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(03) 62 283 220
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Tasmanian Irrigation Pty Ltd
ATTENTION: Ian Smith (NEIS Project Manager)
PO Box 84
Evandale TAS 7212

14 February 2017

Dear Ian

RE: North Esk Irrigation Scheme: Vegetation, Flora and Fauna Assessments Addendum (minor re-alignments)

This statement is prepared as an addendum to:

> ECO*tas* (2017). *Ecological Assessment of the Proposed North Esk Irrigation Scheme, Tasmania. Report by Environmental Consulting Options Tasmania (ECOtas) for Tasmanian Irrigation Pty Ltd,* 31 January 2017.

Minor re-alignments to the proposed transfer and distribution pipeline routes have been proposed, as shown in the maps dated 8 February 2017. Below I outline the ecological values likely to be associated with each variation. If no mention is made of a particular value (e.g. threatened fauna), this means that the recommendations and mapping in ECO*tas* (2017) remain valid.

Variation 1 (van Esperen)

The area covered by the variation was effectively covered in a broad sweep through this section of the original survey corridor, and the revised pipeline route essentially followed as it is close to the boundary of the original survey area.

Vegetation types: The additional area can be allocated to "*Eucalyptus amygdalina* forest and woodland on dolerite" (DAD). A small area may be better mapped as "*Eucalyptus viminalis* grassy forest and woodland" (DVG) or "*Acacia dealbata* forest" (NAD) but this would be away from the pipeline itself so such mapping is a bit moot as neither DVG or NAD are threatened, and as described in ECO*tas* (2017), NAD, DVG and DAD form a tight mosaic that is sometimes inseparable.

Threatened flora: There is a minor chance of additional sites of species such as *Aphelia pumilio* (see original mapping that placed a couple of sites very close to the revised pipeline route). An additional targeted survey would be of academic interest only as (a) it would need to be conducted in spring to detect the species and (b) even if detected, such species would be localised, and additional sites would not alter the conditions that would need to be applied in a threatened species permit (likely to be limited). As such, I do not advocate for an additional survey.

Variation 2 (Dalness)

The area covered by the variation was at least driven through to access the original survey corridor and also covered by our previous assessments of the broader Dalness property.

Vegetation types: The additional area can be allocated to "lowland grassland complex" (GCL) – open areas – and "weed infestation" (FWU) – dark green areas (with a note that the contributing species is gorse, *Ulex europaeus*).

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We did not survey this area per se but did walk right to the end of the original survey corridor and look west over the paddocks.

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Weeds: The section of original corridor west of Nile Road had significant weed infestations of gorse, blackberry, and (annoyingly) patersons curse (only place we detected it), and I expect this additional section may also have some such infestations. General recommendations in ECO*tas* (2017) are applicable but the above is presented because of the suite of species present and to alert TI to a localised management issue (depending on landowner concerns).

Variation 4 (Relbia Road)

Vegetation types: The additional areas can be allocated to: "agricultural land" (FAG) – open paddocks; "water, sea" (OAQ) – dams; "permanent easements" (FPE) – roads; and "weed infestation" (FWU) – patches of gorse.

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Vegetation types: Most of the additional area can be allocated to: "agricultural land" (FAG) – open paddocks. Without a site assessment, it is difficult to assign the small patch of forest to a TASVEG unit but I note the pipeline alignment entirely avoids this so classification is moot. I am confident to state that it would not be classified as a threatened vegetation type (looks most similar to "*Eucalyptus amygdalina* forest and woodland on dolerite" (DAD)).

Variation 6 (Corra Linn)

Vegetation types: The additional area can be allocated to: "agricultural land" (FAG) – open paddocks.

On the above analysis, I do not recommend that additional ecological field surveys are warranted. Please do not hesitate to contact me if you have any further queries or need additional information to that provided.

Yours sincerely

Mark Wapstra
Senior Scientist/Manager

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10 April 2017

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RE: North Esk Irrigation Scheme: Vegetation, Flora and Fauna Assessments Addendum (access road)

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Some sections of the proposed access road (Figure 1) were not included in the original report's findings because the specific location of the road had not been determined. It was known that an access road was likely to be required from Blessington Road to the dam site and the area now proposed for the access was assessed in some detail. Technically, the precise line of the road was not assessed as part of our ecological surveys but I am confident we criss-crossed the proposed route in several locations.

In relation to the small area of the proposed access road that falls outside our originally indicated survey area, I can advise that because we were engaged by the owners of the property to assess the ecological values of the entire property, this area has in fact been surveyed as well.

I do not believe that an additional site assessment is warranted because the ecological values have been assessed to a point where management recommendations can be developed.

Vegetation types: The additional forested areas can be allocated to "*Eucalyptus amygdalina* forest and woodland on dolerite" (DAD) and the non-forest areas to "lowland grassland complex" (TASVEG code: GCL) – refer to Figure 2 (extract from "Dalness" property vegetation mapping).

Threatened flora: There is a moderate chance of additional sites of species such as *Aphelia pumilio*, *Aphelia gracilis*, *Siloxerus multiflorus* and *Triptilodiscus pygmaeus* (see original mapping that placed sites close to Blessington Road). That said, our additional surveys in this area did not detect any such species (some our surveys were outside the peak flowering time) and the area west of the fence was in a more modified state that the grassland east of the fence (heavy grazing regime). In addition, the DAD forest type was found to be generally low in threatened flora, except where there were distinct rock outcrops. An additional targeted survey would be of academic interest only as (a) it would need to be conducted in spring to detect the species and (b) even if detected, such species would be localised, and additional sites would not alter the conditions that would need to be applied in a threatened species permit (likely to be limited). As such, I do not advocate for an additional survey.

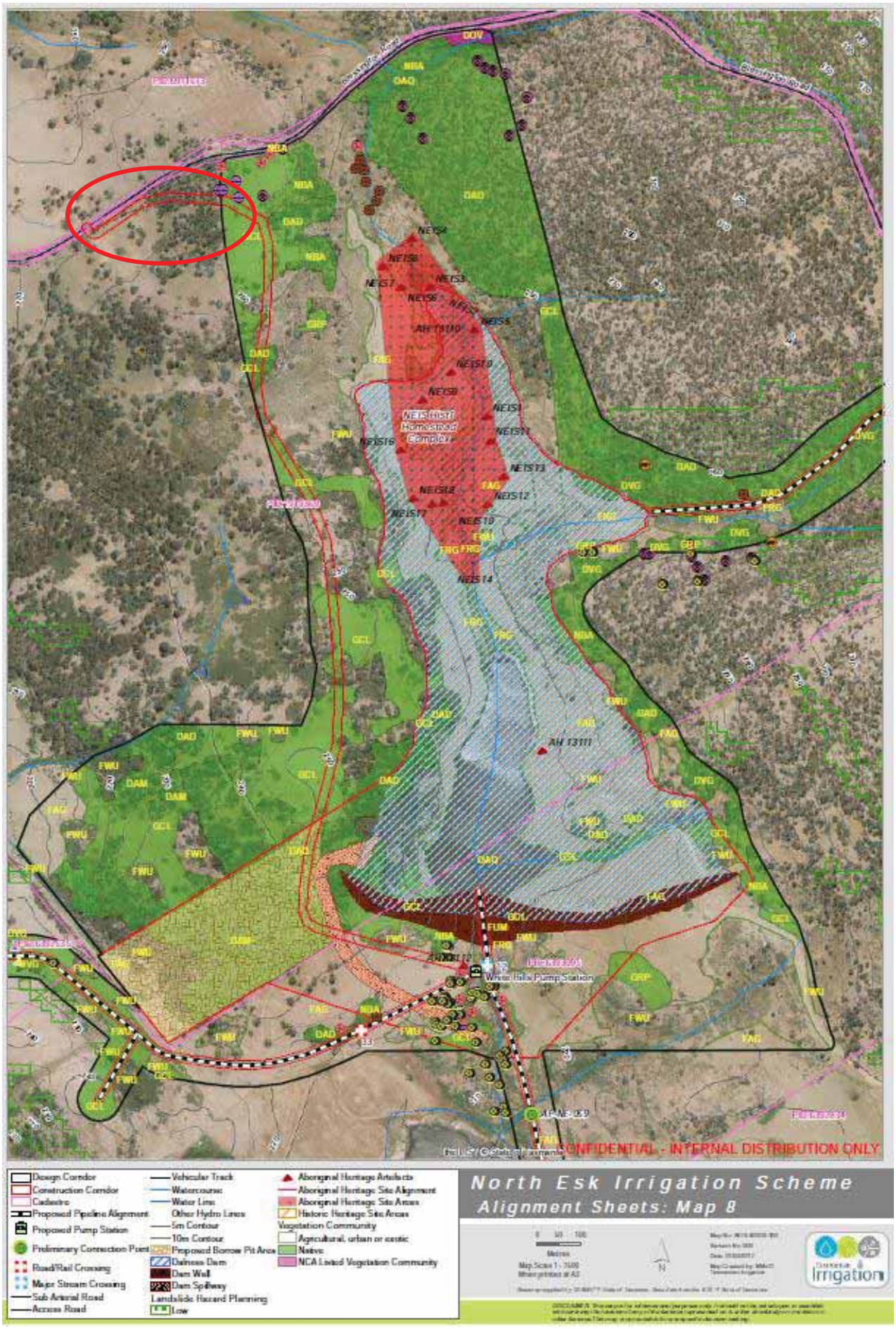

Figure 1. Proposed access road (red double-lined route) showing small area in northwest near Blessington Road that is not reported against in ECO*tas* (2017)

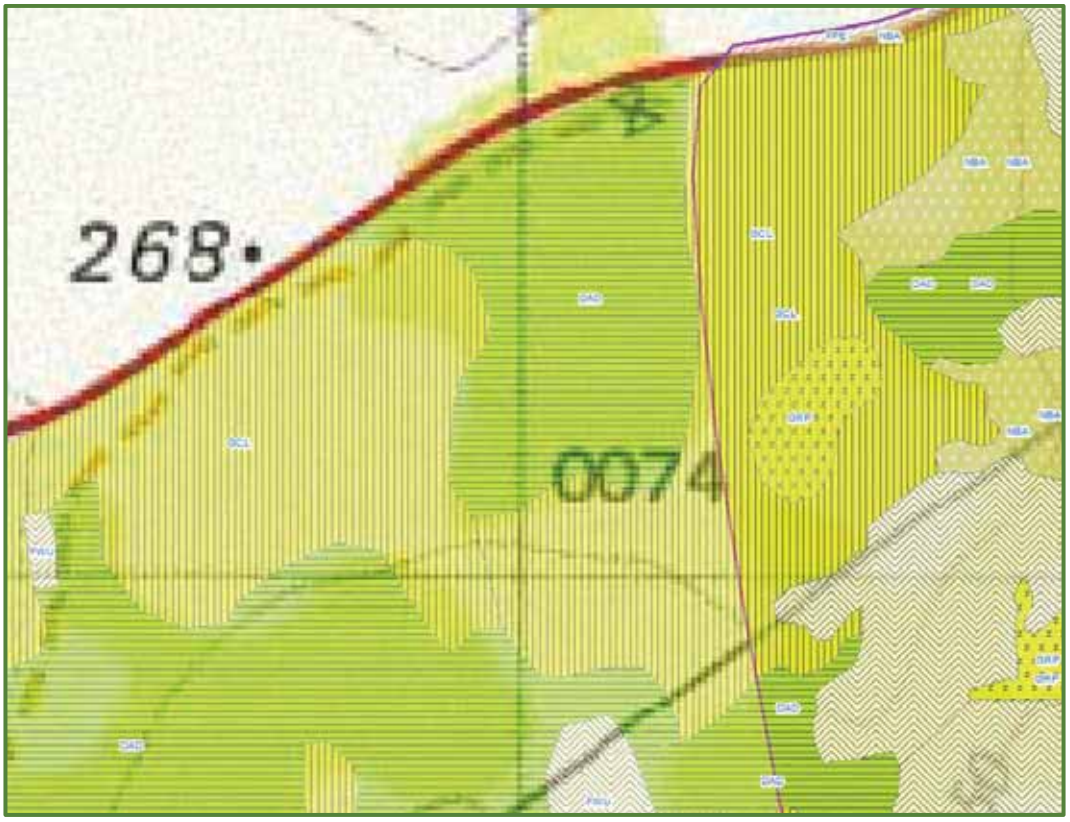

Figure 2. Additional vegetation mapping for area west of original survey area

Threatened fauna: No specific issues identified from this area. Refer to ECO*tas* (2017) for general recommendations.

Weed & disease issues: Refer to ECO*tas* (2017) for general recommendations.

Yours sincerely

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