

Submissions Report

Coppabella Wind Farm – Rebuild of Transmission Line 99M

January 2020

Executive Summary

TransGrid is the proponent and determining authority for the Coppabella Wind Farm – Rebuild of Transmission Line 99M (the proposed activity).

The proposed activity as outlined in the REF (Section 3.2) includes:

- > Replacement of all existing wooden pole transmission structures between Yass 330 kV substation and Structure 143 (inclusive) with new steel or concrete pole transmission structures up to 40 metres (m) in height (up to 20 m higher than the existing wooden pole structures). The additional height of the line is required due to outage constraints as the existing line would remain in service throughout construction.
- Installation of optical ground wire on the rebuilt section of Line 99M, between Yass 330 kV substation and Structure 143 to facilitate the remote monitoring and protection of the new transmission connection.
- > Rearrangement of other transmission lines (Line 973, Line 970 and Line 990) outside of Yass 330 kV substation to facilitate the entry of the rebuilt Line 99M into the substation.
- > Construction of a new switchbay at Yass 330 kV substation to support the grid connection of Coppabella Wind Farm (CWF). This would also involve secondary systems equipment to be installed within the control room and/or auxiliary services building for the necessary control and protection requirements.

To facilitate the construction, the following ancillary works would be required:

- > Establishment of construction work sites at each structure. This would require surface disturbance of an area of approximately 40 m x 40 m surrounding the transmission structure for the laydown of equipment and materials and to support plant and machinery such as EWPs and cranes.
- > Establishment of level construction benches in areas of uneven topography to support the safe operation of plant and machinery.
- Repair, upgrade and maintenance of existing access tracks where required and construction of new access tracks.
- > Construction of new watercourse crossings and upgrade to existing watercourse crossings.

The assessment of the proposed activity is documented in the Coppabella Wind Farm – Rebuild of Transmission Line 99M Review of Environmental Factors (REF) prepared by TransGrid (May 2019). The REF was placed on public display for 42 business days between 13 June 2019 and 9 August 2019, so that the public and stakeholders could understand the proposed activity and provide their feedback. The REF was displayed on TransGrid's website. The initial exhibition timeframe was extended from 20 business days to 42 business at the request of the community within the study area to allow additional time to formulate and provide their submissions.

There were 18 submissions from the public and four submissions from Government agencies. This report provides a summary of the issues raised in the submissions received and provides a response for each issue.

Issues Raised by the Public and Government Stakeholders

The main issues raised in the submissions received during the public exhibition period included:

- > Adverse impacts on visual amenity;
- > Impacts on land use, including agricultural land;
- > Planning approval process;
- > Consultation and engagement process;
- > Property and access; and
- > Ownership and cost of the rebuilt transmission line.

Changes to the Proposed Activity



Since the display of the REF, TransGrid have undertaken a review of the design with the aim of reducing the height of the transmission structures to address the submissions received pertaining to impacts on the visual environment. Nearly 40% of the respondents raised concerns pertaining to impacts on visual amenity imposed by the increased height of the transmission structures. With the aim of addressing this issue, the maximum structure height has been reduced from 40 metres (m) to 30 m. TransGrid is also committed to further addressing impacts on visual amenity through further consultation with landholders.

In addition five mitigation measures have been added pertaining to bushfire management, visual amenity and ecology and a total of 10 mitigation measures amended in response to the submissions received.

Conclusion

Considering the information in the REF and this Submissions Report, it is concluded:

- > That the activity is not likely to significantly impact on the environment, therefore an Environmental Impact Statement under section 5.7 of the EP&A Act is not required, as Division 5.2 of Part 5 of the Act is not triggered.
- > That the activity is not (as per the REF) likely to significantly affect threatened species, populations, ecological communities or their habitats and therefore a Species Impact Statement is not required.



Contents

1.	Intro	duction and Background	6
	1.1	Proposed Activity	6
	1.2	REF display	6
	1.3	Purpose of this report	7
2.	Resp	oonse to Issues	8
	2.1	Overview of Responses	8
	2.2	Overview of Issues Raised	8
	2.3	Response to Issues – Submissions from Individuals	9
	2.4	Response to Issues – Submissions from Agencies	26
3.	Chan	nges to the Proposed Activity	28
3. 4.		nges to the Proposed Activity	
			29
	Upda	ated Activity Description and Environmental Management	29 29
	Upda 4.1 4.2	ated Activity Description and Environmental Management	29 29 29
4. 5.	Upda 4.1 4.2 Conc	ated Activity Description and Environmental Management Activity Description Environmental Management	29 29 29 32
4. 5. Appe	Upda 4.1 4.2 Conc ndix A	ated Activity Description and Environmental Management Activity Description Environmental Management Environmental Management clusion and Next Steps	29 29 29 32 3

Document Preparation History

Revision	Prepared By	Reviewed By	Date
RevA	Chris Page	Snehal Patel, Suzanne Westgate	4/11/2019
RevB	Chris Page	Denise Lo	6/11/2019
RevC	Chris Page	Heather Wagland	25/11/2019
RevD_Final	Chris Page		26/11/2019



1. Introduction and Background

1.1 Proposed Activity

TransGrid is proposing to rebuild Line 99M from the Coppabella Wind Farm to Yass substation (approximately 39 km) as a double circuit transmission line (the proposed activity). TransGrid is the proponent and determining authority for the proposed activity.

The need for the proposed activity is driven by the requirement to connect the Coppabella Wind Farm (CWF) to the National Electricity Market (NEM) via a direct connection to Yass substation.

The assessment of the proposed activity is documented in the Coppabella Wind Farm – Rebuild of Transmission Line 99M Review of Environmental Factors (REF) prepared by TransGrid (May 2019).

The proposed activity as outlined in the REF (Section 3.2) includes:

- > Replacement of all existing wooden pole transmission structures between Yass 330 kV substation and Structure 143 (inclusive) with new steel or concrete pole transmission structures up to 40 metres (m) in height (up to 20 m higher than the existing wooden pole structures). The additional height of the line is required due to outage constraints as the existing line would remain in service throughout construction.
- Installation of optical ground wire on the rebuilt section of Line 99M, between Yass 330 kV substation and Structure 143 to facilitate the remote monitoring and protection of the new transmission connection.
- > Rearrangement of other transmission lines (Line 973, Line 970 and Line 990) outside of Yass 330 kV substation to facilitate the entry of the rebuilt Line 99M into the substation.
- > Construction of a new switchbay at Yass 330 kV substation to support the grid connection of CWF. This would also involve secondary systems equipment to be installed within the control room and/or auxiliary services building for the necessary control and protection requirements.

To facilitate the construction, the following ancillary works would be required:

- > Establishment of construction work sites at each structure. This would require surface disturbance of an area of approximately 40 m x 40 m surrounding the transmission structure for the laydown of equipment and materials and to support plant and machinery such as EWPs and cranes.
- > Establishment of level construction benches in areas of uneven topography to support the safe operation of plant and machinery.
- Repair, upgrade and maintenance of existing access tracks where required and construction of new access tracks.
- > Construction of new watercourse crossings and upgrade to existing watercourse crossings.

The scope or works is shown on the map series provided in Appendix A.

1.2 REF display

TransGrid prepared the REF to assess the environmental impacts of the proposed activity. Consultation has been undertaken in accordance with *TransGrid Consultation Protocol for Review of Environmental Factors (REFs) for Class 4 and 5 Activities* (TransGrid, 2016). The REF was publically displayed for 44 business days between 13 June 2019 and 9 August 2019 on TransGrid's website (<u>https://www.transgrid.com.au/what-we-do/projects/current-projects/yass-murrumburrah-project</u>). The REF was publically displayed for more than the required 20 business days at the request of the community to allow more time to formulate and provide their submissions and due to formatting issues in the technical appendices, which required the REF to be updated and re-displayed on 11 July 2019.

Letters were sent to landholders that are likely to be impacted by the proposed activity on 12 June 2019 and also relevant Government Agencies advising them of the display of the REF and how they could make a



submission. A phone number and email address was also provided in the letter and on the website to enable all stakeholders to contact TransGrid to find out more information.

1.3 Purpose of this report

This Submissions Report relates to the REF prepared for the Coppabella Wind Farm – Rebuild of Transmission Line 99M and should be read in conjunction with that document. The REF was placed on public display and submissions relating to the proposed activity and the REF were received by TransGrid.

This report summarises the issues raised in the submissions and provides responses to each issue (Section 2).

This report also fulfils the requirements as outlined in the *NSW Code of Practice for Authorised Network Operators* to document the consideration of submissions from a member of the public or a Government Agency.



2. Response to Issues

2.1 Overview of Responses

TransGrid received submissions from 22 respondents, accepted up until 9 August 2018 (date of the last day of display).

A total of 18 submissions were from the community and four submissions were from Government Agencies.

No objections to the proposed activity were raised by Government Agencies that responded. All 18 submissions lodged by the community were of a nature that was not supportive of the proposed activity with the issues raised outlined in Section 2.2.

2.2 Overview of Issues Raised

The main issues raised in submissions relate to:

- > Adverse impacts on visual amenity;
- > Impacts on land use, including agricultural land;
- > Planning approval process;
- > Consultation and engagement process;
- > Property and access;
- > Ownership and cost of the rebuilt transmission line.

The percentage breakdown of the issues raised in the submissions are shown in Figure 2-1.

Each submission has been examined individually to understand the issues being raised. The issues raised in each submission have been extracted and collated, and responses to corresponding issues have been provided.

Where similar issues have been raised in different submissions from individuals, only one response has been provided.



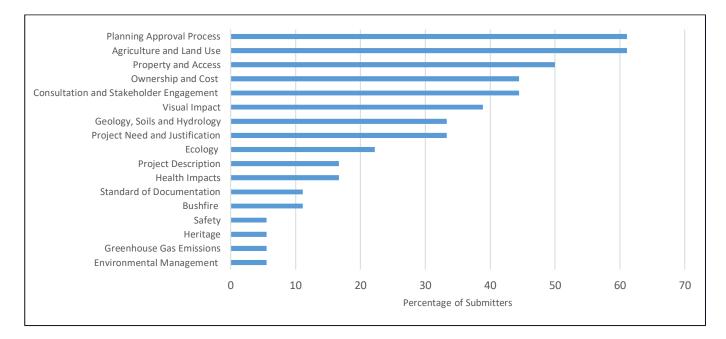


Figure 2-1: Issues raised in the submissions

As shown in Figure 2-1, over 60% of the respondents raised issues relating to the planning approval process and impacts on land use, particularly agricultural land. Over 44% of respondents raised concerns over who would own the Coppabella Wind Farm connection, the cost of the proposed activity, impacts on property (including property values) and access, and the community and stakeholder engagement carried out for the project in general. Additionally, nearly 40% of respondents were concerned with the increased height of the structures and the associated impacts on the visual amenity.

2.3 Response to Issues – Submissions from Individuals

The submissions received from the 18 individual respondents is provided in Appendix B. A summary of these issues and TransGrid's response is provided in Table 1.



Table 1Issues raised by Individuals and Responses

Issue Category	Issue Description	Submitter Number	Response
Planning Approval Process	Why approval is sought under Part 5 of the <i>Environmental Planning and Assessment Act</i> 1979 (EP&A Act) and not via a modification to the State Significant Development approval under Part 4 of the EP&A Act.	9, 10, 12, 17,	Development of the wind farm within the Coppabella precinct (State Significant Development SSD-6698-Modification 1) was approved on 10 December 2018 with the point of connection at Structure 143 on TransGrid's Line 99M. During further assessment of the Connection Application between TransGrid and Goldwind, it was identified that the Coppabella Wind Farm connection point needed to be moved to Yass substation to comply with Australian Energy Market Commission rules.
			Whilst the grid connection point for the proposed activity is at Yass substation and outside the approved boundary of the Coppabella Wind Farm, the actual transmission connection related works within the approved wind farm boundary would remain in general accordance (refer clause 2(a) of the SSD-6698 Development Consent) with the approved project as:
			> The works would involve the replacement of the existing Structure 143 with a new taller steel structure, which would not constitute a significant change to the activities and infrastructure approved in the Yass Valley Wind Farm Environmental Assessment and the associated Modification Application Environmental Assessment Report Coppabella (Formerly Yass Valley) Wind Farm.
			The physical point of interface between the internal 132kV transmission connection from the wind farm and Line 99M would remain the same being at Structure 143.
			Furthermore, as per Section 2.3.1 of the <i>Wind Energy Guidelines For State significant wind energy development</i> (DP&E, December 2016), it is permissible to separate the approval for the grid connection from a wind generation development. Consequently, for this project, TransGrid has chosen to enact its rights as an Authorised Network Operator (ANO) under the <i>Electricity Network Assets (Authorised Transactions) Act 2015</i> , and seek approval under Part 5 of the EP&A Act.
Agriculture and Land Use	7 days landholder notice is insufficient for farm planning and does not give sufficient time the schedule farming operation and stock movements.	2, 7	TransGrid commits to undertake ongoing consultation with landholders well in advance of works commencing to discuss access, crops and stock management. Mitigation measure LU1 has been amended.



Issue Category	Issue Description	Submitter Number	Response
	Financial loss to landholders from disturbances to agricultural land from the proposed activity and impacts on farm operations.	3, 9, 12, 13, 15, 16	To access the transmission line easement, construction vehicles would use the existing access roads and access routes. Additionally, some new tracks would need to be constructed as outlined in Section 3.2 of the REF. Disturbances to farm operations including stock movements would aim to be minimised through consultation with landholders on an individual basis in accordance with mitigation LU1.
			TransGrid acknowledges that the physical presence of the construction works may cause disturbances to landholders as part of the movement of construction vehicles and works occurring within the transmission line easement. TransGrid is committed to undertaking any repair works of any tracks and watercourses which has been damaged during construction in consultation with the landholder. Additionally, remediation of disturbed areas at the transmission tower and brake and winch sites would be carried out in consultation with the landholder.
			Where direct disturbance and/or crop damage has occurred as part of the construction works (e.g. crop damage/ temporary loss of agricultural land from a construction bench), TransGrid would offer compensation to the landholder for that loss. Compensation payment would be determined on a case-by-case basis in consultation with the landholder.
			Mitigation measure LU2 has been amended.
	Biosecurity risks	3, 8, 9, 12, 13	TransGrid is committed to ensuring the risk of weed and pathogen infestation into agricultural areas is minimised as far as practicable. TransGrid would consult directly with the landholders prior to the commencement of construction to understand any specific biosecurity risks/issues on the subject land and incorporate any specific mitigation measures into the Construction Environmental Management Plan. Mitigation measure EC8 has been included.
	Dragging of conductors affecting agricultural land.	3	Stringing of conductor is usually completed through the use of sheaves (or rollers) suspending the conductors from the structure with brake and winches keeping the conductor off the ground. It is not envisaged conductors would be dragged across the ground. However, in the unlikely event that conductors need to be lowered to the ground, the landholder would be consulted with the work methods and safety precautions agreed before commencing the works to avoid damage to people, property and livestock.



Issue Category	Issue Description	Submitter Number	Response
	Aerial agriculture being affected by the taller transmission structures	3, 16	The proposed activity is not expected to significantly affect agricultural aerial application activities in the surrounding area as:
			> Aerial application aircraft routinely fly within close proximity to obstacles such as transmission lines, radio repeater towers and other obstacles within rural agricultural environments. It is reasonable to expect that a trained and experienced pilot would be able to safely manoeuvre the aircraft around such obstacles including the existing Line 99M, whereby its physical alignment would remain unchanged.
			Aerial application that requires low level flying would require aircraft operators to carry out a risk assessment prior to each flight. This risk assessment would identify specific hazards and obstacles within the area subject to the aerial agricultural operations. The presence of Line 99M and its proposed height increase would be treated no differently to other obstacles within the aerial application area that would need to be considered during the pre-flight risk assessment. Consequently, is not anticipated that any increase in the costs to carry out aerial agricultural operations would occur as part of raising the height of the Line 99M transmission towers.
Ownership and Cost of the Rebuilt Line	Who will own and operate the rebuilt Line 99M once it is placed into service.	2, 3, 4, 5, 8, 10, 11, 12	The project is being funded by Goldwind, the owner and operator the Coppabella Wind Farm. However, TransGrid is the proponent for the proposed activity and would own, operate and maintain the transmission connection once it is in operation.
	How much will the proposed activity cost?	2,3	TransGrid is in the process of quantifying the costs through a tender process. It is expected to be within the overall cost of Coppabella Wind Farm development. TransGrid anticipates the costs of line rebuild would be between \$20m and \$40m depending on the detailed design.
Property and Access	Impacts on access roads from heavy vehicles	3, 9	It is acknowledged that use of existing access tracks and watercourse crossings by heavy vehicles during construction works carried out on TransGrid's transmission assets has the potential to cause damage, which may result in erosion and sedimentation impacts. Upon completion of works at each property, TransGrid is committed to undertaking any repair and restoration works of any tracks and watercourses which may have been damaged during construction in consultation with the landholder. Additionally, erosion and sediment controls would be established at sites where erosion risks have been identified and would be maintained by TransGrid until the site has been adequately stabilised. Mitigation measure LU2 has been amended.



Issue Category	Issue Description	Submitter Number	Response
	Relocation of Line 99M as part of the rebuild.	1	TransGrid do not intend to relocate Line 99M as the rebuild can be carried out within the existing easement.
	Impacts on future development and property improvements on private land adjoining Line 99M.	4, 11, 13	The proposed activity would not require any amendment to the existing surveyed easement. As such, development restrictions within and adjoining the easement would remain unchanged.
	Impacts on property values.	4, 9, 11	The rebuild of Line 99M would occur within the existing transmission line easement and no new easement would be acquired. Therefore, there would be no further impact to property values.
	Easement area to facilitate construction is inadequate and the need for additional easement.	1, 4	The existing easement width (generally 45 m) along the extent of the transmission line is adequate to facilitate construction works. As such, no additional easement would be required.
	Location of new watercourse crossings and watercourse crossing upgrade works.	14	The locations of the new watercourse crossings and upgrade of existing watercourse crossings are outlined in Appendix A of the REF. All watercourse crossing upgrade and construction works would be carried out in accordance with mitigation measures HW7 and EC13.
			Where TransGrid requires access across properties outside of the existing easements, TransGrid would seek to enter into separate arrangements and access protocols with landholders.
	Tracking of vehicles and maximum rutting specifications of access tracks.	2	For vehicle tracking, if there is a biosecurity requirement, vehicles would be tracked as required by the landholder biosecurity plan. If there is no biosecurity plan in place, then a vehicle log book will be kept of vehicle movements, along with a daily diary.
			The rutting of tracks would be dependent on the time of season and moisture content of the ground at the time.
			> At the winch sites, where most of the traffic is, access tracks would be made suitable in consultation with the landholder.
			> At the individual structure locations, access would be assessed on a daily basis dependent on the conditions and discussed with the landholder.
			Mitigation measure TA3 has been amended.



Issue Category	Issue Description	Submitter Number	Response
	Rehabilitation of affected areas following completion of construction.	13	TransGrid is committed to ensuring adequate remediation of areas affected by the proposed activity is carried out in consultation with each landholder. Mitigation measure LU2 would be implemented. Where direct disturbance and/or crop damage has occurred as part of the construction works (e.g. crop damage/ temporary loss of agricultural land from a construction bench), TransGrid would offer compensation to the landholder for that loss. Compensation payment would be determined on a case-by-case basis in consultation with the landholder.
Geology, Soils and Hydrology	Impacts from erosion and sedimentation in nearby watercourses.	3, 7, 9, 11, 12, 14	Impacts of erosion and sedimentation have been addressed in Section 6.2.2 of the REF, and mitigation measures to manage these impacts have been included in Section 6.2.3 of the REF.
			Impacts on waterways from erosion and sedimentation have been addressed in Section 6.3.2 of the REF, and mitigation measures to manage these impacts have been included in Section 6.3.3 of the REF.
	Cumulative erosion impacts when considered in conjunction with the Coppabella Wind Farm.	3	It is acknowledged that the Coppabella Wind Farm has challenges associated with the management of erosion, particularly along the steeper slopes and ridgelines. In comparison to the Coppabella Wind Farm site, Line 99M generally traverses more flat to undulating terrain, which is favourable in managing the risks of erosion. Additionally, bulk earthworks and ground disturbance associated with the proposed activity, is significantly less compared to bulk earthworks required to construct the Coppabella Wind Farm. As such, the volumes of spoil and areas of exposed surfaces would be much less compared to the Coppabella Wind Farm, which further minimises erosion risks and associated cumulative impacts of erosion across the broader landscape. Notwithstanding this, erosion would be managed during construction in accordance with an approved erosion and sediment control plan as per mitigation measure GS1.
	Soil and water pollution from accidental spills.	9	Impacts from accidental chemical, fuel and oil spills have been addressed in Section 6.2.2 of the REF, and mitigation measures to manage these impacts have been included in Section 6.2.3 of the REF.
Consultation and Community Engagement	The timeframe set for public exhibition was insufficient.	2, 3, 7, 18	TransGrid's website originally did not clearly list the commencement or completion of the REF consultation timeframes. On 10 July 2019, TransGrid rectified its website to state that the consultation period commenced on 13 June until 26 July 2019 (which included an 11 business day extension).



Issue Category	Issue Description	Submitter Number	Response
			On Thursday 11 July, the REF was updated on this page to address formatting issues in the technical appendices. The consultation period was further extended for an additional 20 business days until 9 August 2019. TransGrid recognises this as a suitable timeframe to lodge a submission which extends beyond the statutory period.
	Failure to consult with adjoining landholders and the wider community.	9, 17	TransGrid acknowledge that only landholders hosting transmission infrastructure were directly consulted in writing. Given the large land parcel sizes across the extent of the study area, TransGrid determined that adjoining landholders and the wider community would unlikely be significantly affected by the proposed activity, particularly in terms of impacts on visual amenity.
	Landholders were not given enough information on the project and there was a lack of direct face-to-face consultation.	9, 10, 13,17, 18	TransGrid notified each landholder in writing of the proposed activity in March 2019 which provided an overview of the proposed activity. A follow up letter was provided to landholders on 12 June 2019 informing of the REF exhibition timeframe and details on how to lodge a submission with all relevant details and documentation provided on TrasnGrid's website. On Thursday 11 July, the REF was updated on this page to address formatting issues in the technical appendices. The consultation period was further extended for an additional 20 business days until 9 August 2019.
			The information contained in the letter sent on 12 June 2019 provided only a brief overview of the proposed activity. The purpose of the letter was to direct the landholder to the complete REF via the project website, which provides a comprehensive description of the scope of works including the concept specifications of the new transmission towers. Providing all this information in letter form would not have been suitable given the extent and nature of the scope of works. Additionally, relevant project information was published on the project website including a general overview of the proposed activity including the proposed height of the new transmission towers and anticipated construction commencement and timeframe.
			TransGrid commits to undertake ongoing consultation with landholders well in advance of works commencing to discuss access, crops and stock management.
			TransGrid acknowledge that only residents hosting transmission infrastructure were directly consulted in writing. Given the large land parcel sizes across the extent of the study area, TransGrid determined that adjoining landholders and the wider community would unlikely be significantly affected by the proposed activity, particularly in terms of impacts on visual amenity.
			Mitigation measure LU1 and LU2 has been amended.



Issue Category	Issue Description	Submitter Number	Response
	Lack of clarity in the notification letters sent to landholders.	18	The notification letters sent in March 2019 advised that the scope of works involved the rebuild of Line 99M between the Coppabella Wind Farm site and Yass substation. The subsequent notification letters sent in on 12 June 2019 provided details of the REF exhibition timeframe and details on how to lodge a submission with all relevant details and documentation provided on TransGrid's website.
Visual Impact	Impacts on visual amenity from the taller transmission structures.	4, 7 , 8, 11, 14, 15	A Landscape and Visual Impact Assessment was undertaken to support the REF, which concluded that the visual impact at sensitive receiver locations (residential dwellings within 1 km) and surrounding roads would be minor. It is acknowledged that the appearance of the rebuilt section of Line 99M would be of a more modern design compared to the existing wooden pole line, however the assessed level of impact on the existing vista at the surrounding residential dwellings was assessed as minor due to distance, presence of existing vegetation and landform screening views towards the transmission line.
			Notwithstanding the above, TransGrid have undertaken a review of the transmission line rebuild design with the aim of reducing the height of the transmission structures to address the submissions received. This review has determined that the rebuild can occur with structures with maximum height of 30 m instead of the previously assessed 40 m high structures. TransGrid is also committed to further addressing impacts on visual amenity through further direct consultation with each landholder.
Project Need and Justification	Negative sentiment towards Coppabella Wind Farm and wind energy development in general.	3, 16, 17, 18	TransGrid as an Authorised Network Operator needs to make reasonable efforts to connect new generation assets to the National Electricity Market with all Connection Applications including Coppabella Wind Farm being assessed in accordance with Australian Energy Market Commission's National Electricity Rules.
			TransGrid acknowledges that people have differing perceptions towards wind energy developments, however it should be noted that the proposed activity is concerned only with the connection of the Coppabella Wind Farm to the National Electricity Market. As such, if the Coppabella Wind Farm was not approved or does not progress, the rebuild of Line 99M would not be required.
	Why is there is need to have the approximate 40 m high transmission structures?	4	The rebuild of Line 99M as a double circuit line between the Coppabella Wind Farm site and Yass substation would need to occur whilst the existing Line 99M circuit between Yass and Murrumburrah substations remains in service, as a continuous outage on the line cannot be obtained. As the line rebuild would occur within the existing easement corridor whilst Line 99M



Issue Category	Issue Description	Submitter Number	Response
			remains in service, there needs to be adequate clearances in place between the overhead conductors strung on the new structures and the existing line below. As such, taller structures are required.
	The cost benefit analysis of Coppabella Wind Farm does not include the rebuild of Line 99M.	5	It is acknowledged that the approval documentation prepared for the Coppabella Wind Farm does not include the proposed activity in any cost-benefit analysis. During the assessment of the Connection Application, it was identified that Coppabella Wind Farm connection point needs to be moved to Yass substation to comply with Australian Energy Market Commission rules.
	Why does Line 99M have to be rebuilt between Coppabella Wind Farm and Yass substation?	15	The current capacity of Line 99M does not meet the required rating to transmit the generation capacity of the Coppabella Wind Farm into the National Electricity Market. Whilst the former approved project (July, 2018) involved uprating the line by replacing the existing conductors, further network constraint studies determined that the line would still be constrained under certain operating conditions. Additionally, a direct cut into Line 99M under this former option would result in an unfavourable marginal loss factor (MLF) being applied to the connection by the Australian Energy Market Operator (AEMO).
			MLF are set by AEMO on an annual basis. As electricity flows through a transmission network, a portion of the electricity is lost, with the losses increasing with distance from the generation source to the end customers. Consequently, the MLF applies these losses to the sale/purchase of electricity in the NEM.
			Rebuilding the approximate 39 km section of Line 99M from the Coppabella Wind Farm site to Yass substation as a double circuit line would address the network constraints under all operating conditions and would avoid an MLF being applied to the connection.
Ecology	The REF refers to Natural Temperate Grasslands, however the corresponding figure maps Derived Native Grasslands. These two ecological communities are different.	2	The REF incorrectly discussed the presence of endangered ecological communities within study area. With reference to Section 3.3.1 of the Ecological Assessment as included in Appendix D of the REF, the plant community types (PCTs) which were recorded in the study area include were:
			 PCT 277: Blakely's Red Gum-Yellow Box grassy tall woodland of the NSW South Western Slopes Bioregion; and PCT 796: Derived grassland of the NSW South Western Slopes.



Issue Category	Issue Description	Submitter Number	Response
			The assessment determined that areas of PCT 277 between spans 99-100. 122-123 and 146- 147 as shown in Figure 6-2 of the REF were representative of the State listed White Box Yellow Box Blakely's Red Gum Woodland endangered ecological community (EEC). This is consistent with the description in the REF.
			The Figure 6-3 caption in the REF should refer to PCT 796: Derived grassland of the NSW South Western Slopes instead of the Natural Temperate Grassland of the Southern Tablelands of NSW and the Australian Capital Territory EEC. The REF incorrectly discusses the two mapped areas of PCT 796 within spans 83-84 and 70-71 as being representative of Natural Temperate Grassland of the Southern Tablelands of NSW and the Australian Capital Territory EEC. The ecological assessment determined that the derived grassland community recorded vegetation did not meet the quality criteria threshold for an EEC listed under the <i>Environmental Protection and Biodiversity Conservation Act 1999.</i> Notwithstanding this, the proposed activity would still avoid impacts to the PCT 796 mapped areas that occur within spans 83-84 and 70-71. Mitigation measure EC1 has been amended.
	The REF does not include the correct name of the Commonwealth EEC being the <i>White Box-Yellow Box -Blakely's Red Gum Grassy Woodland</i> and	2	At a State level, this EEC is listed as White Box Yellow Box Blakely's Red Gum Woodland. Federally it is known as White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland.
	Derived Native Grassland. The derived grassland component has not been recognised and therefore true extent of this EEC has not be identified. Weeds being present does not rule out a derived native grassland.		Woodland present within the study area was not considered to conform to the description provided for the Federally listed EEC given the high weed burden of Line 99M (Section 3.3.2, Page 24, Ecological Assessment). Reference to the Department of Environment and Heritage publication titled <i>White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland: Nationally threatened species and ecological communities</i> (Department of Environment and Heritage May 2006) indicate that areas that are part of the listed ecological community must have either:
			 An intact tree layer and a predominantly native ground layer; or An intact ground cover layer with a high diversity of native plant species but no remaining tree layer.
			Page 21 of the Ecological Assessment report notes that some sections of the easement contain native ground stratum species such as <i>Wahlenbergia</i> , <i>Bothriochloa</i> and <i>Convolvulus</i> species. However, generally these areas contained predominantly exotic groundcover. Page 30, Section 3.4.2 notes recorded flora as follows: Ground stratum: <i>Phalaris aquatica</i> , Wild Oats



Issue Category	Issue Description	Submitter Number	Response
			(Avena fatua), Saffron Thistle (Carthamus lanatus), Sweet Briar (Rosa rubiginosa), all of which are exotic and other common agricultural weeds.
	Vehicle movements are not recognised as ground disturbance in the context of ecological impacts.	2	The existing network of access tracks would be used where possible. New access tracks would be located in areas that are essentially devoid of native vegetation (as documented in the Ecological Assessment). No ground disturbance (including vehicle movements), or vegetation clearing would occur within any of the areas within the study area which contain either the <i>White Box Yellow Box Blakely's Red Gum Woodland EEC</i> or the <i>Derived Native Grassland</i> .
	The environmental significance of road reserves are not recognised, notably Graces Flat Road with confirmed Golden Sun Moth recordings. General impact on Golden Sun Moth.	2	Access to the work locations would generally be facilitated by existing roads and access tracks. No roadside vegetation would require clearing / disturbance. No areas of native grasslands dominated by Wallaby Grass (<i>Austrodanthonia spp</i>) which support Golden Sun Moth were located within any areas of the Line 99M easement during the ecological survey.
	No bat surveys were undertaken.	2	Section 2.3.5, page 12 of the Ecological Assessment (Appendix D of the REF) acknowledges that a limitation associated with the survey was that <i>microchiropteran</i> (insectivorous bat) surveys were not undertaken. Surveys targeting this group of animals were not conducted as no bat habitat (i.e. mature hollow-bearing trees or caves) would be affected by the proposed activity. Whilst this is the case, a precautionary approach to the presence of those State and Federally listed threatened microbats known for the region was adopted (as stated Section 2.3.5, page 12). Relevant assessments that draw on the criteria provided in the <i>Environmental Protection and Biodiversity Conservation Act 1900</i> (EPBC Act) and <i>Biodiversity Conservation Act 2016</i> (BC Act) were carried out in regards to the following species Corben's Long-eared Bat (<i>Nyctophilus corbeni</i>), Eastern False Pipistrelle (<i>Falsistrellus tasmaniensis</i>), Southern Myotis (<i>Myotis macropus</i>) and Yellow-bellied Sheathtail-bat (<i>Saccolaimus flaviventris</i>) (Page 6, Appendix B Federally listed <i>microchiropteran</i> Page 71, Appendix C, State listed microbats). The loss of some potential feeding habitat was acknowledged within those assessments undertaken, and was not considered to cause a significant impact to the foraging behaviour of hollow-dependent <i>microchiropteran</i> , particularly given the extent of surrounding similar vegetation and the isolated character of those stands that would require disturbance. Though no surveys targeting bats were conducted, the impact of the proposed activity on these species was considered and assessed.
	Whole region is a known summer nesting area of the Superb Parrot.	2,3,7	The Ecological Assessment (Appendix D of the REF) acknowledges the presence of the Superb Parrot in the region (Table 3-4). The field investigation did not locate any hollow-bearing



Issue Category	Issue Description	Submitter Number	Response
			trees that would require removal within the Line 99M alignment. No potential Superb Parrot nesting sites would therefore require removal. The loss of some foraging habitat (9 ha in total) compared to the extent of similar surrounding vegetation would not limit the overall availability of food resources for this species.
	Impacts on threatened and migratory species under the EPBC Act.	2	Database searches were undertaken as part of the Ecological Assessment (Appendix D of the REF), identifying those Federally listed endangered ecological communities, plants and animals (including migratory birds) that have been previously recorded in the vicinity of Line 99M (Table 3-3, Table 3-4, Appendix A, Appendix D). Impact on those Federally listed species that could potentially be present in the vicinity of Line 99M were considered and relevant assessments conducted (Appendix B). A number of the migratory birds listed in Appendix A that are known to occur in the surrounding region are wetland associated species. No habitat for these birds was recorded within the study area. As no habitat is available to these species, the proposed works were not considered to have an impact on these birds.
	Rationale as to why impacts on Superb Parrot and Owl species was assessed as unlikely.	2,3,7	As noted in Section 3.5.1, page 31, of the Ecological Assessment (Appendix D of the REF), the proposed activity would mainly clear non-native grassland. The field investigation did not locate any hollow-bearing trees that would require removal for the proposed activity. No potential Owl or Superb Parrot nesting sites would therefore require removal. The loss of some foraging habitat (9 ha in total) compared to the extent of similar surrounding vegetation would not limit the overall availability of food resources for these species. As no areas of important habitat for these birds are to be removed or significantly disturbed, no impacts due to the undertaking of the proposal on the local viability of populations of these species were considered to occur.
	Significance assessments under the EPBC Act were not carried out for Latham's Snipe.	2	As noted in Section 2.3.4, page 12 in the Ecological Assessment (Appendix D of the REF), habitat in the study area was assessed for its potential to provide resources for listed species predicted to occur, this being undertaken in Appendix A.
			The presence of Latham's Snipe was acknowledged (indicated as known – Appendix A) but the assessment considered no impacts would occur as no habitat for this wetland associated bird species was recorded within the proposed disturbance areas.
	Significance assessments under the BC Act were not carried out for Little Eagle.	2	Table 3-4 in the Ecological Assessment (Appendix D of the REF), acknowledges that the Little Eagle has the potential to occur in the study area and be affected by the proposed activity. Impacts on this species which is listed under the BC Act were assessed using the criteria



Issue Category	Issue Description	Submitter Number	Response
			provided under Part 7, Section 7.3 of the BC Act (commonly referred to as the five-part test) (Appendix C, Table C-2 and summarised in Table 3-9). Justification as to why the proposed activity would not have a significant impact on this raptor are presented in Appendix C, Table C-2, these included:
			 No characteristic raptor nests were detected during the field survey. The proposed activity would not remove trees which have the potential to be used for nesting.
			In conducting the assessment, it was acknowledged that 'minor clearing will result in minor fragmentation of the vegetation patch'. Given the ability of raptors to traverse open space areas, the impact of this was not considered significant.
	Increased and cumulative (when considered in conjunction with Coppabella Wind Farm) occurrences of bird strikes.	3	Cumulative impacts when associated with other developments were considered (Section 3.8 page 46, Ecological Assessment (Appendix D of the REF): 'The proposed activity would occur primarily within the existing cleared easement of electricity transmission lines. As the proposed activity would occur within an existing disturbed landscape from agricultural practices and road corridors, it is unlikely that it would cause any significant cumulative impact to the environment.'
			Bird strikes due to raising the existing height of the transmission line were not addressed. That stated, a number of high voltage transmission lines are present in the region including the existing Line 99M, whereby the bird species recorded or expected to occur within the study area are considered to be tolerant of these. Individual bird strikes may arise, but the impact of this on the viability of the species local populations is not considered to be significant.
	Trimming and removal of vegetation was not considered as part of the assessment of threatened species and communities.	7	Database searches undertaken as part of the Ecological Assessment (Appendix D of the REF) identified a number of State and Federally listed Critically Endangered species and communities that are predicted or known to occur within the study area (Table 3-4, Appendix A and Appendix D). Trimming/lopping of the tree canopy where height violations occur was noted and considered in Section 3.3.3, page 26 of the Ecological Assessment.
	OEH (now the Environment Energy and Science Group) have continually assessed Whitefield Road as the highest ecological area and to be no roadside development and disturbance on fragile soils.	7	Whitefield Road is located approximately 8 km south of Line 99M. This area was not assessed as it was located outside the disturbance footprint of the works.





Issue Category	Issue Description	Submitter Number	Response
	Effects on native wildlife, including disturbances to breeding and removal of habitat, particularly birds.	9	The vegetation clearing for the proposed activity would predominantly involve the clearing of underlying grassland, pasture and cropping. The Ecological Assessment (Appendix D of the REF) did not determine there to be any potential significant impacts on native flora and fauna including bird species.
Project Description	Why wasn't the rearrangement of the transmission lines external to Yass substation considered as part of recent works carried on those lines (e.g. Line 970, Line 990 and Line 973).	3	The need for the modification of the existing assets are derived from the due diligence process undertaken during the Connection Application process. The scope of works aligns with the outcome of the Connection Application which complies with Australian Energy Market Commission rules.
	 Clarification on the following: Dimensions of access tracks and the need for access tracks between each structure; 	12, 14	The size of the access tracks vary depending on the terrain that is being traversed however a typical access track is approximately 4 m wide. Materials for access track works would be sourced offsite and would be certified and weed and contaminant free.
	 > Where materials for access track construction would be sourced from; > Dimensions of creek crossings; 		The extent of creek crossing would vary from site to site and typically be 4 m wide. Depending on the size of the creek and the extent of upgrade works required, permits may be required from DPI-Fisheries.
	> Water requirements;> Trenching between each structure; and		Access to the works locations would occur via the existing access tracks and proposed new tracks to be constructed.
	> Whether any blasting would be required.		Trenching may be required between structures for the installation of earthing points. This would vary from structure to structure depending on the ground conditions. The trenching would be limited to within the existing easement.
			No blasting would be required as part of construction.
			All water would be sourced from external suppliers and transported by truck to the work locations.
Health Impacts	Health from electromagnetic frequency (EMF).	4, 8	Refer to Section 6.12 in the SER. The predicted EMF levels are below the General Public reference levels, which are within the International Commission on Non-Ionizing Radiation Protection (ICNIRP) guidelines published in 2010, which have been adopted by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA).
			> The maximum magnetic field strength on the easement will be 215.4 mG which is under the general public reference level of 2000 mG.



Issue Category	Issue Description	Submitter Number	Response
			> The maximum electric field strength on the easement will be 1.88 kV/m which is under the general public reference level of 5 kV/m.
	Health impacts as part of the physical presence of construction.	9	TransGrid acknowledge that construction works would cause some level of disruption to landholders as part of the use of private access tracks (both on and off easement), construction noise and the general physical presence of constriction works being carried out on private land.
			TransGrid and its appointed contractor are committed to ensuring ongoing consultation with every landholder throughout the construction period to minimise the level of disturbance as far as practicable.
Standard of documentation	Documents not of sufficient standard for public consultation.	2	On Thursday 11 July 2019, the REF was updated on this page to address formatting issues in the technical appendices. The consultation period was further extended for an additional 20 business days until 9 August 2019.
Bushfire	Bushfire risk during both construction and operation of the transmission line.	3, 9	The rebuild of Line 99M has followed TransGrid's internal design, operational and maintenance guidelines.
			During construction and maintenance activities, all works would be undertaken in accordance with TransGrid's Hot Works and Fire Risk Procedure. This procedure includes identification and management of potential ignition sources during construction works including during a Total Fire Ban or Catastrophic fire weather.
			Mitigation measure BF1 has been amended and mitigation measure BF2 has been included.
Safety	Management of safety.	2	Prior to commencing construction works, TransGrid would engage a Principal Contractor. The Principal Contractor would develop the Work Health Safety Management Plan and complete the required risk workshops before commencing construction works.
			A third party audit of the Principal Contractor's safety systems would be carried out prior to mobilising to site and during the construction works to ensure compliance is maintained.
Heritage	Impacts on Aboriginal heritage and heritage awareness training for construction staff.	2	Mitigation measure EM3 has been amended to clearly state the inclusion of Aboriginal heritage awareness training.
Greenhouse Gas Emissions	Carbon footprint of the proposed activity.	4	The National Greenhouse and Energy Reporting Regulations 2008 defines emissions as Scope 1 being atmospheric emissions that occur as a direct result of an activity, Scope 2 emissions which occur indirectly as a result of an activity (e.g. consumptions of power during



Issue Category	Issue Description	Submitter Number	Response
			the construction process) and Scope 3 emissions which are all other indirect emissions other than Scope 2 emissions.
			Typically, the operation of on-site machinery during construction works and general site operations account for the majority of construction-related greenhouse gas emissions (Scope 1 emissions). Expected greenhouse gas sources of construction emissions for the proposed activity would include:
			 Combustion of fuel in construction plant, equipment and vehicles (direct emissions occurring on-site) (Scope 1).
			 Vegetation clearing (direct emissions from the decomposition of vegetative material and soil carbon releases) (Scope 1).
			 Electricity used at the construction compound/worksite (electricity indirect emissions, occurring off-site at the power station) (Scope 2).
			 Disposal of waste from construction staff and site compound (indirect emissions from the decomposition of waste material, occurring off-site and waste disposal facilities) (Scope 3).
			 Indirect emissions embodied in key construction materials, including cement and steel (i.e. the energy and resources that were consumed to produce a particular construction material) (scope 3).
			Scope 1 emissions would represent the greatest source of greenhouse gas emissions during construction as part of the operation of construction vehicles, plant and equipment. Notwithstanding this, emissions would be confined to the construction period (approximately 18 months) and once in operation, the line would be transmitting clean energy generated by the Coppabella Wind Farm into the grid.
			Scope 2 emissions would be negligible as they would likely be limited to only minor electricity consumption at Yass Substation. Scope 3 emissions would generally be associated with emissions from the manufacturing of the new steel transmission structures, new conductor and overhead earthwire.
Environmental Management	Environmental management during construction and environmentally sensitive areas shown on site plans	2	The Contractor would prepare the Construction Environmental Management Plan (CEMP), which would be reviewed and approved by TransGrid prior to works commencing. TransGrid would appoint an Environmental Inspector to regularly check the works are being carried out



Issue Categ	ory	Issue Description	Submitter Number	Response
				in accordance with the CEMP. The CEMP and associated site plans would show the location of all relevant environmental sensitivities associate with the proposed activity. Mitigation measures EM1 and EM9 have been amended.



2.4 Response to Issues – Submissions from Agencies

2.4.1 Roads and Maritime Services

Issues raised by Roads and Maritime Services (RMS) and responses to each issue are provided in Table 2.

Table 2: Roads and Maritime	Services	Submission	and Responses

Category	Issues Raised	Response
Traffic and TransportA section 138 permit is required from RMS for the overhead crossing of the Hume Highway, and from Council for all		TransGrid would seek approval under Section 138 of the <i>Roads Act 1993</i> for overhead stringing works above Hume Highway (Classified road).
	roads including the crossing of Illalong Road.	Pursuant to Section 5 of Schedule 2 of the Act, TransGrid is exempt from the requirement to obtain a Section 138 permit for works on or over unclassified roads.
	A Road Occupancy Licence (ROL) will be required for any impacts to traffic and/or closures on State Roads (Hume Highway).	Prior to any overhead stringing above the Hume Highway, a ROL would be sought where impacts on traffic movements are anticipated. The requirement to obtain an ROL would be confirmed under consultation with RMS during the Section 138 application process.

2.4.2 Department of Primary Industries – Fisheries

Issues raised from the Department of Primary Industries (DPI) - Fisheries and responses to each issue are provided in Table 3.

Category	Issues Raised	Response
Riparian vegetation	The Department generally requires the remediation of any disturbed riparian areas with native endemic vegetation.	Riparian areas disturbed as part of the upgrade and construction of watercourse crossings would be remediated where applicable with native endemic vegetation under consultation with DPI-Fisheries and in accordance with any specific conditions associated with the Part 7 permit. The additional mitigation measure EC7 has been included in Table 6.
Watercourse crossings	Design watercourse crossings in accordance with the DPI policy documents.	All watercourse crossings upgrades and construction of new watercourse crossings would be in accordance with <i>Policy</i> and guidelines for fish habitat conservation and management 2013, Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (Fairfull and Witheridge, 2003), Controlled Activity Guidelines under the Water Management Act 2000 (WM Act) and the DPI - Water's Guidelines for watercourse crossings on waterfront land. This is a requirement as per mitigation measure HW3.

2.4.3 Rural Fire Service

Issues raised from the NSW Rural Fire Service (RFS) and responses to each issue are provided in Table 4.

Table 4: RFS Submission and Responses

Category	Issues Raised	Response
Bushfire	The provision of services and utilities	The proposed activity would remain in the current 45 m wide
	shall comply with the requirements of	easement. Consequently, it is not expected that there would



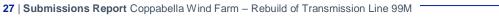
Category	Issues Raised	Response
	Section 4.1.3 of <i>Planning for Bush Fire</i> <i>Protection 2006</i> or any subsequent version	be any changes to the level of bushfire risk associated with the transmission line. During operation, vegetation maintenance would continue to be carried out to manage fuel loads and vegetation clearances within the easement.
	Identification and management of potential ignition sources during construction works especially on days of Total Fire Ban or Catastrophic fire weather. This may include ceasing of construction works.	TransGrid's <i>Hot Works and Fire Risk Work Procedure</i> would be followed when carrying out hot works and fire risk work during construction. The Procedure also includes processes for carrying out works on Total Fire Ban days and during Catastrophic fire weather. The additional mitigation measure BF1 has been included in Table 6.
	Ensure that storage of fuels and other hazardous materials is undertaken to minimise their impact on potential bushfire.	Fuels and hazardous materials would be stored in designated storage areas away from any potential ignition sources. The additional mitigation measure BF2 has been included in Table 6.

2.4.4 Environment Protection Authority

Issues raised from the NSW Environment Protection Authority (EPA) and responses to each issue are provided in Table 5.

Table 5: Environment Protection Authority S	Submission and Reponses
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Category	Issues Raised	Response
Noise	TransGrid should communicate with all potentially affected residents to advise them of the timing of the potential noise impacts, and provide them details on who to contact should they have any issues or require further information.	All potentially affected residents would be notified of the likely timing and duration of any noise generating works as per mitigation measure NV1. Notification would be provided at least 7 days prior to commencing any high noise generating works which has the potential to disrupt nearby residents.
Water quality	When working near waterways, TransGrid must ensure that all reasonable and feasible measures are taken to prevent pollution of waters. This includes installing appropriate sediment and erosion controls measures to prevent discharges to the environment. Sediment and erosion controls should remain in place and be monitored and maintained until such time as the site has been stabilised	Impacts on water quality were assessment in Section 6.3.2 of the REF and appropriate mitigation measures included to manage impacts on receiving water through processes such as erosion and sedimentation and accidental spills. The mitigation measures aimed at protecting water quality (among other environmental impacts) include: EM6, EM7, EM8, EM9, GS1, HW1, HW2, HW3 and HW4.
Waste	If poles have copper chrome arsenate (CCA), EPA recommends that they be disposed of at a waste facility that can lawfully accept them. However, should the poles be gifted to landholders, TransGrid should provide the landholder information on what the pole is treated with, how to appropriately handle treated timber, and what it can and cannot be used for.	Any poles gifted to landholders would include details on what they have been treated with and what they can and cannot be used for. Mitigation measure WA4 has been revised in Table 6.



TransGrid

3. Changes to the Proposed Activity

3.1.1 Description of the change

The proposed activity as described in the REF included the following:

> Replacement of all existing wooden pole transmission structures between Yass 330 kV substation and Structure 143 (inclusive) with new steel or concrete pole transmission structures up to 40 m in height. At some locations, the new structure would be approximately 20 m higher than the existing wooden pole structures and would be installed within approximately 5 m of the existing structure, just off the centreline of the easement. The majority of the line rebuild would involve the existing wooden pole structures being replaced with single pole structures aside from the tension structures which would be replaced with twopole structures.

Changes have now been made so that the proposed activity includes the following:

Replacement of all existing wooden pole transmission structures between Yass 330 kV substation and Structure 143 (inclusive) with new steel or concrete pole transmission structures up to 30 m in height. At some locations, the new structure would be approximately 10 m higher than the existing wooden pole structures and would be installed within approximately 5 m of the existing structure, just off the centreline of the easement. The majority of the line rebuild would involve the existing wooden pole structures being replaced with single pole structures aside from the tension structures which would be replaced with twopole structures.

All other elements of the project described in Section 3.2 of the REF remain unchanged.

3.1.2 Reasons for the change

Since the display of the REF, TransGrid have undertaken a review of the transmission line rebuild design with the aim of reducing the height of the transmission structures to address the submissions received pertaining to impacts on the visual environment. Nearly 40% of the respondents raised concerns pertaining to impacts on visual amenity imposed by the increased height of the transmission structures.

A review of the initial design, which considered structures up to 40 m in height has determined that the rebuild can occur with structures with maximum height of 30 m.

3.1.3 Additional assessment and potential impacts

Section 6.10.2 of the REF assessed the visual impact of the proposed activity as follows:

With consideration to the visual impact assessment from residential and publicly accessible viewpoints, the overall impact on visual amenity associated with the proposed rebuild of the transmission line is generally considered low having regard to distance, existing landform and the presence of existing vegetation screens.

Whilst a reduction in the proposed structure height of approximately 10 m has the potential to improve the level of visual impact at some residential and publicly accessible viewpoints, the overall assessed level of the impact is considered to be consistent with the REF.

TransGrid is also committed to further addressing impact on visual amenity through ongoing direct consultation with landholders.



4. Updated Activity Description and Environmental Management

4.1 Activity Description

Mitigation Measures

Following the display of the REF and consideration of submissions received, TransGrid have reduced the height of the proposed structures from 40 m to a maximum height of 30 m (refer to Section 3.1.1).

4.2 Environmental Management

Appendix C of the REF identified mitigation measures for implementation. The issues raised in the submissions have been considered in relation to the mitigation measures. Additional mitigation measures for ecology (EC7 and EC8), visual amenity (VA2) and bushfire (BF1 and BF2) have been included and a total of 10 mitigation measures amended.

Table 6 provide an overview of the changes to the mitigation measures. Text underlined in Table 6 shows amended mitigation measures or a new measure, while text with strikethrough has been removed from the measure. A revised list of mitigation measures is provided in Appendix C.

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Enviro	onmental Management and Incident Response				
EM1	A Construction Environmental Management Plan (CEMP) shall be prepared and submitted <u>by the Contractor</u> to Environment – HSE/ TransGrid for review and endorsement four weeks prior to the commencement of works, including site establishment. The CEMP shall be prepared in accordance with TransGrid's procedure <i>Preparation of a Construction Environmental Management Plan</i> .				
EM3	All workers shall be inducted onto the Environmental Management Plan, site environmental conditions and sensitivities identified in this REF and receive training as appropriate. <u>All workers shall receive Aboriginal heritage awareness</u> <u>training.</u> Records shall be kept of this induction and training.				
EM5	The following additional environmental approvals/licences/permits are required for the activity:				
	> <u>A Section 138 permit and Road Occupancy Licence shall be obtained</u> Approval from Roads and Maritime Services (RMS) prior to carrying out works in, on or over Hume Highway which is a classified road.				
	> A permit is required to be obtained from NSW Department of Primary Industries-Fisheries (DPI-Fisheries) for the proposed watercourse crossing works at:				
	- Booroo Creek (1st order watercourse) between Structures 8-9.				
	- Booroo Creek (4th order watercourse) between Structures 9-10.				
	- Illalong River (4th order watercourse) to access Structure 99 and 100.				
	- Balgala Creek (3rd order watercourse) between Structures 122 and 123.				
	- Bobbara Creek (5th order) to access Structure 143 from Coppabella Road.				
	 Controlled Activity Approval to be sought from NSW Department of Primary Industries-Water prior to carrying out works at same locations listed above. 				
	> Aboriginal Heritage Impact Permit for works at Structures 11 and 12 on Line 99M.				
EM9	Any environmentally sensitive areas shall be clearly delineated and shown on Site Plans and identified on site.				
Land L	Land Use				

Table 6: Summary of Revised and New Mitigation Measures



Mitiga	ation Measures
LU1	All landholders within the study area shall be notified regarding the schedule of works at least 7 days prior to the commencement of works at their property. This would allow landholders to plan activities on their land which may conflict with the construction works.
	Ongoing consultation shall occur with all affected landholders prior to and during construction to allow the planning of activities on their land which may conflict with the construction works. Landholder requirements shall be discussed on an individual basis.
LU2	On completion of the work disturbed areas shall be stabilised, and returned to as close to original condition or as otherwise agreed with the landholder. <u>TransGrid is to undertake any repair works of access tracks and watercourses</u> which have been damaged during construction in consultation with the landholder.
Geolo	bgy and Soils
GS1	An Erosion and Sediment Control Plan (ESCP) shall be prepared as part of the CEMP. All erosion and sediment control measures shall be designed, implemented and maintained in accordance with relevant sections of " <i>Managing Urban Stormwater: Soil and Construction Volume 1</i> " (Landcom, 2004) ('the Blue Book) (particularly Section 2.2) and " <i>Managing Urban Stormwater: Soil and Construction Volume 1</i> " (Landcom, 2004) ('the Blue Book) (particularly Section 2.2) and " <i>Managing Urban Stormwater: Soil and Construction Volume 2A – Installation of Services</i> " (DECC, 2008a)". The ESCP shall include stockpiles, stormwater run-off, trees, site boundaries, site access and storage areas. Exposed surfaces shall be kept to a minimum to limit the potential for erosion. <u>Erosion and sediment controls shall remain in place and be monitored and maintained until such time the site has been stabilised.</u>
Ecolog	۲. V
EC1	Ground disturbance (including vehicle movements) and vegetation clearing should shall not occur within any of the mapped areas containing <i>White Box Yellow Box Blakely's Red Gum Woodland</i> EECs- and Derived grassland of the NSW South Western Slopes (refer to Figure 6-2 and Figure 6-3 of the REF).
EC7	Any disturbed riparian areas shall be remediated with native endemic vegetation as appropriate.
<u>EC8</u>	Consultation with each landholder shall occur prior to the commencement of construction to understand any biosecurity risks specific to their land. Any properties with an on-farm biosecurity plan shall be complied with and specific measures incorporated in the CEMP.
Noise	and Vibration
NV2	Noise affected neighbouring properties shall be notified as to the timing and duration of the construction works at least 7 days prior to commencing work. <u>The notification shall provide details on who to contact should they have any issues</u> or require further information.
Traffic	and Access
TA3	 Traffic, transportation and access mitigation and management strategies shall be documented and implemented in accordance with the CEMP and updated as required. This shall include: The management of the delivery of equipment and materials.
	Access to and from the site including nominated roads and site access tracks <u>should be undertaken in consultation</u> with the landholder.
	 Traffic management to be implemented for conductor, OPGW and earth wire road crossings Parking. Speed limits. Road occupancy licence conditions
Waste	
WA4	Wooden poles, including pole butts, shall be disposed of in accordance with the TransGrid document – Waste Management of Timber Poles or gifted to landholders in accordance with the OEH's ' <i>Protocols for recycling redundant utility poles and bridge timbers in New South Wales</i> ' (2011) and TransGrid requirements. If gifted, TransGrid shall provide the landholder information on what the pole is treated with, how to appropriately handle treated timber, and what it can and cannot be used for.
Visual	Amenity
VA2	TransGrid shall undertake further direct consultation with each landholder to identify opportunities to further minimise impacts on visual amenity.



Mitigation Measures		
Bushfire		
BF1	All works shall be undertaken in accordance with TransGrid's Hot Works and Fire Risk Work Procedure.	
<u>BF2</u>	Fuels and other hazardous materials shall be stored to minimise potential impacts on bushfires.	



5. Conclusion and Next Steps

The conclusion as described in section 9 of the REF has not changed. Considering the information in the REF and this Submissions Report, it is concluded:

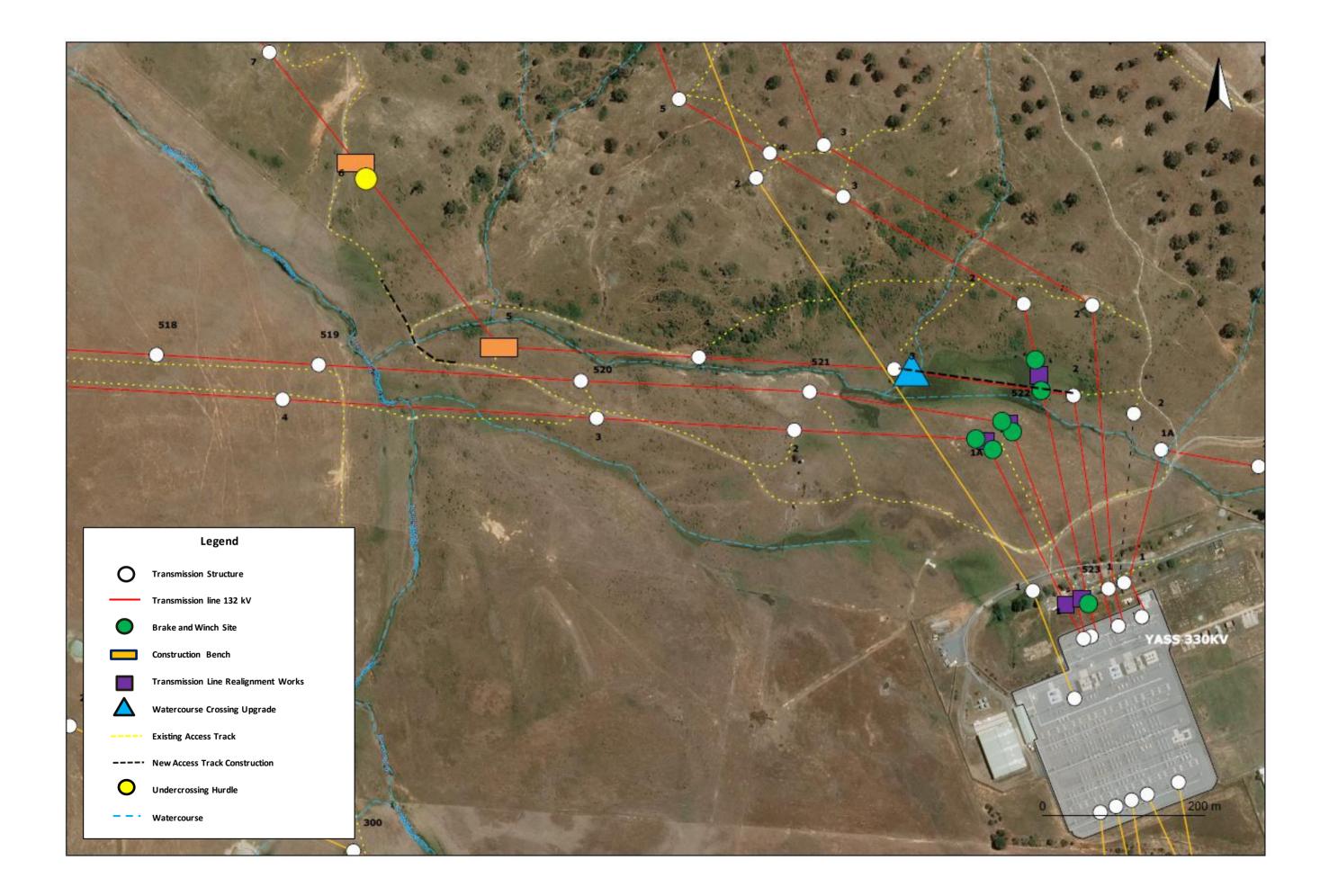
- > That the activity is not likely to significantly impact on the environment, therefore an Environmental Impact Statement under section 5.7 of the EP&A Act is not required, and Division 5.2 of Part 5 of the Act is not triggered
- > That the activity is not likely to significantly affect threatened species, populations, ecological communities or their habitats and therefore a Species Impact Statement is not required.

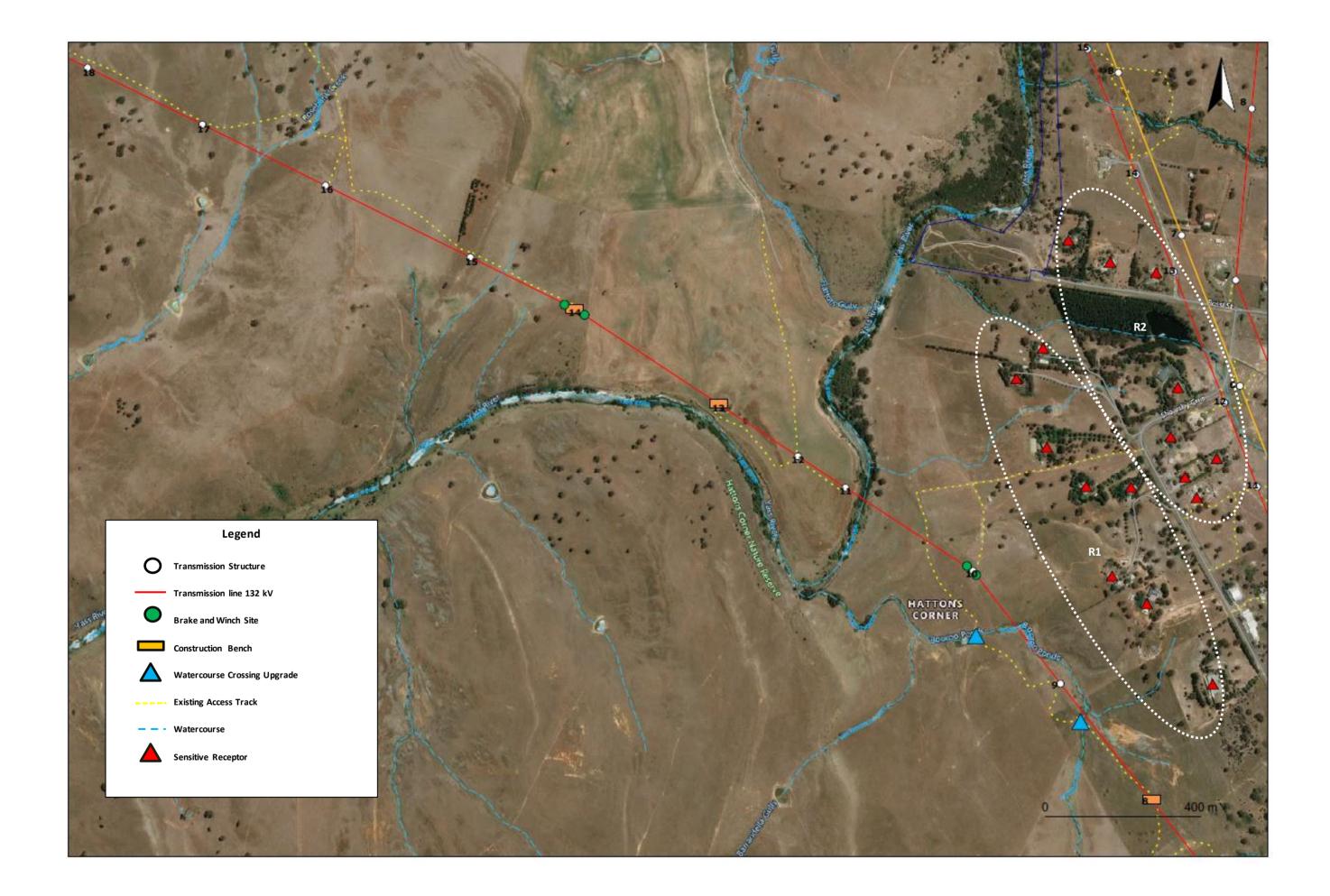
TransGrid is therefore able to make a determination of the activity's impacts based on the information in the REF and this Submissions Report. The REF and Submissions Report provide a true and fair review of the activity in relation to its potential effects on the environment. They address, to the fullest extent possible, all matters affecting or likely to affect the environment as a result of the activity.

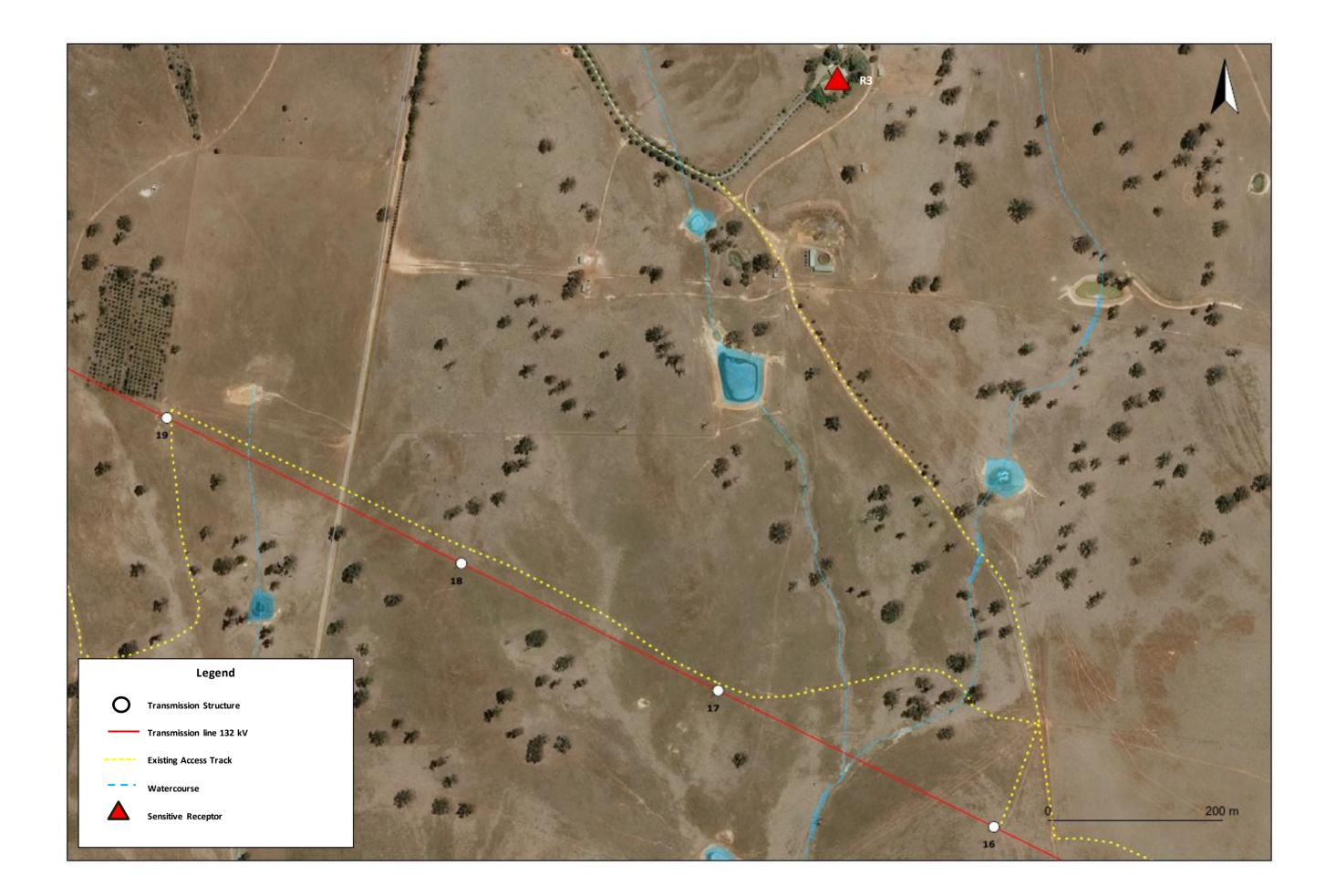
Once TransGrid has completed its assessment of the REF and this Submissions Report, a decision statement will be prepared which may include recommended conditions of approval. A copy of the decision statement, Submissions Report and the REF will be published on TransGrid's website following a determination.

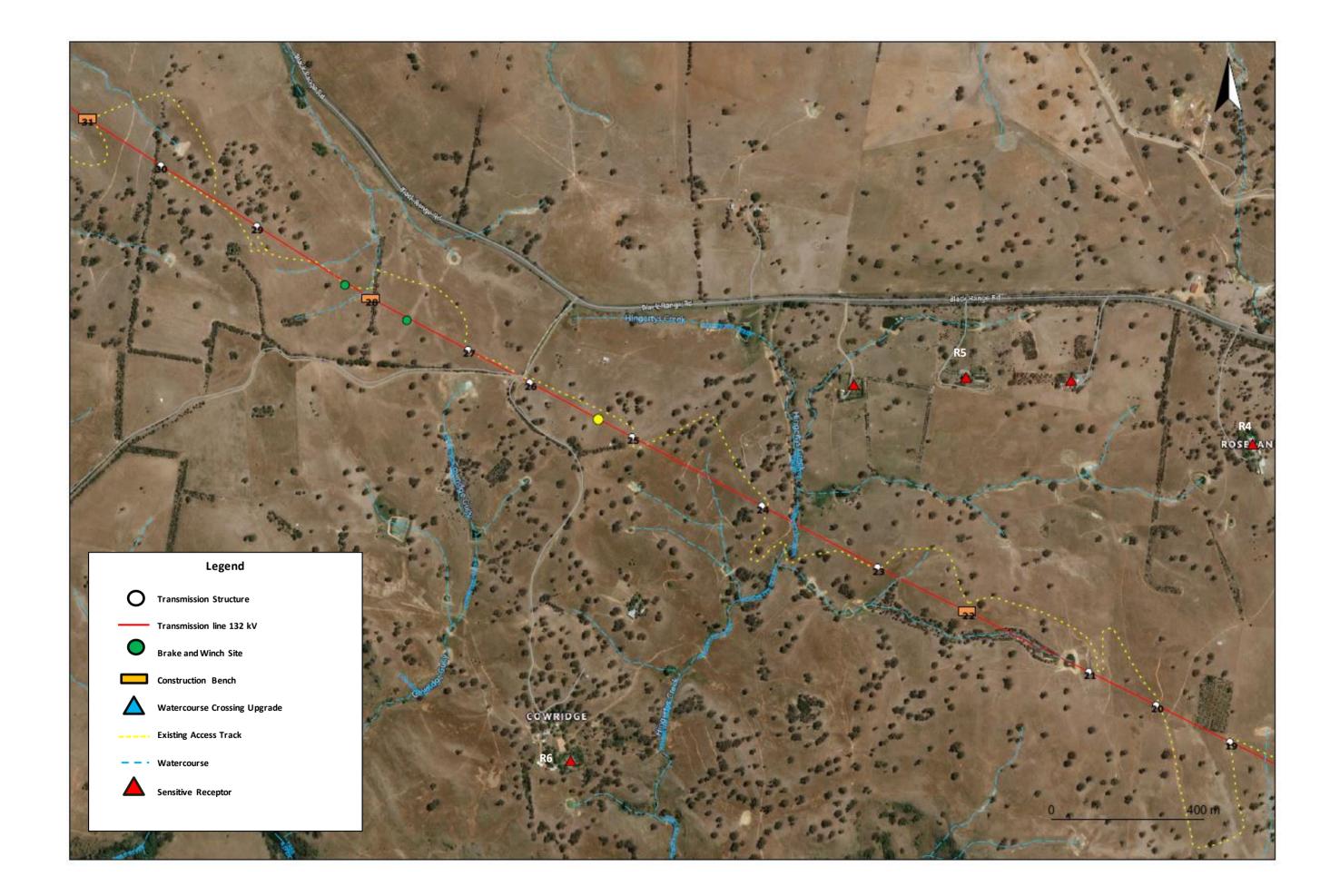














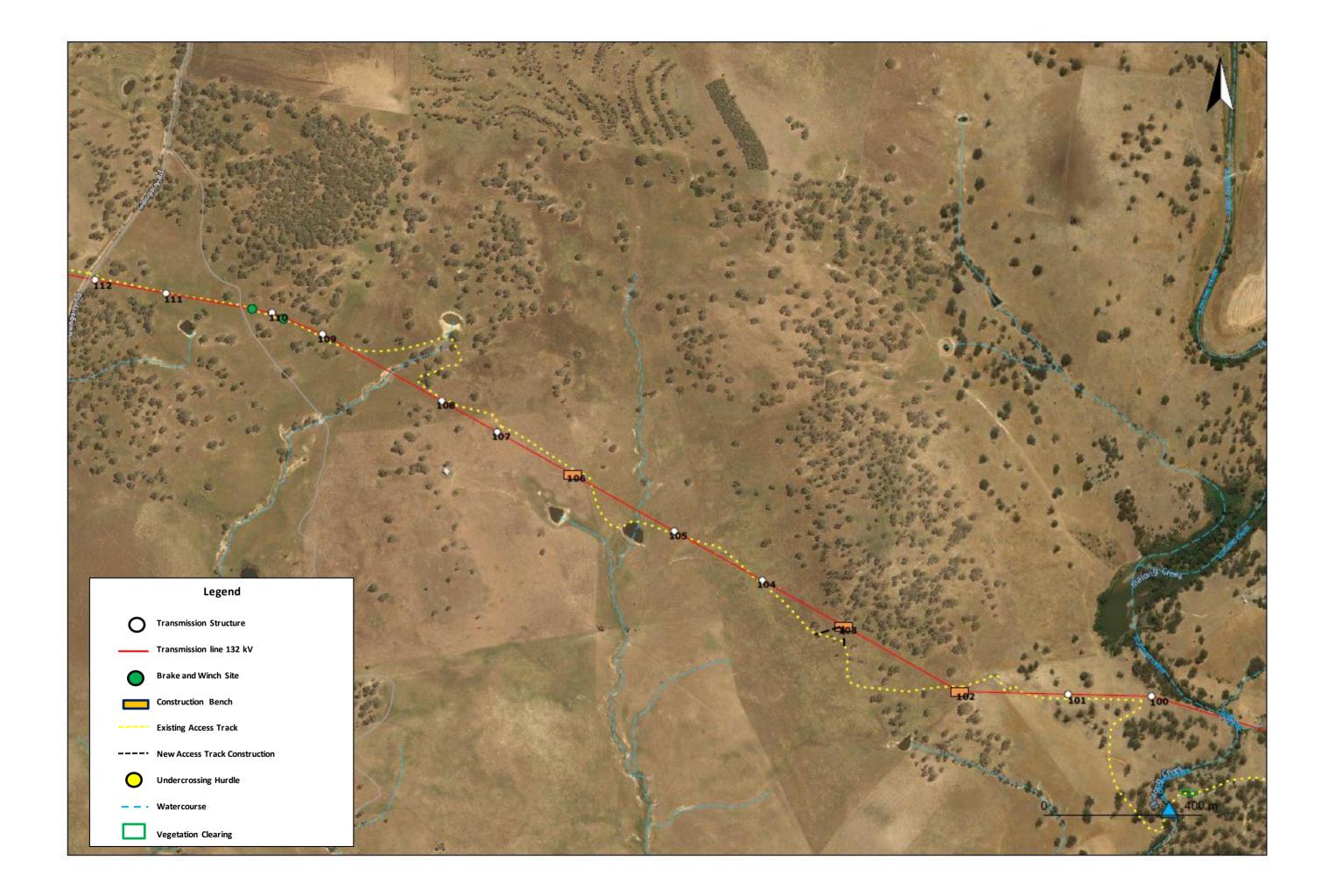


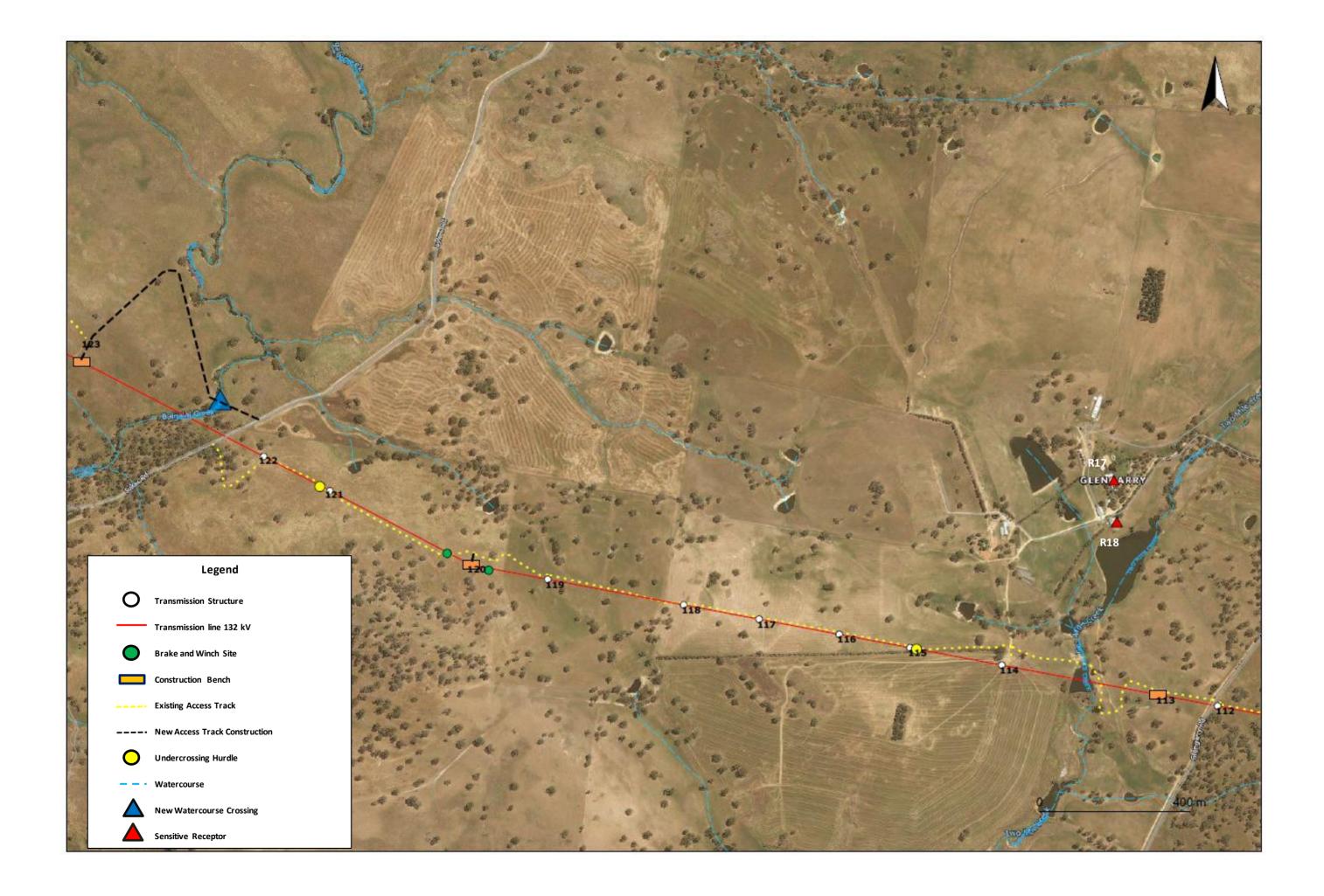


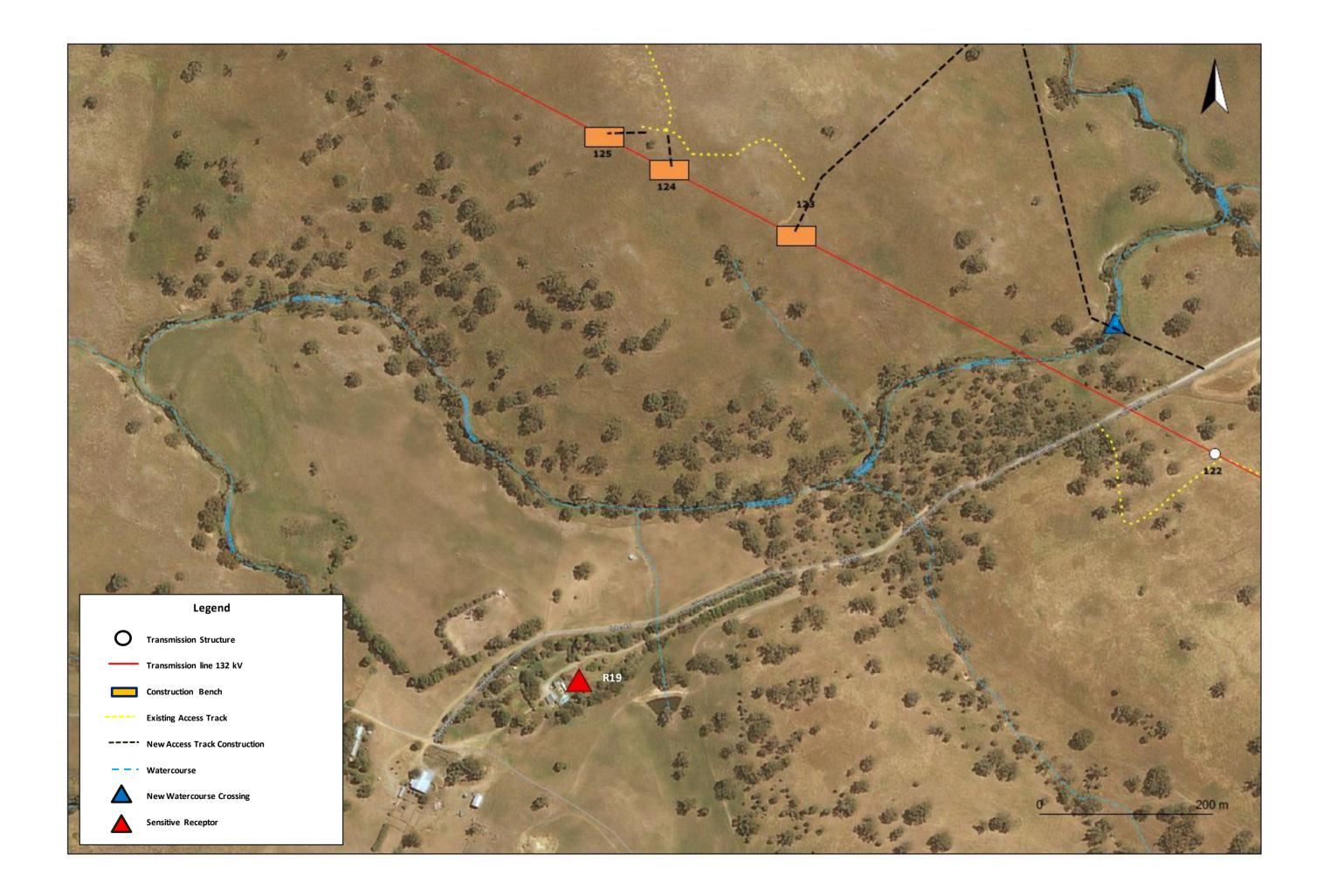


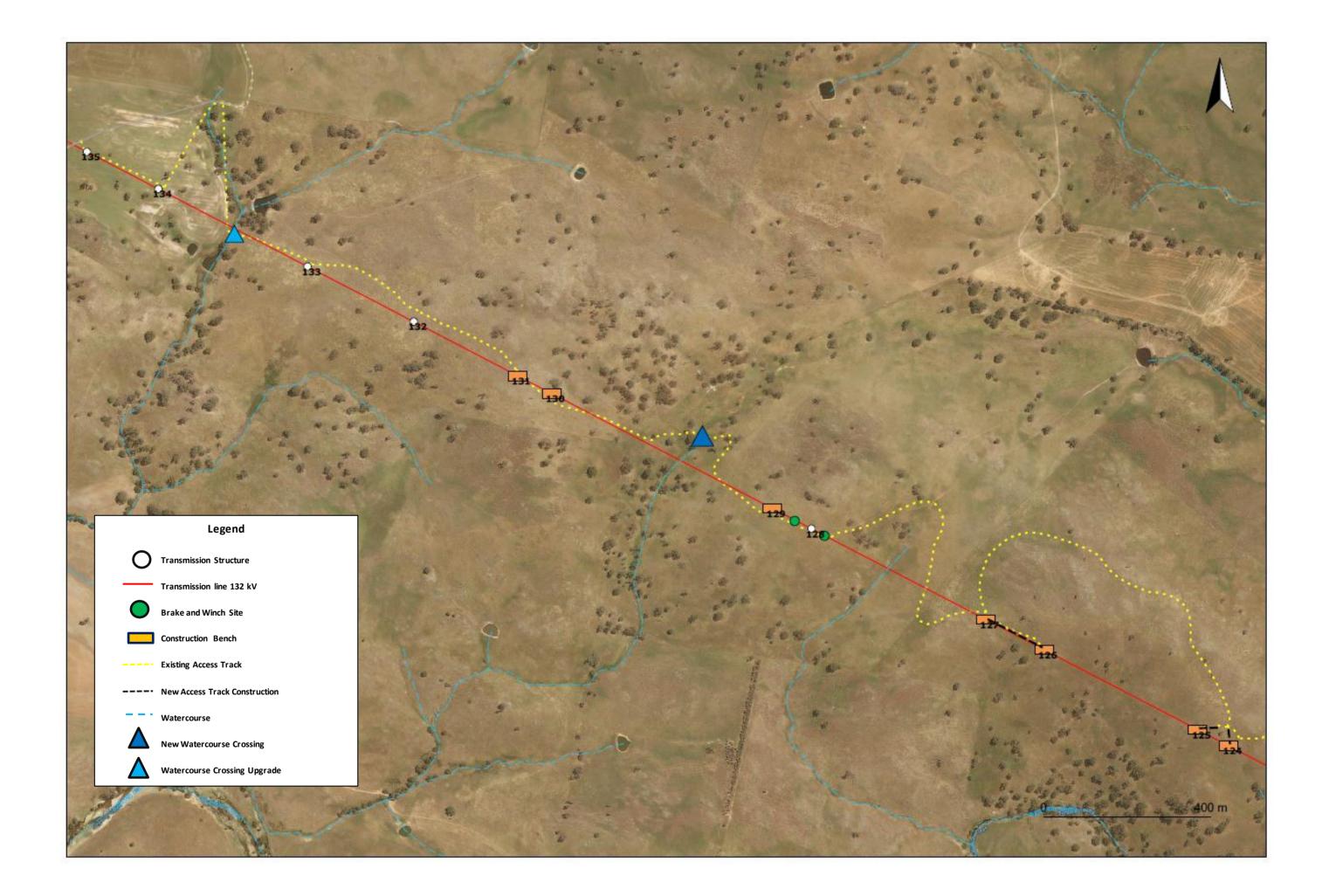


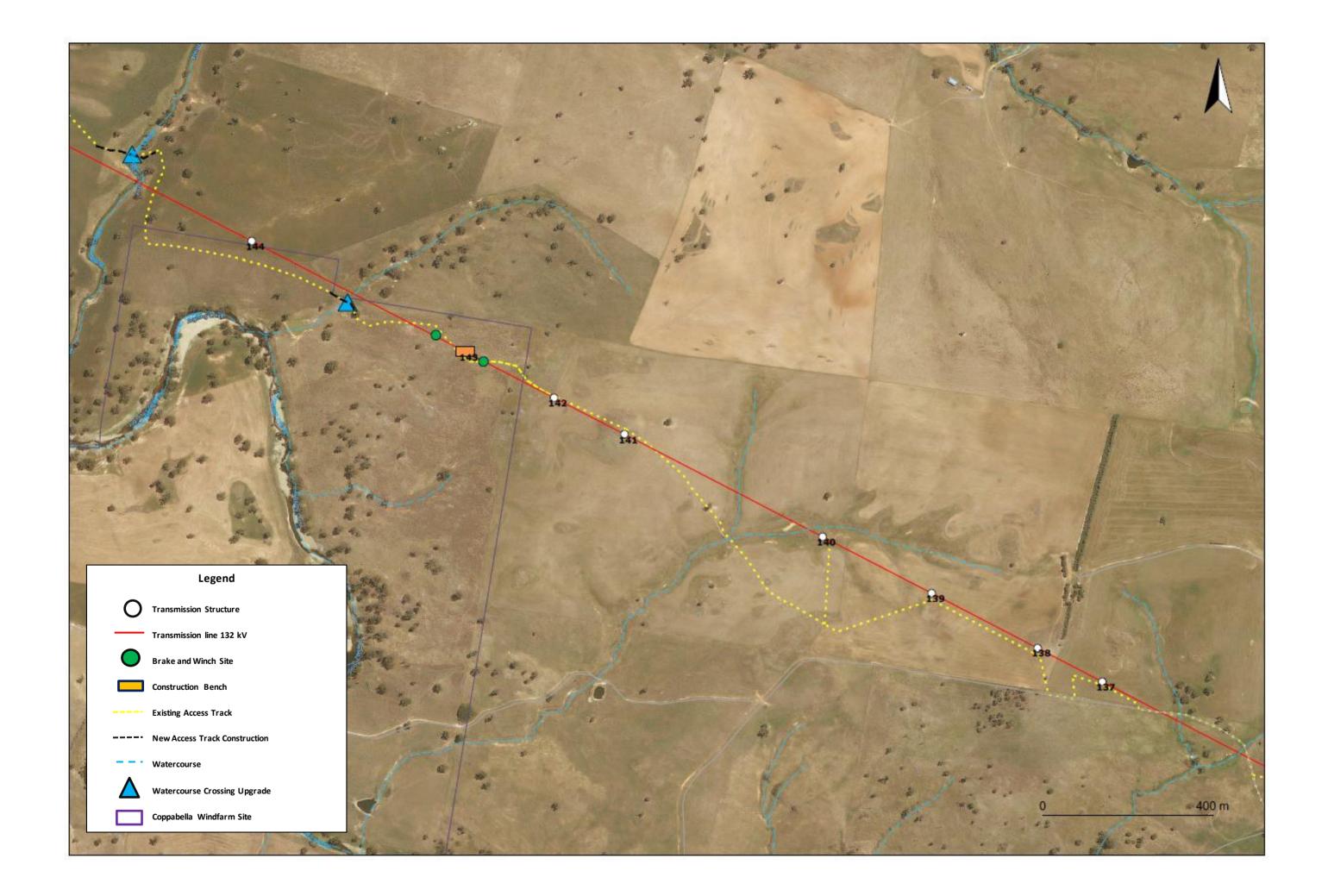


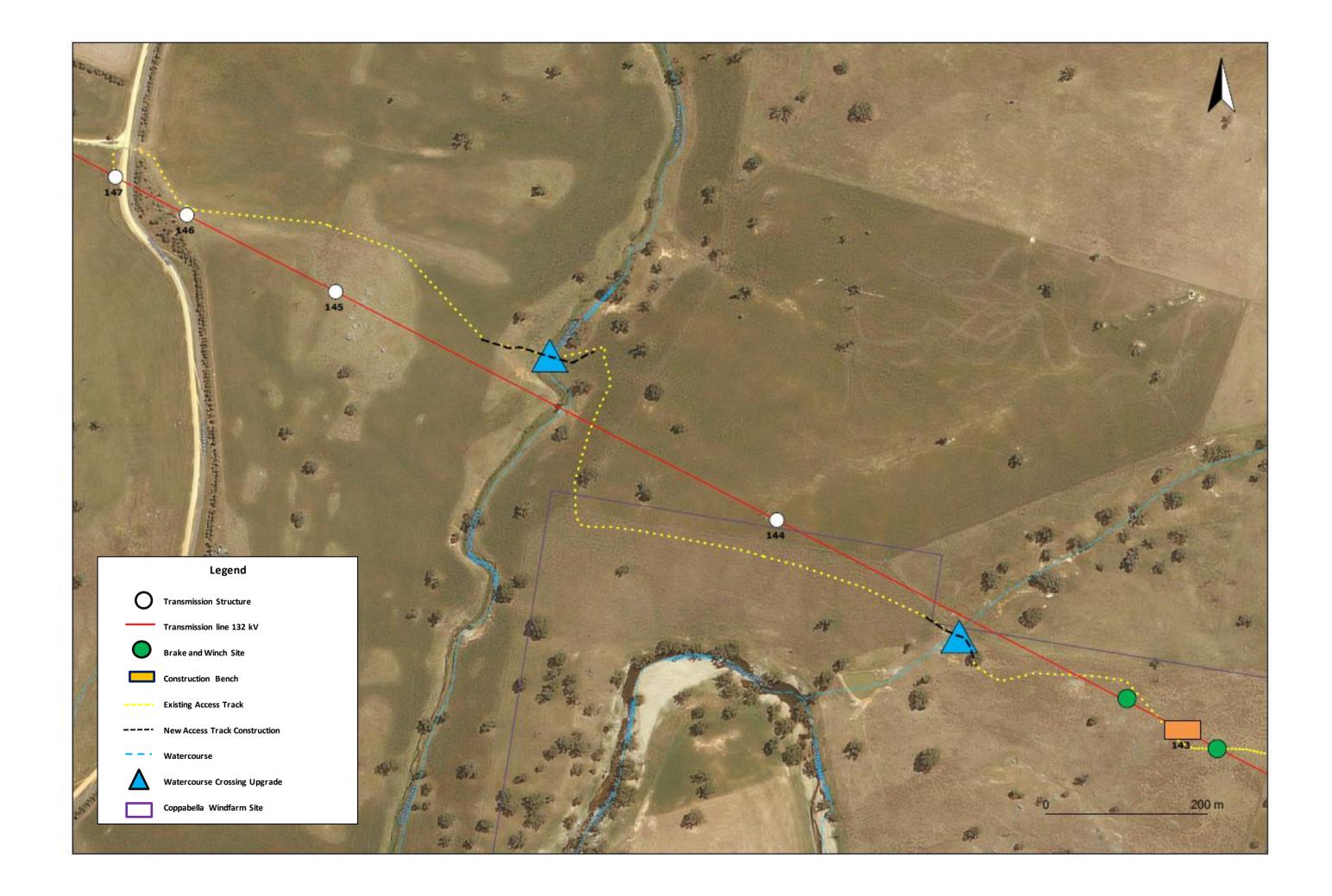














Submitter Number No.	Issue	Full Comment
1	Property and Access	The Coppabella Wind Farm Rebuild of Transmission Line 99M crosses a very small corner of Marilba Properties Pty. Limited land. At present there are poles on this land that with slight adjustment could be moved to the adjoining landholders land, which would avoid property access for maintenance etc. This would also alleviate the need for 2 gates to access the area. I accept there is an easement that covers this small portion of the property, but it seems silly to have poles and access gates in that tiny corner when with planning this can be avoided during the rebuild. To assist you to locate the area our land is close to Goondah and joins the property "Weilora "adjoining the Binalong /Bookham road.
2	Consultation and Stakeholder Engagement Process	You public consultation page does not list When the Consultation period commenced, or When the Consultation period finishes. It only states there are 20 days available for consultation; this is not very helpful. Can you please clarify? Extend the consultation period out to one month following the correction of the Transgrid Web Site posting?
2	Transmission Line Ownership and Costs	Advise us of the total cost of this upgrade of the 99M?
2	Planning Approval Process	TransGrid is both the "player and umpire". How can a Project funded by the Chinese have a private equity Proponent, and the same private equity entity as the Approval Authority. Has NSW sold off to overseas entity its Land Use planning function?
2	Ecology	The report on page 18 discusses Natural Temperate Grasslands, then on page 20 Fig 6.3 maps Derived Native Grasslands, these two ecological communities are different.
2	Ecology	Critically Endangered EEC's "did not meet quality Criteria" and yet only 3 examples of Box Woodland and 2 examples of Derived Grasslands. Correct name under Commonwealth government is: White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland The report failed to recognise the derived grassland component of this classification and therefore has likely failed to identify the true extent of this EEC. Weeds being present does not rule out a derived native grassland.
2	Ecology	The report does not recognise vehicle movements as Ground disturbance! Access to the line will be required from Road reserves, the report does not recognise the environmental significance of many of these Road reserves, notably Graces Flat Road with confirmed Golden Sun Moth recordings.



Submitter Number No.	Issue	Full Comment
2	Ecology	Environmental significance of many road reserves are not recognised, notably Graces Flat Road with confirmed Golden Sun Moth recordings. Graces Flat Road will be crossed in the vicinity of Golden Sun Month recordings
2	Ecology	States: "no fauna species were identified as being significantly affected by the proposed activity" and yet no Bat surveys were undertaken
2	Ecology	and the whole region is a known summer nesting area of the Superb Parrot.
2	Ecology	No impact on EPCB act - wrong with threatened and migratory species
2	Environmental Management	Transgrid will prepare the Construction Environment Management Plan - what about 3rd party review? TransGrid will submit CEMP to TG for review and approve the CEMP - what about 3rd party inspection and audit?
2	Environmental Management	Environmentally sensitive areas shown on plans - these need to be flagged in the field
2	Agriculture and Land Use	7 Days landholder notice is insufficient for farm planning - 7 days' notice does not give landholders sufficient time to schedule stock rotations away from the affected areas
2	Agriculture and Land Use	No reference for fencing out the easement to facilitate pasture re-establishment and grazing exclusion during this process.
2	Property and Access	How will vehicle tracking be managed, what is the seasonality of this work? What is the maximum rutting specifications?
2	Heritage	What Heritage training will workers be given? How will untrained workers identify artefacts, or will a Heritage Consultant be on site during excavations?
2	Ecology	Why is impact on Owls and Superb Parrot listed as Unlikely
2	Ecology	Table 3.8 - two Nos for Golden Sun Moth. Known population on Graces Flat Road and the easement cross this road!
2	Ecology	EPCB table does not list Lathan's Snipe - Lathan's Snipe present in Graces Flat, within 1 km of project
2	Ecology	Table 3.9 - No impact for Little Eagle. Well known habitat area Hume Hwy & Graces Flat road



Submitter Number No.	Issue	Full Comment
2	Standard of Documentation	Documents not of sufficient standard for Public Consultation - The Ecology Assessment presented seems to have been "cut" for publication. This assessment is based on the absence of any Footer information such as Last Update or Page Number. There are no page numbers throughout this report, making review difficult; and yet the Appendix references Page numbers. We suspect the Footer has been deliberately removed to Hide evidence of the Report date and not the last survey was conducted in December 2017. Also, the Ecology Assessment report has been so badly presented that all the Landscape pages have been cut "in half" by presenting the report in Portrait.
2	Standard of Documentation	 The second public document for the 99M has not been loaded correctly, what is Transgrid trying to hide? All the portrait pages on the environmental report (Appendix A) have been cut in half! The Page numbers or entire footer of the environmental report have been Hidden, I can only assume Transgrid is attempting to deceive the public with an out-dated report and have attempted to conceal the Footer of this report with the imbedded page numbers and report date. The Report index refers to page numbers not sections, but the public can not see any page numbers of the environmental report. If these are simple mistakes can they please be fixed, and the public advised when the complete information will be posted on the web site? I have to question Transgrids capacity to run a public consultation process, I previously reported that the Submission opening and closing dates were not posted on the web site, and now this error is also picked up. Why is not the NSW Department of Planning running this process?
2	Transmission Line Ownership and Costs	I note that none of your documents disclose the cost of the replacement of the 99M, or who will own this essential infrastructure.
2	Safety	 Whilst stakeholders can't be certain if it is equivalent to SSD financial thresholds, there will be no doubt that it will exceed the \$250,000 threshold for construction projects requiring the appointment of a Principal Contractor; and yet your documents make no mention of this, or who will be responsible for all the obligations of this project under NSW WHS law. Given that the project will be conducted on both shire roads, State roads and private lands should it not be disclosed who will be acting as the Principal Contractor and who will: prepare the project safety plan, and the publics right to review this plan conduct the project risk assessment conduct safety in design assessments how high risk safety work will be managed



Submitter Number No.	Issue	Full Comment
		 how the site will be secured, workers inducted, visitors (and landholders) managed will there be any independent third party safety inspections and audits conducted on these works?
3	Consultation and Stakeholder Engagement Process	1. As discussed can you please request from the appropriate party an extension of time for submissions on environmental issues surrounding the duplication of TransGrid's 132KV transmission line the 99M Yass 330/132KV substation to Coppabella Wind Farm 132KV Substation? Basically and due to various reasons the concerned public has only been aware of calls for submissions since Tuesday 2nd July with close off date 12th July not giving people anywhere near time to "digest" the lengthy documentation associated with this. So many people would be grateful if that can happen.
3	Transmission Line Ownership and Costs	2. Can you gain me contact information re construction and appropriate cost of duplication of this section of 99M please?
3	Property and Access	During the relatively recent refurbishment (replacement of original wooden structures with either concrete or steel structures plus "restringing" conductors) of the TransGrid 132KV transmission lines 990 and 970 public access roads and private property access roads where heavily impacted to a point of almost impossible passage by conventional property owners' vehicles. Added to this the damage caused to internal property access roads and privately installed creek crossings, in particular some aging concrete crossing were heavily impacted and broken up by the impact of the movement of heavy contractors vehicles carrying the large loads of component to replace existing wooden structures, insulators and new conductors, with upgraded conductors concrete pole components , causing further disruption to various aspects of property owners lives. Many of these internal access tracks whilst upgraded to suit TransGrid's contractors and TransGrid's vehicles continue to cause ongoing erosion. The movement of heavy contractors' vehicles carrying these large loads of components to replace those wooden structures is the machinery required to construct crane "hardstands" including an array of heavy earth moving machines, followed by drilling rigs to sink much larger footing hole for massively larger concrete structures, then ultimately the movement of the mobile crane to each new transmission line towers siting.
3	Agriculture and Land Use	It's disheartening to hear the verbal recitals of the impacts caused and disruption to normal property owners' day to day lives be it movement off farm or internal and impact on stock movement.
3	Agriculture and Land Use	As TransGrid is a self-regulatory body, whom will be ultimately responsible for Biosecurity? Biosecurity control pertinent to human activity, vehicular cleanliness and reliable decontamination of any components imported from overseas, or from areas of Australia with little or no quarantine facilities, that is biosecurity will or may impact on the





Submitter Number No.	Issue	Full Comment
		 business plan of property holders both sited along the length of the proposed duplication of the 99M, or of landholders where construction traffic will transverse their properties? Similarly, contamination of both road surfaces and road verges utilised access roads whether they be dirt country roads, sealed country roads or even the main motor way the Hume Highway 31? Thus, jeopardising the biosecurity of adjoining landholders. Vehicular tyres and mud crusted undersides are potential distributors for elements of biosecurity concern, including seeds, bacterium etc. Whilst TransGrid acknowledge this very important issue within the pages of Review of Environment Factors Coppabella wind farm-Rebuild of Transmission Line 99M, I am aware of times when TransGrid contractors have been less than enthusiastic about maintaining strict biodiversity protocols. Will these inter-property and access road to property and reverse same biosecurity measures be implemented by TransGrid should the duplication of the 99M proceed?
3	Ecology	Increased and accumulative effect of bird strikes; Whilst it is now accepted that wind farms kill bats and birds by erecting a higher transmission line including much higher smaller diameter earth wires there an increased opportunity for bird maiming and ultimately deaths. What is certainly an observation that people living a rural life accept, is seeing the corpses of dead fast flying birds be it they water fowl such as duck, swan or ibis and raptors, lying below transmission lines where the bird has collided with the power line at high speed. Alternatively, to the highly likely scenario of resultant fatalities from collision with power lines, there is the accompanying scenario of a potentially maimed bird left dragging a broken wing to ultimately succumb to a long lingering painful death from starvation, exposure and or being killed and devoured by a higher order carnivorous animal such as higher order raptors and or corvids, dogs or foxes. Ultimately a combination of the proposed work in raising the height and the duplication of the 99M will combine with the Coppabella wind farm bird blade strike impact on a very broad linear expanse of in the vicinity of 50 plus kilometres across both the Hill Tops and Yass Valley Council footprints.
3	Project Need and Justification	Due to the known lack of genuine generation by Australian Wind Farms, which due to their physical restraints of unreliability, thus can never provide base load, that alone reliable ready power connection to the grid when needed as demonstrated by a chart produced by Origin Energy which is a wind farm promoting company. I would even query the claim by Origin Energy that wind turbines can even generate 4% of total Australian grid electricity needs right across Australia. With both "prominent" wind farm proponents Global Power Generation and Goldwind having to publicly admit that power generated from their wind farm installations is intermittent. Thus, why is TransGrid considering this exercise of an ultimately taxpayer funded expense to connect a wind farm such as Coppabella to the NSW energy grid by duplicating the 99M?



Submitter Number No.	Issue	Full Comment
3	Agriculture and Land Use	During the upgrading of the 990 and 970 restringing property owners coming across conductors being dragged across their paddocks with no warning signage in place, will this behaviour be allowed to continue should the duplication of the 99M go ahead? Not only is this behaviour dangerous to personal but dragging transmission lines across property paddocks unannounced and non-guarded (no contractor personal stationed along the length of the restring) livestock movement could be impacted plus any animals left unattended in paddock may also be injured should they become trapped or entangled in these conductor movement. Will there be procedures set in place by TransGrid to effectively stop this dangerous practice should the duplication of the 99M go ahead?
3	Geology, Soils and Hydrology	 Whilst it is obvious to the "thinking person" the high impact/instigation on erosion that Goldwind will create on and around the Coppabella Range. Goldwind personal freely publicly admit that the Coppabella Range is steeper than any other wind farm project that they have ever attempted, even Goldwinds Coppabella wind farm webpage features a large existing large land slip on the side of the Coppabella range. Shouldn't that alone raise alarm bells? So why extrapolate the massive imminent erosion issues that are envisaged to be caused by adding to Goldwinds' impact on erosion constructing the Coppabella wind farm by what TransGrid will do in creating in the earthworks, machinery passes and transmission tower erection? Thus, TransGrid employees making the decision to proceed with the duplication of the 99M should consider the accumulative effect of erosion instigation this project will have on sections of almost 40 kilometres of the existing 99M in its present configuration, stretching from the proposed Coppabella wind farm 132KV substation through to the connection point ono the 132KV busbar of the Yass 330/132KV Substation.
3	Project Need and Justification	Allowing for the connection of the Coppabella wind farm to the TransGrid existing relatively stable transmission system will ultimately raise the likely hood of grid destabilisation such as occurred in the South Australian state black out 28th October 2016. The initial tripping off on protection of generators, AKA wind farms and failure to restart as is commonplace with wind farms followed by transmission line losses due to high winds caused the cascading effect of power outages across South Australia on that day. Post the initial protection tripping of the "power generators" generally wind farms which ultimately need grid power back feed to restart, (as those machines needed grid power to restart post that South Australian State Wide black out) the South Australian grid system ultimately imploded on itself? By duplication of the 99M from Coppabella wind farms step up 132KV substation to the Yass 330/132KV substations 132KV busbar for Goldwind, TransGrid is further adding to the likely hood of the same scenario played out for the



Submitter Number No.	Issue	Full Comment
		South Australian state black 28th October 2016? Whilst in reality I understand that NSW through TransGrid operates on a much more securer grid system than South Australia's radial feeds, there is still the chance of increase in grid destabilisation by adding further intermittent generators such as more wind farms to that "Grid?" Something for TransGrid to consider is the increasing number of wind farms already connected to and approved for construction wind farm potentially connecting to the NSW Grid will ultimately culminatley lead to NSW Grid Destabilisation?
3	Bushfire	Increased Fire Risk-Cumulative Affect; Does TransGrid ultimately wish to place itself in a position of increasing fire ignition risk that "aiding and abetting" the construction of the Coppabella wind farm by allowing the 99M duplication to proceed will ultimately have on the Yass Valley and Hill Tops regions already high incidents of fire ignitions. Duplicating and raising the height of the structures for the 99m and associated Coppabella Yass 132KV line also raises the fire instigation possibilities purely due the size of these structures? At the height of the 2003 Canberra fires another fire that appears to have been instigated at that time in the vicinity of Chidowla unconfirmed but attributed to the high wind combined with heat of the day allowing the extreme sagging of conductors of the 03 330KV transmission line to either come into contact or "flashover?" During a hot February day in the early 1980s another fire was attributed to a raptor either impacting or causing flashover on a 66KV line feeder out of Burringjuck power station in an area a little North of Chidowla. In more recent years an Australian White Ibis Threskiornis molucca which impacted an Essential Energy transmission line caused another fire East of Bowning and North of Bowning Hill North of the Hume Freeway. There's a reasonable track record of hot windy days causing the inevitable sag of electrical conductors and high possibility of either conductor contact or coming into proximity to cause flash over? Thus, TransGrid needs to consider the accumulative fire ignition risk factor of "aiding and abetting" the construction of the Coppabella wind farm by allowing the 99M duplication to proceed will have on the Yass Valley and Hill Tops regions.
3	Planning Approval Process	Due to work of constant questioning to Goldwind over a period of now multiple years since so call consultation with Goldwinds representatives it's been admitted by Goldwind that they could not get their alleged output power from Coppabella wind farm into the existing 132KV transmission line the 99M, (which is the case on their approval by the NSW Department of Planning and Environment dated 10th December 2018, to connect to the existing 132KV transmission line which is effectively running a contingency capacity rating between 137 and 154MVA, nominal load of 125MVA.) Given that Goldwind claim to wish to feed 280MW (280MW equals 280MVA with a power factor correction) alleged generation output from Coppabella wind farm onto the 99M with given then that TransGrid have a "contingency" plan of between 137 and 154MVA for this transmission line.



Submitter Number No.	Issue	Full Comment
		 How was Goldwind ever going to feed this alleged generation into a transmission line with a maximum allowable 29MVA? Goldwind were/are expecting to deliver almost 10 times the power into the 99M in differential between nominal carrying capacity of 125KVA to a maximum contingency of 154KVA? Thus as above I reject that the Proposed Activity Justification "Need of the Proposed Activity TransGrid 132KV transmission line the 99M Duplication from Coppabella wind farm 132KV Substation to the 132KV Bus at Yass 330/132KV Substation is null and void, by description alone and the fact that Goldwind were only granted approval for Coppabella wind farm to connect to the "original" transmission line by NSW Department of Planning and Environment, thus the original 99M in its original configuration not build a new transmission line?
3	Ecology	The hypocritic attitude of NSW and ACT Governments to the conservation of the Superb Parrot Polytelis swainsonii, this bird is listed as vulnerable ICUN Red Listed of Threatened Species "unfortunately" downgraded to Least Concern in 2012 In June 2018 the then member for Goulburn Pru Goward announced \$400,000 to go toward regionally based conservation project, to assist in saving the threatened Superb Parrot through the saving our Species NSW Government programme. This initiative has been put forward by the NSW Office of Environment and Heritage in an initiative to save this species whilst self-regulatory bodies such as TransGrid and NSW Governmental Departments such as the NSW Department of Planning and Environment seem "hell bent" on environmental destruction by embroiling themselves in projects such as the approval of the Coppabella wind farm and intended connection of the "new" duplicated 132KV Transmission line the 99M?
3	Project Description	As described on Page 1 Detailed Activity Scope, Simply to facilitate connecting of the 99M duplicated line from the Coppabella wind farm to the to the yet to be constructed new switch bay in the 132KV yard of the Yass 330/132KV substation. Replacement or strengthening works on structure 1 and 1A on 132KV transmission line 970. Recently refurbished? Replacement of structure 522 on 132KV transmission line 990. Recently refurbished? Replacement of structure 523 on 132KV transmission line 973 Seems a large amount of additional work to facilitate this connection. I hope that TransGrid consider my thoughts, as it appears that the TransGrid Corporation has obviously put little thought into this process, given that they allowed the recent upgrading of the 990 and 970 then to have to rearrange these structures a few short years later?
3	Agriculture and Land Use	 Raising and duplicating the 99M in this rural landscape will impact on aerial agricultural operation in this area in multiple ways. Firstly, Kidman Air overate a superphosphate spreading business of an aerial agriculture strip at 1179 Black Range



Submitter Number No.	Issue	Full Comment
		 Road. (Moments in the air from along lengths of the existing 99M where it crosses the Bowning Creek and Black Range Road) Raising the height of the 99M will add an instant obstacle extending across 39 kilometres of this company's present business plan. That is adding an extra obstacle at the 40 meters above ground level to be aware of for Kidman Air across a formally reasonable clear superphosphate spreading rural landscape. 2. As the conductors transverse many gullies, creeks and the Yass River adding height and the extra mix of a total of at least 8 conductors will bring a new dimension of awareness for rotor bladed aircraft employed to spray blackberries along these water ways. Helicopter spraying is now a well ingrained way of dealing with blackberries that invariably proliferate in these lower wetter areas of the local terrain. Without very visible indicators Transgrid's envisaged new multi "strung" conductors on this duplicated line will invariable have a huge impact on the way aerial blackberry control is conducted. I raise this submission as during the early 1980 whilst working along the Yass River 2 lives were lost when a local superphosphate spreading fixed winged aircraft collided with power lines strung across the Yass River. Whilst not a TransGrid power line the result could well be the same if this 99M duplication should go ahead. I hope that TransGrid will consider this submission whilst making the final decision to go ahead with duplication and raising the height of the 99M 132KV transmission line.
3	Transmission Line Ownership and Costs	Does TransGrid have a "line" designation for the "envisaged" duplicated 99M 132KV transmission line from Coppabella wind farm 132KV substation to Yass 330/132KV substation?
4	Visual	Change to our existing landscape and your request to increase your transmission poles from the current height of 20m to 40+ m and change a rural structure in a rural environment to a industrial structure in a rural environment. The structures are not in keeping with the current landscape, are too high and unsightly.
4	Property and Access	We own two residential blocks within 50 meters of this line and within 50 meters of at least two pole structures this will have an adverse effect on the value of these blocks should these poles be replaced with the proposed poles. This will restrict us from building any residential property near by the easement area in the future. This restriction is directly lowering the value of our property.
4	Health Impacts	Although the maximum of EMF level is expected not to impose any risk to public safety, it will be a health concern for us under constant exposure while working on the farm.
4	Property and Access	Your request for a construction zone of 40m x 40m is larger than legally allowed by the easement which is 30.48m



Submitter Number No.	Issue	Full Comment
4	Project Need and Justification	What the reasoning in taking the existing structure to twice the height? Will total volume be significantly increased?
4	Greenhouse Gas Emissions	What is the Carbon footprint left by this increase?
4	Planning Approval Process	Is there any reason why this is not a State Significant development and subject to the SSD planning process? As Goldwind is financing this project why is it not a modification to the Coppabella Industrial wind Project?
4	Transmission Line Ownership and Costs	Can you provide information as to the beneficiaries of this project so we can check the credentials?
5	Project Need and Justification	That transmission line was known to be fully utilised prior to consideration of the CWF. The cost benefit of the CWF had no allowance for the cost to Goldwind of upgrading it.
5	Transmission Line Ownership and Costs	Transgrid then gets the right to upgrade it (Transgrid approves its own project). The cost gets added to everyone's electricity bill. The cost should have been Goldwind's
6	Planning Approval Process	Why wasn't the power supply line sorted before unbelievably gaining approval from a gutless NSW Planning and IPC?
6	Transmission Line Ownership and Costs	Who will be paying the bill for these poles and wires when CWF rolls over and dies due to its poor energy output?
7	Planning Approval Process	TransGrid, a private equity firm can Propose and Approve their own development.
7	Geology, Soils and Hydrology	2. Ground Disturbance : –Any vehicles and construction sites of 40 x 40 metres,on the fragile soil of the Coppabella's will be of environmental significance.
7	Ecology	3 Failed to identify critically Endangered Species and the trimming and removal of vegetation to access the work sites
7	Ecology	4. It is not acceptable to list the impact of Owls and Superb Parrots as 'unlikely' when there has not been a nocturnal owl survey conducted and this area is a well know Superb Parrot and Little Eagle habitat



Submitter Number No.	Issue	Full Comment
7	Visual	5. It is incorrect to state the visual impact would be minor when the steel or concrete poles will be up to 40 metres in height (20 metres higher than the existing wooden poles)
7	Agriculture and Land Use	6. 7 days is insufficient notice for Landholders to plan stock grazing while this disturbance can continue for 18 months
7	Consultation and Stakeholder Engagement Process	8. Insufficient time for Landholders to submit objections and the document (the 3 PDF total of 337 pages) were difficult and time consuming to review
7	Ecology	The OE&H have continually assessed the Whitefield Road and area as the highest ecological area of the entire site and to be NO road side development and disturbance on the fragile soil of the Coppabella's
8	Planning Approval Process	Firstly why was the Copperbellas wind farm approved without this upgrade being exposed to relevant landholders and community it's part of the same project yes? It's not right that approvals been done without the whole picture in place, A full investigation in this entire project needs to be undertaken the powerlines should have been discussed before the decision to undergo the Copperbella wind farm was approved not visa versa
8	Visual	The upgrade will provide yet another physical negative impact to our beautiful views and cause more destruction to our environment !
8	Transmission Line Ownership and Costs	Who will own this powerline Australia or foreign powers ?!
8	Health Impacts	Also being a farmer that works under these powerlines I'm significantly worried about the health implications these more powerful lines will have to me and my stock !
8	Agriculture and Land Use	Am also concerned about the huge bio security risk this will have on the farms!
9	Consultation and Stakeholder Engagement Process	Why only landholders with easement have been contacted and not adjoining landholders? Lack of informative correspondence from TransGrid to residents who are directly impacted or neighbouring properties whom Transgrid may need to impact on via access for vehicle traffic during the construction process
9	Planning Approval Process	Also why this project is funded by Goldwind but is not a Modification to the Coppabella Industrial Wind Project, as well as concerns regarding further Chinese acquisitions of essential Australian infrastructure.



Submitter Number No.	Issue	Full Comment
9	Consultation and Stakeholder Engagement Process	We find the letter dated 12/7/19 misleading, poor and almost to the point of trying to disguise the true nature of impending events, to quote, "TransGrid is proposing to rebuild Line 99M as a double circuit line from CWF at Structure 143 to Yass substation to better support the connection of CWF and accommodate changing demand on the network." This is a very non descriptive explanation of what is actually going to happen, no mention of raising the height of the towers from 20m to 40m, no mention of an increase in the amount of power cables and definitely no mention of the time frame and type of heavy construction needed to perform and undertake this type of upgrade, we realise that some of these details are covered in the pdf but not everyone has the technology required to access this information, and there is definitely no indication in this correspondence that it would be advisable to look further into this matter. In the letter dated 12/7/19 there is no indication of any proposed timeframe as to when the intended construction will commence nor any intended hours of construction or days of the week when construction will be carried out.
9	Property and Access	As we have had direct experience with minor works performed on the existing towers, we have first-hand knowledge with the amount of vehicle traffic, both small and large. Also, the amount of manpower involved to perform these minor tasks, let alone a project the size of the one proposed. Our experience with the contractors involved has not been pleasant. There has been delayed time frames, failure to repair damage to farmland when performing tasks and issues arising over their access into our property. From our previous experiences ,we have concerns involving our property being subjected to huge interruptions and massive traffic damage during the construction process
9	Health Impacts	During previous works carried out on our property, we were informed by TransGrid that the towers were being upgraded to meet further requirements. Some needed to be raised in height and others needing works to meet safety standards. During this process we were nothing but obliging and co-operative with the operations that were needed to be undertaken. We find it very concerning and are feeling quite misled that we are now faced with a massive construction process which could potentially take months or even years to complete. The interruptions to our family life and livelihoods through such a massive project will have an impact of stress on our health and the well-being of our whole family.
9	Property and Access	Another point to consider is the devaluation of our asset. The visual impact of such large structures must surely create a negative aspect on the views and surrounding landscape, thus affecting property values and impacting on re-sale values. There has been no mention of reimbursement or compensation for this or the loss of income potential due to the interruptions we face. Surely there has to be consideration to the difference in property values prior to and after completion of this type of construction.





Submitter Number No.	Issue	Full Comment
9	Bushfire	We have serious concerns with the possibility of the above mentioned proposal due to a severe bushfire risk. During previous works carried out on our property, contractors have wanted to continue working with machinery during periods of total fire bans. These situations arose as the contractors were running behind on scheduled time frames for the completion of works and were facing financial penalties. We find this type of mindset quite ridiculous and also very disturbing. We were contacted by TransGrid in relation to this matter and they informed us that as we were the landholders, we were the only ones that could prevent such stupid actions being carried out. The contractors had sourced permission from "higher powers" above the control of the local TransGrid employees. I was informed by a TransGrid employee on 13/2/18 to send an email to prevent such work taking place during a period of total fire ban. In wake of the Cobbler Road Bookham bushfire in 2013, which caused so much destruction to the Yass Valley, we find it ridiculous that rules and regulations set in place by the RFS and the State Government, were trying to be bypassed and not adhered to purely for financial gain. The impending results of such stupidity could have disastrous results on surrounding farmland as well as local residents homes and personal property, but also potentially fatal. With a NW wind blowing, Yass town would be in direct line of an impending bushfire and its devastating consequences.
9	Agriculture and Land Use	We believe that there are massive bio-security, environmental, and livestock risks to landholders if the proposed rebuild of transmission line 99M goes ahead. There is also the risk of contamination from vehicles and workers entering the site which are extremely high, as there are no control measures in place too eliminate this risk during the construction process. As we know this could be devastating to landholders who are confronted with this situation and the financial loss incurred on landholders can be excessive in trying to contain a breach in bio-security, with the worst case scenario being the culling of livestock. Some of the possible bio-security risks include footrot, lice, parasites, campylobacter virus and noxious weeds which can takes years to eliminate. All of these have the potential to ruin the landholder financially ,not only with the cost of trying to eradicate the issue but also the loss of income during the eradication process.
9	Agriculture and Land Use	As a rural contractor specialising in sheep pregnancy scanning I have had first hand experience of the impact in relation to stress on ewes prior to joining, pre-lambing and post lambing. Stress is one of the major factors in interrupting a ewes cycle, therefore preventing a ewe from conceiving. Campylobacter virus can cause the foetus to abort. Stress and interruptions during lambing can cause mis-mothering resulting in high lamb mortalities. All these factors greatly contribute to financial losses to landholders.



Submitter Number No.	Issue	Full Comment
9	Ecology	The effect on the environment during such a massive construction process would be huge. Local native wildlife, in particular birdlife would be severely impacted by such a large project. Disturbances to breeding and removal of their habitat would surely be nothing but detrimental to their long-term survival.
9	Geology, Soils and Hydrology	Erosion can be a severe problem to the environment and sometimes it is after the works have been completed that it becomes obvious. Also, the impact on local waterways from residue and silt washing into dams, creeks and waterways can be detrimental to the environment. Landholders will unfortunately be left to clean up or repair the damage.
9	Geology, Soils and Hydrology	Chemical, fuel and oil spills are also a major concern to the environment and we have had first hand experience with such an event. TransGrid where undertaking works on our property when a tip truck towing a heavy compactor on a float was involved in a roll-over accident, resulting in diesel fuel and hydraulic oil being spilt onto the ground. A subsequent clean-up procedure did take place immediately as the spill kit was not on site which resulted in the fuels soaking into the ground. Heavy recovery equipment then had to be employed to correct the turned over vehicle, resulting in further heavy machinery entering the property.
10	Consultation and Stakeholder Engagement Process	Landholders were not given enough information on project.
10	Transmission Line Ownership and Costs	Not clear who will own and maintain line.
10	Planning Approval Process	CWF was approved using existing 99m line
11	Agriculture and Land Use	We have a proposed Rural Tourism Development Proposed for our property known as The Crisp Galleries. Back in 2008 we sought an Amendment to the new LEP to facilitate our development for a tourist resort here at "Gap Range" Bowning. (Also known as the Crisp Galleries). We were successful in getting this amendment through in the New LEP at the time. This of course took a lot of resources financially to achieve this.
		We engaged Peter Stutchbury Architecture Sydney, one of Australia's most famous, to provide us with his vision of this village and it layout. Accommodation for up to 800 international and Australian guests - which just happens to be where this upgrade of 99M. This will cost us our financial investment up to date. We have been here for 50 years to build our asset base which will be destroyed by this power line 99M.



Submitter Number No.	Issue	Full Comment
11	Property and Access	This new line being potentially 20 m higher will totally destroy or devalue any potential future sub-division which is potentially our super to retire on being self employed.
11	Property and Access	If you move the line 5 m surely this will need surveying and negotiation with us? I know there is an easement which you have access to which we believe is not wide enough. We wont allow entry from our land.
11	Visual	Visual impact for generations to come.
11	Transmission Line Ownership and Costs	Who is paying for this work ? Is it foreign investment that we end up paying for.
11	Geology, Soils and Hydrology	Already your vehicles have been bogged in our paddocks with existing work. All adds to erosion especially with the upgrades you are proposing.
12	Planning approval process	Firstly how is it that a project of this scale does not need to be subject to the approval process through the NSW Planning Dept ?
12	Planning Approval Process	How can Transgrid be its own determining authority on a project of this scale ?
12	Transmission Line Ownership and Costs	Who is financing this project ? If the project is funded from an outside party who takes ownership of the poles/wires upon completion ?
12	Project Description	What dimension will access tracks (on property) be ? Where are materials for track construction being sourced ? What will be dimensions of creek crossings ? Where are water requirements being sourced ? Will there be tracks between each structure ? Will there be trenching between each structure ? Will any blasting be required ?
12	Geology, Soils and Hydrology	What detailed erosion control measures will be put in place ?
12	Agriculture and Land Use	Will there be any compensation to landholders for area of land lost to tracks and hardstand areas ?



Submitter Number No.	Issue	Full Comment
12	Agriculture and Land Use	What measures will be put in place to prevent the spread of weeds ?
13	Agriculture and Land Use	These works will directly impact our grazing property situated at Graces Flat Road, Bowning. The works will be targeted in paddocks which hold our stock. Stock which generate our income. The proposed works involve extensive ground work, which will damage existing and future pastures. These pastures are essential to the continued lamb production which is our only source of income from the property. We have spent years focussing on soil and pasture improvement. If these proposed works go ahead, our years of hard work will be for nothing and we will essentially need to start from scratch to return the land in the affected areas to the level of current productivity.
13	Property and Access	The proposed works will essentially cut our property in half, and the works will directly impact our planned future property improvement projects, such as crop plantations, improved farm water facilities and stock movements
13	Agriculture and Land Use	Large number of workers and vehicles that would be involved in the line works. The combination of workers and machinery poses a severe bio-security risk to our grazing property and is directly in opposition to the bio-security guidelines.
13	Consultation and Stakeholder Engagement Process	Disappointed at the lack of direct consultation in relation to the proposed works. We expect more consideration be given to the landholders whose livelihood is directly affected by these proposed works.
14	Geology, Soils and Hydrology	I don't want any roads or tracks which cause erosion going through my place.
14	Project Description	I haven't the water to give away from the dams and leave the stock with less water. Water is a precious commodity today, so I will not be giving it away to your project.
14	Property and Access	If you had to use my place, you would need several creek crossings put in place, your large vehicles would never get across our creeks. So I will not consent to you going through here (my property).
14	Visual	The taller powerlines will be an eyesore to this beautiful landscape.
15	Project Need and Justification	As you frequently say the grid is currently full so why on earth are you thinking of upgrading a transmission line just to accommodate an unrealible source of wind energy. If the proponent, Goldwind, wasn't going to pay for this new 30km.line, would you be considering it then? To me it is ludicrous for millions of dollars to be spent on a insignificant, inconsistent source of energy that might only be for 25 or so years. The majority of farmers and village residents have



Submitter Number No.	Issue	Full Comment
		had the threat of this Coppabella Wind Farm hanging over them for the past fifteen years. Surely it occurs to you that along with the ongoing drought, this new threat is the last straw.
15	Agriculture and Land Use	Along with even more old forest clearing, farmers are going to have vehicles driving over what little pasture they have plus the disturbance of stock as well.
15	Visual	It might surprise you but we farmers and country people love our land and animals and the beauty of our rolling unspoiled hills. Please don't bow down to Goldwind who as far as I have observed will do anything to get their own way. They are only in it for the money and have absolutely no regard for the environment or the people who cherish it.
16	Agriculture and Land Use	To run an effective efficient agricultural farming business weed control is a major priority. Currently it's hard enough to keep our weeds under control with the current power lines running through our property. For efficient weed control we use Aerial spraying, as this gives us greater coverage to our property and our steep creek frontage. The powerlines run through our creek line in a steep decline area that is not assessable by vehicle and difficult to access safely on foot due to the steep decline. When the Aerial spraying is done, the helicopter has a large exclusion zone to safely get around the lines. This results in additional hand spray we must perform via a vehicle and on foot. This also comes at an additional cost which we are already covering.
		With the proposed extension of the current Line 99M this exclusion zone becomes greater due the height extension and the increase in voltage this will result in greater cost for our weed control. As the exclusion flight zone area becomes greater the hand spray is required, so therefore we are paying for the Helicopter, plus more spray, fuel, time and manual effort. Each year prices of Spraying, Fuel, Chemicals & parts goes up, and over the years this extension of the lines is going to result in a huge increase in our cost of business and time.
16	Agriculture and Land Use	If this proposed extension of Line 99M goes ahead this will result with further construction work to occur on our property. With large poles having to be installed results in more foundations to be constructed within our boundaries. This will result in heavy machinery and vehicles accessing our land over a period. This will result in disruptions to our paddocks, stock rotation and large number of personals on our land. As only recently have we had maintenances done to the lines and had several personals access our land. Our concerns are more about outside contractors accessing the land and having the respect for our land and making sure no interruptions occur to our stock and they respect the place to leave it how they found it.



Submitter Number No.	Issue	Full Comment
16	Project Need and Justification	As this proposed updated is to go through to the Coppabella Wind Farm which we have no benefit from. When I believe there is better more efficient ways of producing power these days which has minimal impact to the environment and land.
17	Visual	I would like to object to the proposed plan to upgrade the power lines known as the 99M Copperbella to Yass Tran's grid due to the unsightly aspect affecting the landscape and view, imposing on one of the very reasons why living in the country is so appealing in the first place.
		This expansion of the current power-lines affects all those in the community who view and live with an additional eye saw and yet only information relation to this project was expressed to the direct land holders without considering/consultation with the wider community district. This sends alarm bells and wreaks of corruption, back door deals and hidden agendas
17	Consultation and Stakeholder Engagement Process	Only information relation to this project was expressed to the direct land holders without considering/consultation with the wider community district. This sends alarm bells and wreaks of corruption, back door deals and hidden agendas
17	Planning Approval Process	Can you please provide reasons why planning for this project is not described within the State significant development process. What has instigated this significant expansion especially in view of the recent Coppabella wind project already imposing on visual aspects. If this project is in any way tied into the current Goldwind conglomerate and Chinese grab for more Australian land and infrastructure I will be very disappointed and strongly opposed.
		Prior to this project going ahead there should be a full planning process by the state
17	Project Need and Justification	n addition, to an investigation into any involvement of this project as a result of the proposed wind farms which have continually altered their story from initial concept to coheres land owners, and manipulate the system for their own needs and agenda (this upgrade was not mentioned in the approval process to install an industrial wind farm.
18	Consultation and Stakeholder Engagement Process	The letter does not stipulate that the line will be a duplication of the existing line, just an upgrade to meet anticipated increase in demand and in most cases was not fully understood by the recipients
18	Property and Access	There is no mention of land reclamation in case of damage caused during construction. At last years upgrade of power poles trucks were bogged etc and no reclamation undertaken on the affected property. The landholder is still waiting for stumps left at ground level to be removed



Submitter Number No.	Issue	Full Comment
18	Project Need and Justification	We are also concerned that the project is funded by an international company who are also the proponents of CWF and to the knowledge of Yass Landscape Guardians have not yet secured either funding or a market for their power.
18	Planning Approval Process	We also understand that the IPC approval for the Coppabella Wind Farm did not include the construction of a new transmission line as the existing line was suitable. Therefore it would seem that an amendment to the approval for construction of the Coppabella Wind Farm needs to be granted before an extra line can be put in place anyway!!
18	Consultation and Stakeholder Engagement Process	The letters to SOME of the affected landholders were received almost on the objection deadline? Good practice?.



Appendix C Revised Summary of Mitigation Measures

Enviror	mental Management and Incident Response
EM1	A Construction Environmental Management Plan (CEMP) shall be prepared and submitted by the Contractor to Environment – HSE/ TransGrid for review and endorsement four weeks prior to the commencement of works, including site establishment. The CEMP shall be prepared in accordance with TransGrid's procedure <i>Preparation of a Construction Environmental Management Plan.</i>
EM2	All works shall be undertaken in accordance with the TransGrid Environmental Handbook.
EM3	All workers shall be inducted onto the Environmental Management Plan, site environmental conditions and sensitivities identified in this REF and receive training as appropriate. All workers shall receive Aboriginal heritage awareness training. Records shall be kept of this induction and training.
EM4	An Environmental Supervisor shall be included as part of the construction staff to oversee implementation of the Environmental Management Plan and to ensure that all mitigation measures are being effectively applied.
	In addition to the Contractors Environmental Supervisor, TransGrid shall appoint an Environmental Inspector to regularly check that the work is being carried out in compliance with all environmental approval and legislative conditions.
EM5	The following additional environmental approvals/licences/permits are required for the activity:
	> A Section 138 permit and Road Occupancy Licence shall be obtained Approval from Roads and Maritime Services (RMS) prior to carrying out works in, on or over Hume Highway which is a classified road.
	> A permit is required to be obtained from NSW Department of Primary Industries-Fisheries (DPI Fisheries) for the proposed watercourse crossing works at:
	- Booroo Creek (1st order watercourse) between Structures 8-9.
	- Booroo Creek (4th order watercourse) between Structures 9-10.
	- Illalong River (4th order watercourse) to access Structure 99 and 100.
	- Balgala Creek (3rd order watercourse) between Structures 122 and 123.
	- Bobbara Creek (5th order) to access Structure 143 from Coppabella Road.
	 Controlled Activity Approval to be sought from NSW Department of Primary Industries-Water prior to carrying out works at same locations listed above. Abariginal Haritage Impact Depart for works at Structures 11 and 12 and inc. 20M
EM6	 Aboriginal Heritage Impact Permit for works at Structures 11 and 12 on Line 99M. All environmental incidents and near misses shall be reported to TransCrid. All pollution incidents
LINIO	All environmental incidents and near misses shall be reported to TransGrid. All pollution incidents that threatens or harms the environment shall be reported immediately to relevant authorities, in accordance with the <i>Protection of the Environment Operations Act 1997</i> (POEO Act).
EM7	Environmental spill kits containing spill response materials suitable for the works being undertaken shall be kept on site at all times and be used in the event of a spill. Any spills shall be contained cleaned up promptly and immediately reported to the TransGrid site representative.
EM8	All chemicals or other hazardous substances shall be stored in a bunded area and away from an drainage lines/pits. The capacity of the bunded area shall be at least 130% of the largest chemical



Mitigati	on Measures
	volume contained within the bunded area. The location of the bunded enclosure/s shall be shown on the Site Plans.
EM9	Any environmentally sensitive areas shall be clearly delineated and shown on Site Plans and identified on site.
EM10	A REF Close Out Report shall be prepared at the conclusion of the construction of the proposed activity to document how and whether the conditions and measures were observed, and the nature of and reasons for any non-compliance.
Land U	Se
LU1	Ongoing consultation shall occur with all affected landholders prior to and during construction to allow the planning of activities on their land which may conflict with the construction works. Landholder requirements shall be discussed on an individual basis.
LU2	On completion of the work disturbed areas shall be stabilised, and returned to as close to original condition or as otherwise agreed with the landholder. TransGrid is to undertake any repair works of access tracks and watercourses which have been damaged during construction in consultation with the landholder.
Geolog	y and Soils
GS1	An Erosion and Sediment Control Plan (ESCP) shall be prepared as part of the CEMP. All erosion and sediment control measures shall be designed, implemented and maintained in accordance with relevant sections of " <i>Managing Urban Stormwater: Soil and Construction Volume 1</i> " (Landcom, 2004) ('the Blue Book) (particularly Section 2.2) and " <i>Managing Urban Stormwater: Soil and Construction Volume 2A – Installation of Services</i> " (DECC, 2008a)". The ESCP shall include stockpiles, stormwater run-off, trees, site boundaries, site access and storage areas. Exposed surfaces shall be kept to a minimum to limit the potential for erosion. Erosion and sediment controls shall remain in place and be monitored and maintained until such time the site has been stabilised.
GS2	Any imported fill shall be certified at source location (e.g. Quarrymaster or property owner) as pathogen and weed free Excavated Natural Material (ENM) or Virgin Excavated Natural Material (VENM) in accordance with the <i>Protection of the Environment Operations Act 1997</i> (POEO Act) and the <i>Protection of the Environment (Waste) Regulation 2014</i> (POEO Waste Regulation).
GS3	Any material or soil suspected of showing evidence of contamination shall be sampled and analysed by a NATA Registered laboratory and managed in accordance with the <i>Waste Classification</i> <i>Guidelines</i> (EPA, 2014), <i>the Guidelines on the Duty to Report Contamination</i> (EPA, 2015) and the <i>Contaminated Land Management Act 1997</i> .
GS4	Access tracks off public roads shall not be used in wet weather conditions where there is a risk of damage to the tracks which could cause soil erosion and sediment control issues.
Hydrold	gy and Water Quality
HW1	Spoil shall be stockpiled in a manner so as to avoid the possibility of sediments entering watercourses (including stormwater drains) or migrating off-site.
HW2	Any bulk fuel or hazardous material transport vehicles shall be parked on level ground a minimum of 40 m away from watercourses (including drainage line). No refuelling or bulk herbicide preparation shall occur within 40 metres of a watercourse.
HW3	Watercourse crossings shall be constructed in accordance with the Fisheries Management Act 1994, Policy and guidelines for fish habitat conservation and management 2013, Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (Fairfull and Witheridge,



Mitigati	on Measures
	2003), Controlled Activity Guidelines under the Water Management Act 2000 (WM Act) and the DPI - Water's Guidelines for watercourse crossings on waterfront land.
HW4	If minor dewatering is required, the management of discharge water shall be documented in the CEMP. Discharge water should be limited to vegetated, grassed areas, away from waterways, and within the transmission line easement. If the discharge water is highly turbid, dewatering through a filter sock (or similar) shall be considered, where appropriate, to minimise sedimentation.
Ecolog	/
EC1	Ground disturbance (including vehicle movements) and vegetation clearing shall not occur within any of the mapped areas containing <i>White Box Yellow Box Blakely's Red Gum Woodland</i> EECs- and Derived grassland of the NSW South Western Slopes (refer to Figure 6-2 and Figure 6-3 of the REF).
EC2	Weed control mitigation and management strategies shall be documented and implemented in accordance with the CEMP. All herbicide selection and use shall be in accordance with TransGrid requirements.
EC3	Ground disturbance works and plant traversing the site shall avoid Wombat (<i>Vombatus ursinus</i>) burrows identified near Structures 10, 11 and 13 and any other burrows which may occur within the study area.
EC4	Any fallen timber, dead wood and bush rock (if present) encountered on site shall be left in situ or relocated to a suitable place nearby.
EC5	Consultation with DPI Fisheries would be carried out as part of the design of all watercourse crossings upgrade and construction works to ensure the designs meet relevant requirements and to confirm if a Part 7 Permit is required.
EC6	Consultation with the landholder would be carried out prior to any undertaking any clearing of planted vegetation along the following Spans 19-20, 21-23, 27-28, 30-31, 62A-63, 88-89, 96-98 and 114-115.
EC7	Any disturbed riparian areas would be remediated with native endemic vegetation as appropriate.
EC8	Consultation with each landholder shall occur prior to the commencement of construction to understand any biosecurity risks specific to their land. Any properties with an on-farm biosecurity plan shall be complied with and specific measures incorporated in the CEMP.
Heritag	e
HE1	AHIMS 51-4-0392 (Yass River-OS1) - To manage the unavoidable impact to the site An Aboriginal Heritage Impact Permit (AHIP) pursuant to Section 90 of the <i>National Parks and Wildlife Act 1997</i> shall be sought from the NSW Office of Environment and Heritage prior to any works occurring at Structure 11 and 12. Once obtained, all works at these locations must comply with the conditions outlined in the AHIP.
HE2	 To protect AHIMS 50-5-0027 (Booroo Ponds 1) and the associated sensitive terrace landform the following measures shall be implemented: No ground disturbance associated with improving access through the gate on the existing access track to structure 10 shall occur north of GDA Zone 55 672249E; 6142442N as shown in Figure 6-7. Works in the area should take place in dry weather to minimise ground churning. All ground disturbance works within the terrace landform (area west of the fence line) must be kept to a strict minimum As much as possible, the depression in the terrace (former erosion) should be utilised as the location of the access track/earth works as shown in Figure 6-7.





witigat	on Measures
HE3	In the event that a site or artefact (as defined by the National Parks and Wildlife Act 1974 or Heritage Act 1977) is identified during construction works, works shall cease at the location and no further harm to the object shall occur. The find shall be immediately reported to TransGrid, and the regulator in accordance with legislation. No work shall commence in the vicinity of the find until any required approvals have been given by the regulator. In the event that skeletal remains are encountered during the activity, works must stop immediately, the area secured to prevent unauthorised access and NSW Police, OEH and TransGrid contacted.
Noise a	Ind Vibration
NV1	 Noise generating works shall be in accordance with the Interim Construction Noise Guideline (DECC 2009): 7:00am – 6:00pm Monday to Friday. 8:00am – 1:00pm Saturdays. No work on Sundays or Public Holidays. Work outside normal hours, on Sundays and public holidays shall only comprise: The delivery of materials outside normal hours requested by police or other authorities for safety reasons. Emergency work to avoid the loss of lives and/or property. Work timed to correlate with system planning outages. Other noise generating works outside of the standard construction hours shall require the prior format written consent of Environment - HSE/TransGrid and require justification in accordance with the Guideline.
NV2	Noise affected neighbouring properties shall be notified as to the timing and duration of the construction works at least 7 days prior to commencing work. The notification shall provide details on who to contact should they have any issues or require further information.
Traffic	and Access
TA1	Transportation and equipment delivery movements on public roads shall be in accordance with RMS and Council requirements.
TA2	Access track works shall be constructed in accordance with the Soils and Construction Volume 20 Unsealed Roads (DECC, 2008).
TA3	 Traffic, transportation and access mitigation and management strategies shall be documented and implemented in accordance with the CEMP and updated as required. This shall include: The management of the delivery of equipment and materials. Access to and from the site including nominated roads and site access tracks should be undertaken in consultation with the landholder. Traffic management to be implemented for conductor, OPGW and earth wire road crossings Parking. Speed limits. Road occupancy licence conditions.
Air Qua	lity and Climate Change
AQ1	If necessary, dust suppression techniques shall be implemented, and incorporated into the Environmental Management Plan, as per the techniques outlined in the "Blue Book", such as wate

Mitigat	ion Measures
	spraying of surfaces, covering stockpiles and covering surplus soils and materials during transportation.
AQ2	Air quality mitigation and management strategies shall be documented and implemented in accordance with the CEMP. This shall include:
	 Reducing vehicle speeds when in the vicinity of residences to minimise the generation of nuisance dust.
	> Progressively revegetating or otherwise rehabilitating disturbed areas as works are completed.
Visual	Amenity
VA1	All construction plant, equipment, waste and excess materials shall be contained within the designated boundaries of the work site and shall be removed from the site following the completion of construction.
VA2	TransGrid shall undertake further direct consultation with each landholder to identify opportunities to further minimise impacts on visual amenity.
Waste	
WA1	Waste mitigation and management strategies shall be documented in the Construction Environmental Management Plan, and be in accordance with TransGrid Waste Procedures and associated Work Instructions.
WA2	All waste, including surplus soils, which cannot be reused shall be classified in accordance with the <i>Waste Classification Guidelines</i> (EPA, 2014), removed from the site and disposed of at a facility that can lawfully accept the waste in accordance with the POEO Act and POEO Waste Regulation.
WA3	Concrete trucks shall be permitted to flick wet wipe their discharge chutes with the effluent discharged into prepared bored holes, prepared excavations/formwork or a watertight receptacle for recycling or disposal. No concrete washout or agitators is permitted.
WA4	Wooden poles, including pole butts, shall be disposed of in accordance with the TransGrid document – Waste Management of Timber Poles or gifted to landholders in accordance with the OEH's <i>Protocols for recycling redundant utility poles and bridge timbers in New South Wales</i> ' (2011) and TransGrid requirements. If gifted, TransGrid shall provide the landholder information on what the pole is treated with, how to appropriately handle treated timber, and what it can and cannot be used for.
Electric	and Magnetic Fields
EF1	All designs shall be in accordance with the International Commission on Non-Ionizing Radiation Protection (ICNIRP) Guidelines for limiting exposure to EMF (ARPANSA 2010).
Social	and Economic Considerations
	No Additional Mitigation Measures
Bushfi	re
BF1	All works shall be undertaken in accordance with TransGrid's Hot Works and Fire Risk Work Procedure.
BF2	Fuels and other hazardous materials shall be stored to minimise potential impacts on bushfires.
Cumula	ative Impacts
	No Additional Mitigation Measures

