

POINT GREY REDEVELOPMENT

TRAFFIC ANALYSIS

AUGUST 2025



PLANNING | URBAN DESIGN | LANDSCAPE
ARCHITECTURE | ADVISORY

TRAFFIC LAYOUT CONSIDERATIONS

OVERVIEW

The Great Ocean Road Coast and Parks Authority (GORCAPA) has engaged Human Habitats (HH) to develop an Urban Design Framework (UDF) for the redevelopment of the Point Grey Precinct in Lorne, Victoria.

Point Grey is a highly complex and constrained site, particularly in relation to achieving a functional and balanced traffic and parking layout. The precinct is used by a wide range of groups with often competing needs, and the proposed traffic strategy must carefully balance these demands.

The site presents several significant physical constraints, including steep topography, native vegetation, limited access to the Great Ocean Road, coastal hazards, and heritage considerations. Additionally, planning policy and legislation present further challenges, with requirements around visual sensitivity, protection of natural environments, impacts on public open space, and Native Title obligations all influencing the design response.

To address these issues, multiple traffic layout options have been explored by the project team, NMBW (lead Architect) and HH (urban planning and urban design), with essential contributions from traffic engineers One Mile Grid and Traffic Group. This document seeks to communicate to the community why the traffic layout in the UDF has been adopted. The key requirements are:

- Setting back from the coastal edge to provide public access and open space;
- Setting back essential infrastructure (i.e. roundabout) from coastal hazards including erosion and inundation;
- Minimising the impact of vehicle infrastructure on views from the Great Ocean Road;
- Minimising the impact of vehicle infrastructure on views from the Pier and surrounding public realm;
- Maximising public open space in accordance with the zone requirements and applicable policy;
- Improving public realm as per Geelong City Deal funding requirements;
- Creating an efficient road network for convenient access to car parks (minimise extent of one-way road);
- Provision of a roundabout for emergency services and traffic circulation;
- Preserve existing open space and vegetation to achieve net environmental gain;
- Balance cut and fill requirements with the need to minimise change to topography;
- Minimise impact on areas with presumed Native Title;
- Ensure traffic layout, access and car park dimensions comply with technical standards;
- Balance the needs for pedestrian safety and pathway networks; and
- Provide as many car parking spaces as possible, whilst balancing all of the above considerations.

Each layout has been tested against the physical, environmental, and policy constraints of the site to ensure a balanced and feasible solution. The following layouts presented in this document represent a summary of the key options considered during the design process.

CAR PARKING LOCATIONS CONTEXT

1. ZONING OF THE PRECINCT:

The precinct is located within the *Public Park and Recreation Zone* (PPRZ). The ultimate purpose of this land is for public open space and public recreation. In accordance with the zone's purpose, the *Marine & Coastal Act 2018* (MACA), and the reference documents under MACA, the development will prioritise using the space as a public park along the coastal edge, wherever practical. This means that vehicular infrastructure (including car and boat trailer parking and the roundabout) cannot dominate the public realm.

Ecologically sustainable and equitable use of the marine environment (which Point Grey is considered a part of) involves balancing multiple objectives, including the achievement of socio-economic benefits from use and activity, and conservation outcomes. Integration is required between the different uses, activities and values, and must be in accordance with existing legislation, policies and plans providing direction for the marine environment.

2. PRESERVATION OF NATURAL FEATURES & LANDSCAPES:

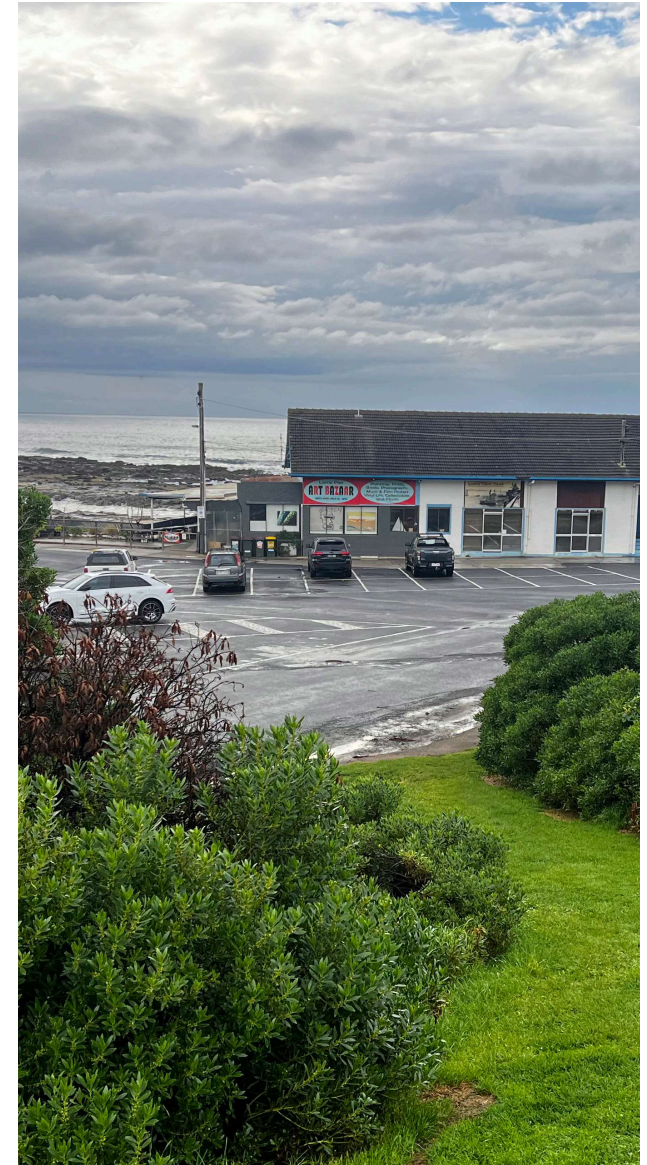
Several policy documents provide clear guidance on protecting of natural features and landscapes. In this context, the provision of car parking and vehicular infrastructure must be carefully balanced against relevant policy objectives.

The Siting and Design Guidelines for Structures on the Victorian Coast (S&DG) - 3.1 states the objective to "Protect and seek to enhance the values and characteristics that contribute to natural features and landscapes (including seascapes) in the marine and coastal environment, including by managing cumulative effects."

Additionally, it is noted that the *Great Ocean Road and Environs Protection Act 2020* (GOR Act) sets out relevant Environmental Principles that include the following:

1. "Natural, cultural and ecological values should be protected, and cumulative impacts on the environment should be considered in decision-making."
2. "There should be a net gain for the environment arising out of any individual change in land use."

Proposals that result in significant impacts to native vegetation or landscaped areas are not aligned with these principles. As such, any provision of car parking that may lead to the loss of these features must be thoroughly assessed and justified in accordance with the above objectives.



TRAFFIC LAYOUT CONSIDERATIONS

3. SAFETY & COMPLIANCE:

To achieve a planning permit for the site's redevelopment, the traffic access arrangement must be brought up to meet current Australian Traffic Design Standards, which the current parking arrangement does not meet.

The existing car parking and access arrangement poses a risk to pedestrians' and drivers' safety in its current form. As the Land Manager, GORCAPA has the responsibility to ensure the land under its management is as safe and accessible as possible. Through the redevelopment, GORCAPA will seek to reduce the potential conflict between pedestrians, vehicles, and boats and improve public safety.

Furthermore, the site's redevelopment must ensure that it will meet Ambulance Victoria and the CFA's minimum access requirements for emergency service vehicles. Traffic engineers must complete the detailed design of the road, parking, and site access points according to Australian Standards and to the satisfaction of the determining Authorities.

4. COASTAL ADAPTATION PATHWAY:

The development must aim to position essential vehicle infrastructure (the roundabout) as far from the coastline as possible (retreat) while still supporting maritime recreation, in accordance with the S&D and the *Point Grey Coastal Hazard Adaptation and Resilience Plan (CHARP)* prepared by BMT Technology. The advantage of this "retreat" is that moving the assets further from the coastal hazard increases the lifespan of this infrastructure.

5. VISUAL IMPACT ON THE PUBLIC REALM:

The S&D - Section 3.2 requires the proposed development to "Maintain important public visual corridors on public land associated with significant landscapes in the marine and coastal environment (including views from within the landscapes and views of the landscapes)."

Setting back the roundabout and car parking facilities helps ensure that such features are as visually unobtrusive as feasible from public areas such as the beach, foreshore, the pier, and the water edge.

6. VISUAL IMPACT FROM THE GREAT OCEAN ROAD:

The GOR Act sets principles and protections for land within the Great Ocean Road Region, including Point Grey. The scenic environs include views from the Great Ocean Road, which are to be protected and maintained wherever feasible.

Furthermore, the aforementioned S&D- section 3.2 sets out the objective to "maintain important visual corridors on public land." One such corridor is the significant view line from the Great Ocean Road across the upper open space to the Lorne Pier. This visual connection plays a key role in the area's character and amenity and must be carefully considered in any proposed design response or development within the precinct.

7. GEELONG CITY DEAL REQUIREMENT:

The Point Grey Redevelopment is funded in part by the Geelong City Deal (GCD) Grant Scheme. The funding agreement has certain non-negotiable deliverables for Point Grey. The project outcomes and objectives, as per the funding agreement, are as follows:

"The Project will support the growing tourism and visitor economy by delivering public realm infrastructure and accessibility improvements, a new commercial offering and new recreational offerings at Point Grey, Lorne. The Project involves:

- A new Lorne Aquatic and Angling Club building.
- Provision for 'casual dining' offerings, including options for coffee, takeaway and al fresco seating.
- Improved public realm spaces.
- Recognition of cultural heritage.
- Improved connectivity."

As noted above, a key requirement of the GCD Grant Scheme is the improvement of public realm spaces within the precinct.

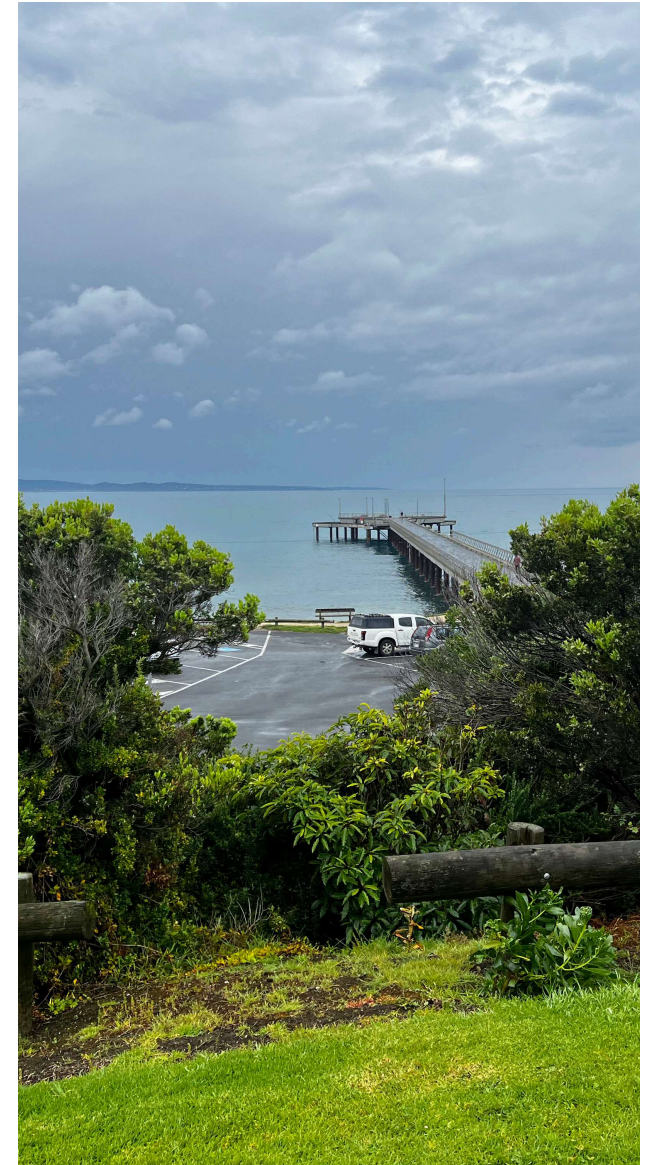
The Lower Open Space, situated at the base of the pier and adjacent to the new buildings, is a critical pedestrian-focused zone. As such, it plays a pivotal role in satisfying the GCD Grant requirement for an improved public realm. With sensitive improvements such as landscaping, art/sculpture, lighting & signage, it is envisioned to create a high-quality public amenity.

So as to maintain the integrity and amenity of the public realm in this location, necessary vehicle infrastructure must be positioned to minimise spatial and visual impact in this location. The provision of car parking must be balanced with satisfying the GCD Grant requirement for improved public realm.

8. NATIVE TITLE LAND & EMAC VIEWS:

GORCAPA governing legislation ensures Aboriginal inclusion principles are upheld in the planning and management of GORCAPA and in the facilitation of traditional owner self-determination.

GORCAPA and the project team acknowledge that some land within Point Grey is subject to a presumption of Native Title under the Native Title Act 1993. GORCAPA has been engaging with Eastern Maar Aboriginal Corporation (EMAC) regarding the development of the UDF and recognises that any future use or development of land where Native Title is likely to exist must align with EMAC's views and comply with Native Title requirements.



TRAFFIC LAYOUT CONSIDERATIONS

FREQUENTLY ASKED QUESTIONS

WHY CANT MORE OF THE LOWER OPEN SPACE BE USED AS CAR PARKING?

Expanding permanent car parking and locating the roundabout within the central Lower Public Open Space would conflict with several key planning and policy objectives. Specifically, it would not align with:

- The preservation of important public vistas, as additional permanent car parking or a roundabout along the coastal edge would visually dominate the area, interrupting important view lines from the pier and diminishing the scenic quality of the coastal interface;
- The requirement to improve the public realm per GCD funding requirements, as expansive vehicle infrastructure would significantly reduce the quality and usability of the lower open space, leaving limited room for essential pedestrian pathways, landscaping, and public amenity upgrades.
- The intention to maximise public open space in accordance with the key purpose of the zone, as converting more of this lower area to permanent hard-stand car parking would directly reduce its open space value and limit its potential as a community-focused recreational asset.

WHY CAN'T THE UPPER OPEN SPACE BE USED FOR CAR PARKING?

The decision not to use the upper open space for car parking is guided by key policy objectives outlined in the GOR Act and the S&DG. These documents prioritise the protection of natural features, landscapes, and significant view lines. It was agreed that locating a large car park (constructed of either crushed rock or formal asphalt) within the upper open space would have a substantial visual impact, particularly on the protected views from the Great Ocean Road down to the Lorne Pier. Furthermore, retaining this area as a landscaped public open space aligns with the established objective to "maintain important visual corridors on public land." Preserving the existing landscape areas in lieu of more urbanised elements is a critical consideration of a visual impact assessment.

Constructing a car park in the upper open space is not considered aligned with the intention "for any changes to provide a net gain for the environment." These policy directions support the retention of existing natural open space as a landscaped area.

Due to its larger expanse, this space can be used for rest and relaxation but also for more active play and recreation. This upper open space is the only passive open space area in the Point Grey precinct that is not likely to be impacted by coastal processes. Its natural ecological values should be protected.

Finally, land in the Upper Open Space is subject to a presumption of Native Title. EMAC supports the UDF identification of this land as undeveloped Upper Open Space. The UDF vision plan identifies targeted opportunities to improve the edges of this area, including opportunities to increase the protection of specific sections.

CAN THE UPPER OPEN SPACE BE MAINTAINED AS AN OVERFLOW CAR PARKING AREA?

The UDF proposes the ongoing use of the upper level of the site for the purpose of overflow parking. Any changes to the upper level will be located along the edge of this area to ensure that it can continue to be used for over-flow parking during busy periods.

Accordingly, the concept plan leaves most of the upper section in its current condition to allow its continued use as informal, overflow parking. It is noted that reducing "in Point Grey and maintaining the relaxed look and feel of Point Grey was a key outcome of the Community Values Survey.

WHY DO WE HAVE TO HAVE FORMAL CAR PARKING?

While we understand that sections of the community enjoy the informal nature of some car parking at Point Grey, car parks will need to be formalised to an extent to demonstrate compliance with the relevant standards of Clause 52.06 of the Victorian Planning Provisions. Furthermore, there is a requirement for the development of the site to consider and minimise safety risks (Marine & Coastal Policy - Chapter 10 - Tourism and Recreation, Pg48.)

This does not mean that all car parks will need to be sealed with asphalt or concrete. The appropriate surface and associated traffic management infrastructure for each car parking area will be determined through the detailed design process. To ensure that Point Grey maintains its natural feel, both the function and the impact of the surface will be considered when determining the appropriate surface for each car park.

Occasional informal overflow parking will be permitted at times in the upper open space and the lower interchangeable zone subject to traffic management control from the GORCAPA.

WHY DO WE NEED A ROUNDABOUT? CAN THE NORTHERN ACCESS BECOME TWO-WAY ACCESS?

The northern access will remain one-way, entrance only. The Department of Transport and Planning, as well as VicRoads, have indicated that two-way access in this location is not safe and should not be supported. Traffic engineers will complete detailed designs of the road and site access points to Australian Standards and to the satisfaction of the determining Authorities. The southern access point will be designed to ensure safe entrance and egress for vehicles carrying boat trailers.

- A roundabout is an essential piece of infrastructure to support the managed circulation of vehicles, boats and vitally, emergency services vehicles. The roundabout has been located in its current position as a result of a number of factors:
- To be set back and outside of the lower open space area to minimise its visual impact on views from the coastal edge, from the pier and from within the public realm;

- To respond to the CHARP requirement to set essential infrastructure back as far from the coastal edges and their hazards;
- To minimise the build up of traffic in peak periods (i.e. cars waiting to circulate through the lower open space to exit the precinct);
- To achieve the greatest number of car parks possible when considering the above constraints and conflicting demands of the site.

CAN THE ROUNDABOUT BE MOVED FURTHER SOUTH INTO THE LOWER PUBLIC OPEN SPACE AREA?

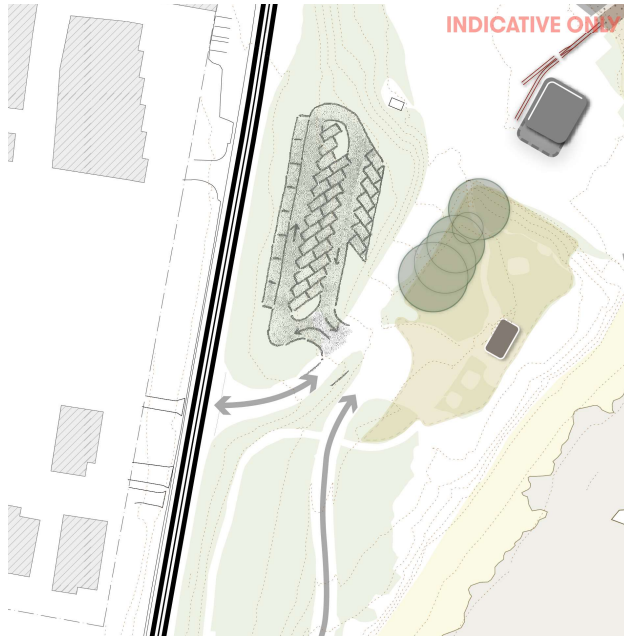
It is noted and appreciated that some members of the community have suggested moving the proposed roundabout further south, towards and partially into the central open space area.

Traffic engineers have tested this concept layout; one of many different iterations of road/car parking arrangements that have been tested to date. This proposed concept layout was tested, and it was confirmed that relocating this roundabout into the lower open space was deemed an unacceptable outcome due to the following:

- The significant spatial impact upon the lower open space was not consistent with the GCD funding's aims to create and improve the public realm.
- The number of car parks gained by shifting the roundabout south was assessed as not a significant enough increase in the car parking to justify the dramatic impact on the public amenity, in comparison to the selected UDF layout (subject to detailed design confirmation);
- The visual impact of the roundabout and further car parking proposed in the lower open space was deemed as not consistent with the policy that speaks to protecting key views from the Great Ocean Road and its environs, to and from the Lorne Pier and other key vistas within the public realm of Point Grey.
- Minimising the extent of one-way road is preferable to allow those vehicles that have accessed the site from the southern entryway to be able to access the majority of the car parking spots in the lower open space.

TRAFFIC LAYOUT OPTIONS & ASSESSMENT

01. UPPER LEVEL CAR PARK



POSITIVES:

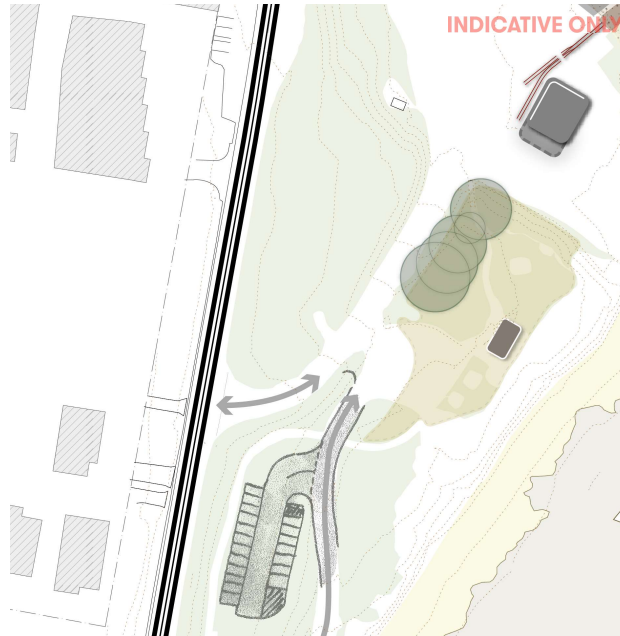
- Parking is set back from coastal edge to provide public access and open space per CHARP and S&DG
- Parking is set back from coastal hazards including erosion and inundation per CHARP
- Minimises the impact of vehicle infrastructure to views from the Pier and surrounding public realm per S&DG
- Improves the public realm at the lower level as per GCD funding requirements
- Provides a large number of car parks (greater than Option 02)

NEGATIVES:

- Significant impact of vehicle infrastructure to protected views from the Great Ocean Road
- Does not maximise public open space in accordance with the zone requirements and applicable policy at the upper level
- Requires cut and fill to change the topography due to slope
- Significant impact to natural open space and vegetation (compared to Option 02)
- Significant impact to areas with presumed Native Title (compared to Option 02)
- Car parking is a significant distance from the Lorne Pier

INCLUDED IN UDF? **X**

02. SOUTHERN CAR PARK



POSITIVES:

- Parking is set back from coastal edge to provide public access and open space per CHARP and S&DG
- Set back from coastal hazards including erosion until yr 2100 and inundation
- Minimises the impact of vehicle infrastructure to views from the Pier and surrounding public realm per S&DG
- Minimises impact of vehicle infrastructure to protected views from the Great Ocean Road
- Improves the public realm at the lower level as per GCD funding requirements
- Provides a large number of car parks (fewer compared to Option 01)
- Maximises public open space in accordance with the zone requirements and applicable policy at the upper level and lower level

NEGATIVES:

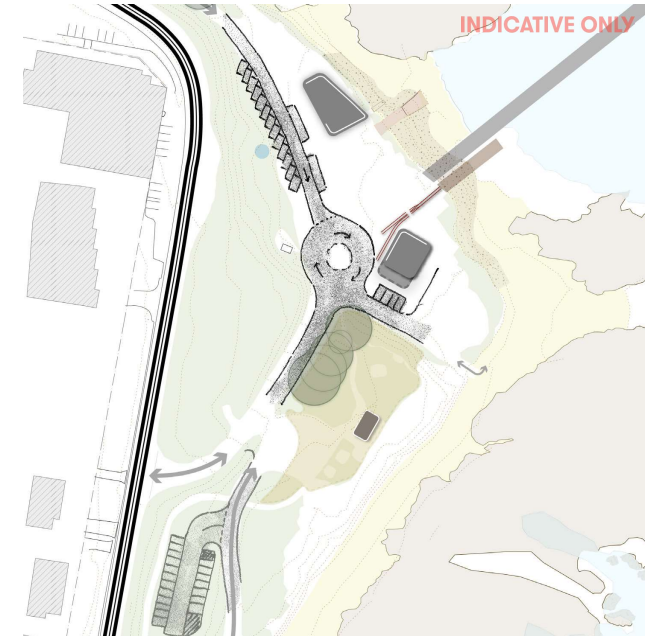
- Requires cut and fill to change the topography due to slope
- Limited impact to existing natural open space and vegetation (compared to Option 01)
- Limited impact to areas with presumed Native Title (compared to Option 01)
- Car parking is a significant distance from the Lorne Pier

INCLUDED IN UDF? **✓**

NOTE:

- Concept layouts as shown are high level and indicatively only.
- Car parking spaces as indicated are subject to change and do not represent final numbers.
- Layouts as shown as subject to detailed traffic and civil engineering design.

03. SOUTHERN ROUNDABOUT + ANGLED PARKING



POSITIVES:

- Provision of roundabout for emergency services and traffic circulation
- Parking responds to the needs for pedestrian safety and pathway networks
- Car parking and roundabout are setback from coastal edge to provide public access and open space per CHARP and S&DG
- Essential infrastructure (i.e. roundabout) is setback from coastal hazards including erosion and inundation per CHARP

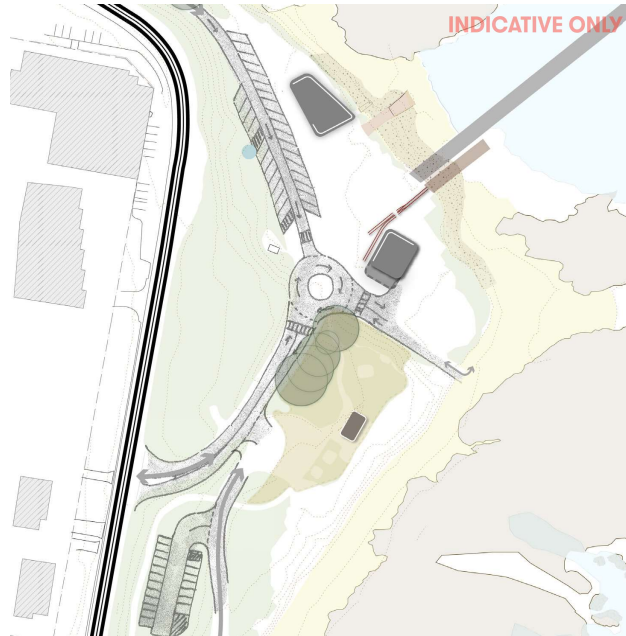
NEGATIVES:

- Does not create an efficient road network for convenient access to car parks (large extent of one way road)
- Roundabout size & location does not maximise public open space in accordance with the zone requirements and applicable policy at the lower level
- Roundabout does not improve public realm as per GCD funding requirements
- Does not minimise impact of vehicle infrastructure to views from the Pier and surrounding public realm per S&DG
- Parking requires cut and fill into the embankment

INCLUDED IN UDF? **X**

TRAFFIC LAYOUT OPTIONS & ASSESSMENT

04. SOUTHERN ROUNDABOUT + ANGLED PARKING



POSITIVES:

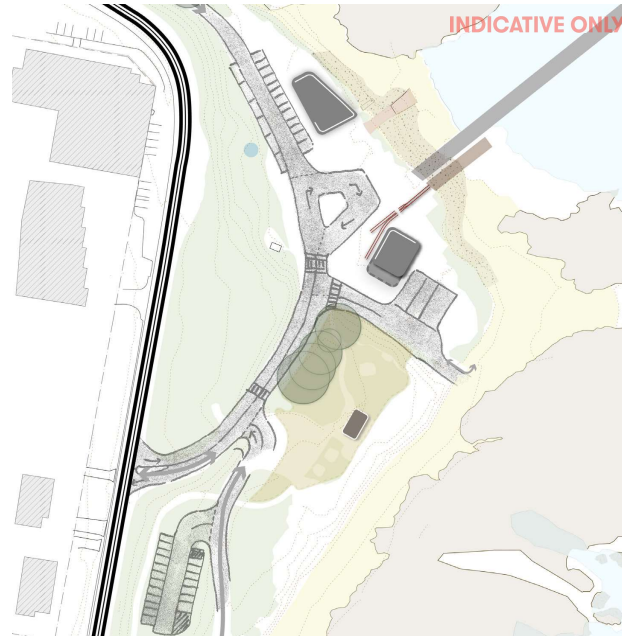
- Provision of roundabout for emergency services and traffic circulation
- Parking responds to the needs for pedestrian safety and pathway networks
- Roundabout location has limited impact upon public realm as per GCD funding requirements
- Roundabout location has limited impact upon the public open space in accordance with the zone requirements and applicable policy at the lower level
- Car parking and roundabout is setback from coastal edge to provide public access and open space per CHARP and S&DG
- Essential infrastructure (i.e. roundabout) is setback from coastal inundation hazard per CHARP

NEGATIVES:

- Does not create an efficient road network for convenient access to car parks (large extent of one way road)
- Roundabout location does not minimise impact to views from the Pier and surrounding public realm per S&DG
- Parking requires cut and fill into the embankment

INCLUDED IN UDF? **X**

05. CENTRAL ROUNDABOUT + COMBO PARKING



POSITIVES:

- Provision of roundabout for emergency services and traffic circulation
- Parking responds to the needs for pedestrian safety and pathway networks
- Parking does not require substantial cut and fill into the embankment

NEGATIVES:

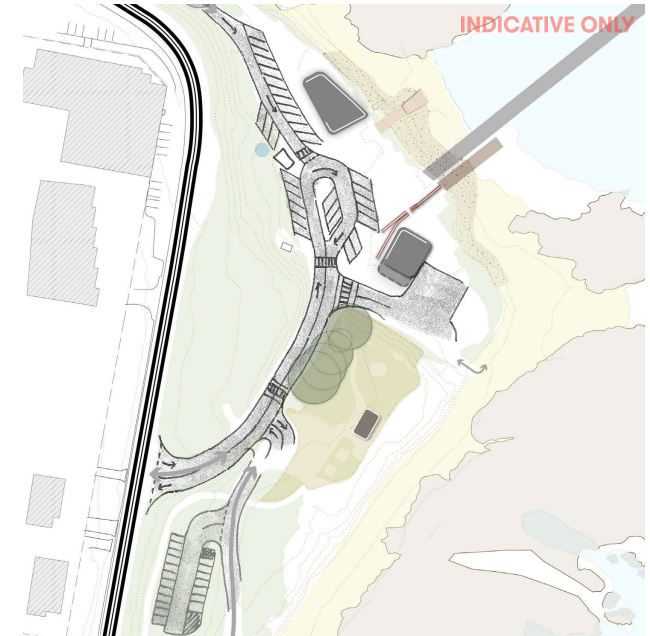
- Essential infrastructure (i.e. roundabout) is not setback from coastal inundation hazard per CHARP
- Roundabout is not setback from coastal edge to provide public access and open space per CHARP and S&DG
- Does not create an efficient road network for convenient access to car parks (large extent of one way road)
- Roundabout does not maximise public open space in accordance with the zone requirements and applicable policy at the lower level
- Roundabout location does not improve public realm as per GCD funding
- Does not minimise impact of vehicle infrastructure to views from the Pier and surrounding public realm per S&DG requirements

INCLUDED IN UDF? **X**

NOTE:

- Concept layouts as shown are high level and indicatively only.
- Car parking spaces as indicated are subject to change and do not represent final numbers.
- Layouts as shown as subject to detailed traffic and civil engineering design.

06. CENTRAL ROUNDABOUT + COMBO PARKING



POSITIVES:

- Provision of roundabout for emergency services and traffic circulation
- Parking responds to the needs for pedestrian safety and pathway networks

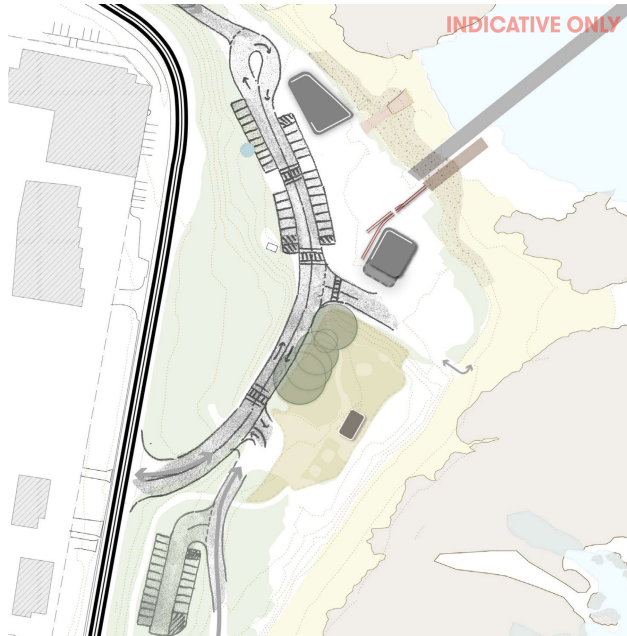
NEGATIVES:

- Essential infrastructure (i.e. roundabout) is not setback from coastal edge & hazards per CHARP
- Roundabout and car parking are not setback from coastal edge to provide public access and open space per CHARP and S&DG
- Roundabout and parking location does not maximise public open space in accordance with the zone requirements and applicable policy at the lower level
- Roundabout location does not improve public realm as per GCD funding requirements
- Does not minimise impact of vehicle infrastructure to views from the Pier and surrounding public realm per S&DG requirements
- Parking requires cut and fill into the embankment

INCLUDED IN UDF? **X**

TRAFFIC LAYOUT OPTIONS & ASSESSMENT

07. NORTHERN ROUNDABOUT + 90DEG PARKING



POSITIVES:

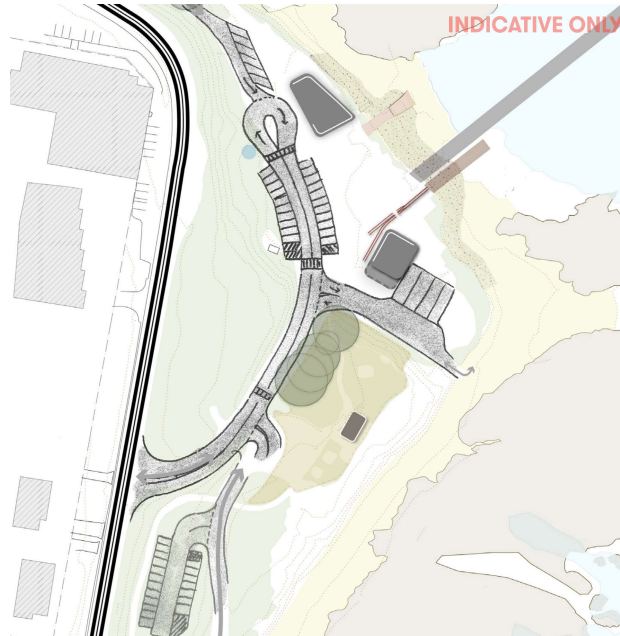
- Provision of roundabout for emergency services and traffic circulation
- Parking responds to the needs for pedestrian safety and pathway networks
- Car parking and roundabout are setback from coastal edge to provide public access and open space per CHARP and S&DG
- Roundabout location does not impact upon public realm as per GCD funding requirements
- Roundabout location does not impact upon the public open space in accordance with the zone requirements and applicable policy at the lower level
- Creates an efficient road network for convenient access to car parks (minimise extent of one way road)
- Roundabout location minimises impact to views from the Pier and surrounding public realm per S&DG

NEGATIVES:

- Essential infrastructure [i.e. roundabout] is not setback from coastal edge & hazards per CHARP
- Parking requires cut and fill into the embankment

INCLUDED IN UDF? **X**

08. UDF SELECTED LAYOUT



POSITIVES:

- Provision of roundabout for emergency services and traffic circulation
- Parking responds to the needs for pedestrian safety and pathway networks
- Car parking and roundabout are setback from coastal edge to provide public access and open space per CHARP and S&DG
- Roundabout location does not impact upon public realm as per GCD funding requirements
- Roundabout location does not impact upon the public open space in accordance with the zone requirements and applicable policy at the lower level
- Creates an efficient road network for convenient access to car parks (minimise extent of one way road)
- Roundabout location minimises impact to views from the Pier and surrounding public realm per S&DG
- Essential infrastructure [i.e. the roundabout] is setback from coastal hazards including erosion and inundation

NEGATIVES:

- Parking requires cut and fill into the embankment

INCLUDED IN UDF? **✓**

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Human Habitats
424/838 Collins Street
Docklands, Melbourne
Victoria 3008
Info@humanhabitats.com.au
www.humanhabitats.com.au
+61 3 9909 2202

