Australian Government

Defence

Defence Science and Technology Group (DSTG)

Fishermans Bend Redevelopment Project

Fishermans Bend, Port Melbourne, Victoria

STATEMENT OF EVIDENCE
TO THE
PARLIAMENTARY STANDING COMMITTEE
ON PUBLIC WORKS

June 2023

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Table of Contents

Defence Science and Technology Group (DSTG)

Fishermans Bend Redevelopment 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, the works proposed under the Defence Science and Technology Group (DSTG) Fishermans Bend Redevelopment Project (the Project).

Executive Summary

2. The aim of the Project is to address existing facilities and engineering services infrastructure at DSTG Fishermans Bend that are aged, non compliant and approaching the end of useful life.

3. The Project proposes to deliver new and upgraded engineering services infrastructure and upgrade the entry precinct to address safety and security compliance requirements.

4. The estimated total capital out-turned cost is $160.9 million (excluding Goods and Services Tax). The cost includes management and design fees, construction, information and communications technology, furniture, fittings, equipment, contingencies and a provision for escalation. As a result of these works, there will be ongoing operating and sustainment costs. No revenue is expected to be generated by these works.

5. Defence, together with the Managing Contractor, will promote opportunities for small and medium local enterprises through construction trade packages, providing employment opportunities in the Victorian region. There will also be opportunities for Indigenous business involvement in accordance with the 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.

7. Environmental and heritage investigations have been completed and the Project will not have a significant impact on existing environmental and heritage values.

Purpose of the Works

Aim of the Project

8. The aim of the Project is to deliver fit-for-purpose facilities and infrastructure at DSTG Fishermans Bend to sustain the operations of DSTG at the site. DSTG is Defence's lead agency dedicated to providing science and technology support to protect and defend Australia and its national interests.

Location of the Project

9. The Project will be delivered at DSTG Fishermans Bend, which is located approximately five kilometres south-west of the Melbourne Central Business District.

Need for the Project

10. The DSTG Fishermans Bend site was originally established in 1939 as Australia's first aeronautical research facility. Today, Fishermans Bend is a specialist science and technology research establishment of national significance that accommodates DSTG's Melbourne-based workforce.

11. DSTG is responsible for providing key scientific and technology advice and innovative solutions to the Australian Defence Force (ADF), including support for the conduct of operations, acquisition of future Defence capabilities and Australia's broader national security requirements. Many of these capabilities are developed in partnership with industry, academia and the scientific community to enhance Defence's combined ability to support Australia's defence and national security.

12. The condition of existing engineering services infrastructure is poor, approaching end of life, have capacity and compliance issues and pose a risk to the current and future capability of the site.

13. The Project will invest in high priority engineering services infrastructure upgrade works to sustain the site, and address safety and security compliance requirements to support the continued operations of DSTG as a fundamental input to ADF capability.

Proposed Facilities Solution

14. Defence undertook comprehensive master planning, site investigations, stakeholder consultation, whole-of-life cost analysis and design development to establish the facilities and infrastructure works required to address the Project need.

15. The Project proposes to deliver new and upgraded critical engineering services infrastructure and an upgraded entry precinct to address safety and security compliance requirements.

Options Considered

16. Defence has developed the following three options:

a. **Option 1** – **Do Nothing**. This option considered the impact of no investment at the site. It would not address the shortfalls, nor maintain the site at current Australian Standards or safety and security requirements to sustain operational efficiencies, and is not considered a viable option.

b. **Option 2 - In-Budget Option**. This option consists of replacing aged engineering services infrastructure that are high priority to maintain the site's critical operations, and an upgrade of the entry precinct to address safety and security compliance requirements. This option is affordable and addresses the site's urgent issues. It also includes 'Below-the-Line' items listed in paragraph 55, should savings be available during delivery.

c. **Option 3 - Prioritised Scope Option**. This option includes the requirements as per Option 2. It also includes high priority facility requirements, including new working accommodation, refurbishment of office accommodation for an existing laboratory, demolition works, front entry security façade upgrades and roof replacment works. While this option includes high priority scope requirements, it exceeds the budget and is therefore not recommended.

d. **Option 4 - Full Scope Option**. This option includes the replacement of all aged engineering services infrastructure, including high priority facility and infrastructure works in Options 2 and 3, as well as an extension to an existing hangar and refurbishment of an additional office accommodation for an existing laboratory. While this option includes all scope requirements, it exceeds the budget and is therefore not recommended.

17. **Preferred option**. Option 2 is the preferred option as it is within the Project's budget and represents the best value for money to the Commonwealth. It addresses the Project's critical minimal requirements to support DSTG's operations at the site.

Scope of Project Works for the Preferred Option

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

a. **Project Element 1 – Entry Precinct.** Upgrade the existing entry precinct, including a new guardbox, refurbished guardhut, upgraded perimeter security, and vehicle and pedestrian access to improve accessibility and traffic flow entering and exiting the site.

b. **Project Element 2 – Electrical Infrastructure.** Upgrade the existing site electrical infrastructure in line with the site's High Voltage Master Plan, including new substations, cabling, switchboards, and a new power control and monitoring system.

c. **Project Element 3 – Potable and Fire Fighting Water Infrastructure.** Upgrade the existing site water supply infrastructure with new independent potable and fire fighting water systems, including a new fire pump and tank arrangement.

d. **Project Element 4 – Stormwater Infrastructure.** Upgrade the existing site stormwater infrastructure, including new pipework, pits to expand stormwater capacity, and devices to improve stormwater quality flowing out of the site.

e. **Project Element 5 – Wastewater Infrastructure.** Upgrade the existing site sewer infrastructure to a new low pressure sewer system, including new sewer pods, pipework and sleeving of some existing pipework.

f. **Project Element 6 – Information and Communications Technology Infrastructure.** Upgrade the existing site information and communications technology infrastructure to include new network capability to support existing reconfigured entry and new electrical infrastructure monitoring system. Compliance and safety issues will be remediated to bring the infrastructure up to current Defence standards.

g. **Project Element 7 – Natural Gas and Compressed Air Infrastructure.** Upgrade the existing site gas infrastructure to replace all gas pipework between the authority meter and supplied buildings, including new isolation valves, regulators and test points. The compressed air infrastucture will be upgraded to replace the central system plant and pipework.

<u>Planning and Design Concepts</u>

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

a. providing cost-effective, functional, low maintenance, energy efficient design options compatible with proposed functions and existing aesthetics;

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

c. applying appropriate durability measures to reduce ongoing maintenance and achieve the proposed design life;
d. providing flexible services and infrastructure to accommodate an appropriate level of growth; and
e. meeting the functional requirements for facilities and infrastructure being provided.

Relevant Legislation, Codes and Standards

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

a. *Environmental Protection and Biodiversity Conservation Act 1999 (Cth)*
b. *Fair Work (Building Industry) Act 2012 (Cth)*
c. *Work Health and Safety Act 2011 (Cth)*
d. *Disability Discrimination Act 1992 (Cth)*
e. *Fair Work Act 2009 (Cth)*
f. *Public Works Committee Act 1969 (Cth)*
g. *Building and Construction Industry (Improving Productivity) Act 2016 (Cth)*
h. *Building and Construction Industry Security of Payment Act 2002 (VIC)*
i. National Construction Code - Building Code of Australia
j. Safe Work Australia Codes of Practice
k. Australian Design Standards
l. Victorian Building Regulations (*Building Act 1993*)
m. Defence Estate Resources Information Kiosk
n. Defence Smart Infrastructure Manual
o. Defence Manual for Infrastructure Engineering Electrical
p. Defence Manual of Fire Protection Engineering
q. Defence Security Manual
r. Defence Security Principles Framework
s. Defence Engineering Services Network Standard
t. Defence Facilities Communications Cabling Standard.

21. An accredited building certifier will certify the compliance of the design and the compliance of the completed works. 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

22. The Bunurong People of the Eastern Kulin Nation are the Traditional Owners of the land where DSTG Fishermans Bend is situated. There is no indigenous land use agreement in place for the site.

23. The proposed works are consistent with uses prescribed in relevant Defence zoning instruments including the Fishermans Bend Estate Base Plan issued in 2019 and the Defence Estate Principles of Development.

24. A Site Selection Board process has been completed in accordance with Defence policy to ensure that the proposed works will not compromise future site development.

Structure

25. The proposed structures have been designed according to the local geotechnical profile and structural loads. New structures have been designed in compliance with all relevant Australian Standards, Defence design guidelines and the National Construction Code. Structures have been developed using low maintenance and durable construction materials, with a consideration for buildability and proposed materials availability, strength of materials and site classification.

26. Facilities being refurbished will utilise the existing structural systems.

Mechanical Services

27. The proposed mechanical services for the refurbishment of office accommodations will meet specific user needs, relevant ventilation, thermal comfort and air quality requirements and the mandatory requirements of the National Construction Code.

Electrical Services

28. Electrical services upgrade works will be in accordance with Australian Standards and Defence engineering requirements. The electrical services design will promote a safe, reliable and flexible electrical system to facilitate safe operation of the proposed facilities. These services have been designed to minimise maintenance and operational costs through the provision of efficient systems and equipment.

Hydraulic Services

29. Hydraulic services upgrade works, such as wastewater, stormwater, potable and fire fighting water, will be in accordance with Australian Standards and Defence engineering requirements. Design will promote a compliant, reliable system to facilite safe and continued operations on the site.

Fire Protection

30. Fire Protection works for the refurbishment of office accommodation will be in accordance with the Manual of Fire Protection Engineering and the Building Code of Australia. Defence has assessed the asset classification and criticality in order to determine the fire protection infrastructure to be upgraded in accordance with consultation with Fire Rescue Victoria.

Information and Communications Technology

31. Information and Communications Technology (ICT) infrastructure upgrade works will be in accordance with the Australian Standards and Defence's engineering requirements, including the Information Security Manual, Defence Cabling Standards, and Defence's Communication Room Standards.

Gas Services

32. Gas services upgrade works will replace existing aged infrastructure within the site in line with all relevant Federal, State, Defence and Energy Safe Victoria codes, standards Defence guidelines. Gas services scope selection has been conducted to improve maintainability throughout asset lifespan.

Compressed Air Services

33. Replacement and relocation of existing compressed air services will improve maintenance outcomes and energy usage for the site whilst also enabling work health and safety obligations of Defence to employees. Greater consistency of functionality of compressed air services would enable the site in its support of wider Defence capability.

Security Measures

34. Security infrastructure for the entry precinct works will be in accordance with Defence regulations and standards and the National Construction Code. Security upgrades have been included to ensure compliance with Defence standards while meeting the needs of reconfigured facilities as develop in consultation with Defence stakeholders.

Acoustics

35. Acoustics works will comply with the National Construction Code and Australian Standards for noise and acoustics. Acoustic separation has been considered in construction elements and surface finishes are being designed to meet user requirements.

Work Health and Safety

36. 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 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.

37. Safety aspects of the Project were addressed during the design development process and 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

38. Internal walls will be lined with plasterboard. Floors will be a combination of carpet and vinyl. Interior materials for refurbished buildings has been selected to respect existing building form and character throughout the site. Material selection was conducted with attention paid to wellness, hygiene, robustness, functionality and maintainability.

Landscaping

39. 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 Provisions

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

Provisions for People with Disabilities

41. 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

42. 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. The general target requirement in new Defence buildings as defined in Section J of the National Construction Code. This includes meeting requirements for fabric insulation, glazing performance, artificial lighting systems and energy monitoring.

b. **Measures to reduce energy and water use.** The Project has been designed in accordance with Section J of the National Construction Code and the Building Energy Performance Manual integrating Defence ecologically sustainable development strategies with relation to Defence obligations to reduce greenhouse gas emissions and optimise the efficient use of energy and resources in buildings.

c. **Re-use of existing structures and infrastructure**. Where appropriate, refurbishment of existing facilities and infrastructure has been prioritised over rebuild options.

d. **Demolition and disposal of existing structures:** Construction waste, demolition and disposal of existing structures will be managed by implementing a site-specific construction environmental management plan. Waste minimisation measures will follow Defence Smart Infrastructure Manual requirements, which requires that all designs consider the minimisation of waste in the planning, design, construction and operation of the Project.

Potential Impacts

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

a. **Visual Impacts:** The Project includes in-ground infrastructure that will have limited visual impact. Refurbished buildings will retain visual appearance of existing facilities.

b. **Noise Impacts:** There will be no material noise impacts to local communities outside of the site. On site, the mechanical plant selection and location of plant rooms within facilities has been designed to minimise the

noise impacts on nearby Defence facilities and neighbouring businesses and academic institutions.

c. **Heritage Impacts:** A Heritage Impact Assessment has been completed during the investigation of the design. All Project elements have been deemed to have no impact on heritage value.

d. **Traffic, Transportation and Road Impacts:** The overall base population will remain unchanged as a result of the Project. The construction of a new entry precinct will alleviate existing traffic congestion issues on Lorimer St by providing additional vehicle throughput capacity. The Project will establish a temporary entry to segregate construction traffic from base users during construction works. The temporary entry will mitigate traffic safety risks, consider additional traffic as the result of the construction workforce and facilitate an expedited construction program.

e. **Existing local facilities.** The Project will not generate any increase or change to the base population. Therefore, Defence does not anticipate an increased dependency on local facilities and amenities within the site boundaries or the local community.

44. 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)*.

Consultation with Key Stakeholders

45. Defence has developed a community consultation and communications strategy that recognises the importance of providing local neighbouring businesses and academic institutions and other interested stakeholders an opportunity to provide input, or raise concerns, relating to the proposed works.

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

a. Federal Member for Macnamara, Mr Josh Burns MP

b. State Member for Albert Park, Ms Nina Taylor MP

c. State Member for Southern Metropolitan, Mr Ryan Batchelor MP

d. State Member for Southern Metropolitan, Mr John Berger MP
e. State Member for Southern Metropolitan, Ms Katherine Copsey MP
f. State Member for Southern Metropolitan, Ms Georgie Crozier MP
g. State Member for Southern Metropolitan, Mr David Davis MP
h. Melbourne City Council
i. The Bunurong Land Council Aboriginal Corporation
j. Local utility providers including Citipower, South East Water and Multinet
k. Department of Transport and Planning (VicRoads)
l. Fire Rescue Victoria
m. Local community, business groups and associations including:
    1) Industry Capability Network (Victoria)
    2) Business Victoria (Aboriginal Business Directory)
    3) Victorian Chamber of Commerce and Industry.

Related Projects

47. There have been capital works projects undertaken previously at DSTG Fishermans Bend. In the last 10 years, the majority of works have been minor building refurbishment and infrastructure repair projects to maintain working facilities and infrastructure across the site, including:

a. EST04621 DSTG Fishermans Bend Fuel Compliance Works Stage 2 (2022)
b. EST07477 DSTG Fishermans Bend Building Refurbishments (2022)
c. EST01352 DSTG Fishermans Bend General Building Refurbishment (2019)
d. EST03461 DSTG Fishermans Bend Building Works (2019)
e. EST01002 DSTG Fishermans Bend Low Speed Wind Tunnel Replacement and Upgrade (2019)
f. Project 11438 DSTG Fishermans Bend Fuel Compliance Works (2018)
g. Project 11439 DSTG Fishermans Bend Building Refurbishment (2018)
h. Project VT10782 DSTG Fishermans Bend and RAAF Williams Point Cook Repairs to Roofs, Gutters and Downpipes (2017)
i. Project VT10784 DSTG Fishermans Bend Electrical and Equipment Replacement Works (2017).

48. The most recent approved major capital works projects include:

a. The Defence Science and Technology Organisation Human Protection and Performance Division (HPPD) Security and Facilities Upgrade Project at

Fishermans Bend was completed in 2016. The project was approved by Parliament in 2013 at a cost of $41.1 million.

b. The Defence Science and Technology Organisation Rationalisation Project at Maribyrnong and Fishermans Bend was completed in 2003. The project was approved by Parliament in 2000 at the cost of $56.171 million.

Cost Effectiveness and Public Value

Project Costs

49. The estimated total capital out-turned cost of the Project is $160.9 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.

50. An increase in operating and sustainment costs is expected as a result of the proposed works. This is due to the additional maintenance, cleaning and utilities expenses that will be required to operate and maintain the proposed upgraded and reconfigured front entry and infrastructure.

Project Delivery System

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

52. A Managing Contractor contract is proposed to deliver the work, with the Managing Contractor being appointed to procure trade sub-contractors and manage the construction works. The Managing Contractor contract provides the Commonwealth with buildability input into the design while promoting opportunities for small to medium enterprises by sub-contracting design and construction trade packages.

Construction Program

53. Subject to Parliamentary approval, design activities are expected to be completed by late 2023, with construction expected to commence in 2024 for completion by 2026.

Public Value

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

a. **Economic impacts:** The Project will actively promote opportunities for small to medium enterprises, in particular in the construction sub-contractor packages and professional services in the Melbourne area.

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. Defence anticipates that over the life of the Project, over 100 personnel could be provided with employment opportunities.

c. **Local industry and Indigenous business involvement opportunities:** Defence and the Managing Contractor will actively promote opportunities for small and medium local enterprises through construction trade packages. There will be opportunities for Indigenous business involvement in accordance with the Government's Indigenous Procurement Policy. Works to be undertaken must comply with the Government policy for local industry participation. The Managing Contractor will be required to develop a Local Industry Capability Plan and an Indigenous Participation Plan to detail its commitments on how it will engage with and maximise opportunities for local industry and Indigenous businesses, while providing value for money to the Commonwealth. These commitments will become contract deliverables and the Managing Contractor will be required to report on their performance against them. While the policy does not mandate local suppliers, there are opportunities to engage local suppliers for the Project.

d. **Health and Safety:** The Project will reduce health and safety risks at the site and for local road users by improving the interface between base users and local traffic at the existing entry.

e. **Existing Infrastructure services:** The Project will improve existing infrastructure services by addressing existing critical issues. All works will be located within Commonwealth land. There is no expected impact on Victorian Government-provided infrastructure services within existing on-site capacities.

Below the Line Items

55. In the event that savings are achieved through competitive tendering or the retirement of risk provision, Defence proposes to utilise the savings to deliver additional

works that are consistent with the prioritised Project scope, including the refurbishment of office accommodation for two existing laboratories and roof replacement works identified under Option 3.

Revenue

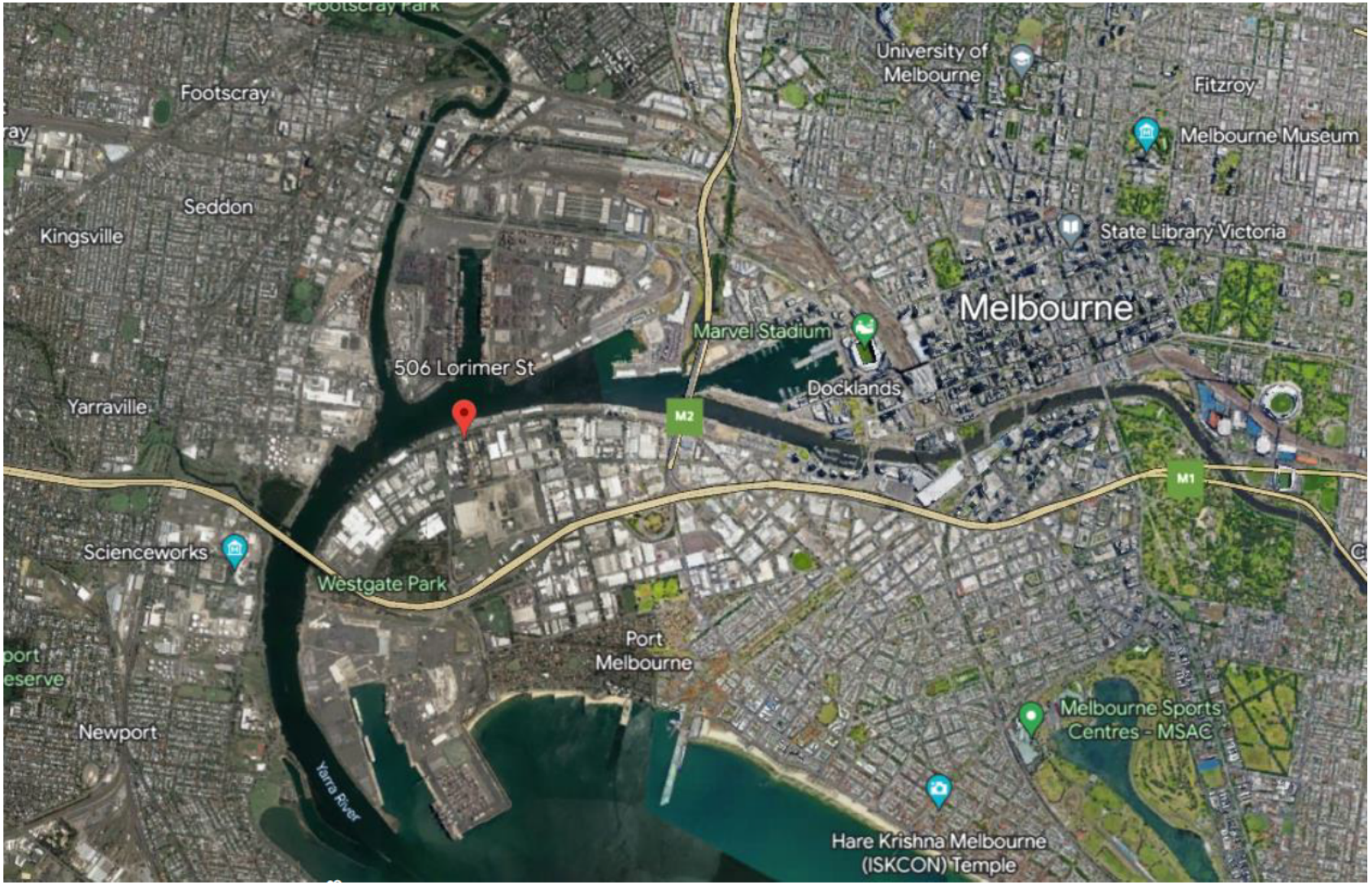
56. No revenue is expected to be derived from the Project.

Attachments

1. Locality Plan
2. Scope Overview

Attachment 1

Locality Plan



Attachment 2 - Scope Overview

Figure 1: Proposed Upgrade Works of Main Entrance – Eye View - Facing South (From Lorimer Street)

Figure 2: Proposed Upgrade Works of Main Entrance - Aerial View – Facing South (from Lorimer Street)

Figure 3: Site Overview – Proposed Engineering Services Infrastructure Upgrade Works