REFERRAL OF A PROJECT FOR A DECISION ON THE NEED FOR ASSESSMENT UNDER THE *ENVIRONMENT EFFECTS ACT 1978*

REFERRAL FORM

The *Environment Effects Act 1978* provides that where proposed works may have a significant effect on the environment, either a proponent or a decision-maker may refer these works (or project) to the Minister for Planning for advice as to whether an Environment Effects Statement (EES) is required.

This Referral Form is designed to assist in the provision of relevant information in accordance with the *Ministerial Guidelines for assessment of environmental effects under the Environment Effects Act 1978* (Seventh Edition, 2006). Where a decision-maker is referring a project, they should complete a Referral Form to the best of their ability, recognising that further information may need to be obtained from the proponent.

It will generally be useful for a proponent to discuss the preparation of a Referral with the Department of Planning and Community Development (DPCD) before submitting the Referral.

If a proponent believes that effective measures to address environmental risks are available, sufficient information could be provided in the Referral to substantiate this view. In contrast, if a proponent considers that further detailed environmental studies will be needed as part of project investigations, a more general description of potential effects and possible mitigation measures in the Referral may suffice.

In completing a Referral Form, the following should occur:

- Mark relevant boxes by changing the font colour of the 'cross' to black and provide additional information and explanation where requested.
- As a minimum, a brief response should be provided for each item in the Referral Form, with a more detailed response provided where the item is of particular relevance. Cross-references to sections or pages in supporting documents should also be provided. Information need only be provided once in the Referral Form, although relevant cross-referencing should be included.
- Responses should honestly reflect the potential for adverse environmental effects. A Referral will only be accepted for processing once DPCD is satisfied that it has been completed appropriately.
- Potentially significant effects should be described in sufficient detail for a reasonable conclusion to be drawn on whether the project could pose a significant risk to environmental assets. Responses should include:
    - a brief description of potential changes or risks to environmental assets resulting from the project;
    - available information on the likelihood and significance of such changes;
    - the sources and accuracy of this information, and associated uncertainties.
- Any attachments, maps and supporting reports should be provided in a secure folder with the Referral Form.
- A CD or DVD copy of all documents will be needed, especially if the size of electronic documents may cause email difficulties. **Individual documents should not exceed 2MB.**

- A completed form would normally be between 15 and 30 pages in length. Responses should not be constrained by the size of the text boxes provided. Text boxes should be extended to allow for an appropriate level of detail.
- The form should be completed in MS Word and not handwritten.

The party referring a project should submit a covering letter to the Minister for Planning together with a completed Referral Form, attaching supporting reports and other information that may be relevant. This should be sent to:

Postal address

Minister for Planning
PO Box 500
EAST MELBOURNE VIC 3002

Couriers

Minister for Planning
Level 17, 8 Nicholson Street
EAST MELBOURNE VIC 3002

In addition to the submission of the hardcopy to the Minister, separate submission of an electronic copy of the Referral via email to ees.referrals@dpcd.vic.gov.au is encouraged. This will assist the timely processing of a referral.

PART 1 PROPONENT DETAILS, PROJECT DESCRIPTION & LOCATION

1. Information on proponent and person making Referral

Name of Proponent:	**VicRoads**
Authorised person for proponent: **Position:** **Postal address:** **Email address:** **Phone number:** **Facsimile number:**	Charlie Broadhurst Project Director – South Eastern Projects 40 Belgrave – Hallam Road, Hallam Charlie.Broadhurst@roads.vic.gov.au (03) 9703 5999 (03) 9703 5900
Person who prepared Referral: **Position:** **Organisation:** **Postal address:** **Email address:** **Phone number:** **Facsimile number:**	Carolyn Deppeler **Team Leader – South Eastern Projects** **VicRoads** **120 Kay Street, Traralgon, Vic 3844** carolyn.deppeler@roads.vic.gov.au **(03) 5172 2326** **(03) 5176 1016**
Available industry & environmental expertise: (areas of 'in-house' expertise & consultancy firms engaged for project)	VicRoads has extensive experience in road planning, construction and environmental management. VicRoads has also engaged a number of consultants including: - Ecology Partners Pty Ltd (flora and fauna investigations), - Dr. Vincent A. Clark & Associates (cultural heritage investigations) VicRoads Environmental Sustainability Department has also provided advice on this EES referral.

2. Project – brief outline

Project title: Princes Highway Duplication – Traralgon East (Stammers Road) to Fulham (Templetons Road)
Project location: (describe location with AMG coordinates and attach A4/A3 map(s) showing project site or investigation area, as well as its regional and local context) The project is located between Traralgon East (Stammers Road) and Fulham (Templetons Road), Victoria. The project forms part of the Princes Highway East Duplication – Traralgon to Sale project. The approximate route location is shown in the VicRoads Country Directory, Map Ref. 98C5 to 98J3. The AMG coordinates are from E462851.6823, N5773207.5997 to E494629.2040, N5782792.6350 Refer to Attachment 1, Locality Plan.

Short project description (few sentences)**:**

The Project will provide a duplicated road facility with two lanes in each direction and associated intersection upgrades to improve road safety and facilitate the efficient movement of traffic.

3. Project description

Aim/objectives of the project (what is its purpose / intended to achieve?):

The objectives of this project are to:

- improve accessibility and road safety,
- reduce transport delays and costs, and
- improve road network connectivity and efficiency.

Background/rationale of project (describe the context / basis for the proposal, eg. for siting):

Duplication of the Princes Highway East between Traralgon and Sale is a key project identified in the Victorian Government's Victorian Transport Plan and the Federal Government's Nation Building program (2009-2014). The project was announced with funding of $175M.

The Princes Highway East has a higher than average accident rate, including head on and run off road accidents, and duplication will contribute to reducing the accidents on this important route.

The Project is 35km long and covers the Princes Highway duplication from Stammers Road, Traralgon East, to Templetons Road in Fulham. Of this 35km, 4.5km is already duplicated through the Rosedale township. The Project forms part of the entire Traralgon to Sale length which extends for approximately 48km.

For further information refer Section "Is the Project an element or stage in a larger project", and Attachments 1 and 2.

Main components of the project (nature, siting & approx. dimensions; attach A4/A3 plan(s) of site layout if available):

The proposed duplication is located both within the existing Princes Highway reservation and in adjacent freehold land. The road footprint varies depending on the width of the median between carriageways adopted (ranging from 2.2m up to 15m) and intersection treatments required (ranging from T intersections to wide median intersections designed to cater for articulated heavy vehicles). Refer to Attachment 3 for typical cross sections.

Of this, there is also approx. 17 km proposed to involve widening of the highway reservation in private property adjacent to the existing highway to minimise environmental impact. The land will be acquired through a Planning Scheme Amendment process to place a Public Acquisition Overlay on private property.

Ancillary components of the project (eg. upgraded access roads, new high-pressure gas pipeline; off-site resource processing):

- Numerous intersections along the highway will be upgraded, including Wilmot Court, Minniedale Road, Barrs Lane, Flynns Creek Road and Nambrok Road,
- Services will be protected or relocated,
- Accesses will be restored as determined appropriate in accordance with the VicRoads Access Management Policy requirements and community feedback, and
- Of the two existing truck stops in the vicinity of Flynns Creek Road, an upgraded truck stop in the eastbound direction will be provided further to the east towards Flynns Creek, and the truck stop retained in the westbound direction.

Key construction activities:

The main construction activity involves civil works to widen the Princes Highway between Traralgon East and Fulham to provide two lanes in each direction. The works are shown in Attachments 1 and 2 and will include:

- Service relocation activities including relocation/protection of overhead powerlines, water and sewerage mains, gas pipelines and telecommunication cables;
- Bridgeworks including modification of existing bridges and construction of new bridges;
- Roadworks including clearing and grubbing, earthworks, drainage, pavement construction, road surfacing, line marking and installation of signage; and
- Roadside landscaping.

Key operational activities:

Key operational activities will be the ongoing road maintenance consistent with current practices and standards. Assets to be maintained include landscaping, stormwater drains, bridges, road pavement, road furniture and line marking.

Key decommissioning activities (if applicable):
n.a.

Is the project an element or stage in a larger project?

☐ No ☒ Yes If yes, please describe: the overall project strategy for delivery of all stages and components; the concept design for the overall project; and the intended scheduling of the design and development of project stages).

There are five sections currently funded for construction. The current funding will largely see completion of duplication at Traralgon East, between Traralgon East and Flynn, Flynn to Rosedale, Nambrok, and Wurruk, with the remaining length, the 6th section to be duplicated between Nambrok and Fulham when funding allows.

Following a review of the existing sections of the Princes Highway not duplicated and the budget of $175M budget, the highest priority areas along the route were determined. The following sections are proposed to be constructed:

- Traralgon East (1.5km);
- Traralgon East to Flynn (9.5km);
- Flynn to Rosedale (7.6km);
- Nambrok (2.5km); and
- Wurruk (4.5km).

Ongoing funding will be required to complete the duplication works between Nambrok and Fulham, (Maffra-Rosedale Road, Nambrok and Reid Drive, Fulham). The preferred options for this remaining section have been determined, and are discussed in Section 4 of the referral. This section does however, form part of this referral.

Preconstruction is underway for the three remaining construction sections:

1. Traralgon East to Flynn - Tendering is scheduled for early 2011, with construction between mid 2011 and late 2012.
2. Flynn to Rosedale - Tendering is anticipated late 2011, with construction between early 2012 and late 2013.
3. Nambrok - Tendering is scheduled for mid 2011, with construction between early 2012 and mid 2013.

Is the project related to any other past, current or mooted proposals in the region?

☒ No ☐ Yes If yes, please identify related proposals.

Traralgon East

The Traralgon East section is under construction and is due for completion by the end of 2010. The area for this section was predominantly cleared in an urban environment. An EES referral was not required as thresholds for referral were not triggered.

Wurruk

The Wurruk section is between Fulham (east of Reid Drive) and Sale (Reeve Street). Tenders have closed and construction is anticipated to be completed by the end of 2012. A Planning Scheme Amendment (PSA) reserved land for the Wurruk section and Fulham (Templetons Road to ReidDrive) in early 2010. Planning Permits were obtained via the PSA process. An EES referral was not required as thresholds were not triggered. VicRoads is currently seeking the Department of Sustainability and Environment's approval to the vegetation offset strategy, including removal of very high conservation significance vegetation. An EPBC referral (2010/5332) for between Templetons Road, Fulham and Reeve Street, Sale, received its decision on 23/2/10 stating that the proposed action is not a controlled action, meaning it did not require further action.

Offsets applicable to the loss of native vegetation in these Traralgon East and Wurruk sections are being provided as part of the overall project and being sourced in accordance with the Memorandum of Understanding between DSE, VicRoads and Department of Transport. A property purchased at Bengworden is able to satisfy the offset requirements for the Traralgon East and Wurruk sections of the project. Offsets for the balance of the project are being sought through various mechanisms including Bush Broker.

It was further agreed between statutory authorities including Department of Planning and Community Development (DPCD) and DSE that the remaining sections would require an EES referral because it exceeds the 10 hectares of clearing of native vegetation.

4. Project alternatives

Brief description of key alternatives considered to date (eg. locational, scale or design alternatives. If relevant, attach A4/A3 plans):

For each section, a number of options were developed and assessed. Refer to Attachment 4 for details. The preferred options are considered the most appropriate balance between road safety and cost, impact on land owners and service authorities, whilst also complying with legal/statutory requirements. The legal/statutory requirements include the principles of the Native Vegetation Framework of avoid, minimise and offset any impacts on nationally significant vegetation and other species.

a) TRARALGON EAST TO FLYNN SECTION – STAMMERS ROAD TO WEST OF FLYNNS CREEK ROAD

There are two distinct sub-sections between Traralgon East and Flynn. The first, between Stammers Road and Sheepwash Creek instead of a wider 15m median is to have a narrower median of 10m with carriageways separated by wire rope safety barrier (WRSB). The second sub-section, between Sheepwash Creek and Flynns Creek Road, is of greatest environmental significance. After review of options by VicRoads' Project Review Committee in October 2009, a 2.2m median with WRSB was adopted as its preferred option because of the significant flora and fauna.

As requested by DSE, specific investigations were undertaken to examine the use of freehold land to the north instead of the road reserve particularly opposite Barrs Lane which has the most dense nationally significant vegetation, to minimise the footprint on the vegetation whilst maintaining safety. The additional cost of this option including land acquisition and service relocation is approximately $5M. Gippsland Water (GW) have confirmed that this reduced length of the regional outfall sewer replacement is possible and hence is now the preferred solution.

b) WEST OF FLYNNS CREEK ROAD TO ROSEDALE

At Flynns Creek Road, a new carriageway is proposed to be constructed to the north within freehold land and road reserve, clear of trees in an area previously cleared for power lines. The proposed alignment comes closer to farm buildings including a house. The road alignment then swings to the south in to freehold land on the opposite side of the existing road.

Between east of Flynns Creek Road and Shaws Road, it is proposed to utilise the existing road reserve to provide a good alignment with a 15m median and to minimise land acquisition costs.

At Shaws Road across Blind Joes Creek, land acquisition is also required. The preferred option is to swing the alignment to the north within freehold land and duplicate with a 15m median within freehold land.

c) EAST OF ROSEDALE TO MAFFRA-ROSEDALE ROAD, NAMBROK

In order to rectify geometry concerns of the existing highway at Nambrok Road, a new eastbound carriageway providing a 15m median will be provided for within freehold land and extend along a frontage of approximately 4km. Road construction will match back in to the existing carriageway approximately 2km along at the eastbound overtaking lanes to maximise the length of eastbound lanes, until additional funding is made available. The existing carriageway will be retained as the future eastbound carriageway but will be improved to meet required highway standards.

d) MAFFRA-ROSEDALE ROAD TO TEMPLETONS ROAD

The sections of Maffra-Rosedale Road to Velore Road, and Velore Road to Templetons Road, are also part of this EES referral. No construction funding is available however preferred options have been developed but will require further design development.

i) Maffra-Rosedale Road to Velore Road Section

The option to duplicate to the north in road/rail reserve to provide a 15m median is preferred at this stage of design development, except in the vicinity of the rail overpass which is proposed to the south in cleared rural freehold land with possibly a reduced median at the rail overpass.

ii) Velore Road to Templetons Road Section

The options considered the most appropriate is to duplicate to the south in freehold land with a 15m median. It has greater social impact due to necessary acquisition but meets all other criteria considered well (road safety, transport efficiency, access and mobility and environment). The acquisition would also match in to the Public Acquisition Overlay now in place between Templetons Road and Wurruk which avoids impact on the vegetation.

Alternative Timeframes:

The current program has the order of the construction contracts based on whether land acquisition and associated planning processes to set aside a PAO are required. The current timeframe assumes that an Environment Effects Statement will not be required. Should this EES referral require an EES process to be undertaken, the alternative timeframes would have all sections being constructed consecutively, including associated roadwork speed limits along approximately 20km operating between 2011 and 2013.

Brief description of key alternatives to be further investigated (if known)**:**

The opportunity to relocate the existing powerlines to the north side of the road reserve, either overhead or underground and design road intersections to further minimise impact on vegetation is still being investigated. Since advice from Gippsland Water was received placing stringent conditions on many options, relocation of their assets is only being considered at specific locations, including at Barrs Lane.

In addition to several community sessions already held, a further community session was held in June 2010 to further identify concerns and suggestions from stakeholders for the Flynn to Rosedale and Nambrok sections. Another community session for the TE to Flynn section is being arranged following resolution of access strategies. Adjustments to the design may be implemented following the community consultation.

5. Proposed exclusions

Statement of reasons for the proposed exclusion of any ancillary activities or further project stages from the scope of the project for assessment:

Not applicable.

6. Project implementation

Implementing organisation (ultimately responsible for project, ie. not contractor)**:**
VicRoads

Implementation timeframe:
2010-2013

Proposed staging (if applicable):

Traralgon East to Flynn:	scheduled to commence construction mid 2011 and be completed by end 2012 (tendering 2011)
Flynn to Rosedale:	scheduled to commence construction early 2012 and be completed by late 2013 (tendering 2011)
Nambrok:	scheduled to commence construction early 2012 and be completed by mid 2013 (tendering 2011)

7. Description of proposed site or area of investigation

Has a preferred site for the project been selected?

☐ No ☒ Yes If no, please describe area for investigation.
If yes, please describe the preferred site in the next items (if practicable).

General description of preferred site, (including aspects such as topography/landform, soil types/degradation, drainage/ waterways, native/exotic vegetation cover, physical features, built structures, road frontages; attach ground-level photographs of site, as well as A4/A3 aerial/satellite image(s) and/or map(s) of site & surrounds, showing project footprint):

The site for the duplication is within the existing road reserve or adjoining freehold which is to be acquired.

The topography between Traralgon East and Fulham consists of mainly undulating terrain, with the Latrobe River flood plain running to the north of the Princes Highway from Traralgon East to Rosedale and then to the north of the Latrobe River flood plain to Kilmany and beyond. The section of the Princes Highway under consideration crosses a number of small creeks including Sheepwash Creek, Flynns Creek, Middle Creek and Blind Joes Creek, and water courses which are formed as tributaries of the Latrobe River flood plain.

The section of highway under consideration in this assessment generally runs in an east-westerly direction. Between west of Sheepwash Creek Road and Flynns Creek Road the vegetation is a relatively continuous corridor about 80m wide. The more intact areas, such as the higher quality vegetation between Sheepwash Creek Road and Flynns Creek Road, provide excellent habitat for arboreal mammals, reptiles, birds and may provide habitat for ground-dwelling mammals.

Regional Outfall Sewer (ROS) and Gippsland Water Factory (GWF) major pipelines within the existing sewerage easement are adjacent to the road reserve to the north. Overhead power lines in the northern part of the road reserve are close to the existing road.

Surrounding land consists mainly of agricultural land outside of the towns and residential/commercial development in the towns. The Melbourne to Bairnsdale Railway line generally follows a similar alignment to the Princes Highway East between Traralgon and Kilmany, south side of the highway, and Kilmany to Sale, to the north of the highway.

Princes Highway East is located upon the Gippsland Groundwater Basin, which is a highly used groundwater resource. Over time, extensive extraction has occurred at a regional level due to requirements for mine dewatering and gas and oil production. At a more local level, intensive agriculture and irrigation activities have lead to groundwater extractions.

Cultural heritage sensitivities particularly the creek have been identified. Subsurface testing is underway and has found an artefact site west of Sheepwash Creek, and another artefact site further west which has over a 100 artefacts. Testing is continuing along the rest of the job

including around Flynns Creek and Blind Joes Creek which have been identified as sensitive areas.

Landowners to the north have already been affected by an easement and associated works in their properties, the land of which is also important high farmland above the Latrobe River floodplains.

Refer to Attachment 4.

Site area (if known): …240 hectares

Route length (for linear infrastructure) 35 km **and width** varies between 10m and 40m depending on width of median and whether land is being acquired.

Current land use and development:

The land through which it is proposed to construct the duplication is road reserve and freehold land used for farming.

The land use in the surrounding area is predominantly agricultural, with mainly cattle and sheep grazing. Cultivation has occurred along the fertile river valleys. The majority of natural forests were cleared for agricultural use, but some have since been replanted in the road reserve.

Small pockets of rural residential land use occur in association with the localities of Flynn and Kilmany, as well as residential housing on the outskirts of Traralgon East and Rosedale.

Description of local setting (eg. adjoining land uses, road access, infrastructure, proximity to residences & urban centres):

Adjoining land is used primarily for farming purposes. The areas of the Princes Highway subject to this approval links the districts of Traralgon East, Flynn, Rosedale, Nambrok, Kilmany, Fulham and Wurruk. Several relatively minor roads access the highway, and several residences, notably farm houses, have direct access. Existing infrastructure in proximity to the Princes Highway includes the Regional Outfall Sewer (ROS), the Gippsland Water Factory Pipeline, overhead power lines, the Gippsland Railway, Mobil/Esso oil and gas pipelines, and other services. The works do not have direct impact on urban centres but acquisition at Flynn and Rosedale does push the road closer to individual farm residences, but does not affect buildings.

Planning context (eg. strategic planning, zoning & overlays, management plans):

The project lies within the boundaries of the Latrobe and Wellington Planning Schemes. The majority of the land is currently zoned Road, Public Use, and Farming.

Several overlays are also apparent through the project area. The overlays include:

- Design and Development Overlay (DDO)
- Public Acquisition Overlay (PAO)
- Land Subject to Inundation Overlay (LSIO)
- Environmental Significance Overlay (ESO)

The Design and Development and Public Acquisition overlays are primarily located in the vicinity of Sheepwash Creek to set aside land for the future Traralgon Bypass. PAO's are now also in place between Templetons Road and Wurruk for future duplication.

The Land Subject to Inundation Overlay is around the creeks, particularly around Blind Joes Creek in Rosedale.

An Environmental Significance Overlay is present at Blind Joes Creek on the south side of the highway.

The project is in line with Latrobe's Municipal Strategic Statement which covers Natural Environment Sustainability, Built Environment Sustainability, Economic Sustainability and Liveability.

Local government area(s):
Latrobe City, Wellington Shire.

8. Existing environment

Overview of key environmental assets/sensitivities in project area and vicinity
(cf. general description of project site/study area under Section 7)**:**

The project contains areas of national conservation significance vegetation. There are six broad habitat types, remnant woodland, streams and drainage lines, scattered remnant trees, planted vegetation, introduced grassland and water bodies and dams in the area. The value of each of these habitats for fauna ranges from low or negligible for exotic grassland, to high for areas of remnant woodland.

The study area supports remnant vegetation ranging from local to national significance for flora and fauna values. Within the road reserve there are significant environmental features of varying quality including nationally significant vegetation communities of Plains Grassy Woodland and Grassy Woodland, scarred trees and FFG/EPBC listed flora species including Matted Flax Lily. Outside of the road reserve there are significant environmental features including a large population of the Matted Flax Lily which is predominantly south of the proposed road alignment.

The section of Traralgon East to Flynn has the highest ecological significance.

No fauna species of national, state or regional significance were recorded within the study area during the assessment.

Previous recordings from the local area indicated three nationally significant fauna species listed under the FFG and EPBC Acts, including Regent Honeyeater, Growling Grass Frog and Australian Grayling. Targeted studies have been undertaken or are being considered for significant species.

Several scarred trees, isolated artefacts, and artefact scatters have been identified, particularly around the creeks, together with a number of European historical sites. A Cultural Heritage Management Plan, including completion of subsurface testing is currently being prepared. Consultation is underway with the local Registered Aboriginal Party, Gunaikurnai Land and Waters Aboriginal Corporation.

Other key environmental sensitivities from the project include being within the catchment of the Gippsland Lakes Ramsar Site, having proximity to residential areas and high quality farmland.

9. Land availability and control

Is the proposal on, or partly on, Crown land?

☐ No ☒ Yes If yes, please provide details.

Apart from an area to be clarified around Blind Joes Creek as to whether it is Crown Land, the proposal is in road reserve and freehold land.

Current land tenure (provide plan, if practicable):

Most of the project area is existing Road Reserve managed by VicRoads, with those areas to be acquired being freehold land generally used for farming purposes.

Intended land tenure (tenure over or access to project land): Land required for the project will be declared as road reservation. The land proposed to be acquired as part of the project is shown in Attachment 3.
Other interests in affected land (eg. easements, native title claims): The major service easement is for Gippsland Water's Gippsland Regional Outfall Sewer (ROS) and Gippsland Water Factory recycled water pipeline which runs parallel to and crosses the Princes Highway East (PHE) between Traralgon East and Flynn. High voltage power lines are located in the PHE road reserve and in easements adjacent to the road, however to avoid impacts on native vegetation additional easements will need to be created. Oil and gas pipelines are also presently crossing the highway to the east of Traralgon. Opposite Barrs Lane it is now proposed to relocate the ROS and GW factory pipelines to minimise the impact on native vegetation. Other utility services, including the power line, which cross the road are anticipated to require protection and/or relocation. A search of the Native Title Tribunal Register showed 2 current and unresolved claims covering the region.

10. Required approvals

State and Commonwealth approvals required for project components (if known):

Approvals required for the project include:

- Planning Scheme Amendments under the Planning & Environment Act
- Permit to remove native vegetation under the Planning & Environment Act and Flora & Fauna Guarantee Act
- Referral and potential subsequent approval under the Commonwealth EPBC Act
- Permit for works on a waterway under the Water Act
- Permit to relocate native fauna under the Wildlife Act
- Cultural Heritage Management Plan under Aboriginal Heritage Act

Planning Scheme Amendments

A Planning Scheme Amendment to place a Public Acquisition Overlay is required. With the revision to access management necessities in the Traralgon East to Flynn section four properties shall be partly affected, with 1 of the properties only affected to provide an unprotected clear zone width between the road and the property boundary. Ten properties in the Flynn to Rosedale section are affected, with 3 properties only affected for clear zone provisions. Four properties in the Nambrok section will have part of their area utilised to improve several curves that are currently considered substandard and to avoid native vegetation. No buildings would be affected and acquisition would be in rural land. The proposal also considers the environmental impacts of various options to reduce the impact on native vegetation and cultural heritage.

Through the PSA process, including the panel hearing if required, full consideration will be given to environmental and social aspects.

FFG Permit and Permit to Remove Native Vegetation

Applications to have permits issued for removal of native vegetation under the *Flora and Fauna Guarantee Act 1988* (FFG) and under the *Planning and Environment Act 1987* are expected to be submitted during the course of the project. Permits could be required for:

- FLORA - Matted Flax Lily, Maroon leek-orchid, Small Scurf Pea, Strzelecki Gum, Clover Glycine, Purple Diuris, Rough-grain Love Grass
- FAUNA – Growling Grass Frog, Dwarf Galaxias, Lewin's Rail, Eastern Great Egret, Grey Goshawk, White-bellied Sea-eagle, Powerful Owl, Masked Owl, Chestnut-rumped Heathwren, Swamp Skink.
- VEGETATION COMMUNITIES – Forest Red Gum Grassy Woodland Community (Grassy Woodland) and/or Central Gippsland Plains Grassland (Plains Grassy Woodland)

EPBC Referral

VicRoads is preparing a referral to the Australian Government's Department of Environment, Water, Heritage and the Arts (DEWHA), under the EPBC Act for the potential impact on matters of National Environmental Significance (NES) including:

- Communities - the critically endangered vegetation community Gippsland Red-gum (*Eucalyptus teriticornis* subsp.*mediana)*, Grassy Woodland and Associated Native Grassland, of which is generally mapped as Plains Grassy Woodland, and/or Grassy Woodland remnants.

- Flora - No species listed under EPBC were recorded within the study area during the latest field survey. However, previous targeted surveys have recorded the endangered Matted Flax Lily. Targeted surveys for Strzelecki Gum, *Eucalyptus strzeleckii*, River Swamp Wallaby-Grass, *Amphibromus fluitans,* and Clover Glycine *Glycine latrobeana* are recommended.

- Fauna - No nationally significant fauna records were recorded in the study area during the last assessment however three nationally significant species have previously been recorded in the local area, Australian Grayling, *Prototroctes maraena*, Growling Grass Frog, *Litoria raniformis*, and Regent Honeyeater, *Anthochaera phrygia*. Targeted surveys

are not recommended since Latrobe River is not being directly impacted. The Growling Grass Frog is considered relatively mobile and although not recorded lately it could be a resident along the Latrobe River. Targeted surveys may be required for this species.

The EPBC referral is expected to be submitted in August 2010.

Previously, VicRoads received advice from DEWHA for the section between Fulham (Templetons Road) and Sale (Park Street/Reeve Street) indicating that it was not a Controlled Action under the EPBC Act.

Cultural Heritage Management Plans will also be prepared. Refer Cultural Heritage section for further details.

Have any applications for approval been lodged?

☒ No ☐ Yes If yes, please provide details.

Applications for the various approvals are programmed to occur during 2010.

Approval agency consultation (agencies with whom the proposal has been discussed):

- Department of Planning and Community Development.
- Department of Environment, Water, Heritage and the Arts.
- Wellington Shire Council
- Latrobe City Council
- Department of Sustainability and Environment
- Registered Aboriginal Party (Gunaikurnai Land and Waters Aboriginal Corporation)
- Aboriginal Affairs Victoria
- Heritage Victoria

Other agencies consulted:

- Gippsland Water
- SP AusNet
- West Gippsland Catchment Management Authority
- Oil/gas pipeline and telecommunication providers

Gippsland Water and SP Ausnet have been consulted regarding opportunities to relocate water and electrical infrastructure to decrease impacts on significant vegetation, particularly from Traralgon East to east of Flynns Creek Road.

Gippsland Water originally advised that no impact is allowed on the ROS easement. The latest discussions have indicated there is scope to relocate part of the ROS over minimal lengths.

PART 2 POTENTIAL ENVIRONMENTAL EFFECTS

11. Potentially significant environmental effects

Overview of potentially significant environmental effects (identify key potential effects and comment on their significance and likelihood, as well as key uncertainties):

VicRoads has carefully considered potential environmental impacts when considering the proposed alignment and cross sections for the Princes Highway duplication to minimise the environmental impact particularly on the Plains Grassy Woodland.

It is anticipated that the proposed works will require the removal of approximately 74 hectares of vegetation and habitat. This figure includes approximately 10 hectares for the Traralgon East, Fulham and Wurruk sections, whose offsets are being sourced through the same process. The extent of the vegetation is dependent on the ultimate alignment selected, the number and nature of intersections and the amount and type of drainage implemented. These uncertainties are being resolved in consultation with stakeholders including the community, designers and road safety auditors.

Potential impacts of this project could include:

- Loss of modified areas of four endangered ecological vegetation communities of Plains Grassy Woodland, or otherwise referenced as the EPBC listed critically endangered Gippsland Red-gum (*Eucalyptus tereticornis* subs. *Mediana)* Grassy Woodland and Associated Native Grassland, together with Grassy Woodland, Flood Riparian Woodland and Swamp Scrub from the Gippsland Plain bioregion. These communities are also listed under the FFG Act as Central Gippsland Plains Grassland (Plains Grassy Woodland) and Forest Red-gum Grassy Woodland Community (Grassy Woodland)

- Disturbance to three nationally significant fauna species, namely the EPBC & FFG listed, Growling Grass Frog, Regent Honeyeater and Australian Grayling which have been recorded previously in the local area and a further 10 species are possibly to occur within 10km. Impact on these is not anticipated particularly since the project does not directly impact on the Latrobe River, which has tributaries of Sheepwash Creek and Flynns Creek. Targeted surveys may be undertaken for the Growling Grass Frog.

- Losses of EPBC and FFG listed Strzelecki Gum and Clover Glycine in treed vegetation patches including Grassy Woodland and Plains Grassy Woodland patches. Targeted surveys will be undertaken but the species are more likely to be found in the higher quality vegetation patches.

- The FFG listed Small Scurf-pea has previously been recorded within the study area and may be impacted on within the Grassy Woodland and Plains Grassy Woodland Patches.

- Other FFG listed species of Lewin's Rail, Eastern Great Egret, Grey Goshawk and White-bellied Sea-Eagle have also been recorded within 10km of the study area usually around perennial watercourses. No direct impact is expected but habitat could be lost. Targeted surveys will be undertaken.

- The FFG listed Swamp Skink may also be impacted in Swamp Scrub areas along the project and hence targeted surveys will be undertaken.

- With works being required in farm dams and slow flowing drainage lines, there may be losses of EPBC listed River Swamp Wallaby-grass. Targeted surveys will be undertaken to confirm its presence.

- Loss of old hollow-bearing Gippsland Red-gums and associated woodland and grassland habitat within the study area, and possible disturbance to adjacent DSE BioSites.

- Fragmentation of existing areas of remnant native vegetation along the roadside and loss of suitable habitat for fauna species which possibly use the study area.

- Other State Significant fauna species may also be impacted on particularly in the patches of higher quality vegetation and in the perennial watercourses.

- Other State Significant flora species may also be impacted on particularly in the intact Grassy Woodland and Plains Grassy Woodland Patches.

- The regionally significant Azure Kingfisher may also be found within the study area.

Traralgon East to Flynn:

- Loss of approximately 15 EPBC and FFG listed matted flax-lily plants on the southern side of the highway reserve.
- Potential impact on FFG listed Powerful Owl, Masked Owl, Chestnut-rumped Heathwren in the Plains Grassy Woodland patches.

Flynn to Rosedale:

- No previous records have been found for Dwarf Galaxias (EPBC and FFG listed). However, since they may be found around Blind Joes and Flynn Creeks targeted surveys will be undertaken.

The key uncertainties include approval of proposed PSA's, EPBC referrals and approval to FFG and permits to remove vegetation.

12. Native vegetation, flora and fauna

Native vegetation

Is any native vegetation likely to be cleared or otherwise affected by the project?

☐ NYD ☐ No ☒ Yes If yes, answer the following questions and attach details.

What investigation of native vegetation in the project area has been done? (briefly describe)

A number of studies including Flora and Fauna, Targeted Surveys and Net Gain, have been undertaken throughout the project area over the past 10 years. Below is the listing of the most recent relevant studies:

- *Flora and Fauna Assessment for the Proposed Princes Highway East duplication, Flynn to Fulham, Victoria,* Ecology Partners Pty Ltd, March 2010

- *Preliminary Net Gain assessment for the Proposed Princes Highway East duplication, Sheepwash Creek Road Flynn to Templetons Road Fulham*, Ecology Partners Pty. Ltd, April 2010.

- *Preliminary Net Gain Assessment for the Proposed Princes Highway East Duplication, Traralgon-Maffra Road to Sheepwash Creek Road, Victoria*, Ecology Partners Pty. Ltd., May 2009

- *Vegetation Condition Assessment for the proposed Princes Highway East duplication, Flynn to Fulham, Victoria*, Ecology Partners Pty. Ltd, May 2009

- *Flora and Fauna Assessment for the proposed Princes Highway East Duplication, Traralgon-Maffra Road to Sheepwash Creek Road*, Ecology Partners Pty Ltd., April 2009

- *Targeted Survey for Matted Flax-lily between Traralgon and Sale, Victoria*, Ecology Partners Pty. Ltd. 3 March 2009

- *Targeted Survey of Matted Flax-lily Dianella amoena along the Traralgon-Bairnsdale Rail Reserve and Princes Hwy Road reserve between Traralgon and Rosedale, Victoria*, Ecology Partners Pty. Ltd., May 2006

Refer to Attachments 5 and 6 for details of studies.

Refer to 'Flora and Fauna' section for further details.

What is the maximum area of native vegetation that may need to be cleared?

☐ NYD Estimated area = 74 hectares

How much of this clearing would be authorised under a Forest Management Plan or Fire Protection Plan?

☒ N/A …… approx. percent (if applicable)

Which Ecological Vegetation Classes may be affected? (if not authorised as above)

☐ NYD ☒ Preliminary/detailed assessment completed. If assessed, please list.

The EVC's that may be affected include:

- Plains Grassy Woodland
- Grassy Woodland and
- Swamp Scrub

Have potential vegetation offsets been identified as yet?

☐ NYD ☒ Yes If yes, please briefly describe.

VicRoads is tracking the entire offsets that the Princes Highway East duplication is required to provide.

For this project (plus Traralgon East, Fulham and Wurruk) approximately 23HH is proposed to be removed; approximately 0.2HH for Traralgon East, 9.8HH for Traralgon East to Flynn, 3.6HH for Flynn to Rosedale, 7.7HH for Rosedale to Fulham, 1.1HH for Fulham, and 1HH for Wurruk..

Remnant vegetation proposed to be removed (including Traralgon East, Fulham and Wurruk) consists of approximately:

- 0.8 habitat hectares of very high conservation significance Grassy Woodland
- 5.75 habitat hectares of high conservation significance Grassy Woodland,
- 8.17 habitat hectares of very high conservation significance Plains Grassy Woodland,
- 8.1 habitat hectares of high conservation significance Plains Grassy Woodland and
- 0.26 habitat hectares of high conservation significance Swamp Scrub,
- Approx. 18 very large old trees
- Approx. 233 large old trees
- Approx. 63 scattered large old trees.

VicRoads has purchased a property in Bengworden (between Sale and Bairnsdale) to contribute to its offset for native vegetation that will be cleared in the project. Of the 140 hectares at Bengworden, 30.46HH could be achieved through protection and management of each of its habitat zones, in Lowland Forest, Plains Grassy Woodland, previously Plains Grassy Woodland (revegetated) and Heathy Woodland vegetation types. VicRoads is also searching BushBroker and other sources to reach the balance of net gain targets. Lodgement of search requests have been made.

Other information/comments? (eg. accuracy of information)

A preliminary assessment of Net Gain for the duplication has been undertaken to determine the impact of the proposed alignment on significant habitat and is shown in Attachment 7.

Further to Section 4, avoidance of impact has been thoroughly investigated. Typically, the options that have less impact on social aspects have greater natural environment impacts. Avoidance of impact has also considered the reasonable cost of avoidance, and has been achieved where possible. Planning Scheme Amendments have been, or are being proposed, over 17 km of the project.

Areas where PSA's are not appropriate include particularly between Traralgon East to Flynn where the railway line, and its associated crossing safety issues, and a State Resource Overlay are located to the south of the road reserve, whilst significant services are located to the north of the road reserve. To relocate the entire lengths of the services impacted and create new easements clear of roadworks would have been cost prohibitive, hence only specific areas where easements are considered to have the least social impacts have been considered. Selection of reduced median widths were then selected as a minimisation technique.

Further Net Gain assessments will be undertaken during design development and as the project progresses to confirm or recalculate the offsets necessary to be provided.

Prior to the removal of higher quality remnant native vegetation within the study area, targeted surveys are to be undertaken for flora and fauna species.

NYD = not yet determined

Flora and fauna

What investigations of flora and fauna in the project area have been done?
(provide overview here and attach details of method and results of any surveys for the project & describe their accuracy)

Refer to previous page for details of studies.

FLORA

No national or state significant flora species were recorded within the study areas during the field assessment undertaken in early 2010.

The nationally significant species, River Swamp Wallaby-grass, *Amphibromus fluitans*, vulnerable under the EPBC Act has been recorded close to the study area and is known to have suitable habitat within the area. Similarly, nationally significant Matted Flax Lilies have been observed in the study area. Clover Glycine and Strzelecki Gums are having targeted surveys undertaken.

Seventeen state significant species have been recorded within close proximity but are known to have suitable habitat particularly in the high quality remnants of Plains Grassland and Plains Grassy Woodland:
- Silurian Leek-orchid,
- Variable Bossiaea,
- Small Scurf-pea,
- Bear's-ear,
- Purple Diuris,
- Rough-grain Love-grass,
- Gippsland Lakes Peppermint,
- Green Scentbark,
- Hypsela,
- Lanky Buttons,
- Fisch's Greenhood,
- Cobra Greenhood,
- Sharp Greenhood,
- Easter Water Ribbons,
- Small-leaf Star-hair,
- Yarra Gum, and
- Golden Grevillea.

One vegetation community, Gippsland Red-gum (*Eucalyptus teriticornis subsp. Mediana*) Grassy Woodland and Associated Native Grassland, listed as critically endangered under the EPBC Act, is within the study area. This community is also listed under the FFG Act as Forest Red-gum Grassy Woodland Community and/or Central Gippsland Plains Grassland, and had been mapped in the reports as Grassy Woodland and Plains Grassy Woodland. These EVC's are recorded as being of an endangered conservation status.

Scattered planted vegetation both of native and exotic trees and shrubs have also been planted within the area. A large number of the trees are eucalypts but are not locally indigenous to the area.

The Swamp Scrub community is present, particularly along drainage lines, including Blind Joes Creek. Other creeks in the area are highly modified and degraded.

FAUNA

No fauna species of national, state or regional significance were recorded within the study area during the early 2010 assessment.

Five major habitat types were found. These included modified woodland, Grassy Woodland (includes Plains Grassy Woodland), Swamp Scrub, creeks, scattered planted native and exotic trees, and exotic pasture. The condition of habitats for fauna species within the study area ranges from low for exotic pasture to high for grassy woodland patches.

Nationally significant vegetation (Gippsland Red Gum Grassy Woodland and Associated Native Grassland, also known as Plains Grassy Woodland), and also Swamp Scrub vegetation of varying quality, is located at a number of locations along the alignment. Nationally significant threatened species of Matted Flax Lily have been found in the study area but are largely to the south of the road reserve clear of the works. Nationally significant River Swamp Wallaby Grass, Strzelecki Gum and Clover Glycine have been recorded close to the study area. Dwarf Galaxias are also potentially around Flynns Creek and Blind Joes Creek.

The Swamp Scrub patches are of poor to moderate condition within tributaries and drainage lines such as Blind Joes Creek.

Three nationally significant fauna species listed under the EPBC Act have previously been recorded from the local area, these species being Regent Honeyeater, Growling Grass Frog and Australian Grayling.

Regent Honeyeater - Targeted surveys have not been recommended.
Growling Grass Frog - A previous targeted survey for the Growling Grass Frog as part of the Gippsland Water Factory Project (Ecology Partners Pty. Ltd. 2008b) did not detect any GGF's, and is only a suspected resident along the Latrobe River.
Australian Grayling - The Australian Grayling *Prototroctes maraena*, a nationally significant species, has been recorded within 10 kilometres of the study area, and the consultant did not recommend a targeted fish survey.

Dwarf Galaxias, FFG & EPBC listed, were not recorded but targeted surveys are to be undertaken in Blind Joes Creek and Flynns Creek.

No state significant fauna was recorded in the study area during the early 2010 assessment. 12 state significant fauna species had potential habitat and further targeted surveys have been recommended for:

- Lewin's Rail
- Royal Spoonbill
- Eastern Great Egret
- Hardhead
- Grey Goshawk
- White-bellied Sea-Eagle
- Black Falcon
- Powerful Owl
- Masked Owl
- Chestnut-rumped Heathwren
- Lace Goanna
- Swamp Skink

Similarly, no regionally significant fauna was recorded during the present assessment, but 5 have been previously documented within 10 km, with only a targeted survey for Azure Kingfisher being recommended.

A permit from DSE under the FFG Act will be sought to 'take' listed flora species, species that are members of listed communities (Forest Red-gum Grassy Woodland Community and Central Gippsland Plains Grassland), threatened flora or protected flora on public land, such as road reserves, and to clear or disturb protected flora species within the study area including any of the *Asteraceae* (Daisies), all orchids and all ferns.

Have any threatened or migratory species or listed communities been recorded from the local area?

☐ NYD ☐ No ☒ Yes If yes, please:

- List species/communities recorded in recent surveys and/or past observations.

No fauna species were recorded within the 10km of the study area in the latest study. Nationally significant species of Regent Honeyeater, Growling Grass Frog and Australian Grayling have had previous documented records.

No flora species were recorded in the latest study. There have been documented records for nationally significant species include River Swamp Wallaby-Grass, Matted Flax-Lily, Strzelecki Gum, Clover Glycine and Wellington Mint-bush. Numerous other state significant and regionally significant species have had recordings.

One nationally listed vegetation community (Plains Grassy Woodland /Gippsland Red-Gum Grassy Woodland and Associated Native Grassland and two state listed communities (Forest Red Gum Grassy Woodland Community and/or Central Gippsland Plains Grassland) is present within the study area.

- Indicate which of these have been recorded from the project site or nearby.

Plains Grassy Woodland has been found along extensive lengths of the road reserve at various points and in a variety of conditions.

The nationally significant flora species, Matted Flax-lily *Dianella amoena*, endangered under EPBC Act (and listed under the FFG Act) has been recorded previously in the study area along the road reserve and particularly within the adjacent Gippsland Railway Line.

A targeted survey of the nationally endangered Matted Flax-Lily was conducted in 2006. A total of 374 plants were located in the study area between Traralgon and Rosedale along the Traralgon to Bairnsdale Rail Reserve. Comprising a total area of 1806m^2, it is believed to be one of the largest known populations of the species in Australia. It was determined that less than 40% of the species recorded face moderate to high threats, with the largest number of plants concentrated in an area between Sheepwash Creek and Barrs Lane (135 plants were recorded in remnant vegetation). In 2009, another targeted survey for the Matted Flax-lily was undertaken between Traralgon and Sale by Ecology Partners Pty. Ltd., in which 14 new records were identified in the area between Stammers Road and Flynns Creek Road. Five plants recorded in the previous survey within the study area were not able to be re-located during this survey, but are considered to be still present. A population of at least 8 individuals within the road reserve south of the Princes Highway between Sheepwash Creek and Flynn were found. Refer to Attachment 6 for details..

If known, what threatening processes affecting these species or communities may be exacerbated by the project? (eg. loss or fragmentation of habitats) Please describe briefly.

Areas of Plains Grassy Woodland will be removed to provide space for the duplication. This will reduce the patch size available for habitat.

Threatening processes include:

1. Invasion of native vegetation by environmental weeds
2. Loss of hollow-bearing trees from Victorian native forests
3. Spread of *Pittosporum undulatum* in areas outside its natural distribution
4. Habitat fragmentation as a threatening process for fauna in Victoria. In other areas, particularly the crossing of Blind Joes Creek, the linear continuity of habitat along the creek has been considered and hence is one reason for placing the alignment to the north.
5. Increase of sediment input into Victorian rivers and streams due to human activities
6. Input of toxic substances into Victorian rivers and streams.

Are any threatened or migratory species, other species of conservation significance or listed communities potentially affected by the project?

☐ NYD ☐ No ☒ Yes If yes, please:

- List these species/communities:
- Indicate which species or communities could be subject to a major or extensive impact (including the loss of a genetically important population of a species listed or nominated for listing). Comment on likelihood of effects and associated uncertainties, if practicable.

It is anticipated at this stage that the largest impact will be on the Plains Grassy Woodland, particularly between Sheepwash Creek to Flynns Creek Road where the greatest apparent conservation significance community is present. The exact extent of this impact will be determined when the design and current investigations are finalised. However the likelihood of effects is certain to areas within the road reserve due to restrictions on both sides of the highway of sewer and railway lines which are cost prohibitive to move.

Matted flax lily plants which are located north of the railway line may also be impacted. Any impact would be managed via the development and implementation of a Matted Flax Lily Management Plan.

Other species which after targeted surveys are found to be present will be managed via Management Plans developed by appropriately qualified consultants.

Is mitigation of potential effects on indigenous flora and fauna proposed?

☐ NYD ☐ No ☒ Yes If yes, please briefly describe.

Section 4 detailed ways in which mitigation of effects was addressed including the Avoid, Minimise and Offsets principles.

The proposed alignment and cross sections have been chosen to minimise impacts on indigenous flora and fauna together with road safety necessities and costs of constructing the road. Even the locations at which tie-ins occur between the new road and existing road have been considered to reduce impact.

VicRoads is to ensure best practice sedimentation and pollution control measures are undertaken at all times to prevent impacts to any wetland, creeks and surrounds, and control any infestation of weeds.

Where avoidance of impact is not possible the proposed design has been modified to minimise the impact on this habitat by reducing the construction footprint as much as practicable, complying with Net Gain Policy requirements, and implementing a Project Environment Protection Strategy. Consultation with authorities has also occurred to balance out other requirements.

Further to the threatening processes above mitigation measures include:

1. Control environmental and noxious weeds in native vegetation. Wash machinery prior to entering the sites to remove weed seeds
2. Identify and retain where possible all significant habitat trees in the study area, and where possible realign the route to avoid trees
3. Limit disturbance in native vegetation and conduct regular weed control
4. Where possible, minimise the removal of native vegetation during construction, and connect existing remnants with locally indigenous vegetation. In other areas, particularly the crossing of Blind Joes Creek ensure that the linear continuity of habitat along the creeks is retained, and hence reduce the fragmentation of habitats.
5. Ensure that best practice sedimentation control measures (to the satisfaction of EPA) are undertaken at all times
6. Ensure that best practice pollution control measures (to the satisfaction of the EPA) are undertaken at all times.

Other information/comments? (eg. accuracy of information)

Reports for Flora and Fauna, and Preliminary Net Gain studies are attached in Attachments 5, 6 and 7.

Targeted studies are proposed to be arranged at the appropriate times to determine the presence of various species, refer Attachment 6. Any species identified under relevant legislation would have approvals sought through the various bodies administering the FFG Act, EPBC Act, and Removal of Native Vegetation processes.

13. Water environments

Will the project require significant volumes of fresh water (eg. > 1 Gl/yr)?

☐ NYD ☒ No ☐ Yes If yes, indicate approximate volume and likely source.

Previous projects of a similar nature have not used in excess of 1GL/yr. VicRoads Water Usage Policy states that "VicRoads will use recycled or other alternative water in construction and maintenance activities dependant on availability and environmental and human health considerations." The majority of water used will be during construction.

Will the project discharge waste water or runoff to water environments?

☐ NYD ☐ No ☒ Yes If yes, specify types of discharges and which environments.

During construction, rainfall runoff from the construction area will be controlled in accordance with best practices and will conform with EPA and VicRoads guidelines. The highway will be designed in a manner which will ensure drainage compliance with the required construction and environmental guidelines including water sensitive road design to minimise any impact. VicRoads will continue to liaise with the Catchment Management Authority to avoid adverse impacts and ensure beneficial uses are protected.

Are any waterways, wetlands, estuaries or marine environments likely to be affected?

☐ NYD ☒ No ☐ Yes If yes, specify which water environments, answer the following questions and attach any relevant details.

Only minimal impacts are anticipated on waterways, including Sheepwash Creek, Flynns Creek, Middle Creek and Blind Joes Creek. These are associated with bridgeworks including piers and abutments that may be in waterways depending on final designs and road runoff during construction. Where possible, works will be reduced around creek areas including placing bridge piers outside of the creek environs if the creek can be spanned.

Are any of these water environments likely to support threatened or migratory species?

☐ NYD ☒ No ☐ Yes If yes, specify which water environments.

The large wetland bodies along Blind Joes Creek, north of the Princes Highway, may potentially provide suitable habitat for the Growling Grass Frog species. A subsequent investigation in to Growling Grass Frogs for Gippsland Water found none to be present.

In addition, no Dwarf Galaxias have had previous recordings. Targeted surveys are being undertaken around Blind Joes Creek and Flynns Creek.

Are any potentially affected wetlands listed under the Ramsar Convention or in 'A Directory of Important Wetlands in Australia'?

☐ NYD ☒ No ☐ Yes If yes, please specify.

Ecology Partners noted in a study from Flynn to Fulham that "The EPBC Act Protected Matters Search Tool (http://www.deh.gov.au/erin/ert/epbc/imap/map.html) lists the Gippsland Lakes as a site of international significance (RAMSAR site) that potentially occurs within the catchment for both study areas."

This RAMSAR site is located over 5 km from this site.

Could the project affect streamflows?

☐ NYD ☒ No ☐ Yes If yes, briefly describe implications for streamflows.

Bridge structures will be designed to provide no afflux as determined with the Catchment Management Authority.

Could regional groundwater resources be affected by the project?

☐ NYD ☒ No ☐ Yes If yes, describe in what way.

Could environmental values (beneficial uses) of water environments be affected?

☐ NYD ☒ No ☐ Yes If yes, identify waterways/water bodies and beneficial uses (as recognised by State Environment Protection Policies)

Not applicable.

Could aquatic, estuarine or marine ecosystems be affected by the project?

☐ NYD ☒ No ☐ Yes If yes, describe in what way.

Is there a potential for extensive or major effects on the health or biodiversity of aquatic, estuarine or marine ecosystems over the long-term?

☒ No ☐ Yes If yes, please describe. Comment on likelihood of effects and associated uncertainties, if practicable.

Is mitigation of potential effects on water environments proposed?

☐ NYD ☐ No ☒ Yes If yes, please briefly describe.

The principles of water sensitive road design will be considered to drain and discharge water in an appropriate manner with due consideration to environmental effects when considering final designs. In addition, best practice environmental protection measures will be installed during construction in accordance with VicRoads Environment Policy (2005) and VicRoads Environmental Guidelines (2006).

Sedimentation and erosion controls must be implemented during construction in accordance with Victorian EPA guidelines including Environment Guidelines for Major Construction Sites (1996) and Construction Techniques for Sediment Control (1991).

Water environments will be protected during the construction phase with appropriate controls as prescribed in the EMP.

Targeted surveys have been undertaken to confirm some species are not present. Where any extra conditions are advised, eg. avoidance of works during breeding seasons, these shall be complied with.

Other information/comments? (eg. accuracy of information)

Hydrology studies have been undertaken for the major waterways including Blind Joes Creek and Flynns Creek. New bridges and drainage features will be constructed so that there is no increased afflux, ie. flooding, upstream of the structure.

14. Landscape and soils

Landscape

Has a preliminary landscape assessment been prepared?

☒ No ☐ Yes If yes, please attach.

Is the project to be located either within or near an area that is:

- **Subject to a Landscape Significance Overlay or Environmental Significance Overlay?**

  ☐ NYD ☐ No ☒ Yes If yes, provide plan showing footprint relative to overlay.

The project is not located within any land affected by a Significant Landscape Overlay and hence there is no impact by these duplication works.

There are three areas with Environmental Significance Overlays (ESO) from Traralgon East to Rosedale. The largest, Latrobe ESO1, is an urban buffer around the land set aside for the future Traralgon Bypass. Wellington ESO3 relates to a coal mining buffer around Rosedale and ESO7 is a landfill buffer to the south east of Rosedale.

- **Identified as of regional or State significance in a reputable study of landscape values?**

  ☐ NYD ☒ No ☐ Yes If yes, please specify.

- **Within or adjoining land reserved under the *National Parks Act 1975* ?**

  ☐ NYD ☒ No ☐ Yes If yes, please specify.

- **Within or adjoining other public land used for conservation or recreational purposes ?**

  ☐ NYD ☐ No ☒ Yes If yes, please specify.

It is understood that land in the vicinity of Blind Joes Creek is being used as a conservation area, and it also has an adjacent highway rest area.

Is any clearing vegetation or alteration of landforms likely to affect landscape values?

☐ NYD ☒ No ☐ Yes If yes, please briefly describe.

There will be an unavoidable effect upon the landscape value through the vegetation removal already described and through the addition of the proposed roadworks in to the landscape.

Is there a potential for effects on landscape values of regional or State importance?

☐ NYD ☒ No ☐ Yes Please briefly explain response.

Is mitigation of potential landscape effects proposed?

☐ NYD ☐ No ☒ Yes If yes, please briefly describe.

VicRoads will be preparing a Landscape Strategy for this project. Landscape design will consider the use of indigenous flora as part of roadside plantings. Suggestions for indigenous species for use in landscaping have been provided in numerous flora and fauna reports and will be updated as part of specifications for contracts.

Other information/comments? (eg. accuracy of information)

Note: A preliminary landscape assessment is a specific requirement for a referral of a wind energy facility. This should provide a description of:

- The landscape character of the site and surrounding areas including landform, vegetation types and coverage, water features, any other notable features and current land use;
- The location of nearby dwellings, townships, recreation areas, major roads, above-ground utilities, tourist routes and walking tracks;
- Views to the site and to the proposed location of wind turbines from key vantage points (including views showing existing nearby dwellings and views from major roads, walking tracks and tourist routes) sufficient to give a sense of the overall site in its setting.

Soils

Is there a potential for effects on land stability, acid sulphate soils or highly erodible soils? ☐ NYD ☒ No ☐ Yes If yes, please briefly describe. Treatment of soils will be considered as part of the Landscape Strategy.
Are there geotechnical hazards that may either affect the project or be affected by it? ☐ NYD ☒ No ☐ Yes If yes, please briefly describe.
Other information/comments? (eg. accuracy of information)

15. Social environments

Is the project likely to generate significant volumes of road traffic, during construction or operation?

☐ NYD ☒ No ☐ Yes If yes, provide estimate of traffic volume(s) if practicable.

No traffic will be diverted on to, or off the highway, therefore existing volumes of traffic will continue to use the road.

Is there a potential for significant effects on the amenity of residents, due to emissions of dust or odours or changes in visual, noise or traffic conditions?

☐ NYD ☒ No ☐ Yes If yes, briefly describe the nature of the changes in amenity conditions and the possible areas affected.

No significant effects are anticipated.

The nature of a duplicated highway may have an effect on the amenity of residents by affecting traffic conditions. To ensure safety, turns will be restricted for access to certain properties, however access will be in accordance with VicRoads Access Management Policy. Accesses, including types of intersection treatments, have undergone an approval process but are still subject to further community consultation.

There is the potential for emission of dust and noise during construction. This will be managed in accordance with EPA guidelines and specifications. Dust emissions shall be controlled by Environmental Management Plans (EMP's) by the Contractor to not create nuisance dust during construction.

The road is proposed to move closer to several houses, the closest 50m away from the road and there may be increased noise levels. Noise attenuation barriers are not proposed as requirements of the VicRoads Noise Policy have not been triggered.

There will be some changes to the visual amenity of the area following road construction. This will be mitigated by implementation of a roadside landscape plan.

Is there a potential for exposure of a human community to health or safety hazards, due to emissions to air or water or noise or chemical hazards or associated transport?

☐ NYD ☒ No ☐ Yes If yes, briefly describe the hazards and possible implications.

Is there a potential for displacement of residences or severance of residential access to community resources due to the proposed development?

☐ NYD ☒ No ☐ Yes If yes, briefly describe potential effects.

Residences will not be displaced as part of the project. Existing driveway locations will be maintained but to maintain safety of the duplication access restrictions are unavoidable. An assessment of the current access arrangements, including the number, type and destination of vehicles using these accesses, has been undertaken against VicRoads Access Management Policies. Where properties originally had access in all directions and are now being restricted in some way, an assessment of the additional distances to be travelled, including for heavy vehicles, has been undertaken to achieve the best result. The intersection locations also aim to reduce other environmental impacts.

Are non-residential land use activities likely to be displaced as a result of the project?

☐ NYD ☐ No ☒ Yes If yes, briefly describe the likely effects.

Land acquired to the north of the project in Flynn and Rosedale will impact on the amount of high ground available to farmers in times of flood, and/or reduce their property sizes. By reducing the number of properties where acquisition is proposed and keeping works within the road reserve where feasible this displacement has been mitigated.

Do any expected changes in non-residential land use activities have a potential to cause adverse effects on local residents/communities, social groups or industries?

☐ NYD ☒ No ☐ Yes If yes, briefly describe the potential effects.

In situations where farming land is being acquired the area of land required is insignificant when compared to the area of the whole property. When compared to the area of high ground, the area to be acquired is also minimal, given some of this will be utilised as easements for power and sewerage.

Is mitigation of potential social effects proposed?

☐ NYD ☐ No ☒ Yes If yes, please briefly describe.

The owners of properties with land proposed to be acquired have been consulted and additional options developed to reduce the social effects. However, the variations often resulted in greater vegetation impacts or greater social impacts on other residents. The land required is also subject to the PSA process. Owners will be compensated under Land Acquisition and Compensation Act.

Construction impacts will be managed in accordance with VicRoads policies and the Transport Integration Act to reduce social impacts whilst also balancing other legislative and stakeholder requirements.

Kilmany residents will be consulted and community feedback will be sought when works in that section are funded. Options considered due to the restriction of the railway line to the north, are centred around the road reserve affecting native vegetation or involve altering direct accesses to the highway. Land acquisition of freehold to the south was not considered a preferred option as some houses may be adversely impacted and should families leave may have a detrimental impact on the community. Social impact investigations will be arranged when this section receives construction funding.

Other information/comments? (eg. accuracy of information)

Cultural heritage

Have relevant Indigenous organisations been consulted on the occurrence of Aboriginal cultural heritage within the project area?

☐ No If no, list any organisations that it is proposed to consult.
☒ Yes If yes, list the organisations so far consulted.

VicRoads has held discussions with Gunaikurnai, the Registered Aboriginal Party for the project area. Gunaikurnai representatives have actively participated in the complex assessment at Wurruk and are also participating in the current cultural heritage investigations of the remaining sections with Dr. Vincent Clark & Associates.

What investigations of cultural heritage in the project area have been done?
(attach details of method and results of any surveys for the project & describe their accuracy)

Due Diligence Assessments for the Fulham and Wurruk sections, from Traralgon to Rosedale and from Rosedale to Fulham, were undertaken by Dr. Vincent Clark & Associates from October 2008 to April 2009, refer Attachment 8. A formalised Cultural Heritage Management Plan for these sections is being developed and should be completed by late 2010. Desktop and standard assessments have been completed and reporting of these results is due shortly. The complex assessment component commenced in June 2010.

Is any Aboriginal cultural heritage known from the project area?

☐ NYD ☐ No ☒ Yes If yes, briefly describe:

- Any sites listed on the AAV Site Register
- Sites or areas of sensitivity recorded in recent surveys from the project site or nearby
- Sites or areas of sensitivity identified by representatives of Indigenous organisations

Cultural Heritage

Due Diligence Assessments were conducted by Dr. Vincent A. Clark & Associates on the three main sections of the Princes Highway between Traralgon and Sale during 2008 and 2009. The two reports relating to Traralgon East to Fulham in March 2009 and April 2009 recorded numerous Aboriginal Cultural Heritage sites within 1km of the section of Princes Highway East between Traralgon and Fulham.

During the 2009 studies, between Minniedale Road and Rosedale, the Princes Highway passes through several areas of Aboriginal Cultural Heritage Sensitivity. Nine Aboriginal Cultural Heritage sites were located directly adjacent to the Princes Highway East, while another three are located within 250m of the existing alignment. These twelve sites consist of two isolated artefacts (VAHR 8221-0021, 0101), three scarred trees (VAHR 8221-0019, 0020, 0022) and seven artefact scatters (VAHR 8221-0048, 0102, 0104, 0133, 0134, 0135) one of which was a sub-surface scatter (VAHR 8221-0111). At least 9 of these sites (VAHR 8221-0019, 0020, 0022, 0101, 0102, 0104, 0133, 0134 and 0135) are located directly adjacent to the current alignment of the Princes Highway and are at high risk of being affected or destroyed by the proposed works. One extra scarred tree (VAHR 8221-0002) is located to the south of the existing Princes Highway East alignment, near Barrs Lane and in the Railway Reserve. Duplication is unlikely to impact on this site, although associated construction activities may disturb this site.

Between Rosedale and Fulham, there are four Aboriginal Cultural Heritage sites located within a 5km radius of the activity area. Of the four sites, two are isolated artefacts (VAHR 8221-0080 and 0103); one is a hearth site (VAHR 8221-0036) and one is an artefact scatter (VAHR 8221-0034). Only one of the isolated artefacts (VAHR 8221-0103) is located within the activity area at the southern side of the highway between Settlement Road and Templetons Road to the east of Kilmany.

Summary of 2009 investigations within close proximity to the existing Princes Highway East alignment between Traralgon East to west of Flynns Creek Road showed:

Table 1 - 2009 Cultural Heritage Sites

VAHR No. 8221 -	Site Name	Site Type	Scientific Significance
0133	West bank of Sheepwash Creek	Artefact Scatter	Moderate
0134	East Bank of Sheepwash Creek	Artefact Scatter	Moderate
0135	West of Flynn	Artefact Scatter	Moderate
0102	West of Flynn	Artefact Scatter	High
0101	Flynn	Isolated Artefact	Low
0019	Flynn	Scarred Tree	Moderate
0020	Flynn	Scarred Tree	Moderate
0021	Flynn	Isolated Artefact	Low
0104	Flynn's Creek	Artefact Scatter	Moderate
0048	Between Middle Creek and Blind Joes Creek	Subsurface Artefact Scatter	Low
0022	East of Blind Joes Creek	Scarred Tree	Moderate
0034	Between Rosedale and Fulham	Artefact Scatter	Moderate
0036	Between Rosedale and Fulham	Hearth	High
0080	Between Rosedale and Fulham	Isolated Artefact	Low
0103	East of Kilmany	Isolated Artefact	Low

2009 studies also showed that there were a number of identified Aboriginal Cultural Heritage sensitive areas along the proposed alignment. These tended to be focused on locations in direct proximity to creeks and water courses, namely:

- Sheepwash Creek
- Sandy Creek
- North of Flynns Creek Road
- Flynns Creek
- Blind Joes Creek
- North of Princes Highway directly across from an unnamed road between Wrights Lane and Shaws Lane
- Banks of Nambrok Creek, west of Kilmany.

A copy of the previous 2009 surveys are attached in Attachment 8.

In 2010, Dr. Vincent Clark & Associates were engaged to complete a Cultural Heritage Management Plan to manage impacts on the Aboriginal Cultural Heritage sites from Stammers Road to Templetons Road, including all formal assessments including desktop, standard and complex assessments. The CHMP also revised the findings from Table 1 above. A copy of the draft conclusions from the ground survey is attached in Attachment 8.

For the section between Stammers Road and west of Flynns Creek Road, all assessments including complex assessments have been undertaken. Two artefact sites were found; site 1 titled "Sheepwash Creek Artefact Scatter 1", 100m west of Sheepwash Creek on the south side, and site 2 titled "Sheepwash Creek Artefact Scatter 2", approximately 400m east of Sheepwash Creek on the northern side of the highway. These assessments showed 1 artefact at the site 1 and 109 artefacts at site 2. It is being proposed in the CHMP that these artefacts be salvaged, as discussed with the local RAP in July 2010.

No scar trees, cave entrances or rock shelters were identified during the standard assessment for Traralgon East to Flynn.

The standard assessment for Stuckeys Lane to Wrights Lane re-located the scarred tree (8221-0019[VAHR]. This site is considered to be clear of any roadworks. Site 8221-0104 [VAHR] at the banks of Flynns Creek is a previously recorded artefact scatter of which will have further assessment as listed above since this place is likely to be impacted with geometry correction required of the highway curve at this location. Other cultural heritage places previously identified were not relocated during the standard assessment. No other previously unrecorded places were

identified.

The standard assessment for Wrights Lane to Rosedale re-located VAHR place 8221-0022 (scarred tree) of which is not proposed to be affected by the works. Apart from the area of sensitivity around Blind Joes Creek which will undergo complex assessment no previously unrecorded Aboriginal cultural heritage places were identified during the standard assessment for this section.

The standard assessment for Rosedale to Settlement Road, Kilmany did not identify any previously unidentified Aboriginal cultural heritage places, and no previously recorded Aboriginal cultural heritage places were present in this section. Further complex assessment will be undertaken in the sensitive areas previously identified.

Are there any cultural heritage places listed on the Heritage Register or the Archaeological Inventory under the *Heritage Act 1995* within the project area?

☒ NYD ☒ No ☒ Yes If yes, please list.

The memorial monument to Count Paul Strzelecki, a site of local significance is on the south side of the road reserve west of Minniedale Road. It will be affected by the proposed duplication.

A historic artefact scatter listed on the Heritage Victoria Inventory (H8221-0011) is on the south side of the highway to the east of Barrs Lane in the rail reserve and not likely to be impacted by the works.

The historic site of Pine Grove, north of the highway near Wrights Lane in Flynn, H8221–0011, is listed on the Victorian Heritage Inventory and may not be disturbed or damaged without consent from the Executive Director of Heritage Victoria. This site will not be impacted by the works.

The Nambrok Ruins Historical Cultural Heritage site, VHI 8221-0010, of local significance, is located on the north-east side of the Nambrok Road intersection. Further investigations are required to be undertaken to document this site with a permit to be obtained from Heritage Victoria to disturb the site. This site is expected to be impacted by the works.

Is mitigation of potential cultural heritage effects proposed?

☒ NYD ☒ No ☒ Yes If yes, please briefly describe.

Where avoidance is deemed to be impractical, the sites of cultural heritage, Strzelecki Monument and Nambrok Ruins, will have approval sought for disturbance, as appropriate. The alignment, in particular near the ruins, was investigated, however to improve the geometry sufficiently means there was even a greater impact on vegetation in the road reserve or on the isolated site.

Mitigation is proposed by selecting routes which are considerate of the significance of the sites. The Registered Aboriginal Party (RAP) has previously noted that scarred trees were to be avoided and consequently the location of these trees has been confirmed and the road alignment developed to avoid them.

Where the alignment still impacts on sites of cultural heritage sensitivity such as creek crossings, sufficient time has been allowed to determine the extent of the site prior to finalising the design, and ascertaining if any changes to the route are required.

The Cultural Heritage Management Plan will be developed and approved by the RAP prior to commencement of construction. The CHMP will specify contingency measures and responsibilities in the event of items of Aboriginal cultural heritage being discovered.

Contractors will also be required to work under an Environmental Management Plan (EMP).

Since works will be undertaken in /near waterways, there is the potential impact. Mitigation measures will be in place, including clauses in the construction specification for the Contractors to

develop their Environmental Management Strategies and Plans to cause no harm including appropriate scheduling and planning of works and creation of no go zones to protect heritage sites.
Other information/comments? (eg. accuracy of information)

16. Energy, wastes & greenhouse gas emissions

What are the main sources of energy that the project facility would consume/generate?

- ☒ Electricity network. If possible, estimate power requirement/output ……..
- ☒ Natural gas network. If possible, estimate gas requirement/output ……...
- ☒ Generated on-site. If possible, estimate power capacity/output ……
- ☒ Other. Please describe.

Please add any relevant additional information.

During construction fossil fuels such as diesel, petrol, and LPG will be used to power construction vehicles.

Quarry products will be used in road formation and bitumen will be used for road sealing. Construction of bridges will require steel, concrete and other structural products as well as quarry products.

Once construction is complete a minimal amount of electrical energy will be required to power street-lighting and associated road infrastructure. Maintenance vehicles will use a minimal amount of fossil fuels.

What are the main forms of waste that would be generated by the project facility?

- ☒ Wastewater. Describe briefly.
- ☒ Solid chemical wastes. Describe briefly.
- ☒ Excavated material. Describe briefly.
- ☒ Other. Describe briefly.

Please provide relevant further information, including proposed management of wastes.

Various forms of waste could be generated including surplus excavated material, building materials, paper, etc. Waste generated during construction will be minimised as far as practicable. Earth excavation for removal from site should be minimal and earth excavated from cuts will be used as fill where possible. Contractors will be required to develop an Environmental Management Plan (EMP) which identifies how waste generated both as by-products of the construction process and how recycled products or those whose production generates lower carbon, are managed. They will be encouraged to carry out works so as to minimise the generation of waste material and whenever possible recover and recycle such materials.

What level of greenhouse gas emissions is expected to result directly from operation of the project facility?

- ☒ Less than 50,000 tonnes of CO_2 equivalent per annum
- ☒ Between 50,000 and 100,000 tonnes of CO_2 equivalent per annum
- ☒ Between 100,000 and 200,000 tonnes of CO_2 equivalent per annum
- ☒ More than 200,000 tonnes of CO_2 equivalent per annum

Please add any relevant additional information, including any identified mitigation options.

Greenhouse gas emission savings are expected as a result of the project due to a reduction of congestion on the highway road network. Additional planting of trees and shrubs as part of the Landscape Strategy will also reduce carbon emissions.

17. Other environmental issues

Are there any other environmental issues arising from the proposed project?

☒ No ☒ Yes If yes, briefly describe.

18. Environmental management

What measures are currently proposed to avoid, minimise or manage the main potential adverse environmental effects? (if not already described above)

☒ Siting: Please describe briefly

In an area with a number of conflicting constraints, the alignment selected uses the most effective combination of the existing road reserve and freehold land to minimise environmental, social and economic impacts overall. It also considers the amenity of adjacent property owners for accessibility and impacts on the properties where acquisition is anticipated.

Based on previous Net Gain evaluations of the broader road reserve, the proposed alignment through the area of Sheepwash Creek Road to Fulham has been able to minimise impact by the following estimate:

EVC	Study Area (HH)	HH proposed to be removed	Minimisation (saving) (HH)
PGW (high)	10.5	6	4.5
PGW (very high)	12.0	2.5	9.5
SS (high)	1.0	0.5	0.5
GW (high)	9.2	5.0	4.2
GW (very high)	0.5	0.5	0
	33.2HH	14.5HH	18.7HH saving

With the alignment now proposed at Barrs Lane to utilise freehold land, this saving should increase further. Compared with the net impact of the project, including Wurruk, Traralgon East and Fulham being a loss of 23 HH of vegetation, a significant amount of vegetation has been able to be saved.

☒ Design: Please describe briefly

Innovative cross sections, intersection treatments and design options for protection of services have been developed to minimise impact on critical areas. Appropriate attention has also been paid to providing the correct road safety features. In some sections, detailed design is being undertaken directly by VicRoads to reduce the risk of additional impacts by the Contractor.

☒ Environmental management: Please describe briefly.

Investigations for potential environmental effects have been undertaken, including development by VicRoads of a Project Environment Protection Strategy (PEPS) in accordance with VicRoads Project Management Guidelines for Environment Protection to document these effects and how they'll be managed. Contractors will also be required to develop Environmental Management Plans (EMP's) before the commencement of works in line with the PEPS document. The contract will also require an EMP to be prepared for each construction activity and stage of work. The plan will cover environmental and social issues discovered in background studies to provide guidance for the design and construction phases of the project. The EMP's will be subject to regular independent surveillance and audit. The PEPS also documents relevant responsibilities and environmental obligations.

☒ Other: Please describe briefly

Native vegetation that is required to be removed will be offset in accordance with "Victoria's Native Vegetation Management: A Framework for Action."

19. Other activities

Are there any other activities in the vicinity of the proposed project that have a potential for cumulative effects?

☐ NYD ☒ No ☐ Yes If yes, briefly describe.

20. Investigation program

Study program

Have any environmental studies not referred to above been conducted for the project?

☒ No ☐ Yes If yes, please list here and attach if relevant.

Has a program for future environmental studies been developed?

☐ No ☒ Yes If yes, briefly describe.

Further environmental studies have been programmed.

a) Targeted flora and fauna surveys will be undertaken at the most appropriate time over the next 12 months. The surveys currently proposed include the following species:

FLORA

- River Swamp Wallaby-Grass
- Strzelecki Gum
- Clover Glycine
- Small-leaf Star-hair
- Variable Bossiaea
- Small Scurf-pea
- Bear's-ear
- Purple Diuris
- Rough-grain Love-grass
- Gippsland Lakes Peppermint
- Green Scentbark
- Hypsela
- Lanky Buttons
- Fisch's Greenhood
- Cobra Greenhood
- Sharp Greenhood
- Easter Water Ribbons
- Small-leaf Star-hair
- Yarra Gum
- Golden Grevillea

FAUNA

- Lewin's Rail
- Royal Spoonbill
- Eastern Great Egret
- Hardhead
- Grey Goshawk
- White-bellied Sea-Eagle
- Black Falcon
- Powerful Owl
- Masked owl
- Chestnut-rumped Heathwren
- Lace Goanna
- Swamp Skink

These studies will result in management plans for any species that are identified directly or may be impacted on by the works.

b) Final Net Gain studies are to be done once final designs are completed as the current calculations are based on habitat hectare scores from the vegetation condition assessment ("Vegetation Condition Assessment for the proposed Princes Highway East duplication, Flynn to Fulham, Victoria, 2009"), and reassessed if variations to clearing is undertaken during the construction of the project.

c) The Cultural Heritage Management Plan is to be completed mid 2010 for Traralgon East to Flynn and late 2010 for Flynn to Rosedale and Nambrok. Other studies will be undertaken for the remaining areas should additional funding be provided for construction.

Consultation program

Has a consultation program been conducted to date for the project?

☐ No ☒ Yes If yes, outline the consultation activities and the stakeholder groups or organisations consulted.

A number of community information sessions have been held in accordance with the Communications Plan to gain community feedback on proposed designs and to provide an opportunity for suggested alterations to designs. Two sessions were held in February 2010, one at Wurruk and one at Flynn. The most recent session was in June 2010 for the Flynn to Rosedale, and Nambrok sections. There have also been meetings with individual local residents and groups like the Flynn Landcare Group, to assess their concerns on items like land acquisition and access.

Relevant authorities including Gippsland Water, DSE and Councils have been consulted regarding potential impacts on existing infrastructure and habitat. Options have been discussed including pros and cons for proposed alignments but to also ensure that all viable alternatives have been evaluated.

Has a program for future consultation been developed?

☐ NYD ☐ No ☒ Yes If yes, briefly describe.

VicRoads South Eastern Projects has a Communications team who have developed a Communication Strategy and Plan for the Princes Highway East duplication project. The Communications Strategy and Plan include stakeholders identified to be consulted with, and a monthly schedule for updating the community on project issues via, eg. project updates, website, newspaper articles, and community sessions. A community session is proposed for the Traralgon East to Flynn section in August 2010 to consult on the access changes now to be proposed.

Should funding for construction be made available for other sections including the Kilmany township area, further community meetings and studies in to social impact will be required.

The EES and EPBC referrals will be available for public display. Following EES referral and EPBC referral decisions, public exhibition of the Planning Scheme amendments required for the project will be undertaken, and as necessary planning permits, and associated public notification, to remove native vegetation will be sought from the local councils.

Authorised person for proponent:

I, CHARLIE BROADHURST (Charlie Broadhurst),

(Project Director – South Eastern Projects), confirm that the information contained in this form is, to my knowledge, true and not misleading.

Signature _____

Date 9.8.2010

Person who prepared this referral:

I, CAROLYN DEPPELER (Carolyn Deppeler),

(Team Leader Project Delivery – South Eastern Projects), confirm that the information contained in this form is, to my knowledge, true and not misleading.

Signature _____

Date 9/8/10

Attachments

1. **Locality Plan & Project Plan**
2. **Construction Areas**
3. **Alignment Plans & Typical cross sections**
4. **Options Assessment**
5. **Flora and Fauna Assessment**
6. **Matted Flax Lily Targeted Survey, and listing of targeted surveys**
7. **Net Gain Assessment and summary of impact**
8. **Cultural Heritage**