

Principal Designer Working Group

Eliminating Risk from the Outset

16 January 2020

Contents

- Eliminating Risk from the Outset
- Case Study from Major Projects
- Case Study from Operations
- GD 300 – Overview of ‘day job’


Eliminating Risk from the Outset

Theme	Corporate activity	Description
<p>Health, safety and wellbeing by design</p> <p>The health, safety and wellbeing of employees, supply chain and road users will be considered from the outset in everything we do, and risks are eliminated wherever possible.</p>	<p>Eliminating risk from the outset</p>	<p>Implement new and innovative methods of road design and construction that eliminates risk to those constructing them, maintaining them or driving on them.</p>



- ✓ HS&W action: undertake a 3-month sprint with focus on roadworkers; 'Desktop not Blacktop'
- ✓ Case studies selected from Safety Alerts
- ✓ Focus on risk elimination angle, not reinvestigating process failures
- ✓ Report back to CHE and H&S Executive with suggested direction of travel
- ✓ Consider road users when roadworker case studies have been exhausted
- ✓ Continue throughout RIS2

Case Study – A14 Paving Slab



The poster features the Highways England logo at the top left. A green banner with the word 'INFORMATION' is positioned at the top right. Below this, a blue banner contains the text 'Safety Alert' and 'Paving slab RIDDOR incident'. A date bar indicates '16 September 2019'. The main body of the poster is white with blue text. At the bottom, there is a small disclaimer and the 'home safe and well' logo.

highways
england

INFORMATION

Safety Alert
Paving slab RIDDOR incident

16 September 2019

The following pages of this safety alert were issued by Highways England's supply chain partner:

A14 Integrated Delivery Team
working on
the A14 Cambridge to Huntingdon scheme

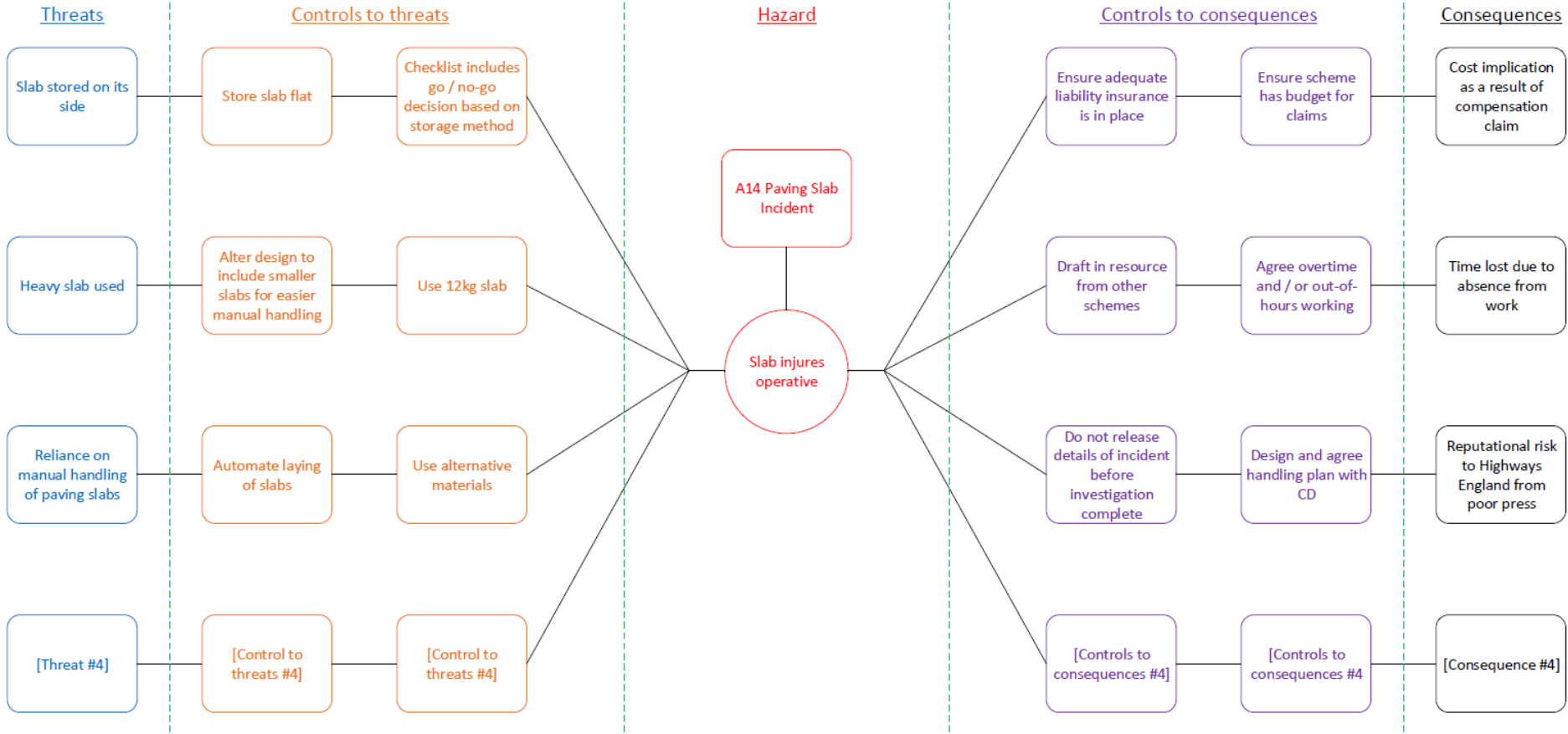
If you have any queries about this safety alert information announcement or any other safety announcement then please contact Richard.Wilson2@highwaysengland.co.uk

home safe and well

HEI119

Methodology

- Establish the facts
- Evidence-gathering
- Focus on why roadworkers were used
- Undertake bow-tie analysis
- Explore other possible practices
- Introduce innovation at design stage



Case Study – M58 IPV



The poster features the Highways England logo at the top left. A green banner with the word 'INFORMATION' is positioned at the top right. Below this, a blue banner contains the text 'Safety Alert IPV Incident' and the date '16 December 2019'. A photograph of a roadworker in a high-visibility jacket with 'home safe and well' written on it is visible on the left side of the blue banner. The main body of the poster is white and contains the following text: 'The following pages of this safety alert were issued by Highways England's supply chain partner: Huyton Asphalt Ltd and HW Martin'. At the bottom, there is a small disclaimer: 'If you have any queries about this safety alert information announcement or any other safety announcement then please contact NH&ST@highwaysengland.co.uk' and the reference code 'HEI134'. The 'home safe and well' logo is also present at the bottom right of the poster.

highways
england

INFORMATION

Safety Alert
IPV Incident

16 December 2019

The following pages of this safety alert were issued by
Highways England's supply chain partner:

Huyton Asphalt Ltd and HW Martin

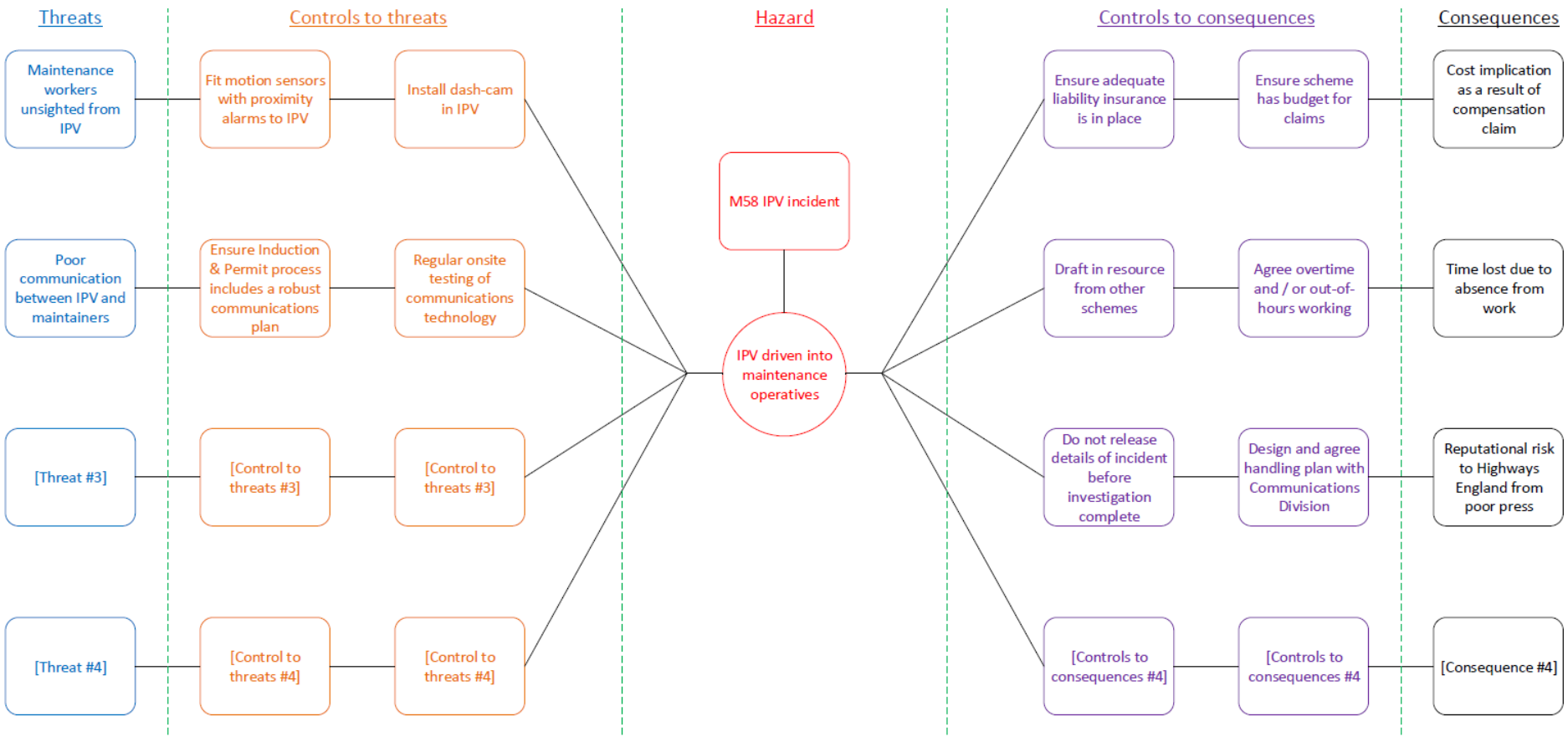
If you have any queries about this safety alert information announcement or any
other safety announcement then please contact NH&ST@highwaysengland.co.uk

HEI134

home safe
and well

Progress

- CHE approval to proceed
- Document analysis
- Methodology as per MP case study:
 - Establish the facts
 - Evidence-gathering
 - Focus on why roadworkers were used
 - Undertake bow-tie analysis
 - Explore other possible practices
 - Introduce innovation at design stage



GD 300 – ‘Expressways’

- Requirements for new and upgraded all-purpose trunk roads (expressways)
- A RIS1 commitment
- Delivers a ‘Level 4’ with Levels 1-3 in production
- First full designs against Standard likely to target RIS3+ schemes and include Level within CSRs
- A14 broadly aligned to a Level 3; LTC designing against Level 3; around a dozen RIS1 RIP schemes are broadly aligned with Level 1 and 2

A need to improve A-roads to modern standards

- Safety
- Connectivity
- Journey time reliability
- Community cohesion



Making our busiest A-roads better – ‘full standard’ concept design

Electronic signals will provide information to drivers and indicate current speed restrictions

Access to local roads will be reduced to remove slow moving vehicles joining the network

Traffic detection technology helps inform road users and manage the network

A minimum of two lanes ensures ability to pass slower vehicles and reduces risk of incident closures

Concrete barrier improves safety and reduces maintenance closures

If motorway designated then familiar blue advance direction signs and junction numbering will be used

Left only entry & exit or grade separated junction to reduce slower moving vehicles in the live lanes

Traffic Officer patrols providing incident response service

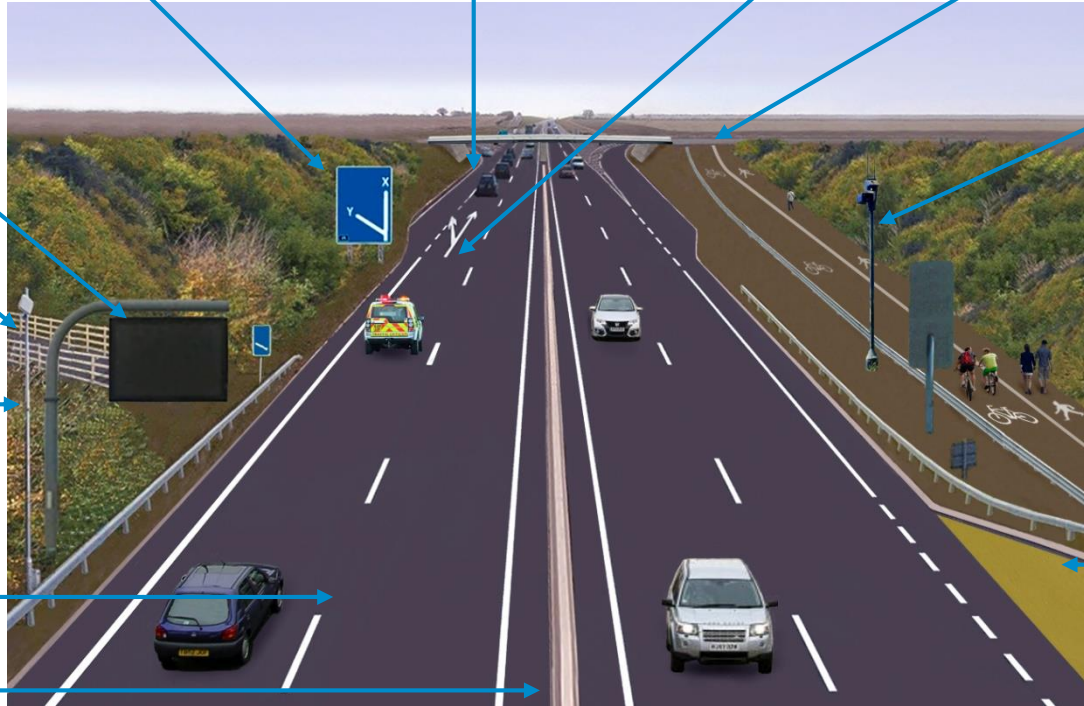
Alternative provision for walkers, cyclists, horse riders and slow moving vehicles away from fast moving traffic

CCTV coverage to improve the management of incidents

Off network rest / service areas so breaks can be taken safely away from the main carriageway

Maximise opportunities for improved environmental outcomes

Emergency areas to provide safer places for breakdowns than the verge



Upgrades suitable for different roads

	<u>Level 1</u> <i>Improved A-road performance</i>	<u>Level 2</u> <i>Further improved A-road performance</i>	<u>Level 3</u> <i>Motorway performance with green signs</i>	<u>Level 4</u> <i>Motorway performance with blue signs</i>
Example features	Junctions improved and provision of additional walking and cycling paths	Concrete central barrier	Technology, Traffic Officer patrols and rest areas	Motorway regulations apply
Benefits for customers	Improved travel times and safety	Safer road and a reduced need for maintenance closures	Further improved safety, journey time reliability and incident response	Full benefits of modernised road

Thank you – Q&As

ses_a-road_concepts@highwaysengland.co.uk

mike.boyland@highwaysengland.co.uk