Appendix C – Out of hours construction impacts: paving and asphalting

Out of hours interpretation

Out of hours works are defined within Part A, Section 3.2.5 as noise generating activities undertaken outside of the proposed construction hours.

Figure interpretation

In order to quantify the level of impact a risk matrix has been developed, which assigns a value for each stage of the works and categorises the risk level based on a comparison with the NML or the ICNG highly affected criterion of 75dB(A). **Table C.1** presents the out of hours risk matrix and indicates where moderate exceedances are predicted, works would be undertaken in line with a consultation program.

Table C.1 Out of hours risk matrix for impact

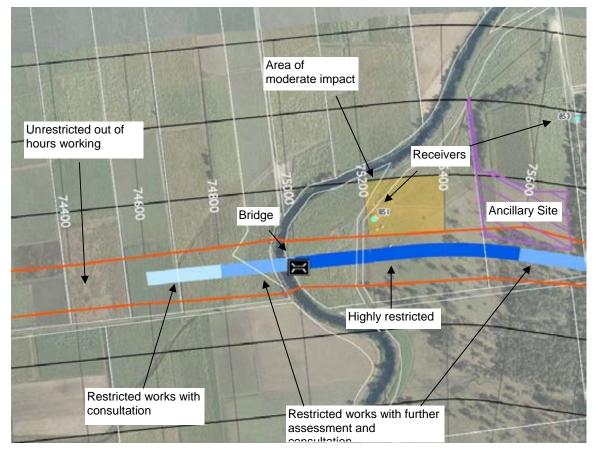
Predicted noise levels				
	<(NML – 10)	(NML – 10) to NML	NML to (NML+5)	>(NML + 5)
	No Impact	Low Impact	Moderate Impact	High Impact
No Impact	Closest out of hour construction works predicted to be inaudible			
Low Impact	Construction levels equal to the lowest out of hours NML are unlikely to cause significant disturbance to the majority of receivers, particularly for short term works.			
Moderate Impact	Levels exceeding the lowest out of hours NML by up to 5dB(A) would be perceptible by the majority of receivers. The impact will be greatest in highly populated areas. Where areas are less populated, the potential for mitigation is more achievable and therefore impacts may be mitigated.		populated areas.	
High Impact	perceptible by almos	t all receivers. Receive	ML by more than 5dB(ers exposed to this mag ial for adverse commu	nitude of impact are

Table C.2 Out of hours risk matrix for identification of suitable work areas

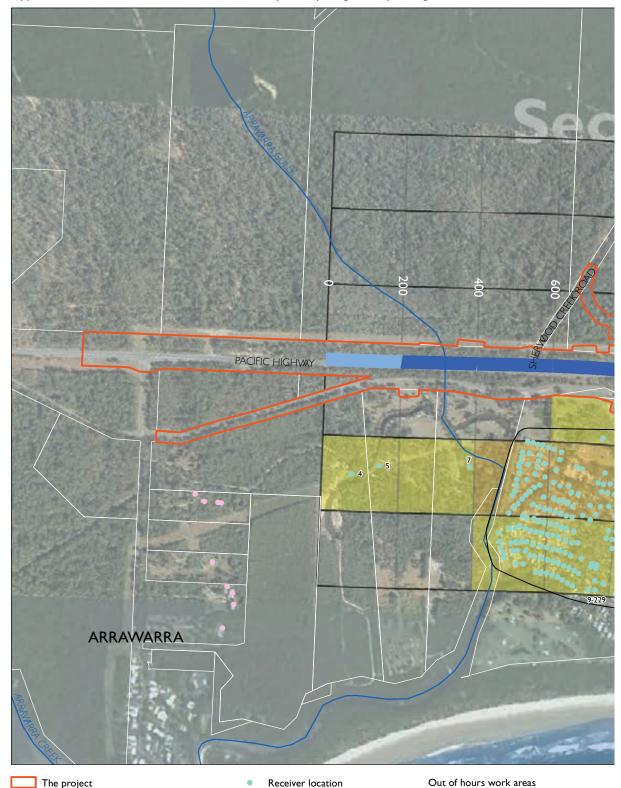
Area classification	Requirements
Unrestricted	Closest out of hour construction works predicted to be inaudible and therefore work area is suitable for out of hours works without undertaking any specific consultation, assessment, management or mitigation measure.
Restricted with consultation	Area is suitable for out of hours works with consultation at the nearest noise sensitive receivers. Implementation of all feasible and reasonable mitigation measures.
Restricted with further assessment and consultation	Out of hours construction works may be suitable for these areas, where reasonable justification can be made for their requirement. A detailed noise assessment and suitable targeted community consultation will be required. This may result in the implementation of appropriate feasible and reasonable mitigation and management measures.
Highly restricted	 Typical construction works are unlikely to be suitable for these areas for all but the most essential of works, i.e. one of the following: Health & safety requirements Work required by emergency services Works required on existing highway where total road closures are required Where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm Where prior agreement is provided from landowners (i.e. negotiated agreements) For technical activities where works cannot be undertaken within the proposed hours of a single period i.e. 24 hour concrete pours within the project. It should be noted that even in the above circumstances, strong justification for the works would be required along with community consultation and implementation of mitigation/management measures.

The study area (600 metres either side of the alignment) has been split into a grid of 200 metres by 200 metres

The predicted noise levels from the activity of Paving & Asphalting, at each receiver, has been used to assign a No impact, Low, Moderate or High Impact, as per **Table C.1**, to each of the assessable receiver locations. Where a receiver is predicted to experience a noise level in the range shown in **Table C.1**, the resultant grid square will be coloured accordingly. This impact has been transposed onto the alignment to identify where potential out of hours work may be suitable, with **Table C.2** used as the key. This does not necessarily mean that out of hours works would be undertaken in these areas, but purely identifies the associated impacts. An annotated screenshot to illustrate this is presented below.



These figures also identify locations of ancillary sites, bridges and potential blasting areas within the project.

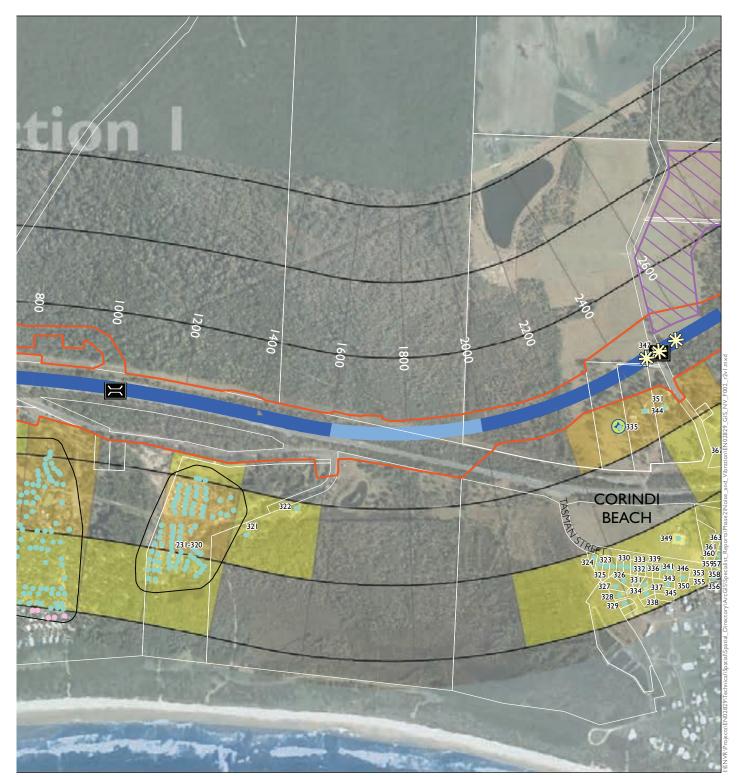




- The project Upgrade completed to dual carriageway
- Upgrade under construction
- Ancillary site

- Receiver locationReceiver location
 - Receiver location outside NCA
- Logger location
- Blasting location
- 📕 Bridge

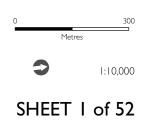
- Unrestricted
 - Restricted with consultation
 - Restricted with further assessment and consultation
- Highly restricted



Out of hours impact areas

- No impact Low impact Moderate impact
- High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🛟
Zone A







Appendix C.2 Out of hours construction impacts - paving and asphalting

- Upgrade completed to dual carriageway Upgrade under construction 🔼 Ancillary site
- Receiver location
- Receiver location outside NCA

Unrestricted

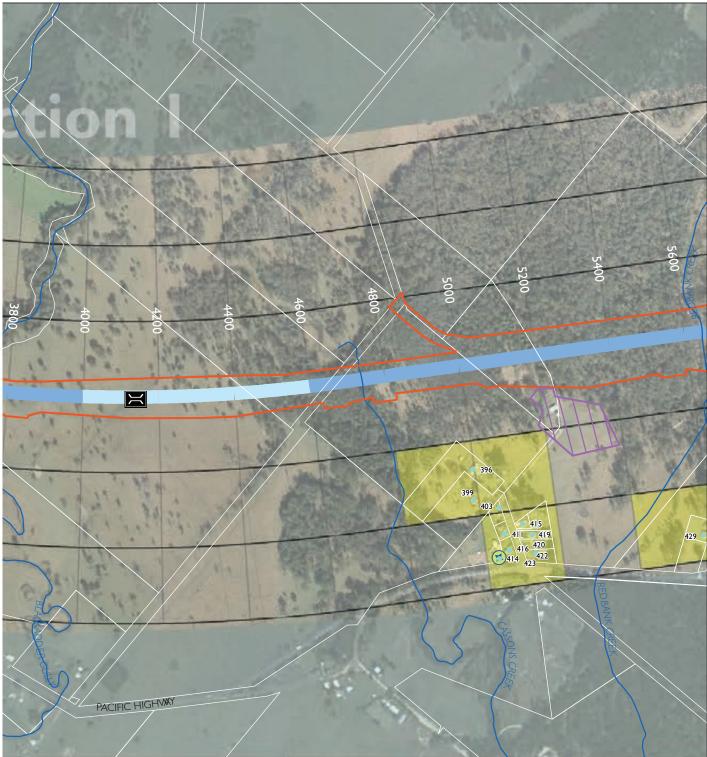
Highly restricted

Restricted with consultation Restricted with further

assessment and consultation

- \bigcirc Logger location
- Blasting location
- X Bridge

Noise and vibration assessment

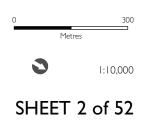


Out of hours impact areas



High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🕂
Zone A





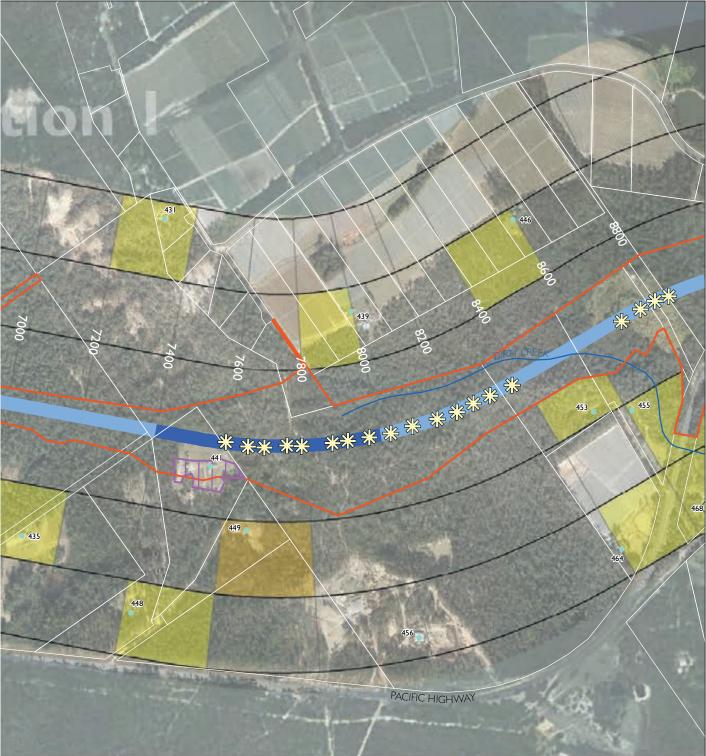




- The project
 Upgrade completed to dual carriageway
 - Upgrade under construction
- 🔼 Ancillary site

- Receiver location
 - Receiver location outside NCA
- Logger location
- Blasting location
- 📕 Bridge

- Out of hours work areas
- - Restricted with consultation Restricted with further
 - assessment and consultation
 - Highly restricted

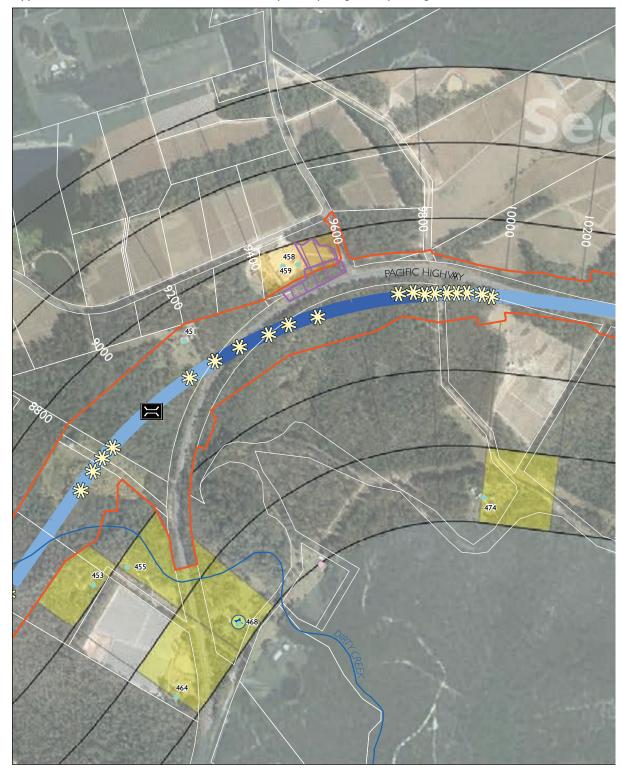




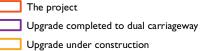
NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🕂
Zone A







Appendix C.4 Out of hours construction impacts - paving and asphalting



- 🔼 Ancillary site

Receiver location •

- Receiver location outside NCA
- \bigcirc Logger location
- Blasting location
- X Bridge

- Unrestricted Restricted with consultation Restricted with further
- assessment and consultation
- Highly restricted

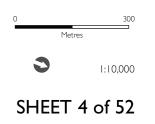
Out of hours work areas



Out of hours impact areas
No impact
Low impact

- Moderate impact
- High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🕂 🙀
Zone A







Appendix C.5 Out of hours construction impacts - paving and asphalting



Receiver location

- Receiver location outside NCA
- Logger location
- Blasting location
- 🖬 Bridge

Out of hours work areas

- Restricted with consultation
- Restricted with further
- assessment and consultation
- Highly restricted



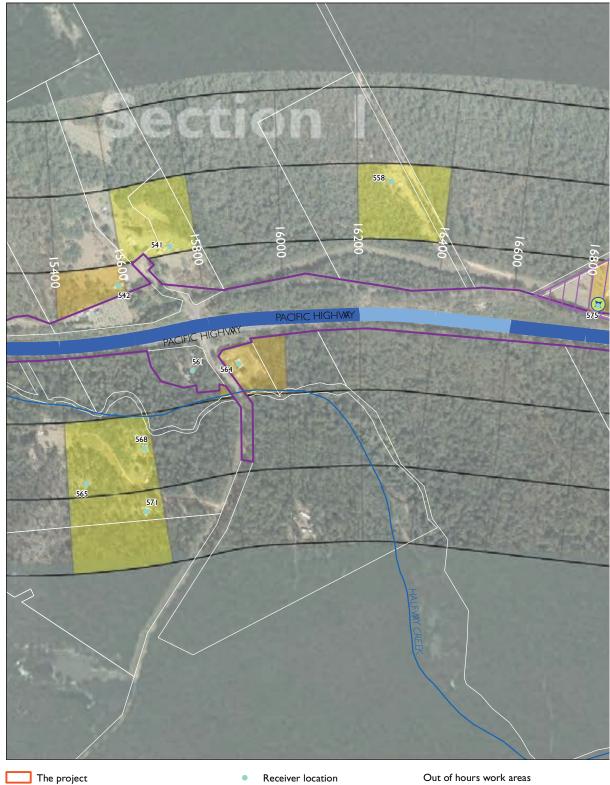
Out of hours impact areas

- No impact
 Low impact
 Moderate impact
- High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🛟
Zone A







Appendix C.6 Out of hours construction impacts - paving and asphalting

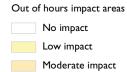
- Upgrade completed to dual carriageway
 - Upgrade under construction
- 🖊 Ancillary site

- Receiver locatReceiver locat
 - Receiver location outside NCA
- Logger location
- Blasting location
- 🖬 Bridge

- Restricted with consultation Restricted with further
- assessment and consultation
- Highly restricted

Unrestricted





High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🛟
Zone A





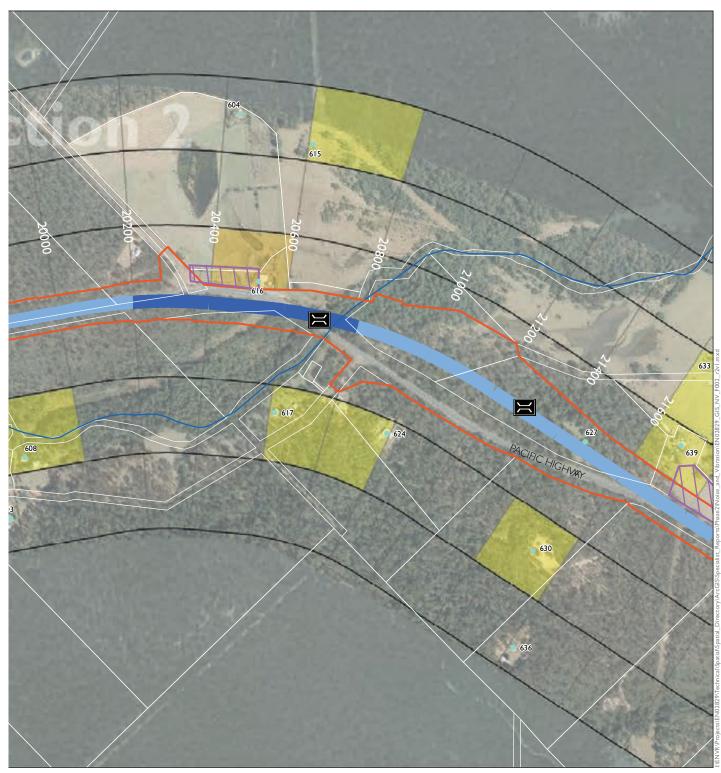


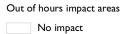
Appendix C.7 Out of hours construction impacts - paving and asphalting

- The project
 Upgrade completed to dual carriageway
 Upgrade under construction
- Ancillary site

- Receiver location
 - Receiver location outside NCA
- Logger location
- Blasting location
- 📕 Bridge

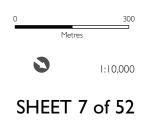
- Out of hours work areas
 Unrestricted
 Restricted with consultation
 Restricted with further
 assessment and consultation
 - Highly restricted



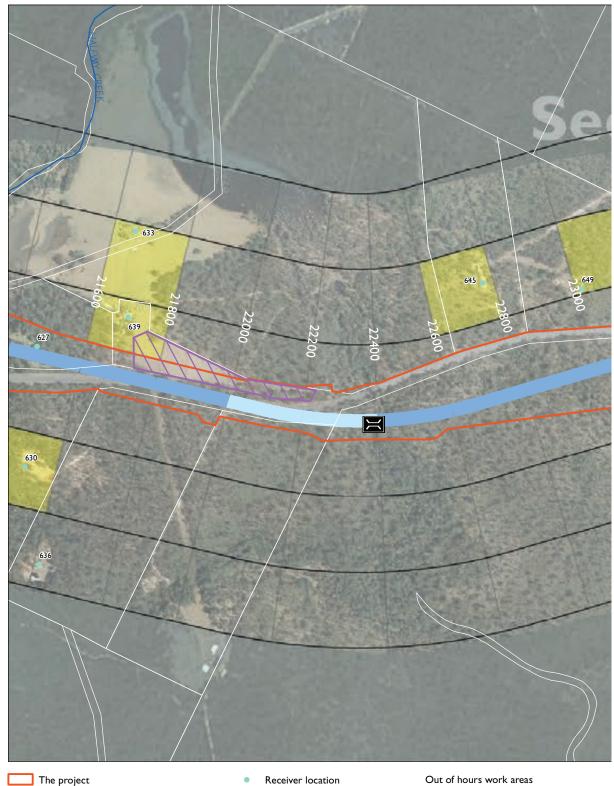


- Low impact
- Moderate impact
- High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🛟
Zone A







Appendix C.8 Out of hours construction impacts - paving and asphalting

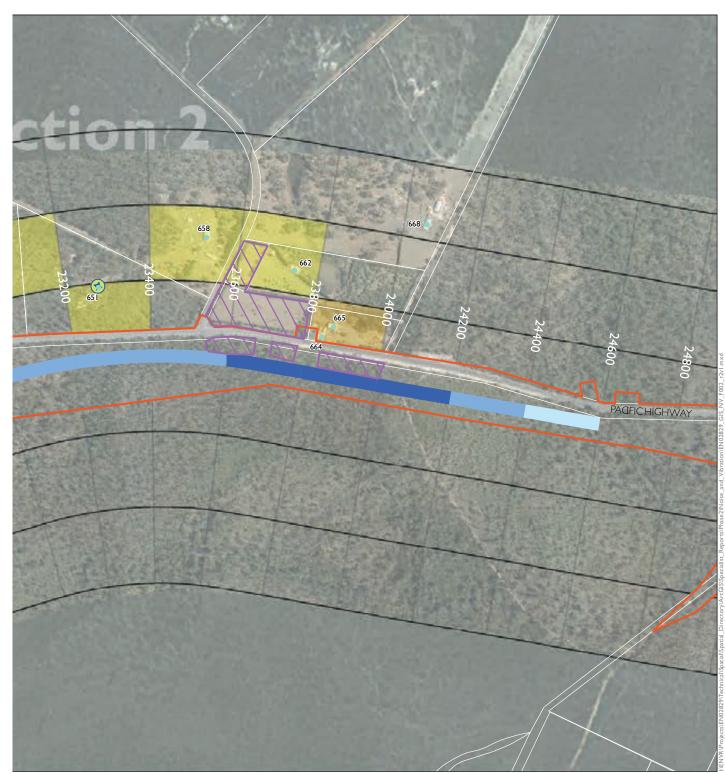


- Upgrade under construction
- 🔼 Ancillary site

- Receiver location
 - Receiver location outside NCA
- \bigcirc Logger location
- **2**12 Blasting location
- X Bridge

Unrestricted Restricted with consultation Restricted with further

- assessment and consultation
- Highly restricted



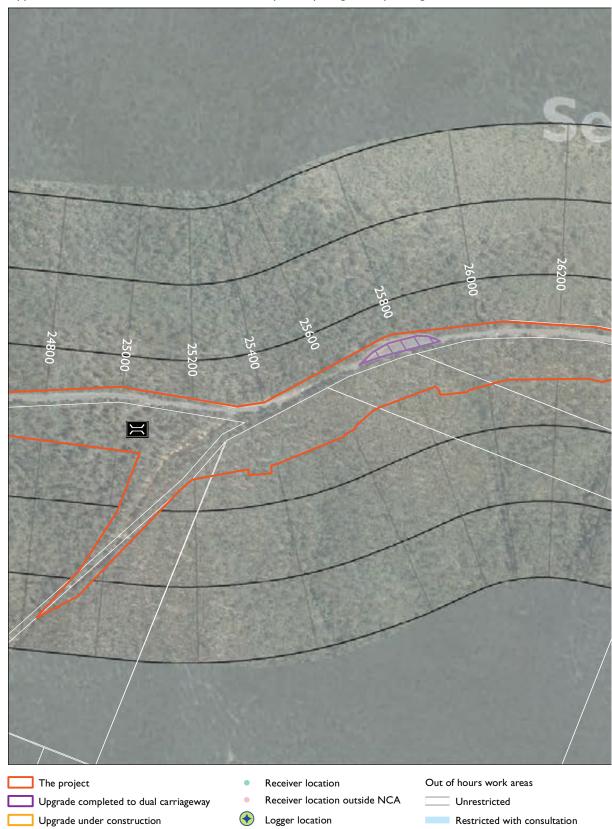
Out of hours impact areas

- No impact Low impact
- Moderate impact
- High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🛟
Zone A







212

X

Blasting location

Bridge

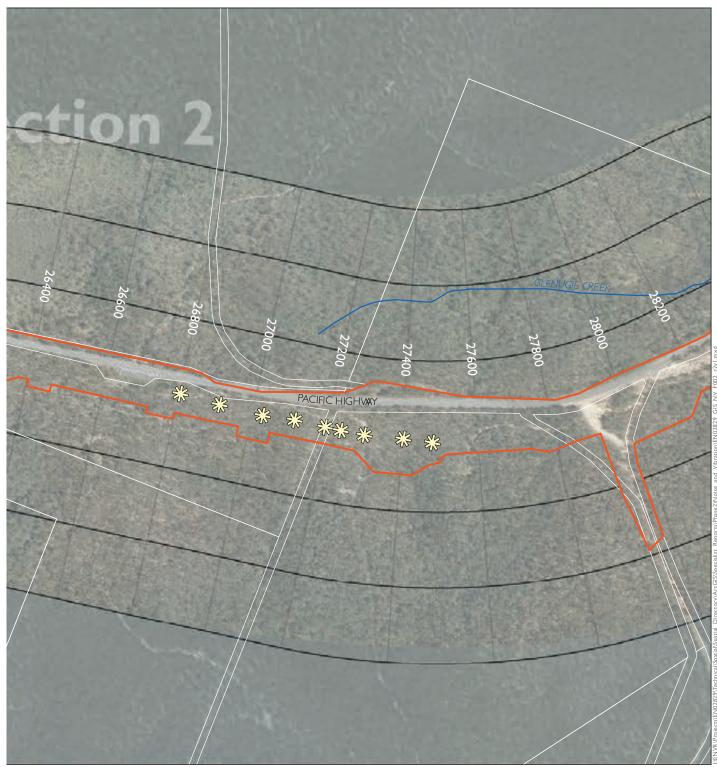
Restricted with further

Highly restricted

assessment and consultation

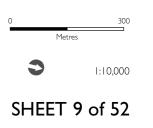
Appendix C.9 Out of hours construction impacts - paving and asphalting

🔼 Ancillary site

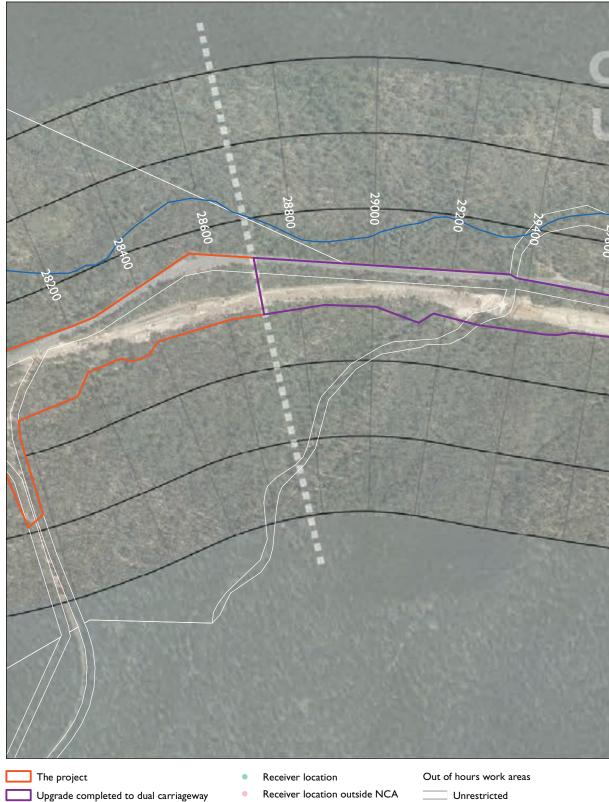




NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🕂 🙀
Zone A







Appendix C.10 Out of hours construction impacts - paving and asphalting

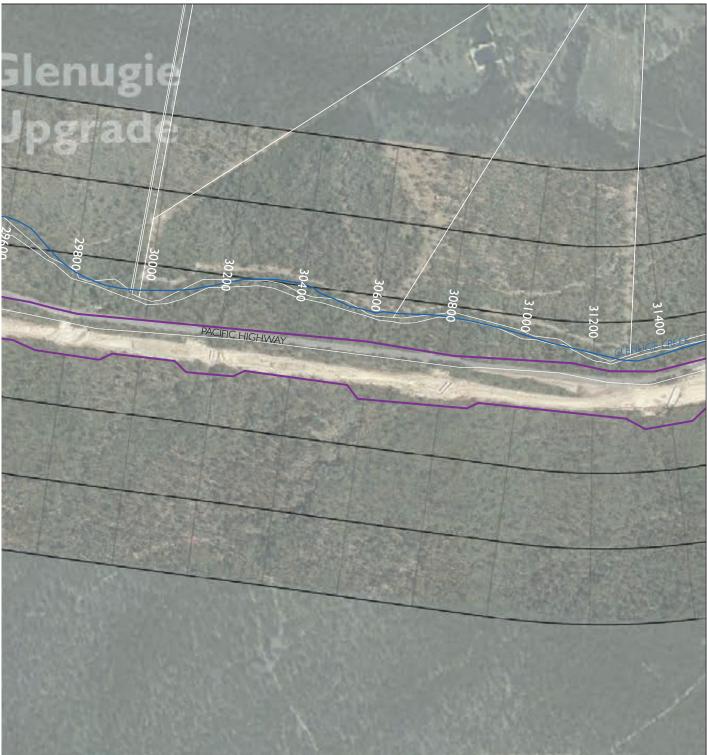
- Upgrade under construction
- 🔼 Ancillary site

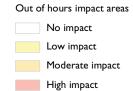
- Receiver location outside NCA
- \bigcirc Logger location
- S12 Blasting location
- X Bridge

Restricted with further assessment and consultation

Restricted with consultation

Highly restricted





 NCA Zones

 Zone F

 Zone E

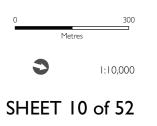
 Zone D

 Zone C

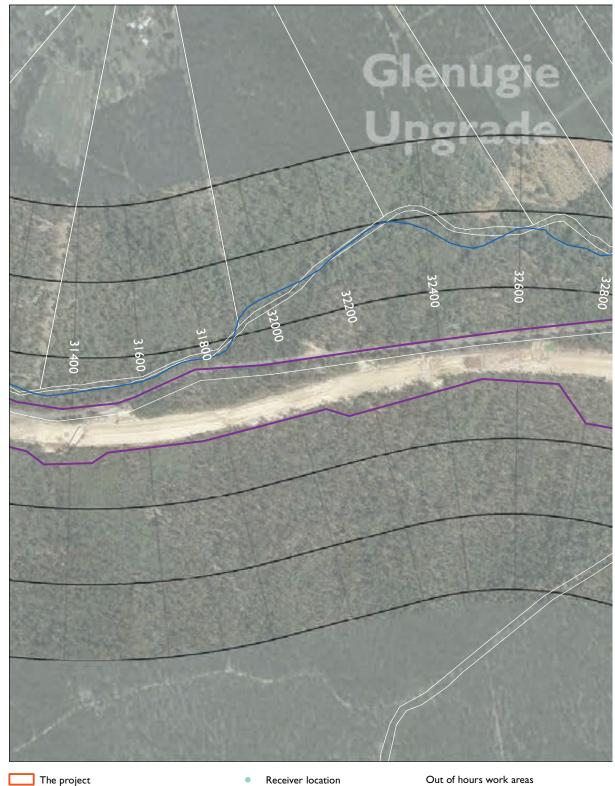
 Zone B

 ↓↓ §

 Zone A







Appendix C.11 Out of hours construction impacts - paving and asphalting



- Receiver location
 - Receiver location outside NCA
- \bigcirc Logger location
- S12 Blasting location
- X Bridge

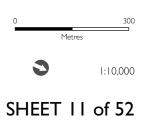
- Unrestricted Restricted with consultation Restricted with further
 - assessment and consultation
- Highly restricted



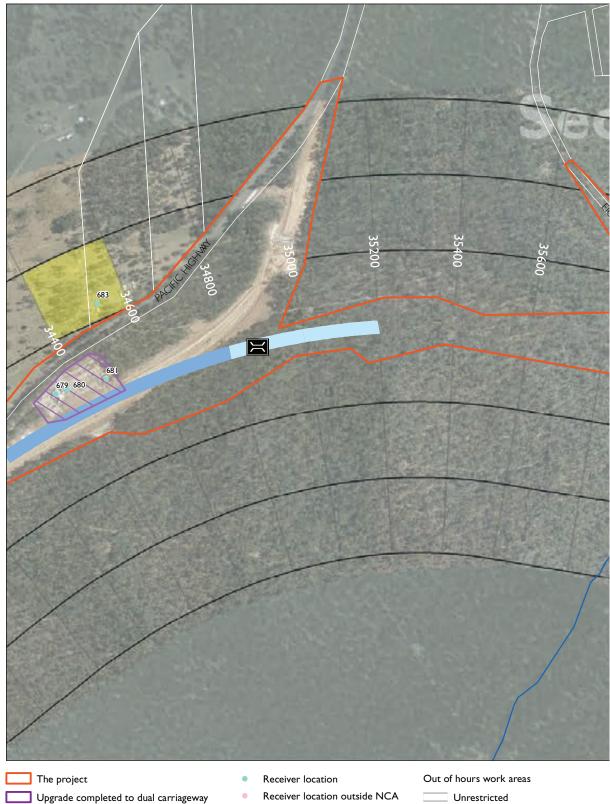
Out of hours impact areas

- No impact Low impact Moderate impact
- High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🛟
Zone A







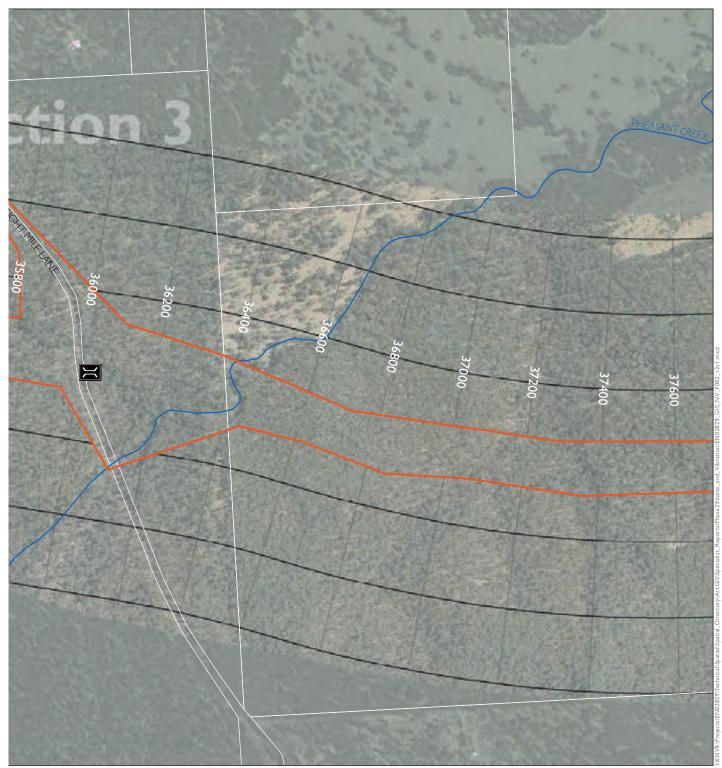
Appendix C.12 Out of hours construction impacts - paving and asphalting

- Upgrade under construction
- 🔼 Ancillary site

- Receiver location outside NCA
- \bigcirc Logger location
- **2**12 Blasting location
- X Bridge

Restricted with consultation Restricted with further

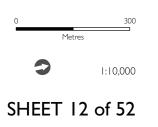
- assessment and consultation
- Highly restricted



Out of hours impact areas

- No impact Low impact Moderate impact
- High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🛟
Zone A







Appendix C.13 Out of hours construction impacts - paving and asphalting

🔼 Ancillary site

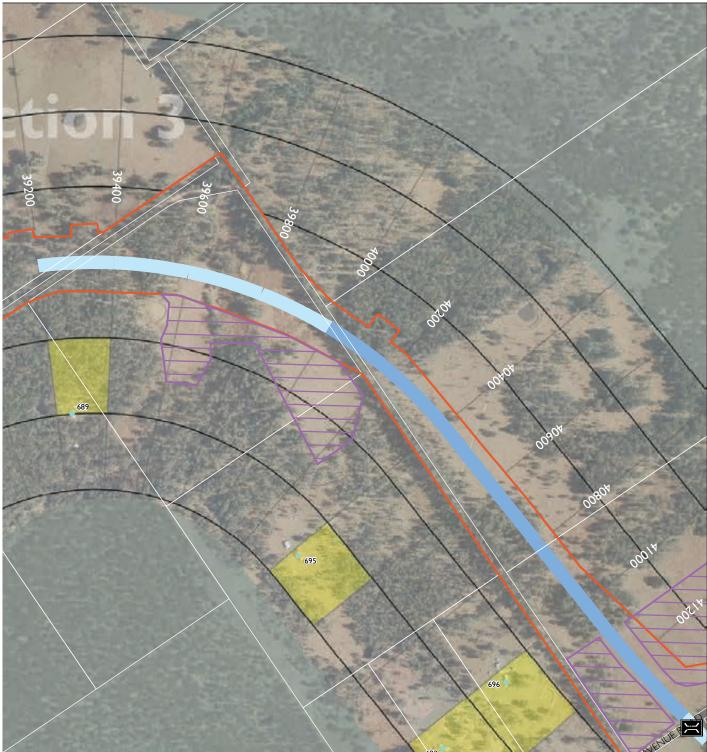
Upgrade under construction

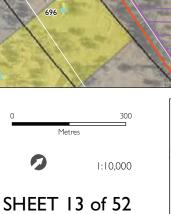
- Receiver location outside NCA
- \bigcirc Logger location
- Blasting location
- X Bridge

Restricted with further assessment and consultation

Restricted with consultation

Highly restricted





Metres

BALLINA WOODBURN EVANS HEAD YAMBA TUCABIA

VOOLGOOLG

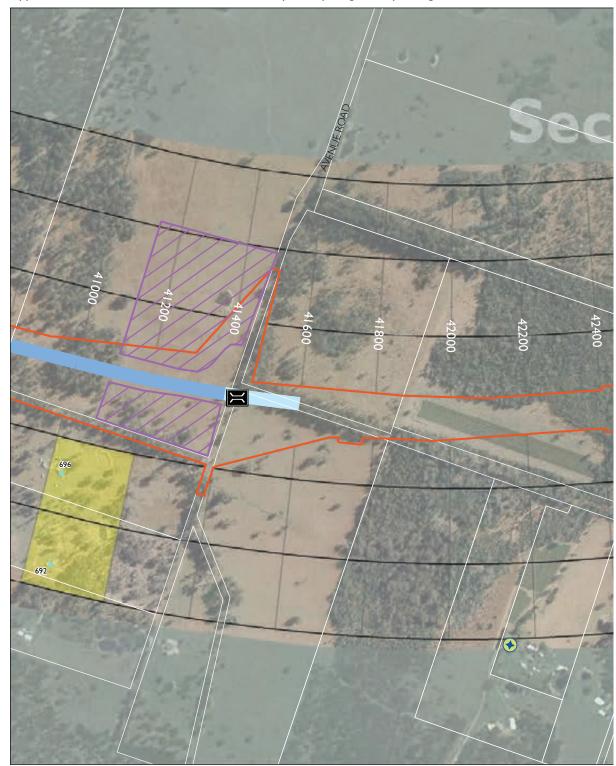
MACLEAN

GRAFTON

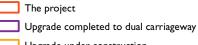
Out of	hours	impact	areas
	No im	pact	

- Low impact
- Moderate impact
 - High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B
Zone A



Appendix C.14 Out of hours construction impacts - paving and asphalting



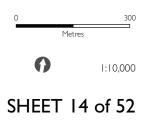
- Upgrade under construction
 Ancillary site
- Receiver locationReceiver location
 - Receiver location outside NCA
- Logger location
- Blasting location
- 🖬 Bridge

- Out of hours work areas
- Unrestricted
 - Restricted with consultation
 - Restricted with further assessment and consultation
 - Highly restricted



- Low impact
- Moderate impact
- High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🛟
Zone A





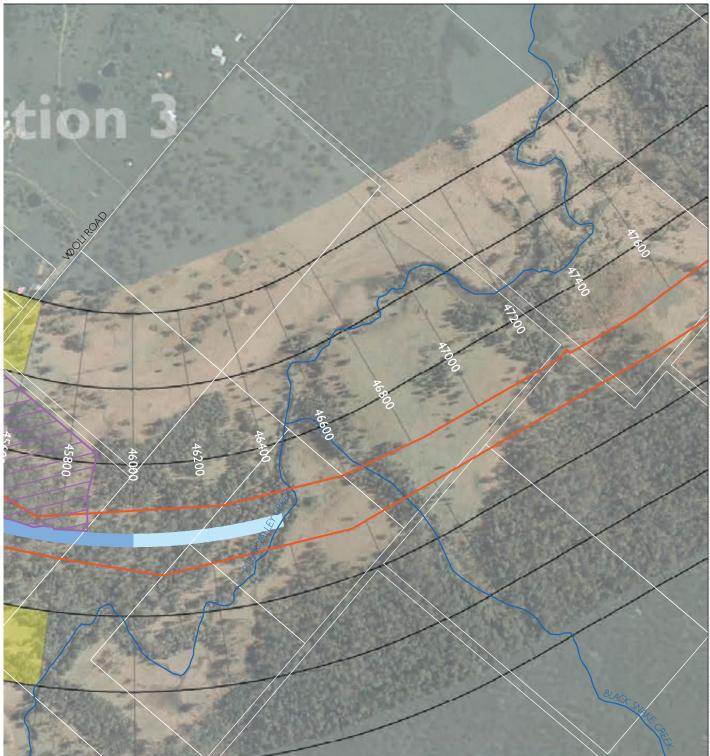


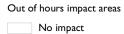
Appendix C.15 Out of hours construction impacts - paving and asphalting

- The project
 Upgrade completed to dual carriageway
 Upgrade under construction
- Ancillary site

- Receiver location
 - Receiver location outside NCA
- Logger location
- Blasting location
- 🗷 Bridge

- Out of hours work areas
 - Unrestricted
 - Restricted with consultation
 - Restricted with further assessment and consultation
 - Highly restricted

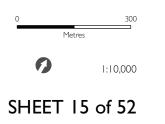




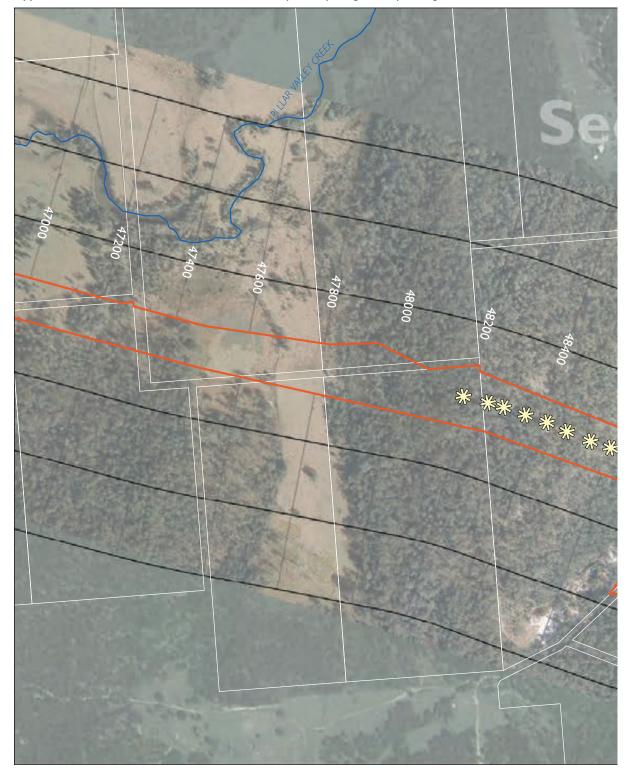
Low impact

- Moderate impact
 - High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🛟
Zone A





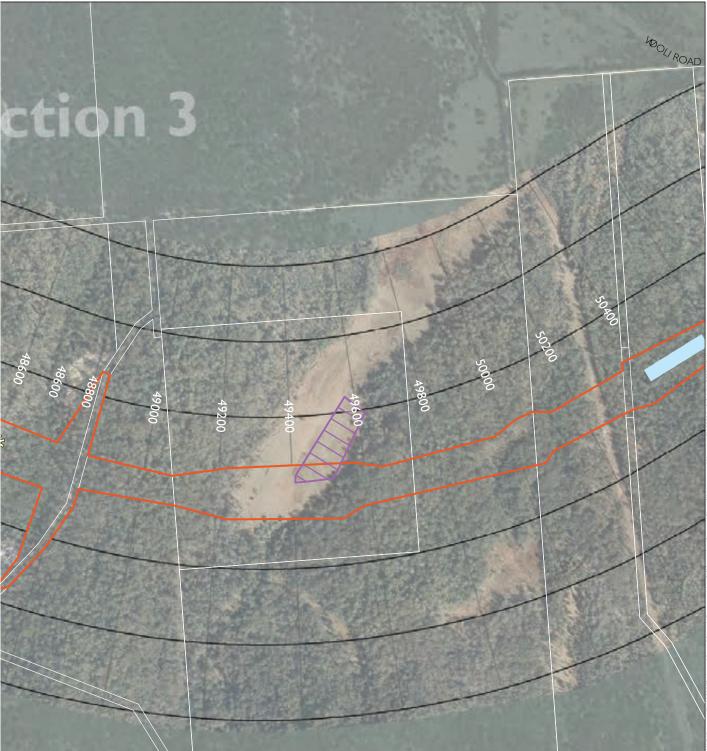




- Upgr
- The project
 - Upgrade completed to dual carriageway
 - Upgrade under construction
- Ancillary site

- Receiver location
 - Receiver location outside NCA
- Logger location
- Blasting location
- 🖼 Bridge

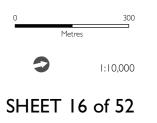
- Out of hours work areas
- Unrestricted
 - Restricted with consultation
 - Restricted with further assessment and consultation
 - Highly restricted



Out of hours impact areas

- No impact Low impact
- Moderate impact
- High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🛟
Zone A







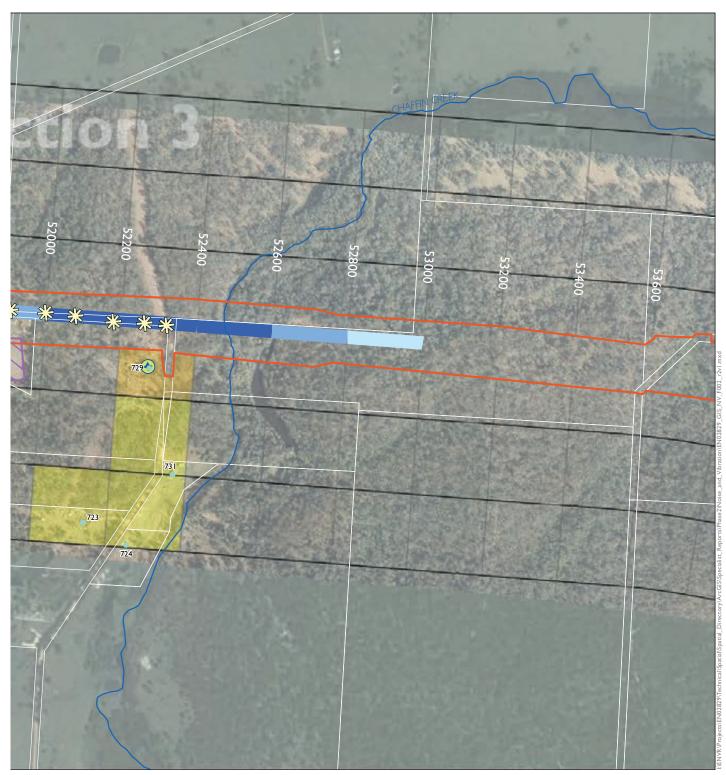
X

Bridge

assessment and consultation

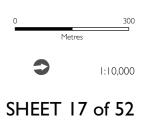
Highly restricted

Appendix C.17 Out of hours construction impacts - paving and asphalting

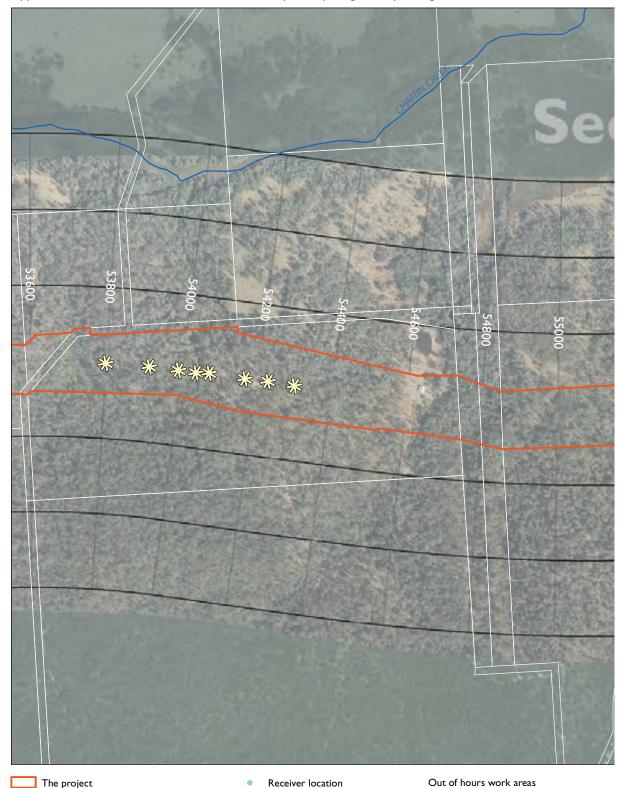


- No impact Low impact Moderate impact
- High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🛟
Zone A







Appendix C.18 Out of hours construction impacts - paving and asphalting



The project

- Upgrade completed to dual carriageway
- Upgrade under construction
- Z Ancillary site

- Receiver location
 - Receiver location outside NCA
- \bigcirc Logger location
- Blasting location
- × Bridge

Unrestricted Restricted with consultation

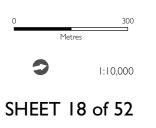
- Restricted with further
- assessment and consultation
- Highly restricted



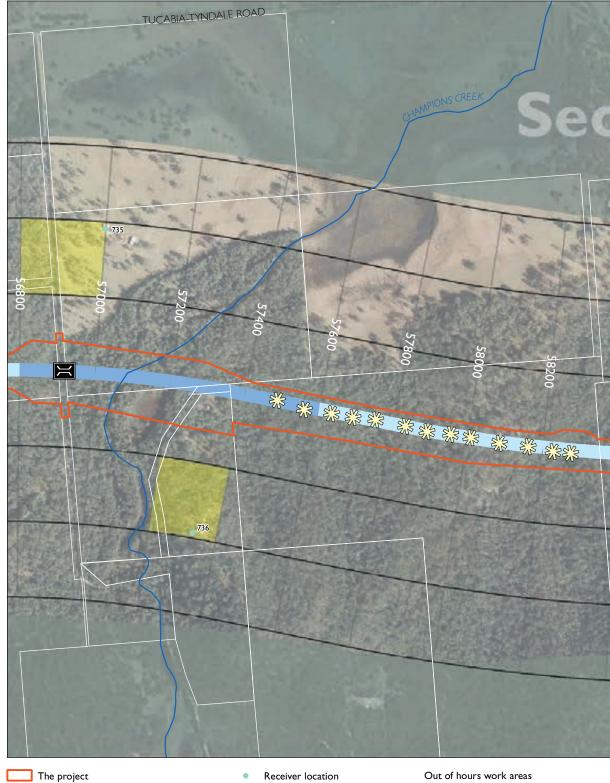
Out of hours impact areas
No impact
Low impact
Moderate impact

High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🛟
Zone A







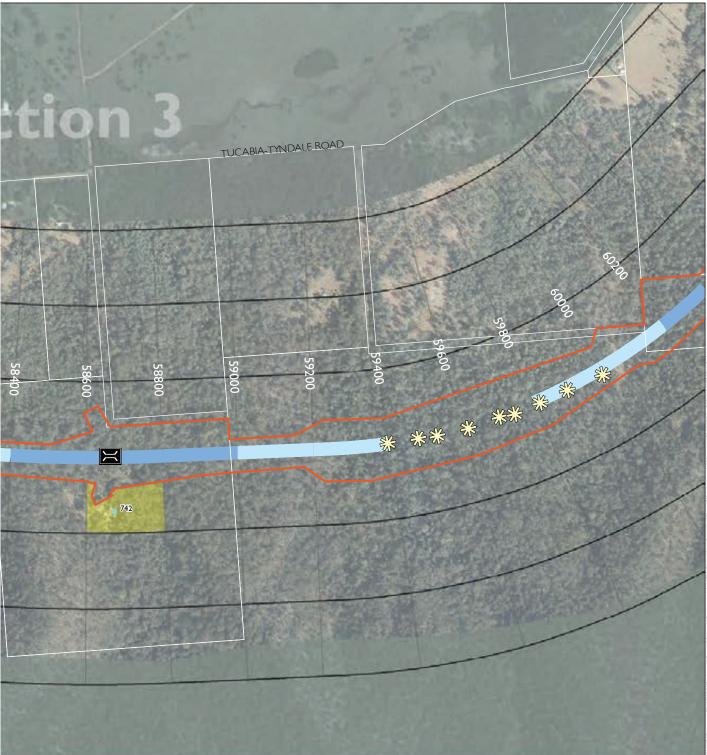
Appendix C.19 Out of hours construction impacts - paving and asphalting

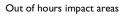
- The project
 Upgrade completed to dual carriageway
 - Upgrade under construction
- Ancillary site

- Receiver loca
 Receiver loca
 - Receiver location outside NCA
- Logger location
- Blasting location
- 🗷 Bridge

- Restricted with consultation Restricted with further
- assessment and consultation
- Highly restricted

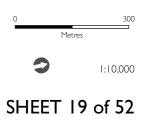
Unrestricted





- No impact
- Moderate impact
- High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🛟
Zone A







Appendix C.20 Out of hours construction impacts - paving and asphalting

- The project Upgrade completed to dual carriageway Upgrade under construction
- 🔼 Ancillary site

- Receiver location
 - Receiver location outside NCA
- \bigcirc Logger location
- Blasting location
- X Bridge

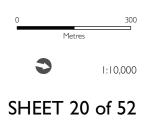
Unrestricted Restricted with consultation Restricted with further assessment and consultation Highly restricted

Noise and vibration assessment



- No impact
- Moderate impact
- High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🛟
Zone A







Appendix C.21 Out of hours construction impacts - paving and asphalting

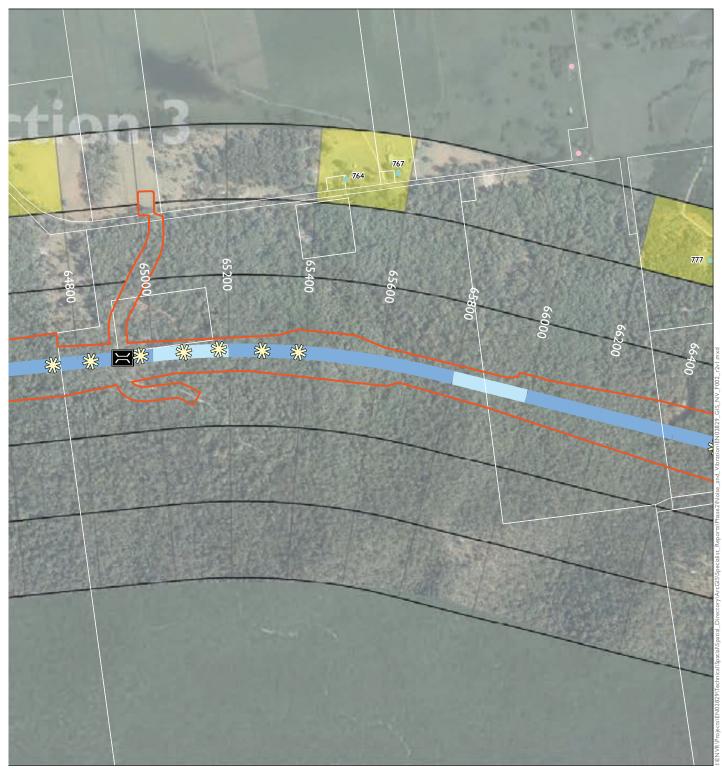


- The project
- Upgrade completed to dual carriageway
- Upgrade under construction
- Z Ancillary site

- Receiver location
 - Receiver location outside NCA
- \bigcirc Logger location
- Blasting location
- × Bridge

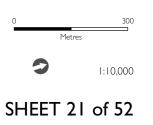
Unrestricted Restricted with consultation Restricted with further assessment and consultation

Highly restricted

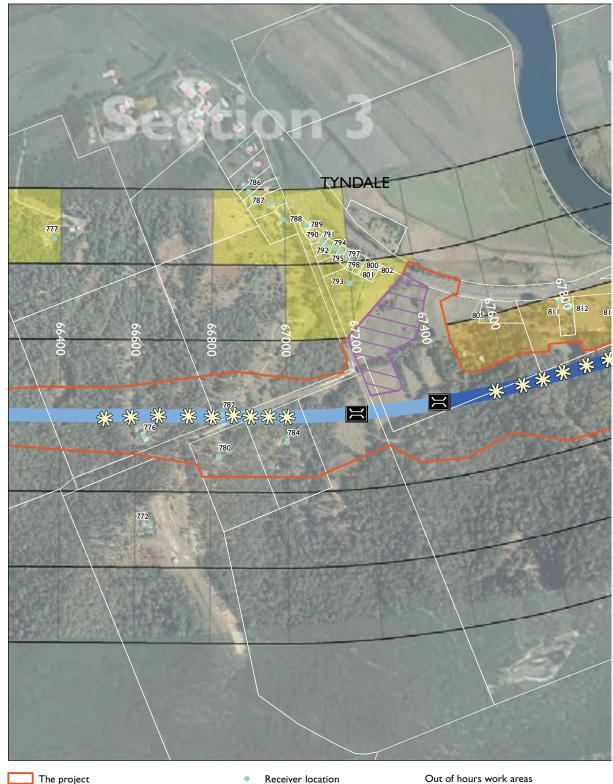


- No impact Low impact
 - Moderate impact
- High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🛟
Zone A







Appendix C.22 Out of hours construction impacts - paving and asphalting

- The project Upgrade completed to dual carriageway
 - Upgrade under construction
- 🔼 Ancillary site

- Receiver location
- Receiver location outside NCA
- \bigcirc Logger location
- **2**12 Blasting location
- X Bridge

- Unrestricted
 - Restricted with consultation Restricted with further
 - assessment and consultation
- Highly restricted



0_____

NCA Zones

Zone F

Zone E

Zone D

Zone C

Zone B

Zone A

+

Metres

300

SHEET 22 of 52



Out of hours impact areas

No impact

Low impact

High impact

Moderate impact



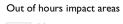
Appendix C.23 Out of hours construction impacts - paving and asphalting

- The project
 Upgrade completed to dual carriageway
 Upgrade under construction
- Ancillary site

- Receiver locationReceiver location
 - Receiver location outside NCA
- Logger location
- Blasting location
- 🖬 Bridge

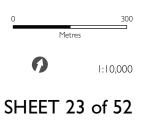
- Out of hours work areas
 Unrestricted
 - - Restricted with consultation Restricted with further
 - assessment and consultation
 - Highly restricted



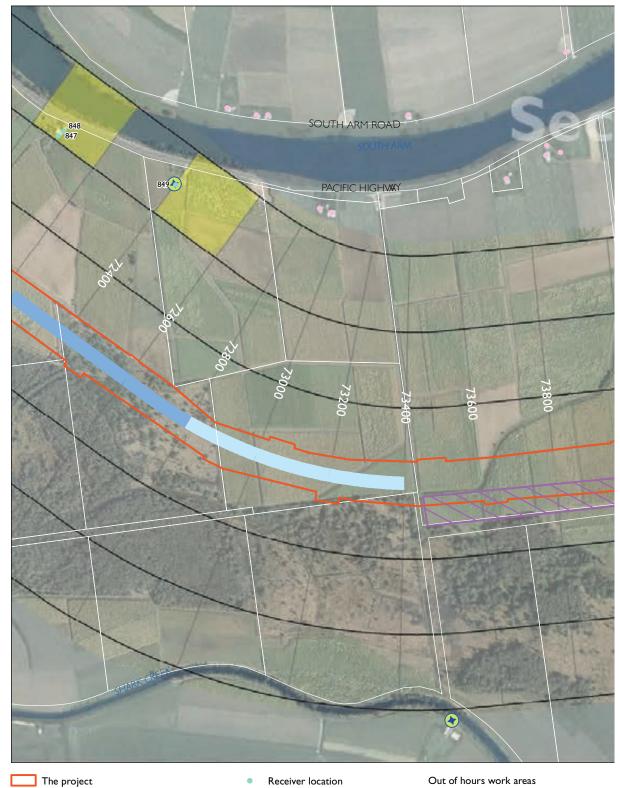


- No impact Low impact
- Moderate impact
- High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🛟
Zone A







Appendix C.24 Out of hours construction impacts - paving and asphalting

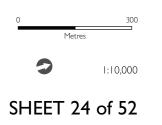
- The project Upgrade completed to dual carriageway
- Upgrade under construction 🔼 Ancillary site
- Receiver location outside NCA
- \bigcirc Logger location
- Blasting location
- X Bridge

- Out of hours work areas
- Unrestricted
 - Restricted with consultation
 - Restricted with further assessment and consultation
 - Highly restricted

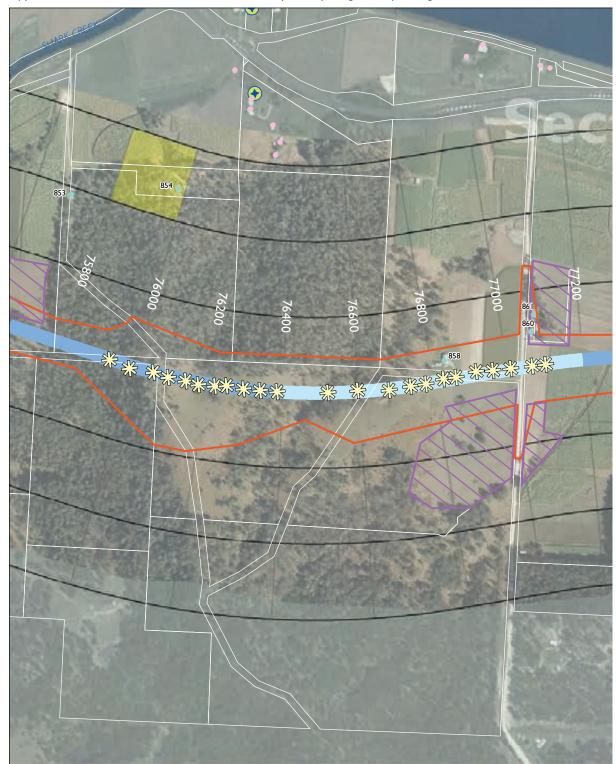


- No impact Low impact
 - Moderate impact
- High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🛟
Zone A







Appendix C.25 Out of hours construction impacts - paving and asphalting



- Upgrade under construction
- 🔼 Ancillary site

- Receiver location
 - Receiver location outside NCA
- \bigcirc Logger location
- Blasting location
- X Bridge

Out of hours work areas

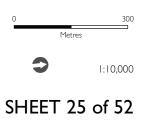
- Unrestricted
 - Restricted with consultation Restricted with further
 - assessment and consultation

Highly restricted

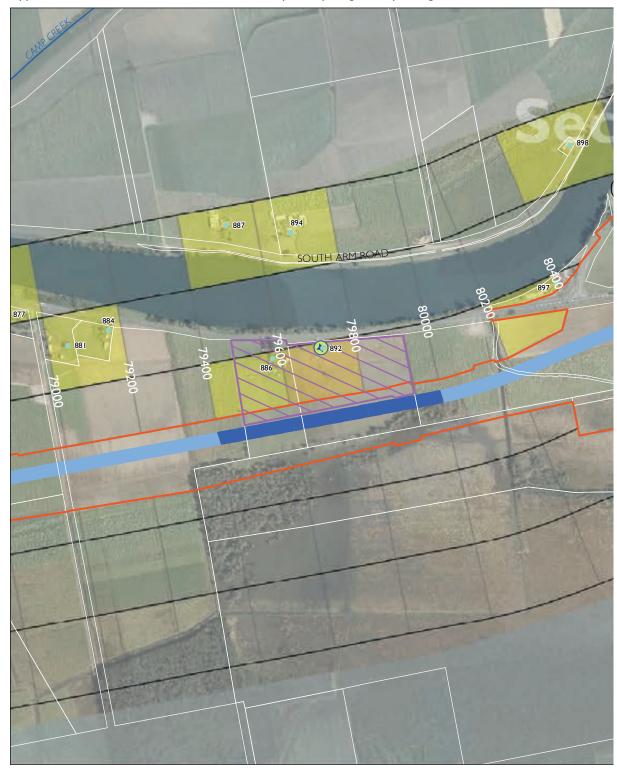


- No impact Low impact
 - Moderate impact
- High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200 m
Zone B 🛟
Zone A







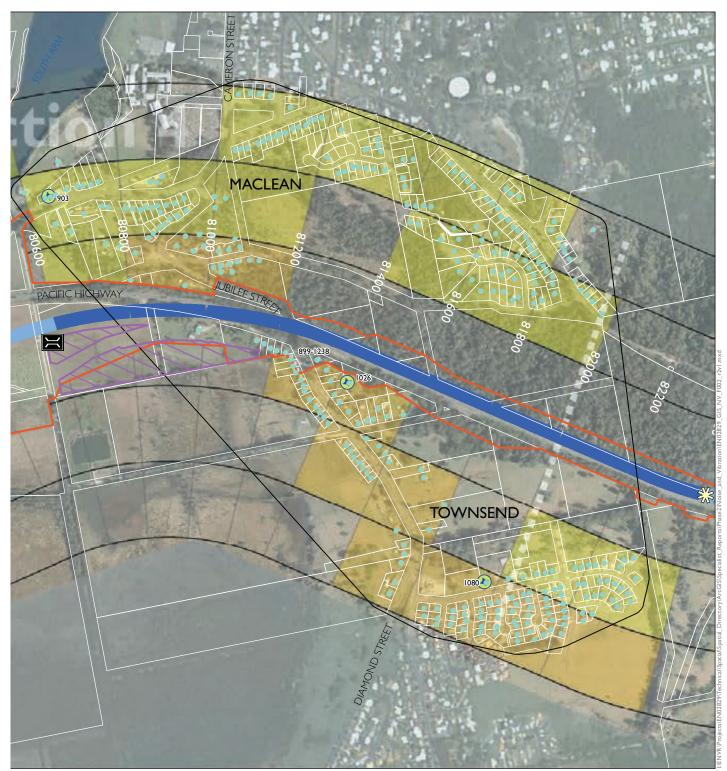
Appendix C.26 Out of hours construction impacts - paving and asphalting

- The project
 Upgrade completed to dual carriageway
- Upgrade under construction
- Ancillary site

- Receiver location
 - Receiver location outside NCA
- Logger location
- Blasting location
- 🖬 Bridge

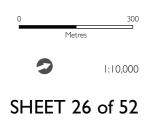
- UnrestrictedRestricted with consultation
- Restricted with further
- assessment and consultation
- Highly restricted

Out of hours work areas



- No impact Low impact
 - Moderate impact
- High impact

NCA Zor	nes
Zone F	
Zone E	
Zone D	
Zone C	200 m
Zone B	200m
Zone A	





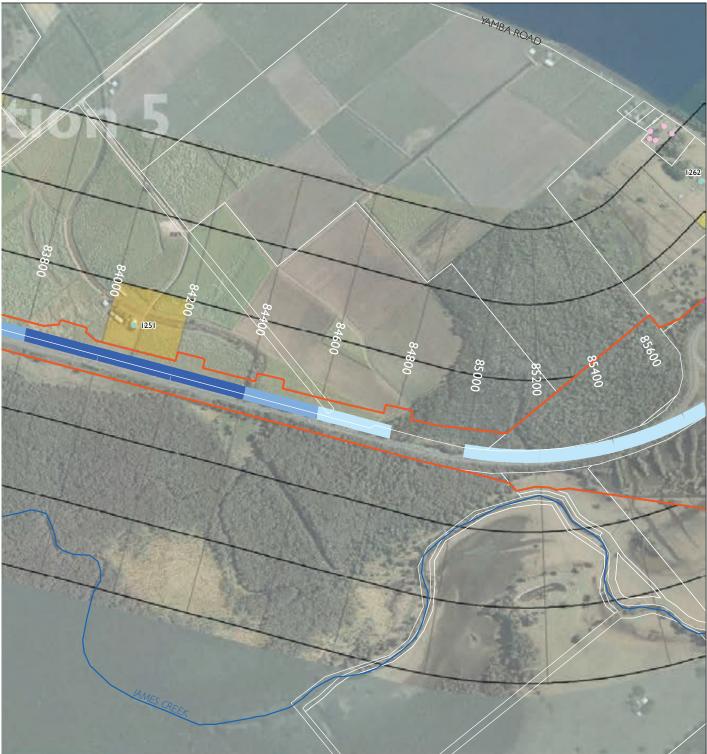


Appendix C.27 Out of hours construction impacts - paving and asphalting

- The project Upgrade completed to dual carriageway
- Upgrade under construction
- 🔼 Ancillary site

- Receiver location
- Receiver location outside NCA
- \bigcirc Logger location
- Blasting location
- X Bridge

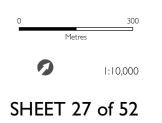
- Unrestricted Restricted with consultation Restricted with further
- assessment and consultation
- Highly restricted



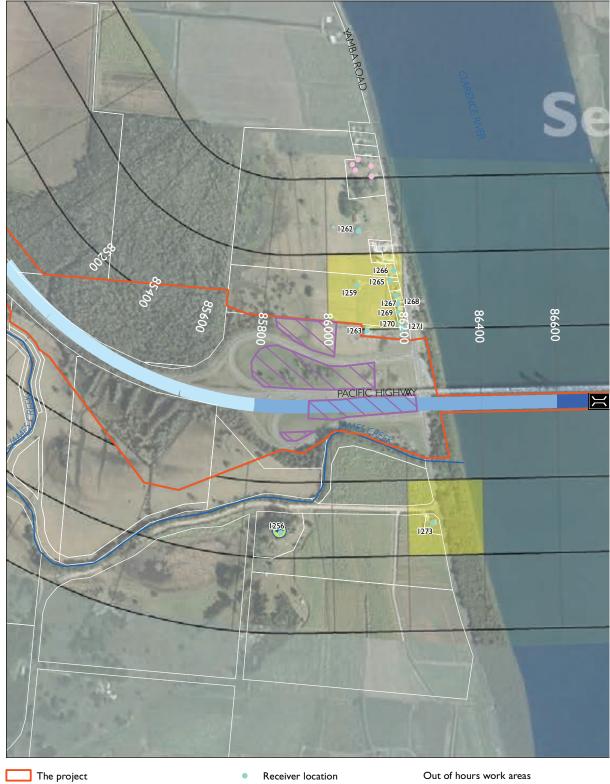
Out of hours impact areas
No impact
Low impact

- Moderate impact
- High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🕂
Zone A







Appendix C.28 Out of hours construction impacts - paving and asphalting

- Upgrade completed to dual carriageway
 - Upgrade under construction
- Ancillary site

- Receiver locat
 Receiver locat
 - Receiver location outside NCA
- Logger location
- Blasting location
- 🖬 Bridge

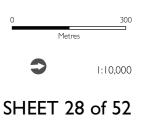
- Restricted with consultation Restricted with further
- assessment and consultation
- Highly restricted

Unrestricted



- No impact Low impact Moderate impact
- High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🕂
Zone A







Appendix C.29 Out of hours construction impacts - paving and asphalting



- Upgrade completed to dual carriageway
- Upgrade under construction
- 🔼 Ancillary site

- Receiver location •
 - Receiver location outside NCA
- \bigcirc Logger location
- Blasting location
- X Bridge

Unrestricted

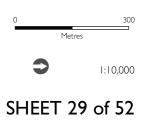
Out of hours work areas

- Restricted with consultation
- Restricted with further assessment and consultation
- Highly restricted



- No impact Low impact
- Moderate impact
 - High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🛟
Zone A







Appendix C.30 Out of hours construction impacts - paving and asphalting

- Upgrade under construction
- Z Ancillary site

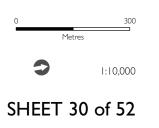
- \bigcirc Logger location
- **2**12 Blasting location
- X Bridge

- Restricted with consultation Restricted with further
- assessment and consultation
- Highly restricted

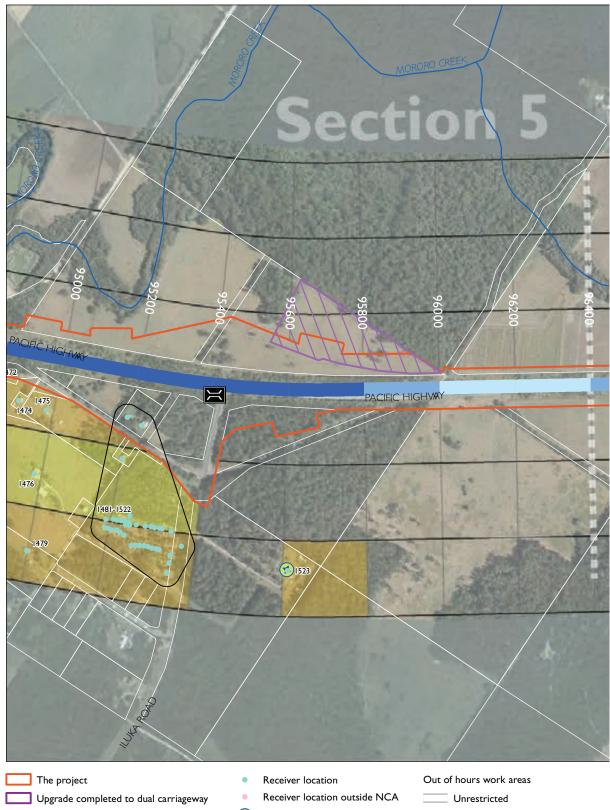


- No impact
 - Moderate impact
- High impact

NCA Zone	es
Zone F	
Zone E	
Zone D	
Zone C	200 m
ZONEC	200m
Zone B	200m
Zone A	







Appendix C.31 Out of hours construction impacts - paving and asphalting

- Upgrade under construction
- 🔼 Ancillary site

 \bigcirc Logger location

Restricted with consultation Restricted with further

assessment and consultation

Highly restricted

- Blasting location
- X Bridge

Noise and vibration assessment



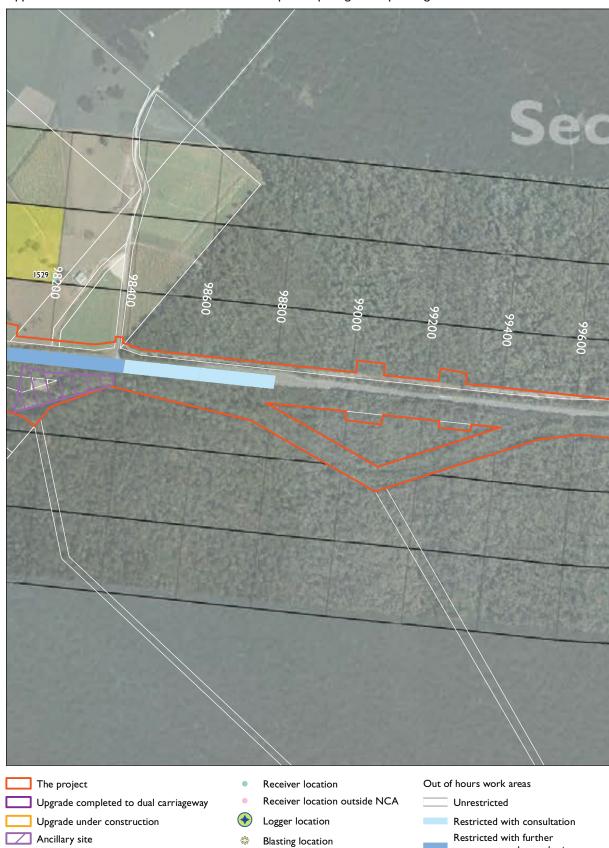
Out of hours impact areas
No impact

- Low impact
- Moderate impact
- High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🛟
Zone A







assessment and consultation

Highly restricted

Appendix C.32 Out of hours construction impacts - paving and asphalting

X

Bridge

Noise and vibration assessment

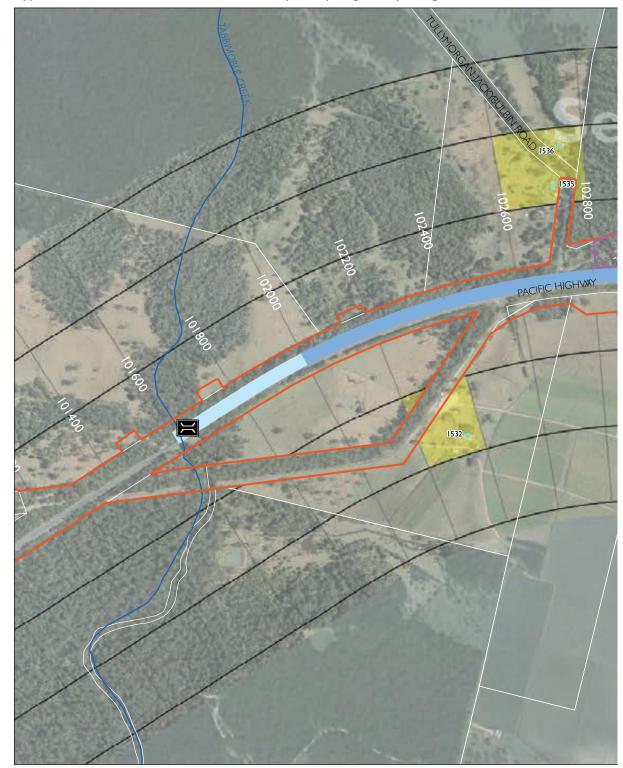


High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🛟
Zone A







Appendix C.33 Out of hours construction impacts - paving and asphalting

- The project
 Upgrade completed to dual carriageway
- Upgrade under construction
 Ancillary site
- Receiver locationReceiver location
 - Receiver location outside NCA

Out of hours work areas

Unrestricted

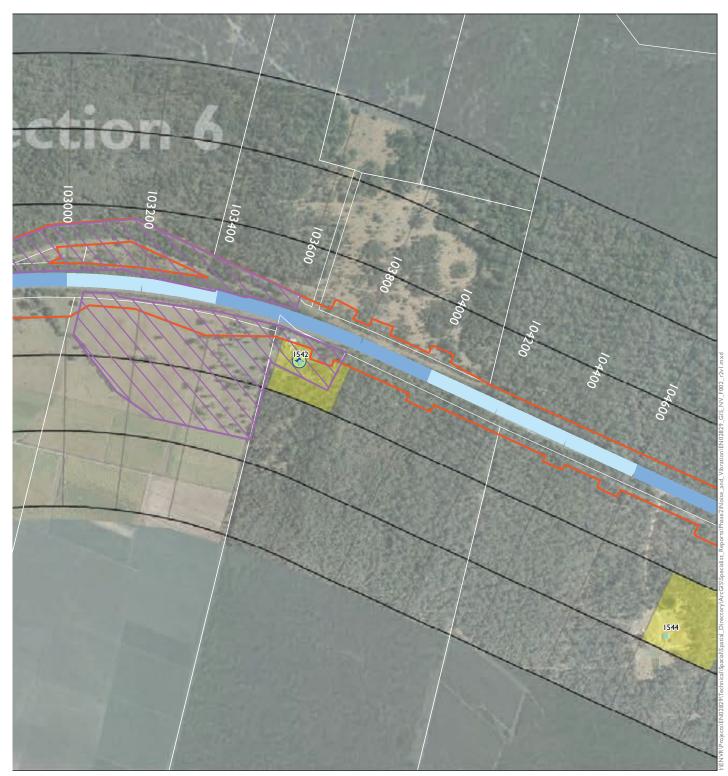
Highly restricted

Restricted with consultation Restricted with further

assessment and consultation

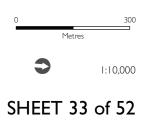
- Logger location
- Blasting location
- 🖼 Bridge

Noise and vibration assessment

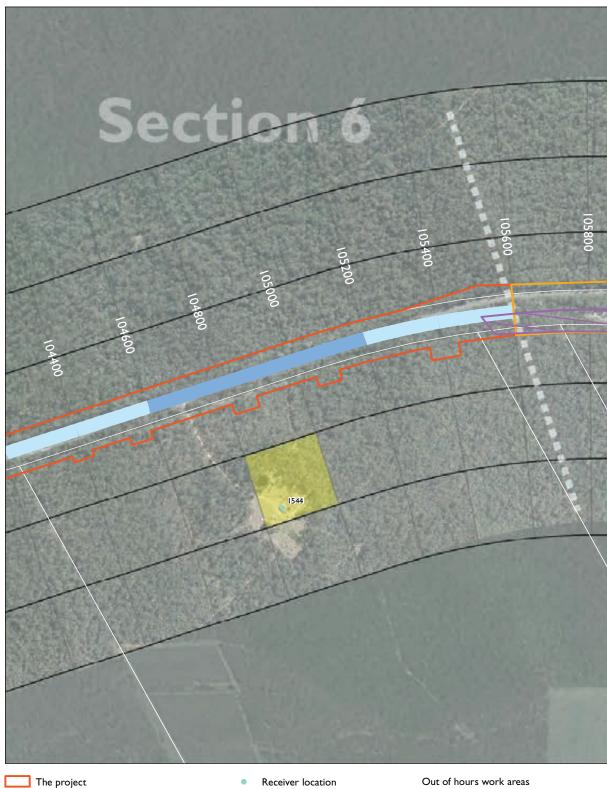


- No impact Low impact
 - Moderate impact
- High impact

NCA Zones	
Zone F	
Zone E	
Zone D	
Zone C	200 m
Zone B	200m
Zone A	





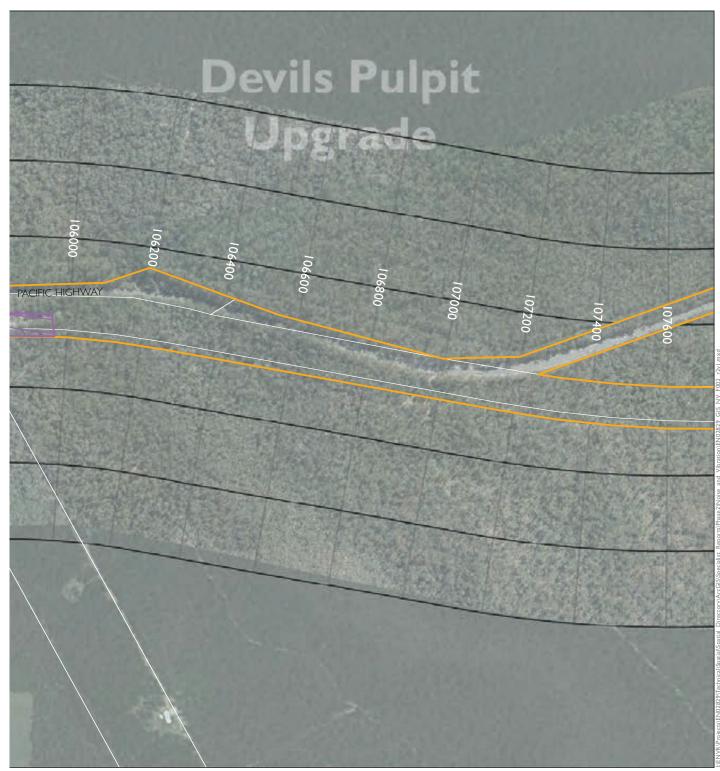


Appendix C.34 Out of hours construction impacts - paving and asphalting

- Upgrade completed to dual carriageway Upgrade under construction
- Z Ancillary site

- Receiver location
- Receiver location outside NCA
- \bigcirc Logger location
- S12 Blasting location
- X Bridge

- Unrestricted
 - Restricted with consultation Restricted with further
 - assessment and consultation
- Highly restricted

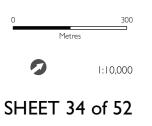




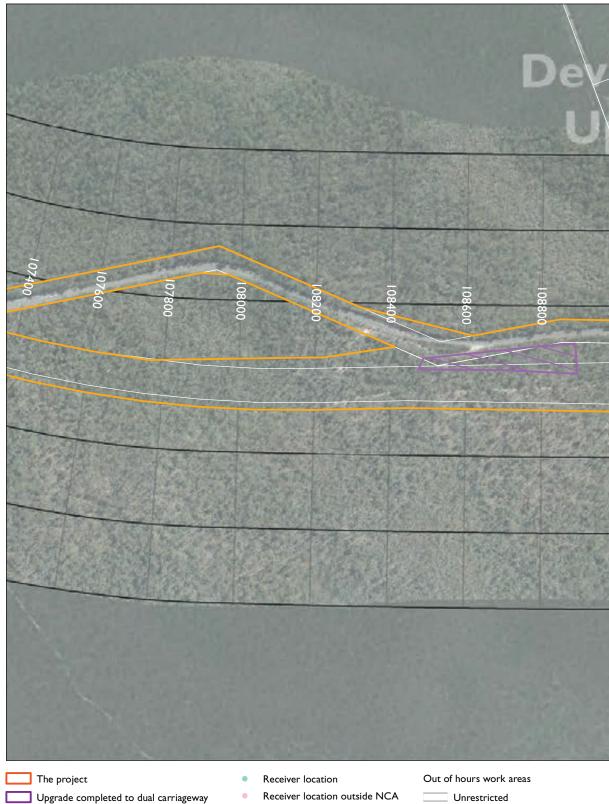
No impact Low impact

- Moderate impact
- High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🕂
Zone A







Appendix C.35 Out of hours construction impacts - paving and asphalting

Z Ancillary site

Receiver location outside NCA

Restricted with consultation Restricted with further

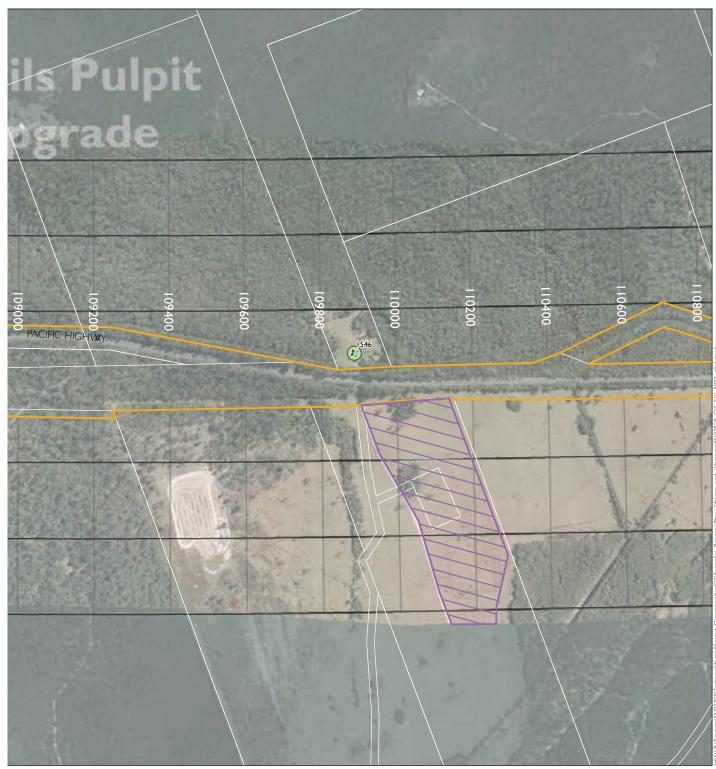
assessment and consultation

Highly restricted

- \bigcirc Logger location
- Blasting location
- X Bridge

Noise and vibration assessment

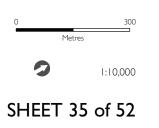
Upgrade under construction



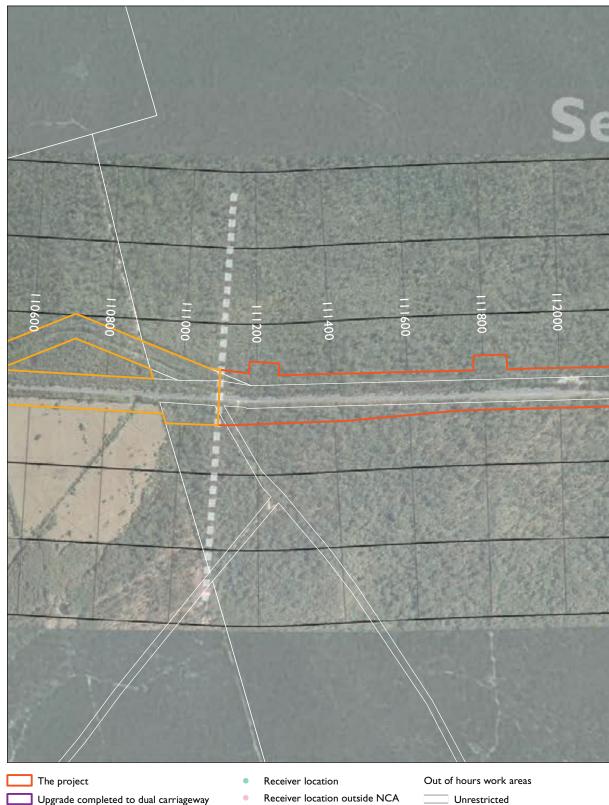
No impact Low impact Moderate impact

High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🛟 🛱
Zone A





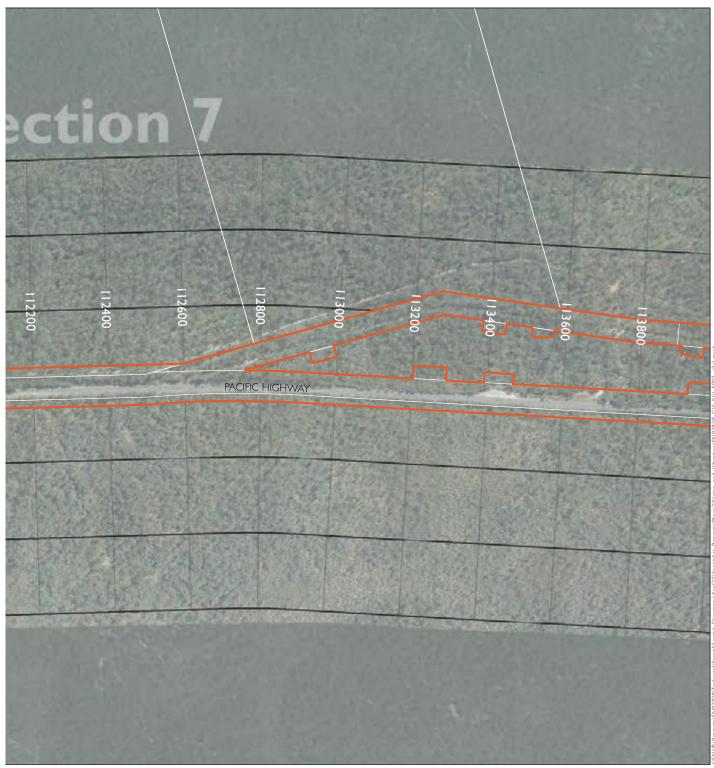


Appendix C.36 Out of hours construction impacts - paving and asphalting

- Upgrade completed to dual carriageway
- Upgrade under construction
- 🔼 Ancillary site

- Receiver location outside NCA
- \bigcirc Logger location
- **2**12 Blasting location
- X Bridge

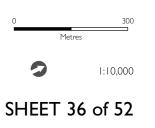
- Restricted with consultation Restricted with further
- assessment and consultation
- Highly restricted



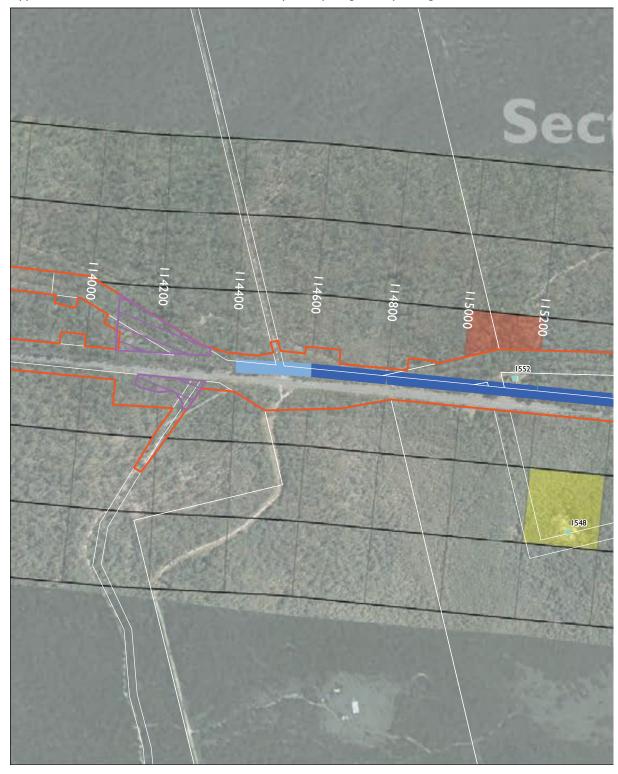
Out of hours impact areas
No impact
Low impact

- Moderate impact
- High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🛟
Zone A







Appendix C.37 Out of hours construction impacts - paving and asphalting



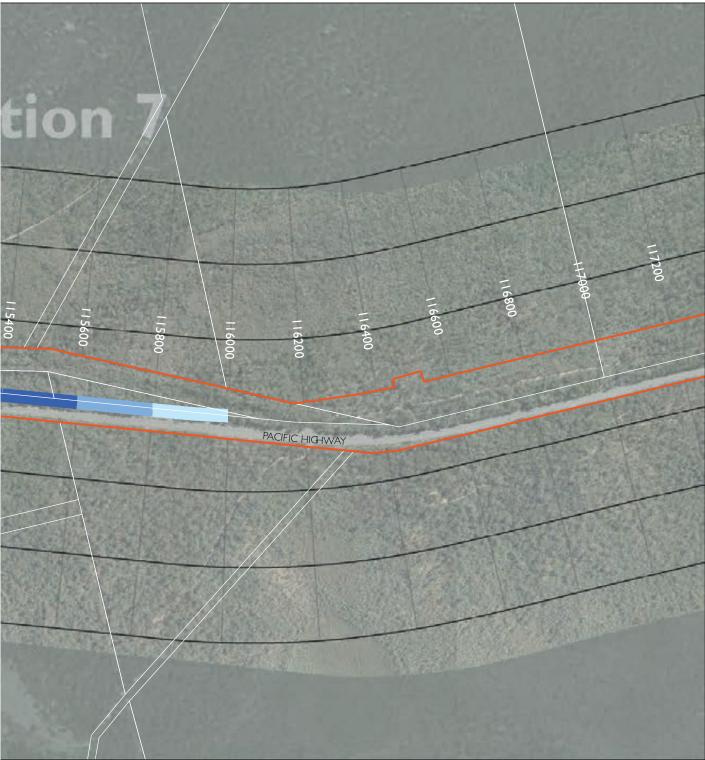
- The project
- Upgrade completed to dual carriageway
- Upgrade under construction
- Ancillary site

- Receiver location
 - Receiver location outside NCA
- Logger location
- Blasting location
- 🖬 Bridge

Unrestricted Restricted with consultation Restricted with further assessment and consultation

Highly restricted

Out of hours work areas



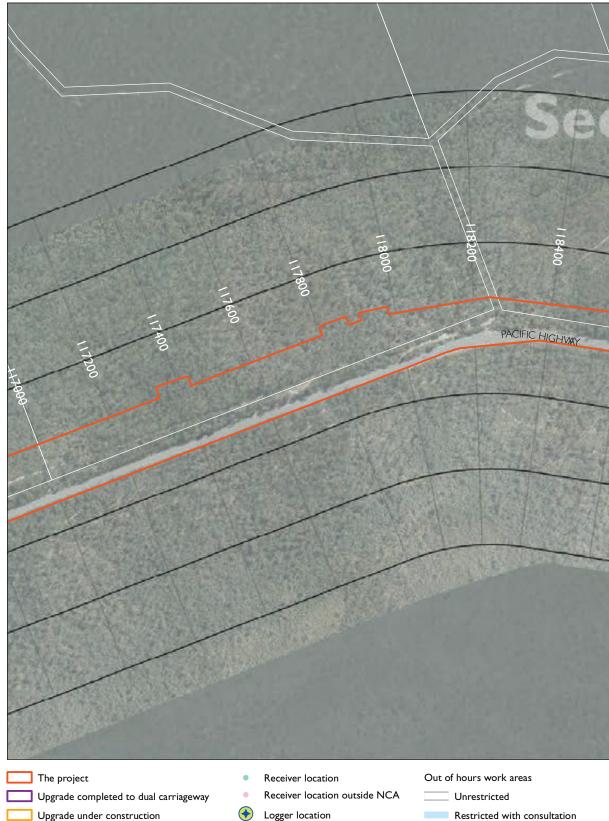
Out of hours impact areas
No impact
Low impact

- Moderate impact
- High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🛟
Zone A







Appendix C.38 Out of hours construction impacts - paving and asphalting

- Upgrade under construction
- 🔼 Ancillary site
- \bigcirc Logger location

Restricted with further

Highly restricted

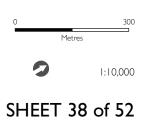
assessment and consultation

- **2**12 Blasting location
- X Bridge
- Noise and vibration assessment

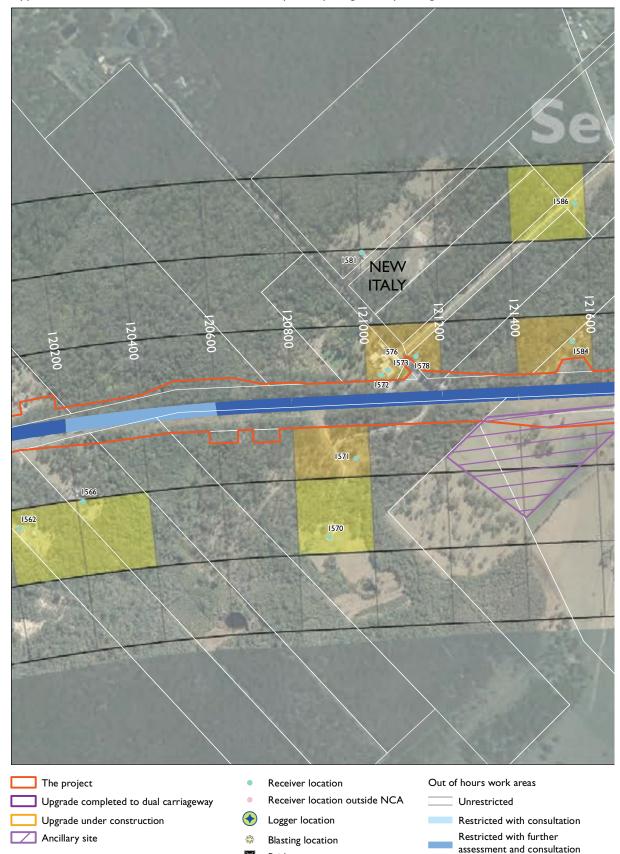


No impact Low impact Moderate impact High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🛟
Zone A







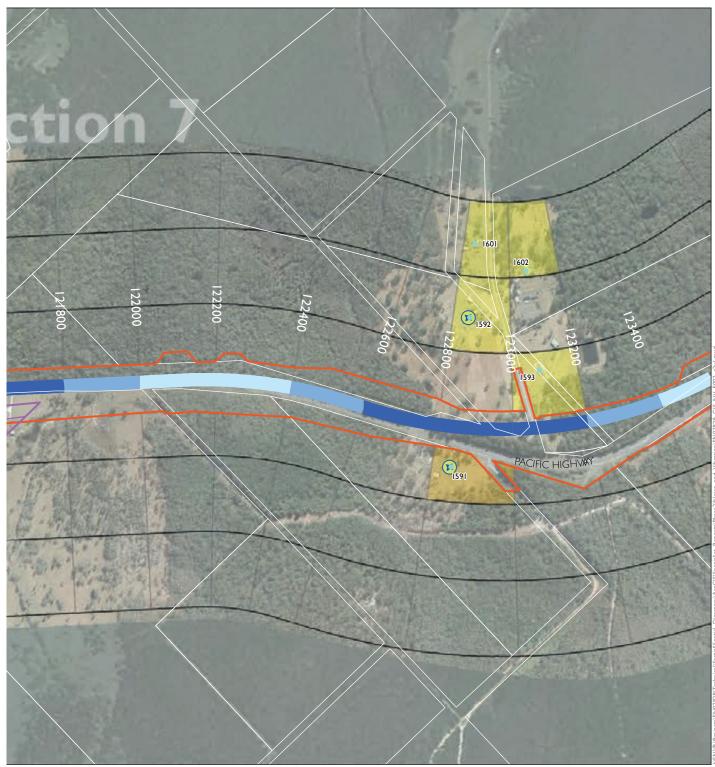
X

Bridge

Highly restricted

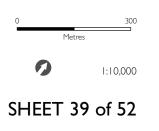
Appendix C.39 Out of hours construction impacts - paving and asphalting

Noise and vibration assessment



- No impact Low impact
- Moderate impact
 - High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B
Zone A





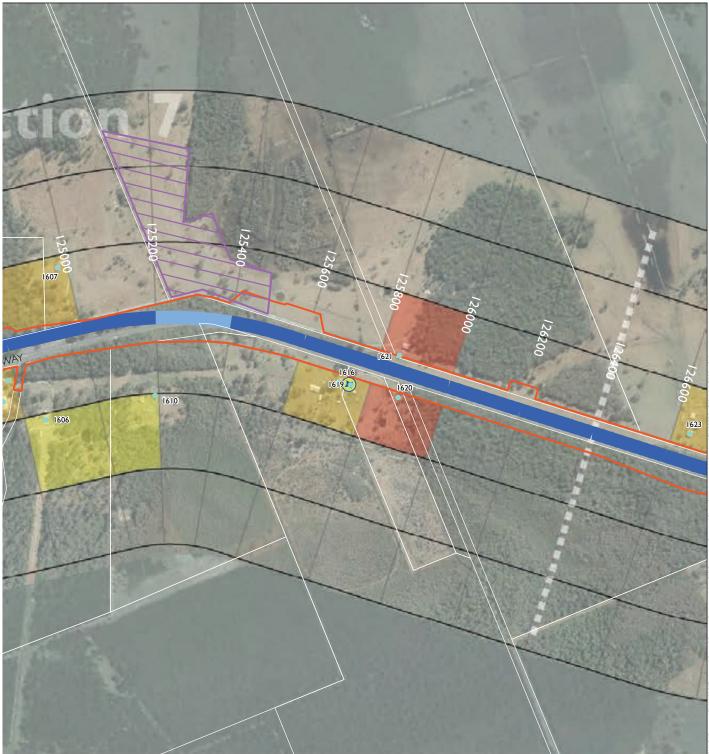


Appendix C.40 Out of hours construction impacts - paving and asphalting

- Upgrade completed to dual carriageway Upgrade under construction
- 🔼 Ancillary site

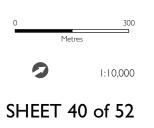
- Receiver location
- Receiver location outside NCA
- \bigcirc Logger location
- **2**12 Blasting location
- X Bridge

- Unrestricted Restricted with consultation
 - Restricted with further
 - assessment and consultation
- Highly restricted



- No impact Low impact Moderate impact
- High impact

NCA Zor	nes
Zone F	
Zone E	
Zone D	
Zone C	200 m
Zone B	200m
Zone A	







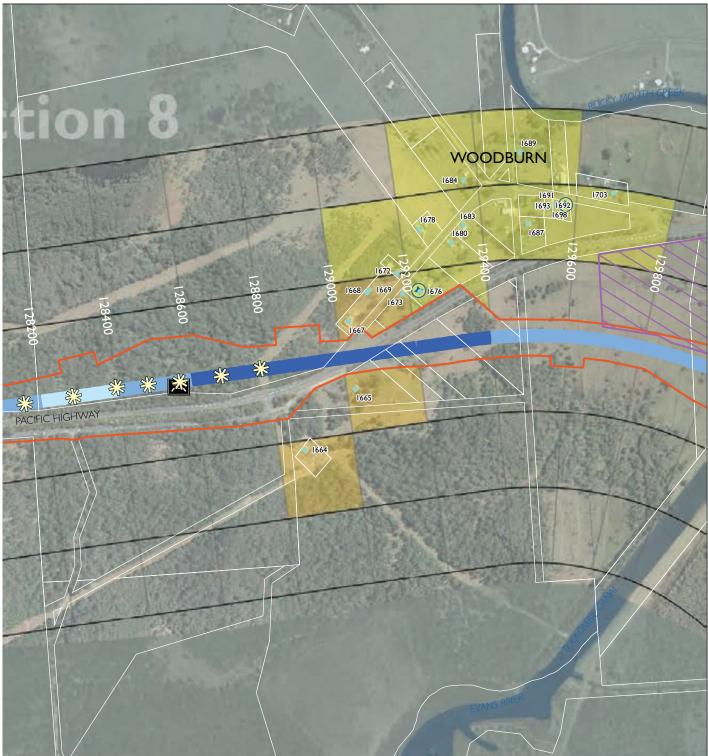


- The project Upgrade completed to dual carriageway
 - Upgrade under construction
- 🔼 Ancillary site

- Receiver location
 - Receiver location outside NCA
- \bigcirc Logger location
- **2**12 Blasting location
- X Bridge

Unrestricted Restricted with consultation

- Restricted with further assessment and consultation
- Highly restricted

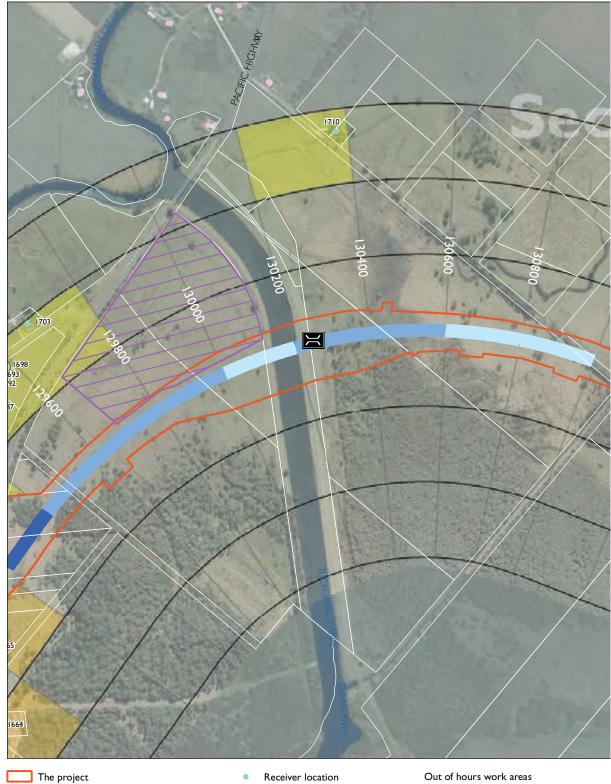


- No impact Low impact
- Moderate impact
 - High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🕂
Zone A







Appendix C.42 Out of hours construction impacts - paving and asphalting

- Upgrade completed to dual carriageway
- Upgrade under construction
- 🔼 Ancillary site

- Receiver location outside NCA
- \bigcirc Logger location
- **2**12 Blasting location
- X Bridge

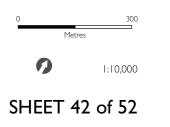
- Unrestricted Restricted with consultation
- Restricted with further
- assessment and consultation
- Highly restricted



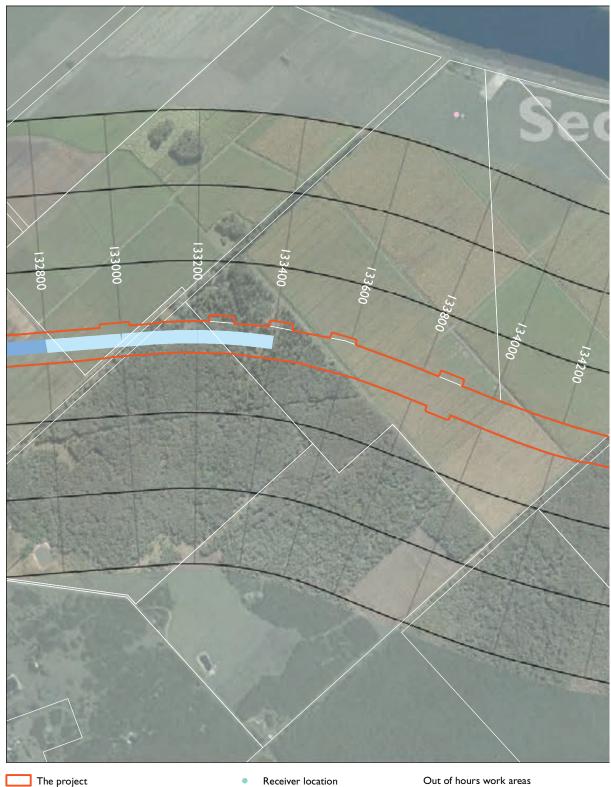
Out of hours impact areas
No impact
Low impact
Moderate impact

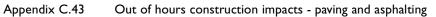
High impact

NCA Zones
Zone F
Zone E
Zone D
Zone C 200m
Zone B 🛟
Zone A





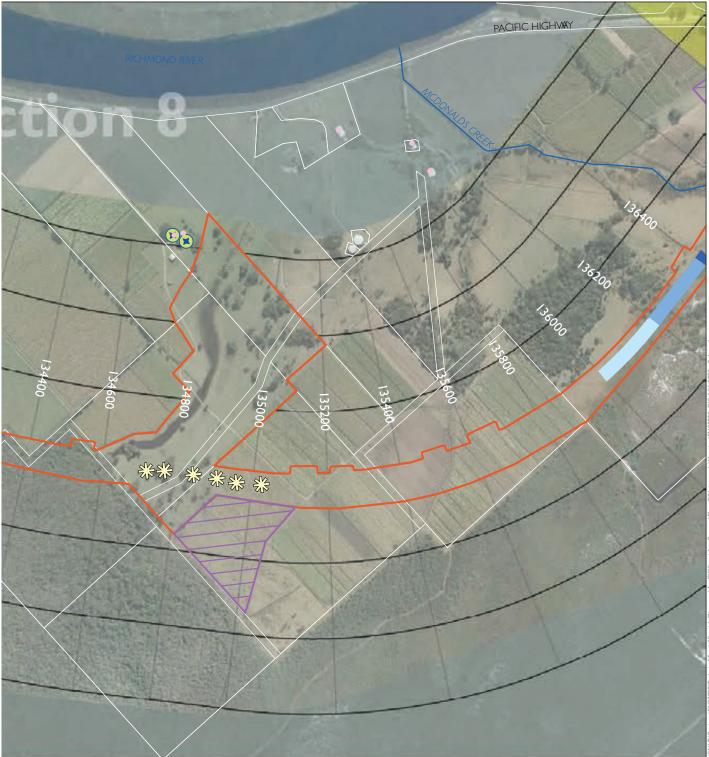




- The project Upgrade completed to dual carriageway Upgrade under construction
- 🔼 Ancillary site

- Receiver location
- Receiver location outside NCA
- \bigcirc Logger location
- Blasting location
- X Bridge

- Unrestricted
 - Restricted with consultation
 - Restricted with further
 - assessment and consultation
 - Highly restricted



NCA Zones

Zone F

Zone E

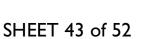
Zone D

Zone C

Zone B

Zone A







Out of hours impact areas

No impact

Low impact

High impact

Moderate impact