

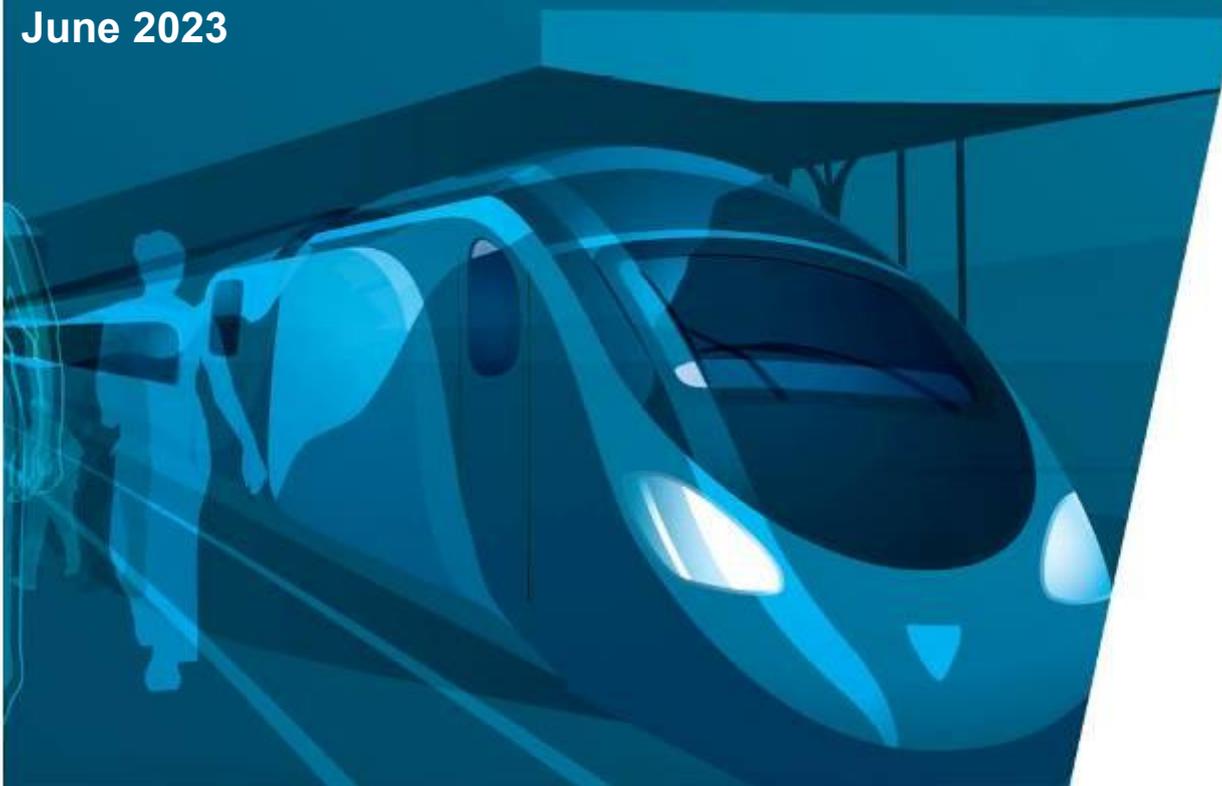
# **Network Rail (Huddersfield to Westtown (Dewsbury) Improvements) Order**

## **Condition 5b(vi): Noise and Vibration Management Plan – Stage 4**

**Document reference: 151667-TSA-00-TRU-REP-W-EN-001243**

**Network Rail**

**June 2023**



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## **1. INTRODUCTION**

### **1.1 Background**

- 1.1.1 The Scheme is part of a wider programme of works under the Transpennine Route Upgrade (TRU) which will improve the Transpennine railway between Manchester, Huddersfield, Leeds and York and improve connections between key towns and cities across the north of England.
- 1.1.2 Planning Direction for the Huddersfield to Westtown (Dewsbury) section of the TRU was received from the Department for Transport referenced TWA/21/APP/03, dated 13 October 2022.
- 1.1.3 This Noise and Vibration Management Plan (NVMP) sets out details in relation to Condition 5b(vi) of the Deemed Planning Permission.

## 2. STAGED APPROACH TO DISCHARGE AND STAGE DESCRIPTION

- 2.1.1 As set out in document ref: 151667-TSA-00-TRU-REP-W-EN-001189 version 3 (submitted in relation to Condition 3 of the Deemed Planning) a staged approach is proposed in relation to discharge of the deemed planning conditions.
- 2.1.2 This document sets out details in relation to Stage 4 of the works for the Huddersfield to Westtown (Dewsbury) Scheme.
- 2.1.3 Stage 4 comprises the main civils works at Huddersfield Station and Huddersfield Viaduct (Stage 4 limits are set as Westgate Overbridge and Hillhouse Lane Underbridge) and are set out in Table 2-1, as well as links to the relevant planning drawings. Figure 1 in Appendix A shows the geographical locations of the works. Route drawings relevant to Stage 4 are [NR13 Planning Drawing - Route Drawing 3.pdf \(windows.net\)](#) and [NR13 Planning Drawing - Route Drawing 4.pdf \(windows.net\)](#).
- 2.1.4 Works within the Huddersfield and Gledholt tunnels, to the west of the station, will be detailed in the Stage 5 submission.
- 2.1.5 The entire Scheme will be subject to electrification; details of the electrification works will be detailed in the Stage 5 submission.
- 2.1.6 At Huddersfield station remodelling works are required with alterations to platforms and roof structures required to facilitate the delivery of a four track railway. East of Huddersfield Station the four-track railway is reinstated across the viaduct.
- 2.1.7 There are existing earthworks throughout the Scheme area associated with the existing operational railway. Earthworks allow the track to stay relatively level through a varied topography and allows trains to operate more efficiently by reducing the need for additional acceleration and deceleration to climb and descend climbs.
- 2.1.8 As set out in Figure 2-1<sup>1</sup> in Volume 4 of the Environmental Statement (ES) and Table 2-4 in Chapter 2: Scheme Description (Route Section 1)<sup>2</sup> in Volume 2i of the ES, a 55m length retaining structure (0.5m high) was proposed along the eastern end of Huddersfield Viaduct (MVL3/92) near to Hillhouse Lane Underbridge (MVL3/94). This was proposed as either king post wall or soil nailing. Following design iteration, soil nailing is planned in this area of existing embankment to the south of the railway (E0).
- 2.1.9 Earthworks (new and where they have been reworked) will generally be covered in topsoil and landscaped as appropriate. Any exceptions to this will be detailed within the Landscape and Ecological Management Plan (LEMP) Stage 8.
- 2.1.10 The Scheme impacts on various existing transmission and distribution utility networks. Conflicts with utility services may occur in Stage 4 where the Scheme crosses highways and. Works within the highway will be carried out in compliance with the Highways Agreement and any impacts on the highways network will be discussed through the Highway Network Management Group.

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<sup>1</sup> [Ch02 Scheme Description - Fig 2-1 Scheme drawings.pdf \(windows.net\)](#)

<sup>2</sup> [Ch02 Huddersfield - Scheme Description.pdf \(windows.net\)](#)

**Table 2-1 Works description**

Location	Structure/works	Summary description	Deemed Planning Drawing Title and Reference
Huddersfield Station	Passenger Footbridge	A covered footbridge (Huddersfield Station Footbridge (MVL3/91AA), with stairs and a lift, to be constructed to the eastern end of the station. This will provide step free access to the central platforms.	<ul style="list-style-type: none"> <li>• Footbridge - Proposed Elevations - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168053</a></li> <li>• Footbridge - Proposed Plan Deck Level - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168051</a></li> <li>• Footbridge - Proposed General Arrangement Platform Level - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168050</a></li> <li>• Footbridge - Proposed Roof Level General Arrangement - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168052</a></li> <li>• Footbridge - Proposed Sections - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168054</a></li> <li>• Existing and Proposed Long Sections (A-A) - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168003</a></li> <li>• Existing and Proposed Long Sections (B-B) - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168005</a></li> </ul>
Huddersfield Station	Passenger Subway	Extension to existing Subway (MVL3/91) (of 12.5m) required to service the new island platform to the north of the station.	<ul style="list-style-type: none"> <li>• Existing Plan and Sections - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168064</a></li> <li>• Proposed Plan and Section - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168065</a></li> </ul>
Huddersfield Station	Parcel Subway (MVL3/91A)	Utilising existing subway for utilities ducting and signalling equipment. Concrete infill.	<ul style="list-style-type: none"> <li>• Existing Plan and Sections - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168067</a></li> <li>• Proposed Plan and Section - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168068</a></li> </ul>
Huddersfield Station	Tearooms	Existing Tea Rooms - Timber structure to be carefully dismantled and relocated within island platform. To be dismantled and reconstructed.	<ul style="list-style-type: none"> <li>• Existing Floor Plan and Elevations - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168016</a></li> <li>• Existing and Proposed Elevations - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168015</a></li> <li>• Proposed Floor Plan and Elevations - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168017</a></li> </ul>
Huddersfield Station	Proposed Platforms	Works to railway lines including provision of new platforms and removal of existing railway sidings.	<ul style="list-style-type: none"> <li>• Existing Plan - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168060</a></li> <li>• Existing and Proposed Platform General Arrangement - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168001</a></li> <li>• Proposed Plan and Section - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168061</a></li> <li>• Proposed Plan and Section - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168062</a></li> <li>• Proposed Plan and Section - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168063</a></li> </ul>

Location	Structure/works	Summary description	Deemed Planning Drawing Title and Reference
Huddersfield Station	Canopy A	Works to the main train shed within Huddersfield Station includes: <ul style="list-style-type: none"> <li>• Structural works to maintain and strengthen;</li> <li>• Demolition of two canopy bays at Manchester end of the station;</li> <li>• Construction of two new bays at Leeds end;</li> <li>• Grit blasting of structure; and</li> <li>• Reinstatement of main train shed lantern.</li> </ul>	<ul style="list-style-type: none"> <li>• Existing and Proposed Roof General Arrangement - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-1680000</a></li> <li>• Existing and Proposed Short Sections (A-A) - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168002</a></li> <li>• Existing and Proposed Short Sections (B-B) - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168004</a></li> <li>• Existing Roof A Structural Plan (Roof Level) - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168010</a>;</li> <li>• Existing Roof A Structural Sections Sheet (1) - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168011</a></li> <li>• Existing Roof A Structural Sections Sheet (2) - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168012</a>;</li> <li>• Existing Roof A OLE Support Details - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168013</a></li> </ul>
Huddersfield Station	Canopy B & C	Canopy B&C are to be demolished with new replacements to be constructed to cover platforms to north.	<ul style="list-style-type: none"> <li>• Existing and Proposed Roof General Arrangement - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168000</a></li> <li>• Existing and Proposed Short Sections (A-A) - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168002</a></li> <li>• Existing and Proposed Short Sections (B-B) - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168004</a></li> <li>• Proposed Roof B (Shed Roof) Structural Plan (Roof Level) - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168020</a></li> <li>• Proposed Roof B (Shed Roof) Structural Plan (Platform Level) - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168021</a></li> <li>• Proposed Roof B (Shed Roof) Structural Sections (1) - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168022</a></li> <li>• Proposed Roof B (Shed Roof) Structural Sections (2) - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168023</a></li> <li>• Proposed Roof B (Shed Roof) Structural Sections (3) - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168024</a></li> </ul>
Huddersfield Station	Platform free standing canopies	Free standing canopies to be constructed over island platforms to eastern end of station.	<ul style="list-style-type: none"> <li>• Existing and Proposed Roof General Arrangement - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168000</a></li> <li>• Proposed Platform General Arrangement - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168030</a></li> </ul>

Location	Structure/works	Summary description	Deemed Planning Drawing Title and Reference
			<ul style="list-style-type: none"> <li>• Proposed Platform Canopies Elevation (1) - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168034</a></li> <li>• Proposed Platform Canopies Elevation (2) - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168035</a></li> <li>• Proposed Platform Canopies Structural Plan (Platform Level) - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168031</a></li> <li>• Proposed Platform Canopies Structural Sections - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168032</a></li> <li>• Proposed Platform Canopies Structural Sections - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168033</a></li> </ul>
Huddersfield Station	Canopies – Penistone Line	Extension of Penistone Line canopies.	<ul style="list-style-type: none"> <li>• Proposed Penistone Line Canopy Platform Level Plan General Arrangement - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168036</a></li> <li>• Proposed Platform Penistone Canopies Structural Sections - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168037</a></li> <li>• Proposed Platform Penistone Canopies Proposed Roof Covering Plans - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168038</a></li> <li>• Proposed Platform Penistone Canopies Elevation (1) - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168039</a></li> </ul>
Huddersfield Station	Relay Room	Existing relay room to be demolished.	<ul style="list-style-type: none"> <li>• Existing and Proposed Platform General Arrangement - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168001</a></li> </ul>
Huddersfield Station	Drainage Works	Fitzwilliam Street sewer outfall (New) SE 1430 1707. Proposed new storm water drainage outfall for the re-modelled areas of Huddersfield Station. It will be a piped outfall from the drainage system, either directly into the sewer in the highway, or into an existing culvert within Network Rail land which connects into this sewer. A new manhole will be provided at the outfall.	<ul style="list-style-type: none"> <li>• No relevant planning drawings</li> </ul>

Location	Structure/works	Summary description	Deemed Planning Drawing Title and Reference
Huddersfield Viaduct (MVL3/92)		Works across Huddersfield Viaduct includes general strengthening works along the length of viaduct together with localised repairs to arches where necessary. These works include pinning and grouting, shear anchors and spandrel strengthening with tie bar and pattress plates.	<ul style="list-style-type: none"> <li>Existing and Proposed East Elevation (Sheet 1) - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168075</a></li> <li>Existing and Proposed East Elevation (Sheet 2) - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168076</a></li> <li>Existing and Proposed East Elevation (Sheet 3) - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168077</a></li> <li>Existing and Proposed East Elevation (Sheet 4) - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168078</a></li> <li>Existing and Proposed East Elevation (Sheet 5) - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168079</a></li> </ul>
Huddersfield Viaduct	Span 1 – John William Street Underbridge (MVL3/92(2))	The existing Span 1 bridge deck will be removed and replaced with a new single span bridge deck due to the current structural arrangement of the bridge clashing with the proposed track and platform works.	<ul style="list-style-type: none"> <li>Existing Plan and Proposed Plan (Sheet 1) - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168070</a></li> <li>Existing Plan and Proposed Plan (Sheet 2) - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168071</a></li> <li>Existing Plan and Proposed Plan (Sheet 3) - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168072</a></li> </ul>
Huddersfield Viaduct	Span 4 – Fitzwilliam Street Underbridge (MVL3/92(3))	Substructure repairs including removal and reinstatement of the pier to the south-western corner of the structure. Strengthening to cross girders. Removal and replacement of parapet.	<ul style="list-style-type: none"> <li>Existing Plan and Proposed Plan (Sheet 4) - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168073</a></li> <li>Existing Plan and Proposed Plan (Sheet 5) - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168074</a></li> <li>John William Street Bridge - Existing Highways General Arrangement - <a href="#">151667-TSA-30-MVL3-DRG-T-LP-168081</a></li> <li>John William Street Bridge - Proposed Highways General Arrangement - <a href="#">1667-TSA-30-MVL3-DRG-T-LP-168082</a></li> </ul>
Huddersfield Viaduct	Span 29 Bradford Road Underbridge (MVL3/92(9))	Existing bridge deck to be removed and replaced. Additional masonry pilasters/buttresses will be formed at the corners of the new abutments into which the concrete parapet will join. New concrete abutments to be built with stone facing in front of existing sandstone at both ends and, on both elevations.	

### 3. RELEVANT PLANNING CONDITION

3.1.1 The wording of Condition 5 sub-section (vi) is reproduced as follows:

*5.a) No stage of the development (including preliminary works) is to commence until a Code of Construction Practice (CoCP) Part B for that stage, including the relevant plans and programmes referred to in (b) below (which incorporates the means to mitigate the construction impacts identified by the Environmental Statement), has been submitted to and approved in writing by the local planning authority. For the avoidance of doubt this does not include approval for Part A of the CoCP (a general overview and framework of environmental principles and management practice to be applied to the scheme along with all construction-led mitigation identified in the Environmental Statement) which has been submitted as part of the Order.*

*5.b) Part B of the CoCP (as defined in the Environmental Statement: Volume 3, Appendix 2-1 Code of Construction Practice (Part A), Section 1.2.5) must include the following plans and programmes, for each stage as defined in condition 3:-*

*vi. A noise and vibration management plan including a construction methodology assessment;*

*The development must be implemented in accordance with the approved CoCP and the relevant plans or programmes unless otherwise agreed in writing with the local planning authority shall be implemented in full throughout the period of the works.*

**Reason:** *To mitigate expected construction impacts arising from the development and to protect local and residential amenity and to ensure the development is carried out in accordance with Kirklees Local Plan policies LP51 and 52.*

#### 4. PURPOSE OF THIS DOCUMENT

- 4.1.1 The purpose of this NVMP, which has been prepared in relation to Stage 4 of the Scheme, is to define the framework by which construction noise and vibration will be managed. The NVMP therefore sets out the principles and procedures for the management of noise and vibration during the construction of Scheme.
- 4.1.2 The NVMP includes details in relation to:
- How works are to be conducted in accordance with Section 61 consents in consultation with the local authority;
  - The scheduling of staged Section 61 applications;
  - Construction noise and vibration thresholds in terms of significance and the criteria for noise insulation and temporary re-housing;
  - How noise and vibration sensitive receptors (NSR), such as households, will be kept informed of construction works and how they can contact Network Rail; and
  - Best practicable means (BPM) to reduce noise and vibration during construction.
- 4.1.3 It also includes a construction noise and vibration assessment methodology (which includes requirement to secure consents under Section 61 of the Control of Pollution Act 1974 (CoPA)).

## 5. NOISE AND VIBRATION MANAGEMENT PLAN

### 5.1 Management framework

#### Roles and responsibilities

- 5.1.1 Staff, operatives and sub-contractors have the authority and responsibility to protect the environment at all times during execution of the works.
- 5.1.2 The responsibilities outlined in this section will be highlighted during site inductions. All personnel will be trained in the necessary skills to fulfil their role. Key personnel for specific job roles are set out in the Table 5-1. The roles outlined may be substituted as required providing that the key environmental responsibilities are clearly and appropriately allocated.
- 5.1.3 Contact details for all key contractors will be displayed on notice boards in the site offices.

**Table 5-1 Roles and responsibilities**

Role	Key environmental responsibilities
Scheme Area Project Manager	<ul style="list-style-type: none"> <li>Responsible for ensuring the Environmental Management System for the project is implemented.</li> <li>Ensures that the Network Rail Environmental Policy is drawn to the notice of all employees under his control.</li> <li>Establishes effective lines of communication with all employees under their control.</li> <li>Promotes the continuous improvement of environmental performance</li> <li>Monitors and reviews the implementation of environmental objectives and targets on the project.</li> </ul>
Principal Environment Manager	<ul style="list-style-type: none"> <li>Carries overall responsibility meeting environmental performance objectives and targets.</li> <li>Ensures adequately trained and competent resources are provided to implement the NVMP.</li> <li>Ensures that environmental risks are evaluated and considered during the planning stage of the project.</li> <li>Interfaces between various design disciplines to ensure that environmental considerations have been taken account of in final design output.</li> <li>Approves all specific or specialist environmental procedures that are required.</li> <li>Responsible for setting and meeting project objectives and targets.</li> <li>Responsible for implementing a Noise Insulation and Rehousing Policy (where required)</li> </ul>
Site Environment Manager	<ul style="list-style-type: none"> <li>Responsible for providing a focal point for all communications between the construction team and outside environmental bodies.</li> <li>Completion of screening risk assessment to identify requirement for Section 61 application associated with the works</li> <li>Liaison with Environmental Health Officer (EHO) at Kirklees Council</li> <li>Identifying noise insulation and rehousing requirements</li> <li>Maintaining and revising the NVMP and all specific or specialist environmental procedures that are required.</li> <li>All measures in the NVMP are implemented on site. This includes ensuring that adequate resources are allocated to environmental management on site.</li> <li>Collecting and collating the project's environmental performance records.</li> <li>Collating reportable environmental incident and NCR data, establishing cause and implementing actions to prevent reoccurrence.</li> </ul>

Role	Key environmental responsibilities
	<ul style="list-style-type: none"> <li>• Reviews and approves risk assessments and Work Package Plans (RAMS) for environmental content.</li> <li>• Ensuring that internal environmental audits are undertaken and reported.</li> <li>• Drawing up measures for emergency preparedness and response procedures.</li> <li>• Environmental issues in risk assessments are communicated effectively on site and that appropriate training is delivered.</li> <li>• Producing monthly environmental reports and forwarding them to the Site Manager.</li> </ul>
Site Manager	<ul style="list-style-type: none"> <li>• Responsible for management of the construction phase, and ensuring compliance with all relevant legal requirements, commitments and targets.</li> <li>• Ensures that site-specific training needs are identified, and training programmes are effectively undertaken.</li> <li>• Establishes and implements comprehensive environmental inductions, training awareness and education programmes for all level of site staff and operatives.</li> </ul>
Resident liaison officer	<ul style="list-style-type: none"> <li>• Ensures any enquiries or complaints directed to site staff are submitted to the Network Rail helpline</li> <li>• Is the first point of contact for the Network Rail Community Relations team for enquiries or complaints that have been submitted to the Network Rail helpline.</li> <li>• Role will link directly with the Network Rail Community Relations team</li> </ul>
All site staff	<ul style="list-style-type: none"> <li>• Protect the environment and act sustainably.</li> <li>• Report any environmental concerns to their supervisors.</li> <li>• Comply with specified systems of work.</li> <li>• Promote and communicate newly developed best practice.</li> <li>• Ensure only staff who have the required understanding, qualifications, and where necessary certification, carry out the specialised tasks.</li> </ul>

### Training awareness and competence

- 5.1.4 All personnel will receive specific and targeted information during site induction.
- 5.1.5 All personnel, whose work may result in noise and vibration, will receive environmental training specific to their task. This will be appropriate to their level and role, and will include subcontractors and the wider supply chain, as appropriate.
- 5.2 Community liaison**
- 5.2.1 Good relations with people living and working in the vicinity of site operations are of paramount importance. Early establishment and maintenance of these relations throughout the carrying out of site operations will go some way towards allaying people's fears.
- 5.2.2 Further details are available in the External Communications Programme (document ref: 151667-TSA-00-TRU-CNT-W-LP-000552) submitted against Condition 5b(i) (Stage 1).
- 5.2.3 Good relations can be developed by keeping people informed of progress and by treating complaints fairly and expeditiously. There will be a dedicated TRU communications team working on the Scheme throughout the construction work. The TRU communications team will be supported by Network Rail's wider communications team.
- 5.2.4 It is well established that people's attitudes to noise can be influenced by their attitudes to the

source or activity itself. Noise from a site will tend to be accepted more readily by residents, if they consider that the contractor is taking all possible measures to avoid unnecessary noise. The attitude to the contractor can also be improved through good community liaison and information distribution and the provision of a helpline to respond to queries or complaints. The acceptability of the project itself can also be a factor in determining community reaction.

- 5.2.5 With regards to vibration, adverse community reaction is sometimes based upon concern over building damage, even when vibration is just perceptible. It is therefore important to assure the community that vibration levels generally need to be of significant magnitude for cosmetic damage to even occur. That said, residents should be advised that there is the potential for movement of non-fixed items within their homes (such as ornaments on shelves) due to vibration from specific activities and, as such, items at risk of damage should be relocated to a suitably safe location (e.g. removed from shelves/boxed).
- 5.2.6 Local residents will be notified of any works at least 14 days in advance of commencement via a letter drop. The notification letters will include contact details for the Network Rail helpline and the website so that recipients are able to make a request for further information, should they want to. The helpline is available 24 hours a day, 365 days a year and all notification letters will be assigned to the TRU communications team to respond to.
- 5.2.7 In accordance with Network Rail standards, letter drops will be sent to addresses within a 200m radius of where the work is due to take place, unless the work is piling, in which case letters will be sent to addresses within a 500m radius. A copy of all letters will also be sent to Kirklees Council and relevant council member representatives (if living outside the letter drop area) for their information and reference.
- 5.2.8 Where appropriate, community events may also be held to notify the local community about forthcoming works.
- 5.2.9 The TRU communications team regularly update the TRU website, which can be accessed via the following link:
- TRU website: <https://thetrupgrade.co.uk/>
- 5.2.10 In line with good practice the helpline team will be briefed on the Scheme in advance of works. The Network Rail helpline details are as follows:
- Freephone: 03457 11 41 41
  - Web: <https://www.networkrail.co.uk/communities/contact-us/>
- 5.2.11 Site staff will familiarise themselves with the locations of nearby NSR as part of the site induction process. There are limited NSR close to the Stage 4 works; these include the following:
- Huddersfield Station
- National Children's Centre;
  - Platform 1 Men's Community Group;
  - The George Hotel to the east;
  - Residential and religious receptors on Fitzwilliam Street to the north; and
  - Residential receptors off Westgate/St Georges Street to the southeast
- Huddersfield Viaduct
- Residential and religious receptors on Fitzwilliam Street and St John's Road to the southwest;
  - Residential receptors on Ray Street to the northeast; and
  - Residential receptors on Northgate/Alder Street to the northwest.

### 5.3 Pre-commencement schedule of condition surveys

- 5.3.1 Given the distance to nearby NSR and structures, cosmetic and/or structural damage is not expected due to the proposed Stage 4 works. As such, pre-commencement schedule condition surveys are not proposed in relation to Stage 4 works.
- 5.3.2 Building condition surveys will be conducted at buildings close to vibration generating activities, where construction vibration levels are expected to approach or exceed 12.5 mm/s peak particle velocity (PPV). If vibration generating activities are required (i.e. compaction or piling) close to buildings or structures (typically within approximately 10m) are identified then a review of the need for building surveys will be carried out by the acoustic specialist.
- 5.3.3 Whilst there is no formal requirement for surveys, given the works at Huddersfield are proposed in proximity to several Listed Buildings, condition surveys will be undertaken at the following locations prior to Stage 3 works (as detailed in the Stage 3 NVMP document ref: 151667-TSA-00-TRU-REP-W-EN-000096);
- Huddersfield Station (Grade I Listed, NHLE 1277385)
  - Two warehouses to the north of the station platforms, (NHLEs 1228533, 1287149)
- 5.3.4 Post condition surveys are proposed at the above locations after Stage 3 (proposed in Stage 3 submission) and Stage 4 works to ensure protection of these assets

### 5.4 Working hours

- 5.4.1 Standard working hours for the Scheme are defined as 08:00 to 18:00 Monday to Friday; 08:00 to 13:00 on Saturdays with 30 minutes either side for setting up and organising/cleaning the site. However, there is also a requirement for 24 hour working during possessions.

### 5.5 Noise and vibration control measures

- 5.5.1 BPM will be employed to reduce noise impacts from the site. BPM are defined in Section 72 of the CoPA as those measures which are:

*“reasonably practicable having regard among other things to local conditions and circumstances, to the current state of technical knowledge and to financial implications”.*

- 5.5.2 British Standard BS 5228:2009+A1:2014 – Code of practice for noise and vibration control on construction and open sites – Part 1: Noise (BS 5228-1) and Part 2: Vibration (BS 5228-2) have Approved Code of Practice status (in England) under the powers conferred by sections 71(1)(b), (2) and (3) of the CoPA, as enacted under The Control of Noise (Code of Practice for Construction and Open Sites) (England) Order 2015. Compliance with the best practice noise and vibration requirements stated therein became a statutory obligation under the Act.

#### General mitigation measures

- 5.5.3 Contractors will be required to follow standard good construction practice as outlined in BS5228-1 and BS5228-2.
- 5.5.4 This will include following the general measures set out below which can reduce noise levels at source, such as:
- No unnecessary revving of engines and switch off equipment when not required;
  - Internal haul routes will be kept well maintained and avoid steep gradients, where possible;
  - Rubber linings in, for example, chutes and dumpers to reduce impact noise;
  - Minimise drop height of materials;
  - Start up of plant and vehicles will occur sequentially rather than concurrently;

- Continuous noisy plant is to be housed in acoustic enclosures, where practicable;
- Exhaust silencing and plant muffling equipment will be fitted and maintained in good working order;
- Static plant known to generate significant levels of vibration will be fitted with vibration dampening features;
- Each item of plant used will be selected so as to comply with the noise limits quoted in the relevant European Commission Directive 2000/14/EC/United Kingdom Statutory Instrument (SI) 2001/1701;
- Consideration will be given to the recommendations set out in Annex B of BS5228-1, noise sources, remedies and their effectiveness;
- Equipment will be well maintained and where possible used in the mode of operation that minimises noise;
- Plant and equipment will be shut down when not in use;
- Semi-static equipment will be sited and orientated as far as is reasonably practicable away from occupied buildings and, where feasible, will be fitted with suitable enclosures;
- Materials will be handled in a manner that minimises noise; and
- All appropriate personnel will be instructed on BPM measures to reduce noise and vibration as part of their induction training.

- 5.5.5 If noisy processes can be avoided, then the amount of noise reaching NSR will be reduced. Alternative ways of reducing noise are to either increase the distance between the construction noise source and NSR or to introduce noise reduction screens, barriers or bunds.
- 5.5.6 The movement of plant onto and around the site will have regard to the normal operating hours of the site and the location of any noise sensitive premises as far as is reasonably practicable.
- 5.5.7 The use of conventional audible reversing alarms has caused problems on some sites and alternatives are available. Audible reversing warning systems on mobile plant and vehicles will be of a type which, whilst ensuring that they give proper warning, have a minimum noise impact on persons outside sites. When reversing, mobile plant and vehicles will travel in a direction away from noise sensitive properties whenever possible. Where practicable, alternative reversing warning systems will be used to reduce the impact of noise outside sites.
- 5.5.8 The plant and activities to be employed on the site will be reviewed to ensure that they are the quietest available for the required purpose; this is in accordance with BPM. Where reasonably practicable, noisy plant or activities will be replaced by less noisy alternatives if noise problems are occurring.
- 5.5.9 Piling will be required during this stage of works for the following activities:
- Huddersfield Station:
    - Construction of replacement Canopy B & C
    - Construction of footbridge and associated lift shafts
    - Construction of staircase on island platform
  - Huddersfield Viaduct:
    - Span 29
- 5.5.10 With regards to vibration, there is a relationship, particularly for percussive piling, between the energy per blow and the resulting level of vibration at an NSR. It may therefore be possible to reduce the level of vibration and/or noise by reducing the energy per blow/cycle. However, the trade-off is that more blows/longer durations are required to drive piles to the required depth. The trade-off will not necessarily be linear owing to other losses in energy in the system. As such, the increased number of blows/duration of works may lead to an increase in the overall impact of works compared to a higher sound or vibration level for a shorter duration.

### Specific mitigation measures

- 5.5.11 No significant noise and/or vibration impacts are expected from proposed works associated with Stage 4 of the Scheme. No specific mitigation measures are therefore proposed beyond the general mitigation measures identified. However, this would be subject to review during any Section 61 applications as required, and where appropriate specific details relating to plant and equipment would be considered through any Section 61 application.

### Noise insulation and temporary rehousing

- 5.5.12 Households will be eligible for noise insulation or temporary rehousing where significant adverse effects are predicted to occur despite the implementation of BPM to minimise the effects of noise and/or vibration. To be eligible for noise insulation or temporary rehousing:
- The construction noise and/or vibration level (only temporary rehousing for significant vibration effects), despite implementation of BPM, must exceed either:
    - The construction noise SOAEL value at the residential NSR during the relevant period as defined in Table 5-2; or
    - A sustained vibration level of at least 1 mm/s at the residential NSR; and
  - The duration of noise and/or vibration exceedance must be for a period of:
    - 10 or more days in any 15 consecutive days; or
    - 40 or more days in any 6 consecutive months.

**Table 5-2 Construction noise SOAEL values**

Day	Time (hours)	Averaging period, T	SOAEL threshold, dB $L_{Aeq,T}$
Mondays to Fridays	0700 – 0800	1 hour	70
	0800 – 1800	10 hours	75
	1800 – 1900	1 hour	70
	1900 – 2200	1 hour	65
	2200 – 0700	1 hour	55
Saturdays	0700 – 0800	1 hour	70
	0800 – 1300	5 hours	75
	1300 – 1400	1 hour	70
	1400 – 2200	1 hour	65
	2200 – 0700	1 hour	55
Sundays and Public Holidays	0700 – 2100	1 hour	65
	2100 – 0700	1 hour	55

<sup>A)</sup> All noise levels are predicted or measured at a point 1m in front of the most exposed of any windows and doors in any façade of any eligible dwelling

5.5.13 No properties are expected to require noise insulation or temporary rehousing due to the proposed Stage 4 works. However, this would be subject to review during any Section 61 applications, as required.

## 5.6 Section 61 application process

### Initial risk assessment

5.6.1 In order to streamline the construction noise and vibration assessment and Section 61 application process, it has been agreed with Kirklees Council, as the local authority, that the requirement for Section 61 applications for specific work packages or tasks is subject to an initial risk assessment. It is intended that the initial risk assessment would be conducted by a suitable qualified acoustician, and would consider:

- The nature of the works;
- The location of the works relative to noise sensitive receptors;
- The existing noise climate at nearby receptors;
- The duration of the works; and
- Whether works may be conducted during sensitive time periods (i.e. night-time).

5.6.2 The outcome of the initial risk assessment can fall under three categories: low, medium or high risk. In all cases professional judgement will be employed to determine the next required step. However, generally:

- Where works are considered to be 'low risk', significant adverse impacts would not be expected and generally only a 'Statement of Intent' (Sol) would be required.
- Where the initial risk assessment indicates a 'medium risk', judgement is to be used to determine whether an Sol or Section 61 application is best applicable, with an assumption in favour of a Section 61 application.
- Where the initial risk assessment indicates a 'high risk', a Section 61 application would be likely be required for the works.

5.6.3 A copy of this initial screening risk assessment completed for Stage 4 is included at Appendix B, which concludes that a s.61 is required and a submission will be made to Kirklees Council Environmental Health team in due course.

### Statement of Intent

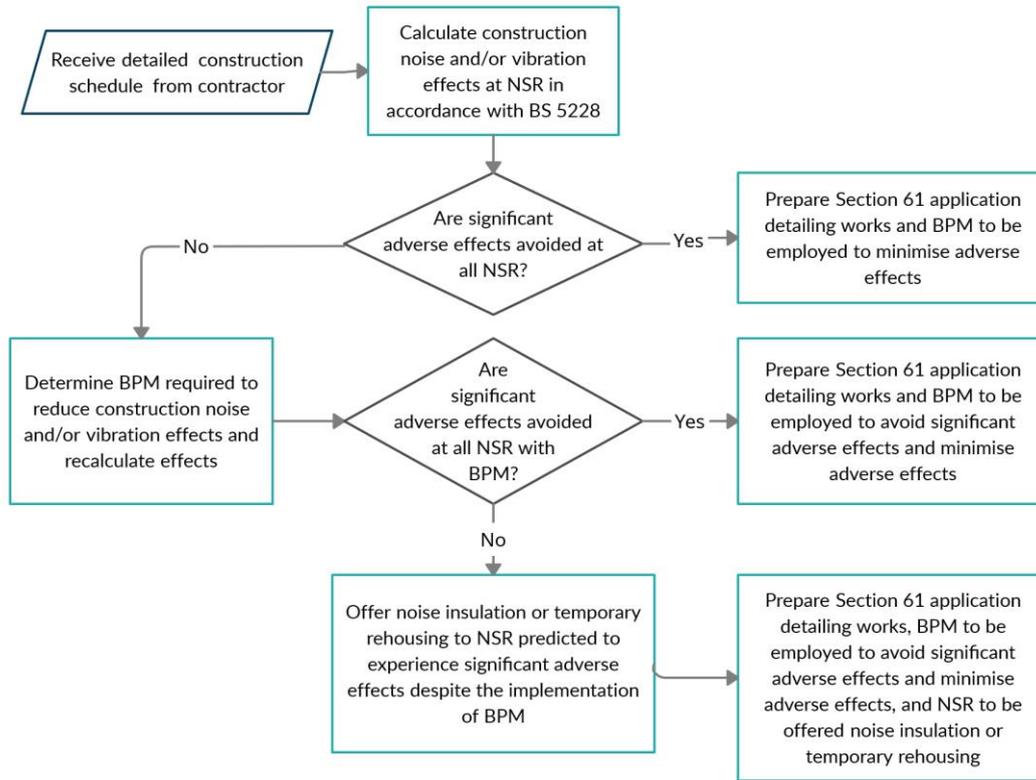
5.6.4 An Sol would be a non-statutory document submitted to Kirklees Council informing them of

the works, including:

- The nature of the works;
- Proposed dates and times;
- Outcome of the initial risk assessment; and
- Details of any BPM to be employed to mitigation noise and vibration.

#### Section 61 application

- 5.6.5 As stated the construction works will be managed through Section 61 applications through consultation with the local authority (Kirklees Council). Section 61 of the CoPA allows developers to apply for 'prior consent' for noise and vibration generating activities during the construction phase of a development provided that BPM are employed to minimise the effects of noise and/or vibration.
- 5.6.6 Contractors would be required to follow good construction practices as outlined in BS 5228-1 and BS 5228-2 to control noise and vibration.
- 5.6.7 A Section 61 application for prior consent requires the assessment of the construction working methods that will be used to undertake the work as well as the general use of sites as construction compounds (detailed in submitted Stage 2 documents) and a prediction of the likely noise and/or vibration levels at nearby NSR. The Section 61 application(s) for the Scheme will detail the specific construction methods and the BPM, agreed with the local authority, to be used to reduce noise and/or vibration levels.
- 5.6.8 When approved, the contractor is required to carry out the works following the processes, including the implementation of BPM, as detailed in the Section 61 consent. The agreed methods will be included in the NVMP.
- 5.6.9 In summary, the Section 61 process identifies:
- NSR where significant adverse effects may occur due to construction noise and/or vibration;
  - The BPM that will be applied to avoid these significant adverse effects; and
  - NSR to be offered noise insulation or temporary rehousing (where significant adverse effects may still occur even following the implementation of BPM).
- 5.6.10 It should be noted that BPM are required to be applied at all times, even in the absence of significant adverse effects, in order to reduce adverse effects at nearby NSR.
- 5.6.11 The Section 61 process is outlined in Insert 5-1.



**Insert 5-1 Section 61 construction noise and vibration assessment and mitigation process**

5.6.12 Section 61 applications will be made either for specific tasks, or at regular periods covering the proposed works during a specific period as appropriate (e.g. 6 months). If required a section 61 application will be submitted to the local authority 4-6 weeks prior to works starting on site to allow for their statutory 28-day period to respond. The Section 61 process will commence at the earliest opportunity and not less than eight to ten weeks prior to the proposed start of the works.

**5.7 Noise and persons on site**

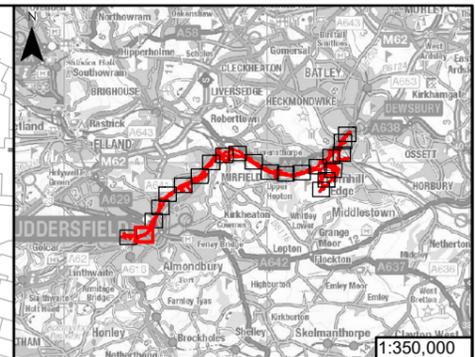
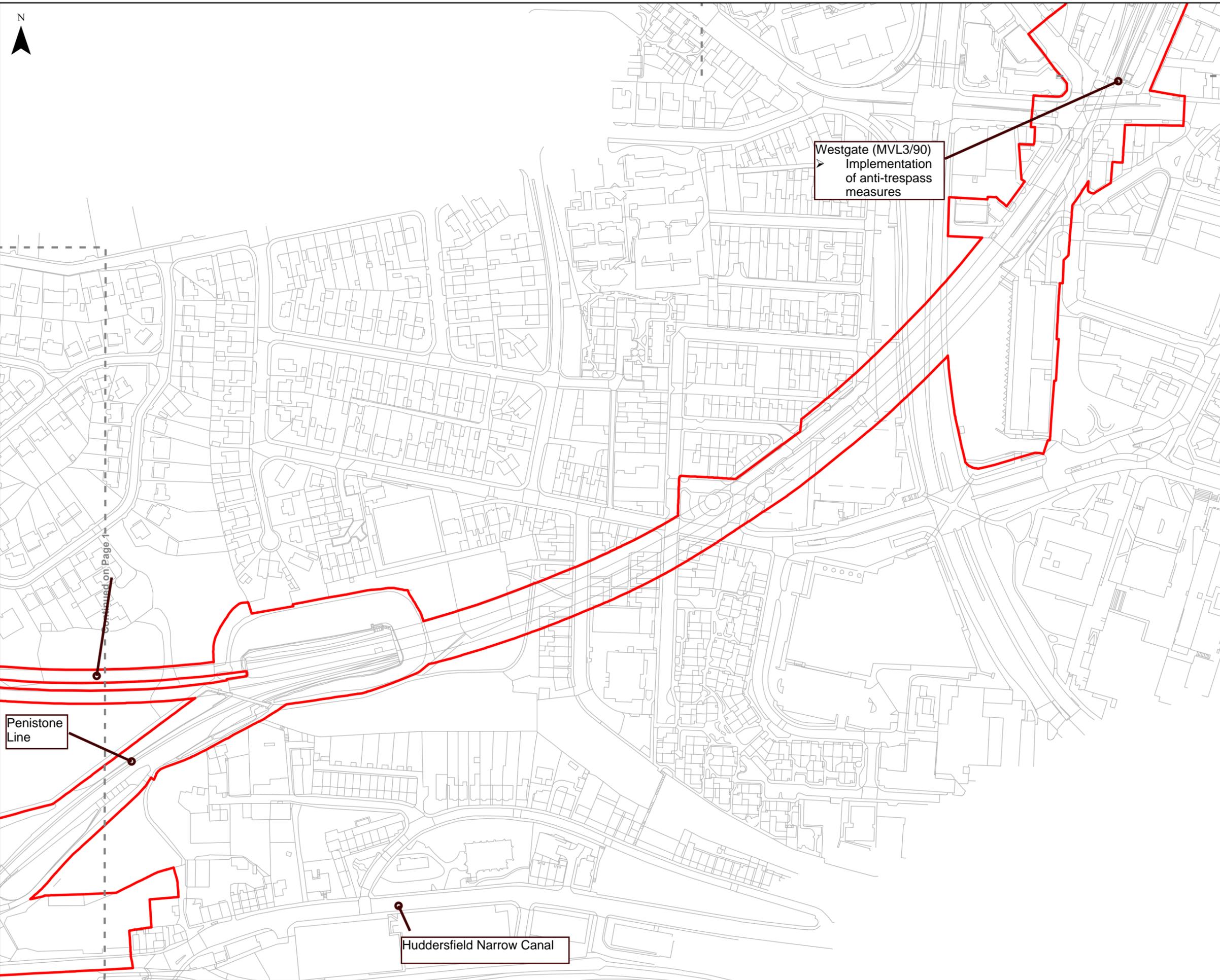
5.7.1 The employer shall ensure that risk from the exposure of their employees to noise is either eliminated at source or, where this is not reasonably practicable, reduced to as low a level as is reasonably practicable in accordance with The Control of Noise at Work Regulations 2005 which places a duty on employers within Great Britain to reduce the risk to their employees' health by controlling the noise they are exposed to whilst at work.

## 6. SUMMARY

- 6.1.1 This NVMP has been prepared to support the Stage 4 works of the Huddersfield to Westtown (Dewsbury) section of the TRU and details:
- How the local community will be informed of the proposed works;
  - Pre-commencement schedule of condition surveys of buildings properties;
  - Working hours;
  - BPM to reduce the impacts of noise and vibration during construction;
  - The criteria for noise insulation and temporary rehousing;
  - How BPM will be managed through Section 61 applications; and
  - How noise impacts on persons on site will be managed.
- 6.1.2 As stated, Section 61 applications will be made either for specific tasks, at specific locations or at regular periods covering the proposed works where consideration will be made to potential noise and/or vibration effects and how these will be managed.

# Appendices

## APPENDIX A – STAGE 4 WORKS LOCATION PLAN



Scheme Boundary  
 Adjacent Map Sheet



P01	12/02/21	FIRST ISSUE	RB	PB	PB
Rev	Date	Description of Revisions	Drwn	Chkd	Appr
Status					Suitability
<b>SHARED</b>					



Project  
**TRANSPENNINE ROUTE UPGRADE**  
 Contract No.  
**151667**  
 Scheme Title  
**THE NETWORK RAIL (HUDDERSFIELD TO WESTTOWN (DEWSBURY) IMPROVEMENTS) ORDER**

Drawing Title

**Figure 1  
Stage 4 works**

Designed	R.Bowes	Signed Electronically	Date	12/02/2021
Drawn	R.Bowes	Signed Electronically	Date	12/02/2021
Checked	P.Butler	Signed Electronically	Date	12/02/2021
Approved	P.Butler	Signed Electronically	Date	12/02/2021

Scale(s) 1:2,500 ELR & Project Chainage ---

Alternative Reference --- Sheet 2 of 22

Drawing Number 151667-TSA-00-TRU-REP-W-EN-001370 Revision P01.1

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Railway works include

- 4 tracking
- Horizontal track realignment
- Relaying of ballast and tracks

Continued on Page 4

Halfords - access to business to be maintained

**Huddersfield Viaduct (MVL3/92) Bradford Road**

- Existing bridge deck to be removed and replaced
- Additional masonry pilasters/butresses will be formed at the corners of the new abutments into which the concrete parapet will join.
- New concrete abutments to be built with stone facing in front of existing sandstone at both ends and, on both elevations.

**Huddersfield Viaduct – Span 4 – Fitzwilliam Street Underbridge**

- Substructure repairs including removal and reinstatement of the pier to the south-western corner of the structure
- Strengthening to cross girders
- Removal of parapet and replacement with replica in cast iron

**Huddersfield Viaduct - general strengthening works** along the length of viaduct together with localised repairs to arches where necessary. These works include pinning and grouting, shear anchors and spandrel strengthening with tie bar and pattress plates.

DNO - Fitzwilliam Street

**Huddersfield Viaduct Span 1 (MVL3/929 (1)) - John William Street**

- existing bridge deck will be removed and replaced with a new single span bridge deck

Fitzwilliam Street Construction Compound

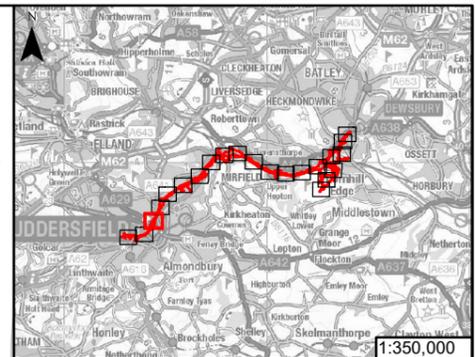
Huddersfield Station - construction compound

Brian Jackson House

**Huddersfield Station**

- main train shed - structural works, two bays at Manchester end of canopy to be demolished, two new bays at Leeds end of platform 1; reinstatement of main train shed lantern;
- smaller train shed (canopies B&C) to be demolished, new roof to be constructed;
- free standing canopies over island platforms
- extension to canopy to service Penistone line;
- tea rooms to be deconstructed and relocated;
- a covered footbridge (with lift and stairs) to be constructed (step free access)
- concrete infill of existing parcel subway
- extension to existing passenger subway to service new island platform to north of station
- Grit blasting of main train shed
- Works to railway lines including provision of new platforms and removal of existing railway sidings
- Demolition of existing relay room

Continued on Page 2



Scheme Boundary  
 Adjacent Map Sheet



P01	12/02/21	FIRST ISSUE	RB	PB	PB
Rev	Date	Description of Revisions	Drwn	Chkd	Appr
Status	SHARED				Suitability

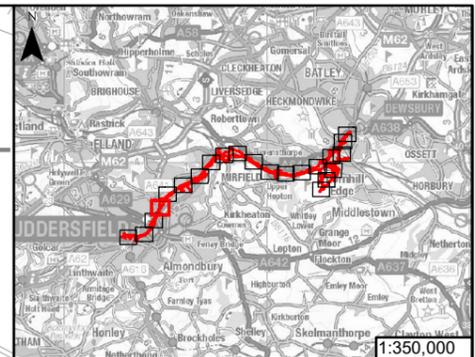
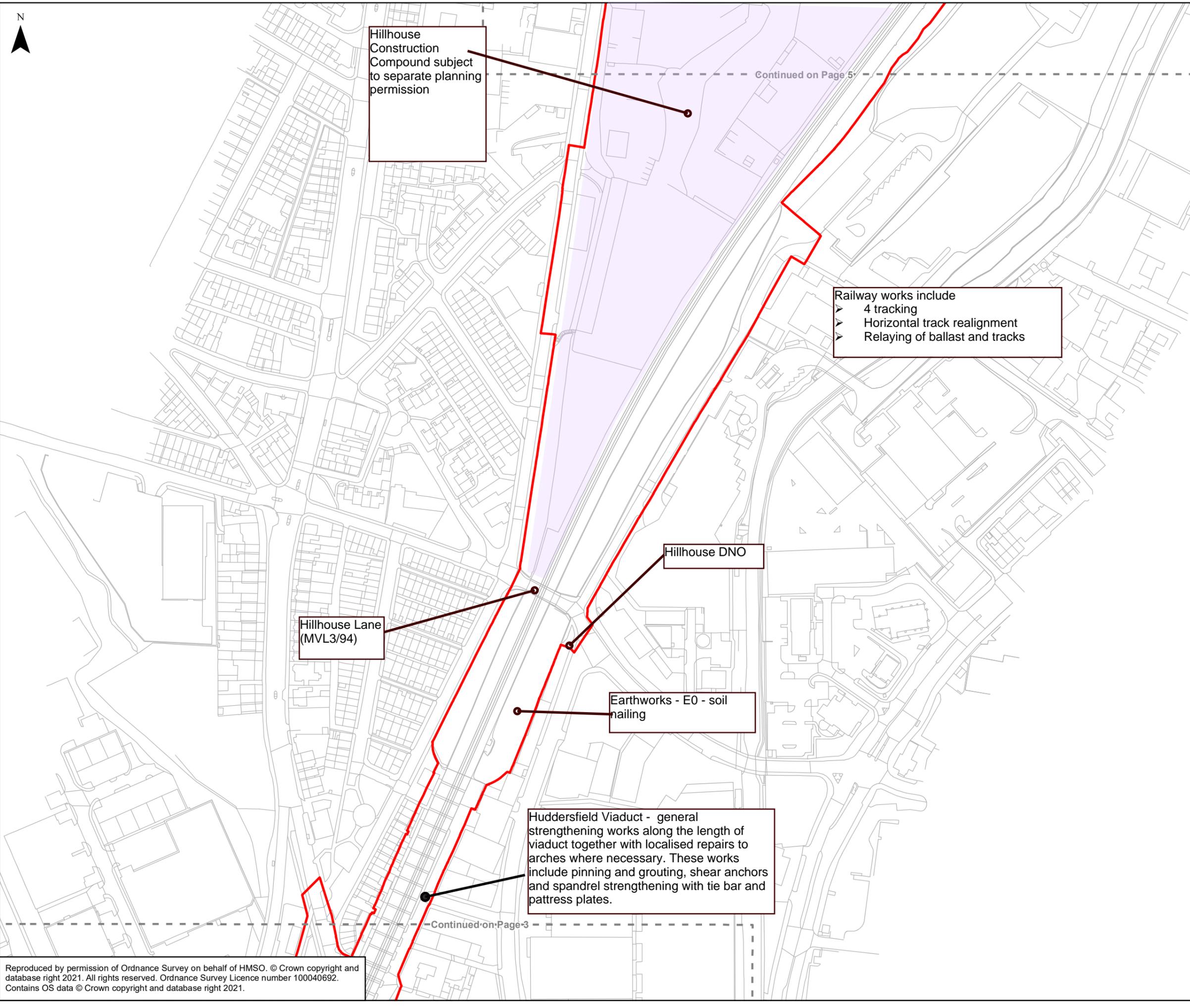


Project  
**TRANSPENNINE ROUTE UPGRADE**

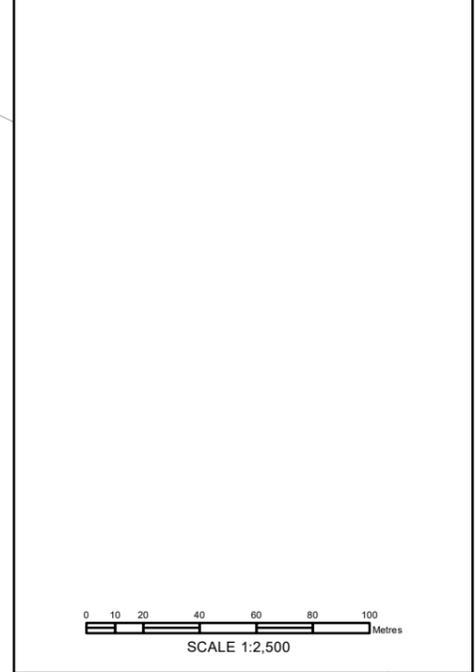
Contract No.  
151667

Scheme Title  
THE NETWORK RAIL (HUDDERSFIELD TO WESTTOWN (DEWSBURY) IMPROVEMENTS) ORDER

Drawing Title					
<b>Figure 1 Stage 4 works</b>					
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Approved	P.Butler	Signed Electronically	Date	12/02/2021	
Scale(s)	1:2,500		ELR & Project Chainage		
Alternative Reference			Sheet		
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Drawing Number				Revision	
151667-TSA-00-REP-W-EN-001370				P01.1	



- Scheme Boundary
- Adjacent Map Sheet



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Project  
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Scale(s)  
1:2,500

ELR & Project Chainage  
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Alternative Reference  
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Sheet  
4 of 22

Drawing Number  
151667-TSA-00-TRU-REP-W-EN-001370

Revision  
P01.1

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## APPENDIX B – INITIAL CONSTRUCTION NOISE AND VIBRATION RISK ASSESSMENT – STAGE 4 WORKS

### Introduction

This document provides an initial assessment of risk associated with potential noise and vibration impacts from proposed construction activities associated with the Transpennine Route Upgrade (TRU) project. The process is based on accepted methodology used for assessing construction noise and vibration in rural areas on the High Speed 2 (HS2) rail scheme, 'Guidance Note – HS2 Risk Assessment for Rural Areas' (RARA), which in turn is broadly based on the Chartered Institute of Environmental Health (CIEH) London Good Practice Guide (LGPG). Whereas LGPG is focused predominantly on impacts on urban areas, the RARA was produced to take account of the potential differences in sensitivity of rural areas with regards to construction noise and vibration.

A construction noise and vibration risk assessment (CNVRA) is proposed to be conducted for each works package associated with the scheme. The outcome of the CNVRA is used to determine an appropriate and proportionate approach to the assessment of construction noise and vibration impacts for the numerous construction activities required for the scheme in order to achieve an agreed, consistent, and efficient approach to assessment for the developer, the noise consultant, and the local authority, given the large and complex nature of the scheme.

This is achieved by focusing detailed assessments and subsequent Section 61 applications under Section 61 of Control of Pollution Act (CoPA) on construction activities with a medium or high noise and vibration risk. Construction activities with a low noise and vibration risk, indicative of where complaint is unlikely and which is likely to be the majority of works, will not be subject to a detailed assessment and subsequent Section 61 applications. However, a 'Statement of Intent' (Sol) will be provided to the local authority detailing the nature of the works and the rationale behind determining it as low risk, via a CNVRA.

Contractors should be aware that low risk activities will still be subject to potential risk of enforcement action under Section 60 of the CoPA, and use of best practicable means (BPM) to reduce levels of noise and vibration is still required.

### Methodology

The assessment categorises proposed works into low, medium, and high risk categories based on a number of factors, including:

- the nature of the works;
- the location of the works relative to noise sensitive receptors;
- the existing noise climate at nearby receptors;
- the duration of the works; and
- whether works may be conducted during sensitive time periods (i.e. night-time).

The assessment is broken down into two parts. Part A considers the locality and site information. Part B considers the works information. Appropriate options are selection for each assessment, categorised as Low, Medium and High risk. The resulting total 'tick' for each risk category are summed separately for Part A and Part B. The assessment outcome is determined via adding an additional 'tick' to the Part A sums for the category with the highest number of 'ticks' in Part B. This approach provides a higher weighting to the location, duration, and the time period of the works, rather than the nature of the works themselves.

The risk category with the highest resulting 'ticks' is then determined as the outcome of the assessment. A 'Low' risk is an indication that a statement of intent is appropriate. A 'Medium' or 'High' risk is an indication that a Section 61 application is appropriate.

If there is the same total in two risk categories, then the higher risk applicable mitigation measures should be employed.

It should be noted that the initial risk assessment is a tool and should be used in conjunction with professional judgement, taking account of the context of the area and the proposed works.

## Assessment for S61 –Stage 4 works

Risk Assessment A		Low	Medium	High
Locality/Site Information	<b>Works Duration</b>			
	<6 months	<input type="checkbox"/>		
	6 months to 12 months		<input type="checkbox"/>	
	>12 months			✓
	<b>Proximity of the nearest sensitive receptor</b>			
	>150m from the site boundary	<input type="checkbox"/>		
	Between 50m and 150m		✓	
	<50m			<input type="checkbox"/>
	<b>Daytime ambient sound level at nearest sensitive receptor<sup>1</sup></b>			
	High (>65 dB L <sub>Aeq,16h</sub> )	<input type="checkbox"/>		
	Moderate (55 to 65 dB L <sub>Aeq,16h</sub> )		✓	
	Low (≤55 dB L <sub>Aeq,16h</sub> )			<input type="checkbox"/>
	<b>Number of receptors within 150m</b>			
	Less than or equal to 5	<input type="checkbox"/>		
	Greater than 5 but less than 20		<input type="checkbox"/>	
	Greater than 20			✓
	<b>Working hours</b>			
	Core daytime only <sup>2</sup>	<input type="checkbox"/>		
	Some extended evening or weekend working		<input type="checkbox"/>	
	Some night-time working			✓
<b>SUBTOTAL A</b> Add up the number of ticks in each column	0	1	3	

Note <sup>1</sup> Can be determined via ES survey data, or strategic noise mapping, or additional surveys

Note <sup>2</sup> Core daytime: Monday to Friday, 08:00-18:00 hrs; Saturday 08:00-13:00 (excluding 1 hour start up/shut down)

Risk Assessment B		Low	Medium	High
Works Information	<b>Ground works</b>			
	Limited to less than 1 month	<input type="checkbox"/>		
	Between 1 month and 6 months		<input type="checkbox"/>	
	Greater than 6 months			✓

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