

6 March 2024

Ref: 0012

Abel East
Creative Capital
44-45/1 Porter Street,
Byron Bay, NSW 2481

Dear Abel,

Hairy-joint Grass Survey in Area 5 BILS on Gulgan Road Byron Shire Council

Thank you for the opportunity to complete the Hairy-joint Grass (*Arthraxon hispidus*) survey to support the Gulgan Road Area 5 BILS Planning Proposal.

We understand the work will inform a Planning Proposal Application to rezone this property from Primary Production (RU1) to a mixed-use development. Zoning amendments are proposed to facilitate a future residential community, consisting of multiple freehold land parcels and associated road access.

Background

Bower Ecology Pty Ltd completed an Ecological Assessment Report (EAR) for the project in October 2023. Although targeted surveys for Hairy-joint Grass (HJG) were not undertaken for the EAR, the EAR identified that HJG may occur on the site.

Documentation pertaining to the proposed planning proposal was submitted to Byron Shire Council in late 2023. Subsequent to this, pre-gateway comments from the Department of Climate Change, Energy, the Environment and Water's (DCCEEW) Biodiversity, Conservation and Science Team was provided by Council. The comments requested further targeted surveys of HJG during the peak detection period.

Methods:

HJG surveys were conducted on 27-29 February 2024 by two ecologists across Lots 32 DP1018929 and relevant portions of Lot 2 DP1159910 (a wider survey area than the land included in the Planning Proposal).

An initial survey via parallel transect across the study area was completed to identify areas of suitable microhabitat for Hairy-joint Grass. Key microhabitats included any:

- exposed basalt rock extrusions in paddocks that may represent areas of ephemeral or permanent groundwater seepage;
- other groundwater seepages in paddocks – as identified by topography, floristics and/or the presence of surface water (e.g. hillside 'bogs' or other small areas where surface expressions of ground water flow or pool on a permanent or ephemeral basis); or
- creek banks, and drainage lines.

A targeted HJG survey was then conducted across areas of suitable habitat utilising transects widths of approximately 10m wide, in accordance with the NSW threatened flora guidelines. In areas such as higher, flatter paddocks generally not suitable for HJG, transects utilised widths of approximately 20m wide. Attachment A shows the tracks of the surveys and provides an indication of the terrain of the site.

Where HJG was observed, a survey point was taken for each 2m x 2m area where the plant existed. In each area, the number of individual plants was also recorded. Extra survey effort was undertaken in these areas to determine the extent of each patch of HJG.

Findings

No HJG was identified within Area 5 BILS.

Across the greater survey area however, patches / clumps of HJG were found at 7 micro-sites in one locality in the south of the survey area (see Attachment A). This area was a steep descending slope adjacent to a small pond which is located outside the site boundary.

Approximately 250 individual plants were identified across the total 7 micro-sites. HJG was found in damp soil, and among sedges and other grasses (including exotic species) that are adapted to wetter environments.

Photographs of the species and the associated habitat is provided in Attachment C.

Conclusion

The targeted survey found HJG in areas consistent with what would be considered suitable habitat for the species. Given the topography of the area and the survey results, the species is not anticipated to be impacted (directly or indirectly) by the current proposed project design (see Attachment B).

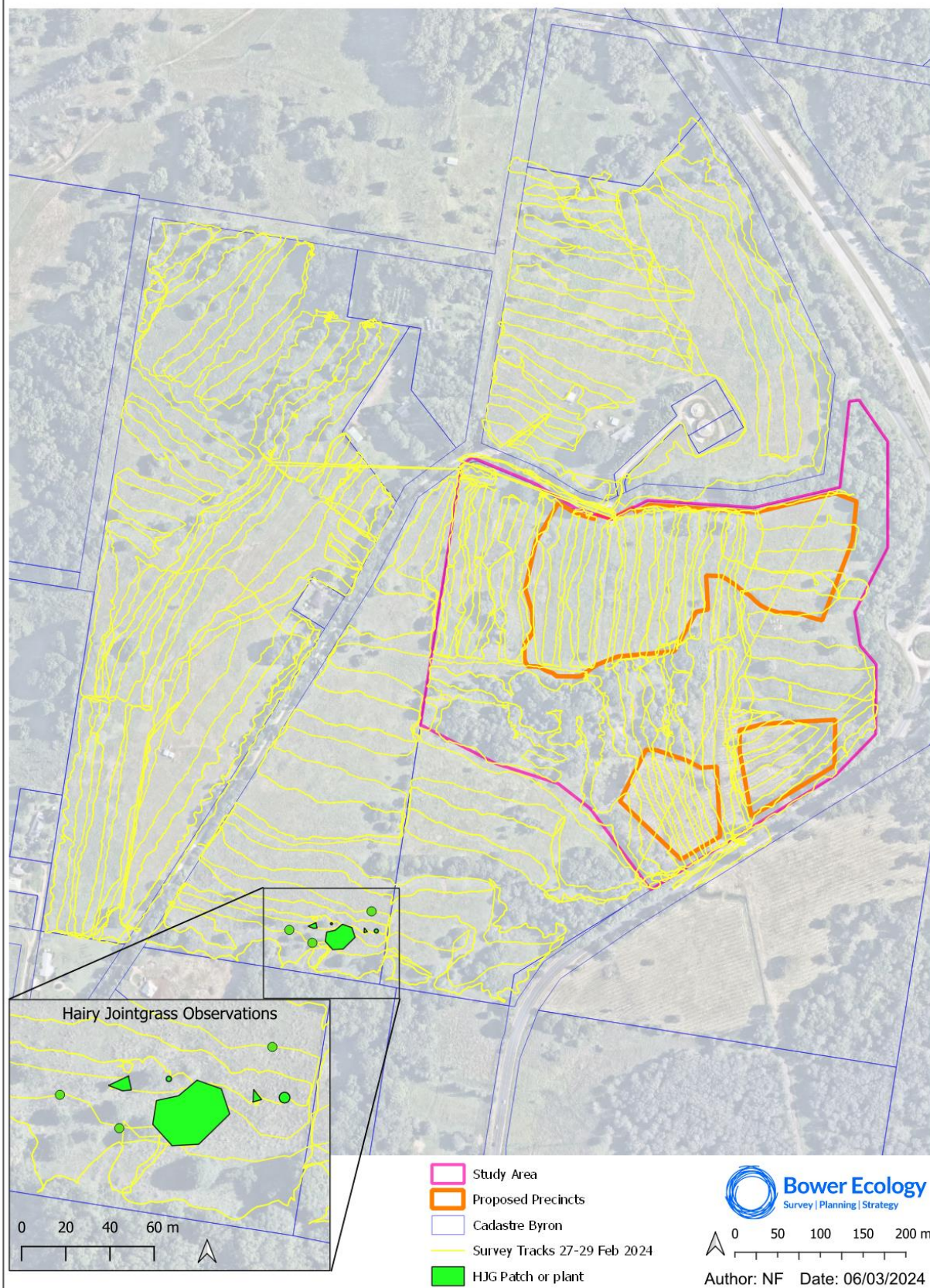
Therefore, in the context of the project it is considered that impacts to this species are appropriately avoided and mitigated.

Regards,

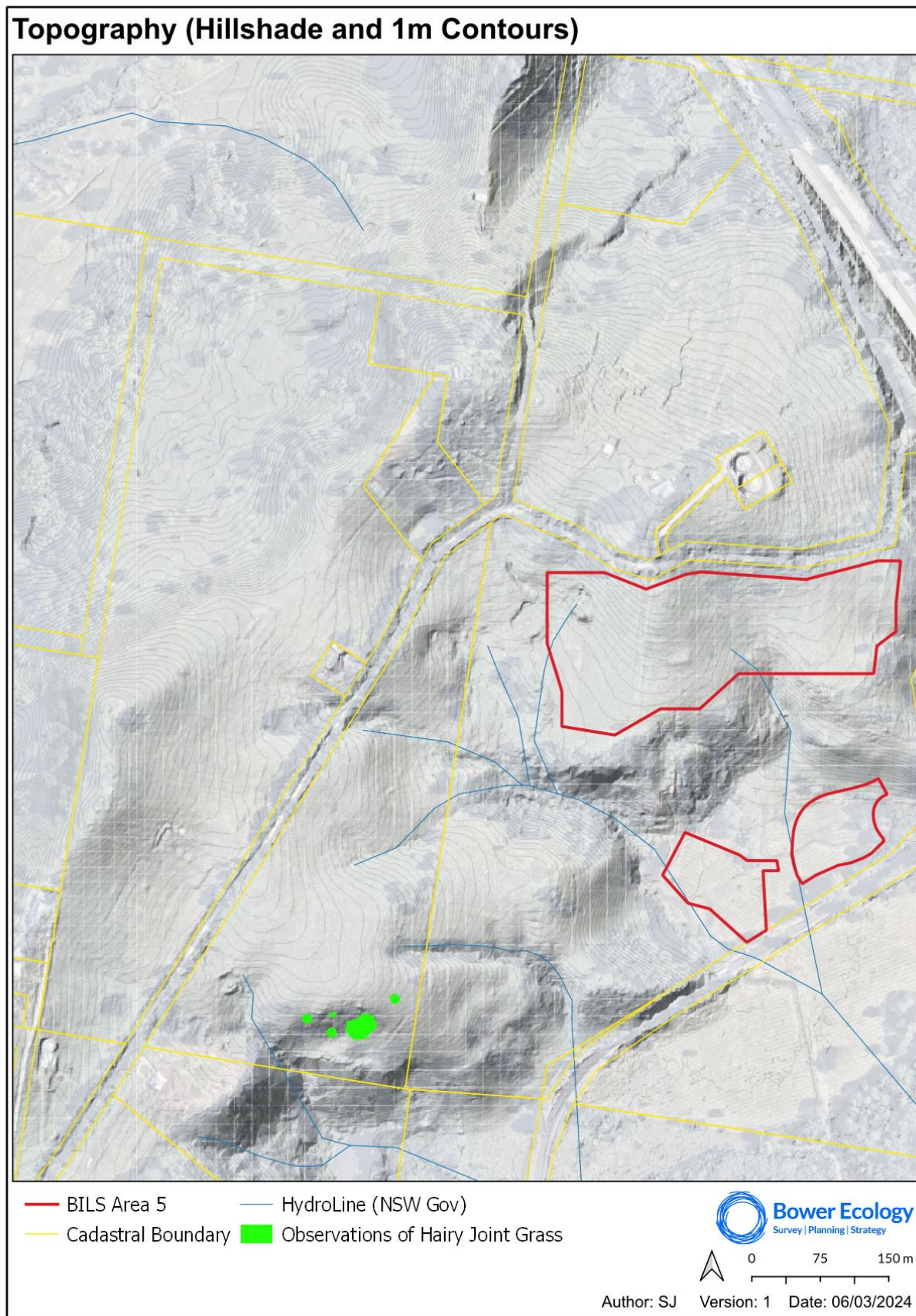
A handwritten signature in blue ink, appearing to read 'Steve Jarman', with a stylized, flowing script.

Steve Jarman
Principal Ecologist

Gulgan Road Hairy Joint Grass Surveys - February 2024



D:\Bower Ecology\Shared drives\GIS\0012 Area 5 Gulgan\Workspace\2024 Gulgan HJG surveys\20240221 Gulgan mapping for HJG surveys.qgz



Attachment C: Photographs of HJG taken on site, and the associated habita

