

24 September 2019

Phillipa Duncan, Team Leader
Planning and Assessment
Department of Planning, Industry and Environment
Level 30, 320 Pitt Street
Sydney NSW 2001

Dear Phillipa,

MP10_160 Mod 6 White Rock Wind Farm (WRWF) – Stage 2 cabling within Stage 1 footprint

1. Purpose

This letter has been prepared by White Rock Wind Farm Pty Ltd (WRWFPL) for the purpose of:

- highlighting the need for an increased clearing limit to address installation of Stage 2 underground cabling within the area of the constructed Stage 1 footprint;
- Outlining the process for integration of this consideration with the current Mod 6 Application and avoiding a further modification application; and
- Setting out the methodology to assess the increased vegetation impact and for determining the increased clearing limit and offset requirements.

2. Background

As outlined in Section 2.5 of the Mod 6 Environmental Assessment (EA), the 33 kV underground cabling where it traverses within the Stage 1 footprint was proposed to be finalised during the detailed design stage prior to the start of construction and following Mod 6 approval. The Stage 1 footprint is now live and being utilised for the Stage 1 generation.

While the detailed design stage is still in the future, the progression of the Mod 6 Application has provided the opportunity to undertake preliminary investigation prior to the design phase for the potential arrangements of 33 kV cabling for Stage 2, both within the new Stage 2 area and for locations where it passes through the existing Stage 1 infrastructure. These preliminary design investigations have identified previously unforeseen additional challenges for the cabling design and its implementation (within the Stage 1 area) and we now believe these will result in an increased vegetation clearance requirement for Ribbon Gum – Mountain Gum, to accommodate additional cabling impacts within the vicinity of the existing Stage 1 as-constructed footprint.

Based on a worst-case initial assessment not differentiating between vegetation types (Ribbon Gum – Mountain Gum, Box Gum Woodland or Exotic/Pasture) and condition (Low or Moderate-to-Good), we estimate there will be up to 20 hectares of additional impact. Once the updated surveys have been completed, the vegetation impact will be accurately calculated and we would expect this

number to reduce. It should be noted that, based on the original vegetation assessment which WRWFPL is proposing to update, the impact on Ribbon Gum – Mountain Gum would be in the order of 6 hectares.

So that we can correctly account for the vegetation clearance requirements of Mod 6 and Stage 2, we consider it beneficial if these impacts can be captured within the Mod 6 assessment and determination process. Identification of the additional clearing required within the Mod 6 determination will avoid the need for another planning modification in the very near future which would be necessary to seek an increase in clearance limits due to updated survey and assessment methodologies.

3. Reason for Additional Assessment

As outlined in the Mod 6 EA, the construction of Stage 2 of WRWF will require underground cabling to connect the Stage 2 wind turbines back to the existing 33 kV /132 kV substation which was constructed as part of Stage 1. It was previously anticipated that Stage 2 could utilise/upgrade existing Stage 1 cabling and/or additional cabling would be installed within the disturbance areas created as part of the construction of Stage 1. However, for the reasons set out below, that approach is not feasible without additional clearing and vegetation impacts.

More detailed consideration of the design options available for connecting Stage 2 back to the substation through the Stage 1 footprint, has identified the following challenges:

- It is not economically viable to upgrade existing Stage 1 cabling to carry electricity from Stage 2 (and Stage 1) wind turbines;
- Steep and challenging terrain in several locations prevents Stage 2 cabling being sited within or adjacent to existing Stage 1 infrastructure and alternative routes are required;
- The number of cables required for Stage 2 is greater than expected based on an increased wind turbine generator size and resulting electricity generation; and
- Widening of existing Stage 1 routes can result in higher vegetation impact than had been anticipated and alternative routes through open areas can have lower vegetation impact, particularly avoid clearing of trees, but may nevertheless have a higher impact than was has been allowed for to date based on existing infrastructure footprints.

4. Cabling locations where the vegetation impact may be increased

Figure 1 shows the proposed location of the Stage 2 cabling (blue) to be constructed within the Stage 1 footprint. Alignment of the Stage 2 cabling with the Stage 1 footprint has found to be more challenging than had been anticipated and diversions are now proposed to improve the feasibility of implementation.

Figures 2-5 show more detailed maps overlain on an aerial image of the site which is proposed to be updated. The updated vegetation mapping would address any diversions and also vary the methodology to coincide with that applied for other parts of the Stage 2 layout outside the Stage 1 footprint.

WRWFPL will, where feasible to do so, undertake to install Stage 2 cabling such that it:

- Minimises the number of cables required to connect Stage 2 back to the 132 kV substation;
- Connects Stage 2 turbines located within the Stage 1 footprint using existing Stage 1 cabling;
- Place cables as close as possible to each other, including existing Stage 1 cabling, to minimise the impact footprint;
- Site cables within, or as close to, the existing clearance footprint for Stage 1;
- Route cables through open areas to avoid the need to clear trees; and
- Re-assess offset requirements to address any additional clearing amount.

5. Proposed Assessment Methodology

WRWFPL proposes to apply the same methodology as was applied for the bulk of the Stage 2 impacts. This involves updating the current Biodiversity Assessment Report (BAR) submitted as part of Mod 6 to account for any increased impacts as a result of the Stage 2 cabling within the Stage 1 footprint. This approach will ensure that the method of assessing the cabling impact will be consistent with the existing reporting presented in the Mod 6 application.

The proposed cable routes shown in Figure 1 will be buffered to create 6m cable corridors to account for the disturbance caused by installing such cables. Cables running in parallel may have overlapping corridors to minimise combined ground disturbance. Where cables cross, overlap or otherwise intersect with the already-assessed Stage 1 footprint, these overlapping areas will not be further assessed as the impact was accounted for in Stage 1 construction. Only areas of new clearing will be considered as impacted for the Stage 2 cabling within the Stage 1 footprint.

We anticipate this additional assessment will only result in a request for an increase in Ribbon Gum – Mountain Gum clearance limits and associated offset requirements. Should surveys uncover specific species impacts, WRWFPL will undertake to avoid any such impacts where feasible to do so. If species impacts cannot be avoided, they will be required to be offset accordingly.

The following tasks and timeframes are proposed in order to complete this assessment in a reasonable timeframe without compromising on the quality of the work undertaken:

Task	Timeframe
Submit request to DPIE and IPC (this letter)	24 September 2019
Consult with DPIE, BCD and IPC on methodology	24 - 27 September 2019
Undertake vegetation and targeted species surveys	30 September - 4 October 2019
Undertake Small Snake Orchid targeted surveys	8 – 11 October 2019
Submit preliminary vegetation impact assessment	8 October 2019
Submit revised BAR for assessment by DPIE, BCD and IPC	21 October 2019

Once the additional quantum of impact is known WRWFPL will request that the clearance limit currently proposed in Condition C1 of the draft Approval Conditions is increased accordingly.

White Rock Wind Farm Pty Ltd

ABN 45 153 592 173

Suite 2, Level 25, 100 Barangaroo Avenue

BARANGAROO NSW 2000

Please advise if the above approach is suitable or whether a variation to the process is required. If you have any questions or require further information, please do not hesitate to contact me.

Regards,

A handwritten signature in black ink that reads "A. Maddocks". The signature is written in a cursive, slightly slanted style.

Adrian Maddocks

Development Manager

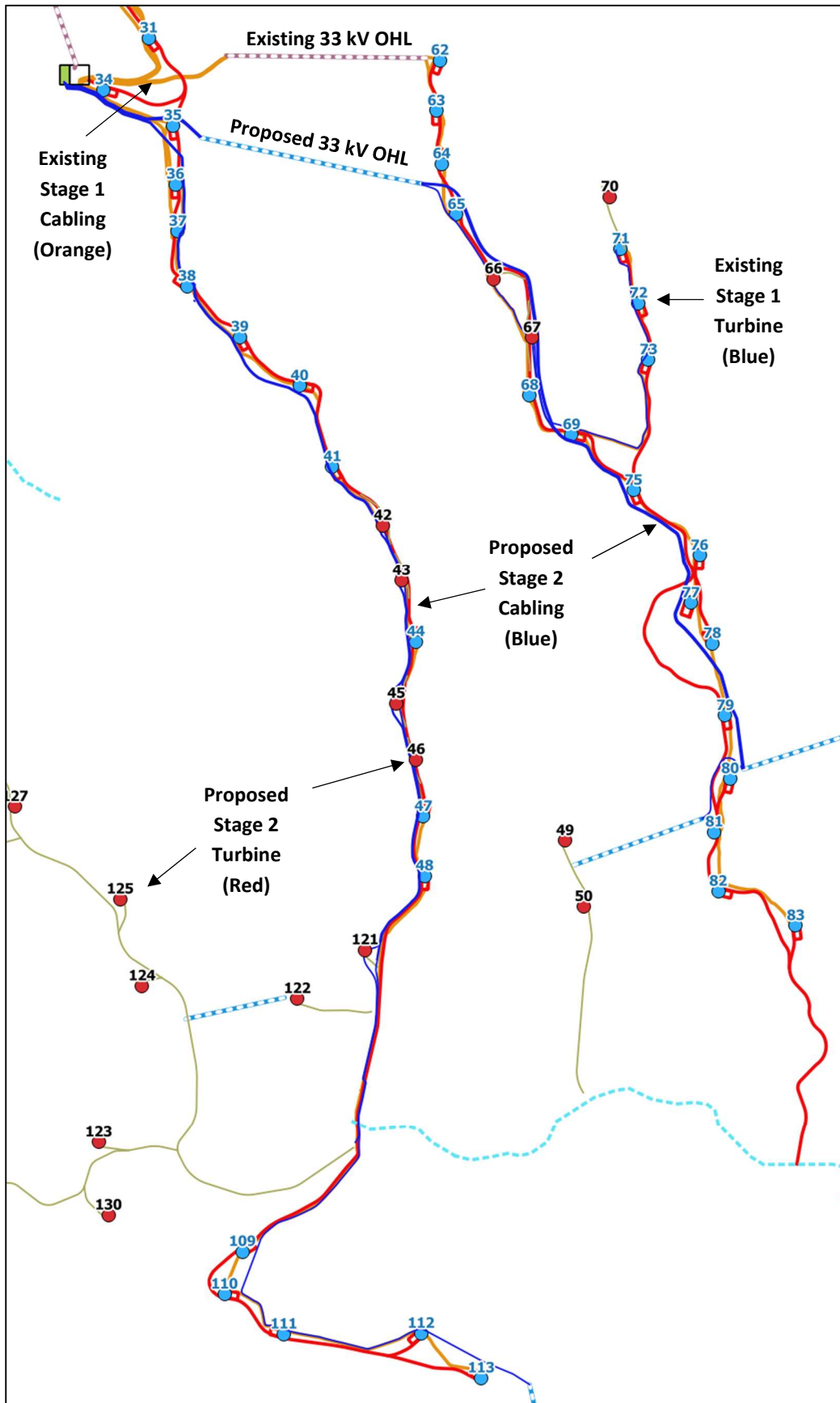


Figure 1 Stage 2 cabling within Stage 1 footprint

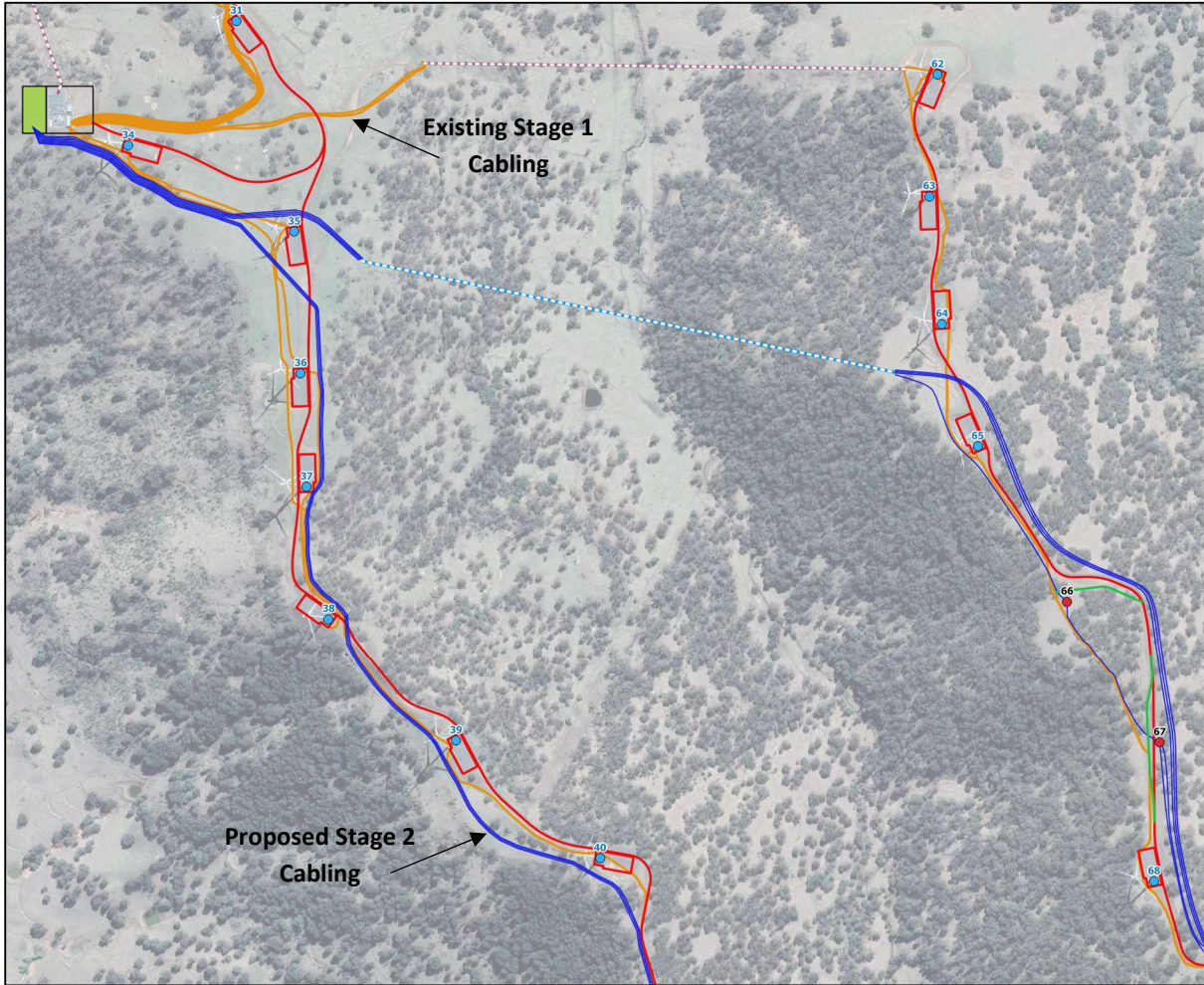


Figure 2 Stage 2 cabling within Stage 1 footprint detail

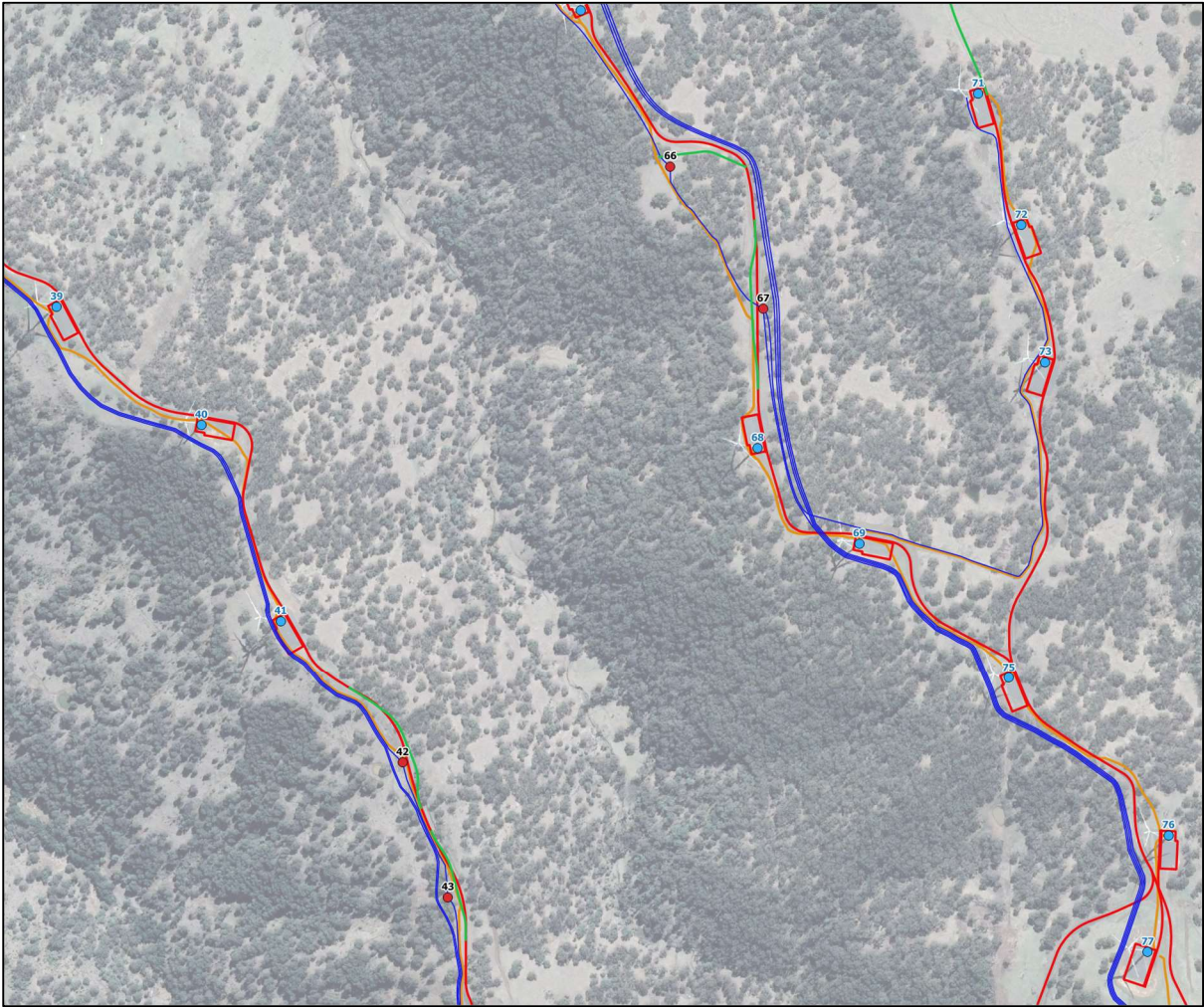


Figure 3 Stage 2 cabling within Stage 1 footprint detail

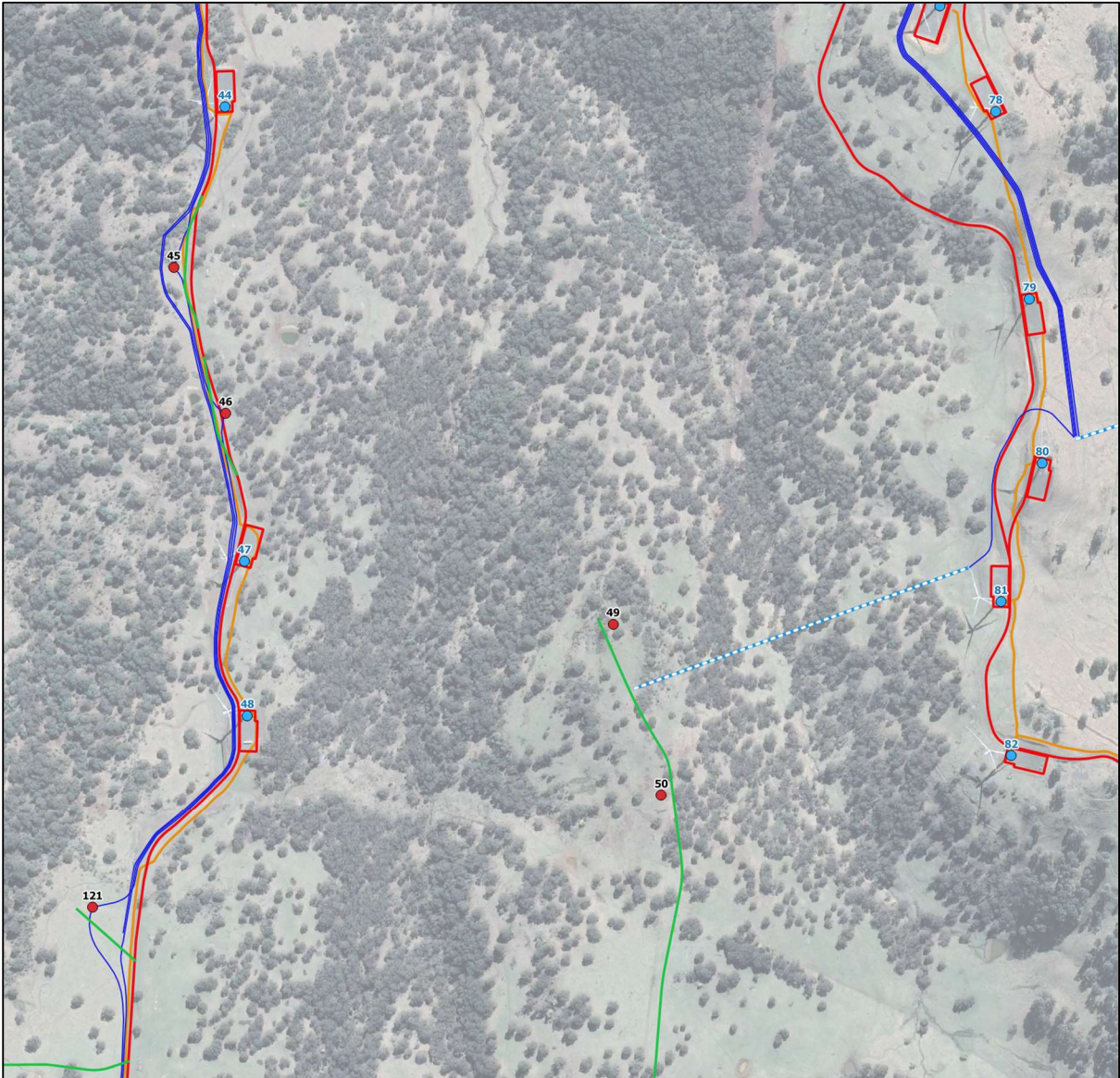


Figure 4 Stage 2 cabling within Stage 1 footprint detail



Figure 5 Stage 2 cabling within Stage 1 footprint detail