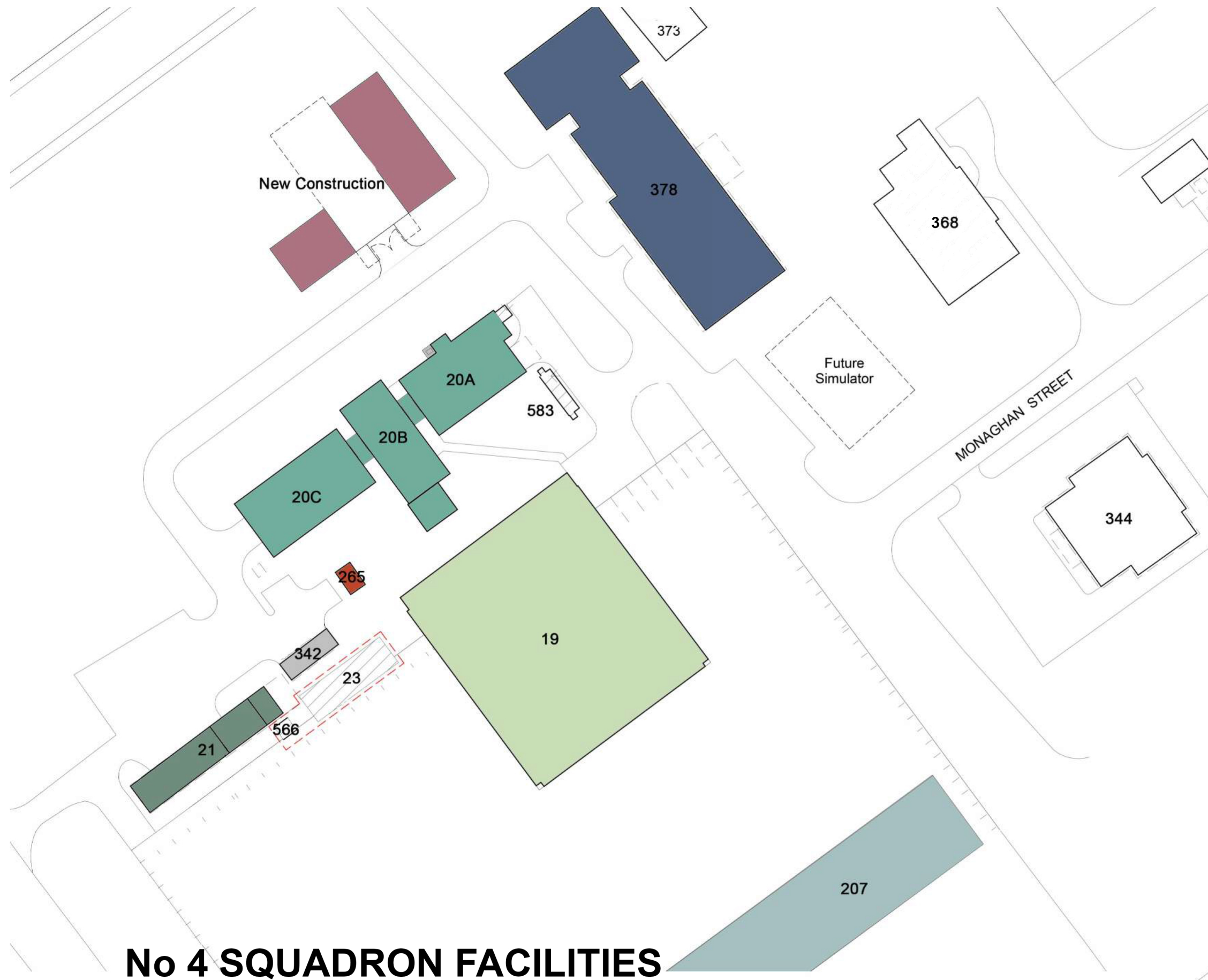
PERSPECTIVE

SITE PLAN



NEW BASE ENTRIES SOUTHERN ENTRANCE

SITE PLAN



Legend:

- TRAINING & OFFICES
- HANGAR
- LOGISTICS
- SHELTER
- STORE
- SUBSTATION
- WORKSHOP
- VEHICLE SHELTERS

NOTE:
ALL BUILDINGS ARE EXISTING
UNLESS NOTED OTHERWISE

No 4 SQUADRON FACILITIES

SITE PLAN



No 4 SQUADRON FACILITIES - BUILDING 19

GROUND FLOOR PLAN

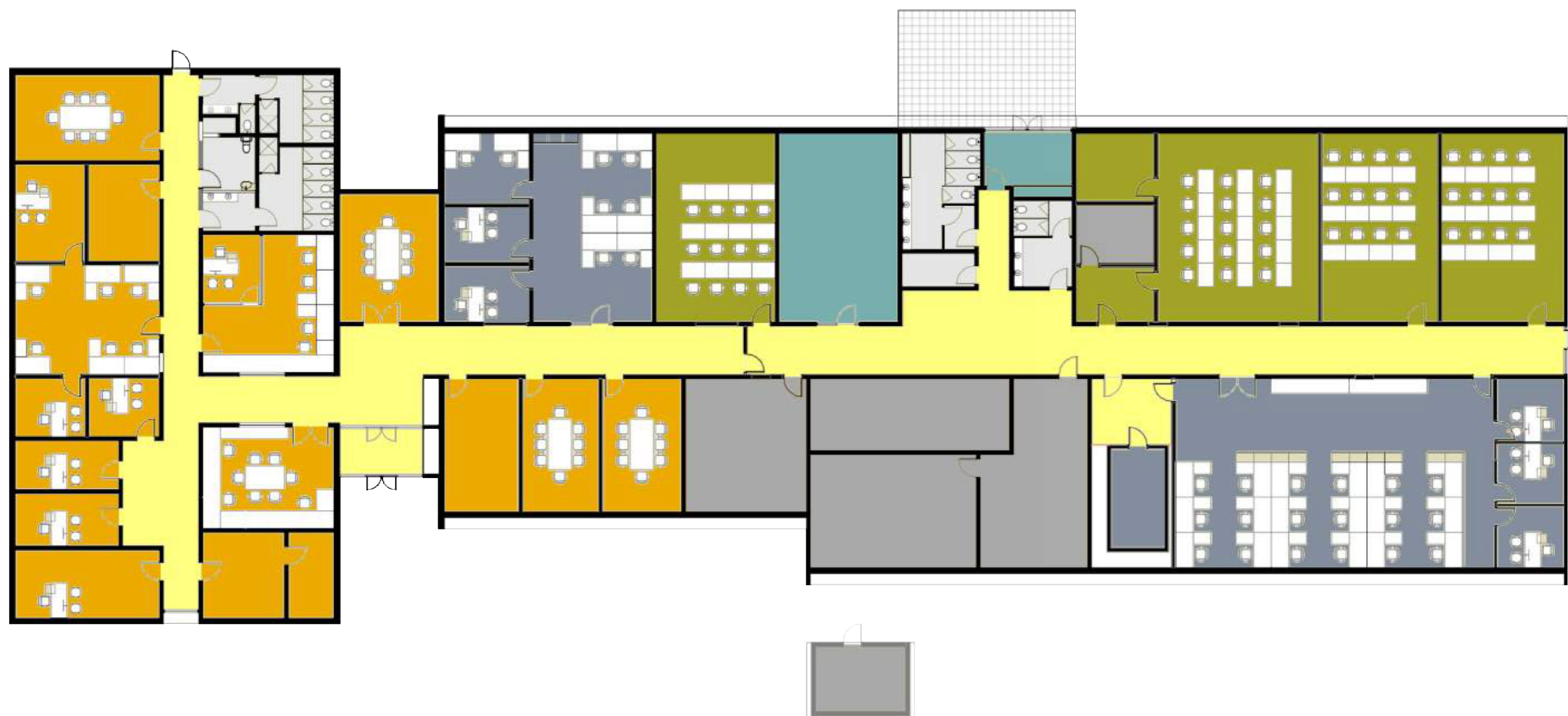


No 4 SQUADRON FACILITIES - BUILDING 20

GROUND FLOOR PLAN

Legend:

- ABLUTIONS
- CIRCULATION
- CLASSROOMS
- CREW ROOM/OFFICES
- EXEC/ADMIN OFFICES
- OPS OFFICES
- PLANT



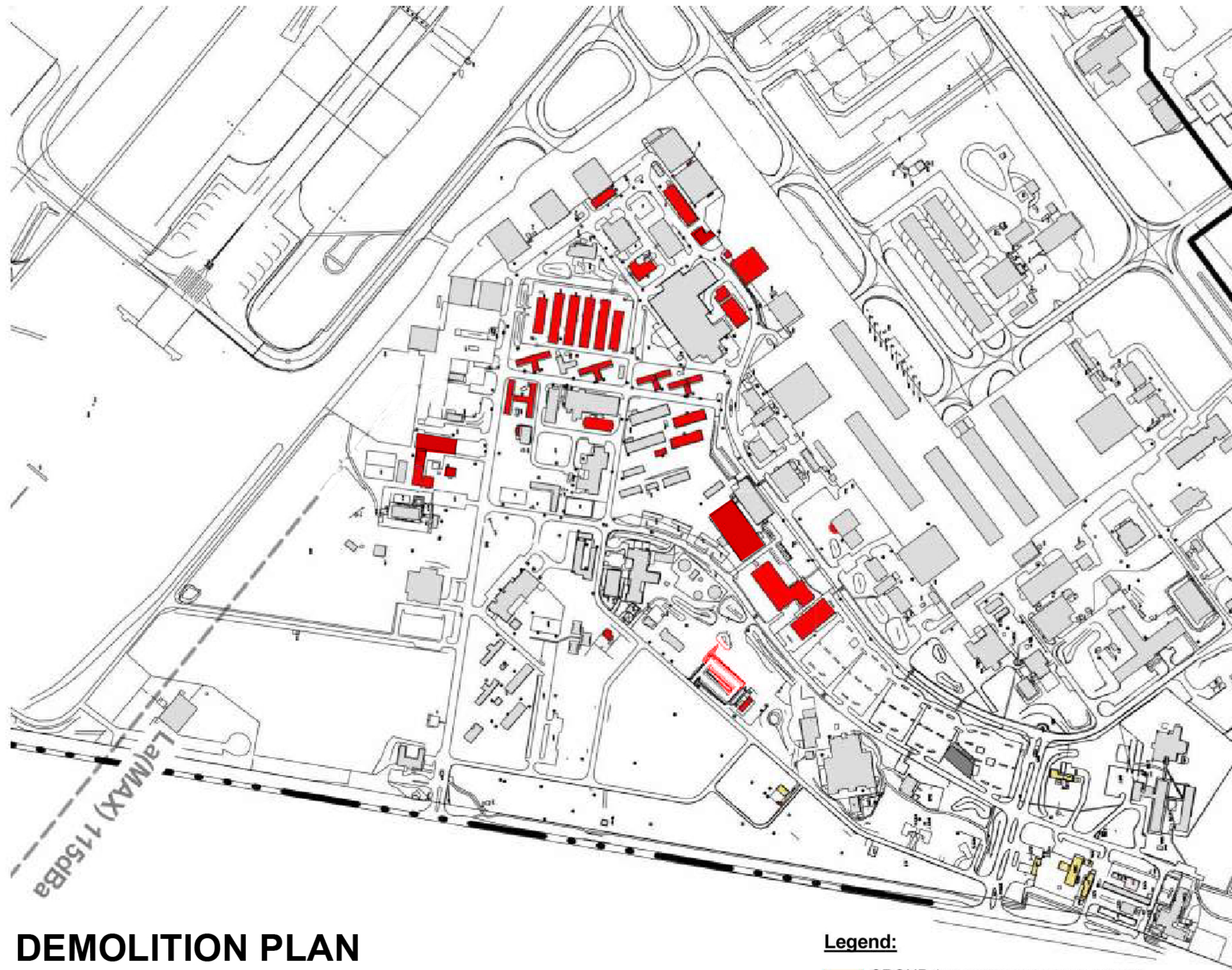
ATTACHMENT 9.4

No 4 SQUADRON FACILITIES - BUILDING 378

GROUND FLOOR PLAN



CAR PARKING
PLAN



DEMOLITION PLAN

Legend:

- GROUP 1: DEMOLITION BUILDINGS
- GROUP 2: DEMOLITION REQUIRED FOR OTHER WORK ELEMENTS

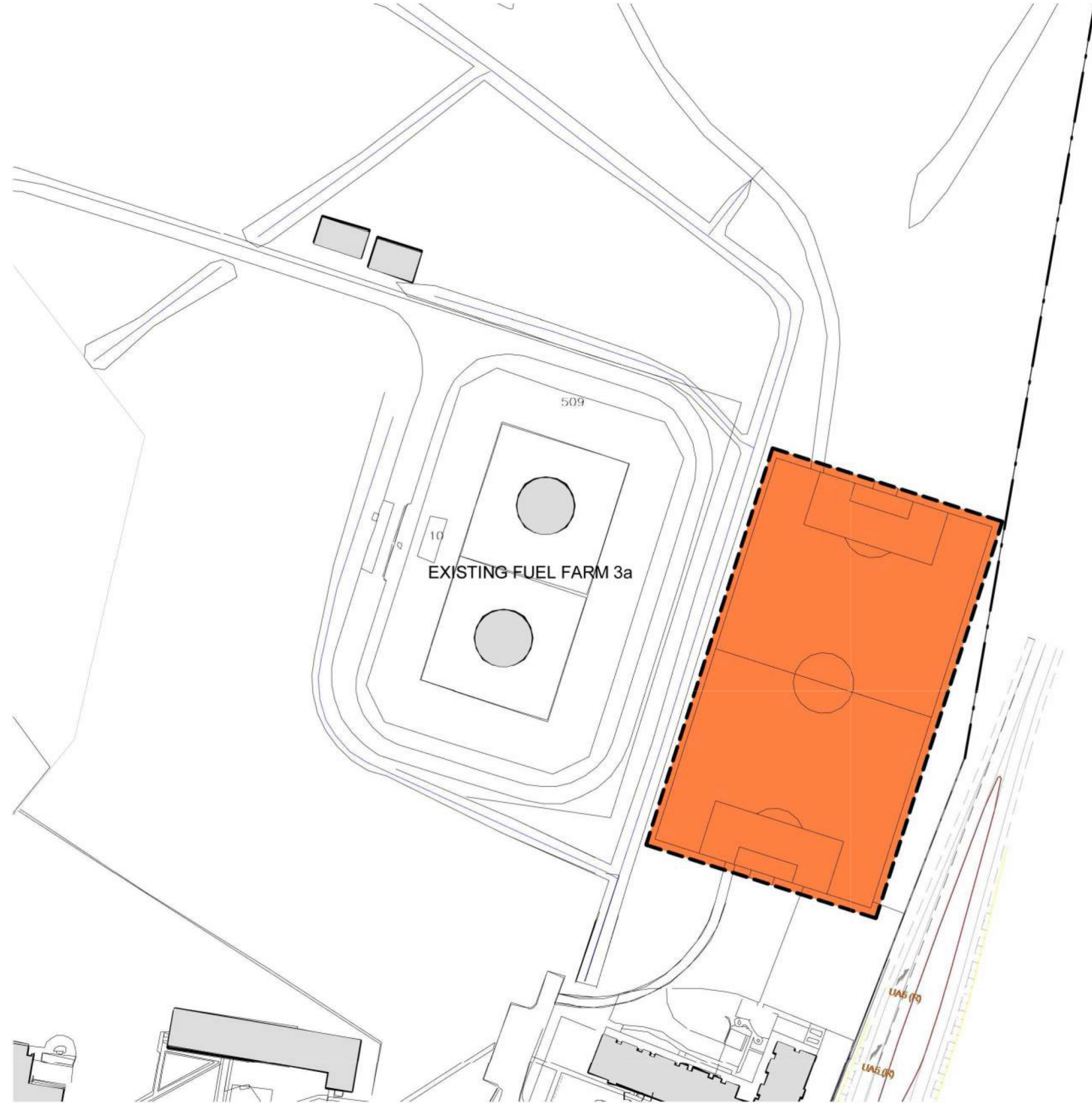
Legend:

- ABLUTIONS
- CIRCULATION
- LUNCH ROOM
- OFFICE
- STORE



BUILDING 631 ADAPTIVE REUSE

GROUND FLOOR PLAN



SPORTING FIELD (OPTION)

SITE PLAN