The Dawlish Story – Feb 2014 to Dec 2015 NetworkRail **Mott MacDonald**

Presentation Outline

- > Introduction
 - Mott MacDonald Team
 - Wider Project Team
- Emergency Project
 - > Introduction
 - Commercial
 - Woodlands
 - Opening
- Dawlish Lower Walkway
 - > Introduction
 - Progress to date
- Questions







Introduction to the Mott Mac Team

Commercial

Commercial Manager – Warren Barrett

Commercial Manager – David Haslett

Project Management

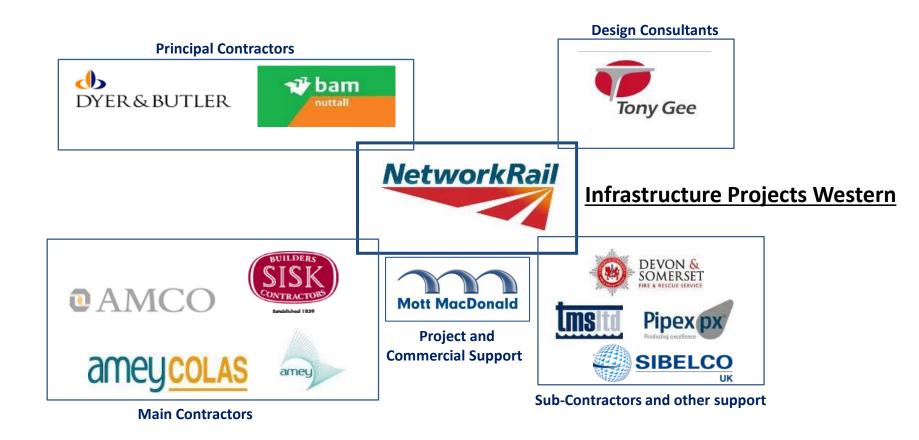
On Site Project Manager – Glynn Eley

Assistant Project Manager - Sophie Young





Emergency Remediation – A collaborative effort







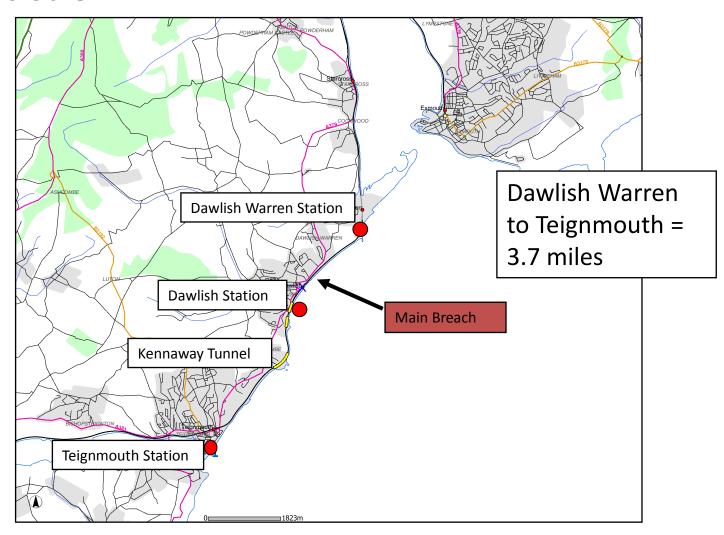
What happened?







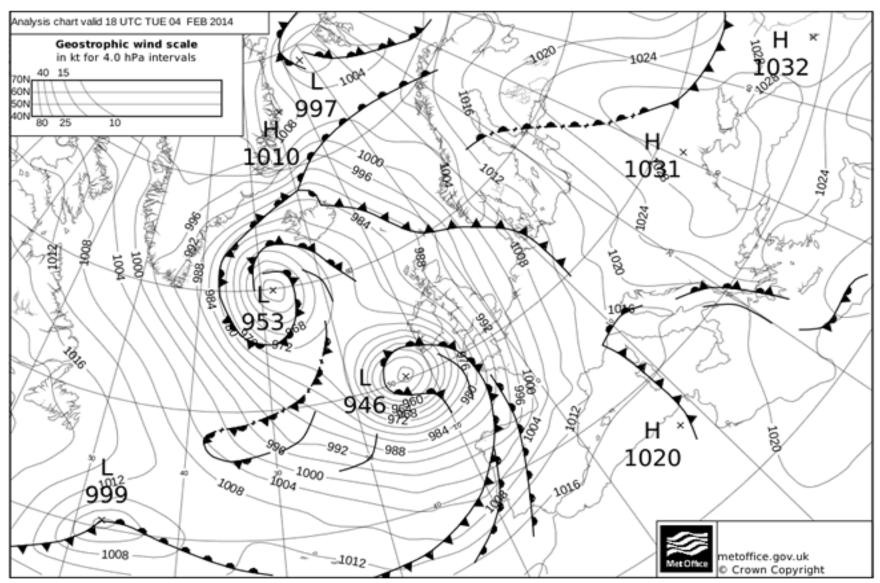
Introduction







4 February 2014



Scope of Works

Very Simple Remit:

'Open a safe railway as soon as possible'

In Reality:

- Unclear and expanding scale of damage
- Unknown solutions
- Unknown programme
- Very challenging environment







The scale of the job

➤ Network Rail's army of 300-strong team working 24/7 for over 50 days = over 130,000 man hours to first train

➤ Rebuilt breach using 6,000+ tonnes of concrete and 150 tonnes

of steel

Rebuilt half of Dawlish station

Installed over 13 miles of new cable

Renewed over700m of newrailway track andballast

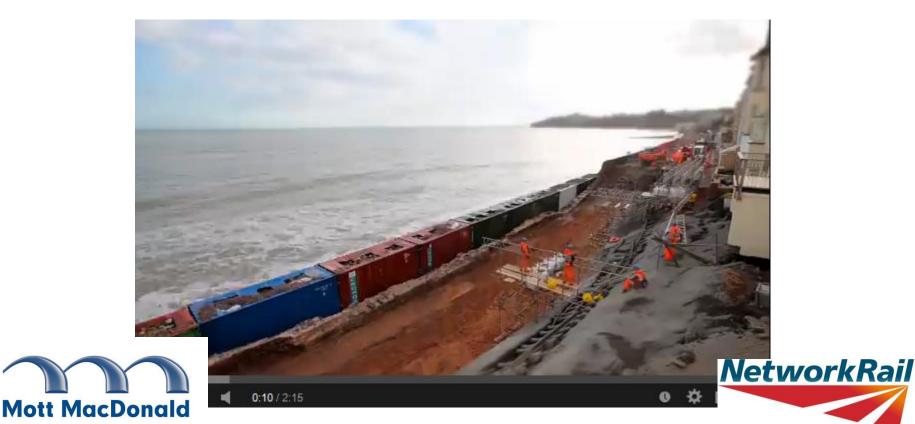






Time Lapse Video

 https://www.youtube.com/watch?v=HEt9_NY KR9E&feature=youtu.be

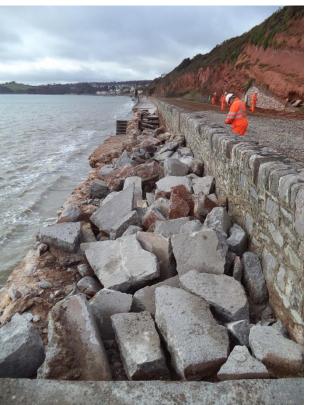


Photos











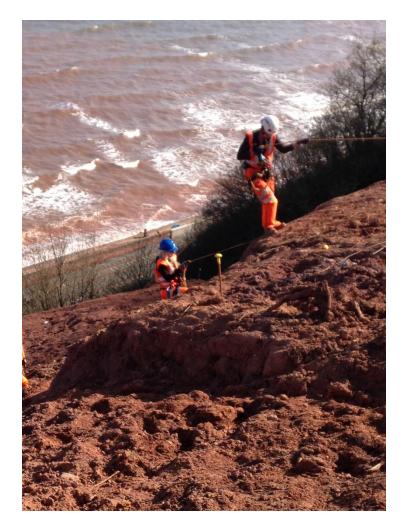






Mott Mac Involvement

- Phone call to appoint MM mobilisation commercial within 48hrs of initial event
- Why MM were chosen
 - > Local
 - > Flexible
- ➤ Involvement of PM 2 weeks later to aid NR PM team







Commercial Management

- ➤ 4 Contractors appointed through NR frameworks with existing relationships allowed for instant mobilisation.
- Form of Contract: NR12A, ICC Target Cost Version amended to Cost Reimbursable.
- Client took design responsibility (kept consistency between 4 Contractors).
- ➤ Fee percentages negotiated between NR and Contractors.





Commercial – Risks

- Losing Control of the budget based on cost reimbursable Contract.
- > Supply of plant, labour and materials (overloaded supply chains).
- Collaborative working between 4 Contractors.







Commercial – Managing the Project

- ➤ Mott MacDonald 2 Commercial Managers on site full time.
- Contractors Commercial Staff on site.
- 1st challenge: 48 hours to produce a financial report on the 4 main Contractors to establish funding requirements.
- ➤ Result: Report 5.7% different to the final issue in January 2015.
- ➤ Weekly reports broken into Contract Cost Components from Contractor on cost liabilities and forecast cost to completion.





Commercial – Managing the Project

- ➤ Individual Contractor's reports analysed together with open book policy. CHALLENGED!
- ➤ Contractor's reports entered into weekly report to Client with reconciliation from previous weeks.
- On Site Audit included site inspections on plant/ materials utilisation.
- ➤ Plant, labour, materials supported with on/ off hire tickets, timesheets, invoices. VALIDATED by MM.





Commercial – Lessons leant

> Commercial staff based on site for target cost/ cost reimbursable is vital.

- ➤ Electronic signing in devices would have reduced paperwork and audit requirements.
- ➤ Open Book accounting allowed fast processing of interim payments. 2 days (£1m per go!).





Commercial – Lessons leant

- > Run audit concurrent with project.
- ➤ Main offices were shared so all staff were located in the same block.
- > 1 team approach.
- No closed doors.
- > Shared Supply Chain.





Commercial

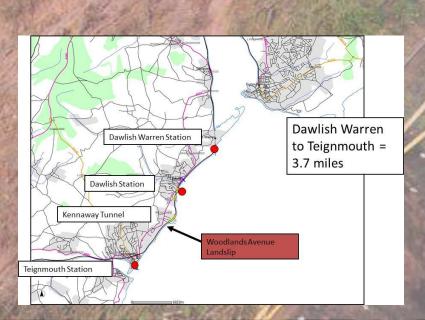
➤ All running smooth, and then...





2 weeks to go....

- > Gathered a meeting of minds:
- ➤ Mass Regrade
- > Explosives
- > Army Equipment
- > No idea was a bad idea



The response to Woodlands - Induce a landslide

- ➤ Water Saturation
- ➤ Water Bombing
- ➤ Water Canons









Teignmouth Sea Cliffs- Woodlands Avenue



4th April 2014 - The Opening (58 days later – 56 if you are DC).







4th April 2014 - The Opening - £12k







Lower Walkway Works – Additional Reinforcement



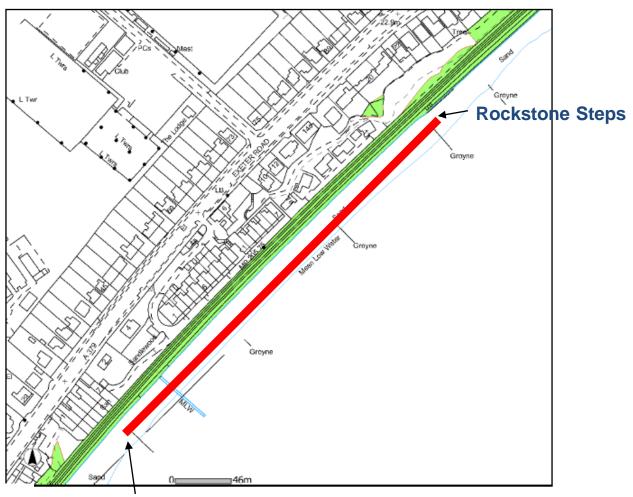
Project Extent







Project Extent

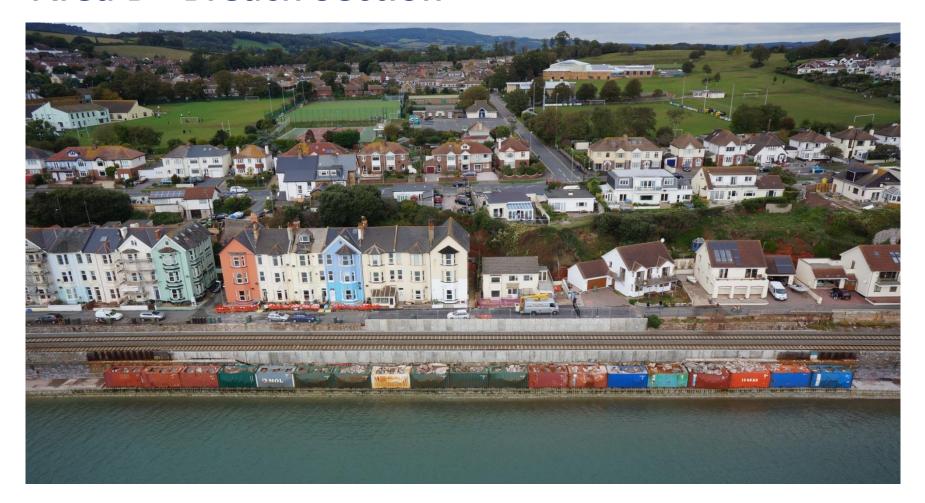




Coastguards Ramp



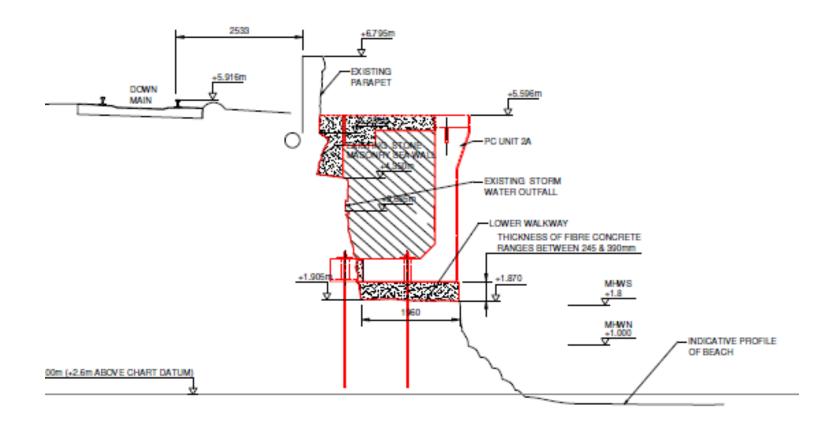
Area B - Breach Section







Outline Design







Challenges

- Weather
- Location
 - > Ocean
 - ➤ Railway
- > Access
 - **Boat**
 - ➤ High level walkway
- **➤** Logistics
- > Tides













Progress to date

- > 101 units landed
- ➤ Anticipated completion Mid June 2015







Acknowledgements

- Network Rail
- > AMCO RAIL
- > BAM
- Dyer & Butler
- > Sisk
- > Tony Gee & partners
- Aerial Technics
- Lobster Pictures





Any questions









www.mottmac.com