

Submission to:

A.C.T. Environment, Planning and Sustainable Development Directorate – Planning

#### Re: Development Application number: 202240445

(Umbagong Bridges, Umbagong District Park, Florey Drive, Latham)

Suburb:	Latham
Block:	1
Section:	144

Umbagong Landcare Group (ULG) welcomes the opportunity to provide a submission in relation to the Development Application to demolish 3 pedestrian bridges in Umbagong Park and replace them with "*3 new lightweight modular steel bridges, landscaping and associated works*".

Umbagong Landcare Group is one of the oldest landcare groups in the ACT and it cares for roughly 50 ha of district park located along the Ginninderra Creek corridor between Southern Cross Drive (Kippax) and Ginninderra Drive (Flynn). Its members participate in monthly working bees to preserve ecological values. They have sponsored and conducted heritage and ecological surveys to document and raise awareness of these values and the group also engages in advocacy to help inform park management.

ULG greatly appreciates the extent to which TCCS has involved the landcare group in planning and design for the bridge replacement. The group has participated in three on-site visits with TCCS to discuss plans, share ecological and heritage knowledge with consultants and it has submitted 2 reports (ecology and heritage) to assist this process. It was also invited to provide a list of suitable plants for revegetation which it has also provided.

Umbagong District Park is one of the best-preserved riparian habitats of Ginninderra Creek, forming part of a natural wildlife corridor along through urban Canberra. Umbagong also has sensitive and valuable habitat and vegetation away from the wet creek banks. Some of that is in plantings of trees and shrubs that have now reached significant age. However, there are also areas of rich remnant grasslands that either classify as Native Grasslands, or Natural Temperate Grassland, the latter being Critically Endangered. While the Environmental Report found no grassland remnants very close to the bridges, there is potential for environmental impact from machinery moving between the Park entrance and the 3 bridges, and also immediately outside construction-fence lines of the 3 sites.

Extensive planning and careful actions must be mandated to maintain Umbagong's habitat and heritage values (see photos 10-39). There needs to be minimal impact, not maximum convenience for design and construction. Major impact followed by restoration must be considered the least preferred option since the success of revegetation can't be guaranteed and would be challenging in areas that will be flooded with fast flows. It is in this context that ULG has reviewed the DA and has made suggestions and recommendations.

Appendix 1: Photographs referred to in the submission Appendix 2: Summary of Recommendations

#### 1. Bridge Design

The stated aim of the new bridges is:

A 'light touch' design approach has been chosen, similar to the Tidbinbilla 'Sanctuary' pedestrian bridges. 'Light touch' refers to a design that will enable a **minimal disturbance footprint during construction**, as well as referencing the **visual impact of the structures** in the landscape.

('Design' tab of TCCS Umbagong Bridges webpage: <u>https://www.cityservices.act.gov.au/Infrastructure-Projects/belconnen/umbagong-bridges</u>)

We are concerned that in a few instances, the proposed design is not consistent with the 'light touch' objective.

#### 1.1. Footings

The footings of the existing wooden bridges are spaced 4m apart (longitudinally). See Photos 1 and 2.

The design documents submitted with the DA ('Landscape Plan.01, .02, .03', drawings L400, L401, L402 and elevation drawing L700) indicate that the footings of the new design will be a mere 1.8m apart, both latitudinally and longitudinally (if measured using the drawing scale). This means that while the new modular bridges are said to be 'lightweight' they appear to require twice the support of the existing heavy timber bridges.

It is possible that the design drawings are still 'concept' drawings and do not accurately convey the spacing of the footings. However, we suggest that this number of footings is not consistent with a 'light touch'. Please verify if this number of footings is indeed required and, if yes, consider a lower impact design with wider-spaced footings. In the case of Bridge 1193, that number of footings would also have a strong visual impact, appearing as a 'forest of poles'.

This number of footings would create twice the amount of disturbance to the land below the bridges as footings with the current 4m spacing. While invisible and below the surface in the case of the two swamp bridges (1194; 1195), the footings involve significant amounts of concrete (e.g., detail plan option 1 of drawing L722) involves a concrete block of 500mm W x 1800mm L x 500mm D). We would prefer footing options that cause minimal disturbance.

We are particularly concerned about the footings of **Bridge 1193**. The rocky outcrop where it is located is an important habitat area for many riparian species and is a breeding area for many (see Photos 21-37). It is also a site of historic interest (Photo 39) and there is a need for visual impact to be considered. The environment consultant report (p.15) advised re-using existing footings where possible (see Photos 4-5). It is unclear to what extent this will happen. The best information regarding this is a vague statement in the Demolition Plan (Drawing L200) saying 'Coordinate existing footings with new bridge and demolish where required'.

The existing footings of bridge 1193 are in many instances bolted directly into the rock, requiring no concrete (see Photo 3). The Rocky Outcrop is made of volcanic rock, and it is stronger than concrete.

The size of footings proposed for bridge 1193 are ambiguous. Drawing L400 (landscape) and L700 (elevation) suggest 60cm square. In the detail drawing of the footing options (Drawing L722, labelled 'Plans – details.02' in the DA), Option 4, is the only option that mentions natural rock, entailing a concrete footing of 1000mm W x 1000mm L x 300mm D. At a spacing of 1.8m between posts, this would mean almost the entire under-surface of the Rocky Outcrop Bridge would be blanketed in concrete. This could not be described as 'light touch'.

The Rocky Outcrop is a sensitive biodiversity area and a breeding area for Cunningham skinks and Eastern Water dragons (see Photos 27-31), hence the disturbance of the rocks (digging, drilling and especially concreting) should be kept to a minimum. Reusing the existing 4m-spaced footings would be by far the best solution.

It is likely that the DA diagrams are simply not sufficiently detailed and that the bridge designers plan to bolt footings directly into the rock where possible. If this is the case we would welcome clarification and additional detail on this.

#### **RECOMMENDATION 1.1:** That consideration be given to minimal impact footings:

- Increasing the spacing of footings, given the existing heavy bridges have footing spacings of 4m
- Assessing the feasibility of reusing existing concrete footings of Bridge 1193 to minimise disturbance, as per ecological consultant report recommendation
- Footing options that have minimal surface area of concrete
- Bolting footings direct into the rock where possible to minimise impact and disturbance for Bridge 1193.

#### 1.2. Viewing platform for Bridge 1193

TCCS has been very accommodating in responding to public requests for a viewing platform at Bridge 1193 with a lower railing so that pedestrians can continue to enjoy the wildlife, while at the same time conforming to current safety standards for cyclists. This bridge is the most spectacular area of the park, very much enjoyed by visitors. It is a place where people enjoy looking down at the river and scenery, watching wildlife and photographing. It also serves to build connections in the community, a place where people linger, meet and chat.

ULG has some suggestions in relation to the viewing platform design.

<u>Position</u>: The DA design ('Landscape Plan.01', drawing L400) indicates that the viewing platform is currently positioned directly over a large rock ledge used by sunning lizards. It would be better placed over the adjacent 'grassy area' which is of low habitat value (primarily rank exotic grasses). See Photos 6-9.

<u>Size</u>: In keeping with other lookouts like Shepherd's Lookout, the viewing platform only needs to be of modest size, where a few people at a time are able to comfortably see over lower railing. The current design (if measured according to the scale on the drawing) would be 7m long x 2.3m wide (if added to the outside width of the main path, the total width would be 4.7m according to L701). We suggest this is larger than needed and it seems out of scale with the site. A smaller platform would be lower impact (less shading to reptiles), would require fewer footings (only one row), and would hopefully be cheaper.

The existing viewing platform design includes a bench 2.42m long (drawing L701). A smaller viewing platform may require a shorter bench to ensure access around it. 4 benches of 2 different designs between Bridges 1194 and 1193 were measured and all were 1.8m long, which would be sufficient.

<u>Shape</u>: A curved rather than an angular viewing platform design would be preferable to blend in better with the sinuous line of the bridge.

A selection of comments received from ULG members is copied below:

"I think the viewing platform can be much smaller than designed. I know it is good to stop and look, away from the imagined bikes swishing past, but I think that most times it would only be a few people together, not groups of ten. So the platform could be as small as 4 m long and 1.5 m wide. The only reason for a platform is to have a lower rail, and if the only way to get that is a 'platform' it can be quite narrow, because the path is so wide.

I think that it would be better to have the platform over the scrubby gully between the rock outcrops. That way anyone on the platform is not looming over any lizards below, and so may be less disturbance to them, and it still gives a good view of the creek. More importantly, it reduces the amount of shade cast onto the rocks, and sunshine is a critical item for basking lizards."

"covering that boulder would be a threatening process for the species we've all seen there"

"I would rather have no viewing platform at all than one that big"

"Re the platform size, we also feel that smaller is better and in a spot that minimises shading of rocks.... viewing platform will need to be big enough to get a bike or a wheelchair off the main path with their user?"

"There may be considerations re disabled access - room for wheelchairs, mobility scooters (if they can get to the viewing platform, of course) or other considerations. But yes, the overriding concern is the effect on the rock platform itself - overshadowing lizard basking places and turning it into a concrete slab are not what we want."

#### **RECOMMENDATION 1.2: That viewing platform location and design be modified**

- Positioned over an adjacent grassy gully rather than over a rock platform used by basking reptiles
- Smaller in size to reduce 'footprint'.
- If possible a curved shape instead of angular to blend with the rest of the bridge.

#### 1.3. Bridge width

The current width (outside railings) of the bridges, is 1.6m. The inner width (inside railings) is roughly 1.5m.

In earlier consultations, ULG members expressed concern that the improved surface of the new bridge design would enabler faster cyclists and that pedestrians would not have sufficient space to move away. This was only a concern for bridge 1193 due to lack of visibility round corners. We suggested various measures to address this, including a pedestrian only bridge or a zig-zag 'slow down' barrier at the beginning and end of each bridge.

Measures suggested by ULG were not suitable for various reasons. TCCS therefore suggested widening the bridges beyond the standard width of 1.8m to 2m.

Having viewed the DA diagrams we feel the standard 1.8m will be sufficient as it is apparent from the diagrams that 1.8m (now 2m) is the <u>inside</u> width (inside railings and hand holds), and not the outer width as originally believed from studying artist impression drawings. We therefore believe the original concept width of 1.8m (significantly wider than the current 1.5m inside width) will be sufficient. The 1.8m width is also consistent with the objective of minimising bridge 'footprint'.

The incorporation of a dedicated 'viewing platform' in the current design also reduces the likelihood that pedestrians will come into contact with bikes.

#### **RECOMMENDATION 1.3: That bridge width revert to standard to reduce its footprint**

• Standard 1.8m 'inside' width for all bridges

#### 2. Environmental management

#### 2.1. Weed management

There is a significant risk that vehicles and machinery could transport weeds at the site (ensuring vehicle hygiene is one of the Environmental Report recommendations, p.15). The Environmental Management Plan should include protocols for material and machine hygiene to ensure vehicles and machines are cleaned before entering the park and also that they are cleaned between bridge sites as well. This requirement needs to be well-communicated to all workers.

A particular concern is that the swamp at Bridge 1195 has been colonised by exotic mint (likely via stormwater drains) and machinery working on that site needs to be well-cleaned before it is used at either of the other bridges so mint is not transported to the other swamp or to the Ginninderra Creek corridor.

#### **RECOMMENDATION 2.1: That vehicles and machinery is cleaned to avoid spreading weeds**

- before entering the park
- between work at different sites in the park
- ensure effective processes to communicate requirements to all personnel involved in the project

#### 2.2. Access

Some of the 'desire lines' through bushland are highly erodible and government grants have been provided to restore the tracks. They contain species and habitat types protected by the EPBC Act.

In view of this the environmental consultant report recommended that access needs to be along formed vehicular gravel paths or the existing bitumen foot paths. This is reflected in site access drawing L010, a map indicating 'No access along goat track. Heavily degraded and erosive' and 'Contractor to use existing track network ONLY'. So that vehicles do not inadvertently use this track, there need to be good communication processes with all personnel involved in the project, including TCCS staff and contractors, to ensure these access routes are adhered to. On-site signage and temporary barriers (e.g., bunting) may also help prevent inadvertent use of these tracks while work is happening.

# **RECOMMENDATION 2.2:** That site access be on formed paths only, as per environment consultant recommendations.

• ensure effective to communicate requirements to all personnel involved in the project, including a map of the access routes that need to be used.

#### 2.3. Revegetation

Major impact followed by revegetation must be considered as a least preferred option. This is because revegetation success can't be guaranteed and would be challenging in areas flooded with fast flows.

The site of bridge 1193 is the most sensitive and has a number of plants not found anywhere else in the park, including some species of fern, (unfortunately some of them only found at bridge level: see Photos 10-20).

In addition, bridge 1194 is a grassland restoration site. Considering the number of volunteer hours landcarers have put in, we would be keen for machinery to avoid the restoration area (upslope) where possible.

ULG would be happy to work with TCCS and its contractors to identify and mark sensitive plants with coloured tape at the time of demolishing / reconstruction so that damage can be avoided where possible.

**RECOMMENDATION 2.3:** That TCCS and contractors work with ULG to minimise damage to sensitive vegetation at each site.



**Above:** Themeda triandra (kangaroo grass) above bridge 1194. This small remnant of Native Temperate Grassland is being restored by ULG volunteers and could be marked to minimise risk of disturbance during bridge works.

#### 3. Public awareness

ULG would be keen for the Construction Environment Management Plan (CEMP) to be publicly available once prepared, so locals are aware of provisions that have been made for:

- The exact location of site compounds at each bridge
- revegetation and site repair requirements
- machinery access routes, weed control
- handling of soil and rock both coming in and being taken away
- sediment control and water quality protection
- general biosecurity of machines and materials
- public safety including signage
- communication with the public
- detailed timetabling of the 3 bridges relative to each other
- protocols for unexpected finds of heritage and environmental jewels

Many of these points, e.g., protocols for unexpected heritage finds, are covered in recommendations of reports written by consultants to the project. However, in view of local concern about this project, it would be reassuring to find all these protocols clearly restated in the CEMP and that provisions and timetables are detailed.

**RECOMMENDATION 3: That the CEMP be made publicly available on the TCCS Umbagong Bridges website.** 

### Appendix 1: ULG Submission Photographs: Bridge 1193

**Photos 1 & 2: Footings spacing** Existing bridge 1193 have a longitudinal footing spacing of 4m





#### Photo 3: Footings attachment

The majority of existing footings are bolted directly into strong volcanic rock without need for concrete. Concrete footings were only required for a few spots in the existing bridge.



Photos 4 & 5: Existing concrete footings where bolting direct into rock was not feasible





## Photo 6: Viewing Platform Location

The rocky platform the photographer is standing on would be completely covered by the proposed ~7m x 2.5m viewing platform. This rock platform is used by basking reptiles.

It would it be better to locate the viewing platform over the scrubby gully between the rocks, an area of little habitat value vegetated with non-native grasses.

#### Photos 7 and 8: Viewing Platform Location

Scrubby grass between 2 rock outcrops as seen from above on the existing bridge (top) and from the rock platform due to be built over (below)

We suggest a modest sized viewing platform be built over the gully rather than over the rock platforms.





### Photo 9: Viewing Platform Location

Under the existing bridge at the rock gully spot



Maidenhair fern is located at bridge height adjacent to the existing bridge (the white railing in the foreground indicates its proximity to the bridge)

Care must be taken not to disturb these ferns during bridge demolishing / construction as they only seem to occur on this level.



**Photos 11 and 12**— maidenhair fern in a different part of the bridge also located at bridge level. A closeup of fern (top) and a photo of the same (below) showing its proximity to the edge of the bridge.



Photos 13 and 14: Other plants, cryptograms and ferns at bridge level, including pelargonium, Cheilanthes fern, Necklace fern just visible behind



16: Necklace fern near to bridge level

Photos 15 and

Photos 17 and 18: Einadia nutans ssp nutans scrambling down the rock by the bridge (top) and Pelargonium (bottom)



**Photos 19 and 20:** Dodonaea viscosa ssp angustissima on the rock platform due to be built over by the viewing platform according to existing plans.







Photo 21 (above): A rakali below the Rocky Outcrop Bridge photographed 9<sup>th</sup> Feb 2022 @ ~4pm



Photo 22 (above): The swamp wallaby often seen from the Rocky Outcrop bridge, usually on the opposite bank.



Photo 23 (above): Reed warblers nest in the reeds



Photo 24: A fantail in the reeds at the Rocky Outcrop bridge

### Photos 25 and 26 (below): Turtles seen from the bridge







**Photos 27 and 28:** An adult water dragon basking on the rocks below the bridge and baby water dragons playing on the Rock platforms below the bridge (there were about 7 of them)





**Photos 29 and 30:** Cunningham's skinks (they can grow almost the size of blue tongues) are very social and counting them is a popular past time for Umbagong pedestrians walking the Rocky Outcrop bridge. These 3 are above the bridge. In the photo below are 3 on a rocky ledge below the bridge.





Photo 31: Cunningham's skinks with babies



Photos 32 and 33: Dusky moorhens (looking upstream from the bridge), above, and courtship (below). They nest in this spot.





Photos 34 and 35: Red-browed finches (above) and Noisy friar bird (bottom) also nest in this area.



Photo 36: Little pied cormorant on its favourite rock below the bridge (below)

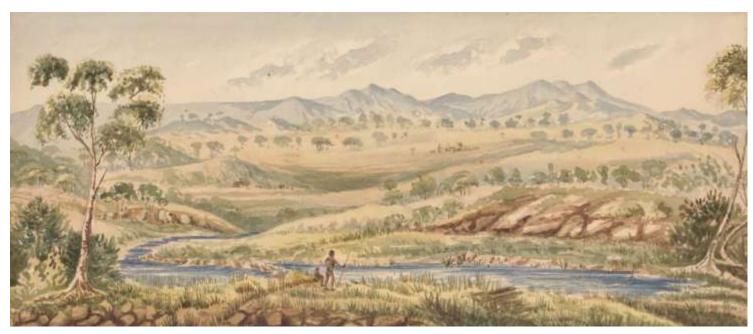


Photo 37 (below): Pacific black and ducklings below the bridge





Photo 38: The existing Bridge 1193 from the opposite bank



**Photo 39 (above):** 'Ginninginderry Plains, New South Wales' by Robert Hoddle, 1832. This painting is held at the National Library (Picture: nla.gov.au/nla.obj-137038759). Among the earliest paintings of Canberra, its location was recently identified by archaeologist Steve Skitmore as being a view of Umbagong's Rocky Outcrop (Bridge 1193) across Ginninderra Creek. The image has received some attention in recent times, having been reproduced in Bill Gammage's book "*The Biggest Estate on Earth: How Aborigines Made Australia*" (Allan and Unwin) and it was the subject of a Canberra Times article by 'Tim the Yowie Man'. Both from the point of view of heritage and ecology, this is a site that demands sensitivity and minimal impact.

### Appendix 2: Summary of Recommendations 1/ BRIDGE DESIGN

#### **RECOMMENDATION 1.1:** That consideration be given to minimal impact footings:

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#### 2/ ENVIRONMENTAL MANAGEMENT

#### **RECOMMENDATION 2.1:** That vehicles and machinery is cleaned to avoid spreading weeds.

- before entering the park
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- ensure effective processes to communicate requirements to all personnel involved in the project

# **RECOMMENDATION 2.2:** That site access be on formed paths only, as per environment consultant recommendations.

• ensure effective processes to communicate requirements to all personnel involved in the project, including a map of the access routes that need to be used.

# **RECOMMENDATION 2.3:** That TCCS and contractors work with ULG to minimise damage to sensitive vegetation at each site.

#### **3/ PUBLIC AWARENESS**

**RECOMMENDATION 3:** That the CEMP be made publicly available on the TCCS Umbagong Bridges website.