

COMMUNITY CONSULTATION REPORT QUINNS BEACH LONG TERM COASTAL MANAGEMENT

MAY 2016

Quinns Beach Long Term Coastal Management - Community Consultation

The Quinns Beach Long Term Coastal Management Study is currently being undertaken by coastal engineering consultants, Cardno. Stage 2 of the study has been completed which has resulted in the identification of two preferred options based on a multi-criteria analysis:

- Option 1 Extended Groynes and Groyne 4, and
- Option 2 Relocated Carpark and Groyne 4.

The City of Wanneroo understands that community feedback is a vital part of the process in determining a long term management plan for the Quinns Rocks coastline. As such, information was provided to the Quinns Rocks community via a mail-out, online and two information sessions. Feedback was invited via a feedback form and online survey.

Two community information sessions were held at the Gumblossom Community Centre on Wednesday 27th April 2016. Approximately 130 people attended over the two sessions.

The deadline for submitting feedback was extended to Friday 13 May as advertised in local papers, the City's website and Facebook page. By this date, 455 responses had been received by the city via the feedback forms and 90 people had participated in the online survey hosted by Survey Monkey. In total, 545 responses were received with over 150 comments.

This document provides a summary of the responses received, clarifications from administration and the community comments. The City does not yet have a preferred option and this document should not be seen as statement of the City's position. It is a collation and summary only of the feedback provided by the community during the consultation process.

From the comments received, the major reasons given by the community for and against each of the options have been summarised in Table 1 and Table 2 below.

Table 1 - Community comments for and against Option 1

	Comments For	Comments Against
	Effective solution for erosion	Large size of the extended groynes
	Recreational values of the groyne (i.e. fishing)	Higher capital and maintenance costs
Option 1	Retention of the existing carpark which is valued for its heritage and proximity to the beach	Poor layout and condition of the existing carpark, reducing amenity and decreasing safety for users
	Low visual impact of existing carpark (from the road level)	Increased impacts on beaches north of Quinns
	Minimal impact on existing dunes and established vegetation	Anti-social behaviour experienced at existing carpark
	Proximity of the shops, restaurant and park to main parking area	Poor access to street and Fred Stubbs park from existing carpark
	Increased security for vehicles of beach goers as they are in view of the beach	Partially exposed rock armour at beach access points can be hazardous to beach users
		Poor condition of the existing toilet block

Table 2 - Community comments for and against Option 2

	Comments For	Comments Against
	Maintaining the beach in as natural a way as possible without installing additional structures on the beach	Reported presence of a rip at the beach in front of the carpark location which may cause decreased safety for beach users
	Decreased impacts on beaches north of Quinns in the long term	Loss of established dune vegetation and associated biodiversity
	Upgrade of parking and ablution facilities, providing better amenity and increased safety	Increased walking distance to Fred Stubbs Park and beach
Option	Reduced requirements for emergency protection measures as the new carpark will be less at risk	Windsurfers and sailboarders use the beach at the new carpark location and would interfere with swimmers
2	Decreased likelihood of anti-social behaviour in carpark due to increased visibility	Likely effectiveness as an erosion management measure
	Lower capital and maintenance costs	Concerns over impacts to local traffic
	Stable beachfront and fore-dunes in front of the proposed carpark location	Increased visual impact of new carpark (from the road level)
	Greater visual appeal (from the beach)	Difficulties of establishing diverse vegetation in rehabilitated dunes
	More sustainable outcome	Increased noise impacts from the carpark on nearby residences
		Concerns over impact to local businesses

Responders were given an opportunity to indicate their preferred option and the outcomes of this survey are included in the table below.

Table 3 - Survey outcomes

	Option 1: Extended Groynes & Groyne 4	Option 2: Relocated Carpark & Groyne 4
Feedback Forms	205	250
Online Survey	58	32
Totals	263	282

Administration comments are contained in Table 4 (Option 1), Table 5 (Option 2) and Table 6 (General). These have been made in response to questions received and to provide factual clarifications of the concepts behind each option.

Community comments received in relation to the two options are included in Table 7 (Option 1) and Table 8 (Option 2). Please note that some minor editing has been undertaken for brevity and clarity. Community feedback which was general and not specific to either of the two options is included in Table 9.

Reference numbers next to individual community comments in Tables 7 - 9 can be used to find the applicable administration clarification in Tables 4 - 6.

Please note, this document is a summary and collation of the community feedback received and does not constitute a statement of the City's position on the option selection. Administration responses aim to provide answers and clarifications and do not constitute a statement of the City's position on the option selection.

Table 4 – Administration responses to comments received regarding Option 1

Ref. No.	Comments received with regard to:	Administration clarification
1.01	Upgrade of the existing carpark and facilities	If Option 1 is selected, civil works for the existing carpark area will be considered as part of a future works package.
1.02	Groyne height	The groyne height will be finalised during detailed design and must be designed according to best practice standards and acceptable levels of damage during storm events.
1.03	Beach access	A new beach access at the Fred Stubbs Park/existing carpark location is included in both options.
		Option 1 is estimated to be more expensive both in terms of capital costs and maintenance costs due to the large construction costs of the extended groyne.
1.04	Construction & maintenance costs	Building the groynes to current best practice standards is necessary in order to ensure the longevity and durability of the structures. This is, however, very expensive due to the high cost of materials (such as armour rock) as well as the cost and complexity of undertaking construction in the active surf zone. Construction in the marine environment presents a great number of challenges which are not present in construction works on land, hence the greater capital and maintenance costs of Option 1 compared to Option 2.
1.05	Revetment/seawall in front of the existing carpark	A revetment/seawall to protect the existing carpark has been investigated during Stage 2 but is not considered to be required at this stage.
1.06	Groyne shape	T and Y shaped groyne heads were assessed as a part of the options study, however it was found that the positive impact of these additions was negligible. As such it is not being considered further.
1.07	Groyne 1 extension	Groyne 1 is not proposed to be extended under this option. Extending Groyne 1 was modelled and assessed by Cardno and was found to provide no significant benefit.
1.08	Durability of limestone	Coastal structures in Western Australia are generally built using either limestone or granite. While limestone is not as durable as granite, it is often preferred for coastal structures because it is found in more abundance in WA and for aesthetic reasons as its blends more into the coastal environment. There are limestone coastal structures in WA which are currently over 40 years old which have maintained structural integrity to date. Construction materials and their specification will be determined during Detailed Design.

Table 5 – Administration responses to comments received regarding Option 2

Comments received with regard to:	Administration clarification
Traffic management within the new carpark and on surrounding streets	While the proposed new carpark would be one-way <i>inside</i> the carpark, drivers would be able to turn either north or south onto Ocean Drive when exiting the carpark, meaning that traffic flow on the street would not be significantly affected. Safety in Design practices will ensure that all safety issues have been considered during detailed design.
Traffic assessment – cost impact to Option 2	Traffic assessments will be conducted as a part of detailed design if Option 2 is chosen. This is a part of the design cost to which both options are subject and does not create a difference between the options. The costs provided at the information session were for construction and maintenance of the two options.
	Please note that the proposed Option 2 does not involve 'removal' of the dunes.
Dune topography	The proposed new carpark would be built into the back of the dunes and would not impact on the crest level of the dune or the fore-dune area, allowing the dunes to still provide a wind and erosion buffer for the infrastructure behind them.
Size and location of proposed carpark	The options presented are concept only at this stage. The precise size and location of the proposed new carpark will be carefully considered during detailed design if Option 2 is the chosen option.
Would fill material from the carpark construction be used in the rehabilitated dune area?	There is a small possibility that material removed in the construction of the proposed new carpark could be used as fill in the rehabilitated dune area. However this would only occur if the fill was found to be clean and suitable material. Any material being re-used would be laboratory tested and screened for debris first.
Angle parking and Option 2 impact on local businesses	If Option 2 is selected, angle parking would be provided across the road from the shops in order to ensure their trade is not impacted.
	Visitors parked in these bays should be able to view the ocean from their cars.
Beach access at the existing carpark location	A new beach access path would provide safe access from the angle parking to Fred Stubbs Park, the shops and the beach at this location
Toilet block location	The final location of the toilet block would be determined during detailed design and walking distances to the shops, beach and park will be considered during this process.
Mosaics on the toilet block	The mosaics are transferrable so could be re-installed at the new toilet block if Option 2 is chosen.
	regard to: Traffic management within the new carpark and on surrounding streets Traffic assessment – cost impact to Option 2 Dune topography Size and location of proposed carpark Would fill material from the carpark construction be used in the rehabilitated dune area? Angle parking and Option 2 impact on local businesses Beach access at the existing carpark location Toilet block location

2.10	Stability of the rehabilitated dune	It is understood that waves reflecting off the rock armour in front of the existing carpark is currently increasing erosion rates at this location. Returning the site to dunes will enable the natural processes of erosion and accretion to occur at this site without emergency works being required to protect the carpark after severe storm events. Ongoing monitoring would be undertaken by the City.
2.11	Erosion issues at the carpark	The carpark and toilet block do not cause erosion at the site. The carpark is vulnerable to damage from erosion events due to its location in extremely close proximity to the active surf zone. In relocating the carpark, in Option 2 aims to reduce the risk of damage and increase the longevity of the facilities by retreating from the hazard.

Table 6 – Administration responses to comments received which are not specific to either option

Ref. No.	Comments received with regard to:	Administration clarification
3.01	Project funding	The City will consider funding for the construction of the selected option as part of the Long Term Financial Plan and will make applications to State Government for assistance where appropriate. The Detailed Design stage is already partially funded by a Coastal Protection and Adaptation Grant by the Department of Transport.
		The City's engineering consultant, Cardno, will commence detailed design once a decision on the option has been made by Council.
3.02	Project timeframe	Once detailed design is complete, the City will advertise a Request for Tender in order to appoint a suitably qualified contractor. Construction on the selected option should begin before the middle of 2017 and is currently estimated to take approximately 9 months.
3.03	Dog Beach	The proposed northern extension of the Dog Beach zoning is a separate proposal to the Quinns Beach Long Term Management project. Changes to the Dog Beach zoning will be discussed at the Council meeting on 24 May 2016.
		It should be noted that both Option 1 and Option 2 will require ongoing beach nourishment, most likely on an annual basis due to the sediment deficit along the Quinns coastline.
3.04	Beach nourishment	Cardno has estimated that the Quinns coastal system has a sediment deficit of approximately 20,000m³ per year. This deficit means that more sediment is leaving the system than entering it, so it is not possible to 'stop' all erosion. It is only possible to influence the extent and location of erosion events and manage the impacts (also refer to 3.06).
		Nourishing the beach is a management measure which lessens the impact of this sediment deficit by providing a buffer zone to vulnerable areas and reducing the net shortage of sediment in the system.
3.05	Groyne 4	The exact location of Groyne 4 will be finalised during detailed design (the next stage of the project) however the current concept drawings show it located near the access point from Queenscliff Park. This groyne will be approximately 60m long and will assist with sand accretion to build a wider beach at this location and reduce the impact of erosion on the dunes.
		Long term erosion impacts have certainly been a primary consideration throughout the concept design process and will be further considered during the detailed design stage.
3.06	Long term erosion impacts	Cardno has undertaken numerical modelling studies to estimate the impact of the options on the coastline over a 10 year timeframe in order to estimate these impacts. While potential impacts over a longer timeframe can be indicated, the extremely complex nature of sediment transport is such that modelling over a longer timeframe becomes unreliable.
		All potential options were scored on their effectiveness in minimising erosion at vulnerable locations, while not having a negative impact on other locations along the coast. In view of sediment deficit identified by the Cardno study (see 3.04 above), it should be understood that erosion mitigation will be an ongoing process for the Quinns coastline.

3.07	Alternative options – Artificial reefs	The study undertaken by Cardno assessed the impact of offshore breakwaters (artificial reefs) and this option was found to not be an effective solution for the Quinns coastline. The two options presented for feedback were determined to be the most effective
3.08	Community feedback process and use in decision making	Community feedback is important to the City and many respondents greatly value the opportunity to express their preference. Community feedback will be one of the factors on which the Council's decision is based, alongside engineering recommendations and cost assessments. The Council has not yet made any decision regarding which Option will be selected, that decision is awaiting the results of this community feedback and will be decided by Council. The public is invited to attend this meeting.
3.09	Likely effectiveness of options	Both options presented are the result of detailed and extensive investigation and numerical modelling studies completed by Cardno. Both options can successfully achieve the project's objectives but each has different costs and benefits.
3.10	Further information	All information relevant to the estimated effectiveness of the options, benefits, costs and impacts is included in the draft Stage 2 study report which is available on the City's website.
3.11	Waterland Point beach access	The City regularly monitors the condition of this access. If the access is found to be hazardous it is closed until it can be repaired.
		Community preferences and opinions were sought throughout the Stage 2 concept design process via the community representatives in the Community Reference Group. Membership of the CRG was advertised publicly and any member of the public that wished to could nominate themselves to take part and be involved in the process directly.
3.12	Community consultation	General community feedback is being sought now that the two most feasible options have been identified with which it is possible for the City to proceed.
	Consultation	Comments are sought prior to the detailed design stage in order to allow respondents to express a preference and voice any concerns over the presented options. It is understood that the management of the Quinns coastline is an issue on which the community feels very strongly and issues raised during this process will be carefully considered during the option selection and detailed design.
3.13	Shark net	The Quinns Beach Long Term Coastal Management project is a separate project to the installation of the shark barrier. The Shark Barrier has been proposed to be installed in the southern section of Quinns Beach.
3.14	Future works/	Cardno has identified that it may be necessary to construct a fifth groyne at the northern end of the Dog Beach in the future. Whether this is required or not, and over what timeframe, is dependent on how the selected option behaves once built.
3.14	Groyne 5	Modelling has shown that Option 1 is likely to have a greater negative impact on the beaches to the north of Quinns, so future works are more likely to be required over a shorter timeframe with this option.
3.15	Geotechnical conditions	The City plans to obtain geotechnical data to provide information on the presence and location of rock under the beach and dune systems. This data will be used to inform the detailed design and construction processes.
		

Table 7 – Comments made by respondents who favour Option 1

Option 1 – Extended Groyne and Groyne 4	
Comment	Response ref.
Option 1 but please renew the toilet block, it is awful.	
We have a carpark. Extend, widen and mark out the bays to maximise space. Make the existing park (Stubbs) more user friendly with shade, BBQ and access to beach. If you have groynes, make them submerged to lessen beach erosion.	1.01 1.02
Option 1 minimises the interference on the existing dunes, beach areas, parking infrastructure and is our preferred option. Also, traffic changes to local streets would be a significant issue with Option 2.	2.01
Points of concern:	1.01
To my knowledge, the ocean has encroached 100% plus since 1980. We have lost two dunes, 2 rows of coastal oaks with picnic space between them, BBQ, toilet and part of the carpark and boat ramp. Is this nature at work or man-made interference?	1.02
Stubbs park and the retaining walls have had a fortune spent on them so keep this nice area but make it user friendly with shade, BBQs etc. and work out a way to provide access to the beach from this area.	
The existing carpark can be widened and extended with the bays marked out so that the area can be better used.	
The recent retaining walls and shore protection have not been tested in a northerly gale. Onshore winds are usually SE-SW and waves are lessened by 1 mile and 3 mile reef.	
Groynes improve the beaches to their south and scour on their northern side. Groynes should not be too high so as to allow waves/swell to break over them in a gale and 'dampen' the waves to lessen their damage. Dunes and coastal heath is fragile and we much do as much as possible to protect it.	
Overall costs would be lower. Shop and restaurant is directly opposite. New carpark would upset the affected residents both visually and noise levels.	1.04
Neither option really, maybe a wall in front of the existing carpark.	1.05
Need to improve the existing carpark. We would like to be able to sit in the car in close proximity to the beach. It is close to the shop and café. Improve the toilet block.	1.01
The existing carpark is safer as it is off the street.	
The existing carpark should be angled parking on both sides with a roundabout at the far end.	1.01

Option 1 is part of the erosion control plan and therefore will save funds. The existing carpark has an area parallel to the wall and in line with	1.01
existing toilet block (which could be renovated) which could be extended to create more spaces. Existing dunes in proposed Option 2 should remain untouched. Thank you.	1.04
I noted that the existing toilet block (on the 16th April) had a workman 'beautifying' the outside wall with mosaics and paint. Will this have to go? Hope the new wall will look like this one.	2.09
I have seen beach renourishment before, it doesn't work. Unless you can stop "washing" the groynes would need to be huge and more than just	1.02
limestone boulders which already move. Option 2 is ridiculous it would affect too many people and spoil the dunes which are supposed to be protected.	3.04
Extending the groynes is good. A 'T' shape at the end should reduce the 'washout' of the beach.	1.06
Keep the existing carpark and toilet block because it is part of Quinns history and where else can you pretty much park on the beach. So keep everything the same, just extend the groynes.	
There are other options for car parking in the commercial area or old caravan park. This is our main beach.	
I do not want the demolition of the dunes at the proposed carpark location (in Option 2).	2.03
I prefer the existing carpark to be improved and leave the natural environment as it is. There is a concern that a rip in front of the proposed carpark location could be dangerous for families	
We do not need another slab of asphalt and concrete. Why destroy a dune and make fake dunes? We need on-street parking. A toilet block at the end of Fred Stubbs park would be an eyesore. Save our dunes, they are home to birds and wildlife.	
You should do a survey of the use of the existing carpark, it is empty most days and only busy on the few hot weekends we have over summer.	
The existing carpark is notorious hoon hotspot. Even closing the carpark has not stopped this annoying, dangerous and criminal activity. Shifting the carpark location will just move the problem to the south.	
We need to encourage people to walk and bike ride. There is a huge carpark at Portofino's which is empty most days and is only busy on surf club Sundays (a limited season). Save our dunes, please don't destroy them.	
Having lived on Ocean Drive for 50 odd years it appears ridiculous to contemplate shifting the car park and toilet block which would require	1.01
parents and children a further walk to the playground and would be well away from the shops. Has any consideration been given to the loss of trade of the cafe and liquor store?	2.06 2.08
The existing car park could be widened towards Ocean Drive and with angle parking both sides giving probably 25% more parks. As a suggestion why not have the existing carpark driveway made one way and the exit road at the far end up to Ocean Drive.	2.00
Why waste money moving carpark, it will just cause problems elsewhere so spend the money to address it now.	

I cannot understand the need to relocate a perfectly good large carpark to another area which would entail cutting into the existing sand hills. Funds would be better spent widening the existing carpark towards Ocean Drive with angle parking on both sides.	1.01
The current toilet block and change rooms could be renovated or new one set back further towards Ocean Drive, with landscaping between the toilets and entry driveway to include benches, barbecues and a drink fountain.	
I consider Option 1 to be more economical. It also minimises impact on the beachfront. Re-locating the car park is considered to impact the beachfront environment, which we do not prefer.	1.04
I prefer Option 1 because it is a very popular parking area and there will be less damage to existing natural bushland. Consideration should be made to putting a sea wall in to protect existing car park and making it a metre wider each side.	1.05
You also need to line the base of the dog beach groynes with rocks and plant out the seaward face of dunes with native vegetation. Refer to Burns Beach vegetation on dune face and also look at Muttonbird Beach, Albany for example of how dunes can be rehabilitated with native vegetation.	
We are running out of spots in WA metro where you can open the boot of your car, take a few steps and you are on the beach. Every other spot you have to hike over a sand dune which is less than ideal with children not to mention for the elderly or disabled.	3.05
Also, it is not clear where Groyne 4 is to be located.	
I've been waiting for this day for over 10 years. Extending the groynes is overdue and important. This will improve recreational opportunities and the safety of this magnificent beach. Well done to those behind this plan.	
I would hate to think what would happen if we remove an already vegetated dune for another carpark. The ease of access for elderly and disabled is far better with Option 1.	
The original groyne proposal allowed for a review of the length and direction 3-4 years after installation when more information was available. Let's re-examine the original plan. We don't need any new carparks, particularly if they encourage people to use non-patrolled beaches. Lengthening the groynes would provide fishing facilities which would be an added tourist benefit.	
The groyne extension and additional groyne is essential. The moved carpark should be considered after the beach becomes safe (moved carpark would be great).	
The carpark and toilets blocks are established and functional. Planting of shade trees/landscaping the upper section and steps from Oceanic Drive would be preferable than completely redeveloping the locale and adding more concrete etc. Also, Salty's café would be impacted by Option 2 significantly.	1.01 2.06
The carpark needs to be fixed up, but otherwise Option 1 is best. It keeps people near the beach, shop and park. Can we please have some BBQs in the Fred Stubbs Park to make it more useful for family picnics.	1.01

Option 1 keeps people near the atmosphere of café/shop. Please put BBQs at Fred Stubbs Park to make it better for BBQs/picnics etc.	
Option 2 has quite a few benefits but we can't see the beach being held without extending the groynes as in Option 1.	3.09
Option 2 would destroy valuable dune vegetation by the construction of the new carpark.	
Why destroy more of the environment (dune system) when it cannot be guaranteed that the problem will be solved? Removal of dunes will expose ugly view of Mindarie Marina.	2.03
The existing car park is not visible from the residences which is an advantage and does not impact the ocean views. The car park could be enhanced economically.	2.01
The Option 2 new carparks will have a negative impact on the ocean views and cause traffic congestion. In addition it is considered that the natural dune will be modified and potentially cause future erosion.	
Leave it alone and rebuild the existing carpark	1.01
Option 2 is a waste of money since it just moves the carpark elsewhere, hoping the erosion issues at the site of the existing carpark will stop by	1.07
converting it into a rehabilitated dune. Nonsense why would the erosion issues "disappear"? Rather fix the erosion here as part of the solution	1.05
with groynes, add artificial headlands and/or offshore breakwaters.	2.10
I suggest also extending groyne 1 (in addition to groyne 2) and placing rock armour under the timber boardwalk and along the entire length and front face of the existing carpark with 2 or 3 dedicated step access points to the beach.	3.07
Option 1 looks like a better option	
I prefer option 1 with additional car parking on the road for the park users.	
The boardwalk sounds a like a fantastic idea.	
Option 2 is not going to give a nice vista of the beach as you arrive. We already have hidden beach access further south, which are quite unattractive, and don't do our beautiful beaches justice. Option 2 would also lose the lovely sunset views we enjoy from the current beach. I definitely prefer Option 1.	
I disagree strongly with moving the carpark and interfering with one of the few good dune systems along the Quinns foreshore. The existing carpark is rarely fully utilised as it is, so there is no need for more parking. Making the existing groynes bigger and installing an additional groyne is the best solution for preserving our coastline.	
This is the best option to stop beach erosion.	
The modifications will look a lot better than simply moving the carpark, as well as the fact that extended groynes will shape the water and avoid further erosion, whilst the moving of the car park may cause even more erosion to occur if the dunes are removed.	

OPTION 1

PROS: The existing car park has been in situ since the oldest resident can remember. The local community love it and do not wish to see it removed. It is set below the road level and so is not a blot on our wonderful seaside views. It services the two most popular beaches in the area which are safe for swimming. It is convenient for the newly established playground. It is serviced by a local café and a general store just a few steps away. It does require upgrading, however the basis of a car park already exists. Perhaps the sandbags which have proved to be such a success south of the car park could also be used to protect a newly renovated car park and its foundations.

2.01

1.01

1.05

The existing toilet block and change rooms only need renovating, the sewage and pipe work is already in situ. The existing groynes would be enlarged but that is not a problem aesthetically and local fishermen will be able to fish from them. The planned new boardwalk with access to both beaches would be a welcome addition to present situation.

CONS: This is a more expensive option for the council. However, the local community was mostly for this option at the morning session of the Community meeting at Gumblossom Hall on 27th April 2016, when I was present for the entire meeting.

OPTION 2

PROS: None that I can see, other than this is a less expensive option for the Council.

CONS: Why on earth would anyone consider removing mature, well established and vegetated dunes to construct a brand new car park?

The proposed new car park is of insufficient size for purpose so additional angled parking for 46 vehicles is proposed further north on Ocean Drive.

The proposed new car park is a one-way system pushing traffic north on Ocean Drive which will mean drivers wishing to return to Quinns Road or Mindarie Drive (main thoroughfares) will need to use side roads to achieve their destinations adding substantially to local traffic on quiet side-roads.

The beach below the proposed new car park is not safe for swimming due to a strong rip off that stretch of beach.

Aesthetically, the proposed new car park will be in full view for all to see causing a blot on our beautiful natural seafront.

The proposed new 46 on-street angled car parking spaces is an absolute traffic nightmare. All parked cars will have to reverse out of the spaces onto Ocean Drive in the path of oncoming traffic whilst families with small children remove their beach paraphernalia, surfboards etc from the rear of their cars in the path of oncoming and reversing traffic. This just hasn't been thought through properly. A thorough traffic assessment needs to be carried out, which is not listed in the costings for Option 2.

A scary thought is excited young children running down the pavement from the angled parking to reach toilet block/changing rooms/the beach, with normal traffic driving past a mere step away. It would only take a distracted child to step off the pavement into the path of an oncoming car to cause a dreadful, possibly fatal, accident.

Option 1 seems like it will help to prevent erosion and is the best option

Don't go with Option 2. Why would you destroy existing dune and vegetation and create a new problem?

I feel the old toilet block should be demolished.

We need more protection from the larger groynes that this option would provide, making the beach safer for little ones.

Option 1 creates less potential new ecological problems, doesn't destroy the last decent undulating sand dunes on that strip of coast and, importantly, maintains the unique 'natural' feel of Quinns Rocks which is so beloved by locals and visitors alike.

2.02

We already live in a very flat part of the world and to make it flatter by further reducing the topography would be heart-breaking. Clearly, decision makers are pressured to choose lower cost options, which is evident with the current *en masse* flattening of the northern coastal corridor for new residential estates.

The dunes that would need removing in Option 2 are preventing further erosion and provide a barrier both visually, when looking south from the shops, as well as physically, from the south westerly wind. The dunes on the other side (eastern) of Ocean Drive that are all built on are quite high behind the proposed new carpark in Option 2. These dunes would surely be compromised if the ones in front of them were removed.

The Option 2 carpark is visually far more intrusive than the existing parking and the consultants engaged by the Council do not appear to have considered any traffic management issues. Clearly no costings were included in the initial assessments, therefore consideration of the Options by council cannot reasonably be made based on current cost estimates.

The beach and dunes that would be affected by Option 2 are special. When walking along the sandy pathway towards the beach, one has a sense of anticipation to reach the top of the dune to finally get the glimpse of the ocean. It is a child-like, almost primal sensation, sorely lacking in our daily lives that is really glorious to experience. There are so few places left like this in suburban Perth. One other spot is the northern end of Tamala Park, and I understand this will be spoiled by a road running through it soon. Similar to Clayton's Beach, the small section of beach in Quinns that would be accessible by the new carpark in Option 2, is unsuitable for family swimming. I regularly swim it and the swells are strong and the water 'swirly' here with rips regularly forming.

I urge council members to consider fixing the existing problem head-on, without creating any new ones, especially at the expense of such a beautiful part of the coast. Please abandon the Option 2 and proceed with Option 1. Thank you for giving me the opportunity to express my views.

This process started well but has ended in a bit of a farce. The Stage 1 was very well scoped and well executed with 6 proposals being presented. All of the options presented in this report have largely been ignored for cost savings. This can be understood as we can't have everything.

To have the election of ideas before the public release of the Stage 2 report is completely incompetent and borderline criminal.

I prefer Option 1 as it will at least prevent some further erosion in the critical Section 3 area. It will of course accelerate erosion to the north (but that's not my concern right now) and CoW can pay for this later.

Option 2 does absolutely nothing for erosion other than buy another few years for the city as the water level works its way through the existing carpark area.

I am in firm support of Option 1 only.

2.01 2.08 have spoken with a great number of local residents and cannot find anyone who agrees that Option 2 could possibly be considered as a realistic pation. To even consider outling into those natural big sand dunes and vegetation south of Fred Stubbs Park and installing a bitumen carpark and oilet block is not a good option. This proposal would be right next to the only bend in Ocean Drive which has already had a number of accidents the to the restricted vision. A carpark there would amplify these problems ten-fold. Local residents and visitors from out of Quinns alike all enjoy he ambience, the feel, the view of our coastal drive. A carpark up at road level squeezed into a narve streth of road with a bend would ruin this, assume that the City of Wanneroo is in favour of encouraging property owners on Ocean Drive to improve the area by replacing existing beach shacks with high quality housing. This carpark option does not encourage development. The existing carpark, being below road level, is out of sight and creates a natural sound barrier from the front houses. It is ideal as it is. This carpark could be simply modified, with possibly a second exit at the north end so as to make it one-way. This carpark is constantly used all year by people simply parking and enjoying watching the ocean, the weather, the sunsets and the boats etc. This cannot happen from a carpark cut not and hidden behind a sand dune. People wanting to view the sea would try to park elsewhere. Please consider other options seriously and listen to the views of people that actually live in Quinns. Adding to existing groynes would create great recreation space and viewing areas and, as the engineers said, would transfer the sand erosion urther north where it would stop. The existing carparks behind the surf club and at the north end of the dog beach could both possibly be increased in capacity. Thank you for your consideration. As a partner in the local Quinns Liquor and General Store which is located opposite the existing beach, it		
have spoken with a great number of local residents and cannot find anyone who agrees that Option 2 could possibly be considered as a realistic option. To even consider cutting into those natural big sand dunes and vegetation south of Fred Stubbs Park and installing a bitumen carpark and oilet block is not a good option. This proposal would be right next to the only bend in Ocean Drive which has already had a number of accidents due to the restricted vision. A carpark there would amplify these problems ten-fold. Local residents and visitors from out of Quinns alike all enjoy he ambience, the feet, the view of our coastal drive. A carpark up at road level squeezed into a narrow stretch of road with a bend would ruin this. assume that the City of Wanneroo is in favour of encouraging property owners on Ocean Drive to improve the area by replacing existing beach shacks with high quality housing. This carpark option does not encourage development. The existing carpark, being below road level, is out of sight and creates a natural sound barrier from the front houses. It is ideal as it is. This carpark could be simply modified, with possibly a second exit at the north end so as to make it one-way. This carpark is constantly used all year by people simply parking and enjoying watching the ocean, the weather, the sunsests and the boats etc. This carpark is constantly used all year one of the people wanting to view the sea would try to park elsewhere. Please consider other options seriously and listen to the views of people that actually live in Quinns. Adding to existing groynes would create great recreation space and viewing areas and, as the engineers said, would transfer the sand erosion unterter north where it would stop. The existing carparks behind the surf club and at the north end of the dog beach could both possibly be increased in capacity. Thank you for your consideration. As a partner in the local Quinns Liquor and General Store which is located opposite the existing beach, it is quite unbelievable to t	As one of many long term residents of Quinns we are very proud of the absolutely unique ambience and character of the Quinns foreshore, coastal walkway and natural dunes.	
Shacks with high quality housing. This carpark option does not encourage development. The existing carpark, being below road level, is out of sight and creates a natural sound barrier from the front houses. It is ideal as it is. This carpark could be simply modified, with possibly a second exit at the north end so as to make it one-way. This carpark is constantly used all year by people simply parking and enjoying watching the ocean, the weather, the sunsets and the boats etc. This cannot happen from a carpark cut not and hidden behind a sand dune. People wanting to view the sea would try to park elsewhere. Please consider other options seriously and listen to the views of people that actually live in Quinns. Adding to existing groynes would create great recreation space and viewing areas and, as the engineers said, would transfer the sand erosion urther north where it would stop. The existing carparks behind the surf club and at the north end of the dog beach could both possibly be increased in capacity. Thank you for your consideration. As a partner in the local Quinns Liquor and General Store which is located opposite the existing beach, it is quite unbelievable to think that the council is even considering investing in a relocation of current facilities. The proposed upgrade in Option 1, with an addition of shaded areas and 38Qs would provide the unique beach front with a very user friendly and live-able area. The Council has shown no regard to the fact that two very small businesses, (who have already endured financial loss due to the beach estoration) in that very precinct, would be disadvantaged if the relocation was to be chosen. Option 1, with the recommended upgrades would not interfere with any residential establishments and would continue to offer the community a local and inviting location to enjoy. Thank you for your time. What are you the council thinking? I can't believe you would propose a new carpark. Isn't the existing one just located perfectly? Is this anything od to with the new sh	I have spoken with a great number of local residents and cannot find anyone who agrees that Option 2 could possibly be considered as a realistic option. To even consider cutting into those natural big sand dunes and vegetation south of Fred Stubbs Park and installing a bitumen carpark and toilet block is not a good option. This proposal would be right next to the only bend in Ocean Drive which has already had a number of accidents due to the restricted vision. A carpark there would amplify these problems ten-fold. Local residents and visitors from out of Quinns alike all enjoy the ambience, the feel, the view of our coastal drive. A carpark up at road level squeezed into a narrow stretch of road with a bend would ruin this.	2.06
carpark could be simply modified, with possibly a second exit at the north end so as to make it one-way. This carpark is constantly used all year by people simply parking and enjoying watching the ocean, the weather, the sunsets and the boats etc. This cannot happen from a carpark cut into and hidden behind a sand dune. People wanting to view the sea would try to park elsewhere. Please consider other options seriously and listen to the views of people that actually live in Quinns. Adding to existing groynes would create great recreation space and viewing areas and, as the engineers said, would transfer the sand erosion unther north where it would stop. The existing carparks behind the surf club and at the north end of the dog beach could both possibly be increased in capacity. Thank you for your consideration. As a partner in the local Quinns Liquor and General Store which is located opposite the existing beach, it is quite unbelievable to think that the council is even considering investing in a relocation of current facilities. The proposed upgrade in Option 1, with an addition of shaded areas and 38BQs would provide the unique beach front with a very user friendly and live-able area. The Council has shown no regard to the fact that two very small businesses, (who have already endured financial loss due to the beach estoration) in that very precinct, would be disadvantaged if the relocation was to be chosen. Option 1, with the recommended upgrades would not interfere with any residential establishments and would continue to offer the community a local and inviting location to enjoy. Thank you for rour time. What are you the council thinking? I can't believe you would propose a new carpark. Isn't the existing one just located perfectly? Is this anything od with the new shark netted swimming area?	I assume that the City of Wanneroo is in favour of encouraging property owners on Ocean Drive to improve the area by replacing existing beach shacks with high quality housing. This carpark option does not encourage development.	
Adding to existing groynes would create great recreation space and viewing areas and, as the engineers said, would transfer the sand erosion urther north where it would stop. The existing carparks behind the surf club and at the north end of the dog beach could both possibly be increased in capacity. Thank you for your consideration. As a partner in the local Quinns Liquor and General Store which is located opposite the existing beach, it is quite unbelievable to think that the council is even considering investing in a relocation of current facilities. The proposed upgrade in Option 1, with an addition of shaded areas and 32.06 as yould provide the unique beach front with a very user friendly and live-able area. The Council has shown no regard to the fact that two very small businesses, (who have already endured financial loss due to the beach estoration) in that very precinct, would be disadvantaged if the relocation was to be chosen. Option 1, with the recommended upgrades would not interfere with any residential establishments and would continue to offer the community a local and inviting location to enjoy. Thank you for your time. Leave the sand dunes alone. What are you the council thinking? I can't believe you would propose a new carpark. Isn't the existing one just located perfectly? Is this anything on do with the new shark netted swimming area?	The existing carpark, being below road level, is out of sight and creates a natural sound barrier from the front houses. It is ideal as it is. This carpark could be simply modified, with possibly a second exit at the north end so as to make it one-way. This carpark is constantly used all year by people simply parking and enjoying watching the ocean, the weather, the sunsets and the boats etc. This cannot happen from a carpark cut into and hidden behind a sand dune. People wanting to view the sea would try to park elsewhere.	
The existing carparks behind the surf club and at the north end of the dog beach could both possibly be increased in capacity. Thank you for your consideration. As a partner in the local Quinns Liquor and General Store which is located opposite the existing beach, it is quite unbelievable to think that the council is even considering investing in a relocation of current facilities. The proposed upgrade in Option 1, with an addition of shaded areas and 20.06 abg. Who have already endured financial loss due to the beach restoration) in that very precinct, would be disadvantaged if the relocation was to be chosen. Option 1, with the recommended upgrades would not interfere with any residential establishments and would continue to offer the community a local and inviting location to enjoy. Thank you for your time. Leave the sand dunes alone. What are you the council thinking? I can't believe you would propose a new carpark. Isn't the existing one just located perfectly? Is this anything of do with the new shark netted swimming area?	Please consider other options seriously and listen to the views of people that actually live in Quinns.	
Thank you for your consideration. As a partner in the local Quinns Liquor and General Store which is located opposite the existing beach, it is quite unbelievable to think that the zouncil is even considering investing in a relocation of current facilities. The proposed upgrade in Option 1, with an addition of shaded areas and 32.06 as Would provide the unique beach front with a very user friendly and live-able area. The Council has shown no regard to the fact that two very small businesses, (who have already endured financial loss due to the beach restoration) in that very precinct, would be disadvantaged if the relocation was to be chosen. Option 1, with the recommended upgrades would not interfere with any residential establishments and would continue to offer the community a local and inviting location to enjoy. Thank you for your time. Leave the sand dunes alone. What are you the council thinking? I can't believe you would propose a new carpark. Isn't the existing one just located perfectly? Is this anything o do with the new shark netted swimming area?	Adding to existing groynes would create great recreation space and viewing areas and, as the engineers said, would transfer the sand erosion further north where it would stop.	
2.06 2.07 Secondary Secon	The existing carparks behind the surf club and at the north end of the dog beach could both possibly be increased in capacity. Thank you for your consideration.	
The Council has shown no regard to the fact that two very small businesses, (who have already endured financial loss due to the beach estoration) in that very precinct, would be disadvantaged if the relocation was to be chosen. Option 1, with the recommended upgrades would not interfere with any residential establishments and would continue to offer the community a local and inviting location to enjoy. Thank you for your time. Leave the sand dunes alone. What are you the council thinking? I can't believe you would propose a new carpark. Isn't the existing one just located perfectly? Is this anything odo with the new shark netted swimming area?	As a partner in the local Quinns Liquor and General Store which is located opposite the existing beach, it is quite unbelievable to think that the council is even considering investing in a relocation of current facilities. The proposed upgrade in Option 1, with an addition of shaded areas and BBQs would provide the unique beach front with a very user friendly and live-able area.	2.06
What are you the council thinking? I can't believe you would propose a new carpark. Isn't the existing one just located perfectly? Is this anything 3.13 o do with the new shark netted swimming area?	The Council has shown no regard to the fact that two very small businesses, (who have already endured financial loss due to the beach restoration) in that very precinct, would be disadvantaged if the relocation was to be chosen. Option 1, with the recommended upgrades would not interfere with any residential establishments and would continue to offer the community a local and inviting location to enjoy. Thank you for your time.	2.07
o do with the new shark netted swimming area?	Leave the sand dunes alone.	
Don't dare build a new carpark. What are you thinking?	What are you the council thinking? I can't believe you would propose a new carpark. Isn't the existing one just located perfectly? Is this anything to do with the new shark netted swimming area?	3.13
	Don't dare build a new carpark. What are you thinking?	

It is noted that there is a pathetically short period of notice and public consultation on such an important public works.

Option 1 should be accepted and Option 2 rejected.

1.01 3.08

Groynes exist and there was always an option for them to be extended to manage erosion.

3.12

Relocating the car park is fiscal irresponsibility of rate payer's money. The car park could retreat many metres from the beach front and happily accommodate more parks closer to the walking path. Moving a functional car park that will be protected by the extension of the groyne anyway is simply a waste of our money. Will the bulldozed sand from the dunes to create a car park there be used to fill in the existing car park to restore dunes there? Are you aware how ridiculous that sounds? This is our rates you are proposing to spend here.

Dunes are gazetted "Bush for Life", so levelling these and building a car park would be eco-terrorism at the least and illegal at worst.

Previous community input suggested that car parking be built along the entire length of Ocean Drive during the road upgrades, but this suggestion was rejected outright by the City and a median strip was built instead that was not needed or wanted, and now the City wants to resume land for parking.

It is not accepted that these options agree with your stated intention "to ensure chosen options align with community needs or expectations". Public opinion was not overtly sought or, if so, not from stakeholders such as ourselves who will be directly affected by these changes. Poor show by the City of Wanneroo and disingenuous at the very least.

Will the city be liable for the devaluation of properties directly affected by the proposed changes?

Please exercise good stewardship of our finite environmental and financial resource, exercise option 1. Thank you.

Leave it and redo the existing carpark.

Why destroy more fragile foreshore bush land? Upgrade the existing carpark, it holds 400 cars. Build new toilets and it will be the jewel on the coast. I definitely do not want a new carpark. Very bad planning Council.

Why would you waste my money in developing a new carpark? You already have one capable of holding 400 vehicles. Give the current ablution block a birthday as you have not spent a cent on it since the 70's. Don't destroy the fragile sand dunes which I believe you have told us would be bush land forever.

Relocating the carpark, in my opinion, would have adverse effects on the local businesses which I think are already struggling.

2.06

Moving the carpark would finish these local businesses off, creating more unemployment in the area.

Also, I have concerns for the residents living opposite the new carpark location as there doesn't seem to be any gates to lock the carpark each night which happens at the existing carpark, stopping hoons from racing around which happens a lot in this area. Not having lockable gates will just encourage antisocial behaviour in my opinion.

Maintain existing sand dunes. Do not destroy them by building a car park.

Despite the alcohol and hoon problems the carpark inherently brings, it is an icon of Quinns rocks and it would be a sad day so see it go.

Did the City not receive recommendations to extend the groynes 10 years ago? The current plan to relocate the car park is a wasteful use of money and will significantly reduce the value of homes all along the Ocean Drive, the least valued beach front street in all of Perth. Why is that? Because of incessant "works" along the road and the lack of foresight. Spare a thought for the people who suggested 10 years ago that the City place car parks all along the road where it was being widened but were shot down.

The sea wall is fantastic and the carpark as an extension of that flows so naturally it should remain where it is. Please reconsider this proposal and spend the money where it needs to be, reinforcing the current set up and making it functional again. That is a long term plan.

We feel that moving the existing car park is unnecessary and will cause much expense that can be better spent elsewhere in the Shire. The car park is rarely at full capacity and there are other parking options available.

Option 1 is better as the café and shop need the toilet block and the existing car park to promote business. There is no need to build a new toilet block when one already exists.

Option 2 is a bad concept as it interferes with the dune rehabilitation and stabilisation that has been taking place. The dunes are habitat for flora and fauna.

CoW could purchase the vacant block next to Salty's café and turn that into a car park as people already park there. The money saved on not building a new toilet block could be put towards purchasing the block of land. This would also bring customers to the café and shop. The shop struggles at the best of times so it needs all the help it can get. The angle parking in front of the café looks like a good idea. No need for the proposed parking area south, it is an unnecessary waste of taxpayers' money. If more parking is required, put it at the Dog Beach or Portofinos /surf club where it is needed and where toilet facilities already exist.

I strongly disagree with Option 2. It is unacceptable to build a car park over what is currently pristine sand dune. In this day and age are we really considering this? Surely the environmental impact must be an issue.

There is already a car park near the existing shop and existing toilet block. It makes far more sense to keep the parking area and amenities close to the shops and support the local business while doing so.

Car parks are generally an eyesore, please keep it where it is. The existing car park is situated so it has a very low impact on the amenity of the beachfront. It is below the road and well removed from neighbouring residences. Why destroy the amenity and peaceful enjoyment elsewhere?

Beachfront car parks and toilet blocks are notorious with regard to social problems such as car burnouts, drug use etc. It would be very unfair to those living opposite the location of the proposed new carpark. Their peaceful enjoyment of their homes would be destroyed as would their view.

Nobody can totally and accurately predict the outcome on the coast of either of these two options. Please do not destroy the beautiful Quinns coastline by building a car park in a pristine location for the sake of an uncertain outcome.

Option 2 will mean existing sand dune will be disrupted. People who live directly across from this proposed carpark will also have to deal with lots of cars, people and noise with a carpark. It will make the quiet part of the street become disturbed. There already is a carpark and it is situated perfectly in front of the cafe.

These are the only untouched sand dunes in the area and I'd like them to remain free of intervention. Far better to manage what we already have with the current car park than to build another. I doubt you will have the locals in that area of Quinns endorse Option 2, with the urban spread come the urban issues such as rubbish, noise, drugs, etc.

1.03 3.03

If you were to build Option 2 how would you look after the 'old car park area' once it's returned to nature, as you would have no access to it. Plus no easy access to the beach in that area which, unless you extend the groynes is going to need it in the future. Even with an extension it will be no easy task to manage it. I would suggest that future car parks, dog beaches, cafes, etc. be put into the move of the northern urban extension.

Why not build a new car park at the northern end of the dog beach? Plus extend the dog beach north? This would make more sense considering the uproar created when the council tried to extend the dog beach south. I understand that the council needs to balance the 'needs of all' however I don't think that can be achieved by tinkering with Old Quinns, I my view it's a small gem in the council back yard to be cared for in its old age. Many thanks for giving me the opportunity to comment.

In support Of Option 1:

1.01

The maintenance of the coastal dunes is of the highest priority. The cost is also wasteful, increasing the already huge tab that exists with the recent road redevelopment, re-dig for the underground power, seawall construction and dune revegetation.

1.04 3.04

Option 1 is more economical as the existing carpark works well and still has the potential to be extended. Removal of the dying trees and bushes that line the retaining wall next to the walking path would accommodate another row or more of cars. If you visit the car park you will see tracks into these areas where I have seen individuals hiding and also sleeping for the night. This area would even allow the carpark to be withdrawn from the seaside and the same number of car spaces would be retained.

Beach renourishment in this area is obviously an ongoing project for the City as residents have witnessed and together with the fact that the groyne 2 extension has previously been the experts recommendation for erosion control, Option 1 is the best.

It is very frustrating to read 'to ensure chosen option aligns with community needs and expectations'. When Ocean Drive was being reconstructed many residents put forward to the City planners the option of not having the medium strip and incorporating car spaces at regular intervals along the road and especially lining the Fred Stubbs Park. This was rejected.

Option 1 is the only one that should be considered by coastal engineering. These dunes in question have already suffered and are recovering beautifully thanks to the City workers that maintain and care for them. Please keep your promise City of Wanneroo and let this coastal dune habitat live on.

Groynes are good for fishermen/women.

The grassed area south of existing toilet would be good if it was retained and turned into proper grass. A nice possibility to view sunsets.

I disagree with moving carpark. Existing dune systems should be preserved including the flora and fauna.

We own a house on Hazel Avenue and don't want extra traffic on that road.

Abbreviated comments from a letter response.

1.01

Many people live in Quinns because of the mainly unspoilt coastal environment and now Option 2 aims to destroy our lifestyle which we enjoy.

1.04

How would councillors like carparks and a toilet block built directly in front of their homes spoiling the great views and affecting property values? Destruction of our sand dunes would amount to environmental vandalism.

| |It was stated at the meeting about the entrance/exit from the existing carpark being dangerous yet unloading of children from cars angle parked

and then reversing onto the road would be ok?

Although we do get anti-social behaviour from young people occasionally at least they and their loud music, bottles, rubbish etc. are confined to

Although we do get anti-social behaviour from young people occasionally at least they and their loud music, bottles, rubbish etc. are confined to the sunken carpark. Should the carpark be closed the trouble would be directly outside people's houses (the locking of the carpark at night is most advantageous when done).

Our personal thoughts would be to extend the existing carpark width into the sand by the toilet block, cut the existing carpark in half lengthwise and build a seawall (like many other countries) and replenish the sand on the beach side of the wall.

To many of the people we have spoken to, it seems incomprehensible that Option 2 would not be far more expensive than Option 1.

It also states that the replenishment of sand would be ongoing for Option 2.

Obviously a revamp of the carpark and toilets are needed anyway, so why not fix it once and for all.

It's a pity we can't have a seawall like Cape Town and no drinking or radios on the beach.

Abbreviated comments from a letter response.

In the 10 years I have owned my business we have been subjected to not having a beach, then having a beach, then not having a beach, then the beach erosion program of 'saving the beach'. Both Federal and State Government are trying to promote small businesses and City Councils (we hope) are doing the same. We are a small business and the beach is our reward, please don't take away that focus.

Instead of destroying another natural feature (Option 2), increase accessibility to Option 1. Finish the park facilities and extend the groyne. Putting in another groyne is a certain destruction of the beach front. Also it must save money to improve what is there? What is already in place just needs a bit of tweaking and my business needs your support.

- Put in wheelchair access, board walks and extend the carpark to the North, complete the park facilities and you will be congratulated.
- Make access to the present area for handicapped visitors.
- Use the present facilities and upgrade the toilets and extend the carpark. We also need BBQs and shade consoles.
- Increase community awareness of these facilities.
- Save further carnage of the coastal dunes and vegetation.
- Maintain what's there and increase the ambience.
- Support this unique business and the people of the immediate community.
- Extend the groyne so it is a workable marine feature/intrusion.

And good luck.

1.05

3.04

1.01

1.03

2.06

2.07

Abbreviated comments from a letter response.	1.04
Points considering Option 1 in favour over Option 2:	2.01
The remnant dune on the point is the only one of its type left on Quinns Beach. It should not be regarded as a quarry. Surely this is an environmental issue.	2.03 2.05
During the 2013 erosion of the dune's seaward side, remains of the old shacks started to come down the slope from the top layers of the dune (from under the root layer) and this had glass shards, nails and old fibro asbestos in it. The dune provides a windbreak from westerlies when people are walking past.	2.07 3.04
Windsurfers and sailboarders currently use the area off the point where they do not interfere with swimmers. There is a seasonal rip which develops off the southern beach outwards from the point is there is a SW swell. The proposed new toilet block being right at the side of the road is not an attractive proposal and will be a constant graffiti target.	3.14
Option 2 requires less re-nourishment to the south of Groyne 1, but it requires a new ablution block in exchange. For Option 1 there is no cost for replacing the toilets as they are already there and no cost for the proposed parking lot of Option 2.	
No provision has been made in Option 2 for accessing the beach from the proposed angle parking, so a ramp cost will be incurred recreating what is already provided by having the lower carpark.	
Children at the new southern parking area and beach would be wandering up and down the road toward the bend in the road to access the shops. Currently they cut directly across the road where they are expected by motorists.	
There are anti-social elements which always will collect in warm weather at public carparks. Currently these elements are able to be locked out of the carpark at night during the period they are most active. People would be parking, or through traffic would be driving more slowly past the angle parking, in case kids run out. This will shunt more northern traffic onto Mindarie Drive and Hazel Ave. Has there been a traffic study done.	
Being a resident of Ocean Drive I would strongly prefer Option 1 as it would maintain the natural barrier of the dunes in front of my home.	1.01
It minimises night time disturbances and anti-social behaviour which currently occurs in the carpark. From a security perspective, the public are still able to see their vehicles from the beach which minimises vehicular theft. The public can also sit in their vehicles with a view of the ocean.	1.04
The carpark has not been fully utilised as there is still additional land on the Ocean Drive side of it to extend the tarmac further and use the old Quinns Surf Club site with clearly marked parking bays and slow points installed to slow traffic in this shared area of pedestrians and vehicles.	
More outdoor showers and taps for public use could be installed at the northern end of the carpark. With this option they may also be able to stabilise the beach with vegetation in front of the carpark. The extension of the groyne should stabilise the carpark to enable expansion.	
Option2 is my least preferred option. It will have a negative environmental impact on the dunes which are currently stable without any human interference. Those residents whose properties are adjacent to this proposed site will then be subject to the antisocial behaviour in front of their houses.	
The proposed angle parking in front of my residence will see the current issues literally brought to my front door. In addition, the cost to ratepayers of Option 2 would far exceed the cost of Option 1. The only positive is that the beach is stable in front of the proposed new carpark.	

Abbreviated comments from a letter response.

1.01

If the City is serious about coastal protection then why is it proposing to clear and destroy the same dunes that help prevent coastal erosion, offer protection from the prevailing winds and offer refuge and habitat for our local fauna?

2.03

The Quinns dunes are an important remnant of the Quindalup dune system and associated flora and fauna. These dunes provide a sense of place and a connection to nature. The bushland contributes to the character and natural heritage of Quinns Rocks to be enjoyed by residents and visitors alike and, more importantly, to be conserved for future generations to enjoy. Our dunes provide protection from coastal erosion, especially along Ocean Drive where the dunes are at their widest and covered with vegetation in good condition. The remnant vegetation needs to be conserved and valued by our community as a green space in an increasingly urban environment.

As long term Quinns residents we will be choosing Option 1 because it is the only option that proposes to retain the existing dunes as a natural buffer and keep the original carpark. Option 2 would wreck our dunes and constructing a new carpark would severely impact on the local environment.

Option 1 should incorporate formalising car parking bays in the existing carpark because it provides better, safer access for beach goers, especially the elderly. Landscaping and revegetation should include local plant species. The existing change rooms should be upgraded as it is long overdue. During the summer there are only 3-5 days where parking demand is at a peak. The carparks are mostly empty at other times and rarely at full capacity. Option 1 retains the character of Quinns Rocks & preserves the coastal dunes & green space for future generations to enjoy.

Abbreviated from a letter response

We acknowledge that the narrow setback along the old Quinns Rocks town site makes the area vulnerable to changes in the coast. Erosion of Quinns Beach has been an issue for decades. Risk to the local coast will increase with climate change if storm activity and sea level increases. A long term response based on an understanding of coastal processes and community values is needed.

The proposal from the latest coastal protection study is of concern. The relocation of the beachside car park could result in the clearing of dune vegetation at the widest point fronting the old Quinns Rocks town site. The conservation and amenity value of the coastal dune and remnant vegetation on it should be protected as far as possible. We favour consideration of alternatives including:

- Continued use of the existing beachside car park in the short term unless or until irreparably damaged by erosion to maintain parking at this key section of beach and near beachside amenities including the café, general store and playground (acknowledging that in the medium to long term erosion activity may require managed retreat of this asset)
- Provision of car parking on part of the southern portion of Fred Stubbs Park or as angled parking along Ocean Drive adjoining the park (to avoid clearing habitat while providing parking at an activity node)
- Consideration of additional parallel or angled parking along Ocean Drive (e.g. near the general store and café).

Quinns Beach is an important area for recreation, including swimming, fishing, walking and sightseeing. As the population grows so will demand for coastal recreation. This demand should be managed to protect coastal amenity and ecological and landscape values. Managing demand should include distributing activity at appropriate points along the coast and moderating parking demand by providing for and promoting bicycle and pedestrian access and using parking in side streets where safe to do so. Peak parking demand will occur on public holidays and in hot weather, however investing in extensive car parking to meet this would adversely affect our coastal reserve.

Abbreviated from a letter response

1.01 1.08

There are essentially three separate remedies: carpark relocation (only), groynes (only) and carpark and groynes but all from the same company. It might be contested that including the carpark as relevant to shoreline erosion is not appropriate because it is proposed that the degraded carpark and toilet block are relocated into the same dune system. Logically, if use of the carpark and toilet clock cause dune degradation they should not be rebuilt anywhere in the dune system.

2.11

If the carpark and toilet block did not cause dune degradation and coastal erosion (and the problem is secondary to bad maintenance) then degradation of the carpark and toilet block are separate issues that the City should manage from different budget allocations. This would mean including the carpark and toilet relocation unnecessarily impinges on the amount that could or should be allocated for the coastal erosion specifically.

If the carpark and toilet block are unsafe and have to removed, they should not be relocated in the dune system until is established how much regeneration occurs without the extra human and vehicular access. Human and vehicular access are significant problems for rehabilitation and maintenance of sensitive environments and it is not logical to rehabilitate one dune whilst knowingly causing degradation of another dune un the same dune system or any other dune system.

Has it been assessed at what rate limestone breaks down in the ocean? At what rate has the size of the groynes decreased due to erosion of the stones used? I went for a walk near the recently renovated park along the same beach and some of the limestone blocks were already eroding.

Much of the problem might be caused by human activity (including building structures into the sea to protect vessels causing part of the problem). If that were quad bikes in the dunes instead of a huge carpark for cars they would be banned. We can't be biased in assessing risk of ecological or other harm.

There is possible complex interaction of coastal dune systems with the hydrology and ecology of complex karst and cave systems in the area.

There is not logic in destroying one dune to save another. Citizens raised this repeatedly at the meeting.

Table 8 - Comments made by respondents who favour Option 2

Option 2 - Relocated Carpark and Groyne 4

Comment Response Ref.

We are looking forward to this starting. Well done, please have it done by Christmas 2016.

The existing carpark is not visible from the street and has to be locked every night. This would no longer be an issue with Option 2. The existing toilet block is very tired and a replacement would be great. Great to see Groyne 4 proposed to assist erosion north of the Dog Beach.

In order to protect as much sand dune as possible would it not be better to extend the carpark at the Surf Life Saving Club.

I realise the amount of planning and consultation that is going into this project and appreciate all of the efforts of the council in doing the best you can for the community.

This seems to be the best option for the long term. Hopefully more being done and spent will avoid the necessity for more modifications in future years, saving our coastline for the future

As a regular user of the Quinns beach and a coastal engineer who has observed Quinns Beach and the dog beach to the north, any extension of groynes in the vicinity of Fred Stubbs park is only likely to aggravate erosion further to the north. This is supported by a review of Cardno's report. I think the proposed southern car park is located in a much more stable beach location and will provide the amenity that beach users require.

In addition, the existing car park at Fred Stubbs Reserve is protected by rock armour which is a hazard to beach users when partially eroded sand nourishment obscures vision or rock. Removal of this hazard will benefit users and the City, as well as providing an opportunity to restore the foredune buffer zone. Beach rehabilitation at this site may also assist to reduce the gradient of the beach in this area, reducing the likelihood for dumping waves which are common in front of the car park and which is a concern for some beach users.

I think Option 2, the removal and relocation of the car parks with the additional Groyne 4 is the best long term option for the City and will reduce overall maintenance costs when the ongoing nourishment and potential cost of upstream issues is considered.

Please take the Option 2 which has the better outlook for long term effects north of the area as well, or else you just push the problem up the coast. Option 2 also delivers more car parks which are needed, ands splits the carparks so there's not a central concentration of traffic.

Option 2 is less likely to have a negative impact to the north in the long term.

If this plan is to go ahead it should include two walkways from the 45 degree parking to the beach. Nothing is shown on the drawings.

The existing toilet block should be replaced with a new one. People cannot be expected to walk all the way to the south toilets.

It is imperative to maintain as close to natural flow/erosion on the beach as possible, secondary to the costs. Thank you for your work so far.

2.07

This city has done a great job in managing this project, getting good information and consulting with the community.

I believe Option 2 is the better alternative from a cost and future point of view. Whilst the current community perception of a small group of the community is negative towards this, I think that if Option 1 were to be constructed then they would be negative about that option once it is built due to the massive size of groynes (and potential for loss of sand in front of the carpark if a seawall is required).

There are other benefits to bringing the carpark to street-level to reduce the incidence of unsavoury activities in that area. It would also enable better access to the park for parents with prams, cars stopping by at Salty's and the store due to the convenience of quick, short-walk parking.

I think it is a well-placed option from the point of view of the greater CoW community, being lower cost and with better access to the foreshore and the safer section of beach for small kids (smaller waves there). I think the only real loss and negative is the physical representation of old memories for the senior residents and impact on the residents directly across from the proposed site.

We live near the T intersection to the existing carpark and toilets. We see continually the bogons doing burn outs and the drunken behaviour from the bottle shop next door with people going down to the car park to get drunk. There is also a drug issue because they are hidden away from the road. Also, at the moment families can't park there and walk to Fred Stubbs Reserve.

Option 2, but no parking on Ocean Drive opposite Robert Road.

Option 2 appears to offer the better solution.

I grew up going to Quinns Beach for our holidays back in the days of Mrs Barlow having her shop caravan (and before) on the beach when the car park and boat ramp (which is no longer there) were used. The Mindarie Keys' groynes and modifications since have, I believe, changed the wave patterns along Quinns Beach forever. Keeping the existing groynes short will hopefully not impact the north of Quinns. To me it makes sense relocating the car park which is too low and now too close to the eroded beach as I don't believe the current car park is worth the continual maintenance. The dune rehabilitation makes sense as does the new proposed car park with a more orderly and greater number of car bays for use of the public. Therefore I prefer Option 2.

Option 2 is the most reasonable long term solution.

Option 2 with less parking. Minimum possible please.

Option 2. With the re-location of the existing carpark there will be less chance for hoons to gather out of sight as they currently do in the carpark that is out of sight from the main road.

Thanks for the information. It would be good to retain, protect and enhance this beach.

Option 2 but the less soil disturbance the better.

Please restrict access to all sand dune area to avoid further erosion/damage.

Option 2 is more attractive.

Option 1: The existing car park and toilet block are an eye-sore and add no amenity. It is a frequent trouble spot for littering, drinking and drug taking given the relative seclusion it offers from Ocean Drive. Extending the existing groynes (2 & 3) will significantly change the appearance of Quinns Beach and will lead to greater ongoing beach maintenance issues.

Option 2 is visually more appealing and adds greater amenity by increasing the parking facility in view of the community which should discourage anti-social behaviour.

Only adding groyne 4 (not extending 2 & 3) will have less impact on the beach appearance and should represent lower beach maintenance efforts ongoing and less impact to the north of Quinns Beach. By all accounts, Quinns Beach is a 'victim' of Mindarie Keys Marina. Let's not make Dog Beach or Jindalee Beach a victim of us.

I support the second option, but would like to see some extension of the second groyne. This would result in more protection for the road, infrastructure and the new carpark between Terry Rod and Robert road. This will result in more beach north of Groyne 1, and will be a compromise to appease those unhappy about losing a bit of old broken bitumen.

However, should Option 1 be the final result, the Council should install large speed humps right from the entry at the top at Ocean Drive and throughout the car park. They should also make it "one way" and create a new exit. This may help stop the anti-social behaviour.

Is there any information regarding the long term erosion outcomes and, if so, has this been a consideration in these management options.

If Option 2 impacts on the northern end of Quinns Beach will that be addressed?

3.06 3.14

3.06

1.01

Removal of the existing beachfront carpark would allow for the recovery of the dune system in this area and prevent further erosion. The council should also consider an elevated beach access ramp from the new 'proposed parking area north' over the revegetated dune.

There are already toilets to access at the south end in the restaurant complex. We need a small toilet block in the northern part of the beach. Trust me I have 3 grandkids and many beach days spoiled having to come back home for toileting needs.

Any reduction in the number of groynes would be preferable, including removal of the original groyne near the existing carpark. Let nature do its thing.

The current carpark is unsafe, cars drive at high speed and it is not safe for children.

Long term environmental impact should be a priority.

I would like a beach access path from the proposed parking area north. Through the dune re-vegetation? In the current plan, people who park here cannot easily access the beach.

If the second option will give more parking and a more sustainable outcome for beach preservation, I think it is better.

Extended groynes will cause bad erosion.

I consider the relocation of the carpark from the immediate erosion risk critical to the success of any coastal management strategy implemented at Quinns. I note that the proposed parking area south is situated on a section of beach at high risk to future erosion (i.e. tip of the cuspate). This erosion risk is offset only in the short to mid-term by the GSC revetment, which has a structural life up to, approximately, 10-15 years. My concern with Option 1 is mainly associated with cost-benefit. In particular:

3.01

- Will the groyne extensions perform as intended? Although I see limited value protecting the carpark anyway.
- How will funding be obtained?
- What expense will the additional cost have to the wider CoW community?

I'm not an Engineer but have lived in a number of coastal W.A towns and have seen the devastation of annual erosion along the beaches that have had rock groynes built at the southern ends of beaches. The council in Geraldton had extensive studies and research done into the best options to protect the coast however there is still significant erosion happening there too. I would like to think that the best options for coastal protection are chosen for the lowest impact on the long term health of the environment.

We think neither option is well thought through nor will it address the long term issues of erosion. However, if there is a need to do some intermediary work, then we opt for the path of least cost.

I strongly support option 2 since it seems the more sustainable solution. Sufficient natural dune stabilisation will, additionally, allow local ecosystems to develop and be sustained throughout the year. However, necessary fences/boundaries during the establishment phase of the natural vegetation must be ensured in order to guarantee success.

Council should consider additional road parking between the existing playground and the new toilet block and change rooms on ocean drive, similar to 'proposed parking area north'. Also additional beach access from this area might be useful if the dune structure allows it.

I am a very long time resident of Quinns, a beach house in the late 60s and then permanent from 86-87. There was a beach then at the café. Then Mindarie caused the disturbance of the currents and washed away the boat ramp and beach playground and a small area south of the parking area that has trees and a barbeque area.

Please learn from your mistakes. I am against carparks on the beach, both north and south, and extending groynes will cause damage further north. I think that wooden ramps are a good idea. I think Option 2 might work but no carparks further onto the beach.

I think this is a better idea due to the building of new change rooms/ toilet blocks. Having the toilets/change rooms away from the beach means parents/adults have to accompany their child to the building as quite a long way from the beach itself this is makes it safer for the child (as there are a lot of sick people in this world who like to stalk children). If they upgrade the old toilet/change rooms parents/adults will keep sending children their alone this scares/worries me every time I go to this beach.

The fact that it is only a "draft" proposal at this stage the relocation of the carpark must be the easier option. I cannot understand why the toilet block needs to be removed. It will serve the grassed area. Build a new one as per plan within playground area. Therefore the picnic areas will be serviced and this will justify the cost of mosaics that have just been installed.

Table 9 – General comments, not specific to either proposed option

General	
Comment	Response Ref.
I have lived in Quinns Rocks since 1974. The first groyne near the caravan park started the erosion to the north. Then it got worse when the 3 were installed. Remove the groynes and put in artificial reefs, it's the only way to stop the erosion	3.07
Due to construction of Mindarie Marina any proposal will be a sticky plaster. Future development should be investigated more thoroughly to establish environmental impact.	3.01 3.08
We do not believe the community should "vote" on the preferred option. This is a cop-out by the council. The decision should be made by the council after spending copious amounts of money in engineering/consulting fees in relation to the proposals. This issue has been created by 'approved development' by the council, so you need to fix it but not at rate payers' expense!	3.10 3.12
Which option requires most maintenance, is the most expensive, is the preferred option by the council and the per cent of rates in relation to proposal.	
I am familiar with the consultation process although we're aware proposal may already be decided. Please confirm how much each proposal will add to our rates per year. Please advise of cost of each proposal. Who are engineers?	
Communication between the City of Wanneroo and the Quinns Rocks community needs to be improved.	
Leave the dog beach as it is.	3.03
I would like the dog beach to be moved to between Burns Beach and Mindarie as all footpaths and roads leading to the dog beach are disgusting and unusable by the general public. It should be out in the bush. Thanks.	3.03
Stop changing our place and wasting money and then putting up rates to pay for it.	3.01
Enlarging the carpark at the rear of Portofinos or into the old caravan park area would be a much better option. Or improving/enlarging the carpark at the Dog Beach end.	
The addition of shade sails over the children's playground south of the existing carpark would make it sun-safe for the kids and much more pleasant for them to use in the warmer months.	
Littering of street verges in 'Old Quinns' region should be addressed by the relevant department and proper maintenance of the surrounds of sump sites should be mandatory.	
We need more shelter, particularly at the playground.	
We already have too much damage to the beach north of Robinson Ave. The slope at times makes walking very difficult. Not pleasant at all.	

It would be nice if someone gave consideration to the totally unacceptable and unsafe beach access below the cul-de-sac at the end of Waterland Point. Someone will have an accident soon.	3.11
Please do not extend the dog beach. I believed that this issue had been finalised as not going to happen at previous council meetings, but it has again been raised.	3.03
The fourth groyne is required as the existing groynes are contributing to sand erosion of the dunes opposite my property.	
As I have previously advised in writing to the City, additional wind break fencing and ranger patrols are also required to prevent people and dogs climbing the dunes and contributing to erosion along this stretch of ocean drive.	
Extend the wall of Mindarie Marina by approximately 500m and the problem will be rectified/solved.	
All groynes should be made longer by 300m or more, with a T shaped head.	1.06
Thank you for giving me a choice.	
How will this affect the Dog Beach?	3.03
	3.05