Australian Capital Territory

Planning and Development (Conditional Environmental Significance Opinion – Block 1620, Belconnen – Jarramlee Detailed Site Investigation) Notice 2018

Notifiable instrument NI2018– 10

made under the

Planning and Development Act 2007 s 138AD (Requirements in relation to environmental significance opinions)

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1 Name of instrument

This instrument is the *Planning and Development (Conditional Environmental Significance Opinion – Block 1620, Belconnen – Jarramlee Detailed Site Investigation) Notice 2018.*

2 Conditional Environmental Significance Opinion

(1) On 13 December 2017, the Conservator of Flora and Fauna, pursuant to section 138AB(4) of the *Planning and Development Act 2007* (the **Act**), gave the Applicant a conditional environmental significance opinion in relation to the detailed site investigation on Block 1620 Belconnen.

(2) In this section:

Conditional environment significance opinion means the opinion in this schedule.

Note Under section 138AD(6) of the Act, the conditional environmental significance opinion and this notice expire 18 months after the day the notice is notified.

Ben Ponton
Chief Planning Executive
3 January 2018

Schedule
(see section 2(2))

ENVIRONMENTAL SIGNIFICANCE OPINION

In accordance with section 138AB(4) of the *Planning and Development Act 2007* (the Act), I provide the following environmental significance opinion:

APPLICANT

SMEC, as represented by Ilia Rosiami, Associate Scientist (Contaminated Land).

APPLICATION and DEVELOPMENT PROPOSAL

The applicant has applied under section 138AA of the Act to the Conservator of Flora and Fauna for an environmental significance opinion to the effect that the development proposal set out in the submission is not likely to have a significant adverse environmental impact (the application).

The development proposal is for detailed site investigation on an area of subsidence within Jarramlee Nature Reserve as described in the submission.

LOCATION

Block 1620 District of Belconnen, Jarramlee Nature Reserve.

MATTERS TO WHICH THIS OPINION APPLIES

This opinion applies only the development proposal as described in the application.

OPINION

Provided the works are undertaken in the manner consistent with the following conditions, they are unlikely to cause a significant adverse environmental impact.

This opinion is granted subject to the following conditions made under s138AB(4) of the Act:

- That all works are in accordance with the Construction Environment Management Plan as submitted with the application; and
- all vehicles and machinery must be washed down prior to entering the reserve.

Attached is a Statement of Reasons for the decision.

Dr Annie Lane
Conservator of Flora and Fauna
13 December 2017

STATEMENT OF REASONS
REASONS FOR THE DECISION

The proposed development is a proposal mentioned in Schedule 4 of the *Planning and Development Act 2007* – Development proposal for an activity requiring an EIS Schedule 4, being:

Part 4.3, item 1(a) development that may impact on a species or ecological community that is endangered, a species that is vulnerable; protected; or has special protection status;

The site is known habitat for the Golden Sun Moth (*Synemon plana*), a species listed as critically endangered under the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999*, and endangered under the *Nature Conservation Act 2014.*

Part 4.3, item 3 proposal for development on land reserved under s 315 for the purpose of a wilderness area, national park, nature reserve or special purpose reserve.

The works are within Jarramlee Nature Reserve, which was established to offset impacts on Golden Sun Moth habitat and Natural Temperate Grassland with the development of the Lawson residential estate.

The proponent wants the application for the development approval assessed in the merit track on the grounds that the proposal is not likely to have a significant adverse environmental impact, and has applied to the Conservator of Flora and Fauna to that effect.

Meaning of *significant* adverse environmental impact
An adverse environmental impact is ***significant*** if—

(a) the environmental function, system, value or entity that might be adversely impacted by a proposed development is significant; or
(b) the cumulative or incremental effect of a proposed development might contribute to a substantial adverse impact on an environmental function, system, value or entity.

In deciding whether an adverse environmental impact is ***significant***, the following matters must be taken into account:

(a) the kind, size, frequency, intensity, scope and length of time of the impact;
(b) the sensitivity, resilience and rarity of the environmental function, system, value or entity likely to be affected.

In deciding whether a development proposal is likely to have a significant adverse environmental impact it does not matter whether the adverse environmental impact is likely to occur on the site of the development or elsewhere.

It has been determined that the proposal is unlikely to have a significant environmental impact, based on the documentation submitted, known values of the site, and provided the works and ongoing management are carried out in accordance with the conditions attached to this ESO.

Project description

Block 1620 District of Belconnen, and the adjoining Block 1568, was the site for the main sewage treatment facility for Belconnen and Gungahlin. The facility, that had the capacity to treat effulent for a population of 50,000, was decommissioned in the 1970's and demolished in the 1980 and 90's. Prior to its demolition it was used as a training facility by the Emergency Services Agency and this training may have involved the use of aqueous fire-fighting foam, a product known to contain perfluorinated chemicals PFOA and PFOS. These chemicals are persistent pollutants, remaining in the environment for many years and, if present, have the potential to adversely impact the soil and groundwater, and sediments in the adjacent Ginninderra Creek.

Along the south eastern border of Jarramlee, approximately 100m from Hilda Kincaid Crescent in the suburb of West Macgregor, significant and ongoing ground subsidence has been documented in recent years. The subsidence is concentrated in an area of approximately 3 hectares in size and appears to be a direct result of underground assets (such as pipes and manholes) not being removed or rehabilitated properly.

Four categories of ground subsidence have been documented (AECOM, 2016):

1. Sinkholes exposing broken drainage pipes;
2. Large intact manhole structures with and without infilling material (rocks);
3. Large and small sink holes and pits which may be isolated or clustered together; and
4. Ground depressions and unevenness.

Without remediation of the remaining underground infrastructure it is anticipated that subsidence activities in the area will be ongoing. However, the extent of the remaining below ground infrastructure associated with the former treatment plant is unknown. In order to determine the scope of works required to stabilise the area, a detailed site investigation is required. This will involve:

- The use of Ground Penetrating Radar or dual magnetic frequency survey of the site to determine the location and condition of below ground structures;

- 40 boreholes of 50mm diameter using geoprobe and push tubes to a maximum depth of 5.0m to obtain sample collection to undertake a combined contamination and geotechnical analysis of the soil;
- Installation of three groundwater wells to a maximum depth of 15 m to undertake monitoring, sampling and analysis of the groundwater.

Surface water samples and sediment samples from Ginninderra Creek will also be taken to determine if there are any offsite impacts.

Documentation Submitted

- Report titled Jarramlee Detailed Site Investigation (DSI) Subsidence Environmental Significance Opinion (SMEC 7/12/2017);
- Jarramlee Detailed Site Investigation (DSI) Subsidence Construction Environmental Management Plan (SMEC 29/11/2017);
- Form 1M.

Natural conservation values present

Jarramlee Nature Reserve is of high conservation significance, supporting a large population of the critically endangered Golden Sun Moth and small patches of the endangered Natural Temperate Grassland ecological community. Golden Sun Moth habitat is present over the majority of Jarramlee and supports one of the largest known populations of Golden Sun Moth in the ACT.

Jarramlee Reserve is 112 ha in area containing both exotic grassland and native pasture dominated by Natural Temperate Grassland Community species e.g. speargrasses, wallaby grass and kangaroo grass, and small patches of Natural Temperate Grassland (approximately 4.65 hectares).

Gooromon Ponds Creek and Ginninderra Creek converge within the reserve. Ginninderra Creek continues to flow west to the confluence with the Murrumbidgee River approximately 4.2 kilometres from the reserve. These waterways are part of an important wildlife corridor providing important habitat for migratory birds such as the Rainbow Bee-Eater *(Merops ornatus)* and the Sacred Kingfisher (*Todiramphus sanctus*).

Both creeks also provide important habitat for other local fauna including the Striped Marsh Frog (*Limnodynastes peronii)* and Spotted Grass Frog *(Limnodynastes tasmaniensis*.

Even-aged stands of *Eucalyptus* spp. have been planted throughout the reserve. These trees provide important nesting and foraging habitat for locally threatened bird species such as the Diamond Firetail (*Stagonopleura guttata)* and Hooded Robin *(Melanodryas cucullata)*, and landscape habitat connectivity. Other woodland and grassland birds utilising the site include the vulnerable White-Winged Triller (*Lalage*

sueurii), Diamond Firetail (*Stagonopleura guttata*) and Brown Songlark (*Cinclorhamphus cruralis*).

The Dusky Woodswallow (*Artamus cyanopterus*), White-Browed Woodswallow (*Artamus superciliosus*), Diamond Firetail (*Stagonopleura guttata)* and Rainbow Bee-Eater (*Merops ornatus*) have also been observed feeding in Jarramlee (Rowell 2013a).

Jarramlee provides important habitat for the vulnerable Little Eagle (*Hieraaetus morphnoides*). A deserted nest is present in the western paddock indicating that this species has nested in Jarramlee in recent years.

Several active burrows of the Canberra Raspy Cricket (*Cooraboorama canberrae*) have been observed within the north-western part of Jarramlee (Rowell 2013a).

Eighteen per cent of golden sun moth habitat within Jarramlee is currently dominated by Chilean needle grass. Woody weeds such as blackberry, hawthorn (*Crataegus monogyna)* and firethorn *(Pyracantha* sp.) are common throughout the reserve. These plants are providing important habitat for woodland birds.

The site was previously extensively grazed for agricultural purposes.

Impact on the Reserve

While the subsidence is concentrated within area of 3.0ha, approximately 6.0ha of the reserve has been fenced and closed to the public for some time due to concerns for public safety. The 'Indicative Sampling Boundary' proposed for the site investigation works is 5.53ha that is wholly within the area of reserve that is currently closed to the public.

Potentially Significant Environmental Impacts

The proposed works can occur without having a significant environmental impact as:

- The works are in a disturbed area with little native floristic diversity or vegetation value;
- The scale of the works (40 x 50mm boreholes) is small;
- Boring will be undertaken in such a way that any impact would be short term; and
- The proposed work area appears to support a low density and dispersed occurrence of Golden Sun Moths. It is therefore unlikely that any moths would be directly impacted by the proposal, while indirect impacts on habitat are limited in scale and time; and

Other than the Golden Sun Moth no other significant species or communities are known to occur within the proposed work area.

All works must be in accordance with the Construction Environment Management Plan as submitted with this application, and all vehicles and machinery must be washed down prior to entering the reserve.

It has been determined that if the works are undertaken in a manner consistent with the above conditions attached to the ESO, they are unlikely to cause a significant adverse environmental impact.