



## **Whitemark Wharf Shed Site Specific S43A Amendment**

Submission to the Flinders Council in support of a combined application under s33(1) and s43(A) of the Land Use Planning and Approvals Act 1993 to amend the Flinders Planning Scheme 1994 Planning and for a Planning Permit for Use and Redevelopment of the Whitemark Wharf Shed, 16 Esplande, for a range of tourist, retail and food services related uses.

April 2017

**COMMERCIAL PROJECT DELIVERY**

Project + Construction Management



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**NOTE**

References in this document to the provisions of the *Land Use Planning and Approvals Act 1993* are references to the former provisions of the Act as defined in Section 2 of Schedule 6 – Savings and transitional provisions of the Act.

# 1. Introduction

## 1.1 Purpose of the Report

Commercial Project Delivery (CPD) have been engaged on behalf of Quoin Holdings Pty Ltd to request an amendment to the *Flinders Planning Scheme 1994* ('Planning Scheme') pursuant to Section 43A of the *Land Use Planning and Approvals Act 1993* (the Act). The proposed amendment is to insert a site-specific provision as a new 'Note' at the end of the Table of Uses for the Port Zone which will essentially allow for use of the existing shed and its curtilage for the purposes of a multi-purpose commercial centre including:

- Café/Restaurant/Bar/conference
- Tourism operator's information desk
- Distillery;
- Provedore;
- Office Space;
- Conference Rooms; and

The application also includes the use and development proposal for the Wharf Shed to convert it into the multi-tenancy commercial space including a café and office.

The proponents have secured a 10 plus 10 year lease with Tasmanian Ports Corporation over a portion of the site as shown in Figure 1 in section 1.3 of this report.

This report forms the basis of the application and has been prepared considering the provisions of the Interim Planning Scheme, the requirements under Section 32 and 43A of the Act and other relevant strategic documents.

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## 1.2 Statutory References

### 1.2.1 Name of Planning Instrument

The subject of the proposed amendment is the *Flinders Planning Scheme 1994* (hence forth referred to as the planning scheme).

### 1.2.2 **Name of Planning Authority**

The Planning Authority is the **Flinders Council**

### 1.3 **Description of Proposed Amendment**

It is proposed to amend the planning scheme ordinance by inserting a new 'Note (b)' immediately following 'Note (a)' located at the end of the Table of Uses at Clause 5.7.5 as follows:

*'Notwithstanding the provisions of Clause 5.7.5, use and development of land at 16 Esplanade, Whitemark, (Certificate of Title Volume 129006, Folio 1), to the extent shown in Figure 1 on the planning scheme maps for the following purposes shall be discretionary Use or Development within the zone:*

- *Restaurant;*
- *Community Building;*
- *Local Shop; and*

This will have the effect of allowing for the redevelopment of the vacant shed on the subject site into a new and exciting retail and production 'hub' in Whitemark. The redeveloped wharf shed will create a unique, quality experience offering Flinders Island food and drink, conference and activities that will assist with the promotion of Flinders Island as a tourist destination.

It is considered important that each of the proposed use classes be afforded discretionary use status rather than rely on Clause 3.7.1 Single Use or Development allowing integral and subservient development to be treated under a single use class to ensure there is clear direction regarding allowance of each proposed use class.

An additional enabling ordinance amendment is proposed to the Zone Intent for the Port Zone. It is proposed to add an additional sentence at the end of the 5.7.1 Zone Intent as follows:

*The areas under this zone are intended for development of uses directly related to the operation of Whitemark or Lady Barron as ports. Appropriate use or development include storage, warehousing, marine-related office and sales outlets, marine maintenance and repair facilities and holding yards. Use or development for tourism/hospitality related purposes is supported in association with Whitemark Wharf.*



**Figure 2 -Planning Scheme Amendment Area (to be inserted into Planning Scheme maps). N.B the conditions of the lease with TasPorts requires public access to wharf to be maintained**

#### 1.4 Description of Proposed Development

It is proposed to undertake internal and external refurbishments to the existing shed at 16 Esplanade Whitemark, to develop it into a tourism 'hub' providing for the following range of uses:

- Distillery;
- Restaurant/bar;
- Provedore;
- Offices; and
- Function area.

The building will also have associated amenities, storage and loading areas contained within it.

A 20 space car park is to be provided on the northern side of the existing entrance partly within an existing cleared, levelled, informal car parking area.

To the north of this will be the on-site wastewater system required to service the facility. The on-site wastewater system. The Wastewater system has been modelled on a maximum of 118 equivalent persons on site at any one time, being a maximum restaurant/function capacity of 90 persons, offices of 20 people and staff of 8 persons.

Details of the proposed building works are summarised as follows:

- Demolish existing internal structures and remove external doors;
- Ground floor to comprise distillery, loading bay, storage, amenities, commercial kitchen, café, provedore and bar. Total floor area 220m<sup>2</sup>
- Mezzanine floor to comprise four office spaces, storage areas and conference/function room. Total floor area 126m<sup>2</sup>.
- Ground level decking constructed on the western elevation for potential outdoor dining.
- Paved area along the northern and part of the eastern elevation for potential outdoor dining;
- Reroofing the building to increase overall height by 200mm to 7.35 metres;
- Reclad building in zinc or galvanised customer orb;
- Partially cladding building in rough sawn timber battens to break up the bulk and provide aesthetic interest.
- Install new glazed entry bi-fold doors on northern elevation;
- Install new windows to upper floor of northern elevation;
- Install new glazing and glazed doors along both the eastern and western elevation;
- Install loading bay door on eastern elevation with access road along the eastern side of the building;
- Signage panels on the eastern [700mm(h) x 3319mm(w)] and northern [700mm (h) x 2460mm (w)] elevations.
- Install three rainwater tanks along the southern end of the building;
- Install grease trap, WTP, balance tank and septic tank along southern end of the building in accordance with the STRATA wastewater and stormwater management reports.

It is proposed to remove/trim existing shrubs located between the building and the wharf to allow for views from the building to the coast.

Public access to the wharf will be maintained and it is clear from the proposal plans that the road linkage to the port will remain open and useable. It is a condition of the lease agreement that this public access be retained.

Tasmanian Ports Corporation own the land and operate the wharf and are unlikely to ever grant land owner approval for any development that interferes with this access point whilst the wharf is still operational.

A clause in the lease agreement regarding access reads as follows:

*'You agree that the Lessor may grant easements or other rights over the Lessor's Land or affecting the Premises to a person on any terms and for any purpose unless the grant of that easement or right would substantially or seriously interfere with Your use and enjoyment of the Premises.*

*You agree that the Lessor may:*

- (a) control the use of the Lessor's Land (other than the Premises); and*

*(b) permit or carry out such activities on the Lessor's Land as it sees fit provided that such use or activity does not unreasonably interfere with Your access to or enjoyment of the Premises.*

*You may use the Common Areas provided that You comply with any rules or restrictions imposed by the Lessor, provided that these rules and restrictions shall not unreasonably interfere with Your access to and enjoyment of the Premises.*

*Your use of the Common Areas must not obstruct the use by any other party of any part of the Common Areas.'*

Detailed proposal plans are included as **Appendix A**.

## 2. Subject Site

### 2.1 The Subject Land

The subject site is located on the western side of the Whitemark township, running between the coast and Esplanade. It is an irregular shaped allotment and includes the Whitemark wharf within it. The site is developed with the wharf facility, informal car parking area, the subject shed and some recreational facilities. Vehicular access to the site is from the Esplanade, with vehicular access through to the wharf enabled. The extent of the overall site subject to this amendment and development application is shown in Figure 1 above whilst the extent of the site in terms of title reference is shown in Figure 2 below.



**Figure 2 - Site Plan**



**Figure 3 – Aerial**

The land is zoned Port and subject to the Shoreline Waterbody overlay as shown in Figures 4 and 5. The land to the east comprises the Whitemark township and the site is within walking distance (300m) from the central area of Whitemark. The lease area has an extensive frontage to the coast and as such is afforded excellent views of Parry's Bay. The land immediately to the north and south comprises Whitemark Beach and its foreshore and is zoned Environmental Management Recreation.



Figure 4 – Zoning Plan



Figure 5 – Special Area Overlays

## 2.2 Title Information

The proposed amendment and development application relates to the following titles:

Address	Owner(s)	Title Reference	Existing Land Area
16 Esplanade, Whitemark	Tasmanian Ports Corporation Pty Ltd	129006/1	3.617ha

Copies of relevant certificate of titles are contained at **Appendix B**. Owner's consent as required by Section 33(2A) of the Act is attached at **Appendix C**.

## 2.3 Servicing

The site is connected to reticulated water and the shed is connected to electricity.

There is no stormwater or wastewater infrastructure on site.

**2.4 Photos**



**Figure 6 - View of wharf shed (northern end)**



**Figure 7 – view of informal parking area**



**Figure 8 – View of shed from access onto Esplanade**



**Figure 9 View of shed interior**

### 3. Background to the Proposed Amendment

The proponents of this development are Flinders Island locals who have a passion for the Island and its people. They are keen to see the Island realise its tourism potential which will assist in securing its long-term economic future. The proponent's currently operate a café/provedore located at 3 Walker Street, Whitemark. Their business has outgrown the existing premises and they are keen to relocate the wharf shed alongside other businesses and producers to create a multi-purpose hub for Flinders Island that will provide a key tourist attraction and allow producers a market for their products.

The shed at the Whitemark Wharf has been vacant for 4 years (and prior to that it was just leased for storage purposes) and its waterfront location makes it an ideal location to provide for a new landmark destination in Whitemark offering a combination of food and beverage experiences. It is submitted that this proposal is an excellent example of adaptive reuse of a former port related building.

Given many of the uses proposed for the Shed are prohibited in the Port Zone, it is submitted that a site-specific amendment that retains the underlying zoning but allows for the proposed mix of uses within the shed, protects the TasPorts asset into the future whilst allowing a vacant site to be redeveloped into an exciting new offering for Flinders Island.

It would be inappropriate to insert the required uses into the Port Zone Table of Uses as this would have the effect of allowing all areas of Port Zoned land across the municipality to be developed for non-port related uses.

#### 3.1 Consideration of use of the site as a Wharf

The Port of Lady Barron has always been the main freight port for Flinders Island. Whitemark Wharf was constructed as a secondary facility. The wharf facility has principally been a public facility for more than 10 years, with the wharf available for the berthing of pleasure vessels and fishing vessels and occasional freight movements and remains in a suitable condition for that type of use. The proposed site specific amendment and redevelopment of the wharf shed will not preclude ongoing use of the Wharf for pleasure and fishing vessels. In fact, the proponents would welcome increased usage of the Wharf facility and the proposal to create a tourist destination at the site may assist in that objective.

As stated in section 1.4 of this report, public access to the wharf remains at the behest of the landowner, the Tasmanian Ports Corporation. The amendment itself does not interfere with public access to the wharf.

#### 3.2 Consideration of Tourism and Economic benefits to Whitemark and Flinders Island

The Destination Action Plans (DAP) are a Tasmanian State Government supported initiative that directly links to the Tasmanian Visitor Economy Strategy 2015-2020 (T21): A core strategy of the Flinders Island DAP is to recognise that visitors to the region are primarily attracted to destinations and experiences. Therefore, the development of Marketing, supporting sustainable Indigenous Tourism and improving visitor access to services, experiences and produce to meet demand were the top three priorities outlined by the DAP participants, who were from a wide cross section of the Flinders Island community. The DAP for Flinders Island identifies priority strategies and actions which if implemented

over three years will enhance competitiveness of Flinders Island as a primary visitor destination of the region. These strategies will also facilitate regional collaboration and cooperation. The Wharf shed Development in Whitemark is specifically designed to meet the top three priorities in the DAP as well as providing new job and business opportunities on island, driving economic benefits to the Flinders Island community.

### **3.3 Potential impact to existing businesses in Whitemark**

Whilst competition is not a valid planning consideration, given the proposal is seeking to enable commercial/hospitality style development outside of existing Commercial Zoned land in Whitemark (although it is noted it the site is situated adjacent to the Commercial Zone), the impacts of the amendment to existing Whitemark businesses need to be addressed.

It is considered that the proposed range of uses to be incorporated into the Wharf Shed redevelopment will complement and enhance rather than detract from the businesses in the commercial centre of Whitemark. The location of the range of differing uses that will attract visitors to the Island under the one roof and in a coastal location with views out to Bass Strait is considered such a unique offering in the context of Whitemark and Flinders Island that it does not pose a competitive threat to existing businesses. Several the uses proposed within the Wharf Shed do not exist in Whitemark currently and therefore there is clearly no issue of competition with respect to these uses such as the proposed distillery and tourism operator's desks. The restaurant/commercial kitchen aspect will potentially compete with existing cafes within Whitemark, although it is noted that there are no similar offerings within the township currently. Whilst the pub also offers bar/restaurant facilities, it is aimed at a different market to the proposed development. It is submitted that rather than decrease revenue to other similar businesses in Whitemark, the proposed development is likely to increase revenue due to the flow on effect of additional tourists visiting the town.

### **3.4 Consideration of Aboriginal Heritage**

The subject land is within an existing developed port and is already developed with shed and port infrastructure including access. The proposed amendment does not constitute a rezoning of land from a non-urban to an urban purpose. For this reason, it is considered that any Aboriginal Heritage Values that the site may have had would already be degraded.

### **3.5 Consideration of Natural and Landscape Values**

The subject site is largely cleared of existing vegetation, however some minor clearing/trimming of existing coastal shrub vegetation will be required as annotated on the plans (Appendix A).

### **3.6 Consideration of Tasmanian Planning Scheme Provisions**

Given the recent declaration of the Tasmanian Planning Provisions by the Minister for Planning, it is prudent to consider how the proposed amendment can be incorporated into the new Statewide Planning Scheme for Flinders Island and what impacts it may have.

Assuming a like for like zoning translation, it is likely that the subject site will be zoned Port and Marine. Table 1 below shows outlines the proposed uses, their status in the Port zone in the existing

Planning Scheme and their status in the Port and Marine Zone under the Tasmanian Planning Provisions. It is evident that whilst two currently prohibited use classes will become discretionary, conversely, two use classes that are currently permissible will become prohibited. It is therefore submitted that the proposed amendment will not have a significant impact on the adoption of the TPS for this site.

USE	Current FI Planning Scheme definition and Status in Port Zone	Tasmanian Statewide Planning Provisions Definition and Status in Port and Marine Zone
Tourism Operator's Information Desk	Tourist Operation - Prohibited	Tourist Operation - Discretionary
Café/restaurant incl Commercial Kitchen	Restaurant - Prohibited	Food Services - Discretionary
Producer Hub	Not readily defined but would fall as ancillary to one of the other uses	Not readily defined but would fall as ancillary to one of the other uses
Offices	Office - Permitted	Business and Professional Services – Prohibited
Conference Room	Community Building - Prohibited	Community Meeting and Entertainment – Prohibited
Provedore	Local Shop (if floor area does not exceed 250m <sup>2</sup> ) – Prohibited	General Retail and Hire - Prohibited
Distillery	Light Industry or Rural Industry (if using local produce) – Discretionary	Resource Processing - Prohibited

**Table 1: Flinders Planning Scheme comparison with Tasmanian Planning Scheme uses**

## 4. Planning Scheme Amendment Assessment

### 4.1 Requirements of the Act

Pursuant to Section 32(1) of the Act, a draft amendment of a planning scheme, and an amendment of a planning scheme, in the opinion of the relevant decision-maker within the meaning of section 20(2A)–

(a).....

(b).....

(c).....

(d).....

*(e) must, as far as practicable, avoid the potential for land use conflicts with use and development permissible under the planning scheme applying to the adjacent area; and*

*(ea) must not conflict with the requirements of section 30O; and*

*(f) must have regard to the impact that the use and development permissible under the amendment will have on the use and development of the region as an entity in environmental, economic and social terms.*

*(2) The provisions of section 20(2), (3), (4), (5), (6), (7), (8) and (9) apply to the amendment of a planning scheme in the same manner as they apply to planning schemes.*

Section 30O of the Act requires that an amendment to an interim planning scheme is as far as practicable, consistent with the regional land use strategy. Section 30O also sets a number of requirements relating to the insertion of a local provision and its relationship to a common provision.

In addition to these requirements, Section 20(1) is also relevant as a planning scheme amendment is also the making of a planning scheme:

*(1) A relevant decision-maker, in preparing, accepting, declaring or making a relevant scheme, or giving approval in relation to the making or approving of a relevant scheme, must, in the opinion of the relevant decision-maker–*

*(a) seek to further the objectives set out in Schedule 1 within the area covered by the scheme;*  
and

*(b) prepare the scheme in accordance with State Policies made under section 11 of the State Policies and Projects Act 1993; and*

(c)....

(d) have regard to the strategic plan of a council referred to in Division 2 of Part 7 of the Local Government Act 1993 as adopted by the council at the time the planning scheme is prepared; and

(e) have regard to the safety requirements set out in the standards prescribed under the Gas Pipelines Act 2000.

The following sections address the matters that are covered by the above mentioned legislative requirements.

## **4.2 Flinders Council Strategic Plan**

The Flinders Council Strategic Plan (September 2015) is centred on 5 key strategic focus areas being:

1. Population Growth;
2. Infrastructure and Services;
3. Access and Connectivity;
4. Strategic, Efficient and Effective Organisation;
5. Liveability;

It is submitted that the proposed amendment aligns with, and furthers 4 of these Strategic Focus Areas. A discussion of how the proposal aligns with and furthers relevant Strategic Focus Areas is provided below:

### **Strategic Focus Area 1: Population Growth**

*Focussing on strategies, projects and policy initiatives that support the community, economic development, innovation and investment attraction.*

#### **Response:**

This Strategic Focus Area is centred around a desire for population growth to ensure the Island remains sustainable and viable into the future. There is a clear focus on supporting innovation and enterprise on the Island. The proposed planning scheme amendment to facilitate the development of a vacant, existing shed at Whitemark Wharf is exactly the type of innovative and entrepreneurial investment that should be supported by the Flinders Council. The amendment itself has been drafted to clearly limit additional development on the site to the existing Wharf Shed and its curtilage, thereby preserving the balance of the Wharf site for use as an operational port and limiting the potential for development along the coast.

The Strategic Focus area recognises the benefits of value adding, particularly to primary production commodities and identifies the role the Planning Scheme shall play in realising the potential of the Island to value add. The proponents of this Planning Scheme amendment and consequent development has shown a clear passion for value adding to the Island's many and varied products. Their existing café and provedore and online presence through 'A Taste of Flinders' showcases the many and varied products the island produces. The Wharf Shed redevelopment will build on the

existing business and enable it to grow, further promoting and value-adding to Island produce. The inclusion of a distillery within the Shed redevelopment is an excellent example of this.

The proposed amendment and development will provide a new attraction on the Island and diversify the food and beverage offering to residents and tourists alike. This aligns with the recognised need to continue to attract 'regional returners' in the 25-44 age cohort to help stabilise population decline and ensure economic viability of the Island. The Wharf Shed redevelopment (and the Planning Scheme amendment that is needed to underpin it) is exactly the type of development that will entice this age group back onto the Island and provide a diversity of lifestyle attractions.

The proponents, through the creation of the 'A Taste of Flinders' brand have demonstrated a keenness to support the Island's producers and offer them an avenue for marketing of their product locally that does not need to be impeded by the cost of exporting products to mainland Australia or Tasmania. This ties directly in with several the Strategies to achieve policy outcomes as follows:

- Increase the 'working age' population;
- Value-add to local commodities;
- Foster and support entrepreneurial activity; and
- A Planning Scheme that facilitates all the of the above.

The last strategy is at the heart of this amendment request. The Planning Scheme should be a flexible document that is able to adopt in order to support development that clearly meets and will assist in furthering the direction of Council's Strategic Plan.

### **Strategic Focus Area 2: Infrastructure and Services**

*'An Islands' specific approach to planning and delivery to ensure community and environmental values are maintained.'*

#### **Response:**

The Strategy identifies that investment in social and community infrastructure that supports social gatherings, improved accessibility and increased liveability are a priority for Council and underpin island life. Whilst this statement is made in reference to Council facilities, there is no reason that support in terms of granting appropriate 'approvals' cannot extend to private sector development that provides outcomes that achieve the same purpose. The wharf shed hub will create a social gathering space that will not only serve visitors to the Island but locals alike. The hub will have the capacity to cater for large events and showcase the Islands produce and wares. Equally it will provide for a day to day space to encourage community interaction whether it be through visiting the café for a coffee, utilising the commercial kitchen facilities to package and seal produce or visiting the bar for a drink.

### **Strategic Focus Area 3: Access and Connectivity**

*Work with service providers and other relevant stakeholders to improve security, reliability and cost effectiveness.'*

#### **Response:**

This strategic direction is centred around providing sea, air and broadband/mobile service to the community.

The development of the wharf shed will not impede on operation of the wharf itself and in fact it is likely that it will increase usage of the wharf as locals and tourists will be able to visit the site via pleasure boat craft.

### **Strategic Focus Area 5: Liveability**

*'Protect, improved and promote the safety creativity, health and wellbeing of the Islands' communities.'*

Council has identified a need and desire to grow the Island's population at a rate that will not directly impact lifestyle but will enable greater sustainability for the island. The Strategy recognises the importance of creating a liveable community and it is submitted that the addition of the wharf shed hub will promote social cohesiveness and economic development which will improve liveability.

The strategy recognises that land use planning should protect the coastal environment while supporting opportunities for coastal development. The proposed redevelopment of an existing shed directly supports this objective. It allows the creation of a new attraction on the coast without further disturbing the natural environment. Adaption and reuse of an existing underutilised asset that will draw people to the coast without impact on the environment is something that the Planning Scheme, through this amendment can allow for.

### **4.3 Flinders Island Destination Action Plan 2016-2019**

The Flinders Island Destination Action Plan 2016-2019 was launched to the public on the 27<sup>th</sup> March 2017. Whilst not a planning strategy and therefore has no statutory weight, given it is a 3-year plan for tourism management, marketing and development on Flinders Island, and the proposed amendment and development is aimed at attracting more tourists to the Island, it is worth considering.

The Key Objectives of the Destination Action Plan are:

- To increase visitor numbers;
- To increase visitor length of stay;
- To increase visitor expenditure;
- To increase visitor dispersal (geographically and seasonally); and
- To increase visitor satisfaction.

The Destination Action Plan includes a 'Vision for the Future' which lists the following items that are pertinent to this proposal:

- Better facilities;
- Significant increased visitors
- Renowned food destination – chefs for hire
- Fabulous visitor centre
- Food availability, better access to it – world class product

Opportunities identified in the Destination Action Plan include:

- Food hub – island produce, kitchen facilities and shop;

- Visitor welcome person and planning;
- Technology hub

Priority 3 of the DAP is *'improve visitor access to services, experiences and produce and to meet demand.'* Embedded within the actions (all to occur within 1-2 years) is:

- Support the development of an island hub that offers:
  - Access to island produce and producers
  - Kitchen facilities and cooking school;
  - A retail shop providing food and beverage hampers and goods;
  - Chefs for hire
  - Visitor go-to-point.

**Comment:**

It is evident that the Flinders Island Destination Action Plan clearly identifies the need for a destination hub such as proposed by this combined planning scheme amendment and development application. The ability of the Island to deliver on the actions identified in the DAP will also influence the achievement of relevant outcomes of the Flinders Council Strategic Plan being population, visitor and economic growth.

#### **4.4 Northern Regional Land Use Strategy**

On 27 October 2011, the Northern Tasmania Regional Land Use Strategy (Regional Land Use Strategy) was declared by the Minister for Planning pursuant to Section 30C of the Act. In October 2013, an amended Regional Land Use Strategy was declared.

The Regional Land Use Strategy provides overall direction on future use and development for the Northern Region. As required through Section 32(1)(ea) the proposed amendment must as far as practicable be consistent with the Regional Land Use Strategy.

##### **Part B – Region Vision and Strategic Directions**

Section 2.1 of outlines the regional planning vision for Northern Tasmania as follows:

*To create a region that through innovation and strong partnerships makes intelligent use of its natural advantages to create a positive, affordable and competitive future for all our communities.*

*'By joining together, Northern Tasmanian councils and communities can create platforms for sustainable economic prosperity while maintaining our beautiful and unique environmental assets.*

*We will enhance the region's attractiveness as a place to live, invest and visit; and seek to enhance the quality of life for all both now and into the future.'*

**Comment:**

The proposed amendment which effectively allows an adaptive reuse of an existing building which is no longer required for its intended purpose demonstrates innovation and sustainability. The proposed reuse of the building for the purposes of what will be a key visitor destination for Flinders Island as well as providing a social hub for locals will assist in promoting the Island as a key tourist destination

which will improve its economic prosperity. The location of the proposed development in a key foreshore location that does not result in any environmental impacts demonstrates that the project is an intelligent use of natural advantages and the range of uses the amendment allows will enable future tenants to highlight the Island's assets.

The proposed amendment and development is in accordance with Strategic Direction 1 which is to:

*'Capitalise upon the region's sources of competitiveness by identifying future sustainable competitive advantage by achieving the following strategy objectives:*

- a. Facilitate innovation and capitalise on the co-location of industry and strengthening clusters of economic and employment activity to add value, diversifying the economy and generating jobs.*
- b. Develop the preconditions for business competitiveness by flexibility through merits-based planning and development assessment processes by:
 
  - i. flexibly considering the location of economic development in a changing economic environment;*
  - ii. focussing on community-specific outcomes and environmental impacts rather than a standards-based approach.**
- c. Facilitate the needs of small business including working from home and other flexible/non-traditional locations.*
- d. Support high value adding and downstream activities to natural resources including small scale manufacturing and processing enterprises. Pg 21*

**Comment:**

The amendment to allow the redevelopment of the wharf shed into a hub of activity with a range of food/hospitality/processing and visitor experiences. The co-location of all these uses into the one building clearly provides a diversification in revenue stream for the site and will generate jobs. The amendment allows an existing Port Zoned site to be used flexibly in accordance with the strategic direction. It is entrepreneurial developments such as the one proposed which create growth both in terms of population and visitor numbers to places like Flinders Island. The NRLUS clearly supports planning schemes that promote innovation and economic development in a sustainable manner.

The proposed amendment and development is also in accordance with Strategy Direction 2 which is to:

*'Adopt an integrated and coordinated approach to all of government infrastructure, transport and land use planning by achieving the following strategy objectives....*

- c. Encourage sustainable modes of transport by:
 
  - i. protecting the rail and road network from encroachment of sensitive uses;*
  - ii. ensuring traffic impacts and car parking are adequately considered;*
  - iii. encouraging greater cycling, walking and public transport use.'* Pg 22.*

**Comment:**

The location of the site on the western edge of Whitemark and within walking distance of all areas of Whitemark, promotes walking and cycling as modes of transport within the settlement. The proposed amendment will not encroach on the use of existing road or rail infrastructure and it does not preclude the need for parking consideration in future development applications.

The proposed amendment and development is also in accordance with Strategic Direction 3 which is to:

*'Develop a thorough understanding of key industry needs, including future demand and spatial (location) requirements by achieving the following strategy objectives:...*

*b. To support Tourism, Culture and the Arts by:*

- i. recognising the drivers of tourism including nature values, heritage, food and wine, and local character;*
- ii. providing for the development of tourism products including accommodation to meet the requirements of the industry.*

Pg 22.

**Comment:**

The proposed site specific amendment will allow for a development that will enhance the visitor experience on Flinders Island and will help to promote the island's natural values, food, wine and local character in accordance with Strategic Direction 3.

Strategic Direction 9 is:

*'Develop planning scheme provisions to advance sustainability development, adapt to and mitigate the impacts of climate change and reduce energy emissions by achieving the following objectives:....*

*Building Design, Reuse and Recycling*

*Increase the energy efficiency of new development in line with national building codes, standards and world class best practices;*

- a. Provide strategic support and incentives for the reuse of old buildings and other development in preference to green field development.*
- b. Identify known or foreseeable impacts of climate change such as sea level rises, flood risk and land stability and adopting a precautionary approach to the location of new development.*

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**Comment:**

The proposed amendment aligns with this strategic direction by promoting adaptive reuse of an existing shed structure that is no longer required for its intended purpose. The site specific amendment which allows the shed to be redeveloped for a range of uses without rezoning the site to a non-port related zone is entirely in accordance with the preference to promote re-use of old buildings in preference to green field development. It is submitted that the site-specific planning scheme amendment that allows adaptive reuse of an existing shed facility within Whitemark will not distort the Regional Activity Centre hierarchy and in terms of Flinders Island, given Whitemark is the key centre, it is considered the most appropriate location for such a 'hub' of activity.

**Regional Policies and Actions**

Whitemark is designated as a Rural Town Centre in the Regional Activity Centres Network under the RLUS. The Regional Policies and Actions in the Section 4.9 of the RLUS are centred around protecting the Regional Activity Centre hierarchy.

Section 4.16 of the RLUS provides strategic guidance in relation to Tourism and Recreation. The following policy and actions around Tourism are relevant to the proposed amendment:

### Tourism

Policy	Action
<p><i>ED-P9. Ensure tourism business development is guided by informed research and economic strategies that develop key strategies, initiatives and projects to enhance the range of tourism and visitor experiences in the Northern Region.</i></p>	<p><i>ED-A14 As part of the Region's Economic Development Plan consider the regions tourism strategy focused on market position and feasible numbers, segmentation and conversion to optimise revenue and yield to expand and enhance the range of tourism and visitor experiences and address broad issues affecting tourism, including skills shortages, improving competitiveness and marketing and the following specific items:</i></p> <ul style="list-style-type: none"> <li><i>• complement the region's Open Space Strategy with a cultural heritage considerations;</i></li> <li><i>• facilitate supply side support programs to deliver on a strategy for existing and new operators;</i></li> <li><i>• identify key tourism investment sites; and</i></li> <li><i>• promote support tourism infrastructure investment as part of the region's Infrastructure Plan.</i></li> </ul> <p><i>ED-A15 Support the implementation of the Trail of Tin Dragon Master Plan 2004 and prioritise the completion of all 18 key projects that the master plan identifies to complete the trail</i></p>
<p><i>ED-P10 Support the development of the tourism sector through land use planning by ensuring land use planning policies and principles do not unnecessarily restrict tourism use and development.</i></p>	<p><i>ED-A16 Identify key tourism sites for Major Tourism zoning and make provision within that zone for existing facilities and future proposals that may enhance the visitor experience. Examples of existing facilities include Barnbogle and Lost Farm golf courses, Franklin House, Country Club Casino, Entally House, Quamby</i></p>

<p><i>ED-P11 Ensure planning schemes provide opportunity to identify, protect and enhance distinctive local characteristics and landscapes.</i></p>	<p><i>Country Club, White Sands Resort and Greens Beach Golf Course.</i></p> <p><i>ED-A17 Provide opportunities to economically support rural land uses (e.g. farming) by allowing diversification through tourism use and development.</i></p> <p><i>ED-A18 Encourage the establishment of small tourism businesses by allowing flexible locations and minimising regulation, such as working from home and farm gate tourism.</i></p>
<p><i>ED-P12 Ensure that planning schemes do not unnecessarily restrict new innovations in the tourism sector and acknowledge that planning schemes cannot always predict future tourist sites/developments.</i></p>	<p><i>ED-A19 Planning authorities must consider the full range of options such as amendments or S 43A applications to enable support for tourism proposals.</i></p>

**Comment:**

It is submitted that the proposed site specific amendment to allow a development that will attract tourists to the Island is guided by informed research in the form of the Flinders Island Destination Action Plan which specifically seeks the proposed type of development in Whitemark in accordance with ED-P9.

It is submitted that ED-P10 is evidence that the proposal should be supported strategically by Council as it is clear that the RLUS supports land use planning that supports the tourism sector. With respect to the proposed amendment, it is submitted that the site -specific approach will enable the ongoing use of the site as a port facility and protect its primary use in that regard, whilst also allowing for complementary development that will support tourism on the Island. It would not be appropriate to amend the use table for the Port Zone as those changes would then apply to all Port Zoned land across the Island. The proposed land use planning response in the form of the amendment to support the development application is considered to accord with the intent of ED-P10.

ED-P12 makes it clear that planning scheme should not be a barrier to new innovation when it comes to tourism development. ED-A19 supports the proposed approach to development on this site of a S43A application to enable the amendment and development proposed to be considered holistically in one proposal.

#### **4.5 Objectives of the RMPS**

An assessment of the Proposed Amendment against the objectives of the Resource Management and Planning System of Tasmania is outlined below.

## Commercial Project Delivery

Objective	Response
<i>Part 1</i>	
<i>(a) to promote the sustainable development of natural and physical resources and the maintenance of ecological processes and genetic diversity</i>	The proposed site specific amendment which proposes to introduce a new range of allowable (discretionary) uses on the subject site (limited to a portion of the site only) which is already developed for port purposes and largely cleared of vegetation, represents sustainable land use planning practice. The full range of zone schedule provisions will still apply to future use and development, therefore environmental aspects of development will still be required to be addressed.
<i>(b) to provide for the fair, orderly and sustainable use and development of air, land and water</i>	<p>The proposed ordinance amendment represents an orderly and sustainable use of land and will not have any impacts on air and water resources. The effect of the site-specific amendment to allow a range of additional uses as discretionary on a portion of the subject title only. The inclusion of the uses as discretionary means that any application for use and development will be discretionary and therefore publicly advertised, allowing the community to have input. The wording of the amendment effectively means that built form is limited to the existing shed on the site only.</p> <p>The site is connected to reticulated water only. Any future development will need to demonstrate how on-site wastewater and stormwater collection and treatment will accord with the Shoreline, Water Bodies and Watercourse schedule in the Planning Scheme as this overlay does and will continue to apply to the site.</p>
<i>(c) to encourage public involvement in resource management and planning</i>	The Draft Amendment and Development Application will be placed on public exhibition for a formal comment period. As stated above, even if the current Development Application did not proceed, the range of uses proposed are being afforded discretionary status meaning any future

## Commercial Project Delivery

Objective	Response
	<p>development application for those uses will always be required to be publicly advertised.</p> <p>Further certainty around the development the amendment allows is provided via the limitation of built form development to the existing wharf shed and its immediate curtilage at the site.</p>
<p><i>(d) to facilitate economic development in accordance with the objectives set out in paragraphs (a), (b) an (c)</i></p>	<p>The proposed site specific ordinance amendment creates the potential for sustainable and orderly economic development on the site. The amendment has been worded to limit new use classes to the existing shed and surrounding curtilage therefore not opening up the entire 3ha + site for future development. The ongoing use of the wharf will be protected as this structure and indeed the entire site remains in the ownership of the Tasmanian Ports Corporation and therefore they will need to provide owner consent to any planning and building applications at the site.</p>
<p><i>(e) to promote the sharing of responsibility for resource management and planning between the different spheres of Government, the community and industry in the State</i></p>	<p>The proposal represents a process of shared responsibility between State government, local government, the land development industry and the community. All relevant bodies will be consulted as part of the planning approval process.</p>
<p><i>Part 2</i></p>	
<p><i>(a) to require sound strategic planning and co-ordinated action by State and local government</i></p>	<p>As stated, the proposed ordinance amendment only allows for the additional range of uses to occur on the subject site, within a prescribed area which includes the existing built form being the shed.</p> <p>As addressed in sections 4.2-4.4 of this report, the proposed amendment is in accordance with the strategy directions under the Flinders Council Strategic Plan, Flinders Island Destination Action Plan 2016-2019 and the Northern Regional Land Use Strategy.</p>

## Commercial Project Delivery

Objective	Response
<p><i>(b) to establish a system of planning instruments to be the principal way of setting objectives, policies and controls for the use, development and protection of land</i></p>	<p>The proposed ordinance amendment allows three additional uses within the Port Zone and only on the subject site within an identified curtilage. Existing development controls under the Port Zone and Schedules in the Flinders Planning Scheme are considered adequate to ensure future development of the wharf shed to be appropriate for the area. It is noted that the restaurant use to be allowed via the proposed amendment will become a discretionary use class in the Port and Marine Zone under the Tasmanian Planning Scheme, therefore the amendment is consistent with what will become the future Planning Scheme for Flinders Island.</p>
<p><i>(c) to ensure that the effects on the environment are considered and provide for explicit consideration of social and economic effects when decisions are made about the use and development of land</i></p>	<p>The proposal will not impact significantly on the environment. The proposal has considered the effect on the environment by promoting development within an existing urban and developed area, with access to some services thereby avoiding development pressures in less appropriate areas.</p>
<p><i>(d) to require land use and development planning and policy to be easily integrated with environmental, social, economic, conservation and resource management policies at State, regional and municipal levels</i></p>	<p>The proposal furthers State and municipal objectives of sustainable economic development of land in a manner which does not compromise environmental, social, conservation and resource management values.</p>
<p><i>(e) to provide for the consolidation of approvals for land use or development and related matters, and to co-ordinate planning approvals with related approvals</i></p>	<p>This objective is not affected by this proposal.</p>
<p><i>(f) to promote the health and wellbeing of all Tasmanians and visitors to Tasmania by ensuring a pleasant, efficient and safe working, living and recreational environment for all Tasmanians and visitors to Tasmania</i></p>	<p>The proposed amendment that facilitates the redevelopment of the existing vacant Whitemark wharf shed into a food/beverage/production/tourism hub will assist in the promotion of a better living environmental for residents of Flinders Island. The amendment affords the opportunity for the development of a restaurant/function centre/bar in a waterfront location, offering residents a</p>

Objective	Response
	location to congregate, specialised and experience Flinders Islands produce.
<i>(g) to conserve those buildings, areas or other places which are of scientific, aesthetic, architectural or historical interest, or otherwise of special cultural value</i>	<p>No items of cultural heritage significance included on the Tasmanian Heritage Register or the Flinders Planning Scheme 2000 are located on or near the site.</p> <p>Given the site is within an existing urban area and has previously been developed, it is submitted that an Aboriginal Heritage Survey is not required. It is noted however, that should any Aboriginal heritage sites be discovered during construction works then the Aboriginal Relics Act 1975 will apply for reporting and management purposes. The proposed amendment will not alter the impact of this Act.</p>
<i>(h) to protect public infrastructure and other assets and enable the orderly provision and co-ordination of public utilities and other facilities for the benefit of the community.</i>	The public infrastructure at the site being public access and the what, is protected by retaining the underlying Port Zoning.
<i>(i) to provide a planning framework which fully considers land capability.</i>	The site is not currently zoned for agricultural purposes so consideration of this objective is not applicable.

## 4.6 State Policies

### 4.6.1 State Coastal Policy 1996

The subject land is located within one kilometre of the coast, and therefore requires assessment against the State Coastal Policy 1996.

#### **Principles**

The policy is guided by three main principles:

*Natural and cultural values of the coast shall be protected.*

**Comment:** The rezoning of the subject site will not impact upon the natural values of the coast. There is no known European cultural history and the land is already developed for port and wharf related purposes.

*The coast shall be used and developed in a sustainable manner.*

**Comment:** The proposed ordinance and map amendment effectively allows additional uses to occur within an existing building. The site is already zoned for urban purposes and as such a range of uses can currently occur. As the site is within the Shoreline, Waterbody and Watercourses Special Area, those standards which are aimed at coastal protection will still apply to any use and development.

*Integrated management and protection of the coastal zone is a shared responsibility.*

**Comment:** The rezoning process requires approval at both a local government level and at a State level through the Tasmanian Planning Commission

#### **4.6.2 State Policy on the Protection of Agricultural Land 2009**

Assessment against the State Policy on the Protection of Agricultural Land has not been provided given the site is already zoned for non-agricultural purposes (Port Zone) and the surrounding land is also adjacent to urban zones (commercial, residential).

#### **4.6.3 State Policy on Water Quality Management 1997**

The coastal location of the site means The State Policy on Water Quality Management 1997 is applicable as any future development the ordinance amendment facilitates will require stormwater runoff to be managed and point source discharges to be avoided.

The proposed planning scheme amendment will not alter the application of the Shoreline, Water Bodies and Watercourses Special Area. It is considered that the provisions of this Special Area are adequate to ensure future works are compliant with the State Policy on Water Quality Management 1997. Specifically, the provisions at Clause 7.5.3 and 7.5.4 are aimed at managing water quality.

#### **4.6.4 National Environment Protection Measures**

National Environmental Protection Measures (NEPMs) are developed under *the National Environment Protection Council (Tasmania) Act 1995* and outline objectives and protections for aspects of the environment. Section 12A of the *State Policies and Projects Act 1993* provides NEPMs with the status of a State Policy.

Seven NEPMs have been made to date that deal with:

- Ambient air quality;
- Air Toxins;
- Assessment of Site Contamination;
- Diesel Vehicle Emissions;
- Movement of Controlled Waste Between States and Territories;
- National Pollutant Inventory; and
- Used Packaging Materials.

None of these NEPMs are considered relevant to this application.

#### **4.7 Provisions relating to use, development, protection or conservation of land**

All required provisions relating to the sustainable development of the land are provided for through the normal planning scheme requirements. In particular, the Special Area Provision dealing with Shorelines, Water Bodies and Watercourses will continue to apply to use and development of the land.

#### **4.8 Gas Pipelines Act 2000**

The subject land is not affected by the Gas Pipeline. This requirement is therefore not applicable.

#### **4.9 Potential Land Use Conflict**

The proposed site specific amendment to allow for the proposed additional range of uses as discretionary uses on the subject title, will not create the potential for land use conflict. It is noted that the Port Zone already allows for uses such as Marine Sales, Hire and Maintenance, Saleyard and Timber Yard as permitted and arrange of industrial uses as discretionary. It is therefore submitted that the additional range of uses will have no greater land use conflict with the adjoining commercial and recreational management zones than the existing use classes allowable.

Given the additional use classes Restaurant; Community Building and Local Shop are proposed to be included as discretionary uses, any application for the use and development of the wharf shed will be required to be advertised to the public as a discretionary application and therefore any land use conflicts can be identified and managed.

#### **4.10 Regional Impact**

The proposed amendment is considered to be consistent with the Northern Tasmania Regional Land Use Strategy, as discussed in Section 5.4 above. This demonstrates that the future development facilitated by the proposed amendment is consistent with the desired environmental, economic and social outcomes for the Northern Region.

#### **4.11 Other requirements of Section 20**

The proposed amendment is also consistent with the other requirements under Section 20(2), (3), (4), (5), (6), (7), (8) and (9) of the Act. In particular, the proposed amendment does not:

- prevent the continuance or completion of any lawful use or development;
- prevent the reconstruction or restoration of buildings or works unintentionally destroyed or damaged;
- extend or transfer a use from one part of a parcel of land to another part; and
- affect forestry operations, mineral exploration, fishing or marine farming.

## 5. Development Application Assessment

### 5.1 Zoning

As described in section 2.1, the subject site is zoned Port Zone under the Flinders Planning Scheme 2000.

### 5.2 Use Categorisation

The proposed development encompasses a variety of use classes to operate out of the upgraded wharf shed as shown in Table 2 below:

USE	PLANNING SCHEME DEFINITION
Visitor Information Desk	<p>Tourist Operation</p> <p><i>Means the use or development of land specifically for integrated tourist purposes, providing accommodation, recreation, and/or entertainment, indoor or outdoor display of historical, natural or other interest, any other similar attraction. The definition does not include any specific type of recreational use or form of tourist accommodation elsewhere defined.</i></p>
Café/restaurant incl Commercial Kitchen	<p>Restaurant</p> <p><i>Means the use or development of land for the sale of meals and/or refreshments for consumption on that land.</i></p>
Producer Hub	<p>Not readily defined but would fall as ancillary to one of the other uses, particularly the café/restaurant as it is intended that producers can hire kitchen space to cook/bottle their products.</p>
Offices	<p>Office</p> <p><i>Means the use or development of land for the administration of a business or the carrying out of an agency, including an estate agent, bank, typist/secretarial service or the like but does not include a Home Occupation or Consulting Room.</i></p>
Conference Room	<p>Community Building</p> <p><i>Means the use or development of land (not being a dwelling unit) as a place in which people gather for the purpose of recreation, entertainment, religious or social activity, including an assembly room, meeting hall church, cinema, theatre, dance or concert hall, non-residential club, reception room, venue for indoor sports or games or the like, with or without a bar or drinking booth as an</i></p>

	<i>ancillary facility, and may include a licensed club as define by the Liquor Accommodation Act 1990 but does not include Active Recreation, Licensed Establishment, Educational/Cultural Establishment or a Civic Building/Centre</i>
Provedore	Local Shop (if floor area does not exceed 250m <sup>2</sup> )  <i>Means any land with unrestricted access to the general public (including minors) during trading hours that is used primarily for the retailing of food and/or convenience goods or personal services, the gross floor area of which is not in excess of 250m<sup>2</sup>.</i>
Distillery	Light Industry  <i>Means the use or development of land for an industry that does not or will not:</i>  <i>(a) impose any undue load on any existing or projected utility service;</i>  <i>(b) have a detrimental effect on the amenity of the environs by causing environmental harm by reason or air, noise or other pollution or waste product emanating from the land, the presence of vermin therein or through the creation of electrical interference,</i>

**Table 2: Proposed Use Classes**

### 5.3 Approval Status

Subject to approval of the amendment proposed as part of this application, all of the uses proposed (identified in Table 2) will 'be afforded discretionary status in accordance with note (a) to Clause 5.7.5. The exception to this being the office component which in accordance with the table at Clause 5.7.5 is a permitted use class within the Port Zone.

The application for use and development also triggers the following discretions:

- 7.5.2 Shorelines, Waterbodies and Watercourses; and
- Signage
- Car Parking.

### 5.4 Port Zone Provisions

#### 5.4.1 Zone Intent

5.7.1	<b>Zone Intent</b>
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*The areas under this zone are intended for development of uses directly related to the operation of Whitemark and Lady Barron as ports. Appropriate use or development include storage, warehousing, marine-related office and sales outlets, marine maintenance and repair facilities and holding yards. Use or development for tourism/hospitality related purposes is supported in association with Whitemark Wharf.*

The proposed development is consistent with the final element of the zone intent in that it is use and development for tourism/hospitality related purposes in association with Whitemark Wharf. It is submitted that given the existing building is no longer required by the Tasmanian Ports Corporation, that its reuse for a purpose that will support tourism on the island and offer users of pleasure craft somewhere to berth (existing wharf to remain) and have a meal/refreshments and shop for local produce. The proposed development will not preclude the ongoing use of the wharf nor public access to the wharf.

#### **5.4.2 Desired Zone Character and Zone Guidelines (Clause 5.7.2)**

- a) *While acknowledging the design requirements of different port-related uses, development should nevertheless take all reasonable measures to limit conflict with the character of the surrounding area (including that under other zoning) and other uses.*

##### **Response:**

The proposed redevelopment of the existing 'Wharf Shed' into a retail, tourism and producer hub will not conflict with the surrounding area. The proposed development will complement the primary function of the Whitemark Wharf being for pleasure and fishing craft, offering visitors somewhere to get food and drink and obtain tourist information.

- b) *Use or development should be of modest scale and use traditional design elements and orientation to the street, where appropriate. Pitched roofs and broken form are preferred and long, high continuous walls are not appropriate.*

##### **Response:**

The proposed development utilises an existing shed structure and no extension to the shed is proposed. The proposed external façade works will bring the building more in line with the zone character as the façade will be broken by substantial glazing and the installation of timber battens on the northern, western and southern elevations. The existing pitched roof form will remain and it is submitted that the proposed works will significantly improve the visual appearance of the shed from the Esplanade and the water.

- c) *Advertising signs may be colourful but should be restrained in their overall impact. Typically, signs should be located on the building face or fence or in a low position if free standing. Large signs and those which are out of scale with the area or the building or structure on which they are located or relate to, as well as those above roof height are inappropriate.*

##### **Response:**

The two proposed wall signs are to be located on the northern and eastern elevations of the building. Their overall size is considered appropriate in the context of the size of the building and will not dominate the streetscape or the view of the building from the public wharf.

- d) *Security fencing shall be kept to a minimum. Where required its visual impact should be minimised through such measures as use of dark coloured/finished wire mesh and screening vegetation, and where possible located behind the line of the building façade.*

**Response:**

No security fencing is proposed.

**5.4.3 Subdivision Standards (Clause 5.7.3)**

Not applicable – subdivision does not form part of this proposal.

**5.4.4 Development Standards (Clause 5.7.4)**

- (a) *The maximum height of buildings is 8.0 metres*

**Response:**

Complies. The maximum height of the building (at the pitch) will increase by 200mm to 7.35 metres.

- (b) *There are no minimum setback requirements except those necessary to meet the zone intent, protect the character of the surrounding area and protect the amenity of neighbouring properties.*

**Response:**

Complies

The setback of the building will remain unchanged.

**5.5 Part 6 – Use and Development Principles**

Assessment against the Use and Development Principles at Part 6 of the Planning Scheme is provided as follows:

**5.5.1 6.1 Use**

- (a) *use or development shall not unreasonably impact on any existing or intended use or development of neighbouring land.*

- (b) *subdivision of land shall be carried out in accordance with the subdivision provisions for the zone within which the land is located or where that is not appropriate in accordance with:*

(i) *the requirements of the intended use, and*

(ii) *the Zone Intent, or alternatively by*

(iii) *an approved Development Plan that has been adopted by Council and inserted as a provision in the Scheme.*

- (c) *Residential Zones shall be protected from encroachment by incompatible use or development.*

- (d) *Rural Industrial operations shall be appropriately located and designed to avoid any detrimental effects on neighbouring land use or development, particularly in respect of atmospheric emissions, solid waste disposal and water pollution, soil erosion, noise or visual quality.*

*(e) Mining and quarrying operations shall be located and carried out in a form which does not conflict with surrounding land use or development, scenic values and the environment.*

**Response:**

The proposed use of the site is entirely appropriate for a coastal location on the edge of an existing settlement. The proposed use will enhance the public's enjoyment of the coastal area without impacting on any adjoining sensitive uses.

No subdivision is proposed.

The proposed use and development does not constitute rural industrial operations.

No mining or quarrying is proposed.

**5.5.2 6.2 Character**

*(a) Use and development shall adequately respect the character of, and future intentions for the area in which it is to be located.*

*(b) Subdivision layout, particularly roads, shall take adequate account of land contours and the need to avoid visual scarring.*

*(c) Use or development (including public facilities and services) should adequately respect the surrounding streetscape and neighbouring use or development, particularly in relation to scale, setbacks, form (including roof shape), landscaping, materials, colours and fencing*

*(d) Landscaping of use or development shall be of a type, form, variety(s) and character which is suited to the intention of the zone, the area and the nature of the use or development.*

*(e) Where trees are an important element in the character of an area they should be retained.*

*(f) Signs shall be consistent in type, scale and location, with the intention of the zone, the streetscape and the building or structure on which they are positioned or to which they otherwise relate.*

*(g) Forestry use or development, particularly plantations, shall be appropriately sited and planned to protect the visual quality and character of the countryside generally, and from important viewing locations in particular*

**Response:**

It is submitted that the proposed use and development will improve the visual amenity of the area and will have a positive impact on the local character. The use and development will increase usage and visitation to the foreshore and wharf and will turn the area into a vibrant meeting place.

No subdivision is proposed.

The building is existing and setbacks will remain the same. The slight increase in height is permitted in the zone. The aesthetics of the building will be improved as a result of the development.

No formal landscaping is proposed and if Council consider necessary it is submitted that a landscaping plan can be required as a condition of permit.

The proposed signs are of a size that is commensurate with the large façades on which they are located and will ensure their visibility from the Esplanade and the access to the site and wharf to enable identification of the site.

Forestry does not form part of this proposal.

## **5.6      6.3 Amenity**

*(a) Adequate public open space shall be provided in areas of new subdivision, to meet the recreational and open space requirements of the community generally and particularly the new owners of the lots created by subdivision.*

*(b) Use or development shall accord all existing and/or future occupiers with adequate and reasonable levels of amenity, especially in relation to privacy, sunlight, aspect, views and noise disturbance.*

*(c) Dwellings shall provide an adequate amount and appropriate type of private open space, to meet the expected lifestyle requirements of occupants. Such private open space shall provide adequate privacy, be exposed to reasonable levels of sunshine and directly accessible from the dwelling to which it belongs.*

### **Response:**

Subdivision is not proposed.

The building renovations have been designed to maximise sunlight into all habitable spaces and take advantage of views to the coast. No overlooking of dwellings from the development will occur.

## **5.7      6.4 Environment**

*(a) Use or development shall not be allowed to detrimentally affect the environment. All areas, and sensitive ecological and/or visual areas in particular, shall be developed in a manner and to an extent which is consistent with the protection of the values of the area.*

*(b) Use or Development and land management practices shall be directed towards achieving environmental sustainability, biodiversity and ecological balance, and avoiding environmental damage such as soil erosion, coastal dune erosion, loss of important animal and plant species and increases in vermin populations.*

### **Response:**

The subject site is not within an ecological or visually sensitive area. The proposed use and development will not detrimentally impact on the environment.

*(c) Use or Development shall not be located in areas of unacceptable risk (eg. from fire, flood or landslip). In situations where risk may exist, use and development shall be appropriately sited and designed to provide an acceptable level of protection and safety for future users. In particular.*

*i. Lands subject to flood risk are those subject to a greater than one in a 100 year flood interval (1% probability), and land, the natural surface level of which is below 3 metres Australian Height Datum (AHD); and*

*ii. Land which comprises soils of known or suspected instability, has a slope greater than 1 in 4, or is filled or reclaimed land, are deemed to constitute an unstable land hazard; and*

*iii. Use and development in bushfire prone areas will comply with the provisions of Schedule 7 Development in Bushfire Prone Areas or some other provisions acceptable to Council and the Tasmania Fire Service.*

### **Response:**

The subject site is not located in an area at risk from flooding or land instability. The building is existing and the provisions of Schedule 7 are not applicable.

*(d) Potentially incompatible Uses or Developments shall be adequately and appropriately located, sited and designed to avoid conflict. Level 2 activities or sources of pollution shall be sited in accordance with the following:*

*i. Use or Development for a use of land that is a Level 2 activity under the provisions of the Environment Management and Pollution Control Act 1994 shall not be allowed within the lesser distance from a residential zone than that recommended by the Director of Environmental Management.*

*ii. Use or Development of land that is not a Level 2 activity, but which Council nonetheless considers will or has the potential for environmental harm, shall not be allowed within a lesser distance from a residential zone than that determined by Council after taking into account the advice from the Director of Environmental Management.*

*iii. A dwelling unit shall not be erected within a lesser distance of any established Level 2 activity or other use of land which Council considers a source of pollution, than that determined by Council taking into account the advice from the Director of Environmental Management. (e) Activities involving extensive site works, such as quarrying, shall be suitably sited, screened, and*

**Response:**

The proposed use is not a level 2 activity.

*(e) Activities involving extensive site works, such as quarrying, shall be suitably sited, screened and rehabilitated where appropriate, to protect the ecological and visual qualities of the area.*

**Response:**

Not applicable.

*(f) Use or development shall be of a suitable form and siting to avoid any adverse impact on any watercourse and vice versa. Use or development (including the siting of effluent disposal systems) shall be setback a minimum of 40 metres, or such distance as is required, from a watercourse to avoid degradation of water quality.*

**Response:**

The on-site wastewater treatment system has been designed to ensure there will be no impact on water quality at the coast. Refer to **Appendix C** for additional details on the design of the Wastewater Treatment System.

*(g) Use of land in the vicinity of those watercourses identified in Schedule 3 shall provide Riparian Reserves in an appropriate location and form.*

**Response:**

The subject building is existing and requires no vegetation removal. Some vegetation removal will be required for the car park and absorption trenches associated with the wastewater treatment system.

## 5.8 6.5 Heritage

*(a) Use or Development shall be undertaken in areas and in a manner which conserves items, sites, areas and customs of historic and cultural value.*

*(b) Any Use or Development carried out on or in the vicinity of an item, site, area, feature or customary activity (including Aboriginal sites and shipwrecks) or conservation value, shall adequately respect its historic and cultural integrity.*

*(c) The protection and conservation of items, sites, areas, features and customary activities of historic and cultural importance applies to those previously identified and listed in the Scheme, and those which subsequently become known to Council.*

*(d) Where an item, site, area, feature or customary activity has or may have historic or cultural importance, Council may require a Statement of Cultural Significance to be prepared.*

*(e) Use or development shall be carried out in accordance with the principles and practices of the Burra Charter.*

*(f) Use or Development involving any historic building or group of buildings shall adequately respect the design and construction elements of the building(s) and particularly the relationship of spaces, orientation, form, mass, scale, fenestration, detailing, style, materials and colour.*

*(g) Areas of identified conservation value, including National Parks and Nature Reserves, shall be protected from inappropriate use or development and detrimental land management practices including land clearance, within such areas and adjacent areas outside them.*

### **Response:**

The subject site and its buildings are not included on the Tasmanian Heritage Register. As the site is already developed and zoned for urban purposes, a search of the Aboriginal Heritage Register was not undertaken but it is anticipated that standard conditions in relation to any findings during construction would apply.

## 5.9 6.6 Access and Parking

*(a) All new lots must be provided with satisfactory pedestrian and vehicular access to a public street.*

*(b) All Use or Development shall provide satisfactory pedestrian and vehicular access which is suited to the volume and needs of future users.*

*(c) Buildings and spaces intended for public access shall provide for satisfactory use and access by the disabled; the requirements of the Building Regulations in relation to AS1428.1-1988 shall be met.*

*(d) Road widths shall be appropriate to the road function, expected traffic type and volume, and future subdivision potential of the subject and surrounding land.*

*(e) Footpaths shall normally be required in areas of new subdivision except where low vehicle traffic volumes are anticipated, in which case a footpath one side only or no footpath may be appropriate.*

*(f) Road intersections shall be kept to a minimum with the use of existing roads, service roads and/or shared driveways being encouraged where appropriate.*

*(g) Intersections of roads, footpaths and foot crossings and driveways shall provide adequate safety for all users and shall satisfy the relevant requirements of Schedule 4.*

*(h) New Use or Development shall provide a suitably constructed driveway of a width to provide for the safe ingress and egress of the anticipated volume of traffic associated with the Use or Development*

*(i) New Use or Development shall provide adequate car parking to provide for the demand it generates and shall be capable of being safely accessed.*

*(j) On site turning shall be provided for development involving significant traffic volumes, heavy vehicle types and/or on roads which carry significant amounts of traffic.*

*(k) New Use or Development in Bushfire Prone Areas will require access that complies with the provisions of Schedule 7, Development in Bushfire Prone Areas.*

**Response:**

The proposed 20 space car park is considered adequate to service the site. Whilst maximum capacity is in excess of 100, this will likely only occur occasionally during functions and special events. There is more than adequate on-street capacity along the Esplanade to cater for additional demand when required.

**5.10 6.7 Services**

*(a) Use or Development shall be provided with adequate and appropriate services which are suited to the lifestyle requirements of people, the nature of the location, and the ability of the community to provide.*

*(b) Lot size and arrangement shall be adequate and appropriate to ensure an acceptable level of servicing, particularly in relation to waste disposal.*

*(c) In areas not serviced with water use or development shall provide adequate water supply and effluent disposal systems. Each dwelling shall provide a potable water storage facility (minimum capacity of 40kl) to provide for the anticipated number of occupants, and a wastewater disposal system approved by the Council's Environmental Health Officer*

*(d) Use or Development in the bushfire prone areas will provide fire protection features and water supplies which comply with Schedule 7.*

*(e) Use or Development shall be appropriately sited, designed and constructed to avoid conflict with service mains (including telephone, power, sewer, water and irrigation channels/pipelines). Buildings shall not be erected over any service main or within any easement providing for same whether utilised or not.*

*(f) Servicing systems shall use adequate and appropriate design methods and materials to ensure an acceptable life span and allow for adequate maintenance requirements.*

*(g) Use or Development shall optimise efficiency in the use of energy and resources. In particular, land should be subdivided on a generally sequential basis (ie. one area is substantially developed before the next is subdivided), common trenching should be used for different services where appropriate, and solar access maximised.*

**Response:**

The subject site is connected to reticulated water. An on-site wastewater disposal system has been designed to cater for a maximum of 118 persons at the site and there is adequate area to provide for this with appropriate soil types as addressed in the wastewater report at **Appendix C**.

### **5.11 6.8 Social Interest**

1. Use or Development should demonstrate how it suits the community interest.
2. Use or Development shall have adequate and appropriate types and levels of access to social facilities and services (eg. shops, government agencies, telecommunication, health services and educational facilities).

#### **Response:**

The proposed use and development has been demonstrated as being in the community interest. It fulfils a number of desired facilities to be provided on the Island as identified in the Destination Action Plan.

### **5.12 6.9 Administration**

- (a) In considering subdivision and/or rezoning proposals, an appropriate balance shall be maintained between current demand and stock available for use or development, and the number of new lots that would be created.
- (b) Use or Development proposals should only be approved where the cost to the public of providing and maintaining services is not exceeded by the economic benefit of the use or development to the community.
- (c) In considering any proposal, Council shall obtain the advice and opinion of other relevant group(s), individual(s) or organisation(s) with direct interest in the proposal.
- (d) A Development Plan for an integrated development may be prepared and adopted by Council for any area in this Scheme, A Development Plan shall include:
  - i. The intended use for the land for which the Development Plan has been created;
  - ii. The reason(s) for selection of the area;
  - iii. A map showing clearly the area subject to the Development Plan showing principal physical features, including existing use or development, hills/slopes, trees, watercourses and existing services buildings and improvements;
  - iv. The nature, form and capacity of proposed services including water, sewerage disposal, power, telephone, roads, footways and reserves;
  - v. A plan of subdivision with proposed staging showing lot sizes and layouts, building envelopes where appropriate, and physical features intended to be conserved;
  - vi. Any special provisions to be used to control land use and development in the area (eg. height, form, character, materials, colours etc.);
  - vii. Any other provisions intended to secure the intention of the Plan. A Development Plan shall be incorporated into the Scheme by way of a Scheme amendment in accordance with the Act

**Response:**

Whilst a planning scheme amendment, the proposal does not constitute a rezoning and will not open up additional land for urban development. Provision of additional services to the site (on-site wastewater) will be a cost borne by the developer and not the public.

It is submitted that adequate information has been included in this application to satisfy the requirements in terms of Development Plan.

**5.13 Special Area Provisions****5.13.1 Visually Sensitive Areas**

Not applicable as the subject site is not within a Visually Sensitive Areas on the Planning Scheme maps.

**5.13.2 Ecologically Sensitive Areas**

Not applicable because the subject site is not within an Ecologically Sensitive Area on the Planning Scheme maps.

**5.13.3 Heritage Places**

Not applicable because the subject site is not listed in Schedule 2.

**5.13.4 Shorelines, Water Bodies and Watercourses**

The subject site is mapped on the Planning Scheme maps as being a shoreline waterbody.

*7.5.2 Development (other than that prohibited within the zone) which pertains to a Shoreline, Water Body or watercourse listed in Schedule 3 shall be considered as a discretionary Use or development in accordance with Clause 3.5.*

**Response:**

The proposal is afforded discretionary status.

*7.5.3 Before considering an application pursuant to Clause 7.5.2 Council may require additional information, prepared and submitted for Council's consideration by a suitably qualified person to ensure that the proposal is adequate in terms of:*

*(a) contours and levels of the natural surfaces in relation to the range of water levels likely to occur in the vicinity of the proposed use or development.*

*(b) existing water quality and seasonal variations;*

*(c) quantities and qualities of water that are proposed to be abstracted from or discharged to the sea, a waterbody or a watercourse listed in Schedule 3;*

*(d) The likely impact of the proposed use or development on the quality of waters by reason of off-site effects such as erosion, siltation, salination, chemical spray drift, nutrient seepage, seed disposal or other emissions;*

*(e) the natural, ecological, cultural, recreational and aesthetic qualities of the site.*

**Response:**

The application is informed by a Site and Soil Assessment and Onsite Wastewater System Design prepared by Strata Consulting (copy included as **Appendix C**), and a Stormwater Management Plan (copy included as **Appendix D**).

*7.5.4 In considering an application for use or development in Shorelines, Water Bodies and Watercourses and whether to impose conditions Council shall consider the following matters:*

*(a) The siting, orientation, setback, bulk, form, height, scale, materials and external finishes of buildings and structures.*

*(b) the impact upon water quality, foreshore or streamside vegetation and wildlife habitat of building, clearing, excavation, effluent disposal, access construction, fences, firebreaks or the deposition of fill;*

*(c) whether land should be acquired by Council as a condition of subdivision or otherwise, to protect the items listed in Schedule 3;*

*(d) whether additional fencing or any other special works or practices are required to protect the items listed in Schedule 3;*

*(e) the design, content and location of signage and interpretative displays.*

**Response:**

The following response is made in relation to each of the matters listed above:

(a) No new buildings are proposed. The additional deck and paving structures will not impact on the adjacent shoreline.

(b) The only potential impact on terms of water quality of the proposed development is the on-site wastewater treatment system, details of which are outlined in the report at **Appendix C**. The system is designed to cater for the full load from the building and will ensure there is no impact on water quality. A plumbing permit will be required for the on-site wastewater system.

(c) Not applicable.

(d) No fencing is required to protect any shorelines or waterbodies from this proposed use and development.

(e) One wall sign is proposed that will not impact on water quality. It is to be erected on the façade of an existing building.

### **5.13.5 Schedule 5 – Signs**

In accordance with S5.4, the proposed wall signs are classified as discretionary. It is submitted that the proposed signs meet the conditions of S5.4 in that:

- The signs will not cause any loss of sunlight or daylight to a dwelling unit;
- Will not intrude in terms of size, colour, movement, illumination, position, shape or standard of construction.

- Will be the only proposed wall signs and will not diminish the role of any statutory sign erected on or near the site.
- Will not be illuminated.

## 6. Conclusion

The proposed site specific ordinance amendment to allow for Restaurant; Community Building and Local Shop; to be discretionary uses within an identified portion of 16 Esplanade, Whitemark and to update the Zone Intent for the Port Zone to facilitate the above amendment has been assessed against all relevant strategic plans, strategies and the objectives of the RMPS. The amendment effectively allows for an adaptive reuse of an existing wharf shed structure which is no longer required for its intended purposes. The reuse of the shed for a tourism/hospitality and production hub is in line with the Island's Destination Action Plan and Strategic Plan and will assist in facilitating economic growth and prosperity on the island. The site specific nature of the amendment means that the opportunity to develop the above listed uses in the Port Zone is limited to the subject site (leased portion). It is proposed that the Shoreline, Waterbodies and Watercourse Overlay remains. The strategic merit of the ordinance and map amendment can be summarised as follows:

- Allows for adaptive reuse of an otherwise vacant building;
- Creates a tourism/hospitality/producer hub in a waterfront location that will form a tourist attraction for the Island as well as service locals;
- Is clearly limited to the leased parcel of land only; and
- Does not preclude or interfere with public access to the wharf.

The proposed development meets all relevant development standards and is only discretionary in relation to shorelines, water bodies and watercourses, signage and car parking numbers. In all instances it has been demonstrated that the exercise of discretion is appropriate. The demand for car parking in excess of the proposed 20 spaces will only occur occasionally when large functions are held and it is submitted there is sufficient on-street parking to cater for overflow parking during these periods. It is important to note that the terms of the lease require public access to the wharf and foreshore to be maintained.

Based on all the supporting information provided in this report, it is submitted that there is sufficient justification to support the case for an amendment as proposed and to approve the development application.

Appendix A  
Proposal Plans

DWG	DWG no	REV DATE							REV									
Cover	A0-001	13/04/17	18/4/17	19/4/17	26/4/17	28/4/17	1/5/17		A	B	C	D	E	F				
Site	A1-001	13/04/17	18/4/17	19/4/17	26/4/17	28/4/17	1/5/17 22/5/17	31/5/17	A	B	C	D	E	F	G	H	I	
Demo Ground Floor Plan	A2-001	13/04/17	18/4/17						A	B								
Ground Floor Plan	A2-002	13/04/17	18/4/17	19/4/17	28/4/17	1/5/17			A	B	C	D	E					
Mezzanine Floor Plan	A2-003	13/04/17	18/4/17	19/4/17					A	B	C							
Elevations	A3-001	13/04/17	18/4/17	1/5/17					A	B	C							

**NOTES** Annexure 5 - June 2017  
 architect - Sam Haberle  
 accreditation no - CC5618 U  
 land title ref number - VOL 129006 FOLIO 1  
 climate zone - 7  
 BAL - Refer to Assessment

ground floor - 220 m2  
 first floor/mezzanine - 126 m2

**floor area total (inc. mez) - 346 M2**

deck/paving area - 197 m2

# THE WHARF SHED

proposed adaptive reuse

17 Esplanade, Whitemark,  
 FLINDERS ISLAND

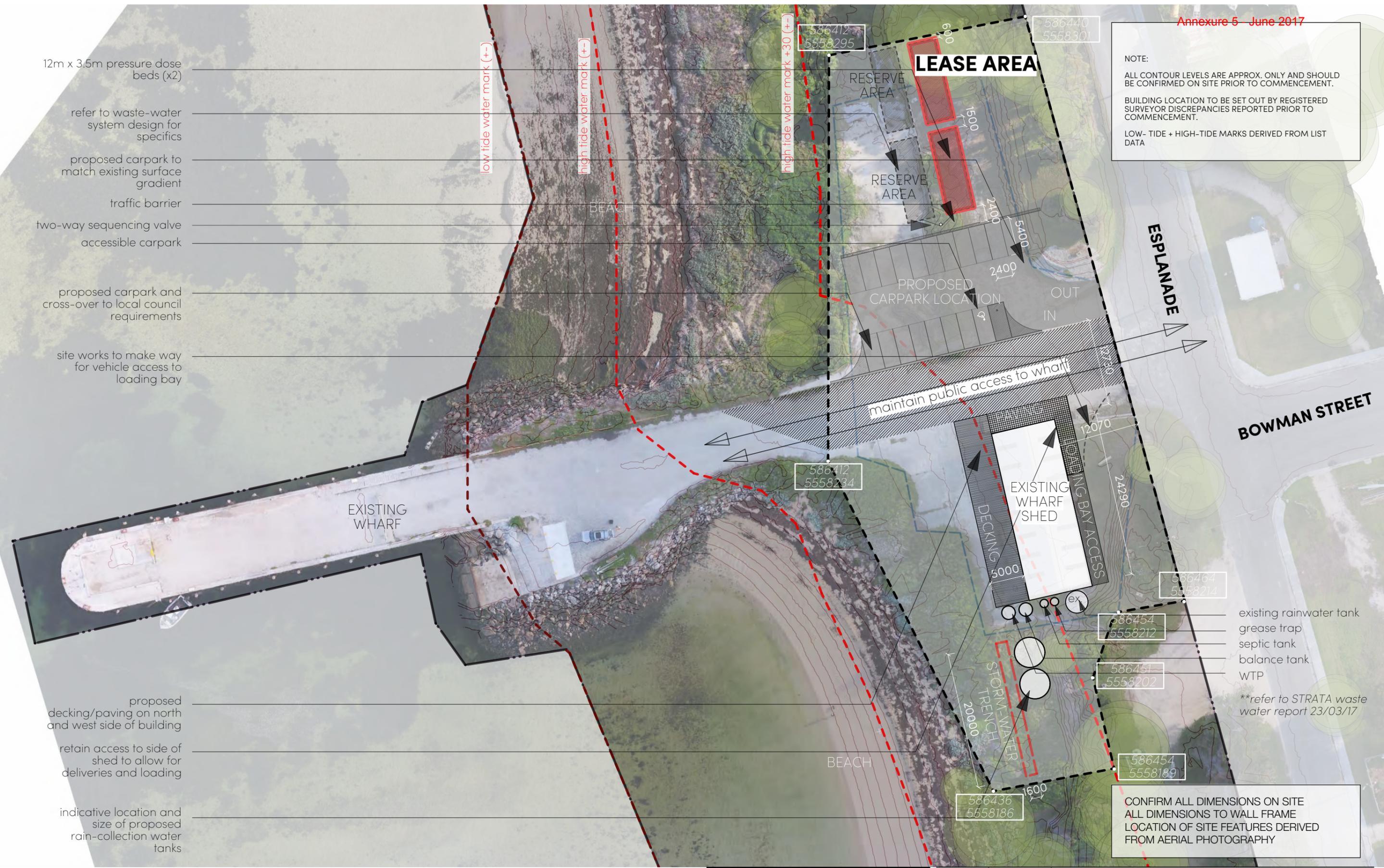


REVISION	DATE	DESCRIPTION	ISSUE
F	1/5/17	Development Application	DA

ADDRESS	17 Esplanade, Whitemark	do not scale off plans all dimensions in millimetres confirm all dimensions on site all work to relevant NCC and AS	DWG #
CLIENT	Jo and Tom Youl	SCALE @ A3	NA
DWG	Cover	DRAWN	KY
		CHKD	SH
		PROJECT#	J002541

NOTE:  
 ALL CONTOUR LEVELS ARE APPROX. ONLY AND SHOULD BE CONFIRMED ON SITE PRIOR TO COMMENCEMENT.  
 BUILDING LOCATION TO BE SET OUT BY REGISTERED SURVEYOR DISCREPANCIES REPORTED PRIOR TO COMMENCEMENT.  
 LOW- TIDE + HIGH-TIDE MARKS DERIVED FROM LIST DATA

- 12m x 3.5m pressure dose beds (x2)
- refer to waste-water system design for specifics
- proposed carpark to match existing surface gradient
- traffic barrier
- two-way sequencing valve
- accessible carpark
- proposed carpark and cross-over to local council requirements
- site works to make way for vehicle access to loading bay



- proposed decking/paving on north and west side of building
- retain access to side of shed to allow for deliveries and loading
- indicative location and size of proposed rain-collection water tanks

- existing rainwater tank
- grease trap
- septic tank
- balance tank
- WTP
- \*\*refer to STRATA waste water report 23/03/17

CONFIRM ALL DIMENSIONS ON SITE  
 ALL DIMENSIONS TO WALL FRAME  
 LOCATION OF SITE FEATURES DERIVED FROM AERIAL PHOTOGRAPHY



REVISION 1	DATE 31/5/17	DESCRIPTION Waste Water Amendment (reserve area)	do not scale off plans all dimensions in millimetres confirm all dimensions on site all work to relevant NCC and AS	ISSUE DA
ADDRESS 17 Esplanade, Whitemark			SCALE @ A3 1:500	DWG # A1-001
CLIENT Jo and Tom Youl			DRAWN KY	PROJECT# J002541
DWG Site			CHKD SH	

**DEMOLITION NOTES**

CONFIRM ALL DIMENSIONS AND DETAIL ON SITE PRIOR TO COMMENCEMENT

ENSURE WALLS ARE NON LOAD BEARING PRIOR TO DEMOLITION AND SEEK ENGINEER'S DIRECTION AS REQUIRED

ALLOW FOR 2 SITE INSPECTIONS BY A SUITABLY QUALIFIED STRUCTURAL ENGINEER AT TIME OF DEMOLITION FOR INSPECTION

MAKE GOOD ALL WORKS AFFECTED BY DEMOLITION

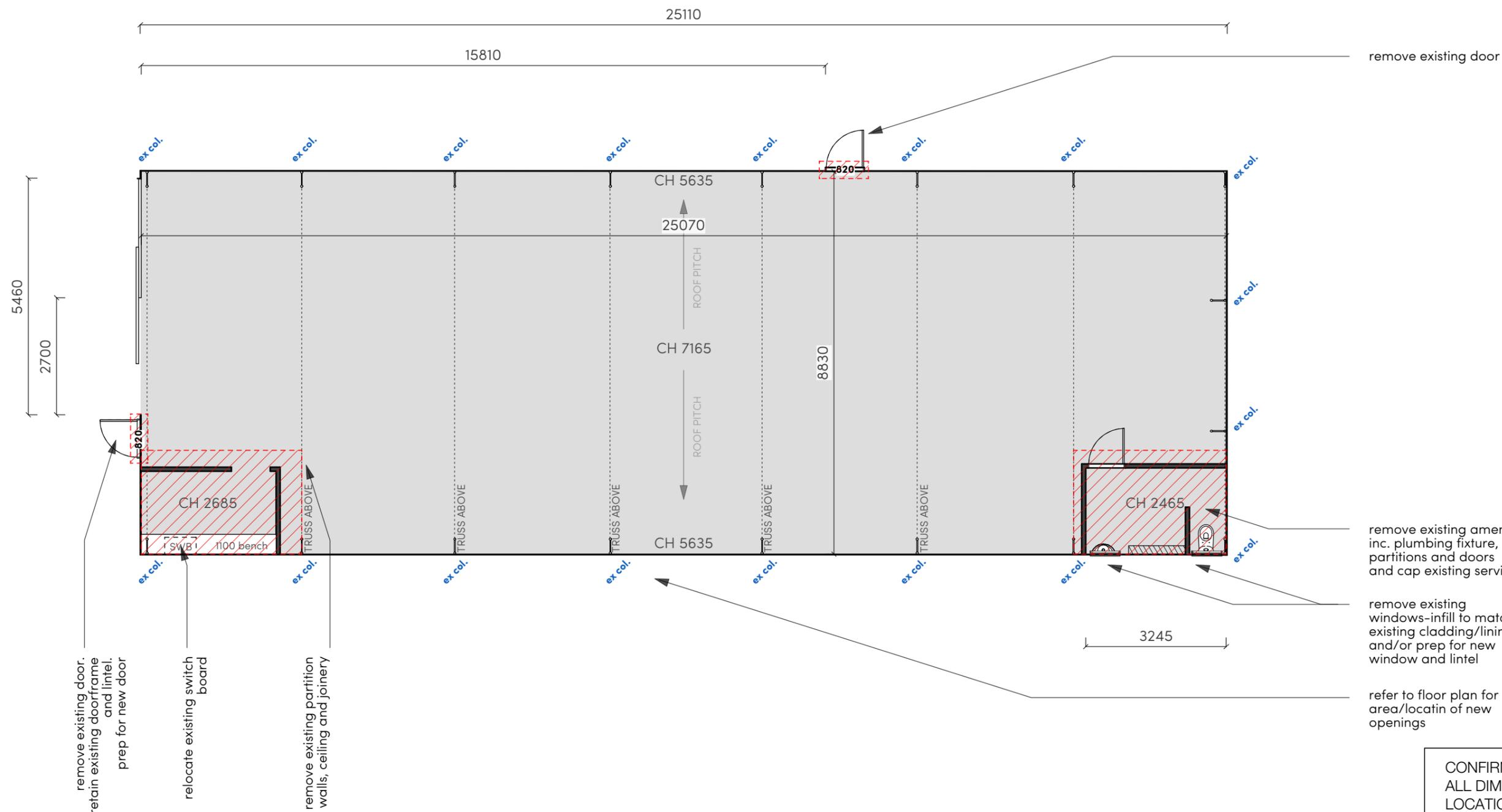
SUITABLY (WHERE POSSIBLE) RELOCATE OR OTHERWISE DECOMMISSION EXISTING PLUMBING AND ELECTRICAL SERVICES ASSOCIATED WITH DEMOLITION

GENERAL DEMOLITION: TO AS 2601

**TEMPORARY SUPPORT**  
GENERAL: IF TEMPORARY SUPPORT IS REQUIRED, CERTIFICATION FOR ITS DESIGN AND INSTALLATION IS REQUIRED FROM A PROFESSIONAL ENGINEER ENGAGED BY THE CONTRACTOR.

**EXISTING BUILDINGS**  
UNTIL PERMANENT SUPPORT IS PROVIDED, PROVIDE TEMPORARY SUPPORT FOR SECTIONS OF EXISTING BUILDINGS WHICH ARE TO BE ALTERED AND WHICH NORMALLY RELY FOR SUPPORT ON WORK TO BE DEMOLISHED.

**ASBESTOS REMOVAL**  
METHOD: USE WET REMOVAL METHODS RECOMMENDED IN THE CODE OF PRACTICE FOR THE REMOVAL OF ASBESTOS (NOHSC:2002) STRICTLY BY LICENSED CONTRACTOR



remove existing amenities, inc. plumbing fixture, partitions and doors and cap existing services

remove existing windows-infill to match existing cladding/lining and/or prep for new window and lintel

refer to floor plan for area/location of new openings

CONFIRM ALL DIMENSIONS ON SITE  
ALL DIMENSIONS TO WALL FRAME  
LOCATION OF SITE FEATURES DERIVED FROM AERIAL PHOTOGRAPHY

NOTE: RETAIN EXISTING STRUCTURAL GRID AND INTERNAL HEIGHTS. ENSURE INTEGRITY OF COLUMNS, BEAMS AND PURLINS

CONFIRM ALL DIMENSIONS ON SITE

--- DENOTES AREAS TO BE REMOVED

— DENOTES EXISTING WALLS

Existing Floor Area

220M2 (approx.)



REVISION B	DATE 18/4/17	DESCRIPTION Development Application	do not scale off plans all dimensions in millimetres confirm all dimensions on site all work to relevant NCC and AS	ISSUE DA
ADDRESS 17 Esplanade, Whitemark			SCALE @ A3 1:100	DWG # A2-001
CLIENT Jo and Tom Youl			DRAWN KY	PROJECT# J002541
DWG Demo Ground Floor Plan			CHKD SH	

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PAVING

COMPACT FILL [ensure access to loading bay]

Annexure 5 - June 2017

new operable glazing.  
refer to elevations

new partition wall  
installed behind existing  
roller door to support  
new sliding system

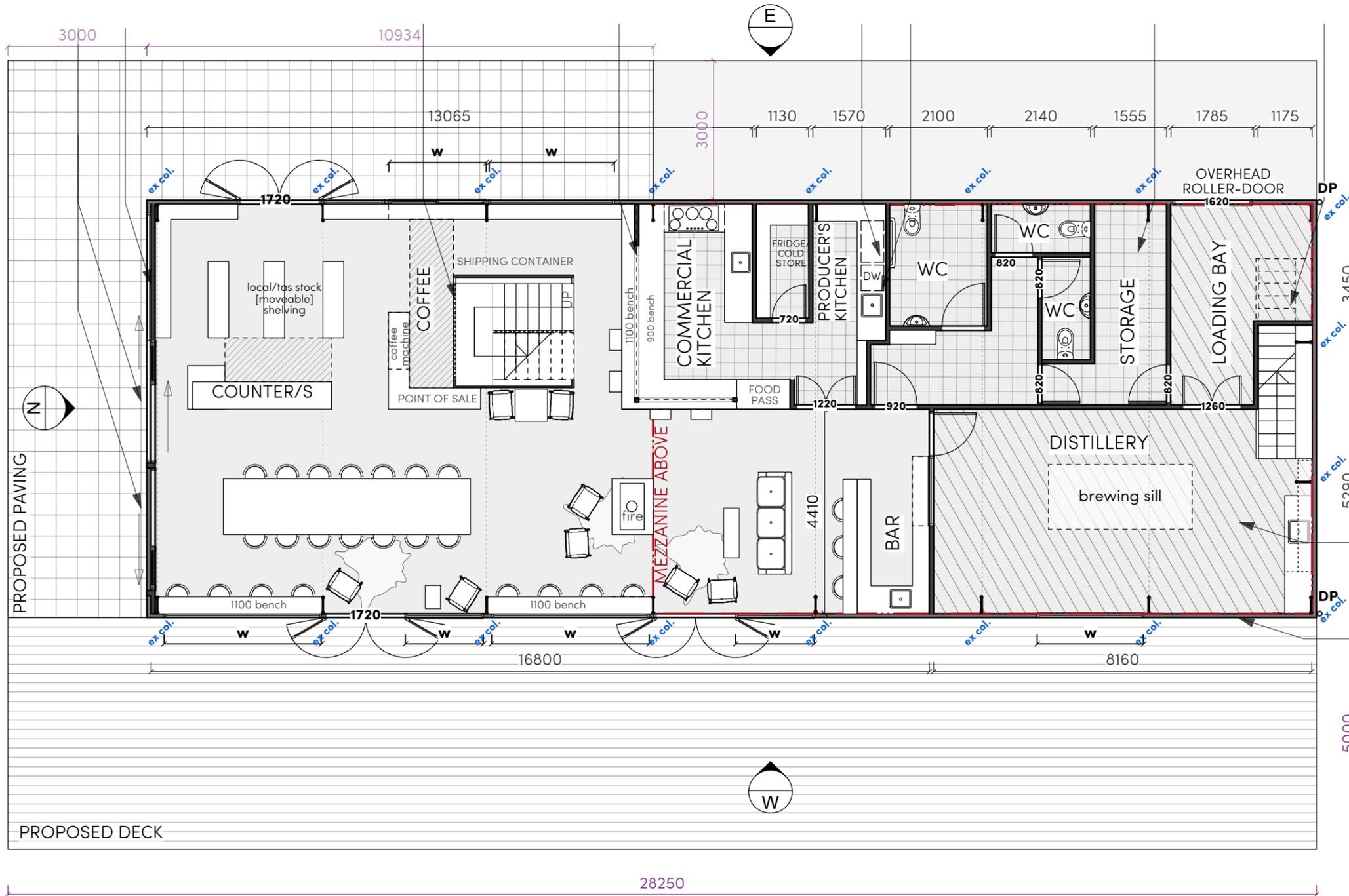
storage below staircase  
(integrated joinery)

overhead  
awning/  
top-hinged  
casement panel  
(operable privacy  
screen)

bottling and  
sterilization area  
below-bench  
dishwasher.  
cryovac machine  
above-bench

goods storage for  
providore and  
sales

DISTILLERY STAFF  
ACCESS STAIR (to  
storage space)



**NOTES:**

NOTES:	m <sup>2</sup>
DISTILLERY + LOADING	50
AMENITIES/CIRCULATION/STORE	25
KITCHEN/S	25
BAR	10
CAFE/BAR SEATING	110
<b>TOTAL</b>	<b>220</b>

note: connect new downpipes (DP) to existing stormwater line or similar approved solution. (confirm location of SW on site)

fire rate extent of distillery to NCC (inc. glazing and openings)

typically battened existing corrugated iron externally. insulate and reclad

CONFIRM ALL DIMENSIONS ON SITE  
ALL DIMENSIONS TO WALL FRAME  
LOCATION OF SITE FEATURES DERIVED FROM AERIAL PHOTOGRAPHY

CONFIRM ALL DIMENSIONS ON SITE

Proposed Fitout Area

220 M2 (approx.)

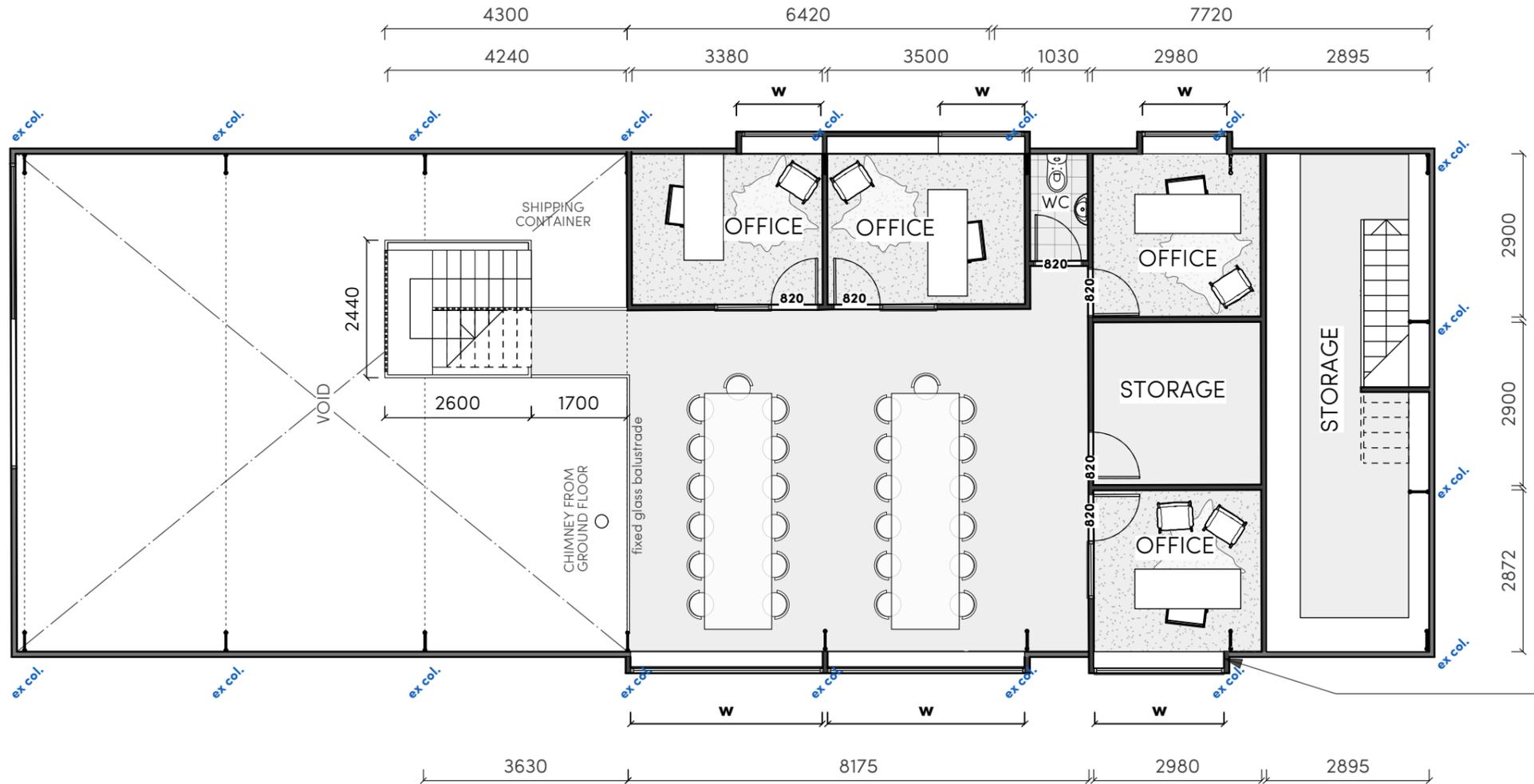
■ DENOTES PROPOSED WALLS  
■ DENOTES EXISTING WALLS



REVISION	E	DATE	1/5/17	DESCRIPTION	Development Application
ADDRESS 17 Esplanade, Whitemark					
CLIENT Jo and Tom Youl					
DWG Ground Floor Plan					
do not scale off plans all dimensions in millimetres confirm all dimensions on site all work to relevant NCC and AS				SCALE @ A3	1:100
DRAWN				KY	ISSUE DA
CHKD				SH	DWG # A2-002
				PROJECT#	J002541

**NOTES:**  
 all window dimensions to aluminium to be confirmed on site  
 all glazing to comply with AS1288 & AS2047  
 all wet areas to be comply with AS3740  
 all timber framing to comply with AS1684  
 all works to be in compliance with NCC PART J  
 all works to comply with BAL ASSESSMENT

NOTES:	m <sup>2</sup>
OFFICE	37
AMENITIES/CIRCULATION	5
STORAGE	34
SITTING/FUNCTION	50
<b>TOTAL</b>	<b>126</b>



deep reveal windows to manufacturers specification

CONFIRM ALL DIMENSIONS ON SITE  
 ALL DIMENSIONS TO WALL FRAME  
 LOCATION OF SITE FEATURES DERIVED FROM AERIAL PHOTOGRAPHY

CONFIRM ALL DIMENSIONS ON SITE

Proposed Fit-out Area

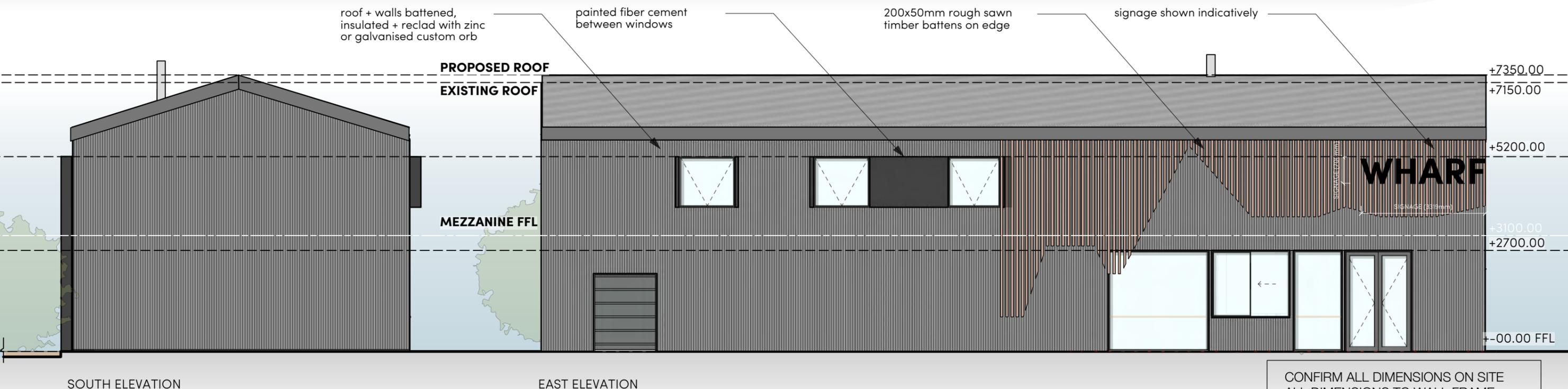
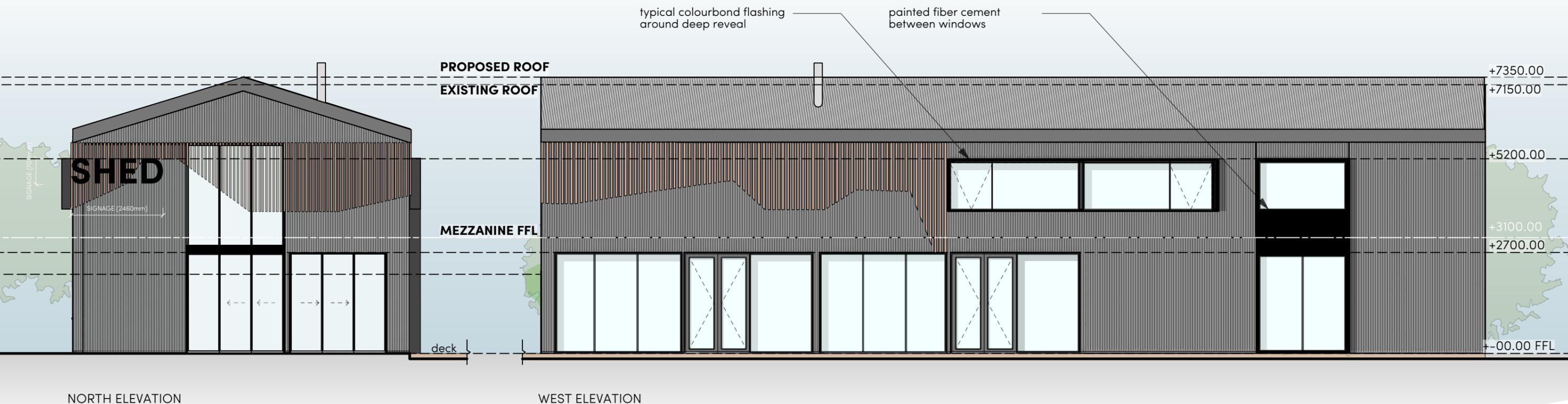
121M2 (approx.)

— DENOTES PROPOSED WALLS  
 — DENOTES EXISTING WALLS



REVISION	DATE	DESCRIPTION	Development Application
C	19/4/17		
ADDRESS		17 Esplanade, Whitemark	
CLIENT		Jo and Tom Youl	
DWG		Mezzanine Floor Plan	
SCALE @ A3		1:100	
DRAWN		KY	
CHKD		SH	
ISSUE		DA	
DWG #		A2-003	
PROJECT#		J002541	

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CONFIRM ALL DIMENSIONS ON SITE  
 ALL DIMENSIONS TO WALL FRAME  
 LOCATION OF SITE FEATURES DERIVED  
 FROM AERIAL PHOTOGRAPHY

note: zinalume (or) galvanised corrugated cladding on exterior of building. Timber-look battens on facade



REVISION	C	DATE	1/5/17	DESCRIPTION	Development Application
ADDRESS	17 Esplanade, Whitemark				
CLIENT	Jo and Tom Youl				
DWG	Elevations				
do not scale off plans all dimensions in millimetres confirm all dimensions on site all work to relevant NCC and AS				ISSUE	DA
SCALE @ A3	1:100			DWG #	A3-001
DRAWN	KY			PROJECT#	J002541
CHKD	SH				
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Appendix B

## Title Documentation

SEARCH OF TORRENS TITLE

VOLUME 129006	FOLIO 1
EDITION 3	DATE OF ISSUE 10-May-2007

SEARCH DATE : 13-Apr-2017

SEARCH TIME : 09.03 AM

DESCRIPTION OF LAND

Town of WHITEMARK

Lot 1 on Plan 129006 (Section 27A of the Land Titles Act.)

Derivation : Whole of Lot 1 on Plan 129006 Gtd. to The Crown

SCHEDULE 1

C456767 TRANSFER to TASMANIAN PORTS CORPORATION PTY LIMITED  
Registered 10-May-2007 at noon

SCHEDULE 2

C63319 Land is limited in depth to 15 metres below the surface and seabed, excludes minerals and is subject to reservations relating to drains sewers and waterways in favour of the Crown

UNREGISTERED DEALINGS AND NOTATIONS

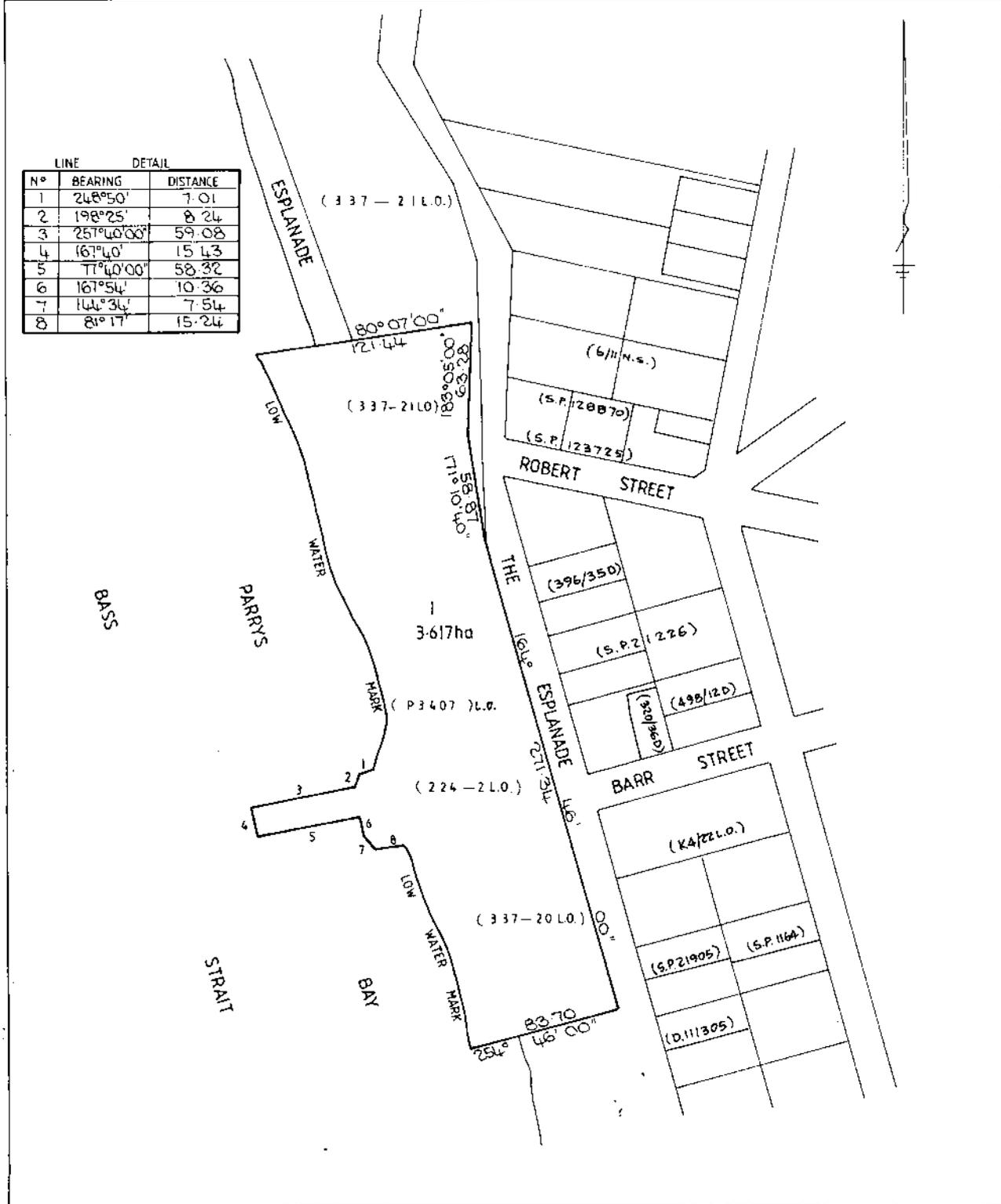
No unregistered dealings or other notations

42165 (3543)

OWNER THE CROWN	<p><b>PLAN OF SURVEY</b></p> <p>BY SURVEYOR R V TAIT OF COHEN &amp; ASSOCIATES PTY. LTD. LAUNCESTON</p> <p>LOCATION TOWN OF WHITEMARK</p> <p>SCALE 1:2000 LENGTHS IN METRES</p>	<p>REGISTERED NUMBER</p> <p><b>P 129006</b></p>
FOLIO REFERENCE SECTION 27A (C.63319)		<p>APPROVED EFFECTIVE FROM 20 NOV 1997</p> <p><i>Michael...</i> Recorder of Titles</p>
GRANTEE LOT 1, 3.617ha The Crown		

MAPSHEET MUNICIPAL CODE No. 110/5855-125	LAST UPI No. 4900061 4900064	LAST PLAN No. -	ALL EXISTING SURVEY NUMBERS TO BE CROSS REFERENCED ON THIS PLAN
--	---------------------------------	-----------------	---

LINE DETAIL		
N°	BEARING	DISTANCE
1	248°50'	7.01
2	198°25'	8.24
3	257°40'00"	59.08
4	167°40'	15.43
5	77°40'00"	58.32
6	167°54'	10.36
7	144°34'	7.54
8	81°17'	15.24



Appendix C

## On-site wastewater report



**strata**  
geoscience and environmental

**Site and Soil Assessment and Onsite Wastewater System Design for**

**Proposed Upgrades,  
Whitemark Wharf Shed  
Flinders Island**

**March 2017**

**Important Notes:**

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Strata Geoscience and Environmental reserves the right to submit this report the relevant regulatory agencies where it has a responsibility to do so.

*Onsite Wastewater System Design  
Proposed Upgrades Whitemark Wharf Shed*

## 1. Introduction

Strata Geoscience and Environmental Pty Ltd was commissioned to perform a limited scope geotechnical and environmental investigation for:

<b>Client and Site Details</b>	
Client Name	Quoin Holdings
Site Address	Whitemark Wharf Shed, Flinders Island
Proposed Development	Conversion to restaurant /café with office space and meeting rooms

The investigation was reference to AS1547-2012 Onsite Domestic Wastewater Management, the Tasmanian Building Act 2016 Directors Guidelines for Onsite Wastewater Management Systems and also follows the principles outlined in AS1726-1993 Geotechnical Site Investigations.

## 2. Summary of Investigation

The investigation's key findings were:

<b>SSE and Design Outcomes</b>	
Key Site and Soil Limitations to Wastewater System Design	Land area, proximal surface waters
Summary of Proposed System Specification	Primary Treatment: Grease Trap/Septic Tank Secondary Treatment: AWTS Land Application: Pressurised Beds

## 3. Project Specific Criteria

Site plans (if available) are presented in Appendix 1.

## 4. Investigation

Please refer to Appendix 4 for the results of field investigation including bore logs and other relevant data.

## 5. Interpretation

The site is underlain Quaternary sand deposits.

With respect to the sustainability of long term disposal of wastewater within the site boundaries the following comments are made:

**Soils** – Natural soils will have a high permeability for the acceptance of wastewater flows and will show a low cation exchange complex for the absorption of nutrients from effluent.

**Environmental Sensitivities** – The development area is gently sloping with nearest surface water body located approximately 30+ m down slope of the proposed land application area. Groundwater was not intersected throughout geotechnical investigation and is anticipated to be several meters beneath the existing ground surface.

**Climate** - the nearest weather station with long term data is the Whitemark Station with a mean annual rainfall of 715.4 mm (BOM 2014) and no evaporation data.

**Title Searches** – Searches of the Land Title did not show any easements or right of ways which have affected the positioning of the wastewater land application system.

Given the above, the general environmental and public health risk associated with the site is regarded as low provided adequate setback distances and other controls are adopted. Please refer to specific design notes and diagrams contained within this report for further information regarding the issues raised above.

## 6. Onsite Wastewater Flow and Land Application Area Modelling

### 6.1 Site and Soil Considerations

Results of the SSE (Appendix 4) found the following typical soil profile on site:

<b>Topsoils (A1-A3)</b>	
Description	SAND (SP/SW/SM)
Soil Category (AS1547-2011)	1
Indicative Permeability (m/d)	2.0
Recommended DIR (mm/d)/DLR (L/D)	50
pH	6.0
EC	2.4
Emmerson Class	8

### 6.2 Risk Management

Risk identification and reduction measures compliant with AS1547 – 2012

Clause A3.2 is presented below:

*Onsite Wastewater System Design  
Proposed Upgrades Whitemark Wharf Shed*

Risk	Factors that Increase Risk Likelihood	Design Risk Reduction Measures
Hydraulic Overloading of System	<ul style="list-style-type: none"> <li>• Under scaled system</li> <li>• Prolonged overuse</li> <li>• Leaking taps</li> <li>• Shock Loading</li> <li>• Excessive solid disposal</li> </ul>	<ul style="list-style-type: none"> <li>• Scale to peak potential loading</li> <li>• Use Conservative DLR/DIR</li> <li>• Use water conservation practices eg water reduction fixtures</li> <li>• Use balance tank</li> <li>• Use septic/grease trap pre treatment</li> </ul>
Biological Failure	<ul style="list-style-type: none"> <li>• Overuse of household chemicals</li> <li>• Shock loading</li> </ul>	<ul style="list-style-type: none"> <li>• Limit detergents and bleach use where practical</li> <li>• System not fit for spa or sinkerator installation</li> </ul>
Site Constraints	<ul style="list-style-type: none"> <li>• Surface waters</li> </ul>	<ul style="list-style-type: none"> <li>• Min 30m setback from high tide mark</li> </ul>
High Rainfall/Torrential Rainfall	<ul style="list-style-type: none"> <li>• Inappropriate LAA Scaling</li> <li>• Stormwater impacts</li> </ul>	<ul style="list-style-type: none"> <li>• Use suitable hydraulic scaling</li> <li>• Stormwater Diversion around LAA if required</li> </ul>
Clogged Outlet Filter	<ul style="list-style-type: none"> <li>• Overloading</li> <li>• Infrequent cleaning</li> </ul>	<ul style="list-style-type: none"> <li>• Clean monthly</li> </ul>
Pipe Blockages	<ul style="list-style-type: none"> <li>• Overloading</li> <li>• Infrequent de-sludging</li> </ul>	<ul style="list-style-type: none"> <li>• Reduce solids inflows</li> <li>• De-sludge septic max 1 year intervals</li> </ul>

*Onsite Wastewater System Design  
Proposed Upgrades Whitemark Wharf Shed*

Risk	Factors that Increase Risk Likelihood	Design Risk Reduction Measures
Sludge transport to LAA	<ul style="list-style-type: none"> <li>• Infrequent de-sludging</li> <li>• Clogged outlet filter</li> <li>• High organic loading</li> </ul>	<ul style="list-style-type: none"> <li>• De-sludge septic max 3 year intervals</li> <li>• Clean filter monthly</li> <li>• No sinkerator installation</li> </ul>
Broken pipes in LAA	<ul style="list-style-type: none"> <li>• Stock/vehicles</li> </ul>	<ul style="list-style-type: none"> <li>• Exclude stock/vehicles</li> </ul>

### 6.3 Proposed Wastewater System Concept Design

It is therefore recommended that the following system be adopted:

Treatment Train Component	Proposed Concept Design
Primary Treatment	<ul style="list-style-type: none"> <li>• Grease trap, Septic tank, balance tank</li> </ul>
Secondary Treatment	<ul style="list-style-type: none"> <li>• AWTS</li> </ul>
LAA Design	<ul style="list-style-type: none"> <li>• Pressure dosed bed</li> </ul>

### 6.4 Effluent Flow and Land Application Area Modelling

The development proposal is for the installation of the sewage treatment infrastructure associated with the existing shed which is to be converted to a restaurant/café with office space and meeting room. The following loadings have been modelled\*

1. Restaurant\*<sup>1</sup> – Maximum 90 EP at max 40L/EP/day – **3600L/D**
2. Offices\*<sup>2</sup> – Maximum 20 EP at max 20L/EP/day – **400L/D**
3. Staff\*<sup>3</sup>- 6 Staff and 2 Managers at max 20L/EP/day – **160 L/D**

\* Loadings taken from Table 4 Tasmanian Building Act 2016 Directors Guidelines for Onsite Wastewater Management Systems (Appendix 2):

\*1 – Loadings for “Restaurants”, \*2 – Loadings for “Factories/ Offices”, \*3 – Loadings for “Factories/ Offices”

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Therefore the total daily wastewater being produced is:

<b>Wastewater System Modelling</b>	
Number of Equivalent Persons	118
Water Source (Tank/Mains)	Mains
Daily Loading (L/per person/D)	40/20
Total Daily Loading (L/D)	4160
Adopted Amended Soil Category (AS1547-2012)*	1
Indicative Permeability (m/d)	2
Adopted Amended DLR/DIR (mm/d OR L/m <sup>2</sup> /d)*	50
Required LAA (m <sup>2</sup> )	83

### **6.5 Consideration of BOD**

Based upon Table 4 Tasmanian Building Act 2016 Directors Guidelines for Onsite Wastewater Management Systems the maximum daily influent BOD would contributions are as follows:

1. Restaurant 90 EP at 50g BOD/day = 4500 g BOD/d
2. Offices 20 EP at 15g BOD/day = 300 g BOD/d
3. Staff 8 EP at 15g BOD/day = 120g BOD/d

Therefore maximum BOD/d= 4420 g BOD/d. The recommended WTP treatment plant has the potential to treat this amount of BOD and it is noteworthy that significant reduction of BOD loadings into the WTP will be achieved through both the grease trap and septic tank.

## **6.6 System Specifications**

The system has the following specifications:

1. Min 3000L Approved Grease Trap to intercept all kitchen effluent
2. Min 4000L Approved Dual Purpose Septic Tank with Outlet filter
3. Min 4000L Balance Tank – recommend Netco model NPE-4000-S/GW or similar
4. Min 4200L Waste Treatment Plant (WTP) – Recommend Fuji clean Model CE4200 or similar
5. Flow rate meter
6. One two way pressure dosed sequencing valve
7. Two 12m x 3.5m pressure dosed beds
8. 100% reserve area (must remain development free)

## **6.7 System Operation, Maintenance and Management**

A system operation, maintenance and management manual will be prepared before system installation to detail all relevant aspects of system operation including maintenance, servicing and troubleshooting.

## 7. Conclusions and Further Recommendations

In conclusion the following comments and recommendations are made:

- The maximum wastewater flow rate (MWWF) modelling conducted in this report shows that the generated flows from the proposed development are likely to be no more than 4160L/day.
- That the treatment train should comprise the following components:
  - Min 3000L Approved Grease Trap to intercept all kitchen effluent
  - Min 4000L Approved Dual Purpose Septic Tank with Outlet filter
  - Min 4000L Balance Tank
  - Min 4200L Waste Treatment Plant (WTP)
  - Flow rate meter
  - One two way pressure dosed sequencing valve
  - Two 12m x 3.5m pressure dosed beds
  - 100% reserve area (must remain development free)
- That the WTP is serviced quarterly in compliance with the manufacturers specifications.
- That the septic tank and grease trap are de-sludged annually.
- That wastewater flows are recorded on service reports quarterly.
- That two 10m x 3.5m septic beds be installed as identified on the site plan.



**S Nielsen MEngSc CPSS-2**  
*Director*  
*Strata Geoscience and Environmental Pty Ltd*



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E:sven@strataconsulting.com.au

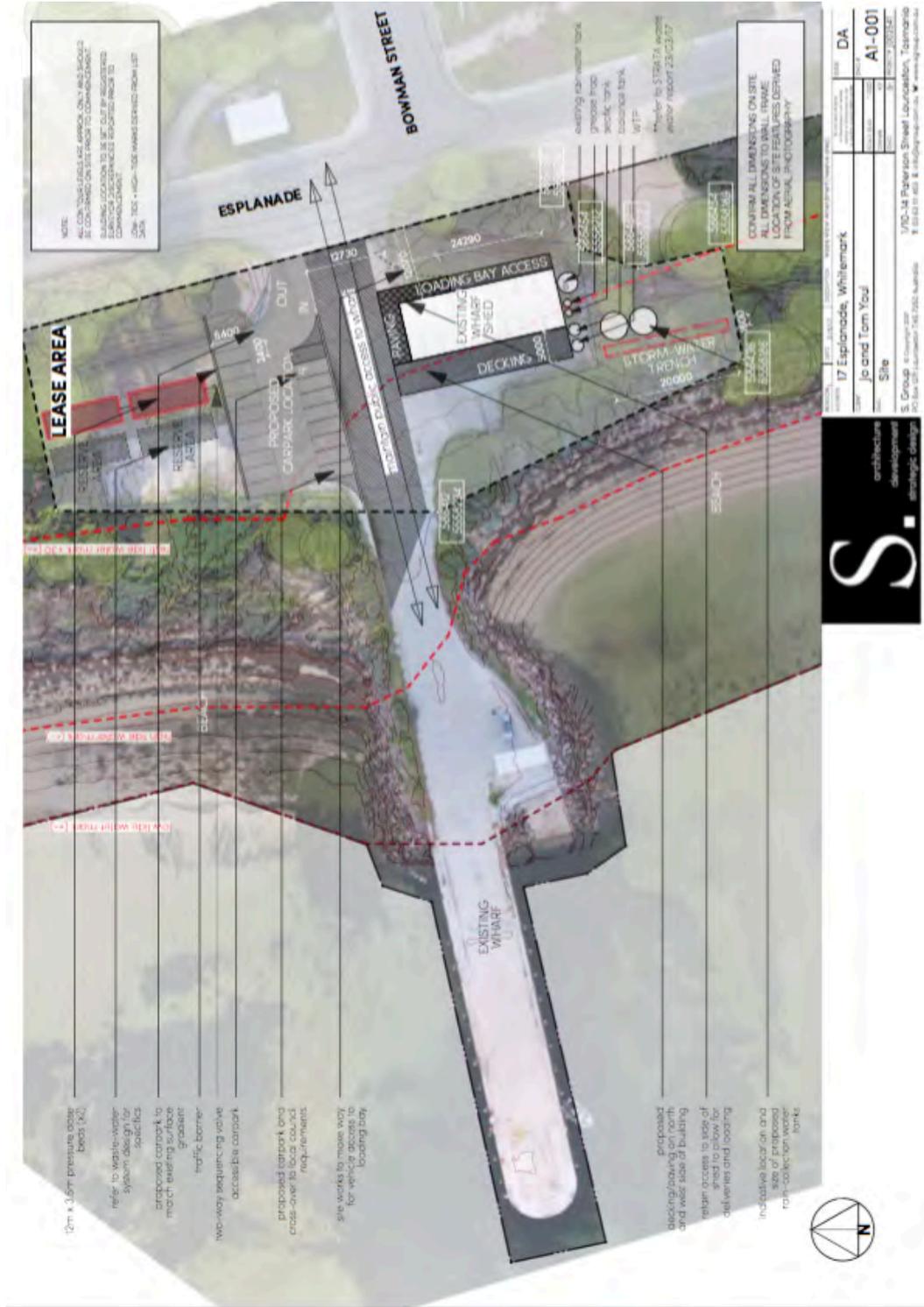
## **8. References**

- AS1726-1993- Geotechnical Site Investigations
- AS 1547-2012 Onsite Wastewater Disposal
- Bureau of Meteorology Website- Monthly Climate Statistics



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Appendix 2 System Specifications



*Onsite Wastewater System Design  
Proposed Upgrades Whitemark Wharf Shed*

## Balance Tank Specifications



2 Austral Place, PO Box 800  
Derwent Park, TAS 7009

p. 03 6272 6628  
f. 03 6272 6281

[sales@netcopumps.com.au](mailto:sales@netcopumps.com.au)  
[www.netcopumps.com.au](http://www.netcopumps.com.au)

### Greywater Pumping Station 1

Selection Criteria : Netco NPE Series pump stations are purpose-designed to suit specific site requirements, and there are many variables that affect the design of a pump station. It is important to note that this pump station proposal has been worked out based upon the following criteria:

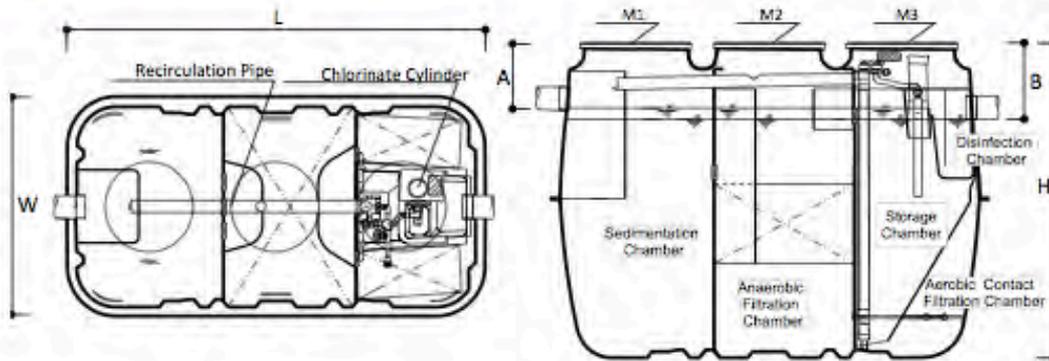
- Chamber Capacity : 4000 Litres
- Flow Requirement : 500-1000 Litres at a time
- Static Head : 0 metres
- Rising Main Length : 24 metres
- Rising Main Size : 40mm OD (32.3mm ID) SDR11 Poly
- Pump Configuration : Single-Pump, Free Standing
- Power Requirement : Single-Phase
- Pumped Medium : Septic Overflow

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WTP Specifications

**SPECIFICATION**

Flow Diagram



Design Hydraulic and Effluent Data

Water Quality Specifications			
Designed Hydraulic Loading	6000L/day	Effluent Quality	BOD<math>\leq 10\text{mg/L}</math>
Treatment Method	Contact Filter Bed Process	Field Data	SS <math>\leq 10\text{mg/L}</math>
Nitrogen Removal	Yes		T-N <math>\leq 20\text{mg/L}^*</math>
Phosphorous Removal	Yes		T-P <math>\leq 2\text{mg/L}</math>
Classification	Secondary Treatment System		

\*Dependent on influent raw water quality

Model Specification

CE 4200 - Model Specifications			
Equivalent Person (EP)	28		
Capacity(L)	4,200	Dimensions(mm)	
Sedimentation Chamber	3,169	Max Width (W)	1,840
Anaerobic Filtration Chamber	3,177	Max Length (L)	3,880
Aerobic Contact Filtration Chamber	1,431	Max Height (H)	2,065
Storage Chamber	703	Inlet Invert (A)	400
Disinfection Chamber	44	Outlet Invert (B)	450
Total Volume	8,524	Inlet Pipe Nominal Size	dia.125
Weight(kg)	530	Outlet Pipe Nominal Size	dia.125
Correspondent Blower Type	MAC150N		
Construction Material	Fiberglass Reinforced Plastic (FRP)		

Model CE 6000			
Equivalent Person (EP)	40		
Capacity(L)	6,000	Dimensions(mm)	
Sedimentation Chamber	4,520	Max Width (W)	1,990
Anaerobic Filtration Chamber	4,511	Max Length (L)	4,665
Aerobic Contact Filtration Chamber	2,006	Max Height (H)	2,215
Storage Chamber	1,009	Inlet Invert (A)	400
Disinfection Chamber	64	Outlet Invert (B)	450
Total Volume	12,110	Inlet Pipe Nominal Size	dia.125
Weight(kg)	700	Outlet Pipe Nominal Size	dia.125
Correspondent Blower Type	MAC200N		
Construction Material	Fiberglass Reinforced Plastic (FRP)		

Onsite Wastewater System Design  
Proposed Upgrades Whitemark Wharf Shed

Indexing Valve Specification

**K-RAIN MODEL 4000:  
DISTRIBUTING VALVE**

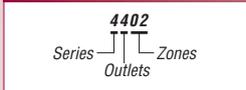
The 4000 distributing valve offers a reliable, economical way to automate multiple zoned residential and small commercial irrigation systems. The simplicity of design and a minimum of moving parts ensures ease of maintenance and long service life.

These patented valves allow for the number of watering zones to be changed quickly and easily. They are ideally suited for both city water and pump applications and may also be used for onsite wastewater or effluent water applications.

The 4000 valve is available in 4 or 6 outlet models. A quick change of the cam allows the valve to operate from 2 to 6 zones. The valve will operate with flows as low as 10 GPM and at pressures of 25 to 75 PSI.

The distributing valve shall carry a two-year trade warranty against manufacturing defects.

**HOW TO SPECIFY**



IRRIGATION SOLUTIONS WORLDWIDE™

**K-Rain Manufacturing Corp.**  
1640 Australian Avenue  
Riviera Beach, FL 33404 USA  
PH: 1-561-844-1002 FAX: 1-561-842-9493  
1-800-735-7246  
EMAIL: krain@k-rain.com  
WEB: http://www.k-rain.com

**MODELS**

**4 Outlet - 1 1/4" x 1 1/4" Models**

- 4400 No Cam
- 4402 Cammed for 2 Zone Operation
- 4403 Cammed for 3 Zone Operation
- 4404 Cammed for 4 Zone Operation

Other Options: Add to Part Number  
**RCW** Reclaimed Water Use

**4 Outlet - 1" x 1" Models**

- 4410 No Cam
- 4412 Cammed for 2 Zone Operation
- 4413 Cammed for 3 Zone Operation
- 4414 Cammed for 4 Zone Operation

**6 Outlet - 1 1/4" x 1" Models**

- 4600 No Cam
- 4602 Cammed for 2 Zone Operation
- 4603 Cammed for 3 Zone Operation
- 4604 Cammed for 4 Zone Operation
- 4605 Cammed for 5 Zone Operation
- 4606 Cammed for 6 Zone Operation

Other Options: Add to Part Number  
**RCW** Reclaimed Water Use

**6 Outlet - 1" x 1" Models**

- 4610 No Cam
- 4612 Cammed for 2 Zone Operation
- 4613 Cammed for 3 Zone Operation
- 4614 Cammed for 4 Zone Operation
- 4615 Cammed for 5 Zone Operation
- 4616 Cammed for 6 Zone Operation

**SPECIFICATIONS**

- Constructed of High Strength, Non-Corrosive ABS Polymer
- Flow Range:  
4 Outlet Valve: 10-40 GPM  
6 Outlet Valve: 10-25 GPM
- Pressure Rating: 25 - 75 PSI
- Pressure Loss:  
4 Outlet Valve  
Flow (GPM) 10 20 30 40  
PSI Loss 2.0 3.0 4.5 6.4  
6 Outlet Valve  
Flow (GPM) 10 20 30  
PSI Loss 2.5 4.5 7.5
- Inlet: Slip and Glue Connection  
4400 Series: to 1 1/4" PVC Pipe  
4410 Series: to 1" PVC Pipe  
4600 Series: to 1 1/4" PVC Pipe  
4610 Series: to 1" PVC Pipe
- Outlets: Slip and Glue Connections  
4400 Series: to 1 1/4" PVC Pipe  
4410 Series: to 1" PVC Pipe  
4600 Series: to 1" PVC Pipe  
4610 Series: to 1" PVC Pipe
- Dimensions: Height: 5-3/4"  
Width: 5-3/4"

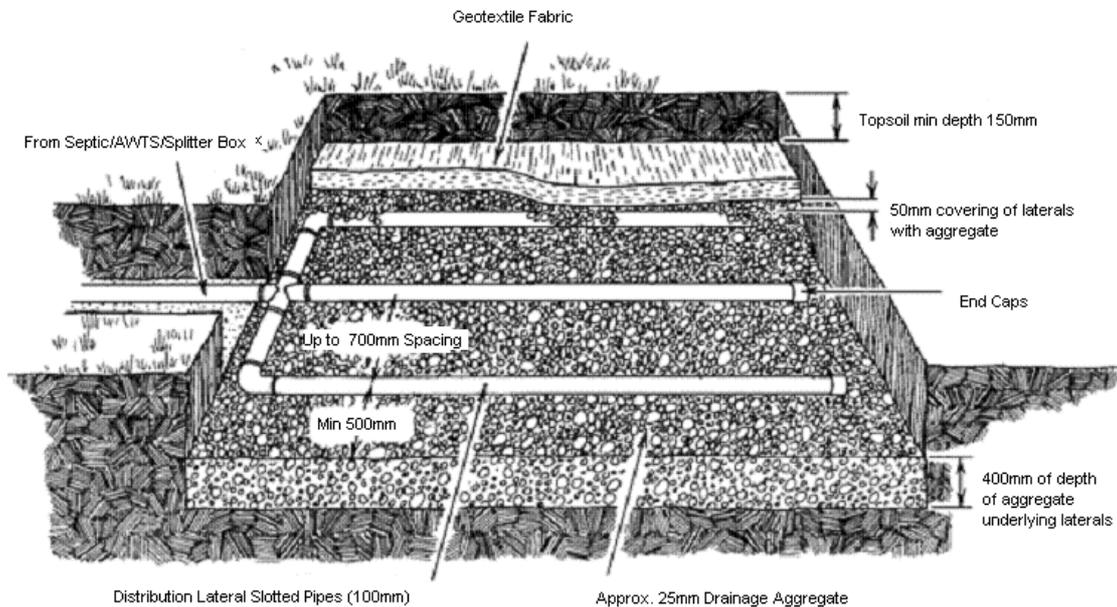
**INSTALLATION TIPS**

- We Recommend the Installation of an Atmospheric Vacuum Breaker Between the Pump and the Valve.

© 2002 K-Rain Manufacturing Corporation

*Onsite Wastewater System Design  
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## Pressure Dosed Bed Design and Construction Notes



**Figure 1 Bed cross section showing key dimensions**

### Pressure Dosed Bed Design and Construction Notes

1. Each bed has the dimensions of 12 m X 3.5 m X 0.6 m.
2. There are two beds in total as located on site plan giving a total trench area of 84 m<sup>2</sup> (See Appendix 1)
3. The base of the bed **MUST** be excavated evenly and level. In clay soils smearing of walls and floors of bed **MUST** be avoided. Bed bases **MUST** be treated with Gypsum at a rate of 1Kg/5m<sup>2</sup>
4. The lower 400mm is to be filled with 20-25mm aggregate.
5. Bed lateral distribution pipes consist of 25 mm PVC pipe with 3-5mm holes drilled and de-burred at 350mm centres. These pipes must be orientated with the hole facing upward. A residual head (squirt height) of 1.5 m should be achieved across all distribution pipes. This **MUST** be tested prior to covering with 100 mm PVC pipe slotted in the 8 o'clock and 4 o'clock positions (ie slots facing downwards). Distribution pipes **MUST** be level to ensure an even wetting front over the entire bed floor.
6. Distribution pipes **MUST** have flush points fitted. These may be pressure controlled flush valves inside an irrigation control box. Laterals should be flushed every 12 months.
7. A further 50mm of aggregate can be added around/over the grid before overlaying with geo-textile to prevent soil from clogging gravels/lateral slots. For sandy soils the sides of the bed should also be lined.
8. Backfilling of the trench to 50 - 75mm above original ground surface level with endemic topsoil (if a sand/loam) or imported loam should proceed. Do not mechanically compact this layer.
9. An inspection outlet should be placed on each distribution pipe.
10. Slight adjustments to the location of Septic Tank/Flow Diverter/Beds are permitted to achieve correct fall to levelled bed base(s).
11. Vehicles and livestock **MUST** be excluded from bed area.

*Onsite Wastewater System Design  
Proposed Upgrades Whitemark Wharf Shed*

## Appendix 2 Detailed Wastewater Design Calculations

<b>Wastewater Loading Certificate*</b>	
<b>System Capacity</b>	4160L/day
<b>Design Summary</b>	
• Effluent Quality	Secondary
• Adopted Soil category	1
• Amended Adopted Soil Category	NA
• Adopted DLR/DIR (mm/d OR L/m <sup>2</sup> /d)	50
• LAA Design	Bed
• Primary LAA Requirement	84 m <sup>2</sup>
• Reserve Area	Min 100% reserve LAA must be maintained in an undeveloped state near the primary system as identified on the site plan
<b>Fixtures</b>	Assumes Std Water saving fixtures inc 6/3L dual flush toilets, aerator forcets, Washing/dishwashing machines with min WELS rating 4.5 star
<b>Consequences of Variation in Effluent Flows</b>	
• High Flows	The system should be capable of buffering against flows of up to 10% above modelled in a 24 hr period. System not rated for spa/bath installation.
• Low Flows	Should not affect system performance
<b>Consequences of Variation in Effluent Quality</b>	Residence to avoid the installation of sink disposal systems (eg "sinkerators"), or the addition of large amounts of household cleaning products or other solvents. These can overload system BOD or affect effluent treatment by system biota.
<b>Consequences of Lack of Maintenance and Monitoring Attention</b>	<p>Owners should maintain the system in compliance with Home Owners Manual.</p> <p>All livestock, vehicles and persons to be excluded from the LAA.</p> <p>Failure to ensure the above may lead to infection of waterways, bores or the spread of disease, as well as production of foul odours, attraction of pests and excessive weed growth.</p>

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Proposed Upgrades Whitemark Wharf Shed*

**Table 4 Minimum daily wastewater allowance for non-residential buildings**

<b>Source</b>	<b>Design hydraulic loading Litres/person/day</b>	<b>Design organic loading grams/person/day</b>
Motel – per bar attendant	1000	120
Motel – meals per diner	10	10
Motel – per resident guest and staff (in house laundry)	150	80
Motel – resident guest and staff (out sourced laundry)	100	80
Restaurant per seat	40	50
Tea rooms and café per seat	10	10
Take-away food per customer	10	40
Conference /function centre	30	35
Public toilet	6	3
Public hall, theatre, gallery (no kitchen)	3	2
Public hall, theatre, gallery (with kitchen)	10	5
Public building with showers and toilets (sports club, gym, pool)	50	10
Hospital (per bed)	350	150
Childcare centre per child and staff	20	20
Factory, office, medical centre per person	20	15
Campgrounds (fully serviced)	150	60
Camp Grounds (with showers and toilets)	100	40

Adapted from Guidelines for Environmental Management – Code of Practice Onsite Wastewater Management EPA Victoria 2013

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### Appendix 3 Site and Soil Evaluation

<b>Table 3 Site Features</b>	
Climate	The nearest weather station with long term data is the Whitemark Station with a mean annual rainfall of 715 mm (BOM 2014) and no evaporation data. The region has a near Mediterranean climate with maximum temperatures and minimum rainfall in the summer.
Exposure	The site is relatively unshielded with exposure to winds which predominate from the NW/SW directions
Vegetation	None
Landform	Flat
Slope	Slight slopes
Fill	No fill evident
Rocks and Rock Outcrops	None
Erosion Potential	None known
Surface Water	30m+
Flood Potential	<1:100 AEP
Stormwater Run-on and Upslope Seepage	The dwelling and land application areas are expected to receive on minor amounts of stormwater run-on or groundwater recharge.
Groundwater	No groundwater was encountered throughout site reconnaissance and is likely to be several meters under the ground surface contained within rock.
Site Drainage and Subsurface Drainage	The site receives minimal run on and does not show signs of springs or other areas of ephemeral subsurface water retention. Given clay subsoils perched watertable may exist in some areas of the site
Recommended Buffer Distances	Given the significant land area, all buffer distances as stipulated in EPA (2013) are achievable.
Available Land Application Area	There is surplus space to land application area requirements (including reserves).





Onsite Wastewater System Design  
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## Appendix 4 Form 35B

### CERTIFICATE OF THE RESPONSIBLE DESIGNER (PLUMBING WORK)

Section  
80(1)(b)

To:  Owner name  
 Address  
  Suburb/postcode

Form  
**35B**

#### Designer details:

Name:  Category:   
 Business name:  Phone No:   
 Business address:   
  Fax No:   
 Accreditation or Licence No:  Email address:

#### Details of the proposed work:

Owner/Applicant:  Designer's project reference No.   
 Address:    
   
 Type of work: (e.g. new installation/ alteration/ addition/ repair/ other)

#### Description of the Design Work (Scope, limitations or exclusions):

Deemed-to-Satisfy:  Alternative Solution:  (tick  the appropriate box)  
**See Design and terms and conditions of appropriate report**

201

#### Design documents provided:

The following documents are provided with this Certificate –

Document description:		
Drawing numbers: Strata Report 02519	Prepared by: S Nielsen	Date: 22/3/17
Schedules:	Prepared by:	Date:
Specifications: Strata Report 02519	Prepared by: S Nielsen	Date: 22/3/17
Computations: Strata Report 02519	Prepared by: S Nielsen	Date: 22/3/17
Alternative solution proposals: Strata Report 02519	Prepared by: S Nielsen	Date: 22/3/17
Test reports: Strata Report 02519	Prepared by: S Nielsen	Date: 22/3/17

Onsite Wastewater System Design  
Proposed Upgrades Whitemark Wharf Shed

<b>Standards, codes or guidelines relied on in design process:</b>	
AS1547-2012	

<b>Any other relevant documentation:</b>	
Terms and Conditions of relevant report	

<b>Attribution as designer:</b>					
<p>I Sven Nielsen..... being a licenced plumber practitioner-certifier or an accredited building practitioner am responsible for the design of that part of the plumbing work or plumbing installation as described in this certificate;</p> <p>The documentation relating to the design includes sufficient information for the assessment of the work in accordance with the <i>Building Act 2000</i> and sufficient detail for the plumber or builder to carry out the work in accordance with the documents and the Act;</p> <p>This certificate confirms compliance of this design with the requirements of the Plumbing Code of Australia (PCA) and is evidence of suitability under Clause A2.2 of the PCA.</p>					
Designer:	<table border="1"> <tr> <td style="text-align: center;">Signed:</td> <td style="text-align: center;">Date:</td> </tr> <tr> <td style="text-align: center;"></td> <td style="text-align: center;">22/3/17</td> </tr> </table>	Signed:	Date:		22/3/17
Signed:	Date:				
	22/3/17				

Director of Building Control - date approved 1 April 2014: Building Act 2000 - Approved Form No 35B

*Onsite Wastewater System Design  
Proposed Upgrades Whitemark Wharf Shed*



## Appendix 4 Terms and Conditions

### **Scope of Work**

These Terms and Conditions apply to any services provided to you ("the Client") by Strata Geoscience and Environmental Pty Ltd ("Strata"). By continuing to instruct Strata to act after receiving the Terms and Conditions or by using this report and its findings for design and/or permit application processes and not objecting to any of the Terms and Conditions the Client agrees to be bound by these Terms and Conditions, and any other terms and conditions supplied by Strata from time to time at Strata's sole and absolute discretion. The scope of the services provided to the Client by Strata is limited to the services and specified purpose agreed between Strata and the Client and set out in the correspondence to which this document is enclosed or annexed ("the Services"). Strata does not purport to advise beyond the Services.

### **Third Parties**

The Services are supplied to the Client for the sole benefit of the Client and must not be relied upon by any person or entity other than the Client. Strata is not responsible or liable to any third party. All parties other than the Client are advised to seek their own advice before proceeding with any course of action.

### **Provision of Information**

The Client is responsible for the provision of all legal, survey and other particulars concerning the site on which Strata is providing the Services, including particulars of existing structures and services and features for the site and for adjoining sites and structures. The Client is also responsible for the provision of specialised services not provided by Strata. If Strata obtains these particulars or specialised services on the instruction of the Client, Strata does so as agent of the Client and at the Client's expense. Strata is not obliged to confirm the accuracy and completeness of information supplied by the Client or any third party service provider. The Client is responsible for the accuracy and completeness of all particulars or services provided by the Client or obtained on the Client's behalf. Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever suffered by the Client or any other person or entity resulting from the failure of the Client or third party to provide accurate and complete information. In the event additional information becomes available to the Client, the Client must inform Strata in writing of that information as soon as possible. Further advice will be provided at the Client's cost. Any report is prepared on the assumption that the instructions and information supplied to Strata has been provided in good faith and is all of the information relevant to the provision of the Services by Strata. Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever if Strata has been supplied with insufficient, incorrect, incomplete, false or misleading information.

### **Integrity**

While all reasonable care is taken reporting to the Client, Strata does not warrant that the information contained in any report is free from errors or omissions. Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever resulting from errors in a report. Any report should be read in its entirety, inclusive of any summary and annexures. Strata does not accept any responsibility where part of any report is relied upon without reference to the full report.

### **Project Specific Criteria**

Any report provided by Strata will be prepared on the basis of unique project development plans which apply only to the site that is being investigated. Reports provided by Strata do not apply to any project other than that originally specified by the Client to Strata. The Report must not be used or relied upon if any changes to the project are made. The Client should engage Strata to further advise on the effect of any change to the project. Further advice will be provided at the Client's cost. Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever where any change to the project is made without obtaining a further written report from Strata. Changes to the project may include, but are not limited to, changes to the investigated site or neighbouring sites, for instance, variation of the location of proposed building envelopes/footprints, changes to building design which may impact upon sewage treatment plant system design, specification and performance.

### **Interpretation**

Strata is not responsible for the interpretation of site data or report findings by other parties, including parties involved in the design and construction process. The Client must seek advice from Strata about the interpretation of the site data or report.

### **Design/Report Recommendations**

Where sewage treatment plant and/or application system designs are provided by Strata, reasonable effort will be made to minimise environmental, public health and commercial risks associated with the disposal of effluent within site boundaries with respect to relevant Australian guidelines and industry best practise at the time of investigation. Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever resulting from:

- (i) changes to either the project or site conditions that affect the onsite wastewater land application system's ability to safely dispose of modelled wastewater flows; or
- (ii) changes to original use of site infrastructure or changes from original modelled loadings as a result of change of use; or
- (iii) seepage, pollution or contamination or the cost of removing, nullifying or clearing up seepage, polluting or contaminating substances; or
- (iv) poor system performance where septic tanks have not been de-sludged at maximum intervals of 3 years or sewage treatment plants have not been serviced in compliance with the manufacturers recommendations; or
- (v) system /component failure of any recommended system/component; or

*Onsite Wastewater System Design  
Proposed Upgrades Whitemark Wharf Shed*

- (vi) poor contractor construction/installation practice; or
- (vii) Inferior product/component selection by installing contractor ; or
- (viii) any treatment plant , treatment plant component or land application area breakdown of any kind; or
- (ix) failure of the client to commission both interim and final inspections by the designer throughout the system construction; or
- (x) the selection of inappropriate plants for irrigation areas or any increased cost associated with upkeep of recommended plants or their replacement; or
- (xi) damage to any infrastructure by seepage/effluent including but not limited to foundations, walls, driveways and pavements; or
- (xii) land instability, soil erosion or dispersion caused by seepage/effluent or the installation of sewage plant infrastructure; or
- (xiii) design changes requested by the Permit Authority; or
- (xiv) time delays associated with any of the above, or to strata or any of its representatives being able to mobilise to site for any reason.

Furthermore Strata does not guarantee septic trench and bed design life beyond 5 years from installation, given the influence various cleaning chemicals have on soil structural decline and premature trench failure in some soil types

Strata does not consider site contamination, unless the Client specifically instructs Strata to consider the site contamination in writing. If a request is made by the Client to consider site contamination, Strata will provide additional terms and conditions that will apply to the engagement.

**Copyright and Use of Documents**

Copyright in all drawings, reports, specifications, calculations and other documents provided by Strata or its employees in connection with the Services remain vested in Strata. The Client has a licence to use the documents for the purpose of completing the project. However, the Client must not otherwise use the documents, make copies of the documents or amend the documents unless express approval in writing is given in advance by Strata. The Client must not publish or allow to be published, in whole or in part, any document provided by Strata or the name or professional affiliations of Strata, without first obtaining the written consent of Strata as to the form and context in which it is to appear.

If, during the course of providing the Services, Strata develops, discovers or first reduces to practice a concept, product or process which is capable of being patented then such concept, product or process is and remains the property of Strata and:

- (i) the Client must not use, infringe or otherwise appropriate the same other than for the purpose of the project without first obtaining the written consent of Strata; and
- (ii) the Client is entitled to a royalty free licence to use the same during the life of the works comprising the project.

**Digital Copies of Report**

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Appendix D

## Stormwater Overflow Trench Specification and Management Plan



**strata**  
geoscience and environmental

## Stormwater Overflow Trench Specification and Management Plan

**Address: Tasports Shed, Whitemark**

**Proponent: Jo Youl**

**Proposed Development – Redevelopment**

Stormwater runoff from impervious surfaces is calculated according to the rational method taken from *Australian Rainfall and Runoff (ARR)* for a 1:20 year 5 minute storm event:

$$Q = 0.278CIA$$

Where:

Q = Flow rate

C = Runoff coefficient (taken as 0.85 for a pitched impervious roof surface)

I = Intensity of rainfall (taken as 50mm/hour for Whitemark)

A = Catchment area – 224 m<sup>2</sup>

Therefore:

$$\begin{aligned} Q &= 0.278 \times 0.85 \times 50 \times 224 \\ &= 2.64 \text{ L/sec} \end{aligned}$$

Now:

$$V=Qt$$

Where:

V=Volume of runoff

t=time

$$\begin{aligned}\text{Volume of Runoff} &= \text{flow rate} \times \text{time} \\ &= 2.64 \text{ L/sec} \times 300 \text{ sec} \\ &= 793 \text{ L}\end{aligned}$$

Assuming a design loading rate of 25 l/m<sup>2</sup>/d

Therefore:

$$BA = V/DLR$$

Where BA = Trench Basal Area

V= Volume

DLR = Design Loading Rate

$$BA=793/25$$

$$BA= 31.72$$

**Therefore a stormwater trench of basal area of 32 m<sup>2</sup> is required**

The dwelling should have all gutters plumber to a min 20KL tanks with the overflow plumbed to the trench. Please refer to Appendix 1&2 for detailed design and construction notes.



S Nielsen MEngSc CPSS-

Director

Strata Geoscience and Environmental Pty Ltd

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E: sven@strataconsulting.com.au

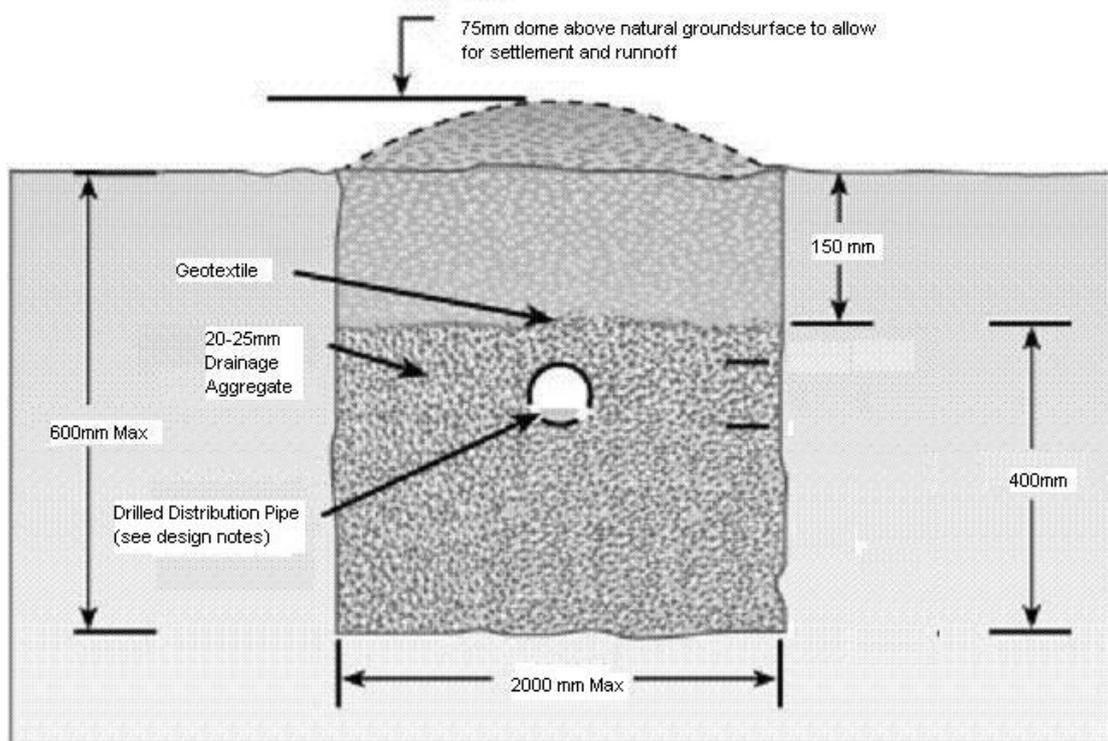
W: www.strataconsulting.com.au

Appendix 1 Site Plan



## Appendix 2 Stormwater Overflow Trench Design and Construction Notes

1. Trench has the dimensions of 20 X 1.6 X 0.6 m.
2. There is one trench in total as located on site plan giving a total area of 32 m<sup>2</sup> (See Appendix 1)
3. The base of the trench **MUST** be excavated evenly and level. In clay soils smearing of walls and floors of bed **MUST** be avoided. Soils **MUST** be parallel raked and treated with gypsum at a rate of 1Kg/m<sup>2</sup>.
4. The lower 400mm is to be filled with 20-25mm aggregate.
5. 100mm PVC pipe slotted in the 8'o'clock and 4'o'clock positions to be placed on top of aggregate as shown. The distribution pipe **MUST** be level to ensure flow of effluent to all areas of the trench. Failure to ensure this may cause preferential overloading of the trench and the potential for bed overflow. A 90 degree elbow should be installed to act as a velocity reducer prior to the main trench pipe.
6. A further 50mm of aggregate can be added around/over the grid before overlaying with geo-textile to prevent soil from clogging gravels/lateral slots. For sandy soils the sides of the trench should also be lined.
7. Backfilling of the bed to 50 - 75mm above original ground surface level with endemic topsoil (if a sand/loam) or imported loam should proceed. Do not mechanically compact this layer.
8. An inspection outlet should be placed on each distribution pipe.
9. Slight adjustments to the location of Septic Tank/Flow Diverter/Trenches are permitted to achieve correct fall to levelled trench bases.
10. Vehicles and livestock should be excluded from trench area.



## Appendix 3 Form 35b

CERTIFICATE OF THE RESPONSIBLE DESIGNER (PLUMBING WORK)		Section 80(1)(b)
To:	Jo Youl	Owner name
		Address
		Suburb/postcode
		Form <b>35B</b>
<b>Designer details:</b>		
Name:	S Nielsen	Category: Hydraulic Domestic
Business name:	Strata Geoscience and Environmental P/L	Phone No: 0413545358
Business address:	17 Little Arthur Street	
	North Hobart 7000	Fax No:
Accreditation or Licence No:	GC6113K	Email address: sven@strataconsulting.com.au
<b>Details of the proposed work:</b>		
Owner/Applicant:	AS ABOVE	Designer's project reference No.
Address:	TASPORTS SHED	
	WHITEMARK	
Type of work:	(e.g. new installation/ alteration/ addition/ repair/ other) NEW STORMWATER LAND APPLICATION SYSTEM	
<b>Description of the Design Work (Scope, limitations or exclusions):</b>		
Deemed-to-Satisfy:	<input type="checkbox"/>	Alternative Solution: <input type="checkbox"/> (tick <input checked="" type="checkbox"/> the appropriate box)
<b>See Design and terms and conditions of appropriate report</b>		
201		
<b>Design documents provided:</b>		
The following documents are provided with this Certificate –		
<i>Document description:</i>		
Drawing numbers:	Strata Report Prepared by: S Nielsen	Date: 19/4/17
02351		
Schedules:	Prepared by:	Date:
Specifications:	Strata Report 02351 Prepared by: S Nielsen	Date: 19/4/17
Computations:	Strata Report 02351 Prepared by: S Nielsen	Date: 19/4/17
Alternative solution proposals:	Strata Report 02351 Prepared by: S Nielsen	Date: 19/4/17
Test reports:	Strata Report 02351 Prepared by: S Nielsen	Date: 19/4/17

<b>Standards, codes or guidelines relied on in design process:</b>	
AS1547-2012	

<b>Any other relevant documentation:</b>	
Terms and Conditions of relevant report	

<b>Attribution as designer:</b>	
---------------------------------	--

I Sven Nielsen..... being a licenced plumber practitioner-certifier or an accredited building practitioner am responsible for the design of that part of the plumbing work or plumbing installation as described in this certificate;

The documentation relating to the design includes sufficient information for the assessment of the work in accordance with the *Building Act 2000* and sufficient detail for the plumber or builder to carry out the work in accordance with the documents and the Act;

This certificate confirms compliance of this design with the requirements of the Plumbing Code of Australia (PCA) and is evidence of suitability under Clause A2.2 of the PCA.

	Signed:	Date:
Designer:		19/4/17



## Appendix 4 Terms and Conditions

### **Scope of Work**

These Terms and Conditions apply to any services provided to you ("the Client") by Strata Geoscience and Environmental Pty Ltd ("Strata"). By continuing to instruct Strata to act after receiving the Terms and Conditions or by using this report and its findings for design and/or permit application processes and not objecting to any of the Terms and Conditions the Client agrees to be bound by these Terms and Conditions, and any other terms and conditions supplied by Strata from time to time at Strata's sole and absolute discretion. The scope of the services provided to the Client by Strata is limited to the services and specified purpose agreed between Strata and the Client and set out in the correspondence to which this document is enclosed or annexed ("the Services"). Strata does not purport to advise beyond the Services.

### **Third Parties**

The Services are supplied to the Client for the sole benefit of the Client and must not be relied upon by any person or entity other than the Client. Strata is not responsible or liable to any third party. All parties other than the Client are advised to seek their own advice before proceeding with any course of action.

### **Provision of Information**

The Client is responsible for the provision of all legal, survey and other particulars concerning the site on which Strata is providing the Services, including particulars of existing structures and services and features for the site and for adjoining sites and structures. The Client is also responsible for the provision of specialised services not provided by Strata. If Strata obtains these particulars or specialised services on the instruction of the Client, Strata does so as agent of the Client and at the Client's expense. Strata is not obliged to confirm the accuracy and completeness of information supplied by the Client or any third party service provider. The Client is responsible for the accuracy and completeness of all particulars or services provided by the Client or obtained on the Client's behalf. Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever suffered by the Client or any other person or entity resulting from the failure of the Client or third party to provide accurate and complete information. In the event additional information becomes available to the Client, the Client must inform Strata in writing of that information as soon as possible. Further advice will be provided at the Client's cost. Any report is prepared on the assumption that the instructions and information supplied to Strata has been provided in good faith and is all of the information relevant to the provision of the Services by Strata. Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever if Strata has been supplied with insufficient, incorrect, incomplete, false or misleading information.

### **Integrity**

Any report provided by Strata presents the findings of the site assessment. While all reasonable care is taken when conducting site investigations and reporting to the Client, Strata does not warrant that the information contained in any report is free from errors or omissions. Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever resulting from errors in a report. Any report should be read in its entirety, inclusive of any summary and annexures. Strata does not accept any responsibility where part of any report is relied upon without reference to the full report.

### **Project Specific Criteria**

Any report provided by Strata will be prepared on the basis of unique project development plans which apply only to the site that is being investigated. Reports provided by Strata do not apply to any project other than that originally specified by the Client to Strata. The Report must not be used or relied upon if any changes to the project are made. The Client should engage Strata to further advise on the effect of any change to the project. Further advice will be provided at the Client's cost. Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever where any change to the project is made without obtaining a further written report from Strata. Changes to the project may include, but are not limited to, changes to the investigated site or neighbouring sites, for instance, variation of the location of proposed building envelopes/footprints, changes to building design which may impact upon building settlement or slope stability, or changes to earthworks, including removal (site cutting) or deposition of sediments or rock from the site.

### **Classification to AS2870-2011**

It must be emphasised that the site classification to AS2870-2011 and recommendations referred to in this report are based solely on the observed soil profile at the time of the investigation for this report and account has been taken of Clause 2.1.1 of AS2870 - 2011. Other abnormal moisture conditions as defined in AS2870 - 2011 Clause 1.3.3 (a) (b) (c) and (d) may need to be considered in the design of the structure. Without designing for the possibility of all abnormal moisture conditions as defined in Clause 1.3.3, distresses will occur and may result in non "acceptable probabilities of serviceability and safety of the building during its design life", as defined in AS2870 - 2011, Clause 1.3.1. Furthermore the classification is preliminary in nature and needs verification at the founding surface inspection phase. The classification may be changed at this time based upon the nature of the founding surface over the entire footprint of the project area. Any costs associated with a change in the site classification are to be incurred by the client. Furthermore any costs associated with delayed works associated with a founding surface inspection or a change in classification are to be borne by the client. Where founding surface inspections are not commissioned the classifications contained within this report are void. Classification is based upon a range of expected ground surface movement as indicated in AS2870-2011. Where the range of movement exceeds the stipulations for the nominated classification Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever suffered by the Client or any other person.

### **Slope Instability Risks**

Where comment, modelling or treatment options are suggested to limit the risk of slope instability Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever resulting from actual slope instability or mass movement over the site at any point over the design life of any structures or neighbouring structures.

### **Subsurface Variations with Time**

Any report provided by Strata is based upon subsurface conditions encountered at the time of the investigation. Conditions can and do change significantly and unexpectedly over a short period of time. For example groundwater levels may fluctuate over time, affecting latent soil bearing capacity and ex-situ/insitu fill sediments may be placed/removed from the site. Changes to the subsurface conditions that were encountered at the time of the investigation void all recommendations made by Strata in any report. Strata is not

liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever resulting from any change to the subsurface conditions that were encountered at the time of the investigation. In the event of a delay in the commencement of a project or if additional information becomes available to the Client about a change in conditions becomes available to the Client, the Client should engage Strata to make a further investigation to ensure that the conditions initially encountered still exist. Further advice will be provided at the Client's cost. Without limiting the generality of the above statement, Strata does not accept liability where any report is relied upon after three months from the date of the report, (unless otherwise provided in the report or required by the Australian Standard which the report purports to comply with), or the date when the Client becomes aware of any change in condition. Any report should be reviewed regularly to ensure that it continues to be accurate and further advice requested from Strata where applicable.

#### **Interpretation**

Site investigation identifies subsurface conditions only at the discrete points of geotechnical drilling, and at the time of drilling. All data received from the geotechnical drilling is interpreted to report to the Client about overall site conditions as well as their anticipated impact upon the specific project. Actual site conditions may vary from those inferred to exist as it is virtually impossible to provide a definitive subsurface profile which accounts for all the possible variability inherent in earth materials. Soil depths and composition can vary due to natural and anthropogenic processes. This is particularly pertinent to some weathered sedimentary geologies or colluvial/alluvial clast deposits which may show significant variability in depth to refusal over a development area. Furthermore where rocky profiles are encountered no comment is made about the potential size of liberated rocks from bulk earthworks or vertical boring. Where large rocks are liberated this may impact upon the ability to cost effectively build on the site and further advice should be sought from Strata. Such profiles may also significantly increase earthworks costs and or materials cost in foundations. Rock incongruities such as joints, dips or faults may also result in subsurface variability. Variability may lead to differences between the design depth of bored/driven piers compared with the actual depth of individual piers constructed onsite. It may also affect the founding depth of conventional strip, pier and beam or slab footings, which may result in increased costs associated with excavation (particularly of rock) or materials costs of foundations. Founding surface inspections should be commissioned by the Client prior to foundation construction to verify the results of initial site characterisation and failure to insure this will void the classifications and recommendations contained within this report. Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever resulting from any variation from the site conditions inferred to exist.

Strata is not responsible for the interpretation of site data or report findings by other parties, including parties involved in the design and construction process. The Client must seek advice from Strata about the interpretation of the site data or report.

#### **Report Recommendations**

Any report recommendations provided by Strata are only preliminary. A report is based upon the assumption that the site conditions as revealed through selective point sampling are indicative of actual conditions throughout an area. This assumption cannot be substantiated until earthworks and/or foundation construction is almost complete. Where variations in conditions are encountered, Strata should be engaged to provide further advice. Further advice will be provided at the Client's cost. Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever if the results of selective point sampling are not indicative of actual conditions throughout an area or if the Client becomes aware of variations in conditions and does not engage Strata for further advice.

#### **Geo-environmental Considerations**

Where onsite wastewater site investigation and land application system designs are provided by Strata, reasonable effort will be made to minimise environmental and public health risks associated with the disposal of effluent within site boundaries with respect to relevant Australian guidelines and industry best practise at the time of investigation. Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever resulting from:

- (i) changes to either the project or site conditions that affect the onsite wastewater land application system's ability to safely dispose of modelled wastewater flows; or
- (ii) seepage, pollution or contamination or the cost of removing, nullifying or clearing up seepage, polluting or contaminating substances; or
- (iii) poor system performance where septic tanks have not been de-sludged at maximum intervals of 3 years or AWTs systems have not been serviced in compliance with the manufacturers recommendations; or
- (iv) failure of the client to commission both interim and final inspections by the designer throughout the system construction; or
- (v) the selection of inappropriate plants for irrigation areas; or
- (vi) damage to any infrastructure including but not limited to foundations, walls, driveways and pavements; or
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- (viii) design changes requested by the Permit Authority.

Furthermore Strata does not guarantee septic trench and bed design life beyond 5 years from installation, given the influence various household chemicals have on soil structural decline and premature trench failure in some soil types

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#### Document Status

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Version: 3

Date: 6/06/2017