

## 3. Proposed Development

### 3.1 Overview

The proposed development comprises a marine base/aquaculture facility for the processing of shellfish and associated car parking, and a future Restaurant (tourism facility) building.

The marine base will include a processing/packing building, nursery shed and a workshop, within three separate buildings. At a future date, the aquaculture facility will be complemented by a restaurant/tourism building where customers can experience the harvesting of fresh oysters and enjoy a meal with a view of Oyster Harbour.

The proposed development represents a significant improvement to the current arrangements and state of buildings and fixtures on the site, seeking to capitalise on the desirable water-front location and befitting of Emu Point as an existing tourist attractor in its own right.

*Refer to Appendix B – Architectural Plans*

### 3.2 Key Components and Staging of Development

The proposed development comprises two functions, the marine base/aquaculture facility for the processing of shellfish, and the future Restaurant (tourism facility) component. These two functions are proposed to be developed in three stages:

#### Stage One:

- Nursery
- Oyster and mussel shed
- Pump station
- Sea water intake and discharge
- Hardstand and stormwater infrastructure
- Access to the hardstand from the car park and from the berthing
- Berthing platform
- Fencing
- 20x car parking bays (within the current lease boundary)

#### Stage Two:

- Demolition of the existing brick building
- Processing/packing facility
- Amenities & office
- Workshop

#### Stage Three:

- Restaurant/Tourism facility
- 8x car parking bays and biofiltration basin

It is intended that the development of stage three will occur once stages one and two are completed and fully functional and in operation. In this regard a staged clearance of any conditions of planning approval, and a staged building permit are intended to be sought.

### 3.3 Land Use and Activities

#### 3.3.1 Aquaculture Facility

The aquaculture processing facility will be farming Native Rock Oysters, Akoya Oysters and mussels. Rock Oysters will be grown from larvae to spat size (the juvenile age of an oyster) within one of the proposed warehouses on the site. Once they have grown to 5mm they are large enough to be grown in open water and are filled into oyster baskets. They remain on water for the grow-out period and are graded for size every 6-8 weeks to find the fully grown oysters, which are then transferred to the packing facility.

Akoya Oysters and mussels both follow the same process. Juvenile spat are grown in a land-based hatchery and are then seeded onto ropes hanging in water to grow for 12 to 15 months. They are then stripped off the ropes and collected in 400kg bulk bins. These bins are stored for dispatch.

The key activities of the seafood facility have been summarised below:

- Rock Oysters spat is received at the facility to grow in the nursery. Akoya and mussels, ropes seeded with spat are received at Emu Point ready for transfer to grow.
- Rock oysters are filled into baskets prior to transfer. Baskets (Rock oysters) and ropes (Akoya, mussels) are loaded onto truck boats at the berthing platform and transferred to areas to grow.
- Rock Oysters are graded every 6 to 8 weeks throughout their lifecycle, with grading planned to occur on water for the first 18 months and on land for the final 12 months.
- Harvested mussels and oysters are filled into ~400kg bulk bins on-water and transferred to Emu Point.
- Product will be stored in cool rooms for up to two days before being dispatched from site. Live Rock Oysters are stored at 15oC, while Akoya and Mussels are stored at 4oC.

The processing facility is made up of two main operations, farming and processing.

#### Farming

The farming operation is proposed to operate 12 hours per day, six days a week. Some of the key activities will be the operations of barges, boats, nursery attendants and general farm management.

#### Processing/Packing

The processing/packing of the shellfish will occur on land at the proposed facility that is expected to operate up to 16 hours per day, 6 days a week during peak periods.

Production output of the site will vary throughout the year due to seasonal variation in growing cycles and market demand. At full scale, the operation is expected to produce 45 million Rock Oysters, 35 million Akoya Oysters and 1,700 tonnes of mussels per annum. Table 2 below shows estimated average daily production volume by month and by product:

**Table 2 – Production Capacity**

Month	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Rock Oyster ('000)	-	-	195	217	239	347	217	239	282	217	217	-
Akoya Oyster ('000)	146	146	146	146	146	146	146	146	146	146	146	146
Mussels (t)	9	-	-	-	9	9	9	9	9	9	9	9

#### 3.3.2 Restaurant/Tourism Facility

The future restaurant use and tourism facility will provide visitors to Emu Point the ability to enjoy a meal with a view of Oyster Harbour and experience how the shellfish are cultivated and harvested. This facility is targeting families, “foodies” and people valuing authentic experiences focused on aquaculture. There are currently few opportunities for experience-based tourism attractions offered in Western Australia that focus on showcasing the harvesting of oysters fresh from the ocean, and on aquaculture operations generally. The proposed facility will offer a unique interactive shellfish experience for visitors that can be hard to find elsewhere on the south coast of WA.

The future component has been designed to operate as a flexible space, to accommodate and showcase

local food and beverage, in a restaurant-like setting, to provide a land base for water-based tourism activities, such as visits to oyster leases, water-based tours into Oyster Harbour (and beyond), and to provide educational opportunities associated with the aquaculture operations.

### 3.4 Built Form and Design

The proposal has been designed by Roberts Gardiner Architects, and the suite of architectural documents provide 3D visuals of the proposed development. The proposal has been designed to respect the existing surrounding built form and is at a scale that complements the landscape. The proposed buildings reflect a contemporary interpretation of the old Western Australian timber jetty kiosks. Sustainability is a key design factor for the choice of materials and construction including the use of sustainable timber for the key architectural features of the tourism building.

An existing boat shed, not subject of this application or part of the development site, is currently the most prominent structure at in the Emu Point precinct, standing at approximately two and a half storeys (11-12m). The proposed bulk and scale of the oyster and mussel nursery/shed is the largest of the three warehouses at 9.7m in height, the packing/processing shed is proposed to be 9.64m and the workshop 9.4m in height. These building heights are indicative, with the final heights to be determined at detailed design building permit stage, however ultimately will complement the existing surrounding improvements and buildings in the precinct.

### 3.5 Landscaping

Landscaping has is proposed at the southern portion of the site that interfaces with the existing car park and boat ramps. A landscaping strip will frame the face of the buildings facing the public area with a biofiltration basin through the middle of the car park to break-up the vehicle circulation area. Another biofiltration basin has been provided along the western boundary of the site, between the workshop and oyster shed/nursery buildings. These will act as a pollution control technique using living material to capture and biologically degrade pollutants produced by the proposed development.

### 3.6 Vehicle and Pedestrian Movement

The restaurant (tourism) building and workshop buildings are the main structures visible to and defining the edge of the publicly accessible area of Emu Point, with the oyster nursery located beyond this. The restaurant (tourism) building will be fully accessible and visible to the public, and parking for visitors will be available. A gate is proposed to separate the rest of the facility for bio-security purposes, and will only be accessible to staff members.

Trucks delivering goods and transporting produce are expected to access the site, along with forklifts operating internal to the site. Due to seasonality of each harvested species, required transport frequency will vary depending each month. Table 3 below shows estimated daily truck departures based on a refrigerated truck with capacity of 20 bulk bins (~12 pallets).

**Table 3 – Truck Departures**

Month	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Truck Departures	2	1	2	2	4	4	4	4	4	3	3	2

During low seasons (June to October), it is estimated only two total truck departures will be required for daily production volumes (total truck movements of four per day, two arrival and two departure). Across peak months (November to May), up to four daily truck departures are anticipated (total truck movements of eight per day). Infrequent inbound supply receivals are also expected to provide the site with consumables and other operational equipment. One to two deliveries per week are expected. A daily delivery of food and beverages to the restaurant (tourism facility) is also anticipated. The proposed traffic volumes are not considered to result in a material impact on the road network, or unreasonably impact on the amenity of the existing residential area, noting that the Emu Point precinct is a long established marine facility that already involves daily truck/heavy vehicle movement, along with the previous aquaculture operations on the subject site.

The use of a forklift internal to the site will be required to service the proposed development and is limited to loading of bulk bins of shellfish from storage onto trucks and unloading one off or irregular delivery of equipment or seeded ropes.

### 3.7 Staffing, Visitors and Hours of Operation

The projected staffing to accommodate the proposed aquaculture facility (excluding the restaurant use and tourism facility) is outlined in Table 4 below. It is expected that approximately 56 staff will be onsite at any one time to operate the different components of the facility, farming, processing, engineering and administrative tasks, however this number may be exceeded from time to time, as may be required to suit operational requirements.

The development is projected to generate roles for approximately 88 staff (excluding the restaurant use and tourism facility), plus additional numbers to account for staff leave arrangements.

The farming component is proposed to operate for 12 hours a day, 6 days a week and the processing will operate for 16 hours per day, 6 days a week.

**Table 4 – Staffing Plan for Seafood Processing Facility**

Area	Role	Headcount / shift	Shift	Total Employees	Comment
<b>Farming</b>	Barges	4	2	8	2 x 2 barges
	Boats	15	2	30	2.5 crew x 10 boats
	Nursery	2	1	2	
	Farm Management	5	1	5	
	<b>Total Farm</b>	<b>26</b>		<b>45</b>	
<b>Processing</b>	Receival	2	2	4	2 operators to load and unload boats, feed hoppers
	Grading	10	2	20	1 inspection, 1 packing x 5 lines
	Premium Box Packing	4	1	4	1 inspection, 1 packing
	Despatch	1	1	1	1 forklift operator to load and unload trucks
	Supervision	1	2	2	1 supervisor per shift
	QA	1	1	1	
	Manager	1	1	1	
	<b>Total Processing</b>	<b>20</b>		<b>33</b>	
<b>Engineering</b>	<b>Eng/Maintenance</b>	<b>4</b>	<b>1</b>	<b>4</b>	
<b>Other</b>	Admin Staff	3	1	3	
	Research Officers	2	1	2	
	Executive	1	1	1	
<b>Total</b>	<b>6</b>	<b>6</b>	<b>6</b>		
<b>Total</b>		<b>56</b>		<b>88</b>	

## 4. Planning Discussion

### 4.1 Strategic Planning Framework

#### 4.1.1 Great Southern Tourism Strategy

The Great Southern Tourism Strategy (the Strategy) provides a coordinated approach that will ensure better planning for the development of future services and infrastructure and lead to more efficient long-term management of existing outdoor recreation activities, programs, events and infrastructure. The Strategy's target area extends 350km along the Southern Ocean from Nornalup (west) to Bremer Bay (east) north along the Wheatbelt to the regional hub of Katanning. This area covers 11 local governments, including the City of Albany and approximately 60,000 people.

The aims of the Strategy are:

- *Establish strong partnerships that will guide infrastructure development and management.*
- *Build and manage world-class trails and facilities.*
- *Promote the Great Southern as an adventure tourism destination.*
- *Build capacity and capability amongst outdoor recreation providers.*
- *Ensure all people have more opportunities to participate in outdoor recreation.*

This proposal builds on one of Albany's biggest assets, the ocean and associated waterbodies, and has been developed in order to take advantage of the benefits of the location and promote outdoors-based Great Southern tourism, fresh produce and provide a boost to the local economy.

#### 4.1.2 State Planning Policy 2.6 State Coastal Planning

State Planning Policy 2.6 – State Coastal Planning (SPP2.6) sets out a range of Policy Measures to ensure that development in coastal locations appropriately takes into account coastal risk and environmental considerations.

The objectives of the policy are listed below:

1. *ensure that development and the location of coastal facilities takes into account coastal processes, landform stability, coastal hazards, climate change and biophysical criteria;*
2. *ensure the identification of appropriate areas for the sustainable use of the coast for housing, tourism, recreation, ocean access, maritime industry, commercial and other activities;*
3. *provide for public coastal foreshore reserves and access to them on the coast; and*
4. *protect, conserve and enhance coastal zone values, particularly in areas of landscape, biodiversity and ecosystem integrity, indigenous and cultural significance.*

Owing to the location, the proposed development will have regard to the provisions and objectives of SPP2.6. A Coastal Hazard Assessment has been prepared for the site in support of the proposed development and is discussed below.

### 4.1.3 Coastal Hazard Risk Management and Adaptation Planning Guidelines

The Coastal Hazard Risk Management and Adaptation Planning Guidelines (CHRMAP) is designed to support the implementation of SPP 2.6 and assist the decision makers to:

- a) *Consider the risks arising from coastal hazards through evaluating their consequence and likelihood, and the vulnerability of specific assets;*
- b) *Identify risk management responses to those risks arising from coastal hazards; and*
- c) *Prioritising and implement the risk management responses.*

This guideline encourages and guides decision-makers and landholders to address these differing responsibilities through the preparation of CHRMAP plans. A Coastal Hazard Assessment has been prepared for the site in support of the proposed development and is discussed below.

### 4.1.4 State Planning Policy 3.7 Planning for Bushfire Prone Areas

The site is within an identified bushfire prone area. Accordingly, the proposal is to be assessed for compliance with State Planning Policy 3.7 Planning in Bushfire Prone Areas ('SPP 3.7') *"to preserve life and reduce the impact of bushfire on property and infrastructure"*. A Bushfire Management Plan and Bushfire Emergency Evacuation Plan have been prepared for the site in support of the proposed development and are discussed below.

### 4.1.5 Planning Bulletin 83/2013 Planning for Tourism

The Planning Bulletin 83/2013 Planning for Tourism (Bulletin 83) sets out the policy position of the WAPC and local government for subdivision, development and scheme amendment proposals for tourism purposes.

The proposed development is considered appropriate for the subject site as Emu Point can be classified as a Tourism Site, which has been defined by Bulletin 63 as:

*Sites which are zoned for tourism purposes or have an existing tourism function, and that have qualities and attributes which necessitates their retention for tourism purposes*

Bulletin 83 has the following policy objectives:

- *Highlight the importance of strategic planning for tourism.*
- *Recognise local and regional variations in tourism demand and development pressures; and their impacts on the viability of tourism development, in assessing and determining tourism proposals.*
- *Provide guidance to local government in planning for tourism development to be undertaken as part of the local planning strategy process.*
- *Provide guidance on the development of non-tourism uses on tourism sites.*
- *Provide for flexibility in the design and assessment of tourism and mixed use development.*

The wider Emu Point precinct provides a popular boat ramp and jetties, the beach itself, playgrounds and existing restaurant/café businesses, and is also less than a kilometre from Emu Point Holiday Park accommodation. The site has a great locational advantage and is already well known to locals and tourists alike.

The proposed development will help complement the existing tourism-based uses in the area and will provide a unique aquaculture based experience that is not currently available, entirely consistent with the aforementioned objectives.

### 4.1.6 City of Albany Local Planning Strategy 2019

The City's Local Planning Strategy (the Strategy) is a strategic document, which provides direction over the next 10-15 years with the aim to deliver a more compact city where residents have improved access to local shops, services, employment and transportation. The Strategy was designed to guide the City's progress towards its vision to be Western Australia's most sought after and unique regional city to work, live and visit.

This aquaculture project realises the ambitions of the City of Albany's 2019 Local Planning Strategy. Specific to aquaculture, the Strategy identifies the City of Albany region as the single largest producer of mussels and oysters in the State, and a premium producer of Rock Oysters and Blue Mussels for local and export consumption.

The Strategy recognises the prime conditions that exist at Oyster Harbour and Emu Point as an oyster hatchery location, and the opportunity for the City of Albany to capitalise on these conditions, and strengthen its leading position in this market.

This project at Emu Point delivers on these aquaculture ambitions, with Rock Oysters, Akoya and Mussels.

#### 4.1.7 Local Planning Policy Development in Flood Prone Areas

The Local Planning Policy Development in Flood Prone Areas provides requirements for development in areas subject to periodic inundation or flooding. The objective for the policy is as follows:

*To ensure development adjacent to water bodies and land prone to flooding is appropriately located and positioned at an established finished floor level to reduce the potential for property damage.*

The subject site is located adjacent to Oyster Harbour, and as a result the Coastal Hazard Assessment has been prepared for the site in support of the proposed development and is discussed below.

## 4.2 Land Use

There is no region planning scheme applicable to the site.

The site is reserved 'Parks and Recreation' under the City of Albany's Local Planning Scheme No. 1 (LPS1), with a 'Restricted Use' overlay specific to the site, restricting the land uses that can be undertaken at the site.

The objective of the 'Parks and Recreation' reserve is as follows:

*"Public Purposes which specifically provide for a range of public recreational facilities."*

The proposed aquaculture facility is entirely consistent with the 'Aquaculture' land use, which is included in the list of Restricted Uses for the site and is defined as per the *Fish Resource Management Act 1994* as follows:

*"means the keeping, breeding, hatching, culturing or harvesting of fish"*

The proposed development is considered to be consistent with the intent of the 'Parks and Recreation' objective as the development will be providing a much-needed upgrade to the existing site conditions, will reactivate the currently underutilised area, and will provide an additional tourism asset accessible to the public as part of the future stage three development. The proposal is entirely consistent with the marine operations already undertaken at Emu Point, and consistent with the previous use, being an oyster processing facility.

'Restaurant' is also one of the Restricted Uses for the site. This is considered an appropriate land use classification for the proposed future restaurant use and tourism facility, noting that this is effectively an ancillary activity associated with the primary aquaculture operations.

## 4.3 Public Art

The City's Local Planning Policy Public Art has been established to ensure private commercial, non-residential or mixed use developments valued over \$1.5 million are required to provide 1% of the estimated total project cost for the development of public artwork which reflect or enhance local cultural identity.

Noting that stages one and two of the proposed development are effectively industrial in nature, and not readily visible to the public, or accessible to the public, it is proposed that public art only be provided to the future stage three restaurant/tourism component, with the required 1% contribution to be based upon the construction cost of this stage only.

Roberts Gardiner Architects has had regard to potential public art opportunities associated with the future stage three restaurant/tourism component, and it is considered that this can be appropriately addressed as a condition of any planning approval.

## 4.4 Bushfire Management

Envision Bushfire Protection has prepared a Bushfire Management Plan (BMP) in accordance with State Planning Policy 3.7 (SPP 3.7) and the Guidelines for Planning in Bushfire Prone Areas V1.3 (the Guidelines) in order to identify appropriate mitigation measures and can be found at Appendix C.

*Refer to Appendix C – Bushfire Management Plan*

The BMP has identified that the restaurant use has been classified as ‘vulnerable’ as the use invites visitation by people who are unfamiliar with the locality. A Bushfire Emergency Evacuation Plan has therefore been prepared and is included at Appendix C.

**Table 5 – Current and Proposed BAL Ratings**

Built Environment	Current BAL	Proposed BAL
Processing/Amenities Building	BAL FZ	BAL-19/12.5
Bulk Fuel Store	NA	BAL-19
Tourism (restaurant)	NA	BAL-12.5
Oyster and Mussel Shed/Nursery	BAL FZ	BAL-FZ
Marine Workshop	Undefined	BAL-FZ

The site will be developed predominantly with hardstand, and buildings, and therefore it will not provide a continuity of bushfire fuels that may act as a wick leading to ignite the adjacent vegetated reserve, or spread from the adjacent reserve to the habitable buildings. The proposal therefore presents a low risk of ignition and spread of a bushfire from the site into the adjacent reserve.

## 4.5 Servicing and Site Suitability Considerations

### 4.5.1 Traffic Movement and Parking

Stantec has reviewed the proposal to ensure that it can accommodate the required truck movements to service the facility.

*Refer to Appendix F – Truck Turning Template*

With respect to car parking for the aquaculture facility, this is considered to best be described as ‘Industry – General’ with respect to the projected demand for car parking, given the processing activities that will be primarily undertaken. Table 6 of LPS1 would require the following parking for the use:

*Car parking - ‘1 per 100m<sup>2</sup> NLA’*

*Bicycle parking - ‘1 per 20 car bays’*

Based on a combined Net Lettable Area (NLA) for the workshop, shed and processing warehouse of approximately 2,355m<sup>2</sup> (i.e. stages one and two), approximately 24 car bays and two bicycle bays would be required.

A total of 20 car bays are proposed as part of the stage one and stage two development, plus a number of bicycle parking bays.

The restaurant/tourism building is intended to be developed as stage three of the proposal, along with eight additional car bays. Table 6 of LPS1 would require the following parking for the use:

*‘1 per 4 persons the facility designed to accommodate + 1 per employee’*

The building has been designed to accommodate approximately 120 people, plus employees, suggesting that approximately 30 car parking bays would be required, plus bays for employees.

It is noted that the proposal sits within the broader Emu Point precinct, where ample existing car parking is available, and which is effectively shared among the various users of Emu Point.

Separate to this application there is an opportunity for the City of Albany to establish a more efficient layout of the wider Emu Point car park, which is included as Appendix I, that would deliver additional public car parking in the precinct. Separate to this application, the City is encouraged to consider the additional car parking opportunities presented at Appendix I.

*Refer to Appendix I – Additional Parking Concept*

### 4.5.2 Waste Management

A waste management plan has been prepared by Encycle Consulting for the servicing of waste and recyclables by a private waste service provider from the proposed shellfish processing facility and future restaurant use.

*Refer to Appendix D – Waste Management Plan*



The development will have two bin stores to allow for the separate storage and collection of:

1. Seafood processing shell waste, general waste from bio-secure area, and general waste and recyclables from processing administration areas (bin store 1).
2. General waste and recyclables from the future restaurant/tourism facility, based on a fully licenced restaurant with commercial kitchen (bin store 2, to be constructed in Stage 3).

Bin store 1 will be located north of the processing facility and bin store 2 will be located north of the restaurant use. Bin store 2 will be enclosed and screened from view from the public, in accordance with the City's LPS1 section 4.8.8. As Bin store 1 is located along the northern boundary of the processing facility and is screened from view of the public, although it is not enclosed bins will have lids to mitigate vermin and flies. Hot and cold water services are to be made available for washing bins.

Tables 6 and 7 below refer to the size and number of bins required for both stores and the collection frequency.

**Table 6 – Bins Store 1 - Number and bin size of bins to be stored – Stage 1 & 2: Processing Facility and administration**

Waste Type	Bin Size (Litre)	Number of Bins	Collection Frequency
General waste	240	2	Twice weekly
Commingled recycling	240	1	Twice weekly
<b>Total</b>		<b>3</b>	

**Table 7 – Bin Store 2 - Number and bin size of bins to be stored – Stage 3: Restaurant Use**

Waste Type	Bin Size (Litre)	Number of Bins	Collection Frequency
General Waste	660	8	Twice weekly
Commingled recycling	240	2	Twice weekly
Cardboard	660	1	Twice weekly
Glass	240	5	Twice weekly
Soft plastic	240	1	As required
Used cooking oil	200 L tank	1	As required
Polystyrene	660	1	As required

A commercial waste service provider will service the general waste and recycling bins from both bin stores. On collection days rear lift vehicles for each waste and recycling stream will enter the site. The vehicle will drive in forward motion and park adjacent to the bin stores. The operatives will enter the bin stores to retrieve and service the bins. The empty bins will be returned to the bin stores. Access to the grease trap for the restaurant use will be located adjacent to the building and accessed at stage 3 of the development.

A staff member will be responsible for overseeing the waste management and will maintain the stores, keeping them clean and tidy. All staff will be made aware of the waste and recycling systems and how to use them.

### 4.5.3 Erosion and Flood Prone Area

A preliminary Coastal Hazard Assessment (CHA) has been prepared by M P Rogers & Associates in accordance with State Planning Policy 2.6 State Coastal Planning (SPP 2.6) and Coastal Hazard Risk Management and Adaptation Planning Guidelines (CHRMAG). The CHA has provided appropriate adaptation or management measures which may be implemented as part of the development.

*Refer to Appendix E – Coastal Hazard Assessment*

The CHA identifies that the beach section of the site is at risk of erosion in the long term, and therefore a coastal management strategy is necessary for the site. Table 8 below is provided by the CHA and outlines SPP 2.6's hierarchy of risk and mitigation options for coastal erosion and coastal inundation hazards, and the appropriateness of each strategy for the subject site.

Table 8 - Risk Adaptation & Mitigation Options for Coastal Erosion and Inundation

Risk Mitigation and Adaption Options	Appropriateness for site	
	Coastal Erosion	Coastal Inundation
<b>Avoid</b>	The option to avoid is not viable for Emu Point Boat Harbour. The development site exists at the harbour and is dependent on the harbour frontage.	The option to avoid is not viable for Emu Point Boat Harbour. The whole site sits below this level and it is impractical to locally fill and develop above this level.
<b>Planned or managed retreat</b>	Planned or managed retreat is not appropriate. The development needs to service Emu Point boat harbour, therefore relocating the development inland is not an option.	Planned or managed retreat is not appropriate. The development needs to service Emu Point Boat Harbour, therefore relocating the development inland is not an option.
<b>Accommodate</b>	This strategy is not appropriate. The development would not be economically viable to be designed to withstand the impacts of significant shoreline recession.	This strategy is most appropriate for the site. This would involve taking measures through the design, construction and management of the site to acknowledge the risk of flooding and inundation.
<b>Protect</b>	This option of coastal erosion mitigation is the most effective for the site. It is recommended that the existing seawall is inspected to confirm its condition and suitability to protect the site. Furthermore, it is recommended that the remainder of the shoreline is protected. The most appropriate form of this protection would be an extension to the existing seawall.	

The “accommodate” strategy is appropriate for coastal inundation as the nature of the proposed shellfish processing facility operations are coastally dependent and the proposal does not include any habitable buildings. This means the development can be designed and managed to accommodate short term inundation.

Noting the broader precinct is under the management of the City of Albany, as a publicly accessible tourism/recreation area, it is considered appropriate that the City appropriately consider its response to the risk of coastal erosion, as it is to be acknowledged that this development application applies to an existing developed area of Emu Point, and the construction/extension of a seawall is a broader public matter.

*Refer to Appendix E – Coastal Hazard Assessment*

#### 4.5.4 Urban/Stormwater Management

An Urban Water Management Plan has been prepared by Stantec and included at Appendix H. This outlines the stormwater management principles and design criteria, along with the bio-filter proposal, to demonstrate the appropriateness of the development in terms of managing stormwater adjacent Oyster Harbour.

*Refer to Appendix H – Urban Water Management Plan*

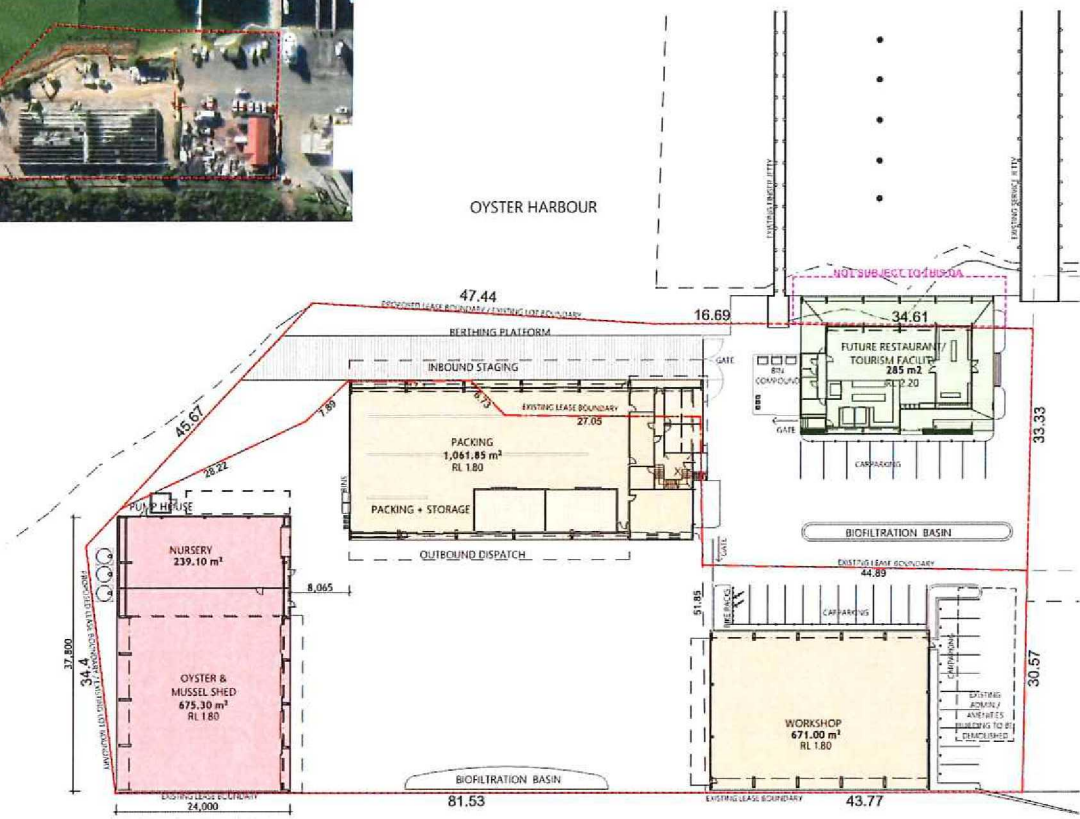
#### 4.5.5 Servicing

The power and sewer servicing concepts prepared by Stantec and included at Appendix G demonstrate that the proposed development can be appropriately provided with essential services.

*Refer to Appendix G – Servicing Concepts*



OYSTER HARBOUR



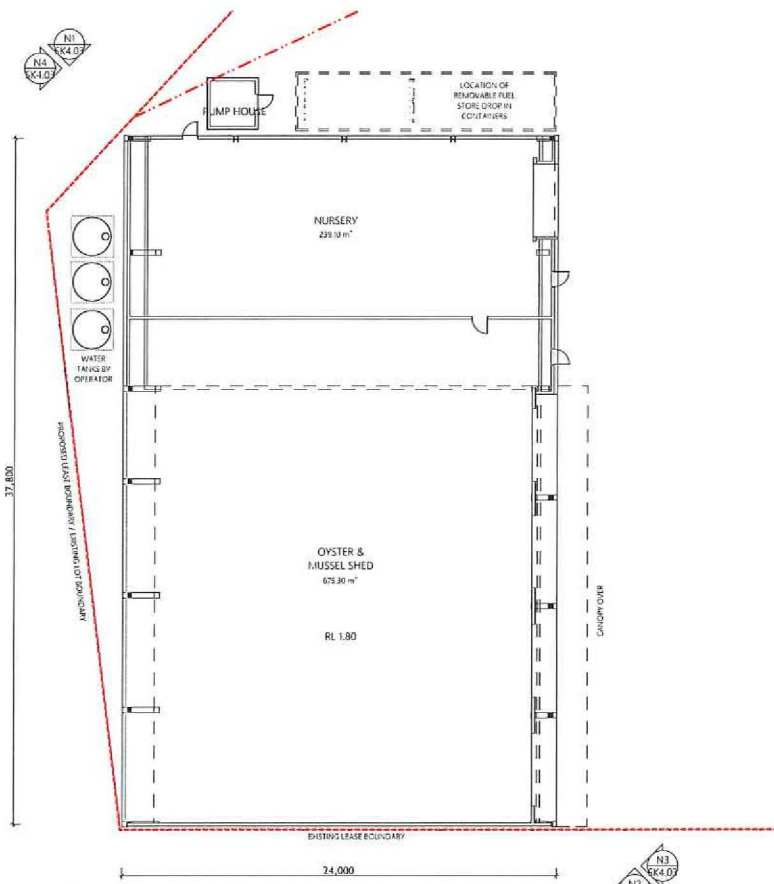
- STAGE 1**
  - Nursery
  - Oyster and mussel shed
  - Pump station
  - Sea water intake and discharge infrastructure
  - Hardstand and stormwater
  - Access to the hardstand from the car park and from the berthing
  - Berthing (and dredging)
  - Fencing
- STAGE 2**
  - Demolition of existing brick building
  - Packing facility
  - Amenities & office
  - Workshop
- STAGE 3**
  - RESTAURANT /TOURISM FACILITY BUILDING
  - PENDING FUTURE LEASE
  - Tourism facility
  - Improvements to car park and biofiltration basin outside tourism facility



ALBANY AQUACULTURE PROJECT  
EMU POINT, ALBANY

Roberts Gardner Architects SK4.01 SITE PLAN

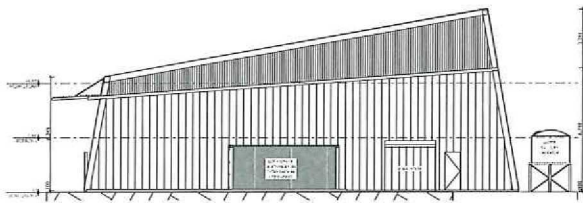
STAGE 1



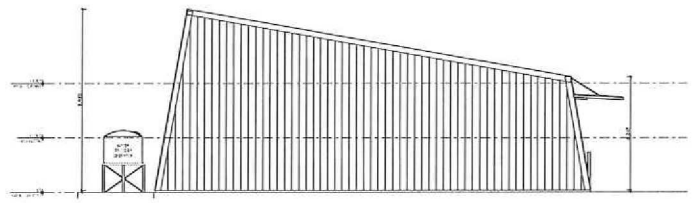
OYSTER & MUSSEL GROUND FLOOR PLAN  
1:200

ALBANY AQUACULTURE PROJECT  
EMU POINT, ALBANY

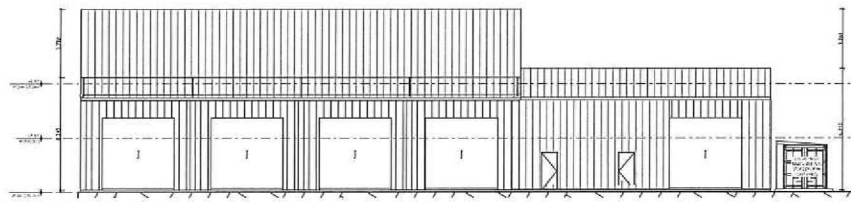
STAGE 1



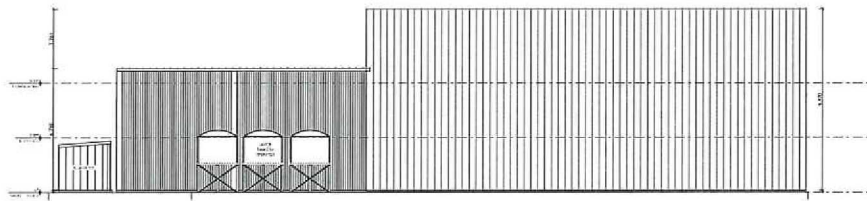
N1 EAST ELEVATION  
1:200



N2 WEST ELEVATION  
1:200



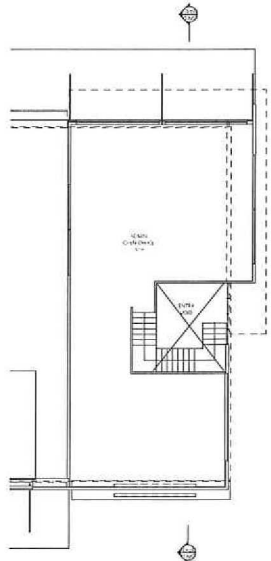
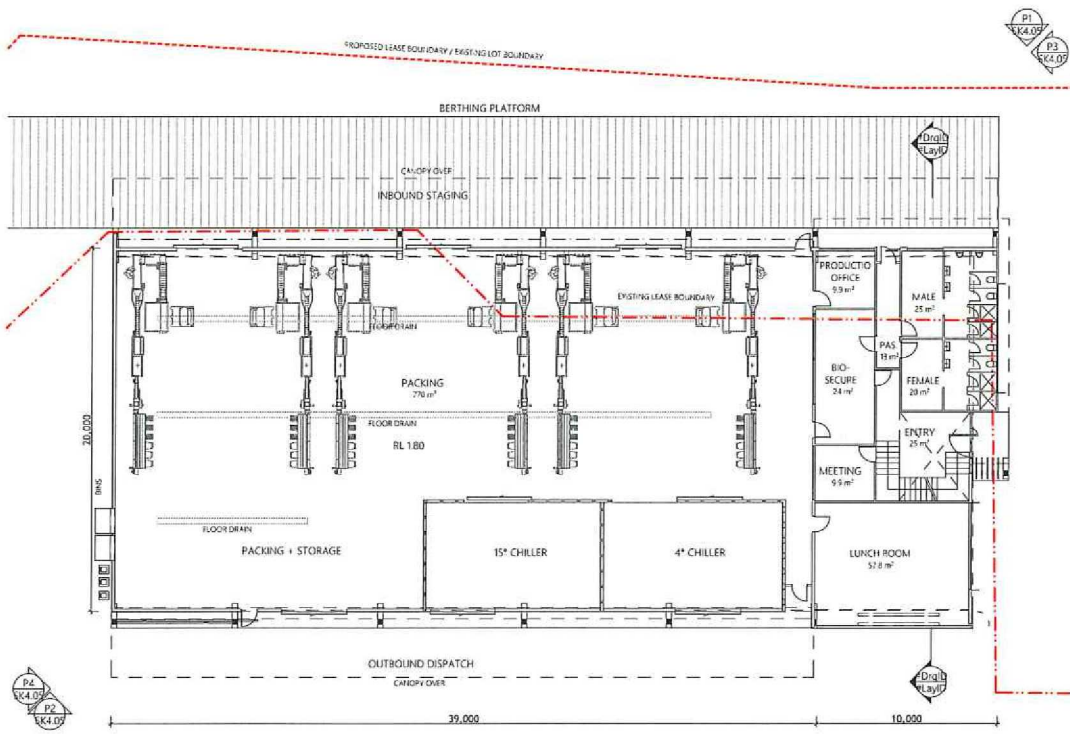
N3 SOUTH ELEVATION  
1:200



N4 NORTH ELEVATION  
1:200

ALBANY AQUACULTURE PROJECT  
EMU POINT, ALBANY

STAGE 2



FIRST FLOOR PLAN  
1:200

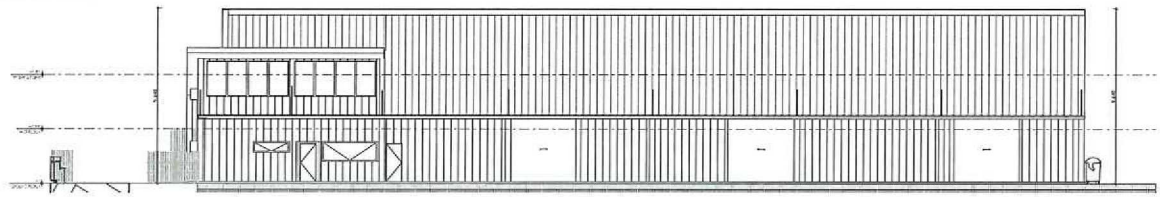
PACKING BUILDING GROUND FLOOR PLAN  
1:200

ALBANY AQUACULTURE PROJECT  
EMU POINT, ALBANY

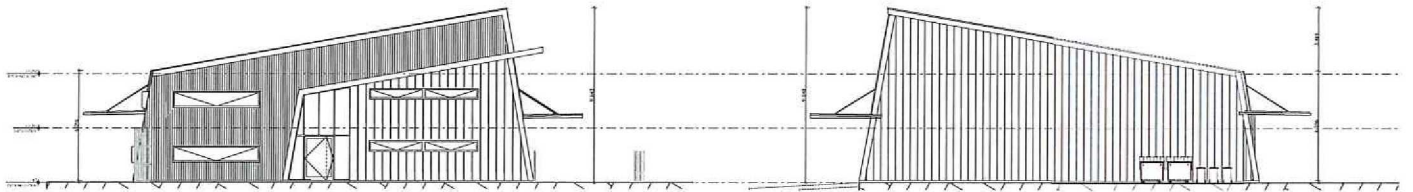
Roberts Gardiner  
**Architects**

SK4.04  
1: B  
OF PACKING PLAN

STAGE 2

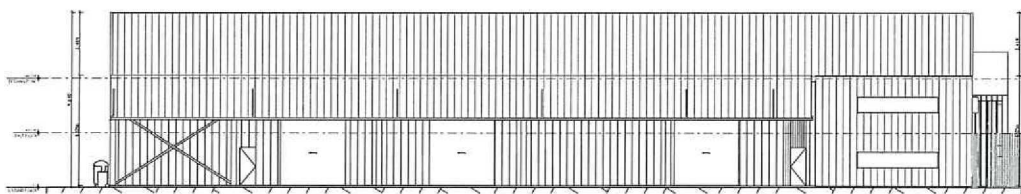


P1 EAST ELEVATION  
1:200



P3 SOUTH ELEVATION  
1:200

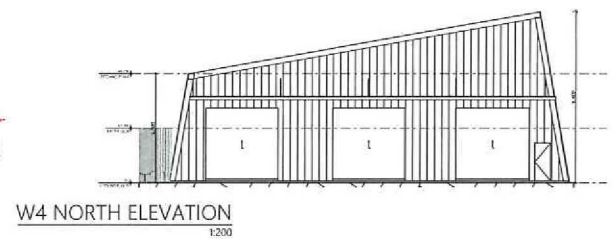
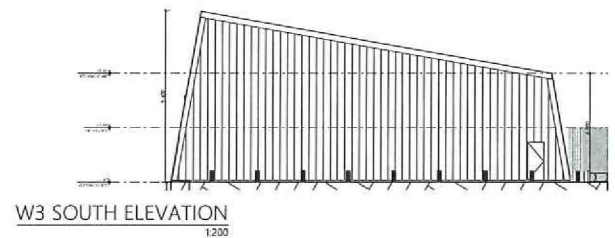
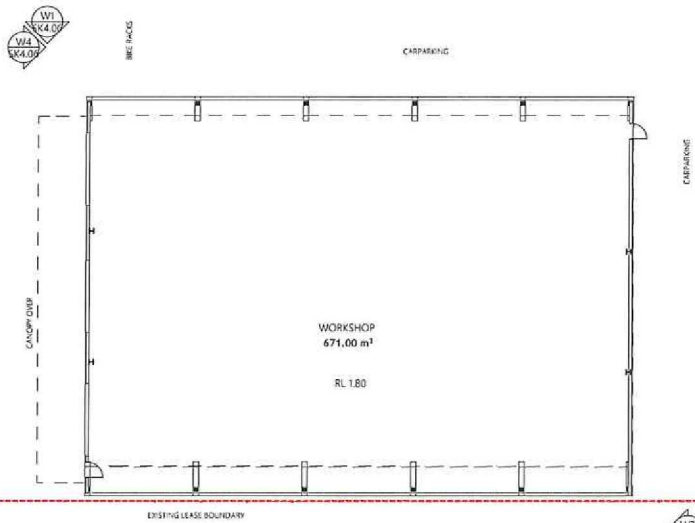
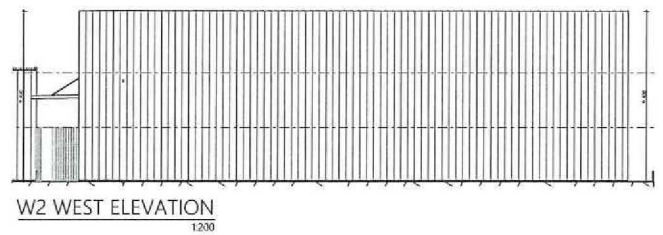
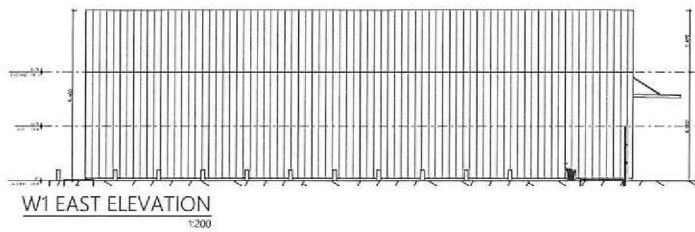
P4 NORTH ELEVATION  
1:200



P2 WEST ELEVATION  
1:200

ALBANY AQUACULTURE PROJECT  
EMU POINT, ALBANY

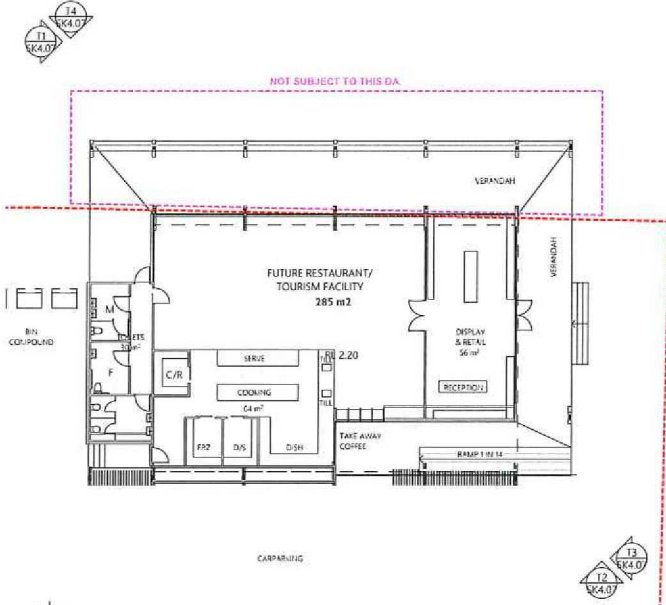
STAGE 2



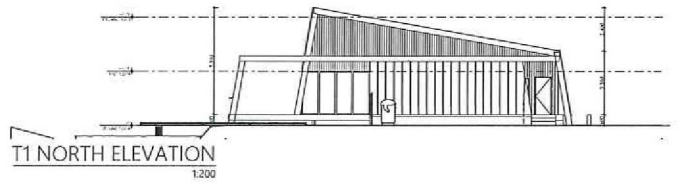
 WORKSHOP GROUND FLOOR PLAN  
1:200  
ALBANY AQUACULTURE PROJECT  
EMU POINT, ALBANY



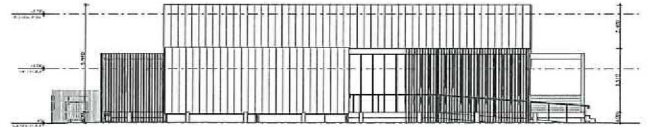
STAGE 3 TOURISM BUILDING  
PENDING FUTURE LEASE



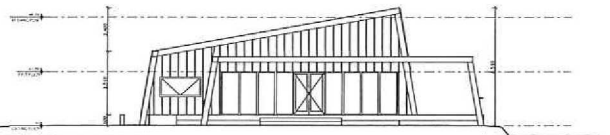
RESTAURANT/TOURIST FACILITY FLOOR PLAN  
1:200



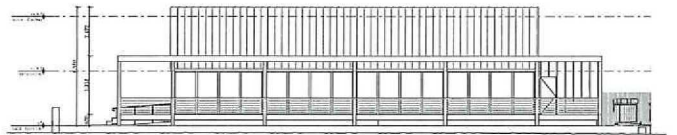
T1 NORTH ELEVATION  
1:200



T2 WEST ELEVATION  
1:200



T3 SOUTH ELEVATION  
1:200



T4 EAST ELEVATION  
1:200

ALBANY AQUACULTURE PROJECT  
EMU POINT, ALBANY