

Supplement: Network Rail presentation for West Area Planning Committee Tuesday 11 October 2016

1. **East West Rail Phase 1 - Noise Scheme of Assessment (16/01634/CND) and Vibration Scheme of Assessment for route I-2 (16/01635/CND)**

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EWR Phase 1 Section 1/2 Schemes of Assessment

West Area Planning Committee
11 October 2016

Background

- ▶ The EWR TWAO made provision for a separate single track approach to Oxford station along the east side of the mainline railway corridor from Oxford North junction to Oxford station
- ▶ As part of the Oxford Corridor project, a better solution has been found which involves EWR trains using the existing mainline tracks into Oxford station
- ▶ ▶ There is an on-going programme of track renewals, including in Section I/1
- ▶ Both NR teams have been working closely with OCC officers and residents to deliver an improved railway and reduce environmental impacts
- ▶ As part of this commitment, NR is spending over £3.5 million on noise mitigation, where it is needed north of Aristotle Lane.

Legitimacy of requiring the 1/2 SoAs

- ▶ TWAO provides for the discharge of planning conditions by geographic section. These were identified and approved as Section I and J. The boundaries chosen were an administrative choice made by NR.
- ▶ Splitting of Section I only took place because of NR's decision to drop separate approach between Aristotle Lane and station.
- ▶ Noise mitigation under the Order was only considered necessary by the S of S where TWA works take place. Not required beyond TWA works eg on Chiltern mainline in Bicester
- ▶ NR position is that a condition requiring an NSoA and VSoA goes beyond what was approved by the S of S in the TWA planning permission and should **not** have been imposed.

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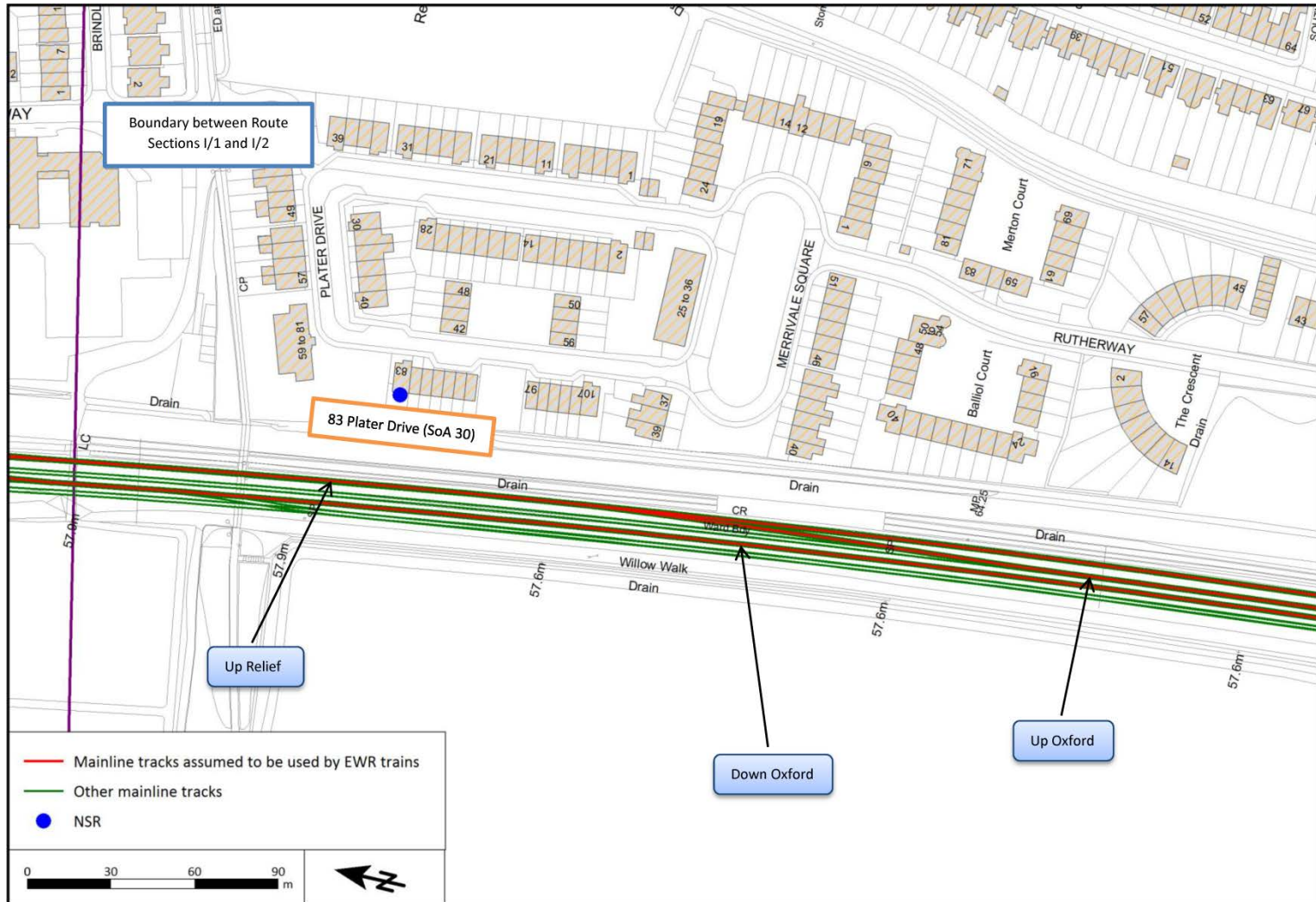
Noise scheme of assessment : Section I/2

- The baseline or ambient noise conditions, including the existing mainline trains, have been measured in Section I/2 in 2015.
- As is made clear in para 29 of the Committee Report, it is **not** part of the requirements on the EWR project to mitigate existing or future rail traffic on the mainline.

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- In order to translate the condition into an NSoA, additional assumptions to create the train scenarios for Section I/2 were agreed which are **outside** those required by the NVMP.
- These relate to the probable routeing of passenger trains on mainline tracks and the freight operations on the mainline.

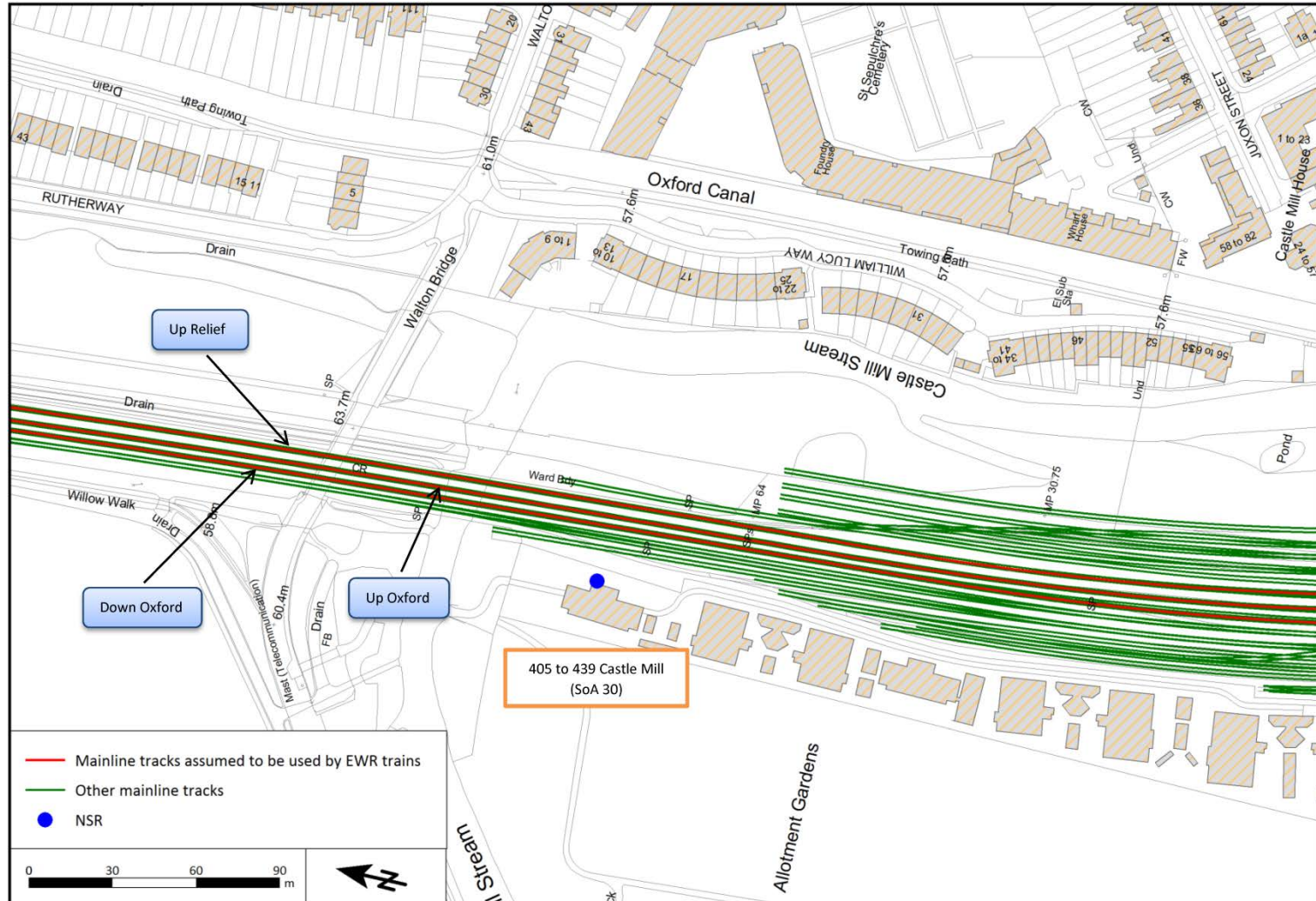
Mainline Track Layout: Plater Drive



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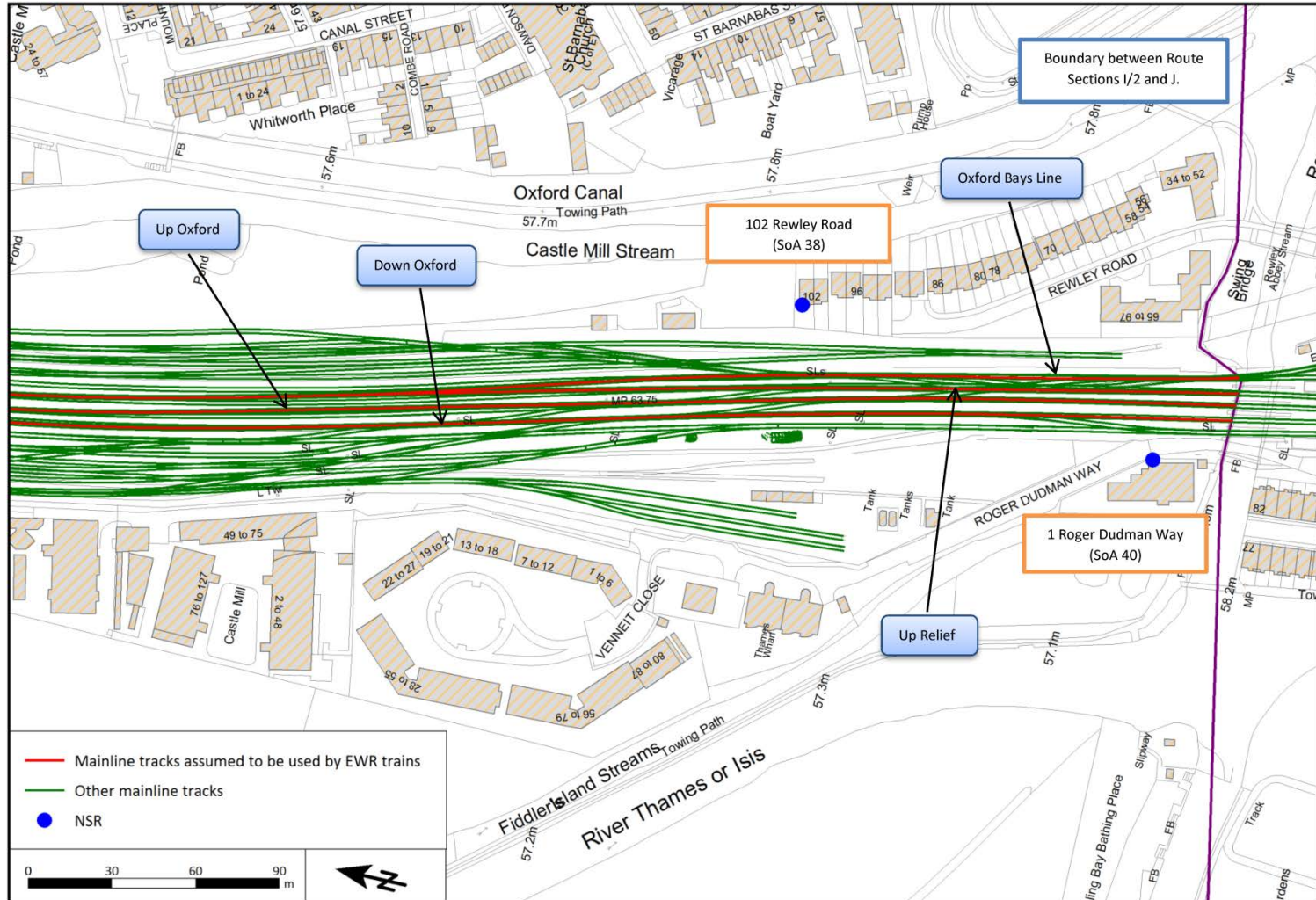
Mainline Track Layout: William Lucy Way

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Mainline Track Layout: Rewley Road

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How were noise impacts assessed in I/2

- Noise impact levels are determined at NSRs by predicting:
 - 1. Exceedances of the Noise Impact Threshold levels set out in the NVMP; and
 - 2. How much the existing ambient noise level will increase as a result of the Order Scheme trains.

10 Following the NVMP, the noise impact level is taken to be the **smaller** of these two predictions

- In some places, eg Castle Mill and Rewley Road, at night, the smaller effect is the increase over ambient levels
- At others eg Roger Dudman Way and Plater Drive, during the day, the smaller effect is the exceedance over the threshold levels.

Noise conclusions: Section I/2

- There is considerable uncertainty about the predictions, which are at the **margin of significance** in the NVMP
- Because of the change in track layout, the predicted increases are now substantially **lower** than in the TWAO ES at locations where the highest impacts were predicted (eg Merrivale Square)
- The NSoA results have been approved by the independent expert.

Would rail damping in Section I/2 achieve the desired effect and be reasonably practicable?

- We note the Officers comment that these are not arguments included in the SoA, but it is important for the Committee to understand the real constraints that exist in Section I/2.

SilentTrack in Section I/2

The reasons why SilentTrack will **not** provide the 2.5 to 3dB reduction agreed by Arup as the maximum likely to be achieved are:

- Almost all passenger trains stop at Oxford. These trains in Section I/2 will be accelerating away from Oxford Station or braking towards it, therefore engine traction and braking noise will be the dominant noise sources. Neither of these noise sources will be mitigated by SilentTrack.
- SilentTrack would only be applied to some of the mainline tracks in I/2
- It cannot be used at crossing points which are common in Section I/2, reducing benefits, because of sound transmitted along rails.
- These factors together mean that the benefits of installing SilentTrack in Section I-2 would be extremely limited.
- Our estimate is no more than **1 to 2dB**. This will be well below the 3dB threshold above which ‘changes in noise levels are **noticeable to most people**’.
- SilentTrack therefore will **not deliver significant mitigation benefits to residents.**

Conclusions

- NR agree with the Officers' conclusions that, as elsewhere, no vibration mitigation is needed in Section I/2 and the VSoA should be approved

- ↳ The requirement to prepare N and VSoAs in I/2 goes beyond the requirements of the NVMP set by the S of S and should not have been imposed
 - The predicted impacts are uncertain and at the margins of significance set by the rigorous standards in the NVMP
 - There are clear practical reasons why rail damping **cannot deliver significant mitigation benefits to residents** in Section I/2.

- Committee should approve the NSoA without the rail damping condition.

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