Australian Government

Defence

DEFENCE FUEL TRANSFORMATION PROGRAM – TRANCHE 2 FACILITIES PROJECT

Western Australia, Northern Territory, Queensland, New South Wales, South Australia, Victoria

Statement of Evidence

to the

Parliamentary Standing Committee

on Public Works

September 2023

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Defence Fuel Transformation Program – Tranche 2 Facilities Project

1. The purpose of this Statement of Evidence is to provide information to the Australian public to comment on, and the Parliamentary Standing Committee on Public Works to enquire into, proposed works under the Defence Fuel Transformation Program – Tranche 2 Facilities Project (the Project).

Executive Summary

2. The aim of the Project is to remediate, replace, upgrade and/or disposal of existing Defence Fuel Installations across various sites.

3. The Project will deliver:

a. new Defence Fuel Installations to service various maritime, aviation, ground vehicles and power generation sites;

b. a new wharf at Garden Island Defence Precinct, Sydney, to support refueling of fleet vessels;

c. consolidation and/or closure of redundant fuel infrastructure, including removal and/or replacement of existing underground fuel storage tanks and contamination remediation works across various sites; and

d. compliance works and minor infrastructure and system remediation works items.

4. The estimated total capital out-turned cost of the Project is $286.9 million (excluding Goods and Services Tax). The cost estimate includes management and design fees, construction, information and communications technology, furniture, fittings, equipment, contingencies and a provision for escalation. There will be ongoing operating costs as a result of the Project. No revenue is expected to be generated by these works.

5. Defence, together with Head Contractors, will actively promote opportunities for small and medium local enterprises through construction trade packages, providing employment opportunities in Western Australia, Northern Territory, Queensland, New South Wales, South Australia and Victoria. There will also be opportunities for Indigenous business involvement in the delivery of the proposed works in accordance with Government's Indigenous Procurement Policy.

6. All works will be designed and constructed in accordance with relevant legislation, standards, codes, guidelines and Defence policy. Accredited building certifiers will certify the compliance of the design and completed works. The building certifiers will rely on the expertise of Professional Chartered Engineers to inspect all

Civil/Structural/Electrical/Process/Fire engineers throughout the construction and commissioning process to inform the certification of the overall structures.

7. Environmental and heritage assessments have been completed for most sites and have identified that the proposed works will not have a significant impact on existing environmental and heritage values. Environmental and heritage assessments for RAAF Base Darwin and RAAF Base Learmonth are still underway due to recently adjusted site locations and associated designs. Once these assessments are completed an updated Environmental Report will be finalised.

8. At Garden Island Defence Precinct the existing 'Gun Wharf' (to be demolished) is listed as having historic heritage value. A Heritage Impact Assessment concluded that impacts to heritage values are not likely to be significant under the Environment Protection and Biodiversity Conservation Act. Consultation with the Directorate of Environment and Heritage Policy Development indicates this is supported through the implementation of specific management measures to support the demolition of the wharf in line with Defence Heritage Policy and Processes.

9. Cultural Heritage constraints are limited for most sites and can be addressed through routine management protocols. More specific controls are warranted at the RAAF Base Learmonth proposed fuel installation site due to the requirement to undertake ground disturbance activities.

Purpose of the Works

Aim of the Project

10. Following on from the Defence Fuel Transformation Program – Tranche 1 Facilities Project, this Project aims to further reduce risk to the Defence Fuel Network and Defence Fuel Supply Chain. The Project will achieve this aim through the upgrading and/or remediation of fuel installations across Australia to increase the resilience of the Defence Fuel Network, reduce the total cost of ownership, and improve industry collaboration in delivering an assured fuel network that meets Defence's fuel requirements.

Location of the Project

11. The Project will deliver facilities and infrastructure at the following locations:

a. **New South Wales.** Garden Island Defence Precinct, HMAS *Albatross*, HMAS *Creswell*, HMAS *Waterhen*, RAAF Base Williamtown and Holsworthy Barracks.

b. **Victoria.** Puckapunyal Military Area and Army Testing Grounds Monegeetta.

c. **Western Australia.** RAAF Base Learmonth, Australian Defence Satellite Communications Station Geraldton, Jindalee Operational Radar Network Laverton, and HMAS *Stirling*.

d. **Queensland.** Lavarack Barracks Townsville, Borneo Barracks Carbalah, Jindalee Operational Radar Network Longreach, RAAF Base Amberley and RAAF Base Townsville.

e. **South Australia.** Joint Proof and Experimental Unit Port Wakefield and RAAF Base Edinburgh.

f. **Northern Territory.** RAAF Base Tindal and RAAF Base Darwin.

12. Attachment 1 illustrates the various site locations.

Need for the Project

13. The Defence Fuel Supply Chain distributes over $430 million of fuel annually through more than 100 sites across the country and is a critical enabler of the Australian Defence Force. The existing fuel supply network has several known network deficiencies, resulting in unacceptable capability and safety risks.

14. In 2015, the Defence Fuel Services Branch conducted a Fuel Network Review to remediate enterprise risk, increase operational resilience, reduce the cost of ownership and explore opportunities for greater collaboration with industry. The Future Defence Fuel Network Implementation Strategy was developed, which set the performance baseline for the Defence Fuel Supply Chain to inform future reform. The strategy was endorsed in 2017 and formed the basis of the business case seeking Government approval to fund the Defence Fuel Transformation Program in a series of tranches until 2039-40.

Proposed Facilities Solution

15. The Department of Defence conducted comprehensive master planning, site investigations, stakeholder consultation, whole-of-life cost analysis and design development to establish the capital facilities and infrastructure works required to address the upgrades and improvements required to the identified compliance and safety risks.

16. Government First Pass approval for the whole Defence Fuel Transformation Program (all tranches) and Second Pass approval for Tranche 1 was provided on 18 June 2018. The Tranche 1 project elements received Public Works Committee approval on an individual basis with the delivery of the works occurring through the Defence Estate Works Program. Government Second Pass approval for Tranche 2 was provided on 30 June 2021. Tranche 3 was planned to commence in mid-2026 (subject to Government

approval), however Defence is seeking to accelerate Tranche 3 to be able to improve fuel preparedness in line with the Defence Strategic Review.

17. The Project's objective is to address risk items not covered by the Defence Fuel Transformation Program – Tranche 1 and enable improvements to the Defence Fuel Supply Chain and Defence Fuel Network. The essential requirements of the Project include:

a. construction of new fuel facilities and infrastructure;

b. decommission and demolition of existing fuel facilities and infrastructure;

c. environmental remediation of sites where existing fuel facilities and infrastructure have been decommissioned and demolished; and

d. communications infrastructure to support the Fuel Management System.

Options Considered

18. Defence has developed the following three options to meet the facilities and infrastructure requirements:

a. **Option 1 – Do nothing:** This option does not reduce the residual enterprise risk to the Defence Fuel Network nor facilitate long-term reform within the Defence Fuel Supply Chain.

b. **Option 2 – In-budget:** This option involves design completion of all sites and delivering as many sites as possible within the Project budget in order of priority. Sites not affordable within the Project budget could be either transferred to Tranche 3 or delivered via an alternative funding source.

c. **Option 3 – Full Scope:** This option involves designing and delivering all sites. However, this option is not affordable within the project budget.

19. Option 2 is the recommended option, as it is viable, affordable and represents value for money.

Scope of Project Works for the Preferred Option

20. The recommended Option 2 includes the following Project elements:

a. **Project Element 1 - Garden Island Defence Precinct:**

   i. Construction of a new perpendicular wharf on the eastern side of Garden Island and provision of services distribution points and connecting dispensing pipework/ pumps from the maritime fuel installation to provide fuel, power, and water connections to suit design vessels; and

   ii. demolition of the Gun Wharf structure, extraction of the fender piles and removal of copper potable water main on the Gun Wharf.

b. **Project Element 2 - RAAF Base Learmonth (Ground Fuel Installation):**

i. Construction of a new fuel installation comprising new diesel fuel tanks and dispensing points with all associated equipment, controls and infrastructure as required; and

ii. decommission, demolition and site remediation of the existing fuel installation, including the removal of existing underground fuel storage tanks.

c. **Project Element 3 - RAAF Base Learmonth (Aviation Fuel Installation):**

i. Construction of a new aviation fuel installation, including new fuel tanks, offloading and dispensing points with all associated equipment, controls and infrastructure, and a new fuel quality control laboratory and support facilities.

d. **Project Element 4 - Puckapunyal Military Area:**

i. Construction of a new fuel installation, including new diesel fuel tanks, dispensing points with all associated equipment, controls and infrastructure, and a new office and ablutions facility; and

ii. decommission, demolition and site remediation of the existing fuel installation, including the removal of existing underground fuel storage tanks.

e. **Project Element 5 - Lavarack Barracks:**

i. Modifications to the existing fuel installation, including new diesel fuel tanks, replacement of dispensing points and upgraded tanker loading system, and associated equipment, controls and infrastructure; and

ii. decommission, demolition and site remediation of existing underground fuel storage tanks.

f. **Project Element 6 – Army Test Grounds Monegeetta:**

i. Construction of a new fuel installation, including diesel fuel tanks and dispensing points with associated equipment, controls and infrastructure; and

ii. decommission, demolition and site remediation of the existing fuel installation, including the removal of existing underground fuel storage tanks.

g. **Project Element 7 - Borneo Barracks:**

i. Construction of a new fuel installation, including diesel fuel tanks and dispensing points with associated equipment, controls and infrastructure,

and relocation of the diesel fuel storage tank from an interim site to the new site.

h. **Project Element 8 - Australian Defence Satellite Communications Station Geraldton:**

i. Construction of a new fuel installation, including diesel fuel tanks and dispensing points with associated equipment, controls and infrastructure, including integration with the existing generators and fire hydrant system; and

ii. decommission, demolition and site remediation of the existing fuel installation, including the removal of existing underground fuel storage tanks.

i. **Project Element 9 - Joint Proof and Experimental Unit Port Wakefield:**

i. Construction of a new fuel installation, including diesel fuel tanks and dispensing points with associated equipment, controls and infrastructure; and

ii. decommission, demolition and site remediation of the existing fuel installation, including the removal of existing above ground fuel storage tank and unleaded petrol infrastructure.

j. **Project Element 10 - Jindalee Operational Radar Network Longreach:**

i. Provision of fuel installation remedial items, including bund compliance, tank monitoring and road alignment works.

k. **Project Element 11 - Jindalee Operational Radar Network Laverton:**

i. Provision of fuel installation remedial items, including a new dispensing point, tank monitoring, and road alignment works; and

ii. decommission, demolition and site remediation of existing oily waste tank.

<u>Planning and Design Concepts</u>

21. The general philosophy for the design of the proposed works is based on:

a. providing facilities and in-ground infrastructure at each site that are sustained in a safe and compliant manner to support operations in a year-round manner over the long term;

b. delivery of the proposed works do not impede routine access to and egress from each site, and disruption to the Commonwealth's operations within each site is maintained;

c. adopting, where possible, conventional construction techniques and materials commonly used by the construction industry and consistent with those already used;

d. applying appropriate durability measures to reduce ongoing maintenance and achieve the proposed design life; and

e. providing flexible services and infrastructure to accommodate an appropriate level of growth.

Relevant Legislation, Codes and Standards

22. The following legislation, standards, codes and guidelines are applicable:

a. *Environmental Protection and Biodiversity Conservation Act 1999 (Cth)*;

b. *Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cth)*;

c. *Australian Heritage Council Act 2003(Cth)*;

d. *Fair Work (Building Industry) Act 2012 (Cth)*;

e. *Work Health and Safety Act 2011 (Cth)*;

f. *Disability Discrimination Act 1992 (Cth)*;

g. *Fair Work Act 2009 (Cth)*;

h. National Construction Code - Building Code of Australia;

i. Defence Manual for Infrastructure Engineering Electrical;

j. Defence Facilities Communications Cabling Standard;

k. Defence Smart Infrastructure Manual;

l. Defence Manual of Fire Protection Engineering;

m. DFI – Design Practices Manual;

n. Defence Contamination Management Manual;

o. Defence Pollution Prevention Management Manual;

p. Australian Standards;

q. Defence Security Principles Framework;

r. Defence Estate Principles of Development;

s. Defence Building Energy Performance Manual;

t. Energy Efficiency in Government Operation Policy (2007);

u. National Waste Policy Action Plan (2019);

v. Australian Cyber Security Centre Information Security Manual; and

w. Australian Security Intelligence Organisation Technical Notes.

23. Accredited building certifiers will certify the compliance of the designs and the completed works. The building certifiers will rely on the expertise of Professional

Chartered Engineers to inspect all Civil/Structural/Electrical/Process/Fire disciplines throughout the construction and commissioning process to inform the certification of the overall structures. Construction compliance with the design shall be assured using approved quality management systems, which will implement processes including independent inspections, audits and testing.

Land and Zoning

24. The proposed works are consistent with uses prescribed in relevant Defence zoning instruments and the Defence Estate Principles of Development.

25. The proposed facilities at all sites have completed or are currently subject to the Defence site selection processes to ensure compliance with the relevant Defence policies and regulations.

Structures

26. The new above-ground structures consist of steel framed canopies and single story buildings. The new bunded areas are concrete slabs cast on-ground. The structures have been designed according to the local geotechnical profile, with appropriate foundations.

Maritime Structures

27. Maritime structures have been designed as dedicated facilities for the Royal Australian Navy (RAN) vessels Oil Product Tankers. The proposed new facilities will be an island-style berth with reinforced concrete decks supported by tubular steel piles. Durability provisions have been incorporated into the design to facilitate a 50-year design life where an element in non-replaceable.

Mechanical Services

28. The mechanical fuel services have been designed in accordance with the Defence Fuel Installation Design Practices Manual and Australian Standards to suit the functional requirements of the facility.

29. The mechanical building services have been designed according to the function and needs of support facility buildings at the sites identified in the scope of Project works. The proposed mechanical services will meet specific user needs, relevant ventilation, thermal comfort and air quality requirements and the mandatory requirements of the Building Code of Australia.

Civil Infrastructure

30. New civil infrastructure will be provided for all sites, including earthworks, roadworks and hardstand areas.

31. Perimeter fencing at existing sites will be upgraded, realigned and/or repaired as required.

32. All civil infrastructure will be designed according to the function of the site and mandatory requirements of the National Construction Code.

Hydraulic Services

33. Existing potable water, oily water, sewerage and storm water services are proposed to be extended to each facility to suit design requirements. Potable water will be connected to the existing supply via sub-metering to each new support facility building.

34. Fuel dispensing, loading or unloading areas are designed in accordance with the Defence Fuel Installation Design Practices Manual, which requires the separation of petroleum products from stormwater using a Stormwater Quality Improvement Device to contain spills onsite, while simultaneously allowing stormwater to proceed to the local stormwater system.

Electrical Services

35. Lighting, power and lightning protection will be provided in accordance with Australian Standards and Defence engineering requirements. Electrical infrastructure and switchboards will have spare capacity to allow for future growth. Sub-metering will be included to each new support facility building where required by Defence policy. Emergency power for new facilities is provided via mobile generators.

Fire Protection

36. Fire Protection has been addressed through compliance with the Manual of Fire Protection Engineering, Australian Standards and the National Construction Code. The Project has assessed the asset classification and criticality in order to determine the fire protection systems to be implemented in all facilities. Typical upgrades to the fire systems within existing facilities consider fire separation and compartmentalisation, fire protection equipment, fire detection and suppression and firefighting water supply requirements.

37. Bushfire protection measures have been designed into sites as required in accordance with the Building Code of Australia. This typically includes elements such as bushfire water storage, clearance zones and fire breaks. Operational elements of bushfire protection will be developed between the Project and the Head Contractors.

Security Measures

38. The security arrangements are a suite of measures based on the Defence-in-Depth principles. Security measures are compliant with statutory requirements. The security

design of the sites will ensure that any new facilities conform to the existing security system employed by each base.

Acoustics

39. The new facilities will comply with the National Construction Code and Australian Standards for noise and acoustics. Acoustic separation has been considered in construction elements, while surface finishes are being designed to meet user requirements.

Work Health and Safety

40. The Project will comply with the *Work Health and Safety (WHS) Act 2011 (Cth)*, Work Health and Safety (Commonwealth Employment – National Standards) Regulations, and relevant Defence policies. In accordance with Section 35 (4) of the *Building and Construction Industry (Improving Productivity) Act 2016 (Cth)*, contractors will also be required to hold full work health and safety accreditation from the Office of the Federal Safety Commissioner under the Australian Government Building and Construction Work Health and Safety Accreditation Scheme.

41. Safety aspects of the Project have been addressed during the design development process and have been documented in a safety in design report. A work health safety plan will be developed for the construction phase prior to the commencement of any construction activities.

Materials and Furnishings

42. Materials and furnishings will be sought from readily available local sources and selected against functionality, durability, low maintenance and ecologically sustainable design properties. The design process has also considered the impact of constructability in remote locations when considering the materials to be used.

43. New buildings (generally office/control rooms) will be single storey steel-framed buildings. Walls and roofing typically consist of metal sheeting.

44. Internal fittings and furnishings will be selected based on key considerations of being modern, functional, durable and low maintenance. Internal partitions are to be lightweight stud walls with plasterboard finishes, providing the ability for simple future reconfiguration as required.

45. Horizontal above ground tanks will be self-bunded in accordance with Australia Standard 1940. Horizontal below ground tanks will be double walled in accordance with Australia Standards 1940 and 4897.

46. RAAF Base Learmonth cut-and-cover tanks will be based on the United States Department of Defense standard.

47. All piping and equipment in contact with fuel will have materials nominated which comply with the Defence Fuel Installation Design Practices Manual.

48. Construction materials otherwise will be selected based on durability and design life considerations.

Landscaping

49. The proposed new landscape works will complement and enhance the character of each site. The landscape design will focus on a functional, low maintenance, water sensitive approach with the use of Indigenous plants. Precautions will be taken to adhere to environmental requirements by adopting landscaping practices in accordance with local environmental conditions and the Construction Environmental Management Plan.

Childcare Provision

50. There is no requirement for childcare facilities under the Project.

Provisions for People with Disabilities

51. Where applicable, access for people with disabilities will be provided in accordance with the National Construction Code, Australia Standard 1428 and the *Disability and Discrimination Act 1992 (Cth).*

Environmental Sustainability

52. Defence is committed to ecologically sustainable development and reducing greenhouse gas emissions. The Project has adopted cost effective measures as a key objective in the design and development of the proposed works. These include:

a. **Energy targets:** Energy performance targets will comply with the Defence Smart Infrastructure Manual where applicable.

b. **Re-use of existing structures:** The design has included maximum re-use of existing facilities at all sites where relevant including staging works to utilise available existing space, reduce new construction, and minimise interruptions to the operation of the capability.

c. **Installing metering:** Electrical services will be metered in accordance with the requirements of the Defence National Sub-Meter Program. They will be suitable to connect to the Defence National Resource Data Management System. Hydraulic services will be metered. All metered services will be connected directly to the respective building’s building management system.

d. **Minimising waste in construction and demolition and disposals:** Minimum reuse or recycled waste targets will be included in the head contractors' brief taking into consideration the location of each site. This applies to both construction and demolition elements. The Defence Smart Infrastructure Handbook approach to minimising waste to landfill will be adopted.

Potential Impacts

53. Defence has conducted rigorous assessments to identify potential environmental and local community impacts and propose suitable mitigation measures. These include:

a. **Visual Impacts.** There will be no potential visual impacts to the local community noting all sites are existing, remote in some cases, and the facilities will not materially increase the visual impacts on the local community.

b. **Noise Impacts.** Both existing facilities and the new sites are typically remote from communities and generate limited noise due to the nature of the operation. There will be no increase to noise impacts with the new capability. In most cases construction will have limited noise impacts noting the sites are generally remote from communities. The only site with the potential for construction noise-related impacts is the Garden Island Defence Precinct. These works will generate construction noise associated with the removal of the existing Gun Wharf and impact pile-driving for the construction of the new pier. A Noise and Vibration Mitigation Plan will be implemented to minimise the potential for impacts to site users and nearby residents. This will be reviewed and approved through each Head Contractor's construction environmental management plan.

c. **Environment Impacts:** Assessment of environment and heritage issues and risks included a desktop environmental review documented in an Environmental Constraints Report at the 5% Master Plan Feasibility Report milestone. An Environmental Report, including a more detailed assessment, was then developed to inform site selections and the 30% Concept Design Report. The Environmental Report was completed to identify potential environmental and heritage factors present or likely to occur in the area of the proposed works, the significance of the potential impacts, and to identify management measures to avoid, minimise or offset potential environmental or heritage impacts. The assessment included:

   i. a desktop review of available environment and heritage studies, reports and databases;

   ii. legislative review;

iii. site investigations, sampling, and analysis, where required;

iv. analysis of the different site environments that may be affected by the proposed action, including Matters of National Environmental Significance, the whole of the environment, and other obligations under the Environment Protection and Biodiversity Conservation Act;

v. assessment of the significance of impacts against the significant impact guidelines for Matters of National Environmental Significance and the actions on, or impacting upon, Commonwealth land and actions by Commonwealth agencies and other Environment Protection and Biodiversity Conservation Act guidance;

vi. the key environmental issue with the potential for impact during the works is associated with pre-existing contamination within soils, groundwater, or other materials in and around the existing Defence Fuel Installation facilities; preconstruction contamination assessments have been undertaken where required to assess these risks, and appropriate contamination remediation at applicable sites is part of the proposed works;

vii. no high risks relating to Matters of National Environmental Significance or Whole of Environment aspects have been identified; the medium risk aspects are those associated with the Garden Island Defence Precinct or sites where underground tank removal is required resulting in the need to manage known contaminated materials;

viii. for the majority of works packages, no further studies or information are considered to be required in order to make an assessment of the Project's potential to have a significant impact under the Environment Protection and Biodiversity Conservation Act; and

ix. due to changes in site locations at RAAF Base Darwin and RAAF Base Learmonth, site investigations and designs are still underway; once these site investigations and design information are available, the Environmental Report assessment for these sites will be completed, and an update of the Environmental Report will be issued.

d. **Heritage Impacts:**

i. Assessment of potential impacts to Indigenous heritage concluded that each of the site locations proposed have a low risk of impact on known areas of cultural significance. The Project is not anticipated to impact

indigenous heritage values, however local Indigenous representatives will be consulted in accordance with heritage management plans.

ii. It is proposed to demolish the existing 'Gun Wharf' at the Garden Island Defence Precinct to accommodate the new refuelling pier. The existing wharf is cited within the Commonwealth Heritage List listing for the broader Garden Island Defence Precinct site, and is noted in the Heritage Management Plan for the site as having high heritage significance. The heritage significance of the existing Gun Wharf is linked to its historic use as a functional wharf rather than the fabric of the structure itself which has undergone substantial modification, demolition and reconstruction over the years. A Heritage Impact Assessment has been undertaken and found that with the implementation of appropriate mitigation measures (such as creation of a photographic archival record, and preparation of a heritage management plan for the works), the impact to heritage values is not likely to be significant under the Environment Protection and Biodiversity Conservation Act. The Heritage Impact Assessment also considered the requirements of the Heritage Management Plan. The outcomes of this assessment and the proposed approach will be confirmed as part of Defence's assessment and approval processes.

e. **Traffic, Transportation and Road Impacts:** There will be minor traffic increases to each site during construction to enable the works to be completed. Traffic impacts are likely to be minimal. Traffic will be managed through the review and approval of each contractor's construction management plan. After construction there will be negligible increase in traffic at existing sites.

54. Based on the findings of the assessments undertaken by the Project, Defence has determined that existing environmental and heritage values will not be significantly impacted by the Project. Therefore, the Project is not required to be referred to the Minister for the Environment and Water under the *Environmental Protection and Biodiversity Conservation Act 1999 (Cth)*. This conclusion will be confirmed once the assessments for RAAF Base Darwin, RAAF Base Learmonth and the Garden Island Defence Precinct Gun Wharf removal are completed and the Environmental Report is finalised.

Consultation with Key Stakeholders

55. Defence has 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 proposed works.

56. Defence has engaged with, or will engage with, a variety of internal and external stakeholders during Project development, and further consultation will be conducted to support the Parliamentary Standing Committee on Public Works' inquiry into the proposed works. These stakeholders include:

a. Local Business Chamber;

b. Federal Members;

c. Local Councils;

d. State Government;

e. Relevant Federal, State and Local Departments/Councils; and

f. Community Groups.

Related Projects

57. The projects, phases, tranches and plans currently underway or proposed that are relevant to this Project are summarised below. This list includes key linkages, such as coordination of project requirements to identify opportunities to incorporate requirements from other projects into Tranche 2 works or vice versa if assessed to constitute value for money to the Commonwealth.

58. Additional to ongoing Estate Works Program de-confliction activities, coordination with the related projects listed below has occurred during the User Requirements Brief and 5% Masterplan Feasibility Review, the Functional Design Brief and 30% Concept Design Report design phases.

59. The following projects relate to this Project:

a. **A9015 Armoured Fighting Vehicle Facilities Program.** The Program consists of LAND 400 Phases 2, 3 and 4, LAND 907 Phase 2 and LAND 8160 Phase 1 capability projects. This Project will need to confirm the vehicles being delivered under A9015 are considered in the design of the fuel installations being delivered.

b. **LAND 121.** The project is providing the Australian Defence Force with current-generation, high-capability field vehicles, modules and trailers to provide battlefield mobility and logistics support. This Project will be required to consider these vehicles in the design of the new facilities being delivered under this Project.

c. **Defence Fuel Transformation Program Tranche 1.** The Project has undertaken risk reduction and transformation work package elements at several fuel installations through the Estate Works Program and some outstanding elements of Tranche 1 have been transferred to Tranche 2 for completion.

d. **Garden Island Defence Precinct:**

   i. N2253B (Stage 2) Knoll Tank and Pipeline Replacement. This project is providing a generational upgrade to critical infrastructure at Garden Island Defence Precinct. Works include the demolition of the existing Knoll tank and installation of a new Bulk Storage Tank, installation of a new bunded fuel storage area, construction of an upgraded pump house and control room, upgrades to existing, and installation of new pipework reticulation, including the install of new fuel pipe infrastructure and fuel cope points to Garden Island Defence Precinct wharves.

   ii. Garden Island Defence Precinct Redevelopment Project. Building and infrastructure reinvestment, including upgrading the Captain Cook Graving Dock and other infrastructure in the Garden Island Defence Precinct. The project is scheduled for delivery commencing in 2025-26.

   iii. The wharf extension at Garden Island Defence Precinct under this Project will need to be coordinated with the above projects. N2253B will deliver the fuel to the wharf location and the redevelopment project is contemplating additional wharfs on the eastern side of Garden Island Defence Precinct that will need to be coordinated with the new wharf being constructed under this Project. At the time of writing, the eastern wharf being considered under the Garden Island Redevelopment Project is only proceeding to 5% Master planning stage, and will not impact on the proposed works to be delivered by this Project.

e. **HMAS *Stirling* Redevelopment Stage 3A.** The project delivered a new Central Emergency Power Station and a new site-wide fire water network servicing the

existing fuel facilities. However, the delivered works will not impact on the new fuel installation which is to be located on the site of the existing fuel installation.

f. **HMAS *Creswell*.** Site-specific upgrade project: upgrade of dispensing/offloading and storage tanks area.

g. **HMAS *Albatross*.** Site-specific upgrade project: wastewater interceptor overhaul, tank farm bitumen replacement, filter vessel replacements and tank non-return valve replacement.

h. **HMAS *Waterhen*.** Site-specific upgrade project: level gauging on Vertical Storage Tank 1, replacement of the existing cope points in the wharves, possible replacement of Horizontal Storage Tank 2.

i. **Borneo Barracks.** Estate Works Program Borneo Barracks – Cabarlah WP2.1 Interim Fuel Installation. The project has documented the delivery of an interim fuel installation at Borneo Barracks to replace the decommissioned fuel installation. The tank provided by this project will be reused for the new fuel installation.

j. **Puckapunyal Military Area:**

   i. Estate Works Program. Work package initially scoped under Defence Fuel Transformation Program Tranche 1 has been reduced in capacity to A-vehicle Petrol Oil and Lubricant only pending this Project.

   ii. Defence Fuel Transformation Program Tranche 1 Project 2.1 Future Footprint Implementation. Close fixed Unleaded Petrol infrastructure at the fuel installation. The project emptied all Unleaded Petrol tanks and made safe.

   iii. Puckapunyal Mid-Term Refresh. The primary interface with the Project is anticipated to consist of the de-confliction of in-ground services at the proposed fuel installation site and potential connection into the water supply (once upgraded).

i. **RAAF Base Darwin.** There are currently no known works occurring at the Base that will interface with this project, noting that the fuel installation work at the Base being undertaken by United States Force Posture Initiatives does not impact the existing ground fuel installation site (which is the subject of this Project).

k. **RAAF Base Learmonth.** KC-30A Multi Role Tanker Airfield Upgrades. This project will be constructing a new apron to house the KC-30A aircraft along with a fuel hydrant line from the new apron to the fuel installation being constructed under this Project. The projects have coordinated siting and will continue to coordinate in relation to the hydrant line connection.

l. **RAAF Base Townsville:**

i. LAND 4503 Armed Reconnaissance Helicopter Capability. This project is considering a siting option for the new Armed Reconnaissance Helicopter Capability at Townsville, which would increase the size of the helicopter fleet at the Base and increase aviation fuel requirements.

ii. Estate Works Program EST04139. Risk reduction works under Defence Fuel Transformation Program Tranche 1 at the fuel installation.

iii. Estate Works Program EST03712. Upgrade existing fuel installation to include stormwater drainage and treatment.

iv. Estate Works Program EST04072. Hazardous Area classification works at the aviation fuel installation and Fuel Quality Control building.

v. Defence Fuel Transformation Program Tranche 1 Project 2.1 – Future Footprint Implementation. Decommission fixed Unleaded Petrol infrastructure at the ground fuel installation. The project has emptied all Unleaded Petrol tanks and made safe, with decommissioning works to be completed during the delivery of this Project.

m. **RAAF Base Williamtown:**

i. Estate Works Program EST04060. Risk reduction works under Defence Fuel Transformation Program Tranche 1 at the aviation fuel installation.

ii. Estate Works Program EST04072. Hazardous Area classification works at the aviation fuel installation and Fuel Quality Control building.

iii. Estate Works Program EST04150 RAAF Base Williamtown Fuel Hydrant Line. Remediation of the Williamtown Fuel Hydrant Line. The project is on hold until siting considerations are complete.

iv. Defence Fuel Transformation Program Tranche 1 Project 2.1 – Future Footprint Implementation. Decommission fixed Unleaded Petrol infrastructure at the ground fuel installation.

n. **RAAF Base Amberley.** Existing minor works projects will be completed before this Project's construction, including relocation of hydrant pump 1, provision of hydrant hose cart test facility, demolition of existing Aviation Gasoline tank, and a new tanker gantry roof.

o. **Army Test Grounds Monegeetta:**

i. LAND400 Management of the acquisition, development, and delivery of Armoured Fighting Vehicles for the Australian Defence Force (coordination of spatial and siting requirements).

ii. Future Weighbridge. Installation of a new weighbridge by Land Engineering Agency (coordination of spatial and siting requirements).

iii. EST08113 Electrical and Fire infrastructure services upgrade works.

Cost Effectiveness and Public Value

Project Costs

60. The estimated total capital out-turned cost of the Project is $286.9 million (excluding Goods and Services Tax). This cost includes management and design fees, construction, information and communications technology, furniture, fittings, equipment, contingencies and a provision for escalation.

61. There will be ongoing operating and sustainment costs resulting from the proposed works. This increase is due to the new capability added to the fuel installation network.

Project Delivery System

62. A Project Manager / Contract Administrator will be appointed to manage the delivery phase of the works.

63. A Design Services Consultant has been engaged to provide design services. It is envisaged that this engagement will be extended for any further design development of the proposed scope.

64. A Head Contract form of contract is planned to deliver the works, with the Head Contractors being appointed to procure trade contractors and manage the construction of the works. The Head Contract form of contract provides the Commonwealth with direct control over the design and quality of the works. The Head Contract delivery methodology will also assist to promote opportunities for small to medium enterprises by sub-contracting construction trade packages where appropriate.

65. The Project plans to procure four Head Contractors based on locality:

a. Western Australia: Learmonth, Australian Defence Satellite Communications Station Geraldton and Jindalee Operational Radar Network Laverton.

b. New South Wales: Garden Island Defence Precinct.

c. Victoria and South Australia: Puckapunyal Military Area, Army Test Ground Monegeetta and Joint Proof and Experimental Unit Port Wakefield.

d. Queensland: Lavarack Barracks, Borneo Barracks, Jindalee Operational Radar Network and RAAF Base Amberley.

Construction Program

66. Subject to Parliamentary approval, design activities are expected to be completed by mid-2024, and construction is expected to commence in late-2024 for completion by mid-2027.

Public Value

67. Defence has comprehensively assessed public value, opportunities and benefit to the community as a result of the proposed works:

a. **Economic impacts:** The Project expenditure will support the Australian economy, in particular in the construction and professional services sectors in the locations outlined in paragraphs 11 and 12 and surrounding regions.

b. **Employment opportunities:** The Project will employ a diverse range of consultants, contractors and construction workers, and is expected to generate opportunities for up-skilling and job training to improve individual skills and employability on future projects.

c. **Local industry and Indigenous business involvement opportunities:** Defence and the Head Contractors will actively promote opportunities for small and medium local enterprises through construction trade packages. The Head Contractors will also develop a Local Industry Capability Plan and an Indigenous Participation Plan to detail how it will engage with and maximise opportunities for local industry and Indigenous businesses, while providing value for money to the Commonwealth.

d. **Health and Safety:** When assessing the health and safety aspects of the proposed works, Defence has undertaken a comprehensive evaluation to ensure the well-being and protection of all individuals involved, including employees, contractors, and the general public. This evaluation includes Risk Assessment, Safety Training, Regulatory Compliance, and Safety Measures.

e. **Existing infrastructure services:** As part of the comprehensive assessment of the proposed works, Defence evaluates the impact on existing infrastructure services. This evaluation involves considering Utility Networks, Transportation, Environmental Considerations, and Community Services.

Below the Line Items

68. In the event that savings are achieved through tendering or retiring risk provision, Defence proposes to utilise the savings to deliver the approved Project scope identified in lower priority sites. Below the line scope items include:

a. **Project Element 12 – RAAF Base Amberley:**
   i. Compliance and upgrade works on the fuel installation, including compliant dedicated fire system, new waste tanks and miscellaneous remedial works.

b. **Project Element 13 – HMAS *Stirling*:**
   i. Installation of new diesel and unleaded petrol storage tanks which will be integrated with the existing fuel installation; and
   ii. decommissioning and site remediation, including removal of underground fuel storage tanks.

c. **Project Element 14 - HMAS *Albatross*:**
   i. Compliance and upgrade works on the fuel installation, including drainage and interceptors, and pipeline integrity and operations, as well as construction of a new bund for the existing Vertical Storage Tank; and
   ii. demolition and site remediation of the concrete bund, drain pits to concrete bunds, various piping and instrumentation at the offloading bay, loading bay and bulk storage tanks.

d. **Project Element 15 - RAAF Base Williamtown:**
   i. Construction of a new ground fuel installation, including new diesel fuel tanks, dispensing points with associated equipment, controls and infrastructure; and
   ii. decommission, demolition, and site remediation of existing ground fuel installation, including removal of underground fuel storage tanks.

e. **Project Element 16 - Holsworthy Barracks:**
   i. Compliance and upgrade works, including provision of compliant automatic fuel flow system and electrical integrity works.

f. **Project Element 17 - RAAF Base Townsville:**

i. Construction of a new ground fuel installation, including new diesel fuel tanks, dispensing points with associated equipment, controls and infrastructure; and

ii. decommission, demolition, and site remediation of existing ground fuel installation, including removal of underground fuel storage tanks.

g. **Project Element 18 - RAAF Base Darwin:**

i. Construction of a new ground fuel installation, including new diesel fuel tanks, dispensing points with associated equipment, controls and infrastructure; and

ii. decommission, demolition, and site remediation of existing ground fuel installation, including removal of underground fuel storage tanks.

h. **Project Element 19 - HMAS *Creswell*:**

i. Miscellaneous compliance and upgrade works, including new portable leak detection unit and replacing high-density polyethylene Fuel line with Stainless steel pipe.

i. **Project Element 20 - HMAS *Waterhen*:**

i. Miscellaneous compliance and upgrade works, including new monitoring alert system, new dispenser point and emergency stop system.

j. **Project Element 21 - RAAF Base Edinburgh:**

i. Provide a facility to connect the portable leak detection unit to the Air Movements Hydrant Line.

k. **Project Element 22 – Design only elements:**

i. Design of remediation and minor capital works at HMAS *Stirling*, RAAF Base Townsville, RAAF Base Williamtown and RAAF Base Tindal.

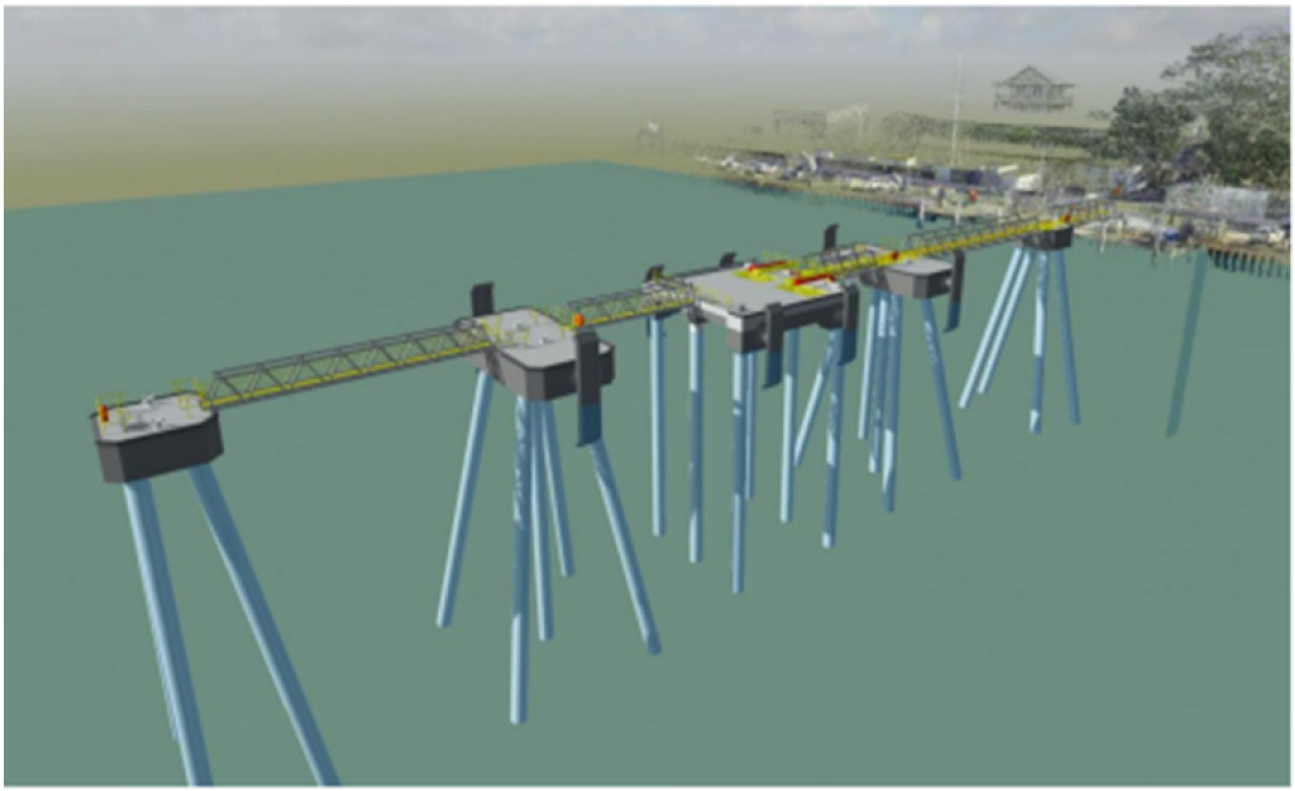
Revenue

69. No revenue is expected to be derived from the Project.

Attachments

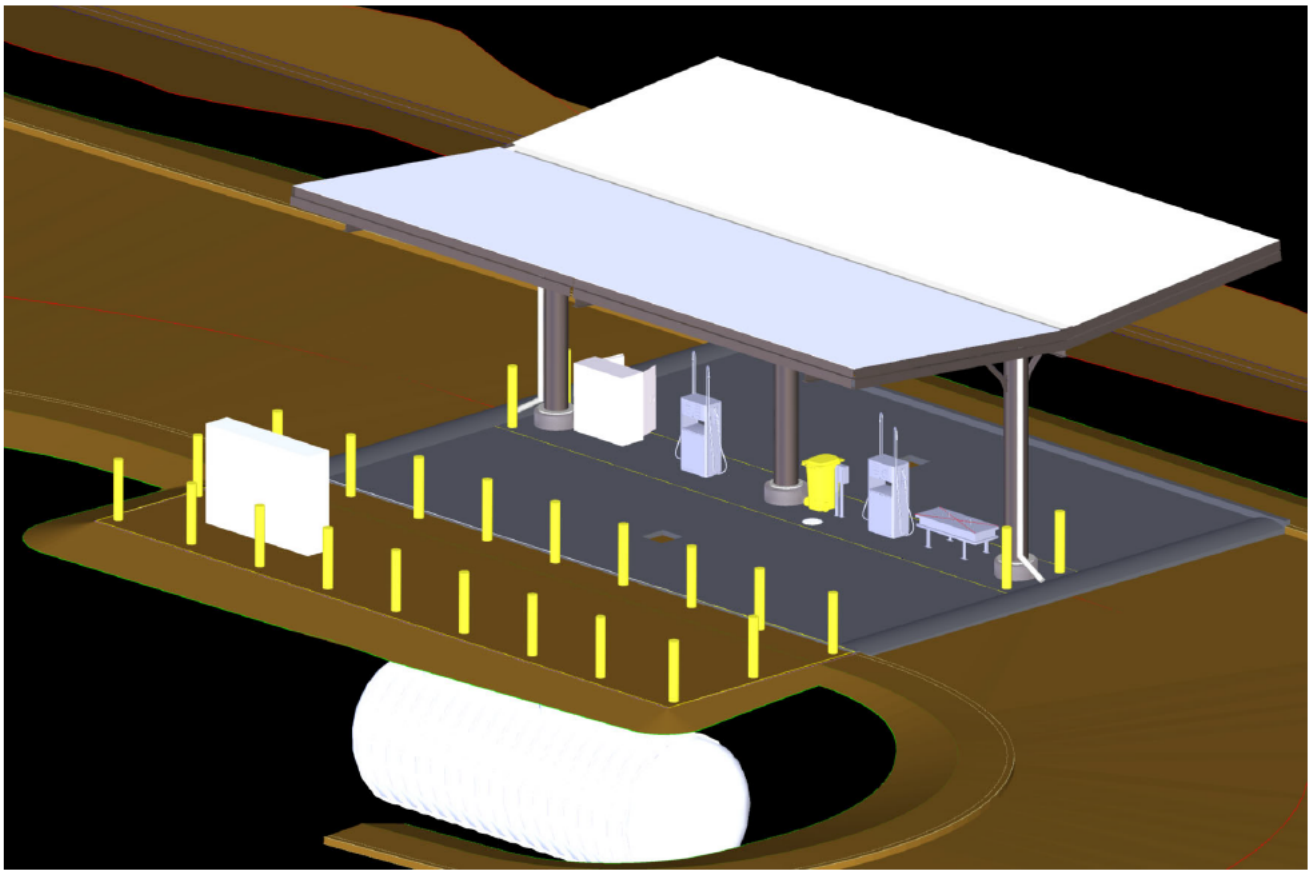
1. National Site Locations Plan
2. Garden Island Defence Precinct Pier Infrastructure Perspective View
3. RAAF Base Darwin Ground Fuel Installation Perspective View
4. RAAF Base Williamtown Ground Fuel Installation Perspective View
5. Puckapunyal Military Area Ground Fuel Installation Perspective Views

ATTACHMENT 1 DFTP - Tranche 2 - NATIONAL SITE LOCATIONS PLAN



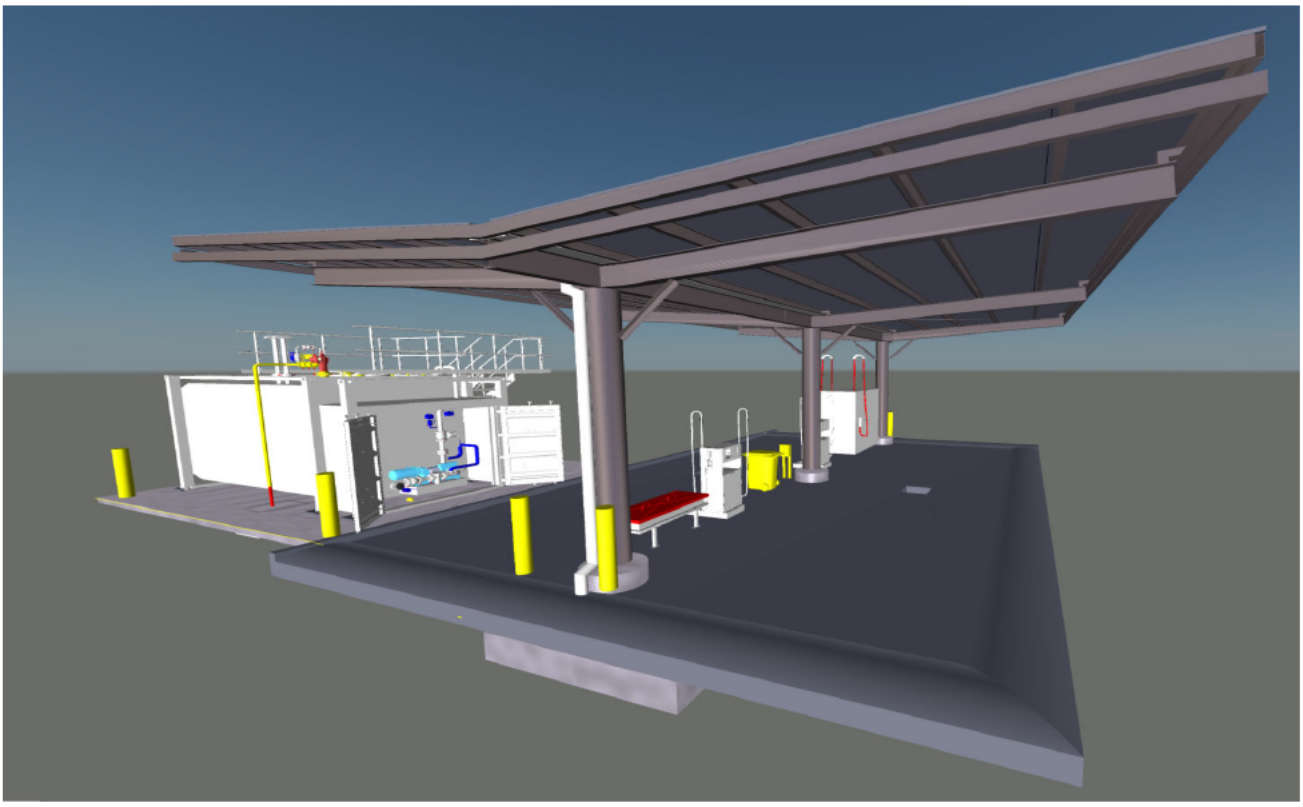
DFTP - Tranche 2 - Garden Island Defence Precinct

ATTACHMENT 2 PIER INFRASTRUCTURE - PERSPECTIVE VIEW



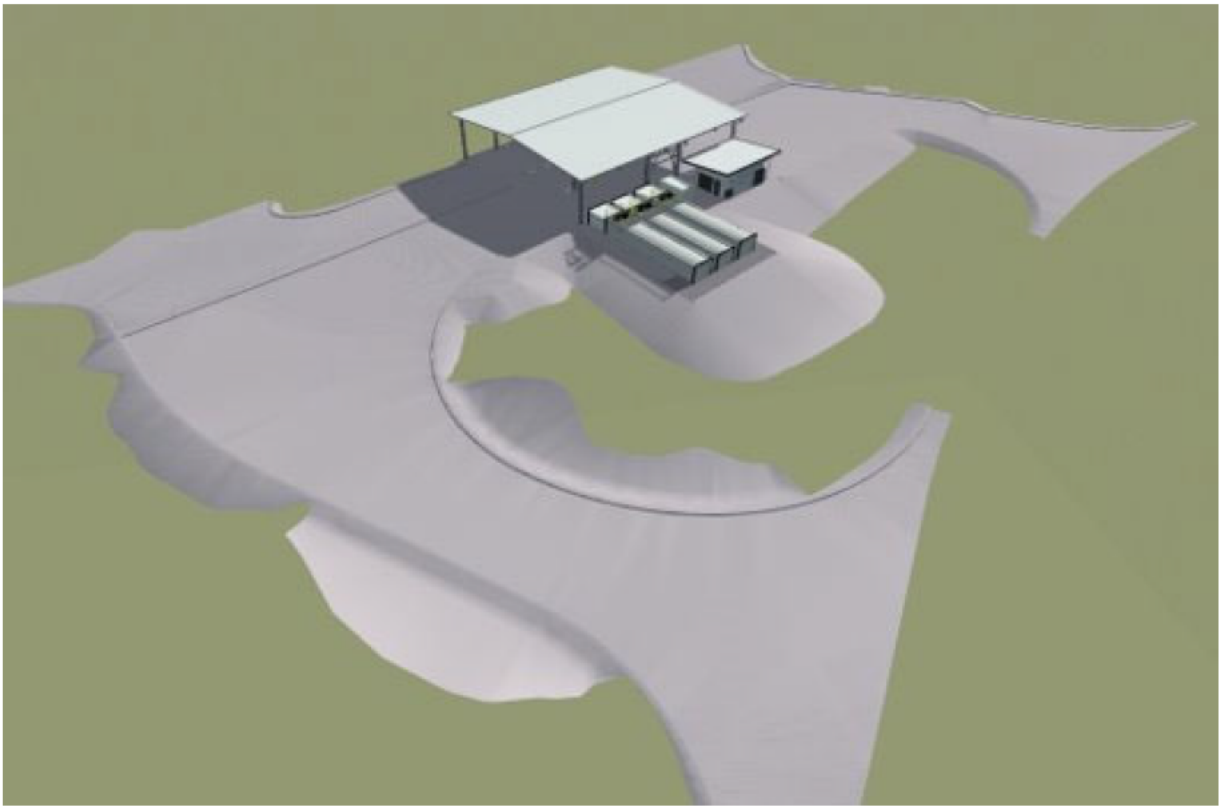
DFTP - Tranche 2 - RAAF Base Darwin

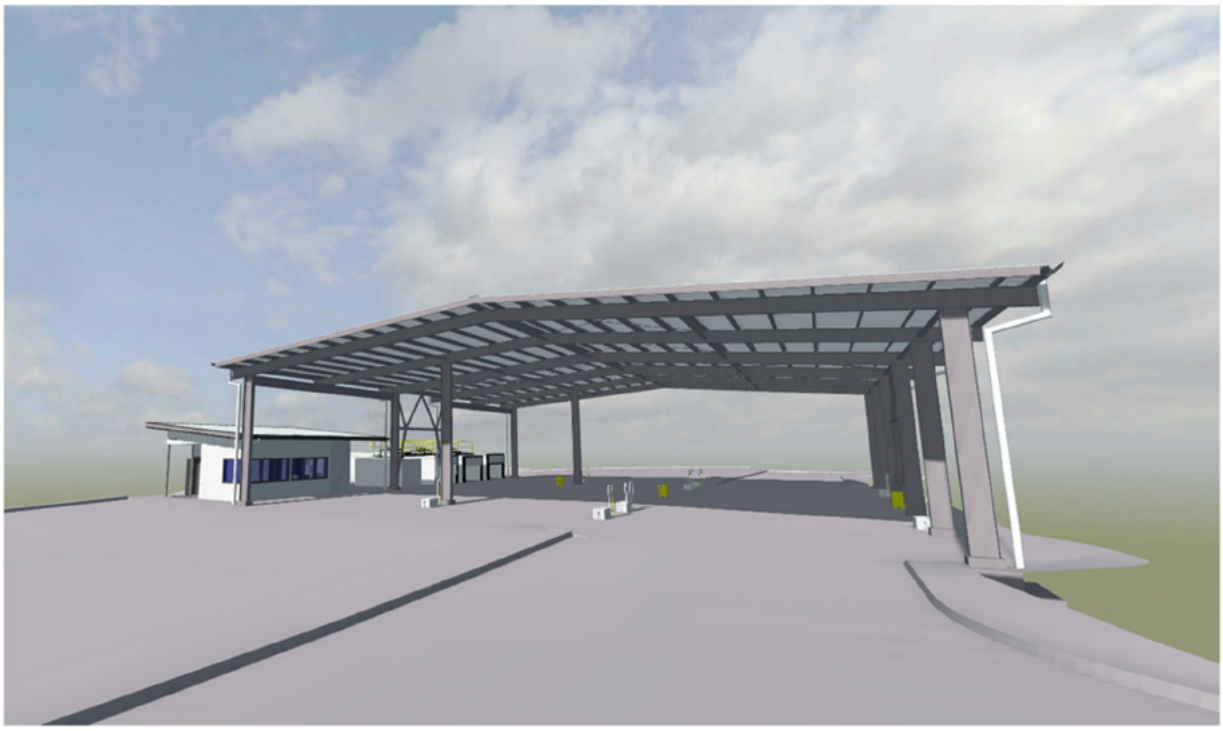
ATTACHMENT 3 DFI GROUND - PERSPECTIVE VIEW



ATTACHMENT 4

DFTP - Tranche 2 - RAAF Base Williamtown
DFI GROUND - PERSPECTIVE VIEW





DFTP - Tranche 2 - Puckapunyal Military Area

ATTACHMENT 5 DFI GROUND - PERSPECTIVE VIEWS