



Town of Cottesloe

12 October 2022

Dear Eric Street resident,

As you may be aware, when the Town Council considered the awarding of the tender to construct the Eric Street Shared Path, Council committed to considering the safety concerns raised by your fellow residents in the following resolution:

Resolution OCM125/2022

THAT Council:

- 1. AWARD the scope of works associated with T03-2022 mentioned in Option four to ADVANTEERING for a contract sum of \$832,980 (excluding GST);***
- 2. APPROVES a budget amendment of \$175,000 from the Active transport Reserve for the additional cost required, increasing the total amount coming from this Infrastructure Reserve to \$317,466.***
- 3. REQUEST the Administration to obtain a copy of the reported "Road Safety Audit" commissioned by Eric Street residents, within two (2) weeks of this decision, and consider and seek if necessary, external professional advice on the matters raised within the Road Safety Audit, prior to the finalisation of final construction plans and construction commencing.***
- 4. REQUEST the Administration to provide feedback to Eric Street residents regarding issues raised in the Road Safety Report prepared by the residents.***
- 5. REQUEST the colour of the Asphalt to be as muted / toned down as possible, noting it is required to be red for safety reasons.***
- 6. REQUEST ADVANTEERING to take specific care whilst cutting through driveways to ensure minimal damage occurs and reduce any patching required by ensuring it is cut to size where practically possible.***
- 7. REQUEST ADVANTEERING takes specific care to ensure lighting has minimal impact on residents.***
- 8. AUTHORISES the Mayor and/or Chief Executive Officer to sign the Contract and affix the Town's Common Seal (if required); and***
- 9. AUTHORISES the Chief Executive Officer or delegate to manage the construction contract, including provision of possible variations (provided the variation is necessary in order for the goods or services to be supplied, does not change the general scope of the contract and is managed within the allotted budget allocation).***



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Subsequent to the Council Resolution, the Town of Cottesloe received safety concerns (not a Road Safety Audit as the Town had been previously advised) from DVC Consultants via Eric Street resident Mr Tom Jowett, and Mr Richard Stallard (a retired Road Safety Auditor).

As per Part 3 of the resolution, these concerns were considered by both the designer of the Eric Street Shared Path and the Town's Engineering Department, and a response was prepared. Inline with the Council's resolution (Part 3), the Town's responses to these concerns were subsequently reviewed by a Road Safety Auditor (Stantec (previously Cardno)) to ensure there was an appropriate response to each concern raised.

The Town's response to these concerns is attached for your review (Part 4 of the resolution). You will note in our response that there are no significant changes to the design as a result of this review, and the Town plans to proceed with construction of the Eric Street Shared Path in the coming weeks.

The Town of Cottesloe would like to thank you and your fellow residents for your feedback and assistance in ensuring the new Shared Path is safe for all future users.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Matthew Scott', is written over a light blue rectangular background.

Matthew Scott
Chief Executive Officer



DVC Consultants Road Safety Review - Eric Street Shared Path

- 1) General points pertaining to the length of the route:
 - a. Narrow strip of native planting (colour coded purple in legend) between new shared path and road is troublesome in terms of maintenance and debris onto the shared path and into the road.

A planting strip is a usual Town of Cottesloe treatment to provide amenity and aesthetics. In this case the Town is prepared to infill this 300mm strip to remove any safety/maintenance concerns.
 - b. Connections between the existing footpath and the new shared path should be splayed to allow more manoeuvring room, particularly those in wheelchairs, with prams and cyclists.

Splays have been included in subsequent revisions, including installing radii (minimum 2.5m design curvature) where the new shared path intersects with existing footpath.
 - c. There appears to be no rationalisation of the existing footpaths with connections being made wherever they cross, creating duplication, and in some locations, introducing safety hazards that could be avoided.

No changes are proposed. This has been considered as part of the design process and as such, risk at these locations are low.
- 2) Marine Parade – Gadsdon Street (Dwg 21-10-148/100-L)
 - a. At the Marine Parade end, the shared path forms a barrier between the parade of shops and the angled parking. Pedestrians will need to cross the shared path to and from their vehicles with cyclists potentially travelling at speed in the downhill direction. This arrangement could be avoided, reducing the potential for pedestrian/cyclist crashes by moving swapping the parking and shared path alignments.

No changes are proposed. The shared path along the OBH carpark will remain at the kerb side as per the current design until the future development of the OBH site. Appropriate signage will be provided to both pedestrians and cyclists.
 - b. Although the aisle widths may be to Australian Standards there is a risk of vehicle overhang into the new shared path. Furthermore, there does not appear to be any kerbing to the shared path at the west end, hence reversing vehicles may encroach into the shared path space.

No changes are proposed. The standard aisle width between the angled parking and the edge of the path minimises the risk of vehicles reversing into the shared path. The situation will be monitored and modifications made if required.



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- c. The off street parking bays near Gadsdon Street do not conform to blind aisle requirements of AS2890.1 Off street car parking facilities.
While correct, this does not have a safety impact on the shared path. This will be reviewed as part of the future OBH redevelopment.
 - d. The skewed alignment of the raised plateau to approaching traffic will be difficult to negotiate for traffic. The transition should be at right-angles to the traffic stream.
As per response to 2(c).
- 3) Gadsdon Street – Broome Street (Dwg 21-10-148/101-L)
- a. West of the blister island, the shared path would be better placed on the existing footpath alignment, thus providing a safety buffer from the road.
No changes are proposed. This proposed alignment has no safety impact on the shared path.
 - b. The curve at the west end of the blister island is sharp and would be difficult to negotiate in combination to the slope and bicycle ramp down to cycle lane. It is understood that this location may be constrained by the existing retaining wall.
As per response to 3(a).
- 4) Gadsdon Street – Broome Street (Dwg 21-10-148/102-L)
- a. The westbound off ramp for the cycle lane, on approach to the blister, is not clear.
No changes are proposed. This is a constrained environment, and there is no ramp at the slow point.
 - b. The reverse curve of the shared path appears tight for cyclists at the southwest corner of the roundabout. A smoother reverse curve tying in directly to new shared path alignment at crossover be preferable and increase the safety buffer between the road and the new shared path.
A smoother reverse curve would permit cyclists to cross the road at high speed which would be a higher risk situation. The design radius ensures cyclist safety by forcing them to slow down before crossing the intersection.
- 5) Broome Street – Chamberlain Street (Dwg 21-10-148/103-L)
- a. The reverse curve of the shared path appears too tight for cyclists at the southeast corner of the Broome Street roundabout. It leaves too little room between the crossover pedestrian ramp to Eric Street and the new path. Also, there is no rationalisation of connections to existing footpaths.
A smoother reverse curve would permit cyclists to cross the road at high speed which would be a higher risk situation. The existing path connections follow pedestrian desire lines. The design radius ensures cyclist safety by forcing them to slow down before crossing the intersections. The lower speed environment compensates for the reduced widths. Existing footpaths will be rationalised in the near future but until such time, there needs to be a safe connection between both infrastructures.



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- b. The new shared path alignment unnecessarily meanders between HN35 and Chamberlain Street, directing cyclist towards Eric Street and then away.
No changes are proposed as the path alignment ensures proper separation between the edge of the new shared path and light poles within the vicinity.
 - c. The layout of the shared path, existing footpath and tie-in connections are confusing at the southeast corner crossing point to Chamberlain Street with little room behind the pedestrian crossing points and a low wall introduced to force path users away from their desire lines. These issues should be resolved through an improved design.
The existing footpath alignment (southern link) tie-in with the new shared path is not achievable due to conflicts with the installation of a new cycle safe pedestrian grab rail which is required as a performance solution through this steeper section. Tactiles will be installed on the southern link where it intersects the new shared path.
- 6) Chamberlain Street – Marmion Street (Dwg 21-10-148/104-H)
- a. Mid-distance between the blister island and Chamberlain Street, the length of cycle lane between cross overs to HN 43 and 45 is redundant. This provides opportunity to modify kerb line accordingly to provide a safety buffer to the road.
No changes proposed - this has no impact on the new shared path. The existing shoulder demarcated by an edge line on Eric Street is not a cycle lane and improves cyclist safety by increasing traffic separation from the new shared path.
- 7) Marmion Street – Charles Street (Dwg 21-10-148/106-H)
- a. Existing path at southeast corner of roundabout is steep and will be even steeper with the installation of shared path. Grades to the existing north-south footpath should be reduced by realigning the footpath.
This follows the desired lines for users on the north-south footpath. Hand rails together with anti-skid surfacing will be installed on the northern section of the existing footpath and this can assist the mobility impaired. There is also the performance solution option for the mobility impaired to cross Eric Street at the south-western corner.
- 8) Charles Street – Curtin Avenue (Dwg 21-10-148/107-E)
- a. Unnecessary short section of shared path proposed just west of Charles Street. This length gives added complications with tie-ins to the existing footpath and should probably be omitted and the eastern end of the shared path tied in further south.
No changes proposed. The short section meets desired pedestrian desire line requirements and provides a safe connection from the formal path onto the service road where vehicles are required to share the space with cyclists.
 - b. There is an unnecessary reverse curve in the new path alignment just west of cross over to Jens Park, which could be removed.
No changes proposed. The reverse curve aligns the shared path at right angles to the driveway/crossover, which improves overall safety at this section.



Richard Stallard Review

- 1) Driveway crossover design has been amended but still includes dangerous 25 mm lip as per previous design. The revised design would largely avoid the issue of degradation of the existing on-road (westbound) bicycle route provided there was no 25 mm lip.
No changes proposed. A 25mm will be the maximum lip height for drainage purposes; however will be reassessed during construction with regards to existing road levels.
- 2) A few footpath/shared path junctions have been amended to show a small, insufficient, radius (for example near eastern entry to Eric St service road), but most are unaltered.
No changes proposed. The tight radius ensures cyclists slow down before entering a conflict point.
- 3) Design for concrete path joints has been amended to specify corrugated lock joints which will minimise vertical movement between the path segments and prolong the useful life of the path.
The shared path is constructed in asphalt.
- 4) Design for crossover at Jen's Park has been amended to show continuous path across crossover but kerb ramps are probably not necessary. Path level should be adjusted to match level of existing crossover level (provided no drainage issues) to avoid unnecessary ups and downs for path users.
The redundant text on drawing 107 has been removed and the design has been done to match existing crossovers to minimise the number of impacted driveways.
- 5) Location: Throughout
 - a. Issue: Wrong type of kerb ramp used. The drawings include details for 2 types of kerb ramp, Type A and Type B, as per Main Roads WA standard drawings. Type A is a 3-plane style which is the type specified in Australian Standard AS1428.1 for Disabled Access. Type A is also preferred for bicycle use as it provides room for turning movements by cyclists turning on or off the adjacent road. Type B has square corners which inhibit turning movements by cyclists. Generally, Type B should only be used on median islands where turning movements are not expected. Although the detail drawings clearly indicate the Type A ramps should be used for all verge locations, the path drawings consistently show the Type B ramp everywhere.
Type A ramp without grab rail has been adopted.



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- 6) Location: Just west of Gadsdon Street
- a. Issue: Steep Gradient. The drawings show the gradient of the path as 17.671% for a short distance and averaging 10% for a longer distance. These gradients violate disability access requirements and would be very difficult for many casual cyclists, i.e. the target audience. In comparison, the gradient of the current on-road bicycle route along Eric Street doesn't exceed 4.1% (from RideWithGPS).
- No changes proposed. The Human Rights Commission Advisory Notes allows factors such as existing terrain to be taken into consideration when designing a path. A grade modification will require major unaffordable earthworks throughout the carpark and is only temporary. The final design will be installed as part of the OBH redevelopment and due consideration will be given to vertical alignments in that design. Contour surveys also show that sections of Eric Street have a gradient of 8% rather than the mentioned 4.1%.**
- 7) Location: Between Gadsdon St and Broome St
- a. Issue: Degradation of Existing On-Road Bicycle Route (Westbound). The path impacts negatively on the westbound direction of the existing on-road bicycle route by removing the bypass around the "slow point". While the design does include a 1 m wide ramp to re-enter the on-road advisory bicycle lane west of the slow point, there is no clear entry point by which to transition from on-road to the path prior to the slow point. The advisory bicycle lane terminates near the crossover to Lot 107. Suggested Action: Reconfigure the crossover to driveway to Lot 107 as a wide kerb ramp, to allow cyclists to safely transition from on-road to path. Ensure that the lip of the crossover is flush rather than the standard 25mm lip indicated on Town of Cottesloe crossover drawing. Adjust the edge line marking to taper in to meet the west end of the crossover location.
- No changes proposed. The on-road facility is not defined as a cycle lane, rather a painted edge line. There is no requirement to have ramp links and further requests to make crossovers flush are in contradiction to this request. The current access ramp configuration is considered sufficient.**
- 8) Degradation of Existing On-Road Bicycle Route (Westbound)
- a. The path impacts negatively on the westbound direction of the existing on-road bicycle route by removing the bypass around the "slow point". In contrast to the western-most slow point, no provision at all has been made for on-road cyclists to use the path to bypass the slow point.
- No changes proposed. The Eric Street shoulder is not a designated cycle facility. Cyclists and vehicles sharing the road are required to comply with the Road Traffic Code (2000) such that vehicles must not try and overtake cyclists at slow points without the one metre clearance.**



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- 9) Location: Intersection of Chamberlain St.
- a. Issue: Tortuous Path Crossing. Zero path radius on approach to kerb ramps. Cyclists would have poor visibility of turning traffic from Eric St as they approach kerb ramps.
No changes proposed. A Give Way marking requires cyclists to stop if required to give way to vehicles entering Chamberlain Street from Eric Street. Placing the ramps close to Eric Street will not provide that safe buffer between vehicles turning into Chamberlain Street and cyclists crossing the same side road. It would seem the concerns raised have not taken into account consideration of the existing terrain, features and gradients.
- 10) Location: Throughout
- a. Issue: Dangerous lip at Driveway Crossovers. Reconstructed crossovers are specified to be done as per Town of Cottesloe crossover drawing which includes a 25 mm lip where the crossover meets the road surface. Such a lip is a proven safety hazard for cyclists especially when the crossover is traversed at a shallow angle. Note that it is quite likely for cyclists to use driveway crossovers at various locations to access the path, for example, if they live on the north side of Eric Street.
As per response to 1)
- 11) Location: Throughout
- a. Issue: Many Driveway Crossovers intrude into PSP Surface. If constructed as per Town of Cottesloe crossover drawing, the crossovers will introduce vertical discontinuities into the path surface up to 1m back from the kerb line. The drawings clearly show the standard crossover intruding into the path surface at multiple locations.
The intrusion of crossover ramps has been modified to allow for a smoother shared space. This is not a significant change in the design.
- 12) Location: Just west of Chamberlain St
- a. Issue: Shopping Centre Access no specific provision has been made for cyclist access to the shopping centre.
The Issued for Construction (IFC) plan has been modified to include the upgrade of the existing pram ramp, west of Chamberlain Street.



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13) Location: Both Ends of Shared Path

- a. Issue: Poor Connections to Existing Railway PSP and Coastal Shared Path Connections to existing cycling paths at both ends are circuitous and of very low standard, for example, crossing to Railway PSP requires 2-stage signalised crossing via small triangular traffic island presently cluttered with grab rails.

No changes proposed. The traffic signals at Curtin Avenue provide a sufficiently safe crossing and the final connection to the PSP along the railway will be considered as part of any Eric Street Bridge Upgrade design. The section west of Gadsdon Street including the Marine Parade crossing will be considered as part of the OBH redevelopment design. Cyclists are required to give way to traffic when crossing Marine Parade. There is also a pedestrian crossing on Marine Parade just north of Eric Street.

14) West end of Path, Adjacent to OBH

- a. Issue: No protection to Path Users from Vehicles Reversing from Parking Bays. Path is merely green paint on the existing road surface here, so there is nothing to stop vehicles reversing over the path. Clearly, this is not consistent with the intention of the shared path being to cater to less-experienced cyclists.

No changes are proposed. The shared path along the OBH carpark will remain at the kerb side as per the current design until the future development of the OBH site. Appropriate signage will be provided to both pedestrians and cyclists. The standard aisle width minimises the risk of vehicles reversing into the shared path. The situation will be monitored and modifications made if required.

15) Location: Various

- a. Issue: Adjusted Footpath Levels. Adjustments to footpath levels to match new path are likely to introduce excessive gradients. This definitely happened as part of Nedlands Safe Active Street project where some altered sections of footpath no longer meet requirements for disability access.

No changes proposed. Existing paths and ramps currently do not meet disability standards but where practical there have been changes included to achieve improvement. This approach is consistent with the Human Rights Commission advisory notes that gives Local Government discretion to consider existing terrains and practicality in the design of shared paths.

- b. Issue: Lack of Radiused Corners at Junctions of Shared Path and Footpaths especially as cycling is now permitted on footpaths in WA, it is extremely likely that cyclists, especially inexperienced, will use footpaths as feeders to access the Shared Path.

Where required a minimum 2.5m radius will be provided.



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16) Location: Throughout

- a. Issue: Concrete Path Joints. The drawings specify that expansion joints are to be Caneite or equivalent. Experience over many years indicates that Caneite joints are prone to vertical movement due to tree roots, etc. and also encourage weed growth.

As per response to 3).

17) Location: Entire Project

- a. Issue: Existing Crossover into Jen's Park. The drawings show the path terminating either side of the crossover implying priority to vehicles using the crossover.

As per response to 4).

18) Location: Entire Project

- a. Issue: Project is incorrectly described as a PSP on Town of Cottesloe website and documents. A PSP or Principal Shared Path is a high-standard shared path typically constructed along railways and major road corridors. While there is no legal difference between an ordinary Shared Path and a PSP, this Eric Street path is clearly not of PSP Standard.

Though not a safety issue, essentially both a PSP and shared path are fundamentally the same in terms of use and have only been named differently for hierarchal reasons. Correct terminology will be used in the future.