# Transpennine Route Upgrade
# Hillhouse Construction Compound
# s73 application

# Appendix C – Construction Traffic Management Plan (CTMP)

**Document Ref: 151667-TSA-00-TRU-REP-W-EN-001960**

**Network Rail**

**August 2025**

## Contents

**Tables**



**Inserts**

# 1. INTRODUCTION

## 1.1 Background

1.1.1 Planning Permission was granted for a temporary strategic construction compound with retaining wall, environmental mitigation measures and a temporary railway platform to facilitate the construction works for the section of the Trans-Pennine Route Upgrade (TRU) between Huddersfield and Westtown (Dewsbury) ('the Scheme') at a site off Alder Street, Huddersfield namely the Hillhouse Yard.

1.1.2 This CTMP supports the submission under section 73 of the Town and County Planning Act 1990 made on behalf of Network Rail and seeks to vary details of the development set out under paragraph 1.1.1 and consented under planning reference 2021/94337 dated 30 March 2022.

1.1.3 It should be noted that certain elements of the proposed development fall under NR's Permitted Development privileges. These did not form part of the approved scheme and were supplied for information only; these include provision of the stabling sidings in the Yard for the train operating company, and the provision of a signing-on/mess facility to serve the sidings in question, along with associated internal access and car parking. It should also be noted that the existing GSM-R mast will remain in situ as part of this temporary works application. There is no change to these elements as part of this submission.

1.1.4 This CTMP is a live document and will be reviewed on a regular basis to ensure that changes to the known road environment can be recognised and addressed at an early stage.

1.1.1 This document addresses the requirements for traffic management measures including:

- Traffic route signage;
- Signing and control of compound access and egress;
- Any route timing or volume restrictions; and
- Parking provision.

## 2. SCHEME DESCRIPTION

### 2.1 The Site and Surrounding Area

2.1.1 The Site is located at Hillhouse railway yard , Alder Street, Fartown is located wholly within the administrative authority of Kirklees Council.

### 2.2 The Proposal

2.2.1 The proposed Development is a construction facility to enable the construction works for the section of the TRU between Huddersfield and Westtown (Dewsbury).

2.2.2 The proposed Scheme will generally be delivered in line with the approved planning permission.

### 2.3 Phased development

2.3.1 The construction site will be used by the civils and rail systems engineers and will include laydown areas for the receipt and storage of the overhead line equipment (OLE) and trackwork. The laydown area for OLE would be located in the northern part of the compound. A laydown area is also proposed for permanent way works including an area where the trackwork will be fabricated. The Site will also be used for storage of waste and excavated material. Active plant and machinery would be present on site.

2.3.2 Construction and project management activities to service the wider Scheme will also be undertaken from the Site. The Site will make provision for welfare cabins for construction staff.

2.3.3 Works associated with the Proposed Development will be undertaken in two stages, comprising a number of elements within each stage:

- Stage 1:
  - Use of the Site for construction of Advanced Works to the Order;
  - Construction of retaining wall (works complete);
  - Construction of environmental mitigation measures (noise attenuation);
  - Construction of railway sidings (works complete);
  - Provision of welfare for civils and rail systems staff (works complete);
  - Material Storage (works complete);
  - Limited staff parking; and
  - Associated utilities/drainage work (complete).
- Stage 2:
  - Use of the Site as a strategic construction compound to facilitate the TRU works between Huddersfield and Westtown (Dewsbury);
  - Material Storage; and
  - Provision of welfare for civils and rail systems staff.

### 2.4 Working hours

2.4.1 The Site will be used throughout the construction of the Order Scheme and therefore will be in use for around four to five years (i.e. to mid 2028).

2.4.1 In general, standard working hours will be as follows:

- 08:00 to 18:00 Monday to Friday, with 30 minutes before 08:00 for setting up and 30 minutes after 18:00 for organising/cleaning the Site;
- 08:00 to 13:00 Saturday, with 30 minutes before 08:00 for setting up and 30 minutes after 13:00 for organising/cleaning the Site; and

- No working on Sundays.

2.4.2 These working hours refer to all activities where construction does not interfere with or require a closure of the operating railway. Non-standard working hours will also be utilised in connection to any construction works that would interfere with the operational railway. In this case, the operating railway is closed, and works can progress. Such closures, known as “possessions”, are normally employed at night time, weekends and Bank Holidays.

2.4.3 The majority of construction works will be undertaken during daytime hours, however there will be a limited amount of construction activity that requires night-time working, primarily works being undertaken during core possessions/blockades where 24 hour working is required.

2.4.4 Office staff hours will be more varied; support and administrative will keep more traditional office hours while delivery staff (engineers and construction managers) will be closer to the operative hours.

## 3. PARKING MANAGEMENT

3.1.1 Parking within the Site is strictly controlled, and requirements and restrictions are included as part of the Site induction.

### Phase 1 – Site operatives

3.1.2 The site accommodates circa 180 operatives at peak periods. Operatives working at the Site are transported to the Site by minibus from the station. Minibuses will also transport staff utilising public car parking sites in Huddersfield Town Centre. Some staff may travel to Site via public transport, or walk or cycle to work. No parking provision is made for operative staff at the Site.

3.1.3 Operatives are required to clock in and out at the start and finish of each shift and it is assumed that no operatives will work outside of the Site working hours.

3.1.4 There is no requirement for temporary traffic regulation orders during this phase..

### Phase 1 - Office Staff

3.1.5 All parking on-site is as per parking signs and rules and avoid creating any form of safety hazard when parking or parked within the Site.

3.1.6 All parking for office staff will be within the Site only. At no time will any personnel be authorised to park outside the Site boundary. In total, 23 associated parking spaces will be provided adjacent to the welfare cabins for staff, of which four will be accessible parking bays. An additional bay will provide motorcycle parking for four motorcycles. A cycle shelter will be provided for six bicycles adjacent to the accessible bays. Car parking provision is shown on the Site layout drawings in Appendix A.

3.1.7 As part of the Site induction, arrangements re parking are communicated to new staff, operatives and subcontractors. This includes arrangements for parking where applicable or alternative available e.g. off-site parking or public transport. All staff who arrive on site are met and are signed in by the site security. A shuttle service is used to bring staff to/from the station as necessary and will be used to bring staff to site when an offsite parking facility has been agreed.

3.1.8 Parking will be restricted to reverse parking, within the marked parking bays in the designated Site car park.

3.1.9 Further efforts will be made to encourage and provide alternative collective methods of transport to staff and operatives from local transport hubs such as nearest train stations wherever practicable. Further details will be contained within the Travel Plan for Construction Staff.

### Phase 2

3.1.10 Staff parking will be provided at the TRU Flint Street site (subject to separate planning approval). From August 2025, no staff parking is proposed at the Hillhouse site.

3.1.11 As there is now no requirement for a temporary platform, there is also no corresponding requirement for temporary traffic regulation orders during this phase.

### General

3.1.12 Parking within the Site will be strictly controlled and requirements and restrictions will be included as part of the Site induction.

3.1.13 No parking by contractors, visitors or delivery vehicles will be permitted on the local highway network at any time during the use of the Site.

3.1.14 All parking will be as per parking signs and rules and avoid creating any form of safety hazard

when parking or parked within the Site.

3.1.15 Visitors will be advised of the parking arrangements in advance of travelling to the Site.

3.1.16 Regarding deliveries, a site delivery plan is in place and this is issued to all suppliers which details vehicle routes, limits to delivery times and general site rules. In addition to this it is made clear to all suppliers that there is to be no waiting on the existing road network and vehicles are to enter straight into site.

## 4. SITE ACCESS

4.1.1 Access to the Site will be via the existing point on Alder Street. This existing junction between Alder Street, Flint Street and the Site is a four-arm priority-controlled junction with raised 'table' carriageway to control speeds.

4.1.2 Flint Street connects to the A641 Bradford Road, a major north-south distributor road to the north of Huddersfield. Alder Street connects to both the A641 Bradford Road and A62 Leeds Road. The Site is therefore easily accessible from the major road network and near to an urban area so that access via non-car modes can be maximised for staff.

4.1.3 The entrance width is 7m and the existing fencing / stonewall, along the front face of the Site (onto Alder Road) will remain unchanged during this initial period.

4.1.4 Vehicle tracking drawing 151667-TSA-31-MVL3-DRG-T-LP-162886 (submitted with the approved planning application and this application) has shown that the Site access point is suitable for all planned vehicle types. No highway improvements are required during the enabling works phase.

4.1.5 Existing palisade fencing will be retained with the Site, with additional fencing installed along the northern boundary, at the Site entrance. A palisade security gate will be installed 30m back from the entrance along with a self-contained welfare unit, with manned security.

4.1.6 Security will remain in the self-contained unit at the gated entrance.


**Insert 4-1 Existing Site entrance to be retained during enabling works**

### 4.2 Construction Vehicle routing

4.2.1 A number of vehicles will require to access to the Site for delivery of plant, equipment and materials, comprising a mix of Heavy Goods Vehicles (HGVs) and Light Goods Vehicles (LGVs).

4.2.2 The primary construction route to the Site (during its use as a construction compound) will route either:

- via A640 from M62 Junction 23, then via the A62 (ring road) onto Bradford Road (A641) and right down Flint Street; or
- via A629 from M62 Junction 24, then via Bradford Road (A641) and right down Flint Street.

4.2.3 The routes are shown in Drawing 151667-TSA-00-TRU-REP-W-EN-001081 (Appendix B).

4.2.4 The construction routes utilise the major highways network, comprising major A roads and B roads where possible.

Sensitive receptors

4.2.5 The construction routes to the Site avoid any particularly sensitive junctions in the local area and areas where road layout may be an issue.

4.2.6 The construction routes avoid any areas where traffic calming measures have been implemented, as this would highlight a likely sensitive area of the local highways network.

4.2.7 Where reasonably practicable, the construction routes avoid passing sensitive receptors, such as schools, churches etc. Areas of high pedestrian movements are also avoided where possible.

4.2.8 At roads and junctions where physical constraints mean that considerable works would be required to provide suitable clearances for construction traffic, these routes were discounted and will be prohibited for construction traffic, as detailed in paragraph 4.5.3.

Restrictions

4.2.9 The construction routes are proposed on designated roads that can be used to access the Site and are of an appropriate design standard for the construction vehicles.

4.2.10 There are no height or weight restrictions on the proposed routes. The construction routes do not have any significant gradients. Roads with steep gradients were avoided to avoid any undue effects of slow vehicles on the highway network.

4.2.11 All construction delivery vehicles accessing the local area from the wider strategic road network will use these designated routes and will be prohibited from using any other routes.

4.2.12 All vehicles accessing the Site will be informed in advance of the designated construction routes to Site and will adhere to the routes. Traffic signage will be installed along the route to identify designated routes, as detailed in Section 8.

4.2.13 In the event of an unexpected road closure or emergency, e.g. a vehicle collision, construction vehicles may be required to divert from the proposed construction routes.

# 5. CONSTRUCTION TRAFFIC DETAILS

## 5.1 Overview

5.1.1 A number of vehicles will require to access the Site for delivery of plant, equipment and materials, comprising a mix of HGVs and LGVs. Further detail on these deliveries and how they will be managed are outlined in this section.

5.1.2 Deliveries to the Site will generally be made by road, however where possible, deliveries associated with track works and OLE will be made via rail.

5.1.3 It is predicted that HGV construction vehicle trips associated with the use of Site as a construction compound would peak at 30 trips, totalling 60 HGV construction vehicle movements per day (Monday to Saturday). It is anticipated that traffic movements will peak at this level during Phase 1.

## 5.2 Construction vehicle classification

### Heavy Goods Vehicles

5.2.1 HGVs are any vehicle over 7.5 tonnes (t). Delivery vehicles will be no larger than articulated HGVs and of standard weight.

5.2.2 The typical HGV construction vehicle types anticipated to be required during the use of the Site as a construction compound include, but are not limited to, the following:

- 8 wheel Hiab wagons;
- 44t Artic curtain-siders;
- 6-8 wheeler rigid tippers;
- 6-8 wheeler rigid flatbeds;
- 8 wheel concrete mixers; and
- 6/8 wheel rigid curtain-siders.

5.2.3 Insert 5-1 shows a typical 40t HGV likely to be used for import of material e.g. granular fill.

### Light Goods Vehicles

5.2.4 LGVs are any vehicle up to 7.5 tonnes excluding cars. They will be used to move small plant and materials around Site, as well as minibuses to move Site operatives (further details are included in Section 6.3 of this CTMP).

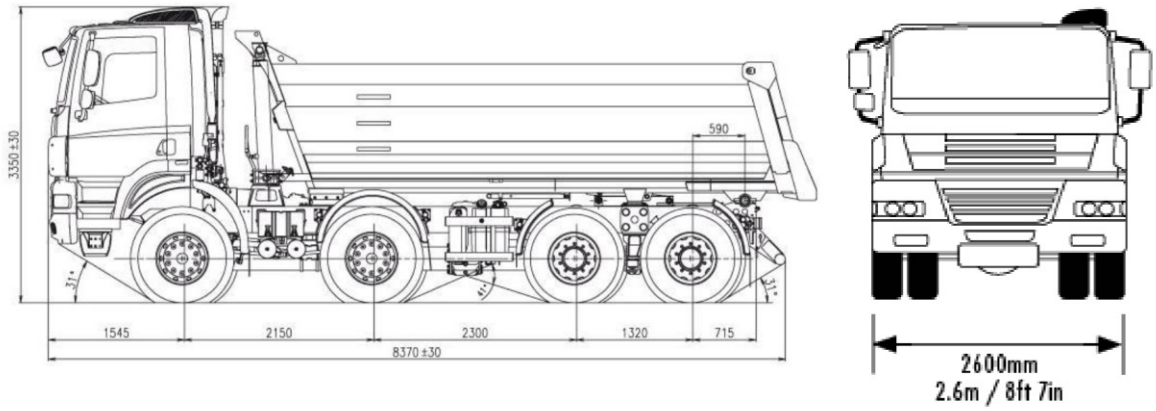
5.2.5 Movements will predominantly be 3.5t and 5t dropside rigid pickups with crew cabs, as shown in Insert 4-2.

5.2.6 The typical LGV construction vehicle types anticipated to be required during the use of the Site as a construction compound include 7T box vans and standard commercial vans.

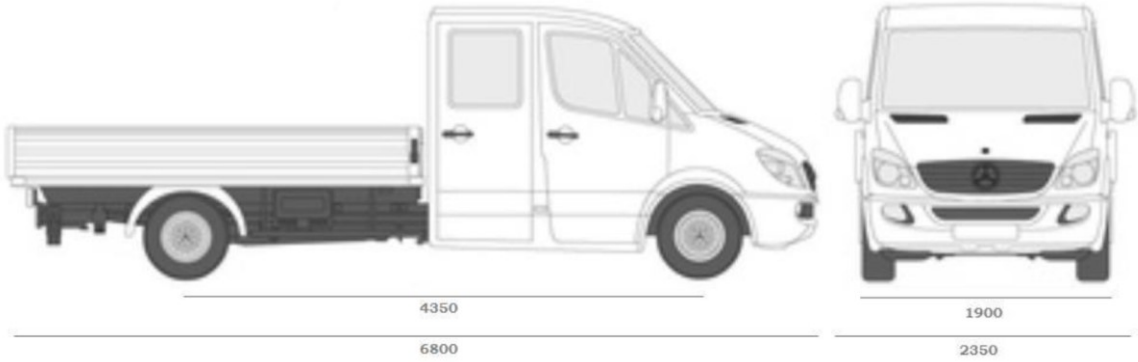
### Other vehicle requirements

5.2.7 Where not road legal, construction plant will be brought to Site via low loader. Where road legal construction plant will be driven to the Site. Cabins and stores will be delivered by Hiab wagon. Extendable trailers may be employed for delivering any Pre-Cast Concrete (PCC) elements.

5.2.8 Other vehicles that will be used include mobile cranes which vary in size but are generally suited for most common roads.




**Insert 5-1 Details of typical 40t HGV**




**Insert 5-2 Details of typical 5t LGV - Site Pickup**

## 5.3 Timings

5.3.1 Deliveries for construction works will generally be made by road and will be in standard working hours. Generally, deliveries and collections will be planned to avoid peak hours i.e. 09:00 – 15:00 Monday to Friday, with no restrictions set on weekends.

5.3.2 Deliveries will be staggered and delivered to Site as required.

5.3.3 Bulk materials to be delivered during construction phase shall be based on a 'just in time' basis and incorporated into the permanent works on the same day as delivery.

## 5.4 Logistic management specifics

5.4.1 It is planned that all logistics for the Site will be scheduled, routed and controlled via a logistics management system such as Voyage Control. This will allow for the precise routing of individual delivery loads and vehicles, clear time slot and prioritisation control, clear measurement of vendor compliance and performance and identification of source and destination of individual loads.

5.4.2 The benefits of using such a system are the ability to respond rapidly to queries relating to:

- Routing;
- Punctuality;
- Sustainability performance;
- Damage or complaints by the public due to vehicle behaviour;
- Deconfliction with other works in the same area;

- Precise control of when and where individual loads will arrive with the associated ability to minimise and eliminate stacking of vehicles on the highway; and
- Maintenance of standards.

## 5.5 Abnormal loads

5.5.1 All Abnormal Load Vehicle movements must be notified in compliance with the requirements of either The Road Vehicles (Construction and Use) Regulations 1986 (2 clear days' notice to the police) or The Road Vehicles (Authorisation of Special Types)(General) Order 2003 (2 or 5 days' notice to police, structure owning authorities and highway authorities). Early notification and liaison with the police and authorities is required to ensure that site specific arrangements can be discussed and agreed.

5.5.2 The deliveries will take place in the evening period or overnight where possible. The route timings for these loads will be dictated by the availability of the local police to provide an escort. The TRU Alliance will inform residents in advance of these movements.

## 5.6 Roadworks conflict

5.6.1 A review of the planned roadworks in the area using the interactive map on the national Roadworks website (one.network)[1] and liaison with Kirklees Council as highways authority will be undertaken to ensure that there are no roadworks or closures that could affect the passage of construction traffic. Where it is identified that roadworks or closures affect the construction traffic movements, appropriate mitigation will be employed where necessary.

## 5.7 Speed limits

5.7.1 All vehicles associated with the Development will be restricted to the speed limit in force on the construction routes used for accessing the Site.

5.7.2 Within the Site, vehicles will be limited to 10mph.

## 5.8 Temporary highway management measures

5.8.1 No highway measures in the form of temporary parking restrictions and/or traffic signals will be required during the Phase 1 or Phase 2 works.

## 5.9 Monitoring

5.9.1 Construction traffic will be monitored/audited to ensure that agreed traffic routes are being used.

5.9.2 The potential to use satellite navigation tracking of HGV will be investigated, such that the information on any one trip can be downloaded and verified.

5.9.3 All HGV and other construction vehicles will use a form of identity that will be visible on the vehicle.

[1] National Roadworks Map - one.network

# 6. NON-CONSTRUCTION TRAFFIC

6.1.1 In addition to construction traffic, the Site will also be accessed by office staff and operatives. There will be no direct public access to the Site.

6.1.2 Further details on anticipated trip generation associated with these vehicle movements are provided in the following sections.

## 6.2 Phase 1 – Office Staff

6.2.1 The Site will be staffed by around 30 office staff, who travel directly to the Site.

6.2.2 As a conservative assumption, two cars for every three members of staff has been assumed, to arrive in the Morning Peak hour and depart in the Evening Peak hour. This means that for the 30 staff there are 20 inbound trips for staff in the Morning Peak hour and 20 outbound trips for staff in the Evening Peak hour.

6.2.3 Specifying car trips along designated routes is not practical as staff travel in from various locations and such a restriction cannot be enforced, office staff will be encouraged to use designated construction access routes where possible.

6.3 Some staff may share cars or travel by other transport modes.

## 6.4 Phase 1 Operatives

6.4.1 Operatives who work at the Site will travel and report to the construction compound at Fitzwilliam Street, Huddersfield at the start of each shift. Provision of the main welfare/canteen and clocking in facilities will be located at the HD1 (Fitzwilliam Street) Compound.

6.4.2 They will then be transported to the Site by minibus. This will minimise the impact of operatives' trips on the local highway network within the vicinity of the Site.

6.4.3 It is assumed that all 180 operatives will arrive in minibuses from Fitzwilliam Street compound, holding 15 operatives each. This is a conservative assumption as some staff may travel to Site via public transport, or walk or cycle to work. No parking provision will be made for operative staff at the Site.

6.4.4 The operatives are expected to travel mostly outside of the peak hours, but to assess the maximum possible impact, the minibuses are assumed to arrive and depart in the peak hours. This means that for the 180 operatives there are 12 movements in each direction in both the Morning Peak hour and Evening Peak hours.

6.4.5 If necessary, minibuses will be parked within the Fitzwilliam Street Compound Site until needed.

6.4.6 A summary of generated trips for non-construction traffic (Phase 1) is shown in Table 6-1.

**Table 6-1 Generated trips**

| Generated trips | Vehicle movements (including two-way vehicles) | Total |
|---|---|---|
| **Morning Peak Hour** | | |
| Staff trips | 20 | 54 |
| Operative trips | 12 (two-way) | |
| **Evening Peak Hour** | | |
| Staff trips | 20 | 54 |
| Operative trips | 12 (two-way) | |

## 6.5 Phase 2

6.5.1 It is assumed that during its use as a Strategic compound the Site will also accommodate up to

180 operatives.

6.5.2 Operatives who work at the Site will travel and report to the parking site at Flint Street at the start of each shift. Operatives will then walk to the Site.

6.5.3 No office staff will be working at the Site during the Phase 2 works.

6.5.4 No traffic is associated with the Phase 2 development in relation to staff/operatives.

## 7. SITE METHODS OF WORKING

7.1.1 During the use of the Site as a construction compound, traffic will be managed and integrated into the existing road highway network.

### 7.2 Entry and exit

Site access control / security

7.2.1 Entry and exit from the Site shall be strictly organised so that the potential for unauthorised access is minimised.

7.2.2 The compound will be kept secure by a permanent security presence. A security gatehouse will be provided at the entrance to the Site to prevent unauthorised access by the public.

7.2.3 A gateman / vehicle marshal will be appointed to control access to and from the Site; this operative will be responsible for sighting oncoming traffic beyond any obstructions in visibility and ensuring oncoming traffic has slowed and is aware of any egressing vehicle. The gateman will be required to wear highway compliant high visibility clothing and a detailed risk assessment and task briefing will be developed for this operation.

7.2.4 All construction vehicles planning to visit the Site must be registered with the logistics management system. Any other visitors are required to sign in with security.

7.2.5 All deliveries of plant, materials and structures to the Site will be booked in/out via the logistics management system.

7.2.6 All deliveries will be by pre-agreed arrangement and logged into the Site delivery schedule daily.

### 7.3 Highway debris

7.3.1 During the use of the Site as construction compound, there is a risk of transporting material (through dirty wheels etc.) on to the road network.

7.3.2 Measures will be put in place to minimise highway debris and mitigate this risk, this includes:

- Plant and vehicles will not exit the Site until they have been washed down on Site and inspected to ensure the wheels and wheel arches are clean and clear of debris. The gateman will be responsible for ensuring that the condition of the public highway is not affected by deposits of mud or debris from the Site;
- Vehicles entering the Site will be parked on an area of hardstanding within the Site. This will ensure that vehicles do not drive on to loose ground where mud and debris can accumulate on the vehicle and be transported off Site and onto the road;
- Where necessary a mechanical road sweeper combined with water spray for the suppression of dust will be employed both on internal access roads and also on to the public highway;
- All vehicles carrying loose or potentially dusty material to or from the Site are fully sheeted; and;
- Bulk cement and other fine powder materials will be delivered (Phase 1) in enclosed tankers and stored in silos with suitable emission control systems to prevent escape of material and overfilling during delivery.

### 7.4 Transporting of materials

7.4.1 It is likely that the storage of materials will be required. The location of areas is presented in Site layouts in Appendix A.

7.4.2 Any materials required to be brought on site or removed for disposal/offsite reuse will transported

by road. This was considered in the Transport Statement which accompanied the planning application.

## 7.5 Vehicle manoeuvring

7.5.1 The Site entrance is designed to ensure that no restrictions are in place to prevent vehicles fully pulling into the Site off the public highway. There will be no HGV waiting areas on, or within, the Strategic Road Network.

7.5.2 An area will be made available within the Site for all vehicles to park, unload and manoeuvre so that all egressing vehicles are able to pull out of the Site in a forward direction. There will be no reversing onto Alder Street.

7.5.3 As far as is reasonably practicable, the Site will be designed to allow vehicles to drive forwards for most of the time to reduce reversing operations.

7.5.4 Site requirements will ensure that where vehicles are required to reverse into operational areas a designated banksman will be used. Plant and vehicle marshallers, who are suitably trained in the task, will be appointed to control manoeuvres.

7.5.5 In circumstances where drivers do not have access to a banksman, such as in cases where they are required to travel alone, they will park up in a designated delivery waiting area and seek assistance from their Site contact.

7.5.6 Where reversing is required, fitting visibility mirrors, CCTV cameras or reversing alarms will help drivers improve visibility around vehicles, to aid the vehicle manoeuvre.

## 7.6 Loading and unloading

7.6.1 As far as is practicable within the Site constraints, loading and unloading areas will be in designated places, clear of passing traffic, pedestrians and other people who are not involved in the loading/unloading operations.

7.6.2 All loading/unloading will be undertaken on firm level ground free from potholes and debris.

7.6.3 Delivery drivers will have a safe area to wait with easy and safe access to welfare facilities and shelters in case of bad weather.

7.6.4 All delivery drivers who are permitted to leave their vehicles are required to provide and wear their Personal Protective Equipment (PPE) that meets minimum requirements of coveralls (with high-viz), hard-hat, light eye protection (glasses), safety boots and gloves.

7.6.5 Any delivery driver who arrives at the Site without PPE that meets the Site's minimum PPE requirements may be refused entry to the Site.

## 7.7 Internal road network

7.7.1 The internal spine road is proposed to have a total width of around 7.85m, comprising sufficient width for two vehicles to pass. Provision of turning heads for large vehicles will be made within the Site.

7.7.2 There will be a two-way operating system along the main access road with speed limited to 10mph while on the road with suitable signage referencing the limit. Speed limits will be imposed and enforced for safety reasons and for the purposes of suppressing dust emissions.

7.7.3 Where appropriate, one-way systems will be designated to prevent conflicting movements caused by 'two-way' traffic flow. One-way systems will be identifiable by signage and will be adhered to at all times.

7.7.4 Site speed limits will be set at 5mph within the car parks.

## 7.8 Segregation of pedestrians

7.8.1 Pedestrian traffic routes will be in the form of clear unobstructed walkways and will be clearly signed to enable safe movement across the Site by the workforce.

7.8.2 Footways (for site use only) will be provided to facilitate pedestrian movements around the Site.

7.8.3 All pedestrian traffic routes will be maintained and adhered to at all times.

7.8.4 As far as is practicable within the Site constraints, pedestrian traffic routes will be segregated from vehicles and plant traffic routes by making the routes entirely separate. The pedestrian traffic routes will be protected by suitable protective barriers or guard rails, particularly at the entrances, exits and corners of site offices/welfare facilities to prevent pedestrians from walking straight into operational areas, or onto roads especially from places where the hazards may not be clear.

7.8.5 Where pedestrian and vehicle routes cross, appropriate and suitably marked and signposted crossing points will be installed for persons to use.

7.8.6 These pedestrian routes will also be segregated from areas where persons are working in or with vehicles, including the provision of separate vehicle and pedestrian access points. Only pedestrians with a clear and demonstrable need to be in the area where vehicles operate shall be allowed to enter.

7.8.7 Visiting pedestrians shall be required to report to the Site office where they will be advised of the safety processes and procedures specific to the area before being allowed to enter the operational areas.

## 7.9 Highway condition surveys

7.9.1 Works are being undertaken outside of the TWA Order (The Network Rail (Huddersfield to Westtown (Dewsbury) Improvements) Order) however Network Rail has undertaken highway condition surveys at the following locations in relation to the development at Hillhouse (in line with the agreement made under the Order).

| Street | Extent of street |
|---|---|
| Alder Street | Between a point 20m south of Flint Street to a point 45m north of Flint Street |
| Flint Street | For 220m west of Alder Street |

## 7.10 Public rights of way closures

7.10.1 No closures or diversions of public rights of way are required to accommodate the Development.

## 7.11 Maintenance

7.11.1 A general maintenance contract will be put in place to service the Site including:

- Fuelling and maintaining generators;
- Delivery of clean water and removal of effluents;
- Cleaning; and
- Security arrangements.

7.11.2 The Site will require the provision of waste skips/bins to facilitate segregation of waste and

environmentally compliant disposal. Separate skips/bins will be required for:

- Scrap metal/cable (provided by Network Rail);
- Timber;
- Paper/Cardboard;
- General waste; and
- Hazardous waste.

7.11.3 Refuse vehicles will therefore be required to access the Site, which will be managed via a logistics management system, as set out in paragraph 5.4.

## 7.12 Monitoring and auditing

7.12.1 A scheme of monitoring and auditing will be initiated to ensure compliance with procedures. Audits will be undertaken to look at the processes associated with Site maintenance.

7.12.2 A formal report will be produced following the inspection and will include:

- Non-conformances with the standards, procedures and RAMS;
- Areas for improvement within the management of safety; and
- Areas of good practice and/or learning opportunities.

7.12.3 The person responsible for the areas which have been subject to an audit will be made aware of the significant findings.

7.12.4 It may also be necessary to bring these results to the attention of outside parties such as contractors and suppliers where indirect health and safety concerns are identified.

7.12.5 Outstanding actions will be recorded and assigned to the necessary individual for remedial measures to be implemented.

## 7.13 Emergency and reporting guidelines

### Reporting of hazards

7.13.1 In the event of any traffic hazard being identified on Site, the hazard will be immediately reported to the Site manager who will take appropriate measures to avoid an incident or accident being caused.

### Accident and incident reporting

7.13.2 If any person is injured the incident is reported to the relevant authorities.

7.13.3 In the event of an incident/accident, the following information is recorded using the Accident & Incident Reporting and Investigation Form Template:

- Names and addresses of those involved;
- Names and addresses of any witnesses;
- Actual types of signs and devices at the Site;
- Photographs of signs and devices at the Site at the time of the incident;
- Details of the surface and the width dimension of the travelled path;
- Details of any hazard at the Site; and
- Details of the prevailing weather.

## 8. TRAFFIC SIGNAGE

8.1.1 Any deliveries/vehicles accessing the Site will be made aware of the agreed construction access routes. Appropriate signage is to be utilised to limit disruption of ongoing construction work.

8.1.2 Temporary road signing will be implemented at the junctions of Bradford Road and Flint Street. Signage will also be present along Bradford Road to warn other road users of the potential for wagons turning. The signs will be in place throughout the duration of the works to direct construction traffic to and from the Site and to inform background traffic of the ongoing works at the Site.

8.1.3 Additional road signage will be placed on the local road network to slow the traffic down and to provide advance warning of the Site access and egress points. In addition, a Site safety sign will be provided at the entrance of the Site with contact details for the Site manager should anyone have any queries in regard to the Site.

8.1.4 Traffic signage, including for Site access, will be clearly signed and consistent with that provided on the public highway.

8.1.5 All road signs are to be used with approved stands or erected on posts set into the ground, where permitted by the relevant authority.

8.1.6 All signs are to be placed in the most advantageous position, having regard for the nature of the hazard and the warning being conveyed, to provide the maximum visual impact for approaching drivers.

8.1.7 All signs will be installed in accordance with the relevant chapters of the Traffic Signs Manual[2].

8.1.8 It will be ensured that all signs used are in good condition and are removed at the completion of the work.

8.1.9 Safety signals are required where, despite putting in place all other relevant measures, a significant risk to the health and safety of employees and others remains. All Site related works shall not commence until all signage is in place, to ensure safety all staff, road and footpath users.

8.1.10 Signs will be clear and legible, and used to identify actions that are prohibited (e.g. no access), safeguards that must be followed (e.g. ear protection must be worn), warning of hazards (e.g. corrosive material) and to direct towards fire exits/equipment or first-aid equipment.

[2] Traffic Signs Manual - Chapter 1 Introduction (publishing.service.gov.uk)

# 9. ENVIRONMENTAL CONTROLS

## 9.1 Noise and vibration

9.1.1 Noise and vibration levels will be controlled and limited, so far as is reasonably practicable so that residential properties on Hammond Street, Abbey Road and Alder Street and all other sensitive receptors are protected from excessive noise and vibration levels arising from the construction activities.

9.1.2 This section includes the general processes by which construction will be managed, including general measures for controlling noise and includes:

- Details of consultation with the Local Authority;
- Details of construction noise and vibration thresholds in terms of significance and the criteria for noise insulation or temporary rehousing;
- Details of how noise sensitive receptors (NSR), such as households, will be kept informed of construction works and how they can contact Network Rail; and
- Details of Best Practicable Means (BPM) to reduce noise and vibration during construction.

<u>Measures to reduce potential nuisance noise and vibration impacts (Phases 1 and 2)</u>

9.1.3 With regard to construction noise arising from the works, Best Practicable Means (BPM) will be employed to mitigate against impacts for neighbouring sensitive receptors.

9.1.4 BPM are defined under Section 72, Part III of the Control of Pollution Act (CoPA) 1974 and Section 79 of the Environmental Protection Act 1990 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".*

9.1.5 All work will be conducted in accordance with the BPM and the recommendations of BS5228, "Noise Control on Construction or Open Sites".

9.1.6 There are many general measures than can reduce noise levels at source, and the following are examples of items that are considered under BPM, which will be adopted within the Development:

- Plant and equipment will be shut down when not in use;
- Modern, silenced and well-maintained plant will be used;
- Unnecessary revving of engines will be avoided; and vehicles and equipment will be switched off when not required;
- Plant shall be sited and operated in a manner which will minimise noise nuisance to those on the respective site and in adjacent occupied buildings and shall be effectively attenuated by means of efficient silencers, mufflers, acoustic linings, shields, enclosures or screens.
- Materials will be handled in a manner that minimises noise;
- All appropriate personnel will be instructed on BPM measures to reduce noise and vibration as part of their induction training and followed up by 'toolbox' talks;
- Internal haul routes will be well maintained and avoid steep gradients, where possible;
- Proposed haul roads would be well maintained and to be free of irregularities;
- Rubber linings will be in, for example chutes and dumpers to reduce impact noise;
- Drop heights will be minimised;
- Engine compartments will be closed when equipment is in use;
- Continuous noisy plant should be housed in acoustic enclosures, where practicable;
- Exhaust silencing and plant muffling equipment should be fitted and maintained in good working order;

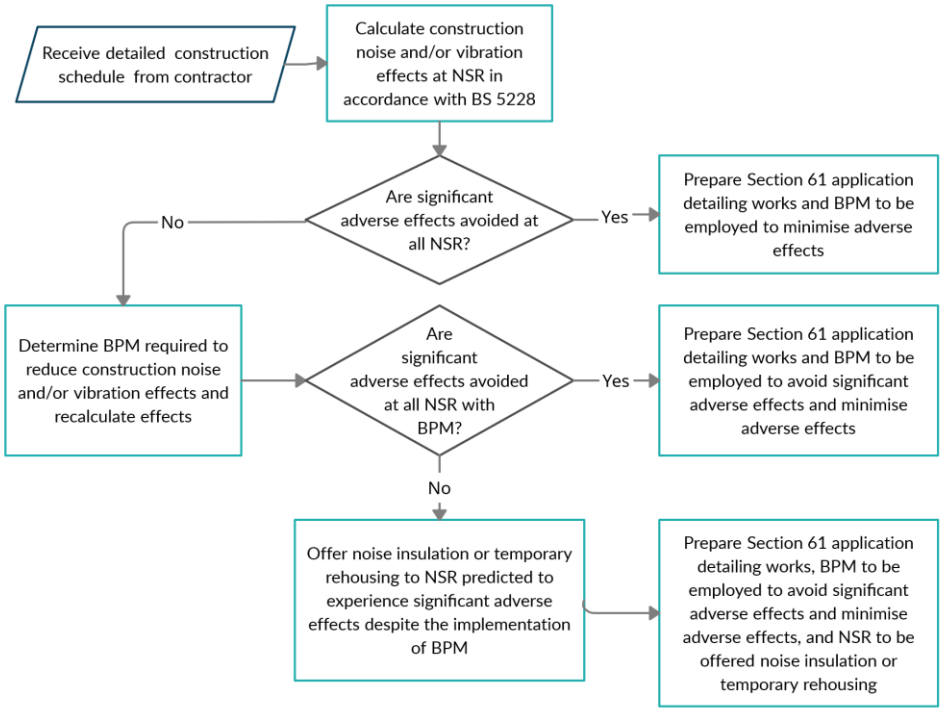
- Static plant known to generate significant levels of vibration should be fitted with vibration dampening features;
- Dampening materials will be used where there is clearly discernible resonance of body panels and cover plates;
- Each item of plant used should be selected so as to comply with the noise limits quoted in the relevant European Commission Directive 2000/14/EC/United Kingdom Statutory Instrument (SI) 2001/1701 as implemented by the Noise Emission in the Environment by Equipment for use Outdoors Regulations 2001/1701;
- Equipment will be maintained and where possible will be used in the mode of operation that minimises noise;
- Super-silencing or screening will be used where there is requirement for 24-hour operation of generators and water pumps;
- Burning equipment will be used in preference to cold cutting; and
- Consideration will be given to the recommendations set out in Annex B of BS 5228-1, noise sources, remedies and their effectiveness.

9.1.7 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 the Site. 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 employed to reduce the impact of noise outside the Site.

Specific mitigation measures - Phase 1

9.1.8 Construction works will be managed through Section 61 applications through consultation with the Local Authority. Section 61 of the Control of Pollution Act (COPA) 1974 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.

9.1.9 Section 61 consent will be formally sought for the development. This will include assessment of noise and vibration impacts considering all works in detail and the application of BPM to reduce noise levels to the lowest possible level.



**Insert 4-1 Section 61 construction noise and vibration assessment and mitigation process**

9.1.10 The consent will contain:

- Location and nature of short-term activities which will involve construction noise likely to exceed the thresholds and the measures which will be taken to reduce the related noise and its duration;
- Any potentially noise generating activities which may be required outside of the agreed normal working hours for construction and the measures and procedures to be adopted lo limit potential nuisance; and
- Monitoring as appropriate where construction works with higher noise generating potential proceed in proximity to identified sensitive locations.

9.1.11 Discretionary noise insulation and temporary re-housing policy that is based on the detailed construction methodology assessment of works in the near future will be implemented. This will identify if any residential properties will be eligible for an offer of noise insulation or re-housing in advance of specific works.

9.1.12 The Section 61 consent will set out the monitoring regime to be adopted during the works as the mechanism to validate the predictions made in assessing the noise and vibration generated by the construction activity. The monitoring regime will ensure that compliance with BPM and any consented noise levels are adhered to, and these will be audited in collaboration with Kirklees Council.

Phase 2

9.1.13 During Phase 2 works will be managed in line with the wider principles employed on TRU (on other areas this is managed via the Noise and Vibration Management Plan and not via the section 61 consent route. Works under Phase 2 will follow this route and the key elements of the process are outlined below in the paragraphs below.

9.1.14 Staff, operatives and sub-contractors have the authority and responsibility to protect the environment at all times during execution of the works.

9.1.15 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 4-2. The roles outlined may be substituted as required providing that the key environmental responsibilities are clearly and appropriately allocated.

9.1.16 Contact details for all key contractors will be displayed on notice boards in the site offices.

**Table 9-1 Roles and responsibilities**

| Role | Key environmental responsibilities |
|---|---|
| Project Manager | • Responsible for ensuring the Environmental Management System for the project is implemented.<br>• Ensures that the Network Rail Environmental Policy is drawn to the notice of all employees under his control.<br>• Establishes effective lines of communication with all employees under their control.<br>• Promotes the continuous improvement of environmental performance<br>• Monitors and reviews the implementation of environmental objectives and targets on the project. |
| Principal Environment Manager | • Carries overall responsibility for delivery of the design stage of the project and for meeting environmental performance objectives and targets.<br>• Ensures adequately trained and competent resources are provided to implement the NVMP. |

| Role | Key environmental responsibilities |
|---|---|
| | • Ensures that environmental risks are evaluated and considered during the planning stage of the project.<br>• Interfaces between various design disciplines to ensure that environmental considerations have been taken account of in final design output.<br>• Approves all specific or specialist environmental procedures that are required.<br>• Responsible for setting and meeting project objectives and targets. |
| Site Environment Manager(s) | • Responsible for providing a focal point for all communications between the construction team and outside environmental bodies<br>• Maintaining and revising the NVMP and all specific or specialist environmental procedures that are required.<br>• All measures in the NVMP are implemented on Site. This includes ensuring that adequate resources are allocated to environmental management on Site.<br>• Collecting and collating the project's environmental performance records.<br>• Collating reportable environmental incident and NCR data, establishing cause and implementing actions to prevent reoccurrence<br>• Reviews and approves risk assessments and WPPs (RAMS) for environmental content.<br>• Ensuring that internal environmental audits are undertaken and reported.<br>• Drawing up measures for emergency preparedness and response procedures.<br>• Environmental issues in risk assessments are communicated effectively on site and that appropriate training is delivered.<br>• Producing monthly environmental reports and forwarding them to the Site Manager. |
| Site Manager(s) | • Responsible for management of the construction phase, and ensuring compliance with all relevant legal requirements, commitments and targets.<br>• Ensures that site-specific training needs are identified, and training programmes are effectively undertaken.<br>• Establishes and implements comprehensive environmental inductions, training awareness and education programmes for all level of site staff and operatives. |
| Resident liaison officer | • Ensures any enquiries or complaints directed to site staff are submitted to the Network Rail helpline<br>• 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.<br>• Role will link directly with the Network Rail Community Relations team |
| All site staff | • Protect the environment and act sustainably.<br>• Report any environmental concerns to their supervisors.<br>• Comply with specified systems of work.<br>• Promote and communicate newly developed best practice.<br>• Ensure only staff who have the required understanding, qualifications, and where necessary certification, carry out the specialised tasks. |

9.1.17 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.

9.1.18 BPM will be employed to reduce noise impacts from the site. BPM are defined in Section 72 of the Control of Pollution Act 1974 (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".

9.1.19 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.

9.1.20 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.

9.1.21 The movement of plant onto and around the site should have regard to the normal operating hours of the site and the location of any noise sensitive premises as far as is reasonably practicable.

9.1.22 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 should 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 should travel in a direction away from noise sensitive properties whenever possible. Where practicable, alternative reversing warning systems should be employed to reduce the impact of noise outside sites.

9.1.23 The plant and activities to be employed on the site should 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 should be replaced by less noisy alternatives if noise problems are occurring.

9.1.24 With regards to vibration there is a relationship between the energy of the plant (for piling or compaction) 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 plant input energy. However, the trade-off is that longer durations may be required to achieve the required outcome. The trade-off will not necessarily be linear owing to other losses in energy in the system. As such the increased 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..

Noise insulation and temporary rehousing

9.1.25 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 below; 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 9-2 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 |

| Day | Time (hours) | Averaging period, T | SOAEL threshold, dB $L_{Aeq,T}$ |
|---|---|---|---|
| | 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 |
| [A)] 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 | | | |

9.1.26 No properties are expected to require noise insulation or temporary rehousing due to the proposed Stage 2 works. However, this would be subject to review during any Section 61 applications, as required.

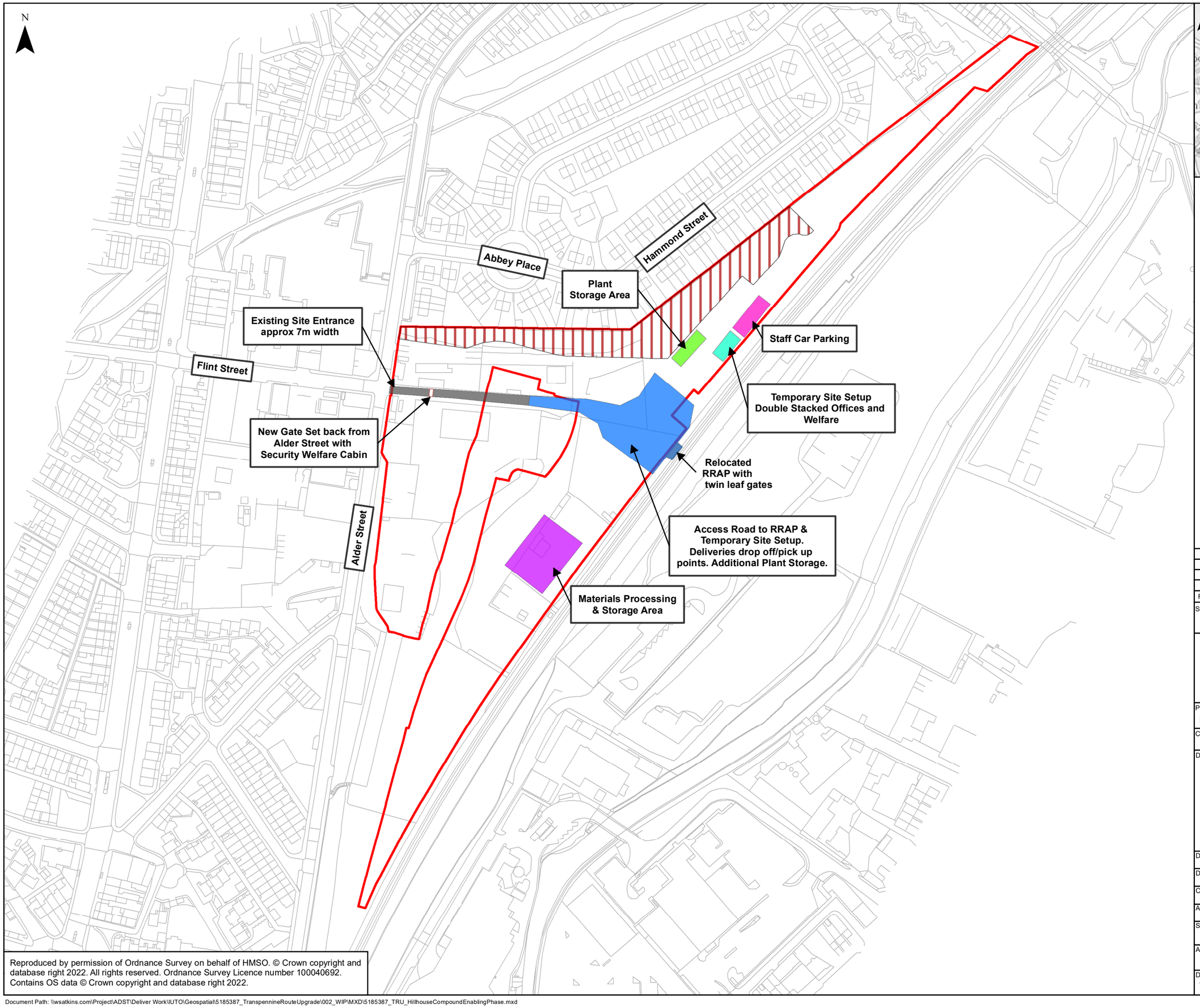
## 10. COMMUNITY ENGAGEMENT

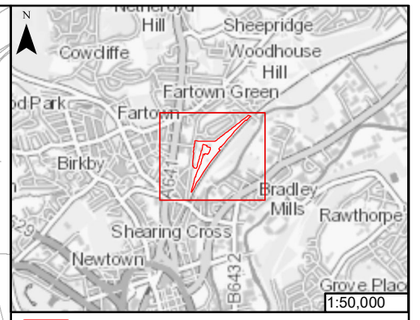
10.1.1 Local residents, landowners and applicable Local Authority and Council officers will be notified of the commencement and likely duration of the construction work activities through a letter drop, which will take place a minimum of 14 days in advance of the start of construction activity in the area.

10.1.2 The letter will include a contact telephone number for the Network Rail helpline which is manned 24 hours a day. In line with good practice the helpline team will be briefed on the Development in advance of works.

# APPENDICES

# APPENDIX A – SITE LAYOUT (PHASE 1)




- Application Site Boundary
- Access Road Extension to RRAP & Temporary Site Setup
- Car Parking
- Existing Access Cobble Sets Road
- New Gate
- Material Storage Area
- New RRAP with twin leaf gates
- Plant Storage Area
- Retaining Wall
- Temporary Site Setup Double Stacked Offices & Welfare

0 10 20 40 60 80 100 Metres

SCALE 1:2,500

| Rev | Date | Description of Revisions | Drwn | Chkd | Appr |
|---|---|---|---|---|---|
| P01 | 11/04/22 | FIRST ISSUE | MMN | NB | NB |

Status: SHARED

Suitability:

NetworkRail

Project: HILLHOUSE CONSTRUCTION COMPOUND

Contract No.: 151667

Drawing Title: HILLHOUSE CONSTRUCTION COMPOUND ENABLING PHASE

| | | | |
|---|---|---|---|
| Designed | M.Mallesha Nayaka | Signed Electronically | Date 11/04/2022 |
| Drawn | M.Mallesha Nayaka | Signed Electronically | Date 11/04/2022 |
| Checked | N.Booth | Signed Electronically | Date 11/04/2022 |
| Approved | N.Booth | Signed Electronically | Date 11/04/2022 |

Scale(s): 1:2,500

ELR & Project Chainage: ---

Alternative Reference: ---

Sheet: 1 of 1

Drawing Number: 151667-TSA-31-MVL3-DRG-T-LP-162886

Revision: P01



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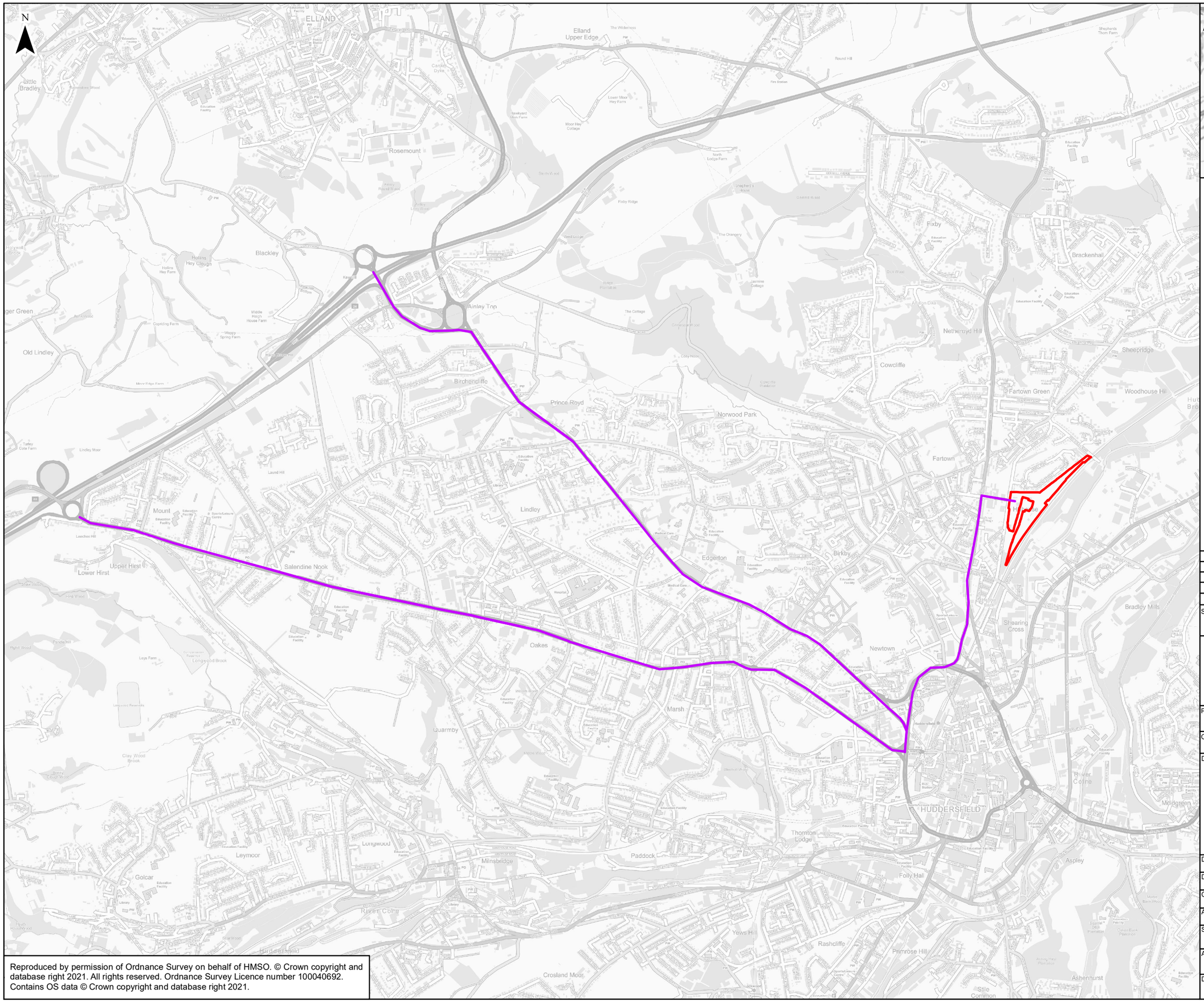
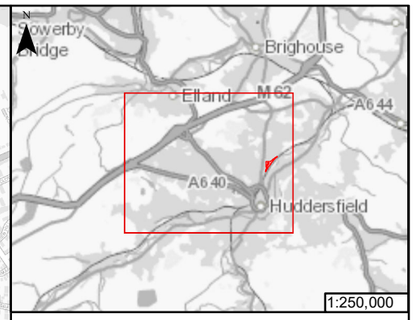
# APPENDIX B – CONSTRUCTION ROUTES




Application Site Boundary

Construction Routes

0 125 250 500 750 1,000 Metres

SCALE 1:20,000

| Rev | Date | Description of Revisions | Drwn | Chkd | Appr |
|---|---|---|---|---|---|
| P01 | 21/10/21 | FIRST ISSUE | MMN | NB | NB |

Status: SHARED

Suitability:

NetworkRail

Project: HILLHOUSE CONSTRUCTION COMPOUND

Contract No.: 151667

Drawing Title: CONSTRUCTION ROUTES

| | | | |
|---|---|---|---|
| Designed | M.Mallesha Nayaka | Signed Electronically | Date 21/10/2021 |
| Drawn | M.Mallesha Nayaka | Signed Electronically | Date 21/10/2021 |
| Checked | N.Booth | Signed Electronically | Date 21/10/2021 |
| Approved | N.Booth | Signed Electronically | Date 21/10/2021 |

Scale(s): 1:20,000

ELR & Project Chainage: ---

Alternative Reference: ---

Sheet: 1 of 1

Drawing Number: 151667-TSA-00-TRU-REP-W-EN-001081

Revision: P01



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