

CERTIFICATE OF DESIGN AND CHECKING
FORM B
for

STANDARD TUNNEL DETAILS
EMERGENCY TEMPORARY MESH REPAIR

on behalf of

NETWORK RAIL

June 2010

Doc. No. NR/CIV/SD/FORMB/580

Donaldson Associates Limited
Peat House
Stuart Street
Derby
DE1 2EQ



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Derby

Stuart Street

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Donaldson Associates Limited

30/06/10	B02	4	-	NLS		
01/04/10	B01	4	-	NLJ	RH	PH
Date	Revision	Pages	Appendices	Originator	Check	Approved

June 2010

NETWORK RAIL

on behalf of

STANDARD TUNNEL DETAILS
EMERGENCY TEMPORARY MESH REPAIR

for

FORM B

CERTIFICATE OF DESIGN AND CHECKING

NETWORK RAIL (Civil Engineering Standard Designs & Details)

FORM B: CERTIFICATE OF DESIGN AND CHECKING

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Title of Scheme: Standard Tunnel Details – Emergency Temporary Repair			
Location: Various			
ELR: N/A	Mileage: N/A	O.S. Grid Reference: N/A	Structure No.: N/A

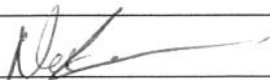
Part 1: Design

Design organisation: Donaldson Associates Limited

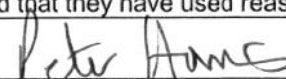
I certify that reasonable professional skill and care have been used in the design of the Scheme (or part of Scheme) identified above, with the objective of ensuring that the Design:

- (a) complies with the Approval in Principle recorded on Form A u
- (b)
- (b) complies with the Design standards, codes and methods stated on the above Form A (including any stated deviations or dispensations), with the following amendments and/or additions:
- (c) Is accurately described by the following drawings, schedules, performance, materials and workmanship specifications and other documents:

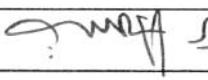
Drawing/Document No.	Rev	Drawing Title
NR/CIV/SD/580	A	Emergency Temporary Mesh Repair in Tunnels without OLE
NR/CIV/SD/581	A	Emergency Temporary Mesh Repair in Tunnels with OLE
NR/CIV/SD/TUM/580	A	Technical User Manual for the application of Emergency Temporary Mesh Repair

Signed: 	Title: Engineer
Name: Neil Johnson	Date: 30/06/2010
To be signed by the Designer or other person authorised to sign on behalf of the organisation responsible for the Design.	

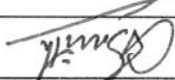
I certify that the staff who have prepared the above Design are competent to carry out their duties and that they have used reasonable professional skill and care.

Signed: 	Title: Chief Civil Engineer
Name: Peter Harris	Date: 30/06/2010
To be signed by the Director or other person authorised to sign on behalf of the organisation responsible for the Design to whom the Designer is responsible.	

(Note: for categories I and II checks the signature above may be the same as that in Part I.)

To be signed by the Director or other person authorised to sign on behalf of the organisation responsible for the Design Check to whom the Checker is responsible.	
Signed: 	Title: Chief Civil Engineer
Name: Peter Harris	Date: 30/06/2010

I certify that the staff who have completed the above check are competent to carry out their duties and that they have used reasonable professional skill and care.

To be signed by the Checker or other person authorised to sign on behalf of the organisation responsible for the Design Check.	
Signed: 	Title: Associate
Name: Rob Hillis	Date: 30/06/2010

I confirm that the Design was checked as Design Check category (insert I, II or III) and that the Design Check has been carried out with the independence specified in NR/SP/CIV/003 (formerly RT/CE/S/003).

(b) complies with the Design standards, codes and methods stated on the above Form A (including any stated deviations or dispensations), with the amendments and/or additions (if any) stated in Part 1 of this certificate. The justification given for these amendments and/or additions is acceptable.

(a) complies with the Approval in Principle recorded on Form A signed by the Designated Project Engineer (Part 4) - Senior Design Engineer Andy Cross on 18th January 2010 and the Civil Engineer (Part 5) - Senior Design Engineer Alan Dray on 18th January 2010 and the Asset Engineer (Part 6) - Senior Technology Engineer (Tunnels) Colin Sims on 21st January 2010 and on behalf of the Network Rail Professional Head of Civil Engineering (Part 7), including associated comments by the Professional Head of Civil Engineering in giving endorsement; with comments by Colin Sims, Alan Dray and Andy Cross.

I certify that reasonable professional skill and care have been used in checking the Design of the Scheme (or part of Scheme) identified in Part 1 of this certificate, with the objective of ensuring that the Design:

Part 2: Check Checking organisation: Donaldson Associates Ltd.

ELR: N/A	Mileage: N/A	O.S. Grid Reference: N/A	Structure No.: N/A
Location: Various			
Title of Scheme: Standard Tunnel Details - Emergency Temporary Repair			

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