



Our ref:DOC19/678467

Your ref: SSD 9667

Mr William Hodgkinson

Assessment and Planning Group
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Dear Mr Hodgkinson

Subject: EES comments on Environmental Impact Statement for Light Horse Interchange Business Hub Eastern Creek – SSD 9667 – 165 Wallgrove Road and 475 Ferrers Road Eastern Creek

Thank you for your email of 7 August 2019 requesting advice on the Environmental Impact Statement (EIS) for this State significant development (SSD). Please note, the Office of Environment and Heritage (OEH) responsibilities and functions have been transferred to the Environment, Energy and Science Group (EES) in the Department of Planning, Industry and Environment.

EES appreciates the Planning and Assessment Group providing it with an extension in which to provide its comments. EES has reviewed the EIS and provides its recommendations and comments at Attachment A.

Please note, in relation to Aboriginal cultural heritage, EES has decided not to provide comments at this time. This does not represent EES support for the proposal and this matter may still need to be considered by the consent authority.

If you have any queries regarding this matter, please do not hesitate to contact Janne Grose, Senior Conservation Planning Officer on 02 8837 6017 or at janne.grose@environment.nsw.gov.au

Yours sincerely

S. Harrison 06/09/19

Susan Harrison

**Senior Team Leader Planning
Greater Sydney Branch
Climate Change and Sustainability**

Attachment A

Subject: EES comments on Environmental Impact Statement - Light Horse Interchange Business Hub Eastern Creek – SSD 9667 – 165 Wallgrove Road and 475 Ferrers Road Eastern Creek

The Environment, Energy and Science Group (EES) has reviewed the following documents:

- Environmental Impact Statement (EIS) - July 2019
- Biodiversity Development Assessment Report (BDAR) – version final 2.1 - 1 August 2019
- Landscape Plans
- Bushfire Assessment (BA) – 28 March 2019
- Urban Design Guideline (UDG) – Rev 3 – April 2019
- Draft Plan of Subdivision
- Site Survey
- Concept Masterplan – April 2019
- Preliminary Construction Management Plan (PCMP)
- Flood Assessment (FA) – June 2019
- Civil Engineering Report (CER) – Rev 4 - June 2019

and provides the following comments.

The EIS and accompanying reports include differing information on the size of the site and the developable area, for example:

- the EIS states the site has a total area of 33.6ha, - 29.4 ha of developable area plus 4.2 ha to accommodate the proposed access road and stormwater detention (pages iv and 15)
- the EIS indicates the site is 39.47ha in area (section 6.7, page 51)
- the BA notes the site is 29.5 ha in size (section 1.1, page 3)
- the BDAR indicates the subject land is approximately 39.47 in area (pviii) and it states smaller revisions to the subject land boundary have also been undertaken during project planning reducing the total subject land and development footprint area to 39.01 ha from 40.71 ha (page viii).

It is recommended the RTS clarifies the size of the site and the developable area.

Biodiversity

Bushland Corridor

EES notes the site forms part of the Western Sydney Parklands and it is located on the western side of the Bushland Corridor within the Parklands. The BDAR indicates the Western Sydney Parklands trust (WSPT) have expanded the Bushland Corridor by 300ha to 1356 ha and that WSPT aims to provide an additional 250ha of bushland corridor to 1606ha (30%) by 2030 (section 8.1.7). EES supports the WSPT expanding the Bushland Corridor but considers this should also occur within the Wallgrove Road Precinct 6 where the site is located.

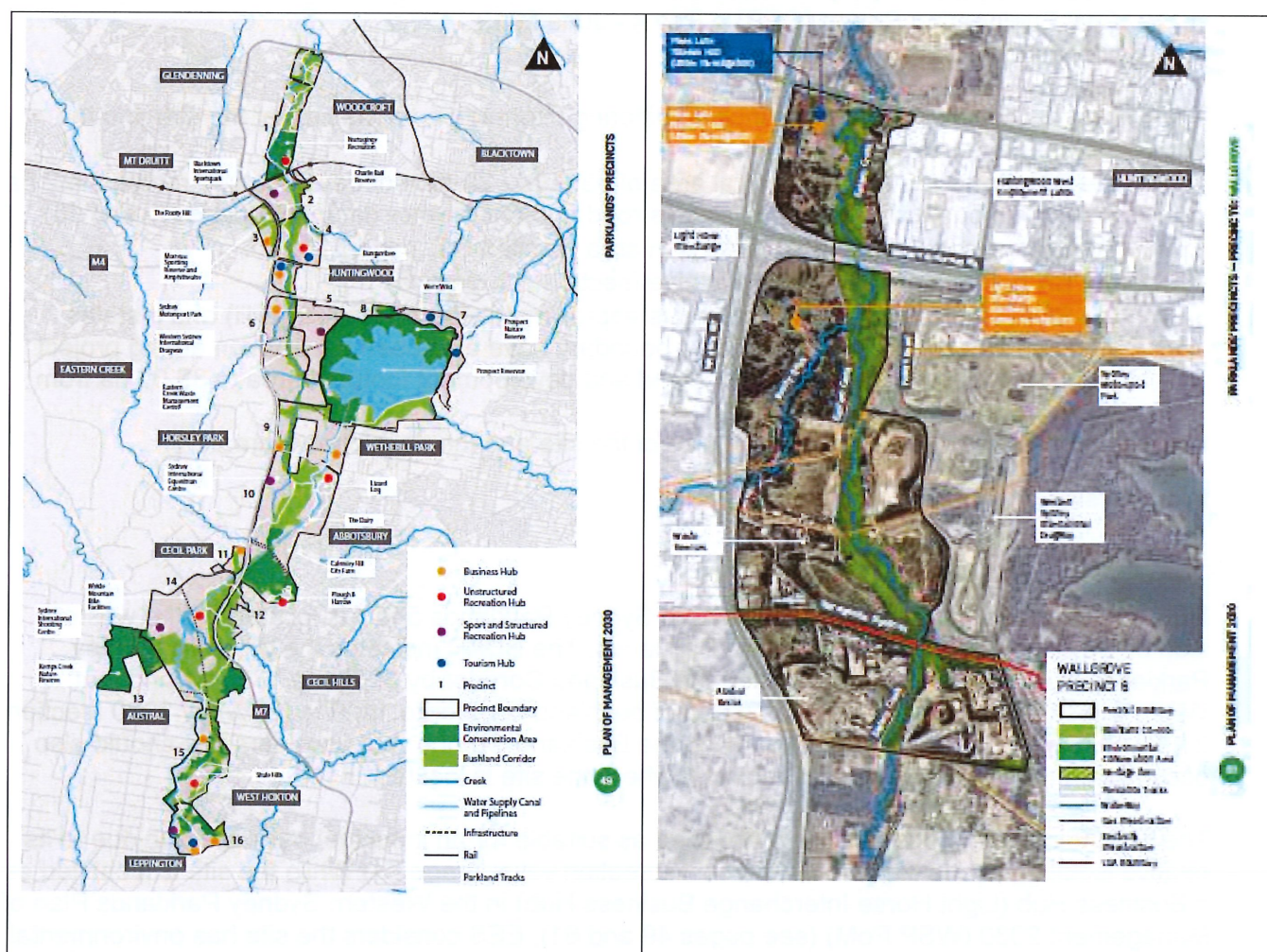
The EIS indicates the site has been identified as suitable for an industrial business hub due to its relative isolation and low environmental or recreation value (page 74). While the site is identified as a Business Hub (Light Horse Interchange Business Hub) in the Western Sydney Parklands Plan of Management 2030 (WSP PoM) (see pages 49 and 61), EES considers the site has environmental value in that it provides potential to widen the Bushland Corridor at this location within Precinct 6.

Compared to elsewhere in the WSP, the Bushland Corridor in Precinct 6 is constrained and is reduced in width by development, especially adjacent to Austral Bricks in the southern part of

Precinct 6 and in the vicinity of the Western Sydney International Dragway (see Parklands precincts and Wallgrove Precinct 6 below from WSP PoM).

The proposed development of the site will further remove the potential to widen and expand the Bushland Corridor along this section of Eastern Creek as it will remove and narrow the area that currently consists of open vacant grassland and native vegetation.

EES recommends the Bushland Corridor is widened in Precinct 6 to improve the robustness of the Western Parklands corridor, particularly as the WSP PoM indicates visitor numbers are increasing and there is now 150 000 walkers and cyclists using the Parklands tracks annually and there is 1.35 million visits per year to the Parklands picnic areas and playgrounds (page 18). The WSP PoM indicates that other landuse opportunities within Precinct 6 include walking and cycling tracks, unstructured recreation etc (page 60). Development along either side of the Bushland Corridor will act to constrict the increasing visitor / recreational use into the Bushland Corridor. EES is concerned that this will place pressure on the Bushland Corridor and impact and disturb the remnant native vegetation, the habitat it provides and the native fauna that use it.



Widening the corridor in Precinct 6 is consistent with:

- Objective 4 of the POM's Strategic Direction 1 (Environmental Protection and Land Stewardship) which is to increase bushland biodiversity by expanding existing biodiversity

corridors and core habitats and connect the Parklands to the Green Grid across Western Sydney (page 33 of the PoM).

Clause 12 of the Western Sydney Parklands State Environmental Planning Policy (SEPP) 2009 includes “matters to be considered by the consent authority—generally” and it states that “*in determining a development application for development on land in the Western Parklands, the consent authority must consider such of the following matters as are relevant to the development*”. The matters to be considered include:

- (a) *the aim of this Policy, as set out in clause 2*
- (d) *the impact of carrying out the development on environmental conservation areas and the natural environment, including endangered ecological communities*
- (e) *the impact on the continuity of the Western Parklands as a corridor linking core habitat such as the endangered Cumberland Plain Woodland*
- (f) *the impact on the Western Parkland’s linked north-south circulation and access network and whether the development will enable access to all parts of the Western Parklands that are available for recreational use*
- (h) *the impact on public access to the Western Parklands.*

Regarding Clause 12(a) of the SEPP, an aim of the Western Sydney Parklands SEPP (2009) includes:

- (d) *protecting and enhancing the natural systems of the Western Parklands, including flora and fauna species and communities and riparian corridors.*

EES recommends the Bushland Corridor is widened along the western side of the creek to include part of the site and that a buffer area is provided between the Light Horse Interchange Business Hub development and the Bushland Corridor to assist in protecting and enhancing the natural systems of the Western Parklands and achieving aim (d).

EES recommends the Concept Masterplan is amended to remove Lot 8 (where the bio-retention basin is proposed to be located) from the development footprint and that Lots 6 and 7 are reconfigured. As Lot 8 and potentially part of Lots 6 and 7 appear to retain intact Alluvial Woodland and under-scrubbed Alluvial Woodland which is contiguous with the remnant vegetation to the south of the site (see Figure 3.2 of BDAR), it is recommended that Lot 8 is included as part of the Bushland Corridor and that Lots 6 and 7 are reconfigured and the native vegetation within these lots is included in the Bushland Corridor. The bioretention should be relocated closer to the proposed lots 1-5.

EES considers this recommendation to include part of the site in the Bushland Corridor also applies to assist in addressing the matters in Clause 12 (d), (e), (f) and (h), particularly the impact on the continuity of the Western Parklands as a corridor linking core habitat such as the endangered Cumberland Plain Woodland.

Avoid and minimise impacts to biodiversity

The EIS notes several revisions of the subdivision layout were made to avoid and minimise impacts including reducing the project footprint to avoid approximately 2.2 ha of Alluvial Woodland and moderately dense mid story of *Melaleuca decora* (pages 32 and 53 of EIS and pages 50 and 52 of BDAR). While EES supports the amendment to avoid removing the 2.2ha patch of Alluvial Woodland in the south-western part of the site (see page 52 of BDAR), the development still proposes to remove 9.99ha of native vegetation within the site (section 1.2, page 6 of BDAR and section 3.2, page 12 of BA).

The removal of 9.99 ha of native vegetation from the 39.47 ha site amounts to the clearing of 25% of the site. The native vegetation to be removed includes Cumberland Plain Woodland which is a critically endangered ecological community and River-flat Eucalypt Forest which is listed as an endangered ecological community under the Biodiversity Conservation Act 2016 (section 6.7, page 51).

The development includes the removal of 2.12ha area of relatively intact Alluvial Woodland (River-Flat Eucalypt Forest) associated with part of the proposed site access and crossing of Eastern Creek (see Table 3.3, page 31, section 5.1, page 50 of BDAR). The BDAR notes the only viable access option (option 2) to the site is via Ferrer's Road and a bridge crossing of the creek which requires the proposed removal of the Alluvial woodland (pages 50-51). While the EIS indicates a range of site access options were explored and that access from Ferrers Road was considered the optimal location, it is recommended other alternative solutions are considered to avoid and minimise impacts to native vegetation.

The CER indicates it is not proposed to use existing access from Wallgrove Road as a primary access to the site and this will only be used by vehicles for emergency purposes (section 4.4, page 9 of CER). The BDAR briefly explains that the existing M7 underpass (Option 1) has constraints due to the inability for B-doubles to navigate the narrow width/tight bend and that the underpass width is generally not conducive to maintain two-way B-double flows. If a two-way access under the existing under pass is not possible, it is recommended:

- a one-way shared accessway is provided under the under pass, and/or
- the Business Hub is restricted to development that does not require access by B-double trucks to allow the existing underpass accessway to be used.

As a last resort, if a bridge crossing must be constructed over Eastern Creek to allow access via Ferrer's Road (option 2), the bridge should be designed to avoid and minimise the clearing/disturbance of native vegetation (see comments below on bridge crossing).

The development should first avoid impacts to native vegetation on the site. This is consistent with the *Biodiversity Conservation Act 2016* (BC Act) and the NSW Government Biodiversity Assessment Method 2017 (BAM) which is established under section 6.7 of the BC Act:

- The purpose of the BC Act requires impacts to biodiversity to be first avoided:
(k) to establish a framework to avoid, minimise and offset the impacts of proposed development and land use change on biodiversity
- The BAM includes the guidelines and requirements that apply the avoid, minimise and offset hierarchy for assessing direct and indirect impacts. It is noted that section 5.1 of the BDAR states that 'the impact footprint has been reduced by WSPT as much as practicable whilst maintaining the economic feasibility of the development'. However, this level of justification is not adequate (particularly regarding impacts on Cumberland Plain Woodland), to demonstrate why the footprint cannot be reduced further.

EES recommends all attempts are made to:

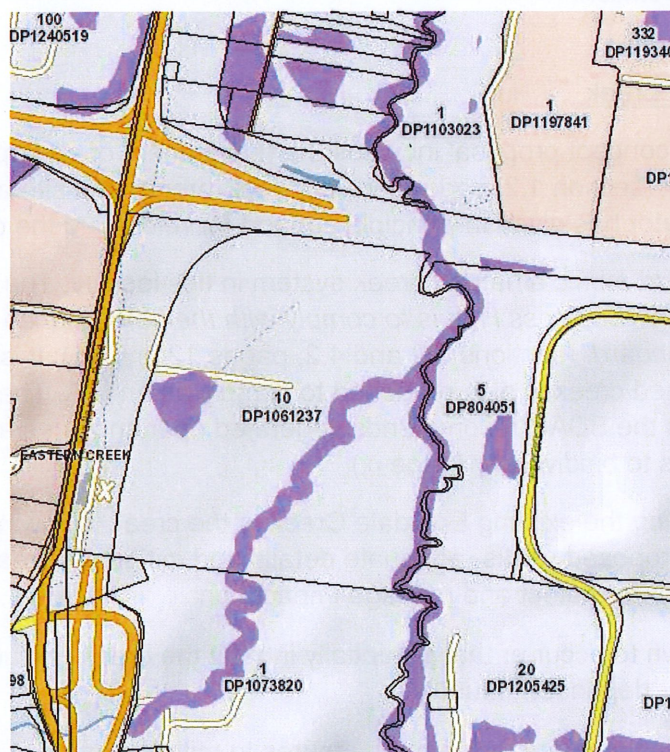
- reduce the footprint of the development on the site to avoid/minimise the clearing of native vegetation and widen the Bushland Corridor, and fully justify any unavoidable impacts
- remove horse and cattle agistment from the native vegetation that is to be retained as the BA states this is keeping the vegetation from regenerating outside of the riparian corridors (see section 1.2, page 3 of BA)
- retain isolated native paddock trees in the proposed subdivision and street layout.

The EIS notes mitigation measures are included to avoid unacceptable biodiversity impacts, including salvaging hollow-bearing trees, protecting and enhancing riparian vegetation. The BDAR states appropriate vegetated riparian zones are to be established along Eastern Creek, Reedy Creek and Erskdale Creek (section 6.3.4, page 63). A Vegetation Management Plan (VMP) needs to be prepared which provides details on how the corridors are to be protected and restored. If the development is approved a condition of consent should be included which requires a VMP to be prepared and implemented.

Watercourses and Riparian Corridors

The proponent needs to clarify if the riparian corridors along Eastern Creek and Reedy Creek are located on the site.

The BDAR notes Eastern Creek and Reedy Creek have been assessed as 'very good' and 'good'. Vegetation mapped along Eastern Creek and Reedy Creek near the site is mapped on the Biodiversity Values Map <https://www.lmbc.nsw.gov.au/Maps/index.html?viewer=BOSETMap>



EES notes a patch of remnant native vegetation occurs between Reedy Creek and Eastern Creek outside the eastern boundary of the site (see Figure 3.2, page 23 of the BDAR). EES seeks clarification as to whether this patch of native vegetation is proposed to be protected and managed in perpetuity and included as part of the Bushland Corridor. EES recommends it is protected and included in the Bushland Corridor and if necessary that the bushfire requirements on the site are amended to ensure this vegetation is protected.

EES recommends:

- existing native vegetation along Eastern Creek and Reedy Creek is protected especially as it is in very good and good condition

- the Bushland Corridor along Eastern Creek is as wide as possible as it provides a north-south corridor connection within the Western Sydney Parklands
- the riparian corridors are rehabilitated where this is required with fully structured local provenance native vegetation from the relevant local native vegetation community or communities that occur at the site
- a Vegetation Management Plan (VMP) is prepared and implemented for the rehabilitation of the riparian corridors.

For clarity, the proponent needs to provide a scaled plan which locates:

- the site boundary
- the development footprint
- the top of highest bank along the creeks
- the riparian corridor widths proposed along Eastern Creek, Reedy Creek and the realigned Erskdale Creek (measured from the top of the highest bank)
- the Bushland Corridor
- Asset Protection Zones
- existing native vegetation.

Realignment of Erskdale Creek

The BDAR indicates the concept proposal includes the realignment of an approximate 300m stretch of Erskdale Creek (section 1.2, page 6) which flows through the site and that the Natural Resource Access Regulator has given in-principle support for relocating the creek (page 53).

The realigned creek should mimic a natural creek system in this locality. The BA states “*vegetation and landscaping across the Business Hub is to comply with the performance objectives of an Inner Protection Area (IPA) standard*” (sections 3.2 and 4.2, pages 12 and 15). It is unclear if the riparian planting along the realigned creek is also proposed to comply as an IPA. The proponent needs to clarify this, particularly as the BDAR recommends vegetated riparian zones as a mitigation measure to avoid impacts to biodiversity (page ix).

Prior to realigning and filling the existing Erskdale Creek, if the creek is flowing or it retains pools of water at the time of the proposed works, adequate details and mitigation measures need to be provided and implemented to protect and manage impacts on:

- native fauna known to occur or that potentially inhabit the creek (including measures to relocate any water dependent fauna)
- the downstream environment including measures to mitigate impacts on the instream habitat and downstream water quality.

Bridge Crossing

The EIS notes access to the site will require the construction of a new 61.5 m long bridge crossing over Eastern Creek as part of the Stage 1 works (page 55). As noted above, EES recommends alternative solutions are considered to avoid constructing the proposed bridge crossing for the primary access to the site. If access to the site must be provided at this location, EES recommends the bridge is designed to maintain and improve riparian/terrestrial connectivity along Eastern Creek and the design includes the following:

- the bridge is an elevated structure and it spans the full width of the riparian corridor to avoid or reduce the need to clear and/or disturb remnant native vegetation along the creek

- the design maximises light and moisture penetration under the structure to encourage native plant growth, for example the bridge could include a grate in the structure (see photos below)
- a gap is provided between the new bridge crossing and the existing crossing of the M4 motorway to assist in allowing light and moisture penetration under the two structures.



An example of a bridge at Lakes Environs (Waterside Green), Lakeview Drive Cranebrook with grates incorporated into the structure to assist in allowing light and moisture penetration for plant growth under the bridge



View under the bridge at Lakes Environs (Waterside Green) looking up at a grate incorporated into the structure

Site Landscaping

The Landscape Plans indicates the boundary buffer plantings are to consist of endemic species as listed in the Western Sydney Parklands Design Manual – Cumberland Plain Woodland and Shale Gravel Transition Forest. EES supports the planting of a diversity of local native provenance plants (trees, shrubs and groundcover species) from the native vegetation communities that occur, or once occurred on the site along the boundary buffers.

EES notes the planting schedule proposes to plant exotic London Plane Trees in the street planting. EES recommends the planting schedule is amended and a diversity of local native provenance species are planted in the street planting and the development lots (rather than plant exotic or non-local natives).

The Landscape Plan shows turf is proposed to be planted around the bio-retention basins. It is recommended a diversity of local native of local native provenance species is planted within the basins and surrounding the bio-retention basins (rather than turf) except where access is required for maintenance.

If the project is approved, it is recommended a condition of consent is included that the plant species used on the site comprise local provenance plant species.

Urban Tree Canopy

The proposed loss of the existing trees, and the many benefits that the trees provide will take years for a juvenile tree to grow and replace. As the site occurs within an area covered by the Central City District Plan (CCDP) it is recommended the development is consistent with Planning Priority

C16 - increasing urban tree canopy cover and delivering Green Grid connections. Objective 30 of this planning priority is that urban tree canopy cover is increased. Planning Priority C16 outlines that the NSW Government has set a target to increase tree canopy cover across Greater Sydney to 40 per cent.

The numerous benefits of urban tree canopy cover are noted in the CCDP, including green cover assists in:

- mitigating the urban heat island effect
- improving air quality
- providing local habitat
- improving amenity
- slowing and storing stormwater
- improving water quality and filtering pollution before it reaches the District's waterways.

One way to achieve urban tree canopy cover at the site is for the development to avoid removing (where possible) the existing native trees/vegetation.

EES recommends that to assist in mitigating the urban heat island effect at the site and improve the urban tree canopy and local habitat that the development:

- first avoids removing the trees from the site where possible
- replaces any removed trees at a ratio greater than 1:1
- replaces the trees with local provenance native plant species from the native vegetation community which once occurred in this locality to enhance local biodiversity, rather than use non-local native or exotic plants
- uses advanced and established local native trees preferably with a plant container pot size of 100 litres or greater
- provides sufficient area/space to allow the trees to grow to maturity.

Mitigation Measures

EES recommends the biodiversity mitigation measures included in section 8 of the EIS (page 79) are amended to include the following:

- Prior to commencement of any works on the site, native vegetation that is to be retained must be clearly marked with temporary fencing to ensure that there is no unnecessary removal of vegetation. The fencing must be regularly checked and maintained throughout the construction phase
- the landscaped areas and areas to be revegetated and enhanced must use a diversity of local provenance species (trees, shrubs and groundcovers) from the native vegetation communities that occur, or once occurred, on the site
- any native trees that are required to be cleared from the site shall be salvaged (for example tree hollows and tree trunks which are greater than approximately 25-30cm in diameter and 3m in length) and placed in the riparian corridors, Bushland Corridor, landscape areas etc to enhance habitat
- Remnant native vegetation that is required be removed from the site, especially juvenile plants shall be translocated to the riparian corridors, Bushland Corridor and landscape areas
- the topsoil from areas of native vegetation that are to be cleared for the development shall be collected and used in the riparian corridors and revegetation areas
- seed from any native plants to be removed shall be collected and used in the riparian corridors, Bushland Corridor and landscape areas

- any trees that are to be planted at the site shall use advanced and established local native species from the relevant vegetation communities which occur on the site, preferably with a minimum tree height of 2-2.5 metres and /or plant container pot size of 100 litres to mitigate the removal of trees and the habitat they provide
- any trees that are to be removed from the site are replaced at a ratio greater than 1:1 to mitigate the urban heat island effect
- any tree hollows to be removed are to be replaced at a ratio greater than 1:1.

If consent is granted to this SSD, EES recommends conditions of consent are included which require the implementation of the above mitigation measures.

Recommended Conditions

If the SSD is approved EES recommends the following are included as conditions of consent:

- 1) a Vegetation Management Plan shall be prepared to protect and restore the riparian corridors along Eastern Creek, Reedy Creek and the realigned Erskdale Creek. The plan should include:
 - a scaled plan which locates the watercourses; top of highest bank; existing native vegetation along the creeks; the riparian corridor widths proposed along Eastern Creek, Reedy Creek and the realigned Erskdale Creek (measured from the top of the highest bank); the boundary of the site; the development footprint and proposed Asset Protection Zones
 - details on the native vegetation communities and plant species that currently occur along Eastern Creek, Reedy Creek and Erskdale Creek
 - details on the local native provenance plant species (trees, shrubs and groundcovers) to be planted – a diversity of local native species should be planted
 - include details on the location and number of trees and other plants that are proposed to be planted
 - specify that plants are to be propagated from locally sourced seeds to ensure genetic integrity.
- 2) The landscape plan for the site shall use a diversity of local native provenance trees, shrubs and groundcover species (rather than exotic species or non-local native species) from the native vegetation community which once occurred in this locality. The Landscape Plan shall include details on:
 - the native vegetation community (or communities) that once occurred in the locality
 - a list of local provenance tree, shrub and groundcovers to be used in the landscaping
 - the quantity and location of plantings
 - the pot size of the local native trees to be planted
 - the area/space required to allow the planted trees to grow to maturity
- 3) Trees removed by the development shall be replaced at a ratio greater than 1:1.
- 4) Native trees to be removed are salvaged and used in the riparian corridor to enhance habitat including tree hollows and tree trunks (greater than approximately 25-30cm in diameter and 3m in length).
- 5) The landscaping shall use advanced and established local native trees preferably with a plant container pot size of 100 litres, or greater to increase urban tree canopy cover.

End of Submission

