

Appendix D – Results from Regulatory Agency Consultation



18 July 2007

Bruce Withnall
Drainage Team Leader
Northern Hume Alliance
Zenith Centre, Tower A
Level 20, 281 Pacific Highway
CHATSWOOD NSW, 2067

Dear, Bruce

RE: Northern Hume Alliance Drainage Design.

Thank you for referring the culvert designs associated with the northern component of the Hume Highway works to the Department of primary Industries (DPI) for comment. The Department would like to submit these recommendations for your consideration.

A site inspection and viewing of the proposed designs took place with DPI and Northern Alliance representative on 16 July 2007, this process has enabled DPI to review the designs and provide the following recommendations of each of the waterway crossing inspected.

N1-130 Dellatery Creek: It is understood that this crossing is designed in accordance with NSW Fisheries Policy and Guidelines for Fish friendly Waterway Crossings 2003 and "Why do fish need to cross the road?: Fish passage Requirements for Waterway Crossings (Fairful and Witheridge 2003). DPI would like to provide concurrence with the plans provided Drawing No: NHA-DR-11041013, and the fish friendly treatments for the culverts emailed to me on 10 July 2007.

N1-210: After inspection and review of the plans DPI is happy to conclude that this culvert will not require fish passage.

N2-220: DPI support the upgrade of the existing structure at this location as per our discussions on 16 July 2007, This culvert has a 1.5-2 metre drop and is considered a significant barrier to fish passage. For the proposed additional crossing to be effective with regard to fish passage at this site, this barrier be removed. DPI requests that as part of the works this structure be upgraded to provide fish passage and the site stabilised and rehabilitated.

It is understood that this crossing is designed in accordance with NSW Fisheries Policy and Guidelines for Fish friendly Waterway Crossings 2003 and "Why do fish need to cross the road?: Fish passage Requirements for Waterway Crossings (Fairful and Witheridge 2003). DPI would like to provide concurrence with the plans provided Drawing No: NHA-DR-12041022 and the fish friendly treatments for the culverts emailed to me on 10 July 2007. DPI is of the opinion that the light provisions provide on the plan drawing number NHA-ST-22072202 would be adequate for light penetration in this situation.

N2-280: After inspection and review of the plans DPI is happy to conclude that this culvert will not require fish passage.

N2-430: It is understood that this crossing is designed in accordance with NSW Fisheries Policy and Guidelines for Fish friendly Waterway Crossings 2003 and "Why do fish need to cross the road?: Fish passage Requirements for Waterway Crossings (Fairful and Witheridge 2003). DPI would like to provide concurrence with the plans provided Drawing No: NHA-DR-11041013, and the fish friendly treatments for the culverts emailed to me on 10 July 2007.

N4-180: After inspection and review of the plans DPI is happy to conclude that this culvert will not require fish passage.


DPI also request further information and detailed designs/construction schedules relating to the diversion of Dellatery Creek. On site discussion and preliminary plans suggested that it would be appropriate to undertake the excavation of the creek diversions and revegetate the sites prior to filling in the current natural creek sections. DPI is to be given sufficient prior notice to undertake inspection of the constructed diversion channels once completed. Constructed channels are to be rehabilitated to the satisfaction of DPI prior to water being diverted from the natural channel. The Conservation Manager, South West, is to advise if physical relocation of aquatic species residing in the section of the creek to be filled to the newly created section prior to diversion is required. Sufficient time should also be allocated for the relocation of aquatic species should it be required.

DPI reinforces that fish passage is to be maintained at all times during the works involving crossings or realignments. In addition, woody debris are to be placed in the realignment sections in appropriate locations, and macrophytes and emergent plant species to be planted along the stream banks. The areas of realignment will be required to have stock exclude from the area for a minimum of 5 years to allow the area to stabilise and the vegetation to establish. The Department requests that creek rehabilitation at all sites be to a level where cheeks can function ecologically in terms of pool and riffle sequences. Habitat must be provided so that aquatic species can move along through the rehabilitated systems as well as reside within them.

For further information please contact me on (02) 6947 4188

Yours Sincerely

Luke Pearce
Conservation Manager, South West

 <p>NORTHERN HUME ALLIANCE</p> <p>The Northern Hume Alliance 84-88 Murray St Wagga Wagga 2650</p>	MINUTES OF MEETING	
	N1 Modification Report Meeting	
	Project:	Hume Highway Northern Duplication Sturt Hwy to Holbrook

MEETING TITLE:	Site Meeting with DWE and DECC	
DATE and TIME:	Thursday, 26 th July 2007	10.00am to 1.00pm approx.
LOCATION:	Compound Site Location N1 & N3	
ATTENDANCE:	Steven Webb & David (DWE)	
	Andrew Moriarty (DECC)	
	Simon Hopper (NHA)	
	Ben Robilliard (NHA)	

1) N1 Modification:

Comments	Comment By
<ul style="list-style-type: none"> ○ With regard to the channel works (creek realignment / Chainage No.39540 - 39640) DWE raised the possibility of needing to stabilise the creek bend to reduce the risk of erosion or address the issue via altering the redirection, to increase the radius of the bend to help maintain bank stability. 	Steven Webb (DWE)
<ul style="list-style-type: none"> ○ At Deadman's Hill (Chainage No. 37600 - 38300) DECC raised concerns about the potential for loss of critical habitat for species such as the Stripped Legless Lizard and Woodland bird species. 	Andrew Moriarty (DECC)
<ul style="list-style-type: none"> ○ Upon ground inspection of T-PAD-2 (Chainage No. 38900 - 39250) DECC identified a number of Quartz fragments and believes it requires further investigation and the Terms of Significance should be referenced. DECC raised the question of why T-PAD-1 (Chainage No. 39000 - 39200) and T-PAD-2 were considered in theory to be the same site despite being dissected by the existing roadway. 	Andrew Moriarty (DECC)

Your reference :
Our reference : DOC07/36774
Contact : Andrew Moriarty, 02 60220606

Ken Holmes
Environment and Community Manager
Northern Hume Alliance
Zenith Centre, Tower A
Level 20 821 Pacific Hwy
Chatswood NSW 2067

Dear Mr Holmes

Re: Variation to Impacts on Aboriginal Heritage at Sturt Highway to Tarcutta (N1), Kyeamba Hill (N2) and Little Billabong (N3).

I refer to your letters of 28 August 2007 and 10 September 2007 regarding the Hume Highway Duplication Project and proposed variations to impacts on Aboriginal Heritage along the Sturt Highway to Tarcutta, Kyeamba Hill and Little Billabong sections.

The Department of Environment & Climate Change (DECC) has reviewed the information provided on the changes in impact, the design development process and proposed mitigation measures and provides the following comments:

Sturt Highway to Tarcutta (N1)

- T6 (formally T-PAD-1) – This site will no longer be impacted by the construction works. As such, the Construction Environmental Management Plan should be updated to reflect the change in status to ensure the site is not inadvertently damaged as a result of construction activities.
- T-PAD-2 – As this site will now be impacted by construction activities, DECC endorse the proposed mitigation measure of salvage excavation. The methodology for the salvage excavation should, however, be undertaken in accordance with the methodology described in Appendix C of the document *Hume Highway Upgrade Duplication Project Aboriginal Cultural Heritage Report Test Excavation Results, Assessment and Management Measures* (RTA July 2007).

Kyeamba Hill (N2)

- K-PAD-5 - As a small area of this site will now be impacted by construction activities, DECC endorse the proposed mitigation measure of a surface collection of the recently located artefacts. The surface collection should be restricted to those areas of the site that exist within the construction corridor. The surface collection should be undertaken in accordance with the methodology described in Appendix C of the document *Hume Highway Upgrade*

The Department of Environment and Conservation NSW is now known as
the Department of Environment and Climate Change NSW

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Department of **Environment and Conservation** NSW



Duplication Project Aboriginal Cultural Heritage Report Test Excavation Results, Assessment and Management Measures (RTA July 2007).

Little Billabong (N3)

- LB-PAD-2 – Depending on the nature of previous disturbance to this site consideration should be given to undertaking salvage excavations within those areas of the PAD that exist within the identified impact zone and construction corridor boundary, in accordance with the methodology described in Appendix C of the document Hume Highway Upgrade Duplication Project Aboriginal Cultural Heritage Report Test Excavation Results, Assessment and Management Measures (RTA July 2007). As this PAD is also located within a known cultural area (“Little Billabong Creek Pathway and Camps”) further consultation should be undertaken with the identified knowledge holders, as outlined in the impact mitigation and management measures in Appendix B of the document Hume Highway Upgrade Duplication Project Aboriginal Cultural Heritage Report Test Excavation Results, Assessment and Management Measures (RTA July 2007).

If you have any queries or wish to discuss DECC's response please contact Andrew Moriarty, Hume Highway Project Manager on (02) 60220606 or Jackie Taylor, Archaeologist on (02) 6298 9740.

Yours sincerely



17.09.07 for
Brian Wild.

Brian Wild
Head Albury Unit
Climate Change and Environment Protection

cc Ingrid Ilias
Department of Planning
GPO Box 39
SYDNEY NSW 2001

28th August 2007

Name
Address

Hume Highway Upgrade Project, Sturt Highway to Holbrook: Changes in impacts on Aboriginal Heritage

Dear _____

As you are aware the Northern Hume Alliance (NHA) have been appointed by the RTA to manage the Hume Highway Duplication in four sections from south of the junction of the Sturt Highway and the Hume Highway, south to Holbrook. Specifically the following sections;

- Sturt Highway to Tarcutta
- Kyeamba Hill
- Little Billabong and
- Yarra Yarra to Holbrook

Over the last few months the NHA have been working towards a final design for the road alignment. As a result of this development and consideration of road safety requirements, the detailed design has resulted in a few changes in the impacts on Aboriginal heritage.

This letter outlines for your record the changes in impacts that were discussed with you over the telephone on Monday 20th August, with Chontelle Perucich from the NHA and Kylie Seretis from the RTA.

The table below, along with the attached aerial photographs, provide you with snapshot of changes in impact that have arisen from the detailed design phase in the following sections:

- N1 - Sturt Highway to Tarcutta
- N2 - Kyeamba Hill and
- N3 - Little Billabong

The recommendations for each site have been developed in consultation with the Project archaeologist - Kelleher Nightingale Consultants Pty Ltd (KNC) and are in line with the Department of Planning's Minister's Conditions of Approval. The comments column provides further information on the change, where required.

Zone	Site	Recommendation	Comments
Sturt Highway to Tarcutta	T-PAD-2	Test excavation	The NHA road design has moved from the east to the west. TA7 (former T-PAD-1) on the eastern side of the alignment will now not be impacted.
Kyeamba Hill	K-PAD-5	Salvage through	Artefacts were located at K-

Zone	Site	Recommendation	Comments
		surface collection	PAD-5 upon a recent site visit by KNC. This PAD is now a site. The recommendation is to collect the artefacts on the surface, that have been exposed.
Little Billabong	LB3	Test excavation	It was previously hoped that this site could be avoided. The recommendation for this site is derived from that outlined in the recent Aboriginal Cultural Heritage Report.
	LB-PAD-1	Test excavation	Same as above.
	LB-PAD-2	Test excavation	Detailed design has resulted in some impact on a small slice of LB-PAD-2 (North and South), see aerial photograph's attached.

The expected timeframe to carry out the required salvage/ test excavation is approximately six weeks.

If you have any questions please call Chontelle Perucich, Environment and Community Coordinator, Northern Hume Alliance (02 9468 8179 or mobile 0418 463 413).

Regards

Simon Hooper
Environment and Community Manager