

Our Ref: 16015 Huntlee - MOD 20 (MP10_0137) Ecology Advice 7-part test 15-12-2021
Via: email

Date: 15 December 2021

Attn: Emma Butcher
Department of Planning, Industry and Environment
4 Parramatta Square, 12 Darcy Street
Parramatta NSW 2150

Dear Emma

RE: HUNTLEE - MOD 20 (MP10_0137 MOD 20) ECOLOGICAL ADVICE EEC

MJD Environmental has been engaged by Huntlee Pty Ltd, to provide a review and ecological validation to accompany 4.55 Modification (MOD 20) to Stage 1 of Major Project (MP10_0137) for the Huntlee New Town Residential development, North Rothbury.

This validation specifically relates to amendments made to the areas listed below and demarcated on the Huntlee Stage 1 Development Area (**Attachment 1**):

- Town Centre (part)
- Stage 13
- Stage 14
- Stage 15
- Stage 16

All development areas subject to assessment under MOD 20 are wholly contained within the Stage 1 approval area. At this time of this advice preparation, the subject lands have been cleared and/or are in the process of being cleared save a small area of Stage 15 under the MOD 9 approval instrument and subsequent construction certificates issued by the project Principle Certifying Authority.

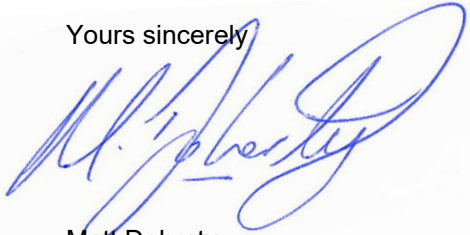
We acknowledge previous correspondence issued by the NSW Department of Planning, Industry and Environment (DPIE) and the Biodiversity and Conservation Division (BCD) relating more broadly to Huntlee project Modifications with regard to the S34 Certification and the requirement for additional ecological information including a 7-part test under the former legislative arrangements.

In response a 7-part test for MOD 20 has been provided as **Attachment 2**. This assessment has been completed based on the status of the land as at the time of this advice preparation. This assessment concluded that it is unlikely that the proposal will have an adverse effect or adversely modify the extent of threatened entities recorded across Huntlee (development and conservation areas) such that an entity is likely to be placed at risk of extinction.

In summary the MOD 20 does not impact the original Ecological Assessment Report conservation outcomes that informed the major project approval.

We trust this is sufficient for your purposes, however should you require any further information or clarification, please do not hesitate to contact the writer.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'M. Doherty', written over a light blue rectangular background.

Matt Doherty
Director
MJD Environmental

Encl: Attachment 1 – MOD 20 plans
Attachment 2 –7-part test

Attachment 1 – MOD 20 plans

Attachment 2 – 7-part test

Section 5A of the EP&A Act lists seven factors that must be taken into account in the determination of the significance of potential impacts of proposed activities on ‘threatened species, populations or ecological communities or their habitats’ (threatened biota) listed under the TSC Act. The ‘7-part test’ is used to determine whether there is likely to be a significant effect on threatened species, populations or ecological communities, or their habitats and thus whether a Species Impact Statement (SIS) is required to be produced.

Foremost in the case of threatened species and ecological communities assessed for the Huntlee major project approval it must be acknowledged that MOD 20 maintains the outcomes that were approved under the Huntlee Major Project which takes into account a package of mitigation and offset measures that form part of the proposal that was considered by the Minister. Specifically, the Huntlee major project approval has provided local and regional conservation offsets in recognition of the proposed loss of biodiversity in areas to be developed. Conservation offsets delivered by the project were set out under a VPA executed by the NSW Government (Minister for Planning and Minister for Climate Change and the Environment) and Huntlee and included the following:

- Dedication of 780 hectares of conservation land within Huntlee;
- Dedication of Persoonia Park (17 hectares);
- Dedication of up to 4988 hectares of conservation land elsewhere within the Lower Hunter Region; and
- Funding for the conservation offset management.

The approval was delivered following detailed consideration on a merits basis by the determining authorities and took into account the strategic location of conservation offsets, protection for threatened species, populations and ecological communities through preservation of habitat, establishment and conservation of corridors habitat linkages within the local offset areas and regional offsets across the Hunter Valley.

The loss of the large areas of endangered communities has been offset under the terms of the VPA and covers the entire Huntlee development. The changes proposed under MOD 20 seek to amend lot boundaries and product types within areas which were always nominated for development in the earlier Development Approvals.

a) In the case of a threatened species, whether the action proposed is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction.

The areas subject to assessment under MOD 20, namely Town Centre (part), Stage 13 to 16 were originally identified within the previous Development Approval and Ecological Assessment as development areas and not set aside for conservation measures, they also generally do not contain vegetation or habitat for threatened species known from the locality. Therefore, the proposed modification to the Stage 1 approval sought under MOD 20 will not have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction.

b) In the case of an endangered population, whether the action proposed is likely to have an adverse effect on the life cycle of the species that constitutes the endangered population such that a viable local population of the species is likely to be placed at risk of extinction.

This section does not apply to the assessment as an endangered population of a threatened entity has not been identified on the Huntlee areas subject to assessment under MOD 20.

c) *In the case of an endangered ecological community or critically endangered ecological community, whether the action proposed:*

- i. is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or***
- ii. is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction.***

The development areas subject to assessment under MOD 20, namely Town Centre (part), Stage 13 to 16 were originally identified within the previous Development Approval and Ecological Assessment as development areas and not set aside for conservation measures, they also generally do not contain vegetation. The development areas are consistent with the concept approval as most recently modified under MOD 9. Therefore, the proposed modification to the Stage 1 approval sought under MOD 20 will not have an adverse effect on the extent of an ecological community or substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction.

d) *In relation to the habitat of a threatened species, population or ecological community:*

- i. the extent to which habitat is likely to be removed or modified as a result of the action proposed,***

The development areas subject to assessment under MOD 20, namely Town Centre (part), Stage 13 to 16 were originally identified within the previous Development Approval and Ecological Assessment as development areas and not set aside for conservation measures, they also generally do not contain habitat as vegetation removal has already occurred under the MOD 9 approval and subsequent construction certificates issued for the development areas.

- ii. whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed action, and***

The proposal does not contribute to an increase in fragmentation or isolation that has been anticipated and approved by the Huntlee Stage 1 approval.

- iii. the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species, population or ecological community in the locality***

On the basis of discussion and assessment presented under item c) above, it has been determined that a significant impact such that a local area of this community would become extinct concluded this was unlikely.

The removal of vegetation that has occurred in areas associated with MOD 20 will not entirely remove ecological communities from the Huntlee development as areas have been assessed (at the time of approval and consistent with the approved Ecological Assessment Report) as being partially retained in riparian areas and on the conservation lands. As such it is not considered the habitat to be removed will impact the long term survival of the ecological community in the locality.

e) *Whether the action proposed is likely to have an adverse effect on critical habitat (either directly or indirectly)*

No critical habitat for a threatened species occurs on site. Notably the land has been cleared under existing approvals as it is land which was previously approved for development. Therefore, the proposal is unlikely to impact upon such habitat.

f) Whether the action proposed is consistent with the objectives or actions of a recovery plan or threat abatement plan,

For the purposes of biodiversity and consideration of recovery and threat abatement plans, the proposal does not change or modify existing approval arrangements issued under the initial Huntlee approval and MOD 9 instrument. The major project approval does contribute to landscape scale biodiversity outcomes via dedication of some 5000ha of offsets that contribute to security for individual threatened entities with recovery and threat abatement plans.

g) Whether the action proposed constitutes or is part of a key threatening process or is likely to result in the operation of, or increase the impact of, a key threatening process.

A Key Threatening Process (KTP) is defined in the TSC Act as a process that “threatens, or could threaten, the survival or evolutionary development of species, populations or ecological communities”. They are listed under Schedule 3 of the TSC Act and may adversely affect threatened species, populations or ecological communities or could cause species, populations or ecological communities that are not threatened to become threatened.

KTP’s that have the potential to operate on site relevant to the removal of CHRF have been outlined below.

1. Anthropogenic Climate Change
2. Invasion, establishment and spread of *Lantana camara* (Lantana)
3. Invasion of native plant communities by exotic perennial grasses
4. Alteration to the natural flow regimes of rivers and streams and their floodplains and wetlands (as described in the final determination of the Scientific Committee to list the threatening process)
5. Infection of native plants by *Phytophthora cinnamomi*
6. Introduction and establishment of Exotic Rust Fungi of the order Pucciniales pathogenic on plants of the family Myrtaceae
7. Invasion of native plant communities by African Olive *Olea europaea* subsp. *cuspidata* (Wall. ex G. Don) Cif.
8. Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants
9. Clearing of native Vegetation

Anthropogenic Climate Change

Modification of the environment by humans is considered to contribute to Climate Change and as a result has been listed as a Key Threatening Process. Land use change and industrial processes which are occurring as a result of the Project are actions that can contribute to greenhouse gas emissions.

The Huntlee approval involves the removal of vegetation from the development site. This is unlikely to make a significant contribution to local climate such that alterations resulting in impacts on locally occurring threatened species, populations or ecological communities would occur.

Invasion, establishment and spread of *Lantana camara* (Lantana)

This species has been observed on the development site within the Huntlee project area with infestations present in areas of high disturbance, particularly along rail works, near previous mine activity, and in creek lines. The residential development will not increase the operation of this KTP on site beyond current levels, and proposed associated works in conserved vegetation corridors may reduce prevalence on site. On this basis it is considered that the proposal will not lead to an increase in the activity or prevalence of this KTP.

Invasion of native plant communities by exotic perennial grasses

This KTP is considered to be operating on site based on the presence of exotic and perennial species intermixed with native species in the groundcover of vegetation across the woodlands pastures of the Huntlee project area. The Huntlee approval involves the removal of vegetation from the development site. The removal of the vegetation in which this KTP is present, may reduce its effects. Conversely the increase in edges to native vegetation may also provide further opportunity for this KTP to establish.

Alteration to the natural flow regimes of rivers and streams and their floodplains and wetlands (as described in the final determination of the Scientific Committee to list the threatening process)

The site development will result in the alteration of previously pervious surfaces within the catchment of ephemeral watercourses on site. Under the guidance of the stormwater management plan prepared based on industry standards to inform the proposal, the development will alter the natural flow regime on site and therefore may contribute to this KTP.

Infection of native plants by *Phytophthora cinnamomi*

The soil born pathogen *Phytophthora cinnamomi* spreads in plant roots and has been known to infect a number of native plants. There was no evidence observed of *P. cinnamomi* impact on site during the survey period. Given the proposal will increase vehicle/machinery movements on site during construction and operations, it is possible that contamination of the site with the pathogen may occur. Due to this risk of contamination it is considered likely that the proposal may contribute to this KTP. A Plant hygiene protocol should be implemented to ensure spread of the pathogen by machinery to be used on site is cleaned down prior to arrival on site in accordance with industry best practice.

Introduction and establishment of Exotic Rust Fungi of the order *Pucciniales* pathogenic on plants of the family *Myrtaceae*

The exotic rust pathogen of the order *Pucciniales* spores can be dispersed by wind, water-splash, on plant material including seed, on people and their clothing and equipment and has been known to infect plants of the family *Myrtaceae*. There was no evidence observed of Exotic rust fungus impact on site during the survey period. Given the proposal will increase vehicle/machinery movements on site during construction and operations, it is possible that contamination of the site with the pathogen may occur. Due to this risk of contamination it is considered likely that the proposal may contribute to this KTP. A Plant hygiene protocol should be implemented to ensure spread of the pathogen by machinery to be used on site is cleaned down prior to arrival on site in accordance with industry best practice.

Invasion of native plant communities by African Olive *Olea europaea* subsp. *cuspidata* (Wall. ex G. Don) Cif.

This species observed scattered throughout vegetation within the Huntlee project area. The residential development will not increase the operation of this KTP on site beyond current levels. On this basis it is considered that the proposal will not lead to an increase in the activity or prevalence of this KTP.

Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants

The creation of residential areas as a result of the proposal will increase the potential for suburban garden plants to escape into surrounding remnant habitat, therefore contributing to this KTP.

Clearing of native vegetation

The KTP final determination lists nine factors that have the potential to impact species distribution or result in extinction. These factors are:

- 1) destruction of habitat resulting in loss of local populations of individual species;
- 2) fragmentation;

- 3) expansion of dryland salinity;
- 4) riparian zone degradation;
- 5) increased greenhouse gas emissions;
- 6) increased habitat for invasive species;
- 7) loss of leaf litter layer;
- 8) loss or disruption of ecological function; and
- 9) changes to soil biota.

The approval allows for the removal of vegetation. This loss of vegetation will represent habitat loss for potential threatened species in the area. The proposal includes significant local conservation offsets, that will provide long term protection for threatened species and their habitat in the locality.

The proposal will affect existing habitat connectivity within the site, however has been assessed and approved in the broader Huntlee context. Connectivity is maintained within the areas approved to become urbanised via riparian connections that shall facilitate continued movement in the locality.

The proposal will have an impact on increasing greenhouse gas emissions and a loss of leaf litter layer due to the reduction of vegetation.

The proposal does border riparian areas along with riparian areas crossing the development site. All watercourses propose riparian buffers of a width relative to the stream order. Therefore, it is considered that representative stands of riparian vegetation shall be maintained thereby reducing impact. No evidence of dry land salinity has been observed on site.

The proposal will have a moderate impact on ecological function and soil biota. The sites ecological function and soil biota has been impacted prior to the proposal due to the previous land uses in the area.

On this basis, it is considered the KTP will be increased in the locality, however has been assessed as not leading to a decline such that an extinction will occur as a direct impact related the clearing of the land. Finally it is acknowledged that the action will not increase or exacerbate this KTP beyond the extent allowed for under the existing major project approval. These outcomes also consider the significant local and regional conservation offsets.