

## NEW EQUIPMENT & SYSTEM APPROVAL PROFORMA

Ref: 13/5214

Note: the prompts given below are only a guide to the information required for approval. Dependent on the type of equipment or system that requires approval delete any section that is not applicable or include additional information if necessary. **Mandatory** fields are marked with an asterisk (\*).

|       |   |
|-------|---|
| 1     | <b>Equipment or System to be approved *</b><br><br><b>Aldon hinged Derailer, Models 4014-01 (left throw) and 4014-02 (right throw) on common rail only in conjunction with ramp blocks between BG and SG rails for use at Appleton Dock.</b>  |
| 2     | <b>Originator *</b><br>Name: John Middleton, Senior Project Manager      Company: Rail Operations Safety and Safeworking  |
| 3     | <b>Introduction *</b><br>Secondary protection of adjacent sidings in Appleton Dock, Melbourne where existing track components protect the main line.  |
| 4     | <b>Determination of Need *</b><br>Required for use in dual gauge track under Rail Safety Management of ARTC (owned by Port of Melbourne).   |
| 5     | <b>Significant Change or Not (as determined by the Manager Standards) *</b><br>This change in equipment or system is assessed as Significant (Manufacturers products not used previously on ARTC network)   |
| 6     | <b>Review Panel (as determined by the Manager Standards) *</b> <ul style="list-style-type: none"> <li>John Furness - Manager Standards</li> <li>Jamie Threader - Delivery Manager, Melbourne</li> <li>Phil Meehan - Operations Support Manager (East/West)</li> <li>Tim Calver - Track Standards &amp; Technical Services Engineer</li> </ul><br><b>Second Review Panel</b> (to review the updated Type Approval with modified ramp blocks between the dual gauge rails) <ul style="list-style-type: none"> <li>John Furness - Manager Standards</li> <li>Bryce Barr - Project Delivery Manager (Melbourne to Crystal Brook)</li> </ul> |
| 7     | <b>Safety</b><br>Considered to be fit for purpose, refer to attached Performance and Suitability summary prepared by ROSS. The derailer will prevent slow moving vehicles going past designated locations.<br>Revision:<br>The use of the existing derailer for SG and use of the existing derailer with the modified ramp blocks in combination for Broad Gauge of the dual gauge tracks are considered suitable for slow speed use at Appleton dock.  |
| 8     | <b>Performance and Suitability</b><br>The use of two existing components in combination to form a secondary derail for dual gauge track is considered to be suitable for use.   |
| (i)   | <b>Use in other rail networks</b><br>See attached listing from Aldon for US clients. Also Downer EDI Port Augusta workshops.  |
| (ii)  | <b>Use in the ARTC network</b><br>There are no known installation of Aldon derailers in the ARTC system however the ramp blocks were employed in conjunction with a derail at the entrance to Port flat Yard in 2008. The combination is considered suitable for temporary use.   |
| (iii) | <b>Issues arising from usage of the equipment/system</b><br>Should the derail fail, the main line is protected by an electro mechanical derail (see New Equipment Approval 08-08-11-086) – copy attached.   |
| (iv)  | <b>Changes required to infrastructure or systems for use of the equipment</b><br>Inspections to be included as part of Appleton Dock regime.<br>Check rail to be removed adjacent both common and dual gauge rails within one meter of the derail.<br>Derail is used in conjunction with ramp blocks for facilitate derail of BG wheel over SG rail. Modified as per attached sketch.<br>The ballast for 5 metres on the derailed side of the derailer is to be clean and flooded up to the underside of the rail head with clean 10mm minus gravel to facilitate capture of derailed wheels.   |

|   |  |   |     |                                     |     |                          |     |                          |
|---|--|---|-----|-------------------------------------|-----|--------------------------|-----|--------------------------|
| 9   | <b>Reliability</b><br>N/A – manually installed and removed.  |   |     |                                     |     |                          |     |                          |
| 10  | <b>Maintainability</b><br>Simple to inspect and replace if damaged during derailment.  |   |     |                                     |     |                          |     |                          |
| 11  | <b>Approval *</b><br>The Aldon Hinged Derailer supplied by Specialised Force is approved for use only at Appleton Dock in Melbourne.   |   |     |                                     |     |                          |     |                          |
| 12  | <b>Conditions of Approval *</b> <ul style="list-style-type: none"> <li>Only approved for use on flat/slow speed track at Appleton Dock in Melbourne.</li> <li>To be installed and operated in accordance with manufacturer's specifications and procedures.</li> <li>To derail towards the outside of the curve.</li> <li>Appropriate signs to be erected at each site, to ensure that Operators are aware of the location of the derailleurs. Such signage to be consistent with existing signs at Appleton Dock.</li> <li>All Operators using this yard to be advised of this installation via a Train Notice or equivalent.</li> <li>Derailers to be securely locked to rail when in use and secured when not in use.</li> <li>Inspection and maintenance to be part of a local TMP approved by the Delivery Manager</li> </ul> |   |     |                                     |     |                          |     |                          |
| 13  | <table border="1"> <tr> <td><b>Does the Originator accept the additional Conditions of Approval as set by the Review Panel:</b></td> <td>Yes</td> <td><input checked="" type="checkbox"/></td> <td>No</td> <td><input type="checkbox"/></td> <td>N/A</td> <td><input type="checkbox"/></td> </tr> </table>   | <b>Does the Originator accept the additional Conditions of Approval as set by the Review Panel:</b> | Yes | <input checked="" type="checkbox"/> | No  | <input type="checkbox"/> | N/A | <input type="checkbox"/> |
| <b>Does the Originator accept the additional Conditions of Approval as set by the Review Panel:</b> | Yes  | <input checked="" type="checkbox"/>   | No  | <input type="checkbox"/>            | N/A | <input type="checkbox"/> |     |                          |

|    |                      |                |                              |
|----|----------------------|----------------|------------------------------|
| 14 | <b>Sign off</b>      |                | <b>ARTC office use only</b>  |
|    | <b>Review Panel:</b> |                |                              |
|    | John Furness         | <u>On File</u> | Date: <u>6 February 2013</u> |
|    | Jamie Threader       | <u>On File</u> | Date: <u>6 February 2013</u> |
|    | Phil Meehan          | <u>On File</u> | Date: <u>6 February 2013</u> |
|    | Tim Calver           | <u>On File</u> | Date: <u>6 February 2013</u> |

Approved by Operations Safety & Environmental Review Group 11 February 2013.

|    |   |                |                             |
|----|---|----------------|-----------------------------|
| 15 | <b>Sign off</b>                               |                | <b>ARTC office use only</b> |
|    | <b>Review Panel for modified ramp blocks:</b> |                |                             |
|    | John Furness                                  | <u>On File</u> | Date: <u>12 August 2013</u> |
|    | Bryce Barr                                    | <u>On File</u> | Date: <u>7 August 2013</u>  |

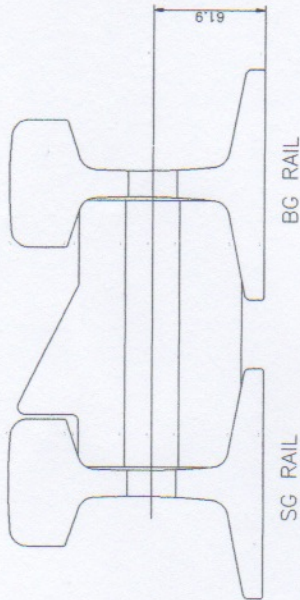
Approval of updated Type Approval:

Operations Safety & Environment Review Group

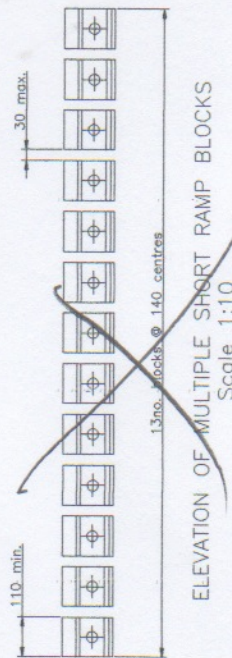
Date: 12 August 2013

Additional sign off received from Rodney Davies from Port of Melbourne (on file) 12 August 2013

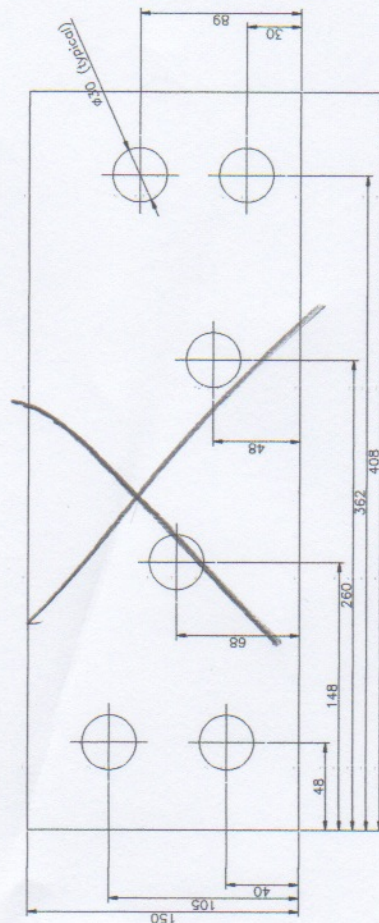




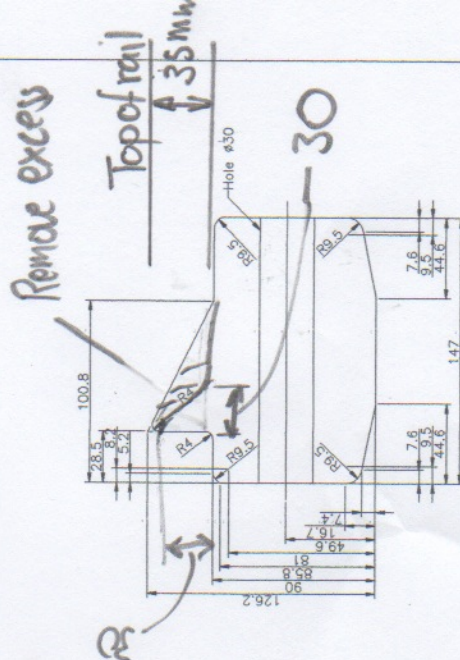
SECTION THROUGH RAMP BLOCK FOR 50kg AS RAIL  
Scale 1:2



ELEVATION OF MULTIPLE SHORT RAMP BLOCKS



WITH 50kg AS RAIL: 2 OFF EX 10MM PLATE, 2 OFF EX 12MM PLATE  
WITH 47kg AS RAIL: 2 OFF EX 10MM PLATE



SECTION THROUGH RAMP BLOCK FOR 47kg AS RAIL  
Scale 1:2

NOTE: BLOCKS CAST STEEL GRADE C3 TO AS 2074

[illegible]