12.2. PORT LINCOLN FORESHORE PLAYSPACE FENCING OPTIONS

REPORT INFORMATION							
Report Title	Port Lincoln Foreshore Playspace Fencing Options						
Records Reference	16.19.2.146						
Organisational Unit	Environment & Infrastructure						
Responsible Officer	Project Manager - Master Plan Projects - Kathleen Brannigan						
Report Attachment/s	Yes Attachment 9 9.1 I231526 Potential Boundary Fence Extension Report 9.2 I231527 Safety in Design Report Fencing and Public Playspaces (Play Australia) 9.3 N23704 Port Lincoln Playspace – Suggestions for Improvement – Themes						

REPORT PURPOSE

The purpose of this report is to provide Council with information to enable consideration of options for extending the fencing of the new Play Space and to determine whether additional fencing should be installed.

REPORT DECISION MAKING CONSIDERATIONS						
Council Role	Owner / Custodian - Manage community assets including buildings, facilities, public space, reserves on behalf of current and future generations					
Strategic Alignment	SDP GOAL: Goal 5: Community Assets and Placemaking SDP ACTION: 5.4 Deliver key elements of CBD, Foreshore and Marina Precincts Master Plan					
Annual Business Plan	ABP INITIATIVE: Not Applicable ABP PROJECT: Foreshore Redevelopment (ongoing)					
Legislation	Not Applicable					
Policy	Choose an item.					
Budget Implications	Moderate Variation > \$10,000 < \$50,000					
Risk Implications	Low Risk					
Resource Implications	This is a planned resource allocation					
Public Consultation	Not Applicable					
IAP2 Commitment	Not Applicable					

OFFICER'S RECOMMENDATION

That Council adopt Option 3A to extend the existing foreshore playspace fence east along Tasman Terrace up to the irrigation box and at the western end of the playspace to the path.

12.2 PORT LINCOLN FORESHORE PLAYSPACE FENCING OPTIONS

REPORT DETAIL

Background

A Special Council meeting was held on 24 April 2023 "to discuss matters pertaining to Port Lincoln Foreshore Playgrounds" and Council reiterated its position that the Andrew Small Playground will be removed. At this meeting Council also resolved to additionally that a further report be brought to Council to enable consideration of the following:

- a) options for extending the fencing of the new Play Space with possible full enclosure of the area;
- b) how this would fit with the design aesthetics and accessibility of the area; and
- c) possible timing and cost to complete the additional works.

Further Council resolved that, after reviewing this additional report and taking into consideration feedback and user experience after the new Play Space has been open for a period of time, determine whether additional fencing needs to be installed.

Current Position

A. POTENTIAL BOUNDARY FENCE EXTENSION REPORT

WAX Design were engaged to provide a report identifying options for additional fencing of the new playspace including possible full enclosure along with an assessment of the impact of extra fencing on accessibility and design aesthetics (The full <u>Potential Boundary Fence Extension Report</u> is at Attachment 9.1). The report highlights the following:

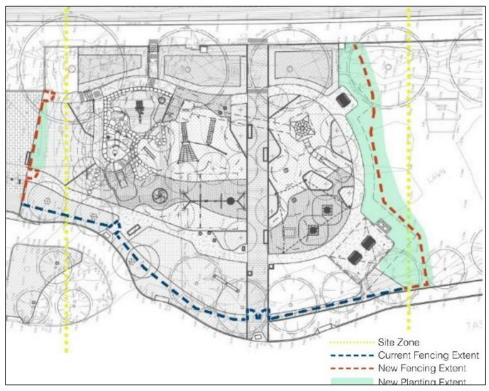
- Guiding design principles and a key focus was "connection, inclusion and universal access".
- Links to overall Foreshore Project the playspace contributes to a "connected ribbon of activation and recreation from the activity hub, through the open lawns, to the foreshore beach and jetty."
- Accessibility "fences and gates can be difficult for with mobility devices to use, the current limited fence extents also ensures all abilities access to the playspace is maintained".
- Risk assessment the potential risk associated with adjacent Tasman Terrace was evaluated, researched, and tested throughout the design process. Risk mitigation measures adopted include:
 - clear sight lines for carers between the road and playspace
 - orientation of play focus away from the road
 - boundary fence, gate and garden beds provide a physical barrier (Safety in Design Report is at Attachment 9.2)
- Play Australia's advice about playground fencing and Australian Standard for Playspace Safety (Fencing and Public Playspaces: Attachment 9.3)
- Materiality "any extension must provide continuity of design and materiality and maintain visual sightlines to and from the playspace".

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Summary of Fencing Options

Option 1: Extend fence to east and south, northern boundary (beach) remaining open, estimated cost \$87,000

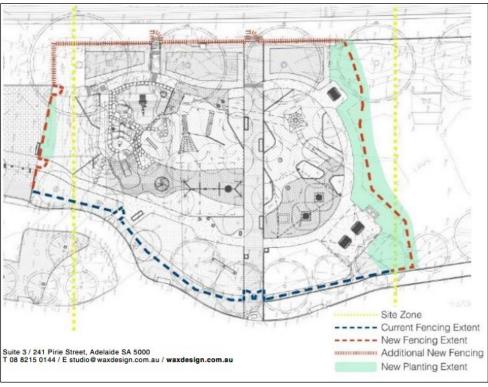
- Delineates playspace on three sides.
- Compromises/ detracts from opens space connections between playspace, lawns and activity node.
- Limits DDA compliant access people in wheelchairs requiring assistance to open gates.



Option 1.

Option 2: Full enclosure, estimated cost \$140,500

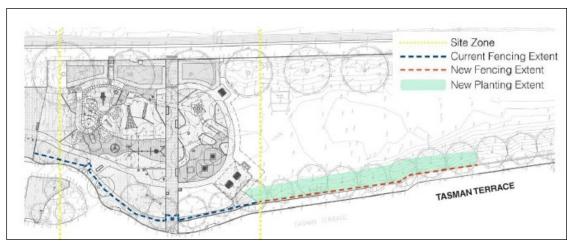
- Complete delineation of playspace on all sides
- Limits DDA access, someone in a wheelchair would require assistance to access playspace from any direction
- Northern fence will need to be located on top of retaining wall height of fence 1800mm viewed from path, visually dominating
- Outward opening gates creates conflicts between playspace and path users



Option 2

Option 3: Extend fence along Tasman Terrace to the east up to existing cream railing fence estimated cost \$80,500

13 Impacts on open space recreation and pedestrian connections from Tasman Terrace through the lawn area.



Option 3

Option 4: Existing boundary fence retained with no additional works, nil cost.

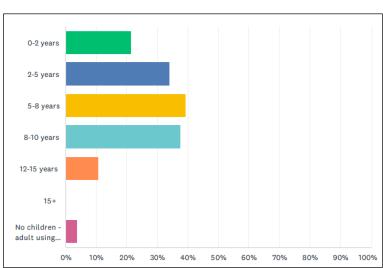
Maintains unimpeded access and open space connections

In the Potential Boundary Fence Extension Report WAX Design recommends Option 4, consistent with the nature and adventure playspace purpose as an inclusive community play, recreation, and open space experience.

B. PLAYSPACE USER FEEDBACK

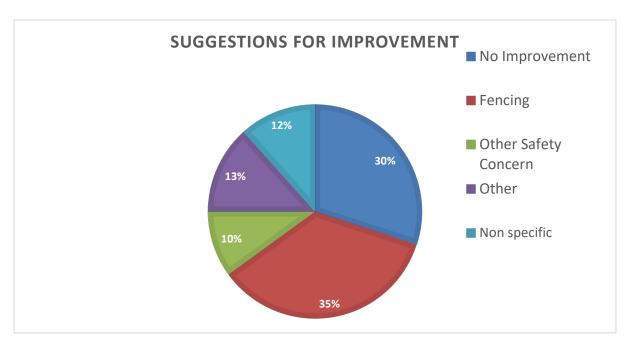
For the purposes of this report, to help inform Council's decision making and to satisfy the requirements of Council's previous decision, Council's community development and engagement staff surveyed users of the playspace between 31 May and 8 June 2023. Of the 65 respondents 75.38 % rated their experience as very good and 24.62% as good on a five point scale ranging from very good to very poor.

They have also asked about the ages of children using the playspace which is shown below.



Ages of children using the playspace

Survey respondents were also invited to provide suggestions for improvement and the approximate breakdown of the 60 responses is shown below. NB. Not all survey respondents responded to this question, and some provided more than one comment. A full list of responses is provided at Attachment 4.



While the feedback was very positive overall 21 people (approximately 35% of respondents) expressed the need for additional fencing.

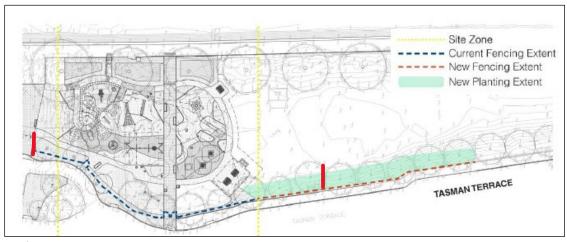
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CONCLUSION

Considering both WAX Design's report and recommendation that the new nature and adventure playspace does not require additional fencing and community feedback it is recommended that Council consider a revised option 3. This option (Option 3A) would involve extending the fence east along Tasman Terrace up to the irrigation box and at the western end of the playspace (adjacent the car park) to the edge of the path as shown below.

Option 3A: Extend fence along Tasman Terrace to the east up to irrigation box and to path on the west estimated cost \$28, 916.

14 Minimal impact on open space recreation and pedestrian connections from Tasman Terrace through the lawn area.



Option 3A







ATTACHMENT 9

ATT 9.1 I231526

REPORT 12.2

POTENTIAL BOUNDARY FENCE

EXTENSION REPORT

ATT 9.2 I231527

SAFETY IN DESIGN REPORT

ATT 9.3 N23704

PORT LINCOLN PLAYSPACE -

SUGGESTIONS FOR IMPROVEMENT

- THEMES



21PFO
PORT LINCOLN FORESHORE PLAYSPACE
POTENTIAL BOUNDARY FENCE EXTENSION
3 JULY 2023
CITY OF PORT LINCOLN
KATHLEEN BRANNIGAN
AMANDA BALMER

Executive Summary:

WAX has been engaged to provide a summary report and professional opinion regarding the question 'does the Port Lincoln Foreshore Playspace fence need to be extended?'

The playspace has been developed to provide a community play and recreation destination where there is 'something for everyone', regardless of age or ability. One of the guiding design principles and a key focus of the project was connection, inclusion and universal access.

It has been designed as a community space that encourages everyone to engage, including carers and parents alike. It is openly connected without fencing to the surrounding open space and infrastructure including the toilet, drinking fountain, DDA car park and foreshore path to facilitate ease of use and 'stay and play' principles. The playspace will provide a connected ribbon of activation and recreation from the activity hub, through the open lawns, to the foreshore, beach and jetty beyond once all projects of the masterplan are completed.

The potential risk associated with the adjacent Tasman Terrace was evaluated, researched and tested throughout the playspace design process. Key features implemented to mitigate the risk include the inclusion of clear sight lines of supervision for carers between the road and playspace and the orientation of the central playspace focus towards the foreshore, and away from the road. A boundary fence, gate and associated vegetated garden beds provide a physical barrier along the southern aspect of the playspace and roadway.

The extent of the playspace fence is limited to Tasman Terrace only. To ensure that play and recreation opportunities are not caged or confined to the playspace area only, and can extend through the lawns to the activity hub and foreshore beyond. As fences and gates can be difficult to for people with mobility devices to use, the current limited fence extents also ensures all abilities access to the playspace is maintained.

Play Australia (peak body for play in Australia) states, 'Councils are not encouraged to erect structures such as fences or gates intended to separate children from adults but to design stimulating playspaces in accord with Australian Standards for Playground Safety that will foster greater use by children and their families'.

Any extension to the existing boundary and barrier is to be a continuation of the existing timber post and wire materiality, which has been implemented as a continuation of the Foreshore precinct materials pallete. The fence must provide continuity of design and materiality and maintain visual sightlines to and from the playspace. Options to extend the existing fence have been investigated and include;



Summary of Options:

Option 1: The existing boundary fence is extended to the east and south of the playspace extents, with the northern boundary remaining open. This will impact on openspace connections but maintain unimpeded all abilities access to the foreshore and foreshore path. Cost estimate \$87,000.

Option 2: The existing boundary fence is extended to the east, south and north of the playspace extents, and the playspace is fully enclosed. This will impact on openspace connections and impede all abilities access to the foreshore and foreshore path. Cost estimate \$140,500.

Option 3: The existing southern boundary fence is extended to the east along Tasman Terrace to the existing cream railing fence, adjacent the 45 degree parking bay. This impacts on pedestrian connections from Tasman Terrace to the foreshore through the lawn area. Cost estimate \$80,500.

Option 4: No extensions or modifications to the existing fence along Tasman Terrace. Current pedestrian, open space and all abilities access is maintained. Cost estimate \$0.

Recommendation:

It is acknowledged that fencing is an important aspect of fully accessiable playspaces, which have a higher percentage of children with special needs because the children can run off, are unable to hear or understand their name, are easily distracted or become absorbed in activity and do not notice they have moved away from their carers.

The recommendation of this report is Option 4, as the Port Lincoln Foreshore Playspace is not designed as a fully accessible playspace, it is an inclusive community play, recreation and openspace experience that provides 'something for everyone'. and consequently, it does not require additional fencing.

Project Background:

The redevelopment of the Port Lincoln foreshore will transform Tasman Terrace and the city's coastal edge into a vibrant, well-connected contemporary waterfront destination. The Port Lincoln Foreshore Playspace is the first of the projects to be realised after years of planning. The adventure playspace was designed as part of the overall activity precinct redevelopment, which includes a half-court activity node (replacing the existing junior play area), toilet upgrade, foreshore plaza regeneration, jetty refurbishment and Parnkalla Trail repairs and upgrades.

The foreshore precinct was designed to function as one cohesive whole based on the outcomes of the award-winning Port Lincoln Precincts Master Plan from 2019, providing public realm activation, tourist destinations, recreation and play opportunities, landscape amenity, cultural representation and improved accessibility.

The playspace has been developed to provide a community play and recreation destination where there is 'something for everyone', regardless of age or ability. One of the guiding design principles and a key focus of the project was connection, inclusion and universal access.

The location of the playspace, builds on the recommendation of the masterplan and is considerate of its surrounding context and adjacent infrastructure. It is orientated 35.5m from the existing toilets and drinking fountain to ensure ease of use for playground users, with a new 1:20 compliant access path to provide access and inclusion (refer to attachment 1 for plan details on layout and mapped distances). The foreshore plaza upgrade includes new DDA compliant car parks and a drop-off zone 15m from the playspace, to support all abilities vehicular access to the playground.



The current playspace is connected to the existing open space lawns to the east and west, providing a continuation of unprogrammed play and recreational open space as part of the playspace provision. It is recognised that provision of informal and open-ended play opportunities for children of all ages is as important as the formal and traditional play experiences equipment can create. The adjacent lawns also provide an amenity provision and informal seating, supporting the picnic area, barbeque and a 'spill out zone' from the congregation area of the shelter.

The lawn area to the east of the playspace connects the open recreation space of the proposed half court activity hub. This arrangement provides clear lines of sight between the two recreation and play nodes, facilitating carers and families an easy transition between the spaces without barriers or physical interruptions to supervision sight lines (refer to attachment 2 for plan details on sight lines).

The northern aspect of the playspace has been designed to physically and visually connect to the foreshore, jetty and ocean. The elevated timber walkway provides a new visual vantage point which reinforces the importance of the recreation and environmental aspects of the foreshore, and this connection to the ocean has been reinforced through the cultural storey telling and sand and water play experiences.

Whilst a new 1:20 gradient path provides all abilities access between the playspace and the foreshore path (refer to attachment 2 for details on DDA compliant access); the water's edge remains 12m from the northern aspect of the playspace, and clear visual sightlines have been maintained between the two elements. Raised seating walls beneath the existing Pine trees provide additional physical and visual boundaries to the northern aspect of the playspace. This landscape boundary is complimented by the grade separation between the foreshore path (Parnkalla Trail) and the beach.

The southern edge of the playspace is located near Tasman Terrace. The potential risk was evaluated, researched and tested throughout the playspace design process, refer to the following 'risk assessment & fence evaluation section' for further information.

To mitigate the potential risk associated with the adjacent road, the play activity zone is centralised away from the road edge to the northern aspect of the site. The southern edge of the playspace extents is offset 12m north from the verge, to provide clear visual sight lines between the playspace edge and the road. A post and wire fence with a vegetated garden bed to either side have been included along the southern playspace boundary, to provide an informal edge to the reserve and reduce pedestrian permeability through this area of the site. Two new pedestrian gates have been included along the external pathway connections to the southern boundary at the request of Council during the construction phase of the project.

Risk Assessment & Fence Evaluation Process:

WAX evaluated the potential risk of adjacent infrastructure, including Tasman Terrace and the Foreshore, through the development of a Safety in Design report for the playspace project, which is based on the guidelines and principles of AS/NZS ISO 31000. Research and evaluation of the benefits of 'unfenced' playspaces was also undertaken as part of the fence evaluation process, along with a precedent review an analysis summary of relevant playspace projects (refer to summaries below for additional information).

The evaluation and design response generated from this process resulted in the inclusion of a 'boundary' to Tasman Terrace to define the playspace through the installation of a timber post and wire fence set within a vegetated garden bed. This boundary was further defined at the request of Council during construction to include two pedestrian gates to the pathway connections leading to Tasman Terrace.



The raised garden beds and seating walls to the northern foreshore aspect of the playspace separate it from the foreshore path and provide a physical barrier, and new vegetated garden beds assist in further defining the northern boundary of the playspace.

The Port Lincoln foreshore playspace was independently audited during the design and construction phases for compliance to Australian Standards for play AS4685, 4422 & 3533.4.2, by Paul Grover, from Play DMC who is a leading risk evaluator of playgrounds in Australia. During both evaluation assessments (D3001.345 Port Lincoln Foreshore Playspace Design Review & PLF01 Port Lincoln Foreshore Playspace Inventory Report), the potential risk of surrounding infrastructure including Tasman Terrace and the Foreshore were not recorded as an identifiable hazard or reported as a risk item that required review or evaluation.

An evaluation of the benefits of 'unfenced' playspaces was also undertaken including the following;

Kidsafe SA Fencing Playgrounds (December 2022 Fact Sheet https://www.kidsafesa.com.au/wp-content/uploads/2022/12/Kidsafe-SA-Fencing-Playspaces-Info-Sheet-2022.pdf):

- Whilst public playspaces are not required to be fenced, the need for fencing is determined by conducting a
 risk assessment to AS/NZS ISO 31000 Risk management -principles and guidelines. Designers should assess
 the most appropriate form of protection.
- A boundary can make the playground appear more defined, though this of course may not necessarily be a fence. Other possible measures include simple one or two rail fences, bollards, garden beds etc.

Play Australia: Fencing and Public Playspaces (2021 Fact Sheet https://www.playaustralia.org.au/sites/default/files/LibraryDownloads/Fencing%20and%20Public%20Playspaces.pdf);

- There is no Standard on playground fencing, and there is no likelihood of there being one in Australia.
- Play Australia and local government authorities generally do not support the provision of fencing around
 playgrounds except where there are particular issues concerning access, but not as a safety barrier, firstly
 because fencing does not prevent most children from running away if they wish to, and secondly it is the
 responsibility of parents to supervise their children in public openspace
- Play Australia advises councils regularly to inform the community that parents are responsible for the supervision of their children, and not the council.
- Councils are responsible for the physical landscape and infrastructure, and spend considerable resources in managing public open space, but parents and/or carers are responsible for the supervision of children.
- Play Australia recognizes that there are sometimes particular circumstances where fencing can add to the quality of the playspace for children
- Play Australia supports experience which suggests that children who enjoy quality play environments in the company of their parents or adult carers will experience significantly less injury than those who play in isolation from supportive adults.
- Consequently, Play Australia believes that children need to be appropriately supervised in public playspaces, as stated in AS4685-2014, and that Councils should plan to enable adults comfortable access to playgrounds by way of provision of adequate seating near to the play equipment, provision of water and toilets nearby etc.
- Councils are not encouraged to erect structures such as fences or gates intended to separate children from adults but to design stimulating playspaces in accord with Australian Standards for Playground Safety that will foster greater use by children and their families.



Fencing (the good playspace guide) https://www.playaustralia.org.au/sites/default/files/LibraryDownloads/Fencing%20and%20Public%20Playspaces.pdf):

- There are many families and groups who are unable to visit playgrounds unless they are fenced because their children run off, are unable to hear or understand their name, are easily distracted, or become absorbed in an activity and do not notice they have moved away from their carers. For these groups, a high fence with a gate is important.
- When a site is close to a hazard such as a water body, busy road, or steep cliffs, a fence makes many adults
 more comfortable about their children's safety
- A major disadvantage of fencing a playspace from the rest of the park is limiting where play activities can take place, or effectively 'caging' play into a confined space.
- It is virtually impossible for people who use wheelchairs to reach child-proof locks on gates, making fenced spaces with these systems inaccessible to some users. In addition, gates and child-proof locks regularly fail in public parks and the cost of replacing locks can be expensive over time.
- Fences can also be used as an excuse not to supervise children properly.
- When considering a fence for a play space, it is important to think clearly about its purpose and make sure its design is consistent with that purpose.
- Every municipality should aim to provide a few fenced play spaces, so there is a variety of options for parents and carers whose children require additional protection. However, natural barriers such as hedges (or another type of planting or design feature) can provide the same sense of containment as a fence, especially for small children. These options should be considered in the planning process.

Fencing information prepared by Play DMC (for the Whittlesea Playspace Policy) August 2012;

In a report prepared by Paul Grover from PlayDMC for the Whittlesea Playspace project, fencing was not considered a requirement for many playspaces for the following reasons;

- It is not the responsibility of a playspace operator to prevent a child from leaving a designated playspace. Indeed, fencing will not stop a child intent on escape. The safety of a child is the responsibility of the parent / carer.
- Parents / carers may feel that a child within a fully fenced area does not require supervision and have unreasonable expectations on the effectiveness on fencing keeping a child contained. It is preferable that parents / carers play with, or actively supervise, their children as children who enjoy quality play environments with their parents or carers experience significantly less injury than if playing in isolation.
- It limits transition between the formal play equipment and play opportunities, especially natural play, elsewhere in a park. It also limits the sense of freedom.
- Child-proof gates can be difficult to open for people in wheelchairs.
- Where a fence is required to fully enclose a playspace, this should not be just around the formal playground
 area as this could create a space that feels caged. Instead enclose a larger area that includes supervision
 areas and natural areas.
- If just a barrier is required to inhibit movement in one or two directions, rather than a fence, features such as bushes and trees, garden beds, boulders and retaining walls should be used.'



WAX also reviewed similar project precedents to assist in the evaluation of potential risks and the development of the Safety in Design report;

- Glenelg Foreshore Playspace: is 12m between the play edge and the foreshore, with open space lawn connection either side and no boundary fence
- Bristow Smith Reserve Playspace: is 4.5m to between the play edge and the foreshore, with an open space lawn connection either side and no boundary fence. The car park is offset from the playspace by 11.0m and the road 15.0m
- Payneham Oval Playground, Payneham: has open space lawn connections with a timber post and wire fence between the playspace and road, through a vegetated garden bed. The playspace is offset from the road 10.5m

Design aesthetics:

The current boundary to Tasman Terrace is a 1200mm hardwood timber post and horizontal tensioned wire fence set within a vegetated garden bed. The fence and garden bed are designed to provide a physical barrier between the playspace and Tasman Terrace with a low visual impact and clear sight lines both internally and externally to and from the playspace.

The boundary materiality of hardwood timber was selected as a continuation of the materials used within the playspace, jetty and foreshore upgrade. The stainless steel wire is a continuation of the existing balustrade material used around the jetty entrance. The gates are operated from an internal access point with a 'D-latch' to assist with less able-bodied individuals opening the gates without the need for assistance when leaving the playspace. The gates open inwards to comply with external pram ramp requirements, which makes it more difficult for children to open the gates to leave the playspace. This, in turn, impedes and restricts wheelchair users from using the gate as the latch is on the internal face of the gate when entering the playspace from outside.

The boundary is designed to 'slow' children down as they traverse the garden bed and negotiate the fence, providing additional time for carers to redirect the child away from the road verge.

The timber and wire fence was not designed to provide swimming pool barrier or equivalent AS 1926.1 safety standards, and as such a swimming pool fence aesthetic was not implemented. Nor was the timber and wire fence designed to provide traffic control measures or mitigate cars from entering the playspace. As per the Kidsafe Fencing Playgrounds report, 'most fences are not designed to withstand the force of an automobile gone astray'.

Fencing Options:

Any extension to the existing boundary and barrier is to be a continuation of the existing timber post and wire materiality, which has been implemented as a continuation of the Foreshore precinct materials pallete. The fence must provide continuity of design and materiality and maintain visual sightlines to and from the playspace.

Latch and gate mechanisms are to be reviewed, as current internal latches impede access for people living with a disability who may wish to enter the playspace. MLAK keys may need to be considered https://brisbanekids.com.au/mlak-key-helping-kids-disabilities/



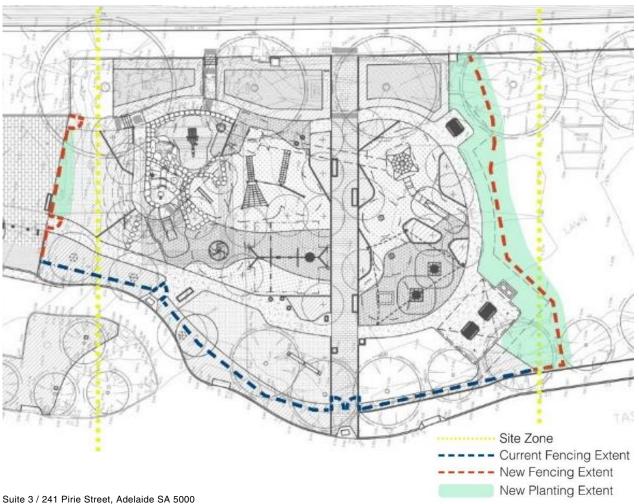
Four different options to extend the existing fence have been investigated and include the following;

Option 1:

The existing boundary fence is extended to the east and south of the playspace extents, with the northern boundary remaining open. This will maintain unimpeded all abilities access to the foreshore and foreshore path. The existing timber post and wire fence would continue at ground level, set within a vegetated garden bed to visually soften the barrier. It is offset from the edge of the playspace to provide a small open lawn to the west for passive recreation and socialisation.

The barrier and associated garden bed to the east are located close to the perimeter playspace pathway to provide separation and circulation space around the existing Makybe Diva statute, with a 6m offset between the statue and the garden bed. Two new pedestrian gates are required to the east fence to provide pathway access to adjacent amenity.

Whilst this option provides a boundary delineation of the playspace on 3 sides, it compromises the open space recreation connections between the playspace, lawns and activity node. It limits DDA compliant access between the playspace and the toilet, drinking fountain and the DDA car park, with an individual in a wheelchair requiring assistance to open the gate when entering the playspace.





Option 2:

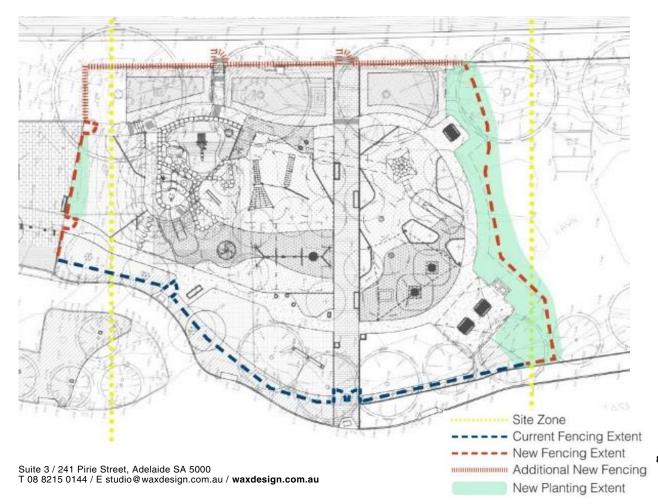
Existing boundary fence is extended to east and west playspace edges as per Option 1.

The fence is extended along the north boundary to provide a full barrier to the playspace. The northern aspect of the fence will need to be located on the top of the existing retaining wall to prevent any further construction works within the TPZ (tree protection zones) of the existing significant Norfolk Island Pines.

Whilst this option provides a complete boundary delineation of the playspace on all sides, it compromises the open space recreation connections between the playspace, foreshore, lawns and activity node. It limits DDA compliant access between the playspace, and the toilet, drinking fountain, DDA car park and foreshore, with an individual in a wheelchair requiring assistance to access the playspace from any direction.

As the fence will need to be located on top of the existing retaining wall which is approximately 600mm high, the total height of the fence when viewed from the foreshore path will be 1800mm high and be visually dominating when seen from the foreshore path, beach or from the water. The two northern boundary pedestrian gates will need to 1800mm high as the access paths grade down from the playspace to the foreshore. The gates will need to open outward to accommodate the existing steps and 1:20 ramp access. The outward opening configuration will create conflicts between people leaving or entering the playspace users of the foreshore path.

The existing handrail to the north eastern steps will need to be removed and replaced to accommodate the fence.



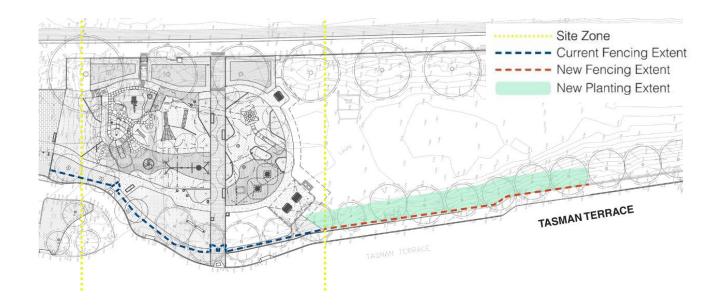


Option 3:

Existing boundary fence is extended to east along Tasman Terrace only.

The fence is extended along the southern boundary and would terminate adjacent the existing cream painted steel railing fence adjacent the access ramp. The existing timber post and wire fence would continue at ground level, set within a vegetated garden bed to visually soften the barrier, and the garden beds would include the existing Plane Trees.

Whilst this option provides provide a full barrier to the southern aspect of playspace and the eastern lawn area, it compromises the open space recreation and pedestrian connections between Tasman Terrace, the foreshore and lawns including the Makybe Diva statue. An individual walking along Tasman Terrace could only access the lawn area through either of the 2 playspace gates, or the ramp situated towards the eastern activity hub end of the lawn area.





Option 4:

Existing boundary fence is retained with no additional works.

This will maintain unimpeded all abilities access and openspace connections to the toilet, drinking fountain, jetty, lawns, activity node, foreshore and foreshore path and beyond to the activity hub, through the open lawns, to the beach and jetty beyond.

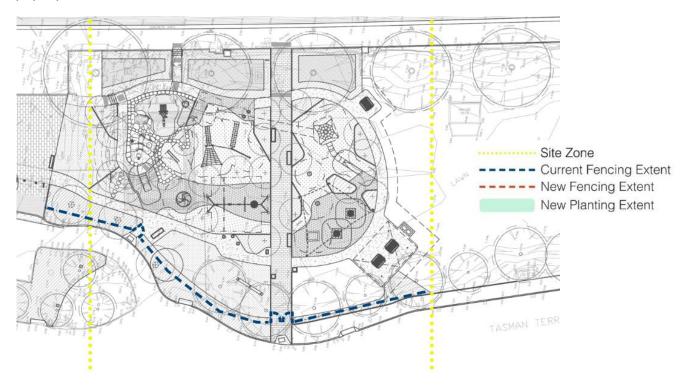


Image references of timber and wire boundary (1), timber gates (2) and existing wire balustrade to jetty below (3);









Probable opinion of costs:

	Option 1				
Item	Description	Unit	Option Qty	Rate (\$)	Total Project (\$)
	TOTAL PRELIMINARIES	item	1		8,500.00
1.1	Demolition of existing turf	m2	215	12.00	2,580.00
1.2	Cultivate planting beds to 300mm depth incorporating organic compost	m²	215	35.00	7,525.00
1.3	Modify existing sprinklers and irrgiation system	m²	215	25.00	5,375.00
1.4	Install flush concrete kerb to garden bed edges	l/m	70	85.00	5,950.00
1.5	Supply and install 4 x 140mm plants per m2	m²	215	75.00	16,125.00
1.6	Supply and install 75mm depth of organic mulch to garden beds	m²	215	7.50	1,612.50
1.7	Supply and install 1200mm high timber post and wire fence to match existing, including pedestrian gates	l/m	70	450.00	31,500.00
	TOTAL				79,167.50
	10% contingency				7,916.75
	TOTAL (exc. GST)				87,084.25



	Option 2				
Item	Description	Unit	Option Qty	Rate (\$)	Total Project (\$)
	TOTAL PRELIMINARIES	item	1		13,000.00
1.1	Demolition of existing turf	m2	215	12.00	2,580.00
1.2	Cultivate planting beds to 300mm depth incorporating organic compost	m²	215	35.00	7,525.00
1.3	Modify existing sprinklers and irrgiation system	m²	215	25.00	5,375.00
1.4	Install flush concrete kerb to garden bed edges	l/m	70	85.00	5,950.00
1.5	Supply and install 4 x 140mm plants per m2	m²	215	75.00	16,125.00
1.6	Supply and install 75mm depth of organic mulch to garden beds	m²	215	7.50	1,612.50
1.7	Supply and install 1200mm high timber post and wire fence to match existing, including pedestrian gates and 2 x 1800mm gates	l/m	120	470.00	56,400.00
1.8	Make good exisitng retaining wall and garden bed adjacent wall	l/m	70	75.00	5,250.00
1.9	1.9 Remove existing handrail and replace with new		2	7000.00	14,000.00
	TOTAL				127,817.50
	10% contingency				12,781.75
	TOTAL (exc. GST)				140,599.25



	Option 3				
Item	Description	Unit	Option Qty	Rate (\$)	Total Project (\$)
	TOTAL PRELIMINARIES	item	1		8,500.00
1.1	Demolition of existing turf	m2	275	12.00	3,300.00
1.2	Cultivate planting beds to 300mm depth incorporating organic compost	m²	275	35.00	9,625.00
1.3	Modify existing sprinklers and irrgiation system	m²	275	25.00	6,875.00
1.4	Install flush concrete kerb to garden bed edges	l/m	55	85.00	4,675.00
1.5	Supply and install 4 x 140mm plants per m2	m²	275	75.00	20,625.00
1.6	Supply and install 75mm depth of organic mulch to garden beds	m²	275	7.50	2,062.50
1.7	Supply and install 1200mm high timber post and wire fence to match existing, including pedestrian gates	l/m	55	450.00	24,750.00
	TOTAL				80,412.50
	10% contingency				8,041.25
	TOTAL (exc. GST)				88,453.75

Option 4:

No costs are associated with Option 4.



Recommendation:

It is acknowledged that fencing is an important aspect of a fully accessible playspace, which have a higher percentage of children and families with special needs because the children can run off, are unable to hear or understand their name, are easily distracted or become absorbed in activity and do not notice they have moved away from their carers.

The Port Lincoln Foreshore Playspace is not designed as a fully accessible playspace, it is an inclusive community play experience that provides something for everyone and consequently, it does not require a complete boundary fence. It has been designed as a community space that encourages everyone to engage, including carers and parents alike. It is openly connected to the surrounding open space and infrastructure including the toilet, drinking fountain, DDA car park and foreshore path to facilitate ease of use and 'stay and play' principles. The playspace provides a connected ribbon of activation and recreation from the activity hub, through the open lawns, to the foreshore, beach and jetty beyond.

As outlined in the research information provided in this report, the peak body for play in Australia, Play Australia believes that children need to be appropriately supervised in public playspaces, as stated in AS4685-2014. Their recommendations that Councils should plan to enable adults comfortable access to playgrounds by way of provision of adequate seating near to the play equipment, provision of water and toilets nearby etc. has been achieved through the design and delivery of the Port Lincoln Foreshore playspace project.

Play Australia also states, 'Councils are not encouraged to erect structures such as fences or gates intended to separate children from adults but to design stimulating playspaces in accord with Australian Standards for Playground Safety that will foster greater use by children and their families'. Several relevant South Australian play projects were reviewed to demonstrate local precedent projects where Councils did not fully fence playspaces when they were colocated with adjacent infrastructure such as roads, car parks and water bodies.

If the current fence and garden bed barrier to Tasman Terrace is to be extended, consideration needs to be given to the cost implications of undertaking these works, as demostrated in the Probable Opinion of Costs along with the compromises on aesthetics, open space connections, playspace function and accessibly as outlined in this report.

Any extension to the existing boundary and barrier is to be a continuation of the existing timber post and wire materiality, which has been implemented as a continuation of the Foreshore precinct materials pallete. The fence must provide continuity of design and materiality and maintain visual sightlines to and from the playspace.

It is our recommendation that the project is promoted as a community space that encourages everyone to engage, including carers and parents alike. That it remains openly connected without any additional fencing to the surrounding open space and infrastructure to maintain full access to the including the toilet, drinking fountain, DDA car park and foreshore path to facilitate ease of use and 'stay and play' principles. To ensure the playspace functions as intended, and provides a connected ribbon of activation and recreation from the activity hub, through the open lawns, to the foreshore, beach and jetty beyond once all projects of the masterplan are completed.



Safety in Design Report

PORT LINCOLN FORESHORE PLAYSPACE

Prepared for City of Port Lincoln By WAX Design (Revision C)

Issued 28 June 2023

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© March 22

1

Contents

REVISION	DATE	AUTHOR(s)	REVIEWER
С	28 June 2023	КР	АВ
В	20 February2023	АВ	wĸ
Α	21 March 2022	КР	АВ

Contents

1	Intro	oduction and Methodology	4
	1.1	INTRODUCTION	4
	1.2	RISK MANAGEMENT APPROACH TO DESIGN	4
	1.3	HAZARD IDENTIFICATION	4
	1.4	RISK ASSESSMENT	5
	1.5	RISK ELIMINATION OR CONTROL	5
2	Rep	orting	6
	2.1	REPORTING TO THE CLIENT	6
	2.2	REPORTING TO THE LANDSCAPE CONTRACTOR	6
	2.3	HOW TO REPORT	6
	2.4	SCOPE OF REPORT	6
	2.5	EXCLUSIONS	7
	2.6	REFERENCE DOCUMENTS	
	2.7	DUTY HOLDERS INVOLVED IN THE PROJECT	8
	2.8	GENERAL NOTES	9
3	Risl	« Matrix	10
4	Rec	ommendations	27

1 Introduction

1 Introduction and Methodology

1.1 INTRODUCTION

- 1.1.1 This report has been prepared for CITY OF PORT LINCOLN and provides safety in design assessment overview of the PORT LINCOLN FORESHORE PLAYSPACE.
- 1.1.2 The primary purpose of this report is to identify reasonably foreseeable risks, eliminate risks so far as reasonably practicable and to minimise risk as far as reasonably practicable.
- 1.1.3 Health and safety at the workplace are a responsibility shared by many people who control the design, construction, use and maintenance of the workplace. Workplace safety legislation requires a hierarchy of risk controls, which begins with the need to eliminate the risk; if the risk cannot be eliminated, then it must be controlled. Clients, project managers, design managers, landscape architects, architects, engineers, and others involved in the design process, have an important role to play in identifying health and safety risks that could arise throughout the life cycle of the project and where practicable eliminating risks through design.
- 1.1.4 This report is based on guidance provided by Safe Work Australia's Code of Practice for Safe Design of Structures.

1.2 RISK MANAGEMENT APPROACH TO DESIGN

- 1.2.1 Design managers should eliminate any foreseeable hazards that may arise from the design of a landscape, structure or building. If it is not reasonably practicable to eliminate the risk completely, then the design manager should control the risk. This process is called risk management.
- 1.2.2 Risk management should be part of the design process and integrated into meetings between parties in the design group, preferably from the concept development phase. Major design decisions are easier to make at this early stage. The risk management process consists of three main steps:
 - Hazard identification
 - Risk assessment
 - Risk elimination or control
- 1.2.3 Note that this report considers work health and safety issues with the design of the works, and does not deal with other aspects of risk associated with design, such as economic risks.

1.3 HAZARD IDENTIFICATION

- 1.3.1 The first step is to identify potentially hazardous situations that could result in injury or illness. It is important to think creatively and systematically about potential hazards. To develop a comprehensive list of potential hazards, design managers should consider the systems of work involved in each life cycle phase of the building or structure. This hazard identification may need to involve a group of people to provide expertise in the potential hazards throughout the life cycle.
- 1.3.2 The more often design managers undertake this risk identification process; the more familiar they will become with the kinds of risks involved. It may be useful to identify the most significant causes of injury and disease in the industry likely to occur regarding the landscape and associated features.

1 Introduction

1.3.3 Sources of information include post-occupancy evaluations on similar projects, industry guidelines, and OHS consultants

1.4 RISK ASSESSMENT

1.4.1 Once the hazards have been identified, the design manager should assess how likely it is that someone could be harmed by each hazard and how serious the injury or illness could be. This process enables priorities to be set and helps determine what control measures might be appropriate.

1.5 RISK ELIMINATION OR CONTROL

- 1.5.1 Having identified potential hazards and their risks, design managers should then consider ways to do something about them. They should aim to eliminate risks by redesigning the landscape, structure or building, or the methods of construction. If this is not reasonably practicable, then the design managers should take steps to reduce the risk. They should document any residual risks and recommended control measures, and pass the information on to the client, maintenance operators, and contractors.
- 1.5.2 The hierarchy of control model is a list of control options, in priority order, which should be used to eliminate or minimise risks to health and safety. Measures at the top of the hierarchy of controls are preferable because they are effective regardless of whether unforeseen events occur, people act as expected, or equipment is being used as intended. The hierarchy of control model is as follows:
 - Eliminate design the hazard out of the building or structure. Substitute substitute less hazardous materials, fixtures, fittings, plant or construction methods.
 - Isolate use guards or barriers to limit access to the hazard.
 - Engineering minimise risk by engineering means, e.g., provide a permanent building maintenance unit to maintain the external facade of the building.
 - Administrative controls recommend the establishment of systems of work or signage, where required, to control residual risks.
 - Personal protective equipment recommend suitable personal protective equipment and training, where required, to control residual risks.
- 1.5.3 A combination of these measures should be applied when no single measure is enough to eliminate or minimise the risk

2 Reporting

2.1 REPORTING TO THE CLIENT

- 2.1.1 For this project where the client is directly involved in the design consultation, a single final report is deemed to be adequate. The report to the client should include information on:
 - Any known hazards e.g., hazardous structural features, materials, procedures or practices
 - How identified hazards could be eliminated or minimised by design modifications, substitute materials or alternative methods of construction.
- 2.1.2 The client may consequently agree for revisions to be made to the design. The final report to the client should be provided upon completion of the final design and include information about any residual risks.
- 2.1.3 The client may consequently agree for revisions to be made to the design. The final report to the client should be provided upon completion of the final design and include information about any residual risks.

2.2 REPORTING TO THE LANDSCAPE CONTRACTOR.

2.2.1 The client should provide a copy of the latest report to the landscape contractor to help them ensure that those undertaking the construction work, and other people near the construction site, are not exposed to foreseeable risks to their health and safety. The information should be sufficiently detailed to allow the building contractor to draw up appropriate safe work methods.

2.3 HOW TO REPORT

- 2.3.1 A risks and solutions register should be prepared early in the design process to track how risk controls are being established for each hazard. Once the register has been completed, information about residual risks should be communicated to relevant downstream users. The report should include:
 - A record of the identified workplace risks that were not eliminated or controlled in the design of the building or structure (residual risks)
 - An assessment of these risks, so that building contractors and end-users can better understand their relative importance and prioritise control measures
 - · How the risks could arise
 - An explanation of design measures that partially control the residual risks
 - Any additional comments that could help the contractors and end-users eliminate or control the residual risks

2.4 SCOPE OF REPORT

- 2.4.1 This report represents the landscape architectural scope of services as per the contract with the CITY OF PORT LINCOLN.
- 2.4.2 It does not necessarily address the risks associated with works carried out by others.

2.5 EXCLUSIONS

- 2.5.1 Hazards arising from normal site construction, installation, maintenance or operation practices that are addressed by SafeWork SA safe installation methods, Australian codes & standards, codes and guidelines are not part of this report.
- 2.5.2 WAX Design's obligations extend to the modification or alteration of the design only to the extent that the person undertaking the design for those modifications or alterations has consulted with WAX Design on the matter. Any changes to the design that may affect the health and safety of those who work on or uses the works must be considered by the person altering or modifying a design.

2.6 REFERENCE DOCUMENTS

Drawings	Revision	Description	Date
Survey			
FORSHORE DETAIL SURVEY 2021 2D	-	Foreshore survey	1/02/21
Landscape and Irrigation			
L00	Н	Legend	17/03/22
L01	Н	Demolition plan	17/03/22
L02	Н	Set out and levels plan	17/03/22
L03	Н	External works plan	17/03/22
L04	Н	Planting plan	17/03/22
D01	Н	Details 01	17/03/22
D02	Н	Details 02	17/03/22
D03	Н	Details 03	17/03/22
D04	Н	Details 04	17/03/22
2699-100 (Sheet 1/3)	4	Irrigation Sheet 1	17/03/22
2699-100 (Sheet 2/3)	4	Irrigation Sheet 2	17/03/22
2699-100 (Sheet 3/3)	4	Irrigation Sheet 3	17/03/22
Engineering			
211938 Sheet 000	С	Cover, locality plan and drawing index	16/03/22
211938	С	Earthworks plan	16/03/22
211938	С	General construction plan	16/03/22
211938	С	Stormwater drainage plan	16/03/22

211938	С	Services plan	16/03/22
211938	С	Stormwater details	16/03/22
211938	С	Services details	16/03/22
211938	A	Jointing details	16/03/22
211938	А	Jointing plan	16/03/22
Other Documents			
Landscape Architecture Specification	Н	Specification	17/03/22
Engineering Specification	С	Specification	16/03/22
Irrigation Specification	1	Specification	28/02/22

2.7 DUTY HOLDERS INVOLVED IN THE PROJECT

2.7.1 The following is a record of persons involved in the project.

WHS Title	Abbr.	Organisation	Role	Contact	Title
Client	CoPL	City of Port Lincoln	Client	Kathleen Brannigan	Project Manager (client)
Design	WAX	WAX Design	Landscape Architect	Amanda Balmer	Design Lead
Design		Tonkin	Engineering (civil, structural and services)	Lachlan Grivell	Design Team
Design	DCI	Don Cameron Irrigation	Irrigation	Don Cameron	Irrigation Consultant
Contractor		TBA			

2.8 GENERAL NOTES

- This report is in a preliminary form and will remain as such until the project has been completed and handed over to the Client.
- The detail information with respects to the design and planning of this Project has been captured within the documentation and specification.
- This report should be read in conjunction with the design reports, action tracker and construction documentation prepared by all consultants.
- This report has been prepared to provide a Safety in Design assessment from a landscape architectural and engineering perspective only and should be read in conjunction with the construction managers, Contractor's Safety in Design report.
- This report is intended to outline some of the potential hazards associated with this project which has been identified during the design and documentation process. It is not the intention of this report to imply that the analysis and statements contained herein will "prevent" injury or death or provide 100% security. This report intends to identify the risks and suggest methods to mitigate and reduce identified risks.
- This report considers the project in Isolation and does not apply to any adjacent existing buildings, structures or landscape activities located on the client's site or elsewhere on the site.
- It is not the intention of this report to identify or measure potential abnormal risks of suicide or self-harm, as these matters are beyond the scope of this Safety in Design Review.
- Some general hazards associated with demolition activities have been noted in this report.
 However, it is unlikely that foreseeable future risk events can be identified as a result of the envisaged life expectancy of this project.

3 Risk Matrix

1 L: Low

Likelihood How likely is								
it to happen?	Insignificant (no injuries)	Minor (first aid treatment only: spillage contained on site)	Moderate (medical treatment but with outside help)	Major (extensive injuries: loss of production)	Catastrophic (death: toxic release of chemicals)			
Almost certain expected in most circumstances	3 H	3 H	4 A	4 A	4 A			
Likely will occur in most circumstances	2 M	3 H	3 H	4 A	4 A			
Possible might occur at some time	1 L	2 M	3 H	4 A	4 A			
Unlikely could occur at some time	1L	1 L	2 M	3 H	4 A			
Rare may occur, only in exceptional circumstances	1L	1 L	2 M	3 H	3 H			
Score and statement	Action							
4 A: Acute	ACT NOW –Urgent –do something about the risks immediately. Required immediate attention.							
3 H: High	Highest management decision is required urgently.							
2 M: Moderate	Follow management instructions.							

Control	Effectiveness	Description	Effort
Elimination	Hazard removed	Remove, design the hazard out.	Low
Substitution	Reducing the hazard	Hazard substituted with something of a lesser risk.	Moderate
Isolation	You are reducing and controlling the hazard	Hazard controlled through isolation	Moderate
Engineering	You are reducing and controlling the hazard	Hazard controlled through engineering	Moderate

Ok for now. Record and review if any equipment/ people/work procedures change.

Administration /	You are now putting soft controls which rely on	Communication remaining risks, hazard controlled by	High
Training	people	influencing people. Hazard controlled through isolation	High
Personal Protective	You are now limiting the damage	Provide persons with safety gear.	Major
Equipment (PPE)			Major

	IDENTIFICATION				RISK LEVEL RISK MITIGATION			RISK	LEVEL	RESPONSIBILTY		
Ref	Activity	Project Phases	Identified Hazard or Risk	Who is at Risk	Likelihood Consequences	Assessment Rank	Suggested/required actions or design solutions to eliminate the hazard or reduce risk	Likelihood Consequences	Assessment - Rank	Responsibility	Comments	Closeout or other as noted date/person
1	Access Limitations	Design Construct	Proximity of adjacent structures restricting movement and ability to manoeuvre materials and perform work	Client Contractor Public	2 M	Mod	 Undertake design reviews Simplify the construction process Construction safe works methods Programme the works to minimise trade overlaps to maintain clear pathways 	1 L	Low	Design team Client Contractor		
2	Contamination	Design Document Construct	 Contamination advice – Test for Contamination. Disturbance of materials during excavation/ trenching 	Client Contractor Public	2 M	Mod	Refer to CBR report undertaken by EMS Geotechnical. If any areas of suspected contamination are found, notify project lead.	1 L	Low	Design team Client Contractor		
3	CPTED and sight-lines	Design Construct Operation	Planting and or structures blocking sight lines and creating place of concealment and hiding	Client Public	2 M	Mod	 Undertake design reviews Provide sight lines Limit places of concealment and hiding Maintain landscapes and 	1 L	Low	Design team Client		

	IDENTIFICATION				RISK LEVEL RISK MITIGATION		RISK LEVEL		RESPONSIBILTY			
Ref	Activity	Project Phases	Identified Hazard or Risk	Who is at Risk	Likelihood Consequences	Assessment Rank	Suggested/required actions or design solutions to eliminate the hazard or reduce risk	Likelihood Consequences	Assessment - Rank	Responsibility	Comments	Closeout or other as noted date/person
4	Demolition of structures, equipment and other materials	Design Construct	Collapse of materials/structure (walls, footings etc.) causing injury Damage to recycled materials and equipment	Client Contractor Public	2 M	Mod	 planting to reduce issues Inspect existing structure to ensure adequate support of materials/structure being retained. Follow sequential demolition methods to ensure the structure remains stable and safe. Compliance with statutory regulations and standards regarding demolition processes. Prop existing load-bearing elements before demolition. Undertake safe work methods to ensure protection of recycled materials and equipment 	1 L	Low	Contractor		
5	Electrical Services	Design Construct Operation	 Contact with live or unearthed wiring Potential electrical hazard Potential services restrictions 	Client Contractor Public	4 A	Acute	 Undertake design reviews Develop construction safe works methods Identify and isolate/make safe, existing services 	2 M	Mod			

	IDENTIFICATION				RISK LEVEL RISK MITIGATION		RISK LEVEL		RESPONSIBILTY			
Ref	Activity	Project Phases	Identified Hazard or Risk	Who is at Risk	Likelihood Consequences	Assessment Rank	Suggested/required actions or design solutions to eliminate the hazard or reduce risk	Likelihood Consequences	Assessment - Rank	Responsibility	Comments	Closeout or other as noted date/person
							 before works. Protect any overhead wires within proximity of construction works 					
6	Entrapment	Design Construct Operation	Associated risk from entrapment of body parts	Client Contractor Public	3 H	High	 Undertake design and compliance reviews Compliance with Australian Standards for play Engagement of playspace certifier to ensure compliance 	2 M	Mod	Design team Client Contractor		
7	Existing hazardous substances on- site (asbestos, pressurised gas, etc.)	Design Construct Operation	 Exposure to hazardous substances Contamination of site or adjacent areas 	Client Contractor Public	3 H	High	 Undertake design reviews Develop construction safe works methods Identify potential hazardous materials on-site before works. Refer to CBR report undertaken by EMS Geotechnical. 	2 M	Mod	Client Contractor		
8	Existing Services (above and below ground)	Design Document Construct Operation	 Clash and relocation requirements Disruption of services 	Client Contractor Public	2 M	Mod	 Undertake design reviews Dial before you dig before construction, service depthing and investigation 	1 L	Low	Design team Client Contractor		

	IDENTIFICATIO	N			RISK	LEVEL	RISK MITIGATION	RISK	LEVEL	RESPONSIB	ILTY	
Ref	Activity	Project Phases	Identified Hazard or Risk	Who is at Risk	Likelihood Consequences	Assessment Rank	Suggested/required actions or design solutions to eliminate the hazard or reduce risk	Likelihood Consequences	Assessment - Rank	Responsibility	Comments	Closeout or other as noted date/person
							Excavation around services by Hydrovac					
9	Exposure to irritant dust and fumes	Construct	 Exposure to dust and fumes Damage to site works Risk of injury	Client Contractor Public	3 H	High	 Develop construction safe works methods Identify potential dust and fume sources and manage impacts before works. 	2 M	Mod	Client Contractor		
10	Exposure to natural events (floods, bushfires, earthquakes)	Construct Operation	Damage to site Risk of injury to contractor, pedestrians, public and users	Client Contractor Public	3 H	High	 Develop emergency response as part of the Site Safety Plan Liaise with emergency service to develop an appropriate response 	3 H	High	Client Contractor		
11	Flooding of excavation	Design Construct	Overland flooding from existing drainage system	Client Contractor Public	1 L	Low	Undertake design reviews Divert/contain overland drainage	1 L	Low	Contractor		
12	General maintenance	Operation	Reduce risk through ongoing maintenance	Client Public	3 H	High	Systems should serviced and maintained by trained personnel in accordance and at regular intervals and manufacture's or the contractors recommendations	1L	Low	Client		

	IDENTIFICATION	N			RISK	LEVEL	RISK MITIGATION	RISK	LEVEL	RESPONSIB	ILTY	
Ref		Project Phases		Who is at Risk	Likelihood Consequences	_	Suggested/required actions or design solutions to eliminate the hazard or reduce risk	Likelihood Consequences	Assessment - Rank	Responsibility	Comments	Closeout or other as noted date/person
13	Handling and operation of plant and equipment	Design Construct	Splinter, cuts, and burns	Client Contractor	3 H	High	 Follow documentation, ensure operational requirements are met Develop construction safe works methods Consideration of the impact of the type of plant or equipment Implement regular inspections and safe maintenance program 	2 M	Mod	Client Contractor		
14	Hazardous substances and materials (including paints and chemical)	Design Construct	 Exposure to hazardous substances Contamination of site or adjacent areas 	Client Contractor Public	3 H	High	 Undertake design reviews Develop construction safe works methods Identify potential hazardous materials on-site before works. 	2 M	Mod	Design team Client Contractor		
15	Heavy or awkward prefabricated elements- handling risks	Design Construct	 Risk of injury from incorrect lifting Associated risk from lifting and handling incorrectly to contractor, pedestrians, public 	Client Contractor Public	3 H	High	 Undertake design reviews Develop construction safe works methods Identify and isolate/make safe existing services before works JSA in place, allowance for 	2 M	Mod	Design team Client Contractor		

	IDENTIFICATIO	N			RISK	LEVEL	RISK MITIGATION	RISK	LEVEL	RESPONSIB	ILTY	
Ref	_	Project Phases	Identified Hazard or Risk	Who is at Risk	Likelihood Consequences		Suggested/required actions or design solutions to eliminate the hazard or reduce risk	Likelihood Consequences	Assessment - Rank	Responsibility	Comments	Closeout or other as noted date/person
							additional equipment and labour on site	I				
16	Human assets- provide a secure and safe environment for all persons working in or visiting the site	Construct	General awareness of hazards or risks to contractor, pedestrians, public	Client Contractor Public	2 M	Mod	 Develop construction safe works methods Identify and isolate/make safe potential hazards and risks 	2 M	Mod	Design team Client Contractor		
17	Irrigation	Design Construct Operation	 Fertilised or recycled water discharging onto footpath and waterbodies Irrigation overspray of paving surfaces and equipment 	Client Contractor	2 M	Mod	 Undertake design reviews Follow recommendations of irrigation designer & documentation Maintenance of irrigation system to limit impacts 	1 L	Low	Design team Client Contractor		
18	Materials – non- slip surfaces etc	Design Construct Operation	Associated risk of slipping to contractor, pedestrians, public and users	Client Contractor Public	3 H	High	 Undertake design reviews Design and select material with appropriate slip ratings Develop construction safe works methods Identify potential slipping hazards areas and isolate before works 	2 M	Mod	Design team Client Contractor		

	IDENTIFICATIO	N			RISK	LEVEL	RISK MITIGATION	RISK	LEVEL	RESPONSIB	ILTY	
Ref	Activity	Project Phases	Identified Hazard or Risk	Who is at Risk	Likelihood Consequences	Assessment Rank	Suggested/required actions or design solutions to eliminate the hazard or reduce risk	Likelihood Consequences	Assessment - Rank	Responsibility	Comments	Closeout or other as noted date/person
19	Materials and finishes	Design Construct Operation	Splinters and cuts Breakage or failure	Client Contractor Public	3 H	High	 Undertake product reviews Follow documentation, ensure repair/renewal requirements are met Consideration of the impact of the type of construction material Implement regular inspections and safe maintenance program 	2 M	Mod	Design team Client Contractor		
20	Materials and proprietary products	Design Construct Operation	Associated risk with exposure and contact, incorrect installation and use	Client Contractor Public	3 H	High	 Undertake product reviews Refer to the manufacturer for product use and installation specifications and guidelines Develop construction safe works methods Identify potential hazards areas and isolate before works 	2 M	Mod	Design team Client Contractor		
21	Mechanical digging, excavation and trenching	Design Document Construct	Damage to unknown servicesPotential electrical hazardPotential services	Client Contractor Public	4 A	Acute	 Undertake design reviews Construction safe works methods Identify existing services 	2 M	Mod	Design team Client Contractor		

	IDENTIFICATIO	N			RISK	LEVEL	RISK MITIGATION	RISK	LEVEL	RESPONSIB	ILTY	
Ref	Activity	Project Phases	Identified Hazard or Risk	Who is at Risk	Likelihood Consequences	Assessment Rank	Suggested/required actions or design solutions to eliminate the hazard or reduce risk	Likelihood Consequences	Assessment - Rank	Responsibility	Comments	Closeout or other as noted date/person
			disruptions (gas, fire, water, telecom, etc.)				before excavating					
22	Nature play	Design Construct Operation	Nature play creates hazard	Client Public	3 H	High	 Undertake design and compliance reviews Confirm requirements regarding nature play elements Compliance with Australian Standards for play Engagement of playspace certifier to ensure compliance 	1L	Low	Design team Client Contractor		
23	No universal access to all areas	Design Document Construct Operation	Associated reputational risk resulting from limited universal accessibility Associated risk of accident to pedestrians, public and users	Public	3 H	High	 Undertake design and accessibility reviews Compliant play equipment, walkways and ramps. Provision of upstand edges, and TGSIs Design to conform all Australian Standards. Illuminance / contrast of TGSIs to be tested against final paving selections. 	1L	Low	Design team Client Contractor		
24	Noise	Construct	General loud noise from construction	Client Contractor	2 M	Mod	Specify noise limits and acceptable hours of	1 L	Low	Contractor Client		

	IDENTIFICATION	N			RISK	LEVEL	RISK MITIGATION	RISK	LEVEL	RESPONSIB	ILTY	
Ref		Project Phases	Identified Hazard or Risk	Who is at Risk	Likelihood Consequences	Assessment Rank	Suggested/required actions or design solutions to eliminate the hazard or reduce risk	Likelihood Consequences	Assessment - Rank	Responsibility	Comments	Closeout or other as noted date/person
			Hearing damage Annoyance of adjacent users	Public			 operation Construction safe works methods Specify noise limits and acceptable hours of operation 					
25	Pavement Design	Design Construct Operation	 Premature pavement failure (asphalt, concrete, brick and stone) Lipping of paving causing tripping hazards 	Client Contractor Public	3 H	High	 Engineered to anticipated loadings Design of paving to minimise potential for lipping Sufficient geotechnical testing and adequate safety factor allowance, selection of appropriate pavement for the design intent. 	2 M	Mod	Design team Client Contractor		
26	Play and recreation activities	Design Construct Operation	Associated risk from play/recreation activities	Client Public	2 M	Mod	Undertake design and compliance reviews Compliance with Australian Standards for play Engagement of playspace certifier to ensure compliance	1 L	Low	Design team Client Contractor		
27	Poisoning or allergic reaction	Design Document	Risk of poisoning to the public from plants	Client Public	3 H	High	 Undertake design reviews Select plant species based	1 L	Low	Design team Client		

	IDENTIFICATION	N			RISK	LEVEL	RISK MITIGATION	RISK	LEVEL	RESPONSIB	ILTY	
Ref	_	Project Phases	Identified Hazard or Risk	Who is at Risk	Likelihood Consequences	Assessment Rank	Suggested/required actions or design solutions to eliminate the hazard or reduce risk	Likelihood Consequences	Assessment - Rank	Responsibility	Comments	Closeout or other as noted date/person
		Construct Operation	Potential for allergic reactions				with no toxicity. • Select plants with hypoallergenic properties			Contractor		
28	Public access to areas adjacent to construction activities	Construct	Risk of a collision resulting in injury	Client Contractor Public	4 A	Acute	 Recommended measures include; Erect and maintain temporary walls, hoardings, barriers, fences, overhead protective structures etc. to provide safe protection to the public Prevent unauthorised access to construction areas. Hoardings and barriers about site area during works 	3 H	High	Design team Client Contractor		
29	Slips and trips	Operation	Accumulation of materials on pavements and surfaces (ie oils, food waste, gross pollutants) reducing slip resistance.	Client Public	3 H	High	 Undertake regular maintenance operations Prepare maintenance manual Remove hazard at earliest opportunity 	2M	Mod	Client		

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30	Stormwater runoff	Design Operation	Stormwater runoff and ponding in areas and over surfaces limiting access and use	Public	3 H	High	 Undertake design reviews Design drainage and permeable surfaces to eliminate standing water and ensure infiltration 	1 L	Low	Design team Contractor Client		
31	Stormwater, dust and mud control of construction works	Design Construct Operation	 Water and mud discharging across road/pedestrian ways Soiled water entering waterbodies or ways Slips/trips for pedestrians 	Client Contractor Public	3 H	High	 Divert/control and contain site drainage Mud control to construction vehicles before using public roadways Remove trip hazards for pedestrians 	2M	Mod	Contractor		
32	Traffic route and control	Construct	 Risk of a collision between; Vehicle/other vehicle and public Vehicle/building structure through the proximity works and traffic route Unforeseen vehicle movement into playspace/openspace 	Client Contractor Public	4 A	Acute	 Undertake design reviews Measures include; Isolation Hoardings and barriers about site area during works Mitigation speed restrictions and controls Bollards located to protect protruding Barrier kerb to Tasman Terrace 	3 H	High	Design team Client Contractor		

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Ref	Activity	Project Phases	Identified Hazard or Risk	Who is at Risk	Likelihood Consequences	Assessment Rank	Suggested/required actions or design solutions to eliminate the hazard or reduce risk	Likelihood Consequences	Assessment - Rank	Responsibility	Comments	Closeout or other as noted date/person
							-		,			
33	Tree limb drop	Design Construct Operation	Risks of limbs dropping and causing injury		3 H	High	 Undertake design review of TPZ and SRZ Formative pruning and arboricultural monitoring and management CoPL to prepare Landscape Maintenance Plan and include tree health monitoring 	2M	Mod	Design team Client Contractor		
34	Trenching and open excavations (fall heights)	Design Construct	Site Levels Fall over changes in levels Fall into open excavations and trenching	Client Contractor Public	4 A	Acute	 Provide barriers and hoardings to required to protect public Design secure support for fencing Construction safe works methods for the soil type and depth of excavation Fencing about perimeter where changes in level >1m 	3 H	High	Design team Client Contractor		
35	Vandalism	Design Construct Operation	Damage caused by skateboardingDamage to structures,	Client Contractor Public	2M	Mod	Undertake design reviews External materials to be durable to withstand	1 L	Low	Design team Client Contractor		

	IDENTIFICATIO	N			RISK	LEVEL	RISK MITIGATION	RISK	LEVEL	RESPONSIB	ILTY	
Ref	Activity	Project Phases	Identified Hazard or Risk	Who is at Risk	Likelihood Consequences		Suggested/required actions or design solutions to eliminate the hazard or reduce risk	Likelihood Consequences	Assessment - Rank	Responsibility	Comments	Closeout or other as noted date/person
			 equipment and landscape Injury resulting from vandalism Damage to irrigation system causing flooding and lose of water 				vandalism • Undertake regular maintenance visits and inspections • Review security requirements during at risk construction elements i.e. rubber softfall installation					
36	Vehicular Movement	Design Construct Operation	Risk of collision- Proximity of different users to; construction vehicles pedestrians' cyclists	Client Contractor Public	4 A	Acute	Undertake design reviews Recommended measures include Isolation Hoardings and barriers about site area during works Mitigation speed restrictions and controls bollards Construction safe works methods Safe work methods during maintenance operations Barrier kerb to Tasman Terrace	3 H	High	Design team Client Contractor		

	IDENTIFICATIO	N			RISK	LEVEL	RISK MITIGATION	RISK	LEVEL	RESPONSIB	ILTY	
Ref	Activity	Project Phases	Identified Hazard or Risk	Who is at Risk	Likelihood Consequences	Assessment Rank	Suggested/required actions or design solutions to eliminate the hazard or reduce risk	Likelihood Consequences	Assessment - Rank	Responsibility	Comments	Closeout or other as noted date/person
							Liaise with CoPL staff					
			•				•					
37	Wet play	Design Construct Operation	Wet play creates hazard	Client Public	2M	Mod	 Undertake design reviews Confirm requirements regarding wet play in playspaces 	1 L	Low	Design team Client Contractor		
38	Work as Executed Drawings	Design Document Construct	 Risk of incorrect materials, incomplete works or poor quality Impacts of design changes which present unintended risks 	Client Designer Contractor	3 H	High	 Undertake reviews during implementation Independent verification of correct materials and record of completed works, reference current OTR requirements Ensure quality is maintained 	1 L	Low	Contractor Client		
39	Working at height	Operation	Fall from height during maintenance	Client Contractor	4 A	Acute	 Undertake design reviews Construction safe works methods Safe work methods during maintenance operations 	3 H	High	Design team Client		
40	Falling from height	Operation	Fall from height during use/play	Client Contractor	4 A	Acute	 Undertake design and compliance reviews Compliance with Australian	2M	Mod	Design team Contractor		

	IDENTIFICATIO	N			RISK	LEVEL	RISK MITIGATION	RISK	LEVEL	RESPONSIB	ILTY	
Ref	Activity	Project Phases	Identified Hazard or Risk	Who is at Risk	Likelihood Consequences	⊑	Suggested/required actions or design solutions to eliminate the hazard or reduce risk	Likelihood Consequences	Assessment - Rank	Responsibility	Comments	Closeout or other as noted date/person
				Public			Standards for play and for barriers/handrails • Engagement of playspace certifier to ensure compliance			Client		
41	Work within Tree protection zones	Design Document Construct	Risk of damage or death to existing mature trees Loss of existing shade to site	Client Designer Contractor	3 H	High	 Undertake design reviews Trees to be protected prior to works commencing Hand excavation/hydrovac within tree protection zones only Undertake reviews during implementation Monitor tree post construction Undertake annual arborist reviews 	1 L	Low	Design team Contractor Client		
42	Unsupervised child access to adjacent foreshore or Tasman Terrace	Design Document Construct	access to foreshore and open water body whilst using playspace access to adjacent roadway whilst using playspace	Public	4 A	Acute	 Undertake design and compliance reviews Maintain adequate visual sightlines between playspace and adjacent hazards foreshore access from openspace and recreation areas is an existing site 	2M	Mod	Design team Contractor Client Community		

	IDENTIFICATION			RISK LEVEL R		RISK MITIGATION	RISK LEVEL		RESPONSIBILTY			
Re	f Activity	Project Phases	Identified Hazard or Risk	Who is at Risk	Likelihood Consequences	⊑	Suggested/required actions or design solutions to eliminate the hazard or reduce risk	Likelihood Consequences	Assessment - Rank	Responsibility	Comments	Closeout or other as noted date/person
							condition • playspace is located greater than 20m from costal access path • playspace is located greater than 13m to the adjacent road • a timber post and wire fence is located within a vegetated garden bed to assist with visual and physical definition of the playspace extents • Compliance to Australian Standards for Play AS4685.1 2014					

4 Recommendations

4 Recommendations

- 4.1.1 This is a summary of the key outcomes from the client and design team reviews. There remain several residual risks that have been identified through the design process that will need to be considered as part of the construction process.
- 4.1.2 This summary report should be read in conjunction with the construction documentation package, minutes and progress design reports. It is recommended that this report is communicated to all downstream users such that
 - a) The end-user (council staff, occupant) develop their own risk controls
 - b) The local-user (council staff) develop their own risk controls
 - c) The nominated contractor prepare and draw up appropriate safe work statements (SWMS), daily checklists, hazard assessment checklist (HAC) and the like
 - d) Any maintenance personnel prepare and draw up appropriate safe work statements (SWMS), daily checklists, hazard assessment checklist (HAC) and the like.

Responses

Accessibility	More wheelchair accessible play equipment such as a disability swing
Accessibility	More wheelchair accessible swings and things.
Dogs	dogs coming into the park and the poops.
Fencing	Be great if there's a smaller area that's fenced in a bit more for babies and toddlers. Parents have to be actively following them around.
Fencing	I have a toddler as well, if there was a gate along the beach side that would be better.
Fencing	Fencing would be nice, bit more secure from the road. Rest is awesome.
Fencing	Would like to have a secure fence. Easy when have older children as helps keep eye on younger kids as a busy road.
Fencing	Would like to see secure fencing as hard to keep eye on several little children at one time. Piece of mind to have secure fencing. Would like to see the other playspace stay.
Fencing	Pretty good, maybe more fenced in
Fencing	Concerned about the location of then swings and kids run past on the narrow path. Fence, would like a fence as can't watch three little ones at one time all the time. Loves the space.
Fencing	Maybe a fence
Fencing	Need another fence, and that's about it!
Fencing	Fully enclosed would be good as need to be onto them all the time scary if they run away
Fencing	Should be more enclosed - fully enclosed like the other one
Fencing	Mindful of children running off on the beach side and car park otherwise very good
Fencing	Fully fenced as stressed about kids getting onto the road. As has experienced this at the Cummins playground with other children, otherwise amazing
Fencing	Would like to see it fully enclosed
Fencing	Fencing could include the toilets perhaps. Love the water play.
Fencing	Worried about not have a fully closed fence. All it takes is a phone call and the child could get away. Otherwise likes the playspace

Fencing	Fencing to stop them disappearing to the beach.
Fencing	Would like a fence on the car park and beach side for piece of mind
Fencing	Would like a perimeter fence at the play space to ensure children safety
Fencing	Bit nervous with not fully enclosed. With some kids not an issue but ours is a runner. Otherwise awesome, been really excited to come here.
Fencing	Would have loved fence to go a little further along the road.
More for toddlers	I know little kids are being catered for but possibly not enough- only one little kids swing for example. Toddler age. Be good to have two. The other day I watched a little boy crawl under the fencing and I went over and stayed with him til I found his mum. A few safety concerns for younger children like the spots you could fall out from the platform. Parents need to be quite vigilant. Matting under swings needs to be wider. You can clean someone up if they're walking past.
More seating	When it get busy needs more seating in the eastern side. When it gets hot maybe more shade. Loves the nature and less plastic.
More seating	More seating would be good.
Rinse tap	A rinse tap for the kids to rinse off after playing in mud and sand in the wet area.
Safety concern	Only thing is the epoxy shells on the rocks, they're not embedded, so a kid could easily get their fingers in behind and even stuck. And dogs coming into the park and the poops. Other than that it's better than anyone expected!
Safety concern	Not that safer place for the real little ones and has seen a few kid have blow outs on the slide. The spider web is a little advanced for the little ones. Would like little tunnels to crawl from. Would like to be able to fill bucket with water in the water play area.
Safety concern	3rd hole on walk way for small kids to fall and land on poles at bottom
Safety concern	Water button to be hire so the little kids can't turn on! 3rd hole up dangerous for smaller kids to fall out and can fall onto metal poles at bottom.

Safety concern	The yellow soft fall walk way in front of swings needs to be bigger. So you don't get hit by someone swinging! One more cord at the bottom part of fence.
Safety concern	Increase the space of the walkway in front of the swings
Water play drainage	Better drainage on water play area. Dry sand is getting wet. Happy with it overall
Non specific	Could probably do without the water park. But a tiki bar would be great 😂
Non specific	Some of the play equipment a little too high for small kids. The space on the rope climb to the platform is a little large for the sallee kids. Overall good as come here a lot
Non specific	My son got a cut from the slippery dip. Not sure how!
Non specific	Weight restrictions on the trampolines
Non specific	Younger kids you'd have to watch on some of the more adventurous climbing stuff. Up to parents to watch them I guess.
Non specific	My boys a good age at. The moment but the ocean and road being so close might make parents of younger kids nervous. Also if you had a 2yo etc very open spaces on some equipment up high.
Non specific	Kids all getting wet with water, bit cold in winter.

No Improvement

no improvement	nprovement First time at the playspace and thinks it's very nice				
no improvement	Looks alright.				
no improvement	Kids are happy I'm happy.				
no improvement	Love the slide.				
no improvement	I like the challenging play equipment and no plastic. Loves the garden and walk through space. Inclusive space. First time at the				
	playground. Thinks it's pretty good				
no improvement	Maintenance on the table at barbecue needs to be looked at. It's wobbly.				
	Otherwise everything taken into consideration. Done really well. Needed something like this here.				
no improvement	It's the best. Only gotta look at all the people here, toddlers to teenagers all together.				
no improvement	Wonderful, great space.				
no improvement	First time here think it's very good.				
no improvement	All great				
no improvement	no				
no improvement	no				
no improvement	all good				
no improvement	none				
no improvement	no				
no improvement	Really like how blends in with the environment.				
no improvement	No				
no improvement	It's fabulous \delta				