ARTC

NEW EQUIPMENT AND SYSTEM APPROVAL CERTIFICATE

Certificate No.	**NESA-T108** **Version No. 1.2**
Approval date	23/04/2019
Approved by	General Manager Technical Standards
Report no.	NESA-T108
Report date	N/A
This certificate is issued to	
Supplier	Austrak
In respect of	
Manufacturer	Austrak
Product description	Non Articulated Bearer Joiner Plate (plate and pad)
Item identification	Austrak Non Articulated Bearer Joiner Plate (plate and pad) drawing number JP11 Revision A and JP12 Revision A.
Application	Scholey Street Junction 95 & 98 PTS Turnouts and Diamond Chullora Junction 346 & 347 PTS Turnouts and Diamond West Footscray WFS5 and WFS7 PTS Turnouts and Diamond

Relevant Standards

Number	Title
ARTC Track and Civil Code of Practice Section 2	Sleepers and Fastenings
ETG-02-01	Sleepers, Bearers and Fastenings General Appendix
ETD-02-02	Resilient Rail Fastenings for Medium Duty Concrete Sleepers - Design
ETD-02-04	Resilient Rail Fastenings for Heavy Duty Concrete Sleepers - Design
ETD-02-05	Concrete Sleepers – Design
AS1085.14	Prestressed concrete sleepers
AS1085.19	Resilient fastening assemblies

Conditions of Approval

Design

1. Only for holding the long bearers to retain a constant bearer spacing and alignment. They do not transmit any loading and not to be used for holding gauge.
2. Joiner plate approval is for fixed nose crossings only. This design cannot be used for swing nose crossings due to any slight misalignment impacting the point machine rodding connection to swingnose.

Austrak:

3. All relevant Rail Safety and WHS requirements must be complied with.
4. Operate a quality management system that provides confidence of ongoing quality assurance specifically for these products.
5. Any subsequent change to the design, materials or manufacturing process is not covered by this approval. The manufacturer should notify ARTC of any modification or changes in order to obtain a valid certificate.
6. Insulation test shall be carried out to ensure there is no connectivity between the rail and the concrete bearer joint plate.
7. Provide ongoing technical support and provision of maintenance manuals for the lifetime of the turnouts.
8. Conformance with relevant ARTC Standards including this type approval and Australian Standards. Provide conformance certificate for each supply.
9. All Engineering Drawings to comply with ARTC's Engineering Drawings and Documentation Procedure.

ARTC:

10. All relevant Rail Safety and WHS requirements must be complied with.
11. Install and maintain as per the manufacturer's type approval.
12. Project Manager to handover to Asset Manager relevant quality documentation confirming supply and installation meet the requirements of nominated relevant standards and this type approval.
13. The Project Manager is to ensure as part of the handover initial replacement spares are provided to inventory and advice requirements for maintaining on going supply of spares.
14. The Project Manager is to ensure as part of the handover arrangements are made to brief maintenance staff of the required inspections including how to detect defects and required response.
15. The Project Manager is to ensure special requirements for inspection and tamping works are captured in the Asset Management System.
16. Extra care should be taken when placing bearers adjacent to each other prior to installation of the joiner plates. The distance between the ends of the bearers is 20mm and thus precaution should be taken to ensure that the two bearer ends do not contact each other for risk of chipping damage to the concrete.
17. Ensure that the eClips are installed to the correct orientation according to the drawing.
18. Ensure that the two connecting bearers are installed to the correct orientation as per the drawing as the bearer tagging on

each bearer will be very similar to each other. The connection point is always on the non-datum end of the bearer.

19. The joiner plates must be removed when the track is tamped or bearers are lifted for other track maintenance. Once the tamping is complete and the ballast is renewed, the joiner plate assembly can be reinstalled.
20. Joiner plates are to be visually inspected to ensure the plates are correctly seated and secured in position and that no cracks, void, pitting, or other defects are present.
21. Area Manager to report ongoing performance issues to the Manager Standards.

Note/Comments

Issue date 23/04/2019 **Expiry date** N/A

Issued by **John Furness**

ARTC Manager Standards

Supporting Documents:

1. Drawing number JP 11 Rev A – Non Articulated Bearer Joiner Plate (Plate & Pad)
2. Drawing number JP 12 Rev A – Non Articulated Bearer Joiner Plate
3. Drawing number VAM 17356 - SCHOLEY STREET JCN-INSLINGTON ARR/DEP-164.8km 95 PTS TURNOUT/DIAMOND & 98 PTS TURNOUT – ARTC GENERAL ARRANGEMENT.
4. Report on Concrete Beam Joiner Plates Installed in a North Melbourne Crossover.
5. Austrak Bearer Joiner Plate System Assembly and Maintenance Manual.
6. Final design report SCHOLEY STREET JUNCTION RENEWAL OF 95 & 98 PTS TURNOUTS & DIAMON dated 27/10/2016.
7. t310 Joiner plate report 110403 (Report on Concrete Beam Joiner Plates Installed in a North Melbourne Crossover).

Revision 1.1:

8. Turnout Bearer Joiner Performance, dated 25/02/2019