PORT STEPHENS COUNCIL

Environmental Assessment

Level 4

ENVIRONMENTAL IMPACT STATEMENT

East Seaham Road Stages 5 & 6, East Seaham

CHAPTER SEVEN CUMULATIVE IMPACTS AND CONCLUSION

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7. CUMULATIVE IMPACTS AND CONCLUSION

7.1. Cumulative impacts

Cumulative impacts have the potential to occur when benefits or impacts from a project overlap or interact with those of other projects, potentially resulting in a larger overall impact (positive or negative) on the environment or local communities. Cumulative impacts may occur when projects are constructed or operated concurrently or consecutively. Once the project is operational, other projects which interact with the project may enhance the project and create positive cumulative benefits. The potential cumulative impacts of the project and the other projects occurring within the locality include:

- Air quality: Cumulative air quality impacts would be unlikely due to the other works occurring in the locality being of sufficient distance from the project area. There would be a minor cumulative impact for emissions due to all works contributing additional greenhouse gas emissions into the atmosphere.
- Biodiversity: Potential cumulative biodiversity impacts associated with native vegetation removal and the removal of hollow-bearing trees from the project and other projects within the locality and previous works along East Seaham Road. However, the areas of vegetation being removed within each of the works within the locality are separated by large areas of cleared lands. The site has connectivity to Wallaroo National Park and as such cumulative impacts, provided the mitigation measures are implemented, are expected to be minor.
- Contamination and chemical/ hazardous substance management: Minor cumulative impacts associated with increased use of hazardous substances within the Williams River catchment as a result of the multiple works occurring within the locality. Due to permanent use of hazardous substances in industrial uses and agricultural land uses within the locality, and cumulative impact caused by the project would be minor.
- Flooding: Based on the flood modelling no cumulative impacts are expected as a result of the project.
- Hazards and risks: There would be a cumulative impact on response times of emergency services potentially as a result of the multiple works occurring within the locality with traffic controls and diversions. Consultation with emergency services would be conducted for all PSC works in accordance with standard PSC notification of works procedures.
- Heritage: There will be a significant impact to Road Alignment which is a local heritage item within the project area. Cumulative impacts due to previous tree removal along the road alignment, has resulted in the tree removal Stages 5 and 6 having a significant impact on the heritage item. This contributes to an overall gradual erosion of heritage within the locality as heritage items are lost or upgraded.

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- Noise and vibration: Cumulative noise and vibration impacts would be unlikely due to the other works occurring in the locality being of sufficient distance from the project area.
- Soil and water: Potential cumulative water quality impacts due to the increase in impervious surfaces due to previous works along East Seaham Road. Although this impact in context of the larger Williams River catchment would be minor.
- Transport and traffic: A temporary localised increase in travel times and kilometres (potentially if road closure option is selected) and speed limit reductions which would be intensified due to the concurrent works occurring within the locality.
- Waste management: There would be cumulative impacts of waste generated and transport related impacts for reuse and disposal of waste from the works within the locality including this project. This would increase the environmental footprint of the locality.

7.2. Conclusion

Whilst considering the environmental impact of the project, Council determined that an EIS was required in accordance with Division 5.1; Clause 5.5 of the EP&A Act. This was due to the cumulative impact of previous works and the proposed works resulting in a significant impact on local heritage item I5 Road Alignment East Seaham.
The Secretary's Environmental Assessment Requirements (SEARs) were issued in September 2024 (see **Attachment 1**). This EIS addresses the key issues identified in the SEARs.

As discussed in **Chapter 1**, the merits of the project were considered in the context of a range of other alternatives and options, including a do nothing option, gravel resurfacing, sealing of the existing surface and road reconstruction. Road reconstruction was selected the preferred option due to the improvements in road safety and support for possible future increases in traffic generation and ability to meet community expectation standards for service provision and road safety. Other alternatives considered would not satisfy the needs and objectives as effectively.

Key environmental issues have been examined throughout the design development process with design considerations including partial minor realignment to avoid impact on the threatened flora species *Pterostylis chaetophora*, partial minor realignment to avoid impacts to biodiversity, improved road sight lines and reduced impacts on local heritage item (through removal of vegetation) and some minor amendments within the design to Austroads standards to help minimise biodiversity and local heritage impacts

Overall, these design considerations helped balance the project impacts including impacts on land use, endangered ecological communities and threatened flora and

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fauna, heritage, utilities, adjacent landholders, community and road users. This refinement of the design and consideration of impacts through an assessment and review process helped ensure that the project best addresses the project objectives, and meets the key performance criteria of function, environmental and socio-economic considerations, and provides value for money.

Consultation has been carried out with the community and relevant stakeholders during the assessment process. Community feedback has generally been positive and has helped to inform the assessment and review process to ensure the impacts were acceptable to the community. Community consultation will continue throughout the construction and operational stages of the works.

Key impacts during the construction of the project would include:

- Air quality: Dust emissions causing human health and environmental harm and general nuisance.
- Biodiversity: Removal of vegetation and habitat including impacts to threatened biodiversity and offsetting.
- Contamination: Potential contaminants would be used as part of the works and have the potential to cause environmental harm.
- Hazards and risks: The project has the potential to increase bushfire risk from accidental ignition and cause potential bushfires from activities such as, the use of mobile equipment, fuels and chemicals. There is a risk of severe weather and flooding during construction and operation and maintenance of the road that may cause impacts to human health (to construction workers and local residents), local properties and the local receiving environment.
- Heritage: The project will have a significant impact on local heritage item Road Alignment and a minor impact on two other local heritage items within the locality.
- Noise: noise impacts have the potential to cause harm to humans and fauna, causing disturbance of activities and nuisance.
- Soil and water: erosion and sedimentation and release of pollutants causing environmental harm. Dewatering may be required which has the potential to cause localised lowering of the groundwater table, discharge and disturbance of pollutants in a prescribed stream and key fish habitat.
- Traffic and transport: There would be delays and cumulative traffic impacts adding potentially distance and travel time to vehicle journeys. There is also the potential for delays to provision of services such as waste services and emergency services and bus services. The impacts of construction traffic from the new Clarence Town bridge works are largely unknown, however, would increase the impacts identified in the EIS.
- Waste: waste production and disposal which have the potential to cause environmental contamination and harm.

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Lesser impacts would include:

- air quality: generation of odours which have the potential to cause nuisance or human health impacts and emissions that would have an insignificant contribution to greenhouse gas emissions and global warming
- contamination: here is a small risk of unexpected finds which have the potential to cause harm to the environment and human health
- heritage: there is a minor risk of harm to Aboriginal heritage due to possible unexpected finds
- hazards and risks: during the construction period there is also the potential for greenhouse gas emissions due to vehicle, plant and equipment releasing emissions, chemical usage and the generation of carbon dioxide from vehicle emissions associated with driving to and from the site and operation of plant and machinery on the site
- vibration impacts have been considered for properties along the East Seaham Road alignment within the project area. Human disturbance and structural damage is unlikely
- soil and water: pollution loads for TSS and TP were reduced and met NorBE criteria (PSC, 2025a). The pollutant loads for TN and gross pollutants increased, however, due to substantial buffer areas between East Seaham Road and the ultimate discharge locations at various points along the Williams River with runoff from all areas and geomorphic protection being installed additional water quality and geomorphic protection would be provided. There is also a low risk of unexpected finds of salinity and acid sulfate soils, impacting soil variability and potential for harm in waterways downstream
- waste: resource use which has the potential to cause depletion of resources, however, is unlikely to affect resource availability.

A CEMP would be prepared for the project. The CEMP will detail the approach to environmental mitigation, management, monitoring and reporting during construction of the project. The CEMP will provide more detailed sub-plans and other documentation focused on key environmental issues during construction.

Key issues that will be addressed in the CEMP, where relevant, will include:

- minimisation and management of air emissions, including dust generation, odours and emissions from plant and equipment
- protection of biodiversity within and around construction sites, preclearance and clearance procedures and unexpected finds procedures
- minimisation and management of pollution and potential for environmental harm from unexpected finds for contamination, acid sulfate soils and salinity.
- protection of Aboriginal and non-Aboriginal heritage during construction and protocols for the management of unexpected finds
- minimisation and management of noise and vibration

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- management of soil and water, including erosion and sediment controls, stockpile management planning, surface, groundwater primarily focusing on mitigation and management of erosion and sedimentation risks, management of works within areas prone to flooding and dewatering methods and requirements if required
- management of construction traffic, including site access arrangements and minimisation of impacts associated with heavy vehicle movements, including spoil haulage
- management of waste, including transport and disposal requirements, and resource efficiency and sustainability measures.

A community engagement plan has also been prepared for the project and would be used to guide community and stakeholder engagement activities during construction of the project. Engagement during construction will include updates on planned construction activities and responding to concerns and enquiries where receiver, in a timely manner, seeking resolution and minimising potential impacts where possible.

With the effective implementation of identified environmental mitigation measures, the potential residual environmental impacts of the project are considered manageable, and the project would be in the public interest.