



WILDFLOWER SOCIETY OF WESTERN AUSTRALIA (Inc)

20 October 2021

Main Roads Western Australia
Don Aitken Centre
Waterloo Crescent
EAST PERTH WA 6004
By email

Attention: Sarah Sharman

Re 2185 Northam-Pithara Road (M032) Seal Widening SLK 5.8 – 27.00

The Wildflower Society of Western Australia (WSWA) welcomes the opportunity to provide comment on the Clearing Assessment Report (CAR) completed as part of requirements of the Statewide Clearing permit CPS 818 for the proposed seal widening of M032 SLK 5.4 – 27.00 (“the Project”). Members of the WSWA inspected the site on 7 October 2021 with a view to commenting on the CAR and the seal widening proposal. Following the site inspection and review of the CAR, WSWA considers the large eucalypt trees on the west side of the road should be conserved as they are not well represented within the broader region around the road, whereas the east side of the road is predominated by Acacia regrowth north of Habgood Road, where the road reserve is restricted to a 20m width. South of Habgood Road, the road reserve back to Southern Brook Road is a 40m width and the vegetation on the east side of the road appears to be regrowth as the trees on the east do not include larger specimens of Eucalypt observed on the west side.

While agreeing that the widening of the formation is required to provide an ample width of shoulder and adequate table drains, WSWA is of the view that all works proposed should be conducted on the east side of the road to conserve the mature eucalypts that can be observed on the west side throughout the project area. Should this require additional space, WSWA considers that land acquisition to the east of the road should be carried out to provide the necessary space for construction.

The Clearing Assessment Report

WSWA finds the mapping provided in the CAR was not adequate in establishing the actual areas to be cleared and to identify the location of the vegetation types described. The mapping does not allow detail of the areas of vegetation to be identified or verified when completing a site inspection as there is no mapping of these areas provided. The supporting survey documentation should be appended to allow the vegetation details and biological features to be reviewed by WSWA as part of their overall consideration of the clearing proposal.

The level of design information is not sufficient to consider the CAR in any detail. As a result, WSWA has had to make assumptions regarding the design proposed when it has inspected the site. WSWA was not able to meet with MRWA staff on site within the review period to discuss the detail of the design and potential modifications that could be accommodated.

The Current Alignment

The current alignment appears to be a 6.8m wide seal with edge lines. Much of the alignment has a table drain on the east side of the road with the west side being a shallow fill batter except in areas close to valley floors which have also have a table drain on the west side.

A section of road at SLK 20.0 has already been reconstructed with sealed shoulders and appears to occupy the full 20.0m of the road reserve with the drainage, as shown in Photograph 1 overleaf. About 500m south of this section, the entire shoulder has been eroded by water draining downslope from the top of the hill at about SLK 18.0, which suggests a larger table drain is required than currently available. The line of trees opposite this area of table drain extends from SLK 18.2 to SLK 19.3 on WSWA's estimation with an offset of less than 1.0m from the existing edge of bitumen for some individual trees.

Immediately south of Habgood Road, a series of large Eucalypts sit within 1.5m of the existing edge of bitumen, as shown in Photograph 2.



Photograph 1: Area of reconstruction in area of different seal shade



Photograph 2: Large eucalypts growing on west side of the road from SLK 18.2. Reconstructed section shown in Photograph 1 is located before the left hand bend in the distance. Washed out table drain commences before large tree on right hand side. Trees on the left range in age to in excess of 100 years.



Photograph 3: Tree in foreground is 1.3m to edge of bitumen. Tree in background is 0.8m to edge of bitumen. Both trees are in excess of 50 years old.

The Existing Vegetation

As stated earlier, the road reserve from the start of the project area to the Habgood Road intersection is 40m in width then 20m width beyond that intersection to the end point of the project, based on the existing fence line locations.

The right hand side of the road appears to be regenerated vegetation whereas the left hand side includes many aged trees. The vegetation on the right hand side appears to be predominantly *Eucalyptus loxophleba* regeneration in the 40 m road reserve that then grades through a transition into a dominance of *Acacia* species, most frequently *Acacia acuminata*, with *Casuarina obesa* being evident in the valley floor areas where high water levels and soil salinity are noticeable.

Much of the vegetation that exists on the right hand side of the road is also located within the existing road drainage system (foreslope and backslope of the table drain) and would not have remained had the road drainage been maintained. Therefore, its presence is not necessarily through

design, whereas the vegetation on the left hand side was deliberately retained by design, if the age of many of the large specimens is an indication.

Regionally, the vegetation cover in the environs surrounding the project area contain less than the recognised 30% of vegetation cover on private land considered to be the minimum requirement for sustainable ecological function (EPA, 2000). The area around the project area has less than this considered minimum.

The significance of the vegetation in this area should not be assessed through the presence/absence of individual species. The significance lies in its existence as a remnant, despite the overall condition and extent of the remnant within the project area.

The Project

The Project proposed is to to widen the road the existing sealed surface of the road, extend culverts to account for the widening, construct drains and rehabilitate a 5 km section of the road within the Project area. WSWA does not disagree that this work is needed to improve road safety, but is does believe that the desired outcome should be achieve by an alternative method to that proposed.

WSWA believes the objective of improving road safety would have less impact on the environment if the road was to be widened on the right hand side only and that land be acquired where the road reserve cannot accommodate the proposed works. WSWA is of the view that the aged trees most often found on the left hand side of the road should be protected as their intrinsic value exceeds that which will arise from modifying the road design and acquiring land to accommodate that design. Photograph 1 includes a section of road that has already been widened to the standard proposed and, if this is an typical example of the work proposed, this would indicate all remaining vegetation is likely to be removed from the 20m road reserve as all vegetation evident in that section, as observed in historical photos on Google Earth, was removed when this work was completed.

WSWA would seek to have the use of safety barriers extended to allow the retention of all aged trees along the left hand side of the Project area so their intrinsic value in the landscape and the roadscape is protected. These trees offer a visual diversity in the roadscape that allows a break in the visual monotony that occurs where vegetation is non-existent or where the viewscape along the road is visually consistent. The diversity of viewscape is important to the safety of the road (Centre for Road Safety Research, pers.comm).

WSWA recognises the modification to drainage design proposed to reduce the width required to accommodate the Project. However, it is evident that there is an existing problem with the volume of water which flows in some of the sections long steeper gradients which may require additional drainage works to minimise the excessive scouring currently evident that is currently undermining the road and the roods of some trees in those sections.

WSWA would suggest that placement of drains on one side of any mature trees is also likely to adversely affect the long-term persistence of those trees and reduce the ability of the trees to withstand strong winds. Our experience is that placement of drains in front of and/or behind large trees results in their reduced stability and increased frequency of falling due to high winds and decreased soil strength when wet. As a result, WSWA is of the view that drainage should divert excess water away from areas where existing stands of large trees are retained.

Conclusion

Following consideration of this CAR and inspection of the site, WSWA is of the view that the Project should be modified to widen the road section under consideration on the east (right hand) side of the road to allow for the conservation of the aged trees that are predominantly on the west (left hand) side of the existing road. WSWA recognises that this modification will require acquisition of land and modification of the road design to accommodate such change, but WSWA believes the cost of these changes does not exceed the intrinsic value of the aged trees that will be retained.

WSWA recognises that much of the vegetation to be cleared on the east side of the road in the sections of 20m road reserve is regrowth following construction and would likely regenerate if not controlled after the work is completed.

The visual amenity offered by the mature trees, many of which exceed 100 years of age, is beneficial to the safety of the road due to the varied viewscape they offer and this has benefit to road safety. Conservation and protection of these trees is consistent with the project objectives.

WSWA looks forward to being able to inspect the site with MRWA staff to explore these ideas further.



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