



COSUF Workshop
5th June 2014

Experience of Tunnel Safety Officer

Stakeholders Plan and Procedures

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Tunnel Safety Officer

Hindhead Tunnel

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Planning Process

- Stakeholder engagement / consultation
- Understand resources available
 - Tunnel Operator
 - External Emergency Services / Support Agencies
 - Tunnel Systems and operational philosophy
- Understand capabilities and limitations
- Develop plans and procedures complimenting local and regional plans
- Test plans and procedures for effectiveness

Emergency Services Documentation

- Surrey Major Incident Plan
- Highways Agency Area 3 Contingency Plan
- Tunnel Emergency Plan
- Joint Emergency Services Response Plan
 - Tunnel Operator Procedures
 - Surrey Fire & Rescue Service - S.I.P (Specific Incident Plan)
 - Surrey Police - Speed Sheet
 - South East Coast Ambulance Service - Speed Sheet
 - Vehicle Recovery Services Speed Sheet

Joint Emergency Services Response Plan

- Developed following table top exercise to address identified need of a coordinated response to tunnel incidents.
- Continuous review process during planning for major exercise.
- Communicated to emergency services through familiarisation visits and inductions including draft instructional video.
- Tested 14th June 2011 Full Scale Emergency Exercise Stag.
- Further tested and refined from FRS Perspective by 5 further full scale FRS Exercises.
- Final review following feedback from Exercise Stag debrief.
- Instructional video produced for on-going familiarisation
- Individual service plans developed based on the joint plan.
- On going emergency exercises and review meetings

Command and Control

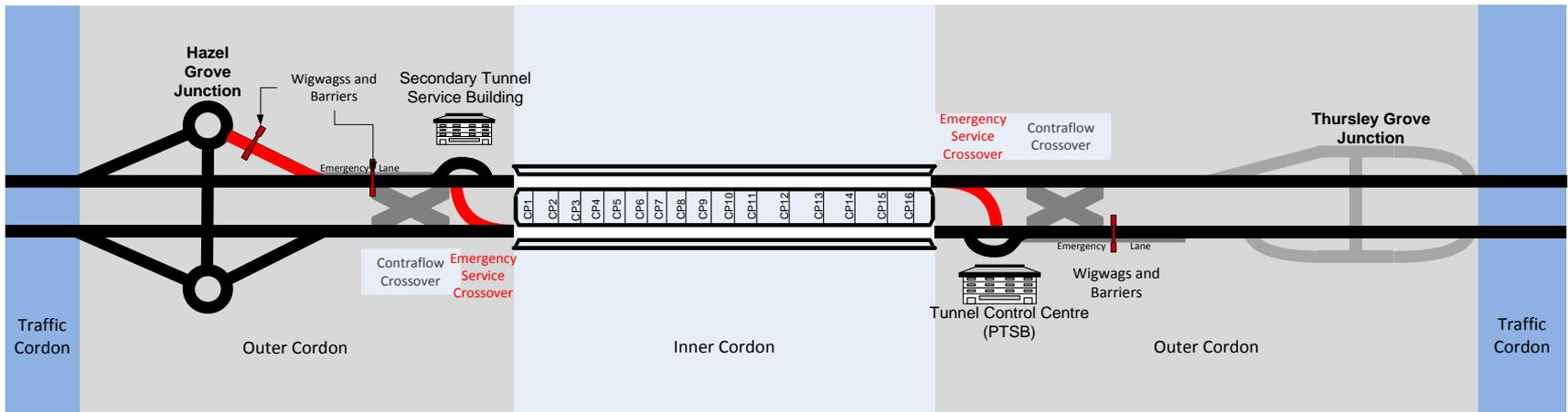
Levels of Incident Response:

- Single lane minor incident i.e. breakdown
- Single lane incident requiring bore closure to resolve incident, i.e. RTC
- Incidents affecting both tunnel lanes requiring emergency service access from non-incident bore (full tunnel closure)
- Fire / Hazmat incidents (full tunnel closure)
- Incidents during maintenance contra-flow (full tunnel closure)

Agreed Portal and Access Control Principles for incidents requiring full tunnel closure

- RVP's Established,
- Command points designated,
- Deployment waiting area designated,
- Parking area for Emergency vehicles (not needed for deployment) designated,
- Access control arrangements designated,
- Liaison and communication protocols adopted.

Tunnel Layout Access Arrangements



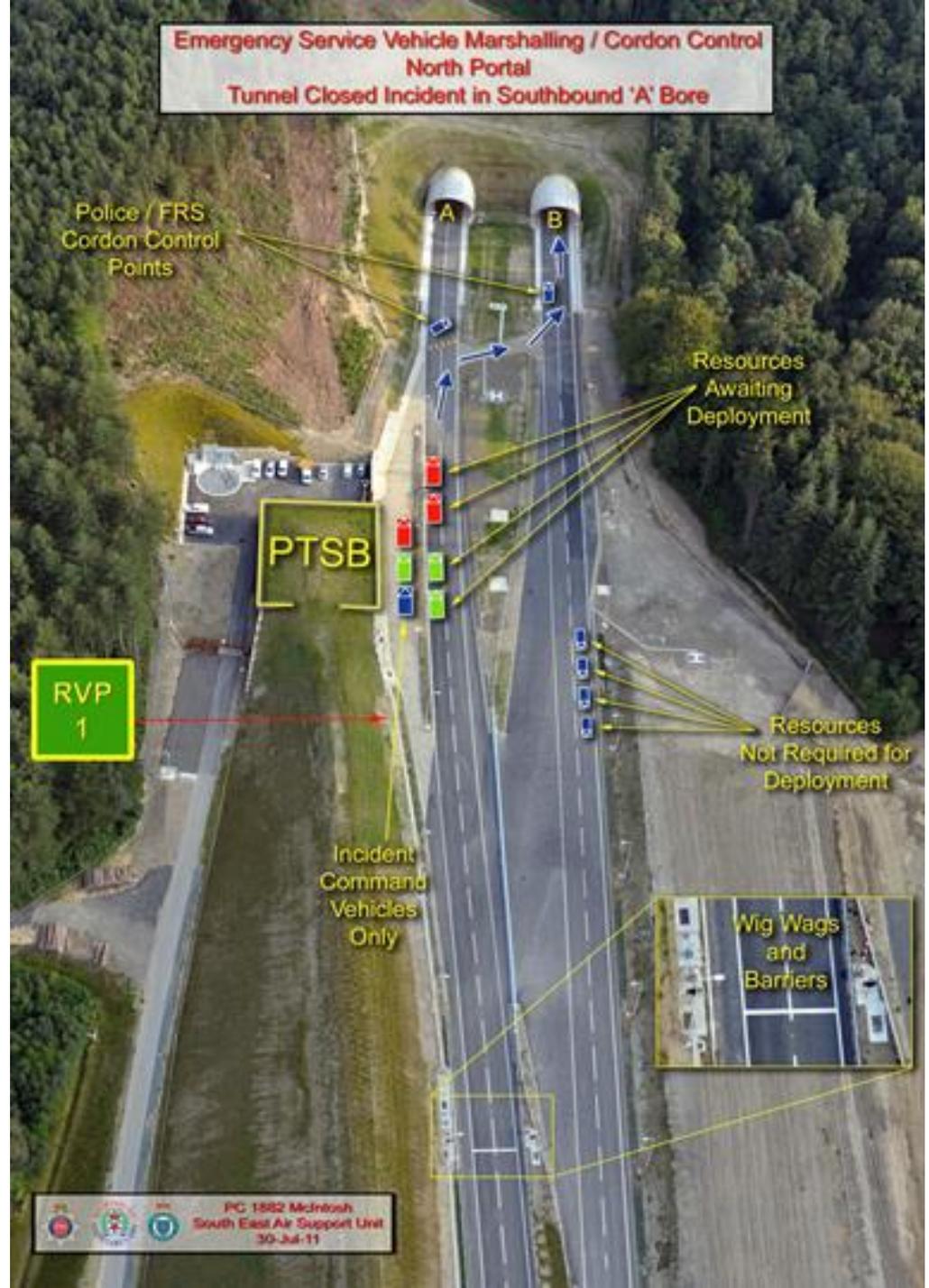
Thursley Interchange



Hazel Grove Interchange



**North Side
Full Tunnel Closure
Incident in A Bore**



**North Side
Full Tunnel Closure
Incident in B Bore**



**South Side
Full Tunnel Closure
Incident in A Bore**

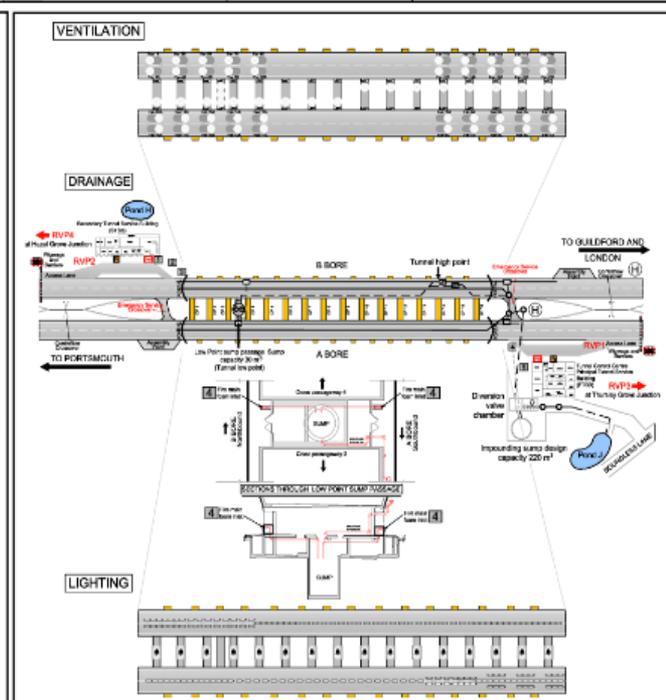
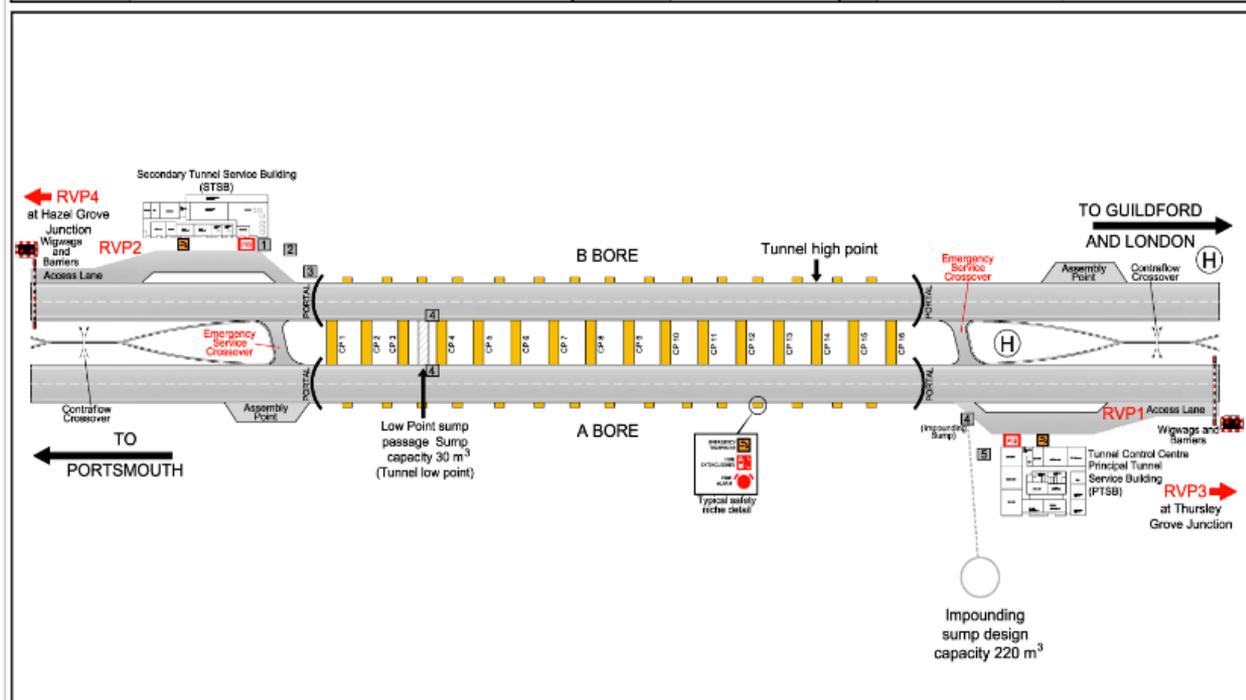


**Emergency Service Vehicle Marshalling / Cordon Control
South Portal
Tunnel Closed Incident in Northbound 'B' Bore**

**South Side
Full Tunnel Closure
Incident in B Bore**



Date:	Time:	: Hrs	Cordons:	North Portal	South Portal	Casualties:	Resources standing by RVP 1. RVP 2. RVP 3. RVP 4.	Remarks:		
Incident No.:	Board Updated	: Hrs	Traffic:							
Incident Bore: Closure (Full / Bore)	A	B	Inner Cordon:			Hazards:	FRS Deployment			
Air Quality: Ventilation: NOx Levels CO Levels Gas Monitoring (FRS)			Evacuation				OIC (Silver) Commander	Tactical Plan	Sector Commander 1	Tactical Plan
Multi-Agency Communications / Contacts details						Access:	Resources Assigned	Resources Assigned	Resources Assigned	
Tunnel Supervisor						Location:				OIC OPS (Bronze) Commander
Police						Emergency Services	Resources Assigned	Resources Assigned	Resources Assigned	Resources Assigned
Ambulance						Type:				
Local Authority						Tactical Mode:				



INCIDENT / SAFETY BRIEF		
ARA RECEIVED	TIME :	OFFICER :
HAZARDS	CONTROL MEASURE	SECTOR

HIGHWAYS AGENCY

HINDHEAD TUNNEL
Tactical deployment briefing board

KEY

- 1 Fire main back flow
- 2 Fire main back seal
- 3 Fire main break seal
- 4 Fire main barrier
- 5 FRS equipment area
- 6 Services information box
- 7 Emergency Transition
- 8 Self seal
- 9 Hydraulic Latching Pad
- 10 Pump
- 11 Ducting
- 12 Hydrant Mains
- 13 Emergency Transition
- 14 Self seal
- 15 Hydraulic Latching Pad
- 16 Pump
- 17 Ducting
- 18 Hydrant Mains
- 19 Electrical Dry Break Cabinet
- 20 Electrical Dry Break Cabinet
- 21 Electrical Dry Break Cabinet
- 22 Electrical Dry Break Cabinet
- 23 Electrical Dry Break Cabinet
- 24 Electrical Dry Break Cabinet
- 25 Electrical Dry Break Cabinet
- 26 Electrical Dry Break Cabinet
- 27 Electrical Dry Break Cabinet
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