

Share with Pain

2 overruns @ Watford Week 6



The Facts

- We overran on the Slow Lines on Bank Holiday Monday and then the Fast Lines on the Tuesday Morning
- Almost 4000 Minutes Train Delay and Multiple Cancellations, particularly with the Slow Line Handback on the Monday Morning
- We have recognised that we had 13 significant issues which contributed to the delays, but the two most significant were preventable and the reason for this share with Pain as others may learn from this immediately
- Some of the other issues were own goals, some were unfortunate, some were poor supply chain issues which will be dealt with
- In isolation, any of these would have been managed and without just one or two of them, we wouldn't have overrun.
- The recent major change of scope and access strategy has had a major impact. It is easy to say that the scope and access for Week 6 has remained the same, but the major changes took the teams eye off the detail for week 06 which may have prevented some of the own goals

A long train of yellow tilting wagons is shown on a heavily canted track. The wagons are tilted at an angle, and the track is supported by concrete sleepers and gravel. Overhead power lines and support structures are visible above the train. The scene is set outdoors with trees in the background.

Operation of Tilting wagons on Heavily Canted Track

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- Whilst attempting to unload S&C panels from the Tilting Wagons, the wagons were positioned at a pre-planned location where the track was heavily canted. This heavy cant led to the inbuilt safety system engaging to prevent an unsafe release of the locking mechanisms, so wagons couldn't be tilted to enable unloading
- **Maximum Cant for normal Operation 100mm, Cant at location that train needed to be unloaded in the overlap was 140mm**
- The Planned duration of this activity was 8 Hours and it actually took 16hours as the Methodology and staging had to be amended
- **On site pre works meetings were held with Kirow, but not Tilting Wagon Ops**
- **Action:**
 1. Business Improvement Team (Alex Forrest) have now amended the process and issued an Operation Alert that deals with this issue(see e-mail dated Friday 9th May)
 2. **A retrospective check will have to be completed for all jobs that are already planned. This needs to be completed immediately by all S&C teams**
 3. Pre-works meetings to also be attended by Wagon Operators – This needs to be coordinated with NSC.

POE On adjacent Line Preventing the installation of one of the S&C Panels

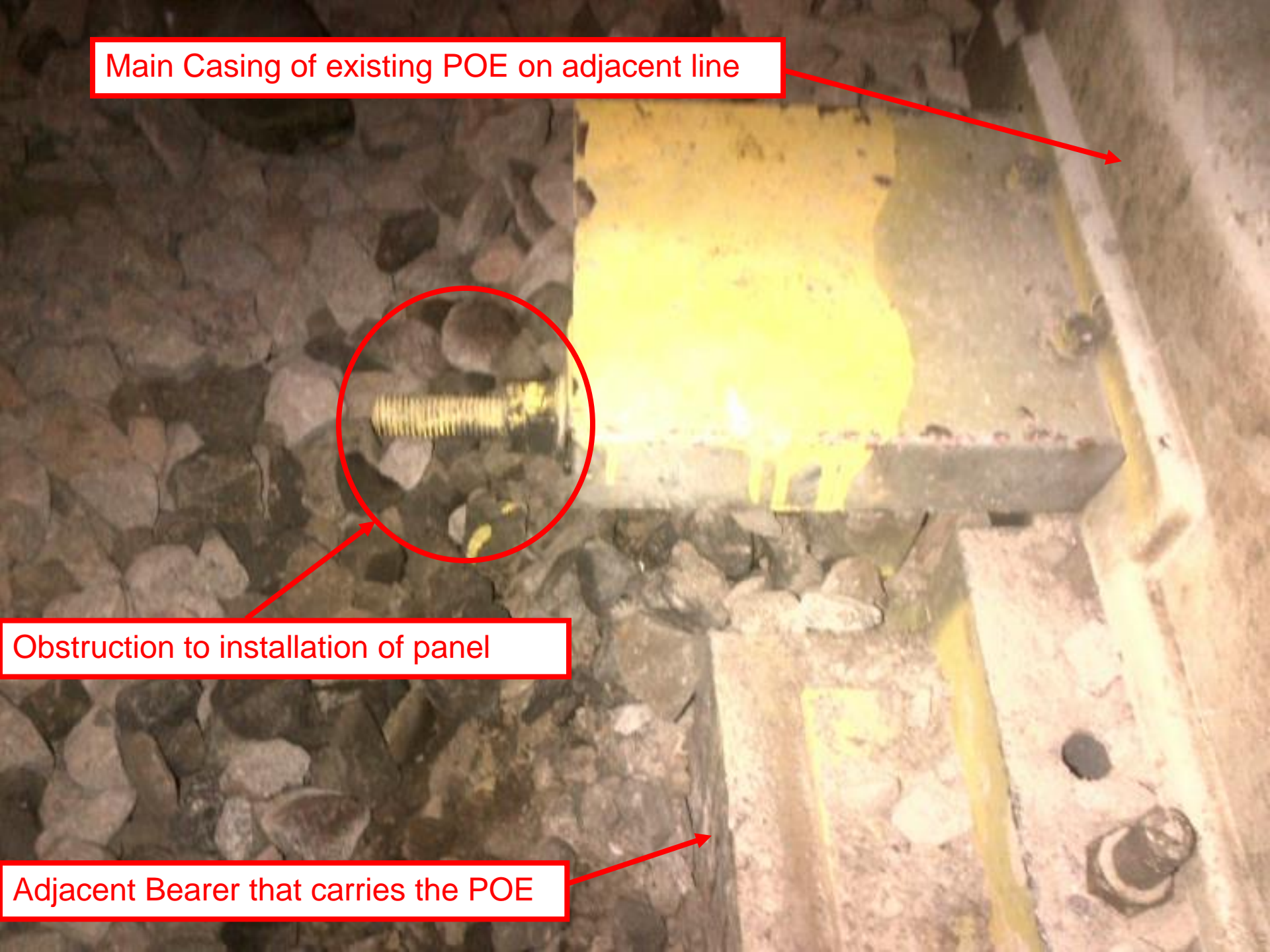


Main Casing of existing POE on adjacent line



Obstruction to installation of panel

Adjacent Bearer that carries the POE



POE On adjacent Line Preventing the installation of one of the S&C Panels

- When installing S&C Panels, the Points Operating Equipment on the Adjacent Line (Down Slow) prevented the installation of one of the new panels
- It wasn't the Main POE Body or the Bearer carrying the Existing POE that Prevented the installation, but the Rodding that protruded from the POE
- New Concrete Bearers had to be trimmed to allow the installation of the panel. We still have to decide whether these bearers have to be replaced
- Two hour delay to the installation of the panels as decision around mitigation had to be made and plant had to be positioned for the mitigation to be undertaken
- This was an oversight in the design checking process, albeit the Bearer and the POE Casing wouldn't have caused the issue. The change of footprint and multi staging was a contributory factor to this issue

Action:

1. On all Multi Stage Works, the whole of the POE must be considered as the Existing Footprint and not just the casing and bearers
2. Retrospective check to be undertaken by designers to see that this isn't an issue elsewhere, particularly on Multistage/Complex works where adjacent lines are left clipped out of use until subsequent stages similar to Watford.

Other Issues which were contributory Factors

- Decision taken on site to change the plan in an attempt to accelerate without realising the impact on future activities
- Failure Of Fastclip machine
- Failure of & Sleeper Hydraulic Bale
- Failure of Auto ballasters
- Change of Methodology due to ALO Guidelines as plan slipped significantly
- Tamper Trolley Derailment Causing a 125mm Misalignment which had to be removed, delaying agreed wheels free time on the Up Fast(see photo)
- Failure in AMP and CDM Process as Unforeseen Cables in four locations (see attached photograph). This is under investigation as was a significant issue for both Time and Risk.
- Tilting Wagon Operator walking off site with one Panel left to install (we were behind plan at this stage and his hours were up)
- Driver of Autoballaster walking off site (we were behind plan at this stage and his hours were up)
- Driver refusing to move between trains as we only had one driver on site(we were behind plan at this stage and moving drivers around trains wasn't in the plan)
- Aside from the NSC Issues we had, they did well to support our plan revisions throughout the weekend

A photograph showing a trench filled with a large bundle of buried cables. The cables are bundled together and run parallel to a concrete curb. A worker in orange safety gear is visible in the background, standing on the asphalt surface. The ground is dark and appears to be a construction or utility site.

Unforeseen Buried Services (DC Line)





**Tamper Misalignment in overlap –
Under investigation**