

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Appendix F Ancillary works assessment matrix

Table 6 Summary of ancillary works areas

Section No	STN	Site No.	Proposed use (eg: site compound, batch plant)	Approx. Site Area (Ha)	Approx area outside road corridor (Ha)	Approx area inside road corridor (Ha)	Site within ancillary area?	Cultural place within ancillary area?	Site within 25 m?	Cultural place within 25 m?	Landsystem	Landform (from Predictive model)	PAS (L, L-M, M, M-H, H)	Investigation recommended? (Survey, Sub-surface testing, Management Recommendations)
8	129800 LHS to canal	1	Main site compound (1ha), batch plant(0.5ha), workshop (0.5ha).	14.51	14.00	0.51	-	-	-	-	Richmond Alluvial Plain	Alluvial plain of low lying flat terrain	L-M	Survey
8	131400 to 132200 RHS	2a	Site compound workshop (0.5ha) and stockpile site.	10.02	8.02	2.00	-	-	-	-	Richmond Alluvial Plain	Alluvial plain of low lying flat terrain	L-M	Survey
8	132000 - 132200 LHS	2b	RMS site office and stockpile site	2.61	2.00	0.61	-	-	-	-	Richmond Alluvial Plain	Alluvial plain of low lying flat terrain	L-M	Survey
8	132300 - 132400 LHS	2c	Stocpile site	1.24	1.24	0.00	-	-	-	-	Richmond Alluvial Plain	Alluvial plain of low lying flat terrain	L-M	Survey
8	135000 to 135200 RHS	3	Site compound (1ha), batch plant (0.5ha) and stockpile site	4.70	4.70	0.00	-	-	-	-	Richmond Alluvial Plain	Alluvial plain of low lying flat terrain	L-M	Survey
9	136800 - 137200 LHS	1	Main site compound (1ha), batch plant(0.5ha), workshop (0.5ha).	7.05	7.05	0.00	-	-	-	-	Richmond Alluvial Plain	Alluvial plain of low lying flat terrain	L-M	Survey
9	137500 - 137900 RHS	2	Site compound workshop (0.5ha) and stockpile site.	3.85	3.85	0.00	-	-	-	-	Richmond Alluvial Plain	Alluvial plain of low lying flat terrain	L-M	Survey
9	142650 to 142900 LHS	3	Site compound (1ha), batch plant(0.5ha)and 'structures lay down' area (0.5ha).	7.48	5.00	2.48	-	-	-	-	Richmond Alluvial Plain	Alluvial plain of low lying flat terrain	L-M	Survey
10	145400 - 145700 RHS	1a	Bridge construction site, batch plant and bridge materials lay down area	11.74	3.00	8.74	-	Cooks Hill to Teven Junction	-	-	Richmond Alluvial Plain	Alluvial plain of low lying flat terrain	L-M	Survey
10	146200 - 146450 LHS	1b	Site compound and vehicle parking	2.39	2.39	0.00	-	Cooks Hill to Teven Junction	Gumi PAD (inside corridor)	-	Richmond Alluvial Plain	Alluvial plain of low lying flat terrain	L-M	Survey
10	148000 - 148300 LHS	2	Site compound (1ha), batch plant(0.5ha), workshop (0.5ha).	3.10	0.00	3.10	-	Cooks Hill to Teven Junction	-	-	Costal Ramp	Low relief erosional landscape of rolling hills, undulating rises and low gradient slopes	M-H	-

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Section No	STN	Site No.	Proposed use (eg: site compound, batch plant)	Approx. Site Area (Ha)	Approx area outside road corridor (Ha)	Approx area inside road corridor (Ha)	Site within ancillary area?	Cultural place within ancillary area?	Site within 25 m?	Cultural place within 25 m?	Landsystem	Landform (from Predictive model)	PAS (L, L-M, M, M-H, H)	Investigation recommended? (Survey, Sub-surface testing, Management Recommendations)
10	152150 - 152600 LHS	3a	Main central site compound (1ha), batch plant(0.5ha), workshop (0.5ha).	11.30	0.00	11.30	PAD 4 (inside corridor)	Cooks Hill to Teven Junction	-	-	Coastal Ramp	Low relief erosional landscape of rolling hills, undulating rises and low gradient slopes	M-H	Management Recommendations
10	152650 - 152800 LHS	3b	RMS site office and stockpile site	2.32	2.32	0.00	-	Cooks Hill to Teven Junction	PAD 4 (inside corridor)	-	Coastal Ramp	Low relief erosional landscape of rolling hills, undulating rises and low gradient slopes	M-H	Survey and sub-surface testing
10	156150 to 156600 RHS	4	Site compound (1ha), batch plant(0.5ha), workshop (0.5ha), vehicle parking and stockpile site	7.41	7.41	0.00	-	Cooks Hill to Teven Junction	-	-	Coastal Barriers and Richmond Alluvial Plain	Low lying terrain with alluvial deposits	M	Survey
10	157400 - 157550 LHS	5	Site compound (1ha), batch plant(0.5ha), 'structures lay down' area (0.5ha).	1.42	1.00	0.42	Rudgley PAD 1A	Cooks Hill to Teven Junction	-	-	Coastal Ramp	Low relief erosional landscape of rolling hills, undulating rises and low gradient slopes	M-H	Survey and sub-surface testing
10	158300 - 158700 LHS	6	Main site compound (1ha), batch plant(0.5ha), workshop (0.5ha).	11.02	10.62	0.40	PAD 12	Cooks Hill to Teven Junction	-	-	Coastal Ramp and Richmond Alluvial Plain	Low lying terrain with alluvial deposits rising to hills	M	Survey and sub-surface testing
11	159500 - 159900 LHS	1a	Main compound (1ha), batch plant, workshop and stockpile site	8.13	8.13	0.00	-	Cooks Hill to Teven Junction	-	-	Richmond Alluvial Plain	Alluvial plain of low lying flat terrain	L-M	Survey
11	159800 - 160050	1b (3 areas)	Stockpile sites	1.53	0.46	1.07	-	Cooks Hill to Teven Junction	-	-	Richmond Alluvial Plain	Alluvial plain of low lying flat terrain	L-M	Survey
11	163700 to 164400	2	Satellite compound and stockpile site	5.47	0.00	5.47	-	Cooks Hill to Teven Junction	-	-	Richmond Alluvial Plain	Alluvial plain of low lying flat terrain	L-M	Survey

Appendix G Predictive model maps

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

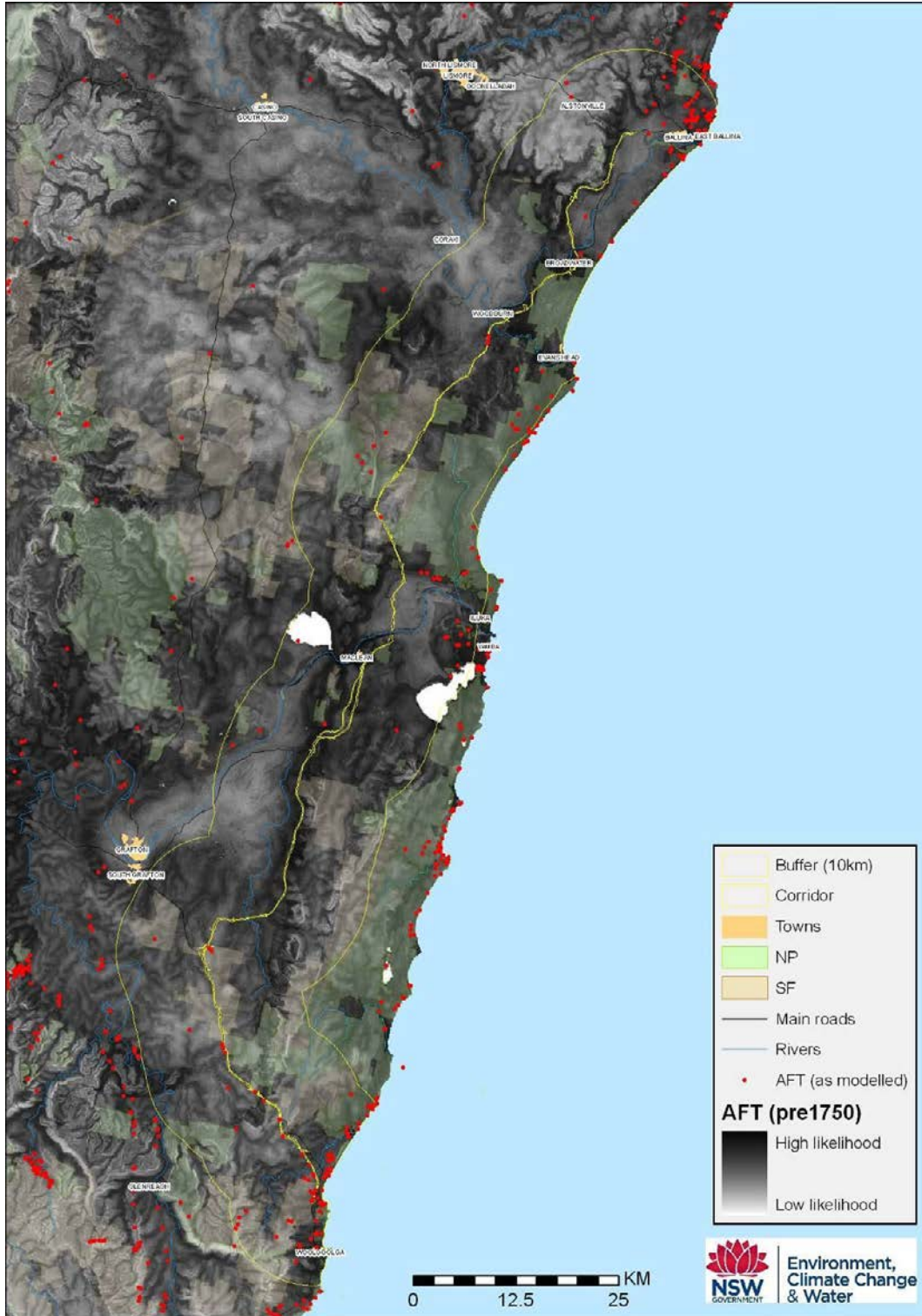


Figure 1 Pre-1750 predicted likelihood of artefact scatters

Woolgoolga to Ballina Pacific Highway Upgrade Aboriginal Heritage Assessment – Woodburn to Ballina Volume 2 Appendices

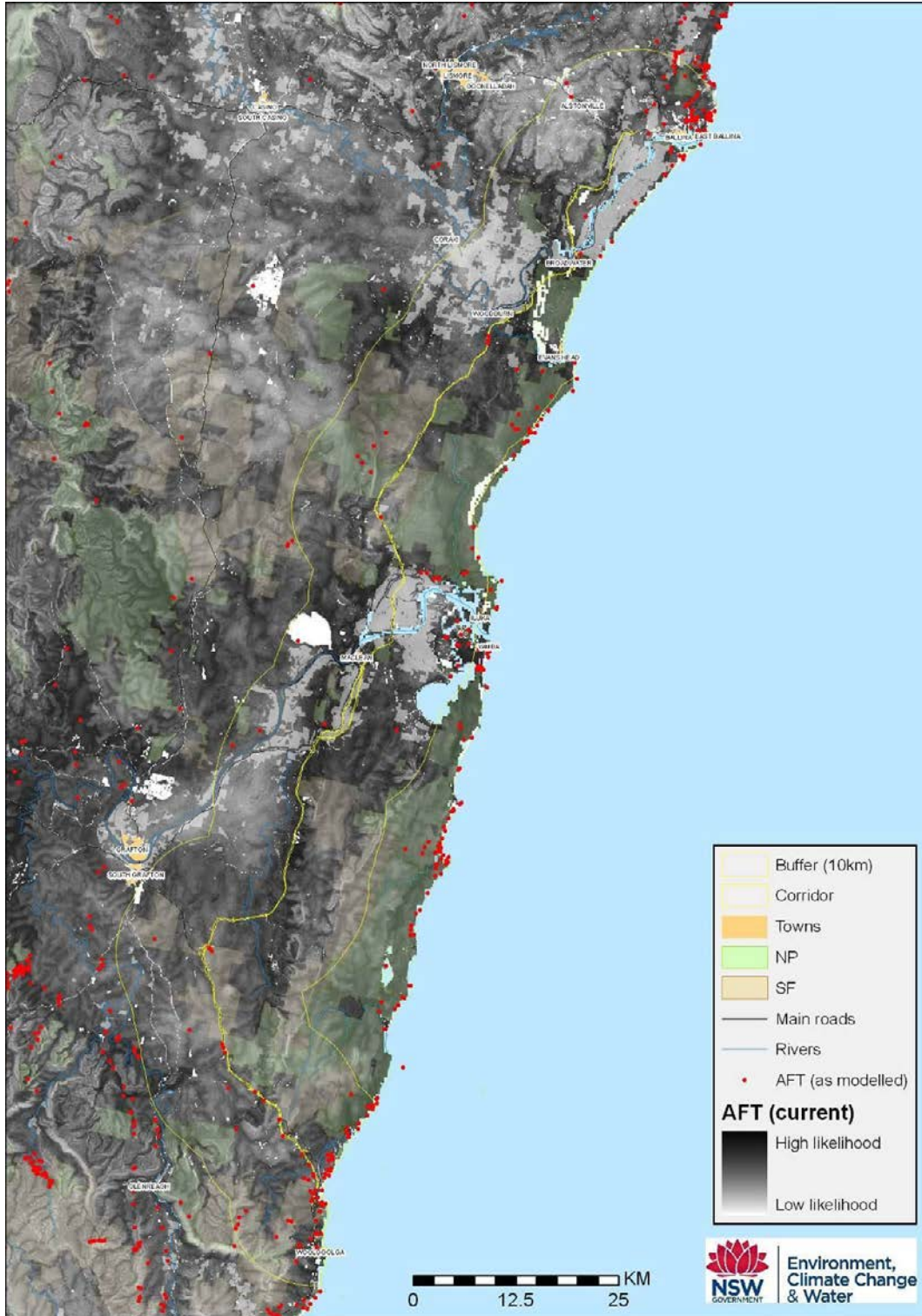


Figure 2 Current predicted likelihood of artefact scatters

Woolgoolga to Ballina Pacific Highway Upgrade Aboriginal Heritage Assessment – Woodburn to Ballina Volume 2 Appendices

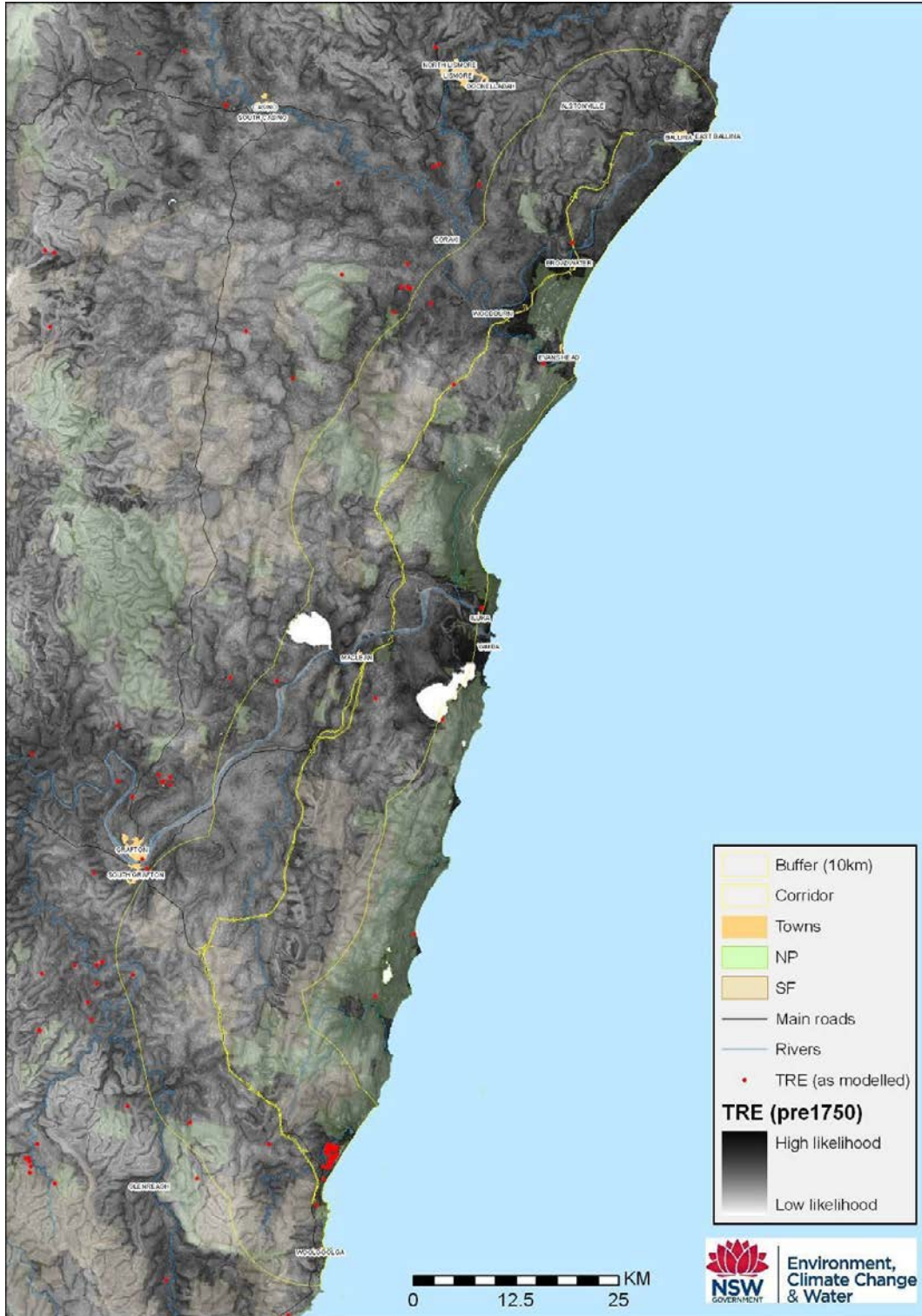


Figure 3 Pre-1750 predicted likelihood of scarred trees

Woolgoolga to Ballina Pacific Highway Upgrade Aboriginal Heritage Assessment – Woodburn to Ballina Volume 2 Appendices

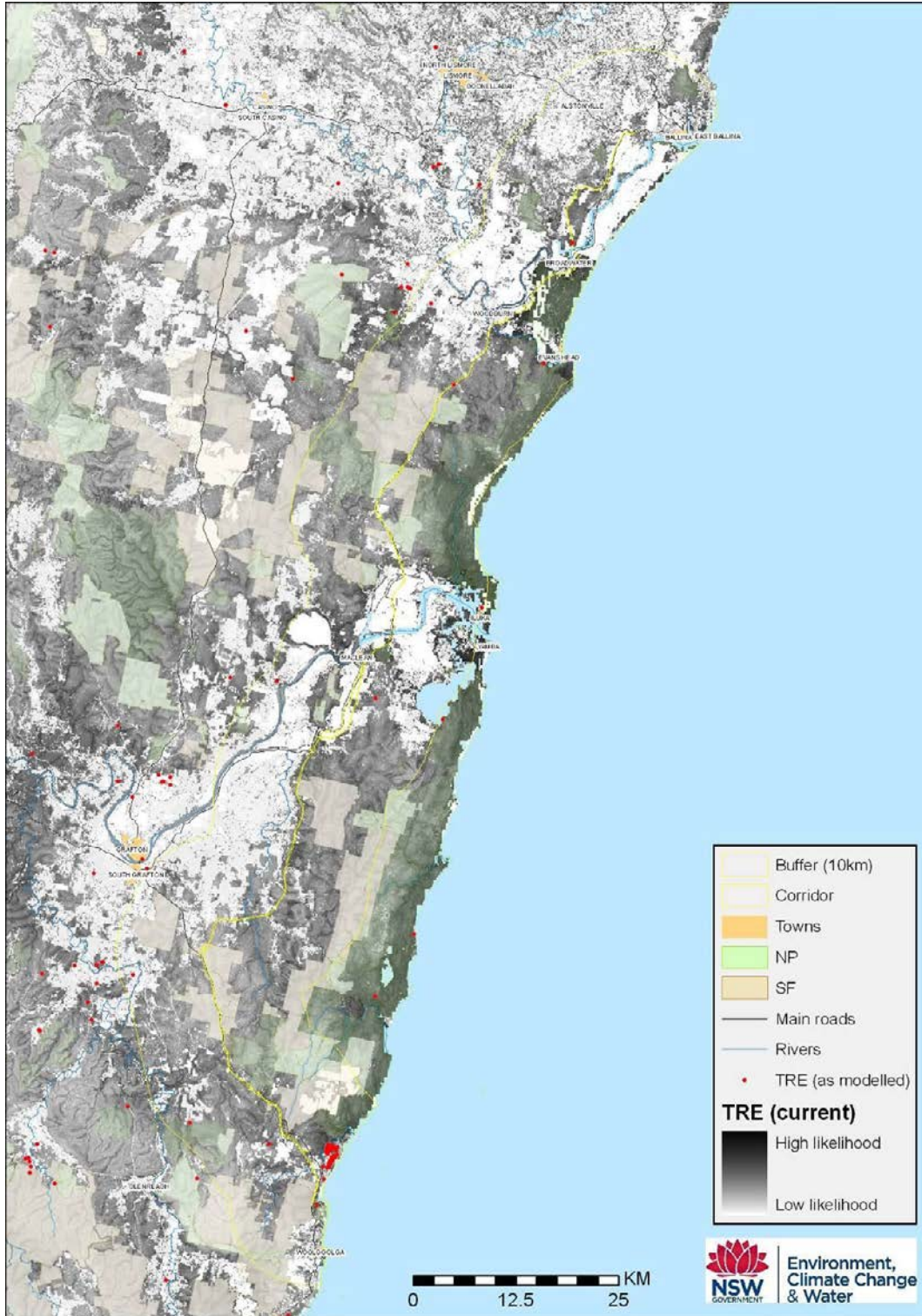


Figure 4 Current predicted likelihood of scarred trees

Woolgoolga to Ballina Pacific Highway Upgrade Aboriginal Heritage Assessment – Woodburn to Ballina Volume 2 Appendices

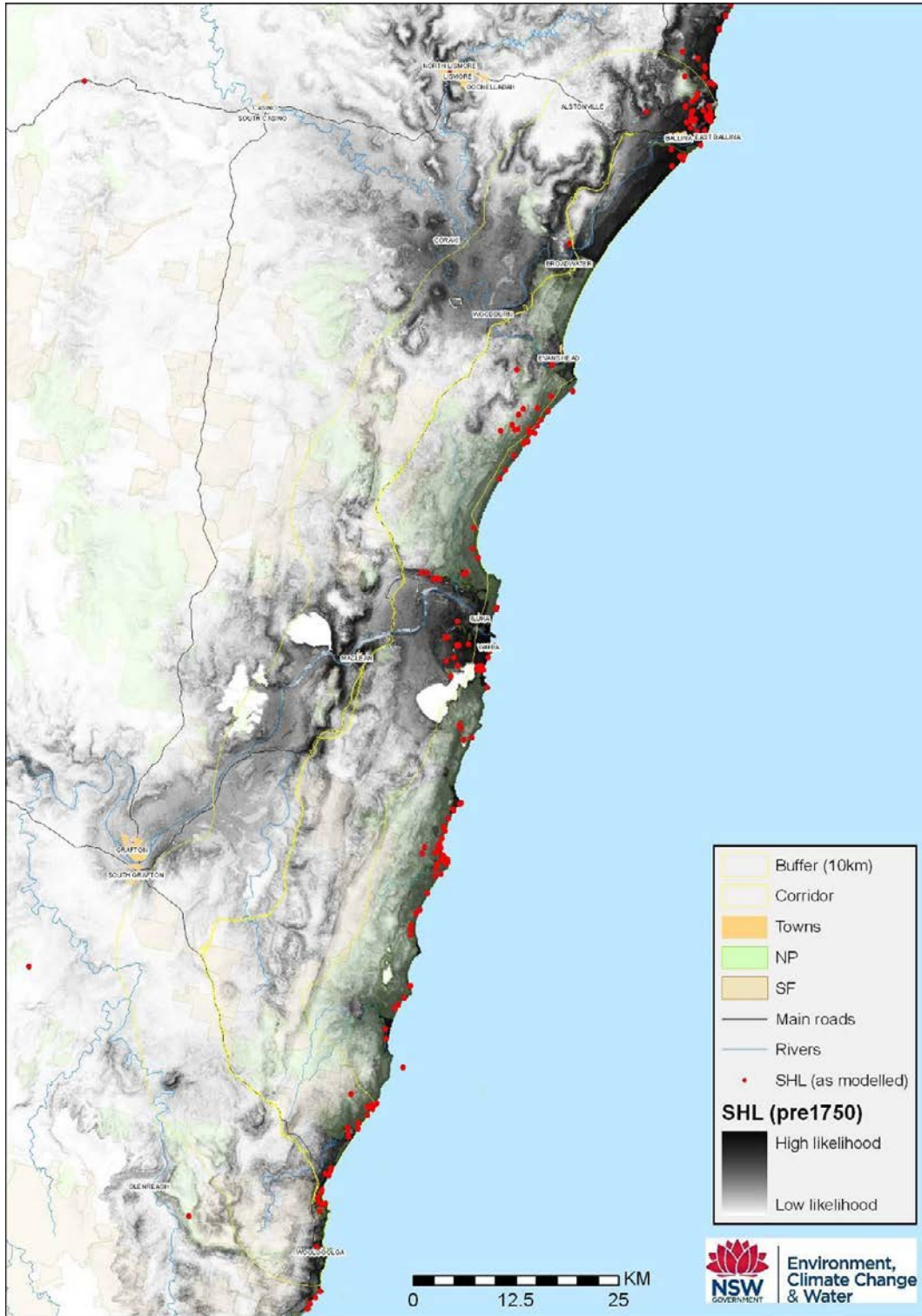


Figure 5 Pre-1750 predicted likelihood of shell middens

Woolgoolga to Ballina Pacific Highway Upgrade Aboriginal Heritage Assessment – Woodburn to Ballina Volume 2 Appendices

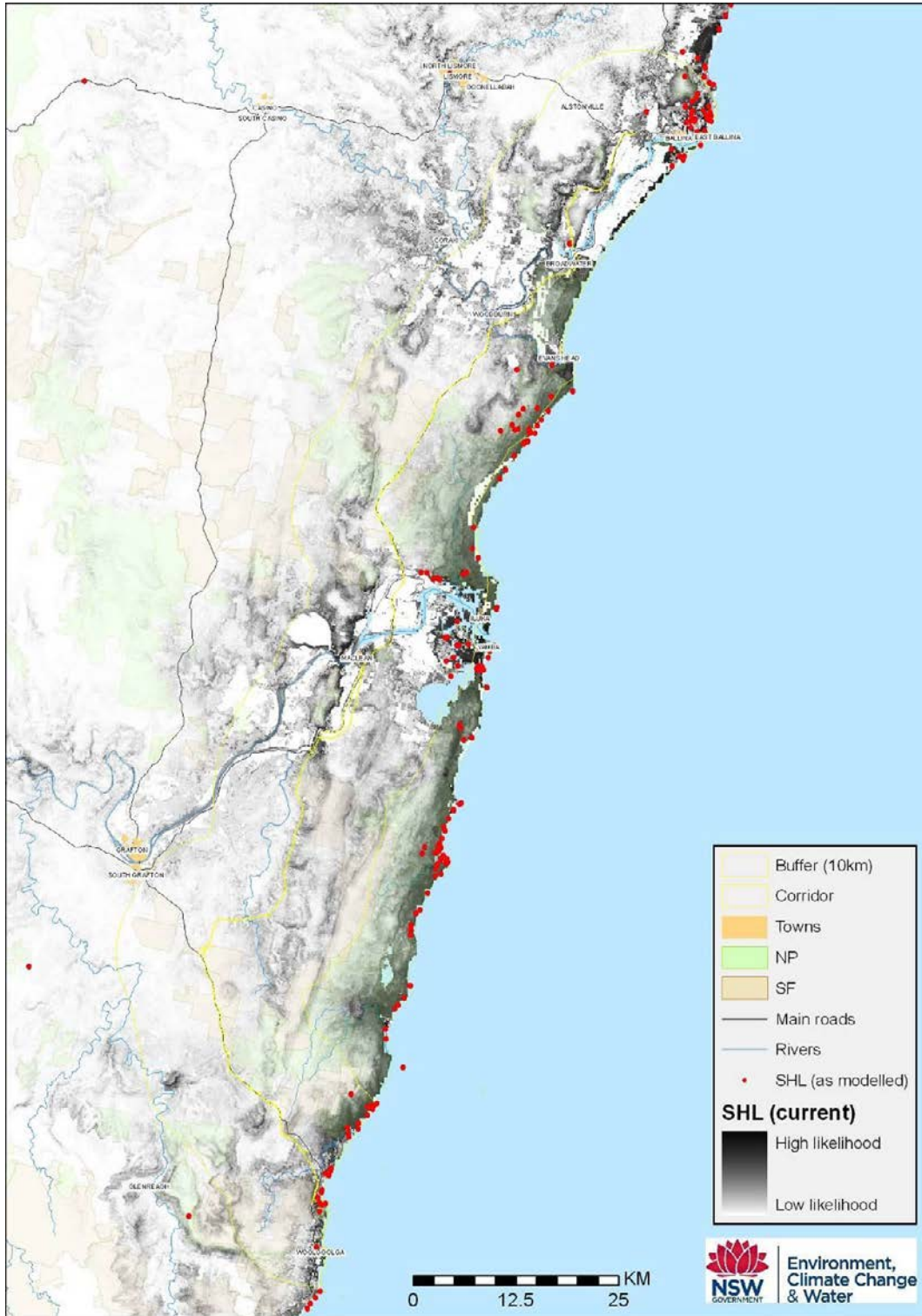


Figure 6 Current predicted likelihood of shell middens

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade Aboriginal Heritage Assessment – Woodburn to Ballina Volume 2 Appendices

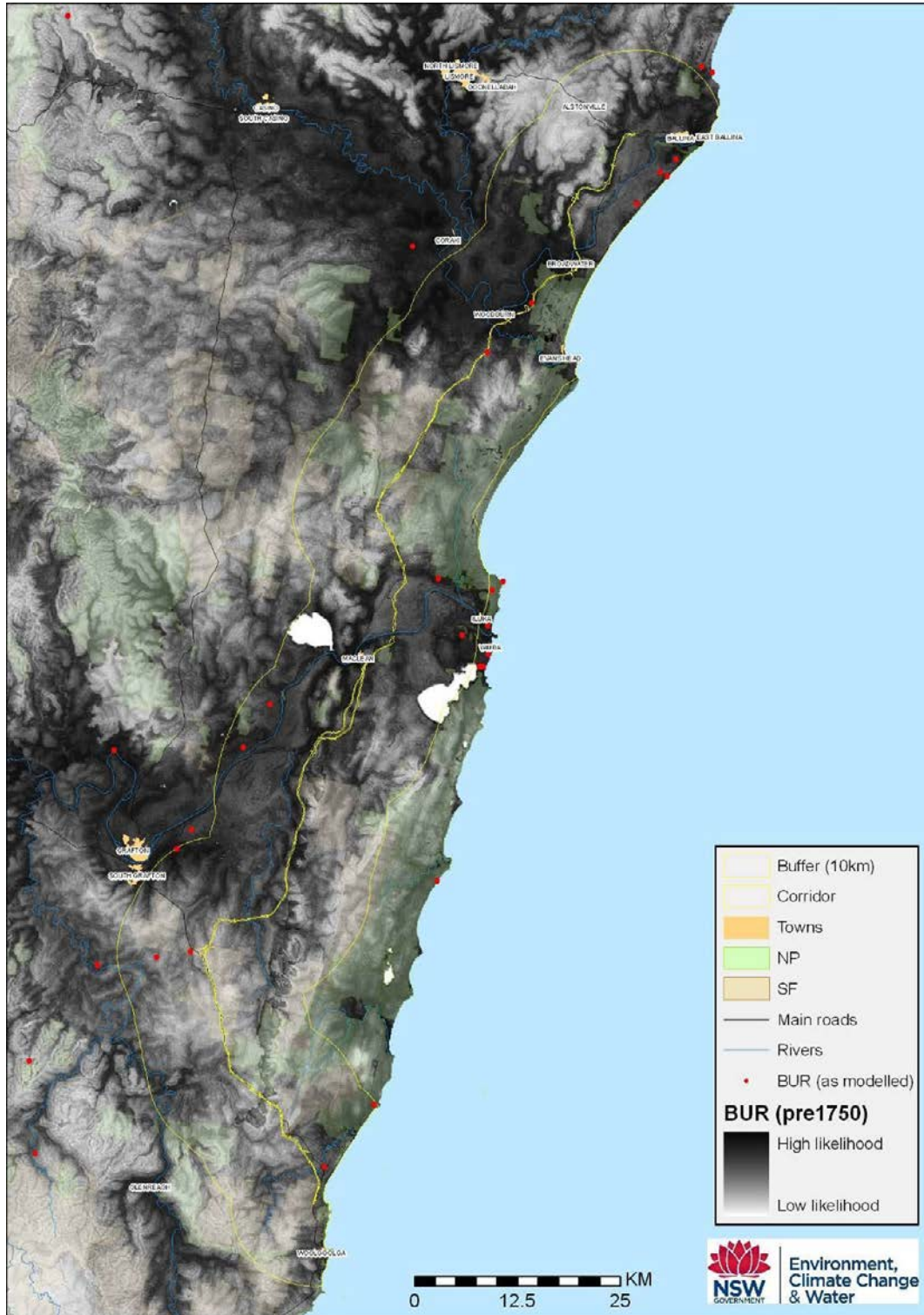


Figure 7 Pre-1750 predicted likelihood of burials

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

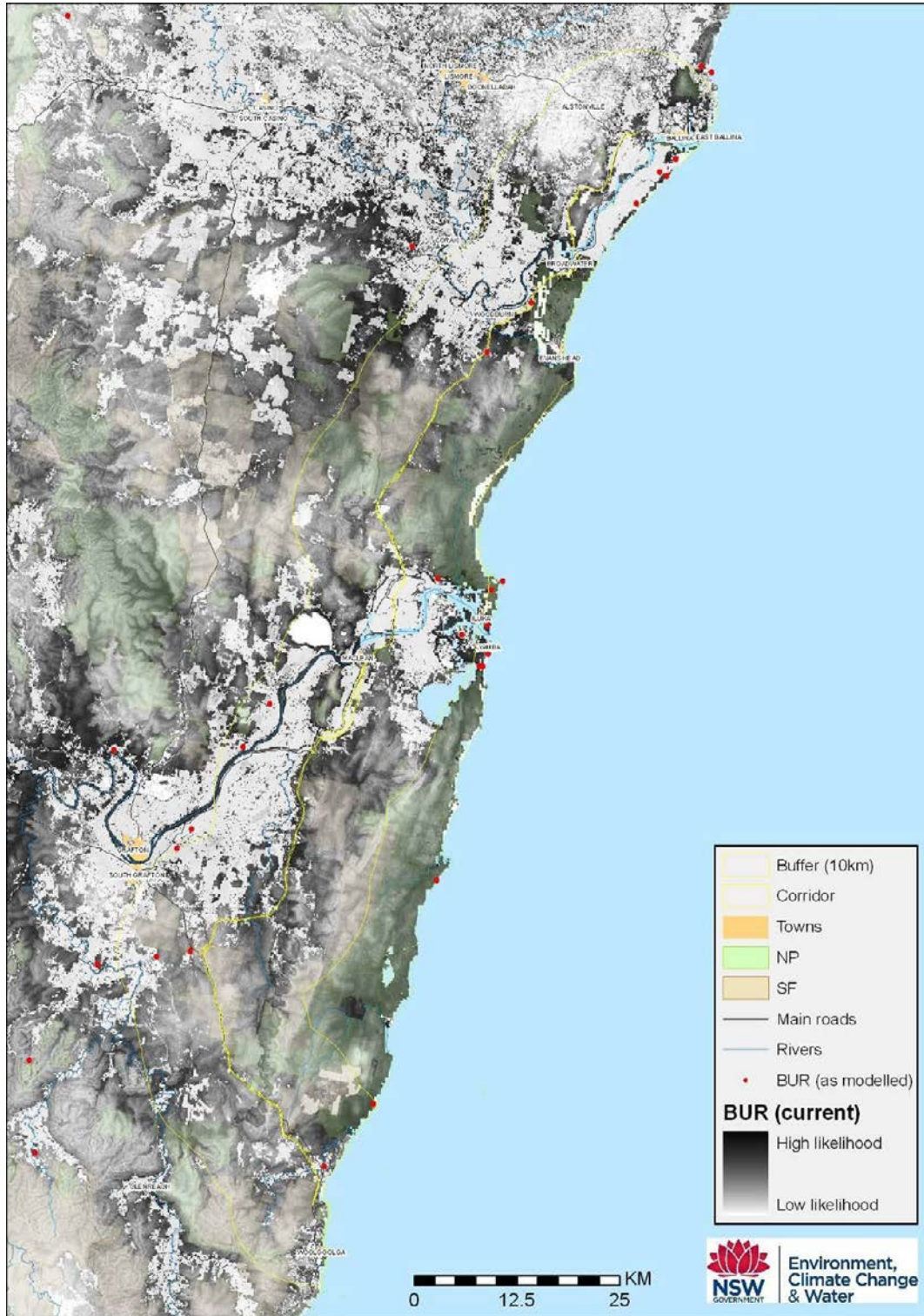


Figure 8 Current predicted likelihood of burials

Appendix H Survey coverage and priority

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

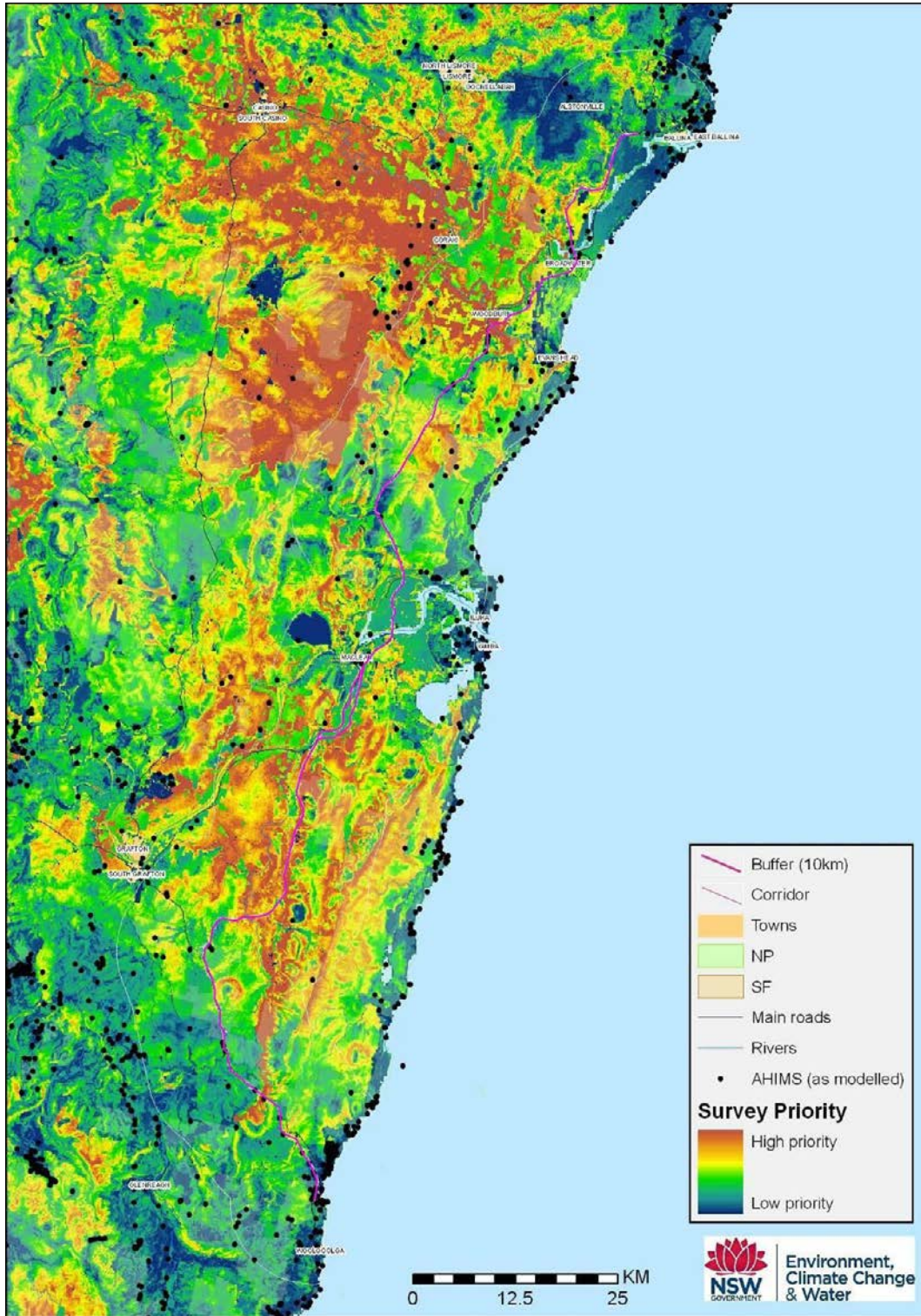


Figure 9 Survey coverage and priority


Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Appendix I Survey coverage

PUBLIC


Working paper 4 – Aboriginal heritage assessment (concept plan)

Table 7 Survey summary

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 140 DP755624	8		Plain	10	5	Plantation	 <p>View across the site (Photo by Joseph Brooke, 26 August 2010).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 2 DP510242 Lot 64 DP755624 Lot 104 DP755624 Lot 6 DP755624	8	PADs 5,6,7, Gittoes Jali Site (AHIMS Site IDs: 09-1-0204, 09-1-0205, 09-1- 0203)	Plain	5	1	Cane farming, grazing and some minor quarrying	 <p>View across site (Photo by Robyn Jenkins, 25 August 2010).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 212 DP851963	8		Plain	10	5	Farming, pastoral/grazing	 <p>View across the site (Photo by Robyn Jenkins, 25 August 2010).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 133 DP839607	8		Plain	15	5	Cane farming	 <p>View west across fields (Photo by Robyn Jenkins, 25 August 2010).</p>

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 2 DP608704	8		Plain	30	20	Farming	 <p>View across site (Photo by Robyn Jenkins, 25 August 2010).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 122 DP1016479	8		Plain	5	1	Intensive farming	 <p>View across site (Photo by Robyn Jenkins, 25 August 2010).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 50 DP868042	8		Plain	10	5	Intensive farming	 <p>View across site (Photo by Rani Attwood, 25 August 2010).</p>

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 3 DP229433	9	PAD 13 (AHIMS Site ID: 13-1-0190)	Plain	15	5	Farming, pastoral/grazing	 <p>View north along the corridor, note low-lying swamp (Photo by Robyn Jenkins, 24 August 2010).</p>

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 204 DP755624	9		Plain	25	10	Cleared, pastoral/grazing	 <p>View across field (Photo by Rani Attwood, 25 August 2010).</p>

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 2 DP604378	9	PAD 10 (AHIMS Site ID: 13-1-0188)	Plain	30	5	Farming	 <p>View west across ground exposure (Photo by Rani Attwood, 24 August 2010).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 3 DP818940	9		Plain	30	10	Residential, cleared	 <p>View across field (Photo by Rani Attwood, 24 August 2010).</p>

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 61 DP755624	9	PAD 11 (AHIMS Site ID: 13-1-0189)	Undulating plain	30	10	Farming, cleared	 <p>View west across PAD 11 and native re-vegetation (Photo by Rani Attwood, 24 August 2010).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 367 DP755624	9	PAD 11 (AHIMS Site ID: 13-1-0189)	Plain	30	5	Tree planting, grazing	 <p>View north along property, note trees planted along fence-line (Photo by Rani Attwood, 24 August 2010).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 4 DP 253906	9		Dune	80-100	80-100	Majority of property has been quarried below Aboriginal deposits	 <p>View north, McGeary quarry (Photo by Rani Attwood, 24 August 2011).</p>

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 4 DP253906 Lot 6 DP1043232	9	E2/2 (AHIMS Site ID: 13-1-0109)	Crests and slope. PAD is close to the Lily Cultural site	40	20	Disturbance from cane farming, tracks and quarrying	 <p>View east across site (Photo by Erica Weston, 7 December 2011).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 4 DP253906 Lot 6 DP1043232	9	Lily Cultural site (E2/2 [AHIMS Site ID: 13-1-0109])	Crest, slopes and plain	40-60	20-40		 <p>View north towards Lily Cultural site from E2/2 (Photo by Erica Weston, 7 December 2011).</p>

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
(556 Back Channel Road) Lot 21 DP755691	10	Law Scarred Tree 1 (AHIMS Site ID: 04-4-0174)	Lower slopes	40	10	Cane fields	 <p>Law Scarred Tree 1 (Photo by Joseph Brooke, 3 August 2011).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
(556 Back Channel Road) Lot 21 DP755691	10	Law PAD (AHIMS Site ID: 04-4-0168)	Coastal ramp	40	10	Cane fields	 <p>View north towards Law PAD (Photo by Rebecca Andrews, 29 November 2011).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
(Back Channel Road) Lot 22 DP755691	10	Gumi PAD	Mid-slope	20-40	0-20	Cleared	 <p>View south over site (Photo by Vanessa Edmonds, 20 December 2011).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
(Back Channel Road) Lot 22 DP755691	10	C21 (AHIMS Site ID: 04-4-0107)	Deflated sand dune and slopes	20-40	0-20	Cleared	 <p>C21 scarred tree (Photo by Joseph Brooke, 3 August 2011).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
(Back Channel Road) Lot 22 DP755691	10	Gumi Scarred Tree	Deflated sand dune and slopes	20-40	0-20	Cleared	 <p>Gumi Scarred Tree (Photo by Robyn Jenkins, 20 December 2011).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
(Back Channel Road) Lot 22 DP755691	10	MSRT2 (AHIMS Site ID: 04-4-0130)	Deflated sand dune and slopes	20-40	0-20	Cleared	 <p>MSRT2 scarred tree (Photo by Joseph Brooke, 3 August 2011).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
(Back Channel Road) Lot 22 DP755691	10	MST3 (AHIMS Site ID: 04-4-0131)	Deflated sand dune and slopes	20-40	0-20	Cleared	 <p>MST3 scarred tree (Photo by Joseph Brooke, 3 August 2011).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
(Back Channel Road) Lot 22 DP755691	10	Melino PAD (AHIMS Site ID: 04-4-0173)	Flat, raised sand, lower slopes	20-40	0-20	Pastoral/ grazing	 <p>View east across upper slope (Photo by Rebecca Andrews, 29 December 2011).</p>

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
(Back Channel Road) Lot 22 DP755691	10	Melino Scarred Tree 4 (AHIMS Site ID: 04-4-0166)	Lower slopes	20-40	20-40	Cleared	 <p>Melino Scarred Tree 4 (Photo by Joseph Brooke, 3 August 2011).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 2 DP585377	10		Undulating plain	10	2	Sand mining	 <p>View south across tea tree swamp (left Marcus Ferguson Jali LALC) (Photo by Rani Attwood, 24 August 2010).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 5 DP843369	10		Plain	5	1		 <p>View across wooded area (Photo by Rani Attwood, 24 August 2010).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 2 DP787102	10		Undulating plain	30	5	Cleared, farming	 <p>View north across to adjacent small property (Photo by Rani Attwood, 24 August 2010).</p>

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot A DP417587	10		Undulating plain	10	5	Cleared, pastoral/grazing	 <p>View west towards the Blackwall Ranges (Photo by Robyn Jenkins, 23 August 2010).</p>

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 172 DP755691	10		Undulating plain	10	2	Cleared, pastoral/grazing	 <p>View east across a previously grazed paddock (Photo by Robyn Jenkins, 23 August 2010).</p>

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 173 DP755691	10	PAD 3 (AHIMS Site ID: 04-4-0175)	Undulating plain	15	5	Cleared, pastoral/grazing	 <p>View east across PAD 3, high rise above the surrounding swamp area (Photo by Robyn Jenkins, 23 August 2010).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 246 DP755691	10	PAD 2 (AHIMS Site ID: 04-4-0178)	Undulating plain	15	5	Artificial channels, cleared	 <p>View east across PAD 2, note Bingal Creek located within the tree line (Photo by Robyn Jenkins, 23 August 2010).</p>

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Woodburn Road Lot 158 DP755731 Lot 7 DP866508	10	PAD 4 (AHIMS Site ID: 04-4-0132)	Low rise	15	10	Gardening and buried pipes	 <p>View north across the site (Photo by Rebecca Andrews, 12 December 2011).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 7 DP866508 Lot 158 DP755731 Lot 2 DP249649		PAD 4 (AHIMS Site ID: 04-4- 0132)	Plain, lower slope, mid- slope to upper slope, coastal ramp	30	10	Cleared	 <p>View north across the site (Photo by Rebecca Andrews, 12 December 2011).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 23 DP847450	10	PAD 1 (AHIMS Site ID: 04-4-0179)	Dune	10	5	Farming	 <p>View north towards the Blackwall Ranges (Photo by Robyn Jenkins, 23 August 2010).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 61 DP1088684	10	Rudgley Cultural PAD (AHIMS Site ID: 04-4-0171)	Lower slopes, plain	20	10	Clearing of woodland	 <p>View south across the site (Photo by Shoshanna Grounds, 9 December 2011).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 61 DP1088684	10	Rudgley Scarred Tree (AHIMS Site ID: 04-4-0170)	Lower slopes	0-20	5	Swamp, clearing of woodland	 <p>Rudgley Scarred Tree (Photo by Joseph Brooke, 2 August 2011).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 61 DP1088684	10	Rudgley PAD 2 (AHIMS Site ID: 04-4- 0169)	Flat, raised sand	20	10	Clearing of woodland	 <p>View north across site (Photo by Shoshanna Grounds, 9 December 2011).</p>



PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 61 DP 1088684	10	Rudgley PADs 1a and b (AHIMS Site ID: 04-4-0167)	Slopes and coastal ramp off the slopes of Blackwell Range	20	10	Some disturbance has occurred in and around this PAD from previous post-contact occupation	 <p>View north across Rudgley PAD 1A (Photo by Shoshanna Grounds, 9 December 2011).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 4 DP 8770997	11	Saezza 1 (AHIMS Site ID: 04-4-0171)	Flat, raised sand	20-40	0-20	Grazing and logging	 <p>View north across the site (Photo by Dani Mitchell, 16 November 2011).</p>
Lot 4 DP 8770997	11	Saezza PAD 1 and Saezza 1 (AHIMS Site IDs: 04-4-0172, 04-4-0171)	Slopes and coastal ramp off the slopes of Blackwell Range	30	10	Residential buildings and associated activities	 <p>View north across Saezza PAD 1 (Photo by Andrew Costello, 18 November 2011).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 3 DP877097	11		Plain	10	5	Farming, residential	 <p>View west across property, to tea tree swamp (Photo by Rani Attwood, 24 August 2010).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 5 DP877097	11	PAD 12 (AHIMS Site ID: 04-4-0176)	Plain	10	5	Farming	 <p>View west towards hill from PAD 12 (Photo by Robyn Jenkins, 26 August 2010).</p>

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 3 DP 814504	11		Undulating plain	10	5	Cleared	 <p>View south towards the property (Photo by Robyn Jenkins, 26 August 2010).</p>

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 5 DP223267	11		Plain	15	5	Intensive farming (cane)	 <p>View south along property boundary, note vegetation along current Pacific Highway and cane fields (Photo by Rani Attwood, 24 August 2010).</p>

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 20 DP1002627	11		Plain	15	5	Intensive farming (cane), service corridor	 <p>View south along property boundary (Photo by Robyn Jenkins, 25 August 2010).</p>

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 141 DP755731	11		Plain	10	2	Intensive farming (cane)	 <p>View west towards mountain ranges, across current cane field (Photo by Robyn Jenkins, 25 August 2010).</p>

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Property	Project section	PAD Name/ AHIMS Site ID	Landform	Ground surface visibility	Subsurface exposure	Disturbance	Image
Lot 4 DP811816	11		Plain	10	2	Cleared, farming	 <p>View acrosss cane fields (Photo by Robyn Jenkins, 25 August 2010).</p>


Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Appendix J Summary of sub-surface testing results

PUBLIC

Working paper 4 – Aboriginal heritage assessment (concept plan)

Table 8 Summary of sub-surface testing results

Site Name (AHIMS Site ID)	Easting/Northing (MGA Zone 56)	Number of Excavations	Cultural Material Identified (Y/N)	Site Type	Site Description	Images
Gittoes Jali (PADs 5, 6, 7) (AHIMS Site IDs: 09-1-0204, 09-1-0205, 09-1-0203)	537365 E/ 678075 N	130 (0.5 m x 0.5 m)	Yes	411 Artefacts (chert, fine grained siliceous, cobble, basalt, chalcedony, sandstone, crystal quartz)	<p>The site is situated on the crest and slope of a ridgeline. The area is cleared with clumps of trees and is currently used for grazing. Adjacent paddocks are used for farming.</p> <p>Artefacts were recovered from the majority of STPs and were distributed across the site and from the top of the STPs to a depth of 800 mm.</p>	 <p>View east along the crest of the ridgeline (Photo by Erica Weston, 11 November 2011).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Site Name (AHIMS Site ID)	Easting/Northing (MGA Zone 56)	Number of Excavations	Cultural Material Identified (Y/N)	Site Type	Site Description	Images
PAD 13 (AHIMS Site ID: 13-1-0190)	540580 E/ 6788906 N	20 (0.5 m x 0.5 m) 4 m x 1 m (Mechanical Transects)	No		<p>The site is located on a very slight, sandy rise in a cleared paddock, which is well-grazed. Mill slag was present in the top 200 mm of the deposit, suggesting that this portion is fill.</p> <p>No artefacts were recovered.</p>	 <p>View north along one of the transects (Photo by Amanda Goldfarb, 15 December 2011).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Site Name (AHIMS Site ID)	Easting/Northing (MGA Zone 56)	Number of Excavations	Cultural Material Identified (Y/N)	Site Type	Site Description	Images
PAD 10 (AHIMS Site ID: 13-1-0188)	542452 E/ 6784603 N	18 (0.5 m x 0.5 m)	No		<p>The site is located on a low, flat terrace above a floodplain. The area is a cleared paddock which appears well-grazed. Power-lines run across the property.</p> <p>No artefacts were recovered.</p>	 <p>View west across the low rise (Photo by Laura Bates, 16 November 2011).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Site Name (AHIMS Site ID)	Easting/Northing (MGA Zone 56)	Number of Excavations	Cultural Material Identified (Y/N)	Site Type	Site Description	Images
PAD 8 (AHIMS Site ID: 13-1-0187)	542617 E/ 6789527 N	12 (0.5 m x 0.5 m)	No		<p>The site is located on a sandy rise, which is a deflated dune with a marshy area at the base. The area was formerly ploughed with residences and a machinery shed located nearby. Excavation ceased at c. 700 mm due to a high water table.</p> <p>No artefacts were recovered.</p>	 <p>View south showing the nearby residences (Photo by Matt Schlitz, 7 November 2011).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Site Name (AHIMS Site ID)	Easting/Northing (MGA Zone 56)	Number of Excavations	Cultural Material Identified (Y/N)	Site Type	Site Description	Images
PAD 11 (AHIMS Site ID: 13-1-0189)	543420 E/ 6790478 N	18 (0.5 m x 0.5 m) 6 m x 1 m (Mechanical Transects)	Yes	1003 Artefacts (chert, chalcedony and quartz)	<p>The site is located on a low, sandy rise below Cook's Hill and is adjacent to a drainage line. The area is a cleared paddock, which appears to be grazed and is surrounded by woodland. A large sand quarry is located nearby.</p> <p>The majority of artefacts were from the mechanical trench (approximately 947 out of the 1003), and were found from 200 mm to a depth of 1.05 m. The remaining artefacts came from seven STPs and also began occurring at a depth of 200 mm.</p>	 <p>View north along Trench 1, showing the cleared landscape (Photo by Robyn Jenkins, 19 December 2011).</p>



PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Site Name (AHIMS Site ID)	Easting/Northing (MGA Zone 56)	Number of Excavations	Cultural Material Identified (Y/N)	Site Type	Site Description	Images
E2/2 (AHIMS Site ID: 13-1-0109)	543303 E/ 6791321 N	40 (0.5 m x 0.5 m) 6 m x 1 m (Mechanical Transects)	Yes	13 Artefacts (chert, chalcedony, quartz, silcrete, igneous material and granite/quartzite) Shell midden (<i>donax deltoides</i>)	<p>The site is located on a sandy rise, which is covered with new growth woodland. The mechanical transect was located along a lightly worn vehicle track.</p> <p>Artefacts were found from the top of the deposit to a depth of 2 m. The assemblage consists of three single platform cores of quartz, igneous material and silcrete, while the flakes were predominantly chert and chalcedony, with quartz, granite/quartzite and igneous material also used.</p>	 <p>View north of the mechanical transect, showing the new growth woodland (Photo by Rebecca Andrews, 13 December 2011).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Site Name (AHIMS Site ID)	Easting/Northing (MGA Zone 56)	Number of Excavations	Cultural Material Identified (Y/N)	Site Type	Site Description	Images
Melino PAD (AHIMS Site ID: 04-4-0173)	542574 E/ 6792780 N	87 (0.5 m x 0.5 m) 6 m x 1 m (Mechanical Transects) 1 (1 m x 1 m) 1 (2 m x 1 m)	Yes	212 Artefacts (basalt, chalcedony, chert cobble, dolerite, fine grained siliceous, quartz, quartzite silcrete) Shell midden (<i>donax deltoides</i>)	<p>There are two distinct landforms within this site, which is located near the floodplain of the Richmond River. One is the upper slope of a hill and the second is a relatively flat sandy area that likely represents the crest and upper slopes of a low, deflated sand dune. The area is cleared with scattered trees and is surrounded by open woodland.</p> <p>Artefacts were present in deposits across the site to a depth of 1 m. Over half of the assemblage consisted of chert artefacts with chalcedony, quartz, silcrete and fine grained siliceous artefacts contributing in descending order. Flakes are the most numerous technological type, with 10 flaked pieces and four cores completing the assemblage. The assemblage features six microblades and seven retouched artefacts, all of which were made on chert or chalcedony, with only two retouched flakes made on quartz.</p>	 <p>View north of the flat sandy area looking towards a surface scatter (Photo by Rebecca Andrews, 29 November 2011).</p>  <p>View east of the upper slope of a hill showing the open woodland</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Site Name (AHIMS Site ID)	Easting/Northing (MGA Zone 56)	Number of Excavations	Cultural Material Identified (Y/N)	Site Type	Site Description	Images
PAD 2 (AHIMS Site ID: 04-4-0178)	541674 E/ 6796907 N	34 (0.5 m x 0.5 m) 6 m x 1 m (Mechanical Transects)	Yes	21 Artefacts (chalcedony, chert, fine grained siliceous, quartz, silcrete)	<p>The site is located on a low, sandy rise adjacent to a swamp. The area is cleared with scattered trees and is lightly grazed.</p> <p>The majority of artefacts were recovered from the mechanical trench. Across the site, artefacts were found from a depth of 650 mm to 1.2 m. The majority of artefacts were flakes (complete and broken), with two cores also found.</p>	 <p>View south across the transect (left Simon Coxe) (Photo by Amanda Goldfarb, 13 December 2011).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Site Name (AHIMS Site ID)	Easting/Northing (MGA Zone 56)	Number of Excavations	Cultural Material Identified (Y/N)	Site Type	Site Description	Images
PAD 3 (AHIMS Site ID: 04-4-0175)	541687 E/ 6796637 N	8 (0.5 m x 0.5 m)	Yes	4 Artefacts (chert, silicified quartz, river cobble)	<p>The site is located on a rise in a swampy area. The area is cleared with isolated trees and appears to have been lightly grazed.</p> <p>The artefacts from this site are four flakes (two of which are broken) made on the various raw materials.</p>	 <p>View west showing the swampy area (taller grass) the site was situated in (Photo by Clair Davey, 22 November 2011).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Site Name (AHIMS Site ID)	Easting/Northing (MGA Zone 56)	Number of Excavations	Cultural Material Identified (Y/N)	Site Type	Site Description	Images
PAD 4 (AHIMS Site ID: 04-4-0132)	542381 E/ 6798427 N	35 (0.5 m x 0.5 m)	Yes	15 Artefacts (chalcedony, chert, silcrete)	<p>The site is located on the crest of a saddle, which has been cleared and is grazed.</p> <p>The artefacts were found from just below the surface down to 250 mm. Artefacts consisted of flakes (complete and broken) and angular fragments.</p>	 <p>View west up the slope (Photo by Rebecca Andrews, 12 December 2011).</p>

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Site Name (AHIMS Site ID)	Easting/Northing (MGA Zone 56)	Number of Excavations	Cultural Material Identified (Y/N)	Site Type	Site Description	Images
PAD 1 (AHIMS Site ID: 04-4-0179)	545113 E/ 6799510 N	12 (0.5 m x 0.5 m)	Yes	7 Artefacts (chert)	<p>The site is located on a low, sandy rise that is dominated by a large grove of trees. The area is cleared, lightly grazed and adjacent to an open woodland.</p> <p>The artefacts consist of one core, two flakes and four flaked pieces. They were recovered from STPs 3, 6 and 8 between 300 mm-500 mm in depth. The core and one of the flakes were recovered from the same STP and are the same raw material.</p>	 <p>View north showing the grove of trees (Photo by Anthony Hamdorf, 18 November 2011).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Site Name (AHIMS Site ID)	Easting/Northing (MGA Zone 56)	Number of Excavations	Cultural Material Identified (Y/N)	Site Type	Site Description	Images
Rudgley Cultural PAD (AHIMS Site ID: 04-4-0171)	545948 E/ 6800055 N	9 (0.5 m x 0.5 m)	No		The site is located on the edge of a gentle slope in a cleared area with woodlands to the east and west. The area is currently grazed.	 <p>View north showing the woodland to each side of the site and a cow path (Photo by Shoshanna Grounds, 9 December 2011).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Site Name (AHIMS Site ID)	Easting/Northing (MGA Zone 56)	Number of Excavations	Cultural Material Identified (Y/N)	Site Type	Site Description	Images
Rudgley PAD 2 (AHIMS Site ID: 04-4-0169)	546025 E/ 6800082 N	6 (0.5 m x 0.5 m)	Yes	3 Artefacts (chert)	<p>The site is located on a slight, sandy rise within open woodland. The water table was encountered at 1 m.</p> <p>The artefacts consisted of two flakes and one flaked piece. One flake was found in STP 1 at 700-800 mm, while the other artefacts were found in STP 6R at 550-600 mm.</p>	 <p>View west showing the open woodland setting (Photo by Shoshanna Grounds, 9 December 2011).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Site Name (AHIMS Site ID)	Easting/Northing (MGA Zone 56)	Number of Excavations	Cultural Material Identified (Y/N)	Site Type	Site Description	Images
Rudgley PAD 1b (AHIMS Site ID: 04-4-0167)	546007 E/ 6800304 N	15 (0.5 m x 0.5 m)	Yes	5 Artefacts (chert, chalcedony)	<p>The site is located mid-slope of a ridgeline running almost north-south. The area is cleared with woodlands to the east and west and appears to be lightly grazed.</p> <p>The artefacts consist of two angular fragments (chalcedony), a single chalcedony flake and a flake and flaked piece made on chert. All artefacts were recovered from 0-200 mm deep.</p>	 <p>View north showing the slope (Photo by Shoshanna Grounds, 9 December 2011).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Site Name (AHIMS Site ID)	Easting/Northing (MGA Zone 56)	Number of Excavations	Cultural Material Identified (Y/N)	Site Type	Site Description	Images
Rudgley PAD 1a (AHIMS Site ID: 04-4-0167)	546020 E/ 6800400 N	26 (0.5 m x 0.5 m)	Yes	6 Artefacts (chert, basalt)	<p>The site is located on the crest of a spur adjacent to natural springs and a swamp. The area is cleared with isolated trees and is bordered by woodland.</p> <p>The artefacts consist of a single platform core (chert), five broken flakes (chert) and an axe fragment (basalt).</p>	 <p>View west along the spur (Photo by Clair Davey, 23 November 2011).</p>

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Site Name (AHIMS Site ID)	Easting/Northing (MGA Zone 56)	Number of Excavations	Cultural Material Identified (Y/N)	Site Type	Site Description	Images
Saezza 1 (AHIMS Site ID: 04-4-0171)	546360 E/ 6800623 N	7 (0.5 m x 0.5 m)	Yes	60 Artefacts (chalcedony, quartz and chert)	<p>The site is located on a small rise above a creek. The area is extremely disturbed, with a thin soil profile situated on a compact clay layer. There are also cleared areas within an open forest, and evidence of logging.</p> <p>The artefacts were found from 100-900 mm over five STPs. There were 36 flakes (complete and broken), 21 flaked pieces and 3 cores: one single platform core (chert) and two multiple platform cores (chalcedony and chert).</p>	 <p>View north of the site (Photo by Andrew Costello, 18 November 2011).</p>


PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Site Name (AHIMS Site ID)	Easting/Northing (MGA Zone 56)	Number of Excavations	Cultural Material Identified (Y/N)	Site Type	Site Description	Images
Saezza PAD 1 (AHIMS Site ID: 04-4-0172)	546222 E/ 6800628 N	2 (0.5 m x 0.5 m)	No		The site is located on a small sandy rise above a swamp. Area is cleared, surrounded by open forest and is located near a house block.	 <p>View north of the site (Photo by Andrew Costello, 18 November 2011).</p>

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Site Name (AHIMS Site ID)	Easting/Northing (MGA Zone 56)	Number of Excavations	Cultural Material Identified (Y/N)	Site Type	Site Description	Images
PAD 12 (AHIMS Site ID: 04-4-0176)	546505 E/ 6801440 N	8 (0.5 m x 0.5 m)	Yes	15 Artefacts (chert)	<p>The site is located on a low sandy rise. The area is grassed and is currently used for grazing, bordered by an open forest.</p> <p>Artefacts were found from 300-700 mm in three STPs. There were 10 flaked pieces, three complete flakes and two proximal flakes.</p>	 <p>View west across areas (Photo by Dani Mitchell, 17 November 2011).</p>

Appendix K Summary of all excavations

Table 9 Summary of all excavations

Date	MGA Zone 56		Site / PAD name	Excavation number	Excavation type	Dimension of excavation (m)	End depth (mm)	Landscape unit (landform)	Number of artefacts	Artefact materials	Site condition	Comments
	Easting	Northing										
7/11/2011	537364.8	6785075.6	Gittoes Jali	STP 1	Shovel Probe	0.5 x 0.5	400	Ridge	0	-	-	-
7/11/2011	537363.8	6785067.0	Gittoes Jali	STP 2	Shovel Probe	0.5 x 0.5	200	Ridge	0	-	-	-
7/11/2011	537363.1	6785058.3	Gittoes Jali	STP 3	Shovel Probe	0.5 x 0.5	450	Ridge	0	-	-	-
7/11/2011	537362.4	6785048.8	Gittoes Jali	STP 4	Shovel Probe	0.5 x 0.5	650	Ridge	0	-	-	-
7/11/2011	537362.4	6785037.2	Gittoes Jali	STP 5	Shovel Probe	0.5 x 0.5	50	Ridge	0	-	-	-
7/11/2011	537361.4	6785028.4	Gittoes Jali	STP 6	Shovel Probe	0.5 x 0.5	500	Ridge	5	Chalcedony	-	-
7/11/2011	537360.1	6785015.9	Gittoes Jali	STP 7	Shovel Probe	0.5 x 0.5	550	Ridge	0	-	-	-
7/11/2011	537362.9	6785005.2	Gittoes Jali	STP 8	Shovel Probe	0.5 x 0.5	450	Ridge	0	-	-	-
7/11/2011	537365.5	6784995.4	Gittoes Jali	STP 9	Shovel Probe	0.5 x 0.5	250	Ridge	0	-	-	-
7/11/2011	537368.5	6784985.9	Gittoes Jali	STP 10	Shovel Probe	0.5 x 0.5	350	Ridge	0	-	-	-
8/11/2011	537371.1	6784977.8	Gittoes Jali	STP 11	Shovel Probe	0.5 x 0.5	350	Ridgeline	0	-	-	-
8/11/2011	537374.7	6784968.4	Gittoes Jali	STP 12	Shovel Probe	0.5 x 0.5	350	Ridgeline	0	-	-	-
8/11/2011	537381.4	6784959.5	Gittoes Jali	STP 13	Shovel Probe	0.5 x 0.5	350	Ridgeline	0	-	-	-
8/11/2011	537386.6	6784951.4	Gittoes Jali	STP 14	Shovel Probe	0.5 x 0.5	350	Ridgeline	1	Chalcedony	Cleared	-
8/11/2011	537392.6	6784942.4	Gittoes Jali	STP 15	Shovel Probe	0.5 x 0.5	350	Ridgeline	0	-	-	-
8/11/2011	537395.5	6784932.8	Gittoes Jali	STP 16	Shovel Probe	0.5 x 0.5	500	Ridgeline lower slope	0	-	-	-
8/11/2011	537396.9	6784923.7	Gittoes Jali	STP 17	Shovel Probe	0.5 x 0.5	600	Ridgeline lower slope	0	-	-	-
8/11/2011	537398.3	6784913.5	Gittoes Jali	STP 18	Shovel Probe	0.5 x 0.5	100	Ridgeline lower slope	0	-	-	-
8/11/2011	537385.0	6784955.8	Gittoes Jali	STP 19	Shovel Probe	0.5 x 0.5	250	Ridgeline lower slope	3	Chalcedony, river cobble	Cleared	-
8/11/2011	537383.5	6784949.5	Gittoes Jali	STP 20	Shovel Probe	0.5 x 0.5	400	Ridgeline lower slope	1	River cobble	Cleared	-
8/11/2011	537386.1	6784944.6	Gittoes Jali	STP 21	Shovel Probe	0.5 x 0.5	400	Ridgeline lower slope	0	-	-	-
8/11/2011	537389.7	6784946.5	Gittoes Jali	STP 22	Shovel Probe	0.5 x 0.5	600	Ridgeline lower slope	0	-	-	-
8/11/2011	537391.8	6784953.1	Gittoes Jali	STP 23	Shovel Probe	0.5 x 0.5	290	Ridgeline lower slope	0	-	-	-
8/11/2011	537380.5	6784953.9	Gittoes Jali	STP 24	Shovel Probe	0.5 x 0.5	300	Ridgeline lower slope	0	-	-	-
8/11/2011	537379.3	6784947.9	Gittoes Jali	STP 25	Shovel Probe	0.5 x 0.5	200	Ridgeline lower slope	0	-	-	-
8/11/2011	537399.5	6784904.6	Gittoes Jali	STP 26	Shovel Probe	0.5 x 0.5	200	Ridgeline lower slope	0	-	-	-
8/11/2011	537400.6	6784894.1	Gittoes Jali	STP 27	Shovel Probe	0.5 x 0.5	200	Ridgeline lower slope	0	-	-	-
8/11/2011	537401.8	6784884.1	Gittoes Jali	STP 28	Shovel Probe	0.5 x 0.5	400	Ridgeline lower slope	1	River cobble	Cleared	-
8/11/2011	537355.9	6785026.8	Gittoes Jali	STP A	Shovel Probe	0.5 x 0.5	200	Crest of ridge	5	Silcrete, chalcedony, bone	Cleared	Radial
8/11/2011	537349.3	6785024.1	Gittoes Jali	STP B	Shovel Probe	0.5 x 0.5	300	Top of slope	0	-	Cleared	Radial
8/11/2011	537357.0	6785034.4	Gittoes Jali	STP C	Shovel Probe	0.5 x 0.5	250	Crest of slope	0	-	Cleared	Radial
8/11/2011	537360.4	6785031.5	Gittoes Jali	STP D	Shovel Probe	0.5 x 0.5	500	Top of crest	1	Quartzite	Cleared	Radial
8/11/2011	537355.4	6785021.1	Gittoes Jali	STP E	Shovel Probe	0.5 x 0.5	300	Ridgeline lower slope	0	-	-	-
8/11/2011	537361.2	6785021.2	Gittoes Jali	STP F	Shovel Probe	0.5 x 0.5	400	Ridgeline lower slope	0	-	-	-
8/11/2011	537365.0	6785024.2	Gittoes Jali	STP G	Shovel Probe	0.5 x 0.5	400	Top of slope	4	Quartzite, chalcedony	Wooded	Radial

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	MGA Zone 56		Site / PAD name	Excavation number	Excavation type	Dimension of excavation (m)	End depth (mm)	Landscape unit (landform)	Number of artefacts	Artefact materials	Site condition	Comments
	Easting	Northing										
8/11/2011	537366.1	6785019.3	Gittoes Jali	STP H	Shovel Probe	0.5 x 0.5	400	Ridgeline lower slope	4	Chalcedony	Cleared	-
8/11/2011	537366.8	6785014.9	Gittoes Jali	STP I	Shovel Probe	0.5 x 0.5	400	Top of slope	0	-	Cleared	Radial
8/11/2011	537372.6	6785021.2	Gittoes Jali	STP J	Shovel Probe	0.5 x 0.5	300	Top of slope	0	-	Cleared	Radial
8/11/2011	537372.1	6785025.1	Gittoes Jali	STP K	Shovel Probe	0.5 x 0.5	500	Top of slope	1	Chert	Wooded	Radial
8/11/2011	537373.3	6785028.9	Gittoes Jali	STP L	Shovel Probe	0.5 x 0.5	450	Top of slope	0	-	Wooded	Radial
8/11/2011	537367.2	6785030.1	Gittoes Jali	STP M	Shovel Probe	0.5 x 0.5	350	Top of slope	0	-	Crest of slope	Radial
8/11/2011	537376.6	6785024.4	Gittoes Jali	STP N	Shovel Probe	0.5 x 0.5	350	Top of slope	0	-	Cleared	Radial
9/11/2011	537398.4	6784882.9	Gittoes Jali	STP 29	Shovel Probe	0.5 x 0.5	250	Ridgeline lower slope	3	Fine grained siliceous	Cleared	-
9/11/2011	537398.7	6784879.5	Gittoes Jali	STP 30	Shovel Probe	0.5 x 0.5	200	Ridgeline lower slope	5	Fine grained siliceous	Cleared	-
9/11/2011	537402.4	6784880.0	Gittoes Jali	STP 31	Shovel Probe	0.5 x 0.5	250	Ridgeline lower slope	4	Fine grained siliceous	Cleared	-
9/11/2011	537406.0	6784880.7	Gittoes Jali	STP 32	Shovel Probe	0.5 x 0.5	200	Ridgeline lower slope	0	-	-	-
9/11/2011	537402.9	6784877.2	Gittoes Jali	STP 33	Shovel Probe	0.5 x 0.5	250	Ridgeline lower slope	4	Fine grained siliceous	Cleared	-
9/11/2011	537395.9	6784878.8	Gittoes Jali	STP 34	Shovel Probe	0.5 x 0.5	200	Ridgeline lower slope	24	Fine grained siliceous	Cleared	-
9/11/2011	537393.0	6784877.8	Gittoes Jali	STP 35R	Shovel Probe	0.5 x 0.5	240	Ridgeline lower slope	3	Cobble, fine grained siliceous, silcrete	-	-
9/11/2011	537399.7	6784873.9	Gittoes Jali	STP 36R	Shovel Probe	0.5 x 0.5	180	Lower slope	9	Silcrete cobble	-	-
9/11/2011	537403.4	6784874.4	Gittoes Jali	STP 37	Shovel Probe	0.5 x 0.5	300	Lower slope	0	-	-	-
9/11/2011	537406.1	6784875.5	Gittoes Jali	STP 38R	Shovel Probe	0.5 x 0.5	250	Lower slope	2	Silcrete	-	-
9/11/2011	537404.3	6784869.5	Gittoes Jali	STP 39R	Shovel Probe	0.5 x 0.5	400	Lower slope	2	Chert	-	Charcoal feature in north-west corner at 400 mm. Sample taken
9/11/2011	537405.1	6784864.6	Gittoes Jali	STP 39	Shovel Probe	0.5 x 0.5	300	Lower slope	1	Chert	-	-
9/11/2011	537405.9	6784855.6	Gittoes Jali	STP 40	Shovel Probe	0.5 x 0.5	300	Ridgeline lower slope	2	Chalcedony	Cleared	-
10/11/2011	537406.7	6784845.2	Gittoes Jali	STP 41	Shovel Probe	0.5 x 0.5	250	Ridgeline lower slope	13	Chert	Cleared	-
10/11/2011	537404.1	6784845.1	Gittoes Jali	STP 42	Shovel Probe	0.5 x 0.5	550	Ridgeline lower slope	2	Chert	Cleared	-
10/11/2011	537411.3	6784845.2	Gittoes Jali	STP 43	Shovel Probe	0.5 x 0.5	400	Ridgeline lower slope	6	Chert	Cleared	-
10/11/2011	537411.5	6784838.1	Gittoes Jali	STP 44R	Shovel Probe	0.5 x 0.5	550	Ridgeline lower slope	8	Chert	Cleared	-
10/11/2011	537415.3	6784844.7	Gittoes Jali	STP 45R	Shovel Probe	0.5 x 0.5	300	Lower slope	7	-	-	-
10/11/2011	537410.2	6784833.8	Gittoes Jali	STP 46R	Shovel Probe	0.5 x 0.5	450	Lower slope	30	-	-	-
10/11/2011	537406.9	6784834.4	Gittoes Jali	STP 47	Shovel Probe	0.5 x 0.5	250	Lower slope	21	-	-	-
10/11/2011	537404.1	6784834.9	Gittoes Jali	STP 48R	Shovel Probe	0.5 x 0.5	350	Lower slope	24	-	-	-
10/11/2011	537407.9	6784824.9	Gittoes Jali	STP 49	Shovel Probe	0.5 x 0.5	250	Lower slope	17	-	-	-
10/11/2011	537402.7	6784825.7	Gittoes Jali	STP 50R	Shovel Probe	0.5 x 0.5	200	Lower slope	5	-	-	-
10/11/2011	537411.0	6784824.4	Gittoes Jali	STP 51R	Shovel Probe	0.5 x 0.5	250	Lower slope	0	-	-	-
10/11/2011	537405.7	6784815.6	Gittoes Jali	STP 52	Shovel Probe	0.5 x 0.5	500	Lower slope	0	-	-	-
10/11/2011	537405.7	6784806.9	Gittoes Jali	STP 53	Shovel Probe	0.5 x 0.5	450	Lower slope	0	-	-	-

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	MGA Zone 56		Site / PAD name	Excavation number	Excavation type	Dimension of excavation (m)	End depth (mm)	Landscape unit (landform)	Number of artefacts	Artefact materials	Site condition	Comments
	Easting	Northing										
10/11/2011	537401.2	6784797.9	Gittoes Jali	STP 54	Shovel Probe	0.5 x 0.5	550	Lower slope	1	-	-	-
10/11/2011	537398.7	6784790.4	Gittoes Jali	STP 55	Shovel Probe	0.5 x 0.5	450	Lower slope	5	-	-	-
10/11/2011	537395.7	6784789.5	Gittoes Jali	STP 56	Shovel Probe	0.5 x 0.5	500	Lower slope	3	-	-	-
10/11/2011	537402.0	6784789.8	Gittoes Jali	STP 57R	Shovel Probe	0.5 x 0.5	450	Lower slope	0	-	-	-
10/11/2011	537398.2	6784783.0	Gittoes Jali	STP 58	Shovel Probe	0.5 x 0.5	600	Lower slope	0	-	-	-
10/11/2011	537392.5	6784775.3	Gittoes Jali	STP 59	Shovel Probe	0.5 x 0.5	400	Lower slope	1	-	-	-
10/11/2011	537388.2	6784776.0	Gittoes Jali	STP 60R	Shovel Probe	0.5 x 0.5	350	Lower slope	0	-	-	-
10/11/2011	537396.9	6784770.7	Gittoes Jali	STP 61R	Shovel Probe	0.5 x 0.5	350	Lower slope	2	-	-	-
11/11/2011	537406.3	6784770.0	Gittoes Jali	STP 62R	Shovel Probe	0.5 x 0.5	300	Lower slopes ridgeline	1	Chalcedony	-	-
11/11/2011	537409.6	6784769.4	Gittoes Jali	STP 63R	Shovel Probe	0.5 x 0.5	300	Lower slopes ridgeline	3	Chert	-	-
11/11/2011	537391.0	6784765.9	Gittoes Jali	STP 64	Shovel Probe	0.5 x 0.5	450	Lower slope	8	River cobble	-	-
11/11/2011	537388.0	6784765.9	Gittoes Jali	STP 65R	Shovel Probe	0.5 x 0.5	300	Lower slope	0	-	-	-
11/11/2011	537400.4	6784747.2	Gittoes Jali	STP 66	Shovel Probe	0.5 x 0.5	400	Lower slope	0	-	-	-
11/11/2011	537399.9	6784739.0	Gittoes Jali	STP 67	Shovel Probe	0.5 x 0.5	250	Lower slope	2	Chert	-	-
11/11/2011	537400.4	6784714.8	Gittoes Jali	STP 68	Shovel Probe	0.5 x 0.5	400	Lower slope	0	-	-	-
11/11/2011	537399.7	6784705.2	Gittoes Jali	STP 69	Shovel Probe	0.5 x 0.5	300	Lower slope	0	-	-	-
11/11/2011	537401.4	6784695.1	Gittoes Jali	STP 70	Shovel Probe	0.5 x 0.5	400	Ridgeline lower slopes	2	Chert	-	-
11/11/2011	537398.0	6784693.6	Gittoes Jali	STP 71R	Shovel Probe	0.5 x 0.5	400	Ridgeline lower slopes	0	-	-	-
14/11/2011	537405.7	6784695.9	Gittoes Jali	STP 72R	Shovel Probe	0.5 x 0.5	450	Flat on lower slope of Ridgeline	5	Chert	-	-
14/11/2011	537407.5	6784684.8	Gittoes Jali	STP 73	Shovel Probe	0.5 x 0.5	300	Flat on lower slope of Ridgeline	2	River cobble	-	-
14/11/2011	537402.7	6784684.9	Gittoes Jali	STP 74R	Shovel Probe	0.5 x 0.5	250	Flat end of ridgeline	0	-	-	-
14/11/2011	537404.0	6784674.9	Gittoes Jali	STP 75	Shovel Probe	0.5 x 0.5	300	Ridgeline lower slope	3	Chert	-	-
14/11/2011	537405.1	6784663.2	Gittoes Jali	STP 76	Shovel Probe	0.5 x 0.5	300	Ridgeline lower slope	4	Chert	-	-
14/11/2011	537404.0	6784650.8	Gittoes Jali	STP 77	Shovel Probe	0.5 x 0.5	300	Ridgeline lower slope	7	Chert quartzite	-	-
14/11/2011	537404.9	6784643.4	Gittoes Jali	STP 78	Shovel Probe	0.5 x 0.5	200	Ridgeline lower slope	1	Chert	-	-
14/11/2011	537403.8	6784638.7	Gittoes Jali	STP 79	Shovel Probe	0.5 x 0.5	400	Ridgeline lower slope	0	-	-	-
14/11/2011	537403.5	6784626.0	Gittoes Jali	STP 80	Shovel Probe	0.5 x 0.5	300	Ridgeline lower slope	6	River cobble	-	-
15/11/2011	537402.0	6784615.2	Gittoes Jali	STP 81	Shovel Probe	0.5 x 0.5	300	Ridgeline lower slope	3	Chert	-	-
15/11/2011	537400.8	6784604.7	Gittoes Jali	STP 82	Shovel Probe	0.5 x 0.5	400	Ridgeline lower slope	2	River cobble	-	-
15/11/2011	537398.9	6784596.2	Gittoes Jali	STP 83	Shovel Probe	0.5 x 0.5	300	Ridgeline lower slope	43	Chalcedony	-	-
15/11/2011	537404.7	6784593.5	Gittoes Jali	STP 84R	Shovel Probe	0.5 x 0.5	400	Ridgeline lower slope	2	Quartzite cobble	-	-
15/11/2011	537395.3	6784594.2	Gittoes Jali	STP 85R	Shovel Probe	0.5 x 0.5	300	Ridgeline lower slope	7	Chert	-	-
15/11/2011	537398.9	6784583.5	Gittoes Jali	STP 86	Shovel Probe	0.5 x 0.5	200	Ridgeline lower slope	3	Chert	-	-
15/11/2011	537399.9	6784573.9	Gittoes Jali	STP 87	Shovel Probe	0.5 x 0.5	500	Ridgeline lower slope	0	-	-	-
15/11/2011	537399.6	6784564.0	Gittoes Jali	STP 88	Shovel Probe	0.5 x 0.5	400	Ridgeline lower slope	0	-	-	-
15/11/2011	537399.4	6784553.3	Gittoes Jali	STP 89	Shovel Probe	0.5 x 0.5	400	Ridgeline lower slope	5	Quartzite cobble	-	-

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	MGA Zone 56		Site / PAD name	Excavation number	Excavation type	Dimension of excavation (m)	End depth (mm)	Landscape unit (landform)	Number of artefacts	Artefact materials	Site condition	Comments
	Easting	Northing										
15/11/2011	537399.9	6784543.4	Gittoes Jali	STP 90	Shovel Probe	0.4 x 0.4	500	Ridgeline lower slope	14	Chert, quartzite cobble	-	-
15/11/2011	537404.6	6784542.6	Gittoes Jali	STP 91R	Shovel Probe	0.4 x 0.4	300	Ridgeline lower slope	11	Quartzite, chert	-	-
15/11/2011	537396.4	6784543.2	Gittoes Jali	STP 92R	Shovel Probe	0.4 x 0.4	400	Ridgeline lower slope	1	Chert	-	-
15/11/2011	537395.8	6784535.2	Gittoes Jali	STP 93	Shovel Probe	0.5 x 0.5	400	Ridgeline lower slope	20	Chert, chalcedony, quartzite	-	-
15/11/2011	537401.2	6784532.3	Gittoes Jali	STP 94R	Shovel Probe	0.5 x 0.5	300	Ridgeline lower slope	2	Chert	-	-
15/11/2011	537392.1	6784537.8	Gittoes Jali	STP 95R	Shovel Probe	0.5 x 0.5	100	Ridgeline lower slope	1	Chert	-	-
15/11/2011	537391.0	6784526.9	Gittoes Jali	STP 96	Shovel Probe	0.5 x 0.5	300	Ridgeline lower slope	5	Quartzite, chalcedony	-	-
15/11/2011	537387.4	6784516.5	Gittoes Jali	STP 97	Shovel Probe	0.5 x 0.5	300	Ridgeline lower slope	4	Quartzite	-	-
15/11/2011	537383.2	6784507.3	Gittoes Jali	STP 98	Shovel Probe	0.5 x 0.5	400	Ridgeline lower slope	8	Chert, quartzite	-	-
15/11/2011	537386.9	6784506.3	Gittoes Jali	STP 99R	Shovel Probe	0.5 x 0.5	400	Ridgeline lower slope	0	-	-	-
15/11/2011	537379.2	6784508.8	Gittoes Jali	STP 100R	Shovel Probe	0.5 x 0.5	400	Ridgeline lower slope	2	Quartzite	-	-
15/11/2011	537379.6	6784497.3	Gittoes Jali	STP 101	Shovel Probe	0.5 x 0.5	300	Ridgeline lower slope	1	Quartzite	-	-
15/11/2011	537375.6	6784489.2	Gittoes Jali	STP 102	Shovel Probe	0.5 x 0.5	400	Ridgeline lower slope	2	Chert	-	-
15/11/2011	537373.7	6784480.5	Gittoes Jali	STP 103	Shovel Probe	0.5 x 0.5	400	Ridgeline lower slope	0	-	-	-
15/11/2011	537369.6	6784470.1	Gittoes Jali	STP 104	Shovel Probe	0.5 x 0.5	600	Ridgeline lower slope	7	Chert, quartzite	-	-
15/11/2011	537366.9	6784460.9	Gittoes Jali	STP 105	Shovel Probe	0.5 x 0.5	400	Ridgeline lower slope	6	Chert, quartzite	-	-
15/11/2011	537364.9	6784451.6	Gittoes Jali	STP 106	Shovel Probe	0.5 x 0.5	400	Ridgeline lower slope	3	Chert, chalcedony	-	-
15/11/2011	537360.5	6784442.5	Gittoes Jali	STP 107	Shovel Probe	0.5 x 0.5	400	Ridgeline lower slope	4	Chert, quartzite	-	-
15/11/2011	537357.3	6784431.3	Gittoes Jali	STP 108	Shovel Probe	0.5 x 0.5	400	Ridgeline lower slope	1	Chert	-	-
15/11/2011	537351.3	6784423.7	Gittoes Jali	STP 109	Shovel Probe	0.5 x 0.5	200	Ridgeline lower slope	0	-	-	-
15/11/2011	537374.6	6784459.6	Gittoes Jali	STP 110T	Shovel Probe	0.4 x 0.4	400	Ridgeline lower slope	1	Chert	-	-
15/11/2011	537383.9	6784457.8	Gittoes Jali	STP 111T	Shovel Probe	0.5 x 0.5	200	Ridgeline lower slope	6	Quartzite	-	-
15/11/2011	537393.7	6784456.8	Gittoes Jali	STP 112T	Shovel Probe	0.4 x 0.4	200	Ridgeline lower slope	0	-	-	-
15/11/2011	537358.7	6784463.2	Gittoes Jali	STP 113T	Shovel Probe	0.5 x 0.5	500	Ridgeline lower slope	10	Chert, chalcedony, quartzite	-	-
15/11/2011	537348.2	6784466.6	Gittoes Jali	STP 114T	Shovel Probe	0.5 x 0.5	500	Ridgeline lower slope	11	Chert, chalcedony	-	-
15/11/2011	537342.6	6784468.7	Gittoes Jali	STP 115T	Shovel Probe	0.5 x 0.5	400	Ridgeline lower slope	0	-	-	-
15/12/2011	540580.0	6788905.9	PAD 13	STP 1	Shovel Probe	0.5 x 0.5	250	Very slight sandy rise	0	-	-	-
15/12/2011	540584.7	6788914.4	PAD 13	STP 2	Shovel Probe	0.5 x 0.5	450	Very slight sandy rise	0	-	-	-
15/12/2011	540590.8	6788923.0	PAD 13	STP 3	Shovel Probe	0.5 x 0.5	500	Very slight sandy rise	0	-	-	-
15/12/2011	540596.0	6788931.2	PAD 13	STP 4	Shovel Probe	0.5 x 0.5	650	Very slight sandy rise	0	-	-	-

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	MGA Zone 56		Site / PAD name	Excavation number	Excavation type	Dimension of excavation (m)	End depth (mm)	Landscape unit (landform)	Number of artefacts	Artefact materials	Site condition	Comments
	Easting	Northing										
15/12/2011	540601.7	6788939.3	PAD 13	STP 5	Shovel Probe	0.5 x 0.5	900	Very slight sandy rise	0	-	-	-
15/12/2011	540607.1	6788946.7	PAD 13	STP 6	Shovel Probe	0.5 x 0.5	400	Mid-slope into gully from very slight sandy rise	0	-	-	-
15/12/2011	540618.1	6788961.7	PAD 13	STP 7	Shovel Probe	0.5 x 0.5	600	Down slope from very slight sandy rise	0	-	-	-
15/12/2011	540623.2	6788966.8	PAD 13	STP 8	Shovel Probe	0.5 x 0.5	500	Down slope from very slight sandy rise	0	-	-	-
15/12/2011	540586.5	6788902.9	PAD 13	STP 9	Shovel Probe	0.5 x 0.5	450	Very slight sandy rise	0	-	-	-
15/12/2011	540592.5	6788911.9	PAD 13	STP 10	Shovel Probe	0.5 x 0.5	500	Sandy rise	0	-	-	-
15/12/2011	540597.6	6788919.5	PAD 13	STP 11	Shovel Probe	0.5 x 0.5	500	Sandy rise	0	-	-	-
15/12/2011	540603.6	6788925.7	PAD 13	STP 12	Shovel Probe	0.5 x 0.5	650	Very slight sandy rise	0	-	-	-
15/12/2011	540609.6	6788934.2	PAD 13	STP 13	Shovel Probe	0.5 x 0.5	800	Very slight sandy rise	0	-	-	-
15/12/2011	540615.9	6788942.9	PAD 13	STP 14	Shovel Probe	0.5 x 0.5	750	Lower sand rise	0	-	-	-
15/12/2011	540603.2	6788896.6	PAD 13	STP 15	Shovel Probe	0.5 x 0.5	450	Very slight sandy rise	0	-	-	-
15/12/2011	540608.4	6788906.2	PAD 13	STP 16	Shovel Probe	0.5 x 0.5	550	Lower sand rise	0	-	-	-
15/12/2011	540613.2	6788914.2	PAD 13	STP 17	Shovel Probe	0.5 x 0.5	600	Lower sand rise	0	-	-	-
15/12/2011	540618.2	6788922.6	PAD 13	STP 18	Shovel Probe	0.5 x 0.5	750	Lower sand rise	0	-	-	-
15/12/2011	540623.9	6788931.1	PAD 13	STP 19	Shovel Probe	0.5 x 0.5	850	Very slight sandy rise	0	-	-	-
15/12/2011	540627.8	6788939.3	PAD 13	STP 20	Shovel Probe	0.5 x 0.5	850	Very slight sandy rise	0	-	-	-
15/12/2011	540602.5	6788914.1	PAD 13	Trench 1 (0-2 m)	Mechanical Trench	1 x 2	0	Lower sand rise, floodplain	0	-	-	-
15/12/2011	540602.1	6788912.1	PAD 13	Trench 1 (2-4 m)	Mechanical Trench	1 x 2	0	Lower sand rise, floodplain	0	-	-	-
15/12/2011	540600.4	6788908.7	PAD 13	Trench 1 (4-6 m) [End]	Mechanical Trench	1 x 2	0	Lower sand rise, floodplain	0	-	-	-
16/11/2011	542450.9	6789607.2	PAD 10	STP 1	Shovel Probe	0.5 x 0.5	660	Flat	0	-	-	-
16/11/2011	542447.9	6789598.9	PAD 10	STP 2	Shovel Probe	0.5 x 0.5	600	Flat	0	-	-	-
16/11/2011	542444.5	6789588.5	PAD 10	STP 3	Shovel Probe	0.5 x 0.5	600	Flat	0	-	-	-
16/11/2011	542440.5	6789579.4	PAD 10	STP 4 (T1)	Shovel Probe	0.5 x 0.5	600	Flat	0	-	-	-
16/11/2011	542437.1	6789569.2	PAD 10	STP 5 (T1)	Shovel Probe	0.5 x 0.5	500	Flat	0	-	-	-
16/11/2011	542432.6	6789560.3	PAD 10	STP 6 (T1)	Shovel Probe	0.5 x 0.5	500	Flat	0	-	-	-
16/11/2011	542400.1	6789572.7	PAD 10	STP 7 (T2)	Shovel Probe	0.5 x 0.5	400	Flat	0	-	-	-
16/11/2011	542404.1	6789581.6	PAD 10	STP 8 (T2)	Shovel Probe	0.5 x 0.5	450	Flat	0	-	-	-
16/11/2011	542406.6	6789591.4	PAD 10	STP 9 (T2)	Shovel Probe	0.5 x 0.5	450	Flat	0	-	-	-
16/11/2011	542411.9	6789599.2	PAD 10	STP 10 (T2)	Shovel Probe	0.5 x 0.5	700	Flat	0	-	-	-
16/11/2011	542415.9	6789608.5	PAD 10	STP 11 (T2)	Shovel Probe	0.5 x 0.5	600	Flat	0	-	-	-
16/11/2011	542419.1	6789618.0	PAD 10	STP 12 (T2)	Shovel Probe	0.5 x 0.5	600	Flat	0	-	-	-
16/11/2011	542368.3	6789517.2	PAD 10	STP 13 (T3)	Shovel Probe	0.5 x 0.5	400	Flat	0	-	-	-
16/11/2011	542376.4	6789509.1	PAD 10	STP 14 (T3)	Shovel Probe	0.5 x 0.5	450	Flat	0	-	-	-
16/11/2011	542382.7	6789502.9	PAD 10	STP 15 (T3)	Shovel Probe	0.5 x 0.5	550	Flat	0	-	-	-
16/11/2011	542389.9	6789496.9	PAD 10	STP 16 (T3)	Shovel Probe	0.4 x 0.4	600	Flat	0	-	-	-

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	MGA Zone 56		Site / PAD name	Excavation number	Excavation type	Dimension of excavation (m)	End depth (mm)	Landscape unit (landform)	Number of artefacts	Artefact materials	Site condition	Comments
	Easting	Northing										
16/11/2011	542396.7	6789490.9	PAD 10	STP 17 (T3)	Shovel Probe	0.5 x 0.5	500	Flat	0	-	-	-
16/11/2011	542403.5	6789483.6	PAD 10	STP 18 (T3)	Shovel Probe	0.5 x 0.5	400	Flat	0	-	-	-
7/11/2011	542616.8	6789527.2	PAD 8	STP 1	Shovel Probe	0.5 x 0.5	700	Deflated dune	0	-	-	-
7/11/2011	542617.7	6789537.4	PAD 8	STP 2	Shovel Probe	0.5 x 0.5	750	Deflated sand dune	0	-	-	-
7/11/2011	542611.8	6789517.4	PAD 8	STP 3	Shovel Probe	0.5 x 0.5	700	Deflated sand dune	0	-	-	-
7/11/2011	542607.9	6789509.2	PAD 8	STP 4	Shovel Probe	0.5 x 0.5	700	Deflated sand dune	0	-	-	-
7/11/2011	542603.0	6789496.4	PAD 8	STP 5	Shovel Probe	0.5 x 0.5	700	Deflated sand dune	0	-	-	-
7/11/2011	542631.2	6789523.5	PAD 8	STP 6	Shovel Probe	0.5 x 0.5	500	Deflated sand dune	0	-	-	-
7/11/2011	542633.0	6789533.3	PAD 8	STP 7	Shovel Probe	0.5 x 0.5	650	Deflated sand dune	0	-	-	-
7/11/2011	542650.6	6789532.7	PAD 8	STP 8	Shovel Probe	0.5 x 0.5	700	Deflated sand dune	0	-	-	-
7/11/2011	542644.8	6789520.8	PAD 8	STP 9	Shovel Probe	0.5 x 0.5	550	Deflated sand dune	0	-	-	-
7/11/2011	542633.0	6789504.9	PAD 8	STP 10	Shovel Probe	0.5 x 0.5	700	Deflated sand dune	0	-	-	-
7/11/2011	542624.7	6789505.2	PAD 8	STP 11	Shovel Probe	0.5 x 0.5	650	Deflated sand dune	0	-	-	-
7/11/2011	542614.8	6789491.3	PAD 8	STP 12	Shovel Probe	0.5 x 0.5	750	Deflated sand dune	0	-	-	-
6/12/2011	543372.2	6790329.1	PAD 11	STP 1	Shovel Probe	0.5 x 0.5	900	Sandy rise	0	-	-	-
6/12/2011	543375.2	6790339.3	PAD 11	STP 2	Shovel Probe	0.5 x 0.5	1,050	Sandy rise	0	-	-	-
6/12/2011	543379.9	6790346.8	PAD 11	STP 3	Shovel Probe	0.5 x 0.5	1,000	Sandy rise	0	-	-	-
6/12/2011	543381.8	6790357.0	PAD 11	STP 4	Shovel Probe	0.5 x 0.5	1,100	Sandy rise	9	Chert, chalcedony	-	Top layers disturbed from clearing
6/12/2011	543385.5	6790367.6	PAD 11	STP 5	Shovel Probe	0.5 x 0.5	800	Sandy rise	0	-	-	-
6/12/2011	543389.1	6790355.0	PAD 11	STP 6R	Shovel Probe	0.5 x 0.5	900	Sandy rise	0	-	-	-
6/12/2011	543374.0	6790357.8	PAD 11	STP 7R	Shovel Probe	0.5 x 0.5	1,000	Sandy rise	0	-	-	-
6/12/2011	543389.3	6790377.7	PAD 11	STP 8	Shovel Probe	0.5 x 0.5	1,050	Sandy rise	0	-	-	-
6/12/2011	543359.2	6790467.4	PAD 11	STP 9	Shovel Probe	0.5 x 0.5	900	Sandy rise	18	Chert, chalcedony	-	Transect 2
6/12/2011	543357.3	6790476.7	PAD 11	STP 10	Shovel Probe	0.5 x 0.5	1,000	Sandy rise	2	Chalcedony	-	Transect 2
6/12/2011	543357.0	6790488.5	PAD 11	STP 11	Shovel Probe	0.5 x 0.5	900	Sandy rise	0	-	-	-
6/12/2011	543355.9	6790497.8	PAD 11	STP 12	Shovel Probe	0.5 x 0.5	800	Sandy rise	6	Chalcedony, quartz	-	Transect 2
6/12/2011	543353.9	6790507.3	PAD 11	STP 13	Shovel Probe	0.5 x 0.5	1,000	Sandy rise	4	Chalcedony	-	Transect 2
6/12/2011	543353.9	6790466.8	PAD 11	STP 14R	Shovel Probe	0.5 x 0.5	900	Sandy rise	17	Chert, chalcedony	-	Transect 2
7/12/2011	543420.4	6790478.8	PAD 11	STP 1 (T3)	Shovel Probe	0.5 x 0.5	1,000	Low flat sandy rise	0	-	Top layers disturbed	-
7/12/2011	543418.6	6790486.6	PAD 11	STP 2 (T3)	Shovel Probe	0.5 x 0.5	800	Low flat sandy rise	0	-	-	-
7/12/2011	543415.0	6790496.7	PAD 11	STP 3 (T3)	Shovel Probe	0.5 x 0.5	850	low flat sandy rise	0	-	-	-
7/12/2011	543428.8	6790464.4	PAD 11	STP 4 (T3)	Shovel Probe	0.5 x 0.5	900	-	1	Chert	-	-
7/12/2011	543407.7	6790515.9	PAD 11	STP 5 (T3)	Shovel Probe	0.5 x 0.5	900	-	0	-	-	-
19/12/2011	543354.5	6790489.2	PAD 11	Trench 1 (0-2 m)	Mechanical Trench	1 x 2	0	-	947	Chert, chalcedony	-	-
13/12/2011	543293.5	6791228.9	E2/2	STP 1	Shovel Probe	0.5 x 0.5	0	New growth/relict sand	0	-	-	-

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Date	MGA Zone 56		Site / PAD name	Excavation number	Excavation type	Dimension of excavation (m)	End depth (mm)	Landscape unit (landform)	Number of artefacts	Artefact materials	Site condition	Comments
	Easting	Northing										
								dune				
13/12/2011	543302.6	6791230.9	E2/2	STP 2	Shovel Probe	0.5 x 0.5	0	New growth woodland / relict sand dune	0	-	-	-
13/12/2011	543316.1	6791238.2	E2/2	STP 3	Shovel Probe	0.5 x 0.5	0	New growth woodland / relict sand dune	0	-	-	-
13/12/2011	543326.6	6791233.2	E2/2	STP 4	Shovel Probe	0.5 x 0.5	1100	New growth woodland / relict sand dune	0	-	-	-
13/12/2011	543333.3	6791239.3	E2/2	STP 5	Shovel Probe	0.5 x 0.5	900	New growth woodland / relict sand dune	0	-	-	-
13/12/2011	543346.7	6791239.6	E2/2	STP 6	Shovel Probe	0.5 x 0.5	1,000	New growth woodland / relict sand dune	0	-	-	-
13/12/2011	543355.3	6791240.5	E2/2	STP 7	Shovel Probe	0.5 x 0.5	950	New growth woodland / relict sand dune	0	-	-	-
13/12/2011	543363.8	6791242.4	E2/2	STP 8	Shovel Probe	0.5 x 0.5	950	New growth woodland / relict sand dune	0	-	-	-
13/12/2011	543377.7	6791244.5	E2/2	STP 9	Shovel Probe	0.5 x 0.5	600	New growth woodland / relict sand dune	0	-	-	-
13/12/2011	543383.6	6791246.9	E2/2	STP 10	Shovel Probe	0.5 x 0.5	800	New growth woodland / relict sand dune	0	-	-	-
13/12/2011	543384.2	6791235.3	E2/2	STP 11	Shovel Probe	0.5 x 0.5	1000	New growth woodland / relict sand dune	0	-	-	-
13/12/2011	543396.5	6791237.5	E2/2	STP 12	Shovel Probe	0.5 x 0.5	600	New growth woodland / relict sand dune	0	-	-	Shell material
13/12/2011	543385.0	6791227.1	E2/2	STP 13	Shovel Probe	0.5 x 0.5	700	New growth woodland / relict sand dune	0	-	-	-
13/12/2011	543383.6	6791218.0	E2/2	STP 14	Shovel Probe	0.5 x 0.5	1,100	New growth woodland / relict sand dune	0	-	-	-
13/12/2011	543384.0	6791205.0	E2/2	STP 15	Shovel Probe	0.5 x 0.5	600	New growth woodland / relict sand dune	0	-	-	Shell material 150-250 mm
13/12/2011	543385.7	6791190.5	E2/2	STP 16	Shovel Probe	0.5 x 0.5	700	New growth woodland / relict sand dune	0	-	-	-
13/12/2011	543385.0	6791183.4	E2/2	STP 17	Shovel Probe	0.5 x 0.5	1,000	New growth woodland / relict sand dune	0	-	-	-
13/12/2011	543386.3	6791173.0	E2/2	STP 18	Shovel Probe	0.5 x 0.5	600	New growth woodland / relict sand dune	0	Quartzite	-	-
13/12/2011	543377.4	6791174.7	E2/2	STP 19	Shovel Probe	0.5 x 0.5	0	New growth woodland / relict sand dune	0	Quartzite	-	-
13/12/2011	543385.4	6791172.7	E2/2	STP 20R	Shovel Probe	0.5 x 0.5	0	New growth woodland / relict sand dune	0	-	-	-
14/12/2011	543391.3	6791169.4	E2/2	STP 21R	Shovel Probe	0.5 x 0.5	0	New growth woodland / relict sand dune	0	-	-	Shell present
14/12/2011	543386.6	6791166.9	E2/2	STP 22R	Shovel Probe	0.5 x 0.5	800	New growth woodland / relict sand dune	1	Chert	-	-
14/12/2011	543355.2	6791172.2	E2/2	STP 23	Shovel Probe	0.5 x 0.5	800	New growth woodland / relict sand dune	0	-	-	-
14/12/2011	543365.3	6791171.2	E2/2	STP 24	Shovel Probe	0.5 x 0.5	800	New growth woodland / relict sand dune	0	-	-	-
14/12/2011	543395.1	6791174.4	E2/2	STP 25	Shovel Probe	0.5 x 0.5	600	New growth woodland /	0	-	-	-

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	MGA Zone 56		Site / PAD name	Excavation number	Excavation type	Dimension of excavation (m)	End depth (mm)	Landscape unit (landform)	Number of artefacts	Artefact materials	Site condition	Comments
	Easting	Northing										
								relict sand dune				
14/12/2011	543405.4	6791174.3	E2/2	STP 26	Shovel Probe	0.5 x 0.5	600	New growth woodland / relict sand dune	0	-	-	-
14/12/2011	543414.9	6791172.9	E2/2	STP 27	Shovel Probe	0.5 x 0.5	700	New growth woodland / relict sand dune	0	-	-	-
14/12/2011	543424.6	6791172.5	E2/2	STP 28	Shovel Probe	0.5 x 0.5	750	New growth woodland / relict sand dune	0	-	-	-
14/12/2011	543394.3	6791181.9	E2/2	STP 29	Shovel Probe	0.5 x 0.5	900	New growth woodland / relict sand dune	0	-	-	-
14/12/2011	543394.7	6791204.2	E2/2	STP 30	Shovel Probe	0.5 x 0.5	400	New growth woodland / relict sand dune	0	-	-	Shell material found throughout
14/12/2011	543397.5	6791219.5	E2/2	STP 31	Shovel Probe	0.5 x 0.5	850	New growth woodland / relict sand dune	0	-	-	Shell material found throughout
14/12/2011	543396.1	6791228.6	E2/2	STP 32	Shovel Probe	0.5 x 0.5	400	New growth woodland / relict sand dune	0	-	-	-
14/12/2011	543396.7	6791246.7	E2/2	STP 33	Shovel Probe	0.5 x 0.5	600	New growth woodland / relict sand dune	0	-	-	-
14/12/2011	543398.6	6791193.5	E2/2	STP 34	Shovel Probe	0.5 x 0.5	800	New growth woodland / relict sand dune	0	-	-	-
14/12/2011	543395.3	6791155.1	E2/2	STP 35	Shovel Probe	0.5 x 0.5	750	New growth woodland / relict sand dune	0	-	-	Shell material
14/12/2011	543384.3	6791159.9	E2/2	STP 36	Shovel Probe	0.5 x 0.5	900	New growth woodland / relict sand dune	0	-	-	Shell material
14/12/2011	543353.3	6791162.8	E2/2	STP 37	Shovel Probe	0.5 x 0.5	900	New growth woodland / relict sand dune	0	-	-	-
14/12/2011	543378.1	6791278.1	E2/2	STP 38	Shovel Probe	0.5 x 0.5	900	New growth woodland / relict sand dune	0	-	-	-
14/12/2011	543383.2	6791288.1	E2/2	STP 39	Shovel Probe	0.5 x 0.5	900	New growth woodland / relict sand dune	0	-	-	-
14/12/2011	543386.0	6791295.4	E2/2	STP 40	Shovel Probe	0.5 x 0.5	800	New growth woodland / relict sand dune	0	-	-	-
14/12/2011	543387.8	6791306.1	E2/2	STP 41	Shovel Probe	0.5 x 0.5	900	New growth woodland / relict sand dune	0	-	-	-
14/12/2011	543357.0	6791267.1	E2/2	STP 42	Shovel Probe	0.5 x 0.5	650	New growth woodland / relict sand dune	0	-	-	-
14/12/2011	543343.2	6791262.0	E2/2	STP 43	Shovel Probe	0.5 x 0.5	650	New growth woodland / relict sand dune	0	-	-	-
14/12/2011	543317.6	6791438.3	E2/2	STP 45	Shovel Probe	0.5 x 0.5	200	New growth woodland / relict sand dune	0	-	-	-
14/12/2011	543305.8	6791434.0	E2/2	STP 46	Shovel Probe	0.5 x 0.5	600	New growth woodland / relict sand dune	0	-	-	-
16/12/2011	543368.7	6791173.5	E2/2	Trench 1	Mechanical Trench	4 x 2	2,200	-	0	-	-	Artefacts
16/12/2011	543363.5	6791174.4	E2/2	Trench 2	Mechanical Trench	4 x 2	2,200	-	0	-	-	Artefacts
28/11/2011	542575.1	6792780.2	Melino PAD	STP 1	Shovel Probe	0.5 x 0.5	400	Lower slope	0	-	-	-
28/11/2011	542579.1	6792788.9	Melino PAD	STP 2	Shovel Probe	0.5 x 0.5	600	Lower slope	0	-	-	-
28/11/2011	542585.2	6792799.9	Melino PAD	STP 3	Shovel Probe	0.5 x 0.5	500	Lower slope	0	-	-	-

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	MGA Zone 56		Site / PAD name	Excavation number	Excavation type	Dimension of excavation (m)	End depth (mm)	Landscape unit (landform)	Number of artefacts	Artefact materials	Site condition	Comments
	Easting	Northing										
28/11/2011	542586.1	6792806.8	Melino PAD	STP 4	Shovel Probe	0.5 x 0.5	500	Lower slope	0	-	-	-
28/11/2011	542590.5	6792816.9	Melino PAD	STP 5	Shovel Probe	0.5 x 0.5	500	Lower slope	0	-	-	-
28/11/2011	542595.5	6792822.1	Melino PAD	STP 6	Shovel Probe	0.5 x 0.5	350	Lower slope	0	-	-	-
28/11/2011	542628.8	6792769.3	Melino PAD	STP 7	Shovel Probe	0.5 x 0.5	300	Mid-slope	0	-	-	-
28/11/2011	542629.9	6792775.1	Melino PAD	STP 8	Shovel Probe	0.5 x 0.5	300	Mid-slope	0	-	-	-
28/11/2011	542633.0	6792782.6	Melino PAD	STP 9	Shovel Probe	0.5 x 0.5	300	Mid-slope	0	-	-	-
28/11/2011	542636.1	6792794.9	Melino PAD	STP 10	Shovel Probe	0.5 x 0.5	200	Mid-slope	0	-	-	-
28/11/2011	542644.4	6792765.5	Melino PAD	STP 11	Shovel Probe	0.5 x 0.5	300	Upper slope	11	Chalcedony	-	-
28/11/2011	542646.5	6792795.9	Melino PAD	STP 12	Shovel Probe	0.5 x 0.5	250	Upper slope	0	Chert	-	-
28/11/2011	542641.6	6792777.5	Melino PAD	STP 13	Shovel Probe	0.5 x 0.5	300	Upper slope	6	Chalcedony	-	-
28/11/2011	542652.9	6792793.8	Melino PAD	STP 14	Shovel Probe	0.5 x 0.5	300	Upper slope	0	-	-	-
28/11/2011	542643.7	6792783.5	Melino PAD	STP 15	Shovel Probe	0.5 x 0.5	300	Upper slope	1	Quartz	-	-
28/11/2011	542654.4	6792785.4	Melino PAD	STP 16	Shovel Probe	0.5 x 0.5	300	Upper slope	4	Chalcedony, chert	-	-
28/11/2011	542652.9	6792776.5	Melino PAD	STP 17	Shovel Probe	0.5 x 0.5	250	Upper slope	15	Chalcedony, chert, quartzite	-	-
28/11/2011	542654.1	6792766.9	Melino PAD	STP 18	Shovel Probe	0.5 x 0.5	250	Upper slope	0	-	-	-
28/11/2011	542640.6	6792753.7	Melino PAD	STP 19	Shovel Probe	0.5 x 0.5	300	Upper slope	1	Chalcedony	-	-
28/11/2011	542653.9	6792761.3	Melino PAD	STP 20	Shovel Probe	0.5 x 0.5	300	Upper slope	0	-	-	-
28/11/2011	542670.9	6792767.3	Melino PAD	STP 21	Shovel Probe	0.5 x 0.5	300	Upper slope	2	Chalcedony, quartz	-	-
28/11/2011	542670.4	6792775.4	Melino PAD	STP 23	Shovel Probe	0.5 x 0.5	400	Upper slope	0	-	-	-
28/11/2011	542672.9	6792784.6	Melino PAD	STP 24	Shovel Probe	0.5 x 0.5	150	Upper slope	0	-	-	-
28/11/2011	542672.4	6792795.0	Melino PAD	STP 25	Shovel Probe	0.5 x 0.5	300	Upper slope	2	Quartz and chalcedony	-	-
29/11/2011	542634.4	6792760.0	Melino PAD	STP 26	Shovel Probe	0.5 x 0.5	400	Upper slope	1	River cobble	Cleared	-
29/11/2011	542635.8	6792768.9	Melino PAD	STP 27	Shovel Probe	0.5 x 0.5	250	Upper slope	2	Siliceous	Cleared	-
29/11/2011	542637.4	6792781.3	Melino PAD	STP 28	Shovel Probe	0.5 x 0.5	250	Upper slope	2	Chert	Cleared	-
29/11/2011	542638.0	6792789.6	Melino PAD	STP 29	Shovel Probe	0.5 x 0.5	200	Upper slope	0	-	-	-
29/11/2011	542634.1	6792751.0	Melino PAD	STP 30	Shovel Probe	0.5 x 0.5	250	Upper slope	0	-	-	-
29/11/2011	542627.3	6792752.1	Melino PAD	STP 31	Shovel Probe	0.5 x 0.5	300	Upper slope	0	-	-	-
29/11/2011	542624.6	6792743.7	Melino PAD	STP 32	Shovel Probe	0.5 x 0.5	300	Mid-upper slope	0	-	-	-
29/11/2011	542629.7	6792738.5	Melino PAD	STP 33	Shovel Probe	0.5 x 0.5	200	Mid-slope	0	-	-	-
29/11/2011	542641.6	6792746.5	Melino PAD	STP 34	Shovel Probe	0.5 x 0.5	300	Upper slope	0	-	-	-
29/11/2011	542627.6	6792758.3	Melino PAD	STP 35	Shovel Probe	0.5 x 0.5	50	Upper slope	0	-	-	-
29/11/2011	542652.3	6792748.1	Melino PAD	STP 36	Shovel Probe	0.5 x 0.5	250	Upper slope	2	Chalcedony	Cleared	-
29/11/2011	542657.7	6792748.1	Melino PAD	STP 37	Shovel Probe	0.5 x 0.5	300	Upper slope	0	-	-	-
29/11/2011	542648.9	6792742.6	Melino PAD	STP 38	Shovel Probe	0.5 x 0.5	300	Mid-upper slope	0	-	-	-
29/11/2011	542533.0	6792783.1	Melino PAD	STP 39	Shovel Probe	0.5 x 0.5	900	Floodplain	2	Shell	Cleared	-
29/11/2011	542529.1	6792789.3	Melino PAD	STP 40	Shovel Probe	0.5 x 0.5	1,000	Deflated sand rise	17	Chert,	-	Shell midden (pipi shell)

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	MGA Zone 56		Site / PAD name	Excavation number	Excavation type	Dimension of excavation (m)	End depth (mm)	Landscape unit (landform)	Number of artefacts	Artefact materials	Site condition	Comments
	Easting	Northing										
										quartzite		
29/11/2011	542533.7	6792799.5	Melino PAD	TP Square A and B	Test Pit (Other)	2 x 1	0	Deflated sand dune	21	Quartz, dolerite, chert, chalcedony, quartzite, river cobble	-	-
29/11/2011	542533.3	6792801.7	Melino PAD	STP 41	Shovel Probe	0.5 x 0.5	0	Deflated sand dune	8	Quartz, river cobble	-	Excavation stopped due to midden trench opened
29/11/2011	542652.1	6792776.0	Melino PAD	TP 1	Test Pit	1 x 1	0	Upper slope	0	-	-	-
30/11/2011	542559.1	6792802.4	Melino PAD	STP 1	Shovel Probe	0.2 x 0.2	0	Deflated sand dune	0	-	-	-
30/11/2011	542556.5	6792803.8	Melino PAD	STP 2	Shovel Probe	0.2 x 0.2	250	Deflated sand dune	0	-	-	-
30/11/2011	542552.5	6792803.9	Melino PAD	STP 3	Shovel Probe	0.5 x 0.5	500	Deflated sand dune	0	-	-	-
30/11/2011	542546.8	6792804.3	Melino PAD	STP 4	Shovel Probe	0.2 x 0.2	800	Deflated sand dune	2	Silcrete, chert	Cleared	-
30/11/2011	542548.4	6792803.4	Melino PAD	STP 5	Shovel Probe	0.2 x 0.2	800	Deflated sand dune	3	Quartz	Cleared	-
30/11/2011	542553.4	6792813.8	Melino PAD	STP 6	Shovel Probe	0.2 x 0.2	600	Deflated sand dune	1	Chalcedony	Cleared	-
30/11/2011	542558.1	6792812.6	Melino PAD	STP 6	Shovel Probe	0.2 x 0.2	600	Deflated sand dune	0	-	-	-
30/11/2011	542554.4	6792821.4	Melino PAD	STP 8	Shovel Probe	0.2 x 0.2	400	Deflated sand dune	0	-	-	-
30/11/2011	542549.4	6792824.9	Melino PAD	STP 9	Shovel Probe	0.2 x 0.25	400	Deflated sand dune	0	-	-	-
30/11/2011	542546.7	6792825.2	Melino PAD	STP 10	Shovel Probe	0.2 x 0.2	400	Deflated sand dune	1	Quartz	Cleared	-
30/11/2011	542541.0	6792826.7	Melino PAD	STP 11	Shovel Probe	0.25 x 0.25	600	Deflated sand dune	4	Chalcedony	Cleared	-
30/11/2011	542542.9	6792834.0	Melino PAD	STP 12	Shovel Probe	0.2 x 0.2	550	Deflated sand dune	1	-	Cleared	-
30/11/2011	542548.5	6792833.5	Melino PAD	STP 12	Shovel Probe	0.2 x 0.2	550	Deflated sand dune	1	-	Cleared	-
30/11/2011	542548.3	6792833.7	Melino PAD	STP 12	Shovel Probe	0.2 x 0.2	550	Deflated sand dune	1	-	Cleared	-
30/11/2011	542548.2	6792833.9	Melino PAD	STP 13	Shovel Probe	0.2 x 0.2	500	Deflated sand dune	1	Glass	Cleared	-
30/11/2011	542553.4	6792833.2	Melino PAD	STP 14	Shovel Probe	0.2 x 0.2	600	Deflated sand dune	0	-	-	-
30/11/2011	542558.8	6792831.6	Melino PAD	STP 15	Shovel Probe	0.2 x 0.2	500	Deflated sand dune	0	-	-	-
30/11/2011	542563.9	6792832.6	Melino PAD	STP 16	Shovel Probe	0.2 x 0.2	600	Deflated sand dune	0	-	-	-
30/11/2011	542566.5	6792841.5	Melino PAD	STP 17	Shovel Probe	0.2 x 0.2	650	Deflated sand dune	0	-	-	-
1/12/2011	542567.6	6792845.6	Melino PAD	STP 18	Shovel Probe	0.2 x 0.2	450	Deflated sand dune	0	-	-	-
1/12/2011	542563.0	6792846.8	Melino PAD	STP 19	Shovel Probe	0.2 x 0.2	400	Deflated sand dune	0	-	-	-
1/12/2011	542556.2	6792850.3	Melino PAD	STP 20	Shovel Probe	0.2 x 0.2	400	Deflated sand dune	0	-	-	-
1/12/2011	542545.4	6792853.6	Melino PAD	STP 21	Shovel Probe	0.2 x 0.2	500	Deflated sand dune	1	Chalcedony	Disturbed	-
1/12/2011	542536.8	6792856.8	Melino PAD	STP 22	Shovel Probe	0.2 x 0.2	550	Deflated sand dune	0	-	-	-
1/12/2011	542531.7	6792857.5	Melino PAD	STP 23	Shovel Probe	0.2 x 0.2	600	Deflated sand dune	0	-	-	-
1/12/2011	542534.5	6792866.8	Melino PAD	STP 24	Shovel Probe	0.2 x 0.2	550	Deflated sand dune	0	-	-	-
1/12/2011	542539.2	6792864.2	Melino PAD	STP 25	Shovel Probe	0.2 x 0.2	550	Deflated sand dune	0	-	-	-
1/12/2011	542535.8	6792876.1	Melino PAD	STP 26	Shovel Probe	0.2 x 0.2	300	Deflated sand dune	0	-	-	-
1/12/2011	542550.9	6792874.5	Melino PAD	STP 27	Shovel Probe	0.2 x 0.2	500	Deflated sand dune	0	-	-	-
1/12/2011	542559.5	6792871.2	Melino PAD	STP 28	Shovel Probe	0.2 x 0.2	400	Deflated sand dune	1	Chert	Disturbed	-
1/12/2011	542567.8	6792868.0	Melino PAD	STP 29	Shovel Probe	0.2 x 0.2	500	Deflated sand dune	1	Chert	Disturbed	-

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	MGA Zone 56		Site / PAD name	Excavation number	Excavation type	Dimension of excavation (m)	End depth (mm)	Landscape unit (landform)	Number of artefacts	Artefact materials	Site condition	Comments
	Easting	Northing										
1/12/2011	542577.9	6792864.4	Melino PAD	STP 30	Shovel Probe	0.2 x 0.2	600	Deflated sand dune	0	-	-	-
1/12/2011	542580.7	6792875.1	Melino PAD	STP 31	Shovel Probe	0.2 x 0.2	600	Deflated sand dune	0	-	-	-
1/12/2011	542582.1	6792885.7	Melino PAD	STP 32	Shovel Probe	0.2 x 0.2	400	Deflated sand dune	0	-	-	-
1/12/2011	542584.4	6792895.6	Melino PAD	STP 33	Shovel Probe	0.2 x 0.2	450	Deflated sand dune	0	-	-	-
12/02/2011	542590.9	6792928.5	Melino PAD	STP 34	Shovel Probe	0.2 x 0.2	500	Deflated sand dune	0	-	-	-
12/02/2011	542591.8	6792935.5	Melino PAD	STP 35	Shovel Probe	0.2 x 0.2	500	Deflated sand dune	0	-	-	-
12/02/2011	542595.8	6792942.1	Melino PAD	STP 36	Shovel Probe	0.2 x 0.2	400	Deflated sand dune	0	-	-	-
12/02/2011	542597.3	6792953.9	Melino PAD	STP 37	Shovel Probe	0.2 x 0.2	400	Deflated sand dune	0	-	-	-
12/02/2011	542609.6	6792949.8	Melino PAD	STP 38	Shovel Probe	0.2 x 0.2	500	Deflated sand dune	0	-	-	-
12/02/2011	542616.2	6792945.9	Melino PAD	STP 39	Shovel Probe	0.2 x 0.2	500	Deflated sand dune	0	-	-	-
12/02/2011	542604.2	6792930.7	Melino PAD	STP 40	Shovel Probe	0.2 x 0.2	200	Deflated sand dune	0	-	-	-
12/02/2011	542539.3	6792756.2	Melino PAD	STP 41	Shovel Probe	0.5 x 0.5	1,200	Deflated sand dune	0	-	-	-
12/02/2011	542544.0	6792745.1	Melino PAD	STP 42	Shovel Probe	0.5 x 0.5	10	Deflated sand dune	1	Quartz	Cleared	-
12/02/2011	542551.3	6792736.6	Melino PAD	STP 43	Shovel Probe	0.5 x 0.5	10	Deflated sand dune	0	-	-	-
12/02/2011	542560.4	6792717.1	Melino PAD	STP 44	Shovel Probe	0.2 x 0.2	500	Deflated sand dune	0	-	-	-
12/02/2011	542570.5	6792702.9	Melino PAD	STP 45	Shovel Probe	0.2 x 0.2	500	Deflated sand dune	1	Quartz	Cleared	-
12/02/2011	542578.7	6792703.4	Melino PAD	STP 46	Shovel Probe	0.5 x 0.5	500	Deflated sand dune	0	-	-	-
14/12/2011	542546.2	6792800.9	Melino PAD	Trench 1 (0-2 m)	Mechanical Trench	1 x 2	0	Lower sand rise	23	-	-	-
14/12/2011	542547.4	6792801.8	Melino PAD	Trench 1 (2-4 m)	Mechanical Trench	1 x 2	11	Lower sand rise	31	Chert, chalcedony	-	-
14/12/2011	542547.2	6792806.7	Melino PAD	Trench 1 (4-6 m)	Mechanical Trench	1 x 2	12	Lower sand rise	11	Chert, quartz, silcrete	-	-
14/12/2011	542547.3	6792807.6	Melino PAD	Trench 1 (4-6 m) [End]	Mechanical Trench	1 x 2	12	Lower sand	11	-	-	All artefacts found were buried here
21/11/2011	541674.6	6796908.8	PAD 2	STP 1	Shovel Probe	0.5 x 0.5	750	Lower sand rise	0	-	-	-
21/11/2011	541685.0	6796908.1	PAD 2	STP 2	Shovel Probe	0.5 x 0.5	750	Lower sand rise	0	-	-	-
21/11/2011	541695.3	6796905.0	PAD 2	STP 3	Shovel Probe	0.5 x 0.5	950	Lower sand ridge	0	-	-	-
21/11/2011	541704.7	6796902.3	PAD 2	STP 4	Shovel Probe	0.5 x 0.5	750	Lower sand ridge	0	-	-	-
21/11/2011	541714.7	6796899.7	PAD 2	STP 5	Shovel Probe	0.5 x 0.5	900	Lower sand rise	0	-	-	-
21/11/2011	541723.4	6796897.5	PAD 2	STP 6	Shovel Probe	0.5 x 0.5	800	Lower sand rise	0	-	-	-
21/11/2011	541721.6	6796888.8	PAD 2	STP 7	Shovel Probe	0.5 x 0.5	800	Low sand rise adjacent to swamp	0	-	-	-
21/11/2011	541711.5	6796890.5	PAD 2	STP 8	Shovel Probe	0.5 x 0.5	800	Lower sand rise	0	-	-	-
21/11/2011	541702.2	6796892.4	PAD 2	STP 9	Shovel Probe	0.5 x 0.5	800	Lower sand rise	0	-	-	-
21/11/2011	541692.5	6796895.4	PAD 2	STP 10	Shovel Probe	0.5 x 0.5	700	Lower sand rise	0	-	-	-
21/11/2011	541682.9	6796895.7	PAD 2	STP 11	Shovel Probe	0.5 x 0.5	800	Lower sand rise	1	Chert	-	-
21/11/2011	541673.4	6796898.3	PAD 2	STP 12	Shovel Probe	0.5 x 0.5	750	Lower sand rise	0	-	-	-
21/11/2011	541679.8	6796888.9	PAD 2	STP 13	Shovel Probe	0.5 x 0.5	900	Lower sand rise	0	-	-	-
21/11/2011	541700.1	6796885.7	PAD 2	STP 14	Shovel Probe	0.5 x 0.5	700	Lower sand rise	0	-	-	-
21/11/2011	541670.5	6796890.1	PAD 2	STP 15	Shovel Probe	0.5 x 0.5	950	Lower sand rise	0	-	-	-

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	MGA Zone 56		Site / PAD name	Excavation number	Excavation type	Dimension of excavation (m)	End depth (mm)	Landscape unit (landform)	Number of artefacts	Artefact materials	Site condition	Comments
	Easting	Northing										
21/11/2011	541709.9	6796883.5	PAD 2	STP 16	Shovel Probe	0.5 x 0.5	800	Lower sand rise	0	-	-	-
21/11/2011	541689.3	6796887.1	PAD 2	STP 17	Shovel Probe	0.5 x 0.5	800	Lower sand rise	0	-	-	-
21/11/2011	541681.4	6796892.9	PAD 2	STP 18R	Shovel Probe	0.5 x 0.5	800	Lower sand rise	0	-	-	-
21/11/2011	541683.2	6796900.8	PAD 2	STP 19R	Shovel Probe	0.5 x 0.5	800	Lower sand rise	0	-	-	-
21/11/2011	541679.0	6796897.9	PAD 2	STP 20R	Shovel Probe	0.5 x 0.5	750	Lower sand rise	0	-	-	-
21/11/2011	541686.3	6796895.7	PAD 2	STP 21R	Shovel Probe	0.5 x 0.5	800	Lower sand rise	0	-	-	-
21/11/2011	541680.8	6796863.6	PAD 2	STP 22	Shovel Probe	0.5 x 0.5	700	Lower sand rise	0	-	-	-
21/11/2011	541689.5	6796858.0	PAD 2	STP 23	Shovel Probe	0.5 x 0.5	750	Lower sand rise	0	-	-	-
21/11/2011	541697.6	6796853.1	PAD 2	STP 24	Shovel Probe	0.5 x 0.5	800	Lower sand rise	1	Chert	-	-
22/11/2011	541693.4	6796854.4	PAD 2	STP 25R	Shovel Probe	0.5 x 0.5	1000	Elevated area in swamp	0	-	-	-
22/11/2011	541695.9	6796849.6	PAD 2	STP 26R	Shovel Probe	0.5 x 0.5	750	Elevated area in swamp land	0	-	-	-
22/11/2011	541700.3	6796855.6	PAD 2	STP 27R	Shovel Probe	0.5 x 0.5	800	Elevated area in swamp	0	-	-	-
22/11/2011	541701.9	6796849.8	PAD 2	STP 28	Shovel Probe	0.5 x 0.5	750	Elevated area in swamp	0	-	-	-
22/11/2011	541686.8	6796950.2	PAD 2	STP 29	Shovel Probe	0.5 x 0.5	1,000	Elevated area in swamp	2	Silcrete	Cleared	-
22/11/2011	541696.4	6796946.2	PAD 2	STP 30	Shovel Probe	0.5 x 0.5	1,000	Elevated area in swamp	0	-	-	-
22/11/2011	541706.1	6796944.8	PAD 2	STP 31	Shovel Probe	0.5 x 0.5	800	Elevated area in swamp	0	-	-	-
22/11/2011	541688.1	6796954.5	PAD 2	STP 32	Shovel Probe	0.5 x 0.5	950	Elevated area in swamp	0	-	-	-
22/11/2011	541682.6	6796950.9	PAD 2	STP 33	Shovel Probe	0.5 x 0.5	1,000	Elevated area in swamp	0	-	-	-
22/11/2011	541686.7	6796945.9	PAD 2	STP 34	Shovel Probe	0.5 x 0.5	1,000	Elevated area in swamp	1	Chert	-	-
13/12/2011	541695.5	6796951.7	PAD 2	Trench 1 (0-2 m)	Mechanical Trench	1 x 2	14	Low sandy rise	7	Quartz, chalcedony	-	Trench filled with water by approx 1.4 m
13/12/2011	541691.8	6796953.2	PAD 2	Trench 1 (3-5 m)	Mechanical Trench	1 x 2	11	Lower sand rise	10	Quartz, chalcedony, chert	-	-
13/12/2011	541688.3	6796952.6	PAD 2	Trench 1 (6-8 m)	Mechanical Trench	1 x 2	0	Lower sand rise	0	-	-	-
13/12/2011	541686.5	6796956.5	PAD 2	Trench 1 (6-8 m) [End]	Mechanical Trench	1 x 2	10	Lower sand rise	0	-	-	-
22/11/2011	541686.8	6796637.8	PAD 3	STP 1	Shovel Probe	0.5 x 0.5	1,000	Elevated area in swamp	0	-	-	-
22/11/2011	541697.7	6796634.3	PAD 3	STP 2	Shovel Probe	0.5 x 0.5	1000	Elevated area in swamp	2	Silicified quartz	Cleared	-
22/11/2011	541709.5	6796633.4	PAD 3	STP 3	Shovel Probe	0.5 x 0.5	1,150	Elevated area in swamp	0	-	-	-
22/11/2011	541718.4	6796629.1	PAD 3	STP 4	Shovel Probe	0.5 x 0.5	950	Elevated area in swamp	2	River cobble and chert	-	Kept by Marcus Jali LALC depth 0-200 mm and 300-350 mm. Disturbed by fallen tree
22/11/2011	541734.3	6796626.8	PAD 3	STP 5	Shovel Probe	0.5 x 0.5	1,100	Elevated area in swamp	0	-	-	-
22/11/2011	541740.4	6796624.8	PAD 3	STP 6	Shovel Probe	0.5 x 0.5	1,050	Elevated area in swamp	0	-	-	-
22/11/2011	541720.9	6796613.4	PAD 3	STP 7	Shovel Probe	0.5 x 0.5	1,000	Elevated area in swamp	0	-	-	-
22/11/2011	541712.6	6796615.3	PAD 3	STP 8	Shovel Probe	0.5 x 0.5	1,000	Elevated area in swamp	0	-	-	-
12/12/2011	542380.6	6798417.3	PAD 4	STP 1	Shovel Probe	0.5 x 0.5	300	Hill top	0	-	-	-
12/12/2011	542381.3	6798427.9	PAD 4	STP 2	Shovel Probe	0.5 x 0.5	200	Hill top	0	-	-	Heavily disturbed

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	MGA Zone 56		Site / PAD name	Excavation number	Excavation type	Dimension of excavation (m)	End depth (mm)	Landscape unit (landform)	Number of artefacts	Artefact materials	Site condition	Comments
	Easting	Northing										
12/12/2011	542392.1	6798422.7	PAD 4	STP 3	Shovel Probe	0.5 x 0.5	200	Hill top	0	-	-	-
12/12/2011	542385.2	6798439.0	PAD 4	STP 4	Shovel Probe	0.5 x 0.5	300	Hill top	0	-	-	-
12/12/2011	542395.5	6798436.2	PAD 4	STP 5	Shovel Probe	0.5 x 0.5	250	Upper slope	0	-	-	-
12/12/2011	542397.2	6798447.4	PAD 4	STP 6	Shovel Probe	0.5 x 0.5	250	Upper slope	0	-	-	-
12/12/2011	542405.5	6798434.1	PAD 4	STP 7	Shovel Probe	0.5 x 0.5	200	Upper slope	0	-	-	-
12/12/2011	542408.5	6798447.3	PAD 4	STP 8	Shovel Probe	0.5 x 0.5	200	Upper slope	0	-	-	-
15/12/2011	542553.7	6798369.4	PAD 4	STP 13	Shovel Probe	0.5 x 0.5	200	Top of saddle	0	-	-	-
15/12/2011	542538.9	6798368.3	PAD 4	STP 15	Shovel Probe	0.5 x 0.5	250	Top of saddle	0	-	-	-
15/12/2011	542529.6	6798367.8	PAD 4	STP 16	Shovel Probe	0.5 x 0.5	300	Top of saddle	0	-	-	-
15/12/2011	542549.3	6798362.2	PAD 4	STP 17	Shovel Probe	0.5 x 0.5	250	Top of saddle	0	-	-	-
15/12/2011	542547.7	6798369.7	PAD 4	STP 17R	Shovel Probe	0.5 x 0.5	200	Top of saddle	0	-	-	-
15/12/2011	542542.7	6798369.2	PAD 4	STP 18R	Shovel Probe	0.5 x 0.5	200	Top of saddle	5	Chalcedony, silcrete	-	-
15/12/2011	542551.6	6798378.6	PAD 4	STP 19	Shovel Probe	0.5 x 0.5	400	Top of saddle	0	-	-	-
15/12/2011	542548.8	6798376.6	PAD 4	STP 20	Shovel Probe	0.5 x 0.5	350	Top of saddle	0	-	-	-
15/12/2011	542539.7	6798374.8	PAD 4	STP 21	Shovel Probe	0.5 x 0.5	250	Top of saddle	0	-	-	-
15/12/2011	542531.7	6798376.0	PAD 4	STP 22	Shovel Probe	0.5 x 0.5	300	Top of saddle	1	Silcrete	-	-
15/12/2011	542528.3	6798374.1	PAD 4	STP 23	Shovel Probe	0.5 x 0.5	250	Top of saddle	1	Silcrete	-	-
15/12/2011	542524.0	6798373.9	PAD 4	STP 24	Shovel Probe	0.5 x 0.5	250	Top of saddle	0	-	-	-
15/12/2011	542528.1	6798377.8	PAD 4	STP 25	Shovel Probe	0.5 x 0.5	200	Top of saddle	0	-	-	-
15/12/2011	542531.8	6798377.8	PAD 4	STP 26	Shovel Probe	0.5 x 0.5	300	Top of saddle	2	Silcrete	-	-
20/12/2011	542516.9	6798353.7	PAD 4	STP 27	Shovel Probe	0.5 x 0.5	0	Saddle	1	Chert	-	-
20/12/2011	542525.7	6798353.6	PAD 4	STP 28	Shovel Probe	0.5 x 0.5	200	Saddle	0	-	-	-
20/12/2011	542535.5	6798353.6	PAD 4	STP 29	Shovel Probe	0.5 x 0.5	200	Saddle	0	-	-	-
20/12/2011	542548.0	6798352.2	PAD 4	STP 30	Shovel Probe	0.5 x 0.5	250	Saddle	0	-	-	-
20/12/2011	542556.1	6798351.9	PAD 4	STP 31	Shovel Probe	0.5 x 0.5	250	Saddle	0	-	-	-
20/12/2011	542556.7	6798351.8	PAD 4	STP 32	Shovel Probe	0.5 x 0.5	200	Saddle	0	-	-	-
20/12/2011	542564.7	6798351.7	PAD 4	STP 33	Shovel Probe	0.5 x 0.5	200	Saddle	0	-	-	-
20/12/2011	542565.7	6798360.3	PAD 4	STP 34	Shovel Probe	0.5 x 0.5	150	Saddle	1	Chalcedony	-	Heat damaged
20/12/2011	542566.9	6798371.4	PAD 4	STP 35	Shovel Probe	0.5 x 0.5	200	Saddle	1	-	-	-
20/12/2011	542567.6	6798380.7	PAD 4	STP 36	Shovel Probe	0.5 x 0.5	250	Saddle	0	-	-	-
20/12/2011	542560.2	6798339.3	PAD 4	STP 37	Shovel Probe	0.5 x 0.5	250	Saddle	0	-	-	-
20/12/2011	542550.1	6798339.1	PAD 4	STP 38	Shovel Probe	0.5 x 0.5	250	Saddle	0	-	-	-
20/12/2011	542540.7	6798339.4	PAD 4	STP 39	Shovel Probe	0.5 x 0.5	400	Saddle	0	-	-	-
20/12/2011	542530.7	6798339.6	PAD 4	STP 40	Shovel Probe	0.5 x 0.5	0	Saddle	0	-	-	-
17/11/2011	545111.3	6799512.0	PAD 1	STP 1	Shovel Probe	0.5 x 0.5	700	Low flat sandy rise	0	Sand	Poor	Rise within dense grove. Major disturbance by tree roots
17/11/2011	545099.6	6799519.6	PAD 1	STP 2	Shovel Probe	0.5 x 0.5	600	Low flat sandy rise	0	-	-	-
17/11/2011	545107.5	6799555.1	PAD 1	STP 3	Shovel Probe	0.5 x 0.5	600	Low flat sandy rise	0	-	-	-

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	MGA Zone 56		Site / PAD name	Excavation number	Excavation type	Dimension of excavation (m)	End depth (mm)	Landscape unit (landform)	Number of artefacts	Artefact materials	Site condition	Comments
	Easting	Northing										
17/11/2011	545096.9	6799558.8	PAD 1	STP 4	Shovel Probe	0.5 x 0.5	600	Low flat sandy rise	0	-	-	-
17/11/2011	545089.2	6799557.3	PAD 1	STP 5	Shovel Probe	0.5 x 0.5	500	Low flat sandy rise	0	-	-	-
17/11/2011	545087.7	6799527.0	PAD 1	STP 6	Shovel Probe	0.5 x 0.5	650	Lower sand rise	1	Chert	-	-
17/11/2011	545107.8	6799554.4	PAD 1	STP 7	Shovel Probe	0.5 x 0.5	700	Low flat sandy rise	0	-	-	Edge of grove
17/11/2011	545111.6	6799562.5	PAD 1	STP 8	Shovel Probe	0.5 x 0.5	700	Low flat sandy rise	2	Chert	Good just outside grove	-
18/11/2011	545119.7	6799564.1	PAD 1	STP 9	Shovel Probe	0.5 x 0.5	750	Low flat sandy rise	0	-	-	-
18/11/2011	545120.3	6799573.4	PAD 1	STP 10	Shovel Probe	0.5 x 0.5	700	Low flat sandy rise	1	Chert	-	-
18/11/2011	545107.1	6799570.1	PAD 1	STP 11	Shovel Probe	0.5 x 0.5	700	Low flat sandy rise	0	-	-	-
18/11/2011	545073.1	6799563.2	PAD 1	STP 12	Shovel Probe	0.5 x 0.5	600	Low flat sandy rise	0	-	-	-
18/11/2011	545131.3	6799580.4	PAD 1	STP 13	Shovel Probe	0.5 x 0.5	500	Low flat sandy at bottom of colluvial slope	0	-	-	-
18/11/2011	545088.2	6799564.6	PAD 1	STP 15	Shovel Probe	0.5 x 0.5	800	Sandy flat	0	-	-	-
18/11/2011	545079.8	6799577.5	PAD 1	STP 14	Shovel Probe	0.5 x 0.5	600	Sandy flat	0	-	-	-
18/11/2011	545129.9	6799554.8	PAD 1	STP 16	Shovel Probe	0.5 x 0.5	500	Sandy flat	0	-	-	-
9/12/2011	545945.3	6800062.0	Rudgely Cultural PAD	STP 1	Shovel Probe	0.5 x 0.5	400	Edge of slight rise	0	-	-	Low-lying and slightly boggy
9/12/2011	545938.8	6800053.2	Rudgely Cultural PAD	STP 2	Shovel Probe	0.5 x 0.5	300	Edge of slight rise	0	-	-	-
9/12/2011	545932.0	6800044.4	Rudgely Cultural PAD	STP 3	Shovel Probe	0.5 x 0.5	250	Edge of slight rise	0	-	-	-
9/12/2011	545924.8	6800040.1	Rudgely Cultural PAD	STP 4	Shovel Probe	0.5 x 0.5	300	Edge of slight rise	0	-	-	-
9/12/2011	545919.1	6800031.4	Rudgely Cultural PAD	STP 5	Shovel Probe	0.5 x 0.5	300	Edge of slight rise	0	-	-	-
9/12/2011	545913.3	6800022.6	Rudgely Cultural PAD	STP 6	Shovel Probe	0.5 x 0.5	300	Edge of slight rise	0	-	-	-
16/12/2011	545933.5	6800016.0	Rudgely PAD 2	STP 7	Shovel Probe	0.5 x 0.5	0	Sand flat	0	-	-	-
16/12/2011	545930.7	6800006.4	Rudgely PAD 2	STP 8	Shovel Probe	0.5 x 0.5	0	Sand flat	0	-	-	-
16/12/2011	545925.8	6799998.1	Rudgely PAD 2	STP 9	Shovel Probe	0.5 x 0.5	0	Sand flat	0	-	-	-
9/12/2011	546025.6	6800082.8	Rudgely PAD 2	STP 1	Shovel Probe	0.5 x 0.5	850	Sand flat	1	Chert	-	-
9/12/2011	546016.3	6800076.6	Rudgely PAD 2	STP 2	Shovel Probe	0.5 x 0.5	0	Sand flat	0	-	-	-
9/12/2011	546010.8	6800068.4	Rudgely PAD 2	STP 3	Shovel Probe	0.5 x 0.5	0	Sand flat	0	-	-	-
9/12/2011	546003.0	6800061.8	Rudgely PAD 2	STP 4	Shovel Probe	0.5 x 0.5	0	Sand flat	0	-	-	-
9/12/2011	545995.5	6800059.3	Rudgely PAD 2	STP 5	Shovel Probe	0.5 x 0.5	0	Sand flat	0	-	-	-
9/12/2011	546023.2	6800080.6	Rudgely PAD 2	STP 6R	Shovel Probe	0.5 x 0.5	900	Sand flat	2	Chert	-	-
9/12/2011	546005.7	6800305.9	Rudgely PAD 1b	STP 1	Shovel Probe	0.5 x 0.5	350	Upper slope	0	-	-	-
9/12/2011	546014.1	6800300.6	Rudgely PAD 1b	STP 2	Shovel Probe	0.5 x 0.5	300	Upper slope	0	-	-	-
9/12/2011	546021.9	6800295.3	Rudgely PAD 1b	STP 3	Shovel Probe	0.5 x 0.5	400	Mid-slope	0	-	-	-
9/12/2011	546030.5	6800290.5	Rudgely PAD 1b	STP 4	Shovel Probe	0.5 x 0.5	300	Mid-slope	0	-	-	-
9/12/2011	546039.4	6800284.7	Rudgely PAD 1b	STP 5	Shovel Probe	0.5 x 0.5	0	Mid-slope	1	Chert	-	-

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	MGA Zone 56		Site / PAD name	Excavation number	Excavation type	Dimension of excavation (m)	End depth (mm)	Landscape unit (landform)	Number of artefacts	Artefact materials	Site condition	Comments
	Easting	Northing										
9/12/2011	546048.8	6800280.0	Rudgley PAD 1b	STP 6	Shovel Probe	0.5 x 0.5	0	Mid-slope	0	-	-	-
9/12/2011	546053.9	6800276.8	Rudgley PAD 1b	STP 7	Shovel Probe	0.5 x 0.5	0	Lower slope	0	-	-	-
9/12/2011	546040.6	6800288.7	Rudgley PAD 1b	STP 8R	Shovel Probe	0.5 x 0.5	200	Mid-slope	0	-	-	-
9/12/2011	546037.0	6800279.8	Rudgley PAD 1b	STP 9R	Shovel Probe	0.5 x 0.5	250	Mid-slope	0	-	-	-
16/12/2011	546001.6	6800296.4	Rudgely PAD 1b	STP 10	Shovel Probe	0.5 x 0.5	0	Sand flat	0	-	-	-
16/12/2011	546010.4	6800289.9	Rudgely PAD 1b	STP 11	Shovel Probe	0.5 x 0.5	0	Sand flat	0	-	-	-
16/12/2011	546017.3	6800284.5	Rudgely PAD 1b	STP 12	Shovel Probe	0.5 x 0.5	0	Sand flat	0	-	-	-
16/12/2011	546024.5	6800278.5	Rudgely PAD 1b	STP 13	Shovel Probe	0.5 x 0.5	0	Sand flat	0	-	-	-
16/12/2011	546033.1	6800271.4	Rudgely PAD 1b	STP 14	Shovel Probe	0.5 x 0.5	0	Sand flat	0	-	-	-
16/12/2011	546040.0	6800265.5	Rudgely PAD 1b	STP 15	Shovel Probe	0.5 x 0.5	0	Sand flat	0	-	-	-
23/11/2011	546021.3	6800402.3	Rudgley PAD 1a	STP 1	Shovel Probe	0.5 x 0.5	400	Mid-slope	4	Chert	Cleared	-
23/11/2011	546030.3	6800401.1	Rudgley PAD 1a	STP 2	Shovel Probe	0.5 x 0.5	300	Mid-slope	1	Chert	-	-
23/11/2011	546039.4	6800401.3	Rudgley PAD 1a	STP 3	Shovel Probe	0.5 x 0.5	400	Mid-slope	0	-	-	-
23/11/2011	546050.6	6800399.8	Rudgley PAD 1a	STP 4	Shovel Probe	0.5 x 0.5	350	Mid-slope	0	-	-	-
23/11/2011	546060.8	6800400.6	Rudgley PAD 1a	STP 5	Shovel Probe	0.5 x 0.5	250	Lower slope	0	-	-	-
23/11/2011	546021.4	6800391.5	Rudgley PAD 1a	STP 6	Shovel Probe	0.5 x 0.5	300	Mid sope	0	-	-	-
23/11/2011	546031.2	6800391.5	Rudgley PAD 1a	STP 7	Shovel Probe	0.5 x 0.5	300	Mid-slope	0	-	-	-
23/11/2011	546041.2	6800389.4	Rudgley PAD 1a	STP 8	Shovel Probe	0.5 x 0.5	400	Mid-slope	0	-	-	-
23/11/2011	546050.3	6800387.9	Rudgley PAD 1a	STP 9	Shovel Probe	0.5 x 0.5	300	Mid-slope	0	-	-	-
23/11/2011	546061.9	6800387.0	Rudgley PAD 1a	STP 10	Shovel Probe	0.5 x 0.5	300	Lower slope	0	-	-	-
23/11/2011	546059.6	6800369.4	Rudgley PAD 1a	STP 11	Shovel Probe	0.5 x 0.5	200	Lower slope	0	-	-	-
23/11/2011	546048.3	6800372.3	Rudgley PAD 1a	STP 12	Shovel Probe	0.5 x 0.5	300	Mid-slope	0	-	-	-
23/11/2011	546038.3	6800372.3	Rudgley PAD 1a	STP 13	Shovel Probe	0.5 x 0.5	250	Mid-slope	0	-	-	-
23/11/2011	546028.6	6800373.8	Rudgley PAD 1a	STP 14	Shovel Probe	0.5 x 0.5	300	Mid-slope	1	Basalt	Cleared	-
23/11/2011	546019.3	6800378.5	Rudgley PAD 1a	STP 15	Shovel Probe	0.5 x 0.5	400	Mid-slope	0	-	-	-
23/11/2011	546020.8	6800384.2	Rudgley PAD 1a	STP 16	Shovel Probe	0.5 x 0.5	300	Mid-slope	0	-	-	-
23/11/2011	546022.2	6800397.0	Rudgley PAD 1a	STP 17	Shovel Probe	0.5 x 0.5	300	Mid-slope	0	-	-	-
23/11/2011	546020.0	6800402.9	Rudgley PAD 1a	STP 18	Shovel Probe	0.5 x 0.5	300	Mid-slope	0	-	-	-
23/11/2011	546023.1	6800404.7	Rudgley PAD 1a	STP 19	Shovel Probe	0.5 x 0.5	400	Mid-slope	0	-	-	-
23/11/2011	546028.6	6800368.9	Rudgley PAD 1a	STP 20	Shovel Probe	0.5 x 0.5	200	Mid-slope	0	-	-	-
23/11/2011	546034.0	6800373.1	Rudgley PAD 1a	STP 21	Shovel Probe	0.5 x 0.5	250	Mid-slope	0	-	-	-
23/11/2011	546030.6	6800406.0	Rudgley PAD 1a	STP 22	Shovel Probe	0.5 x 0.5	200	Mid-slope	0	-	-	-
23/11/2011	546030.8	6800397.9	Rudgley PAD 1a	STP 23	Shovel Probe	0.5 x 0.5	400	Mid-slope	0	-	-	-
23/11/2011	546035.9	6800400.2	Rudgley PAD 1a	STP 24	Shovel Probe	0.5 x 0.5	250	Mid-slope	0	-	-	-
23/11/2011	546029.2	6800378.2	Rudgley PAD 1a	STP 25	Shovel Probe	0.5 x 0.5	250	Mid-slope	0	-	-	-
23/11/2011	546024.2	6800374.3	Rudgley PAD 1a	STP 26	Shovel Probe	0.5 x 0.5	400	Mid-slope	0	-	-	-
16/11/2011	546359.3	6800623.5	Saezza 1	STP 1	Shovel Probe	0.5 x 0.5	550	Low sand ridge	21	Chalcedony, chert	-	-
16/11/2011	546358.6	6800621.4	Saezza 1	STP 2	Shovel Probe	0.5 x 0.5	950	Lower sand ridge	3	Chert	-	-

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	MGA Zone 56		Site / PAD name	Excavation number	Excavation type	Dimension of excavation (m)	End depth (mm)	Landscape unit (landform)	Number of artefacts	Artefact materials	Site condition	Comments
	Easting	Northing										
16/11/2011	546358.6	6800617.1	Saezza 1	STP 3	Shovel Probe	0.5 x 0.5	900	Lower sand ridge	14	Chert, charcoal	-	-
16/11/2011	546356.5	6800614.7	Saezza 1	STP 4	Shovel Probe	0.5 x 0.5	1,000	Lower sand ridge	23	Chert, chalcedony	-	-
16/11/2011	546355.1	6800603.4	Saezza 1	STP 5	Shovel Probe	0.5 x 0.5	900	Lower sand ridge	1	Chert	-	-
16/11/2011	546354.4	6800600.2	Saezza 1	STP 6	Shovel Probe	0.5 x 0.5	700	Lower sand ridge	0	-	-	-
16/11/2011	546353.3	6800626.9	Saezza 1	STP 7R	Shovel Probe	0.5 x 0.5	800	Lower sand ridge	12	Chert, chalcedony	-	-
17/11/2011	546216.7	6800614.3	Saezza PAD 1	STP 1	Shovel Probe	0.5 x 0.5	200	Rise above creek	0	-	Disturbed	Rocky, compact degraded soils on compact blocky clay layer
17/11/2011	546227.4	6800608.1	Saezza PAD 1	STP 2	Shovel Probe	0.5 x 0.5	200	Lower slope	0	-	Poor	Lower slope of rise, thin compact soil layer, highly disturbed - u/g telephone cable within 10 m
17/11/2011	546506.8	6801433.8	PAD 12	STP 1	Shovel Probe	0.5 x 0.5	700	Low sandy rise	0	-	Poor	Deflated sand ridge with heavy disturbance to top layers
17/11/2011	546508.0	6801442.7	PAD 12	STP 2	Shovel Probe	0.5 x 0.5	600	Low sand ridge	0	-	Poor	-
17/11/2011	546510.0	6801452.4	PAD 12	STP 3	Shovel Probe	0.5 x 0.5	700	Low sand ridge	0	-	-	-
17/11/2011	546512.5	6801462.7	PAD 12	STP 4	Shovel Probe	0.5 x 0.5	700	Low sand ridge	1	Chert	-	Artefact probably dropped through sand. appears bleached and poorly preserved
17/11/2011	546512.7	6801442.0	PAD 12	STP 5	Shovel Probe	0.5 x 0.5	750	Low sand ridge	0	-	-	-
17/11/2011	546502.9	6801443.0	PAD 12	STP 6	Shovel Probe	0.5 x 0.5	800	Low sand ridge	1	Chert	-	-
17/11/2011	546503.1	6801460.5	PAD 12	STP 7	Shovel Probe	0.5 x 0.5	800	Low sand ridge	9	Chert	-	-
17/11/2011	546502.7	6801464.5	PAD 12	STP 8	Shovel Probe	0.5 x 0.5	700	Low sand ridge	0	-	-	-

Table 10 Summary of post-excavation activity

Date	MGA Zone 56		Site / PAD name	Post-excavation activity	Post-excavation record	Number of artefacts	Comments
	Easting	Northing					
22/12/2011	543356.3	6790486.4	PAD 11	Artefact reburial	Transect Point	963	-
22/12/2011	543361.2	6791176.0	E2/2	Shell reburial	Transect Point	0	-
16/12/2011	543360.3	6791174.7	E2/2	Artefacts left from mechanical excavation	Transect Point	0	Artefacts left from mechanical excavation
22/12/2011	542533.1	6792799.0	Melino PAD	Shell reburial	Transect Point	0	-

Appendix L Stratigraphy drawings

Working paper 4 – Aboriginal heritage assessment (concept plan)

Pacific Highway Upgrade - Woolgoolga to Ballina: Cultural Heritage Sub-Surface Testing

AHIMS Site ID: 09-1-0203 and 09-1-0204

Site Name: Gittoes-Jali

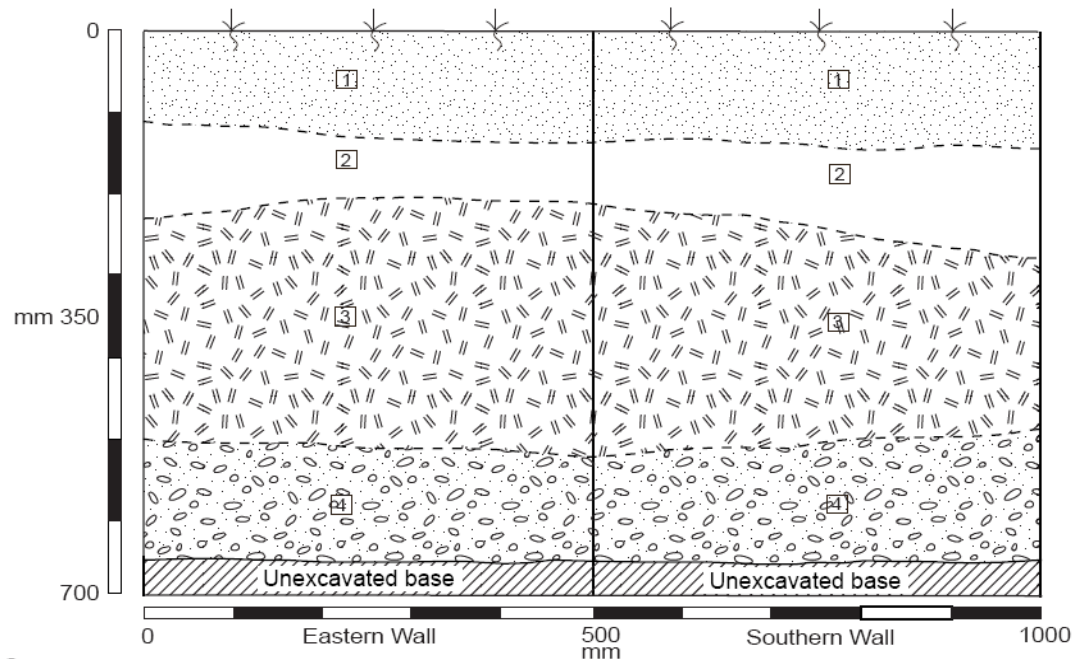
Shovel Test Pit 4 (0.5 metre x 0.5 metre)

537636E / 6785044N (GDA 94, MGA Zone 56)

Stratigraphic Profile: Eastern and Southern Walls

Drawn by: Erica Weston

Excavation Date: 7 November 2011



Stratigraphic Components

1	10YR 3/3 (colour from Munsell), pH 6. Highly compacted, greyish-brown, humic silt. Rootlets present.	3	10YR 5/8 (colour from Munsell), pH 6.5. Yellowish-brown mottled clay with charcoal flecks and ironstone inclusions.
2	7.5YR 3/4 (colour from Munsell), pH 6. Moderately compacted dark-brown silty clay. Inclusions of sandstone and quartz pebbles (5-30 mm) and charcoal flecks.	4	10YR 5/6 (colour from Munsell), pH 6. Yellow, sandy clay base.

Figure 10 Stratigraphy drawing: Gittoes Jali (PADs 5, 6 and 7), shovel test pit 4

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Pacific Highway Upgrade - Woolgoolga to Ballina: Cultural Heritage Sub-Surface Testing

AHIMS Site ID: 09-1-0203 and 09-1-0204

Site Name: Gittoes-Jali

Shovel Test Pit 46 (0.5 metre x 0.5 metre)

537410E / 6784833N (GDA 94, MGA Zone 56)

Stratigraphic Profile: Southern and Western Walls

Drawn by: Simon Cox

Excavation Date: 10 November 2011

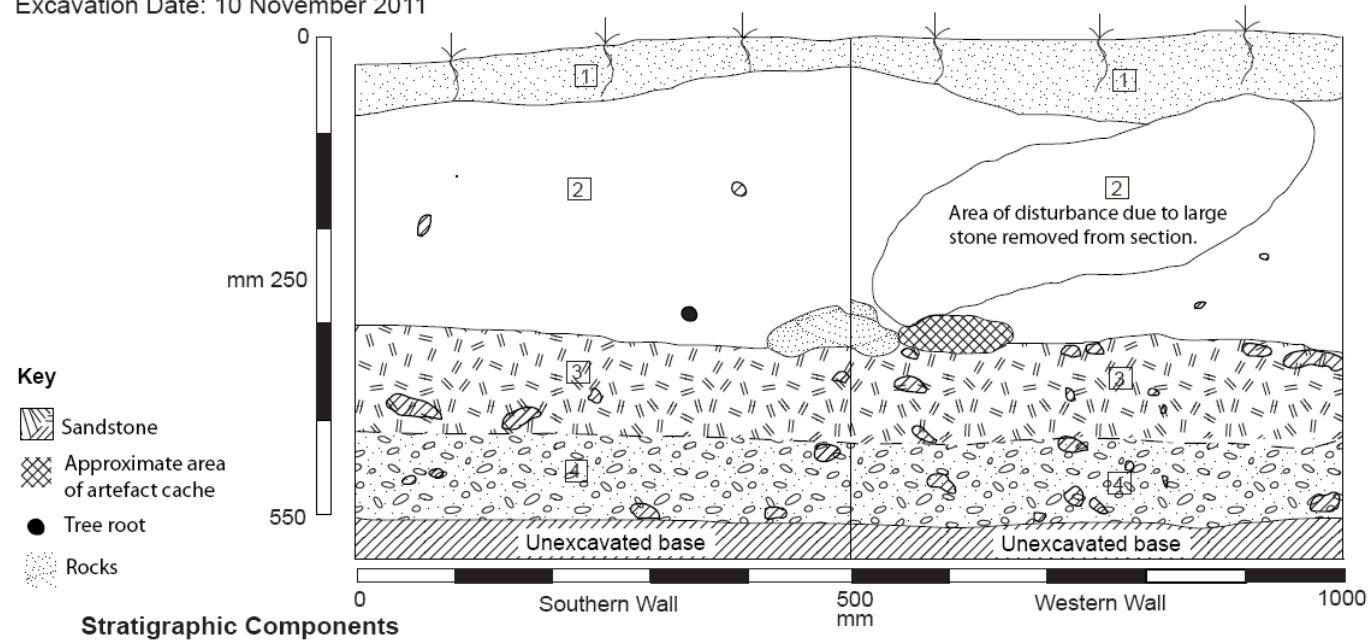


Figure 11 Stratigraphy drawing: Gittoes Jali (PADs 5, 6 and 7), shovel test pit 46

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Pacific Highway Upgrade - Woolgoolga to Ballina: Cultural Heritage Sub-Surface Testing

AHIMS Site ID: 13-1-0190

Site Name: PAD 13

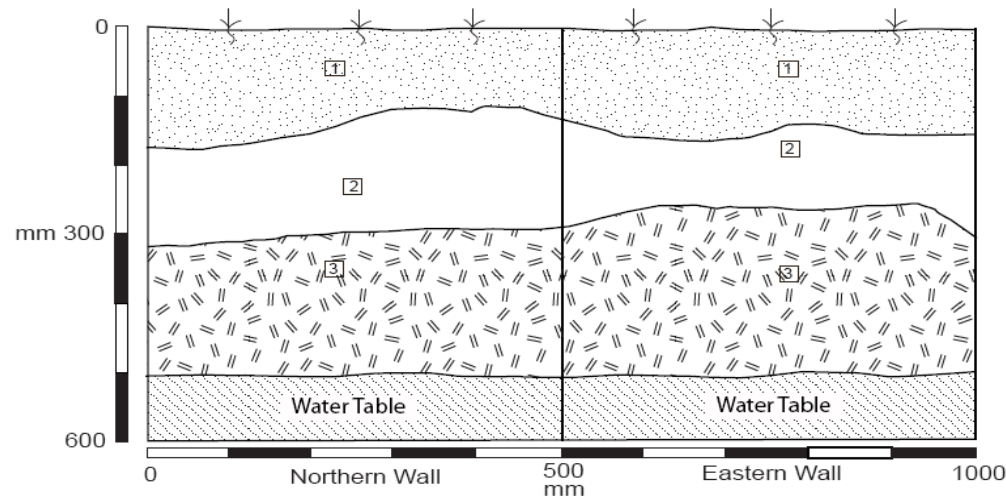
Shovel Test Pit 4 (0.5 metre x 0.5 metre)

540597E / 6788930N (GDA 94, MGA Zone 56)

Stratigraphic Profile: Northern and Eastern Walls

Drawn by: Shoshanna Grounds

Excavation Date: 15 December 2011



Stratigraphic Components

1	10YR 2/1 (colour from Munsell), pH 7. Dark, blackish-brown, sandy-clay-loam with rootlets and worm activity. Inclusions of 'mill slag'.
2	GLE Y1 4/N (colour from Munsell), pH 6.5. Moderately diffuse transition layer. Medium blackish-grey, very slightly silty sand. Slightly humic with rootlets and inclusions of 'mill slag' (5-100 mm).
3	2.5YR 5/1 (colour from Munsell), pH 6.5. Medium to light, slightly brownish-grey, very moist and well-sorted medium-grained sand. Very rare rootlet inclusions. Water table reached at 550 mm.

Figure 12 Stratigraphy drawing: PAD 13, shovel test pit 4

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Pacific Highway Upgrade - Woolgoolga to Ballina: Cultural Heritage Sub-Surface Testing

AHIMS Site ID: 13-1-0188

Site Name: PAD 10

Shovel Test Pit 1 (0.5 metre x 0.5 metre)

542452E / 6789603N (GDA 94, MGA Zone 56)

Stratigraphic Profile: Northern Wall

Drawn by: Simon Coxe/Anthony Hamdorf

Excavation Date: 16 November 2011

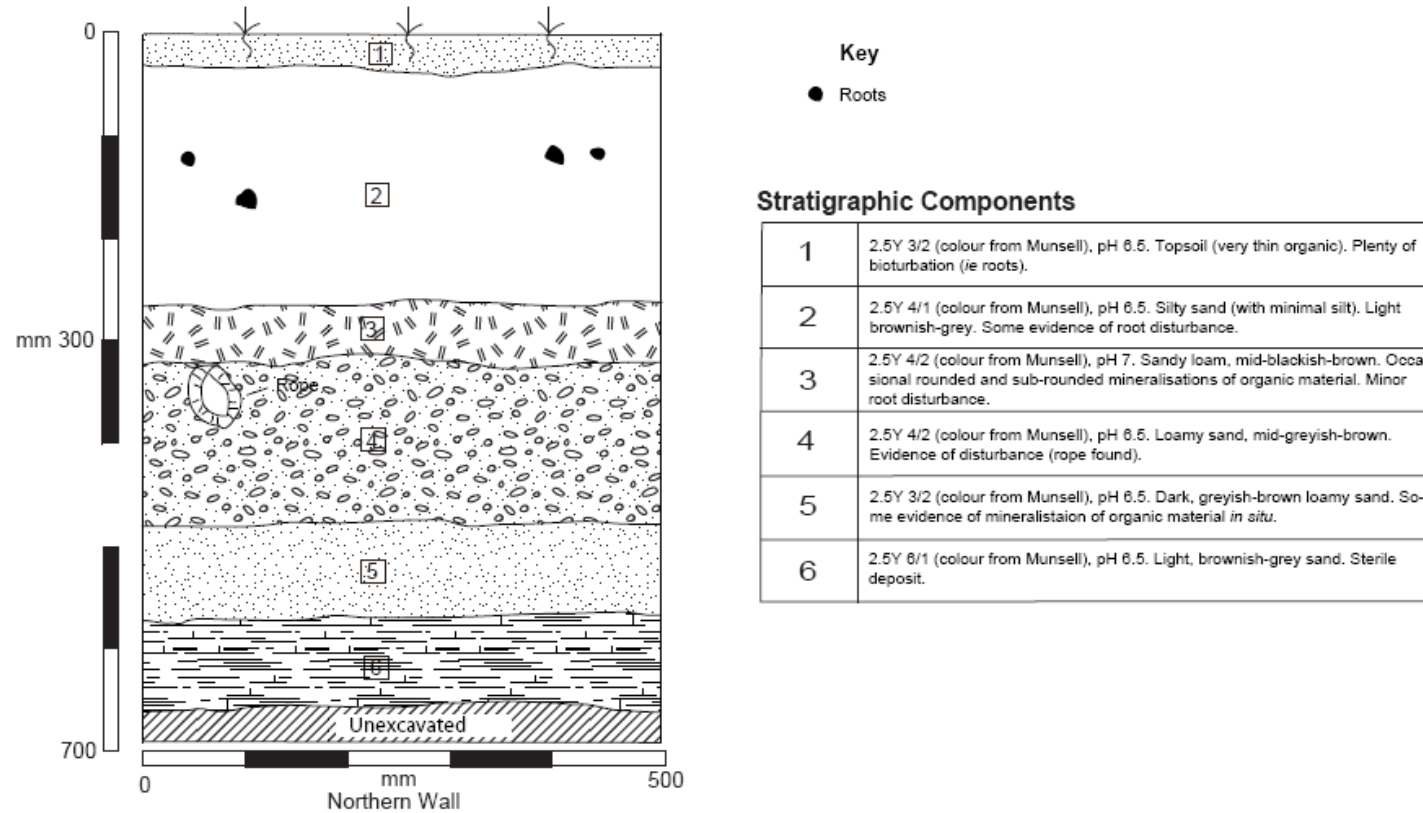


Figure 13 Stratigraphy drawing: PAD 10, shovel test pit 1

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Pacific Highway Upgrade - Woolgoolga to Ballina: Cultural Heritage Sub-Surface Testing

AHIMS Site ID: 13-1-0187

Site Name: PAD 8

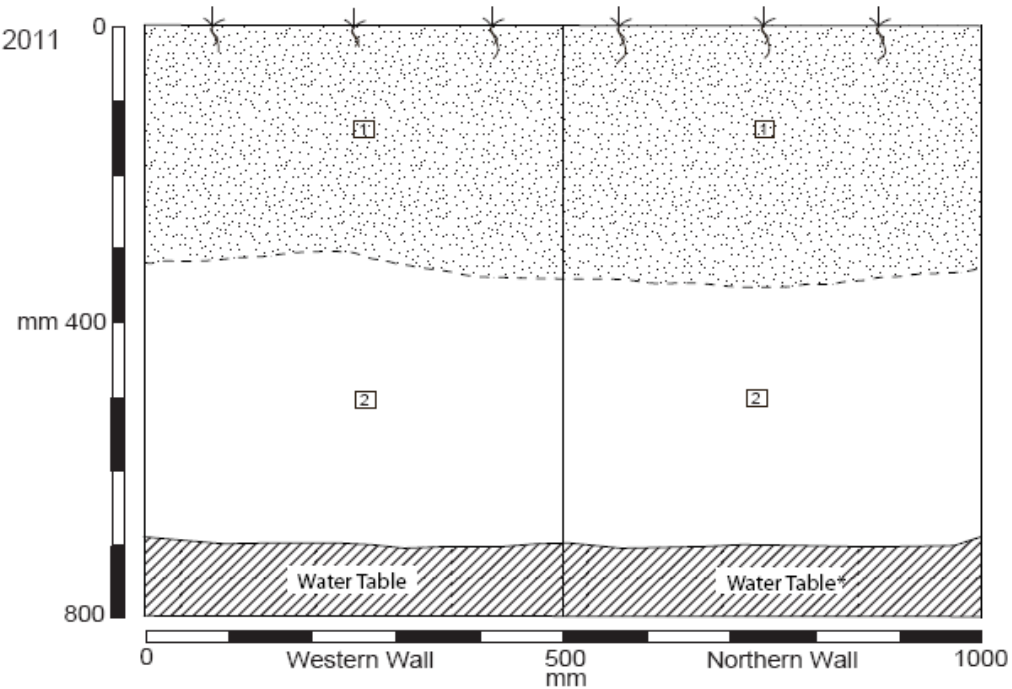
Shovel Test Pit 1 (0.5 metre x 0.5 metre)

542617E / 6789527N (GDA 94, MGA Zone 56)

Stratigraphic Profile: Western and Northern Walls

Drawn By: Morgan Wilcox

Excavation Date: 7 November 2011



Stratigraphic Components

1	10YR 2/1 (colour from Munsell), pH 4.5. Dark brown/grey very sandy humic soil, loose. Contained rootlets.
2	7.5YR 4/1 (colour from Munsell), pH 6.5. Light brown/grey sand (bleached), loose.

*Digging ceased upon encountering low horizon water table.

Figure 14 Stratigraphy drawing: PAD 8, shovel test pit 1

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Pacific Highway Upgrade - Woolgoolga to Ballina: Cultural Heritage Sub-Surface Testing

AHIMS Site ID: 13-1-0189

Site Name: PAD 11

Shovel Test Pit 4 (0.5 metre x 0.5 metre)

543382E / 6790355N (GDA 94, MGA Zone 56)

Stratigraphic Profile: Northern Wall

Drawn by: Shoshanna Grounds

Excavation Date: 6 December 2011

Stratigraphic Components

1	5YR 3/1 (colour from Munsell), pH 6. Dark grey, loosely compacted, sandy loam. Inclusions of grass rootlets and evidence of insect activity. Artefacts recovered from this horizon.
2	5Y 6/1 (colour from Munsell), pH 6.5. Loosely compacted, grey sand. Some root disturbance and occasional flecks of charcoal. Moderately moist. Artefacts recovered from this horizon.

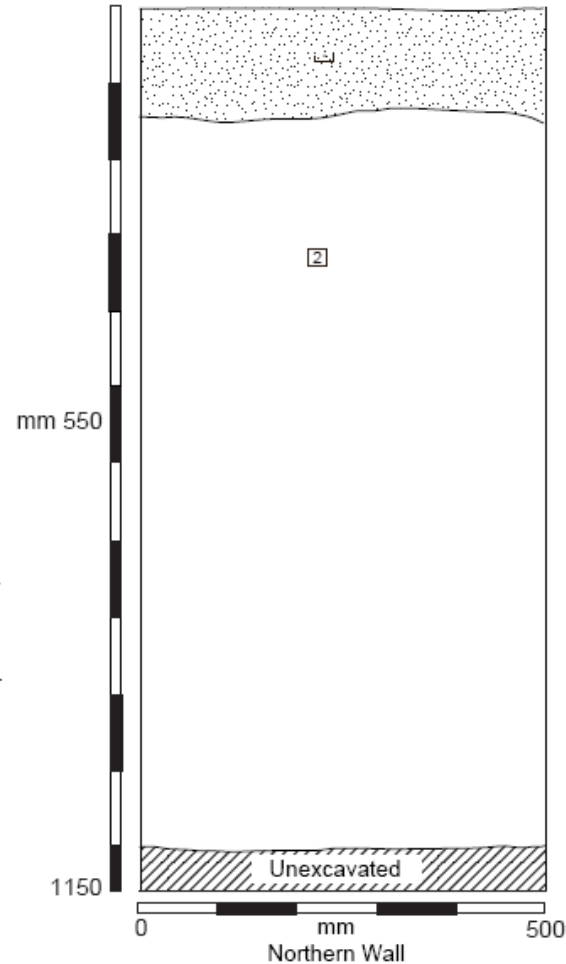


Figure 15 Stratigraphy drawing: PAD 11, shovel test pit 4

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Pacific Highway Upgrade - Woolgoolga to Ballina: Cultural Heritage Sub-Surface Testing

AHIMS Site ID: 13-1-0109

Site Name: E2/2

Shovel Test Pit 4 (0.5 metre x 0.5 metre)

534324E / 6791237N (GDA 94, MGA Zone 56)

Stratigraphic Profile: Northern and Eastern Walls

Drawn by: Rebecca Andrews

Excavation Date: 13 December 2011

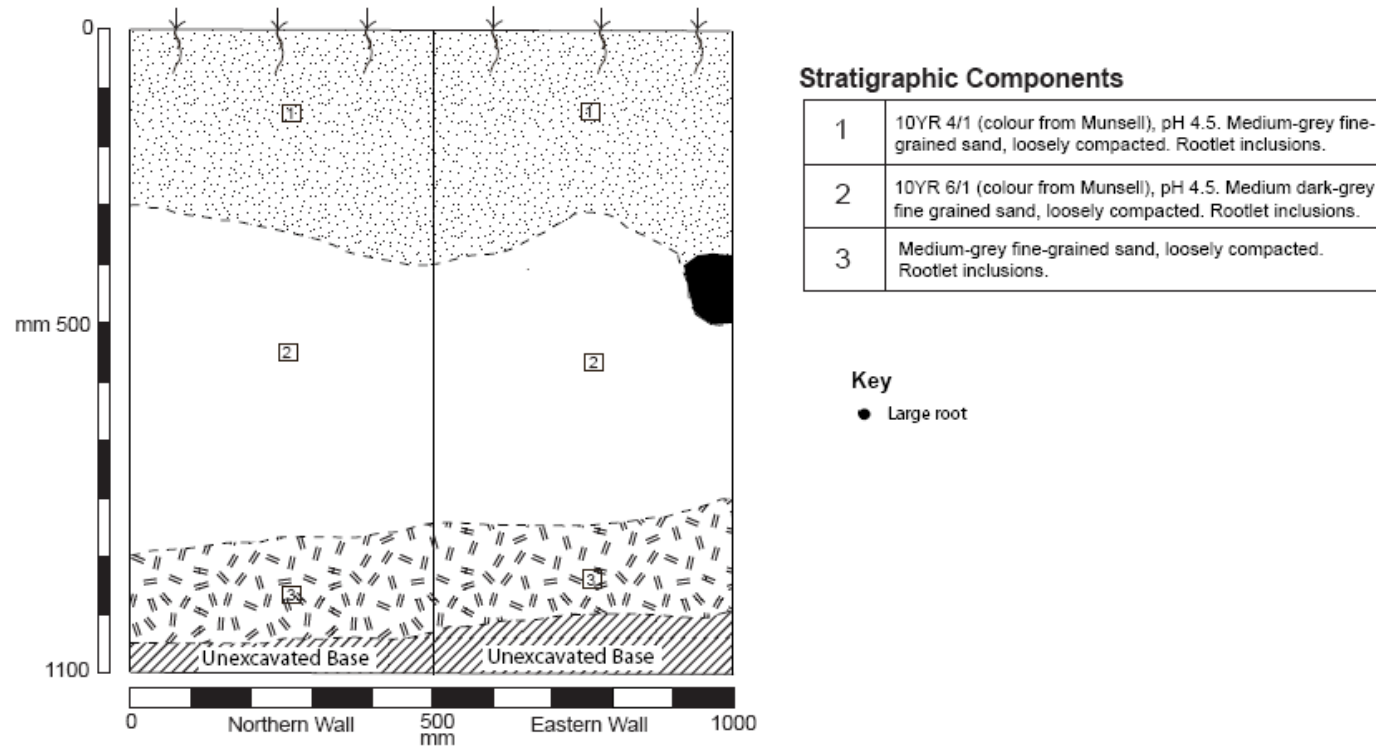


Figure 16 Stratigraphy drawing: E2/2, shovel test pit 4

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Pacific Highway Upgrade - Woolgoolga to Ballina: Cultural Heritage Sub-Surface Testing

AHIMS Site ID: 04-4-0173

Site Name: Melino PAD

Shovel Test Pit 1 (1 metre x 1 metre)

542651E / 6792776N (GDA 94, MGA Zone 56)

Stratigraphic Profile: Northern and Eastern Walls

Drawn by: Shoshanna Grounds

Excavation Date: 29 November 2011

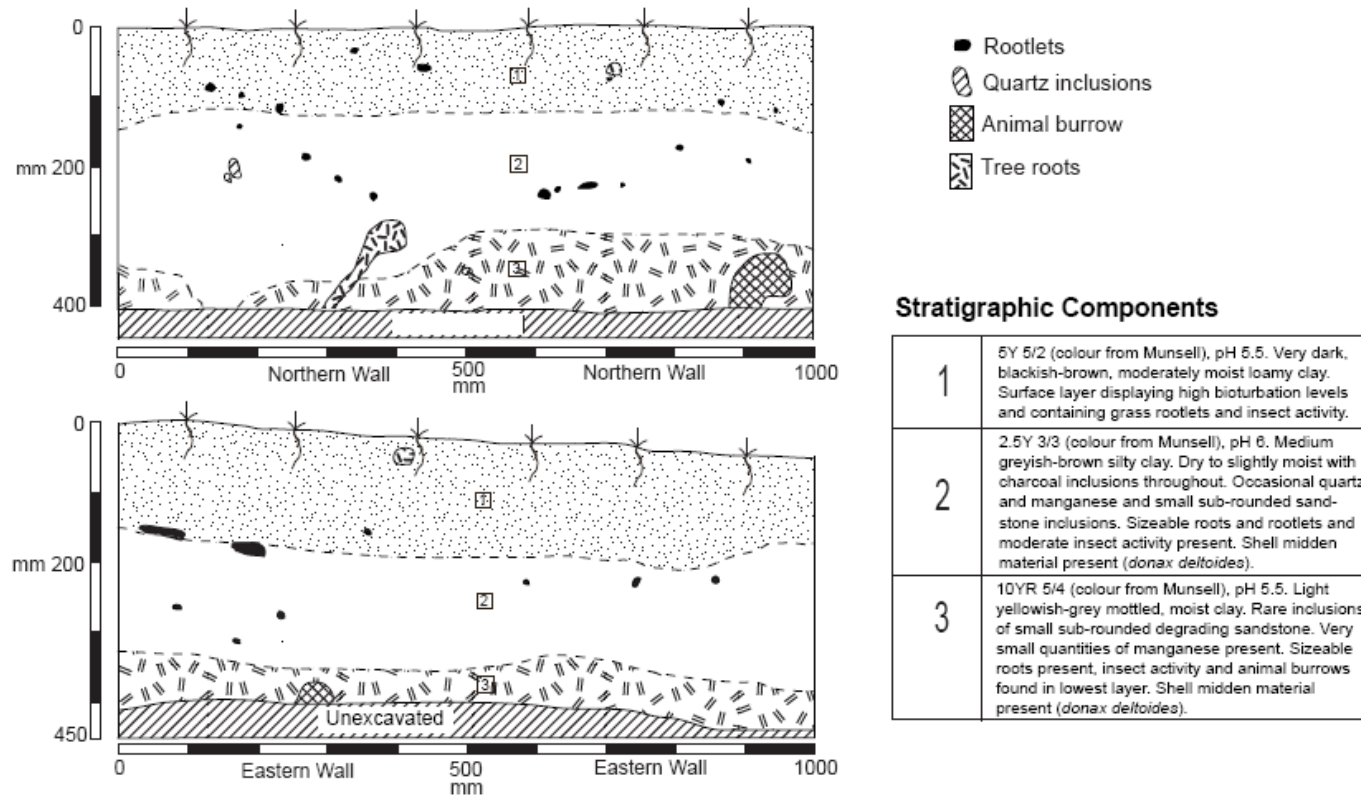


Figure 17 Stratigraphy drawing: Melino PAD, shovel test pit 1

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Pacific Highway Upgrade - Woolgoolga to Ballina: Cultural Heritage Sub-Surface Testing

AHIMS Site ID: 04-4-0173

Site Name: Melino PAD

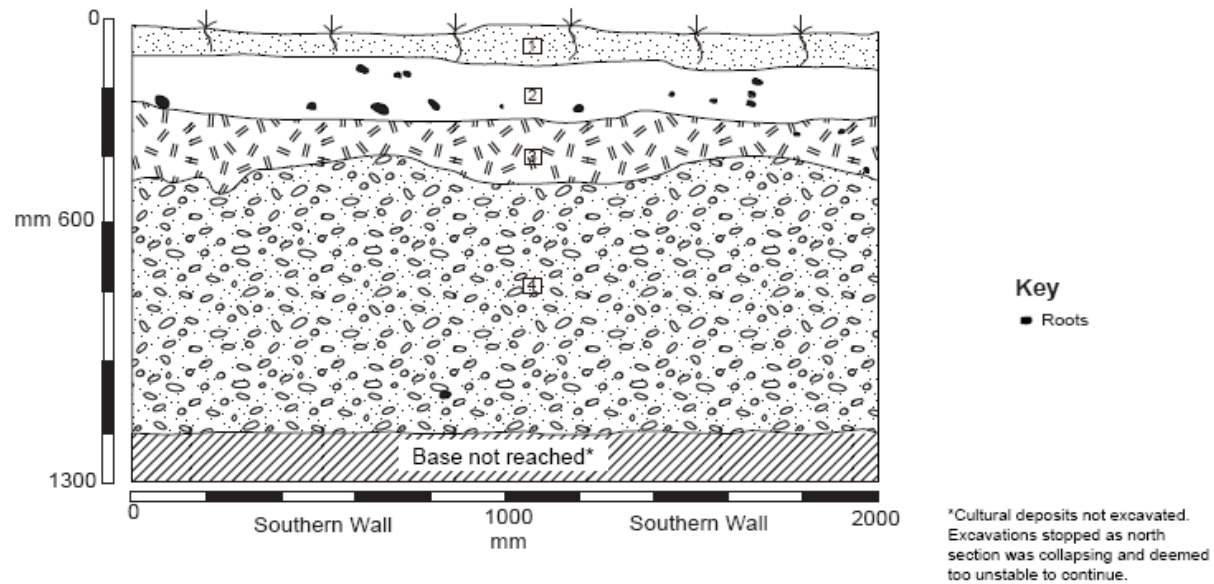
Trench 1 (2 metre x 1 metre)

542533E / 6792800N (GDA 94, MGA Zone 56)

Stratigraphic Profile: Southern Wall

Drawn by: Laura Bates

Excavation Date: 29 November 2011



Stratigraphic Components

1	10YR 3/3 (colour from Munsell), pH 6. Medium blackish-grey sand, humic content low. Loosely compacted, well sorted. Lots of roots, bioturbation present. Artefacts found in this horizon.	3	5YR 4/1 (colour from Munsell), pH 6.5. Dark brownish-grey sand. Humic deposit due to leaching from above.
2	Gley1 3/N (colour from Munsell), pH 6.5. Light-grey sand. No organic matter present. Alluvial deposits. Artefacts found in this horizon.	4	5YR 5/1 and Gley1 5/1 (colour from Munsell), pH 6.5 to 7. Light grey sand with some mid-greyish-brown mottling. No organic matter present. Alluvial deposits.

Figure 18 Stratigraphy drawing: Melino PAD, trench 1

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Pacific Highway Upgrade - Woolgoolga to Ballina: Cultural Heritage Sub-Surface Testing

AHIMS Site ID: 04-4-0178

Site Name: PAD 2

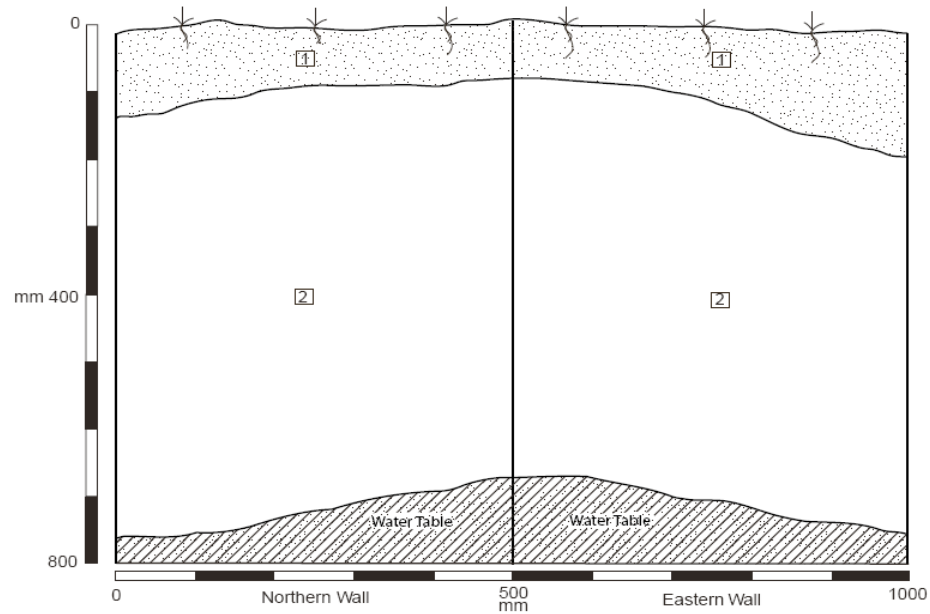
Shovel Test Pit 1 (0.5 metre x 0.5 metre)

513146E / 6723659N (GDA 94, MGA Zone 56)

Stratigraphic Profile: Northern and Eastern Walls

Drawn By: Erica Weston

Excavation Date: 4 November 2011



Stratigraphic Components

1	10YR 2/1 (colour from Munsell), pH 6.5. Black loamy sand containing grass and rootlets.
2	10YR 5/1 (colour from Munsell), pH 6.5. Fine-grained grey/white sand until water table.

Figure 19 Stratigraphy drawing: PAD 2, shovel test pit 1

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Pacific Highway Upgrade - Woolgoolga to Ballina: Cultural Heritage Sub-Surface Testing

AHIMS Site ID: 04-4-0175

Site Name: PAD 3

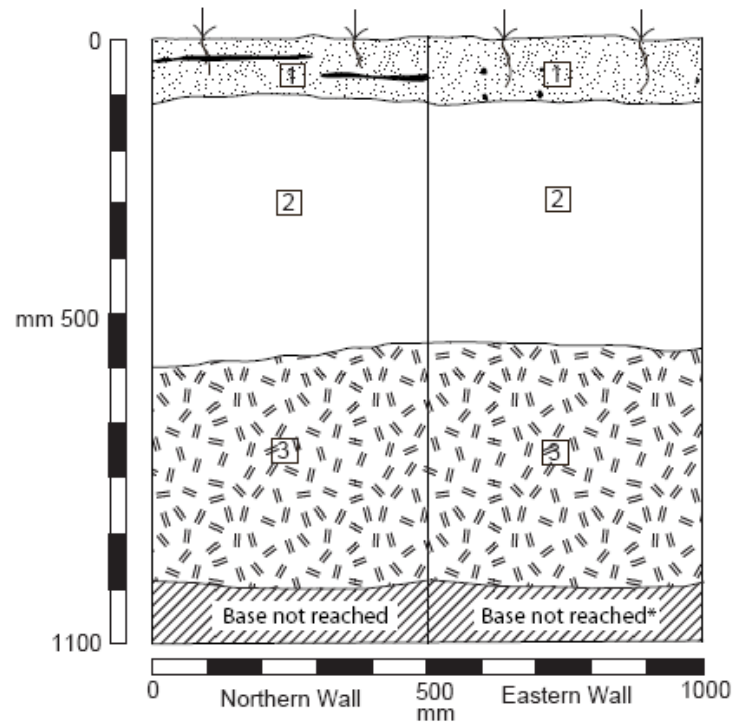
Shovel Test Pit 2 (0.5 metre x 0.5 metre)

541697E / 6796637N (GDA 94, MGA Zone 56)

Stratigraphic Profile: Northern and Eastern Walls

Drawn By: Erica Weston

Excavation Date: 22 November 2011



Stratigraphic Components

1	10YR 7/1 (colour from Munsell), pH 6.5. Humic, very light-grey sand. Loosely compacted and dry.
2	7.5YR 5/1 (colour from Munsell), pH 4. Very light-grey sand, loosely compacted and moist.
3	7.5YR 6/1 (colour from Munsell), pH 6.5. Very light, tan-grey sand, loosely compacted and moist. Artefacts found in this horizon.

*Base not reached. Maximum depth for 0.5 metre x 0.5 metre pit.

Key

● Roots

Figure 20 Stratigraphy drawing: PAD 3, shovel test pit 2

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Pacific Highway Upgrade - Woolgoolga to Ballina: Cultural Heritage Sub-Surface Testing

AHIMS Site ID: 04-4-0132

Site Name: PAD 4

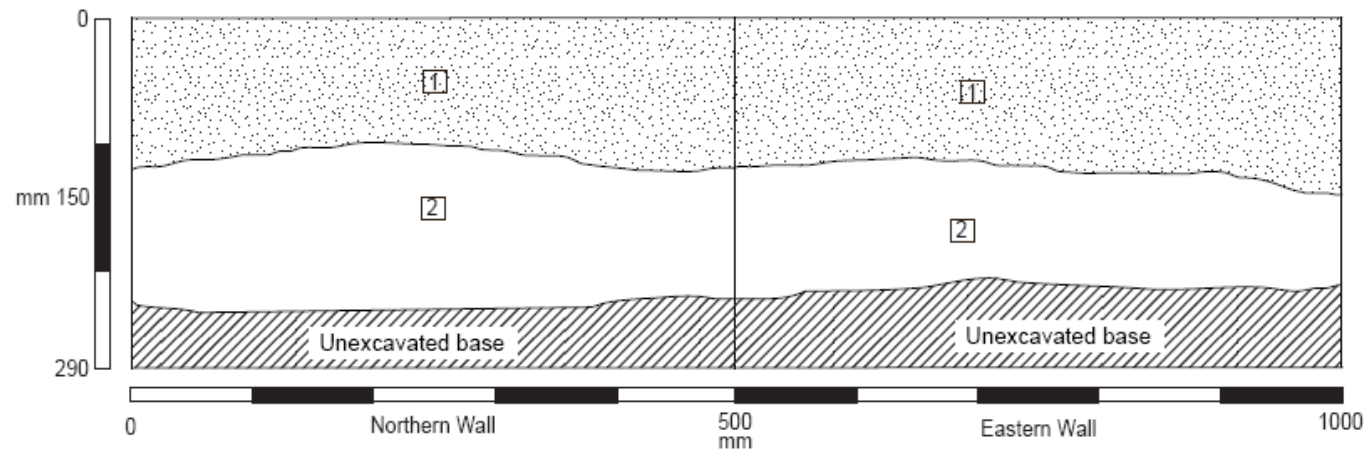
Shovel Test Pit 2 (0.5 metre x 0.5 metre)

542381E / 6798427N (GDA94, MGA Zone 56)

Stratigraphic Profile: Northern and Eastern Walls

Drawn By: Rebecca Andrews

Excavation Date: 12 December 2011



Stratigraphic Components

1	10YR 3/2 (colour from Munsell), pH 6.5. Very dark greyish-brown, humic, compacted, silty clay. Bioturbation from rootlets and occasionally worms.
2	10YR 4/3 (colour from Munsell), pH 5.5. Mottled brown and orange, compact, silty clay. Bioturbation from rootlets and occasional inclusions of charcoal.

Figure 21 Stratigraphy drawing: PAD 4, shovel test pit 2

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Pacific Highway Upgrade - Woolgoolga to Ballina: Cultural Heritage Sub-Surface Testing

AHIMS Site ID: 04-4-0179

Site Name: PAD 1

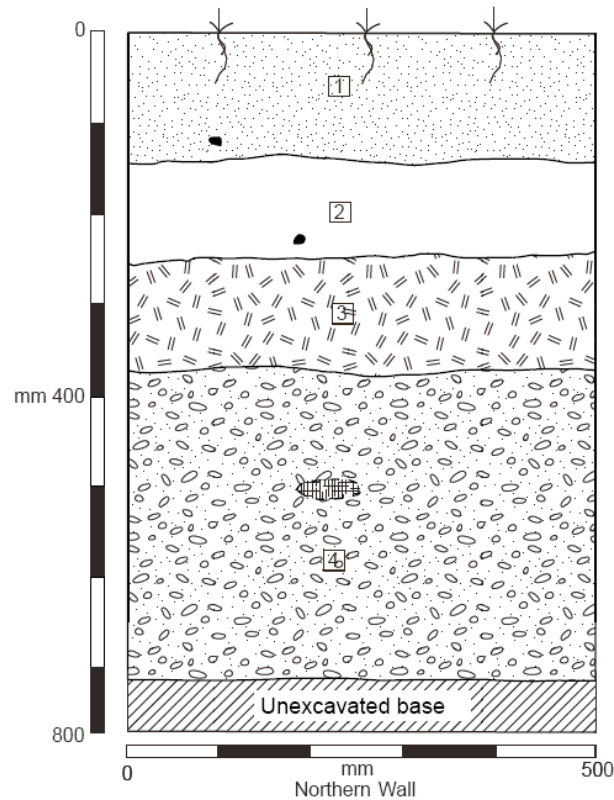
Shovel Test Pit 8 (0.5 metre x 0.5 metre)

545113E / 6799510N (GDA 94, MGA Zone 56)

Stratigraphic Profile: Northern Wall

Drawn by: Simon Coxe

Excavation Date: 17 November 2011



Stratigraphic Components

1	7YR 4/2 (colour from Munsell), pH 6. Light brown-grey loosely compacted sand with some organic colouration. No visible inclusions. Root disturbance common.
2	7.5YR 3/1 (colour from Munsell), pH 6. Mid brown-grey, loosely compacted sand. No visible inclusions. Minor root disturbance.
3	7.5YR 4/6 (colour from Munsell), pH 6. Mid-orange-brown, loosely compacted sand. No visible inclusions. Minor root disturbance.
4	10YR 4/4 (colour from Munsell), pH 6. Light grey-brown, loosely compacted sand. No visible inclusions. Minor root disturbance. Artefact found in this horizon.

Key



-  Area where the core was situated.
-  Roots

Figure 22 Stratigraphy drawing: PAD 1, shovel test pit 8

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Pacific Highway Upgrade - Woolgoolga to Ballina: Cultural Heritage Sub-Surface Testing

AHIMS Site ID: 04-4-0179

Site Name: PAD 1

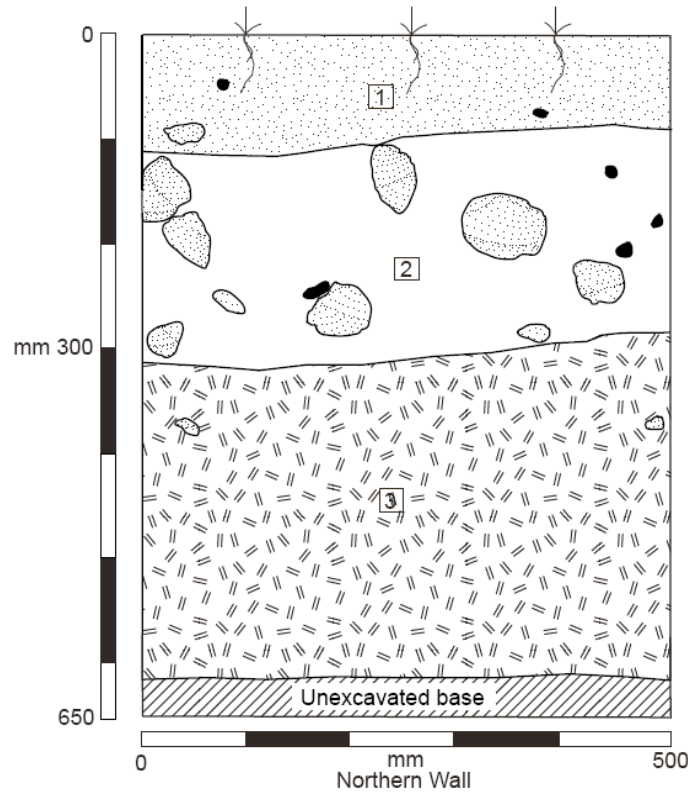
Shovel Test Pit 14 (0.5 metre x 0.5 metre)

545080E / 6799577N (GDA 94, MGA Zone 56)

Stratigraphic Profile: Northern Wall

Drawn by: Simon Coxe

Excavation Date: 18 November 2011



Stratigraphic Components

1	7.5YR 2.5/3 (colour from Munsell), pH 6. Mid-brown-grey softly compacted loamy sand. Inclusions of occasional small to medium sub-rounded stones. Plentiful root intrusions. Sharp interface with Layer 2.
2	10YR 4/3 (colour from Munsell), pH 6. Light brown-grey, softly compacted loamy-sand. Common inclusions of medium to large sub-rounded stones, poorly sorted. Moderate root intrusions. Some flecks of iron pan, occasional flecks of manganese. Slightly higher moisture content than Layer 1. Diffuse interface with Layer 3.
3	7.5YR 5/4 (colour from Munsell), pH 6.5. Light orange-grey, softly compacted sand with high moisture content. Rare inclusions of small sub-rounded stones. Plentiful flecks of iron pan and occasional flecks of manganese.

Key

-  Rock
-  Root

Figure 23 Stratigraphy drawing: PAD 1, shovel test pit 14

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Pacific Highway Upgrade - Woolgoolga to Ballina: Cultural Heritage Sub-Surface Testing

AHIMS Site ID: 04-4-0171

Site Name: Rudgley Cultural PAD

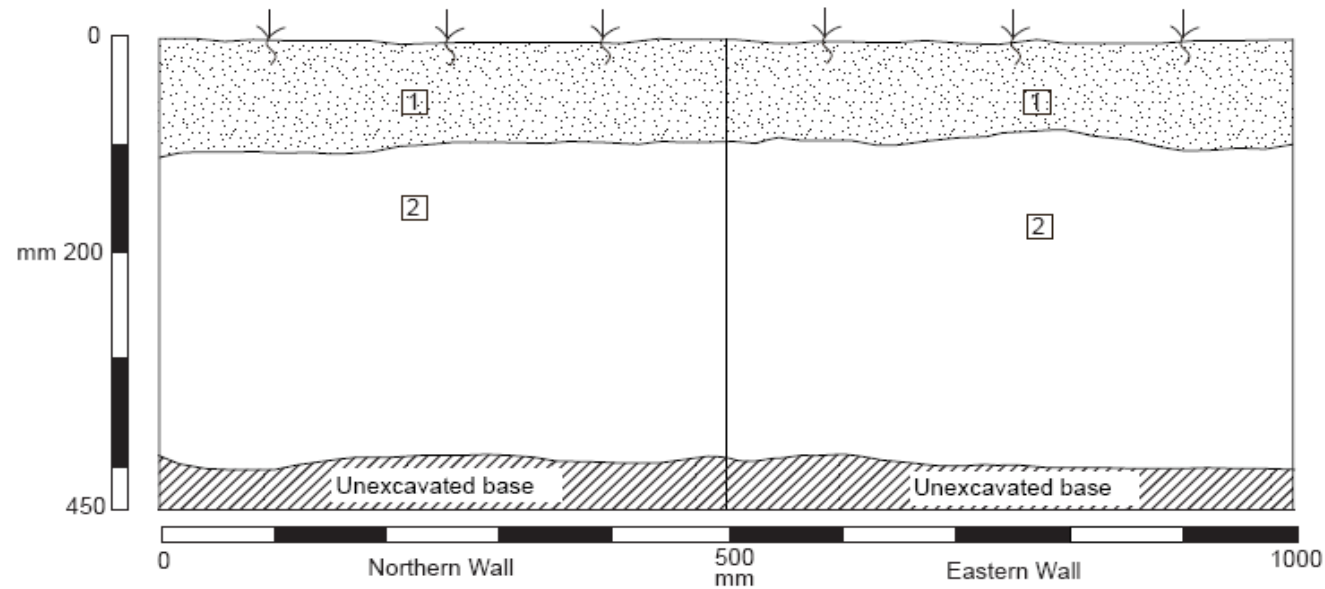
Shovel Test Pit 1 (0.5 metre x 0.5 metre)

545948E / 6800055N (GDA 94, MGA Zone 56)

Stratigraphic Profile: Northern and Eastern Walls

Drawn by: Shoshanna Grounds

Excavation Date: 9 December 2011



Stratigraphic Components

1	10YR 4/2 (colour from Munsell), pH 6. Dark blackish-brown, very slightly sandy silty clay. Moderately moist with grass rootlets and worm activity.
2	10YR 3/4 (colour from Munsell), pH 5.5. Moderately moist, very slightly sandy, slightly reddish-grey-brown clay. Very occasional rootlets and sub-angular (5-10 mm) pebbles.

Figure 24 Stratigraphy drawing: Rudgley Cultural PAD, shovel test pit 1

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Pacific Highway Upgrade - Woolgoolga to Ballina: Cultural Heritage Sub-Surface Testing

AHIMS Site ID: 04-4-0169

Site Name: Rudgley PAD 2

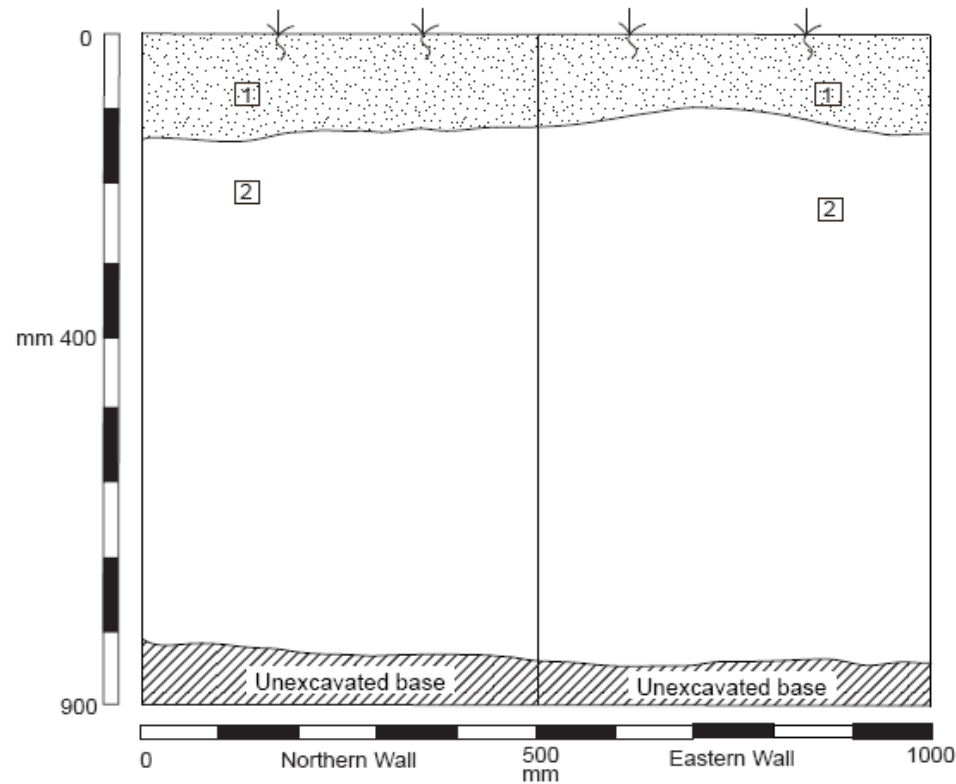
Shovel Test Pit 1 (0.5 metre x 0.5 metre)

546025E / 6800082N

Stratigraphic Profile: Northern and Eastern Walls

Drawn by: Shoshanna Grounds

Excavation Date: 9 December 2011



Stratigraphic Components

1	10YR 4/1 (colour from Munsell), pH 6. Medium grey-brown sand with 5-10 mm roots and occasional charcoal flecks.
2	10YR 6/1 (colour from Munsell), pH 5.5. Medium grey sand with frequent flecks of charcoal and occasional rootlets. Lightens very gradually towards base, remaining the same sediment layer. Artefact found in this horizon.

Figure 25 Stratigraphy drawing: Rudgley PAD 2, shovel test pit 1

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Pacific Highway Upgrade - Woolgoolga to Ballina: Cultural Heritage Sub-Surface Testing

AHIMS Site ID: 04-4-0167

Site Name: Rudgeley PAD 1b

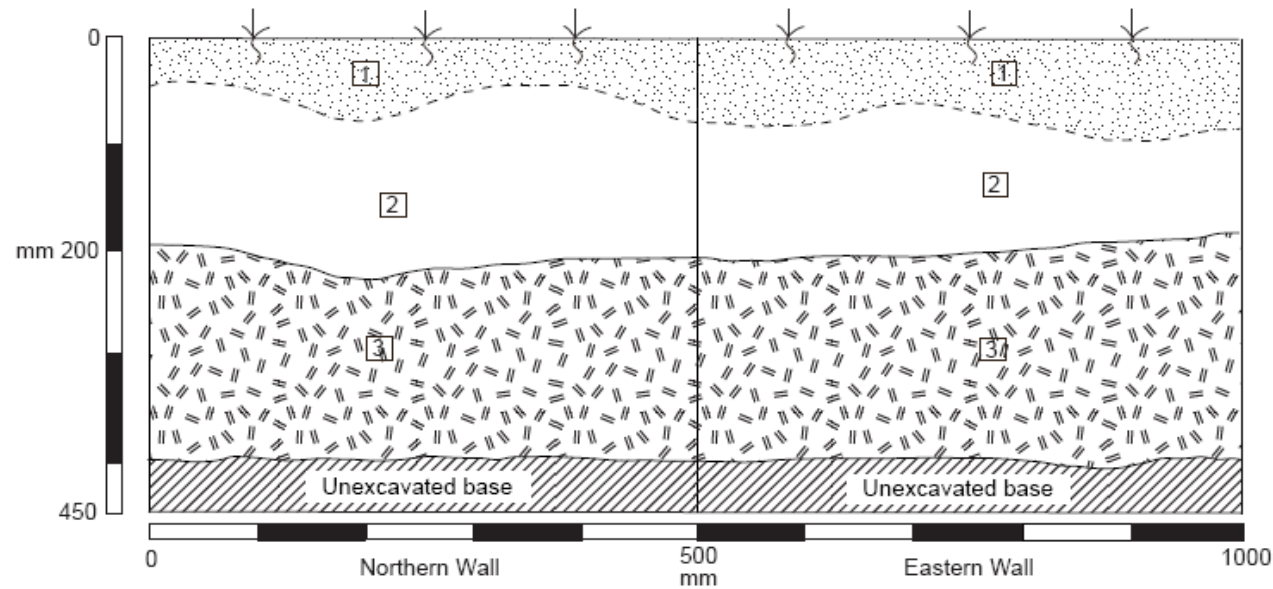
Shovel Test Pit 3 (0.5 metre x 0.5 metre)

546024E / 6800294N (GDA 94, MGA Zone 56)

Stratigraphic Profile: Northern and Eastern Walls

Drawn by: Shoshanna Grounds

Excavation Date: 9 December 2011



Stratigraphic Components

1	10YR 4/2 (colour from Munsell), pH 5.5. Medium grey-brown moderately compacted, moist, humic silty-clay. Frequent (5-10 mm) sub-angular pebbles and cobbles (50-100 mm) present, evidence of ant and worm activity, rootlets.	3	10YR 5/4 (colour from Munsell), pH 5.5. Medium yellowish-brown, moderately moist clay with very rare degrading ironstone inclusions, along with occasional sub-angular pebbles (5-10 mm) and cobbles (50-100 mm). Occasional rootlets.
2	Transition layer. Approximately 100 mm diffuse interface between topsoil and clay.		

Figure 26 Stratigraphy drawing: Rudgeley PAD 1b, shovel test pit 3

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Pacific Highway Upgrade - Woolgoolga to Ballina: Cultural Heritage Sub-Surface Testing

AHIMS Site ID: 04-4-0167

Site Name: Rudgley PAD 1a

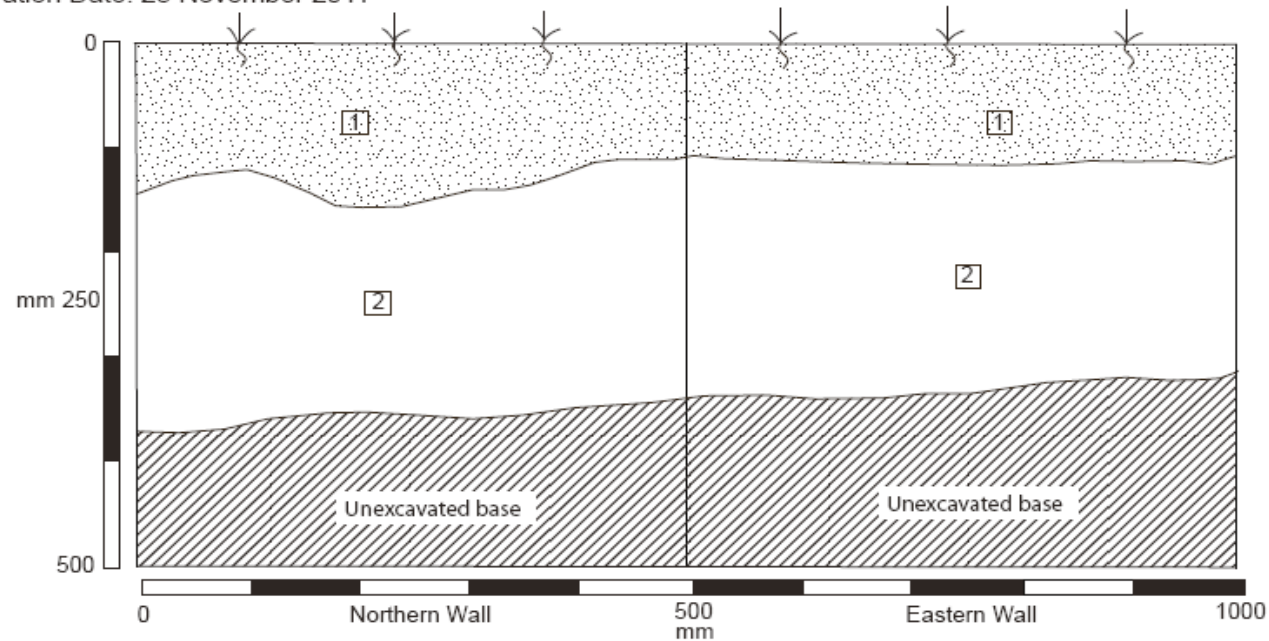
Shovel Test Pit 1 (0.5 metre x 0.5 metre)

546020E / 6800400N (GDA 94, MGA Zone 56)

Stratigraphic Profile: Northern and Eastern Walls

Drawn by: Shoshanna Grounds

Excavation Date: 23 November 2011



Stratigraphic Components

1	10YR 4/3 (colour from Munsell), pH 6. Medium-brown, silty, sandy clay. Highly compacted and dry; pebbles and rootlet inclusions present. Artefacts found in this horizon.
2	10YR 4/6 (colour from Munsell), pH 5.5. Dark yellowish-brown clay, highly compacted. Dry, becoming moist. Artefacts found in this horizon.

Figure 27 Stratigraphy drawing: Rudgley PAD 1a, shovel test pit 1

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Pacific Highway Upgrade - Woolgoolga to Ballina: Cultural Heritage Sub-Surface Testing

AHIMS Site ID: 04-4-0171

Site Name: Saezza 1

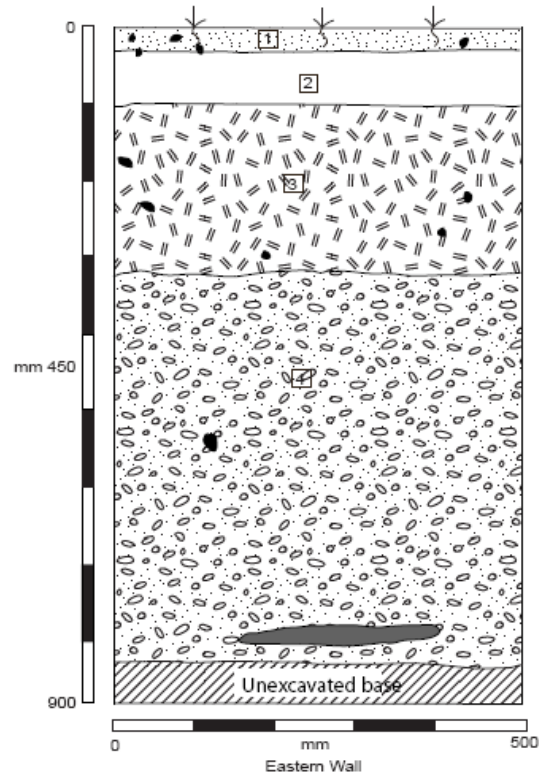
Shovel Test Pit 3 (0.5 metre x 0.5 metre)

546359E / 6800618N (GDA 94, MGA Zone 56)

Stratigraphic Profile: Eastern Wall

Drawn by: Anthony Hamdorf

Excavation Date: 16 November 2011



Key

- Charcoal Lens
- Roots







Stratigraphic Components

1	pH 6. Thin organic layer. Bioturbation from roots.
2	2.5YR 3/1 (colour from Munsell), pH 5.5. Light, greyish-brown sand. Some bioturbation from roots.
3	2.5YR 2.5/1 (colour from Munsell), pH 5.5. Mid-greyish-brown sand. Some bioturbation from roots. Artefacts found in this horizon.
4	2.5YR 4/1 (colour from Munsell), pH 5.5. Light greyish-brown sand. No visible disturbance. Artefacts found in this horizon.






Figure 28 Stratigraphy drawing: Saezza 1, shovel test pit 3

Appendix M Site photos




Table 11 Artefact photos: Woodburn to Ballina (from south to north)

Site Name (AHIMS Site ID)	Number of Artefacts	Photos
<p>Gittoes Jali (PADs 5, 6, 7)</p> <p>(AHIMS Site IDs: 09-1-0204, 09-1-0205, 09-1-0203)</p>	<p>386 Artefacts (chert, fine grained siliceous, cobble, basalt, chalcedony, sandstone, crystal quartz)</p>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>(Top row): Two complete chalcedony flakes, the right with edge damage and a notch. (Bottom row): Two proximal chalcedony flakes. Artefacts found in STP 6 at 0-200 mm (Photo by Matthew Schlitz, 7 November 2011).</p> </div> <div style="text-align: center;">  <p>Sedimentary river cobble, found in STP 20 at 150- 200 mm (Photo by Dani Mitchell, 8 November 2011).</p> </div> <div style="text-align: center;">  <p>Broken medium grained siliceous longitudinally split flake with a flaked platform, step termination and bending initiation. Artefact found in STP H at 0- 20 mm (Photo by Clair Davey, 8 November 2011).</p> </div> </div>
<p>PAD 11</p> <p>(AHIMS Site ID: 13-1-0189)</p>	<p>1003 Artefacts (chert, chalcedony and quartz)</p>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Ventral surface of artefacts from Mechanical Trench 1, Step D at 200-400 mm. Artefacts were made from chalcedony and chert and are angular fragments and complete and broken flakes (Photo by Robyn Jenkins, 19 December 2011).</p> </div> <div style="text-align: center;">  <p>Two chert geometric-microliths and a single chalcedony geometric microlith. Artefacts found in Mechanical Trench 1, Step A at a depth of 400-600 mm (Photo by Robyn Jenkins, 19 December 2011).</p> </div> <div style="text-align: center;">  <p>Chert multi-platform core with a total of nine flake scars off three platforms. Artefact found in Trench 1 Wall Collapse. (Photo by Robyn Jenkins, 19 December 2011).</p> </div> </div>




Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Site Name (AHIMS Site ID)	Number of Artefacts	Photos		
E2/2 (AHIMS Site ID: 13-1-0109)	13 Artefacts (chert, chalcedony, quartz, silcrete, igneous material and granite/quartzite)	 <p>A chert complete flake artefact found in Mechanical Trench 1 (0-2 m) at a depth of 0-400 mm (Photo by Robyn Jenkins, 16 December 2011).</p>	 <p>Single platform silcrete core with a cortical platform and three complete scars. Originally would have been a river cobble. Artefact found in Trench 1 (0-2 m) at 1 m depth (Photo by Robyn Jenkins, 16 December 2011).</p>	
Melino PAD (AHIMS Site ID: 04-4-0173)	212 Artefacts (basalt, chalcedony, chert cobble, dolerite, fine grained siliceous, quartz, quartzite silcrete)	 <p>Selection of chert and chalcedony artefacts from Mechanical Trench 1 (0-2 m) at a depth of 400-500 mm (Photo by Robyn Jenkins 14 December 2011).</p>	 <p>Selection of artefacts, primarily featuring chert flakes, with a single quartz flake present (second from the top right). Artefacts from Test Pit 1 found at a depth of 100-200 mm (Photo by Clair Davey, 29 November 2011).</p>	 <p>Broken chalcedony flake, possibly a burin spall. Artefact found in STP 11 at 500 mm (Photo by Clair Davey, 28 November 2011).</p>




Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Site Name (AHIMS Site ID)	Number of Artefacts	Photos
PAD 2 (AHIMS Site ID: 04-4-0178)	21 Artefacts (chalcedony, chert, fine grained siliceous, quartz, silcrete)	 <p>Chert flaked piece with evidence of heat shatter. Artefact found in STP 11 at 750-800 mm (Photo by Clair Davey, 21 November 2011).</p>
PAD 3 (AHIMS Site ID: 04-4-0175)	4 Artefacts (chert, silicified quartz, river cobble)	 <p>Complete silicified quartz flake and broken silicified quartz flake, ventral surfaces. Artefacts found at 950-1,000 mm (Photo by Robyn Jenkins, 22 November 2011).</p>
PAD 4 (AHIMS Site ID: 04-4-0132)	15 Artefacts (chalcedony, chert, silcrete)	 <p>Chalcedony flaked piece with retouch on right lateral margin, dorsal surface. Artefact found in STP 14 at 150-200 mm (Photo by Shoshanna Grounds, 15 December 2011).</p>

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Site Name (AHIMS Site ID)	Number of Artefacts	Photos
PAD 1 (AHIMS Site ID: 04-4-0179)	7 Artefacts (chert)	 <p>Chert multi-platform core found in STP 8 at 500 mm (Photo by Anthony Hamdorf, 17 November 2011).</p>
Rudgley PAD 2 (AHIMS Site ID: 04-4-0169)	3 Artefacts (chert)	 <p>Complete chert flake artefact found at 750-800 mm (Photo by Shoshanna Grounds, 9 December 2011).</p>
Rudgley PAD 1b (AHIMS Site ID: 04-4-0167)	5 Artefacts (chert, chalcedony)	 <p>Complete chert flake artefact found in STP 10 (Photo by Shoshanna Grounds, 16 December 2011).</p>

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Site Name (AHIMS Site ID)	Number of Artefacts	Photos
Rudgley PAD 1a (AHIMS Site ID: 04-4-0167)	6 Artefacts (chert, basalt)	 <p>Chert single platform core and chert proximal flake. Artefacts found in STP 1 between 0-400 mm (Photo by Clair Davey, 23 November 2011).</p>
Saezza 1 (AHIMS Site ID: 04-4-0171)	60 Artefacts (chalcedony, quartz and chert)	 <p>Chert multi-platform core, chert single platform core, chert flaked piece showing heat damage, chert flaked piece and chert longitudinally split flake. Artefacts found in STP 1 at 150-300 mm (Photo by Anthony Hamdorf, 16 November 2011).</p>
PAD 12 (AHIMS Site ID: 04-4-0176)	15 Artefacts (chert)	 <p>Photo of selected chert flakes from PAD 12. Artefacts found in STP 7 at 350-400 mm (Photo by Dani Mitchell, 17 November 2011).</p>

Appendix N Artefact and shell midden analysis

Table 12 Artefact analysis table for the Woodburn to Ballina section (from south to north)

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
7/11/2011	Gittoes Jali	STP 6	100-200	Complete Flake	Chalcedony	19.58	10.59	5.36	22.49	Flaked	9.57	1.61	Step	0	Rejuvenation flake
7/11/2011	Gittoes Jali	STP 6	100-200	Complete Flake	Chalcedony	9.65	12.47	3.09	15.19	Cortical	9.64	3.61	Feather	25	Edge damage/notched
7/11/2011	Gittoes Jali	STP 6	100-200	Proximal Flake	Chalcedony	-	-	-	12.5	Crushed	-	-	-	0	
7/11/2011	Gittoes Jali	STP 6	100-200	Proximal Flake	Chalcedony	-	-	-	11.27	Flaked	1.87	1.35		0	
7/11/2011	Gittoes Jali	STP 6	250	Complete Flake	Chalcedony	9.55	10.29	5.61	12.2	Flaked	8.71	4.72	Step	0	
8/11/2011	Gittoes Jali	STP 14	100-150	Complete Flake	Unknown	13.22	8.37	2.19	14.63	Crushed	6.02	1.31	Hinge	0	Minimal edge damage
8/11/2011	Gittoes Jali	STP 19	100-150	Complete Flake	Unknown	16.94	15.23	4.21	21.45	Cortical	5.58	0.92	Feather	10	
8/11/2011	Gittoes Jali	STP 19	100-150	Proximal Flake	Unknown	-	-	-	20.95	-	3.32	1.51	-	0	Edge damage
8/11/2011	Gittoes Jali	STP 19	100-150	Cobble	Cobble	-	42.96	27.27	42.48	-	-	-	-	0	
8/11/2011	Gittoes Jali	STP 20	150-200	Cobber	Cobble	-	45.13	26.46	73.3	-	-	-	-	0	
8/11/2011	Gittoes Jali	STP 28	200-400	Manuport	Cobble		67.64	25.9	102.04	Cortical	-	-	Feather	0	Percussion length: 99.91 mm
8/11/2011	Gittoes Jali	STP A	150-200	Complete Flake	Silcrete	47.9	7.44	39.5	49.87	Flaked	23.6	4.8	Feather	20	
8/11/2011	Gittoes Jali	STP A	150-200	Bipolar Core	Chert	-	-	-	23.68	-	-	-	-	80	Possibly chalcedony
8/11/2011	Gittoes Jali	STP A	150-200	Longitudinally Split Flake	Silcrete	11.69	-	3.65	15.12	Flaked	-	-	Feather	10	
8/11/2011	Gittoes Jali	STP A	150-200	Longitudinally Split Flake	Chalcedony	-	-	-	10.88	-	-	-	-	0	
8/11/2011	Gittoes Jali	STP D	-	Complete Flake	Quartzite	49.25	21.35	44.62	49.57	Flaked	23.46	21.84	Hinge	50	
8/11/2011	Gittoes Jali	STP G	200-250	Complete Flake	Quartzite	11.83	8.66	19.16	13.7	Cortical	-	-	Hinge	75	
8/11/2011	Gittoes Jali	STP G	200-250	Longitudinally Split Flake	Quartzite	10.65	-	6.49	12.31	Cortical	-	-	Hinge	50	
8/11/2011	Gittoes Jali	STP G	200-250	Proximal Flake	Quartzite	-	-	-	13.85	Flaked	14.01	6.57	-	25	
8/11/2011	Gittoes Jali	STP G	200-250	Bipolar Core	Chalcedony	-	-	-	13.28	-	-	-	-	70	
8/11/2011	Gittoes Jali	STP H	0-200	Complete Flake	Chalcedony	15.18	19.37	3.7	24.59	Cortical/Flaked	11.82	3.49	Feather	100	
8/11/2011	Gittoes Jali	STP H	0-200	Longitudinally Split Flake	Medium Grained Siliceous	-	-	4.51	18.99	Flaked	-	-	Step	0	Bending Initiation
8/11/2011	Gittoes Jali	STP H	0-200	Complete Flake	Chalcedony	8.82	5.95	5.45	9.97	Flaked	4.46	1.9	Plunge	0	
8/11/2011	Gittoes Jali	STP H	0-200	Single Platform Core	Chalcedony	-	-	-	13.31	-	-	-	-	50	Length of longest flake scar: 5.38 mm
8/11/2011	Gittoes Jali	STP K	-	Complete Flake	Chert	18.15	13.64	2.44	21.73	Crushed	-	-	Step	0	
9/11/2011	Gittoes Jali	29R	100-150	Longitudinally Split Flake	Chert	-	-	-	24	Flaked	10	6	Feather	0	Broken during excavation
9/11/2011	Gittoes Jali	29R	100-150	Flaked Fragment	Chert	-	-	-	19	-	-	-	Hinge	0	Heat broken
9/11/2011	Gittoes Jali	29R	100-150	Flaked Fragment	Fine Grained Siliceous	-	-	-	22	-	-	-	-	0	
9/11/2011	Gittoes Jali	30R	150	Proximal Flake	Cobble	-	-	-	45	Crushed	39	8	-	20	
9/11/2011	Gittoes Jali	30R	150	Complete Flake	Chert	11	10	1	12	Flaked	11	1	Plunge	90	
9/11/2011	Gittoes Jali	30R	150	Longitudinally Split Flake	Fine Grained Siliceous	-	-	-	15	Flaked	-	6	Plunge	0	Heat damaged
9/11/2011	Gittoes Jali	30R	150	Complete Flake	Chert	9	6	1	13	Flaked	9	3	Feather	0	Pot-lidded

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
9/11/2011	Gittoes Jali	30R	150	Complete Flake	Chert	9	12	1	12	Flaked	9	2	Feather	0	
9/11/2011	Gittoes Jali	31	100-150	Longitudinally Split Flake	Fine Grained Siliceous	-	-	-	21	Flaked	-	-	Hinge	0	Right distal
9/11/2011	Gittoes Jali	31	100-150	Complete Flake	Chert	15	25	10	26	Flaked	3	2	Feather	0	
9/11/2011	Gittoes Jali	31	100-150	Complete Flake	Chert	15	10	2	17	Flaked	5	2	Feather	0	
9/11/2011	Gittoes Jali	31	100-150	Bipolar Core	Chert	-	-	-	26	Crushed	-	-	Feather	0	
9/11/2011	Gittoes Jali	33	50-100	Distal Flake	Chert	-	-	-	13	-	-	-	Feather	0	Retouch on dorsal and ventral side (notch)
9/11/2011	Gittoes Jali	33	50-100	Proximal Flake	Basalt	-	-	-	16	Flaked	9	2	-	0	
9/11/2011	Gittoes Jali	33	10-100	Complete Flake	Chert	17	9	1	21	Flaked	9	2	Feather	0	Pot-lidded/burnt
9/11/2011	Gittoes Jali	33	20-25	Complete Flake	Chert	9	6	1	13	Flaked	10	3	Feather	0	Pot-lidded
9/11/2011	Gittoes Jali	84R	0-200	Complete Flake	Basalt	45	28	29	52	Flaked	24	14	Plunge	0	
9/11/2011	Gittoes Jali	84R	0-200	Complete Flake	Basalt	29	30	1	39	Flaked	18	3	Hinge	0	
9/11/2011	Gittoes Jali	84R	0-200	Complete Flake	Basalt	24	31	2	33	Flaked	10	2	Hinge	0	
9/11/2011	Gittoes Jali	84R	0-200	Complete Flake	Basalt	30	30	2	34	Flaked	14	4	Feather	0	
9/11/2011	Gittoes Jali	84R	0-200	Complete Flake	Chert	12	10	3	14	Flaked	9	5	Feather	0	Redirecting flake
9/11/2011	Gittoes Jali	84R	0-200	Complete Flake	Chert	29	14	4	29	Flaked	3	1	Feather	10	Pot-lidded
9/11/2011	Gittoes Jali	84R	0-200	Complete Flake	Chert	13	12	1	15	Flaked	5	1	Feather	0	
9/11/2011	Gittoes Jali	84R	0-200	Complete Flake	Chert	12	6	2	14	Flaked	4	3	Feather	0	
9/11/2011	Gittoes Jali	84R	0-200	Complete Flake	Chert	11	12	1	14	Flaked	3	1	Feather	10	
9/11/2011	Gittoes Jali	84R	0-200	Complete Flake	Basalt	15	9	3	16	Flaked	11	3	Feather	0	
9/11/2011	Gittoes Jali	84R	0-200	Complete Flake	Chert	15	14	2	17	Flaked	13	3	Feather	0	
9/11/2011	Gittoes Jali	84R	0-200	Bipolar Flake	Chert	21	12	6	21	Crushed	9	2	Crushed	0	
9/11/2011	Gittoes Jali	84R	0-200	Distal Flake	Chert	-	-	-	21	-	-	-	Feather	0	Heat damaged
9/11/2011	Gittoes Jali	84R	0-200	Distal Flake	Chert	-	-	-	20	-	-	-	Plunge	0	
9/11/2011	Gittoes Jali	84R	0-200	Medial Flake	Chert	-	-	-	20	-	-	-	-	0	
9/11/2011	Gittoes Jali	84R	0-200	Distal Flake	Chert	-	-	-	8	-	-	-	Hinge	0	
9/11/2011	Gittoes Jali	84R	0-200	Longitudinally Split Flake	Chert	-	-	-	14	Flaked	-	1	Feather	0	Right side
9/11/2011	Gittoes Jali	84R	0-200	Complete Flake	Chert	8	7	1	-	-	8	2	Feather	0	Bending initiation
9/11/2011	Gittoes Jali	84R	0-200	Flaked Fragment	Chert	-	-	-	23	-	-	-	-	0	
9/11/2011	Gittoes Jali	84R	0-200	Flaked Fragment	Chert	-	-	-	24	-	-	-	-	0	
9/11/2011	Gittoes Jali	84R	0-200	Flaked Fragment	Chert	-	-	-	17	-	-	-	-	0	Pot-lidded
9/11/2011	Gittoes Jali	35R	0-240	Complete Flake	Basalt	36	42	38	62	Cortical	39	31	Plunge	30	
9/11/2011	Gittoes Jali	35R	0-240	Complete Flake	Chert	5	20	3	23	Cortical	16	7	Step	30	Bending Initiation
9/11/2011	Gittoes Jali	35R	0-240	Complete Flake	Fine Grained Siliceous	10	8	3	13	Crushed	7	1	Feather	0	
9/11/2011	Gittoes Jali	36R	0-180	Complete Flake	Chert	16	8	2	16	Flaked	2	1	Feather	0	
9/11/2011	Gittoes Jali	36R	0-180	Bipolar Flake	Chert	14	10	2	16	Flaked	6	2	Crushed	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
9/11/2011	Gittoes Jali	36R	0-180	Bipolar Flake	Chert	23	13	3	24	Crushed	7	3	Step & Crushed	0	Heat affected
9/11/2011	Gittoes Jali	36R	0-180	Distal Flake	Chert	-	-	-	12	Feather???	-	-	-	0	Pot-lidded
9/11/2011	Gittoes Jali	36R	0-180	Proximal Flake	Chert	-	-	-	14	Flaked	3	1	-	0	Crenated
9/11/2011	Gittoes Jali	36R	0-180	Longitudinally Split Flake	Basalt	-	-	-	16	Flaked	-	3	-	0	Proximal right side
9/11/2011	Gittoes Jali	36R	0-180	Longitudinally Split Flake	Basalt	-	-	-	11	-	-	-	-	0	
9/11/2011	Gittoes Jali	36R	0-180	Longitudinally Split Flake	Chert	-	-	-	15	-	-	-	-	0	
9/11/2011	Gittoes Jali	38R	0-50	Medial Flake	Chert	-	-	-	15	-	-	-	-	0	
9/11/2011	Gittoes Jali	38R	200-250	Proximal Flake	Basalt	-	-	-	31	Flaked	18	7	-	0	
9/11/2011	Gittoes Jali	39	150-200	Distal Flake	Chert	-	-	-	18	-	-	-	Feather	0	
9/11/2011	Gittoes Jali	39	150-200	Proximal Flake	Chert	-	-	-	23	Flaked	13	4	-	0	
9/11/2011	Gittoes Jali	40	10-100	Flaked Fragment	Chert	-	-	-	15	-	-	-	-	90	Pot-lidded
10/11/2011	Gittoes Jali	40	0-300	Complete Flake	Chalcedony	13	12	3	16	Flaked	6	3	Feather	0	Edge damage
10/11/2011	Gittoes Jali	40	0-300	Longitudinally Split Flake	Chalcedony	-	-	1	11	-	-	-	-	0	Left medial
10/11/2011	Gittoes Jali	41	150-200	Flaked Fragment	Chert	-	12	5.5	15	-	-	-	-	0	Heat damaged
10/11/2011	Gittoes Jali	41	200-250	Complete Flake	Chert	11	10	1.5	12	Flaked	3.5	1	Feather	0	
10/11/2011	Gittoes Jali	41	200-250	Complete Flake	Basalt	14	9	3	15	Flaked	7.5	1	Feather	0	
10/11/2011	Gittoes Jali	41	200-250	Complete Flake	Chert	10	13.5	2	17.5	Flaked	17	4	Feather	0	
10/11/2011	Gittoes Jali	41	200-250	Complete Flake	Chert	18	7	8	18	Cortical	2.5	1	Feather	0	Redirecting Flake
10/11/2011	Gittoes Jali	41	200-250	Complete Flake	Chert	18	11.5	2	18.5	Flaked	5	2.5	Plunge	0	Redirecting Flake
10/11/2011	Gittoes Jali	41	200-250	Complete Flake	Chert	6	9	3.5	9	Flaked	9	5	Feather	0	
10/11/2011	Gittoes Jali	41	200-250	Longitudinally Split Flake	Chert	-	-	1	21	-	-	-	-	0	Right medial
10/11/2011	Gittoes Jali	41	200-250	Longitudinally Split Flake	Chert	-	-	2	18	Cortical	2	0.5	Hinge	0	
10/11/2011	Gittoes Jali	41	200-250	Longitudinally Split Flake	Basalt	-	-	5	18	-	-	-	Feather	0	Right distal
10/11/2011	Gittoes Jali	41	200-250	Distal Flake	Sandstone	-	-	4	23	-	-	-	Feather	0	
10/11/2011	Gittoes Jali	41	200-250	Longitudinally Split Flake	Chert	-	-	3	16	-	-	-	Feather	0	Left distal
10/11/2011	Gittoes Jali	41	200-250	Distal Flake	Chert	-	-	4	22	-	-	-	Feather	0	Heat damaged
10/11/2011	Gittoes Jali	42r	0-550	Complete Flake	Chert	13.5	13	3	16	Flaked	6	2.5	Feather	0	
10/11/2011	Gittoes Jali	42r	0-550	Complete Flake	Chalcedony	10.5	11	3	15.5	Focal	1.5	0.5	Feather	0	
10/11/2011	Gittoes Jali	43r	150-200	Complete Flake	Chert	9	8	3	13	Flaked	10	5.5	Feather	0	Pot-lidded
10/11/2011	Gittoes Jali	43r	150-200	Complete Flake	Chert	28	17	7	29	Flaked	7	3	Feather	0	Broken flake: surface break; Heat damaged
10/11/2011	Gittoes Jali	43r	200-250	Distal Flake	Basalt	-	3.5	-	18	Flaked	-	-	-	0	
10/11/2011	Gittoes Jali	43r	200-250	Proximal Flake	Chert	-	6	-	12	Flaked	6	6	-	0	Heat damaged
10/11/2011	Gittoes Jali	43r	250-300	Complete Flake	Crystal Quartz	6	9	3	11	Flaked	8	3	Feather	0	
10/11/2011	Gittoes Jali	43r	250-300	Longitudinally	Basalt	-	-	8	23.5	-	-	-	Feather	0	Left distal

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
				Split Flake											
10/11/2011	Gittoes Jali	44r	0-550	Complete Flake	Chert	15	21	6.5	23	Flaked	15	10	Feather	0	Heat damaged
10/11/2011	Gittoes Jali	44r	0-550	Complete Flake	Silcrete	12	28	3.5	28	Flaked	23.5	4	Step	0	
10/11/2011	Gittoes Jali	44r	0-550	Complete Flake	Chert	11	9.5	4.5	14	Flaked	12	6	Feather	0	
10/11/2011	Gittoes Jali	44r	0-550	Complete Flake	Chert	11	10	1	13	Flaked	6	1.5	Feather	0	Edge damage
10/11/2011	Gittoes Jali	44r	0-550	Longitudinally Split Flake	Chert	-	-	6	14	-	-	-	Plunge	70	Left side
10/11/2011	Gittoes Jali	44r	0-550	Flaked Fragment	Chert	-	-	1.5	23.5	-	-	-	-	0	Retouch, marginal
10/11/2011	Gittoes Jali	44r	0-550	Proximal Flake	Chert	-	-	3	15	Flaked	10	3	-	0	
10/11/2011	Gittoes Jali	44r	0-550	Distal Flake	Chert	-	-	3	12.5	-	-	-	-	0	
10/11/2011	Gittoes Jali	45r	150-200	Complete Flake	Chert	12	14	3	14	Flaked	6	1	Feather	0	
10/11/2011	Gittoes Jali	45r	150-200	Complete Flake	Chert	11.9	9.9	1.9	12.2	Flaked	3.6	0.93	Hinge	0	
10/11/2011	Gittoes Jali	45r	150-200	Complete Flake	Chert	25.1	20.3	4.9	31.3	Flaked	12.4	9.3	Plunge	10	
10/11/2011	Gittoes Jali	45r	150-200	Complete Flake	Silcrete	6.5	32.4	14.7	33.9	Cortical	33.6	12.1	Feather	30	
10/11/2011	Gittoes Jali	45r	150-200	Complete Flake	Chert	18.3	11	4.2	18.9	Flaked	6	1.9	Feather	40	Pressure flaked x 2
10/11/2011	Gittoes Jali	45r	150-200	Distal Flake	Chert	-	-	4.9	26.2	-	-	-	-	0	
10/11/2011	Gittoes Jali	45r	150-200	Proximal Flake	Chert	-	-	8.4	17.1	Flaked	5.2	2.1	-	0	
10/11/2011	Gittoes Jali	46r	-	Cobble	Cobble	-	-	45.1	74.1	-	-	-	-	0	From cache, split
10/11/2011	Gittoes Jali	46r	-	Cobble	Cobble	-	-	19.4	58	-	-	-	-	0	From cache, split
10/11/2011	Gittoes Jali	46r	-	Cobble	Cobble	66.7	87.5	11.8	83	Cortical	22.3	1.2	Feather	100	River cobble from cache
10/11/2011	Gittoes Jali	46r	-	Core	Cobble	121.5	61.9	42.2	121.5	-	22.3	1.9	-	100	Split river cobble from cache
10/11/2011	Gittoes Jali	46r	-	Complete Flake	Cobble	19.7	28.2	3.2	34	Cortical	27.1	2	Hinge	10	River cobble from cache
10/11/2011	Gittoes Jali	46r	-	Complete Flake	Cobble	43.4	18.1	8.5	47.6	Flaked	16.2	3.9	Feather	20	River cobble from cache
10/11/2011	Gittoes Jali	46r	-	Complete Flake	Cobble	26.8	12.1	12.4	29.5	Flaked	7.5	4.9	Feather	60	River cobble from cache
10/11/2011	Gittoes Jali	46r	-	Complete Flake	Cobble	24.9	11.6	9.4	34.7	Cortical	15.4	20.4	Feather	30	River cobble from cache
10/11/2011	Gittoes Jali	46r	-	Distal Flake	Cobble	-	-	22.5	112	-	-	-	-	0	Some pitting
10/11/2011	Gittoes Jali	46r	-	Complete Flake	Chert	21.3	10.1	5.7	21.2	Flaked	4.7	9	Feather	0	Redirecting
10/11/2011	Gittoes Jali	46r	-	Complete Flake	Chert	19.9	10	4.5	20.7	Flaked	12.9	4.9	Hinge	0	Redirecting
10/11/2011	Gittoes Jali	46r	-	Complete Flake	Chert	13.3	5	1.4	13.3	Flaked	5.1	3.2	Feather	0	
10/11/2011	Gittoes Jali	46r	-	Complete Flake	Chert	10.8	13.7	2.4	17.2	Flaked	12.8	3.5	Feather	0	Heat damaged
10/11/2011	Gittoes Jali	46r	-	Complete Flake	Chert	8.5	14.3	2.6	14.9	Cortical	14.6	3	Feather	0	Heat damaged
10/11/2011	Gittoes Jali	46r	-	Complete Flake	Chert	10.9	10.1	1.9	13.6	Flaked	3	1.8	Feather	0	Heat damaged
10/11/2011	Gittoes Jali	46r	-	Complete Flake	Chert	7.6	6.8	1.9	9.7	Flaked	6.6	2.1	Feather	0	Heat damaged
10/11/2011	Gittoes Jali	46r	-	Complete Flake	Chert	12.1	7.6	1.5	12.1	Flaked	5.1	2.1	Hinge	0	Heat damaged
10/11/2011	Gittoes Jali	46r	-	Longitudinally Split Flake	Basalt	-	-	6.4	23.6	Flaked	-	-	Feather	100	Left side
10/11/2011	Gittoes Jali	46r	-	Distal Flake	Chert	-	-	3.1	15.1	Flaked	-	-	Feather	0	Heat damaged
10/11/2011	Gittoes Jali	46r	-	Longitudinally Split Flake	Chert	-	-	6.5	23.2	-	-	-	-	0	Left distal; heat and edge damaged

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
10/11/2011	Gittoes Jali	46r	-	Distal Flake	Basalt	-	-	13.8	34.1	-	-	-	Feather	0	
10/11/2011	Gittoes Jali	46r	-	Complete Flake	Silcrete	17.6	21.6	4.8	26.2	Flaked	15.4	2.3	Hinge	0	
10/11/2011	Gittoes Jali	46r	-	Longitudinally Split Flake	Silcrete	-	-	2.4	14.4	-	-	-	-	0	
10/11/2011	Gittoes Jali	46r	-	Proximal Flake	Chert	-	-	1.7	15.8	Flaked	1.8	0.7	-	0	
10/11/2011	Gittoes Jali	46r	-	Proximal Flake	Chert	-	-	2.5	12.6	Flaked	7.4	1.5	-	0	
10/11/2011	Gittoes Jali	46r	-	Distal Flake	Chert	-	-	4.7	17	-	-	-	Feather	0	Crenated
10/11/2011	Gittoes Jali	46r	-	Distal Flake	Chert	-	-	6.8	25	-	-	-	Feather	0	
10/11/2011	Gittoes Jali	46r	-	Proximal Flake	Chert	-	-	3.8	14	Flaked	10	3.8	-	0	
10/11/2011	Gittoes Jali	46r	-	Proximal Flake	Chert	-	-	1.9	9.8	Flaked	6.2	3.2	-	0	Crenated
10/11/2011	Gittoes Jali	46r	-	Flaked Fragment	Chert	-	-	3.1	11.3	-	-	-	-	0	Heat damaged
10/11/2011	Gittoes Jali	46r	-	Distal Flake	Chert	-	-	3.4	9.7	-	-	-	-	0	Heat damaged
10/11/2011	Gittoes Jali	46r	-	Distal Flake	Chert	-	-	4.1	16.4	-	-	-	Hinge	0	
10/11/2011	Gittoes Jali	46r	-	Longitudinally Split Flake	Chert	-	-	2.8	15.5	Flaked	8.9	3	-	0	Right side
10/11/2011	Gittoes Jali	50r	-	Complete Flake	Silcrete	25	20.5	5.1	29.4	Bipolar	11.6	2.7	Feather	30	
10/11/2011	Gittoes Jali	50r	-	Complete Flake	Basalt	30.3	17	5.7	29.9	Cortical	7.5	4.2	Feather	10	
10/11/2011	Gittoes Jali	50r	-	Complete Flake	Chert	9.2	8.3	2.1	14.4	Cortical	7.5	5.1	Feather	10	Heat damaged
10/11/2011	Gittoes Jali	50r	-	Complete Flake	Chert	14.1	13.8	3.2	18.6	Flaked	13.8	3.3	Hinge	10	
10/11/2011	Gittoes Jali	50r	-	Longitudinally Split Flake	Chert	-	-	-	11.3	Crushed	7.1	0.2	Feather	0	Heat damaged
10/11/2011	Gittoes Jali	54	-	Longitudinally Split Flake	Silcrete	-	-	4.6	16.4	Flaked	-	-	Feather	30	
11/11/2011	Gittoes Jali	47	0-100	Complete Flake	Chert	18	26	4	34.5	Focal	1	2	Feather	90	
11/11/2011	Gittoes Jali	47	0-100	Complete Flake	Chert	22	11	3	22	Flaked	5	1	Hinge	0	
11/11/2011	Gittoes Jali	47	0-100	Complete Flake	Silcrete	15	20	3	27	Flaked	15	3	Feather	80	
11/11/2011	Gittoes Jali	47	0-100	Distal Flake	Chert	-	13	4	26	-	-	-	Plunge	0	Heat damaged, pot-lidded
11/11/2011	Gittoes Jali	47	0-100	Longitudinally Split Flake	Chert	-	-	3	24	-	-	-	-	0	Medial right; heat damaged, pot-lidded
11/11/2011	Gittoes Jali	47	100-250	Complete Flake	Chert	20	17	19	27	Flaked	16	13	Feather	0	Complete retouch flake
11/11/2011	Gittoes Jali	47	100-250	Complete Flake	Silcrete	45	23	7	51	Flaked	22	12	Feather	0	Edge damage
11/11/2011	Gittoes Jali	47	100-250	Complete Flake	Silcrete	31	33	8	50	Flaked	16	4	Feather	0	
11/11/2011	Gittoes Jali	47	100-250	Complete Flake	Chert	10	19	7	25	Cortical	18	14	Feather	20	Redirecting flake
11/11/2011	Gittoes Jali	47	100-250	Flaked Fragment	Chert	-	-	9	21	-	-	-	-	30	Heat damaged
11/11/2011	Gittoes Jali	47	100-250	Flaked Fragment	Chert	-	-	6	22	-	-	-	-	0	Heat damaged
11/11/2011	Gittoes Jali	47	100-250	Complete Flake	Chert	7	17	2	17	Flaked	5	2	Feather	0	Heat damaged
11/11/2011	Gittoes Jali	47	100-250	Complete Flake	Chert	17	11	1	17	Flaked	6	0.15	Feather	0	Heat damaged
11/11/2011	Gittoes Jali	47	100-250	Complete Flake	Chert	5	17	5.5	25	Flaked	19	11	Feather	0	Flaked fragment, heat damaged, crenated
11/11/2011	Gittoes Jali	47	100-250	Bipolar Core	Quartz	11	8	4	11	Flaked	9	5	-	0	Bipolar core, crushed distal end
11/11/2011	Gittoes Jali	47	100-250	Complete Flake	Chert	8	9	1	14	Flaked	4	0.5	Feather	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
11/11/2011	Gittoes Jali	47	100-250	Medial Flake	Chert	-	10	2	19	-	-	-	-	10	Heat damage
11/11/2011	Gittoes Jali	47	100-250	Medial Flake	Chert	-	-	3	15	-	-	-	-	0	Crenated
11/11/2011	Gittoes Jali	47	100-250	Complete Flake	Chalcedony	5	10	1.5	10	Crushed	2	0.5	Feather	10	Crenated
11/11/2011	Gittoes Jali	48r	-	Complete Flake	River Cobble	15	26	4	26	-	14	3	Feather	100	
11/11/2011	Gittoes Jali	48r	-	Single Platform Core	River Cobble	14	59	10	65	Flaked	47	43	-	0	
11/11/2011	Gittoes Jali	48r	-	Longitudinally Split Flake	Basalt	26	13	3	27	Flaked	5	2	Feather	10	Right side
11/11/2011	Gittoes Jali	48r	-	Complete Flake	River Cobble	37	32	7	45	Flaked	26	3	Feather	80	
11/11/2011	Gittoes Jali	48r	-	Complete Flake	River Cobble	21	23	6	30	Flaked	11	0.5	Feather	0	
11/11/2011	Gittoes Jali	48r	-	Complete Flake	River Cobble	24	18	5	24	Flaked	12	5	Feather	0	Retouched
11/11/2011	Gittoes Jali	48r	-	Complete Flake	River Cobble	29	19	6.5	29	Cortical	20	9	Hinge	30	
11/11/2011	Gittoes Jali	48r	-	Complete Flake	Silcrete	15	16	3.5	21	Cortical	16	2	Feather	0	
11/11/2011	Gittoes Jali	48r	-	Complete Flake	River Cobble	18	20	4	31	Cortical	19	7	Feather	20	
11/11/2011	Gittoes Jali	48r	-	Longitudinally Split Flake	River Cobble	-	-	5	25	Flaked	-	-	Hinge	0	Cone split flake
11/11/2011	Gittoes Jali	48r	-	Proximal Flake	Basalt	-	-	2.5	11	Flaked	10.5	4	-	0	
11/11/2011	Gittoes Jali	48r	-	Proximal Flake	Chert	-	-	2.5	19	-	14	5	-	0	Heat damage
11/11/2011	Gittoes Jali	48r	-	Distal Flake	Chert	-	-	5	10	-	-	-	-	0	
11/11/2011	Gittoes Jali	48r	-	Core	River Cobble	-	34	29	60	Flaked	23	11	-	30	
11/11/2011	Gittoes Jali	48r	-	Distal Flake	Chert	-	10	2	25	-	-	-	Feather	0	Edge damage, backed
11/11/2011	Gittoes Jali	49	-	Complete Flake	Chert	14	16	8	29	Cortical	9	3.5	Feather	60	
11/11/2011	Gittoes Jali	49	-	Complete Flake	Chert	21	16	16	33	Cortical	7.5	19	Feather	40	Redirecting Flake
11/11/2011	Gittoes Jali	49	-	Proximal Flake	Basalt	-	25	8	35	Flaked	6	35	-	0	
11/11/2011	Gittoes Jali	49	-	Complete Flake	Chert	11	12	2.5	12	Flaked	1	0.5	Hinge	0	
11/11/2011	Gittoes Jali	49	-	Complete Flake	Chert	10	7	3	15	Flaked	10	8	Feather	10	Heat damaged
11/11/2011	Gittoes Jali	49	-	Flaked Fragment	Chert	-	-	1.5	12	-	-	-	-	0	
11/11/2011	Gittoes Jali	49	-	Distal Flake	Chert	-	-	4	17	-	-	-	-	0	Retouched
11/11/2011	Gittoes Jali	49	-	Proximal Flake	Chert	-	5	1	16	Flaked	1	0.5	-	0	Microblade segment
11/11/2011	Gittoes Jali	49	-	Distal Flake	Chert	-	-	3	12	-	-	-	-	0	
11/11/2011	Gittoes Jali	49	-	Complete Flake	Chert	7	15	4	15	Crushed	2	0.5	Feather	30	
11/11/2011	Gittoes Jali	49	-	Distal Flake	Chert	-	-	3.5	10	-	-	-	-	0	
11/11/2011	Gittoes Jali	49	-	Distal Flake	Chert	-	-	3.5	12	-	-	-	-	0	
11/11/2011	Gittoes Jali	49	-	Complete Flake	Chert	11	4	1	11	Flaked	3	0.5	Feather	0	
11/11/2011	Gittoes Jali	49	-	Complete Flake	Chert	11.5	6	2	11.5	Flaked	3	1	Feather	0	
11/11/2011	Gittoes Jali	55	300	Bifacial Core	River Cobble	77	73	32	89	-	60	2	-	90	
11/11/2011	Gittoes Jali	55	300	Bi-directional Core	River Cobble	46	27	29	52	-	28	16	-	40	
11/11/2011	Gittoes Jali	55	300	Complete Flake	Chert	15	16	8	22	Flaked	16	6	Feather	0	
11/11/2011	Gittoes Jali	56r	150-200	Complete Flake	Chert	9	9	0.5	11	Flaked	2	1	Step	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
11/11/2011	Gittoes Jali	62r	100-150	Distal Flake	Chalcedony	-	-	5	15	-	-	-	-	0	
11/11/2011	Gittoes Jali	63r	100-150	Flaked Fragment	Chert	-	-	3	-	-	-	9	-	0	
11/11/2011	Gittoes Jali	63r	100-150	Complete Flake	Chert	15	5	12	15	Flaked	2	1	Plunge	0	
11/11/2011	Gittoes Jali	59	200-250	Single Platform Core	Cobble	66	107	39	107	Cortical	102	21	-	100	
11/11/2011	Gittoes Jali	59	200-250	Complete Flake	Chert	14	17	2	22	Flaked	15	2	Hinge	0	
11/11/2011	Gittoes Jali	59	200-250	Distal Flake	Chert	-	-	1.5	16	-	-	-	Feather	0	
11/11/2011	Gittoes Jali	59	200-250	Complete Flake	Quartz	10	10	2	15	Flaked	8	4	Feather	0	
11/11/2011	Gittoes Jali	61r	0-50	Distal Flake	Agate	-	16	6	25	-	-	-	Feather	70	
11/11/2011	Gittoes Jali	61r	250-300	Flaked Fragment	Chert	-	-	6	18	-	-	-	-	0	
11/11/2011	Gittoes Jali	64	-	Complete Flake	Chert	22	11	8	26	Cortical	11	6	Feather	0	
11/11/2011	Gittoes Jali	64	-	Complete Flake	Chert	17.5	4	1	17.5	Flaked	4	1.5	Feather	0	
11/11/2011	Gittoes Jali	64	-	Proximal Flake	Chert	-	-	7	16	-	-	-	-	0	
11/11/2011	Gittoes Jali	64	-	Complete Flake	Chert	18	12	5	21	Focal	1.5	0.5	Feather	100	
11/11/2011	Gittoes Jali	64	-	Longitudinally Split Flake	Chert	-	-	3	19	-	-	-	Feather	0	Right proximal
11/11/2011	Gittoes Jali	64	-	Distal Flake	Chert	-	-	4	16	-	-	-	Feather	0	
11/11/2011	Gittoes Jali	64	-	Complete Flake	River Cobble	13	6	1	13	Flaked	8	0.5	Hinge	0	
11/11/2011	Gittoes Jali	64	100-200	Complete Flake	Crystal Quartz	10	8	2.5	13	Flaked	4	2	Feather	0	
11/11/2011	Gittoes Jali	64	250-300	Multi-platform Core	River Cobble	-	60	87	87	Flaked	87	36	-	50	
11/11/2011	Gittoes Jali	65	-	Complete Flake	Chert	14	10	2	15	Flaked	3	1.5	Feather	0	
14/11/2011	Gittoes Jali	67	0-100	Complete Flake	Chert	17	9.17	2.07	17	Cortical	1.05	2.19	Feather	20	Broken flake
14/11/2011	Gittoes Jali	67	0-100	Distal Flake	Basalt	-	8.84	2.45	14.77	-	-	-	Hinge	0	
14/11/2011	Gittoes Jali	72r	0-100	Medial Flake	Silcrete	-	7.55	2.33	9.8	-	-	-	-	0	
14/11/2011	Gittoes Jali	72r	0-100	Proximal Flake	Siltstone	-	27.02	8.83	37.99	Flaked	23.32	7.61	-	20	
14/11/2011	Gittoes Jali	72r	-	Core	Chert	7.57	16.04	7.97	22.83	Flaked	10.52	10	-	70	Unsure: core or re-directional flake
14/11/2011	Gittoes Jali	72r	-	Proximal Flake	Chert	-	-	4.14	25.83	Flaked	-	2.29	-	95	
14/11/2011	Gittoes Jali	72r	-	Flaked Fragment	Chert	-	-	3.82	17.58	-	-	-	-	40	
14/11/2011	Gittoes Jali	72r	-	Single Platform Core	Silcrete	10.45	19.02	17.51	19.02	Flaked	12.41	8.98	-	40	
14/11/2011	Gittoes Jali	72r	-	Complete Flake	Silcrete	5.76	14.95	2.11	25.6	Cortical	13.75	3.5	Feather	50	
14/11/2011	Gittoes Jali	70	-	Core	Chert	-	15.94	4.64	23.68	Flaked	14.73	3.08	-	0	
14/11/2011	Gittoes Jali	70	-	Medial Flake	Chert	-	-	5.64	16.16	-	-	-	-	0	
14/11/2011	Gittoes Jali	75	100-150	Medial Flake	Quartzite	-	8.72	1.2311.53	-	-	-	-	-	0	
14/11/2011	Gittoes Jali	75	100-150	Complete Flake	Basalt	21.44	12.56	3.93	26.07	Focal	9.07	3.67	Step	0	
14/11/2011	Gittoes Jali	75	100-150	Flaked Fragment	Silcrete	-	-	-	13.97	-	-	-	-	0	Possible core, very heavily reduced and also used as flake
14/11/2011	Gittoes Jali	76	-	Distal Flake	Chert	-	33.35	6.02	33.39	-	-	-	Step	5	
14/11/2011	Gittoes Jali	76	-	Core	Chert	10.65	15.5	2.89	16.41	Flaked	1.86	1.94	Plunge	30	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
14/11/2011	Gittoes Jali	78	100-150	Distal Flake	Chert	-	-	2.11	13.81	-	-	-	Feather	0	Distal end with additional removals
15/11/2011	Gittoes Jali	77	-	Complete Flake	Chert	12.41	9.26	1.94	12.94	Crushed	4.13	1.96	Plunge	0	
15/11/2011	Gittoes Jali	77	-	Distal Flake	Basalt	-	29.75	10.31	49.53	-	-	-	Feather	30	Freshly broken
15/11/2011	Gittoes Jali	77	-	Distal Flake	Silcrete	-	12.08	4.29	21.08	-	-	-	Feather	60	
15/11/2011	Gittoes Jali	77	-	Distal Flake	Mudstone	-	10.34	4.4	14.83	-	-	-	Feather	30	
15/11/2011	Gittoes Jali	77	-	Flaked Fragment	Chert	-	4.2	-	20.34	-	-	-	-	0	
15/11/2011	Gittoes Jali	77	-	Flaked Fragment	Chert	-	2.38	18.65	-	-	-	-	-	0	
15/11/2011	Gittoes Jali	80	-	Single Platform Core	River Cobble	35.3	121.44	61.55	121.44	Flaked	-	-	-	70	
15/11/2011	Gittoes Jali	80	-	Core	River Cobble	22.18	54.93	21.47	55.1	Flaked	10.63	21.47	-	50	Cortical platform
15/11/2011	Gittoes Jali	80	-	Complete Flake	Basalt	20.08	24.28	6.59	29.97	Flaked	18.82	5.57	Hinge	0	
15/11/2011	Gittoes Jali	80	-	Distal Flake	Basalt	-	-	4.16	31.35	-	-	-	Feather	0	
15/11/2011	Gittoes Jali	80	-	Proximal Flake	Silcrete	-	13.22	2.24	17.6	Flaked	7.53	1.27	Feather	0	
15/11/2011	Gittoes Jali	80	-	Complete Flake	Chalcedony	7.94	13.86	2.66	18.32	Crushed	4.18	1.15	Hinge	0	
15/11/2011	Gittoes Jali	81	60-120	Distal Flake	Chert	-	11.99	1.59	13.78	-	-	-	Feather	0	
15/11/2011	Gittoes Jali	81	200-300	Complete Flake	Chalcedony	24.65	19.32	3.59	25.18	Crushed	8.55	1.84	Step	20	
15/11/2011	Gittoes Jali	81	200-300	Distal Flake	Chalcedony	-	-	7.67	36.52	-	-	-	Feather	0	
15/11/2011	Gittoes Jali	82	200	Distal Flake	Basalt	-	26.92	8.86	41.77	-	-	-	Plunge	50	
15/11/2011	Gittoes Jali	83	-	Core	Chalcedony	26.46	28.1	8.26	38.51	Flaked	38.51	17.28	-	80	Bi-platform. Dimensions taken from larger platform
15/11/2011	Gittoes Jali	83	-	Complete Flake	Basalt	22.95	27.68	3.35	35.71	Flaked	27.67	2.78	Feather	0	
15/11/2011	Gittoes Jali	83	-	Proximal Flake	Quartzite	-	22.42	7.51	31.05	Crushed	-	-	-	0	
15/11/2011	Gittoes Jali	83	-	Proximal Flake	Chalcedony	-	-	3.09	19.31	-	-	-	-	0	
15/11/2011	Gittoes Jali	83	-	Distal Flake	Chalcedony	-	7.03	3.87	13.27	-	-	-	Feather	60	
15/11/2011	Gittoes Jali	83	-	Distal Flake	Chalcedony	24.47	13.82	3.49	24.47	-	-	-	Feather	0	Platform has been snapped
15/11/2011	Gittoes Jali	83	-	Distal Flake	Chalcedony	-	10.23	1.84	20.59	-	-	-	Feather	0	
15/11/2011	Gittoes Jali	83	-	Complete Flake	Basalt	10.91	-	3.37	20.68	Flaked	13.34	4.55	Plunge	0	Slight break on side
15/11/2011	Gittoes Jali	83	-	Complete Flake	Basalt	18.9	10.91	3.33	19.48	Flaked	6.25	2.96	Feather	0	
15/11/2011	Gittoes Jali	83	-	Distal Flake	Chalcedony	-	11.04	1.64	19.59	-	-	-	Step	0	
15/11/2011	Gittoes Jali	83	-	Flaked Fragment	Chalcedony	-	-	-	23.79	-	-	-	-	0	
15/11/2011	Gittoes Jali	83	-	Flaked Fragment	Chalcedony	-	-	-	13.07	-	-	-	-	10	
15/11/2011	Gittoes Jali	83	-	Complete Flake	Chalcedony	11.83	12.51	0.94	17.49	Flaked	6.37	1.76	Feather	10	
15/11/2011	Gittoes Jali	83	-	Medial Flake	Chalcedony	-	14.03	3.01	17.77	-	-	-	-	0	
15/11/2011	Gittoes Jali	83	-	Flaked Fragment	Chalcedony	-	-	1.41	17.43	-	-	-	-	10	
15/11/2011	Gittoes Jali	83	-	Proximal Flake	Chalcedony	-	9.4	3.07	17.7	Crushed	3.1	-	-	0	
15/11/2011	Gittoes Jali	83	-	Complete Flake	Chalcedony	11.36	9.96	1.87	19.71	Crushed	-	-	Feather	0	
15/11/2011	Gittoes Jali	83	-	Distal Flake	Chalcedony	-	-	1.09	18.06	-	-	-	-	0	
15/11/2011	Gittoes Jali	83	-	Distal Flake	Chalcedony	-	-	1.34	13.38	-	-	-	Plunge	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
15/11/2011	Gittoes Jali	83	-	Complete Flake	Chalcedony	18.54	8.67	2.69	18.54	Flaked	3.57	1.57	Step	5	
15/11/2011	Gittoes Jali	83	-	Distal Flake	Chalcedony	-	7.43	1.95	11.46	-	-	-	Feather	0	
15/11/2011	Gittoes Jali	83	-	Complete Flake	Chalcedony	13.27	-	2.09	13.27	Flaked	-	1.54	Feather	0	
15/11/2011	Gittoes Jali	83	-	Complete Flake	Chalcedony	12.86	6.86	1.81	12.86	Flaked	3.6	1.28	Feather	0	
15/11/2011	Gittoes Jali	83	-	Complete Flake	Chalcedony	10.82	6.46	1.54	16.66	Flaked	6.9	1.27	Feather	0	
15/11/2011	Gittoes Jali	83	-	Flaked Fragment	Chalcedony	-	6.36	-	16.93	-	-	-	-	0	
15/11/2011	Gittoes Jali	83	-	Flaked Fragment	Chalcedony	-	-	1.84	10.87	-	-	-	-	0	
15/11/2011	Gittoes Jali	83	-	Proximal Flake	Chalcedony	-	10.31	4.54	18.38	Crushed	-	-	-	0	
15/11/2011	Gittoes Jali	83	-	Distal Flake	Chalcedony	-	12.76	3.7	15.26	Crushed	-	-	Hinge	0	
15/11/2011	Gittoes Jali	83	-	Flaked Fragment	Chalcedony	-	-	1.76	9.89	-	-	-	Hinge	0	
15/11/2011	Gittoes Jali	83	-	Distal Flake	Chalcedony	-	6.74	1.21	10.85	-	-	-	Plunge	0	
15/11/2011	Gittoes Jali	83	-	Distal Flake	Chalcedony	-	9.7	2.43	12.61	-	-	-	Feather	0	
15/11/2011	Gittoes Jali	83	-	Distal Flake	Chert	-	-	1.46	11.57	-	-	-	-	0	
15/11/2011	Gittoes Jali	83	-	Flaked Fragment	Chert	-	-	1.24	7.45	-	-	-	-	0	
15/11/2011	Gittoes Jali	83	-	Flaked Fragment	Chert	-	-	1.17	9.97	-	-	-	-	0	
15/11/2011	Gittoes Jali	83	-	Flaked Fragment	Chalcedony	-	-	3.1	13.36	-	-	-	-	20	
15/11/2011	Gittoes Jali	83	-	Flaked Fragment	Chalcedony	-	-	4.23	14.38	-	-	-	-	20	
15/11/2011	Gittoes Jali	83	-	Complete Flake	Basalt	12.1	2.57	8.37	13.29	Flaked	4.49	2.06	Step	0	
15/11/2011	Gittoes Jali	83	-	Flaked Fragment	Basalt	-	-	3.47	18.2	-	-	-	-	0	
15/11/2011	Gittoes Jali	83	-	Flaked Fragment	Dolerite	-	2.79	22.21	-	-	-	-	-	0	
15/11/2011	Gittoes Jali	83	-	Flaked Fragment	Basalt	-	2.36	13.09	-	-	-	-	-	0	
15/11/2011	Gittoes Jali	83	-	Proximal Flake	Basalt	-	10.76	3.06	13.26	Flaked	5.05	1.6	-	0	
15/11/2011	Gittoes Jali	85r	-	Distal Flake	Chert	-	11.91	3.05	23.04	-	-	-	Plunge	0	Pot-lidded and crenated
15/11/2011	Gittoes Jali	85r	-	Proximal Flake	Chert	-	-	1.33	13.36	Crushed	2.37	0.95	-	0	
15/11/2011	Gittoes Jali	85r	-	Distal Flake	Chert	-	-	1.82	11.94	-	-	-	Feather	0	
15/11/2011	Gittoes Jali	85r	-	Complete Flake	Chert	7.25	9.21	1.92\$11.21	11.21	Flaked	5.28	1.66	Plunge	0	
15/11/2011	Gittoes Jali	85r	-	Distal Flake	Chert	-	1.83	-	22.34	-	-	-	Feather	0	
15/11/2011	Gittoes Jali	85r	-	Flaked Fragment	Chert	-	-	3.13	15.45	-	-	-	-	10	
15/11/2011	Gittoes Jali	85r	-	Flaked Fragment	Chert	-	-	2.09	15.72	-	-	-	-	0	Heat damage
15/11/2011	Gittoes Jali	85r	-	Proximal Flake	Chert	-	18.91	3.73	21.05	Crushed	15.25	5.59	-	50	
15/11/2011	Gittoes Jali	86	150-200	Core	Chert	-	-	11.06	37.83	Crushed	-	-	Step	60	Distal flake
15/11/2011	Gittoes Jali	86	-	Distal Flake	Chert	-	8.98	3.16	15.03	-	-	-	Plunge	20	
15/11/2011	Gittoes Jali	86	-	Distal Flake	Chert	15.76	26.2	5.06	26.2	Focal	16.35	5.48	Plunge	80	
15/11/2011	Gittoes Jali	89	-	Flaked Fragment	Quartzite	-	-	9.25	40.16	-	-	-	-	0	
15/11/2011	Gittoes Jali	89	-	Muller	Cobble	-	-	-	91.34	-	-	-	-	0	Manuport - smooth surface, grey blue cobble with edge(?)
15/11/2011	Gittoes Jali	89	-	Distal Flake	Quartzite	-	5.42	20.33	22.88	-	-	-	Feather	80	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
15/11/2011	Gittoes Jali	89	-	Distal Flake	Quartzite	-	-	2.1	9.22	-	-	-	Plunge	0	
15/11/2011	Gittoes Jali	90	-	Distal Flake	Chert	-	20.43	4.17	29.06	Flaked	7.24	2.43	-	0	
15/11/2011	Gittoes Jali	90	-	Medial Flake	Chert	-	-	1.77	10.86	-	-	-	-	0	
15/11/2011	Gittoes Jali	90	-	Complete Flake	Quartzite	21.02	24.24	2.33	30.5	Flaked	16.63	3.44	Feather	0	
15/11/2011	Gittoes Jali	90	-	Longitudinally Split Flake	Chert	34.27	-	7.68	34.27	Crushed	-	-	Plunge	0	Left side
15/11/2011	Gittoes Jali	90	-	Single Platform Core	Chert	-	-	-	26.23	-	-	-	-	0	Broken
15/11/2011	Gittoes Jali	90	-	Medial Flake	Chert	-	23.43	5.37	28.47	-	-	-	-	0	
15/11/2011	Gittoes Jali	90	-	Single Platform Core	Chert	12.9	14.85	7.02	22.73	Flaked	13.15	9.63	-	0	
15/11/2011	Gittoes Jali	90	-	Core	Chert	-	-	4.93	22.72	-	-	-	-	0	
15/11/2011	Gittoes Jali	90	-	Distal Flake	Chert	-	7.06	2.53	17.08	-	-	-	Feather	0	
15/11/2011	Gittoes Jali	90	-	Proximal Flake	Chert	-	-	2.98	17.4	Crushed	6.13	1.99	-	0	
15/11/2011	Gittoes Jali	90	-	Single Platform Core	Quartzite	17.9	15.6	12.8	45.61	Flaked	32.67	16.73	-	50	
15/11/2011	Gittoes Jali	90	-	Medial Flake	Chert	-	8.28	5.24	11.24	-	-	-	-	0	
15/11/2011	Gittoes Jali	90	-	Distal Flake	Chert	-	6.25	2.37	8.69	-	-	-	Feather	0	
15/11/2011	Gittoes Jali	91r	150-200	Single Platform Core	Quartzite	26.36	13.15	6.46	26.36	Flaked	19.52	10.89	-	20	
15/11/2011	Gittoes Jali	91r	150-200	Complete Flake	Quartzite	8.17	14.86	3.38	14.86	Flaked	14.09	4.84	Feather	20	
15/11/2011	Gittoes Jali	91r	150-200	core	Chert	15.91	9.91	11.66	26.93	-	-	-	-	40	
15/11/2011	Gittoes Jali	91r	150-200	Longitudinally Split Flake	Chert	27.27	0	4.26	27.27	Flaked	7.6	2.58	Plunge	10	
15/11/2011	Gittoes Jali	91r	150-200	Longitudinally Split Flake	Chert	15.47	14.65	2.89	16.22	Flaked	7.02	2.53	Plunge	0	Complete? Heat damaged
15/11/2011	Gittoes Jali	91r	150-200	Proximal Flake	Chert	12.05	8.16	1.62	12.05	Crushed	-	-	-	0	
15/11/2011	Gittoes Jali	91r	150-200	Flaked Fragment	Chert	-	-	2.64	8.48	-	-	-	-	0	Crenated
15/11/2011	Gittoes Jali	92r	-	Core	Chert	-	9.81	4.39	14.92	Crushed	-	-	-	20	
15/11/2011	Gittoes Jali	93	100-150	Multi-platform Core	Chalcedony	-	-	5.3	26.74	-	-	-	-	0	Broken
15/11/2011	Gittoes Jali	93	100-150	Distal Flake	Chalcedony	-	11.36	1.46	14.93	-	-	-	Plunge	0	
15/11/2011	Gittoes Jali	93	100-150	Flaked Fragment	Chert	-	-	1.59	16.37	-	-	-	-	0	
15/11/2011	Gittoes Jali	93	100-150	Distal Flake	Quartzite	-	7.68	2.16	13.96	-	-	-	Hinge	20	
15/11/2011	Gittoes Jali	93	100-150	Medial Flake	Chalcedony	-	-	3.85	12.23	-	-	-	-	0	
15/11/2011	Gittoes Jali	93	100-150	Distal Flake	Chert	-	5.77	2.4	17.07	-	-	-	Feather	20	Crenated
15/11/2011	Gittoes Jali	93	150-200	Complete Flake	Quartzite	54.04	43.4	17.4	58.91	Flaked	25.97	12.99	Plunge	30	Cortical, grounded
15/11/2011	Gittoes Jali	93	150-200	Complete Flake	Quartzite	33.69	7.24	-	41.05	Flaked	13.21	6.36	Plunge	10	
15/11/2011	Gittoes Jali	93	150-200	Complete Flake	Quartzite	20.58	19.6	2.89	23.36	Flaked	7.45	1.45	Feather	0	
15/11/2011	Gittoes Jali	93	150-200	Medial Flake	Quartzite	-	18.3	3.74	21.68	-	-	-	Feather	0	
15/11/2011	Gittoes Jali	93	150-200	Flaked Fragment	Quartzite	-	-	5.47	22.79	-	-	-	-	80	
15/11/2011	Gittoes Jali	93	150-200	Proximal Flake	Quartzite	-	22.66	4.78	24.66	Flaked	21.1	3.47	-	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
15/11/2011	Gittoes Jali	93	150-200	Longitudinally Split Flake	Quartzite	15.14	3.22	-	15.14	Flaked	-	2.3	Feather	0	
15/11/2011	Gittoes Jali	93	150-200	Proximal Flake	Quartzite	-	13.63	2.08	13.63	Flaked	12.2	2.18	Feather	0	
15/11/2011	Gittoes Jali	93	150-200	Flaked Fragment	Chert	-	-	4.06	11.08	-	-	-	-	0	Crenated
15/11/2011	Gittoes Jali	93	150-200	Distal Flake	Chert	-	11.97	13.09	18.97	-	-	-	Plunge	0	
15/11/2011	Gittoes Jali	93	150-200	Flaked Fragment	Chert	-	-	1.5	9.82	-	-	-	-	0	Pot-lidded, heat damaged
15/11/2011	Gittoes Jali	93	150-200	Distal Flake	Chalcedony	-	-	2.37	19.05	-	-	-	Feather	0	Pot-lidded, heat damaged
15/11/2011	Gittoes Jali	93	200-250	Complete Flake	Quartzite	22.41	23.28	4.74	24.54	Flaked	9.1	3.68	Step	10	
15/11/2011	Gittoes Jali	93	200-250	Distal Flake	Chalcedony	-	-	2.53	15.04	-	-	-	Feather	0	
15/11/2011	Gittoes Jali	95r	0-50	Flaked Fragment	Chert	-	-	1.97	13.31	-	-	-	-	0	
15/11/2011	Gittoes Jali	94r	50-100	Flaked Fragment	Chert	-	-	7.05	18.19	-	-	-	-	0	
15/11/2011	Gittoes Jali	96	-	Complete Flake	Chalcedony	12.44	13.34	2.19	22.53	Flaked	6.83	1.95	Plunge	0	
15/11/2011	Gittoes Jali	96	-	Proximal Flake	Quartzite	-	24.76	9.96	35.07	Flaked	24.66	11.52	-	70	
15/11/2011	Gittoes Jali	96	-	Proximal Flake	Quartzite	-	-	2.73	23.96	Flaked	22.38	7.21	-	0	
15/11/2011	Gittoes Jali	96	-	Longitudinally Split Flake	Quartzite	24.98	-	3.78	24.98	Flaked	-	3.12	-	65	Left side
15/11/2011	Gittoes Jali	96	-	Distal Flake	Quartzite	-	-	3.7	22.51	-	-	-	Feather	100	
15/11/2011	Gittoes Jali	96	-	Distal Flake	Chert	-	7.18	1.59	10.98	-	-	-	Step	90	
15/11/2011	Gittoes Jali	97	-	Proximal Flake	Mudstone	-	25.04	4.67	25.57	Cortical	23.13	4.96	-	30	
15/11/2011	Gittoes Jali	97	-	Distal Flake	Mudstone	-	22.1	4.61	23.53	-	-	-	Feather	100	
15/11/2011	Gittoes Jali	98	-	Complete Flake	Chert	26.83	26.35	9.07	36.34	Focal	-	12.21	Plunge	0	Use wear; probable core use
15/11/2011	Gittoes Jali	98	-	Proximal Flake	Chert	-	12.63	5.87	14.61	Flaked	4.63	2.28	-	10	Retouch?
15/11/2011	Gittoes Jali	98	-	Flaked Fragment	Chert	10.24	-	3.1	10.24	-	-	-	-	0	
15/11/2011	Gittoes Jali	98	-	Complete Flake	Chert	11.62	11.22	2.12	11.62	Flaked	7.15	1.7	Feather	0	
15/11/2011	Gittoes Jali	98	-	Distal Flake	Chert	-	-	4.03	19.98	-	-	-	Plunge	20	
15/11/2011	Gittoes Jali	98	-	Flaked Fragment	Chert	-	-	1.43	10.47	-	-	-	-	0	
15/11/2011	Gittoes Jali	98	-	Complete Flake	Quartzite	12.45	16.48	3.56	16.48	Flaked	17.57	6.44	Step	0	
15/11/2011	Gittoes Jali	98	-	Distal Flake	Chert	-	5.52	1.89	12.1	-	-	-	Feather	0	
15/11/2011	Gittoes Jali	100r	50-200	Complete Flake	Quartzite	25.36	38.34	9.76	45.85	Flaked	30.79	11.64	Feather	100	
15/11/2011	Gittoes Jali	100r	200-250	Complete Flake	Quartzite	28.26	25.12	5.59	37.4	Cortical	12.24	4.03	Feather	60	
15/11/2011	Gittoes Jali	101	-	Single Platform Core	Quartzite	14.91	80.43	36.87	80.43	Flaked	78.78	35.18	-	70	
15/11/2011	Gittoes Jali	102	-	Medial Flake	Chert	6.67	12.18	4.14	15.09	-	-	-	-	0	
15/11/2011	Gittoes Jali	104	700-800	Distal Flake	Chert	-	-	2.61	9.66	-	-	-	Plunge	0	
15/11/2011	Gittoes Jali	104	700-800	Flaked Fragment	Chert	-	-	11.57	18.93	-	-	-	-	0	
15/11/2011	Gittoes Jali	104	700-800	Flaked Fragment	Chert	-	-	1.65	15.72	-	-	-	-	0	
15/11/2011	Gittoes Jali	104	700-800	Flaked Fragment	Chert	-	-	1.07	11.97	-	-	-	-	0	
15/11/2011	Gittoes Jali	104	700-800	Distal Flake	Chert	-	7.5	1.36	9.73	-	-	-	Feather	0	
15/11/2011	Gittoes Jali	104	700-800	Flaked Fragment	Chert	-	-	1.36	9.63	-	-	-	-	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
15/11/2011	Gittoes Jali	105	400-450	Distal Flake	Chert	-	10.37	2.03	14.29	-	-	-	Feather	70	
15/11/2011	Gittoes Jali	105	400-450	Flaked Fragment	Chert	-	-	2.9	20.35	-	-	-	-	0	
15/11/2011	Gittoes Jali	105	400-450	Longitudinally Split Flake	Quartzite	32.3	5.41	-	38.21	Cortical	-	-	Feather	90	Right side
15/11/2011	Gittoes Jali	106	-	Complete Flake	Chalcedony	17.95	17.37	4.9	21.51	Flaked	-	-	Hinge	0	
15/11/2011	Gittoes Jali	106	-	Proximal Flake	Chert	-	11.89	5.43	38.15	Cortical	-	-	-	0	
15/11/2011	Gittoes Jali	106	-	Proximal Flake	Chert	9.08	7.13	1.72	10.35	Flaked	-	-	-	0	
15/11/2011	Gittoes Jali	107	150-200	Flaked Fragment	Quartzite	-	6.34	-	33.85	-	4	1.28	-	40	
15/11/2011	Gittoes Jali	107	200-250	Proximal Flake	Chert	-	10.69	2.9	11.84	Flaked	11.47	5.2	-	0	
15/11/2011	Gittoes Jali	107	200-250	Complete Flake	Chert	13.4	7.71	2.2	13.4	Flaked	5.24	1.3	Step	0	
15/11/2011	Gittoes Jali	107	200-250	Complete Flake	Quartzite	17.63	9.78	2.31	18.88	Cortical	-	-	Feather	0	
15/11/2011	Gittoes Jali	108	-	Flaked Fragment	Chert	-	-	2.17	13.28	-	-	-	-	0	
15/11/2011	Gittoes Jali	110t	-	Flaked Fragment	Chert	-	-	4.1	13.8	-	-	-	-	0	
15/11/2011	Gittoes Jali	111t	0-200	Distal Flake	Chalcedony	-	23.5	9.9	23.5	Cortical	9.7	3.5	-	0	
15/11/2011	Gittoes Jali	111t	0-200	Distal Flake	Cobble	-	43.5	10.6	43.5	Flaked	9.2	5.9	-	70	
15/11/2011	Gittoes Jali	111t	0-200	Flaked Fragment	Cobble	-	-	17.1	44.2	-	-	-	-	0	
15/11/2011	Gittoes Jali	111t	0-200	Distal Flake	Cobble	-	44.6	8.9	44.6	Flaked	20.2	16.8	-	40	
15/11/2011	Gittoes Jali	111t	0-200	Medial Flake	Cobble	-	31.1	9.9	31.1	-	-	-	-	70	
15/11/2011	Gittoes Jali	111t	0-200	Flaked Fragment	Chalcedony	-	4.4	18.7	18.7	-	-	-	-	0	
15/11/2011	Gittoes Jali	113t	200-250	Distal Flake	Chalcedony	-	26.6	10	33.4	-	-	-	Feather	10	
15/11/2011	Gittoes Jali	113t	-	Flaked Fragment	Chert	-	-	1.1	10.8	-	-	-	-	0	
15/11/2011	Gittoes Jali	113t	-	Flaked Fragment	Chert	-	-	2.2	8.6	-	-	0	-	0	
15/11/2011	Gittoes Jali	113t	-	Flaked Fragment	Quartz	-	-	0.9	8.7	-	-	-	-	0	
15/11/2011	Gittoes Jali	113t	-	Medial Flake	Chalcedony	-	17.2	8.5	17.2	-	-	-	-	40	
15/11/2011	Gittoes Jali	113t	200-250	Flaked Fragment	Chalcedony	-	-	4.2	17.8	-	-	-	-	0	Flaked fragment; heat damage
15/11/2011	Gittoes Jali	113t	250-300	Flaked Fragment	Chalcedony	-	-	2.8	27.8	-	-	-	-	0	Flaked fragment; heat damage
15/11/2011	Gittoes Jali	113t	250-300	Proximal Flake	Chert	-	17.3	6.9	-	Cortical	6.7	6.1	-	0	
15/11/2011	Gittoes Jali	114t	200-250	Longitudinally Split Flake	Chalcedony	28.12	-	1.33	28.12	-	-	1.81	Feather	0	
6/12/2011	PAD 11	4	300-400	Complete Flake	Chalcedony	14.5	7.5	1.6	15.2	Flaked	6.1	1.3	Step	0	
6/12/2011	PAD 11	4	300-400	Distal Flake	Chalcedony	-	-	-	11.6	-	-	-	-	0	
6/12/2011	PAD 11	4	300-400	Complete Flake	Chalcedony	12.7	12.6	1.5	14	Flaked	12.6	0.9	Feather	0	
6/12/2011	PAD 11	4	550-600	Complete Flake	Chalcedony	16.8	8.9	2.4	16.8	Flaked	3.1	0.8	Step	0	
6/12/2011	PAD 11	4	550-600	Distal Flake	Chalcedony	-	-	-	19.3	-	-	-	-	0	
6/12/2011	PAD 11	4	700-800	Complete Flake	Chalcedony	15.8	8.4	3	15.8	Flaked	5.7	3.4	Feather	0	
6/12/2011	PAD 11	4	700-800	Flaked Fragment	Chalcedony	-	-	-	8	-	-	-	-	0	
6/12/2011	PAD 11	4	700-800	Flaked Fragment	Chert	-	-	-	25	-	-	-	-	0	Heat damaged
6/12/2011	PAD 11	4	700-800	Distal Flake	Chert	-	-	-	11	-	-	-	-	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
6/12/2011	PAD 11	10	800-900	Flaked Fragment	Chalcedony	-	-	-	16.8	-	-	-	-	0	Heat damaged
6/12/2011	PAD 11	10	800-900	Flaked Fragment	Chalcedony	-	-	-	9.8	-	-	-	-	0	Crenated and heat damaged
6/12/2011	PAD 11	9	350-400	Flaked Fragment	Chalcedony	-	-	-	16.5	-	-	-	-	0	Heat damaged
6/12/2011	PAD 11	9	350-400	Flaked Fragment	Chalcedony	-	-	-	13.1	-	-	-	-	0	
6/12/2011	PAD 11	9	350-400	Complete Flake	Chalcedony	18.5	10.4	2.9	18.5	Flaked	6.1	1.7	Feather	0	
6/12/2011	PAD 11	9	400-450	Medial Flake	Chalcedony	-	-	-	32.5	-	-	-	-	0	
6/12/2011	PAD 11	9	400-450	Distal Flake	Chalcedony	-	-	-	23.1	-	-	-	Hinge	0	Heat damaged
6/12/2011	PAD 11	9	400-450	Complete Flake	Chalcedony	13	11.2	1.9	14.2	Crushed	6.3	7.7	Hinge	0	
6/12/2011	PAD 11	9	450-500	Longitudinally Split Flake	Chert	-	-	-	31.9	Flaked	-	-	-	0	Proximal, also heat damage
6/12/2011	PAD 11	9	450-500	Flaked Fragment	Chalcedony	-	-	-	32	-	-	-	-	0	Heat damage, crenated
6/12/2011	PAD 11	9	450-500	Proximal Flake	Chalcedony	-	-	-	20.1	Crushed	10.7	3.7	-	0	Heat damage, crenated
6/12/2011	PAD 11	9	450-500	Longitudinally Split Flake	Chalcedony	-	-	-	12.1	-	-	-	-	0	Right side
6/12/2011	PAD 11	9	450-500	Proximal Flake	Chalcedony	-	-	-	9	Flaked	7	1.2	-	0	
6/12/2011	PAD 11	9	450-500	Flaked Fragment	Chalcedony	-	-	-	19.5	-	-	-	-	0	
6/12/2011	PAD 11	9	500-550	Complete Flake	Chalcedony	29.7	18.3	3.5	31.7	Flaked	7.8	2.7	Feather	0	Heat damaged
6/12/2011	PAD 11	9	500-550	Distal Flake	Chalcedony	-	-	-	15.8	-	-	-	Feather	0	
6/12/2011	PAD 11	9	500-550	Angular Fragment	Chalcedony	-	-	-	22.8	-	-	-	-	0	
6/12/2011	PAD 11	9	500-550	Flaked Fragment	Chalcedony	-	-	-	13.6	-	-	-	-	0	
6/12/2011	PAD 11	9	500-550	Complete Flake	Chalcedony	24.4	20.1	3.5	27.6	Crushed	6.7	1.6	Feather	0	
6/12/2011	PAD 11	9	500-550	Flaked Fragment	Chalcedony	-	-	-	12	-	-	-	-	0	
6/12/2011	PAD 11	12	250-300	Complete Flake	Quartz	24.3	25.7	7	32.5	Crushed	19.1	5.6	Feather	0	
6/12/2011	PAD 11	12	250-300	Distal Flake	Chalcedony	-	-	-	23.8	-	-	-	Feather	0	
6/12/2011	PAD 11	12	250-300	Longitudinally Split Flake	Quartz	-	-	-	13.8	-	-	-	-	0	Crystal quartz, retouched
6/12/2011	PAD 11	12	250-300	Flaked Fragment	Quartz	-	-	-	9.6	-	-	-	-	0	Crystal quartz
6/12/2011	PAD 11	12	250-300	Flaked Fragment	Chert	-	-	-	17.7	-	-	-	-	0	Heat damaged
6/12/2011	PAD 11	12	250-300	Flaked Fragment	Quartz	-	-	-	8.8	-	-	-	-	0	Crystal quartz
6/12/2011	PAD 11	13	200	Complete Flake	Chalcedony	19.8	6.4	8	22.2	Focal	5	5.3	-	0	Bipolar microblade, ridged preparation
6/12/2011	PAD 11	13	800	Longitudinally Split Flake	Chalcedony	-	-	-	12.4	-	-	-	-	0	
6/12/2011	PAD 11	13	800	Distal Flake	Chalcedony	-	-	-	14	-	-	-	-	0	Heat damaged
6/12/2011	PAD 11	13	800	Distal Flake	Chalcedony	-	-	-	8.7	-	-	-	Hinge	0	
6/12/2011	PAD 11	14	400-450	Complete Flake	Quartz	11.6	5.3	3.8	12.6	Flaked	5.4	3.5	Step	0	
6/12/2011	PAD 11	14	400-450	Flaked Fragment	Chalcedony	-	-	-	10.6	-	-	-	-	0	
6/12/2011	PAD 11	14	400-450	Distal Flake	Chalcedony	-	-	-	16.7	-	-	-	Feather	0	
6/12/2011	PAD 11	14	400-450	Proximal Flake	Chalcedony	-	-	-	22.5	Flaked	7.1	2.9	-	0	
6/12/2011	PAD 11	14	400-450	Flaked Fragment	Chalcedony	-	-	-	8.5	-	-	-	-	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
6/12/2011	PAD 11	14	450-650	Complete Flake	Chalcedony	22.8	15.1	2.3	22.8	Flaked	4.2	1.4	Feather	0	
6/12/2011	PAD 11	14	450-650	Flaked Fragment	Chalcedony	-	-	-	12.6	-	-	-	-	0	
6/12/2011	PAD 11	14	450-650	Flaked Fragment	Chalcedony	-	-	-	13.1	-	-	-	-	0	Heavily heat damaged
6/12/2011	PAD 11	14	450-650	Flaked Fragment	Chalcedony	-	-	-	14	-	-	-	-	0	Heat damaged
6/12/2011	PAD 11	14	450-650	Flaked Fragment	Chalcedony	-	-	-	12.2	-	-	-	-	0	
6/12/2011	PAD 11	14	450-650	Distal Flake	Chalcedony	-	-	-	10.5	-	-	-	Feather	0	
6/12/2011	PAD 11	14	450-650	Flaked Fragment	Chalcedony	-	-	-	11.2	-	-	-	-	0	Heavily heat damaged
6/12/2011	PAD 11	14	450-650	Flaked Fragment	Quartz	-	-	-	8.2	-	-	-	-	0	
6/12/2011	PAD 11	14	450-650	Complete Flake	Quartz	7.5	4.8	1.1	-	Flaked	4.5	1.1	Feather	0	
6/12/2011	PAD 11	14	700	Proximal Flake	Chalcedony	-	-	-	8.5	Flaked	7.3	1.9	-	0	
6/12/2011	PAD 11	14	700	Flaked Fragment	Chalcedony	-	-	-	13	-	-	-	-	0	Heat damaged
7/12/2011	PAD 11	4	0-100	Longitudinally Split Flake	Chert	-	-	-	17.02	Flaked	-	1.78	Step	100	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chert	-	-	-	38.20	-	-	-	-	100	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chalcedony	-	-	-	29.70	-	-	-	-	60	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chalcedony	-	-	-	22.60	-	-	-	-	40	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chalcedony	-	-	-	24.90	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chalcedony	-	-	-	31.40	-	-	-	-	60	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chalcedony	-	-	-	36.70	-	-	-	-	80	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chalcedony	-	-	-	33.20	-	-	-	-	70	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chert	-	-	-	20.80	-	-	-	-	70	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Complete Flake	Chalcedony	32.90	20.60	13.90	33.00	Flaked	26.60	17.90	Feather	90	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chalcedony	-	-	-	22.00	-	-	-	-	80	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chalcedony	-	-	-	10.20	-	-	-	-	20	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	13.60	-	-	-	-	30	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	13.80	-	-	-	-	20	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chalcedony	-	-	-	15.50	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Distal Flake	Chalcedony	-	-	-	17.10	-	-	-	Feather	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Complete Flake	Chalcedony	11.60	16.70	3.00	19.30	Flaked	17.80	2.80	Hinge	100	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Medial Flake	Chalcedony	-	-	-	15.30	-	-	-	-	100	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chert	-	-	-	15.20	-	-	-	-	60	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chert	-	-	-	10.10	-	-	-	-	100	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chalcedony	-	-	-	12.50	-	-	-	-	100	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chalcedony	-	-	-	14.90	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chalcedony	-	-	-	16.00	-	-	-	-	50	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chalcedony	-	-	-	15.10	-	-	-	-	80	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	10.40	-	-	-	-	40	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chalcedony	-	-	-	23.10	-	-	-	-	70	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chert	-	-	-	19.90	-	-	-	-	90	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Medial Flake	Quartz	-	-	-	16.60	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	26.70	-	-	-	-	80	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	23.70	-	-	-	-	20	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chalcedony	-	-	-	13.40	-	-	-	-	40	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	11.70	-	-	-	-	80	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	13.50	-	-	-	-	10	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	15.30	-	-	-	-	30	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Complete Flake	Chalcedony	9.50	6.60	5.80	13.40	Flaked	5.10	4.10	Feather	100	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	19.60	-	-	-	-	80	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	12.10	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	6.90	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	6.20	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	8.00	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	4.80	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	7.10	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	6.80	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	8.60	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	8.10	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chalcedony	-	-	-	10.10	-	-	-	-	80	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chalcedony	-	-	-	17.80	-	-	-	-	100	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Complete Flake	Chalcedony	22.20	17.70	2.80	27.10	Crushed	18.10	1.50	Feather	0	Overhang removal

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Distal Flake	Chalcedony	-	-	-	13.10	-	-	-	Feather	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chalcedony	-	-	-	10.20	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Complete Flake	Chalcedony	22.30	7.60	4.10	22.30	Flaked	8.00	1.60	Feather	30	Overhang removal
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chert	-	-	-	11.00	-	-	-	-	100	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	12.60	-	-	-	-	60	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chalcedony	-	-	-	10.40	-	-	-	-	80	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chalcedony	-	-	-	11.00	-	-	-	-	20	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chert	-	-	-	11.60	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	8.90	-	-	-	-	50	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chalcedony	-	-	-	12.90	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	8.50	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chert	-	-	-	17.70	-	-	-	-	60	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	17.00	-	-	-	-	40	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Complete Flake	Chalcedony	15.30	12.70	4.10	20.20	Cortical	14.40	3.40	Feather	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Proximal Flake	Chalcedony	-	-	-	30.30	Flaked	21.10	5.60	-	100	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chalcedony	-	-	-	25.80	-	-	-	-	60	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	8.00	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	12.40	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chert	-	-	-	12.00	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	13.20	-	-	-	-	100	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Proximal Flake	Chalcedony	-	-	-	22.10	Crushed	18.70	2.10	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	18.90	-	-	-	-	30	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Proximal Flake	Chert	-	-	-	11.80	Flaked	9.50	5.40	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	14.20	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Medial Flake	Chalcedony	-	-	-	11.10	-	-	-	-	100	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	10.80	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chert	-	-	-	7.40	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	9.60	-	-	-	-	60	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	11.80	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	10.20	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	12.00	-	-	-	-	10	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Proximal Flake	Chalcedony	-	-	-	12.30	Cortical	12.10	1.80	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	12.40	-	-	-	-	20	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chalcedony	-	-	-	9.80	-	-	-	-	70	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	9.90	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Proximal Flake	Chalcedony	-	-	-	10.20	Flaked	4.10	0.90	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chalcedony	-	-	-	15.70	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Proximal Flake	Chalcedony	-	-	-	14.00	Flaked	4.40	1.00	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Longitudinally Split Flake	Chert	-	-	-	15.00	Flaked	-	-	Feather	0	Left side
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	14.20	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chert	-	-	-	12.40	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Proximal Flake	Chert	-	-	-	11.70	Flaked	6.20	1.40	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Proximal Flake	Chalcedony	-	-	-	14.20	Focal	14.20	1.30	-	0	Overhang removal, gullwing
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Complete Flake	Chalcedony	10.10	8.00	2.50	12.00	Cortical	8.60	2.80	Feather	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chalcedony	-	-	-	14.70	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Proximal Flake	Chalcedony	-	-	-	11.60	Cortical	6.50	1.70	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	11.70	-	-	-	-	20	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	7.80	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	8.10	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chert	-	-	-	11.90	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	8.00	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chert	-	-	-	11.20	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Proximal Flake	Chalcedony	-	-	-	16.40	Cortical	10.50	3.20	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chert	-	-	-	18.00	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chert	-	-	-	14.40	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Complete Flake	Chalcedony	14.00	13.20	1.10	15.60	Flaked	7.60	1.60	Feather	0	Gullwing

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Proximal Flake	Chalcedony	-	-	-	7.90	Flaked	3.50	1.00	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chert	-	-	-	9.70	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	9.90	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	11.20	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Medial Flake	Chalcedony	-	-	-	10.20	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Distal Flake	Chalcedony	-	-	-	12.70	-	-	-	Hinge	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Distal Flake	Chalcedony	-	-	-	12.60	-	-	-	Feather	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	10.90	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chalcedony	-	-	-	10.30	-	-	-	-	50	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Proximal Flake	Chalcedony	-	-	-	16.20	Flaked	13.70	1.40	-	0	Gullwing
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	13.00	-	-	-	-	100	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	19.10	-	-	-	-	50	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Angular Fragment	Chalcedony	-	-	-	11.60	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	11.30	-	-	-	-	100	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Distal Flake	Chalcedony	-	-	-	14.00	-	-	-	Feather	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Proximal Flake	Chalcedony	-	-	-	19.20	Flaked	14.80	0.50	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	8.90	-	-	-	-	20	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	14.30	-	-	-	-	20	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Proximal Flake	Chalcedony	-	-	-	12.50	Flaked	3.10	1.40	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Distal Flake	Chalcedony	-	-	-	20.20	-	-	-	Feather	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Complete Flake	Chalcedony	14.90	11.80	3.10	15.10	Flaked	12.10	3.70	Feather	30	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chalcedony	-	-	-	12.30	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Complete Flake	Chalcedony	20.90	17.80	5.30	21.50	Flaked	15.20	2.20	Plunge	10	Overhang removal
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Complete Flake	Chalcedony	20.20	15.30	6.20	22.80	Cortical	13.70	6.20	Hinge	80	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Complete Flake	Chalcedony	21.70	13.40	2.60	21.90	Cortical	9.80	3.20	Feather	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Complete Flake	Chalcedony	30.50	23.60	8.40	29.90	Crushed	10.80	2.30	Feather	5	Overhang removal, possibly part of core before removal
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Complete Flake	Chalcedony	17.70	21.90	3.20	28.00	Flaked	5.70	2.00	Feather	20	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Flaked Fragment	Chert	-	-	-	17.30	-	-	-	-	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Complete Flake	Chert	25.00	30.60	4.00	32.00	Flaked	19.90	4.30	Feather	0	Overhang removal
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Complete Flake	Chert	34.20	16.90	4.60	34.20	Crushed	3.90	2.10	Feather	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Complete Flake	Chert	18.90	6.10	1.20	18.90	Flaked	4.40	0.80	Feather	10	Blade
19/12/2012	PAD 11	Mechanical Trench 1, Step A	200-400	Complete Flake	Chalcedony	25.00	7.00	2.20	25.00	Flaked	3.70	1.70	Plunge	0	Overhang removal, blade
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	39.99	-	-	-	-	40	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	38.01	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Single Platform Core	Chalcedony	-	-	-	37.18	-	-	-	-	30	Length of longest flake scar: 2,301 mm
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	33.41	-	-	-	-	80	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	27.61	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	26.02	-	-	-	-	90	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	23.47	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	31.63	-	-	-	-	70	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	24.05	27.94	5.84	34.04	Cortical	19.03	6.36	Step	80	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	40.74	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	31.27	33.00	6.43	39.62	Flaked	13.98	5.62	Feather	20	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	27.71	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	34.40	-	-	-	-	30	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	21.77	21.37	6.26	26.16	Flaked	10.36	5.94	Feather	70	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chert	-	-	-	26.31	-	-	-	-	20	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	35.03	30.57	5.89	36.05	Cortical	9.45	5.05	Feather	90	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	17.37	24.17	6.02	39.74	Cortical	14.59	4.53	Feather	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	25.38	28.03	9.99	34.01	Flaked	17.87	4.20	Hinge	80	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	16.64	-	-	-	-	40	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	19.53	21.47	5.46	28.34	Crushed	-	-	Hinge	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	30.47	-	-	-	-	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	18.94	-	-	-	-	40	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chert	-	-	-	19.02	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	25.91	-	-	-	-	100	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chert	23.51	14.78	3.11	24.63	Flaked	5.66	2.68	Feather	5	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chert	22.61	19.02	5.04	24.08	Cortical	5.77	1.96	Step	20	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Proximal Flake	Chert	-	-	-	24.38	-	-	-	-	5	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	23.27	12.09	3.62	23.27	Cortical	7.46	3.93	Plunge	60	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	18.38	1.50	2.20	18.38	Flaked	5.28	1.80	Feather	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	25.53	-	-	-	-	20	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chert	19.11	10.71	5.18	20.90	Flaked	8.19	2.78	Feather	40	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chert	15.53	14.98	2.21	23.74	Flaked	5.81	1.10	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chert	9.03	16.19	2.07	16.35	Flaked	7.89	2.85	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chert	23.41	12.68	5.84	28.62	Cortical	5.11	2.40	Plunge	20	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chert	7.77	3.05	3.33	19.07	Flaked	16.58	4.85	Plunge	50	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Distal Flake	Chalcedony	-	-	-	20.39	-	-	-	Feather	5	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Flaked Fragment	Chalcedony	-	-	-	32.74	-	-	-	-	80	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Distal Flake	Chalcedony	-	-	-	23.07	-	-	-	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Fine Grained Siliceous	13.82	20.21	3.47	25.86	Flaked	11.96	3.62	Feather	0	Banded chert(?), potential use/wear
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Fine Grained Siliceous	12.67	10.83	3.15	15.79	Crushed	-	-	Feather	5	Banded chert (?)
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Fine Grained Siliceous	13.15	7.15	3.08	17.93	Flaked	7.45	2.01	Feather	0	Banded chert (?)
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	22.47	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	13.52	34.03	5.18	34.03	Flaked	21.99	5.15	Feather	40	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	36.26	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	17.24	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	12.82	13.88	3.54	17.76	Cortical	11.16	1.98	Feather	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	25.66	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chert	21.64	16.71	5.00	23.60	Flaked	23.60	4.34	Feather	20	Most of the platform was removed after the flake was struck, overhang removal
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	9.45	9.10	1.70	9.45	Flaked	3.27	1.43	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Flaked Fragment	Chalcedony	-	-	-	10.39	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chert	-	-	-	16.63	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	9.43	6.80	1.90	9.43	Flaked	5.26	1.20	Feather	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	10.67	9.96	2.18	11.13	Flaked	4.22	1.62	Step	90	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Distal Flake	Chalcedony	-	-	-	12.57	-	-	-	Step	20	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	14.27	13.21	2.00	18.76	Flaked	7.21	2.68	Feather	5	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	28.00	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	14.53	-	-	-	-	80	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chert	14.83	9.25	3.36	18.68	Flaked	7.72	4.45	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	28.33	-	-	-	-	60	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	13.56	-	-	-	-	80	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	9.28	6.91	1.02	11.19	Cortical	6.03	1.67	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chert	16.21	5.91	2.56	16.21	Flaked	2.28	0.77	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	16.54	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chert	11.87	9.46	1.77	12.35	Flaked	2.76	1.15	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Distal Flake	Chert	-	-	-	12.19	-	-	-	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	11.91	-	-	-	-	80	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chert	-	-	-	15.93	-	-	-	-	20	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	8.56	11.41	3.38	16.16	Flaked	12.84	2.98	Step	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	22.54	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	6.12	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chert	12.66	10.42	3.53	15.18	Crushed	-	-	Feather	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	9.43	7.58	2.06	13.22	Cortical	7.44	4.83	Feather	60	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	17.37	18.82	3.35	32.15	Cortical	24.75	5.55	Step	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	26.27	9.02	5.22	30.10	Cortical	11.97	9.24	Feather	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Flaked Fragment	Chert	-	-	-	18.49	-	-	-	-	20	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chert	-	-	-	31.54	-	-	-	-	90	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	23.63	14.51	3.85	24.51	Cortical	10.89	5.25	Step	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chert	12.59	9.53	3.33	15.87	Flaked	7.74	2.05	Step	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Distal Flake	Chalcedony	-	-	-	14.95	-	-	-	Hinge	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chert	10.54	6.45	1.59	13.14	Crushed	-	-	Hinge	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	19.03	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	15.60	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	15.41	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chert	19.17	14.51	2.03	20.41	Flaked	8.55	2.06	Feather	40	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	18.46	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chert	17.64	17.81	2.49	28.17	Flaked	9.03	2.15	Step	30	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	15.02	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	22.31	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chert	-	-	-	17.71	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Flaked Fragment	Chert	-	-	-	17.68	-	-	-	-	20	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chert	19.27	12.89	3.09	20.77	Flaked	5.04	1.91	Step	20	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Flaked Fragment	Chalcedony	-	-	-	8.78	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Medial Flake	Chert	-	-	-	10.97	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	14.44	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	8.13	5.65	1.88	9.94	Flaked	2.77	0.81	Step	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	17.46	12.33	5.06	21.06	Cortical	13.20	4.56	Feather	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Distal Flake	Chert	-	-	-	17.13	-	-	-	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chert	16.53	13.17	4.42	19.11	Flaked	6.78	2.90	Step	30	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chert	8.35	9.52	3.66	14.64	Crushed	-	-	Feather	20	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chert	13.23	8.67	4.90	15.20	Flaked	5.53	2.78	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chert	10.78	19.08	3.72	20.27	Flaked	2.89	1.35	Step	30	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	20.72	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	10.70	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	4.05	10.01	2.16	16.11	Cortical	8.35	2.59	Feather	80	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	16.35	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	20.08	6.52	1.21	20.08	Cortical	2.79	0.81	Feather	80	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Proximal Flake	Chert	-	-	-	11.39	Flaked	7.06	2.44	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	8.95	13.88	2.29	13.88	Flaked	5.81	1.90	Feather	100	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chert	8.84	14.07	2.63	20.24	Flaked	11.91	3.81	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chert	5.42	9.40	4.94	14.81	Flaked	6.82	3.87	Feather	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chert	-	-	-	12.80	-	-	-	-	50	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	17.58	-	-	-	-	20	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chert	-	-	-	15.46	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	13.97	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	15.57	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	16.54	8.39	3.99	16.54	Flaked	4.85	3.63	Feather	30	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chert	5.65	5.38	0.74	7.83	Cortical	4.99	1.00	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	17.56	-	-	-	-	60	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Proximal Flake	Chalcedony	-	-	-	11.56	Cortical	6.54	1.16	-	50	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chert	7.37	5.78	1.13	9.24	Flaked	5.50	0.79	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Proximal Flake	Chalcedony	-	-	-	8.96	Flaked	6.74	1.92	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	12.15	-	-	-	-	80	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	13.11	-	-	-	-	40	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chert	7.04	14.04	3.92	15.56	Cortical	5.32	4.49	Feather	50	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chert	-	-	-	9.90	-	-	-	-	20	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	11.90	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	12.46	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chert	-	-	-	15.13	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	18.13	-	-	-	-	80	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	9.89	6.98	4.07	12.49	Flaked	8.95	4.78	Hinge	30	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chert	8.82	12.03	2.91	15.80	Flaked	7.79	2.97	Hinge	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	13.29	8.75	2.63	16.53	Flaked	2.21	0.79	Feather	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Proximal Flake	Chert	-	-	-	16.28	Focal	2.39	0.79	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chert	17.46	8.87	2.78	17.98	Flaked	4.23	2.06	Step	40	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chert	-	-	-	16.70	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chert	-	-	-	16.54	-	-	-	-	100	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Proximal Flake	Chert	-	-	-	15.81	Flaked	18.44	1.69	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Distal Flake	Chert	-	-	-	22.09	-	-	-	Feather	90	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chert	-	-	-	16.98	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chert	-	-	-	11.59	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chert	-	-	-	15.62	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	12.38	6.46	3.55	16.16	Cortical	8.31	2.91	Feather	95	No bulb, lipped platform
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Flaked Fragment	Chert	-	-	-	18.48	-	-	-	-	50	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Flaked Fragment	Chalcedony	-	-	-	11.77	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Proximal Flake	Chert	-	-	-	11.69	Flaked	9.06	2.73	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	17.58	9.48	2.90	20.39	Cortical	2.48	1.30	Feather	50	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Distal Flake	Chalcedony	-	-	-	14.04	-	-	-	Step	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chert	12.24	6.05	1.29	13.91	Flaked	7.45	1.23	Step	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	9.87	10.78	3.66	14.06	Flaked	5.46	2.71	Feather	90	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Flaked Fragment	Chalcedony	-	-	-	18.73	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Flaked Fragment	Chalcedony	-	-	-	17.45	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Flaked Fragment	Chalcedony	-	-	-	9.20	-	-	-	-	30	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Flaked Fragment	Chalcedony	-	-	-	12.78	-	-	-	-	40	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Flaked Fragment	Chalcedony	-	-	-	10.50	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Flaked Fragment	Chalcedony	-	-	-	10.14	-	-	-	-	40	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	13.52	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chert	-	-	-	13.52	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Distal Flake	Chert	-	-	-	10.81	-	-	-	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Flaked Fragment	Chalcedony	-	-	-	12.95	-	-	-	-	40	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Flaked Fragment	Chalcedony	-	-	-	8.69	-	-	-	-	50	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Proximal Flake	Chert	-	-	-	11.49	Flaked	4.47	2.71	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Distal Flake	Chert	-	-	-	11.07	-	-	-	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chert	6.00	7.01	1.33	9.40	Flaked	5.28	1.19	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	6.24	6.95	1.63	10.09	Flaked	4.05	1.17	Feather	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Complete Flake	Chalcedony	6.85	7.78	0.80	7.78	Crushed	-	-	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	6.74	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chert	-	-	-	7.24	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chert	-	-	-	7.49	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chert	-	-	-	7.03	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	6.21	-	-	-	-	30	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Angular Fragment	Chalcedony	-	-	-	8.21	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Flaked Fragment	Chert	-	-	-	10.93	-	-	-	-	5	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Medial Flake	Chalcedony	-	-	-	9.62	-	-	-	-	5	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Flaked Fragment	Chert	-	-	-	9.29	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Flaked Fragment	Chert	-	-	-	8.50	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Flaked Fragment	Chalcedony	-	-	-	8.15	-	-	-	-	60	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Flaked Fragment	Chalcedony	-	-	-	7.63	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Flaked Fragment	Chalcedony	-	-	-	9.01	-	-	-	-	5	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Geometric Microlith	Chert	-	-	-	16.54	-	-	-	-	0	Retouch (backing) on platform margin= 664 mm, Retouch on right margin= 1,133 mm
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Geometric Microlith	Chert	-	-	-	26.25	Flaked	4.55	2.22	-	0	Retouch (backing) on right margin= 2,308 mm, cortex on right margin as well
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Geometric Microlith	Chalcedony	-	-	-	23.41	-	-	-	-	5	Retouch (backing) on platform margin= 907 mm, left margin= 1,708 mm
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Geometric Microlith	Chalcedony	-	-	-	22.95	-	-	-	-	0	Retouch (backing) on platform margin= 82 mm, left margin= 167 mm
19/12/2011	PAD 11	Mechanical Trench 1, Step A	400-600	Flaked Fragment	Chalcedony	-	-	-	14.10	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	600-800	Complete Flake	Chalcedony	11.36	23.29	4.77	26.57	Cortical	14.19	7.52	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	600-800	Angular Fragment	Chalcedony	-	-	-	14.02	-	-	-	-	30	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	600-800	Angular Fragment	Chalcedony	-	-	-	15.25	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	600-800	Flaked Fragment	Chert	-	-	-	12.44	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	600-800	Complete Flake	Chalcedony	8.92	8.06	1.92	15.16	Crushed	-	-	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	600-800	Angular Fragment	Chert	-	-	-	6.15	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	600-800	Medial Flake	Chert	-	-	-	11.92	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical	600-800	Angular Fragment	Chalcedony	-	-	-	12.87	-	-	-	-	100	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
		Trench 1, Step A													
19/12/2011	PAD 11	Mechanical Trench 1, Step A	600-800	Angular Fragment	Chalcedony	-	-	-	21.66	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	600-800	Angular Fragment	Chalcedony	-	-	-	10.59	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	600-800	Angular Fragment	Chalcedony	-	-	-	10.90	-	-	-	-	20	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	600-800	Angular Fragment	Chert	-	-	-	8.28	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	600-800	Angular Fragment	Chalcedony	-	-	-	12.17	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	600-800	Complete Flake	Chalcedony	11.36	23.29	4.77	26.57	Cortical	14.19	7.52	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	600-800	Angular Fragment	Chalcedony	-	-	-	14.02	-	-	-	-	30	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	600-800	Angular Fragment	Chalcedony	-	-	-	15.25	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	600-800	Flaked Fragment	Chert	-	-	-	12.44	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	600-800	Complete Flake	Chalcedony	8.92	8.06	1.92	15.16	Crushed	-	-	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	600-800	Angular Fragment	Chert	-	-	-	6.15	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	600-800	Medial Flake	Chert	-	-	-	11.92	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	600-800	Angular Fragment	Chalcedony	-	-	-	12.87	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	600-800	Angular Fragment	Chalcedony	-	-	-	21.66	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	600-800	Angular Fragment	Chalcedony	-	-	-	10.59	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	600-800	Angular Fragment	Chalcedony	-	-	-	10.90	-	-	-	-	20	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	600-800	Angular Fragment	Chert	-	-	-	8.28	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	600-800	Angular Fragment	Chalcedony	-	-	-	12.17	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Angular Fragment	Chalcedony	-	-	-	45.08	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Angular Fragment	Chert	-	-	-	30.64	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Angular Fragment	Chalcedony	-	-	-	16.91	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Angular Fragment	Chert	-	-	-	20.81	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Angular Fragment	Chalcedony	-	-	-	14.52	-	-	-	-	90	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Angular Fragment	Chert	-	-	-	15.59	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Angular Fragment	Chert	-	-	-	10.77	-	-	-	-	80	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Flaked Fragment	Chalcedony	-	-	-	29.02	-	-	-	-	30	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Complete Flake	Chert	14.33	7.30	2.48	17.56	Crushed	3.23	2.15	Axial	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Flaked Fragment	Chalcedony	-	-	-	12.44	-	-	-	-	5	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
		Trench 1, Step A													
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Flaked Fragment	Chert	-	-	-	8.49	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Distal Flake	Chert	-	-	-	15.60	-	-	-	Hinge	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Distal Flake	Chalcedony	-	-	-	8.39	-	-	-	Feather	90	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Proximal Flake	Chalcedony	-	-	-	16.30	Flaked	5.02	1.44	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Proximal Flake	Chalcedony	-	-	-	7.95	Flaked	3.62	1.50	-	50	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Longitudinally Split Flake	Chert	-	-	-	31.28	-	-	-	Feather	0	Left side; possible previous core platform
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Longitudinally Split Flake	Chert	-	-	-	16.25	-	-	-	Step	80	Left side
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Complete Flake	Chalcedony	29.95	37.39	6.52	41.35	Flaked	10.25	4.02	Feather	85	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Complete Flake	Chalcedony	22.92	21.12	7.22	28.90	Flaked	12.90	1.46	Feather	5	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Complete Flake	Chert	14.84	25.58	3.79	28.58	Flaked	12.07	10.34	Feather	2	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Complete Flake	Chert	12.68	17.90	4.38	24.46	Flaked	12.30	3.46	Feather	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Complete Flake	Chalcedony	22.22	20.56	6.35	22.22	Flaked	8.53	8.08	Hinge	95	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Complete Flake	Chert	11.25	12.29	2.13	23.10	Cortical	6.70	2.62	Step	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Complete Flake	Chalcedony	15.87	14.74	1.61	20.56	Flaked	17.64	3.47	Feather	95	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Complete Flake	Chalcedony	13.23	15.57	3.08	18.82	Flaked	4.59	1.89	Step	5	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Complete Flake	Chalcedony	6.85	8.09	2.47	10.48	Flaked	4.28	2.56	Feather	20	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Complete Flake	Chert	7.46	9.05	1.37	10.48	Flaked	7.07	1.58	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Multi-platform Core	Chert	-	-	-	59.72	-	-	-	-	60	Platform 1= 4 scars, Platform 2= 2 scars, Platforms= 1
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Single Platform Core	Chalcedony	-	-	-	34.15	-	-	-	-	90	Platform 1= 2 scars
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Single Platform Core	Chalcedony	-	-	-	31.89	-	-	-	-	5	Platform 1= 3 scars
19/12/2011	PAD 11	Mechanical Trench 1, Step A	800-1050	Single Platform Core	Chalcedony	-	-	-	22.53	-	-	-	-	90	Platform 1= 1 scar
19/12/2011	PAD 11	Mechanical Trench 1, Step B	200-400	Muller	River Cobble	-	-	-	71.46	-	-	-	-	0	Smoothed surfaced= 6,712 mm x 5,694 mm, pitted surface= 3,963 mm x 1,438 mm, raw material possibly silcrete
19/12/2011	PAD 11	Mechanical Trench 1, Step B	200-400	Longitudinally Split Flake	Chert	-	-	-	23.09	Flaked	-	-	-	0	Left proximal
19/12/2011	PAD 11	Mechanical Trench 1, Step B	200-400	Distal Flake	Chalcedony	-	-	-	14.47	-	-	-	Feather	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step B	200-400	Distal Flake	Chalcedony	-	-	-	13.17	-	-	-	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step B	200-400	Angular Fragment	Chalcedony	-	-	-	8.96	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step B	200-400	Angular Fragment	Chert	-	-	-	15.05	-	-	-	-	100	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
		Trench 1, Step B													
19/12/2011	PAD 11	Mechanical Trench 1, Step B	200-400	Angular Fragment	Chalcedony	-	-	-	10.89	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step B	200-400	Angular Fragment	Chalcedony	-	-	-	11.35	-	-	-	-	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step B	200-400	Flaked Fragment	Chalcedony	-	-	-	21.25	-	-	-	-	60	
19/12/2011	PAD 11	Mechanical Trench 1, Step B	200-400	Complete Flake	Chalcedony	10.54	16.00	4.34	17.81	Flaked	13.38	3.48	Feather	80	
19/12/2011	PAD 11	Mechanical Trench 1, Step B	200-400	Complete Flake	Chert	7.59	6.37	3.37	8.76	Flaked	5.42	3.66	Feather	60	
19/12/2011	PAD 11	Mechanical Trench 1, Step B	200-400	Complete Flake	Chalcedony	22.43	23.26	1.52	25.84	Crushed	-	-	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step B	200-400	Complete Flake	Chert	17.44	9.52	2.61	21.95	Flaked	4.12	2.80	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step B	200-400	Complete Flake	Chalcedony	8.08	10.29	1.85	13.05	Cortical	5.15	2.18	Feather	30	
19/12/2011	PAD 11	Mechanical Trench 1, Step B	200-400	Angular Fragment	Chert	-	-	-	23.70	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step B	200-400	Flaked Fragment	Chalcedony	-	-	-	13.80	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step B	200-400	Complete Flake	Chert	16.62	15.19	3.35	22.62	Flaked	4.45	2.72	Step	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step B	200-400	Complete Flake	Chert	30.46	12.63	2.96	15.82	Flaked	6.52	3.52	Hinge	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step B	200-400	Complete Flake	Chert	12.99	11.39	2.60	18.01	Cortical	12.92	3.29	Feather	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step B	200-400	Complete Flake	Chalcedony	10.12	6.17	2.54	10.75	Flaked	5.15	1.26	Hinge	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step B	200-400	Flaked Fragment	Chert	-	-	-	15.16	-	-	-	-	20	
19/12/2011	PAD 11	Mechanical Trench 1, Step B	200-400	Proximal Flake	Chalcedony	-	-	-	10.98	Cortical	3.99	2.17	-	70	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Angular Fragment	Chalcedony	-	-	-	53.70	-	-	-	-	90	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Angular Fragment	Chalcedony	-	-	-	71.80	-	-	-	-	70	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Angular Fragment	Chalcedony	-	-	-	51.10	-	-	-	-	70	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Angular Fragment	Chalcedony	-	-	-	49.80	-	-	-	-	20	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Angular Fragment	Chert	-	-	-	15.20	-	-	-	-	60	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Angular Fragment	Chert	-	-	-	62.40	-	-	-	-	80	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Angular Fragment	Chert	-	-	-	17.30	-	-	-	-	100	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Angular Fragment	Chalcedony	-	-	-	19.50	-	-	-	-	60	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Flaked Fragment	Chalcedony	-	-	-	35.80	-	-	-	-	20	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Flaked Fragment	Chalcedony	-	-	-	24.00	-	-	-	-	50	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Angular Fragment	Chalcedony	-	-	-	11.00	-	-	-	-	80	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Angular Fragment	Chalcedony	-	-	-	18.50	-	-	-	-	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
		Trench 1, Step B													
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Angular Fragment	Chert	-	-	-	11.00	-	-	-	-	50	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Angular Fragment	Chalcedony	-	-	-	21.30	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Angular Fragment	Chalcedony	-	-	-	14.90	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Flaked Fragment	Chalcedony	-	-	-	12.20	-	-	-	-	50	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Flaked Fragment	Chert	-	-	-	6.80	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Flaked Fragment	Chert	-	-	-	10.00	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Flaked Fragment	Chert	-	-	-	15.20	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Flaked Fragment	Chalcedony	-	-	-	10.00	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Medial Flake	Chalcedony	-	-	-	10.50	-	-	-	-	50	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Flaked Fragment	Chalcedony	-	-	-	17.30	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Angular Fragment	Chert	-	-	-	12.50	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Angular Fragment	Chalcedony	-	-	-	13.10	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Angular Fragment	Chalcedony	-	-	-	8.20	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Angular Fragment	Chalcedony	-	-	-	12.20	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Flaked Fragment	Chalcedony	-	-	-	20.60	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Angular Fragment	Chalcedony	-	-	-	12.00	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Angular Fragment	Chalcedony	-	-	-	8.40	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Medial Flake	Chalcedony	-	-	-	20.00	-	-	-	-	30	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Complete Flake	Chert	34.00	17.40	7.00	35.70	Flaked	14.20	3.90	Hinge	50	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Medial Flake	Chert	-	-	-	18.50	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Medial Flake	Chert	-	-	-	18.50	-	-	-	-	30	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Angular Fragment	Chalcedony	-	-	-	14.90	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Flaked Fragment	Chert	-	-	-	12.70	-	-	-	-	30	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Medial Flake	Chert	-	-	-	11.20	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Distal Flake	Chalcedony	-	-	-	16.70	-	-	-	Feather	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Flaked Fragment	Chert	-	-	-	10.30	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Medial Flake	Chalcedony	-	-	-	18.20	-	-	-	-	50	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Medial Flake	Chalcedony	-	-	-	13.50	-	-	-	-	20	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
		Trench 1, Step B													
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Distal Flake	Chalcedony	-	-	-	13.10	-	-	-	Feather	20	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Angular Fragment	Chalcedony	-	-	-	9.40	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Flaked Fragment	Chalcedony	-	-	-	9.00	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Angular Fragment	Chert	-	-	-	9.50	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Proximal Flake	Chalcedony	-	-	-	7.90	Flaked	7.60	1.20	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Angular Fragment	Chert	-	-	-	8.00	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Angular Fragment	Chalcedony	-	-	-	8.80	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Angular Fragment	Chert	-	-	-	8.10	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Proximal Flake	Chert	-	-	-	16.60	Flaked	11.30	3.40	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Medial Flake	Chert	-	-	-	14.70	-	-	-	-	0	Blade
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Flaked Fragment	Chert	-	-	-	15.30	-	-	-	-	20	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Medial Flake	Chert	-	-	-	15.00	-	-	-	-	10	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Flaked Fragment	Chalcedony	-	-	-	19.70	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Medial Flake	Chert	-	-	-	13.60	-	-	-	-	20	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Distal Flake	Chert	-	-	-	14.50	-	-	-	Feather	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Distal Flake	Chalcedony	-	-	-	13.30	-	-	-	Feather	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Flaked Fragment	Chalcedony	-	-	-	11.70	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Complete Flake	Chalcedony	9.50	4.80	1.00	9.70	Cortical	5.90	1.90	Feather	10	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Proximal Flake	Chert	-	-	-	12.40	Flaked	4.00	1.10	-	100	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Flaked Fragment	Chert	-	-	-	12.10	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Distal Flake	Chalcedony	-	-	-	18.10	-	-	-	Feather	50	Blade
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Complete Flake	Chalcedony	24.10	24.50	6.80	33.10	Flaked	10.90	3.60	Feather	10	Overhang removal
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Single Platform Core	Chalcedony	-	-	-	41.20	-	-	-	-	40	3 complete scars
19/12/2012	PAD 11	Mechanical Trench 1, Step B	400-600	Geometric Microlith	Chert	-	-	-	17.30	-	-	-	-	0	Retouch on right margin (143 mm). Retouch on proximal margin (86 mm)
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Angular Fragment	Chalcedony	-	-	-	36.40	-	-	-	-	80	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Angular Fragment	Chalcedony	-	-	-	27.30	-	-	-	-	90	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Multi-platform Core	Chert	-	-	-	19.20	-	-	-	-	20	3 complete scars/2 complete scars

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Angular Fragment	Chert	-	-	-	47.20	-	-	-	-	15	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Proximal Flake	Chert	-	-	-	28.70	Cortical	25.70	7.70	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Angular Fragment	Chert	-	-	-	15.20	-	-	-	-	95	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Flaked Fragment	Chert	-	-	-	12.10	-	-	-	-	30	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Distal Flake	Chalcedony	-	-	-	15.30	-	-	-	Feather	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Flaked Fragment	Chalcedony	-	-	-	20.40	-	-	-	-	20	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Angular Fragment	Chalcedony	-	-	-	18.50	-	-	-	-	40	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Angular Fragment	Chalcedony	-	-	-	26.60	-	-	-	-	95	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Complete Flake	Chert	17.10	9.00	4.10	17.10	-	-	-	-	0	Retouch - left margin 164 mm
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Angular Fragment	Chalcedony	-	-	-	23.80	-	-	-	-	20	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Distal Flake	Chert	-	-	-	31.40	-	-	-	Feather	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Proximal Flake	Chert	-	-	-	18.00	Cortical	8.40	3.60	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Angular Fragment	Chert	-	-	-	16.40	-	-	-	-	30	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Distal Flake	Chert	-	-	-	14.80	-	-	-	Feather	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Complete Flake	Chert	29.40	15.40	5.30	30.10	Flaked	14.80	5.50	Feather	10	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Complete Flake	Chert	19.70	12.50	3.60	21.30	Cortical	9.00	3.10	Feather	80	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Angular Fragment	Chalcedony	-	-	-	13.20	-	-	-	-	50	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Proximal Flake	Chalcedony	-	-	-	26.70	Flaked	17.60	6.30	-	20	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Distal Flake	Chalcedony	-	-	-	20.70	-	-	-	Feather	10	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Flaked Fragment	Chalcedony	-	-	-	30.90	-	-	-	-	60	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Angular Fragment	Chert	-	-	-	8.70	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Medial Flake	Chert	-	-	-	18.70	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Distal Flake	Chert	-	-	-	11.50	-	-	-	Hinge	40	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Angular Fragment	Chalcedony	-	-	-	18.20	-	-	-	-	95	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Angular Fragment	Chert	-	-	-	10.20	-	-	-	-	80	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Flaked Fragment	Chert	-	-	-	15.70	-	-	-	-	60	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Angular Fragment	Chalcedony	-	-	-	16.40	-	-	-	-	80	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Distal Flake	Chert	-	-	-	21.70	-	-	-	Hinge	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Complete Flake	Chert	22.50	10.00	2.70	22.90	Flaked	9.30	2.10	Feather	0	Blade
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Proximal Flake	Chalcedony	-	-	-	16.10	Flaked	3.80	4.20	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Angular Fragment	Chalcedony	-	-	-	9.50	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Proximal Flake	Chert	-	-	-	16.60	Flaked	7.00	1.00	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Proximal Flake	Chert	-	-	-	12.50	Flaked	9.60	2.50	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Angular Fragment	Chert	-	-	-	9.60	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Angular Fragment	Chert	-	-	-	5.70	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Proximal Flake	Chert	-	-	-	18.40	Flaked	6.70	3.90	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Complete Flake	Chalcedony	13.90	9.90	2.60	13.90	Flaked	7.00	2.60	Feather	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Flaked Fragment	Chert	-	-	-	19.50	-	-	-	-	20	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Flaked Fragment	Chert	-	-	-	17.50	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Flaked Fragment	Chert	-	-	-	12.10	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Flaked Fragment	Chert	-	-	-	11.10	-	-	-	-	10	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Flaked Fragment	Chert	-	-	-	13.30	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Medial Flake	Chalcedony	-	-	-	15.70	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Flaked Fragment	Chalcedony	-	-	-	13.90	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Flaked Fragment	Chert	-	-	-	11.50	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Distal Flake	Chert	-	-	-	21.80	-	-	-	Hinge	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Complete Flake	Chert	9.60	9.00	1.20	9.60	Flaked	3.60	1.30	Feather	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Flaked Fragment	Chert	-	-	-	11.60	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Flaked Fragment	Chert	-	-	-	8.30	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Flaked Fragment	Chalcedony	-	-	-	12.70	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Flaked Fragment	Chert	-	-	-	13.40	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Flaked Fragment	Chert	-	-	-	15.40	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Flaked Fragment	Chert	-	-	-	10.40	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Proximal Flake	Chert	-	-	-	13.40	Flaked	8.80	1.90	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Flaked Fragment	Chert	-	-	-	9.30	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Flaked Fragment	Chalcedony	-	-	-	7.20	-	-	-	-	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Angular Fragment	Chalcedony	-	-	-	9.90	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Flaked Fragment	Chert	-	-	-	12.10	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Flaked Fragment	Chalcedony	-	-	-	12.40	-	-	-	-	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Complete Flake	Chert	34.40	14.50	4.20	47.80	Crushed	13.00	1.90	Plunge	30	
19/12/2012	PAD 11	Mechanical Trench 1, Step B	600-800	Complete Flake	Chalcedony	16.80	16.00	3.80	17.50	Flaked	8.00	2.00	Plunge	0	Gullwing and overhang removal
19/12/2012	PAD 11	Mechanical Trench 1, Step C	200-400	Angular Fragment	Chalcedony	-	-	-	17.00	-	-	-	-	40	
19/12/2012	PAD 11	Mechanical Trench 1, Step C	200-400	Angular Fragment	Chalcedony	-	-	-	16.30	-	-	-	-	40	
19/12/2012	PAD 11	Mechanical Trench 1, Step C	200-400	Angular Fragment	Chalcedony	-	-	-	18.30	-	-	-	-	80	
19/12/2012	PAD 11	Mechanical Trench 1, Step C	200-400	Angular Fragment	Chalcedony	-	-	-	18.50	-	-	-	-	80	
19/12/2012	PAD 11	Mechanical Trench 1, Step C	200-400	Distal Flake	Chalcedony	-	-	-	15.00	-	-	-	Feather	20	
19/12/2012	PAD 11	Mechanical Trench 1, Step C	200-400	Angular Fragment	Chalcedony	-	-	-	11.90	-	-	-	-	30	
19/12/2012	PAD 11	Mechanical Trench 1, Step C	200-400	Angular Fragment	Chalcedony	-	-	-	15.60	-	-	-	-	80	
19/12/2012	PAD 11	Mechanical Trench 1, Step C	200-400	Angular Fragment	Chert	-	-	-	8.70	-	-	-	-	60	
19/12/2012	PAD 11	Mechanical Trench 1, Step C	200-400	Angular Fragment	Chalcedony	-	-	-	8.70	-	-	-	-	60	
19/12/2012	PAD 11	Mechanical Trench 1, Step C	200-400	Distal Flake	Chalcedony	-	-	-	23.10	-	-	-	Feather	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step C	200-400	Distal Flake	Chalcedony	-	-	-	16.80	-	-	-	Feather	0	
19/12/2012	PAD 11	Mechanical Trench 1, Step C	200-400	Proximal Flake	Chalcedony	-	-	-	11.80	Flaked	8.10	0.90	-	0	Gullwing
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	31.40	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chalcedony	-	-	-	56.00	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	28.30	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	15.80	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	23.10	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chalcedony	-	-	-	15.60	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Quartz	-	-	-	24.50	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Complete Flake	Chalcedony	21.00	13.70	3.30	21.50	Flaked	6.10	2.60	Feather	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Proximal Flake	Chalcedony	-	-	-	11.60	Flaked	4.80	1.40	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Complete Flake	Chert	29.30	16.80	3.90	30.40	Flaked	16.60	4.50	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Proximal Flake	Chert	-	-	-	20.00	-	-	-	Feather	10	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	20.20	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Proximal Flake	Chert	-	-	-	13.10	Flaked	4.60	1.60	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	24.00	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	18.80	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	10.20	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Complete Flake	Chalcedony	16.20	7.80	3.50	16.20	Flaked	5.30	2.00	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Medial Flake	Chalcedony	-	-	-	19.30	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Complete Flake	Chalcedony	12.30	6.80	2.90	15.00	Cortical	7.20	2.10	Feather	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chalcedony	-	-	-	13.80	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chalcedony	-	-	-	16.90	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chalcedony	-	-	-	14.10	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Proximal Flake	Chalcedony	-	-	-	21.30	Flaked	11.20	4.30	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Proximal Flake	Chalcedony	-	-	-	17.70	Crushed	6.20	1.70	-	0	Overhang removal
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Proximal Flake	Chert	-	-	-	15.90	Flaked	8.00	3.10	-	50	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	19.70	-	-	-	-	60	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	17.30	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Complete Flake	Chert	25.30	14.90	3.60	26.90	Flaked	11.50	4.20	Feather	60	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chalcedony	-	-	-	13.30	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	10.10	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	10.40	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	9.90	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	14.40	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Distal Flake	Chalcedony	-	-	-	13.90	-	-	-	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Distal Flake	Chert	-	-	-	14.10	-	-	-	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Complete Flake	Chert	23.50	12.30	3.00	24.00	Flaked	7.40	1.60	Feather	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Complete Flake	Chert	25.50	15.40	5.00	28.60	Flaked	12.80	1.70	Plunge	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Quartz	-	-	-	13.90	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	28.80	-	-	-	-	40	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chalcedony	-	-	-	16.20	-	-	-	-	15	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Medial Flake	Chalcedony	-	-	-	17.50	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chalcedony	-	-	-	9.80	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Complete Flake	Chert	12.30	6.10	1.90	12.30	Flaked	4.90	2.20	Feather	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Complete Flake	Chert	21.10	21.30	2.90	23.20	Flaked	11.40	1.90	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Complete Flake	Chert	18.30	16.6	1.90	18.90	Focal	3.40	1.70	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Complete Flake	Chert	24.80	24.30	2.70	26.30	Flaked	19.00	2.54	Feather	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	11.20	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chalcedony	-	-	-	12.10	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Complete Flake	Chalcedony	8.40	9.20	1.70	10.60	Flaked	9.90	1.10	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Longitudinally Split Flake	Chert	-	-	-	37.80	Flaked	-	-	Feather	80	Left side
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	31.40	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chalcedony	-	-	-	56.00	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	28.30	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	15.80	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	23.10	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chalcedony	-	-	-	15.60	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Quartz	-	-	-	24.50	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Complete Flake	Chalcedony	21.00	13.70	3.30	21.50	Flaked	6.10	2.60	Feather	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Proximal Flake	Chalcedony	-	-	-	11.60	Flaked	4.80	1.40	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Complete Flake	Chert	29.30	16.80	3.90	30.40	Flaked	16.60	4.50	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Proximal Flake	Chert	-	-	-	20.00	-	-	-	Feather	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	20.20	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Proximal Flake	Chert	-	-	-	13.10	Flaked	4.60	1.60	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	24.00	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	18.80	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	10.20	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Complete Flake	Chalcedony	16.20	7.80	3.50	16.20	Flaked	5.30	2.00	Feather	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Medial Flake	Chalcedony	-	-	-	19.30	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Complete Flake	Chalcedony	12.30	6.80	2.90	15.00	Cortical	7.20	2.10	Feather	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chalcedony	-	-	-	13.80	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chalcedony	-	-	-	16.90	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chalcedony	-	-	-	14.10	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Proximal Flake	Chalcedony	-	-	-	21.30	Flaked	11.20	4.30	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Proximal Flake	Chalcedony	-	-	-	17.70	Crushed	6.20	1.70	-	0	Overhang removal
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Proximal Flake	Chert	-	-	-	15.90	Flaked	8.00	3.10	-	50	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	19.70	-	-	-	-	60	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	17.30	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Complete Flake	Chert	25.30	14.90	3.60	26.90	Flaked	11.50	4.20	Feather	60	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chalcedony	-	-	-	13.30	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	10.10	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	10.40	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	9.90	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	14.40	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Distal Flake	Chalcedony	-	-	-	13.90	-	-	-	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Distal Flake	Chert	-	-	-	14.10	-	-	-	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Complete Flake	Chert	23.50	12.30	3.00	24.00	Flaked	7.40	1.60	Feather	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Complete Flake	Chert	25.50	15.40	5.00	28.60	Flaked	12.80	1.70	Plunge	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Quartz	-	-	-	13.90	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	28.80	-	-	-	-	40	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chalcedony	-	-	-	16.20	-	-	-	-	15	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Medial Flake	Chalcedony	-	-	-	17.50	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chalcedony	-	-	-	9.80	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Complete Flake	Chert	12.30	6.10	1.90	12.30	Flaked	4.90	2.20	Feather	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Complete Flake	Chert	21.10	21.30	2.90	23.20	Flaked	11.40	1.90	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Complete Flake	Chert	18.30	16.6	1.90	18.90	Focal	3.40	1.70	Feather	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Complete Flake	Chert	24.80	24.30	2.70	26.30	Flaked	19.00	2.54	Feather	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chert	-	-	-	11.20	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Angular Fragment	Chalcedony	-	-	-	12.10	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Complete Flake	Chalcedony	8.40	9.20	1.70	10.60	Flaked	9.90	1.10	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	200-400	Longitudinally Split Flake	Chert	-	-	-	37.80	Flaked	-	-	Feather	80	Left side
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Angular Fragment	Chalcedony	-	-	-	50.60	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Complete Flake	Chert	43.10	40.50	14.70	58.80	Flaked	27.50	10.90	Feather	80	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Flaked Fragment	Chalcedony	-	-	-	49.50	-	-	-	-	60	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Flaked Fragment	Chert	-	-	-	30.40	-	-	-	-	30	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Single Platform Core	Chert	-	-	-	30.80	-	-	-	-	60	4 scars
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Angular Fragment	Chalcedony	-	-	-	27.20	-	-	-	-	60	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Medial Flake	Chert	-	-	-	23.10	-	-	-	-	60	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Proximal Flake	Chert	-	-	-	18.30	Flaked	13.80	4.10	-	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Proximal Flake	Chalcedony	-	-	-	15.00	Flaked	13.00	2.50	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Complete Flake	Chert	19.10	13.40	2.40	18.90	Flaked	5.10	2.00	Feather	0	Overhang removal
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Flaked Fragment	Chert	-	-	-	24.20	-	-	-	-	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Angular Fragment	Chert	-	-	-	21.00	-	-	-	-	60	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Complete Flake	Chert	16.30	9.80	2.70	16.90	Flaked	9.80	2.70	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Complete Flake	Chalcedony	24.80	12.50	4.50	25.10	Faceted	12.20	4.50	Feather	20	Overhang removal
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Distal Flake	Chalcedony	-	-	-	31.50	-	-	-	Feather	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Complete Flake	Chalcedony	36.90	14.30	3.90	37.30	Cortical	7.00	3.80	Feather	20	3 scars on dorsal side
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Angular Fragment	Chert	-	-	-	20.30	-	-	-	-	50	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Flaked Fragment	Chert	-	-	-	17.90	-	-	-	-	20	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Flaked Fragment	Chert	-	-	-	12.30	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Flaked Fragment	Chalcedony	-	-	-	25.70	-	-	-	-	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Proximal Flake	Chert	-	-	-	10.50	Flaked	6.20	2.50	-	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Angular Fragment	Chert	-	-	-	18.90	-	-	-	-	30	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Medial Flake	Chalcedony	-	-	-	13.60	-	-	-	-	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Flaked Fragment	Chalcedony	-	-	-	13.60	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Proximal Flake	Chert	-	-	-	21.00	Flaked	10.20	3.40	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Complete Flake	Chalcedony	8.10	7.20	1.10	9.90	Flaked	4.50	1.20	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Flaked Fragment	Chert	-	-	-	15.30	-	-	-	-	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Angular Fragment	Chert	-	-	-	19.30	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Angular Fragment	Chalcedony	-	-	-	50.60	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Complete Flake	Chert	43.10	40.50	14.70	58.80	Flaked	27.50	10.90	Feather	80	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Flaked Fragment	Chalcedony	-	-	-	49.50	-	-	-	-	60	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Flaked Fragment	Chert	-	-	-	30.40	-	-	-	-	30	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Single Platform Core	Chert	-	-	-	30.80	-	-	-	-	60	4 scars
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Angular Fragment	Chalcedony	-	-	-	27.20	-	-	-	-	60	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Medial Flake	Chert	-	-	-	23.10	-	-	-	-	60	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Proximal Flake	Chert	-	-	-	18.30	Flaked	13.80	4.10	-	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Proximal Flake	Chalcedony	-	-	-	15.00	Flaked	13.00	2.50	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Complete Flake	Chert	19.10	13.40	2.40	18.90	Flaked	5.10	2.00	Feather	0	Overhang removal
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Flaked Fragment	Chert	-	-	-	24.20	-	-	-	-	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Angular Fragment	Chert	-	-	-	21.00	-	-	-	-	60	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Complete Flake	Chert	16.30	9.80	2.70	16.90	Flaked	9.80	2.70	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Complete Flake	Chalcedony	24.80	12.50	4.50	25.10	Faceted	12.20	4.50	Feather	20	Overhang removal
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Distal Flake	Chalcedony	-	-	-	31.50	-	-	-	Feather	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Complete Flake	Chalcedony	36.90	14.30	3.90	37.30	Cortical	7.00	3.80	Feather	20	3 scars on dorsal side
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Angular Fragment	Chert	-	-	-	20.30	-	-	-	-	50	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Flaked Fragment	Chert	-	-	-	17.90	-	-	-	-	20	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Flaked Fragment	Chert	-	-	-	12.30	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Flaked Fragment	Chalcedony	-	-	-	25.70	-	-	-	-	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Proximal Flake	Chert	-	-	-	10.50	Flaked	6.20	2.50	-	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Angular Fragment	Chert	-	-	-	18.90	-	-	-	-	30	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Medial Flake	Chalcedony	-	-	-	13.60	-	-	-	-	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Flaked Fragment	Chalcedony	-	-	-	13.60	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Proximal Flake	Chert	-	-	-	21.00	Flaked	10.20	3.40	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Complete Flake	Chalcedony	8.10	7.20	1.10	9.90	Flaked	4.50	1.20	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Flaked Fragment	Chert	-	-	-	15.30	-	-	-	-	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Angular Fragment	Chert	-	-	-	19.30	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Angular Fragment	Chalcedony	-	-	-	15.80	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Angular Fragment	Chert	-	-	-	15.40	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Angular Fragment	Chalcedony	-	-	-	8.90	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Complete Flake	Chalcedony	8.80	10.10	2.70	10.90	Flaked	3.50	2.20	Feather	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Distal Flake	Chert	-	-	-	11.70	-	-	-	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Complete Flake	Chert	23.80	15.50	5.60	24.50	Flaked	5.70	2.70	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Flaked Fragment	Chalcedony	-	-	-	12.00	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Flaked Fragment	Chert	-	-	-	11.80	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Flaked Fragment	Chalcedony	-	-	-	14.60	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Complete Flake	Chalcedony	13.50	7.70	2.50	16.90	Flaked	12.50	2.00	Feather	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Flaked Fragment	Chert	-	-	-	13.00	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Medial Flake	Chert	-	-	-	14.60	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Flaked Fragment	Chert	-	-	-	16.10	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Medial Flake	Chert	-	-	-	11.50	-	-	-	-	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Proximal Flake	Chert	-	-	-	10.10	Flaked	10.90	4.00	-	20	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	400-600	Proximal Flake	Chert	-	-	-	19.90	Flaked	9.50	2.20	-	10	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Complete Flake	Chalcedony	40.58	31.02	13.88	47.31	Flaked	18.67	3.45	Hinge?	20	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Complete Flake	Chert	21.86	14.28	1.88	26.37	Flaked	7.74	1.67	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Distal Flake	Silcrete	-	-	-	25.35	-	-	-	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Longitudinally Split Flake	Chert	11.81	-	-	20.16	Flaked	11.12	1.38	Feather	0	Left side
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Complete Flake	Chalcedony	10.09	8.12	3.09	12.33	Flaked	8.02	2.12	Step	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Complete Flake	Chert	11.72	8.95	1.66	13.34	Flaked	3.95	1.66	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Complete Flake	Chalcedony	8.78	17.56	2.17	20.67	Cortical	8.11	1.36	Feather	5	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Flaked Fragment	Chalcedony	-	-	-	36.04	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Proximal Flake	Chalcedony	-	-	-	14.27	Flaked	9.77	3.95	-	5	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Complete Flake	Chalcedony	7.99	6.73	1.23	11.83	Crushed	-	-	Step	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Medial Flake	Chert	-	-	-	11.02	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Angular Fragment	Chert	-	-	-	12.13	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Complete Flake	Chalcedony	9.07	6.26	1.76	10.89	Flaked	6.89	2.26	Step	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Distal Flake	Chalcedony	-	-	-	12.02	-	-	-	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Distal Flake	Chert	-	-	-	7.45	-	-	-	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Complete Flake	Chert	7.92	5.76	1.26	8.57	Flaked	3.80	0.85	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Angular Fragment	Chalcedony	-	-	-	22.06	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Complete Flake	Chalcedony	40.58	31.02	13.88	47.31	Flaked	18.67	3.45	Hinge?	20	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Complete Flake	Chert	21.86	14.28	1.88	26.37	Flaked	7.74	1.67	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Distal Flake	Silcrete	-	-	-	25.35	-	-	-	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Longitudinally Split Flake	Chert	11.81	-	-	20.16	Flaked	11.12	1.38	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Complete Flake	Chalcedony	10.09	8.12	3.09	12.33	Flaked	8.02	2.12	Step	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Complete Flake	Chert	11.72	8.95	1.66	13.34	Flaked	3.95	1.66	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Complete Flake	Chalcedony	8.78	17.56	2.17	20.67	Cortical	8.11	1.36	Feather	5	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Flaked Fragment	Chalcedony	-	-	-	36.04	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Proximal Flake	Chalcedony	-	-	-	14.27	Flaked	9.77	3.95	-	5	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Complete Flake	Chalcedony	7.99	6.73	1.23	11.83	Crushed	-	-	Step	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Medial Flake	Chert	-	-	-	11.02	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Angular Fragment	Chert	-	-	-	12.13	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Complete Flake	Chalcedony	9.07	6.26	1.76	10.89	Flaked	6.89	2.26	Step	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Distal Flake	Chalcedony	-	-	-	12.02	-	-	-	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Distal Flake	Chert	-	-	-	7.45	-	-	-	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Complete Flake	Chert	7.92	5.76	1.26	8.57	Flaked	3.80	0.85	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Step D	600-800	Angular Fragment	Chalcedony	-	-	-	22.06	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	51.00	-	-	-	-	80	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	47.50	-	-	-	-	70	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Complete Flake	Chert	36.00	38.30	7.40	49.30	Flaked	39.50	8.00	-	90	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	43.80	-	-	-	-	20	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chert	-	-	-	35.70	-	-	-	-	60	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	20.30	-	-	-	-	40	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	37.40	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Complete Flake	Chert	41.80	32.50	13.50	44.30	Cortical	34.10	15.00	Feather	100	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	20.60	-	-	-	-	80	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chalcedony	-	-	-	27.40	-	-	-	-	60	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	43.40	-	-	-	-	90	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chalcedony	-	-	-	35.20	-	-	-	-	60	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Distal Flake	Chalcedony	-	-	-	36.30	-	-	-	Feather	30	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	12.90	-	-	-	-	40	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	21.20	-	-	-	-	60	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	33.20	-	-	-	-	70	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	31.90	-	-	-	-	70	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	33.50	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	17.20	-	-	-	-	70	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	16.10	-	-	-	-	60	
19/12/2011	PAD 11	Mechanical	-	Angular Fragment	Chalcedony	-	-	-	21.90	-	-	-	-	50	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
		Trench 1, Wall Collapse													
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chalcedony	-	-	-	43.50	-	-	-	-	40	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chalcedony	-	-	-	24.60	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chalcedony	-	-	-	31.10	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Multi-platform Core	Chert	-	-	-	27.80	-	-	-	-	10	Platform one: 4 complete scars - platform 2: 1 complete scar - platform 3: 1 complete scar
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Single Platform Core	Chalcedony	-	-	-	18.90	-	-	-	-	0	Three complete scars
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	31.20	-	-	-	-	40	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	29.40	-	-	-	-	60	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Complete Flake	Chert	29.70	12.00	3.20	29.90	Flaked	9.00	2.70	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chert	-	-	-	26.00	-	-	-	-	40	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	28.10	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Distal Flake	Chalcedony	-	-	-	28.50	-	-	-	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	25.80	-	-	-	-	60	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	25.90	-	-	-	-	60	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chert	-	-	-	36.10	-	-	-	-	30	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	32.40	-	-	-	-	80	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Distal Flake	Chalcedony	-	-	-	20.10	-	-	-	Feather	10	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Complete Flake	Chert	23.30	9.00	4.50	24.00	Cortical	14.10	4.30	Feather	30	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chert	-	-	-	21.10	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Longitudinally Split Flake	Chert	-	-	-	19.20	Flaked	-	-	Hinge	80	Left side

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
		Collapse													
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Medial Flake	Chert	-	-	-	13.90	-	-	-	-	10	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chert	-	-	-	22.50	-	-	-	-	20	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	25.30	-	-	-	-	60	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	19.80	-	-	-	-	30	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	19.40	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chalcedony	-	-	-	25.30	-	-	-	-	70	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chalcedony	-	-	-	15.90	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	22.00	-	-	-	-	60	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chert	-	-	-	8.50	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	7.90	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Complete Flake	Chalcedony	13.20	7.10	1.80	16.20	Flaked	8.90	2.80	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Proximal Flake	Chalcedony	-	-	-	16.50	Flaked	16.50	3.20	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Complete Flake	Chert	25.70	15.30	4.10	27.30	Cortical	9.90	3.90	Feather	20	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Complete Flake	Chert	26.40	10.80	3.90	27.80	Flaked	6.30	2.10	Plunge	0	6 complete scars on dorsal surface and overhang removal
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	21.60	-	-	-	-	40	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Complete Flake	Chert	16.50	16.80	3.20	17.70	Flaked	12.60	2.80	Feather	20	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	17.50	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	13.30	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chert	-	-	-	9.60	-	-	-	-	20	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	16.40	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Distal Flake	Chalcedony	-	-	-	9.50	-	-	-	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	23.90	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chert	-	-	-	17.10	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Proximal Flake	Chert	-	-	-	15.50	Flaked	10.50	3.20	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Distal Flake	Chert	-	-	-	25.60	-	-	-	Feather	20	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	21.50	-	-	-	-	40	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	15.10	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chert	-	-	-	18.90	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	18.50	-	-	-	-	60	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Complete Flake	Chert	14.10	7.50	2.20	15.10	Flaked	8.00	3.30	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	20.30	-	-	-	-	50	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	19.10	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	10.70	-	-	-	-	30	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	8.50	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Longitudinally Split Flake	Chert	-	-	-	17.90	Flaked	-	-	-	60	Proximal
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chert	-	-	-	12.40	-	-	-	-	20	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chalcedony	-	-	-	17.20	-	-	-	-	60	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chert	-	-	-	16.30	-	-	-	-	20	
19/12/2011	PAD 11	Mechanical	-	Angular Fragment	Chalcedony	-	-	-	18.30	-	-	-	-	60	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
		Trench 1, Wall Collapse													
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	14.70	-	-	-	-	60	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Medial Flake	Chalcedony	-	-	-	19.20	-	-	-	-	100	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chert	-	-	-	10.70	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chert	-	-	-	17.10	-	-	-	-	60	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chert	-	-	-	13.40	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chalcedony	-	-	-	10.50	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	13.20	-	-	-	-	60	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chalcedony	-	-	-	19.70	-	-	-	-	30	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chert	-	-	-	19.40	-	-	-	-	30	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	14.20	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Distal Flake	Chalcedony	-	-	-	16.20	-	-	-	Feather	10	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Distal Flake	Chalcedony	-	-	-	13.00	-	-	-	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chert	-	-	-	24.60	-	-	-	-	20	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chert	-	-	-	10.90	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chert	-	-	-	11.30	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	9.70	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Complete Flake	Chalcedony	26.30	16.80	4.60	26.40	Flaked	14.50	4.20	Feather	80	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Proximal Flake	Chalcedony	-	-	-	9.30	Flaked	5.20	1.10	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall	-	Distal Flake	Chalcedony	-	-	-	17.70	-	-	-	Hinge	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
		Collapse													
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chert	-	-	-	10.40	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chert	-	-	-	8.00	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chalcedony	-	-	-	4.90	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chert	-	-	-	8.70	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chert	-	-	-	9.60	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	8.20	-	-	-	-	20	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Complete Flake	Chalcedony	8.30	4.40	1.40	8.30	Flaked	8.90	3.20	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chalcedony	-	-	-	18.50	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Proximal Flake	Chalcedony	-	-	-	12.70	Cortical	6.30	3.00	-	30	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chalcedony	-	-	-	11.60	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Proximal Flake	Unknown	-	-	-	8.60	Flaked	8.00	1.20	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chert	-	-	-	18.60	-	-	-	-	80	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chalcedony	-	-	-	11.60	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chert	-	-	-	9.20	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	12.70	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Geometric Microlith	Chert	-	-	-	19.50	-	-	-	Feather	0	Retouch on left and proximal margin, left margin= 185 mm, proximal= 105 mm
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	9.70	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	8.70	-	-	-	-	50	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	9.20	-	-	-	-	30	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chalcedony	-	-	-	8.90	-	-	-	-	20	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	9.60	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	13.40	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Complete Flake	Chert	11.20	13.10	2.60	13.30	Flaked	9.80	3.40	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chalcedony	-	-	-	13.50	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Complete Flake	Chert	7.30	6.90	1.30	7.30	Flaked	4.60	0.60	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Proximal Flake	Chert	-	-	-	14.80	Flaked	14.40	1.00	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Distal Flake	Chalcedony	-	-	-	13.70	-	-	-	Feather	80	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Proximal Flake	Chalcedony	-	-	-	12.70	Flaked	11.70	1.40	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Complete Flake	Chert	10.10	8.90	2.80	10.10	Flaked	5.90	1.90	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chert	-	-	-	8.70	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	9.20	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chalcedony	-	-	-	9.80	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	9.00	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chalcedony	-	-	-	12.80	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chert	-	-	-	11.10	-	-	-	-	20	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Distal Flake	Chalcedony	-	-	-	12.50	-	-	-	Feather	40	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chert	-	-	-	11.70	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chalcedony	-	-	-	14.80	-	-	-	-	20	
19/12/2011	PAD 11	Mechanical	-	Complete Flake	Chert	15.00	11.10	2.90	15.00	Flaked	5.30	2.40	Feather	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
		Trench 1, Wall Collapse													
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	6.80	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	10.50	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	10.60	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	9.50	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chert	-	-	-	12.70	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chert	-	-	-	5.50	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chert	-	-	-	8.70	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	8.90	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Distal Flake	Chalcedony	-	-	-	9.30	-	-	-	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chert	-	-	-	6.80	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chert	-	-	-	9.60	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	7.70	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	11.40	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chert	-	-	-	13.90	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chert	-	-	-	12.20	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Proximal Flake	Chert	-	-	-	10.50	Flaked	4.80	2.00	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	10.40	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	18.70	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall	-	Flaked Fragment	Chalcedony	-	-	-	18.60	-	-	-	-	60	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
		Collapse													
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	9.60	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chert	-	-	-	10.50	-	-	-	-	20	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chert	-	-	-	17.70	-	-	-	-	30	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chalcedony	-	-	-	12.00	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chert	-	-	-	9.20	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chalcedony	-	-	-	8.30	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chert	-	-	-	13.60	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chert	-	-	-	9.00	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chert	-	-	-	9.90	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	4.60	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chert	-	-	-	7.60	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chert	-	-	-	8.50	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chalcedony	-	-	-	6.70	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chert	-	-	-	8.50	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chert	-	-	-	7.30	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chert	-	-	-	8.60	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chert	-	-	-	7.50	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chert	-	-	-	8.80	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Angular Fragment	Chert	-	-	-	8.80	-	-	-	-	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Geometric Microlith	Chert	-	-	-	12.80	-	-	-	-	0	Retouch on right margin + platform, right margin= 88 mm, platform= 78 mm
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Complete Flake	Chalcedony	10.20	12.60	2.30	14.30	Cortical	8.80	1.00	Feather	5	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Complete Flake	Chert	13.80	4.80	1.30	13.80	Flaked	3.90	1.40	Feather	0	Blade tech, three flake scars on dorsal surface
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Complete Flake	Chert	10.70	7.00	1.00	10.70	Flaked	7.40	2.20	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chert	-	-	-	12.00	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Distal Flake	Chalcedony	-	-	-	16.20	-	-	-	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Distal Flake	Chalcedony	-	-	-	15.30	-	-	-	Feather	30	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Complete Flake	Chert	13.80	11.30	1.40	13.80	Flaked	7.50	1.60	Feather	0	Overhang removal
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chalcedony	-	-	-	12.50	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Proximal Flake	Chert	-	-	-	10.80	Flaked	5.70	1.30	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Proximal Flake	Chert	-	-	-	13.30	Flaked	5.20	1.40	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chalcedony	-	-	-	12.60	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chert	-	-	-	9.70	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chert	-	-	-	19.30	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chert	-	-	-	18.50	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chert	-	-	-	14.30	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chert	-	-	-	13.20	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chalcedony	-	-	-	12.20	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chert	-	-	-	12.20	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical	-	Complete Flake	Chalcedony	13.40	10.10	2.50	17.40	Flaked	8.30	2.70	Feather	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
		Trench 1, Wall Collapse													
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Geometric Microlith	Chert	-	-	-	12.10	-	-	-	-	0	Retouch on right margin and proximal margin, right margin= 125 mm, proximal margin= 126 mm
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Distal Flake	Chalcedony	-	-	-	32.90	-	-	-	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Geometric Microlith	Chert	-	-	-	17.20	-	-	-	-	0	Retouch on right margin and proximal margin, right margin= 159 mm, proximal margin= 68 mm
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Complete Flake	Chalcedony	18.50	7.90	2.70	18.50	Cortical	10.70	4.80	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Complete Flake	Chalcedony	13.00	15.90	2.20	15.90	Cortical	9.90	2.40	Feather	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Flaked Fragment	Chert	-	-	-	19.00	-	-	-	-	0	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Complete Flake	Chert	20.90	25.50	8.10	36.70	Cortical	18.90	6.70	Feather	60	
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Distal Flake	Chert	-	-	-	28.20	-	-	-	Feather	0	Retouch on left margin, left margin= 128 mm
19/12/2011	PAD 11	Mechanical Trench 1, Wall Collapse	-	Distal Flake	Chalcedony	-	-	-	34.60	-	-	-	Feather	60	Five complete scars on both surfaces
13/12/2011	E2/2	18	400-500	Single Platform Core	Granite/Quartzite	-	-	-	73.40	-	-	-	-	0	Flaked river cobble, smooth - 3 flake scars
14/12/2011	E2/2	20R	350-400	Single Platform Core	Igneous	25.50	28.60	15.40	28.80	-	-	-	-	0	
14/12/2011	E2/2	20R	400-450	Flaked Fragment	Igneous	-	-	-	22.00	-	-	-	-	0	
14/12/2011	E2/2	20R	400-450	Complete Flake	Quartz	12.60	7.90	3.40	12.60	-	3.60	2.50	Feather	0	
14/12/2011	E2/2	22R	300-400	Medial Flake	Chert	-	-	-	8.50	-	-	-	-	0	
16/12/2011	E2/2	Mechanical Trench 1 (0-2m)	1000	Single Platform Core	Silcrete	43.00	35.80	29.14	44.10	Cortical	27.60	16.80	-	0	3 complete scars, river cobble
16/12/2011	E2/2	Mechanical Trench 1 (8-10m)	0-400	Complete Flake	Chalcedony	15.90	9.20	4.50	16.90	Flaked	5.50	3.50	Feather	0	
16/12/2011	E2/2	Mechanical Trench 1 (2-4m)	400-800	Complete Flake	Quartz	19.60	9.70	7.70	21.10	Flaked	2.00	4.10	Feather	0	Retouch left margin (199 mm)
16/12/2011	E2/2	Mechanical Trench 1 (2-4m)	1000 (wall collapse?)	Proximal Flake	Chalcedony	16.90	12.10	3.70	19.20	Flaked	9.50	3.80	-	0	Retouch left margin (182 mm)
16/12/2011	E2/2	Mechanical Trench 2 (0-2m)	0-400	Complete Flake	Chert	10.30	11.80	1.60	11.80	Focal	4.50	1.30	Feather	0	
16/12/2011	E2/2	Mechanical Trench 2 (2-4)	0-200	Complete Flake	Chalcedony	12.80	14.30	1.70	15.10	Flaked	9.60	1.10	Hinge	0	Overhang removal
16/12/2011	E2/2	Mechanical Trench 2 (2-4)	300-600	Distal Flake	Chalcedony	-	-	-	17.10	-	-	-	Feather	0	
16/12/2011	E2/2	Mechanical Trench 2 (0-2m)	2000	Single Platform Core	Quartz	-	-	-	21.80	Flaked	47.40	24.90	-	40	2 complete scars, cemented sand
28/11/2011	Melino PAD	11	50-100	Complete Flake	Chalcedony	24.4	10.7	6.1	29.5	Flaked	1.5	10.5	Feather	10	Crested microblade. Bi-directional dorsal scars

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
28/11/2011	Melino PAD	11	150-200	Complete Flake	Chalcedony	15.6	6.3	1.8	16.8	Flaked	4.7	1.8	Feather	0	Microblade
28/11/2011	Melino PAD	11	150-200	Complete Flake	Chalcedony	16	14	1.9	19	Flaked	10	0.6	Feather	0	
28/11/2011	Melino PAD	11	150-200	Complete Flake	Chalcedony	10.5	10.5	0.6	15.6	Cortical	8.2	0.7	Feather	10	
28/11/2011	Melino PAD	11	150-200	Flaked Fragment	Chalcedony	-	-	4.6	15.5	-	-	-	-	0	Pot-lidded
28/11/2011	Melino PAD	11	150-200	Complete Flake	Chalcedony	8.8	12.3	6.1	14.2	Flaked	0.7	0.3	Plunge	15	Pot-lidded
28/11/2011	Melino PAD	11	150-200	Complete Flake	Chert	12.1	9.2	1.7	13.6	Flaked	8.3	3.5	Feather	0	Heat damaged, pot-lidded
28/11/2011	Melino PAD	11	150-200	Complete Flake	Chalcedony	7	7.7	0.6	9.7	Flaked	-	-	Feather	0	
28/11/2011	Melino PAD	11	150-200	Complete Flake	Chalcedony	7.5	-	-	9.1	Flaked	6.4	1.6	Feather	0	Surface break ventral
28/11/2011	Melino PAD	11	150-200	Flaked Fragment	Chalcedony	-	-	0.8	10.3	-	-	-	-	0	Heat damaged
28/11/2011	Melino PAD	11	150-200	Flaked Fragment	Chalcedony	-	-	1.3	7.9	-	-	-	-	0	Heat damaged
28/11/2011	Melino PAD	13	150-200	Complete Flake	Chalcedony	23.2	19.4	6.8	31.4	Flaked	6.9	6.5	Feather	0	
28/11/2011	Melino PAD	13	150-200	Flaked Fragment	Chalcedony	-	-	3.7	19.5	-	-	-	-	0	Broken distal, heat damage
28/11/2011	Melino PAD	13	150-200	Flaked Fragment	Chalcedony	-	-	3.9	10.4	-	-	-	-	0	Broken medial, heat damage
28/11/2011	Melino PAD	13	150-200	Flaked Fragment	Chalcedony	-	-	4.6	20.1	-	-	-	-	0	Broken distal, heat damage
28/11/2011	Melino PAD	13	150-200	Proximal Flake	Chalcedony	-	-	-	17.6	Flaked	17.6	4.6	-	0	Heat crenated
28/11/2011	Melino PAD	13	150-200	Proximal Flake	Chalcedony	-	-	7.1	20.6	Flaked	14.8	5.2	-	0	Heat damaged
28/11/2011	Melino PAD	15	150-200	Complete Flake	Quartz	20.9	15.7	19	27.6	Flaked	15.2	14.3	Feather	0	Retouch flake
28/11/2011	Melino PAD	16	100-150	Flaked Fragment	Chalcedony	-	-	2.5	16.8	-	-	-	-	10	Backed-impact snap
28/11/2011	Melino PAD	16	100-150	Complete Flake	Chalcedony	10.6	10.4	1.1	13.3	Flaked	8.2	1.7	Hinge	0	Heat damaged, pot-lidded
28/11/2011	Melino PAD	16	100-150	Flaked Fragment	Chalcedony	-	-	2.4	22.4	-	-	-	-	0	Heat damaged, pot-lidded
28/11/2011	Melino PAD	16	100-150	Flaked Fragment	Chert	-	-	1.8	14.3	-	-	-	-	0	Heat
28/11/2011	Melino PAD	17	100-150	Complete Flake	Chert	25	13.3	6.6	27.1	Flaked	5.4	1.5	Feather	0	Ridge straightening
28/11/2011	Melino PAD	17	100-150	Complete Flake	Chert	16.6	8	3.6	19.6	Flaked	3.1	2.7	Feather	0	
28/11/2011	Melino PAD	17	100-150	Complete Flake	Chert	19.6	8.7	3.7	21.7	Focal	1.2	0.3	Feather	0	
28/11/2011	Melino PAD	17	100-150	Complete Flake	Chert	17.6	10.3	5.6	19.1	Focal	1.4	1	Feather	0	
28/11/2011	Melino PAD	17	100-150	Complete Flake	Chert	10.4	8.7	8.5	11.1	Flaked	1.3	0.1	Plunge	0	
28/11/2011	Melino PAD	17	100-150	Complete Flake	Fine Grained Siliceous	22.6	22.7	6.9	33	Flaked	33.3	8.8	Feather	0	
28/11/2011	Melino PAD	17	100-150	Distal Flake	Chert	-	-	10.2	28.2	-	-	-	Plunge	0	
28/11/2011	Melino PAD	17	100-150	Medial Flake	Chert	-	-	2	14.6	-	-	-	-	0	
28/11/2011	Melino PAD	17	100-150	Distal Flake	Chert	-	-	11.4	26.5	-	-	-	Plunge	0	
28/11/2011	Melino PAD	17	100-150	Complete Flake	Chert	10.8	12.6	1.9	13.7	Flaked	9.5	2	Feather	0	
28/11/2011	Melino PAD	17	100-150	Flaked Fragment	Chert	-	-	5.5	18.2	-	-	-	-	0	Heat damaged
28/11/2011	Melino PAD	17	100-150	Proximal Flake	Chert	-	-	3.6	22.5	Flaked	11.3	3.6	-	0	
28/11/2011	Melino PAD	17	100-150	Medial Flake	Chert	-	-	3.5	20.5	-	-	-	-	0	
28/11/2011	Melino PAD	17	100-150	Flaked Fragment	Chert	-	-	3.6	10.3	-	-	-	-	0	
28/11/2011	Melino PAD	17	100-150	Proximal Flake	Chert	-	-	3.6	16.9	Flaked	8.5	1.8	-	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
28/11/2011	Melino PAD	17	100-150	Distal Flake	Chert	-	-	1.2	12.6	-	-	-	-	0	
28/11/2011	Melino PAD	19	100-150	Complete Flake	Chert	21.2	6.2	1.8	21.6	Flaked	6.8	1.8	Feather	0	Microblade, possible usewear
28/11/2011	Melino PAD	22	100-150	Flaked Fragment	Chert	-	-	3	16.3	-	-	-	-	0	Heat damaged
28/11/2011	Melino PAD	22	100-150	Complete Flake	Chert	11.1	11.5	2.3	13.5	Flaked	8.4	2.5	Hinge	0	Edge damage
28/11/2011	Melino PAD	25	100-150	Medial Flake	Fine Grained Siliceous	-	-	7.9	22.5	-	-	-	-	0	
28/11/2011	Melino PAD	25	100-150	Distal Flake	Fine Grained Siliceous	-	-	3.9	16	-	-	-	-	0	
29/11/2011	Melino PAD	Isolated find	-	Complete Flake	Chert	21.3	18.7	4.2	28.6	Flaked	10.4	9	Feather	0	Heat affected
29/11/2011	Melino PAD	26	0-50	Multi-platform Core	Cobble	43.1	49.1	32.2	58.6	Flaked	44	35.1	-	40	
29/11/2011	Melino PAD	27	50-100	Complete Flake	Silcrete	16	13.6	6.1	15.1	Flaked	6.7	0.8	Step	0	
29/11/2011	Melino PAD	27	50-100	Complete Flake	Chert	-	-	10.4	19.9	-	-	-	-	0	Broken distal. Heat damaged, pot-lidded
29/11/2011	Melino PAD	28	0-50	Complete Flake	Quartz	16.3	9.8	6.4	16.6	Flaked	1.9	3.6	Plunge	0	
29/11/2011	Melino PAD	28	150-200	Complete Flake	Quartz	12.6	17.4	5	25.5	Flaked	3.4	0.8	Step	0	
29/11/2011	Melino PAD	36	100-150	Complete Flake	Chert	-	-	6	34.5	-	-	-	Feather	0	Broken heat effected distal - crenated/pot-lidded
29/11/2011	Melino PAD	36	100-150	Complete Flake	Chert	-	-	3	11.7	-	-	-	Feather	0	Broken heat effected distal - crenated/pot-lidded
29/11/2011	Melino PAD	40	150-200	Complete Flake	Silcrete	24.8	36.2	5.3	-	Cortical	23	3.9	Feather	10	Edge damage from excavation
29/11/2011	Melino PAD	40	150-200	Complete Flake	Chert	11.1	5	1.5	-	Focal	1.6	0.2	Feather	0	Microblade
29/11/2011	Melino PAD	40	300-400	Distal Flake	Chert	-	-	1.2	11.3	-	-	-	-	0	
29/11/2011	Melino PAD	40	300-400	Complete Flake	Chert	10.4	8.9	1	11.2	Flaked	2.2	0.1	Feather	0	
29/11/2011	Melino PAD	40	300-400	Distal Flake	Chert	-	-	2.9	13.1	-	-	-	-	0	Heat damaged
29/11/2011	Melino PAD	40	300-400	Complete Flake	Chert	13.1	5.1	3.4	12.9	Flaked	2.5	0.5	Feather	0	
29/11/2011	Melino PAD	40	300-400	Complete Flake	Chert	8.2	6.9	1	9	Flaked	2.2	0.1	Feather	0	
29/11/2011	Melino PAD	40	300-400	Distal Flake	Chert	-	-	4.6	19.5	-	-	-	-	0	
29/11/2011	Melino PAD	40	300-400	Longitudinally Split Flake	Silcrete	-	-	3.7	21.2	Flaked	8	2.2	Feather	0	
29/11/2011	Melino PAD	40	300-400	Complete Flake	Silcrete	20.1	16.5	1.8	21	-	-	-	-	0	
29/11/2011	Melino PAD	40	300-400	Bipolar Core	Chert	-	-	5.1	22.8	Crushed	3.1	0.7	Crushed	0	
29/11/2011	Melino PAD	40	300-400	Bipolar Core	Chert	25.4	12.9	6.1	25.7	Flaked	2.6	0.1	Feather	0	
29/11/2011	Melino PAD	40	400-500	Complete Flake	Chert	12.5	6.5	1.5	13.4	Flaked	2.7	0.1	Feather	0	
29/11/2011	Melino PAD	40	600-700	Complete Flake	Chert	7.8	5.5	0.6	8.8	Flaked	12.3	4.2	Plunge	0	
29/11/2011	Melino PAD	40	600-700	Longitudinally Split Flake	Chert	4.6	5.9	1	12.1	-	-	-	-	0	
29/11/2011	Melino PAD	40	700-800	Distal Flake	Silcrete	-	-	3.6	17.5	-	-	-	-	0	
29/11/2011	Melino PAD	40	900-1000	Distal Flake	Chert	-	-	3	16.5	-	-	-	-	0	
29/11/2011	Melino PAD	40	900-1000	Medial Flake	Chert	-	-	2.6	10.8	-	-	-	-	0	
29/11/2011	Melino PAD	41	50-150	Longitudinally Split Flake	Quartz	-	-	15	27.3	-	-	-	-	0	Left side
29/11/2011	Melino PAD	41	50-150	Flaked Fragment	Quartz	-	-	13.8	36.5	-	-	-	-	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
29/11/2011	Melino PAD	41	50-150	Complete Flake	River Cobble	29.7	40	147.8	68.9	Flaked	68.7	21.4	Feather	30	
29/11/2011	Melino PAD	41	50-150	Complete Flake	Quartz	9.6	6.7	7.5	21	Flaked	17.2	10.7	Plunge	0	
29/11/2011	Melino PAD	41	50-150	Medial Flake	Quartz	-	-	2.2	14.9	-	-	-	-	0	
29/11/2011	Melino PAD	41	50-150	Distal Flake	Quartz	-	-	5.9	15.1	-	-	-	Feather	0	
29/11/2011	Melino PAD	41	50-150	Complete Flake	Quartz	6.5	13.4	1.5	13.3	Flaked	13	2.1	Feather	0	
29/11/2011	Melino PAD	41	50-150	Complete Flake	Quartz	16.4	17.1	2.8	30.4	Flaked	30.4	4.2	Feather	0	Burnt
29/11/2011	Melino PAD	TP 1 (1 x 1m)	0-150	Single Platform Core	Chalcedony	26.6	14.2	37.7	45.4	Cortical	17.5	35.8	-	85	Possible micro-blade pressure flaking (<i>in situ</i> #1 xu3)
29/11/2011	Melino PAD	TP 1 (1 x 1m)	100-200	Proximal Flake	Chert	12.1	11.3	10.5	17.1	Flaked	9.4	6.2	-	10	<i>In situ</i> #1 xu4
29/11/2011	Melino PAD	TP 1 (1 x 1m)	100-200	Proximal Flake	Chert	6.2	8.8	2.2	10.2	Flaked	5.4	1.4	-	0	Very heat damaged <i>in situ</i> #2 xu4
29/11/2011	Melino PAD	TP 1 (1 x 1m)	100-200	Distal Flake	Chert	-	-	7.7	24.7	-	-	-	-	0	<i>In situ</i> #3 xu4
29/11/2011	Melino PAD	TP 1 (1 x 1m)	100-200	Distal Flake	Chert	-	-	4.2	20	-	-	-	-	0	
29/11/2011	Melino PAD	TP 1 (1 x 1m)	100-200	Flaked Fragment	Chert	-	-	5.1	24.2	-	-	-	-	0	Retouched - redirecting?
29/11/2011	Melino PAD	TP 1 (1 x 1m)	100-200	Distal Flake	Chert	-	-	2	21	-	-	-	-	0	
29/11/2011	Melino PAD	TP 1 (1 x 1m)	100-200	Complete Flake	Quartz	12	14.8	6.6	14.5	Flaked	14.5	6.6	Feather	0	Retouch left distal
29/11/2011	Melino PAD	TP 1 (1 x 1m)	100-200	Distal Flake	Chalcedony	-	-	1.4	8.9	-	-	-	Feather	0	
29/11/2011	Melino PAD	TP 1 (1 x 1m)	100-200	Complete Flake	Chert	16.8	10.5	3.3	6.8	Flaked	11.9	5.3	Hinge	10	
29/11/2011	Melino PAD	TP 1 (1 x 1m)	100-200	Distal Flake	Chert	-	-	2.1	14.4	-	-	-	Hinge	0	
29/11/2011	Melino PAD	TP 1 (1 x 1m)	100-200	Longitudinally Split Flake	-	-	-	1.2	14.9	-	-	-	-	0	Right side
29/11/2011	Melino PAD	TP 1 (1 x 1m)	100-200	Complete Flake	-	9.8	10.6	2.6	13.7	Flaked	7.9	2.7	Feather	0	
29/11/2011	Melino PAD	TP 1 (1 x 1m)	100-200	Longitudinally Split Flake	Chert	-	-	1.9	13.2	Flaked	-	-	-	0	Left side
29/11/2011	Melino PAD	TP 1 (1 x 1m)	100-200	Proximal Flake	Chert	-	-	2.2	20.9	Cortical	12.3	1.5	-	0	
29/11/2011	Melino PAD	TP 1 (1 x 1m)	100-200	Distal Flake	Chert	-	-	22	9.5	-	-	-	-	0	Heat damaged
29/11/2011	Melino PAD	TP 1 (1 x 1m)	100-200	Flaked Fragment	Chert	-	-	13	13.5	-	-	-	-	0	
29/11/2011	Melino PAD	TP 1 (1 x 1m)	100-200	Complete Flake	Chert	11.5	7.6	2.4	17.7	Flaked	5.1	1.1	Feather	0	Backed along left lateral margin
29/11/2011	Melino PAD	TP 1 (1 x 1m)	100-200	Distal Flake	Chert	-	-	1.9	14.4	-	-	-	Feather	0	Heat damage
29/11/2011	Melino PAD	TP 1 (1 x 1m)	100-200	Distal Flake	-	-	-	2.1	12.2	-	-	-	-	0	Heat damage
29/11/2011	Melino PAD	TP 1 (1 x 1m)	100-200	Flaked Fragment	Chert	-	-	3.8	13.5	-	-	-	-	0	Significant heat damage
29/11/2011	Melino PAD	TP 1 (1 x 1m)	100-200	Medial Flake	Chert	-	-	0.8	10.6	-	-	-	-	0	
29/11/2011	Melino PAD	TP 1 (1 x 1m)	100-200	Longitudinally Split Flake	Chert	-	-	2.9	12.5	Crushed	1.5	0.5	Hinge	0	Right side
29/11/2011	Melino PAD	TP 1 (1 x 1m)	100-200	Flaked Fragment	Chert	-	-	3.4	14	-	-	-	-	0	Lots of heat damage
29/11/2011	Melino PAD	TP 1 (1 x 1m)	100-200	Flaked Fragment	Chert	-	-	1.2	13	-	-	-	-	0	Heat damage dorsal side
29/11/2011	Melino PAD	TP 1 (1 x 1m)	100-200	Flaked Fragment	Chert	-	-	1.6	14.7	-	-	-	-	0	Heat damage
29/11/2011	Melino PAD	TP 1 (1 x 1m)	100-200	Flaked Fragment	Chert	-	-	2.9	15.2	-	-	-	-	0	Heat damage
29/11/2011	Melino PAD	TP 1 (1 x 1m)	100-200	Flaked Fragment	Chert	-	-	3.3	9.5	-	-	-	-	0	Heat damage
29/11/2011	Melino PAD	TP 1 (1 x 1m)	100-200	Flaked Fragment	Chalcedony	-	-	1.2	9.6	-	-	-	-	0	Heat damage

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
29/11/2011	Melino PAD	TP 1 (1 x 1 m)	200-250	Flaked Fragment	Chalcedony	-	-	2.7	17.2	-	-	-	-	0	Broken microblade
29/11/2011	Melino PAD	TP 1 (1 x 1 m)	200-250	Longitudinally Split Flake	Chalcedony	-	-	1.6	11	-	-	-	-	0	Retouch on distal, left distal
29/11/2011	Melino PAD	TP 1 (1 x 1 m)	250-300	Flaked Fragment	Chert	-	-	3.5	17.4	-	-	-	-	0	
29/11/2011	Melino PAD	TP 1 (1 x 1 m)	250-300	Complete Flake	Silcrete	4.3	14.1	8	16	Flaked	13.4	8.6	Plunge	0	
30/11/2011	Melino PAD	4	150-250	Complete Flake	Silcrete	21.6	16.4	5.8	25.3	Flaked	17.6	10.6	Feather	0	
30/11/2011	Melino PAD	4	400-500	Complete Flake	Chert	16.7	16.6	2.4	22.6	Flaked	8.6	4.5	Hinge	10	
30/11/2011	Melino PAD	5	500-600	Single Platform Core	Quartz	20.9	24.3	23	27.6	Flaked	23.5	24.5	Feather	0	
30/11/2011	Melino PAD	5	500-600	Distal Flake	Chert	-	-	-	7.9	-	-	-	Hinge	0	
30/11/2011	Melino PAD	5	500-600	Complete Flake	Chert	7.9	6.5	0.7	10.1	Flaked	5.2	0.5	Hinge	0	
30/11/2011	Melino PAD	5	500-600	Complete Flake	Chert	7.6	6.7	1	10	Flaked	2	0.1	Hinge	0	
30/11/2011	Melino PAD	5	500-600	Distal Flake	Chert	-	-	-	7.4	-	-	-	Hinge	0	
30/11/2011	Melino PAD	6	250-350	Complete Flake	Chalcedony	22	14	8.3	24	Crushed	-	-	Feather	80	
30/11/2011	Melino PAD	10	350-400	Proximal Flake	Quartz	-	-	-	11.9	Flaked	7	1.5	-	0	Overhang removal & retouch
30/11/2011	Melino PAD	11	500	Proximal Flake	Chalcedony	-	-	-	7.8	Flaked	-	-	-	0	
30/11/2011	Melino PAD	11	500	Flaked Fragment	Chalcedony	-	-	-	11.4	-	-	-	-	0	Possible burn spall
30/11/2011	Melino PAD	11	500	Flaked Fragment	Chalcedony	-	-	-	13.4	-	-	-	-	0	Broken backed artefact, broken on the non-backed side
30/11/2011	Melino PAD	11	600	Complete Flake	Chalcedony	16	14.6	3.5	23.5	Flaked	3.5	1.2	Hinge	0	Retouch on distal end
30/11/2011	Melino PAD	12	300-400	Distal Flake	Chert	-	-	-	13.7	-	-	-	Feather	0	
30/11/2011	Melino PAD	Trench 1, Square B (2 x 1 m)	150	Complete Flake	Quartz	13.9	15.1	7.2	17	Cortical	16.3	9.7	Feather	20	
30/11/2011	Melino PAD	Trench 1, Square B (2 x 1 m)	150	Complete Flake	Quartz	13.2	16	4.6	13.5	Flaked	13.4	8.4	Feather	0	
30/11/2011	Melino PAD	Trench 1, Square B (2 x 1 m)	150	Flaked Fragment	Quartz	-	-	-	13.7	-	-	-	-	0	
30/11/2011	Melino PAD	Trench 1, Square B (2 x 1 m)	250	Complete Flake	Quartz	10.1	8.4	5.3	22	Flaked	12.7	7.2	Feather	0	
30/11/2011	Melino PAD	Trench 1, Square B (2 x 1 m)	500-600	Distal Flake	Dolerite	-	-	-	77	-	-	-	-	0	
30/11/2011	Melino PAD	Trench 1, Square B (2 x 1 m)	500-600	Complete Flake	Quartz	33	19	8.3	35.6	Flaked	15.2	6	Plunge	0	In situ
30/11/2011	Melino PAD	Trench 1, Square B (2 x 1 m)	500-600	Longitudinally Split Flake	Chert	-	-	-	9	-	-	-	-	0	Right side
1/12/2011	Melino PAD	Trench 1, Square B (2 x 1 m)	1,100-1,200	Distal Flake	Quartz	-	-	-	7.9	-	-	-	Feather	0	
2/12/2011	Melino PAD	Trench 1, Square B (2 x 1 m)	-	Complete Flake	Chert	8.78	5.08	0.64	8.78	Flaked	1.87	0.44	Feather	0	
2/12/2011	Melino PAD	Trench 1, Square B (2 x 1 m)	-	Distal Flake	Chert	-	-	-	48.72	-	-	-	Hinge	100	
30/11/2011	Melino PAD	Trench 1, Square A (2 x 1 m)	120	Distal Flake	Quartz	-	-	-	14.98	-	-	-	Step	0	Lateral break as well
30/11/2011	Melino PAD	Trench 1, Square A (2 x 1 m)	130	Medial Flake	Chalcedony	-	-	-	14.8	-	-	-	-	0	
30/11/2011	Melino PAD	Trench 1, Square A (2 x 1 m)	130	Complete Flake	Quartz	29.5	11.81	3.71	29.58	Flaked	14.9	5.1	Feather	0	1 surface is quite smooth
30/11/2011	Melino PAD	Trench 1, Square A (2 x 1 m)	130	Medial Flake	Quartz	-	-	-	14.2	-	-	-	-	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
30/11/2011	Melino PAD	Trench 1, Square A (2 x 1 m)	130	Distal Flake	Quartz	-	-	-	16.76	-	-	-	Feather	20	
30/11/2011	Melino PAD	Trench 1, Square A (2 x 1 m)	xu4	Longitudinally Split Flake	Quartzite	-	-	-	28	Flaked	17.89	5.13	Feather	0	
30/11/2011	Melino PAD	Trench 1, Square A (2 x 1 m)	xu5	Complete Flake	River Cobble	7.77	19.95	3.01	28.28	Cortical	28.28	8.31	Feather	40	
30/11/2011	Melino PAD	Trench 1, Square A (2 x 1 m)	xu5	Multi-platform Core	Quartzite	-	-	-	50.15	Flaked	30.78	23.07	-	70	
30/11/2011	Melino PAD	Trench 1, Square A (2 x 1 m)	xu6	Multi-platform Core	Quartzite	-	-	-	121.62	Flaked	46.4	115.77	-	80	
30/11/2011	Melino PAD	Trench 1, Square A (2 x 1 m)	xu7	Complete Flake	Quartzite	16.08	38.11	14.8	44.39	Flaked	32.26	15.34	Plunge	10	Chunky flake
30/11/2011	Melino PAD	Trench 1, Square A (2 x 1 m)	xu9	Single Platform Core	Chalcedony	-	-	-	17.9	-	-	-	-	0	Broken
30/11/2011	Melino PAD	Trench 1, Square A (2 x 1 m)	xu9	Distal Flake	Chalcedony	-	-	-	9.44	-	-	-	Hinge	20	
30/11/2011	Melino PAD	Trench 1, Square A (2 x 1 m)	xu9	Complete Flake	Chert	30.2	16.36	4.43	30.2	Flaked	7.43	3.14	Feather	60	Backing
30/11/2011	Melino PAD	Trench 1, Square A (2 x 1 m)	xu9	Complete Flake	Chert	14.05	6.73	2.28	14.05	Flaked	5.87	1.38	Feather	20	Heat damaged
1/12/2011	Melino PAD	Trench 1, Square A (2 x 1 m)	850	Distal Flake	Quartz	-	-	-	15.75	-	-	-	Feather	0	
2/12/2011	Melino PAD	Trench 1, Square A (2 x 1 m)	1,180	Flaked Fragment	Silcrete	30.33	138.22	37.66	139.08	Flaked	136.11	74.67	-	70	Flaked artefact, usewear, possible adze?
2/12/2011	Melino PAD	Trench 1, Square A (2 x 1 m)	400-1,000	Multi-directional Core	Chert	-	-	-	148.08	Flaked	-	-	-	90	
1/12/2011	Melino PAD	21	400-500	Multi-platform Core	Chalcedony	-	-	-	28.1	-	-	-	-	0	
1/12/2011	Melino PAD	28	200	Multi-platform Core	Chert	-	-	-	38.7	-	-	-	-	0	
1/12/2011	Melino PAD	29	200	Complete Flake	Chert	14.8	12.2	1.7	15.8	Flaked	1.2	0.5	Feather	0	
2/12/2011	Melino PAD	42	600-700	Multi-platform Core	Quartz	-	-	-	107.6	Flaked	85.5	49.5	-	0	Bipolar
2/12/2011	Melino PAD	45	400-500	Distal Flake	Quartz	-	-	-	16	-	-	-	Hinge	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (0-2m)	100-200	Complete Flake	Silcrete	41.4	62.3	10.8	66.9	Cortical	40.1	8.7	Feather	10	Overhang removal
14/12/2011	Melino PAD	Mechanical Trench 1 (0-2m)	100-200	Proximal Flake	Silcrete	-	-	-	18.9	Cortical	11	3.7	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (0-2m)	200-300	Complete Flake	Basalt	25.1	28.4	4.2	30.1	Cortical	19.5	4.2	Feather	10	River cobble
14/12/2011	Melino PAD	Mechanical Trench 1 (0-2m)	200-300	Longitudinally Split Flake	Chert	-	-	-	21.1	Flaked	4	16	Plunge	0	Left side. Retouch right margin (2,006 mm)
14/12/2011	Melino PAD	Mechanical Trench 1 (0-2m)	200-300	Longitudinally Split Flake	Chalcedony	-	-	-	23.41	Cortical	14.2	4.2	Step	5	Left side, 2 dorsal scars
14/12/2011	Melino PAD	Mechanical Trench 1 (0-2m)	300-400	Flaked Fragment	Chert	-	-	-	10.8	-	-	-	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (0-2m)	300-400	Distal Flake	Quartz	-	-	-	11.64	-	-	-	Feather	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (0-2m)	400-500	Complete Flake	Chert	33.5	20.5	4.7	38.6	Cortical	18.7	4.8	Feather	0	3 dorsal scars
14/12/2011	Melino PAD	Mechanical Trench 1 (0-2m)	400-500	Complete Flake	Chert	23.6	13	3.5	24	Flaked	10.2	2.1	Feather	5	Overhang removal
14/12/2011	Melino PAD	Mechanical Trench 1 (0-2m)	400-500	Complete Flake	Chert	31.8	12.2	6.2	32.3	Crushed	12.3	3.9	-	90	
14/12/2011	Melino PAD	Mechanical Trench 1 (0-2m)	400-500	Proximal Flake	Chert	-	-	-	17.2	Flaked	13.5	4.1	-	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
14/12/2011	Melino PAD	Mechanical Trench 1 (0-2m)	400-500	Complete Flake	Chert	20.1	15.6	3.5	22.7	Flaked	12.12	2.3	Hinge	0	Overhang removal
14/12/2011	Melino PAD	Mechanical Trench 1 (0-2m)	400-500	Flaked Fragment	Chalcedony	-	-	-	17.6	-	-	-	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (0-2m)	400-500	Longitudinally Split Flake	Fine Grained Siliceous	-	-	-	40.6	Cortical	20.2	7.2	Feather	0	Right side
14/12/2011	Melino PAD	Mechanical Trench 1 (0-2m)	400-500	Flaked Fragment	Chert	-	-	-	12.9	-	-	-	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (0-2m)	400-500	Flaked Fragment	Chert	-	-	-	11.8	-	-	-	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (0-2m)	400-500	Multi-platform Core	Chert	-	-	-	36.5	Cortical	34	13	-	20	4 negative scars
14/12/2011	Melino PAD	Mechanical Trench 1 (0-2m)	400-500		-	-	-	-	-	Flaked	22	6	-	0	3 negative scars
14/12/2011	Melino PAD	Mechanical Trench 1 (0-2m)	400-500	Multi-platform Core	Chert	26.8	18.4	13.2	26.7	Flaked	14.9	5.5	-	0	4 complete negative scars
14/12/2011	Melino PAD	Mechanical Trench 1 (0-2m)	400-500		-	-	-	-	-	Flaked	9.8	4.8	-	0	4 complete negative scars
14/12/2011	Melino PAD	Mechanical Trench 1 (0-2m)	800-900	Complete Flake	Chert	14.3	17.5	3.1	18.2	Flaked	17.4	2.7	Feather	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (0-2m)	900-1000	Flaked Fragment	Chert	-	-	-	17.8	-	-	-	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (0-2m)	900-1000	Flaked Fragment	Silcrete	-	-	-	12.5	-	-	-	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (0-2m)	900-1000	Flaked Fragment	Silcrete	-	-	-	17.1	-	-	-	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (0-2m)	700-800	Muller Fragments?	Silcrete	-	-	-	74	-	-	-	-	80	Pitting: 53 mm x 26 mm
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	400-500	Distal Flake	Chert	-	-	-	27.2	-	-	-	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	400-500	Complete Flake	Chalcedony	14.2	17.3	2.8	18.7	Flaked	17.7	1.9	Hinge	50	
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	400-500	Single Platform Core	Chert	18.7	11.7	6.3	19.3	Flaked	10.5	4.9	-	10	3 scars
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	400-500	Flaked Fragment	Chert	-	-	-	17.8	-	-	-	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	400-500	Medial Flake	Chert	-	-	-	24.6	-	-	-	-	30	
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	400-500	Flaked Fragment	Chert	-	-	-	6.3	-	-	-	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	400-500	Proximal Flake	Chert	-	-	-	12.2	-	-	-	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	400-500	Proximal Flake	Chert	-	-	-	17.3	Flaked	10.3	3.3	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	400-500	Distal Flake	Chalcedony	-	-	-	13.5	-	-	-	Feather	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	400-500	Flaked Fragment	Chert	-	-	-	17.9	-	-	-	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	400-500	Single Platform Core	Chert	-	-	-	17.7	Cortical	4.6	2.5	-	40	3 scars
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	400-500	Complete Flake	Chalcedony	32.8	18.7	4.2	34.3	Cortical	11.7	3.8	Feather	0	6 dorsal scars, overhang removal
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	400-500	Complete Flake	Chert	26.9	15.5	5.9	27.2	Crushed	-	-	Feather	0	Overhang removal, possible scraper. Retouch on right margin (378 mm)
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	500-600	Flaked Fragment	Chert	-	-	-	9.4	-	-	-	-	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	500-600	Flaked Fragment	Chert	-	-	-	13.2	-	-	-	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	500-600	Flaked Fragment	Chert	-	-	-	14.4	-	-	-	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	500-600	Distal Flake	Chert	-	-	-	20.6	-	-	-	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	800-900	Flaked Fragment	Chalcedony	-	-	-	16.8	-	-	-	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	800-900	Flaked Fragment	Chert	-	-	-	10.97	-	-	-	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	1000-1100	Single Platform Core	Chert	-	-	-	22.7	-	-	-	-	0	Broken
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	200-300	Flaked Fragment	Chert	-	-	-	14.8	-	-	-	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	300-400	Angular Fragment	Chert	-	-	-	28.44	-	-	-	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	300-400	Flaked Fragment	Chalcedony	-	-	-	10.6	-	-	-	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	300-400	Flaked Fragment	Chalcedony	-	-	-	13.3	-	-	-	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	300-400	Longitudinally Split Flake	Chalcedony	-	-	-	10.2	Flaked	5.2	3.4	Feather	0	Left side
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	300-400	Longitudinally Split Flake	Chalcedony	-	-	-	34.7	Flaked	6.09	3.4	Feather	0	Left side
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	300-400	Complete Flake	Chert	19.6	8.5	3.2	20.3	Focal	4.1	1.9	Feather	0	Retouch on right margin (154 mm)
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	300-400	Flaked Fragment	Chert	-	-	-	17.3	-	-	-	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	300-400	Flaked Fragment	Chert	-	-	-	14.6	-	-	-	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	400-500	Multi-platform Core	Chalcedony	41.6	32.6	16.04	42.01	Flaked	16.4	10.4	-	60	2 complete negative scars
14/12/2011	Melino PAD	Mechanical Trench 1 (2-4m)	400-500		-	-	-	-	-	Cortical	26.3	21.1	-	0	1 complete negative Flake
14/12/2011	Melino PAD	Mechanical Trench 1 (6-4m)	800-900	Flaked Fragment	Chert	-	-	-	11.2	-	-	-	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (6-4m)	500-600	Flaked Fragment	Chalcedony	-	-	-	10.9	-	-	-	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (6-4m)	1000-1100	Complete Flake	Chert	8.5	11.5	1	12	Flaked	12.5	1.1	Feather	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (6-4m)	1000-1100	Angular Fragment	Chert	-	-	-	27.8	-	-	-	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (6-4m)	200-300	Single Platform Core	Silcrete	-	-	-	86.8	-	-	-	-	80	
14/12/2011	Melino PAD	Mechanical Trench 1 (6-4m)	300-400	Complete Flake	Quartz	29.6	13.1	6.4	30.3	Flaked	9.2	1.5	Feather	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (6-4m)	300-400	Flaked Fragment	Chert	-	-	-	21.6	-	-	-	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (6-4m)	300-400	Flaked Fragment	Chert	-	-	-	17.2	-	-	-	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (6-4m)	300-400	Flaked Fragment	Chert	-	-	-	11.2	-	-	-	-	0	
14/12/2011	Melino PAD	Mechanical Trench 1 (6-4m)	300-400	Proximal Flake	Chert	-	-	-	21.9	Cortical	10.6	3.2	-	0	Overhang removal
21/11/2011	PAD 2	11	750-800	Flaked Fragment	Chert	-	14.2	3.22	28.08	-	-	-	-	80	Coastal chert, heat shattered
21/11/2011	PAD 2	24	650	Complete Flake	Chert	26.9	9.9	6.2	-	Flaked	3.6	2.1	Feather	0	Heat damaged

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
22/11/2011	PAD 2	29	750-800	Complete Flake	Silcrete	76.5	28.9	16.4	81.2	Flaked	26.4	11.4	Feather	0	
22/11/2011	PAD 2	29	800-850	Complete Flake	Chert	13.7	11	2.6	16.1	Flaked	4.6	2	Step	0	
22/11/2011	PAD 2	33-R	800-850	Core	Chert	14.6	28.5	21.3	32.6	Flaked	32.6	20.8	-	40	
13/12/2012	PAD 2	Mechanical Trench 1 (0-2m)	900	Complete Flake	Quartz	16.16	18.98	5.73	24.72	Flaked	20.15	4.24	Feather	0	
13/12/2012	PAD 2	Mechanical Trench 1 (0-2m)	900	Angular Fragment	Quartz	-	-	-	28.5	-	-	-	-	0	Cemented sand
13/12/2012	PAD 2	Mechanical Trench 1 (0-2m)	900	Medial Flake	Quartz	-	-	-	19.65	-	-	-	-	0	Cemented sand
13/12/2012	PAD 2	Mechanical Trench 1 (0-2m)	1.1-1.2m	Distal Flake	Quartz	-	-	-	19.65	-	-	-	Feather	0	
13/12/2012	PAD 2	Mechanical Trench 1 (0-2m)	1.1-1.2m	Complete Flake	Quartz	12.88	9.06	1.04	13.04	Flaked	1.3	0.28	Feather	0	Weathered dorsal surface
13/12/2012	PAD 2	Mechanical Trench 1 (0-2m)	1-1.1m	Distal Flake	Quartz	-	-	-	13.13	-	-	-	Feather	0	
13/12/2012	PAD 2	Mechanical Trench 1 (0-2m)	1-1.1m	Complete Flake	Chalcedony	21.98	13.54	2.11	22.21	Flaked	5.28	2.86	Feather	0	
13/12/2012	PAD 2	Mechanical Trench 1 (3-5m)	1.1m	Complete Flake	Quartz	25.9	22.8	5.5	26.7	Flaked	21.03	6.09	Feather	0	
13/12/2012	PAD 2	Mechanical Trench 1 (3-5m)	1.1m	Medial Flake	Chalcedony	-	-	-	15.65	-	-	-	-	0	3 dorsal scars
13/12/2012	PAD 2	Mechanical Trench 1 (3-5m)	1.1m	Angular Fragment	Silcrete	-	-	-	8.5	-	-	-	-	0	
13/12/2012	PAD 2	Mechanical Trench 1 (3-5m)	1.1m	Medial Flake	Chalcedony	-	-	-	14.3	-	-	-	-	0	2 dorsal scars
13/12/2012	PAD 2	Mechanical Trench 1 (3-5m)	1.1m	Longitudinally Split Flake	Chalcedony	-	-	-	12.1	-	-	-	-	0	Left side
13/12/2012	PAD 2	Mechanical Trench 1 (3-5m)	1.1m	Single Platform Core	Fine Grained Siliceous	-	-	-	15.2	Flaked	-	-	-	60	Cobble
13/12/2012	PAD 2	Mechanical Trench 1 (3-5m)	1.1m	Complete Flake	Silcrete	15.6	12.3	4.1	18.8	Flaked	11.09	4.4	Hinge	90	
13/12/2012	PAD 2	Mechanical Trench 1 (3-5m)	1.1m	Complete Flake	Quartz	16.02	8.3	1.8	16.8	Flaked	6.5	0.6	Feather	0	
13/12/2012	PAD 2	Mechanical Trench 1 (3-5m)	1.1m	Complete Flake	Chalcedony	11.7	9.5	2.3	12.5	Cortical	5.5	2.3	Feather	20	
22/11/2011	PAD 3	2	950-1000	Complete Flake	Silicified Quartz	35.71	30.73	12.37	39.28	Flaked	27.53	11.57	Step	70	
22/11/2011	PAD 3	2	950-1000	Complete Flake	Silicified Quartz	-	-	26.77	29.67	-	-	-	-	10	
22/11/2011	PAD 3	4	0-200	Proximal Flake	River Cobble	-	-	8.07	48.72	Cortical	47.53	6.72	-	60	Disturbed context - fallen tree
22/11/2011	PAD 3	4	300-350	Distal Flake	Chert	-	-	8.81	45.58	-	-	-	Hinge	0	Bi-directional and bipolar flake. Retouched as a core
15/12/2011	PAD 4	14	0-100	Angular Fragment	Chalcedony	-	-	-	6.47	-	-	-	-	0	
15/12/2011	PAD 4	14	0-100	Angular Fragment	Chalcedony	-	-	-	8.52	-	-	-	-	0	
15/12/2011	PAD 4	14	100-150	Longitudinally Split Flake	Chalcedony	-	-	-	21.58	Flaked	-	-	Feather	0	
15/12/2011	PAD 4	14	150-200	Flaked Fragment	Chalcedony	-	-	-	36.06	-	-	-	-	0	Retouch on right lateral margin, dorsal side up
15/12/2011	PAD 4	-	100-150	Complete Flake	Silcrete	22.59	19.06	5.56	27.23	Flaked	13.82	6.18	Feather	0	
15/12/2011	PAD 4	18R	100-150	Complete Flake	Silcrete	14.73	9.34	4.33	17.36	Flaked	7.56	3.37	Feather	0	
15/12/2011	PAD 4	18R	100-150	Angular Fragment	Chalcedony	-	-	-	19.78	-	-	-	-	50	
15/12/2011	PAD 4	18R	100-150	Complete Flake	Chalcedony	15.27	7.48	3.20	16.12	Flaked	4.09	1.65	Feather	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
15/12/2011	PAD 4	18R	100-150	Distal Flake	Chalcedony	-	-	-	12.95	-	-	-	Feather	0	
15/12/2011	PAD 4	18R	100-150	Distal Flake	Chalcedony	-	-	-	11.52	-	-	-	Step	0	
15/12/2011	PAD 4	22	100-150	Complete Flake	Silcrete	14.21	11.00	3.17	19.18	Flaked	13.55	2.71	Feather	0	
15/12/2011	PAD 4	26	100-200	Proximal Flake	Silcrete	-	-	-	16.03	Flaked	11.74	2.24	-	0	
15/12/2011	PAD 4	26	100-200	Longitudinally Split Flake	Silcrete	-	-	-	13.07	-	-	-	-	0	Left side
20/12/2011	PAD 4	27	200-250	Angular Fragment	Chert	-	-	-	16.90	-	-	-	-	0	
20/12/2011	PAD 4	13	50-100	Distal Flake	Chalcedony	-	-	-	11.90	-	-	-	Feather	80	
17/11/2011	PAD 1	3	300-400	Flaked Fragment	Chert	-	-	6.74	35.32	-	-	-	-	0	
17/11/2011	PAD 1	3	300-400	Flaked Fragment	Chert	-	-	2.36	20.2	-	-	-	-	0	
17/11/2011	PAD 1	3	300-400	Flaked Fragment	Chert	-	-	1.38	12.56	-	-	-	-	0	
17/11/2011	PAD 1	3	300-400	Flaked Fragment	Chert	-	-	1.95	9.24	-	-	-	-	0	
17/11/2011	PAD 1	6	300-400	Flaked Fragment	Chert	-	4.7	1.8	7.07	-	-	-	-	70	
17/11/2011	PAD 1	8	500	Multi-platform Core	Chert	35.11	66.15	37.2	76.09	Flaked	62.59	34.44	-	40	
17/11/2011	PAD 1	8	500	Distal Flake	Chert	-	9.67	2.74	12.32	-	-	-	Plunge	0	Belongs to above core
9/12/2011	Rudgley PAD 2	1	700-800	Complete Flake	Chert	8.10	8.80	2.06	9.30	Flaked	4.30	2.10	Feather	0	
9/12/2011	Rudgley PAD 2	6R	550-600	Complete Flake	Chert	5.30	12.80	1.90	13.40	Flaked	12.80	2.50	Feather	0	
9/12/2011	Rudgley PAD 2	6R	550-600	Flaked Fragment	Chert	-	-	-	8.30	-	-	-	-	0	
9/11/2011	Rudgley PAD 1B	5	0-100	Flaked Fragment	Chert	-	-	-	17.90	-	-	-	-	0	
16/12/2011	Rudgley PAD 1B	11	50-100	Angular Fragment	Chalcedony	-	-	-	7.00	-	-	-	-	0	
16/12/2011	Rudgley PAD 1B	10	100-150	Complete Flake	Chert	8.00	10.50	3.00	14.00	Flaked	4.50	1.10	Step	0	
16/12/2011	Rudgley PAD 1B	12	100-200	Complete Flake	Chalcedony	7.00	4.00	1.50	8.00	Flaked	2.00	1.50	Feather	0	
16/12/2011	Rudgley PAD 1B	15	100-150	Angular Fragment	Chalcedony	-	-	-	11.00	-	-	-	-	0	
23/11/2011	Rudgley PAD 1A	1	0-100	Single Platform Core	Chert	125	44.8	21.6	49.1	Cortical	43	22.5	Plunge	80	
23/11/2011	Rudgley PAD 1A	1	0-100	Proximal Flake	Chert	41	34.1	13.35	46.3	Flaked	25.4	5.2	Feather	0	
23/11/2011	Rudgley PAD 1A	1	300-350	Flaked Fragment	Chert	-	-	2.4	16.9	-	-	-	-	0	
23/11/2011	Rudgley PAD 1A	1	350-400	Longitudinally Split Flake	Chert	-	-	4	17.95	Flaked	-	-	Feather	0	Right side, heat damaged
23/11/2011	Rudgley PAD 1A	2	100-200	Medial Flake	Chert	-	-	2.1	14.4	-	-	-	-	0	
23/11/2011	Rudgley PAD 1A	14	50-150	Axe Fragment	Basalt	-	-	34.6	47.6	-	-	-	-	0	Significant edge damage
16/11/2011	Saezza 1	1	100-150	Medial Flake	Chert	-	-	-	11.49	-	-	-	-	0	
16/11/2011	Saezza 1	1	150-250	Multi-platform Core	Chert	-	-	-	41.12	-	-	-	-	0	
16/11/2011	Saezza 1	1	150-250	Single Platform Core	Chert	16.29	16.87	27.22	-	Flaked	30.95	17.47	-	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
 Aboriginal Heritage Assessment – Woodburn to Ballina
 Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
16/11/2011	Saezza 1	1	150-250	Flaked Fragment	Chert	-	-	-	31.35	-	-	-	-	50	Shows signs of heat damage
16/11/2011	Saezza 1	1	150-250	Flaked Fragment	Chert	-	-	-	26.19	-	-	-	-	30	
16/11/2011	Saezza 1	1	250-300	Longitudinally Split Flake	Chert	-	-	-	15.69	Crushed	-	-	Feather	0	
16/11/2011	Saezza 1	1	250-300	Complete Flake	Chert	11.28	12.05	2.78	14.44	-	-	-	Feather	0	
16/11/2011	Saezza 1	1	250-300	Flaked Fragment	Chert	-	-	-	13.13	-	-	-	-	0	
16/11/2011	Saezza 1	1	250-300	Flaked Fragment	Chert	-	-	-	9.09	-	-	-	-	0	
16/11/2011	Saezza 1	7R	400-500	Medial Flake	Chalcedony	-	-	-	20.62	-	-	-	-	0	
16/11/2011	Saezza 1	7R	400-500	Complete Flake	Chalcedony	11.49	18.06	2.93	18.96	Flaked	8.65	2.92	Plunge	20	
16/11/2011	Saezza 1	7R	400-500	Distal Flake	Chalcedony	-	-	-	22.54	-	-	-	Hinge	40	
16/11/2011	Saezza 1	7R	400-500	Flaked Fragment	Chert	-	-	-	23.67	-	-	-	-	20	
16/11/2011	Saezza 1	7R	400-500	Flaked Fragment	Chert	-	-	-	21.66	-	-	-	-	0	
16/11/2011	Saezza 1	7R	400-500	Multi-platform Core	Chalcedony	-	-	-	17.28	-	-	-	-	0	Broken
16/11/2011	Saezza 1	7R	400-500	Complete Flake	Chalcedony	17.49	9.25	3.07	17.49	Crushed	-	-	Feather	30	
16/11/2011	Saezza 1	7R	400-500	Flaked Fragment	Chert	-	-	-	12.38	-	-	-	-	0	
16/11/2011	Saezza 1	7R	400-500	Complete Flake	Chert	10.20	-	1.38	10.20	Flaked	6.00	1.17	Feather	0	
16/11/2011	Saezza 1	7R	400-500	Complete Flake	Chert	15.37	5.38	2.43	15.37	Flaked	6.32	1.38	Feather	0	
16/11/2011	Saezza 1	7R	400-500	Flaked Fragment	Chert	-	-	-	21.24	-	-	-	-	0	
16/11/2011	Saezza 1	7R	400-500	Flaked Fragment	Quartz	-	-	-	8.36	-	-	-	-	0	
16/11/2011	Saezza 1	2	500-600	Complete Flake	Chert	23.51	30.49	6.72	33.24	Crushed	-	-	Feather	0	Retouch on distal end
16/11/2011	Saezza 1	2	500-600	Proximal Flake	Chert	-	-	-	11.13	Flaked	2.42	1.17	-	0	
16/11/2011	Saezza 1	2	900-1000	Complete Flake	Chert	12.27	7.62	2.57	14.52	Flaked	7.98	2.48	Feather	0	Heat damaged
16/11/2011	Saezza 1	3	250-300	Flaked Fragment	Chert	-	-	-	10.87	-	-	-	-	0	
16/11/2011	Saezza 1	3	250-300	Complete Flake	Chert	10.93	4.34	2.59	10.93	Flaked	6.68	4.36	Feather	0	
16/11/2011	Saezza 1	3	250-300	Distal Flake	Chert	-	-	-	8.70	-	-	-	Feather	80	
16/11/2011	Saezza 1	3	250-300	Flaked Fragment	Chert	-	-	-	5.77	-	-	-	-	0	
16/11/2011	Saezza 1	3	300-350	Flaked Fragment	Chert	-	-	-	20.94	-	-	-	-	60	
16/11/2011	Saezza 1	3	300-350	Proximal Flake	Chert	-	-	-	14.30	Crushed	-	-	-	80	
16/11/2011	Saezza 1	3	300-350	Distal Flake	Chert	-	-	-	10.30	-	-	-	Feather	70	
16/11/2011	Saezza 1	3	300-350	Longitudinally Split Flake	Chert	-	-	-	15.26	Crushed	-	-	Feather	0	
16/11/2011	Saezza 1	3	300-350	Flaked Fragment	Chert	-	-	-	5.46	-	-	-	-	0	
16/11/2011	Saezza 1	3	350-400	Complete Flake	Chert	14.76	5.60	2.98	14.76	Flaked	3.15	1.13	Plunge	0	
16/11/2011	Saezza 1	3	350-400	Medial Flake	Chert	-	-	-	19.35	-	-	-	-	40	
16/11/2011	Saezza 1	3	350-400	Longitudinally Split Flake	Chert	-	-	-	15.63	Flaked	-	2.48	Step	0	
16/11/2011	Saezza 1	3	700-800	Complete Flake	Chert	19.80	11.67	1.89	19.80	Flaked	4.87	1.65	Feather	0	
16/11/2011	Saezza 1	3	700-800	Complete Flake	Chalcedony	10.57	9.93	2.93	10.57	Flaked	6.71	2.93	Plunge	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
16/11/2011	Saezza 1	5	900	Complete Flake	Chert	11.50	16.70	3.10	18.10	Flaked	5.90	1.80	Plunge	0	
17/11/2011	Saezza 1	3	240	Flaked Fragment	Chalcedony	-	-	-	21.47	-	-	-	-	0	
17/11/2011	Saezza 1	3	240	Flaked Fragment	Chert	-	-	-	9.10	-	-	-	-	0	
17/11/2011	Saezza 1	3	240	Complete Flake	Chert	9.81	7.46	3.63	9.81	Flaked	6.05	3.49	Feather	20	
17/11/2011	Saezza 1	3	240	Complete Flake	Chert	14.80	16.61	3.41	22.82	Flaked	-	2.22	Feather	0	Part of platform broken away
17/11/2011	Saezza 1	3	240	Complete Flake	Chert	6.45	8.02	1.35	8.02	Flaked	6.41	1.40	Feather	0	
17/11/2011	Saezza 1	3	240	Distal Flake	Chert	-	-	-	18.74	-	-	-	Step	0	
17/11/2011	Saezza 1	3	240	Flaked Fragment	Chert	-	-	-	11.46	-	-	-	-	0	
17/11/2011	Saezza 1	3	240	Distal Flake	Chert	-	-	-	9.40	-	-	-	Feather	0	
17/11/2011	Saezza 1	3	400+	Distal Flake	Chalcedony	-	-	-	54.11	-	-	-	Feather	0	Possibly from same core
17/11/2011	Saezza 1	3	400+	Complete Flake	Chalcedony	20.02	15.10	5.10	22.76	Flaked	15.16	7.30	Feather	0	Possibly from same core
17/11/2011	Saezza 1	3	400+	Complete Flake	Chalcedony	22.55	31.15	9.22	34.16	Flaked	18.99	13.39	Feather	0	Possibly from same core
17/11/2011	Saezza 1	3	400+	Distal Flake	Chert	-	-	-	29.61	-	-	-	Feather	0	Heat damaged
17/11/2011	Saezza 1	3	400+	Flaked Fragment	Chert	-	-	-	13.59	-	-	-	-	0	
17/11/2011	Saezza 1	3	400+	Medial Flake	Chert	-	-	-	13.85	-	-	-	-	0	Usewear
17/11/2011	Saezza 1	3	400+	Flaked Fragment	Chert	-	-	-	16.62	-	-	-	-	0	
17/11/2011	Saezza 1	3	400+	Flaked Fragment	Chalcedony	-	-	-	15.57	-	-	-	-	0	
17/11/2011	Saezza 1	3	400+	Proximal Flake	Chalcedony	-	-	-	10.01	Flaked	4.98	1.91	-	0	
17/11/2011	Saezza 1	3	400+	Proximal Flake	Chalcedony	-	-	-	11.78	Flaked	4.73	1.79	-	0	
17/11/2011	Saezza 1	3	400+	Flaked Fragment	Chert	-	-	-	10.09	-	-	-	-	0	
17/11/2011	Saezza 1	3	800-900	Complete Flake	Chert	22.31	17.71	7.80	25.34	Flaked	15.31	9.48	Step	0	
17/11/2011	Saezza 1	3	800-900	Flaked Fragment	Chert	-	-	-	11.94	-	-	-	-	0	
17/11/2011	PAD 12	4	600	Proximal Flake	Chert	-	-	-	6.60	Flaked	3.78	1.91	-	0	
17/11/2011	PAD 12	6	700	Complete Flake	Chert	13.76	6.22	2.49	13.76	Flaked	3.80	2.99	Step	0	
17/11/2011	PAD 12	7	300	Proximal Flake	Chert	-	-	-	19.26	Flaked	-	1.41	-	0	Part of the platform is broken
17/11/2011	PAD 12	7	300	Flaked Fragment	Chert	-	-	-	15.72	-	-	-	-	0	
17/11/2011	PAD 12	7	300	Flaked Fragment	Chert	-	-	-	24.30	-	-	-	-	0	
17/11/2011	PAD 12	7	300	Flaked Fragment	Chert	-	-	-	19.22	-	-	-	-	0	
17/11/2011	PAD 12	7	300	Flaked Fragment	Chert	-	-	-	10.00	-	-	-	-	0	
17/11/2011	PAD 12	7	300	Flaked Fragment	Chert	-	-	-	16.34	-	-	-	-	0	
17/11/2011	PAD 12	7	350-400	Flaked Fragment	Chert	-	-	-	26.00	-	-	-	-	20	
17/11/2011	PAD 12	7	350-400	Flaked Fragment	Chert	-	-	-	18.28	-	-	-	-	60	
17/11/2011	PAD 12	7	350-400	Flaked Fragment	Chert	-	-	-	20.23	-	-	-	-	0	
17/11/2011	PAD 12	7	350-400	Flaked Fragment	Chert	-	-	-	14.16	-	-	-	-	0	
17/11/2011	PAD 12	7	350-400	Complete Flake	Chert	8.32	8.17	2.20	9.55	Flaked	5.37	1.29	Hinge	0	
17/11/2011	PAD 12	7	350-400	Flaked Fragment	Chert	-	-	-	11.43	-	-	-	-	0	

PUBLIC

Woolgoolga to Ballina Pacific Highway Upgrade
Aboriginal Heritage Assessment – Woodburn to Ballina
Volume 2 Appendices

Date	Site Name	STP Number	Depth (mm)	Artefact Type	Raw Material	Length (mm)	Width (mm)	Thickness (mm)	Maximum Dimension	Platform Type	Platform Width	Platform Thickness	Termination Type	Cortex (%)	Comments
17/11/2011	PAD 12	7	350-400	Complete Flake	Chert	6.71	5.32	1.41	8.55	Flaked	2.69	1.47	Feather	0	

PUBLIC

Upgrading the Pacific Highway – Woolgoolga to Ballina Upgrade

Table 13 Shell midden table: Woodburn to Ballina (from south to north)

Date	Site Name	STP Number	Depth (mm)	Shell species	MNI (left)	MNI (right)	Weight (g)
13/12/2011	E2/2	12	150-400	<i>Donax deltoides</i>			
13/12/2011	E2/2	15	0-200	<i>Donax deltoides</i>			
13/12/2011	E2/2	20R	200-250	<i>Donax deltoides</i>			
13/12/2011	E2/2	21R	0-150	<i>Donax deltoides</i>			
14/12/2011	E2/2	30	Surface	<i>Donax deltoides</i>			
14/12/2011	E2/2	31	Surface	<i>Donax deltoides</i>			
14/12/2011	E2/2	36	50-100	<i>Donax deltoides</i>	4	3	40
16/12/2011	E2/2	Trench 1	0-400	<i>Donax deltoides</i>		3	20.8
16/12/2011	E2/2	Trench 1	500-800	<i>Donax deltoides</i>			
16/12/2011	E2/2	Trench 1 (2-4 m)	0-400	<i>Donax deltoides</i>			4.9
16/12/2011	E2/2	Trench 1 (4-6 m)	0-200	<i>Donax deltoides</i>	1	2	4.7
16/12/2011	E2/2	Trench 1 (6-8 m)	0-400	<i>Donax deltoides</i>			0.8
16/12/2011	E2/2	Trench 2A (0-2 m)	0-400	<i>Donax deltoides</i>	1		7.1
29/11/2011	Melino PAD	38	200-300	<i>Donax deltoides</i>			
29/11/2011	Melino PAD	39		Shell fragments			