Client	TfNSW
Contract No.#	21.0000139295.2145
Contract	New Dubbo Bridge
ITP prepared by	
ITP approved by	

INSPECTION AND TEST PLAN FOR:

Cold Milling of Road Pavement Materials (R101)

Work Area:	
Inspection and	l Test Plan
ITP 19	(ITC 19)
Lot No:	

Legend	:	W = Witnes	SS	H = Hold	S = Surveillance		ACPL = A	bergelo	S/C = Subcontractor		
Activit	Description	Requirement s /		Acceptance Criteria			Frequency		ction – Eng Date	Comments / Attachments /	
y No.#		Reference						S/C	ACPL	Client	Records
1	Safety Review	Project Safety Plan	 Required Sat 	nnel inducted (includes envir e Work Method Statements or's safety plan/procedure app	completed and signed	Prior to commer	ncing works		W	S	
2	Environment	Project Environment Plan	in accordance Air quality to	 Installation of soil erosion and sedimentation controls completed in accordance with Soil and Water Specs. Air quality to be visually monitored for dust etc. as a direct result of construction activities. 			ncing works		W	S	
3	Scope	R101 Cl1.1	pavement ma Structures by vertical faces	This Specification sets out the requirements for the removal of pavement materials from road pavements and Concrete Structures by cold milling, including the treatment of the milled vertical faces and the cleaning up and removal and disposal of the milled materials.			Prior to commencing works		S	S	
4	Survey of Hidden Objects	R101 Cl3		 HOLD POINT: Submission of verification documentation, the marking of milling depths and locations of all Hidden Objects on site, records 			vorks		Н	Н	Hold Point
5	Working Tolerances	R101 Cl4.1	 Depth of cut tolerances sp 	omply with the				S	S		

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y No.#	•	Reference								. ,	S/C	ACPL	Client	Records
				Table R101.1 – Tolera	nces									
			Nature of Milling Work	Tolerance, Greater than specified	Depth of Cut (mm) Less than specified	Groove Spacing (mm)	Surface Text Depth (mm							
			Cutting to depth ≤ 40 mm Cutting to depth > 40 mm where the floor of the cut is asphalt or material	0	8 max 5 max	15 max 15 max	2.5 max Not specifie							
			Cutting to depth > 40 mm where the floor of the cut is unbound Cutting to depth within nominal 40 mm of the surface of a Conc		5 max 8 max	15 max 10 max	Not specifie 2.5 max	d						
			Structure and/or waterproofing membrane that is to be retained Producing a surface suitable for spray sealing without prior com Milling to achieve specified level (Clause 4.3)	ection Not specified 10 max	Not specified	10 max Not specified	1.5 max Not specifie							
			Re-texturing the surface of asphalt pavement (Clause 4.4)	As specified in Clause 4.4	As specified in Clause 4.4	10 max	Not specifie							
			Producing a surface to optimise ride quality (Clause 4.5) On Concrete Bridge Element with extra fine milling requirement ("Nominated Bridges" as listed in Anneoure R101/E)	5 max s 0	5 max 8 max	Not specified 10 max	Not specifie 1.5 max	d						
			Note: Where the nature of milling work satisfies more the	an one of the descriptions at	ove, the least tolerance	e applies.								
6	Milling to Achieve Specified Depth of Cut	R101 Cl4.2	advance of the tim	HOLD POINT: Written notice to the Principal at least 24 hours in advance of the time when the floor of the milled area will be available for inspection.						24 hours		Н	Н	Hold Point
7	Milling to Achieve Specified Level	R101 Cl4.3	Annexure R101/A)	HOLD POINT: Survey Report of the milled floor (if specified in Annexure R101/A) and written notice to the Principal of the time that the floor of the milled surface will be available for inspection.						red		Н	Н	Hold Point

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y No.#		Reference							S/C	ACPL	Client	Records
			Type of Work (e.g. m milling to specified let milling to optimise rid Concrete Structures)		Milling to specified le (to provide minimun depth for AC Over Existing Pavement- Pavement (types INI's and IN2'x') As shown on the Drawings	-						
	Milling to		(specified depth, avera or average depth to rer surface) When milling outcome mus predetermine m.	(specified depth, average depth to specified level, or average depth to remove all asphalt from the surface) When milling is required to optin outcome must be achieved by c predetermined by survey. The n		verage depth width must be 2						
8	Optimise Final Ride Quality	R101 Cl4.5	minimum 6 m system. Set cutting seque You may prop	alternative metho	or an equivaler to a constant some the crown to nent subject to the crown the crown to the crown th	nt non-contact speed and the	As require	ed		S	S	

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Activit y No.#	Description	Requirement s /		Acceptance Cr	iteria	Fred	quency	Inspe	ction – Eng Date	Comments / Attachments /	
y NO.#		Reference	3 m straighte	e shape and profile of the milled surface by the use of a ghtedge after each cut. Carry out testing transversely				S/C	ACPL	Client	Records
			Method TfNS	nally at intervals not exc W T183. The milled sur the bottom of the straigh							
	Investigation of Thickness of Existing Asphalt over Concrete Structures		thickness of einformation of on existing particle. Where specifinvestigation over each Co	avement prior to the confied in Annexure R101/A to determine the thicknessing the Structure. The Formation,							
9		R101 Cl4.6.1	a) Deterr on the sensin	pavement the lines of m g foot on each side of th	rn of milling works and mark novement of the depth ne milling machine	24 hours commen milling	before cement of		S	S	
			diame concre concre depth		at 3 m intervals (over 20 m intervals (over other th line of movement of a						
				ings of the investigation ommencement of milling.	to the Principal at least 24						
10	Revised Scope of Works Based on Investigation	R101 Cl4.6.2	prior to milling	g of the time and date of and date the proposed o	al not less than 24 hours commencement of milling depths of cut will be marked	24 hours milling	prior to		W	S	Witness Point

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y No.#		Reference						S/C	ACPL	Client	Records
11	Milling Operations	R101 Cl4.6.2	the operation sensing equip Submit to the each operato During milling suitably traine milling machinity i) Oi	ors must have adequate train of the cold milling machine (is ment). Principal the experience and reprior to the commencement operations over Concrete Start and skilled milling machine at all times as follows: The on the driving platform the on each side of the machine cinity of the sensor/cutting machine means as the control of the sensor/cutting machine on the driving platform the control of the sensor/cutting machine of the sensor/cutting machine of the cold of the machine of the sensor/cutting machine of the cold of the machine of the cold of the	training records of of work on site. ructures, provide three operators at the cold	Prior to the commen works	ne cement of		S	S	
12	Milling Procedures	R101 Cl4.6.5	HOLD POINT: Written notice to the Principal together with proposed procedures for the work at least 7 days (except for Clause 4.6.2 where it is 24 hours) prior to the commencement of milling work				rior		Н	Н	Hold Point
13	Operation of Cold Milling Machine	R101 Cl4.6.6	ride quality of or specifically During the op take all necessides of the contacting the sides of the concrete Structures). HOLD POINT concrete, noti	old milling machines to correct the surface of Concrete Strudirected by the Principal. eration of cold milling over Cosary precautions to prevent the concrete. Measure the actual old milling machine at interval the bridge elements) or 10 m (compared to the Concrete that the control of the concrete that the soft that the control of the concrete that the soft that the control of the concrete that the control of the control	ctures unless specified concrete Structures, he cutting teeth from al depth of cut on both is not exceeding 3 mover other Concrete contacted the of the incident and	As requir	ed		Н	Н	Hold Point
14	Operation of Cold Milling Machine	R101 Cl4.6.6	due to broker immediately of	After any change to the patter or worn cutting teeth, notify of the incident and submit det course of action	the Principal	As requir	red		Н	Н	Hold Point

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y No.#		Reference						S/C	ACPL	Client	Records
15	Work in Vicinity of Object within Milling Area	R101 Cl4.7	remove the si	s are located within the urrounding material for the object by means o	Prior/Dur	ing Works		S	S		
16	Unsuitable Material	R101 Cl4.8	concrete and/ existing at the milling operat HOLD POINT removal of the	Remove any planes of weakness within the asphalt, cement concrete and/or pavement materials, or any unsuitable material existing at the base of the cut, which is not removed by the milling operation to the extent directed by the Principal. HOLD POINT: Written notice to the Principal of the time that the removal of the unsuitable material will be completed and be available for inspection.					н	н	Hold Point
17	Temporary Treatment at Edges of Milling	R101 Cl4.9	milled surface of ramps mus i) Tran ii) Long iii) Inter	e to tie into the existing of the as follows: Isverse joints Gitudinal joints Iface with structures by either bevelling with	e, ramp the edges of the road levels. The dimensions				S	S	
18	Clean up & Disposal of Milled Materials & Temporary Ramp Materials	R101 Cl4.10	traffic at the s particles dete exceed 20 pa representative Principal.	eeping and prior to the ignposted speed, the irmined in accordance inticles per square metre of the section and as T: Notification of the timent at least 24 hours principles.	At least 2 prior	24 hours		н	Н	Hold Point	
REVIEV	V BY PROJECT	ENGINEER				<u> </u>					
	-conformances?		YES NO	Nos:			Close	ed Out		YES	Пио

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													Subco	ontractor
	-4114		Requ	uirement					Inspection – Enginee			gineer Sign a	Com	ments /
	Activit	Description		s/		Acceptance Criteria	Frequency			Date	Attac	Attachments /		
У	No.#		Ref	ference						S/C	ACPL	Client	Re	Records
0	Other QA details – NCRs, CARs,													
ld	entified	d Records etc												
All work has been satisfactorily completed.				y complete	ed.	☐YES				□NO				
Name						Signature				Dat	е			

PM009-F02

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