

# Level Crossing Flangeway and Field Side Relief Asphalt Repair

ETW-12-02

## Applicability

ARTC Network Wide	Limited to selected trial sites
SMS	

## Publication Requirement

External
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## Primary Source

ETW-16-01
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## Document Status

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## **1 Introduction**

### **1.1 Purpose**

This work instruction describes the process for repairing bitumen at the flangeway and field side relief.

### **1.2 Scope**

Repair of flangeway gap and field side relief. The work instruction is for the trial of the process on the Melbourne Adelaide Crystal Brook corridor.

### **1.3 Safety**

Appropriate rail and road traffic protection shall be in place. WHS shall be in accordance to approved WMS.

Prior to commencing the works, all personnel involved in the task shall be briefed on and understand the Work Method Statements (WMS). The WMS, pre-work brief and Safety Data Sheets (SDS) are to be kept on site.

All personnel shall undertake a site specific induction to be included within the daily pre-work brief for site safety, quality and site environmental issues. All personnel shall sign the pre-work brief.

All personnel shall hold appropriate certification or proof of competency. All plant and equipment shall be inspected and assessed prior to use.

Hot work permits to be issued when required.

All personnel to abide by the ARTC Work, Health and Safety (WHS) guidelines and have access to all ARTC safety alerts and the minimum PPE requirements for the completion of hot works.

### **1.4 Quality**

All activities to comply with ARTC standards with supporting documented evidence.

### **1.5 Methodology**

#### **1.5.1 Equipment**

1. LPG Asphalt Heating Machine.
2. Channel for forming field side.

#### **1.5.2 Process**

1. Clean surface to repair.
2. If required Apache Asphalt can provide a compressed fireboard over the rails that helps protect each rail from the heat and open flames. Note the rail will not need protection as the rail can withstand temperatures up to 180 degrees.
3. Using the LPG Asphalt heating machine, melt the asphalt into hot mix along the affected area of the flangeway or field side relief. Temperatures can reach up to 180°C.

4. Once the asphalt has been converted into hot mix, form the flange way and field side relief in accordance to ARTC requirements. Construction details in appendix A.
5. Once forming is complete the hot mix will set and curing will take approximately 1hr.

## **1.6 Risks Controlled**

This work instruction is a control for any rail heat damage. The LPG Asphalt Heating Machine used to convert asphalt back to hot mix will be touching the rail at approximately 180 degrees Celsius as its maximum. The control Apache have in place is the machine runs parallel to the rail and not on top of the rail.

## **1.7 Responsibilities**

The ARTC Project Engineer in charge of the work is responsible for the implementation of this work instruction.

The ARTC Project Engineer in charge of the work shall report on the outcome of the trial and any changes required to the work instruction.

Appendix A – Construction details

