

Title of Proposal - Denny Avenue Level Crossing Removal, Kelmscott WA

Section 1 - Summary of your proposed action

Provide a summary of your proposed action, including any consultations undertaken.

1.1 Project Industry Type

Transport - Land

1.2 Provide a detailed description of the proposed action, including all proposed activities.

The Public Transport Authority (PTA) is proposing to remove the railway level crossing at Denny Avenue, Kelmscott as part of the METRONET Level Crossing Removal Project. METRONET is the Western Australian Government's long term plan to connect suburbs, reduce road congestion and meet Perth's future planning needs. In addition to significant extensions to the rail network, Stage 1 of METRONET includes a program to start removing level crossings on the Armadale and Midland lines.

This project is the first of the METRONET's level crossing removals and is due to begin in 2019. The project will involve closing Denny Avenue level crossing and replacing this with an alternative east/west connection built at Davis Road. It is proposed that the rail will be raised by up to 3m and a road underpass built at Davis Road (Davis Road grade separation), with Davis road being extended to flow into Third Avenue. Associated construction and infrastructure works include the installation of traffic lights at Davis Road intersections at Albany Highway, Streich and Railway Avenues. Sections of Third and Slee Avenues will be turned into cul-de-sacs and a shared path will be constructed on the Railway Avenue side of the railway. There are also future plans to upgrade the Kelmscott Station area as part of this METRONET project. This project will also provide more effective pedestrian links throughout the town centre and improve the local public environment.

The Denny Avenue level crossing removal is a priority due to risk taking behaviour of road users who cross the tracks while the boom gates are down or descending. Level crossing safety risks increase when road users become frustrated by extended queues at boom gates. Denny Avenue has an average closure time of one minute and 44 seconds per closure and a total average closure of three hours and 7 mins per day. If the crossing remains open, this is expected to increase to three hours and 34 mins per day by 2031 due to increased train services. The Davis Road grade separation will provide safer and quicker access between Albany Highway and Railway Avenue.

As part of the staged process to implement the level crossing removal and minimise rail service disruptions, it is proposed that a new portion of rail line will be installed within the eastern boundary of the rail reserve, running approximately 1km south from the Kelmscott Station..

To proceed with the proposed rail and road infrastructure changes there are a number of trees that have been identified as potential Black Cockatoo habitat trees that may require removal. The location of these trees is illustrated on Attachment 3 of the Aurora Environmental Advice.

There are 49 potential black cockatoo habitat trees (diameter at breast height greater than or equal to 50cm), that may require removal for this project to proceed. Attempts will be made to preserve as many trees as possible, particularly 2-4 trees along the south eastern end of the rail reserve .

1.3 What is the extent and location of your proposed action? Use the polygon tool on the map below to mark the location of your proposed action.

Area	Point	Latitude	Longitude
Environmental Assessment Area	1	-32.112008905377	116.01337790725
Environmental Assessment Area	2	-32.114385150497	116.01471353994
Environmental Assessment Area	3	-32.114385150497	116.01471353994
Environmental Assessment Area	4	-32.114331354964	116.0149360559
Environmental Assessment Area	5	-32.11450637447	116.01499956977
Environmental Assessment Area	6	-32.11688918455	116.01631878834
Environmental Assessment Area	7	-32.116916082676	116.01644603218
Environmental Assessment Area	8	-32.116916082676	116.01658894101
Environmental Assessment Area	9	-32.116242918334	116.01752685502
Environmental Assessment Area	10	-32.116377588427	116.01768564232
Environmental Assessment Area	11	-32.117212134581	116.01646191065
Environmental Assessment Area	12	-32.118652581806	116.01711358004
Environmental Assessment Area	13	-32.118693108462	116.01689106409
Environmental Assessment Area	14	-32.118369981758	116.01677969872
Environmental Assessment Area	15	-32.117643035666	116.01647778912
Environmental Assessment Area	16	-32.117239213418	116.01620763776
Environmental Assessment Area	17	-32.11749491902	116.01453865939
Environmental Assessment Area	18	-32.118019958335	116.01460217457

Area	Point	Latitude	Longitude
Assessment Area			
Environmental	19	-32.119460391703	116.01490429896
Assessment Area			
Environmental	20	-32.12029490967	116.01507896473
Assessment Area			
Environmental	21	-32.121802731325	116.01515857185
Assessment Area			
Environmental	22	-32.122664303438	116.01498358522
Assessment Area			
Environmental	23	-32.123175774479	116.01487232724
Assessment Area			
Environmental	24	-32.123889229579	116.01461000707
Assessment Area			
Environmental	25	-32.124488284846	116.01432397659
Assessment Area			
Environmental	26	-32.12484500824	116.014093414
Assessment Area			
Environmental	27	-32.12484500824	116.01322716756
Assessment Area			
Environmental	28	-32.124636298637	116.0133701828
Assessment Area			
Environmental	29	-32.124070862978	116.0136960175
Assessment Area			
Environmental	30	-32.123532501894	116.01393441225
Assessment Area			
Environmental	31	-32.122845939829	116.01414104973
Assessment Area			
Environmental	32	-32.122489118777	116.01423642892
Assessment Area			
Environmental	33	-32.121122877416	116.01257539077
Assessment Area			
Environmental	34	-32.121008478246	116.01269458798
Assessment Area			
Environmental	35	-32.121890231183	116.01375159279
Assessment Area			
Environmental	36	-32.121674791475	116.01388666912
Assessment Area			
Environmental	37	-32.121621000238	116.01406948825
Assessment Area			
Environmental	38	-32.121621000238	116.01432386919
Assessment Area			
Environmental	39	-32.121567116907	116.01432386919
Assessment Area			
Environmental	40	-32.120988306388	116.01434768689
Assessment Area			
Environmental	41	-32.120584407986	116.01430788333
Assessment Area			
Environmental	42	-32.120207495908	116.01426818651

Area	Point	Latitude	Longitude
Assessment Area			
Environmental	43	-32.119796960965	116.01420456459
Assessment Area			
Environmental	44	-32.119325817668	116.01408536607
Assessment Area			
Environmental	45	-32.119258484822	116.01403773001
Assessment Area			
Environmental	46	-32.119271932982	116.01392647203
Assessment Area			
Environmental	47	-32.119642124872	116.01344957514
Assessment Area			
Environmental	48	-32.119581516316	116.01337018214
Assessment Area			
Environmental	49	-32.1190228655	116.01400586568
Assessment Area			
Environmental	50	-32.117932542394	116.01379933559
Assessment Area			
Environmental	51	-32.117959439104	116.0133384239
Assessment Area			
Environmental	52	-32.118026680842	116.01289339199
Assessment Area			
Environmental	53	-32.117972887455	116.01260714738
Assessment Area			
Environmental	54	-32.118040129184	116.0126867545
Assessment Area			
Environmental	55	-32.118174796625	116.01276614815
Assessment Area			
Environmental	56	-32.117919094037	116.01254363219
Assessment Area			
Environmental	57	-32.117811322971	116.01236875164
Assessment Area			
Environmental	58	-32.118457576973	116.01155829626
Assessment Area			
Environmental	59	-32.118376705348	116.01147868782
Assessment Area			
Environmental	60	-32.116667099169	116.01352918292
Assessment Area			
Environmental	61	-32.116572775183	116.01352918292
Assessment Area			
Environmental	62	-32.116343965292	116.01343369601
Assessment Area			
Environmental	63	-32.116155500692	116.01325881677
Assessment Area			
Environmental	64	-32.116074625918	116.01313178641
Assessment Area			
Environmental	65	-32.112291615528	116.0123129632
Assessment Area			
Environmental	66	-32.112008905377	116.01337790725

Area	Point	Latitude	Longitude
Assessment Area			

1.5 Provide a brief physical description of the property on which the proposed action will take place and the location of the proposed action (e.g. proximity to major towns, or for off-shore actions, shortest distance to mainland).

The Denny Avenue level crossing removal project will occur in the suburb of Kelmscott within the City of Armadale. The site is located approximately 23.5km south east of the Perth CBD. The project is located primarily within the existing Public Transport Authority (PTA) rail reserve directly south of Kelmscott Train Station and also impacts on a number of the City of Armadale's public roads/road reserves. The surrounding land is urbanised, comprising of residential, retail and industrial premises.

1.6 What is the size of the proposed action area development footprint (or work area) including disturbance footprint and avoidance footprint (if relevant)?

Full project area covers up to 21.4ha. The area of MNES/Black Cockatoo habitat tree clearing is 1.55ha

1.7 Is the proposed action a street address or lot?

Street Address

Denny Avenue
Kelmscott WA 6111
Australia

1.8 Primary Jurisdiction.

Western Australia

1.9 Has the person proposing to take the action received any Australian Government grant funding to undertake this project?

Yes

1.9.1 Please provide details.

As part of the Federal Infrastructure Investment Programme through the Department of Infrastructure, Regional Development and Cities the Denny Avenue Level Crossing Removal is receiving funding as part of the Western Australian METRONET Rail Program. The Australian

Government committed to a \$49.6 million contribution for this project.

1.10 Is the proposed action subject to local government planning approval?

Yes

1.10.1 Is there a local government area and council contact for the proposal?

Yes

1.10.1.0 Council contact officer details

1.10.1.1 Name of relevant council contact officer.

Paul Sanders, Executive Director Development Services

1.10.1.2 E-mail

PSanders@armadale.wa.gov.au

1.10.1.3 Telephone Number

9394 5137

1.11 Provide an estimated start and estimated end date for the proposed action.

Start date 06/2019

End date 06/2020

1.12 Provide details of the context, planning framework and State and/or Local government requirements.

Development Approval will be sought from the Metropolitan Redevelopment Authority (MRA) for the majority of the proposed works. Consultation will be undertaken with the City of Armadale regarding the areas that are outside the MRA boundary, which comprise of road works only, to determine whether Development Approval is required or whether these works can be signed off by the City's engineering team.

1.13 Describe any public consultation that has been, is being or will be undertaken, including with Indigenous stakeholders.

All communications undertaken during the Denny Avenue Level Crossing Removal project are under the guidance of the *Denny Avenue Level Crossing Removal Delivery Stage: Communication and Stakeholder Engagement Strategy*. This strategy provides the overarching direction for required communication and engagement activities during delivery of the project. The strategy has been developed by the Public Transport Authority (PTA) and METRONET.

To date, public consultation with the general community and targeted stakeholders includes:

Letterbox drop to 7500 properties in Kelmscott and Camillo in mid- 2018 notifying residents of the proposed project; A targeted invitation was sent to ratepayers and residents in Kelmscott advising of a shopping centre pop-up display being held at Kelmscott Plaza on 30 June 2018; 95 community members visited the pop-up display on 30 June 2018; Local businesses within the project area have been engaged and visited to offer the opportunity for them to express their thoughts and provide feedback to the project team; Project update emails issued to registered people; The South West Aboriginal Land and Sea Council (SWALSC), on behalf of the Whadjuk people, the traditional owners of this region, was consulted under the PTA's Noongar Standard Heritage Agreement (NSHA); Two Activity Notices were issued under the NSHA, which outlined geotechnical investigations and the proposed construction works associated with the level crossing removal. SWALSC determined that an Aboriginal Heritage Survey was required for the level crossing removal works; An Aboriginal Heritage Survey was conducted on 23 November 2018 with the Aboriginal Consultants identified by SWALSC and the outcome of this consultative process is contained in the report attached. There was no objection by the Survey participants to the proposed works proceeding; There have also been presentations to the Councillors, Executive team and officers of the City of Armadale; Project team have met with City of Armadale and businesses in the project area to provide project updates; Letterbox drop to 8700 properties notifying them of a public information session to be held on 20 February 2019; One on one consultation with targeted residents and businesses will take place after the upcoming information session to advise of potential project impacts.

The following engagement tools may be used at the discretion of the PTA project team throughout the project life include, and are not limited to:

METRONET social media accounts (Facebook, Twitter and Instagram) METRONET and PTA websites METRONET and PTA YouTube account Electronic Direct Mail (EDM) to registered recipients Publications including factsheets, letterbox drops, posters and project updates Community information sessions / displays Community events Community briefings and workshops Community advisory/reference groups One on one meetings

Additional engagement methods may include:

Information on partner platforms (Local councils, partner agencies) Signage on project site (free standing signs, hoarding) Project signage on PTA property (train stations, trains, buses) Information offices

1.14 Describe any environmental impact assessments that have been or will be carried out under Commonwealth, State or Territory legislation including relevant impacts of the project.

An application will be made under Part V of the *Environmental Protection Act 1986* (WA) for a clearing permit to clear less than 1.43 ha of native vegetation. A flora and vegetation survey assessed this vegetation as being native vegetation regrowth in completely degraded condition. The vegetation proposed to be cleared consists primarily of *Corymbia Calophylla* (Marri) overstorey with a mix of native and exotic understorey species. Other than the impacts upon Black Cockatoo foraging and potential habitat trees, the removal of this vegetation is not considered to have a significant impact upon flora and fauna habitats or regional ecosystems.

Noise and Vibration has been assessed for compliance against WA's State Planning Policy 5.4 - Road and rail transport noise and freight considerations. Noise and Vibration mitigation measures have been considered and overall the project will create improvements in current noise and vibration levels from the rail operation. The installation of noise walls has been included in the project design based on noise modelling, to ensure that sensitive receptors do not receive noise and vibration levels higher than the target levels specified in SPP 5.4.

A Preliminary Site Investigation (PSI) has been undertaken in line with "The Assessment and management of contaminated sites - Contaminated sites guidelines" which provides guidance for the assessment and management of contaminated sites within the legislative framework provided by the *Contaminated Sites Act 2003* (WA) and the *Contaminated Sites Regulations 2006* (WA) and the *National Environmental (Assessment of Site Contamination) Measure 1999*. The PSI has indicated a requirement for a Detailed Site Assessment (DSI). A Sampling and Analysis Quality Plan is currently being drafted in preparation for the DSI.

1.15 Is this action part of a staged development (or a component of a larger project)?

No

1.16 Is the proposed action related to other actions or proposals in the region?

No

Section 2 - Matters of National Environmental Significance

Describe the affected area and the likely impacts of the proposal, emphasising the relevant matters protected by the EPBC Act. Refer to relevant maps as appropriate. The [interactive map tool](#) can help determine whether matters of national environmental significance or other matters protected by the EPBC Act are likely to occur in your area of interest. Consideration of likely impacts should include both direct and indirect impacts.

Your assessment of likely impacts should consider whether a bioregional plan is relevant to your proposal. The following resources can assist you in your assessment of likely impacts:

- [Profiles of relevant species/communities](#) (where available), that will assist in the identification of whether there is likely to be a significant impact on them if the proposal proceeds;
- [Significant Impact Guidelines 1.1 – Matters of National Environmental Significance](#);
- [Significant Impact Guideline 1.2 – Actions on, or impacting upon, Commonwealth land and Actions by Commonwealth Agencies](#).

2.1 Is the proposed action likely to have ANY direct or indirect impact on the values of any World Heritage properties?

No

2.2 Is the proposed action likely to have ANY direct or indirect impact on the values of any National Heritage places?

No

2.3 Is the proposed action likely to have ANY direct or indirect impact on the ecological character of a Ramsar wetland?

No

2.4 Is the proposed action likely to have ANY direct or indirect impact on the members of any listed species or any threatened ecological community, or their habitat?

Yes

2.4.1 Impact table

Species	Impact
Carnaby's Black Cockatoo <i>Calyptrorhynchus latirostris</i> (Endangered) Baudin's Black Cockatoo <i>Calyptrorhynchus baudinii</i>	Impacts applicable to all three listed species: - Removal of foraging habitat; - Removal of potential nesting habitat; and - Removal of

Species	Impact
(Endangered) Forest Red-tailed Black-Cockatoo <i>Calyptrorhynchus banksii naso</i> (Vulnerable)	potential roosting habitat.

2.4.2 Do you consider this impact to be significant?

No

2.5 Is the proposed action likely to have ANY direct or indirect impact on the members of any listed migratory species, or their habitat?

No

2.6 Is the proposed action to be undertaken in a marine environment (outside Commonwealth marine areas)?

No

2.7 Is the proposed action to be taken on or near Commonwealth land?

No

2.8 Is the proposed action taking place in the Great Barrier Reef Marine Park?

No

2.9 Is the proposed action likely to have ANY direct or indirect impact on a water resource related to coal/gas/mining?

No

2.10 Is the proposed action a nuclear action?

No

2.11 Is the proposed action to be taken by the Commonwealth agency?

No

2.12 Is the proposed action to be undertaken in a Commonwealth Heritage Place Overseas?

No

2.13 Is the proposed action likely to have ANY direct or indirect impact on any part of the

environment in the Commonwealth marine area?

No

Section 3 - Description of the project area

Provide a description of the project area and the affected area, including information about the following features (where relevant to the project area and/or affected area, and to the extent not otherwise addressed in Section 2).

3.1 Describe the flora and fauna relevant to the project area.

A detailed description of the flora and fauna of the project and surrounding area is provided in Aurora Environmental's advice and accompanying Flora and Fauna Survey Reports (Attached in Section 2.14 of this application).

The majority of the vegetation proposed to be cleared was surveyed as containing *Corymbia calophylla* (Marri) with a combination of native and exotic understorey vegetation. Other native vegetation that was recorded as being present within this area included *Xanthorrhoea preissii* and *Melaleuca preissiana*. Additional vegetation within the project area comprises of planted native and exotic vegetation.

3.2 Describe the hydrology relevant to the project area (including water flows).

The project area has low slopes and the ground varies between approximately 24m to 32mAHD. Surface drainage would naturally move eastwards towards the Canning River, located approximately 400 metres from the proposed vegetation clearing. However, surface drainage has been highly modified by road, rail and building infrastructure and associated urban stormwater management facilities.

Groundwater within the project area is between 17.5m to 25mAHD. Groundwater contours sourced from the Department of Water and Environmental Regulation, Perth Groundwater Map (<https://maps.water.wa.gov.au/#/webmap/gwm>) show groundwater in the immediate vicinity flows north easterly. Groundwater is between 5 to 8 metres below the natural surface level within the project area.

The location of proposed vegetation clearing will have rail and road/footpath infrastructure installed and stormwater will be managed in line with current urban stormwater management standards. The proposed project is not anticipated to have a significant impact upon local surface drainage or cause impacts upon the Canning River. The proposed removal of vegetation is not considered to be of sufficient size to have a significant impact upon groundwater. Limited dewatering may be required during construction of the rail bridge support pillars. Any dewatering is unlikely to lead to significant draw down of the water table. Dewatering will be undertaken in accordance with the *Rights in Water and Irrigation Act 1914* (WA).

3.3 Describe the soil and vegetation characteristics relevant to the project area.

The project area is located on the Pinjarra Plain system, a broad low relief plain west of the Darling Scarp foothills. The site comprises of predominantly Pleistocene fluvial sediments and some Holocene alluvium associated with major current drainage systems. The major soils in the Pinjarra system are naturally poorly drained and many swamps occur. The soils in this vicinity are described as imperfectly drained mottled yellow duplex soils with sand to sandy loam topsoil (DPIRD, 2018 - as described in the Flora and Vegetation Survey attached).

3.4 Describe any outstanding natural features and/or any other important or unique values relevant to the project area.

The project area is largely urbanised, containing roads, rail, residential and commercial premises. The foraging habitat and potential habitat trees for Black Cockatoos are the most notable natural features of the project area. There are no wetlands located within the project area and Canning River is located over 100 metres to the east. The Cammillo Reserve was surveyed as part of the flora and fauna surveys undertaken for this project. The Reserve is identified as an Environmentally Sensitive Area by the Department of Water and Environmental Regulation but its area (0.2ha) is considered too small to meet the listing conditions for a Threatened Ecological Community (TEC). The proposed works will not impact upon the Cammillo Reserve.

3.5 Describe the status of native vegetation relevant to the project area.

Historical aerial photography available through Landgate, Map Viewer Plus (<https://maps.landgate.wa.gov.au/maps-landgate/registered/>), indicates the site was largely cleared of native vegetation prior to 1953. Much of the vegetation within the project area is considered to have been planted, however, there is an area along the rail reserve that may comprise of both planted and regrowth native vegetation. The proposed vegetation clearing comprises part of this regrown native vegetation. This vegetation is described as being in degraded to completely degraded condition and is mixed with exotic species. However, as this vegetation is considered to potentially meet the description of "native vegetation" under the *Environmental Protection Act 1986* (WA) a clearing permit will be applied for through the Western Australian Department of Water and Environmental Regulation.

3.6 Describe the gradient (or depth range if action is to be taken in a marine area) relevant to the project area.

As described in Section 3.2, the project has low slopes and the ground varies between approximately 24m to 32mAHD.

3.7 Describe the current condition of the environment relevant to the project area.

The project area is largely urbanised, with the vegetation proposed to be cleared described as being native vegetation regrowth mixed with exotic species and in completely degraded condition. There is a small area (0.2ha) of remnant vegetation in Cammillo Reserve described as being in good condition but this will not be impacted by the proposed works.

3.8 Describe any Commonwealth Heritage Places or other places recognised as having heritage values relevant to the project area.

A search of Commonwealth Heritage Places, through the Department of Environment and Energy did not reveal any places within the Site of National significance (http://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=search_results;state=WA;list_code=CHL;legal_status=35).

A European Heritage Survey was undertaken for this project, which identified various places of European heritage within the surrounding project area. A search of the Western Australian Heritage Sites Register (<http://inherit.stateheritage.wa.gov.au/Public/Search/Results?newSearch=True&placeNameContains=&streetNameContains=&suburbOrTownContains=Kelmscott&lgaContains=&isCurrentlyStateRegistered=false>), identifies a number of heritage sites within the project area, but none have statutory listing. It is not anticipated that these sites will be impacted upon by the proposed project, with the exception of the Station Masters House, located directly east of Kelmscott Station. As part of the future upgrades to the Kelmscott Station Precinct, the Station Masters House is likely to be restored and repurposed by the City of Armadale.

3.9 Describe any Indigenous heritage values relevant to the project area.

An Aboriginal Heritage Survey was undertaken on behalf of the PTA in line with the Noongar Standard Heritage Agreement (NSHA) and on advice from South West Aboriginal Land and Sea Council. There are no registered Aboriginal sites within the project area and no registered Aboriginal sites that will be impacted in the vicinity of the project area. Consultation with Aboriginal stakeholders did not reveal additional sites or matters of traditional significance within the project area and there was not objection to the proposed works.

3.10 Describe the tenure of the action area (e.g. freehold, leasehold) relevant to the project area.

The majority of the proposed works will occur within the PTA Rail reserve and within the City of Armadale's road reserves. There are additional areas of land that are under the Western Australian Metropolitan Redevelopment Authority (MRA) Control (including land held by the Western Australian Department of Communities) and one private landholding which will be acquired.

3.11 Describe any existing or any proposed uses relevant to the project area.

The land is primarily used for passenger rail transport and associated land reserve areas.

Section 4 - Measures to avoid or reduce impacts

Provide a description of measures that will be implemented to avoid, reduce, manage or offset any relevant impacts of the action. Include, if appropriate, any relevant reports or technical advice relating to the feasibility and effectiveness of the proposed measures.

Examples of relevant measures to avoid or reduce impacts may include the timing of works, avoidance of important habitat, specific design measures, or adoption of specific work practices.

4.1 Describe the measures you will undertake to avoid or reduce impact from your proposed action.

The 49 potential Black Cockatoo habitat trees that have been identified for possible removal will be retained if possible, particularly within the south eastern portion of the clearing footprint area. However the proposed changes to rail alignment and installation of a dual use footpath will require the majority of these trees to be removed. Although the trees have been identified as potential habitat trees, they are not located within an area that is conducive to Black Cockatoo breeding or night roosting due to the presence of the rail operation, causing the area to be considered noisy. Although the vegetation shows evidence of foraging by the three species of Black Cockatoos, the removal of this vegetation is not considered to have a significant impact on the available foraging habitat as there is approximately 13,200 ha of remnant native vegetation within 10 kilometres of the subject site, much of which is likely to represent Black Cockatoo foraging habitat. Trees which can be avoided will be flagged or marked off prior to clearing commencing and the contractor directed to avoid them.

4.2 For matters protected by the EPBC Act that may be affected by the proposed action, describe the proposed environmental outcomes to be achieved.

Based on available mapping, there is approximately 13,200 ha of remnant native vegetation within 10 kilometres of the subject site. Much of this is likely to contain “potential” breeding habitat as defined by DoEE (i.e. suitable tree species with a DBH >50cm). Much of this is likely to represent Black Cockatoo foraging habitat of some type.

Although the proposed action will remove potential Black Cockatoo habitat trees and foraging habitat, this is not considered likely to reduce Black Cockatoo breeding numbers or population size and therefore the PTA does not believe that it will have a significant impact on Black Cockatoos.

Section 5 – Conclusion on the likelihood of significant impacts

A checkbox tick identifies each of the matters of National Environmental Significance you identified in section 2 of this application as likely to be a significant impact.

Review the matters you have identified below. If a matter ticked below has been incorrectly identified you will need to return to Section 2 to edit.

5.1.1 World Heritage Properties

No

5.1.2 National Heritage Places

No

5.1.3 Wetlands of International Importance (declared Ramsar Wetlands)

No

5.1.4 Listed threatened species or any threatened ecological community

No

5.1.5 Listed migratory species

No

5.1.6 Commonwealth marine environment

No

5.1.7 Protection of the environment from actions involving Commonwealth land

No

5.1.8 Great Barrier Reef Marine Park

No

5.1.9 A water resource, in relation to coal/gas/mining

No

5.1.10 Protection of the environment from nuclear actions

No

5.1.11 Protection of the environment from Commonwealth actions

No

5.1.12 Commonwealth Heritage places overseas

No

5.2 If no significant matters are identified, provide the key reasons why you think the proposed action is not likely to have a significant impact on a matter protected under the EPBC Act and therefore not a controlled action.

The application is submitted for assessment under the EPBC Act due to the potential impacts of this proposed action on a matter of national environmental significance, that is the potential impacts upon the 3 Western Australian Black Cockatoo species that are listed as threatened species under the EPBC Act. That is:

Carnaby's Cockatoo (*Calyptorhynchus latirostris*): Endangered

Baudin's Cockatoo (*Calyptorhynchus baudinii*): Vulnerable

Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso*): Vulnerable

Based on the *Significant impact guidelines 1.1*, significant impact criteria for endangered and vulnerable species includes impacts that will have a real or possible impact upon the species in relation to such things as the size of the population, area of occupancy, fragmentation of the population and adversely affecting habitat critical to the survival of the species. In particular, critical habitat includes habitat that is necessary for foraging, breeding, roosting and dispersal.

The *EPBC Act referral guidelines for three threatened black cockatoo species* outlines scenarios where there is a high risk of impacts or uncertainty of impact, in which referral is recommended. In particular when nesting trees or breeding habitat is cleared or more than 1ha of foraging habitat is affected. The Fauna Survey revealed that there was no evidence of breeding or suitable breeding hollows within the survey area. It is estimated that there will be 1.55ha of suitable foraging habitat removed for the proposed works. An assessment of the habitat by Aurora Environmental, based on the Revised Draft Referral Guidelines for Black Cockatoos (DoEE, 2017) determined that the habitat meets the definition of high quality habitat for Carnaby's and Baudin's Black Cockatoo species. Refer to Table C in Aurora Environmental's letter of advice for a significant impact assessment of the proposed clearing on Black Cockatoos. A referral is recommended but an examination of the proposed vegetation removal in the context of the site and surrounding region indicates that the highly urbanised environment and the availability of large areas of good quality foraging habitat within 10km of the site minimise the significance of the proposed clearing. On this basis it is anticipated that the proposed action is unlikely to have a significant impact to protected matters and therefore is not a controlled action.

Section 6 – Environmental record of the person proposing to take the action

Provide details of any proceedings under Commonwealth, State or Territory law against the person proposing to take the action that pertain to the protection of the environment or the conservation and sustainable use of natural resources.

6.1 Does the person taking the action have a satisfactory record of responsible environmental management? Please explain in further detail.

The PTA has an established record of delivering public infrastructure projects in compliance with all environmental management requirements. The PTA has an environmental policy and Environmental Management System (EMS) which has been developed in accordance with the ISO 14001.

6.2 Provide details of any past or present proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against either (a) the person proposing to take the action or, (b) if a permit has been applied for in relation to the action – the person making the application.

An investigation took place for the unauthorised clearing of a portion of threatened ecological community in the Byford/Mundijong area circa 2006. There were extenuating circumstances involving rail safety. No proceedings were initiated.

6.3 If it is a corporation undertaking the action will the action be taken in accordance with the corporation's environmental policy and framework?

Yes

6.3.1 If the person taking the action is a corporation, please provide details of the corporation's environmental policy and planning framework.

The PTA has an environmental policy and EMS which has been developed in accordance with the ISO 14001. The proposed action will be undertaken in accordance with the PTA's EMS.

The lead construction contractor for this action will also be required to operate an accredited EMS which complies with the requirements of ISO 14001:2004.

6.4 Has the person taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?

Yes

6.4.1 EPBC Act No and/or Name of Proposal.

The PTA has referred the following proposals under the EPBC Act:

EPBC 2003/1175 New MetroRail, Southern Suburbs Railway Project

EPBC 2010/5632 Butler Railway Extension Project

EPBC 2011/5989 Butler Railway Extension, Nowergup Depot Eastern Alignment

EPBC 2015/7399 Forrestfield Airport Link, Forrestfield

EPBC 2018/8188 Thornlie Cockburn Link

EPBC 2018/8262 Yanchep Rail Extension Part 2

Section 7 – Information sources

You are required to provide the references used in preparing the referral including the reliability of the source.

7.1 List references used in preparing the referral (please provide the reference source reliability and any uncertainties of source).

Reference Source	Reliability	Uncertainties
O'Connor, R. (2018) Aboriginal Heritage Survey. Unpublished report prepared for Public Transport Authority.	good	minor
PGV Environmental (2018) Flora and Vegetation Survey - Metronet Denny Avenue Level Crossing	good	minor
Greg Harewood (2018) Fauna Habitat Assessment - Denny Avenue Level Crossing Removal Project	good	minor
Aurora Environmental (2018) Flora and Fauna Advice - Denny Avenue, Kelmscott	good	minor

Section 8 – Proposed alternatives

You are required to complete this section if you have any feasible alternatives to taking the proposed action (including not taking the action) that were considered but not proposed.

8.0 Provide a description of the feasible alternative?

The Denny Avenue level crossing removal is a priority METRONET project. In the last decade 44 reported incidents have occurred specifically at this crossing, while more than 110 incidents have occurred at the nearby intersections of Streich and Railway avenues in the last five years. These statistics have led to the RAC ranking Denny Avenue as WA's riskiest road for the second year running. Based on this information, leaving the level crossing at Denny Avenue is not considered to be a suitable option for WA road users.

A number of alternatives to remove the level crossing at Denny Avenue have been considered. One option considered was to remove the level crossing at Denny Avenue without providing an alternative east west linkage across the rail line within this area. This option was not considered feasible due to the high volume of traffic requiring east west access across the rail line within this vicinity and the proximity to other rail crossings that provide the east west linkage. The nearest alternative rail line crossings are 3km to the north at Tonkin Highway and 2km to the south on Railway Avenue.

Other options involved an examination of where an alternative grade separated crossing could be located nearby to the existing Denny Avenue level crossing. This included an assessment of a road over rail crossing at Cammillo Road and Ottaway Street (700m south of Denny Avenue) and a crossing linking Westfield Rd to Page Rd (600m north of Denny Avenue). The installation of the Davis Road grade separation was determined to be the preferable option. Similar vegetation removal would be required for the alternative grade separated options assessed within this location.

8.1 Select the relevant alternatives related to your proposed action.

8.27 Do you have another alternative?

No

Section 9 – Contacts, signatures and declarations

Where applicable, you must provide the contact details of each of the following entities: Person Proposing the Action; Proposed Designated Proponent and; Person Preparing the Referral. You will also be required to provide signed declarations from each of the identified entities.

9.0 Is the person proposing to take the action an Organisation or an Individual?

Organisation

9.2 Organisation

9.2.1 Job Title

Environmental Officer

9.2.2 First Name

Julia

9.2.3 Last Name

Stewart

9.2.4 E-mail

julia.stewart@pta.wa.gov.au

9.2.5 Postal Address

PO Box 8125

Perth Business Centre
Perth WA 6849
Australia

9.2.6 ABN/ACN

ABN

61850109576 - Public Transport Authority of Western Australia

9.2.7 Organisation Telephone

(08) 9326 3224

9.2.8 Organisation E-mail

julia.stewart@pta.wa.gov.au

9.2.9 I qualify for exemption from fees under section 520(4C)(e)(v) of the EPBC Act because I am:

Not applicable

Small Business Declaration

I have read the Department of the Environment and Energy's guidance in the online form concerning the definition of a small a business entity and confirm that I qualify for a small business exemption.

Signature:..... Date:

9.2.9.2 I would like to apply for a waiver of full or partial fees under Schedule 1, 5.21A of the EPBC Regulations

No

9.2.9.3 Under sub regulation 5.21A(5), you must include information about the applicant (if not you) the grounds on which the waiver is sought and the reasons why it should be made

Person proposing the action - Declaration

I, Julia Stewart, declare that to the best of my knowledge the information I have given on, or attached to the EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. I declare that I am not taking the action on behalf of or for the benefit of any other person or entity.

Signature:.....J Stewart..... Date: 8/2/19.....

I, Julia Stewart, the person proposing the action, consent to the designation of Owen Thomas as the proponent of the purposes of the action describe in this EPBC Act Referral.

Signature:.....J Stewart..... Date: 8/2/19.....

9.3 Is the Proposed Designated Proponent an Organisation or Individual?

Organisation

9.5 Organisation

9.5.1 Job Title

Executive Director - IP&LS

9.5.2 First Name

Owen

9.5.3 Last Name

Thomas

9.5.4 E-mail

owen.thomas@pta.wa.gov.au

9.5.5 Postal Address

PO Box 8125

Perth Business Centre

Perth WA 6849

Australia

9.5.6 ABN/ACN

ABN

61850109576 - Public Transport Authority of Western Australia

9.5.7 Organisation Telephone

9326 3224

9.5.8 Organisation E-mail

julia.stewart@pta.wa.gov.au

Proposed designated proponent - Declaration

I, OWEN THOMAS, the proposed designated proponent, consent to the designation of myself as the proponent for the purposes of the action described in this EPBC Act Referral.

Signature:  Date: 11/2/2019

9.6 Is the Referring Party an Organisation or Individual?

Organisation

9.8 Organisation

9.8.1 Job Title

Environmental Officer

9.8.2 First Name

Julia

9.8.3 Last Name

Stewart

9.8.4 E-mail

julia.stewart@pta.wa.gov.au

9.8.5 Postal Address

PO Box 8125

Perth Business Centre
Perth WA 6849
Australia

9.8.6 ABN/ACN

ABN

61850109576 - Public Transport Authority of Western Australia

9.8.7 Organisation Telephone

9326 3224

9.8.8 Organisation E-mail

julia.stewart@pta.wa.gov.au

Referring Party - Declaration

I, Julia Stewart, I declare that to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and

Signature: J. Hunt Date: 8/2/19

Appendix A - Attachments

The following attachments have been supplied with this EPBC Act Referral:

1. Aboriginal Heritage Survey Denny Av 2018 redacted.pdf - *do not publish*
2. Aboriginal Heritage Survey Denny Av 2018 redacted resubmission.pdf
3. Aboriginal Heritage Survey Denny Ave 2018.pdf - *do not publish*
4. Aurora Environmental Advice Attachment 1 Flora & Veg Survey.pdf
5. Aurora Environmental Advice Attachments 2 - 4.pdf
6. Aurora Environmental Advice Letter.pdf
7. Communications and Engagement Plan DRAFT.docx- *do not publish*