

# Review of Environmental Factors Addendum

Austral and Leppington Wastewater Project - Bonds Creek carrier extension and access roads

## 1 Determination

This Review of Environmental Factors Addendum (REFA) assesses potential environmental impacts of extending the Bonds Creek carrier and retaining access roads and hardstand areas for the Austral Leppington Wastewater project. The REFA was prepared under Division 5.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act), with Sydney Water both the proponent and determining authority.

The Sydney Water Project Manager is accountable for ensuring the proposal is carried out as described in this REFA and the Review of Environmental Factors: Austral and Leppington Wastewater Project (January 2022) (approved REF). Additional environmental impact assessment may be required if the scope of work or work methods described in this REFA change significantly following determination.

### Decision Statement

The main potential construction environmental impacts of the proposal are vegetation clearing, noise, traffic and access and air quality. The proposal will not be carried out in a declared area of outstanding biodiversity value and is not likely to significantly affect threatened species, populations or ecological communities, or their habitats. Therefore, a Species Impact Statement (SIS) and/or Biodiversity Development Assessment Report (BDAR) is not required.

Given the nature, scale and extent of impacts and implementation of the mitigation measures outlined in this REFA and the approved REF, the proposed work is unlikely to have a significant impact on the environment. Therefore, we do not require an Environmental Impact Statement (EIS) and the proposal may proceed.

### Certification

I certify that I have reviewed and endorsed this REFA and, to the best of my knowledge, it is in accordance with the EP&A Act and the Environmental Planning and Assessment Regulations (EP&A Regulation). The proposal has been considered against matters listed in section 171 (Appendix A) and the guidelines approved under section 170 of the EP&A Regulation and the information it contains is neither false nor misleading.

Prepared by:

Reviewed by:

Endorsed by:

Approved by:

## 2 Proposal Summary

Aspect	Detailed description
<b>Proposal location</b>	<p>The proposal is situated in the suburb of Austral within the local government area of Liverpool City Council. The proposed Bonds Creek carrier extension intersects private properties, Sydney Water owned land at the existing SP1183 and road corridors.</p> <p>Access roads were installed during construction of the Austral and Leppington Wastewater Project and are located in private property in Austral (maps in Appendix C):</p> <p>Kemps Creek carrier</p> <ul style="list-style-type: none"><li>• Lot 24 DP3403 (map 1)</li><li>• Lot 3 DP235953 (map 1)</li><li>• Lot 8 DP30409 (map 2)</li><li>• Lot 9 DP30409 (map 2)</li><li>• Lot 13 DP30409 (map 2)</li><li>• Lot 25 DP30409 (map 3)</li><li>• Lot 13 DP776298 (map 3)</li><li>• Lot 14 DP776298 (map 3)</li><li>• Lot 9 DP776297 (map 4)</li><li>• Lot 12 DP776297 (map 4)</li></ul> <p>Bonds Creek carrier</p> <ul style="list-style-type: none"><li>• Lot 11 DP776297 (map 4)</li></ul> <p>Austral carrier</p> <ul style="list-style-type: none"><li>• Lot 14 DP30409 (map 2)</li><li>• Lot 17 DP30409 (map 5)</li><li>• Lot 21 DP30409 (map 5)</li><li>• Lot 647 DP2475 (map 5)</li><li>• Lot 761 DP2475 (map 6)</li><li>• Lot 787 DP2475 (map 6)</li><li>• Lot 819 DP2475 (map 6)</li><li>• Lot 820 DP2475 (map 6)</li><li>• Lot 821 DP2475 (map 6)</li></ul>

#### Austral lead-in

- Lot 640 DP2475 (map 7)

#### Bonds Creek lead-in

- Lot 802 DP2475 (map 8)
- Lot 1 DP2756 (map 8)
- Lot A DP385901 (map 8)
- Lot 131 DP879822 (map 9)
- Lot 132 DP879822 (map 9)
- Lot 1 DP598602 (map 9).

#### Approved REF

Review of Environmental Factors: Austral and Leppington Wastewater Project (January 2022).

#### Proposal scope

Sydney Water proposes to construct and operate the Austral and Leppington Wastewater Project in order to cater for predicted growth in demand for wastewater servicing associated with the South West Growth Area.

The approved project included:

- new wastewater pumping station (SP1211)
- pressure main connecting SP1211 to the existing SP1190
- gravity mains to convey wastewater in Austral and Leppington to SP1211.

#### Proposal change

The additional scope of works includes:

- extend the Bonds Creek carrier – construct new gravity wastewater main, DN900/750, for about 1.2 km beside Bonds Creek (**Figure 1 to Figure 4**)
- retain some access roads and hardstand areas for access to maintenance holes during operations (refer Appendix C).

Construction of the Bonds Creek carrier extension would be consistent with the construction methodology of the approved REF:

- microtunnelling involving excavation of launch and receival pits
- construction of access roads
- stockpiling material.

#### Justification for proposal change

##### Bonds Creek carrier extension

The Upper South Creek Advanced Water Recycling Centre (AWRC) is approved critical State Significant Infrastructure (CSSI). Wastewater flows from the Austral Leppington catchment are required for commissioning the AWRC. Development in the catchment has occurred at a slower rate than anticipated and wastewater flows from the Austral Leppington Wastewater Project will not be sufficient for AWRC commissioning. Sydney Water proposes to construct the Bonds Creek



carrier extension to service additional development in the catchment, increasing wastewater flows to the AWRC for commissioning.

### **Access roads for operations**

The Austral Leppington Wastewater project is designed to service the ultimate development in the catchment, expected in 2056. Wastewater flows in the pipes would increase as development increases.

Wastewater pipes are designed to self-cleanse and control slime, reducing the risk of pipe corrosion and odour. This is achieved when wastewater flow in the pipes exceeds a certain flow rate.

Due to the large size of the Austral Leppington wastewater pipes and the low rate of development in the catchment, self-cleansing and slime control is not expected to be achieved until about 2028. Sydney Water Operations must flush the pipes until the pipes have sufficient flows for self-cleansing and slime control. Sydney Water Operations will need to access the maintenance holes along the pipe alignment for flushing.

Temporary access roads to all maintenance holes were installed for construction of the Austral Leppington Wastewater project. Sydney Water proposes to retain the access roads for operational use. Sydney Water would enter into licensing agreements with landowners and ownership of the tracks would transfer to landowners or be removed when the tracks are no longer needed for Sydney Water operations (flows are sufficient for self-cleansing and slime control).



Legend

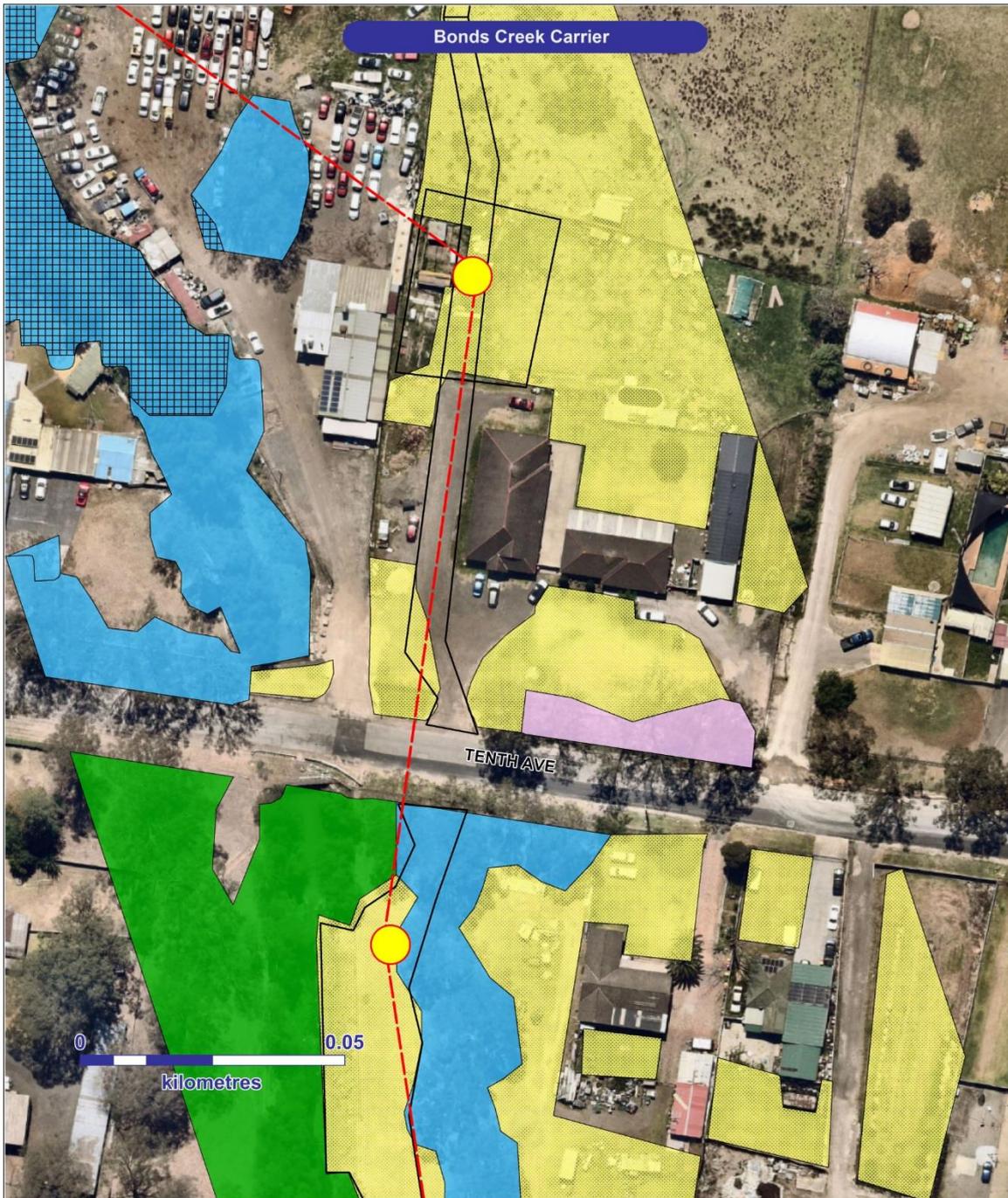
- Bonds Creek Carrier
- Construction footprint
- Existing Native Vegetation (ENV)
- MH Locations
- Coastal Valleys Swamp Oak Riparian Forest
- Cumberland Red Gum Riverflat Forest
- Exotic Pasture
- Planted exotic/native vegetation
- Hollow-bearing tree



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Figure 1 Proposal change (Eleventh Avenue)



- Legend**
- Bonds Creek Carrier
  - Construction footprint
  - Existing Native Vegetation (ENV)
  - MH Locations
  - Coastal Valleys Swamp Oak Riparian Forest
  - Cumberland Red Gum Riverflat Forest
  - Exotic Pasture
  - Planted exotic/native vegetation



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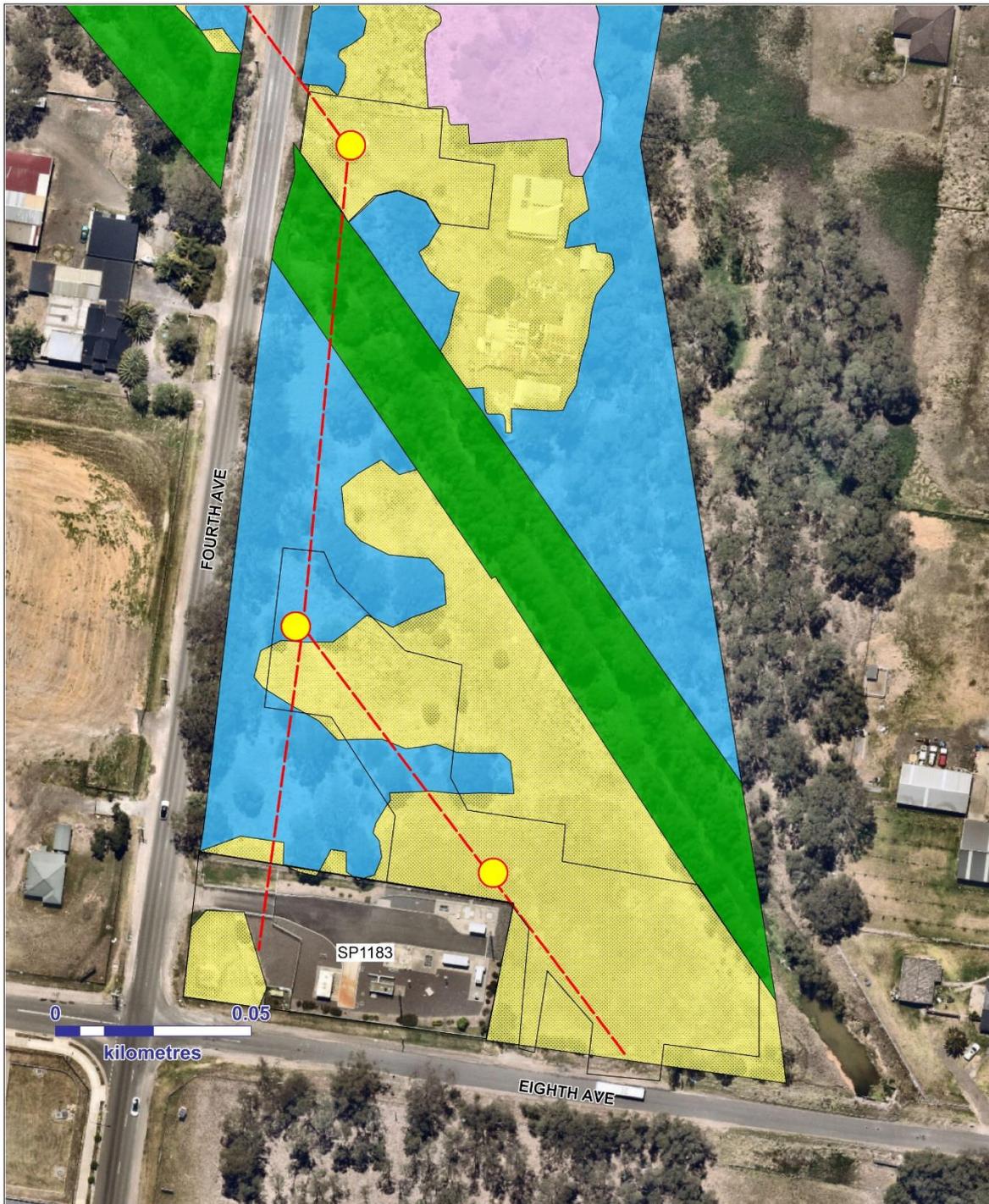
**Figure 2** Proposal change (Tenth Avenue)



- Legend**
- - - Bonds Creek Carrier
  - Construction footprint
  - Existing Native Vegetation (ENV)
  - MH Locations
  - Coastal Valleys Swamp Oak Riparian Forest
  - Cumberland Red Gum Riverflat Forest
  - Exotic Pasture
  - Planted exotic/native vegetation



**Figure 3** Proposal change (Ninth Avenue)



- Legend**
- - - Bonds Creek Carrier
  - Construction footprint
  - Existing Native Vegetation (ENV)
  - MH Locations
  - Coastal Valleys Swamp Oak Riparian Forest
  - Cumberland Red Gum Riverflat Forest
  - Exotic Pasture
  - Planted exotic/native vegetation



**Figure 4** Proposal change (Eight Avenue)



### 3 Consultation

Sydney Water must consult with councils and other authorities for work in sensitive locations or where the work may impact other agencies infrastructure or land (specified in the State Environmental Planning Policy (Transport and Infrastructure) 2021 (TISEPP)).

Consultation with Liverpool City Council is not required for the proposed works covered by this addendum. Further detail is provided in Appendix B. However, ongoing consultation with Liverpool City Council would occur during the proposed addendum works.

Consultation with the Department of Planning and Environment is required under SEPP (Precincts – Western Parklands City) (2021) for clearing native vegetation in non-certified land in the Sydney region growth centres. As the proposal involves clearing of native vegetation, the Department was notified on 28 November 2023. DPE responded on 30 November 2023 and stated that offsets are not required and that they have no further comment on the proposed clearing.

Department of Primary Industry (DPI Fisheries) was notified on 30 November 2023 under section 199 of the *Fisheries Management Act 1994* during REFA preparation, as the work involves underboring beneath a waterway classified as 'Key Fish Habitat'. DPI Fisheries responded on 20 December and their recommended safeguards have been considered in this REFA.

Sydney Water consulted all property owners with hardstand areas or access roads on their property. These were installed during earlier works for the Austral Leppington Wastewater Project. Sydney Water propose to enter into licensing agreements with affected property owners that have agreed to retain access roads and hardstand areas on their land. The licence agreement would include the following conditions:

- Sydney Water will use the access roads and hardstand areas for operational purposes until the wastewater pipes achieve self-cleansing and slime control
- option for landowner to assume ownership of the access roads/hardstand after Sydney Water no longer needs access to for operational purposes
- where the landowner wishes to retain the access roads/hardstand, maintenance responsibilities transfer to the landowner
- where the landowner no longer wishes to retain the access roads/hardstand, Sydney Water will remove them and restore the disturbed areas in accordance with the Austral Leppington Wastewater Project REF
- the landowner must provide Sydney Water with alternative access, if they remove or relocate the access road/hardstand material. The landowner would also be responsible for obtaining their own planning and or environmental approvals.

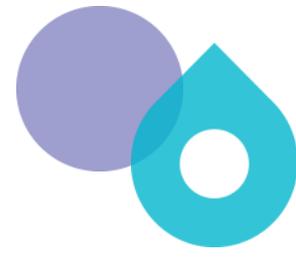
### 4 Legislative consideration

There are no additional legislative requirements above those already assessed in the approved REF.

Section 2.126 of the *State Environmental Planning Policy (Transport and Infrastructure) 2021* (TISEPP) permits development by or on behalf of a public authority for sewerage without consent on any land.

The proposed change involves the development of sewerage infrastructure on land zoned:

- E2 Environmental conservation



- E4 Environmental living
- RE1 Public recreation
- R2 Low density residential
- R3 Medium density residential
- RU4 Primary production small lots
- RU6 Transition
- SP2 Infrastructure.

## 5 Additional environmental impacts and mitigation measures

### Existing environment

Access roads and hardstand areas are within the REF (January 2022) approved boundary of the Austral Leppington Wastewater Project.

The proposed Bonds Creek carrier extension generally follows Bonds Creek. The surrounding land uses in the area include vegetated areas including riparian corridor, public recreational areas and commercial properties.

Environmentally sensitive areas include the endangered ecological communities and waterways. The area in the vicinity of Bonds Creek is a high risk landscape, with the potential for additional Aboriginal heritage sites to be present.

The table below lists environmental impacts and mitigation measures, additional to the approved REF. All other environmental impacts and mitigation measures identified in the approved REF remain the same and will be incorporated into the Contractor's CEMP.

Environmental impacts table		
Aspect	Additional impacts	Additional mitigation measures
<b>Land use</b>	<p>Land use on the Bonds Creek carrier extension is residential, commercial and open pasture. There is substantial residential development occurring in the area. The proposed pipeline is mostly located in future recreational areas and the current flood zone. This location minimises constraints on future land use, as development over wastewater pipelines is restricted.</p> <p>Access roads and hardstand areas would be retained on various private properties (Appendix C).</p>	<ul style="list-style-type: none"> <li>• Sydney Water proposes to enter into licensing agreements with property owners, where access roads or hardstand areas would be retained for operational purposes.</li> </ul>
<b>Topography, geology and soils</b>	<p>Construction methodologies of the proposal are generally consistent with the overall project. Accordingly, the potential impacts of the proposal are expected to be consistent with those assessed in the approved REF.</p>	<p>No additional mitigation measures.</p>



## Environmental impacts table

Aspect	Additional impacts	Additional mitigation measures
	<p>By adopting the mitigation measures in the approved REF, residual impacts are expected to be minor.</p>	
<p><b>Water and drainage</b></p>	<p>The main waterways in the project area are Kemps Creek and its tributaries including Bonds Creek, along with other, smaller tributaries. The project area also contains numerous small dams. The project area is largely within the flood planning areas associated with Kemps Creek, Bonds Creek and tributaries, and is therefore likely to be flood affected during the 1:100 year average recurrence interval (ARI) event.</p> <p>Proposal areas near waterways, are likely to experience a range of smaller and more frequent flooding events. Groundwater is expected to be encountered and dewatering will be required, particularly in the vicinity of identified waterways.</p> <p>The access roads could act as a barrier to overland flows. Adequate drainage would be installed on the access roads to ensure that the tracks do not form a barrier to overland flows.</p>	<ul style="list-style-type: none"> <li>• Drainage controls must be designed allow overland flows and minimise impacts to existing drainage patterns.</li> <li>• As dewatering of groundwater is required to complete the proposed works adjacent to identified waterways, a Water Supply Works Approval would be required prior to construction. If dewatering of more than 3ML is required, a Water Access Licence would be required.</li> </ul>
<p><b>Flora and fauna</b></p>	<p>Arcadis prepared an addendum to the Austral and Leppington Wastewater Project Biodiversity Assessment (GHD, 2020) to assess the biodiversity impacts associated with the Bonds Creek carrier extension. The addendum report is provided in Appendix D and summarised here.</p> <p>Arcadis carried out a site survey of the study area (Appendix D) in March 2023. Arcadis identified two plant community types in the study area:</p> <ul style="list-style-type: none"> <li>• Cumberland Red Gum Riverflat Forest (PCT 4025) consistent with Riverflat Eucalypt Forest – endangered under the <i>Biodiversity Conservation Act 2016</i> (BC Act) and critically endangered under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act).</li> <li>• Coastal Valleys Swamp Oak Riparian Forest (PCT 4023) consistent with Swamp Oak Floodplain Forest – endangered under the BC Act and EPBC Act.</li> </ul> <p>Spatial data showing areas mapped as existing native vegetation (ENV) in the SEPP Growth Centre 2006 shows 3.32 hectares of ENV in the study area. However, following ground-truthing, only 2.16 hectares of this is native vegetation considered to meet the criteria for ENV. The study area</p>	<ul style="list-style-type: none"> <li>• The hollow-bearing tree identified as containing hollows adjacent to the Construction Footprint is to be demarcated with a Tree Protection Zone (TPZ) to reduce indirect impacts to hollow inhabiting fauna.</li> <li>• Construction activities will be limited to normal working hours where possible. If night works are essential, then then an appropriate artificial light management plan, as per the National Light Pollution Guidelines for Wildlife (DCCEE 2023b), must be implemented.</li> <li>• Underbore launch and receival pits be located at least 10m from the waterway and not located</li> </ul>

## Environmental impacts table

Aspect	Additional impacts	Additional mitigation measures
	<p>contains the construction footprint (<b>Figure 1</b> to <b>Figure 4</b>). The construction footprint does not contain ENV.</p> <p>The proposal would result in clearing of 0.12ha of Cumberland Red Gum Riverflat Forest, all in non-certified land. This is in addition to 1.33ha of the vegetation community assessed for removal in the approved Austral Leppington Wastewater Project REF. An assessment of significance (AoS) was prepared for clearing 1.45ha of this community. The AoS concluded that the clearing would not result in a significant impact. The 0.12ha of Cumberland Red Gum Riverflat Forest did not meet the criteria to be listed as threatened under the EPBC Act and a significant impact criteria (SIC) assessment is not required. There would be no impact to Coastal Valleys Swamp Oak Riparian Forest.</p> <p>Three threatened flora species and 19 threatened fauna species were identified as having a moderate or higher likelihood of occurrence in the construction footprint and have suitable habitat present that will be impacted by the proposal. AoSs and SICs were prepared to assess the potential for significant impact on threatened species due to the proposed clearing of the additional 0.12ha of habitat to that assessed in the approved REF. The AoSs and SICs concluded that there would be no significant impact on threatened species.</p> <p>One hollow-bearing tree was identified during site survey, a stag featuring cracks suitable for hollow-roosting microbat species such as Southern Myotis or Yellow-bellied Sheath-tailed Bat. The location of the stag is shown in <b>Figure 1</b>. The tree is beside the construction footprint. Due to its proximity to the impact area, the proposal could result in disturbance to threatened microbats as a result on loud noise and vibration during construction.</p> <p>DPI Fisheries requested entry and exit points for the underbore are located at least 10 m from the waterway and are not located within riparian vegetation. Ten of the twelve launch and receival pits are at least 10 m from waterways. Two pits are within 10 m from waterways in cleared areas. These have been located to minimise the impact on property and vegetation.</p> <p>There would be no biodiversity impact associated with retention of the access roads and hardstand areas.</p>	<p>within riparian vegetation. This applies except for pits immediately south of Tenth Avenue and Eleventh Avenue.</p> <ul style="list-style-type: none"> <li>DPI Fisheries (1800 043 536) and the Environment Protection Authority (131 555) is to be notified immediately if any fish kills occur in the vicinity of the works. In such cases, all works other than emergency response procedures are to cease until the issue is rectified and approval is given by DPI Fisheries and/or the Environment Protection authority for the works to proceed.</li> </ul>
<b>Aboriginal heritage</b>	Kelleher Nightingale Consulting (KNC) prepared an addendum archaeological assessment to the Austral Leppington Cultural	No additional mitigation measures.

## Environmental impacts table

Aspect	Additional impacts	Additional mitigation measures
	<p>Heritage Assessment Report for the approved project. The addendum report is provided in Appendix E and summarised here.</p> <p>Database searches and a review of previous archaeological investigations found that no previously registered Aboriginal archaeological sites are found in the construction footprint. Two registered Aboriginal archaeological sites have been recorded close to the construction footprint. The sites comprise a [REDACTED].</p> <p>KNC's addendum report concluded the following:</p> <ul style="list-style-type: none"><li>• Archaeological survey did not identify any Aboriginal archaeological objects/sites or areas of archaeological potential within the construction footprint. Significant disturbance of ground surfaces in the construction footprint has impacted on the survival of archaeological deposit across the majority of the area and the presence of Aboriginal objects is unlikely.</li><li>• No Aboriginal archaeological sites will be impacted by the proposed works within the construction footprint.</li></ul> <p>Based on KNC's findings it is considered unlikely that the addendum works will impact Aboriginal Heritage.</p>	
<b>Noise and vibration</b>	<p>A specialist noise and vibration assessment was completed as part of the approved REF. The construction methodologies of the works assessed in this REFA are generally consistent with those assessed in the approved REF and specialist noise and vibration assessment. Therefore, noise and vibration impacts are anticipated to be consistent with the approved REF and specialist noise and vibration assessment. Although impacts are anticipated to be consistent, as the works will be occurring in a new area some additional receivers may be impacted by the works.</p> <p>Other sensitive receivers that may be impacted by noise and vibration from the proposal include:</p> <ul style="list-style-type: none"><li>• nearby residential premises</li><li>• Sikh Mission Centre</li><li>• Kids Kinder Childcare.</li></ul> <p>With the implementation of the mitigation measures in the approved REF, impacts from noise and vibration can be</p>	No additional mitigation measures.

## Environmental impacts table

Aspect	Additional impacts	Additional mitigation measures
	adequately managed, and residual impacts are expected to be minor.	
<b>Air and energy</b>	<p>Construction methodologies of the proposal are generally consistent with the overall project. Accordingly, the potential impacts of the proposal are expected to be consistent with those assessed in the approved REF.</p> <p>Although impacts are anticipated to be consistent, as the works will be occurring in a new area some additional sensitive receivers may be impacted by the works.</p> <p>Sensitive receivers that may be impacted by air and energy from the proposal include residential premises, places of worship and educational premises.</p> <p>By adopting the mitigation measures in the approved REF, residual impacts are expected to be minor.</p>	No additional mitigation measures.
<b>Waste and hazardous materials</b>	<p>There is potential to encounter unexpected contamination during construction of the Bonds Creek carrier extension. This would be managed in accordance with the mitigation measures in the approved REF.</p> <p>All material used for access roads and hardstand areas was certified clean material on arrival to site. However, there is potential for some material to be contaminated from minor leaks and spills during construction of the approved project.</p>	<ul style="list-style-type: none"> <li>• Test all access roads and hardstand material to be retained onsite. Remove material that contains contamination.</li> </ul>
<b>Traffic and access</b>	<p>Construction methodologies of the works assessed in this REFA are generally consistent with those assessed in the approved REF. Traffic and access impacts are anticipated to be generally consistent with the approved REF however may impact additional roadways and receivers. Traffic control may be required in additional areas and should be assessed by the Contractor prior to works commencing.</p> <p>With the implementation of the mitigation measures in the approved REF, impacts to traffic and access can be adequately managed, and residual impacts are expected to be minor.</p> <p>Sydney Water Operations would require access to maintenance holes to flush the pipelines. This would be a water tanker and light vehicles, and is not expected to impact traffic or access.</p>	No additional mitigation measures.
<b>Social and visual</b>	Construction methodologies of the proposal are generally consistent with the overall project. Accordingly, the potential	No additional mitigation measures.

## Environmental impacts table

Aspect	Additional impacts	Additional mitigation measures
	<p>impacts of the proposal are expected to be consistent with those assessed in the approved REF.</p> <p>Some additional sensitive receivers may be impacted by the works. These include residential premises, places of worship and educational premises.</p> <p>By adopting the mitigation measures in the approved REF, residual impacts are expected to be minor.</p>	

## 6 Conclusion

This REFA outlines potential environmental impacts associated with the Bonds Creek Carrier Extension project as part of the Austral and Leppington Wastewater project. Any additional environmental impacts are considered minor and potential impacts can be mitigated through implementation of the measures outlined in this REFA and the approved REF. The proposal is not likely to significantly impact the environment.

## Appendix A – Section 171 checklist

Requirements in addition to the approved REF are considered in the table below.

Section 171 checklist	REF finding
Any environmental impact on a community	There may be short-term impacts on the community from emission of noise, dust, potential traffic and access impacts during construction. There will be environmental improvements by providing a reliable wastewater service to the local community.
Any transformation of a locality	The proposal will not result in the transformation of a locality. The wastewater mains will be constructed underground and therefore will not be visible. The access roads and hardstand areas were located in previously cleared areas and would not transform the locality.
Any environmental impact on the ecosystems of the locality	The Bonds Creek carrier construction footprint is located to minimise vegetation clearing and minimise impact to the ecosystem.
Any reduction of the aesthetic, recreational, scientific or other environmental quality or value of the locality	The proposal will not reduce the aesthetic, recreational, scientific or other environmental quality or value of the locality.
Any effect upon a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or any other special value for present or future generations	The proposal will not have any effect upon a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or any other special value for present or future generations.
Any impact on the habitat of any protected animals (within the meaning of the <i>Biodiversity Conservation Act 2016</i> )	About 0.12 ha of habitat would be removed. ToS and SICs were prepared for threatened flora and fauna with potential to be impacted. The assessments concluded that the proposal will not have significant impacts on flora and fauna.
Any endangering of any species of animal or plant or other form of life, whether living on land, in water or in the air	The proposal will not be endangering any species of animal, plant or other form of life, whether living on land, in water or in the air.
Any long-term effects on the environment	The proposal will not have any long-term impacts on the environment but will have a long-term benefit by providing a reliable and modern wastewater service for the area.
Any degradation of the quality of the environment	The proposal will not cause the degradation of the quality of the environment.
Any risk to the safety of the environment	The proposal will not increase risk to the safety of the environment.



## Section 171 checklist

## REF finding

Any reduction in the range of beneficial uses of the environment

The proposal will not reduce the range of beneficial uses of the environment.

Any pollution of the environment

There is potential for noise, dust and erosion and sedimentation. Mitigation measures would be implemented to minimise the potential for the proposal to pollute the environment.

Any environmental problems associated with the disposal of waste

Waste disposal will be in accordance with the environmental mitigation measures, and no environmental problems associated with the disposal of waste are expected.

Any increased demands on resources (natural or otherwise) that are, or are likely to become, in short supply

The proposal will not increase demand on resources, that are, or are likely to become, in short supply.

Any cumulative environmental effect with other existing or likely future activities

The proposal is not anticipated to have cumulative environmental effect with other existing or likely future activities.

Any impact on coastal processes and coastal hazards, including those under projected climate change conditions

The proposal will not have any impact on coastal processes or hazards, and coastal processes and coastal hazards will not have any impact on the proposed activity.

Any applicable local strategic planning statements, regional strategic plans or district strategic plans made under the EP&A Act, Division 3.1

The proposal is to service growth and the applicable strategic planning statements or plans have been considered in the system planning and options selection process.

Any other relevant environmental factors.

The proposal has been assessed against the factors listed above, and there are no other relevant environmental factors to consider.



## Appendix B – Consideration of TISEPP consultation

TISEPP section	Yes	No
<b>Section 2.10, council related infrastructure or services – consultation with council</b>		
Will the work:		
Potentially have a substantial impact on stormwater management services provided by council?		X
Be likely to generate traffic that will strain the capacity of the road system in the LGA?		X
Connect to, and have a substantial impact on, the capacity of a council owned sewerage system?		X
Connect to, and use of a substantial volume of water from a council owned water supply system?		X
Require temporary structures on, or enclose, a public space under council's control that will disrupt pedestrian or vehicular traffic that is not minor or inconsequential?		X
Excavate a road or a footpath adjacent to, a road for which the council is the roads authority that is not minor or inconsequential?		X
<b>Section 2.11, local heritage – consultation with council</b>		
Is the work likely to affect the heritage significance of a local heritage item, or of a heritage conservation area (not also a State heritage item) more than a minor or inconsequential amount?		X
<b>Section 2.12, flood liable land – consultation with council</b>		
Will the work be on flood liable land (land that is susceptible to flooding by the probable maximum flood event) and will works alter flood patterns other than to a minor extent?		X
<b>Section 2.13, flood liable land – consultation with State Emergency Services</b>		
Will the work be on flood liable land (land that is susceptible to flooding by the probable maximum flood event) and undertaken under a relevant provision*, but not the carrying out of minor alterations or additions to, or the demolition of, a building, emergency works or routine maintenance? * (e) Div.14 (Public admin buildings), (g) Div. 16 (Research/ monitoring stations), (i) Div. 20 (Stormwater systems)?		X
<b>Section 2.14, development with impacts on certain land within the coastal zone– council consultation</b>		
Is the work on land mapped as coastal vulnerability area and inconsistent with a certified coastal management program?		X
<b>Section 2.15, consultation with public authorities other than councils</b>		
Will the proposal be on land adjacent to land reserved under the <i>National Parks and Wildlife Act 1974</i> or to land acquired under Part 11 of that Act? <i>If so, consult with DPIE (NPWS).</i>		X
Will the proposal be on land in Zone E1 National Parks and Nature Reserves or on a land use zone that is equivalent to that zone? <i>If so, consult with DPIE (NPWS)</i>		X
Will the proposal include a fixed or floating structure in or over navigable waters? <i>If so, consult TfNSW</i>		X
Will the proposal be on land in a mine subsidence district within the meaning of the <i>Coal Mine Subsidence Compensation Act 2017</i> ? <i>If so, consult with Subsidence Advisory NSW.</i>		X
Will the proposal be on land in a Western City operational area specified in <i>the Western Parkland City Authority Act 2018</i> , Schedule 2 and have a capital investment value of \$30 million or more? <i>If so, consult the Western Parkland City Authority.</i>		X
Will the proposal clear native vegetation on land that is not subject land (ie non-certified land)? <i>If so, notify DPIE at least 21 days prior to work commencing. (Requirement under s3.24 Chapter 3 Sydney Region Growth Centres - of the SEPP (Precincts – Central River City) 2021).</i>	X	

# Appendix C – Access roads and hardstand

Map 1 – Kemps Creek carrier



**Legend**

-  Access track
-  Approved Alignment



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....(insert relevant source as required)

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Map 2 – Kemps Creek carrier and Austral carrier



Legend  
 Access track  
 Approved Alignment

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 ....(insert relevant source as required)  
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Map 3 – Kemps Creek carrier



Legend

- Access track
- Approved Alignment



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 ... (insert relevant source as required)  
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Map 4 – Kemps Creek carrier and Bonds Creek carrier



Legend

- Access track
- Approved Alignment

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 ... (insert relevant source as required)  
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Map 5 - Austral carrier



Legend



Access track



Approved Alignment

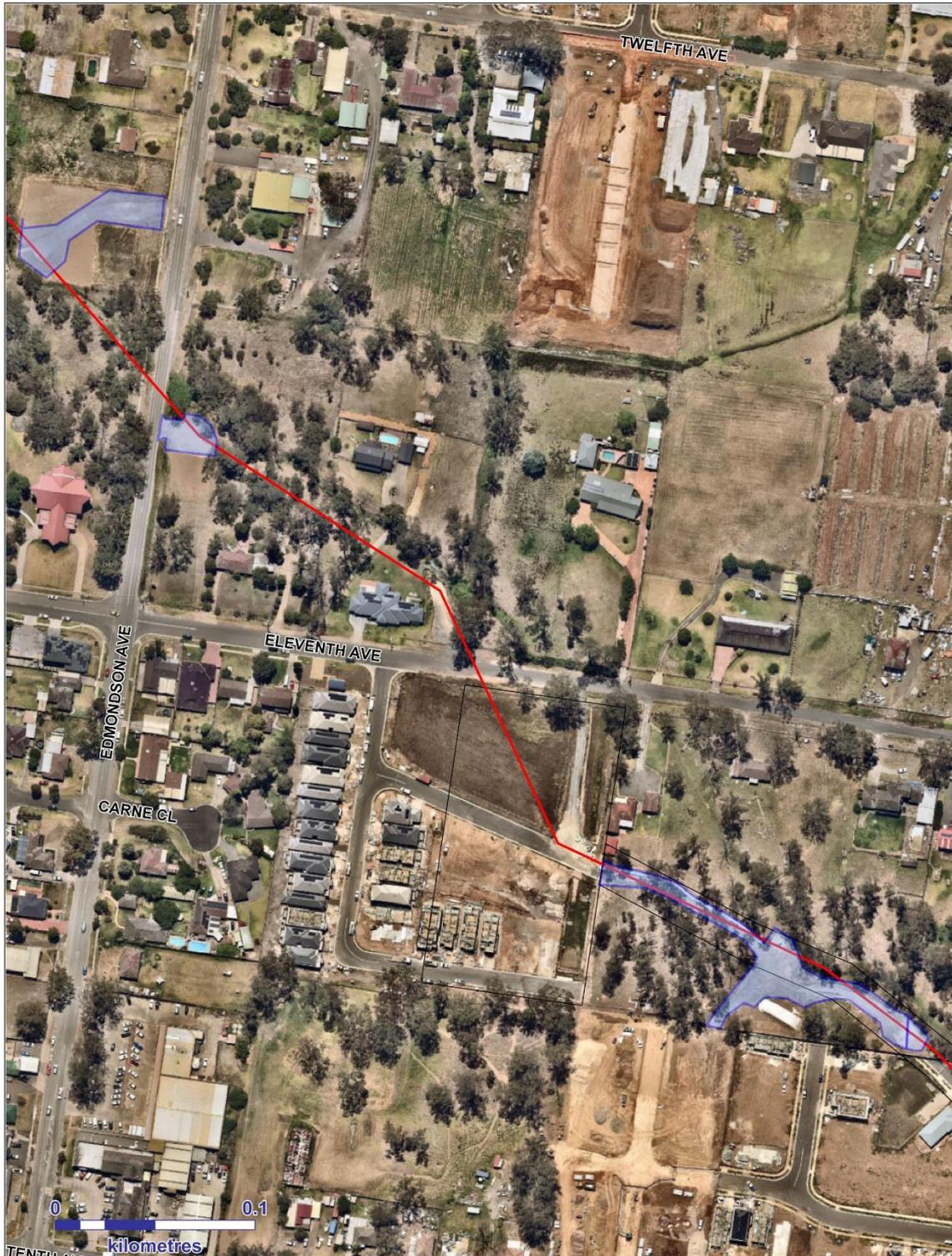


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Map 6 – Austral carrier



Legend

- Access track
- Approved Alignment



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Map 7 - Austral lead-in



Legend

- Access track
- Approved Alignment



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Map 8 - Bonds Creek lead-in



Legend



Access track



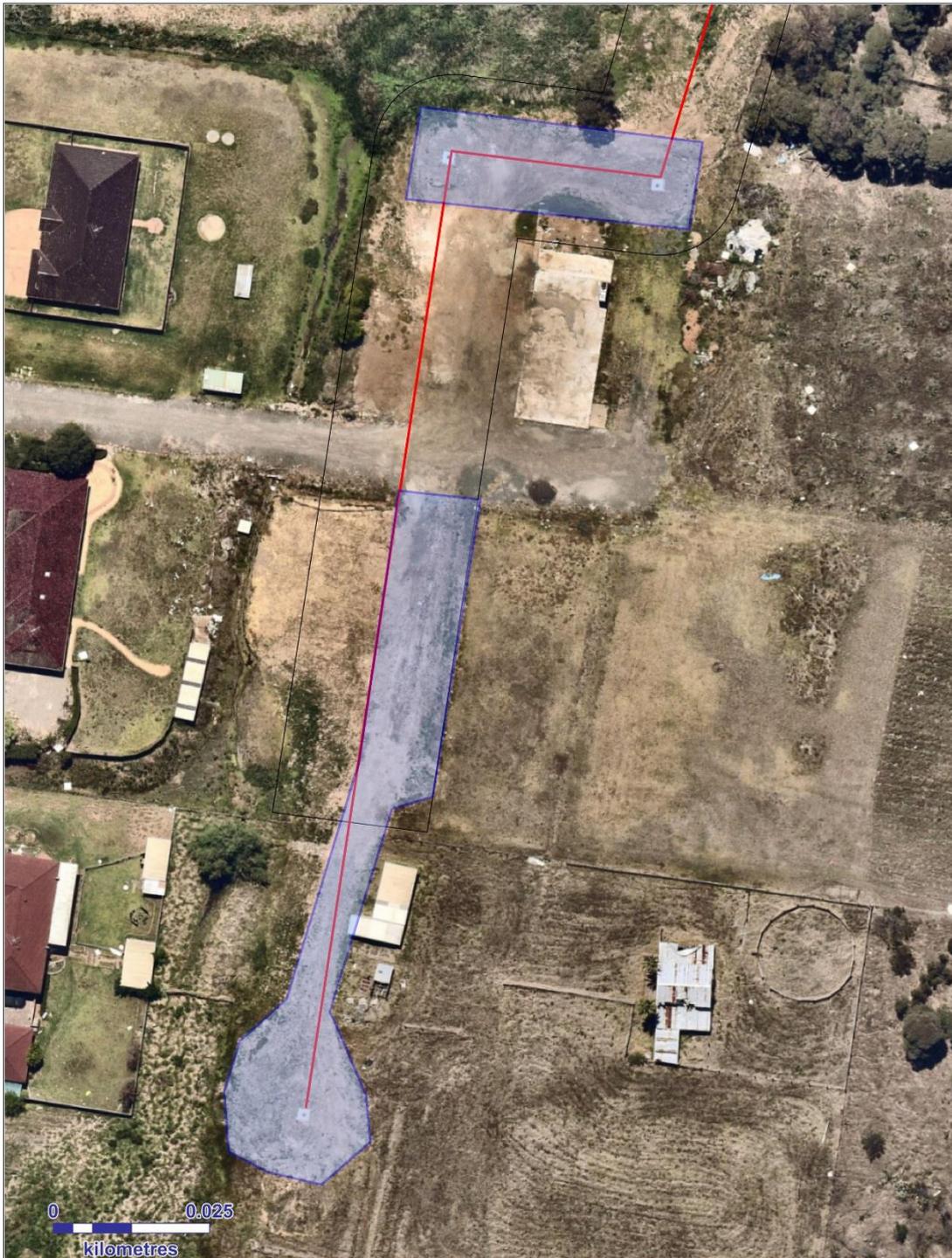
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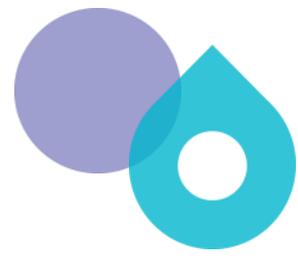
# Map 9 – Bonds Creek lead-in



Legend  
[Blue box] Access track [Red line] Approved Alignment

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## Appendix D – Specialist studies (ecology)





## Appendix E – Specialist studies (Aboriginal heritage)

