

Building Better Regions Fund Infrastructure Projects Stream Application

Portland All Abilities Foreshore Development



GLENELG SHIRE
Victoria's Birthplace

**Supporting Documents
November 2018**



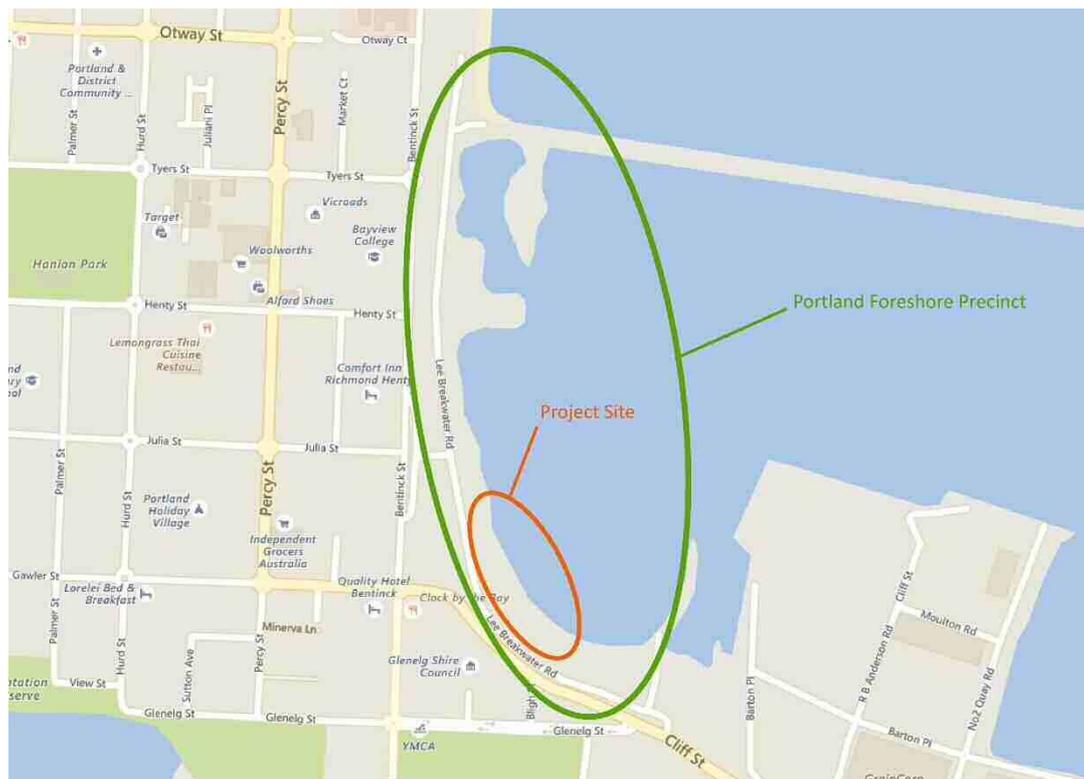
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Project overview

Portland Foreshore is the natural focal point for Portland and one of the region's most popular visitor destinations. Less than 250 metres from the central shopping precinct in Percy Street, the foreshore offers open lawns and park space, beaches, boat ramps, play equipment and a skate park. The foreshore is home to the Portland Visitor Information Centre and Maritime Discovery Centre and is serviced by the Portland Cable Tram, which travels through the foreshore lawns.

Figure 1 - Map showing project site and foreshore precinct



The Portland All Abilities Foreshore Development is the next stage in the delivery of Council's Master Plan for the Portland Foreshore Precinct and is a priority project identified in the Glenelg Shire Council Plan. The Master Plan is aimed at improving amenity and accessibility across the foreshore to deliver significant social benefits and enhance the appeal of one of the Shire's most important tourism hubs.

While the precinct is an extremely popular recreational space for local families and visitors, access to many parts of the foreshore is poor. Currently beach and playground access is by uneven informal tracks worn across grass areas by pedestrian traffic; play equipment is inaccessible to children, parents and grandparents using a wheelchair, pram or other mobility aid; there is a lack of properly constructed disabled parking places; and park furniture, picnic tables and barbecues are not wheelchair-friendly.

In 2016, Council received a petition bearing 2,240 signatures calling for the installation of an all abilities playground and wheelchair accessible features at the Portland Foreshore under the Master Plan. In response, Council committed to the inclusion of an all abilities adventure playground and accessible elements in the Master Plan.

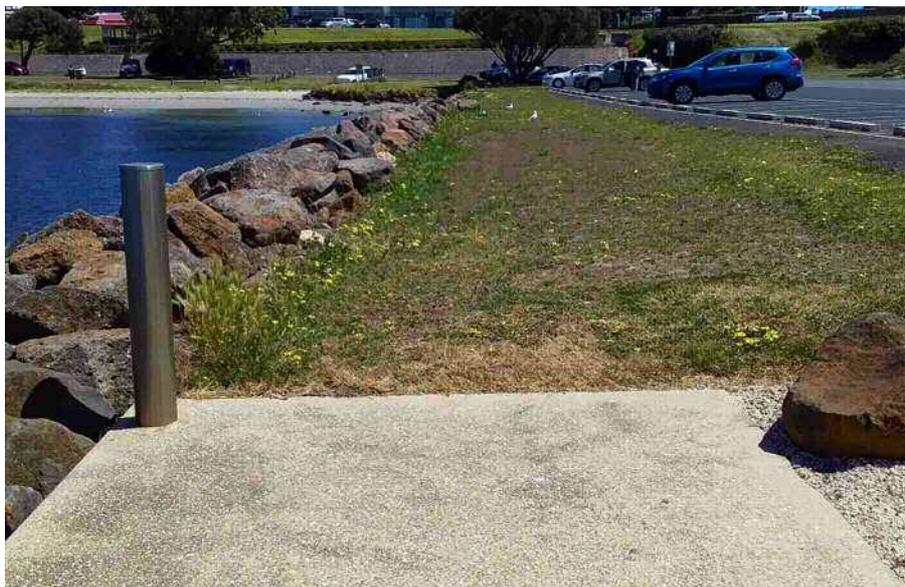
Council commenced design work for the playground in 2017, conducting extensive community consultation on playground features and foreshore access improvements to accompany the playground. In 2018, Council was successful in securing funding from the Victorian Department of Health and Human Services towards the installation of accessible changing place toilets at the foreshore, in close proximity to the site of the all abilities playground and disabled parking spaces. The changing place toilet facility will be delivered as part of the current project.

Figure 2 - Existing play equipment is inaccessible by wheelchair.



Council has committed \$1.252 million through its 2018/19 budget to allow the construction of the all abilities playground. Funds sought through the Building Better Regions Fund (BBRF) will enable the construction of wheelchair friendly hard pathways to link the new playground to disabled parking spaces, accessible changing place toilets and other foreshore amenities; boardwalks to provide all abilities waterside access while protecting the shoreline from further degradation; and properly constructed car parking and vehicle access points that afford easy access to the foreshore. The Portland Foreshore Master Plan and All Abilities Play Space Concept Designs are presented at Appendix A.

Figure 3 - Much of the foreshore is access by informal tracks that are unsuitable for wheelchairs and mobility aids.



Merit Criteria

Criterion One – Economic Benefit

In December 2017, Council commissioned an independent economic impact and cost benefit analysis for the entire Portland Foreshore Precinct Master Plan. This analysis has been adapted to provide an estimate of the economic benefits the current project will deliver to the region. The analysis and accompanying cost plan are presented at Appendix B.

Economic Impact Multipliers

As part of the economic analysis and cost benefit analysis, input-output multipliers were developed to model the direct and indirect economic benefits associated with the delivery of infrastructure projects under the Master Plan. These multipliers reflect Australian Bureau of Statistics (ABS) input-output tables published in 2015 and have been scaled to address recognised limitations associated with the application of national economic ratios to smaller areas, as shown in Table 1. Given the size of the current project, supply-side constraints and opportunity costs are negligible.

Table 1 – Relevant ABS Input-output Multipliers (published 2015) scaled for Glenelg Region

Input-Output Multiplier	Direct Multiplier (Note: Employment multipliers have been scaled to 50%)	Production Multiplier (Note: Production multipliers have been scaled to 20%)	Consumption Multiplier (Note: Consumption multipliers have been scaled to 20%)	Indirect Multiplier (Note: Indirect multipliers have been scaled to 20%)	Total Multiplier
Non-residential building construction output	1.00	0.27	0.13	0.40	1.40
Non-residential building construction employment	0.81	0.84	0.42	1.26	2.07
Tourism output	1.00	0.16	0.15	0.31	1.31
Tourism employment	3.49	0.58	0.47	1.05	4.54

Construction - Output

The construction output multiplier forecasts an additional forty cents in economic activity for every dollar spent on construction of community infrastructure along the Portland Foreshore. The application of this multiplier to the current \$2.7 million project shows an expected increase in economic activity of around \$3.8 million.

Construction - Employment

The construction employment multiplier shows that for every \$1 million spent building community infrastructure in Glenelg Shire, 2.07 jobs are created. Using this multiplier, it is forecast that the current project will generate an additional 5.6 jobs during the construction phase.

Tourism – Output

The foreshore precinct is one of Portland’s most popular tourist destinations and is the location of the Portland Visitor Information Centre and Maritime Discovery Centre. The importance of the foreshore continues to grow in line with increased cruise ship visitations to the Port of Portland, which is also the focal point for recreational sport fishing in Victoria.

Tourism Research Australia data shows that Glenelg Shire receives around 163 000 visitors each year, worth approximately \$79 million to the regional economy. Most of these visitors will spend time in Portland.

While tourism is not the principal focus of the current project, it is expected that improvements to foreshore amenity will have a positive effect on visitor perceptions, visitor numbers and length of stay. A modest 0.5 percent increase in visitations is forecast to produce increased economic activity worth approximately \$400 000 to the local economy each year. The application of the tourism output multiplier shows a total uplift in local economic activity of around \$524 000 per annum as a result of increased visitor spend.

Tourism - Employment

The tourism employment multiplier shows that 4.54 jobs are created for every \$1 million in additional tourism output in Glenelg Shire. The application of this multiplier forecasts the creation of 2.4 direct and indirect jobs (ongoing) as a result of increased visitor spending produced by the current project.

Use of Local Suppliers

Glenelg Shire Council supports procurement that not only delivers appropriate value for money, but also generates positive social outcomes. Council is committed to supporting the local business community and encouraging its involvement in purchasing processes. Accordingly, Council requires the inclusion of an 'Economic Contribution to the Shire' evaluation criterion in all tender specifications and quotes for work, with a minimum weighting of 25 percent.

It is also proposed to engage local social enterprises employing adults with a disability to procure trees, landscaping supplies and related labour as appropriate during the construction of the current project.

Criterion Two – Social Benefit

The Portland All Abilities Foreshore Development will deliver tremendous social benefits to the Shire of Glenelg and the broader region. As the region's first fully integrated accessible open space, the project will provide opportunities for hundreds of residents and visitors with limited mobility the chance to participate in play and outdoor social activities with friends and families in a way that has been inaccessible until now.

Community involvement

The Portland All Abilities Foreshore Development enjoys an exceptionally high level of community support. Council's vision for the project was developed in response to a community campaign by Maycie Reeves – a local school girl with cerebral palsy who is wheelchair-dependant and was frustrated with the limited recreational options available to people with a disability living in the Shire. The campaign included a petition signed by 2,240 people asking for the development of an all abilities play space and wheelchair accessible features as part of the foreshore Master Plan.

The design process initiated by Council for the project included an extensive community consultation program, which involved more than 550 primary school children; twenty preschool age children; approximately sixty teachers, teacher's aides and carers; and input from more than one-hundred community members. The consultation program included engagement sessions with local schools; special education providers; disability service providers; disability support groups and tourists visiting the Portland Foreshore. A report on the consultation program is presented at Appendix C; relevant media clips and letters of support appear at Appendices D and E.

Improved amenity

The project will greatly enhance the amenity and appeal of the Portland Foreshore, which is a favourite destination for community activities and family outings, as well as being an extremely popular tourist stop. In response to community input received during consultation on the project, the foreshore improvements have been designed to deliver better recreational outcomes for all park users and add visual appeal to the beachside reserve.

The importance of the foreshore to regional tourism is expected to increase as the number of cruise ship visitations continues to grow. For visitors arriving in Portland by ship, Portland Bay and the foreshore precinct is the gateway to the Shire and south west Victoria. The facilities and linkages to be delivered through the project will significantly improve the tourist experience.

The provision of fully constructed accessible pathways and boardwalks along the shoreline; accessible changing place toilets; all abilities playground; improved vehicle access with dedicated disabled parking spaces; mobility aid charging stations; accessible park furniture and barbecues; and park lighting will deliver the region's first fully integrated all abilities open space. The play space design incorporates sensory sand and water play elements; safety fencing; and passive barrier components to prevent children straying into vehicle movement zones. These elements offer a level of access and usability previously unavailable anywhere in the region.

Social inclusion

Issues of social isolation associated with disability – and caring for children with a disability – are well recognised. 2016 Australian census data shows that more than 1,300 residents in Glenelg Shire – or 6.8 percent of the population – reported needing help with their day-to-day lives due to disability, compared to a Victorian state average rate of 6 percent.

The improvements to be delivered through the project will make the Portland Foreshore accessible to residents and visitors of all abilities for the very first time. The project directly addresses issues of social isolation and the lack of recreational opportunities for residents with a disability and their families living in the Shire by providing an integrated suite of high-quality, accessible public infrastructure at one of the Shire's most popular parks.

The design of project elements is intended to deliver equality in participation through the inclusion of features that will be of universal appeal to families and children of all abilities. The provision of smart lighting will improve precinct safety and security, while also allowing use across a longer time period to provide new opportunities for working parents to enjoy the space with their families.

Aboriginal heritage

The Glenelg Shire has a large, young, and very active Aboriginal community – of the 2.5 percent of the local population that identifies as Aboriginal, over half are under 25 years of age. Our community has expressed a desire to increase our connection to Aboriginal history, by celebrating culture and art, sharing honest accounts of events such as the Eumerella Wars, and promoting significant sites such as Budj Bim.

The current project will incorporate design elements, interpretive signage and art installations that tell the story of the importance of Portland Bay and the foreshore precinct to the traditional owners, the Gunditjmarra people. These elements will be developed in partnership with the Gunditj Mirring Traditional Owners Aboriginal Corporation.

Health and wellbeing

Participation in outdoor recreation is known to contribute to better health and wellbeing outcomes. While Council's Health and Wellbeing Plan recognises the need to increase participation in active recreation to improve health and wellbeing outcomes, the Glenelg Shire Council Access and Inclusion

(Disability) Action Plan identifies the significant barriers to participation that exist for many people with a disability or age-related mobility limitations.

In addition to promoting physical activity through the development of the accessible play space, the project incorporates hard paths and boardwalks that reflect universal design principles to provide genuine opportunities for gentle exercise to residents and visitors who are unable to negotiate uneven surfaces and steep gradients.

Community connections

The Portland Foreshore is a favourite place for family gatherings and community activities. Each year, the foreshore hosts a wide range of festivals and community functions including the Upwelling Festival, community markets, Hooked on Portland fishing festival, and pop-up cinema events. The improvements to foreshore amenity delivered through the project will increase opportunities for participation in these community activities for residents and visitors with a disability.

In addition to key events, the foreshore precinct is a favourite destination for local schools; disability service providers; informal recreational groups and disability support groups. Kyeema Support Services Inc. provides a wide range of activities and support services for local residents with disabilities, including a kayaking program and regular games of basketball at the foreshore's youth precinct. Currently, the lack of appropriate toilet facilities and access constraints limit participation in these activities for several of Kyeema's clients. The amenity improvements to be delivered through the project will greatly enhance opportunities for participation in community activities for these residents and hundreds of other locals with a disability.

Project partnerships are being established with regional disability support groups and service providers including Kyeema Support Services Inc.; the Gunditj Mirring Traditional Owners Aboriginal Corporation; and local schools including Portland Bay Special Development School to develop design elements that reflect the very high level of community support and ownership of the project.

Addressing disadvantage

ABS Socio-Economic Indexes for Areas (SEIFA) data shows that Portland and surrounding areas sit at the 13th percentile for relative socio-economic disadvantage in Australia – put simply, this means that 87 percent of Australian towns and suburbs are better off than Portland. This index score not only highlights the need for further investment in community facilities in Glenelg Shire, but also underscores the limited capacity within the region to provide these facilities without significant external support. The project's focus on all abilities open space access delivers social, health and wellbeing benefits for residents in the Portland region who frequently experience further disadvantage as consequence of their disability.

Environmental sustainability

The Portland Foreshore is subject to environmental challenges through the action of the sea on the shoreline, compounded by erosion caused by pedestrian traffic. The foreshore beaches are amongst the Shire's most popular during summer months, when they are exposed to very heavy pedestrian use and unrestricted vehicle movements across sandy lawn areas.

Figure 4 - Significant shoreline erosion is compounded by informal pedestrian access points.



To help ensure this valuable natural resource is available for future generations, the project incorporates shoreline stabilisation works in the form of rock shoring, as well as beachside boardwalks and hard pathways to protect the Portland Foreshore from further degradation. The creation of fully constructed parking near the all abilities play space and installation of safety bollards will serve to restrict vehicle access to lawn areas, further protecting the foreshore from compaction and erosion.

Figure 5 - Informal parking on lawns causes erosion and compaction.



Social enterprises

The Portland All Abilities Foreshore Development project incorporates significant landscaping elements and tree plantings. During project delivery, it is intended that Council will engage local social enterprises employing residents with disabilities for the supply of indigenous trees, landscaping materials and related labour.

Criterion Three – Project Delivery

Glenelg Shire Council will be responsible for managing the project, which has been in development since late in 2016. The project is within Council's capacity and is well aligned with the organisation's areas of expertise.

Council is proud of its excellent track record in delivering grant funded projects on time and within budget. Similar projects recently completed by Council include:

- The \$10 million Portland Bay Coastal Infrastructure Project which included a 70-berth floating marina; reclaiming a 49,500m² section of land for parking and community use; enlarged car and boat trailer parking areas; and a modern four-lane boat ramp.
- The \$1.5 million Australian Kelpie Centre in Casterton, incorporating a Visitor Information Centre, meeting spaces, amenities and an interpretative display showcasing the history of the Kelpie working dog.

A Project Control Group (PCG) will be established early in the delivery of the project to ensure effective project governance. Regional Development Australia will be invited to participate in this group.

Approvals

As the project is the next stage in the delivery of the Portland Foreshore Master Plan, Council has already commenced work to secure all necessary approvals. This process is the same as that undertaken during previous foreshore development projects, including the Portland Bay Coastal Infrastructure Project; design and construction of the Portland Skate Park; and Nuns Beach improvement works.

Council has received principal support for the implementation of the Portland Foreshore Master Plan from the Victorian Department of Environment, Land, Water and Planning; and work to establish the Indigenous Land Use Agreement (ILUA) with the Gunditj Mirring Traditional Owners Aboriginal Corporation is well progressed.

Site suitability

Council has completed geotechnical studies to confirm the suitability of the site for the proposed development, as well as establishing seawater incursion margins, the levels of tidal action, and the extent of groundwater inundation. The site is well suited to the intended use and the level of development proposed under the project. Shoreline stabilisation works in the form of rock shoring; waterside boardwalks; fully constructed hard pathways; and tree planting completed through the project will help to protect the site from degradation.

Project maintenance

Infrastructure and improvements delivered through the project will be maintained by Glenelg Shire Council as part of its regular asset inspection and maintenance works. This work is funded annually through the Council budget and occurs in accordance with established asset management and maintenance schedules.

Criterion Four – Impact of Grant Funding

The Portland All Abilities Foreshore Development is a key project for Glenelg Shire Council. As such, council has committed funding of \$1.25 million toward the project, which will allow the construction of the all abilities play space to proceed. State government funding of \$100,000 towards the construction of the accessible changing place toilets will also ensure this project component can occur concurrent to the construction of the play space.

Funds sought through the BBRF will allow the provision of hard pathways and boardwalks to provide wheelchair and pram friendly access to the play space; properly constructed disabled parking; mobility aid charging stations; and accessible linkages to the shoreline that transform the playground project into a fully integrated all abilities precinct. As such, this funding is critical to the success of the entire project.

Council has been working to provide funding for the project since 2016. The introduction of the 'Fair Go Rates System' in Victoria has limited Council's capacity to generate revenue needed to deliver projects under the Portland Foreshore Master Plan – a situation that is compounded in Glenelg Shire by significant reductions in income received through negotiated rate agreements with large ratepayers like Alcoa. Consequently, it is not known when Council would have the capacity to fund the pathways, boardwalks and parking needed to provide all abilities access to the foreshore precinct.

The funding sought through the BBRF leverages an investment to date of nearly \$12 million in improvements to the Portland Bay Foreshore; \$1.35 million in project funding from Council and the Victorian Department of Health and Human Services; and in-kind support and project consultancies worth approximately \$232,000 to create a fully integrated all abilities recreational space.

Appendix A – Portland Foreshore Master Plan and All Abilities Play Space Concept Designs

PORTLAND FORESHORE MASTERPLAN CONCEPT



Appendix B - Economic Impact & Cost Benefit Analysis and Cost Plan

Glenelg Shire Council
Foreshore Precinct Project

Economic Impact and Cost Benefit Analysis

Commercial in Confidence

11 December 2017

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Version Control

Version	Date	Purpose
Version 1.0	11 December 2017	Review

Clarification of accuracy

This report uses inputs provided by third parties, including information from the Glenelg Shire Council and its consultant advisors, from consultation with the community and industry, and drawn from publications in the public domain. Biruu has not independently checked these inputs, and notes that the findings presented in this report are subject to the accuracy of these inputs.

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1 RESULTS OF ECONOMIC IMPACT AND COST BENEFIT ANALYSIS

1.1 Economic logic

The economic logic underpinning this analysis of the Portland Foreshore Precinct is as follows:

Portland is the western book-end to Victoria’s Great Ocean Road, the third most popular natural attraction in Australia. However, ABS reports that tourism supports just 4.5% of jobs in the Shire, despite the Shire covering the iconic natural attractions of Portland Bay, Cape Bridgewater and Bridgewater Bay.

Tourism Australia research found that Portland’s problem is not the lack of natural assets, rather it is the lack of signature interpretive facilities, ageing infrastructure, and poor visitor amenity. These intrude on visitors’ perception of Portland as a tourist destination, and act as a brake on the visitor economy.

Ocean fishing is already a very successful tourism product for Portland. It would be made stronger by better meeting the entertainment needs of the family left on-shore.

If this problem is solved more self-drive international and domestic tourists travelling the coastal route between Melbourne and Adelaide will stay in Portland, creating economic activity and local jobs.

The physical form of the solution has been endorsed the community in two planning policies (Portland Bay Foreshore Master Plan, Portland Bay Marine Master Plan) as an adjacent pair of linked initiatives, a) An All Abilities Play Space, and b) A Town Jetty.

1.2 Assumptions and documents

Assumptions made in this analysis include:

- Baseline visitor (tourism) numbers have been sourced from Tourism Research Australia.
- Average daily expenditure of \$136 for visitors to the region has been estimated from Tourism Research Australia, Tourism in Local Government Areas 2015, Glenelg (S) Victoria.
- A discount rate of 4% for the net present value (NPV) over a 20 year time horizon.
- Increased tourism in Portland as a result of developing the foreshore. The baseline tourism is assumed to increase by 1% as a consequence of the development of the foreshore precinct.

A more complete list of assumptions is provided in this report.

Biruu was provided with the following documents;

- Portland Foreshore Master Plan
- Zinc Quantity Surveyors Cost report
- Portland Foreshore Master Plan Business Case

1.3 Results of the Economic Impact and Cost Benefit Analysis

Based on the assumptions set out in this report the proposed Portland Foreshore Precinct will have the following economic impacts:

Parameter	Economic Impact of the Portland Foreshore Precinct
The total development cost	\$10.8m in net present value terms
The economic impact of the construction alone	\$15.2m in net present value terms
The economic impact of construction and ongoing operation	\$27.4m in net present value terms
Jobs created in the region (excludes jobs created outside the region)	12 EFT direct and indirect construction jobs during the two year construction term 4 EFT direct and indirect ongoing jobs.

The Benefit Cost Ratio of construction and ongoing operation	2.5:1
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2 ECONOMIC ANALYSIS

2.1 Objective

The objective of this economic assessment is to calculate the economic impact (direct and indirect) for the proposed foreshore precinct development in Portland.

This assessment considers direct and indirect economic impacts arising from capital costs, direct and indirect economic activity from production and increased tourism, and the corresponding employment impacts.

2.2 Methodology

The following development is assessed in this analysis:

- Develop the Portland Foreshore Precinct, which encompasses rebuilding the jetty and construction of an all abilities play space. Design and construction cost is \$11.495m, to be completed in a two year construction period.
- Increased tourism in Portland as a result of developing the foreshore precinct. Baseline tourism estimates have been sourced from Tourism Research Australia. The baseline tourism estimates have been increased by 1% as directed by the Glenelg Shire

The economic analysis assesses the direct and indirect production and employment effects over 2 years of the construction of the proposed development. The capital cost of \$11.495m is also the direct production benefit to the Portland economy and is used to estimate the indirect production impact and the direct and indirect employment effects of the proposed development annually for the length of the construction period, assumed to be two years.

The analysis assesses the direct and indirect production and employment effects from year 3-20 of additional tourism in Portland after construction of the proposed development is complete.

The ABS ANZSIC does not have an industry code for tourism. We have estimated output, income and employment multipliers for tourism by averaging the multipliers for industries associated with tourism in the following table.

Input-Output Multipliers	Direct Multiplier	Production Multiplier	Consumption Multiplier	Indirect Multiplier	Total Multiplier
Accommodation Output	1.00	0.78	0.70	1.49	2.49
Accommodation Income	0.27	0.19	0.17	0.36	0.63
Accommodation Employment	5.16	2.67	2.20	4.88	10.03
Food and Beverage Services Output	1.00	0.87	0.79	1.66	2.66
Food and Beverage Services Income	0.32	0.20	0.19	0.39	0.71
Food and Beverage Services Employment	8.21	2.74	2.47	5.22	13.43
Retail Trade Output	1.00	0.71	0.85	1.56	2.56
Retail Trade Income	0.38	0.18	0.21	0.38	0.77
Retail Trade Employment	7.83	2.31	2.67	4.98	12.81
Heritage, Creative and Performing Arts Output	1.00	0.77	0.65	1.42	2.42
Heritage, Creative and Performing Arts Income	0.21	0.22	0.16	0.38	0.59
Heritage, Creative and Performing Arts Employment	8.42	3.15	2.05	5.19	13.61
Sports and Recreation Output	1.00	0.94	0.75	1.69	2.69
Sports and Recreation Income	0.23	0.26	0.18	0.44	0.67
Sports and Recreation Employment	5.24	3.67	2.34	6.01	11.25
Tourism Output	1.00	0.81	0.75	1.56	2.56
Tourism Income	0.28	0.21	0.18	0.39	0.67
Tourism Employment	6.97	2.91	2.35	5.26	12.23

The net present value (NPV) of the proposed development has been calculated to assess the benefit cost ratio. A real discount rate of 4% has been used in all NPV calculations. The discount rate has been determined with reference to the Capital Asset Pricing Model (CAPM) methodology using a Treasury Corporation of Victoria (TCV) 10 year nominal interest rate of 3%, inflation rate of 1.5% (real risk free rate of 1.5%) and a risk premium of 2.5%.

In order to quantify the indirect economic and employment impacts of this project we have used the ABS Input/Output (I-O) Multiplier methodology. Following some criticism from the ABS on the misuse of this methodology by practitioners, Biruu has developed an enhanced (more conservative) I-O methodology taking into account ABS comments and recalculated these effects for the purposes of this assessment.

This leads to a lower, more conservative, and more accurate assessment of economic impact than many other practitioners' assessments. Care should be taken when comparing different economic impact claims.

This 'I-O' method estimates economic impacts from the increase in annual production spurred by increased employment in the development from the region and consequent and subsequent spending effects as this works through the local economy.

We have conducted an assessment to determine the likely economic impact that the proposed development in Portland would have on the local economy based on the 2012-13 Australian National Accounts: Input-Output Tables published by the ABS in June 2015. The total economic impact of the increased production has been estimated using direct and indirect production and employment multipliers based on the ABS 2012-13 data. As the ABS no longer publishes the multipliers that can be derived from this data, we have calculated them in house using matrix maths techniques.

In order to address the published ABS concerns on I-O methodology we have made the following adjustments to these basic multipliers in our enhanced methodology:

- We have used 20% of the indirect production and employment multipliers to estimate the flow-on effect of the increased spending on the regional economy.
- To account for the marginal effects of increases in non-residential construction employment and tourism, we have used 50% of the direct employment multiplier for non-residential construction and tourism.

The rationales for these (reduced) effects are outlined in the table below:

ABS Issue Raised	Biruu Response	Correction to Multiplier in our Methodology
Lack of supply-side constraints: The most significant limitation of economic impact analysis using multipliers is the implicit assumption that the economy has no supply-side constraints. That is, it is assumed that extra output can be produced in one area without taking resources away from other activities, thus overstating economic impacts. The actual impact is likely to be dependent on the extent to which the economy is operating at or near capacity.	This issue can be dealt with relatively easily by looking at the percentage of the working age population employed in the region which is available from Census data.	When the regional economy is facing capacity constraints, Biruu uses a lower proportion of the multiplier to estimate the likely regional economic impacts.
Fixed prices: Constraints on the availability of inputs, such as skilled labour, require prices to act as a rationing device. In assessments using multipliers, where factors of production are assumed to be limitless, this rationing response is assumed not to occur. Prices are assumed to be unaffected by policy and any crowding out effects are not captured.	In effect, this is again a spare capacity issue as with lack of supply-side constraints.	Same correction as with lack of supply-side constraints.
Fixed ratios for intermediate inputs and production: Economic impact analysis using multipliers implicitly assumes that there is a fixed input structure in each industry and fixed ratios for production. As such, impact analysis using multipliers can be seen to describe average effects, not marginal effects. For example, increased demand for a product is assumed to imply an equal increase in production for that product. In reality, however, it may be more efficient to increase imports or divert some exports to local consumption rather than increasing local production by the full amount.	Use of multipliers in economic impact analyses assumes that the marginal effects of a new development has the same impact as the average national impact as calculated from the National Accounts. This assumption probably overestimates the impact of the new development on the regional economy.	Biruu uses a lower proportion of the multipliers to estimate the likely regional economic impacts.
No allowance for purchasers' marginal responses to change: Economic impact analysis using multipliers assumes that households consume goods and services in exact proportions to their initial budget shares. For example, the household budget share of some goods might increase as household income increases. This equally applies to industrial consumption of intermediate inputs and factors of production.	In effect, this is again a marginal versus average issue as with fixed ratios for intermediate inputs and production.	Same correction as with fixed ratios for intermediate inputs and production.

Absence of budget constraints: Assessments of economic impacts using multipliers that consider consumption induced effects (type two multipliers) implicitly assume that household and government consumption is not subject to budget constraints.

In effect, this is again a spare capacity issue as with lack of supply-side constraints.

Same correction as with lack of supply-side constraints.

Not applicable for small regions: Multipliers that have been calculated from the national I–O table are not appropriate for use in economic impact analysis of projects in small regions. For small regions multipliers tend to be smaller than national multipliers since their inter–industry linkages are normally relatively shallow. Inter–industry linkages tend to be shallow in small regions since they **usually don't have the capacity to produce the wide range of goods** used for inputs and consumption, instead importing a large proportion of these goods from other regions.

This a critical issue, especially for non-residential construction projects which are capital intensive and have quite large multipliers because the industry relies on inputs from other industries. However, these multipliers are national not regional so the regional multipliers would be much smaller if the intermediate production is done outside the region, which is usually the case.

Biruu uses a lower proportion of the multiplier to estimate the likely regional economic impacts.

2.3 Economic Impact Multipliers

Production and Employment Multipliers have been calculated for 114 industries based on the Australian National Accounts: Input-Output Tables 2012-13. The table below contains the multipliers relevant to this project.

'Raw' calculated multipliers (prior to our adjustments)

Input-Output Multipliers 2012-13, Based on ABS Data					
Input-Output Multipliers	Direct Multiplier	Production Multiplier	Consumption Multiplier	Indirect Multiplier	Total Multiplier
Non-Residential Building Construction Output	1.00	1.35	0.67	2.02	3.02
Non-Residential Building Construction Employment	1.62	4.22	2.08	6.30	7.92
Tourism Output	1.00	0.81	0.75	1.56	2.56
Tourism Employment	6.97	2.91	2.35	5.26	12.23

The Direct Output Multiplier is simply the production/expenditure value of the project. A \$10 million building project has \$10 million output to the economy. Increased production of \$10 million per annum expands regional output by \$10 million.

Further production increases flow from this direct output as firms in the supply chain expand to account for the additional demand for further production. The Indirect Production Multiplier for a building project is 1.35. For every \$1 million spent on a building project, indirect production in the national economy increases \$1.35 million.

As firms in the supply chain expand, there are additional flow-on effects on household consumption, the Indirect Consumption Multiplier. For every \$1 million spent on a building project, indirect production spurred by increased household consumption increases \$0.67 million. Adding the indirect production and consumption multipliers gives a Total Indirect Multiplier effect. Adding the Direct and Indirect Multipliers equates to the Total Multiplier.

On average, for every \$1 million spent on construction, there are 1.62 workers directly employed in the construction industry. As firms in the supply chain expand to satisfy extra demand from additional output, they employ additional workers. On average, for every \$1 million of construction output, 6.3 workers are employed indirectly.

Given the limitations of using multipliers outlined above, Biruu has adjusted these Input-Output Multipliers. The table below contains the multipliers that have been used in estimating the direct and indirect impacts of the proposed project.

'Adjusted' multipliers (used in our 'enhanced I-O assessment)

(note that these are reduced significantly from the 'raw' numbers in the table above for the reasons given in the methodology section)

Input-Output Multipliers 2012-13, Scaled for Glenelg Region						
Input-Output Multipliers	Direct Multiplier	Production Multiplier	Consumption Multiplier	Indirect Multiplier	Total Multiplier	
	(50% Construction and Tourism Employment)	(20%)	(20%)	(20%)		
Non-Residential Building Construction Output	1.00	0.27	0.13	0.40	1.40	
Non-Residential Building Construction Employment	0.81	0.84	0.42	1.26	2.07	
Tourism Output	1.00	0.16	0.15	0.31	1.31	
Tourism Employment	3.49	0.58	0.47	1.05	4.54	

The direct output multipliers for Non-Residential Building Construction, and the estimated Tourism Industries have not been adjusted because the region's direct production will be wholly received in the region.

The direct construction and tourism employment multipliers have been adjusted to 50% of the original values to consider the marginal versus average effect of increases in production.

All the indirect output and employment multipliers have been adjusted to 20% of the original values to consider the shallow inter-industry linkages within small regions and the spare capacity issues discussed above. It is impossible to know exactly what percentage of production and employment will remain within the region. However, these assumptions are fairly conservative and should serve to give a reasonable estimation of the economic impact of the proposed development on the region.

The table below indicates the average daily spend of overnight visitors to the Glenelg Shire of \$136 per night.

Tourism in Local Government Areas Data, Glenelg (\$), 2015					
Type of Visitor	Number	Days	Average Days	Expenditure	Average Daily Expenditure
Overnight Visitor	152,000	527,000	3	\$75,000,000	\$142
International Visitor	11,000	53,000	5	\$4,000,000	\$75
Total	163,000	580,000	4	\$79,000,000	\$136

The following table indicates the additional output (expenditure) associated with an estimated 1% increase in visitors to the proposed development.

Effects of Increasing Glenelg Tourism by 1%					
Type of Visitor	Additional Visitors	Days	Average Days	Expenditure	Average Daily Expenditure
Overnight Visitor	1,520	5,270	3	\$750,000	\$142
International Visitor	110	530	5	\$40,000	\$75
Total	1,630	5,800	4	\$790,000	\$136

2.4 Assumptions

The economic impact of the proposed Portland development project is derived from the construction of the proposed development and anticipated increases in tourism in the region.

Assumptions made in this analysis include:

- A 2 year construction period
- Capital cost is \$11.495m, with 50% spent in year 1 and in year 2.
- Direct production benefit of construction is the same as the capital cost pa.
- Indirect production benefit of construction is 20% of the I/O indirect non-residential construction output multiplier times the direct construction output pa.
- Direct employment in construction is 50% of the I/O direct non-residential construction employment multiplier times the direct construction output pa.
- Indirect employment in construction is 20% of the I/O indirect non-residential construction employment multiplier times the direct construction output pa.
- Direct ongoing production is the additional expenditure of \$0.8m pa associated with increased tourism.

- Indirect ongoing production is 20% of the I/O indirect output multiplier of the industry times the direct ongoing production.
- Direct ongoing employment in tourism is 50% of the I/O direct tourism multiplier times the direct tourism output pa.
- Indirect ongoing employment is 20% of the I/O indirect employment multiplier of the industry times the direct ongoing production.
- Baseline visitor (tourism) numbers have been sourced from Tourism Research Australia.
- Average daily expenditure of \$136 for visitors to the region has been sourced from Tourism Research Australia, Tourism in Local Government Areas 2015, Glenelg (S) Victoria.
- A discount rate of 4% is applied to the cashflows to calculate the net present value (NPV) of the options over a 20 year time horizon.

2.5 Impact Assessment

The table below shows the first 5 years of cashflows associated with the proposed development.

	NPV@4%	Sum	1	2	3	4	5
Costs							
Development Cost	-\$10,840,329	-\$11,495,000	\$5,747,500	\$5,747,500			
	-\$10,840,329	-\$11,495,000					
Benefits							
Direct Development Output	\$10,840,329	\$11,495,000	\$5,747,500	\$5,747,500			
Indirect Development Output	\$4,373,738	\$4,637,878	\$2,318,939	\$2,318,939			
Direct Tourism Output	\$9,246,343	\$14,220,000	\$0	\$0	\$790,000	\$790,000	\$790,000
Indirect Tourism Output	\$2,891,584	\$4,446,982	\$0	\$0	\$247,055	\$247,055	\$247,055
	\$27,351,994	\$34,799,860					
Cost to Government	-\$10,840,329	-\$11,495,000					
Benefits	\$27,351,994	\$34,799,860					
B/C Ratio	2.5	3.0					
Direct Employment			5	5	3	3	3
Indirect Employment			7	7	1	1	1
Total Employment			12	12	4	4	4

The proposed development:

- Sees an additional \$5.75m and 5 jobs pa, one off, direct economic and employment impact from construction effects for two years, for a total economic impact of \$8.1m pa (NPV of \$15.2m) and 12 direct and indirect jobs pa during the construction period.
- Sees an additional \$1.0m and 4 jobs, per annum ongoing, total economic impact (20 yr. NPV of \$12.1m)
- The Benefit/Cost Ratio is 2.5x.

2.6 Summary

The proposed development summary in Victoria only:

- The NPV of the construction cost is \$10.8m
- The NPV of the economic impact of the construction is \$15.2m
- The NPV on the ongoing economic impact from additional tourism is \$12.1m
- The BCR is 2.5x
- The development generates 12 direct and indirect construction jobs pa during the 2 year construction term and 4 direct and indirect ongoing jobs pa.

The table below provides the per annum impact summary of the proposed development in Victoria only.

Impact Summary of Proposed Development	
Impact Summary	Development
Direct Economic Impact - Construction (\$M pa)	\$5.7
Indirect Economic Impact - Construction (\$M pa)	\$2.3
Total Economic Impact - Construction (\$M) pa	\$8.1
Direct Employment - Construction pa	5
Indirect Employment - Construction pa	7
Total Employment - Construction	12
Direct Economic Impact - Ongoing (\$M) pa	\$0.8
Indirect Economic Impact - Ongoing (\$M) pa	\$0.2
Total Economic Impact - Ongoing (\$M) pa	\$1.0
Direct Employment - Ongoing pa	3
Indirect Employment - Ongoing pa	1
Total Employment - Ongoing	4

The above results are for Victoria alone.

National impacts will be:

- The investment will generate 18 direct full time equivalent employment generated during the project period (measured in job-years)
- The investment will generate 69 indirect full time equivalent employment generated during the project period (measured in job-years)
- The investment will generate 3 direct full time equivalent employment generated following the project period (measured in job-years)
- The investment will generate 6 indirect full time equivalent employment generated following the project period (measured in job-years)

Ref 17020-cp2

15 December, 2017

Glenelg Shire Council
PO Box 152
PORTLAND VIC 3305

Via email dhol@glenelg.vic.gov.au

Attention Mr David Hol

Dear David,

**Portland Foreshore Precinct
Cost Plan No. 2**

We have prepared Cost Plan No. 2 for the above project based on the documentation provided and our discussions.

The cost plan can be summarised as follows:

	Stage 1 - Cost (\$)	Stage 2 - Cost (\$)	Stage C - Cost (\$)	Total - Cost (\$)
Building & External Works and Services	\$8,789,000	\$2,898,000	\$3,221,000	\$14,908,000
Sub-Total (excl. GST)	\$8,789,000	\$2,898,000	\$3,221,000	\$14,908,000
ESD Initiatives	\$110,000	\$75,000	\$50,000	\$235,000
Contingency and Cost Escalation	\$1,456,000	\$588,000	\$759,000	\$2,803,000
Non-Construction Costs	\$1,140,000	\$393,000	\$422,000	\$1,975,000
TOTAL END COST (excl. GST)	\$11,495,000	\$3,954,000	\$4,472,000	\$19,921,000

Please refer to the attached cost plan for further information and scope of works included.

All costs are reported exclusive of GST.

The cost plan is based on Master Plan Design documentation and has been split into 3 Stages as requested; the cost plan has been broken down into further subsections as per items noted on the master plan documentation provided.

The cost plan has been prepared using the following:

- Portland Foreshore master plan sketch (rev B) prepared by Justin Staggard dated August, 2017
- Site visit inspection on 20 February, 2017
- Scoping discussions with David Hol, Glenelg Shire on 15 December, 2017 showing works to be excluded from cost plan for this funding bid

We advise that services documentation was not available at the time of preparing the cost plan and have therefore used estimates typical for this type of construction. Confirmation will be required once further documentation is available.

We also note that structural documentation was not available and therefore the assumptions made will require confirmation once further documentation is available.

Allowances

The following allowances have been included in the cost plan:

- Allowance for new amenities to Fishing marina carpark - \$200,000
- New town jetty (option B) – \$1,560,000 as per estimate from Ainley Coast & Environment
- All abilities playspace - \$1,300,000
- Refurbishment of Navy Cadets building - \$150,000
- Foreshore Park infrastructure (i.e seating, BBQ's, drinking taps etc) - \$100,000
- Foreshore Park lighting - \$200,000
- Youth precinct reinstatement of beach sand - \$40,000
- Youth precinct park infrastructure (i.e seating, BBQ's, drinking taps etc) – \$20,000
- Youth precinct lighting - \$25,000
- External services and connections per Stage - \$200,000
- Interactive Heritage / Indigenous signage per Stage - \$100,000
- Locality allowance – 2.5% of Construction Cost
- Consultants fees – 8% of Total Construction Cost
- Authority/ headworks charges – 1% of Total Construction Cost
- Client costs – 1% of Total Construction Cost
- Public art – 1% of Total Construction Cost

The cost plan includes an allowance of \$110,000 (stage 1), \$75,000 (stage 2) & \$50,000 (stage 3) for ESD initiatives such as rainwater collection tanks, PV cells etc. to the building works component of the project.

The cost plan is indicative only of the possible order of cost. All components of the cost plan will require confirmation once the design has developed further.

The cost plan also includes allowances for design contingency (5%) and contract contingency (5%). The cost plan assumes that the contingency will be required for design documentation related issues and not for changes to the scope.

The cost plan is based on costs current at December 2017, and includes allowance for cost escalation to December 2018 (stage 1), December 2019 (stage 2) and December 2020 (stage 3), the anticipated tender dates.

Assumptions

The following assumptions have been made with regards to the cost plan:

- The new multi-purpose building will be single storey and comprise multipurpose room & amenities only.
- The water's edge boardwalk to the Maritime Museum area will be predominantly hard pavement (i.e concrete) with some feature timber elements
- The new Community building has been assumed to 850m²
- No allowance for roof structure over performance stage
- Refurbishment of the existing Navy Cadet's building will be a minor refurbishment only (i.e paint)
- The cost plan excludes any provision for costs associated with abnormal ground conditions including piling associated with being in close proximity to the sea
- The cost plan assumes the coastline is of reasonable structural integrity and excludes any costs associated with rock stabilisation
- Site infrastructure is sufficient to allow for connection of new external site services however an allowance of \$200,000 has been included for minor repairs and upgrades.
- Pathway along coast line is predominately concrete paving

Costs are also based on the assumption that the project will be competitively tendered to a select list of appropriate and interested builders in the form of a fixed lump sum contract. The cost plan makes no allowance for cost plus, negotiated, staged or construction management forms of procurement.

Main Risks

The main risks associated with cost are:

- Allowances noted above
- ESD initiatives
- Hazardous material removal (i.e. asbestos, etc.)
- Latent conditions
- Existing services infrastructure
- Condition of existing wharf structure
- Exclusions (as noted below)

Please note that the cost plan specifically excludes any allowances for the following:

- Scope items shown on master plan documentation but noted as excluded in Cost Plan
- Expansion of parking area to boat launch
- Entry features
- Rock stabilisation
- Works associated with the tram lines
- Works to existing piers
- Placing powerlines underground
- Works outside site boundary
- Abnormal ground conditions (i.e. rock, ground water, filling, etc.)
- Site decontamination and remediation
- Cost escalation beyond dates noted
- Furniture, fittings and equipment
- Works to public amenities
- Audio visual / IT equipment and infrastructure including interpretative displays
- Staging of the works
- Archaeological investigations
- Tenancy incentives
- Restaurant fitout including kitchen equipment
- Planning permit
- Finance, legal costs, etc.
- Staging of the works
- Goods and Services Tax

Where appropriate, allowances for the above items should be made in the overall feasibility study.

Do not hesitate to contact us to discuss any clarifications or if you require further information.

Yours faithfully,



Justin Zumpe
Director

Encl. Appendix A – Cost Plan No. 2

Appendix A

Portland Foreshore Master Plan
Glenelg Shire Council

15 December, 2017

Cost Plan No. 2 based on master plan (Rev B) prepared by Justin Staggard Pty Ltd dated August, 2017 and subsequent scoping discussions with Glenelg Shire

Description of Works	Unit	Quantity	Rate (\$/unit)	Stage 1 Cost (\$)	Stage 2 Cost (\$)	Stage 3 Cost (\$)	Total Cost (\$)
Nuns Beach Area							
1 - Hard pavement surface to link shelter to existing steps	m2	470	100	-	-	47,000	47,000
Works to existing shelter, amenities, stairs etc.	Note		Excluded	-	-	Excluded	Excluded
2a - Extend boardwalk from Nuns Beach amenities to Breakwater							
2a - Extend boardwalk from Nuns Beach amenities to Breakwater	m2	350	350	-	-	123,000	123,000
2b - New boardwalk along Breakwater on Nuns Beach side	m2	670	350	-	-	235,000	235,000
Works to existing breakwater	Note		Excluded	-	-	Excluded	Excluded
Fishing Marina Area							
3a - Multi-purpose building including multi-purpose rooms, public toilets, change rooms etc. (1 storey)	m2	135	3,000	-	405,000	-	405,000
3b - Outdoor area on ground	m2	150	500	-	75,000	-	75,000
4 - Works to existing open lawn area							
4a - Hard pavement surface	m2	12,500	10	-	125,000	-	125,000
4b - Trees	No.	1,341	100	-	134,000	-	134,000
4c - Sundry seating, bollards, bins etc.	Item	50	500	-	25,000	-	25,000
4d - Allowance for new amenities to carpark	Item	1	50,000	-	50,000	-	50,000
		1	200,000	-	200,000	-	200,000
Maritime Museum Area							
5 - Waters edge boardwalk (hard pavement with some timber elements)	m2	2,845	250	-	711,000	-	711,000
5a - Water's edge hard pavement surface	m2	800	100	-	80,000	-	80,000
5b - Structural repairs to existing historic wharf	Note	1	Excluded	-	Excluded	-	Excluded
5c - Link bridge	Note	1	Excluded	-	Excluded	-	Excluded
6 - Carpark modification	m2	3,950	50	-	198,000	-	198,000
6a - Soft landscape work to entry of museum including additional trees and plantings	m2	1,500	75	-	113,000	-	113,000
7 - Hard pavement surface pedestrian links	m2	1,000	100	100,000	-	-	100,000
Works to Maritime Museum	Note	1	Excluded	-	Excluded	-	Excluded
Middle Beach Area							
8 - Small water craft launch area	m2	400	250	-	100,000	-	100,000
9 - Bollards and barriers to Lee Breakwater Road	No.	90	300	-	27,000	-	27,000
10 - Hard pavement surface pedestrian access	m2	450	100	-	45,000	-	45,000
11 - Food vending area including provision of services	m2	200	150	-	30,000	-	30,000
12 - Expanded road from Bentinck Street	m2	1,960	200	-	-	392,000	392,000
Works to retaining walls (i.e. heritage bluestone & Bentinck Street)	Note	1	Excluded	-	-	Excluded	Excluded
Event Lawn / Market Space							
13 - Elevated viewing deck	m2	150	1,000	-	-	150,000	150,000
13a - Lift including supporting structure	Item	1	200,000	-	-	200,000	200,000
14 - Hard pavement surface pedestrian paving incl stage performance forecourt	m2	940	100	-	-	94,000	94,000
15 - Stage performance deck (NOTE: no roof structure over)	m2	450	500	-	-	225,000	225,000
15a - Event plaza	m2	1,000	250	-	-	250,000	250,000
19 - Event space lawn including minor earthworks	m2	16,600	15	-	-	249,000	249,000
19a - Demolition of existing road including topsoil to required levels	m2	1,600	25	-	-	40,000	40,000
19b - Demolition of Portland Angling Club House	Item	1	40,000	-	-	40,000	40,000
Asbestos / hazardous material removal	Note		Excluded	-	-	Excluded	Excluded
Old Marina / Facilities Area							
New town jetty (Option B as per estimate from Ainley Coast & Environment dated 8 February, 2017)	Item	1	1,560,000	1,560,000	-	-	1,560,000
16a - Community building including clubrooms, amenities, café etc. (2 storey)	m2	850	3,500	2,975,000	-	-	2,975,000
Allowance for passenger lift	Item	1	100,000	100,000	-	-	100,000
16b - Outdoor decking	m2	335	250	84,000	-	-	84,000
Extra over cost for restaurant fitout	Note		Excluded	Excluded	-	-	Excluded
Café equipment	Note		Excluded	Excluded	-	-	Excluded
Works to existing public amenities	Note		Excluded	-	Excluded	-	Excluded
17 - Carpark improvements	m2	3,500	50	175,000	-	-	175,000
18 - Timber boardwalk to outer edge of carpark	m2	750	250	188,000	-	-	188,000
20 - Boat storage area including fencing	m2	500	150	75,000	-	-	75,000
21 - Elevated boardwalk	m2	750	500	375,000	-	-	375,000
21a - Beach rock shoring	m2	1,100	250	275,000	-	-	275,000
Demolition of existing Portland Yacht Clubhouse	Item	1	100,000	-	100,000	-	100,000
22 - Additional disabled car parking and links to parkland	Item	1	30,000	30,000	30,000	-	60,000

**Portland Foreshore Master Plan
Glenelg Shire Council**

15 December, 2017

Cost Plan No. 2 based on master plan (Rev B) prepared by Justin Staggard Pty Ltd dated August, 2017 and subsequent scoping discussions with Glenelg Shire

Description of Works	Unit	Quantity	Rate (\$/unit)	Stage 1 Cost (\$)	Stage 2 Cost (\$)	Stage 3 Cost (\$)	Total Cost (\$)
All Abilities Playspace							
24 - Playspace including fencing, play elements, seating, picnic spaces etc.	Item	1	1,300,000	1,300,000	-	-	1,300,000
25 - Additional car parking - 13 No. spaces	m2	370	150	56,000	-	-	56,000
Foreshore Park							
26 - Refurbishment of Navy Cadets building (minor works only)	Item	1	150,000	-	150,000	-	150,000
Asbestos / hazardous material removal	Note			-	Excluded	-	Excluded
27 - Pedestrian bridge link	m2	60	2,500	-	-	150,000	150,000
28 - Open park land	m2	10,300	15	155,000	-	-	155,000
28a - Outdoor decking	m2	510	250	128,000	-	-	128,000
28b - Hard pavement surface pedestrian pathways	m2	1,580	100	158,000	-	-	158,000
28c - Park infrastructure (i.e.. seating, BBQ's, drinking taps tables, etc.	Item	1	100,000	100,000	-	-	100,000
28d - Park lighting	Item	1	200,000	200,000	-	-	200,000
Youth Precinct Expansion							
29 - Expansion of skate park including additional surfaces	Item	1	100,000	-	-	100,000	100,000
29a - Reinstatement of beach sand to including stage deck	Item	1	40,000	-	-	40,000	40,000
29b - Allowance for IT & communications provisions	Item	1	40,000	-	-	40,000	40,000
29c - Park infrastructure (i.e.. seating, BBQ's, drinking taps tables, etc.	Item	1	20,000	-	-	20,000	20,000
29d - Carpark improvements	m2	220	50	-	-	11,000	11,000
29e - Park lighting	Item	1	25,000	-	-	25,000	25,000
Lee Breakwater Road							
23 - Allowance for alterations to existing road including kerbs and channels	m2	4,800	75	-	-	360,000	360,000
Cliff Street Road							
Hard surface pedestrian pathway including ramp	m2	1,300	100	-	-	130,000	130,000
External services and connections to existing infrastructure							
Interactive Heritage/ Indigenous Signage	Item	1	100,000	100,000	100,000	100,000	300,000
Works to existing piers	Note		Excluded	Excluded	Excluded	Excluded	Excluded
Expansion of parking area	Note		Excluded	Excluded	Excluded	Excluded	Excluded
New boat launch	Note		Excluded	Excluded	Excluded	Excluded	Excluded
Entry feature	Note		Excluded	Excluded	Excluded	Excluded	Excluded
Rock stabilisation	Note		Excluded	Excluded	Excluded	Excluded	Excluded
Relocate or upgrade of existing services and infrastructure	Note		Excluded	Excluded	Excluded	Excluded	Excluded
Works outside site boundary	Note		Excluded	Excluded	Excluded	Excluded	Excluded
Abnormal ground conditions / site decontamination / remediation	Note		Excluded	Excluded	Excluded	Excluded	Excluded
Works to existing tram track	Note		Excluded	Excluded	Excluded	Excluded	Excluded
Builder's preliminaries and overheads on external works and services	Note		Included	Included	Included	Included	Included
Total Building and External Works & Services				8,789,000	2,898,000	3,221,000	14,908,000
ESD Initiatives							
ESD initiatives (i.e. PV cells etc.)	Item			110,000	75,000	50,000	235,000
Contingencies & Escalation							
Locality allowance	Item		2.5%	220,000	74,000	82,000	376,000
Design contingency	Item		5.0%	456,000	152,000	168,000	776,000
Cost escalation (to Tender at December, 2018)	Item		3.0%	287,000	-	-	287,000
Cost escalation (to Tender at December, 2019)	Item		6.0%	-	192,000	-	192,000
Cost escalation (to Tender at December, 2020)	Item		9.0%	-	-	317,000	317,000
Total Anticipated Construction Tender Sum				9,862,000	3,391,000	3,838,000	17,091,000
Contract contingency	Item		5.0%	493,000	170,000	192,000	855,000
Total Construction Cost (refer dates above)				10,355,000	3,561,000	4,030,000	17,946,000
Non-Construction Costs							
Consultants fees	Item		8.0%	828,000	285,000	322,000	1,435,000
Authority / headwork's charges	Item		1.0%	104,000	36,000	40,000	180,000
Archaeological investigations	Note			Excluded	Excluded	Excluded	Excluded
Client costs	Item		1.0%	104,000	36,000	40,000	180,000
Public art	Item		1.0%	104,000	36,000	40,000	180,000
Tenancy incentives (i.e. restaurant fitout)	Note			Excluded	Excluded	Excluded	Excluded
Temporary accommodation/ Decanting	Note			Excluded	Excluded	Excluded	Excluded
Furniture, fittings and equipment	Note			Excluded	Excluded	Excluded	Excluded
ITC/ AV Equipment	Note			Excluded	Excluded	Excluded	Excluded
Goods & Services Tax	Note			Excluded	Excluded	Excluded	Excluded
Total End Cost (refer dates above)				11,495,000	3,954,000	4,472,000	19,921,000

This cost plan is based on preliminary information and therefore is indicative only of the possible order of cost. All components of the cost plan will require confirmation once the design has developed further. Refer to the accompanying letter for details of basis of cost plan and exclusions from above costs.

Appendix C – Community Consultation Report

DRAFT - Community Consultation Report
PORTLAND FORESHORE ALL ABILITIES PLAYSPACE
Glenelg Shire Council



Justin
Staggard

AILA Registered Landscape Architect
B.L.Arch (R.M.I.T)



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- 2.2 Online surveys / Paper Surveys
- 2.3 Children's consultation sessions
- 2.4 Community consultation sessions
- 2.5 One on one interviews / Stakeholders

3. Appendix



1. Community Engagement

Glenelg Shire Council consulted with **over 550 primary school age children, 20 preschool age children, approximately 60 teachers, teacher aids and carers and over 100 members of the public** during September 2016 for the development of a concept for the Portland Foreshore All Abilities Playspace. During the consultation sessions, the following feedback was sought -

- Existing playground conditions and usability
- Feedback on retention of any existing playground equipment
- Examples of other playspaces/ playgrounds visited
- Ideas for new playspace/ playground equipment
- Themes and stories for the development of the concept design
- Current issues
- Identification of current and future users of the playspace/ playground

Information gathered during the sessions and events is an important part of the design process where **'consultation informs design'**. The consultations were held with a broad range of stakeholders including -

- Local schools of Portland
- Preschools of Portland
- School Principals, Teachers, Teacher Aids and Assistants
- Parents, Grandparents and Carers
- Disability Service Providers
- Disability Support Groups
- Members of the public
- Tourists to Portland

1.1 Purpose

The purpose of the consultations was to support the development of a Playspace Concept Plan and future funding for the Portland All Abilities Playspace. During 2015/2016, the local community submitted a petition supporting the development of an All Abilities Playspace.

The consultations encouraged creative ideas and constructive discussion from stakeholders, community groups and children. The methods used allowed for open responses, receiving a broad range of comments, ideas and suggestions.



1.2 Engagement methods

Surveys

The survey was a three-page questionnaire with multiple choice questions and a space to provide text based answers. A copy of the survey is included in the Appendix. The online survey could be accessed via the Glenelg Shire Council's "Your Say" website and was promoted in council media release advertisements in the local paper, emailed to major stakeholders and mentioned on ABC local radio. At all consultation sessions, a paper survey was available.

There were **21** survey responses received.

School Consultation

A large number of schools were engaged throughout the process to ensure local children had the opportunity to provide their ideas and feedback.

The schools included were -

- Portland Bay School (Special Development School)
- Portland Primary School
- Bundarra Primary School
- All Saints Parish School
- Portland South Primary School
- St John's Lutheran Primary School
- Portland North Primary School
- Bolwarra Primary School
- Kyeema Support Services

Other schools in the Portland Region were invited to participate but were unable to, due to prior commitments. Further consultations will take place during the design and development stage of the All Abilities Playspace and these schools will have the opportunity to participate then.

The school consultation sessions included children aged between 3 and 12 participating in a range of activities. The sessions took place at the schools in their class groups.

The structure of each session was as follows -

- An initial introduction about the project and the importance of the children's feedback
- Why an All Abilities Playspace is needed and who will be able to use it
- The type of play, games, themes and story ideas needed
- 'Ideas Activity' – students identified future ideas and directions for the design of the playspace
- The opportunity for students to provide ideas by drawing them. These could be handed in at a later date.
- A wrap-up of the session including 'what's next' and future consultation to keep the children engaged in the project
- (Note: Prior to some sessions, students had prepared written and illustrated feedback including their own research on playspace examples.)

From these sessions, a total of **1280 ideas, themes and playground items** were identified. Additional ideas that were drawn were also submitted. A number of the ideas were of a similar theme and are shown in the results section. A copy of the 'Ideas Activity' poster is included in the appendix.

Community Events

Four community consultation sessions were held during local public events. This gave stakeholders, members of the public and tourists the opportunity to provide feedback on the playspace. These sessions included one-on-one interviews, completion of the paper survey and participation in the 'Ideas Activity'.

The local public events were -

- Tour of the Great South Coast (Cycling Race) in the Portland CBD
- Portland Community Market (Indoor Market and Outdoor Market)
- Portland Lego Club (Located at Portland Library)
- Portland Council Drop In Session (Public drop in event at the Council Officers Foyer)

Tour of the Great South Coast was held on a Sunday in conjunction with the **Portland Community Market (Outdoor Market)**. The session was run with the use of the Glenelg Shire Council Library Van. The van provided a visual presence; shade and all weather protection as well as panels to mount consultation posters. The van was positioned next to the community market and the start/ finish line of the cycling event. During the session, input was received from **approximately 50 people**. These included interested locals, tourists and people from outside the Portland region.

Portland Community Market (Indoor Market) was held on a Saturday morning. Using a stall within the market space, a display was set up that included consultation posters. The survey was available for people to fill in as well as the opportunity to have one-on-one interviews and complete the 'Ideas Activity'. Input was received from **approximately 25 people**. These were mainly locals, including children, from the Portland region.

Portland Lego Club is held at Portland Library one Saturday each month. The consultation session was held inside the library which meant that library visitors were also able to participate. The short session included feedback from mainly preschool and school age children and their parents. This was **approximately 15 people**.

Portland Council Drop in Session was held on a Thursday afternoon from 3pm – 5pm. A small display was set up which included the paper survey and the 'Ideas Activity'. **Approximately 5 people** attended this session.



One-on-one Consultation

During the consultation period, a number of one-on-one interviews took place.

These included -

- Victoria Police
- Matthew Reeves (Facilitator of the All Abilities Playspace Petition)
- Winda Mara Community Representative
- Portland Cable Car Group
- Border Protection Australia
- Portland Autism Support Group
- Interested community members

The consultations took place at times that were convenient to the individuals. Notes were taken of the interviews and are provided in the results section.

Stakeholder Group Workshops

Stakeholder group workshops ran over the period of consultation to provide specific feedback for the development of the All Abilities Playspace. Using an aerial photo of the site and surrounding area, sticky notes were used to identify site comments of existing constraints as well as to identify opportunities and ideas.

Stakeholder group workshops included -

- Various council departments
 - Youth Services Team
 - Planning & Development
 - Local Laws
 - Outdoor Team
 - Early Childhood Department
 - Local Port of Portland Team
 - Community & Culture Department
 - Assets & Infrastructure Department
- Kyeema Support Services
- Ministers Associations (Local Churches)

The sessions occurred at various times based on the availability of groups. The information collected is shown in the results section.

Other Feedback

Ideas for the All Abilities Playspace were also given to the Glenelg Shire Council by email. These emails have been recorded and some examples are in the appendix.

1.3 Next steps

The Portland Foreshore All Abilities Playspace concept will need to be developed in conjunction with the following design brief requirements –

- Proposed funding amount
- Glenelg Shire Council requirements as per the council's Playground Strategy
- Feedback from the community consultation
- Specific requirements based on stakeholder feedback
- Council requirements from various departments
- State Government's design requirements as the site is under their governance

2. Results

2.1 Summary

Online Survey / Questionnaire

The surveys provided specific feedback on the views of the general community in relation to the planning and development of the All Abilities Playspace.

Each of the questions provided common and repetitive responses which are listed below:

Survey Question 1: What are the good qualities at the Portland Foreshore Playground?

"The existing net climber"

"New Skate Park"

"Views of the Port"

"Having existing shade trees"

"Having the playground within open space"

"Being close to the CBD"

"Vast lawn areas"

Survey Question 2: What are your concerns about the current Portland Foreshore Playground?

"The location of the roads adjacent to the playground and that they are very busy and unsafe"

"There is sometimes no suitable parking with safe exiting from the car"

"The playground has no safety fencing to protect children from the dangers of the nearby roads and also the beach."

"There are no concrete pathways to walk to the playgrounds especially for prams and wheelchairs"

"The toilets are old and too far away from the playground."

"We need shelters next to the playgrounds for when it rains and also for shade."

"The playground looks old and not very inviting"

"There is not accessible playground equipment for people in wheelchairs, including no footpaths to the playgrounds."

Survey Question 3: What are things you most like to improve with the Portland Foreshore Playground and why?

"The playground needs to be fenced to make it easier to protect my children from the busy road and also the beach as I cannot see the children as the beach is lower than the playground and can be hard to see."

"There are no concrete pathways from the Carpark or new skate park to the playgrounds. The new skate park has pathways which need to be connected to the playgrounds."

"New rain and sun shelters are needed."

"Bigger playground equipment"

"A water park would be fun and safe for little children"

"Toilets need to be accessible."

"The playground is lacking imagination and needs to have more sensory types of playgrounds stuff."

Survey Question 4: What would you like to retain at the Portland Foreshore Playground?

"Keep the BBQ's" "The climbing tower is fun" "Spinning Pomma / Octopus"
"The trees provide natural shade and needs to be retained and improved"
"The large open space and lawn areas which we can have parties on."

Survey Question 5: What would make Portland Foreshore Playground an even better place to visit?

"Having a fenced playground." "More shade / Trees" "Improved access and linkages"
"The playground needs more accessible infrastructure to support a new All Abilities Playground."
"Larger / higher slides" "Lawn areas" "Enclosed areas to play in"
"We need a water play park where children can get wet and be safe from the beach and deeper water."
"More BBQ's spread around the playground and not just in one location."

Survey Question 6: What themes / ideas or stories need to be considered for the All Abilities Playspace?

"People of the sea / Whaling / Early Settlers / Portland History" "Coastal / Sea life"
"Having tactile playspace objects and accessible play equipment"
"Trains / Trams" "Aboriginal Heritage" "European Settlement"

Survey Question 7: What equipment need to be considered for the All Abilities Playspace?

"All Abilities Swing" "Ramps for access to equipment"
"Shallow water play" "More swinging equipment"

Survey Question 8: Can you provide other examples of good playspaces you have seen (Australia Wide). What was it about this example you liked the most?

"Blue Lake, Mt Gambier as it is a fenced playground and has different themes"
"Geelong Foreshore Playground" "Halls Gap Playground" "Lake Pertobe, Warnambool"
"Hamilton Adventure Playground" "Millicent, South Australia" "Lake Wendouree, Ballarat"
"Eltham Lower Park Playground, Victoria" "Hilary's Beach Park, Western Australia"
"Muddy's Playground, Cairns – It was not plastic and chains"

Survey Question 9: Any further questions or advice to the development of the All Abilities Playspace?

"Timing of the project needs to be improved"

"It needs to be a tourist attraction"

"Provide the community with a project plan and timing". "Provide feedback to the community"

"Keep in mind children with a disability"

"Need to consider fencing"

Children's Consultation Sessions

Children's consultation was an exciting and engaging process with the opportunity to allow for children of all ages to participate in the development of the All Abilities Playspace design process. The idea that "Consultation Informs Design" is seen as the best practice method and allows for direct engagement and "buy in" to the project by the specific users of the space.

The "Ideas Activity" method was used to inform and provide direction. The main key ideas listed but are not limited to other ideas shown in spreadsheet:

- **Outdoor Games**
- **Trampolines**
- **Water Play Pumps**
- **Playground Fencing**
- **Hiding Spots and Tunnels**
- **Carousal**
- **Water Play**
- **Surface Mazes**
- **Play Towers**
- **Forests**
- **Stepping and Sitting**
- **Climbing Nets**
- **Talking Pipes**
- **Flying Foxes**
- **Old Spinning Carousel (The existing playground item on the Foreshore)**
- **Giant Swings**
- **Whale Themes**
- **Boat Themes**

2.2 Online Surveys / Paper Surveys

PORTLAND FORESHORE ALL ABILITIES PLAYSPACE - SELECTED CONSULTATION SURVEY RESPONSES

1. What are the good qualities currently at the Portland Foreshore Playground?

Sheltered harbour / BBQ	Spinning Wheel / vast lawn / small beach / Net Climbing	New Skate Park
Close to water / lawn area	Trees / Shade	Beach
Lawn areas	Tram Stop	Views of the Port
Open Space	Location to CBD	Natural spaces
Seperate spaces	Lack of vegetation	

2. What are your concerns about the current Portland Foreshore Playground?

Traffic / poor parking / lack of safety fencing.	No Pathways	Old equipment / spread out / not visually appealing
No fencing	Erosion on beach	Poor quality toilets
Lack of windbreaks	Lack of Shelters	Parent friendly spaces
Close to risks (water and traffic)	Lack character	Lack of toddler equipment
Old equipment	Lack of interesting colours	No exploring
Lack of seating	Undercover BBQ's	Accessibility

3. What are the things you most like to improve with the Portland Foreshore Playground and why?

Close to beach and water play.	Fenced playspace	More seating / Picnic areas / Pathways
More activities / themes	Toilet location	Drinking taps
Green spaces	Access for all.	Accessible playground equipment
Shelters	Sensory elements	Water Play
Ropes play	Boats	Shade
Nature based play	Natural materials	Bigger equipment
Todder Play	Climbing	More imaginative playspace
Flying Fox	Adventure Playground	Lighting
Accessible Toilets	Baby Changing Facilities	

4. What would you like to retain at the Portland Foreshore Playground?

BBQ / Toilets / Swings	Spinning Wheel / vast lawn / small beach / BBQ's / Net	BBQ areas
Climbing net / lawn	Merging of playgrounds	Spinning poma
Open Space	Natural Shade	Spider net
Beach	Sand	Trees / Lawn

5. What would make Portland Foreshore Playground an even better place to visit?

Hot Sea Baths	Fenced playspace	Windbreaks / longer tables / more seating
More equipment	Art / Sculpture	Shade
Seperation of age based play equipment	Improved access / linkages	Tram stop
Wind Sculpture	Wifi	Accessible infrastructure
Site security	Larger slides	Parking
Lawn areas	Baby Change Room	Big kids play elements
Enclosed spaces	Family spaces	Seating
No animals on beach	Themed equipment	Shelters
Safe swimming	Trees	Water Play
More BBQ's	Drinking Taps	

6. What themes / ideas or stories need to be considered for the All Abilities Playspace?

People of the Sea / Whaling / Early Settlers / Portland History	Tactile objects / Accessible Play Equipment	Trains / Trams
Aboriginal Heritage / European Settlement	Marine Life	Local stories
Portland history	Planting theme	Colours
Ships	Reflective of the Port	Timber
Water	Stone	Volcanoes
Mounds / Rocks	Coastal / Sea Life	Fenced space
Jumping pillow	Pirates	Music / Sounds
Native animals		

7. What equipment need to be considered for the All Abilities Playspace?

Slides / Ramps	All Abilities Swing / Ramps for access	Flying Fox
Solid and durable equipment	Seniors equipment / sensory elements	Large climbing elements
Playground for Adults	Obstacle courses	Fitness equipment
Shallow water play	Rubber surface	Ramps
More swings	Public Art that is interactive	Custom made play equipment
Interactive equipment	Seating	All age spaces
Natural elements		

8. Can you provide other examples of good playspaces you have seen (Australia Wide). What was it about this example you liked the most?

Outdoor gym equipment - QLD	Blue Lake - Mt Gambier - Fenced space with different themes and	Geelong Foreshore
Halls Gap Playground	Lake Pertobe - Warnambool	Hamilton Adventure Playground
Millicent - SA - Imaginative play elements / flying fox	Muddy's Playground - Cairns Was not plastic and chains	Hilary's Beach Park - WA
Lake Wendouree - Ballarat	Eltham Lower Park Playgroundw	

9. Any further questions or advice to the development of the All Abilities Playspace?

Timing of project needs to be improved.	Need to make it a tourist attraction	Playspace to be one space
Provide community with a project plan.	Great Ideas	Provide feedback to community
Keep in mind children with disabilities	Need to consider fencing	

2.3 Children's consultation sessions

PORTLAND FORESHORE ALL ABILITIES PLAYSPACE IDEAS ACTIVITY POSTER	
<i>POSTER IMAGE</i>	<i>DOT TOTAL</i>
OUTDOOR GAMES	24
PERFORMANCE STAGE	11
SAND DIGGING	18
TRAMPOLINES	94
CLIMBING THINGS	17
BALANCE WALK	17
WATER PLAY PUMPS	29
ROPES COURSES	17
PLAGROUND FENCING	24
HIDING SPOTS AND TUNNELS	23
CAROUSAL	29
WATER PLAY	151
SURFACE MAZES	21
SHADE / SHELTER	10
BOARDWALKS / JETTY	15
BOATS / FISHING THEMES	16
PLAY TOWERS	36
DIFFERENT TYPES OF SURFACES	5
SWINGS	20
INTERESTING SURFACES / ARTWORK	4

FOREST	41
PLANTED MAZES	14
COLOURFUL THINGS	11
STEPPING OR SITTING	21
CLIMBING NETS	93
SANDPLAY	9
TALKING PIPES	27
BALL SPORTS	12
BOULDERS / CLIMBING / SCRAMBLE	18
FLYING FOXES	113
OLD SPINNING CAROUSAL	43
NET CLIMBERS AND BRIDGES	20
MOUSE WHEEL	16
BBQ / EATING	17
DRINKING FOUNTAINS	17
HIDDEN TREASURES	14
ACCESSIBLE SWINGS	13
PLAY CUBBIES	9
ART PLAY	19
GIANT SWINGS	58
BICYCLE PARKING	8
PLANTING FOREST	7
WHALE THEMES	43
BOAT THEMES	21

2.4 Community consultation sessions

PORTLAND FORESHORE ALL ABILITIES PLAYSPACE IDEAS ACTIVITY POSTER - COMMUNITY SESSIONS	
POSTER IMAGE	DOT TOTAL
HIDDEN TREASURES	3
TOILET FACILITIES	10
BIKE PARKING	3
ACCESSIBLE CAROUSAL	6
SHADE	9
PARK FACILITIES (BBQ'S / BIN'S)	6
DRINKING FOUNTAINS	7
GETTING WET / WATER PARK	15
CLASSIC / OLD EQUIPMENT	4
INTERACTIVE SIGNAGE AND STORIES	4
NET CLIMBING	12
PLAYGROUND FENCE	8
SEATING	5
IMAGINATIVE PLAY	4
DYNAMIC PLAY	5
TRAMPOLINES	9
ACCESS AND PLAY	7
CLIMBING NETS	10
GIANT SWINGS	7
LOOKOUT TOWER / FORT	10
INCLUSIVE PLAY ELEMENTS	6
FLYING FOXES	13
VARIOUS SWING TYPES	4
CLIMBING OBJECTS	4
LOCAL THEMES	1
GATHERING POINTS / HUBS	6
SANDPLAY	2

2.5 One-on-one interviews / Stakeholders

Victoria Police

These are key points mentioned during discussions with Portland Victoria Police:

- Allowances for safety for all users of the playground area.
- Windbreaks to provide protection from wind.
- Boardwalk themes to pathways.
- Vehicle movements within the proximity to be managed.
- Consideration for the playground to be enclosed.

Matthew Reeves (Facilitator of the All Abilities Playspace Petition)

These are key points mentioned during discussions with Matthew Reeves:

- Requirements that the new playspace be fully inclusive to all types of abilities and ages including adults.
- Pathways are needed from parking to new playground.
- Requirements to dedicated disabled parking and also consideration to large numbers of this type of parking based on additional needs to area and also visitors and users of the playground from the greater district.
- Sensory play elements are needed.
- Grass is not a suitable surface for access with wheel chairs getting stuck in soft soil conditions.
- Consideration for accessible facilities such as improved disabled toilets with changing facilities for the disabled.
- Eating and BBQ's to be accessible areas.
- The drinking station at the Skate Park is suitable for all abilities use.

Winda Mara Community Representative

These are key points mentioned during discussion with representatives of the Winda Mara Community:

- Opportunities for indigenous stories to be considered to be incorporated into the design themes of the All Abilities Playspace.
- Future consultation is to occur to explore opportunities including art work, stories and past themes.

Portland Cable Car Group

These are key points mentioned during a discussion with the Portland Cable Car Group:

- There is an opportunity to consider the addition of a Tram Stop at the location of the new playspace which can be incorporated into the design.
- Themes in the playspace can be related to the heritage of the Cable Tram or Foreshore Heritage.
- Requirement for improved pedestrian connections and pathways.
- Need to consider pedestrian crossing points for safe access to the playspace.

Border Protection Australia

These are key points mentioned during a discussion with Portland Border Protection:

- Awareness of underground infrastructure within the location of the existing playground area.

Portland Autism Support Group

Consultation occurred through completion of the on-line survey and has been incorporated into the main results.

Kyeema Support Services

Consultation with the Kyeema Support Services was undertaken and all staff and clients participated in the "Ideas Activity Poster" with results incorporated into the main results.

Additional consultation will be needed to discuss design ideas and direction of the All Abilities Playspace Concept.

3. Appendix

Portland All Abilities Playspace

Community Engagement &
Consultation



Feedback Form

Feedback closes 2pm, Monday 5th September 2016

This feedback form asks specific questions about the project and provides an opportunity for general comments regarding the project/proposal.

Q1. What are the good qualities currently at the Portland Foreshore Playground?

Q2. What are your concerns about the current Portland Foreshore Playground?

Q3. What are the things you would most like to improve with the Portland Foreshore Playground and why?

Q4. What would you like to retain at the Portland Foreshore Playground?

Q5. What would make Portland Foreshore Playground an even better place to visit?

Q6. What themes / ideas or stories need to be considered for the All Abilities Playspace?

Portland All Abilities Playspace

Community Engagement &
Consultation



Q7. What equipment needs to be considered for the All Abilities Playspace?

Q8. Can you provide other examples of good playspaces you have seen (Australia Wide). What was it about this example you liked the most?

Q9. Any further questions or advice to the development of the All Abilities Playspace?

All submissions must be received by: 2.00pm, Monday 5th September 2016

Online Submissions can be completed at <http://yoursay.glenelg.vic.gov.au/>

Written submissions can be returned to:

Portland All Abilities Play Space
Community Consultation & Engagement
PO Box 152, Portland, Victoria 3305

Or

hand delivered to one of the Shires Customer Service Centres in Portland, Heywood or Casterton.

For enquiries, please call David Hol, Project Planning & Facilities Manager on 03 5522 2222.

Thank you for taking the time to provide us with your comments regarding the Portland All Abilities Playspace. Please help us gather a little more information about you by filling in the remainder of the form on the **next page**.

Portland All Abilities Playspace

Community Engagement & Consultation



Providing contact details in a feedback form is optional, however, the reason we are asking for this information is because we want to know a little more about who you are and how you use the City to ensure we get a higher quality of data to go along with your feedback. The data will help us analyse feedback from specific groups (e.g. age, gender, City users), which in-turn will provide a richer and more valuable response to help Council make decisions.

First Name

Surname

Email

Address

If a Business or Organisation, Organisation Name

Gender: Female Male Unspecified Indeterminate Intersex Prefer not to disclose. Year of Birth: e.g. 1973

Are you a Glenelg Shire Council Ratepayer? Yes No

Please tell us how you participate in city life (tick all that apply):

- Work Live Shop Play (e.g. Leisure, recreation, entertainment, dining)
 Study Tourist Own a Business

Please indicate your main areas of interest (tick all that apply):

- Council Services & Programs Open space & Recreation Urban Design, Planning & Development
 New & Future Projects Social & Community Issues Policy, Budget & Strategic Plans
 Environmental Issues Arts & Events in the City

Please indicate townships that are of interest to you (tick all that apply):

- Casterton Cape Bridgewater Dartmoor
 Digby Greenwald Heywood
 Hotspur Lake Mundi Merino
 Milltown Mumbannar Narrawong
 Nelson Portland Sandford
 Strathdownie

Your Say Glenelg is Council's online consultation website. It is your chance to be kept up-to-date and provide feedback on areas of the Shire that interest you. Would you like to be signed up to Your Say Glenelg online and be emailed when there is an opportunity to have your say on areas that are of interest to you?

- Yes No

Please Note: If you've ticked Yes, you will receive an email to your nominated email address above to confirm your new account.

ALL ABILITIES PLAYSPACE

PLAYSPACE IDEAS

Place your stickers on the elements you would most like to see included in the project or write or draw ideas on the poster if you think we've missed something.

Place your stickers on the elements you would most like to see included in the project or write or draw ideas on the poster if you think we've missed something.



'Ideas Activity' – School Consultation Poster

HIDDEN TREASURES	TOILETS FACILITIES	BIKE PARKING
ACCESSIBLE CAROUSEL	SHADE	PARK FACILITIES (BBQ / BINE)
DRINKING FOUNTAINS	GETTING WET / WATER PARK	CLASSIC / OLD EQUIPMENT
INTERACTIVE STORAGE AND STORIES	NET CLIMBING	PLAYGROUND FENCING
SEATING	IMAGINATIVE PLAY	DYNAMIC PLAY (MOUSE WHEEL)

TRAMPOLINES	ACCESS AND PLAY	CLIMBING
GIANT SWINGS	LOOKOUT TOWER / FORTS	NATURE BASED PLAY
MARINE LIFE THEMES	WATER PLAY	INCLUSIVE PLAY ELEMENTS
FLYING FOXES	VARIOUS SWINGS TYPES	CLIMBING OBJECTS
LOCAL THEMES	GATHERING POINTS / HUBS	SANDPLAY



PORTLAND ALL ABILITIES PLAYSPACE DOTMOCRACY

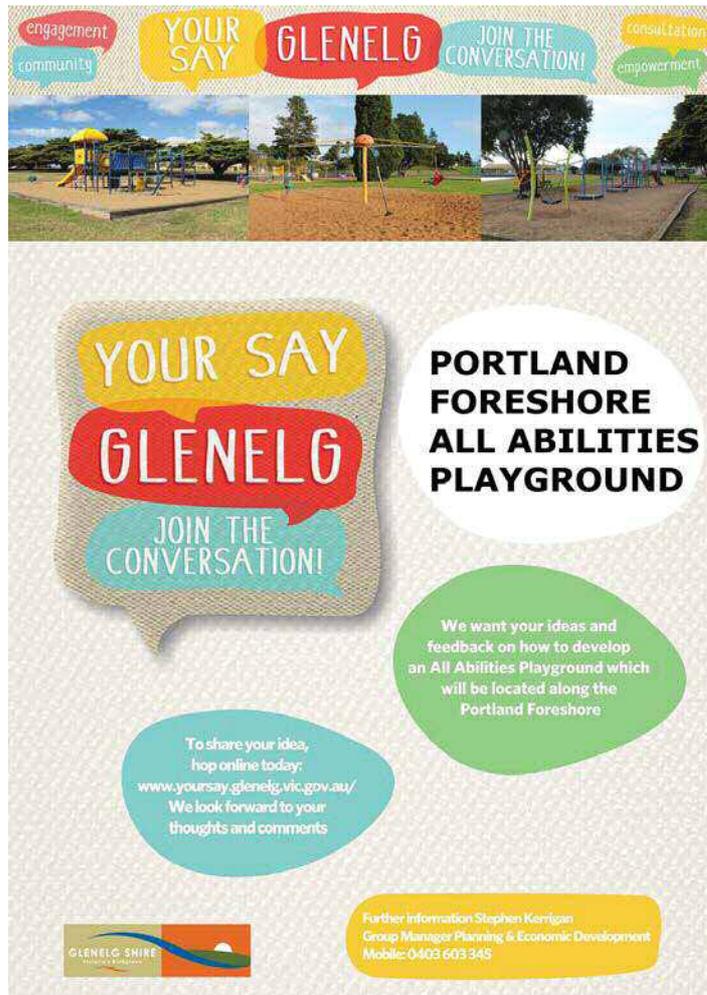
DOTMOCRACY NOTE: THIS ACTIVITY IS NOT A COMPETITION TO THE NUMBER OF DOTS BUT MORE AN UNDERSTANDING TO IDEAS, NEEDS AND INTEREST OF THE COMMUNITY



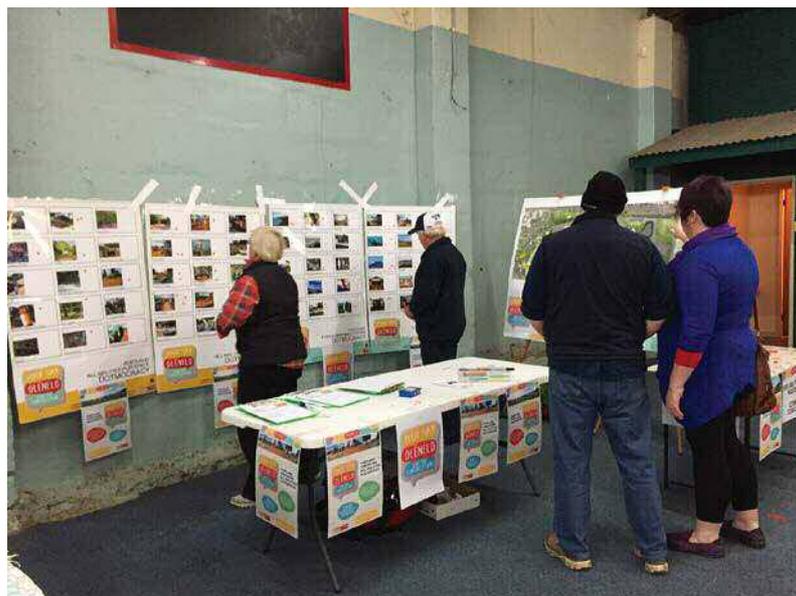
PORTLAND ALL ABILITIES PLAYSPACE DOTMOCRACY

DOTMOCRACY NOTE: THIS ACTIVITY IS NOT A COMPETITION TO THE NUMBER OF DOTS BUT MORE AN UNDERSTANDING TO IDEAS, NEEDS AND INTEREST OF THE COMMUNITY

'Ideas Activity' – Community Consultation Poster



Community Consultation Advertising Poster – On display around the foreshore



Community Consultation Session – Portland Community Market (Indoor Market)



Community Consultation Session – Cycling Event / Community Market (Outdoor Market)



Community Consultation Session – Portland Lego Club

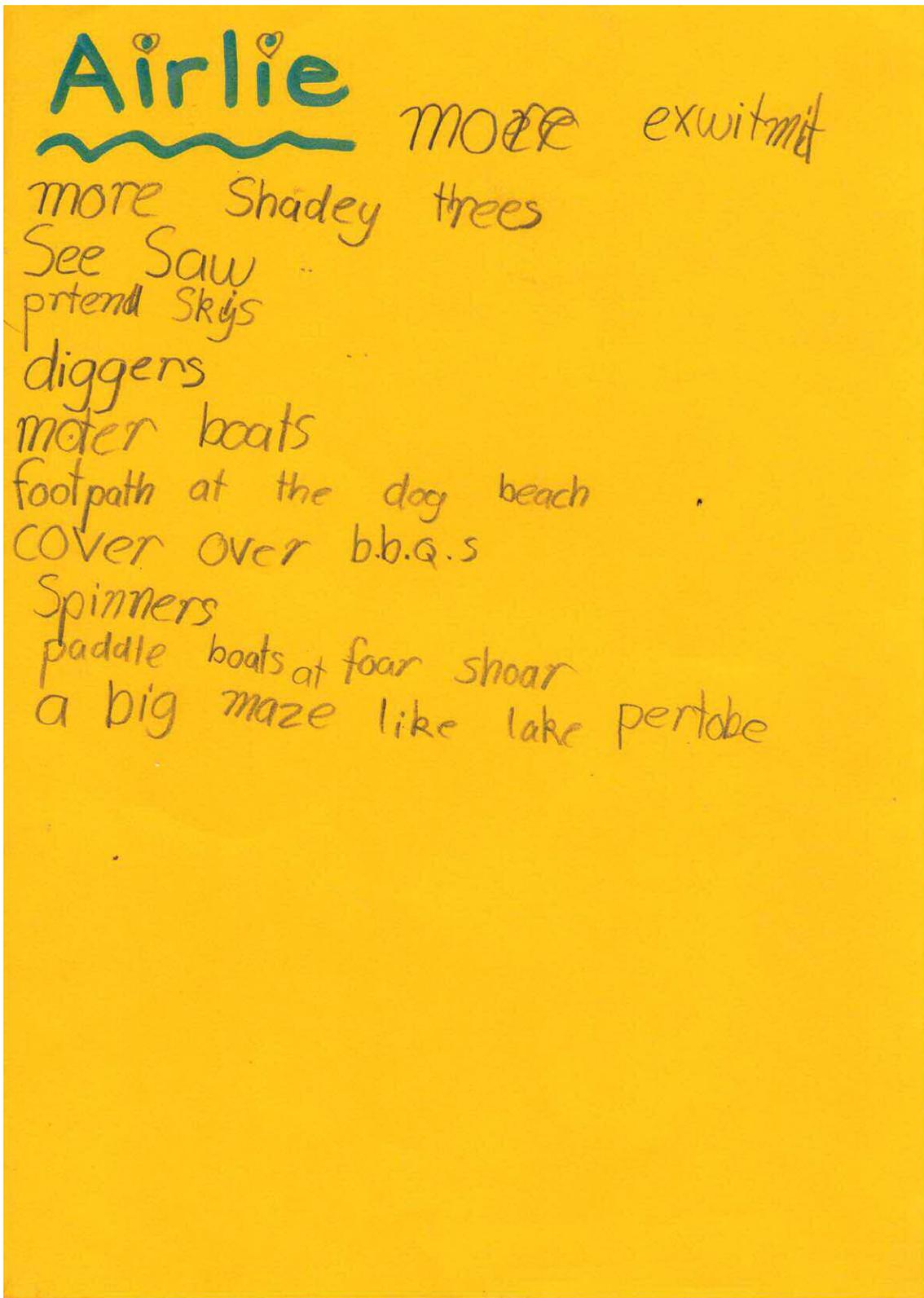


Community Consultation Session – Council Drop In Session



Community Consultation Session – School Session

Selection of Written and Drawings by Children



I would make a ~~re~~ walk track next to the beach, next to the walk track a row of flowers, ~~next~~ to that I would put a bike track. You could put two play playgrounds together to make a big

↓
Playground. You can make a big pool on the grass for peoples back if they want to go for a swim together to the playground.

Luck Amali Indiana

Laura

1 MORE Shady trees.
2 MORE and seats for mums
3 MORE grandmas.

- Ploughed Field
- 4 Flying fox.
 - 5 A minie maze.
 - 6 a Child freindly rock wall.
 - 7 a firemans pole.
 - 8 Spider web ^{a new}
 - 9 Steps for the big slide at the forma park
 - 10 Paddle boats.
 - 11 A big maze
 - 12 Clife lake (partole)
 - 13 a big tyre swing.
 - 14 a board walk over the beach.
 - 15 a digger
 - 16 the big spiral slide
 - 17 a Spring surf board -
 - 18 a water spurter.

Fiona

More Shady Trees

Flying Fox and ^{big} Maze
Merigo round at ^{late} Puito

Stairs for the former park

Play tours for the dog beach

more Shady Trees

Seats

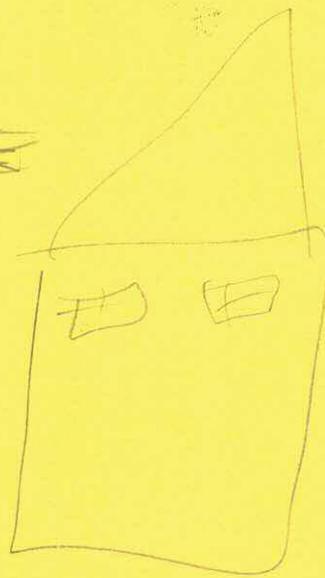
Rock climbing wall
~~Rock climbing wall~~

Cubbyhouse

\$ a giant swing

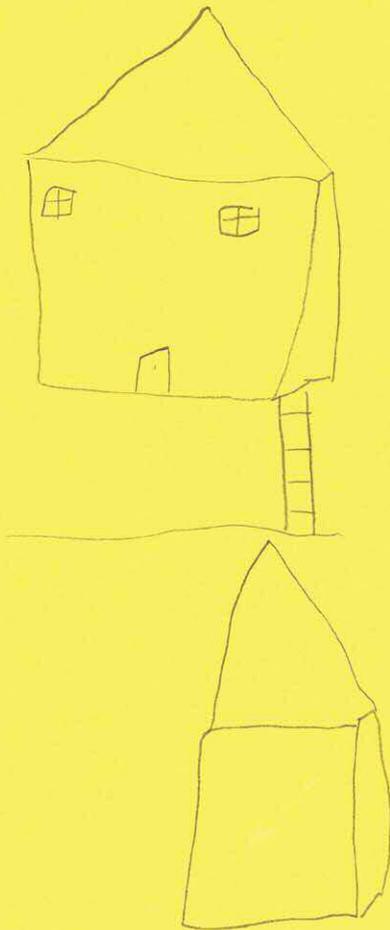
Funnel slide

Water play

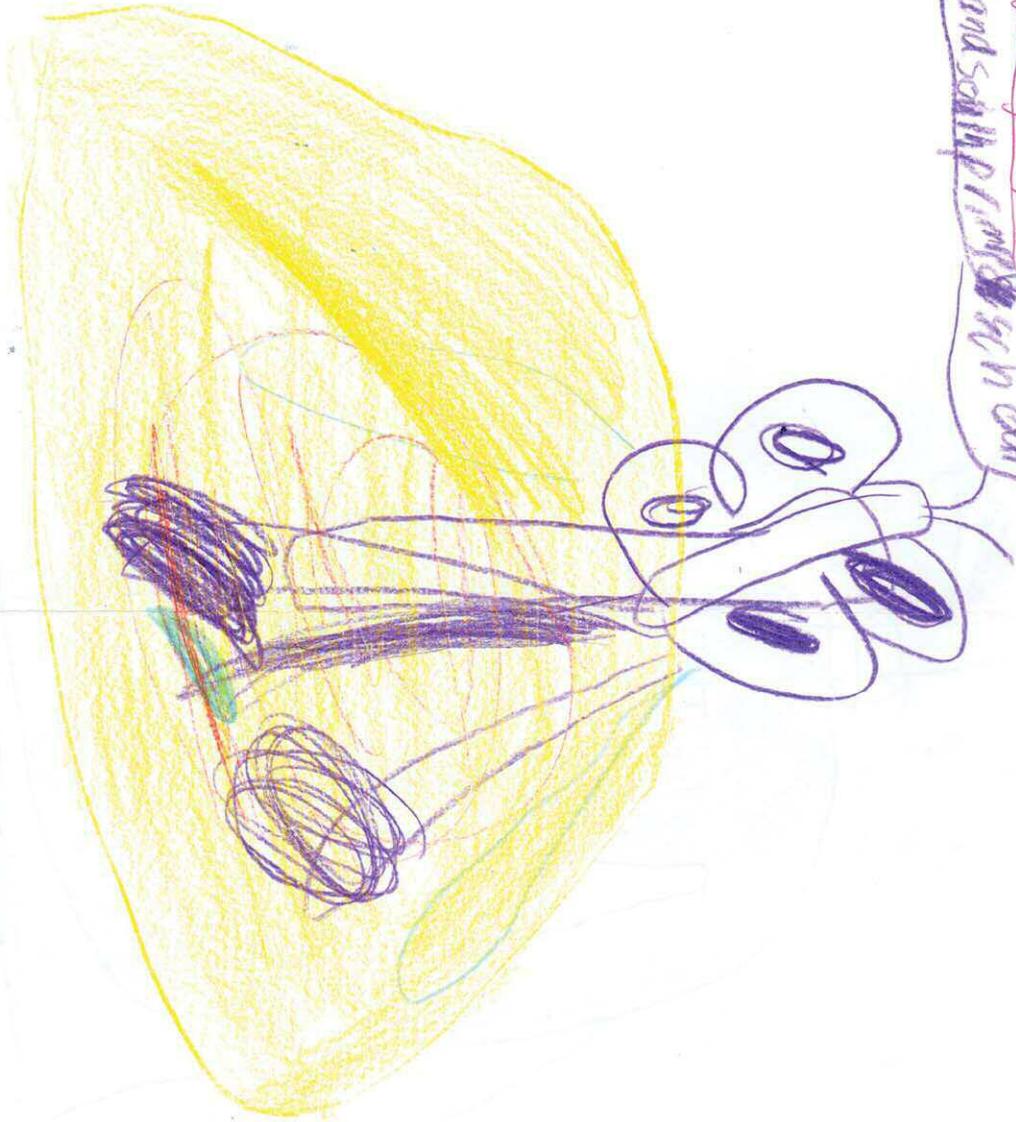


Eden More Shady trees.

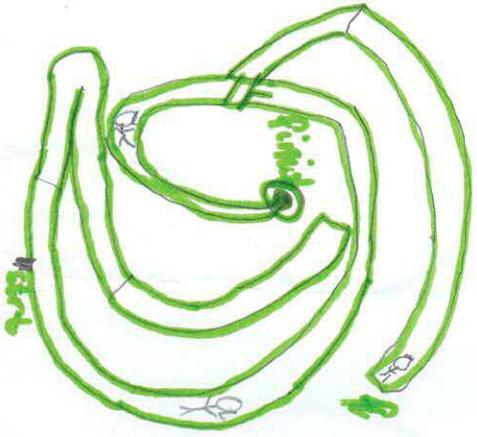
Things Lake Portobc have like: new Slides, flying fox big maze Merry go round. Cuby house More foot paths for the Forna pake, new slide.



Beleg am Meer 21/190
Poland schiff / 17/190 / 17/190 / 17/190



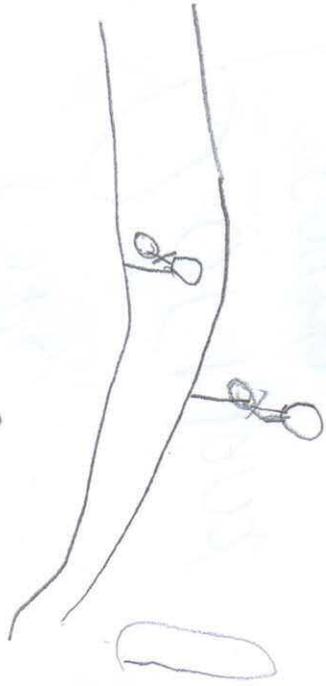
Gracie Velder 2/3/18



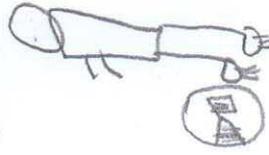
Flying Foxes



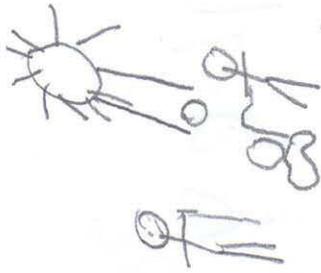
flying fox



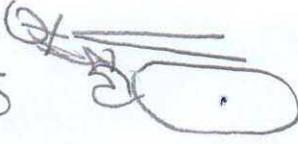
ball game

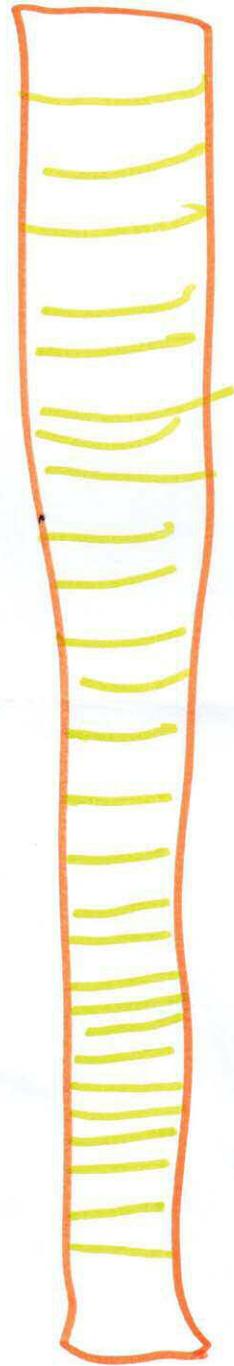
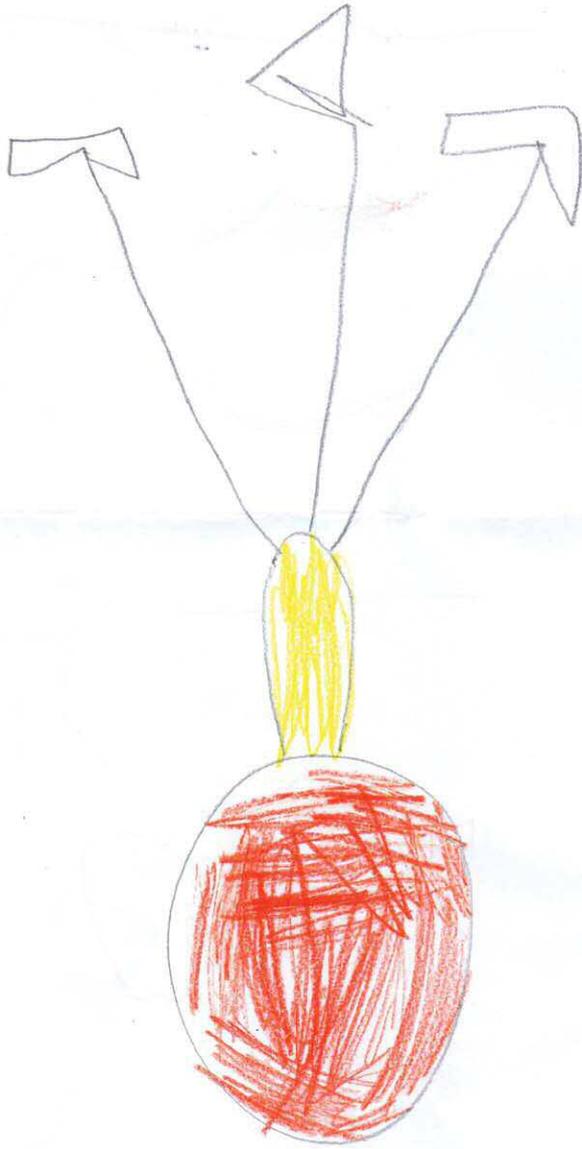


min. Gdf



DRINKING FOUNTAIN

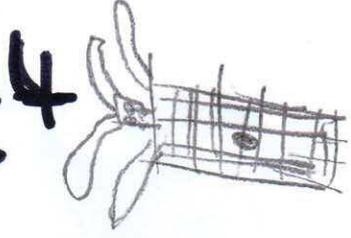




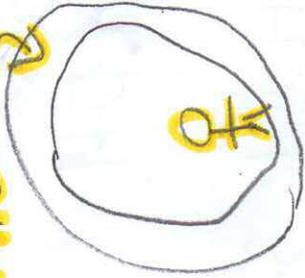
frying Fox



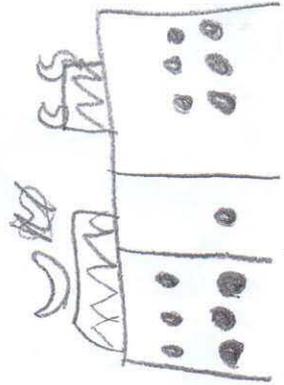
Water

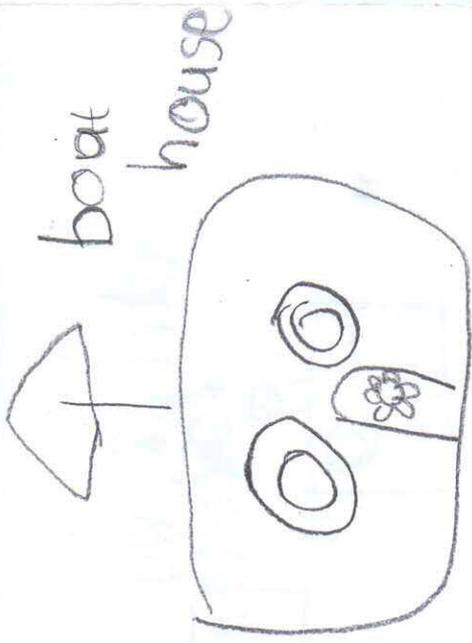


mouse

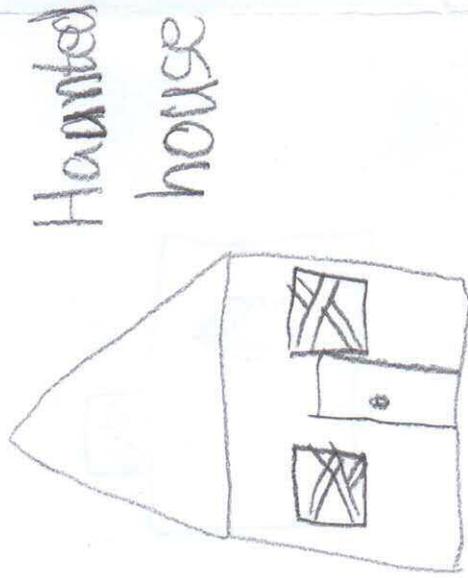
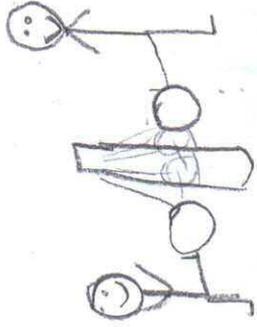


B.B



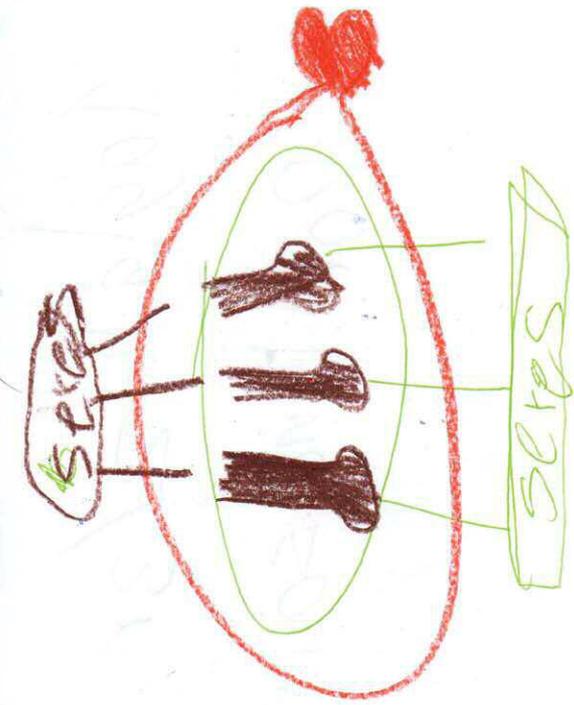


ball kicker



flower spinner





Drinking fountain

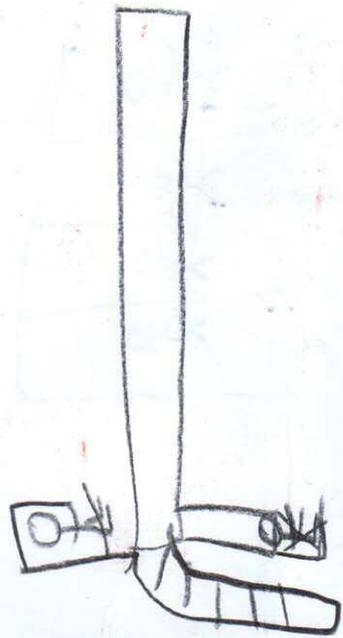


RO DIZZY
fizzy



SPIN'S
around
in a circle

flying box

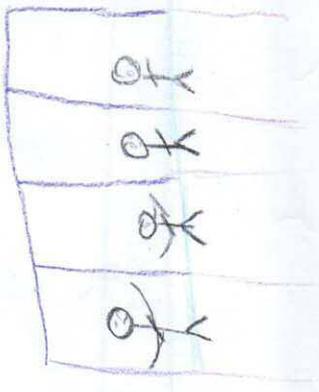


Minne golf



LOCKERS Behind the entrance @ school 10

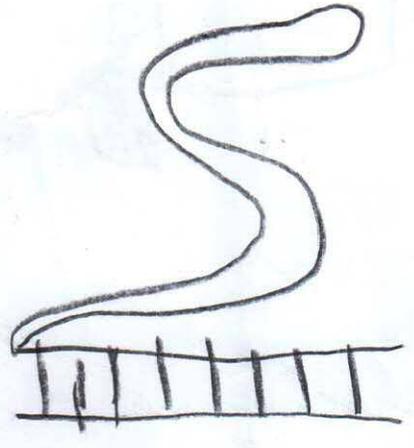
4 sites Saining



Walk in side and see fact's about Planin's

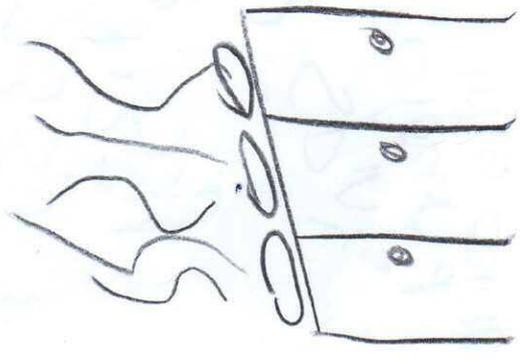


Crazy slide



fluse

BBQ



camp

Appendix D – Media Clips



A SIMPLE wish: Maycie-Lee Reeves, 14, and her father Matthew Reeves, are hoping the Glenelg Shire Council will provide more inclusive playground equipment for the many children with special needs in the district.

Picture: JOSH NASH 150929jn04

Calls for a more inclusive foreshore

BEN FRASER

IT started with a Facebook post, a picture showing a playground with wheelchair accessible swings. As each person saw the post, it received unyielding support.

Yet for Matthew Reeves and his daughter Maycie-Lee, 14, the idea of enjoying a swing on the foreshore, or anywhere else in Portland, remains a pipedream.

New playground equipment, such as the Liberty Swing, allow wheelchair-bound children a safe and simple way to enjoy playgrounds.

"The reality is there are more and more special needs children in the district," Mr Reeves said. "There will be a higher demand for more inclusive equipment."

Mr Reeves said in neighbouring cities, such as Mount Gambier, there are numerous places for his family enjoy a day out together.

"In Adelaide there are plenty of playgrounds with wheelchair accessible swings, and even in Panmure.

"When we're booking a holiday, it's one of the things we look for; given the choice between two places, we'll obviously choose the one with that caters to our whole family.

Mr Reeves believes it wouldn't require a

complete overhaul of play equipment, just minor tweaks.

"It's not just about the swings; bringing interactive panels down to ground level would allow everyone to use them

"It would not only allow wheelchair-bound children to use them, but also the many children who cannot climb up.

A Glenelg Shire Council spokesperson said while the Liberty Swing is a good idea but there were a number of considerations.

"The Liberty Swing, costing in excess of \$35,000 installed, illustrates how a design might be usable, but not socially inclusive for people in a wheelchair.

"Specially designed for people in wheelchairs, it is highly usable and reportedly provides a satisfactory swinging experience, so long as users or their carers have access to the MLAK key," the spokesperson said.

A Master Locksmiths Access Key is a special key designed to enables people with disabilities to gain access to a network of public facilities, such as elevators at railway stations, accessible toilets and adaptive playground equipment.

"Liberty Swings are normally required to be located in a section of a playground separated from other equipment, fenced off and

locked given risks the heavy device poses to unsupervised able-bodied children.

"Although it was initially designed in response to social exclusion, the dominant message built into the Liberty Swing and its enclosure is the segregation of its 'special' users from other park-goers.

"Current trends in all abilities play space provision is away from the supply of disability specific play equipment, which is seen as isolating."

While the idea of a Liberty Swing being installed on the Portland foreshore is slim, the spokesperson said objectives of Council's Access and Inclusion (Disability) Action Plan support the installation of inclusive play equipment.

"This will be given further consideration following the development of the Open Space Strategy and a review of the current Playground Provision Policy," the spokesperson said.

"Officers are continuing to seek potential funding to enable the provision of new inclusive play equipment.

"There has been considerable development in 'Inclusive' play equipment with a range of equipment, including swings, which can be enjoyed equally by persons with little or no mobility as well as those with no mobility issues."

All-abilities playground petition has 2100 backers

BILL MELDRUM

AN online petition calling for wheelchair inclusive and equal access play equipment to be installed at Portland playgrounds has attracted 2100 signatures in little more than a week.

The petition on the change.org website was started recently to gather support for equipment.

The numbers supporting that petition and an announcement by Gleneelg Shire chief executive officer Greg Burgoyne this week have buoyed Portland resident Matthew Reeves, one of the leading voices on the issue.

Mr Burgoyne announced that the council was seeking funding opportunities for an all-inclusive playground as part of future plans for the foreshore Mr Reeves, whose daughter Maycie-Lee, 15, is wheelchair bound said the support for the online petition was fantastic.

“It just goes to show how much support there is out there,” Mr Reeves said.

“I will be out and about town with my own petition soon ... and I intend distributing it to areas such as Ararat as well.

By ensuring the petition reaches the widest possible

audience Mr Reeves hopes it becomes another reason for people to consider coming to Portland.

“That’s why my petition will go to places like Ararat, there will be people up there who bypass Portland and head to Mount Gambier or Wannambool where there are all-inclusive playgrounds,” Mr Reeves said.

“We have to keep the pressure up. So I encourage people to write letters to the council as well.

“The council is soon to seek comment on its open space strategy and the council budget is also coming up soon,” Mr Reeves said.

Appendix E – Letters of Support

8 November 2018

Mr Greg Burgoyne
Chief Executive Officer
Glenelg Shire Council
PO Box 152
Portland Vic 3305

RDA Barwon South West Committee

Level 2, Harrison Place
237 Ryrie Street
Geelong VIC 3220

P: +613 5215 6000

F: +613 5215 6099

E: rda.barwonsouthwest@rdv.vic.gov.au

Dear Greg

**BUILDING BETTER REGIONS FUND ROUND 3 – LETTER OF SUPPORT
INFRASTRUCTURE PROJECTS STREAM**

Thank you for providing the Regional Development Australia Barwon South West Committee (RDA BSW) with an overview of 'Portland All Abilities Foreshore Development' (the project).

RDA BSW has considered the project against each of the Building Better Regions Fund assessment criteria and is supportive of your application for the following reasons:

- The Portland Foreshore is one of Portland's most popular tourist destinations and the project will greatly enhance the amenity and appeal of the foreshore.
- The foreshore continues to grow in line with cruise ship visits to the Port of Portland and the project will deliver the first fully integrated all abilities open space in the region.
- The project directly addresses issues of social isolation and the lack of recreational opportunities for residents with a disability living in the region and will further increase local community participation in both passive and active recreation.
- The project is a priority for Glenelg Shire Council and is supported by extensive consultation throughout the community.

RDA BSW continues to support local government and community stakeholders to access government programs and funding to grow our regional communities. The Committee is supportive of this initiative of the Glenelg Shire Council and wishes you well with your application.

Yours sincerely



Bruce Anson
Chair
Regional Development Australia Barwon South West





13 November 2018

Hon Michael McCormack MP
Deputy Prime Minister, Minister for Infrastructure, Transport and Regional Development
PO Box 6022
Parliament House
CANBERRA ACT 2600



Dear Deputy Prime Minister,

I write to lend my strong support to the Glenelg Shire Council in their application for funding under the Building Better Regions Fund – Infrastructure Projects Stream.

The Glenelg Shire Council's **All Abilities Foreshore Development Project** proposes to build the region's first fully integrated all abilities adventure playground incorporating opportunities for sensory sand and water play. As well, it includes the development of accessible changing place and toilet facilities, mobile aid charging points and accessible hard pathways and boardwalks. These new developments build upon the existing facilities at the Portland foreshore, including play equipment, barbeque facilities and spaces suitable for picnicking, valued by local residents and visitors alike.

I commend the Glenelg Shire Council for bringing this application on behalf of the local community. Local community members have expressed strong support for the project, with a community petition spearheaded by local school girl, Macie-Lee Reeves, attracting thousands of signatures. This project will make the Portland Foreshore more accessible and inclusive for locals like Macie-Lee, but will make Portland an even better place to live for many local families and a even better place to visit for tourists.

In addition to the many social benefits of encouraging local residents and tourists to enjoy an active and engaging community space, this application outlines a number of economic benefits flowing from the project. The All Abilities Play Space is located in close proximity to the commercial precinct and tourist accommodation on Bentinck Street, and further improvements to the facilities promise to add to Portland's attractiveness as a destination for holiday makers, particularly over the summer months. This project complements the existing tourist offerings, like the recreation opportunities arising from Portland's seaside location, the Portland Botanical Gardens and culture rich Portland Maritime Discovery Centre.

With our Coalition Government's recent investment in the implementation of the Shipwreck Coast Masterplan further to the east, we have made a vital investment in the infrastructure that will encourage tourists from Melbourne and further abroad to extend their stay in south-west Victoria. Alongside Portland's exceptional natural assets like Bridgewater Bay, projects like this one further



make the case for visitors to extend their travel even further and spend their time and money in our region and our businesses.

In order to complete this project, the Glenelg Shire Council is offering to go into a partnership with the Australian Government pledging half of the \$2,704,000 million required. The Glenelg Shire Council has a proven track record of delivery on projects in partnership with the Australian Government, including a number of Roads to Recovery projects and Casterton's Australian Kelpie Centre, which was constructed with the support of the Building Better Regions Fund.

I am pleased to offer my strong support for the Glenelg Shire Council's application for funding under the Building Better Regions Fund – Infrastructure Projects Stream.

Yours sincerely



Hon Dan Tehan MP
Member for Wannon

Ref: dt/lm

12 November 2018

To whom it may concern,

**RE: APPLICATION BUILDING BETTER REGIONS FUND – PORTLAND ALL ABILITIES
FORESHORE REDEVELOPMENT**

I write to strongly support the Glenelg Shire Council's application to the Building Better Regions Fund (BBRF) for the construction of an all abilities open space in Portland, in south west Victoria.

This project proposes to build the region's first fully integrated all abilities play space situated on the Portland foreshore, one of the state's most beautiful seaside locations, popular with families and tourists alike because of its vast lawns, play equipment and barbecue areas.

The play space concept plans, designed following extensive community consultation over the past two years, incorporate an all abilities adventure playground, accessible changing place toilets, accessible hard pathways and boardwalks, and mobile aid charging points.

A highlight of the play space is a sensory sand and water play component and themed walking experiences set alongside grassland for picnics and sheltered barbecue area for social gatherings.

This proposed development is the next major stage in the redevelopment of the Portland foreshore which is a community meeting point, hosting regular events and festivals, plus popular recreation activities such as group fitness, kayaking and paddle boarding.

The vision for this project was borne direct from the community with local school girl Macie-Lee Reeves spearheading a campaign for its construction. The teenager, who has cerebral palsy and is confined to a chair, led a community petition attracting thousands of signatures in response to her frustrations of not being able to play alongside her friends at the popular recreation space.

This project will provide significant social benefits for hundreds of children such as Macie-Lee, adding to the health and well-being in the local community. The addition of this playground will further boost the appeal and amenity of the foreshore area, providing direct contributions to the local economy as people are expected to travel from across the Green Triangle region to use such amenities.

Having been a parent of a child with a disability living in Portland, I can personally attest that the local community has a long and justifiably proud record of supporting people with disabilities and their families.

This project is another very important step forward in ensuring people of all abilities have every opportunity in education, recreation and community life in Portland and the Shire of Glenelg.

Therefore, I strongly support the Glenelg Shire Council's application for the All Abilities Playspace, a project which will have positive economic and social impacts for the region.

Yours sincerely,

A handwritten signature in blue ink that reads "DENIS NAPHTHINE". The signature is written in a cursive, flowing style.

DENIS NAPHTHINE

Premier of Victoria 2013-14

Member of Victorian Parliament for Portland & South West Coast 1988-2015.



Empowering People with a Disability

*Lalor Street Day Programs
Respite & Independent Living Programs
Child and Adolescent Respite Services
Individualised Support
Ameeyk on Hurd
Windward Industries
Seawinds Nursery
Green Fingers Gardening*

13 November 2018.

To whom it may concern,

**RE: APPLICATION BUILDING BETTER REGIONS FUND – PORTLAND ALL ABILITIES
FORESHORE DEVELOPMENT**

This project would provide many benefits for our centre. During the warmer months we have kayaking programs and we like to include all participants in these outings. At present we have two participants in wheelchairs who like to attend these outings but if they wish to get in the water or use the toilet we need to bring them back to the centre to use our facilities, then return to the foreshore.

We also use the basketball area on a weekly basis but as above, have to return to the centre to use our facilities.

We also host other centres a number of times throughout the year but have tended to stay at the centre whereas we would love to have bbq/picnic meetings at the foreshore if facilities were available. We have quarterly Advocacy meetings at Kyeema with visitors from Hamilton, Warrnambool & Terang. Quite often these centres take their lunch to the foreshore to enjoy before travelling back to their centres and they also would appreciate the facilities.

Our clients have spoken at their weekly "Speak Up" meetings that they would enjoy a space designed especially for their use and that they would be able to spend time on the weekend and after hours at the foreshore with their families and carers.

We hope you will take into consideration the above benefits to our participants.

Yours sincerely,

Bernie Stiles,
Supports Manager.

Students at Portland Bay Special Development School have been working hard to support the provision of an All Abilities Playground on the Portland Foreshore since 2016. The following letters of support were provided to Council early in 2017.

15/2/17
Jodie Maybery
Community wellbeing manager
P.O. Box 152
Portland

Dear Jodie

Portland Bay School would like an
All Abilities Playground for everyone to enjoy.

from Emma
Student at
Portland Bay
School

15-2-2017

Jodie Maybery
Community Wellbeing Manager
Phone box: 125 Portland

Dear Jodie Maybery,

Portland Bay School would really like all abilities playground because for the children in a wheel chair
Or have a back brace or oddly people can't go on and play with their grandchildren.

And it is unfair for all those people who can't go on and have some fun they have to watch kids run,
kick, swing and laugh where they have to sit there wishing they could do all that. So I think it would
be handy if all of these people could have some fun and join in without missing the fun. ☺

From Alisha
Student at Portland Bay School

Jodie Maybery
Community Wellbeing Manager
P.O. Box 152
Portland

15/2/17

To Jodie
We would like an All Abilities Playground for everyone to play
On at the Foreshore.

From Andy
Student at
Portland Bay School

Jodie Mayberry
Community wellbeing manager
P.O. box 152 Portland

Dear Jodie

We want a new All Abilities Playground
in Portland because there's nothing for
wheel chairs.

From Bart
Student at Portland Bay School

Jodie Mayberry
Community Wellbeing Manager
P.O box 152
Portland

Dear Jodie,

Our school would like All Abilities Playground for everyone to
play on at the Portland Foreshore.

From Brady
Student at Portland Bay School

Jodie Maybery
Community Wellbeing Manager
P.O Box 152
Portland

To Jodie

We all want to have an All Abilities playground for everyone just so everyone can have fun and we want footpaths for all wheelchairs.

From Isaac
Student at
Portland Bay School

15. 02.17

Jodie Maybery
Community wellbeing manager
P. O. Box 152
Portland

To Jodie,

We would like an All Abilities Playground for everyone to play on.

From Kate
Student at Portland Bay School.

Jodie Maybery

15/02/2017

Community Wellbeing Manager

P.O. box 152

Portland

Dear Jodie

We would like an All Abilities Playground for everyone to play on at the foreshore

From Michael

Student at

Portland Bay School

Jodie Maybery

15/02/17

Community Wellbeing Manager

P. O. box 152

Portland

To Jodie, everyone in the school wants a new All Abilities Playground for the foreshore and a new footpath for people in wheelchairs.

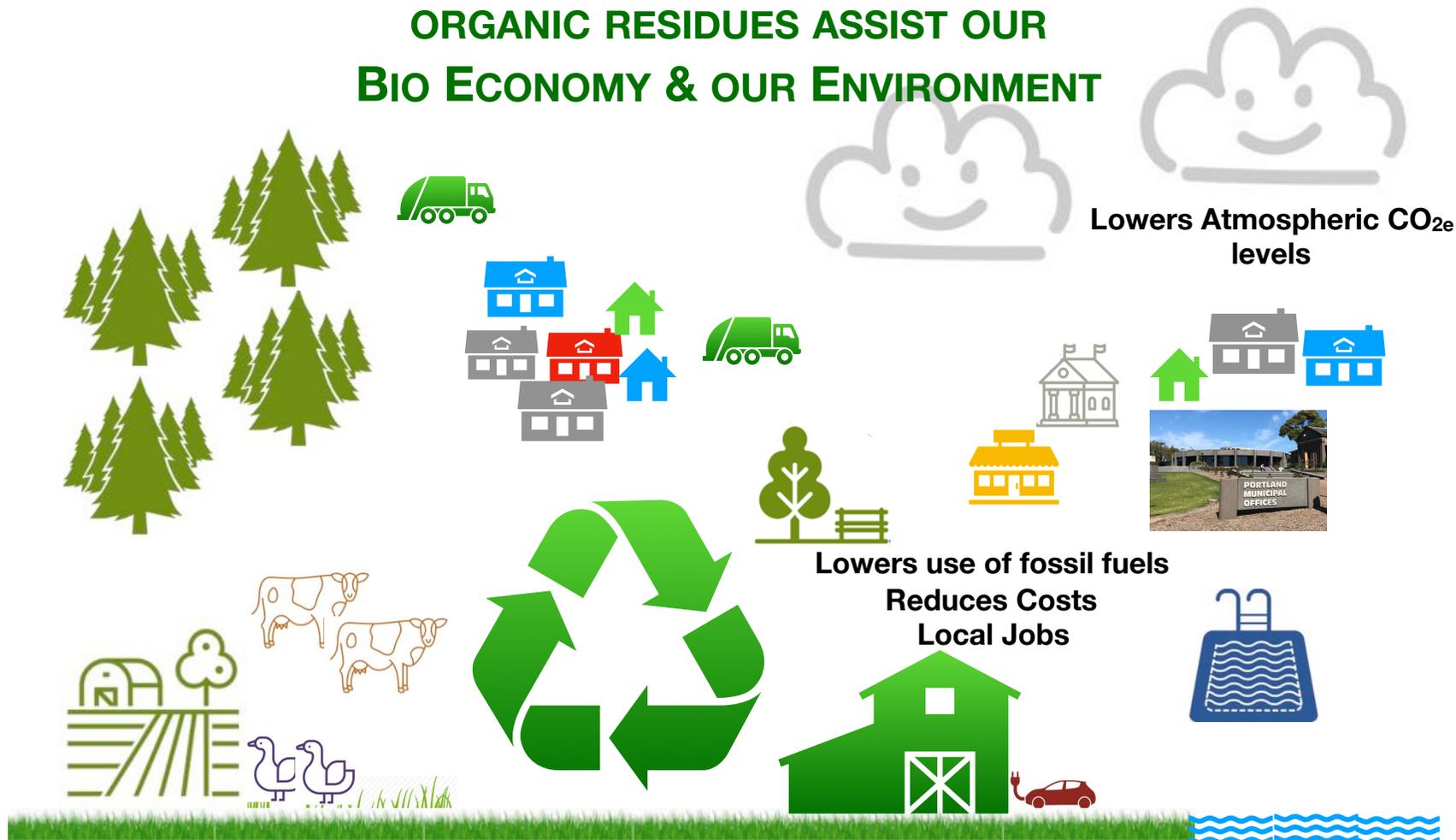
From Sarah

student at Portland bay school.

PORTLAND: 24 x 7 RENEWABLE ENERGY WITH CARBON CAPTURE AND STORAGE



ORGANIC RESIDUES ASSIST OUR BIO ECONOMY & OUR ENVIRONMENT



Lowers Atmospheric CO_{2e} levels

Lowers use of fossil fuels
Reduces Costs
Local Jobs

Cleaner Ocean & Rivers

Increased Soil Carbon
Less CO_{2e} emissions
Less imported chemicals
Assists animal health
Assists crop productivity


Biochar

**Portland Bio Economy Hub
Converts Organic Residues to
Electricity, Hot Water & Biochar**

PORTLAND: 24 x 7 RENEWABLE ENERGY WITH CARBON CAPTURE AND STORAGE



OPPORTUNITY

Glenelg Shire seek to replace their purchased electricity and natural gas fired hot water system with a low emission, low cost alternative. Various options were considered including solar, wind and wood chip boilers.

PROPOSED SOLUTION

ECHO₂ the Australian developed and manufactured biomass to energy & biochar technology currently undergoing commercial demonstration at nearby Tantanoola, South Australia, was proposed. Two ECHO₂ modules will use local biomass residues to provide the hot water and electricity for the pool and six public buildings. After favourable pre-feasibility assessment, Rainbow Bee Eater and SDA Engineering, the developers of ECHO₂ were requested to prepare an engineering study for Council.

EXPECTED RESULTS

Upon full operation, the ECHO₂ modules will utilise just one of the many suitable biomass residues that today are landfilled, burned or regarded as a disposal problem. Glenelg Shire energy costs will be close to zero as the biochar by-product will pay for the biomass.

Every year Glenelg Shire will produce energy from a renewable resource and remove another four year's worth of their previous CO₂ emissions from the atmosphere in the biochar. The biochar will help local farmers reduce soil carbon and nitrogen emissions and assist soil and food health.

Customer

Glenelg Shire
Heat and Electricity for public pool and six public buildings

Location

Portland, Victoria



ECHO₂ Modules

biomass 15,000 tonnes/yr
heat 25,000Gj/yr
electricity 2,000MWh/yr
biochar 5,000 tonnes/yr
carbon capture & storage
18,000 tonnes/yr CO₂e
local jobs

Applications

Waste to Energy
Biochar Production
Carbon Capture & Storage





ECHO₂ MODULE



ECHO₂



SDA Engineering

**24 X 7 LOW COST RENEWABLE ENERGY & BIOCHAR
WITH CARBON CAPTURE AND STORAGE
FROM LOW VALUE BIOMASS RESIDUES
VIC/SA/WA DEVELOPED AND MANUFACTURED**

Indicative economics for an Energy Producer with an ECHO₂ module selling their Biochar for \$300/tonne

Biomass Cost \$/wet tonne prepared & delivered just in time	\$ 75 cost	\$ 75 gate fee
Cost of generating Gas only \$/Gj LCOE	~ 0	< 0
Cost of generating Electricity \$/MWh LCOE	~ 50	< 0

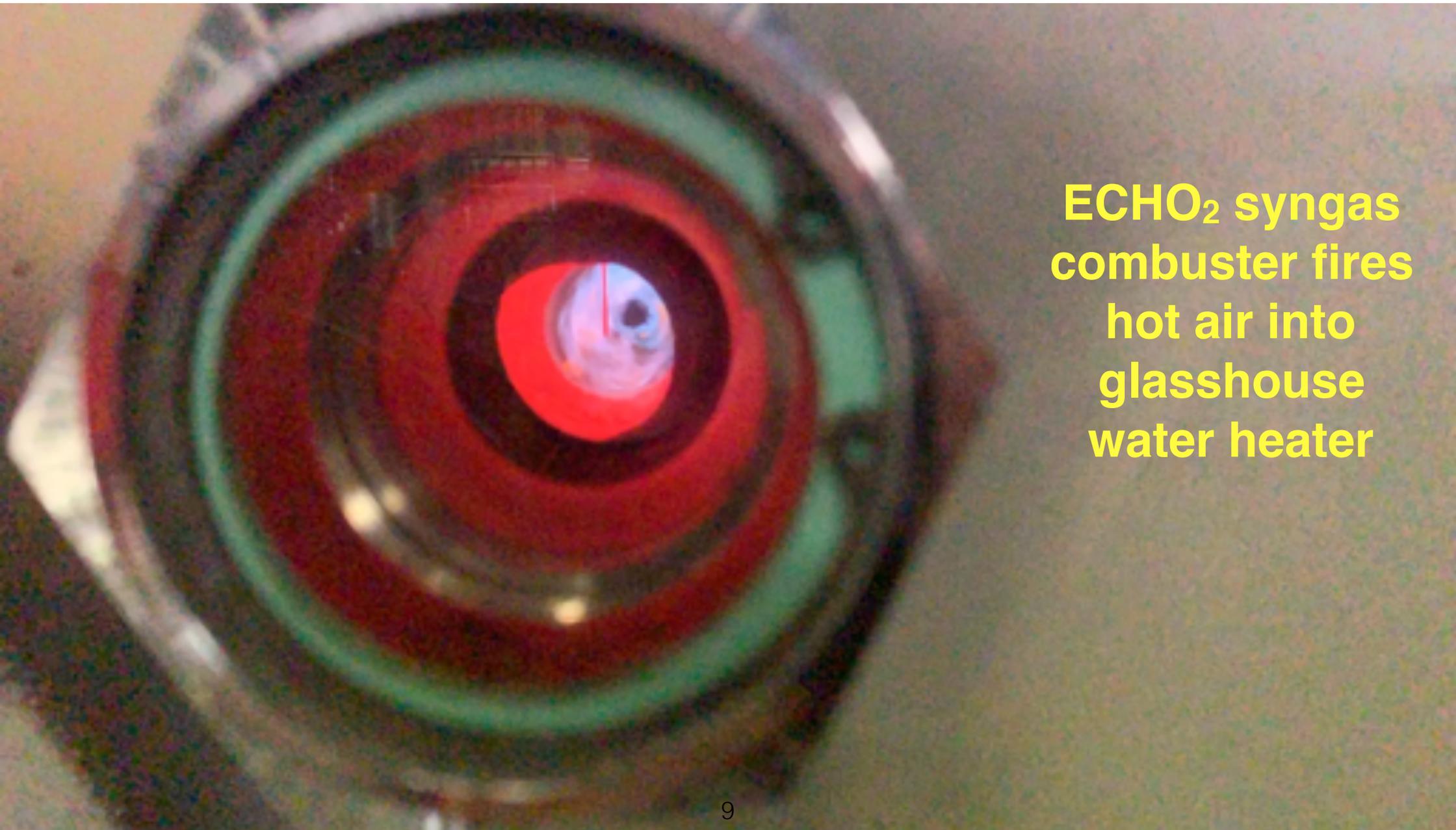
LCOE is levelised cost of energy including capital and operating costs.
 Basis: 24 x 7 operation, Annual: 7,500 hours. 5,500t biomass @ 20% moisture.
 Output: 2,000MWh_e or 30,000Gj gas. 3,000t biochar sold for \$300/wet tonne FOB
 Economics will improve further if power and heat are both of value (co-gen)

AUTOMATED ECHO₂ PROCESS





**CONTINUOUS CONVERSION
BIOMASS TO CLEAN SYNGAS
+ BIOCHAR
USING PYROLYSIS**



**ECHO₂ syngas
combuster fires
hot air into
glasshouse
water heater**

One slow moving
component does the tough
high temperature work





EST. 1991
HOLLA-FRESH
PTY. LTD.

Growers of Fine Herbs & Produce

AusIndustry
BUILDING BUSINESS · POWERING PRODUCTIVITY

ECHO2 Commercial Demonstration
hot water, electricity & horticultural CO2
RBE/SDA won competitive tender managed by SA Govt

1HA Glasshouse
Tantanoola South Australia



EXPECTED RESULTS ON FULL OPERATION

- 1. Holla-Fresh very low energy costs:** 'free' fuel, biomass-biochar swap with Van Schaik's BioGro
- 2. Soil and Food Health:** Van Schaik's compost - biochar products reduce soil C & N emissions and assist soil and food health. Holla-Fresh herb shelf life increases (CO₂ R&D)
- 3. Carbon Capture and Storage:** each year, Holla-Fresh energy is from a renewable resource + another 2 year's worth of their past CO₂ emissions is captured & stored in the biochar

COMMISSIONING PROGRESS AT HOLLA-FRESH

- hot commissioning started 17/10/18
- 1st **syngas and hot water** 18/10/18
- 1st **biochar** to Van Schaik's 8/11/18
- 1st 12 hour automated run 29/11/18
- 1st 32 hour **automated run** 5/12/18
- Christmas break for engineers 20/12 - 14/1/19
- next: ***electricity, horticultural CO2***



CLEAN RECYCLED WOOD DELIVERED TO HOLLA-FRESH MOVING FLOOR TRAILERS





ADD THE BIOCHAR TO THEIR COMPOSTED PRODUCTS



INDICATIVE SPECS: ONE ECHO₂ MODULE

750 kg/hr biomass (~20% moisture)

800kW hot water (80C)

100kW electricity (300kW capacity)

400 kg/hr biochar (~45% moisture)

250 kg/hr horticultural CO₂

4,000 t/yr CO₂e capture & storage



next



next



ECHO₂

low cost alternative to natural gas/LPG

& for generating electricity

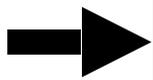
plus low cost Biochar

~~\$ 500 – 2000 per tonne~~

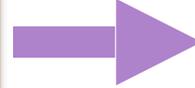
under \$ 200 per tonne

ECHO₂'s major points of difference?

- #1 single process step to clean fuel gas*
- #2 from low value biomass*



single step
process



what biomass can be used?

clean, particles, ~ 5mm to 25mm, ~ 5 to 55% moisture

tested OK	not tested believe OK	need testing to know
hardwood	grape vines & marc	rice hulls (dust?)
softwood	nut shells	others?
poultry bedding	pips	
tomato vines/ wood chip mix	bagasse	
green waste		
straw		



RBE believes ECHO₂'s low biochar production cost will enable large scale use for:

- horticulture and agriculture
- farmers seeking healthier soils and crops
- animal feed and bedding
- road making and building products
- fuel etc

Green Triangle Biochar Study Tour

20-22 October 2019

International Speakers/Guests

Mt Gambier/Portland/
Tantanoola/Wandilo

sponsors include: Glenelg
Shire, Glenelg Hopkins CMA
and Rainbow Bee Eater

**AUSTRALIA NEW ZEALAND
BIOCHAR CONFERENCE 2019
& STUDY TOUR ANZBC19**

1ST ANZ BIOCHAR STUDY TOUR

MAINSTREAMING BIOCHAR IN OUR REGIONS
ANIMAL HEALTH, SOIL HEALTH, DIVERSION FROM LANDFILL OR BURNING,
WATER QUALITY, ROAD BUILDING, REGIONAL ENERGY AND JOBS

SUNDAY 20 - TUESDAY 22 OCTOBER 2019
Green Triangle Region

BIO ECHO2

www.anzbc.org.au

Australian Government Department of Industry, Innovation and Science
Glenelg Hopkins
National Landcare Program
Rainbow Bee Eater

ABC LANDLINE CREW

FILMING
BIOMASS TO ENERGY
STORY
AT HOLLA FRESH

EXPECTED ON AIR
EARLY 2019

ECHO₂ - the benefits



- 1. low cost energy from low value biomass residues**
2. not reliant on subsidies to build or operate
3. automated energy on demand (despatchable)
4. uncomplicated, clean, quiet, safe
5. affordable, 2 to 8 year capital return
6. very low emissions, very carbon negative
- 7. commercial demonstration operating**
- 8. very committed and competent engineering & service team**



Proposed Portland Bio-Economy Hub



SDA Engineering

**24 X 7 LOW COST RENEWABLE ENERGY & BIOCHAR
WITH CARBON CAPTURE AND STORAGE
FROM LOW VALUE BIOMASS RESIDUES
VIC/SA/WA DEVELOPED AND MANUFACTURED
ENGINEERING STUDY EXPECTED MARCH 2019**



ECHO2 MODULE