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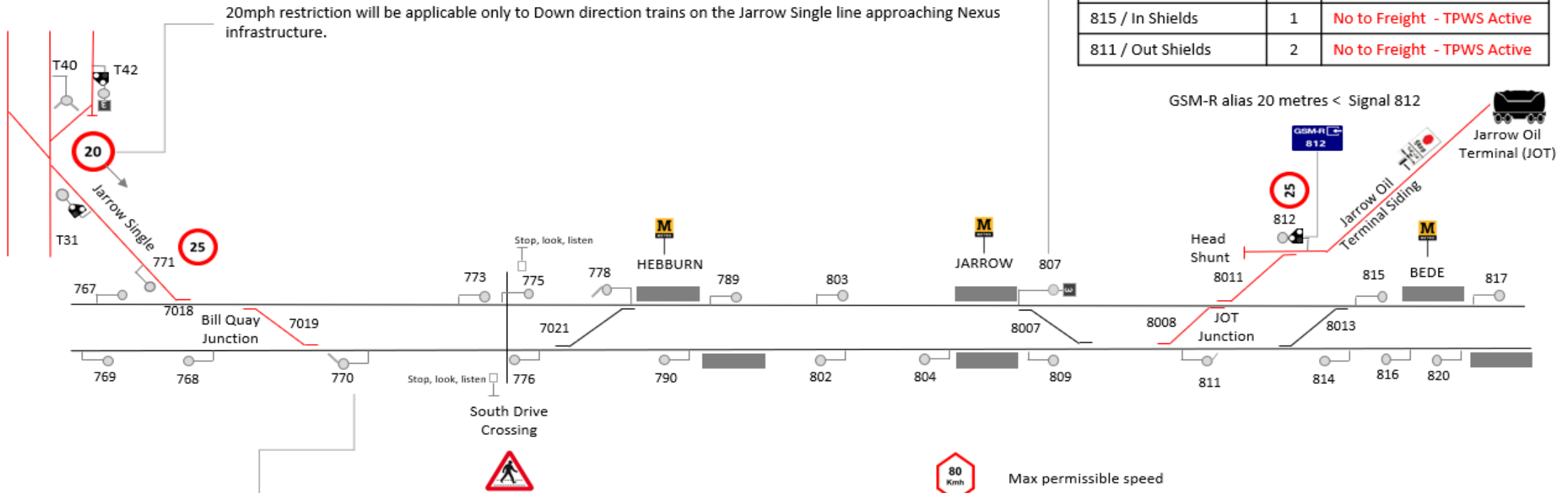
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Service Delivery Manager  
Nexus



# Managing Light Rail Interfaces: An Operations Perspective

## Jarrow Branch Line

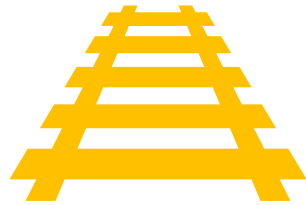
Route	Ind	Note
Oil Siding Stop Board	S	Indusi Trainstop Active
815 / In Shields	1	No to Freight - TPWS Active
811 / Out Shields	2	No to Freight - TPWS Active



Route	Indi	Note
770 - T32	J11	Indusi Trainstop Indusi Active
770-768	-	No to Freight - TPWS Active

Max permissible speed

Max permissible speed Freight



**Scheme**



**Pilot Operations**



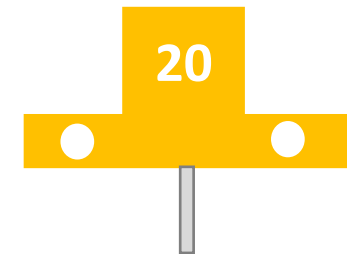
**Freight & Dangerous  
Goods**



**GSM-R**



**Rules & Standards**



**TSR/ESR**

# Organisational Differences



Training/Competence

'Us' and 'Them'



Rules

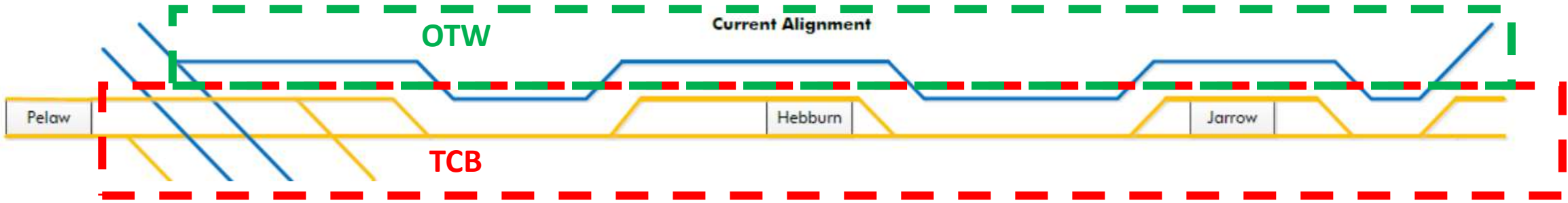
Standards

Operating Practices

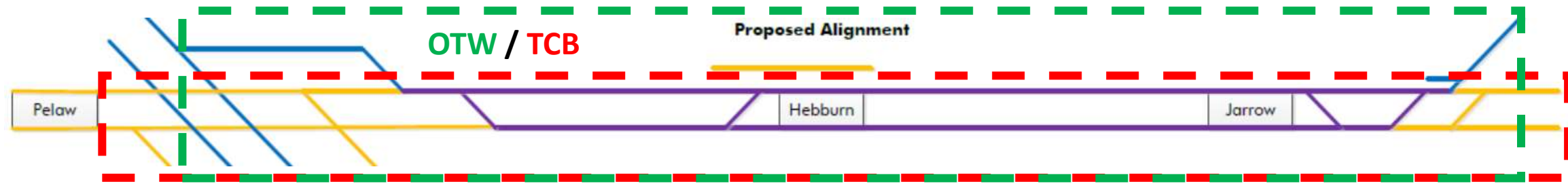


# Proposal Development

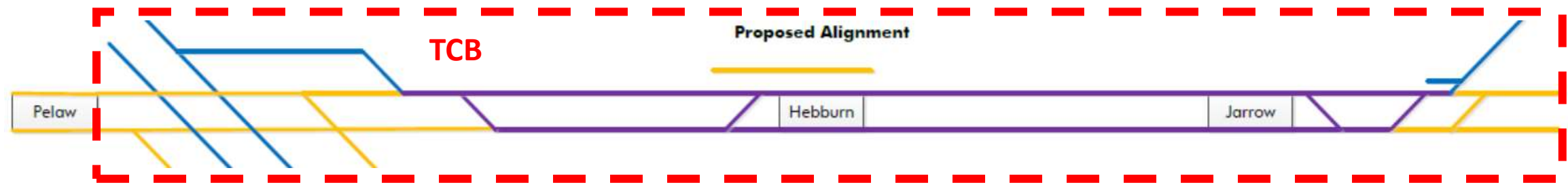
## Existing / Segregated



## Proposed / Overlay



## Proposed / Integrated





# Key Project Interfaces/Actors



Metro / Nexus



PRAX Oil Ltd  
Jarrow



NCB  
[AsBo]



Buckingham  
Group



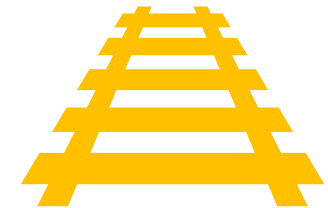
COLAS / DB FOC



RSSB



Office of Road  
and Rail



Network Rail

# Operational Publications



LOR	Seq.	Line of Route Description	ELR	Route	Last Updated	
LN670	001	Jarrow Branch	JAW1	London North Eastern	04/12/2022	
Location	Mileage M Ch	Running lines & speed restrictions	Signalling & Remarks			
Pelaw Jn for Jarrow	0 09		<p>OTN (G) TCB Tyneside ROC (T) RA8 Sunderland workstation</p> <p><b>GSM-R</b></p> <p><b>LN670 – JARROW BRANCH</b></p> <p><b>METRO FLOW PROJECT – COMMISSIONING OF JARROW BRANCH CONNECTION TO NEXUS INFRASTRUCTURE FROM 0600 HOURS ON SUNDAY 04 DECEMBER 2022</b></p> <p>The LN670 Jarrow Branch and associated infrastructure was divested to Nexus Tyne &amp; Wear Metro on Monday 12th September 2022, as part of the Metro Flow Project. The JAW 1 Jarrow Single line is currently subject to extended blockade from the new Network Rail/Nexus Route Boundary (0m 26ch) to the former Network Rail Boundary at the Jarrow Oil Depot (3m 36ch), to facilitate supporting alterations to Nexus infrastructure.</p> <p>As part of the project, the associated LN670 Table A diagram will be shortened to 0m 62ch, to include interfacing Nexus infrastructure assets only. New infrastructure will be commissioned and existing infrastructure assets recovered as follows:</p> <p><b>SIGNALLING</b></p> <p>A new three aspect LED colour light signal Nexus 771 will be installed on the Jarrow Single line (0m 27ch), applicable to trains travelling in the Down direction towards Nexus infrastructure. 771 signal will be controlled by Nexus from Metro System Control at South Gosforth. 771 signal is shown with a 'P' prefix on Tyneside ROC Sunderland Workstation VDU, to denote Pelaw interlocking on Nexus infrastructure. The signal ID plate will read '771' and will be shown as black letters on a white background.</p> <p>In association with installation of 771 signal, a new AWS magnet will be installed 125m on approach applicable to Down direction trains. A new TPWS Speed Stop trigger will be installed 50m on the approach to 771 signal applicable to Down direction trains. TPWS train stop will also be installed at 771 signal.</p> <p>A new three aspect LED colour light signal Nexus 770 will be installed on Nexus infrastructure Out Shields line (0m 62ch), applicable to trains travelling in the Up direction towards Network Rail infrastructure. 770 signal will be controlled by Nexus from Metro System Control at South Gosforth. 770 signal is shown with a 'P' prefix on Tyneside ROC Sunderland Workstation VDU, to denote Pelaw interlocking on Nexus infrastructure. The signal ID plate will read '770' and will be shown as black letters on a white background. 770 signal will be fitted with a Position 4 Junction indicator reading towards the Jarrow Single line and Network Rail infrastructure.</p>			
Route Boundary	0 26					
Bill Quay Jn (Nexus)	0 47					

**\*\*Explanation of change/office use only: Amended from Table A issued on 12/09/22 by removal of adjacent Nexus/Metro infrastructure and stations. Total route mileage shown has been shortened, with most assets shown being wholly Nexus/Metro owned/operated. Interfacing Nexus/Metro infrastructure shown for reference only, and does not include detail of line speed beyond the blanket 25mph PSR for heavy rail operation, as defined in the project scheme plan. The temporally disabled One Train Working system will be permanently deactivated in favor of TCB single line operation. Control responsibility for all assets north of 0m 27ch on the Jarrow Single will pass to Nexus on commissioning.**



# Special Ticket Working



B

## SPECIAL INSTRUCTIONS TO THE SIGNALLERS AT TYNESIDE ROC SUNDERLAND WORKSTATION

### Failure of Signalling Equipment on the Jarrow Single Line

In the event of a failure of signalling equipment affecting control of the Jarrow Single line, you may continue to run trains in one direction only pending rectification. Where the failure cannot be rectified prior to a movement required in the opposite direction, you must apply **Special Ticket Working** arrangements.

**Special Ticket Working** is authorised in the section between Pelaw Junction for Jarrow and Bill Quay Junction (Metro) for through train movements over the Jarrow Single line. The provisions of **Module P2 / 7 Modified Working** apply to Special Ticket Working with the following exemptions:

- Pilot working will not be implemented during application of **Special Ticket Working**, regardless of pilot availability



## Modified Working Risk Assessment Tool

### 1. Infrastructure

		RAW SCORE	ADJUSTED SCORE
1.1	How many signals / signalled routes directly protect the entrance to the MW section controlled by the signaller(s)?	3 <span style="background-color: red; color: white;">2</span>	3 <span style="background-color: red; color: white;">2</span>
1.2	Are there any intermediate loops or sidings?	No <span style="background-color: green; color: white;">0</span>	No <span style="background-color: green; color: white;">0</span>

### 2. Communications

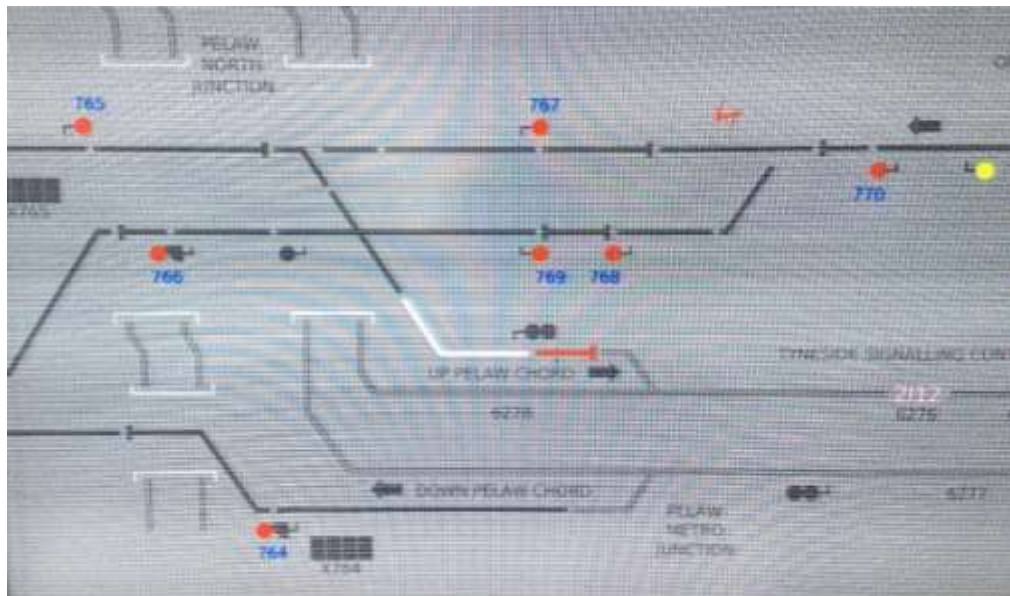
2.1	Is GSMR communications available to drivers?	Yes <span style="background-color: green; color: white;">-1</span>	Yes <span style="background-color: green; color: white;">-1</span>
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### 3. Train Service Patterns

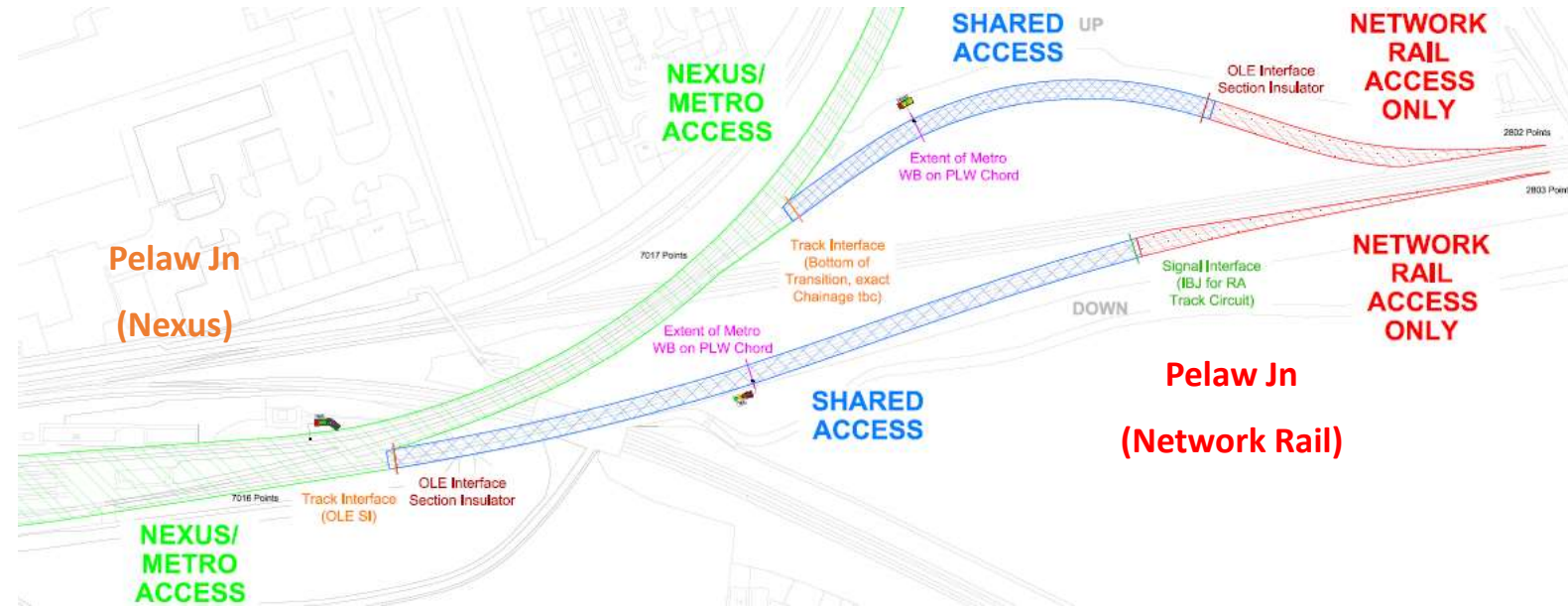
3.1	What is the maximum capacity that can be accommodated on the single line during modified working?	1 <span style="background-color: green; color: white;">0</span>	1 <span style="background-color: green; color: white;">0</span>
3.2	Is the train service captive to the single line?	Yes <span style="background-color: green; color: white;">0</span>	Yes <span style="background-color: green; color: white;">0</span>



# Not That Different?



# Future Aspirations




Working single and bi-directional lines by pilot

Issue 7



Module P2

**Metro Rule Book**



Working single and bi-directional lines by Pilotman

P2 (G2-8)



# Questions?

