An aerial photograph of St Kilda Marina in Melbourne, Australia. The image shows the marina's layout with numerous boats docked at the piers, a large parking lot, and surrounding urban and green spaces. The water is a deep blue-green color. In the top right corner, there is a white logo consisting of three overlapping circles.

SJB Urban

St Kilda Marina Comparative Study

Prepared for
City of Port Phillip

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We create amazing places

SJB was commissioned by City of Port Phillip to engage in the research and comparative analysis of marinas in the national and international context. The report will contribute to guide the future of the St Kilda Marina.

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This comparative study seeks to understand the physical qualities of marinas around Australia and internationally and what makes them successful. Questions asked during the research include:

- What types of vessels are catered for;
- What is the ownership structure;
- Is it publicly accessible and under what circumstances (public/private relationship);
- What is the mix of land uses including retail, residential, commercial, industrial;
- What kinds of activities happen at the marina including events;
- What is the physical relationship with the surrounds; and,
- What characteristics can be applied to the St Kilda Marina context.

Understanding how these characteristics influence the look and feel of marinas and how they contribute to a sense of place and differing levels of public life will contribute to the body of information guiding the future of the St Kilda Marina.

Key 'lessons for St Kilda Marina' have been noted. These lessons cover both opportunities and constraints in their application to the future of the St Kilda Marina.

The research has been broadly categorised into three themes. These themes relate particularly to the urban impact of the marinas and include:

Placemaking & Built Form

This theme addresses the natural and built form attributes of the site and includes natural and human-made landscape, building mass, height and materiality and how they work together to create a site-specific response. These elements will be important for St Kilda as they provide the physical structure for future development and enhancement/retention of valued site character.

Land Uses & Activities

This theme looks at what types of activities occur in the marina from water based activities through to casual recreation, entertainment and retail opportunities. The diversity of activities can have a large impact on the variety and number of people that visit the marina. Uses can also include temporary activities such as festivals and regattas that bring a different kind of life to the area.

Connectivity & Access

This theme deals with how people access the marinas. This includes looking at road access, pedestrian and cycle access and how security is managed both to the boats and between the private and public realm. Connectivity will have an impact on how welcoming and easy it is to navigate to and through the marina.

1.1 Definitions

Berth types – A berth is a designated location in the marina or harbour used for mooring vessels when they are not at sea.

Dry berths – A dry berth is one that is out of the water, often undercover and in a vertically stacked arrangement. Dry berths may rely on specialist forklifts to ‘park’ and manoeuvre the boats from the berth to the water.

Fixed Berths – A fixed berth is where the marine vessel is moored to a structure such as a pier, jetty or wharf. Fixed berths allow easy access to the vessel and may have access to power and water while moored.

Swing Berths – A swing berth is where the vessel is moored to a permanent anchor and requires a dinghy or other small boat for access. They are called ‘swing’ berths as the water craft swings around depending on the wind or tide.

Recreational Berths – A recreational berth is one that is designated for day visitors rather than long term mooring.

Sailboats – Boats that are under the power of sail (wind-powered). They can also have small motors to navigate into moorings and during times of no wind, and regulatory-wise, are then under the same rules as motorised boats.

Power Driven Craft/Motorised Boats – Vessels that are powered by a motor or engine.

Chandlery – A retail dealer who specialises in supplies and equipment for the marine industry.

Deep Water Access – Deep Water Access allows larger vessels to use the marina in safety, such as super yachts.

Shipwright – A carpenter skilled in ship building.

Icons Legend



Boat Fuel Station



Marine Services
(Repairs, detailing, chandlery)



Public Transport



Showers
(club access)



Toilets



Restaurant



Accommodation



Market



Picnic Area



Ferry



Boat Ramp



Parking



Golf Course



Swimming Facility



Medical Centre



Public
Open Space

1.2 Recommendations



Figure 01: Distinctive zig-zag roof of the St Kilda Marina.

The following recommendations to consider when re-imagining St Kilda Marina, are the result of the qualitative and quantitative analysis of fourteen selected national and international marinas.

Each analysed marina has different attributes and qualities, with these attributes having varying relevance to the St Kilda study area. In comparing the marinas against each other and against the existing St Kilda marina we have determined the most relevant 'Lessons for St Kilda' from each case study as they relate to;

Placemaking & Built Form,
Land Uses & Activities, and
Connectivity & Access,



Figure 02: Architecture and story telling elements contributing to placemaking at Marina Douro.

Placemaking & Built Form

Landscape has a significant impact on the sense-of-place of marinas. It should be carefully considered and be used to help define private and public areas, contribute to ecological sustainability, build on valued site characteristics including distinctive planting and create a robust and engaging place suited to the ocean location.

Architecture should contribute to the desired character of the marina and utilise materials that respond to the site conditions. The height and mass of the buildings should contribute to a human scale environment and take into consideration impacts on neighbouring areas.

Views to and from the marina will help in wayfinding and placemaking. These include long-distance views over the surrounding bay as well as close views to boats and marine related activities. Ensure the design of the piers and moorings does not result in the large boats blocking views through the marina. Built form should be carefully sited to maximise views through the site as well as from the built form.

History and story telling can help visitors gain a more in-depth understanding of place. This can be done through integrated signage, materials and interpretive information.

Development Staging may help the marina adapt over time. This may include temporary festivals and activities that can generate interest and public engagement with the site.

Environmentally Sustainable Design can contribute to a site that addresses elements such as rising sea levels and water pollution in an integrated manner.

Marina Design Guidelines can help establish a clear vision providing certainty for private and public development.



Figure 03: Office buildings at Kalkbraenderihavnen in Denmark bringing activity to the marina throughout the year.

Land Uses & Activities

Mixed use marinas provide a variety of activities. This variety can help the marina appeal to different user groups throughout the day and night and across the year. This may be appropriate when the marina is intended to do more than just provide safe boat storage, mooring and boating facilities.

Economic resilience can be enhanced by ensuring complementary facilities are provided, guaranteeing vitality throughout the times of the day and year when boating can't. These may include venues for hire, retail activities suited to marine and tourism, and commercial and residential offerings.

Marine synergies will help enhance the atmosphere of the waterside facility, for example, seafood restaurants, fish and chip shops and boat hire facilities can help enhance the marina as a destination by the sea. The spectacle of a working marina can also be a drawcard and contribute to the authentic nature of the marina if desired.

Public / private ownership balance will contribute to how public the marina feels as well as help establish economic resilience.

Adaptable spaces that can be used for a variety of activities can allow for small, medium and large public and/or private gatherings. A variety of shelter options can also help ensure the site can be used throughout the year and in different weather conditions.

Recreational offerings can include non-motorised water sports, motorised water sports as well as land based activities including public barbecues and picnic facilities to ensure there is 'something for everyone'.

Industry links to other yacht and boating clubs can help connect the marina to the larger network and promote 'inter-club' activities.

Local clientele can help ensure local stewardship however this needs to be balanced with the marina's potential role for St Kilda and greater Melbourne.



Figure 04: Boardwalk connecting Port City Marina with downtown Wilmington.

Connectivity & Access

Public / Private ownership may influence the accessibility of the marina. A balance should be achieved to ensure the use and enjoyment of the marina for a large range of people.

Car parking can have a significant impact on the accessibility, look and feel of the marina. A balance between the practicalities of access and the need to provide safe and attractive pedestrian environments should be a priority. Where possible avoid conflict points, prioritise pedestrian access to the waterfront and enhance Bay Trail access to the marina.

Public access to the waterfront and to the marina should be balanced with the need to provide secure storage / mooring points.

Pedestrian access should be enhanced through the use of materials and land uses. Elements such as decking can help define spaces and contribute to the marine atmosphere.

The street interface is the marina's gateway when not entering from the water or the foreshore. This interface should be presented as a welcoming experience and clearly indicate access routes, car parking and activities.

A variety of modes, including public transport, cycle, pedestrian, private vehicle, tourist bus and the potential for a tourist ferry, should be considered in the access plan.

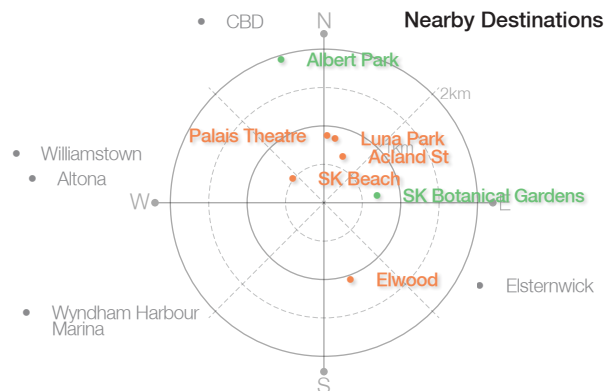
St Kilda Marina

2



St Kilda Marina Elwood, VIC

Located on Port Phillip Bay, approximately 1km from Acland Street, St Kilda, the St Kilda Marina provides wet and dry berths, boat and trailer storage and jet ski storage. Facilities include 2 restaurants, boat maintenance and repair services, marine trimming, and fuel. It is the only Marina in Melbourne with instant water access.



Facilities





Figure 05: Decorative Pilot Beacon viewed from gated promenade.

| | |
|--------------------------|--|
| Year Built: | 1969 |
| Development Type: | Marina |
| Ownership: | Public |
| Management: | Crown land Private |
| Water Body: | Australian Marinas Pty Ltd Port Phillip Bay |

Placemaking & Built Form

- Views from the Marina take in St Kilda Pier in the north, Williamstown in the east and the entire Bay in the south west and include the decorative Pilot Beacon at the northern tip of the promontory.
- The boat storage units are approximately 2-3 storeys tall and of considerable length restricting views and access to the water from the Bay Trail. They have a distinctive zig-zag roof line and are open to the marina side with blank walls to the ocean side.
- The interface with Marine Parade is predominately fenced with limited interaction with the commercial tenancies although there are entrances to the restaurant and cafe from the street side.
- Over Marine Parade to the east, the built form is dominated by low-scale, 1-3 storey residential developments.

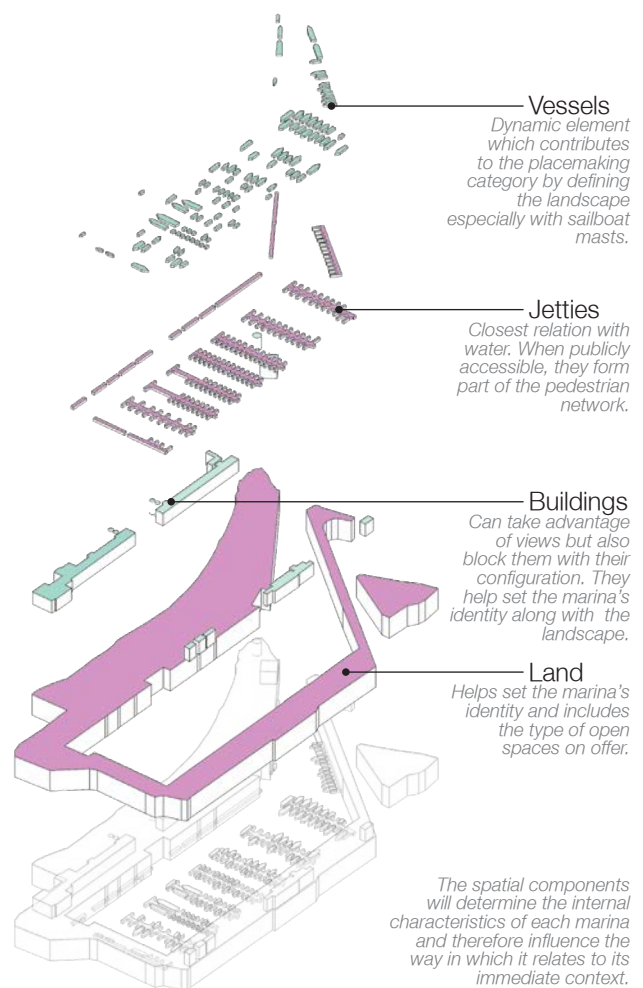


Figure 06: Spatial components of the marina.

- There is limited opportunity for the public to visually engage with the boat servicing operations and the activity of the marina.

Analysis

- The marina has several elements that could contribute to building its identity. However, these are lost in obstructed views and disjointed interactions which result in every element being read individually and not as a whole.
- The enhancement of a unified character for the marina would boost its presence within the urban context and lift its status to that of nearby destinations, attracting more visitors and activity.

St Kilda Marina



Figure 07: Walk towards restaurant's open space.



Figure 08: Open space next to restaurant and boat ramp.



Figure 09: North end cafe only interacts with public realm on corner.



Figure 10: Restaurant and functions; can be opened to public space.

Land Uses & Activities

- The Marina offers convenient boating storage and maintenance in a prime location on the foreshore close to St Kilda's key tourism destinations including Luna Park.
- Boat storage facilities include wet and dry storage with dry storage offering undercover options, boat/trailer parking and jet ski mooring.
- There are 2 restaurant/cafes, boat sales, marine servicing, fuel and shipwright services as well as commercial offices for tourism businesses such as skydiving.

Analysis

- Most activities have an internal focus and do not take advantage of the surrounding public open spaces or the traffic from the Bay Trail.
- The disconnection between some of the businesses and the surrounds limit their visibility to potential customers.
- The activities currently on offer lack the capacity to successfully activate the site at times of the day and the year when 'water based' activities decline in intensity.



Figure 11: Fence against skate park; no interaction.



Figure 12: Gated promenade.



Figure 13: Marine Parade interface; no interaction.



Figure 14: South section of Bay Trail.

Connectivity & Access

- The marina is well located within a 10 minute walk from the Acland Street activity centre.
- Pedestrian access is via the popular waterfront 'Bay Trail'.
- Private vehicle access is from Marine Parade with car parking supplied adjacent to the marina.
- Access is predominately private with restricted public access through the site to access tourist and marine-related businesses and restaurants.
- The location of the Marina pushes the Bay Trail inland creating a number of conflict points between cars and pedestrians/bikes.

- Marine Parade is a busy four lane road, plus on street parking and provides access to the Marina as well as a barrier for pedestrian movement from the east.
- The marina is located within walking distance of the 246 bus route on Barkly St, the 600, 606, 922 and 923 on Mitford St, and the 96 tram on Acland St.

Analysis

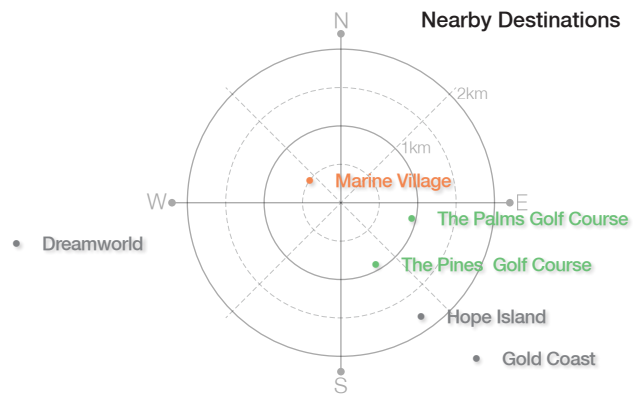
- Public access to the marina is not visually prominent with the major pathway, the Bay Trail skirting around the marina. The fenced interfaces to Marine Parade and the foreshore further disconnect the marina from its surrounding context.

3.1 Sanctuary Cove Marina



Sanctuary Cove Marina Hope Island, QLD

Located on the Coomera River 15km north of Gold Coast, the Sanctuary Cove Marina is part of a mixed-use development including a hotel, retail, town houses and a golf course. The Marina performs the role of an activity centre, benefiting from the demand created by its focus on tourism and the adjacent gated community.



Facilities



Figure 15: Bird's eye view.



Figure 16: Marine Village. Activity centre for residents and tourists.

| | |
|--------------------------|-----------------------------|
| Year Built: | 1986 |
| Development Type: | Mixed Use |
| Ownership: | Private |
| Management: | Mulpha Private Mulpha |
| Water Body: | Coomera River |

Placemaking & Built Form

- Built form is predominately low rise and has a resort feel.
- Landscape well integrated into street and waterfront design contributing to a sense-of-place.

Land Uses & Activities

- Successful privately owned tourism destination with a variety of activities including retail, hospitality and entertainment.
- Association with other activities including neighbouring golf course extends the recreational offer.

Connectivity & Access

- Accessed primarily by private motor vehicle with very limited public transport - one low frequency bus route departing from southwest end.
- Well connected and maintained internal streets and spaces.

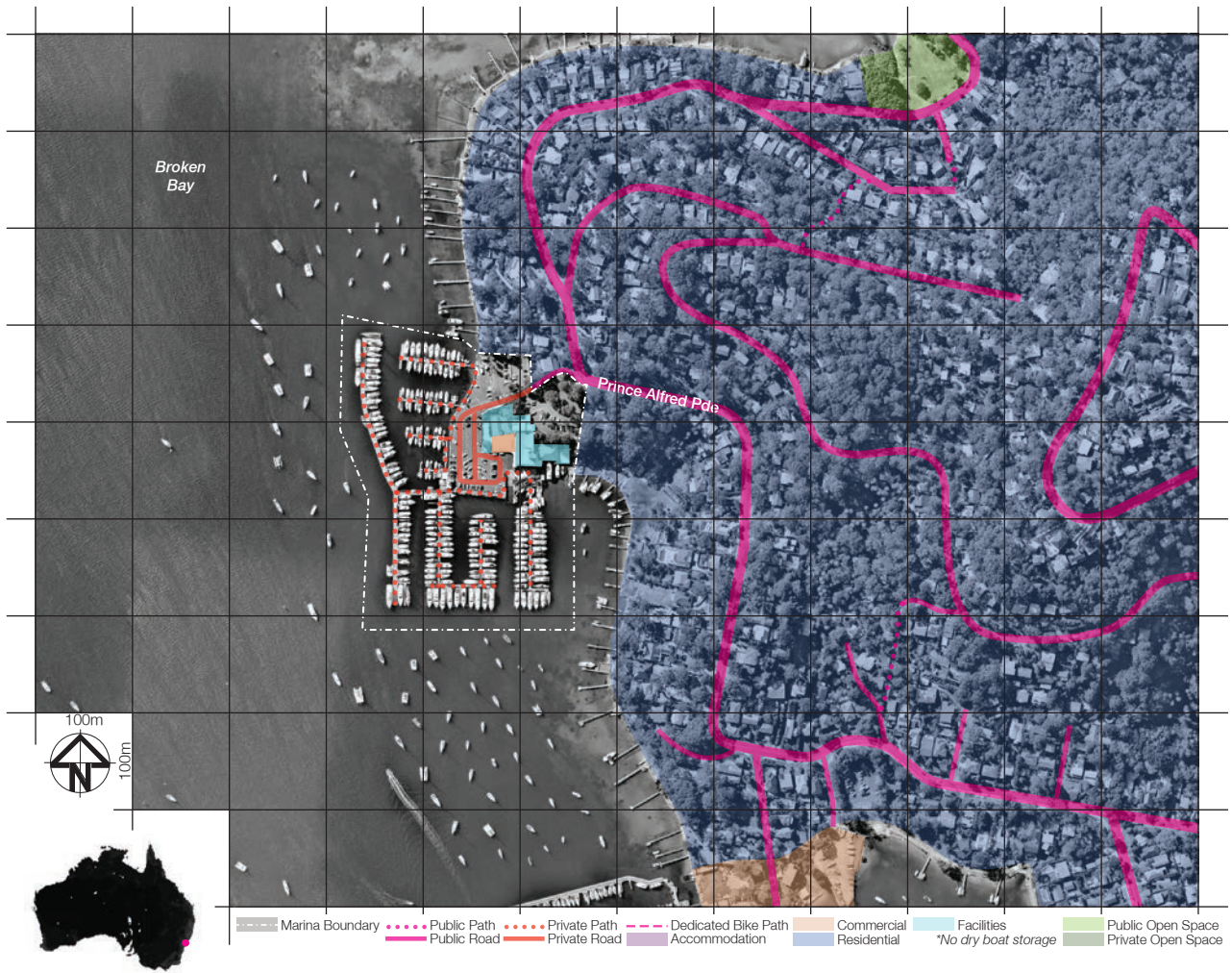


Figure 17: Restaurants on Marina promenade.

Lessons for St Kilda

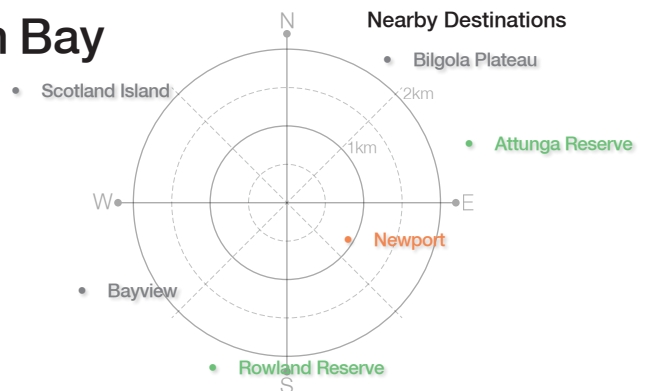
- A mix of uses can help activate the Marina during the day and night.
- Different uses can help generate income from a variety of sources.
- Well maintained public realm attracts people.
- Privatisation of Marinas can restrict access and emphasise public/private.
- Reliance on private motor vehicle for access can restrict visitor access and pedestrian and cyclist safety.

3.2 Royal Motor Yacht Club - RMYC



Royal Motor Yacht Club Broken Bay Newport, NSW

Located in Salt Pan Cove, Pittwater 1.6 km from Newport town centre, the RMYC provides access to the Hawkesbury River and Broken Bay. Containing 218 fixed berths and 49 swing berths it provides fuel, marine trade services and club house facilities for members with a restaurant open to the public.



Facilities





Figure 18: Bird's eye view.



Figure 19: The club house offers a public restaurant

| | |
|--------------------------|-----------------|
| Year Built: | 1926 |
| Development Type: | Marina |
| Ownership: | Private RMYC |
| Management: | Private RMYC |
| Water Body: | Broken Bay |

Placemaking & Built Form

- Distinctive neighbourhood character and response to surrounding landscape and topography.
- Landscape provides a buffer between the marina and the surrounding residential development.

Land Uses & Activities

- Member facilities, including a pool, promotes local ownership and sense of community.
- Public restaurant allows some access to the facilities.

Connectivity & Access

- At-grade car park separates club house and amenities from the water.
- The 'hidden' nature of the club contributes to its local appeal.



Figure 20: Activities are separated from the water by the parking lot.

Lessons for St Kilda

- Using well-considered landscape can help create a sense-of-place. It can also assist in defining private and public areas through a variety of planting.
- Avoid placing at-grade car parking between the water and the land facilities. Access to water should be prioritised for pedestrians where practicable.
- A local clientele can help ensure local stewardship however this needs to be balanced with its role for St Kilda and greater Melbourne.

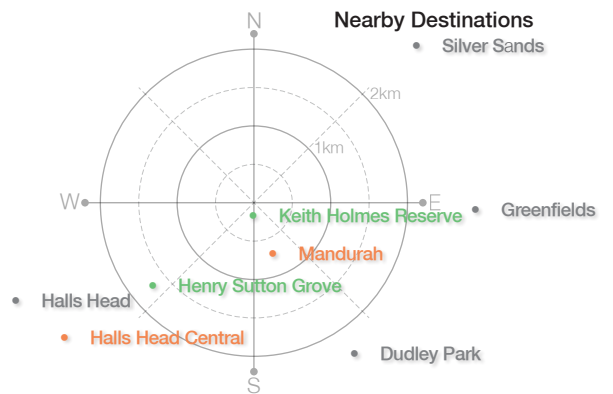
3.3 Mandurah Ocean Marina



Mandurah Ocean Marina

Mandurah, WA

Located on the ocean edge of Mandurah, the Marina is less than 1km from the city centre. It is owned by Council and is a mixed use development including retail, entertainment and residential uses as well as a full suite of marine services such as fuel, maintenance, shipwright and commercial and recreational berths.



Facilities



Figure 21: Bird's eye view.



Figure 22: Dolphin Quay; direct public interaction with the water.

| | |
|--------------------------|---|
| Year Built: | Early 2000's |
| Development Type: | Mixed Use |
| Ownership: | Public + Private |
| Management: | City of Mandurah + Strezlecki Group |
| Water Body: | City of Mandurah + Strezlecki Group Mandurah Estuary |

Placemaking & Built Form

- Publicly owned Marina well integrated into the City activity centre.
- A variety of building heights including 3-5 storeys provides a density of residential apartments which contribute to activity during the day and night.
- Includes a variety of uses including retail, commercial and residential.
- Has associated design guidelines to guide future development.

Land Uses & Activities

- Restaurants and shops cater to residents of the apartments and attract visitors from the nearby CBD, turning the marina into an activity centre.

Connectivity & Access

- Some marina uses have a poor interface with public realm including large inactive facades.
- Good balance between pedestrian and vehicle access along the waterfront.

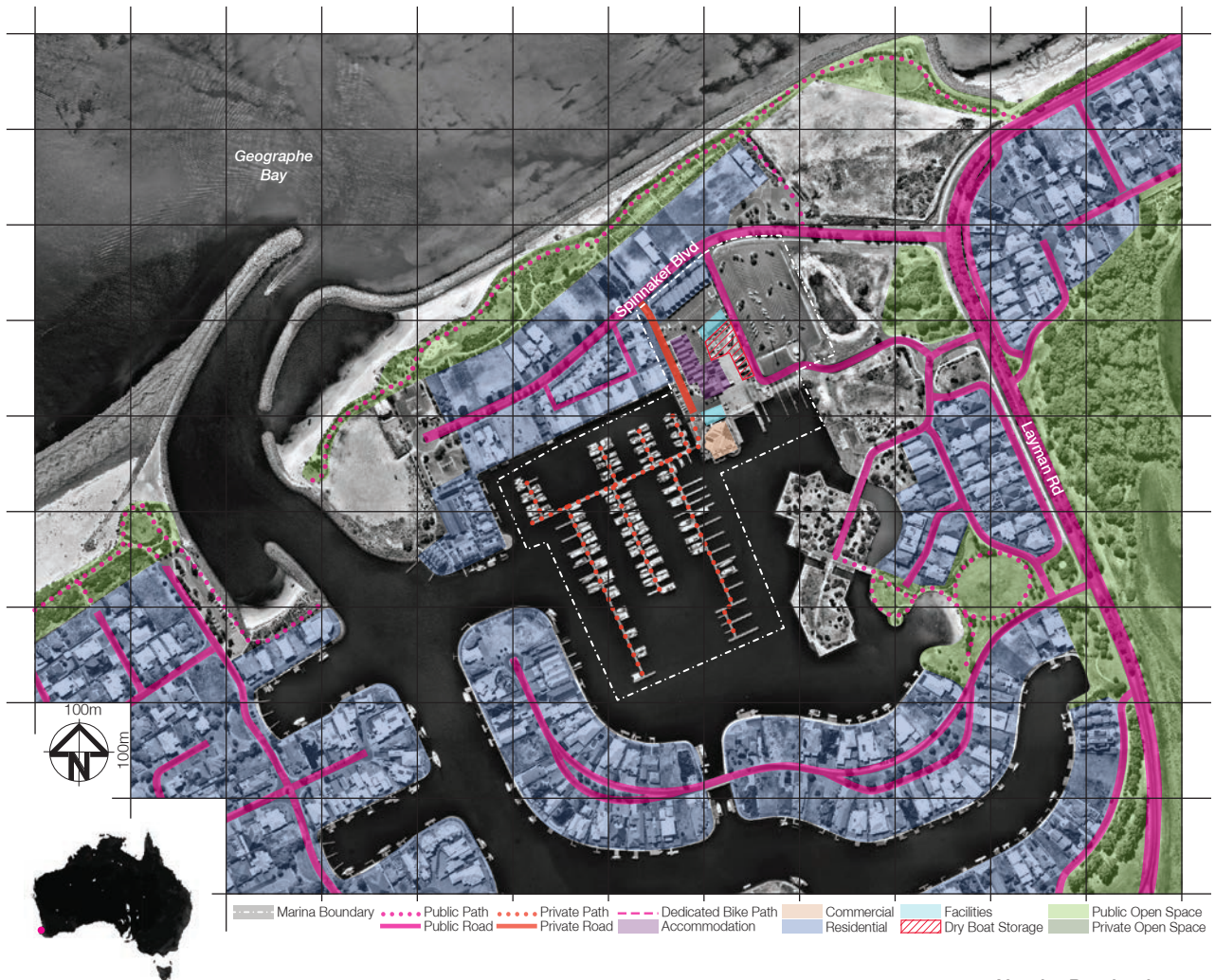


Figure 23: Main shopping street is public and an integrated part of Marina.

Lessons for St Kilda

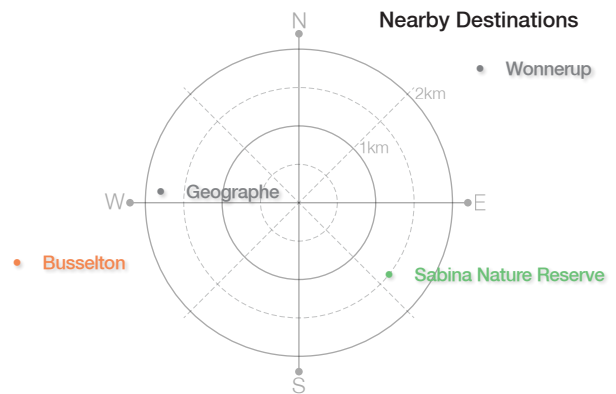
- A mix of uses can help activate the Marina during the day and night.
- Different uses can help generate income from a variety of sources.
- Public ownership can help ensure public access.
- Design 'commercial/industrial' marine support facilities to contribute to the activity of the area where possible by allowing view points into the activities.
- Ensure good pedestrian access to the water edges.
- Consider integrated design guidelines.

3.4 Port Geographe Marina



Port Geographe Marina Geographe, WA

Located around 6km from Busselton Jetty and town centre, Port Geographe Marina offers 7 hardstand and 268 berths for motorised and sailing boats. A water-side restaurant provides amenity for public and a Chandlery caters for resident and visiting sailors. There is some surrounding low scale residential development.



Facilities





Figure 24: Bird's eye view.



Figure 25: Waterfront is lined up with townhouses.

| | |
|--------------------------|-------------------------------------|
| Year Built: | 1990s |
| Development Type: | Marina with surrounding residential |
| Ownership: | Private |
| Management: | Private |
| Water Body: | Geographe Bay |

Placemaking & Built Form

- Variety in offering from sailing boats to motorised contributes to the visual interest of the marina.
- Entrance to the marina is not clear and is surrounded by private dwellings, the activities including the club house are not visible from the street.

Land Uses & Activities

- Minimal variety in uses noting an increase in surrounding residential density may have a positive impact on the variety of services available.

Connectivity & Access

- Marina removed from the town centre and the primary tourism destination of Busselton Jetty which may reduce incidental visitation.
- Marina is accessed by private vehicle only and through a gate-like entry way reducing perceived public permeability and access to restaurant.



Figure 26: Marina is hidden from public by housing.

Lessons for St Kilda

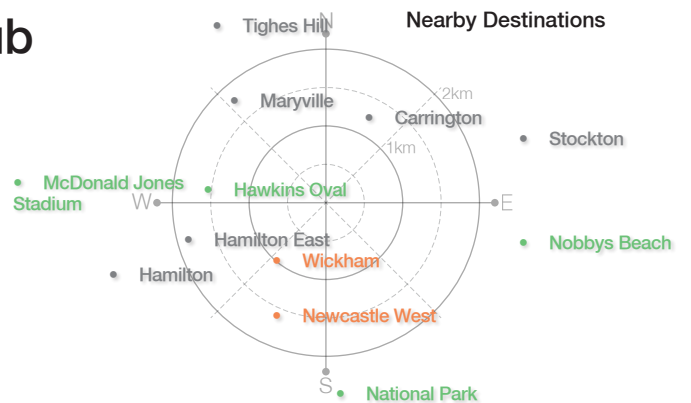
- Ensure access to Marina is provided for a range of modes including pedestrian, cycle, public transport and private vehicle.
- Consider vantage points to help with wayfinding and providing long-distance viewing points.
- Consider boat types and the impact these have on views including the mass of large motorised vehicles, and the positive impacts of masts on the skyline.

3.5 Newcastle Cruising Yacht Club



Newcastle Cruising Yacht Club Newcastle, NSW

A yacht club on the edge of the Hunter River /Throsby Creek providing deep water access to the river and the ocean, NCYC is around 1.5km from Newcastle town centre. It provides shipyard services including maintenance, a commercial centre, chandlery, restaurant and licensed club.



Facilities



Figure 27: Bird's eye view.



Figure 28: Newcastle Riverwalk beside marina brings the public through

| | |
|--------------------------|----------------------------|
| Year Built: | 2006 |
| Development Type: | Marina with some Mixed Use |
| Ownership: | Private |
| Management: | Private |
| Water Body: | Throsby Creek |

Placemaking & Built Form

- A range of jetty configurations from horizontal to perpendicular provides varied access and views.

Land Uses & Activities

- Businesses include 'water based' retail, design services, banking and other commercial activities contributing to diversity.

Connectivity & Access

- Privately owned Marina along a 4 lane road (similar to St Kilda) with minimal relationship to the opposite side of the road.
- Good public pedestrian and cycle access along the waterfront.
- At-grade car parking separating Marina from the street interface.

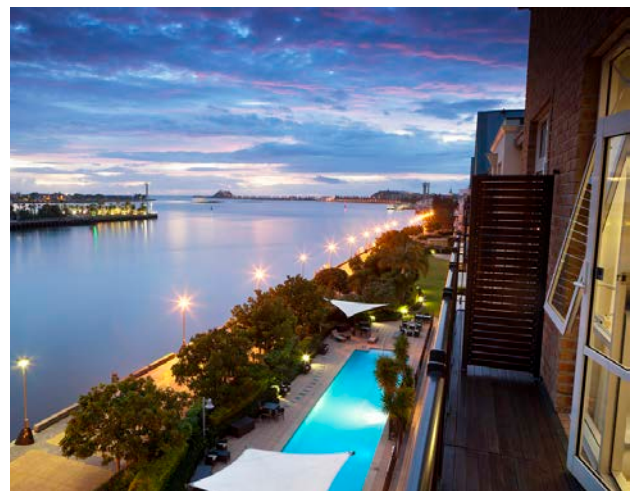
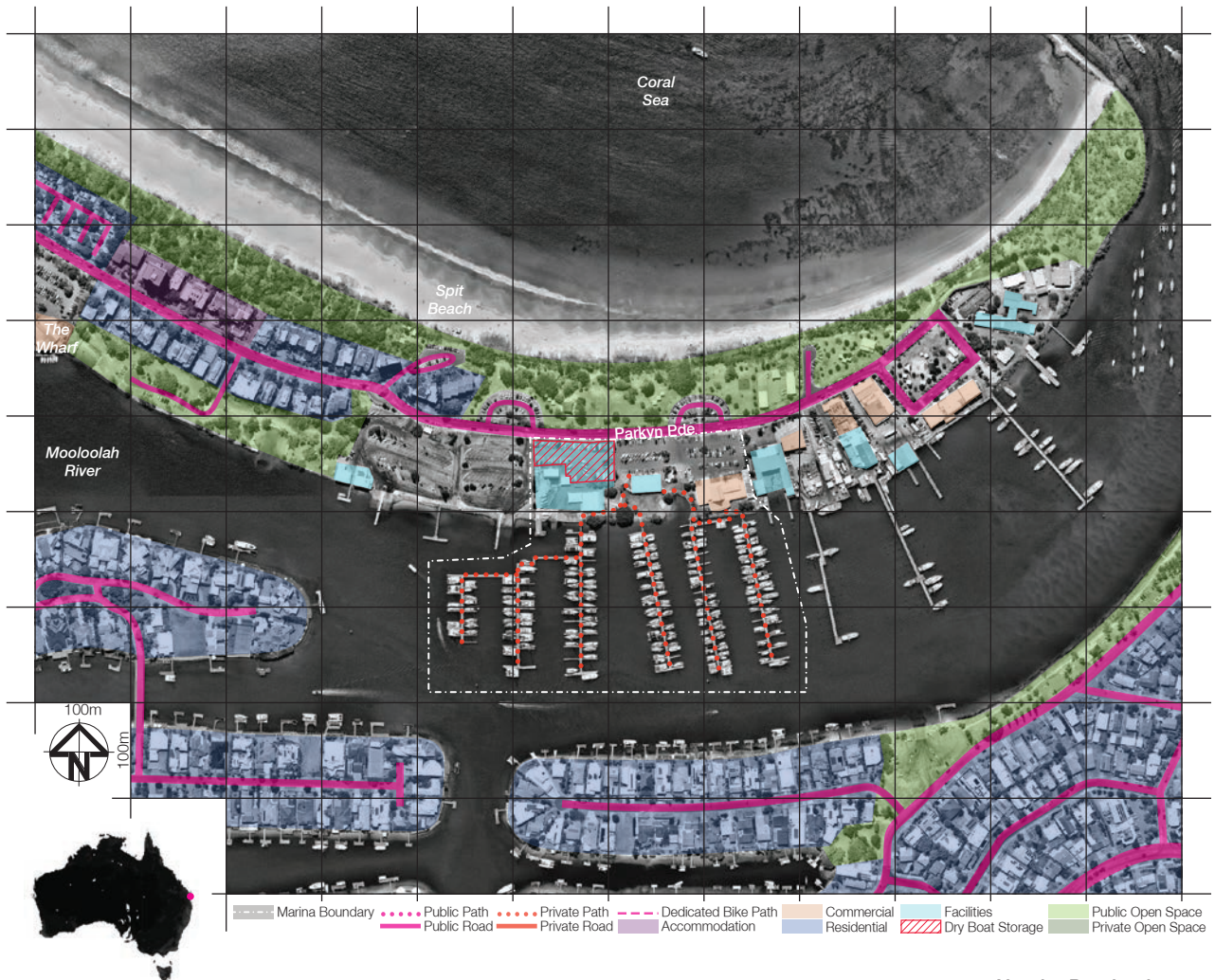


Figure 29: View from nearby hotel further down riverwalk.

Lessons for St Kilda

- Public access along the water front contributes to passive surveillance and public engagement.
- 'Water based' retail activities including seafood shops help to promote a 'boating' atmosphere and is balanced by varying commercial activities.
- Strong links to other yacht and boat clubs allows for inter-club activities and support.

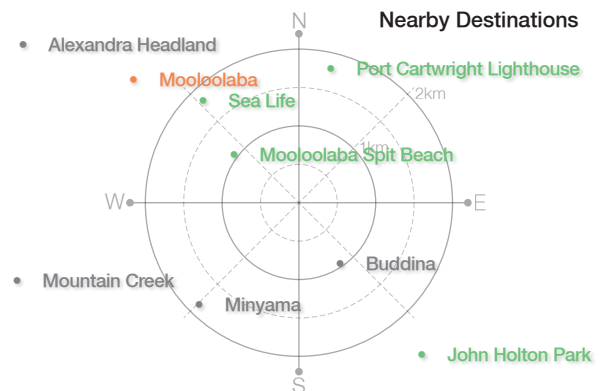
3.6 Mooloolaba Marina



Mooloolaba Marina

Mooloolaba, QLD

Mooloolaba Marina provides 265 fixed and 49 swing berths and associated marine services including maintenance within 1.5 km of the main tourist foreshore. Built in the river it allows direct access to the ocean and river and is surrounded by other water based attractions such as the Fish Market and Whale Encounters Centre.



Facilities





Figure 30: Bird's eye view.



Figure 31: Restaurant in marina takes advantage of waterfront.

| | |
|--------------------------|--------------------------------------|
| Year Built: | Not Known |
| Development Type: | Marina |
| Ownership: | Private |
| Management: | Mooloolaba Marina Private |
| Water Body: | Mooloolaba Marina Mooloolah River |

Placemaking & Built Form

- Is close to other attractions based on the waterside location achieving a concentration of activities.
- Has a poor interface with the street dominated by at-grade parking.

Land Uses & Activities

- Has a licensed restaurant open to the public with minimal other activity.

Connectivity & Access

- Can be accessed by a beach front walk on the northern side of the road and is opposite public open space/park opposite side of the road.
- Good public pedestrian and cycle access along the waterfront.
- At-grade car parking separates the Marina from the street interface.

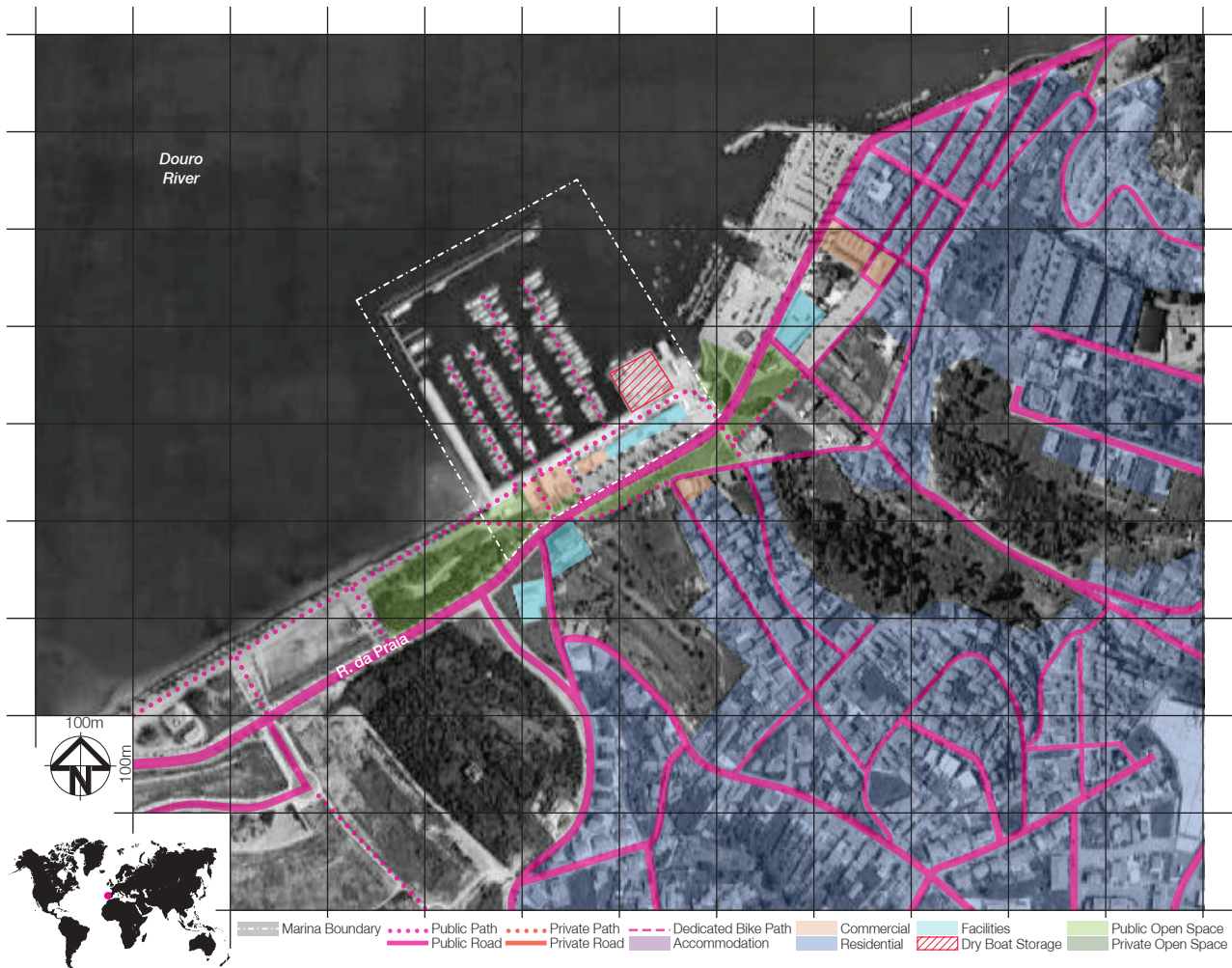


Figure 32: Parking separates the Marina from the park and beach.

Lessons for St Kilda

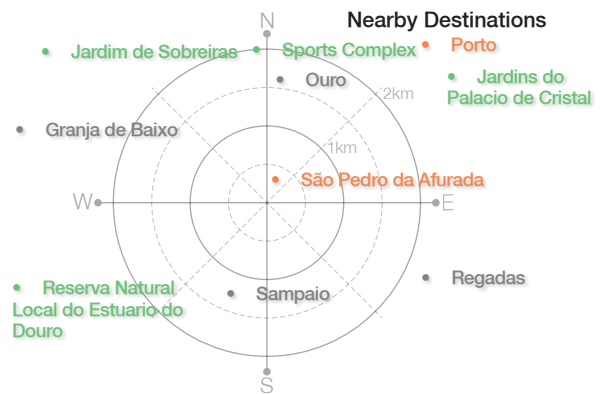
- Maximise benefit of surrounding public open space including BBQ facilities, toilets and other amenities and consider supporting retail.
- Consider street interface as an important 'entry' into the Marina.
- Consider associated attractions to enhance tourism/visitor offering.

4.1 Marina Douro



Marina Douro Vila Nova de Gaia, Portugal

Located on the Douro River in the City of Porto, this new Marina offers 300 berths, maintenance, chandlery, restaurants, cafe and convenience store. It provides docking for the tourist ferry and provides event space as well as training rooms. The buildings and landscape are contemporary in design and reflect its urban context.



Facilities



Figure 33: Bird's eye view.



Figure 34: Contemporary design creates a distinctive destination.

| | |
|--------------------------|-----------------------------|
| Year Built: | 2013 |
| Development Type: | Mixed Use |
| Ownership: | Private |
| Management: | Douro Marina Private |
| Water Body: | Douro Marina Douro River |

Placemaking & Built Form

- Privately owned Marina with a strong architectural language.
- At-grade car parking provided between the built form and the road giving priority to the waterfront however the surface treatment is high quality.
- Perpendicular finger wharves provide visibility from the shore along the wharves.

Land Uses & Activities

- Tourist ferry provides alternative access.
- Restaurants and cafes cater to marine users and public.

Connectivity & Access

- Private marina located adjacent to public marina allowing for synergies between offerings - public marina users have access to restaurants and cafes of private side while private marina users have access to fuel station on public side.

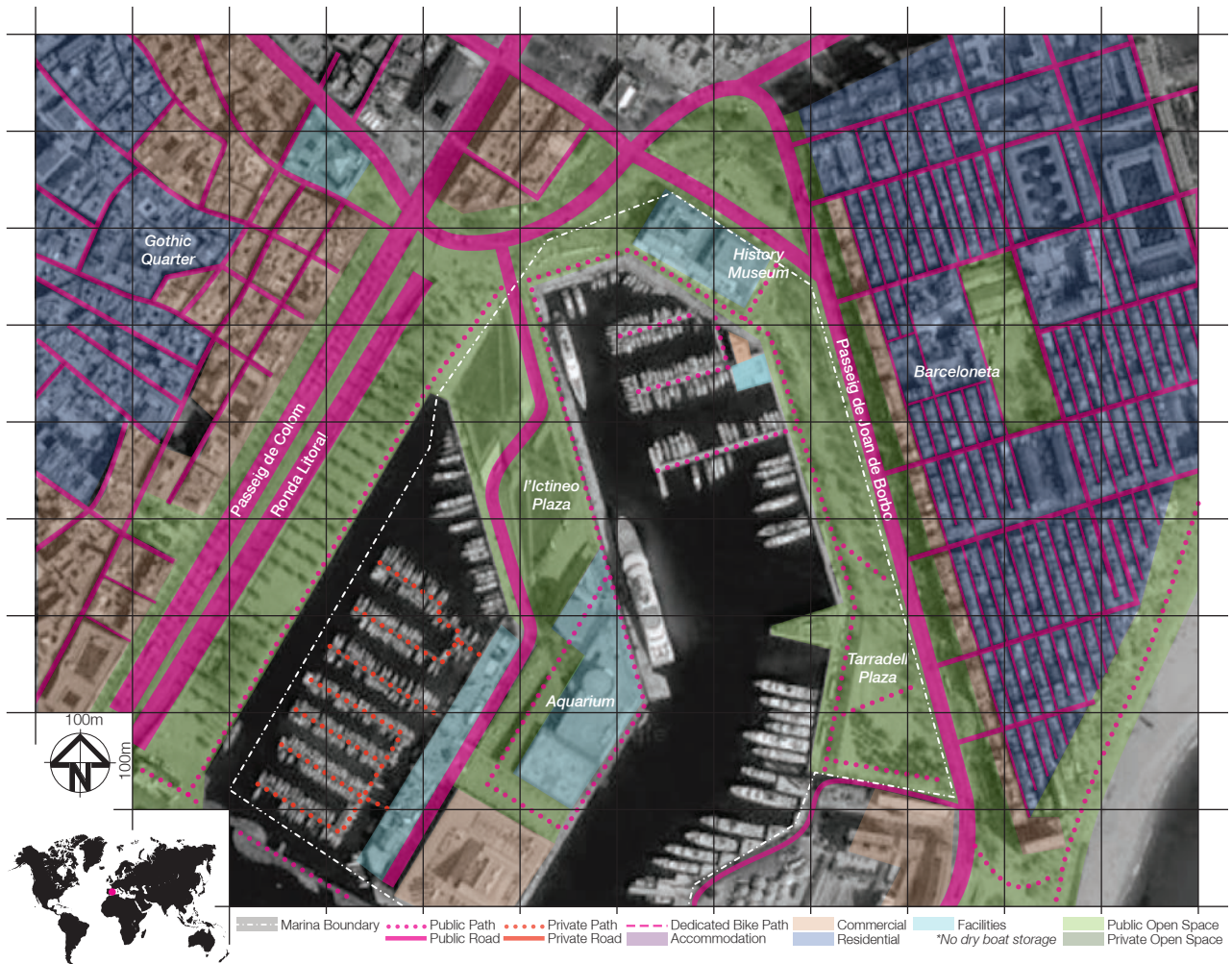


Figure 35: Restaurant raised for views and increased open space.

Lessons for St Kilda

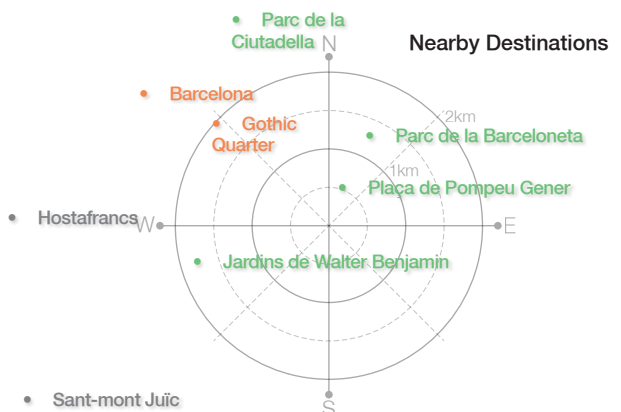
- Utilise architecture and strong design principles to create a sense of place.
- Integrate car parking design into high quality public realm outcome.
- Consider water links to other Melbourne attractions (tourist ferry).
- Consider wharf configuration to avoid ocean views and views to other activities being blocked by boats.

4.2 Marina Port Vell



Marina Port Vell Barcelona, Spain

This major tourism drawcard is located on the waterfront of Barcelona. It offers 148 berths, marine trade services, restaurants and commercial centre. It offers a berth for tourist ferries and is located in the same precinct as a museum, aquarium, beaches and hotels, a shopping mall and plazas.



Facilities



Figure 36: Bird's eye view.



Figure 37: Restaurant caters for tourists and controls access to jetties .

| | |
|--------------------------|---------------------------------------|
| Year Built: | 1992 + 2015 |
| Development Type: | Mixed Use |
| Ownership: | Public On lease until 2036 |
| Management: | Private OneOcean (Salamanca Group) |
| Water Body: | Mediterranean Sea |

Placemaking & Built Form

- Privately owned Marina with significant supporting tourism infrastructure adjacent to a major city.
- A combination of contemporary architecture and heritage architecture.
- Local controversy over the lease of public land for private use.
- An opportunity in the city to see high end boats and super yachts, prestige on show.

Land Uses & Activities

- Huge variety of uses associated with the adjacent/integrated shopping mall.
- Secure access to the boat moorings provided through gated access points.

Connectivity & Access

- Good public transport access and within a 9 minute walk from famous pedestrian street La Rambla.
- Car parking provided under the shopping centre.
- Public/private realms very distinct.



Figure 38: Museum interacts with water through public open space.

Lessons for St Kilda

- Consider scale of offering and intended end users.
- Consider the impact of cars on accessibility and walkability and balance the vehicle access requirements of the marina and businesses' operations with the needs of visiting pedestrians.
- Consider wayfinding from well known places (i.e. Luna Park) to the Marina.
- Consider private/public balance in land use.

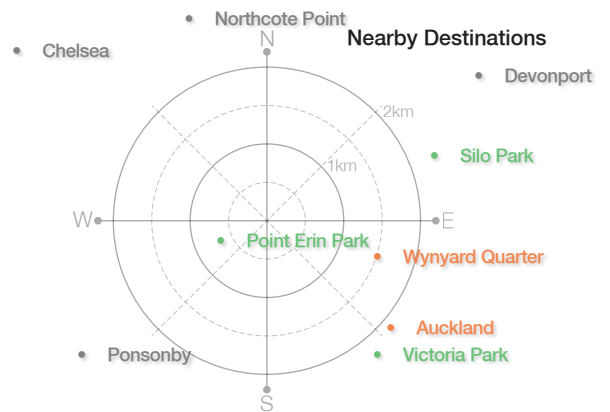
4.3 Westhaven Marina



Westhaven Marina

Auckland, New Zealand

The largest Marina in the southern hemisphere, Westhaven is undergoing a transformation from a purely working/maintenance marina into a destination for everyone. Facilities include full service marine servicing, restaurants, cafés and other retail and it is a 20 minute walk into the centre of Auckland.



Facilities



Figure 39: Bird's eye view.



Figure 40: Boardwalk connects marina with the city.

| | |
|--------------------------|--------------------------------------|
| Year Built: | recent changes 2010+ |
| Development Type: | Marina - Mixed Use |
| Ownership: | Public |
| Management: | City of Auckland + 2 Trusts |
| Water Body: | Panuku Development Auckland Ocean |

Placemaking & Built Form

- New mixed-use built form between 3-6 storeys.
- Considers environmental aspects of the boating industry as well as providing filters for the adjacent freeway run off.

Land Uses & Activities

- Large marina servicing all types of boats and offering a range of private and public recreational opportunities.

Connectivity & Access

- Separated from adjacent residential suburbs by large freeway interface.
- Increasing integration with the City via streets and boardwalks.

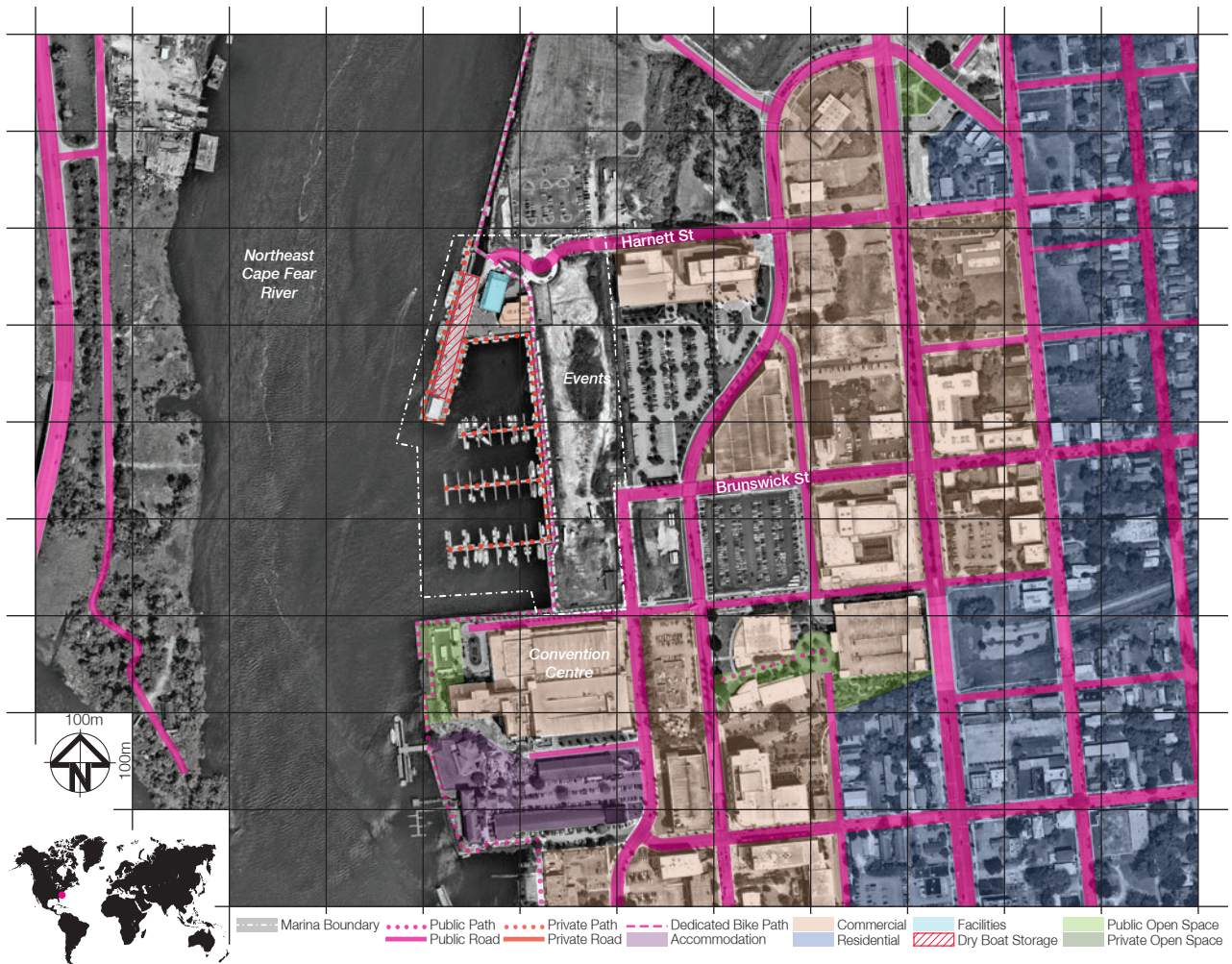


Figure 41: Boardwalk provides quality open space for city.

Lessons for St Kilda

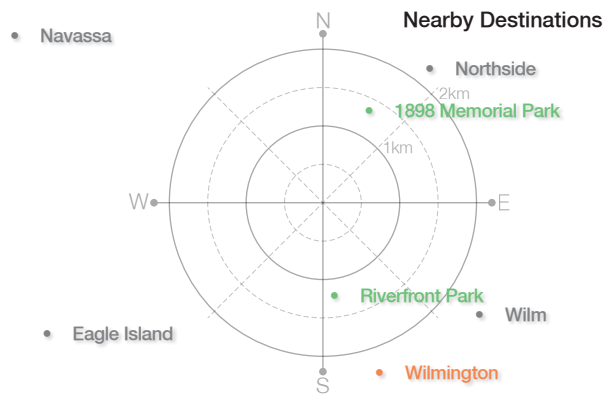
- Consider a mix of recreational offerings including non-motorised water sports.
- Integrate Ecologically Sustainable Development principles into the design including a response to the adjacent street run-off.
- Consider a variety of pedestrian pathways including textural changes such as boardwalks.
- Consider built form and its impact on views, solar access to public streets and spaces.

4.4 Port City Marina



Port City Marina
Wilmington, NC - USA

This new development located in downtown Wilmington is evolving from an industrial area into a mixed use, medium/high density residential suburb and marina offering over 200 berths. The privately owned development has utilised temporary events including music concerts to create a sense of place and activation.



Facilities





Figure 42: Bird's eye view.



Figure 43: Food truck event at the pier.

| | |
|--------------------------|---|
| Year Built: | 2015 |
| Development Type: | Mixed Use |
| Ownership: | Private |
| Management: | USA Invest Co Private |
| Water Body: | Port City Marina Northeast Cape Fear River |

Placemaking & Built Form

- Holds regular festivals including music and food attracting large numbers of people.
- Offers marine services including maintenance, fuel and club facilities.
- Incorporates history of the River and its role in the formation of riverside cities and towns through signage and events.

Land Uses & Activities

- Development includes high density residential and mixed use.
- Temporary 'pop-up' uses to increase activity and public ownership.

Connectivity & Access

- Deep water berthing for small and large boats.
- Increasing connections to the city through designated pedestrian walkways.

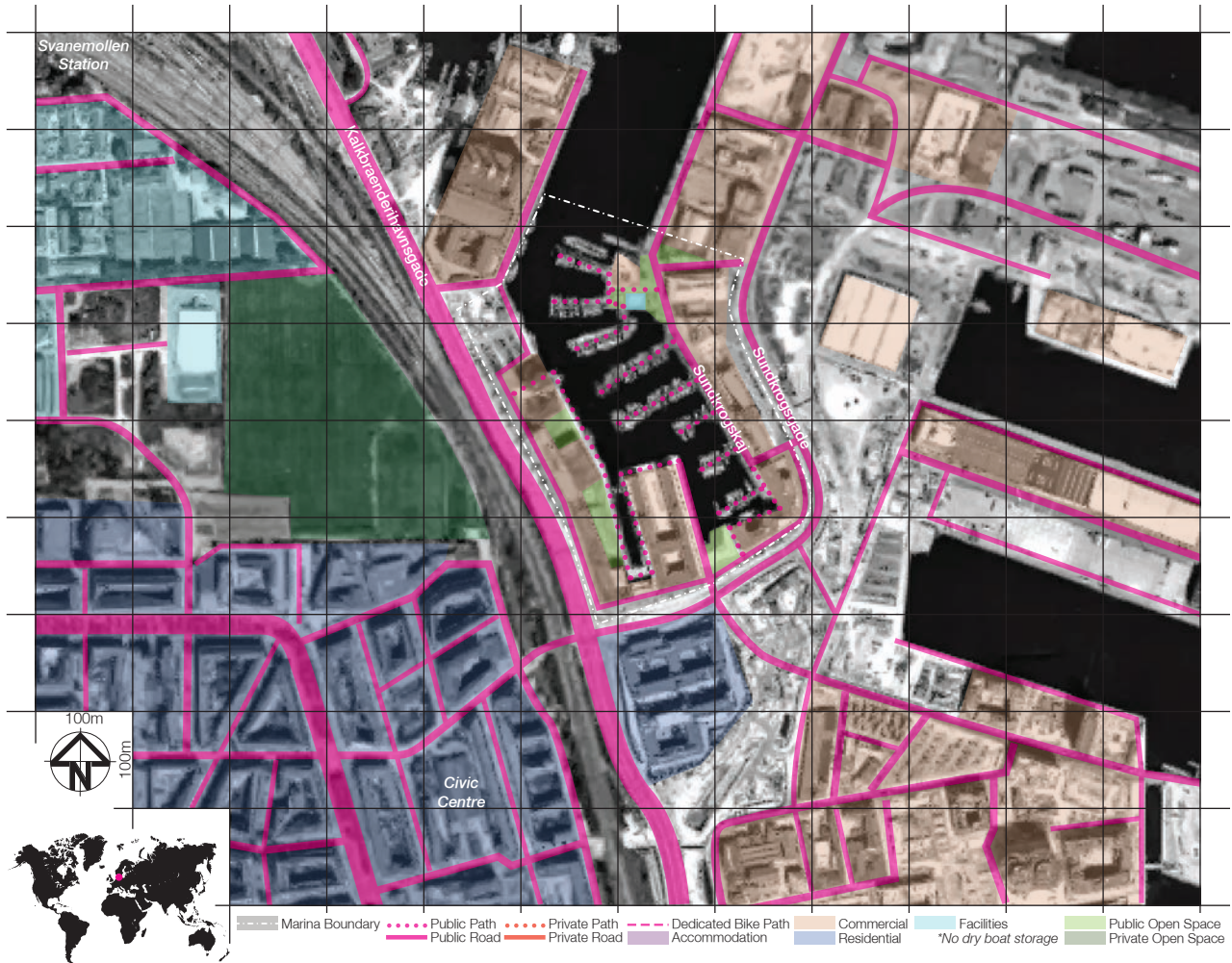


Figure 44: Riverwalk connects marina with downtown.

Lessons for St Kilda

- Short term and temporary events can help familiarise a diverse range of people with the marina and provide a catalyst for future development.
- Incorporating historical information into the activities and signage can assist in placemaking.
- Staged development may be appropriate.

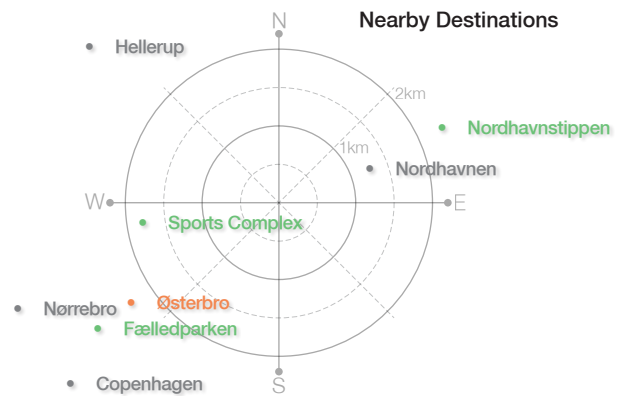
4.5 Kalkbrænderihavnen



Kalkbrænderihavnen

Copenhagen, Denmark

An inner city marina offering over 250 berths. The marina is surrounded by new mixed-use development of around 5-6 storeys as well as lower scale commercial and light industrial buildings. Streets are predominately shared zones with cobbled surfaces and provide the primary public space.



Facilities





Figure 45: Bird's eye view.



Figure 46: Public open space and restaurant.

| | |
|--------------------------|------------------|
| Year Built: | 1999 |
| Development Type: | Mixed Use |
| Ownership: | Private |
| Management: | Private |
| Water Body: | The Sound Strait |

Placemaking & Built Form

- Built form is integrated into the existing neighbourhood character and includes mid-rise buildings around 5-6 storeys.
- Views to the heritage gas works provide engaging views incorporating the site's recent history.

Land Uses & Activities

- A mix of sail boats and motorised boats are accommodated providing variety on the water.
- Car parking is along the edge of the water interrupting pedestrian access.

Connectivity & Access

- Streets are designed for all modes of transport (mixed-use) and have a high quality, fine grain materiality.

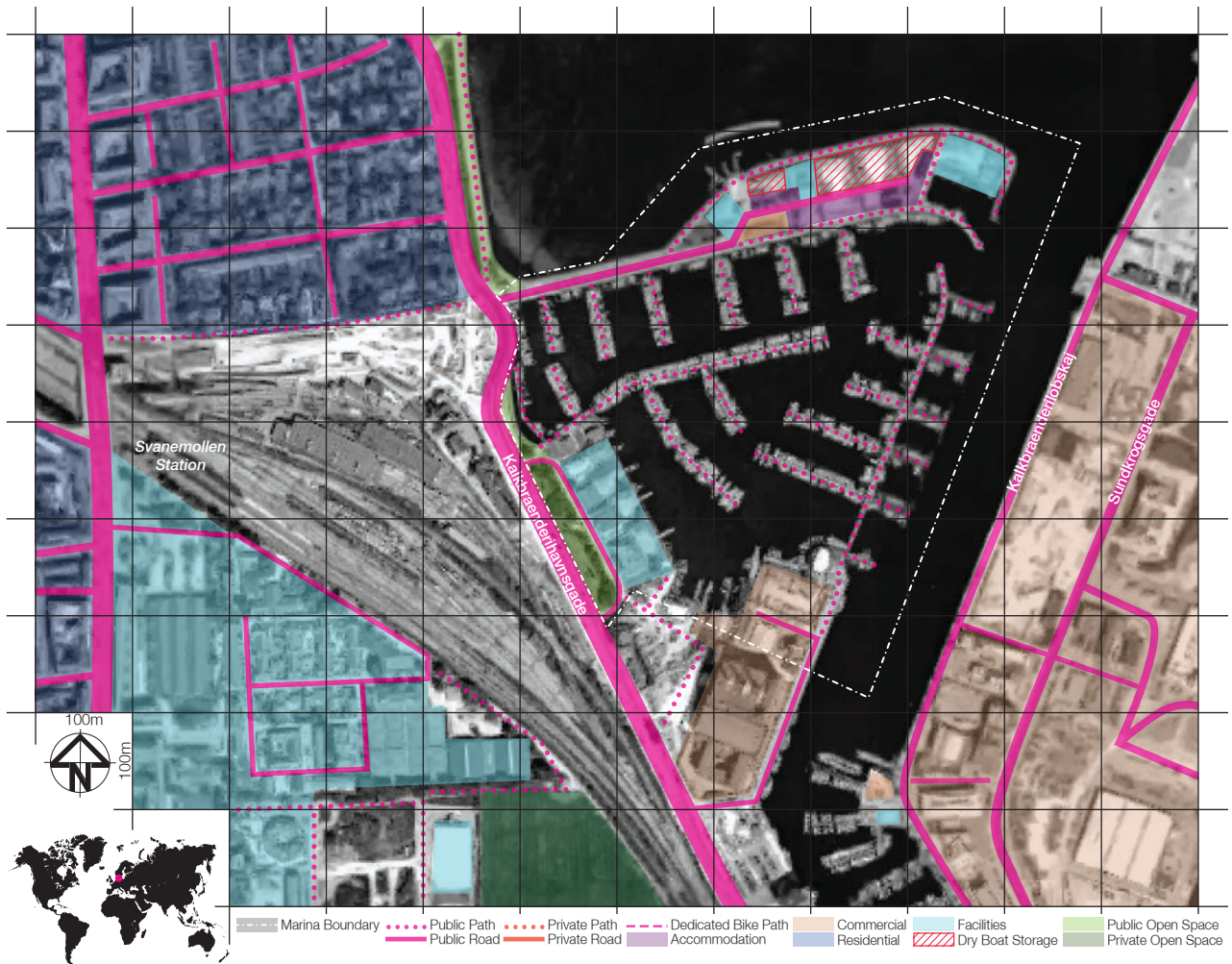


Figure 47: The Marina is integrated within the context.

Lessons for St Kilda

- Maximising the usability of the public realm, including streets may help accommodate a larger variety of uses including shared pedestrian and vehicle zones.
- Views in and around the site, including to light industrial uses (or Marine uses) can contribute to authenticity.

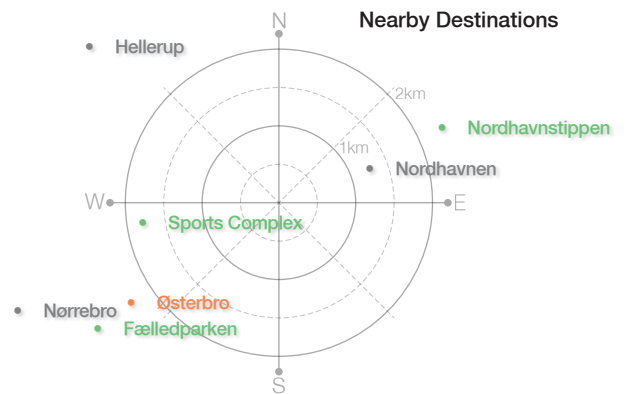
4.6 Svanemolle Marina



Svanemolle Marina

Copenhagen, Denmark

This Marina offers unique residential options for visiting sailors allowing them to stay in a series of 'huts' located on the Spit, looking out over the Fjord. The spit contains basic facilities and includes an ocean swimming club and is available for caravan parking.



Facilities





Figure 48: Adjacent park.



Figure 49: Caravan park and rental cabins.

| | |
|--------------------------|------------------|
| Year Built: | Not known |
| Development Type: | Marina |
| Ownership: | Private |
| Management: | Private |
| Water Body: | The Sound Strait |

Placemaking & Built Form

- Built form is low scale and unobtrusive based on a fishing hut typology.

Land Uses & Activities

- Infrastructure is basic and targeted at 'outdoors' activities.

Connectivity & Access

- The location, close to the city and residential suburbs provides an alternative approach to providing amenity and access to the water. Views to the heritage gas works provide engaging views incorporating the site's recent history.



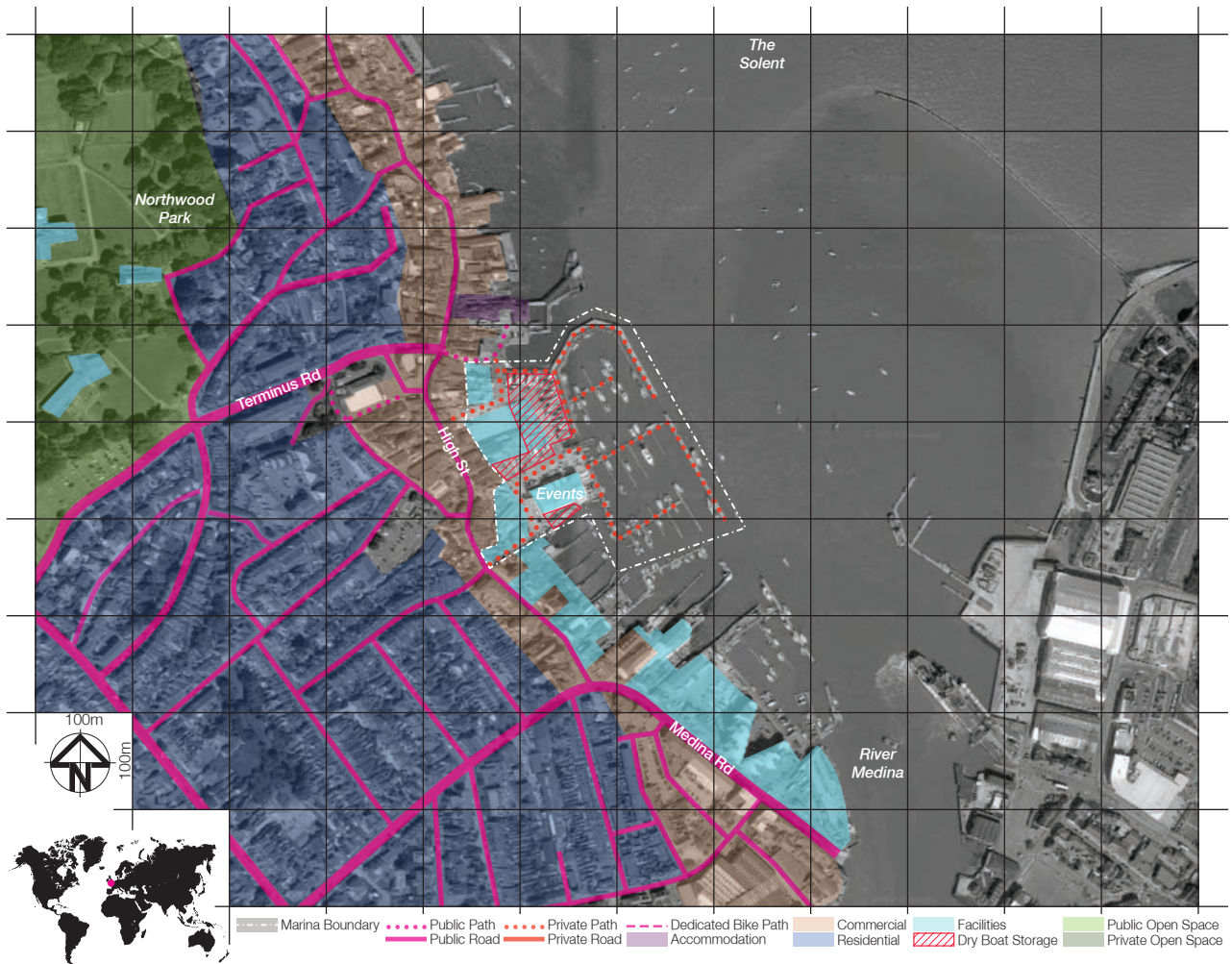
Figure 50: On site accommodation and camping facilities.

Lessons for St Kilda

- Consider a variety of recreational options and residential typologies that cater to a range of people.
- Include 'raw' materials in the design that reflect the nautical purpose of the marina.
- Consider a range of accommodation typologies that cater to a range of travellers.

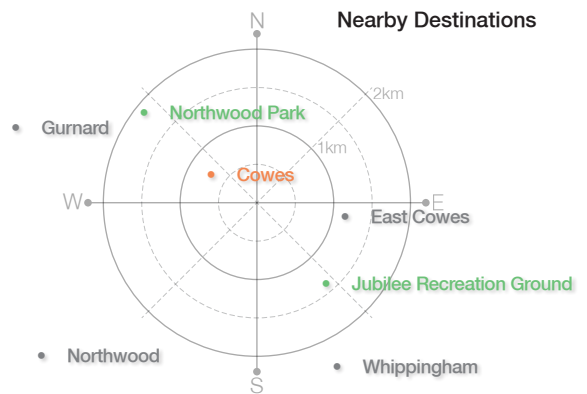
International Case Studies

4.7 Cowes Yacht Haven



Cowes Yacht Haven Cowes, UK

Well known world-wide for yachting events, Cowes Yacht Haven is well integrated into town life. Ownership is both public and private and it provides around 260 berths including full marine services, 50 tonne hoist and club facilities. It includes an events centre and outdoor exhibition space.



Facilities





Figure 51: Bird's eye view.



Figure 52: High Street main entrance.

| | |
|--------------------------|---|
| Year Built: | 1970s |
| Development Type: | Marina |
| Ownership: | Public + Private Cowes Town Waterfront Trust |
| Management: | Public + Private Cowes Town Waterfront Trust |
| Water Body: | River Medina/The Solent Strait |

Placemaking & Built Form

- Yacht Haven is part of a larger network of Boating clubs in Cowes that line the edge of the river mouth and township.
- Yachting festivals are held regularly and Cowes is known internationally for these events.

Land Uses & Activities

- It is adjacent to the Southampton Ferry Terminal and on the tourism trail however access to the waterfront at the club is restricted.

Connectivity & Access

- Primary access is by foot from the town centre or by water.
- Security fences and gates restrict access to the dry docks.

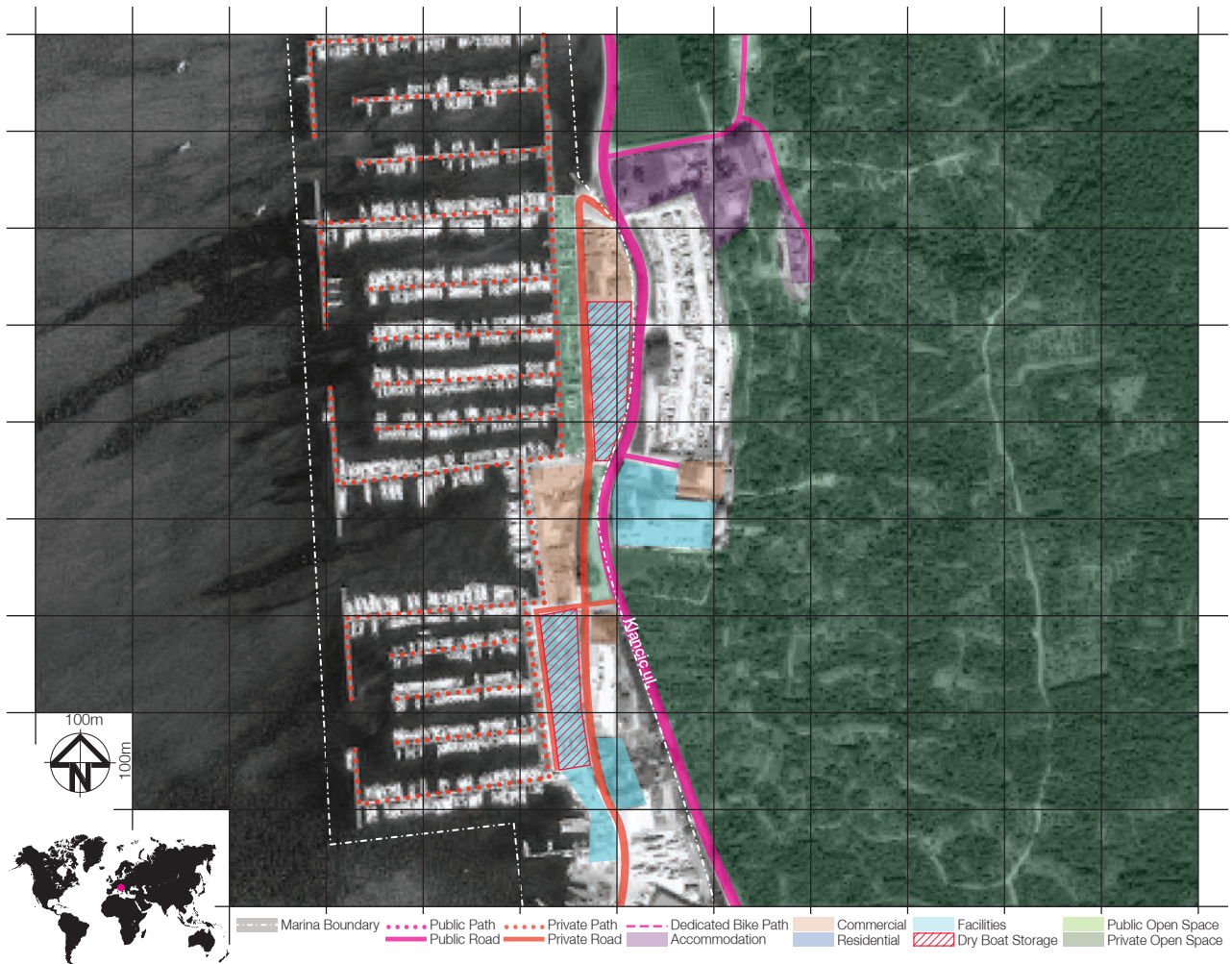


Figure 53: Events site.

Lessons for St Kilda

- Consider the activity of a working marina as a drawcard.
- Integration of secure boat storage with public access is crucial to sustain a viable marina - increasing vitality from public access but ensuring safety for boat owners.
- Consider events as a way of promoting the location.

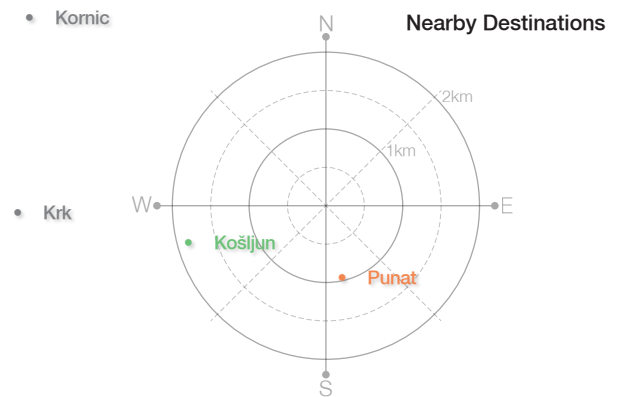
4.8 Marina Punat



Marina Punat

Punat, Croatia

The Punat Marina is on the edge of the township and provides extensive marine services including 800 fixed and 400 dry berths, shipwright, chandlery, fuel and club facilities.



Facilities





Figure 54: Bird's eye view.



Figure 55: Facilities include super yacht storage

| | |
|--------------------------|----------------------|
| Year Built: | 1964 |
| Development Type: | Marina |
| Ownership: | Private |
| Management: | Private |
| Water Body: | Puntarska Draga Cove |

Placemaking & Built Form

- A private marina that can only be visually appreciated from the water with no public access along the waterfront.

Land Uses & Activities

- Major boat storage and servicing hub with some private club facilities.

Connectivity & Access

- Very poor integration with the surrounding streets and neighbourhoods presenting a fenced barrier to the road.
- Access is primarily by private vehicle with public access to the water edge restricted.



Figure 56: Entrance from Puntat is only used by staff.

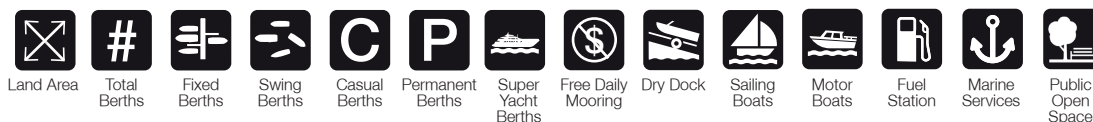
Lessons for St Kilda

- Ensure the servicing activity is integrated with more public uses to avoid a 'single use' facility.
- Provide options for public access and secure boat mooring.

Marina Characteristics

5

5.1 Summary



Subject Site

| | | | | | | | | | | | | | | |
|-----------------|-----|-----|---|--|--|---|--|--|---|---|---|---|---|---|
| St Kilda Marina | 8ha | 500 | ✓ | | | ✓ | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
|-----------------|-----|-----|---|--|--|---|--|--|---|---|---|---|---|---|

Australian Case Studies

| | | | | | | | | | | | | | | |
|-------------------------------------|-------|-----|---|---|---|---|---|---|---|---|---|---|---|---|
| Sanctuary Cove Marina | 4ha | 293 | ✓ | | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | | ✓ |
| Royal Motor Yacht Club - Broken Bay | 1.7ha | 220 | ✓ | ✓ | ✓ | ✓ | | ✓ | | ✓ | ✓ | ✓ | ✓ | |
| Mandurah Ocean Marina | 8.7ha | 425 | ✓ | | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Port Geographe Marina | 1.7ha | 268 | ✓ | | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Newcastle Cruising Yacht Club | 5.5ha | 180 | ✓ | | ✓ | ✓ | | | | ✓ | ✓ | ✓ | ✓ | ✓ |
| Mooloolaba Marina | 2.5ha | 314 | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ | ✓ | |

International Case Studies

| | | | | | | | | | | | | | | |
|---------------------------|---------|-------|---|---|---|---|---|---|---|---|---|---|---|---|
| Marina Douro | 7ha | 300 | ✓ | | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Marina Port Vell | 40+ ha | 148 | ✓ | | | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ | ✓ |
| Westhaven Marina | 110+ ha | 2000+ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Port City Marina | 5ha | 200+ | ✓ | | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ | | |
| Kalkbraenderhavnen Marina | 8ha | 260 | ✓ | | ✓ | ✓ | | ✓ | | ✓ | ✓ | ✓ | | ✓ |
| Svanemolle Marina | 10+ ha | 1100 | ✓ | | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Cowes Yacht Haven | 4ha | 260 | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Marina Punat | 30+ ha | 1200 | ✓ | | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ | ✓ | |



Subject Site

| | | | | | | | | | | | | | |
|-----------------|---|---|---|---|--|--|--|---|--|---|--|--|--|
| St Kilda Marina | ✓ | ✓ | ✓ | ✓ | | | | ✓ | | ✓ | | | |
|-----------------|---|---|---|---|--|--|--|---|--|---|--|--|--|

Australian Case Studies

| | | | | | | | | | | | | | |
|-------------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sanctuary Cove Marina | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | | ✓ | ✓ | | ✓ |
| Royal Motor Yacht Club - Broken Bay | ✓ | ✓ | ✓ | ✓ | | | | | ✓ | ✓ | | ✓ | |
| Mandurah Ocean Marina | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | | ✓ | ✓ | | ✓ | |
| Port Geographe Marina | | | ✓ | ✓ | | | | | | ✓ | | | |
| Newcastle Cruising Yacht Club | ✓ | ✓ | ✓ | ✓ | | ✓ | | | | ✓ | | | |
| Mooloolaba Marina | ✓ | ✓ | ✓ | | | | ✓ | | | ✓ | | | |

International Case Studies

| | | | | | | | | | | | | | |
|---------------------------|---|---|---|---|---|---|---|---|---|---|--|---|--|
| Marina Douro | | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | | ✓ | | | |
| Marina Port Vell | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | | | | |
| Westhaven Marina | ✓ | ✓ | ✓ | ✓ | | | | | ✓ | ✓ | | ✓ | |
| Port City Marina | | ✓ | ✓ | ✓ | | | | | | ✓ | | | |
| Kalkbraenderhavnen Marina | | ✓ | ✓ | ✓ | | | ✓ | | ✓ | ✓ | | | |
| Svanemolle Marina | ✓ | ✓ | ✓ | ✓ | | | | | ✓ | ✓ | | | |
| Cowes Yacht Haven | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | ✓ | | | |
| Marina Punat | ✓ | ✓ | ✓ | ✓ | | ✓ | | | ✓ | ✓ | | ✓ | |

Marina Characteristics

5.2 Learnings for St Kilda Marina

Placemaking & Built Form

The following are the lessons learnt regarding Placemaking and Built Form.

- Using well-considered landscape can help create a sense-of-place. It can also assist in defining private and public areas through a variety of planting.
- A local clientele can help ensure local stewardship however this needs to be balanced with its role for St Kilda and greater Melbourne.
- Consider vantage points to help with wayfinding and providing long-distance viewing points.
- Consider boat types and the impact these have on views including the mass of large motorised vehicles, and the impact of masts on the skyline.
- Maximise benefit of surrounding public open space including BBQ facilities, toilets and other amenities and consider supporting retail.
- Utilise architecture and strong design principles to create a sense of place.
- Integrate car parking design into high quality public realm outcome.
- Consider wharf configuration to avoid ocean views and views to other activities being blocked by boats.
- Consider wayfinding from well known places (i.e. Luna Park) to the Marina.
- Consider built form and its impact on views, solar access to public streets and spaces.
- Integrate Ecologically Sustainable Development principles into the design including a response to the adjacent street run-off.
- Incorporating historical information into the activities and signage can assist in placemaking.
- Staged development may be appropriate.
- Views in and around the site, including to light industrial uses (or Marine uses) can contribute to authenticity.
- Include 'raw' materials in the design that reflect the nautical purpose of the marina.



Figure 57: Integration of landmarks and landscape at Marina Douro.



Figure 58: Masts as part of the landscape at Westhaven.



Figure 59: Port Vell's materiality reflecting the nautical purpose.

Marina Characteristics

Land Uses & Activities

The following are the lessons learnt regarding Land Use and Activities.

- A mix of uses can help activate the Marina during the day and night.
- Different uses can help generate income from a variety of sources.
- Design 'commercial/industrial' marine support facilities to contribute to the activity of the area where possible by allowing view points into the activities.
- 'Water based' retail activities including seafood shops help to promote a 'boating' atmosphere and is balanced by varying commercial activities.
- Strong links to other yacht and boat clubs allows for inter-club activities and support.
- Consider associated attractions to enhance tourism/visitor offering.
- Consider scale of offering and intended end users and ensure the design will accommodate these users.
- Consider a mix of recreational offerings including non-motorised water sports.
- Short term and temporary events can help familiarise a large range of people with the marina and provide a catalyst for future development.
- Consider private/public balance in land use.
- Maximising the usability of the public realm, including streets may help accommodate a larger variety of uses including shared pedestrian and vehicle zones.
- Consider a variety of recreational options and residential typologies that cater to a range of people.
- Consider the activity of a working marina as a drawcard.
- Ensure the servicing activity is integrated with more public uses to avoid a 'single use' facility.



Figure 60: Mix of uses at Mandurah Marina contributing to activation.



Figure 61: Yachting events at Cowes spread onto the streets.



Figure 62: Offices integrated with marina at Kalkbraender, havnen.

Marina Characteristics

Connectivity & Access

The following are the lessons learnt regarding Connectivity and Access.

- Well maintained public realm attracts people.
- Privatisation of Marinas can restrict access and emphasise public/private.
- Reliance on private motor vehicle for access can restrict visitor access and pedestrian and cyclist safety.
- Avoid placing at-grade car parking between the water and the land facilities. Access to water should be prioritised for pedestrians where practicable.
- Public ownership can help ensure public access.
- Ensure good pedestrian access to the water edges.
- Ensure access to Marina is provided for a range of modes including pedestrian, cycle, public transport and private vehicle.
- Public access along the water front contributes to passive surveillance and public engagement.
- Consider street interface as an important 'entry' into the Marina.
- Consider water links to other Melbourne attractions (tourist ferry).
- Consider the impact of cars on accessibility and walkability and reduce conflict where possible.
- Consider a variety of pedestrian pathways including textural changes such as boardwalks.
- Integration of secure boat storage with public access is crucial to sustain a viable marina.



Figure 63: Mandurah marina pedestrian connectivity.



Figure 64: Rambla de mar at Port Vell connects marina's end with city.



Figure 65: Westhaven's boardwalk contributes to the marina's vitality.

Image References

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Figure 51: Anon, (n.d.). [image] Available at: <http://www.transeuropemarinas.com/cowes-yacht-haven/> [Accessed 10 Nov. 2017].

Figure 52: Google Streetview (2017). [image].

Figure 53: Anon, (n.d.). [image] Available at: http://www.lendycowesweek.co.uk/web/code/php/main_c.php?section=shoreside&page=venues [Accessed 10 Nov. 2017].

Figure 54: Anon, (n.d.). [image] Available at: <http://www.garant-charter.com/garant-charter-dove-siamo/marina-punat-parcheggio> [Accessed 10 Nov. 2017].

Figure 55: Anon, (2015). [image] Available at: <https://yachtscroatia.com/marina-punat/> [Accessed 10 Nov. 2017].

Figure 56: Google Streetview (2017). [image].

Figure 57: Campos, J. (n.d.). [image] Available at: <https://www.archdaily.com/575060/marina-douro-barbosa-and-guimaraes-architects> [Accessed 10 Nov. 2017].

Figure 58: Anon, (n.d.). [image] Available at: <http://www.charterworld.com/index.html?sub=auckland-yacht-charter> [Accessed 10 Nov. 2017].

Figure 59: Goula, A. (2016). [image] Available at: <https://www.archdaily.com/782076/marina-port-vell-scob-architecture> [Accessed 10 Nov. 2017].

Figure 60: Anon, (n.d.). [image] Available at: <http://www.lakeviewmandurah.com/gallery-mandurah-ocean-marina.htm> [Accessed 10 Nov. 2017].

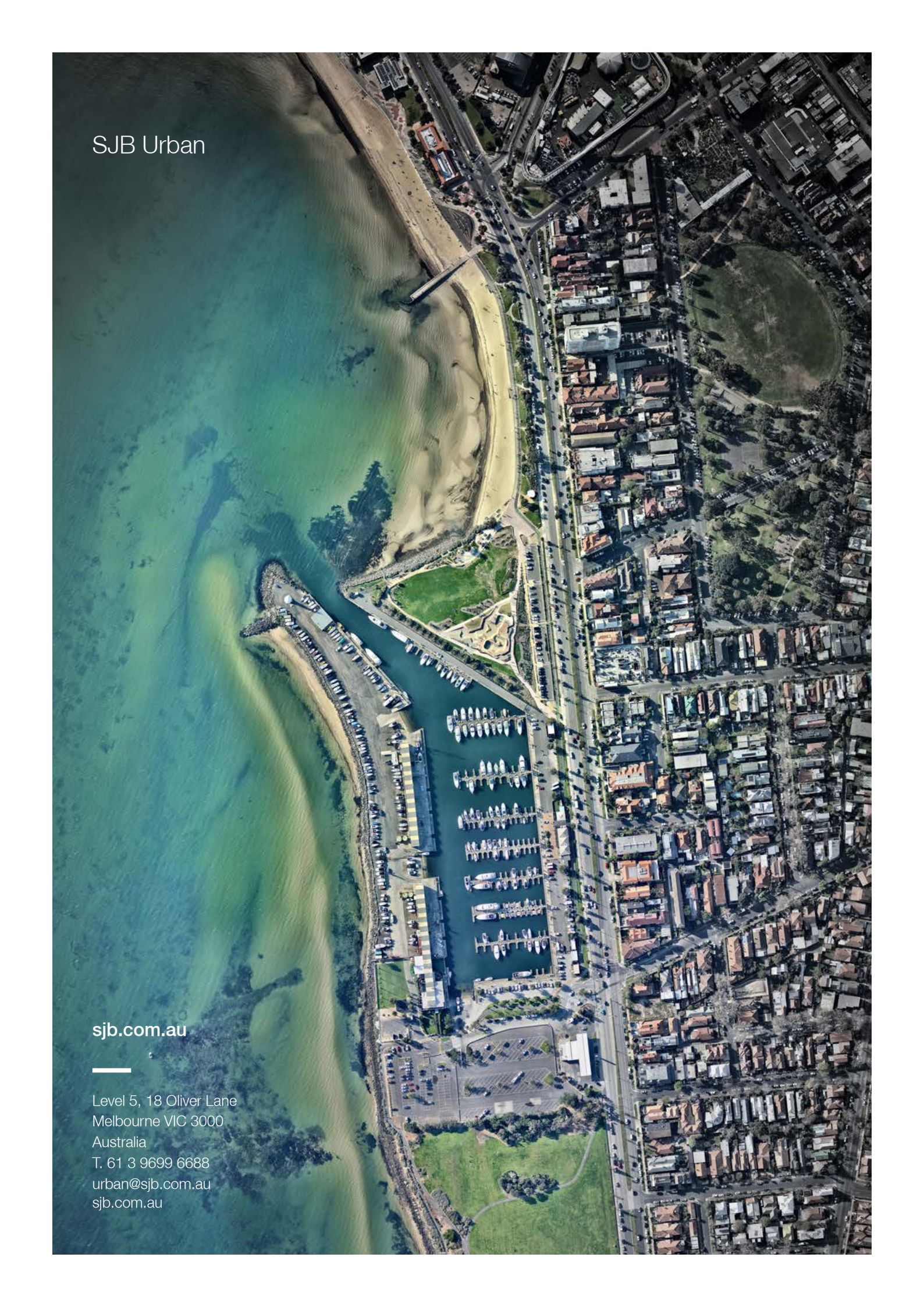
Figure 61: Curno, J. (2017). [image] Available at: <https://www.google.com.au/maps/@50.760882,-1.2973669,3a,75y,90t/data=!3m8!1e2!3m6!1sAF1QipNingt-kpJsCuxw6CS4rx6Z3Kfyqya8AL9TUMn3!2e10!3e12!6shhttps:%2F%2Fh5.googleusercontent.com%2Fp%2FAF1QipNingt-kpJsCuxw6CS4rx6Z3Kfyqya8AL9TUMn3%3Dw203-h152-k-no!7i4128!8i3096> [Accessed 10 Nov. 2017].

Figure 62-63: Google Streetview (2017). [image].

Figure 64: Bohringer, F. (2008). [image] Available at: https://commons.wikimedia.org/wiki/File:Port_Vell_Rambla_de_Mar_06.JPG [Accessed 10 Nov. 2017].

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Aerial Images: nearmap.com.au & maps.google.com.au

An aerial photograph of a coastal urban area. On the left, there is a large body of water with a sandy beach and a marina filled with numerous white boats. A road runs along the coast, separating the water from a dense residential area of houses with red-tiled roofs. To the right of the road, there is a large green field, possibly a sports ground or park. The overall scene depicts a well-developed coastal community.

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