Friends of Port River

RESPONSE TO ANI'S ENVIRONMENT IMPACT STATEMENT

SUMMARY OF FRIENDS OF PORT RIVER CONCERNS

Friends of Port River (FPR) are concerned that the EIS proposes that ANI do what it must, and not what it ought, especially re mitigation measures, community consultation and ensuring community benefit.

It's disappointing that the EIS understates the importance of the local environment, including minimising the risks to Mutton Cove and the Adelaide Dolphin Sanctuary.

Matters in the Mitigation Schedule (EIS, Appendix 2) of interest/concern to Friends of Port River (FPR) in both the construction and operational phases include

- Air quality
- Noise
- Flooding (including Emergency Flood Response Plan)
- Stormwater Management
- Biosecurity
- Marine flora and fauna
- Coastal and marine (including Dredge Management Plan)
- Climate change adaptation
- Sustainable use of resources
- Site and groundwater contamination including Soil, Erosion and Contamination Management Plan, Acid Sulphate Soil Management Plan and Dewatering Management Plan
- Community Wellbeing/Social Impact

And during operations

- Greenhouse Gas Emissions

The EIS indicates that NONE of the matters in the Mitigation Schedule will have 'significant effects' during the construction phase and no Additional Mitigation Measures are required. The EIS relies upon Management Plans, licenses and other approvals, to prevent, reduce or offset the significant adverse effects of the development proposal.

The ASA's Strategic Impact Assessment Report at least identified that a risk rating of 'high' remained for clearing of vegetation.

There are many matters that are subject to further detailed design, meaning the mitigation measures cannot now be determined. The Appendices to the EIS (as outlined below) propose recommended measures, targeted mitigation measures and industry best practice to lessen the impact of the development. It seems that the consultants' proposals could be in vain.

Unfortunately, there's no requirement in the State processes that the community be informed about designs and/or mitigation measures as they are developed or have any opportunity to have input to them. Nor are the State Government's processes normally very transparent in reporting on compliance with mitigation measures.

FPR wants proactive measures e.g. environmentally-friendly seawalls, employment, social infrastructure, so that the local community gets SOME benefit from the development, and not just have to bear any problems created e.g. loss of habitat, inadequate stormwater systems, flooding, traffic, pollution etc.

FPR understands that to manage and store radioactive material from testing and commissioning of the power module, a purpose-built industrial facility will need to be constructed within the assembly and testing area of the Submarine Construction Yard. The SIAR (pp3-20) advises that "this facility is considered outside the scope of the Strategic Assessment and will be managed via separate environmental assessment processes and approvals as necessary".

Given high levels of community concern about the management and storage of radioactive material, and that the SCY depends on this facility if it is to build nuclear submarines, it's regrettable that this SIAR, the EIS and the environmental assessment processes for the proposed purpose-built industrial facility did not coincide. There's considerable community frustration both that radiation material will be stored and managed at the SCY and that the SIAR, and EIS, are assuming that the SCY will be built while the regime for managing and storing radiation material at the SCY is not established.

CONCERNS RE EIS's MITIGATION MEASURES

Matters in the Mitigation Schedule (EIS, Appendix 2) of interest/concern to Friends of Port River (FPR) in both the construction and operational phases include

- Air quality
- Noise
- Flooding (including Emergency Flood Response Plan)
- Stormwater Management
- Biosecurity
- Marine flora and fauna
- Coastal and marine (including Dredge Management Plan)
- Climate change adaptation
- Site and groundwater contamination including Soil, Erosion and Contamination Management Plan, Acid Sulphate Soil Management Plan and Dewatering Management Plan
- Community Wellbeing/Social Impact

And during operations

- Greenhouse Gas Emissions

As shown in Appendix A below, Table 25.1 of the EIS (pp 403) indicates that NONE of these will have 'significant effects' during the construction phase and no Additional Mitigation Measures are required. Similarly in Table 25.2 (pp 405) significant effects (of the issues of concern to FPR) are only identified for road traffic noise and the road network and it's suggested these can be solved in the ten to fifteen years before they cause significant effects.

The EIS relies on the usual management plans, licences and approvals being implemented and for this the State processes provide for very little public visibility or accountability re implementation. The EIS assessment is very disappointing and there are major issues of concern to FPR, arising from local knowledge and the expert assessments provided in the Appendices to the EIS.

Issues of concern include those:

- that are subject to further detailed design – see below in red re *Air Quality*, *Flooding, Stormwater Management*, the impact of *Dredging* on seagrass, impact on *Native Marine Fauna*
- that can lessen risks if recommended measures are implemented - see below in red re
    - *Biosecurity*
    - *Cumulative impacts*
    - *Native Marine Fauna Management* (see also Table 12, pp 45-46)
    - *Noise and Vibration Impacts on Native Marine Fauna Management* (see also Table 14, pp 52-53)
    - *Wetlands and Groundwater-dependent Ecosystems Management*
- that can lessen risks if targeted mitigation measures are implemented – see below in red re *Terrestrial and Marine Flora and Fauna Ecological Report*
- that can lessen risks if industry best-practice is adopted – see below in red re *Indo-Pacific Bottlenose Dolphins*
- that are underestimated – see below re the role of the Port River as a nursery for fish, crabs and prawns
- that are not addressed – see below re the risk of the further deterioration or collapse of the Mutton Cove seawall, with impact on its habitat and the species it supports.
- that are informed by outdated information – see below re *Water Quality* and *Coastal Systems and Morphology*

CITY OF PORT ADELAIDE ENFIELD SUBMISSION

The Friends of Port River are supportive of the draft submissions[1] by the City of Port Adelaide Enfield to the Strategic Impact Assessment Report and the EIS.

We share Council's concerns about the EIS

- relying, within the EIS, on the Lefevre Masterplan process managing impacts upon the wider peninsula because of the development, including the identification of mitigation measures
- discounting flooding risks Table 4.9 (page 80) as a natural disaster and furthermore discounting climate change as being relevant to development infrastructure
- not delaying planning which is needed now for transport and traffic management, since in future years land and infrastructure costs will have increased and the resultant traffic issues significantly worsened
- needing to give detailed consideration to the Mutton Cove and precinct development interface (pp11 of Council submission)

FPR would highlight the following in Council's draft submission:

- Given the EIS includes mitigation measures still to be determined, it's anticipated the Impact Assessed Development will be subject to a range of reserved matters and conditions that will include all those matters requiring further assessment as identified throughout the EIS

[1] Draft submissions to the SIAR and EIS, City of PAE Agenda of March 11th, 2025 Items 14.2.1.1 and 14.2.1.2

- Recommendation 2 - the EIS should include relevant sections of the Port River channel that may require future dredging to support AUKUS related activities and subsequent Dredge Management Plans are prepared in accordance with the requirements under relevant legislation.
- Recommendation 3 - the edge treatments for Area 3 in particular, and also Areas 1 and 2 need to minimise any negative environmental impacts on the surrounding environments. This includes appropriate sediment controls, buffering and vegetations for management of batters etc.
- Recommendation 6 - the EIS should be amended to consider the future risks of coastal inundation and mitigations (resilient infrastructure) required to reduce these risks of a natural disaster.
- Recommendation 13 - Council and the community are consulted on the development of the Construction Environmental Management Plan (CEMP) (or equivalent) to better understand and help strengthen the mitigation measures that will be put in place to mitigate potential impacts to marine and terrestrial flora and fauna throughout the construction phase and into operation.
- Recommendation 16 - in relation to the proposed development of a Marine and Coastal Environmental Management Plan (MCEMP), the report should assess the impacts of the proposed operations of the development and document the environmental protection controls and measures to be implemented and monitored. The report should address impacts on marine organisms from development activities (including noise, vibration, and water quality).
- Recommendation 17 - the EIS and subsequent planning considers impacts on and mitigation measures that ensure the protection and restoration of the Port River and Barker Inlet system.
- Recommendation 19 - matters relevant to the interface management, hazard management, public open space and river access raised above are addressed in the EIS, subsequent planning and the development of the site.
- Recommendation 21 - opportunities for investment in local social infrastructure are identified and prioritised.

POTENTIAL IMPACT ON MUTTON COVE

While the EIS recognises that Mutton Cove is directly adjacent to the subject site, and there may be indirect impacts, it doesn't address the potential risk from further deterioration, or collapse, of the seawall at Mutton Cove, which was breached in May 2016 after the SA Government failed to provide funds for its maintenance.

Given the major construction proposed on the subject site, especially at the southern end, there would seem to be a substantial risk to the seawall and to Mutton Cove, its habitat and the species it supports. Before constructing major buildings next to Mutton Cove, to deal with potential climate risks, the land will need to be raised and often this process requires substantial preloading. Risks will also arise in constructing maritime and dock facilities, including excavation and dewatering. While Mutton Cove's seawall has been breached at several points, the inner banks at Mutton Cove have not been built as seawalls and are also progressively eroding.

Figure 5.1 - Preliminary dredging areas for the construction of the development, Appendix 1.17

While FPR would recommend greater community input, FPR supports the draft City of PAE submission to the EIS, in relation to Mutton Cove and precinct development interface:

- We recommend that ANI and Department for Environment and Water work in partnership to invest not only in sea level rise infrastructure protection planning but holistically consider Mutton Cove integration with the proposed development, including environmental protection opportunities for marine flora and fauna.
- Utilising living coastal infrastructure treatments within and on the river boundary of Mutton Cove to provide opportunities for enhancing marine habitats and adapting to sea level rise.
- Seagrass, mangroves and samphire species contribute to a healthy intertidal ecosystem in the Port River and are found at Mutton Cove. Mitigation measures to ensure no negative impact on these species and Mutton Cove as a whole-of-site need to be thoroughly considered and in consultation with knowledgeable saltmarsh experts.
- Council would appreciate updates from the early stages of planning in relation to marine habitats to allow complete transparency on this matter to help inform other community stakeholders of progress.

The City of Port Adelaide Enfield recommends in their response to the SIAR (Recommendation 1)

> That ASA work in partnership/collaboration with Council and other stakeholders on best practice mitigation measures that go beyond standard practice for developments due to the significance of the flora and fauna and conservation areas/sanctuaries. Council also recommends ensuring that ecological expertise is sought regarding best practice mitigation measures for marine flora (particularly seagrass and saltmarsh), marine fauna and migratory shorebirds.

SUPPORTING INFORMATION

The material below generally provides direct quotes from the EIS and its Appendices:

- Quotes are shown in black
- Quotes in red refer to matters for which there are not yet designs, or where recommendations/proposals have been made that the EIS seems not to be adopting
- Information in blue are summaries from FPR of that section of the EIS/Appendices

Air quality (EIS pp 131)

This air quality assessment was based on an initial concept, which was the level of development design detail available at the time of preparing this EIS. Additional modelling will be undertaken once detailed design progresses, to confirm assumptions, conclusions and mitigation measures required.

Table 7.2: Construction Assessment Effects (pp 133 -135)

Table 7.3: Operation Assessment Effects

Air quality emissions will be controlled during the operation phase at each building, with mitigation measures tailored to its specific function during detailed design, as appropriate. (pp 137)

Flooding (Appendix 2, *Section 1.2.3*)

At a very minimum, surface and building levels across the development site would be set above the 1% AEP design flood envelope, with an appropriate allowance for increased rainfall, sea level rise, land subsidence or uplift, and coastal erosion. To achieve this, finished surface levels would be set above a minimum level of 3.30 mAHD and building floor levels set above a minimum level of 3.55 mAHD. This is consistent with recommendations for coastal developments.

Critical buildings and infrastructure may be raised to higher elevations to protect against more extreme flood events. The required levels of flood protection for this critical infrastructure are yet to be determined and are subject to future detailed design. In addition to raised surface and building levels, the development will include a sea wall along the eastern boundary of Area 3 to protect the development site from extreme storm surges or tidal interactions. The design requirements and height of this sea wall are subject to further detailed design.

Emergency Flood Response Plan is part of the Flooding CEMP

Stormwater Management Plan (Appendix 2, Section 1.2.4)

Stormwater runoff will be captured by the major and minor drainage network, which then conveys flow towards a series of detention systems.

Outflows from the detention systems would discharge to outfalls along the Port River. Design of the drainage system would account for tidal interactions, and it is recommended that the drainage system is designed to suitable climate conditions.

Biosecurity (Appendix 1.5)

Exec Summary pp6:

Potential biosecurity risks as a result of construction and operational activities include:

- Spread of declared noxious fish, plant and mollusc species listed under the *Fisheries Management Act 2007* due to construction activities, bilge water, biofouling and ballast water.
- Spread of diseases due to construction activities, bilge water, biofouling and ballast water.

It is anticipated that construction and operational biosecurity risks can be managed through targeted biosecurity management measures, which broadly align with industry-standard best practices.

Summary of Management for Biosecurity pp38:

As outlined, the Development will implement the mandatory management measures required under legislation and associated guidelines. These mandatory management measures will be detailed in relevant environmental management plans and/or management subplans. The relationships among the relevant management plans are diagrammed in Figure 3.

The recommended management measures, in contrast, are derived from subordinate legislative instruments (e.g. guidelines) or developed by experts to achieve compliance against the relevant Acts and Regulations. These management measures are optional and not enforced under South Australian and/or Commonwealth law. However, they are strongly recommended to assist in achieving compliance under South Australian and Commonwealth legislation. Many of these management measures are best-practice environmental management and are standard for development and construction projects. It is suggested that the recommended management measures are tailored into relevant construction and operational environmental management plans and/or management subplans (Figure 3).

Terrestrial and Marine Flora and Fauna Ecological Report (Appendix 1.6)

Executive Summary pp8:

The subject site is located on the Lefevre Peninsula, South Australia. The Lefevre Peninsula is a highly industrialised area. Much of the subject site occurs within pre-disturbed land infested with Declared Plants and degraded or planted native vegetation. However, there are pockets of remnant vegetation regenerating native vegetation throughout the subject site. Planted native and/or exotic vegetation is found within Falie Reserve and the Pelican Point Power Station. The subject site contains the Adelaide Dolphin Sanctuary and neighbours Torrens Island and Mutton Cove, which both offer high-value habitats for flora and fauna. In the wider locality, the Adelaide International Bird Sanctuary

provides important habitat to migratory birds and resident shorebirds. The subject site provides habitat for several protected or threatened fauna species under the *EPBC Act* and/or *NPW Act*.

Potential construction and operational impacts on the biological environment include:

- Clearance of native vegetation and suitable habitat for protected and/or threatened species.
- Spread of Declared Plants, noxious weeds and/or marine pest species via construction activities, biofouling and ballast water.
- Increased underwater and terrestrial noise and vibration.
- Increased dust.
- Increased light pollution and human activity.
- Diminished water quality.

It is anticipated that construction and operational impacts can be managed through targeted mitigation measures for marine flora and fauna and terrestrial flora and fauna. Appropriate mitigations will be provided in relevant management plans for construction and operation.

Section 7.1 Native Marine Fauna, pp31:

The majority of the marine-based portion of the subject site lies within the existing open shipping channel. The dredging is anticipated to occur along primarily along the Port River frontage of the SCY, out to and along the northern extent of the current shipping channel. The actual extent of dredging will be confirmed during detailed design. The Northern Dredge Area (NDA) assessed by J Diversity via a limited towed camera survey in August 2023. The NDA represents a portion of the marine-based portion of the subject site. For the purposes of this report, the NDA will henceforth be referred to as the surveyed marine-based portion of the subject site. An indicative map of seagrass and other habitats was prepared. Nevertheless, further survey effort will be required to confirm the accuracy and precision of the seagrass cover in the marine-based portion of the subject site. The marine-based portion of the subject site occupies approximately 82 ha, of which only a portion was surveyed by J Diversity. This surveyed area consisted of approximately 7 ha of sparse and moderate density *Zostera* species. The remaining area consisted of filamentous macroalgae of varying densities and sand or rocky ledges of the shipping channel. Notably, no pest *Caulerpa* species, which previously dominated sections of the Port River, were observed (J Diversity Pty Ltd 2023). This is possibly a result of improved water quality in the Port River.

Tursiops aduncus (Indo-Pacific Bottlenose Dolphin) summary (pp42)

The Development is contained within the Port River and Barker Inlet, which is home to a small population of Indo-Pacific bottlenose dolphins that face several threats. Several intrinsic and extrinsic factors contribute to ADS Indo-Pacific Bottlenose Dolphin population being particularly vulnerable to anthropogenic pressures. Construction and dredging associated with the Development is likely to cause a negative impact on the dolphin population. However, these impacts can be mitigated using industry's best practice approaches.

Native Marine Fauna Cumulative Impact pp42

Cumulative impacts are critical to consider for the Development. The Lefevre Peninsula has multiple long-standing industrial developments, as well as several in the construction or pre-construction

stages. Several of those related to the Development include service infrastructure realignments and the Osborne North Car Park and Grade Separated Road.

A cumulative impact assessment considers the Development at its broadest scope, including construction, operation, and all related activities and infrastructure, with direct and indirect impacts. Cumulative impact assessments need to consider intensity, timing, duration, scale and frequency of the Development and all its stages. They also consider the sensitivity of the receiving environment. At the time of writing, limited details are known about the Development's design, duration, scale, intensity or frequency. However, a summary of high-level cumulative impacts is described below:

Particular impacts that may result from the Development construction and/or operation activities include:

- Habitat loss (terrestrial and marine)
    - Reduced habitat for prey species
    - Reduced area of *Zostera* sp. in the ADS
    - Reduced foraging resources for threatened or protected species.
    - Disturbance to adjacent habitats and ecosystems
    - Sedimentation and erosion of the coastline
    - Diminished amenity of the ADS
- Increased noise and vibration
- Decreased air quality (via construction dust, vehicle emissions)
- Increased human activity in the Port River and surrounding land.
- Increased artificial light
- Diminished water quality
- Increased stormwater run-off
- Increased pollutant concentrations in water bodies, soil or sediments, or their bioaccumulation.
- Disturbance of contaminated
- sediments; and
- Introduction or spread of terrestrial and marine pests.

Collectively, over time, these impacts are likely to diminish the existing ecosystem if left unmanaged. The subject site and its surrounding locality has already been heavily modified via through anthropogenic activities such as dredging, vegetation removal, establishment of infrastructure (such as roads, train transport corridors, fuel storage, power stations, bulk shopping and grain operations, importation of fill, contamination by industries and introduction and spread of pest flora and fauna species.

Note: see *Table 12: Native Marine Fauna Management* (pp45 – 46) for required and recommended management measures

Section 7.2 Noise and Vibration: Native Marine Fauna pp 47

7.2.2 Noise and Vibration Impacts on Native Marine Fauna, pp50:

In summary, the following impacts are anticipated:

- The greatest impact is expected on low-frequency cetaceans, given their increased hearing sensitivity to low-frequency noises.
- Impacts to high-frequency cetaceans are unlikely.

- Pinnipeds (particularly phocid carnivores) are significantly less sensitive to noise exposure in air than in water.
- The potential for temporary or permanent physiological impact from non-impulsive sources is very low for fish, sharks and marine turtle. However, within this group, the greatest impact potential is on fish with swim bladders, given their increased hearing sensitivity.
- Short-term impacts are expected to be limited to the construction phase.
- It is expected that underwater noise impacts can be managed via a series of mitigation measures.
- Long term impacts are expected to be negligible.

7.2.3 Noise and Vibration Impacts on Native Marine Fauna Management, pp50 - 51

A series of mitigations have been formulated based on the results of the noise and vibration impact assessment. Mitigation and management measures are considered necessary for impact sheet piling in particular and to a lesser extent dredging and vibratory piling. In relation to impact piling however, it is expected that most of the piling would be undertaken using vibro-driving, and impact piling only required if very stiff soils are encountered.

Management measures will consist of mandatory requirements under the relevant legislation and guidelines and recommended measures based on the expert knowledge. To minimise noise and vibration impacts to native marine fauna, the Development will implement the required management measures.

Note: see *Table 14: Noise and Vibration Impacts on Native Marine Fauna Management* for required and recommended management measures

Section 7.3 Adelaide Dolphin Sanctuary

7.3.2 Adelaide Dolphin Sanctuary Impacts pp57

This section addresses dredging noise impacts, dredging with impacts to habitat and water quality, impact to other fauna species especially birds, water quality, vessel strikes to marine megafauna and marine pests.

This content reflects information provided in other sections of the *Terrestrial and Marine Flora and Fauna Ecological Report*, however as outlined below there are required management measures under the ADS Act and recommended management measures.

7.3.3 Adelaide Dolphin Sanctuary Management pp 60

In addition to the management measures for marine native fauna (Table 14), Table 15 outlines required management measures under the *ADS Act*.

Table 15: Adelaide Dolphin Sanctuary Management for required and recommended management measures pp60-61

7.4 Commercial and Recreational Fisheries

The assessment requires that impacts are addressed on commercial and recreational fisheries and impacts that could arise from the loss of nursery habitat (e.g. seagrass beds, reefs, mangroves) of target species (such as prawns and fish).

While there is no mention of the role that the Port River, and Torrens Island, plays in providing nursery habitat, that seems short sighted given local experience of many small fish and shrimp in the River. In section 7.2 "results from the underwater noise monitoring found the marine area noise consisted of snapping shrimp noise underpinned by continuous low-frequency mechanical noise". Flinders University studies provide up to date information about local fish species.

In a later section (8.1.2, pp74) there's recognition that Barker Inlet and St Kilda Wetland, Barker Inlet – St Kilda Aquatic Reserve, the St Kilda Chapman Creek Aquatic Reserve, and the St Kilda Mangroves are nursery areas for several important commercial and recreational species including the Western King Prawn, King George Whiting, Yellow Fin Whiting, and Blue Swimmer Crabs. "These three ecosystems are connected to the Port River via a series of waterways and wetlands. Potential indirect impacts include spills and contamination via waterways."

Section 8.2 Wetlands and Groundwater-dependent Ecosystems

8.2.3 Wetlands and Groundwater-dependent Ecosystems Management

Managing stormwater and pollution will be critical to ensuring the neighbouring water bodies and ecosystems are not negatively impacted by the Development.

Table 18: Wetlands and Groundwater-dependent Ecosystems Management identifies Required and Recommended Management Measures.

Coastal and Marine (Appendix 1.17)

Section 3.5 Water Quality

It's disgraceful that URPS is relying on information dating back to 2003-2013 for the description they provide of water quality in the Port River. The work is both lazy and lopsided. After a page of information dating back to 2003-13 they advise

> Considerable effort and investment has been put into improving the water quality of the Port River since the early 1990s. As a result, water quality has improved in recent decades. However, given its status as a highly active port with regular dredging and significant stormwater loads from residential and industrial land uses, water quality issues remain.

Since Penrice went into liquidation in 2013-14 there have been marked improvements in Port River water quality, observed for example in the natural restoration of seagrass as far south as the AGL power station.

The EPA and SA Health advise that the river is swimmable and EPA's data from 2017-18 supported that assessment. Their guidance is the same as for our local beaches that people should not swim within 2-3 days of a major storm.

The EPA also works closely with Flinders Ports to ensure that regular dredging does not affect water quality, and minimises impacts on seagrass.

Consultants providing inadequate, outdated information harm the interests of project proponents seeking a social licence for their projects.

Friends of Port River

Section 3.7 Coastal Systems and Morphology

This section is based on information from Johnston & Hardison 2005. Again, this is lazy and inadequate research and suggests URPS has been relying on the same information for twenty years. There's no mention of the development of West Lakes nor the pipeline off Grange that brings seawater through West Lakes into the Port River. The UNSW Water Research Laboratory provided the figure below in their scoping study for a Port River tidal swimming facility.

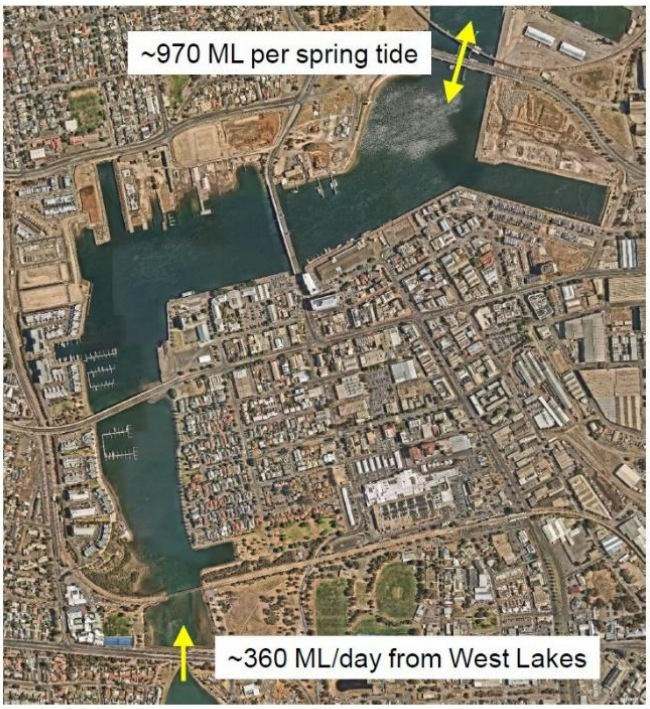

Figure 3.2 Magnitude of tidal exchange and inflows from West Lakes system (19 December 2022, Source: Nearmap)

Section 5.1 Coastal Development

5.1.1 Stage 1 Dredging

The EIS excludes dredging of the Port River navigational channel and basin (to support the launching and movement of vessels to and from the new shipyard) and other maintenance dredging as part of the operation of the development. The EIS only includes an assessment of the dredging that is required to construct the development.

Preliminary dredging areas and sizes for the construction of the development are shown in Figure 5.1 and Table 5.1 below. These details may change as the development progresses through detailed design.

Recommendation 2 of the City of PAE submission is that "the EIS should include relevant sections of the Port River channel that may require future dredging to support AUKUS related activities and subsequent Dredge Management Plans are prepared in accordance with the requirements under relevant legislation".

This section advises that the dredging methodology is yet to be determined and the disposal location for dredged materials not been confirmed, with dredge ponds within the development site no longer

able to be used for this purpose. While URPS suggests that land based disposal cannot be used, based on 2005 information, that matter will need to be determined by the EPA.

5.1.3 Stage 3 Maritime infrastructure

The entire coastal edge of Area 3 is anticipated to be hardened as part of the development (refer Figure 5.2 below). Coastal armouring or similar will protect infrastructure and stabilise the riverbank.

Figure 5.2 - Render showing coastal infrastructure within Area 3

FPR will seek to work with ANI to determine if some areas of the shoreline in Area 3 can be constructed as environmentally friendly seawalls, rather than hardened in the usual manner with few ecological benefits.

SOCIAL IMPACT ASSESSMENT (Appendix 1.19)

The Social impact Assessment identifies potential problems for the community with vehicle traffic and congestion and inadequate stormwater systems for the community. It also highlights that the defence precinct appears currently to provide limited employment for locals.

5.3.3 Infrastructure Projects and Initiatives

Lefevre Peninsula Upgrades Project

According to the Department for Infrastructure and Transport, traffic at the Victoria Road and Pelican Point Road junction is anticipated to increase from approximately 2,500 to 9,100 vehicles per day by 2030. To accommodate this growth in both passenger and freight traffic, it is crucial to upgrade the road network to maintain safety and efficiency. This infrastructure development is essential to support the SCY development. Additional work programs will be established as the project progresses. (pp35)

Southfront Stormwater Management Plan 2018

The Lefevre Peninsula features undulating dunes to the west and flat, low-lying land to the east. This topography has led to several low-lying areas and trapped low points that cannot be serviced by conventional gravity drainage systems, necessitating the use of pumped or soakage (infiltration) systems to manage stormwater.

The stormwater management plan has identified several key issues that must be addressed in future developments:

- Subpar minor (underground) drainage systems: Current systems perform below desirable standards.
- Seawater ingress and sea level rise: These factors could negatively impact the effectiveness of gravity drainage systems.
- Soil and groundwater conditions: These conditions limit feasible stormwater management improvements at certain locations.
- Limited public open space: There is insufficient public space to support catchment-scale stormwater detention, water quality improvement, and stormwater harvesting and reuse initiatives.
- Impact of future development: Primarily infill development may exacerbate the aforementioned issues.

A comprehensive stormwater plan will be developed to guide future development and associated stormwater management strategies.

Section 6 Social Profiling

A significant number (28.6%) of those who work in the area also live in the area, indicating that local jobs are serviced by a fair number of local people. Additional employment opportunities will be provided to these local residents within short proximity to their homes. However, it is likely that as demand for workers increase, many of these will come from outside the local area.

Almost 80% of employed people who live in the study area currently work outside of the area. The development is likely to provide an opportunity for some of these residents to work closer to home as a result of the employment opportunities generated by this project.

The information provided does not identify where the current defence workforce lives. With almost 80% of employed people who live in the study area currently working outside of the area, and high volumes of traffic along Victoria Road to/from the defence precinct, it seems likely that locals are a minority in the defence employment workforce. While it's to be expected that non-locals will gain employment at the defence precinct, this development needs to ensure that locals do not bear problems arising from the development while sharing in few of the gains.

Friends of Port River

Appendix A: Section 25.2 Summary of Significant Effects

25.2 Summary of Significant Effects

A summary of the identified significant effects for each topic is presented in Table 25.1 for the construction phase, Table 25.2 for the operational phase. Negligible and minor effects (adverse and beneficial) are not included in the following tables and are more numerous.

Table 25.1: Summary of significant residual effects - Construction Phase

Effect	Potential effect significance	Additional mitigation	Likely Residual Effect
7 Air Quality			
No significant effects identified			
8 Noise and Vibration			
Construction noise from activities and plant	*Short-Term, Major Adverse to Negligible Effect during the daytime*	None	*Short-Term, Major Adverse to Negligible Effect during the daytime*
No significant effects identified for Vibration			
9 Traffic and Transport			
No significant effects identified			
10 Visual Amenity			
No significant effects identified			
11 Biosecurity			
No significant effects identified			

Effect	Potential effect significance	Additional mitigation	Likely Residual Effect
12 Marine Flora and Fauna			
No significant effects identified			
13 Terrestrial Flora and Fauna			
No significant effects identified			
14 Climate Change Adaption			
No significant effects identified			
15 Greenhouse Gas Emissions			
No significant effects identified			
16 Water Management			
No significant effects identified			
17 Local, Regional and State Economies			
Construction Employment	*Short-Term, Moderate / Minor Beneficial effects on job creation at the regional level*	None	*Short-Term, Moderate / Minor Beneficial effects on job creation at the regional level*
Employment and labour force impacts and risks	*Short-Term, Moderate Adverse effect at the regional level*	South Australian Government Commitments – Skills and Training	*Short-Term, Minor Adverse effect at the regional level*
18 Flooding			
No significant effects identified			
19 Contamination			
No significant effects identified			
20 Coastal and Marine			
No significant effects identified			
21 Surface Water and Groundwater Quality			
No significant effects identified			

22 Aboriginal Cultural Heritage			
No significant effects identified			
23 Community Wellbeing/Social Impact Assessment			
No significant effects identified			
24 Heritage Places and Areas			
Vibration Effects to the Historic shipwreck Excelsior	*Long-Term, Negligible to Moderate Adverse*	Implement measures included within Section 24.8 Additional	Long-Term, Negligible to Minor Adverse