nationalgrid

Visual Impact Provision (VIP)

Peak District East

Outline Trans Pennine Trail Management Plan

July 2019

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1 INTRODUCTION

1.1 VIP Project

1.1.1 National Grid's Visual Impact Provision (VIP) project makes use of an allowance of £500M by Ofgem for UK electricity transmission owners to mitigate the visual impact of existing electricity infrastructure in nationally protected landscapes in Great Britain.

1.1.2 In 2012-2013 National Grid prepared a VIP policy statement, setting out how the fund would be used and how stakeholders would be engaged in identifying opportunities for maximising benefits from it. After a public consultation on the draft between July and September 2013 the policy statement was presented to Ofgem for review. The policy statement made it clear that National Grid's objective is *'to achieve the maximum enhancement to the landscape from the available funds whilst ensuring that no significant adverse impacts arise as a result*'.

1.1.3 A Stakeholder Advisory Group (SAG) was set up by National Grid in early 2015 to assist National Grid in identifying and selecting projects to use the fund in the most efficient way and deliver maximum benefit.

1.1.4 Following an optioneering process in September 2015 the SAG recommended that the following four projects be taken forward for potential engineering work:

- Dorset Area of Outstanding Natural Beauty (AONB);
- New Forest National Park;
- Peak District (East) National Park; and
- Snowdonia National Park.

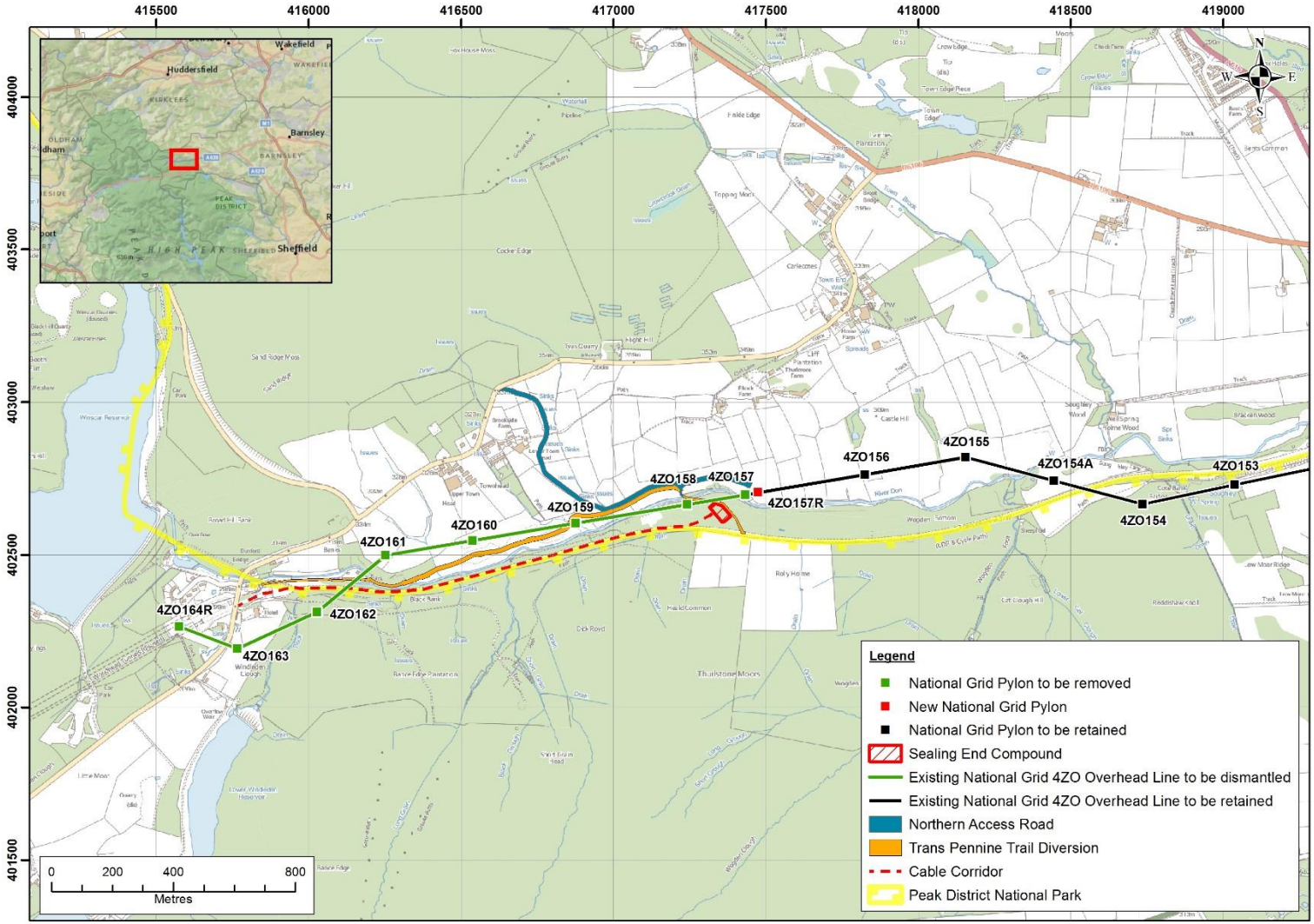
1.2 VIP Peak District (East) Project

1.2.1 The Peak District was the first National Park in England and Wales, being designated in 1951. The Peak District (East) National Park Project (here on referred to as the Proposed Project) represents a major opportunity to mitigate the visual impact of existing electricity infrastructure within the Peak District National Park near Dunford Bridge and to conserve and enhance the natural beauty, wildlife and environmental heritage of the area. The OHL in this area (OHL 4ZO.2 subsection) is judged to have:

- Landscape impacts of a high level of importance particularly relating to strong localised topographical variety around Dunford Bridge, together with the proximity of nearby areas of high conservation interest, recreational value and relative tranquillity, which all serve to increase the value of the landscape. Although the impact of the VIP Subsection is geographically contained, the scale of impact is high with the Terminal Pylon and Sealing End Compound (SEC) being locally dominant man-made features.
- Visual impacts of a high level of importance with Dunford Bridge serving as a local gateway for visitors to the Pennine Moors. The pylons are in views from visitors to the promoted Trans Pennine Trail car park, picnic area and walkers and cyclists on the Trans Pennine Trail National Cycle Route 62 and Pennine Cycleway (NCN 68). The scale of visual impacts on the local community in and around Dunford Bridge is also considered to be high due to the proximity of the OHL and its elevated situation in relation to this settlement.

1.2.2 The location of the VIP Subsection is shown in Fig 1.1 below. The VIP Subsection runs eastwards from the existing Dunford Bridge Sealing End Compound (SEC) near the eastern entrance of the Woodhead Tunnel (Pylon 4ZO164R). It crosses the Peak District National Park boundary and continues north over the Upper Don River and the Trans Pennine Trail, south of the hamlet of Townhead towards Castle Hill. The VIP Subsection (as shown on Plate 2.1, including Pylons 4ZO164R, 4ZO163, 4ZO162, 4ZO161, 4ZO160, 4ZO159, 4ZO158 and 4ZO157) proposed to be put underground is approximately 2km in length.

Figure 1.1 – VIP Peak District East Location



1.3 The Works

1.3.1 The undergrounding of the VIP Subsection includes the following main elements that comprise the Proposed Project:

- Removal of the existing Dunford Bridge SEC to a depth of 1.1m below ground level. The existing tunnel shaft cap will be lowered, and mounding created over the shaft for landscaping purposes. Gabion baskets (of approximately 1m in height and width) will be used to protect the shaft from any vehicle access.
- Removal of the existing VIP Subsection including eight pylons (one of which will be replaced, see replacement tension pylon below) and 2km of OHL (shown on figure 1.1 above).
- An underground XLPE cable 'here on referred to as the Cable Corridor' of approximately 1.8km beneath the route of the Trans Pennine Trail from the entrance of the Woodhead Tunnel to a proposed new SEC.
- Construction of a new SEC within Wogden Foot Local Wildlife Site (LWS) and a separate replacement tension pylon located approximately 40m north east of the SEC on the northern side of the River Don, close to the location of the existing Pylon 4ZO157. Within the SEC the circuits will terminate onto two full tension gantries to connect the Cable Corridor to the remaining existing OHL. A permanent access off the Trans Pennine Trail will be required to the proposed SEC.
- Temporary laydown areas, access tracks (including from the highway Windle Edge and Brook Hill Lane), to the pylons to be removed and along the Trans Pennine Trail to the SEC at Wogden Foot as well as site offices will be required to facilitate construction activities.
- Construction of a temporary Trans Pennine Trail diversion, in Farmland immediately North of the River Don, for use during the construction phase of the Proposed Project. The diversion will involve the use of two bridges, one being a permanent replacement of an existing bridge; the other a temporary bridge to cross over the River Don. Following construction a stretch of approximately 410m of the diversion surface will be retained permanently along the stretch that provides private access to Yorkshire Water assets, this is along the route of an existing farm track, and includes the Permanent Bridge 1. The remaining diversion, temporary Bridge 2, associated working and laydown areas will be removed.

1.4 Purpose of the Trans Pennine Trail Management Plan

1.4.1 This management plan aims to outline the details and specifications for work relating to:

- The proposed temporary Trans Pennine Trail (Trans Pennine Trail) diversion; and
- The reinstatement of the existing Trans Pennine Trail once the cable has been installed beneath.

1.4.2 The plan details National Grid's proposals for minimising disruption to users of the Trans Pennine Trail caused by the Proposed Project.

1.4.3 This plan has been prepared in support of the Environmental Assessment Report which covers all elements of the Proposed Project, including the planning application for the Trans Pennine Trail Diversion, the Northern Access Road and the Sealing End Compound (SEC) at Wogden Foot.

1.4.4 This Trans Pennine Trail Management Plan will be adopted by the Principal Contractor throughout the duration of the works and ensure that mitigation measures and commitments made with Stakeholders and Landowners are implemented.

1.5 Consents Required to temporarily divert the Trans Pennine Trail

1.5.1 There will be a number of consents required in order to temporarily divert the Trans Pennine Trail as outlined in the table below:

Activity	Consent Required
TPT diversion	Full planning permission under Town and Country Planning Act 1990. Traffic Regulation Order under Section 14 of the Road Traffic Act 1984
Bridges 1 and 2	Full planning permission under Town and Country Planning Act 1990.

1.5.2 Planning Permissions:

1.5.3 Planning permissions will be required under the Town and Country Planning Act 1990 for the construction of the Trans Pennine Trail diversion and the two bridges.

1.5.4 A small area of the Trans Pennine Trail Diversion falls within the Peak District National Park Authority Boundary, therefore the planning application is being made to both Barnsley Metropolitan Borough Council and Peak District National Park Authority. That said, it has been agreed that Barnsley Metropolitan Borough Council will take the lead on processing and determining the application.

1.5.5 Further details on the consenting process for the Proposed Project are outlined within the Environmental Assessment Report (EAR).

1.5.6 Traffic Regulation Order:

1.5.7 A Traffic Regulation Order (TRO) under Section 14 of the Road Traffic Act (1984) will be required for the temporary diversion of the Trans Pennine Trail.

1.5.8 This will be obtained from Barnsley Metropolitan Borough Council (BMBC) by the contractor.

1.5.9 Applications need to be submitted no later than 3 weeks before the TRO is required to start. This allows the legal order to be made and advertised in local tabloids for two consecutive weeks. There are no appeal or objection process and hence assuming that the diversion route is built and that BMBC are happy with the surface and condition there should be no time delay.

1.5.10 BMBC only has powers to make a TRO for 6 months, following the first 5 months, the Definitive Map Officer will confirm if a time extension is required and an application to the Secretary of State (SoS) would be made if required. The SoS can authorise an extension for 6 months or longer depending on the situation and request from the applicant. The contractor will be responsible for renewing the TRO.

1.5.11 The reinstatement of the existing Trans Pennine Trail will form part of the works associated with undergrounding the cable and is permitted development. Please see the Environmental Assessment Report for further details on wider consenting requirements for the project.

1.6 National Grid's Commitment

1.6.1 National Grid has committed to the following principles regarding the Trans Pennine Trail Diversion works:

- To provide a safe and suitable diversion for all current users;
- To provide a diversion that is compliant with the relevant gradient requirements of the Equality Act (formerly covered under the Disability Discrimination Act (DDA)), wherever feasible within the space/topographical constraints;
- To reinstate the existing Trans Pennine Trail following construction works to an equivalent or better standard than current ensuring suitable for range of users;
- To engage fully with a wide range of stakeholders regarding their requirements; and
- To provide relevant landowners with adequate access arrangements to meet their needs.

Photo 1.1: Existing Trans Pennine Trail Route



2 DIVERSION ROUTE

2.1 Existing Trans Pennine Trail Route

2.1.1 The Trans Pennine Trail (Dunford Bridge to Penistone section) largely follows the alignment of the former Woodhead Line railway, on the east of the Pennines along the upper Don Valley, and also forms part of European Long Distance Footpath E8 and National Cycle Route 62.

2.1.2 This section of the Trans Pennine Trail is used by pedestrians, equestrians and cyclists and is made of a bound surface, approximately 3m wide, with an adjacent equestrian soft ground track.

2.2 Proposed Works along the Trans Pennine Trail

2.2.1 The Cable Corridor will follow the Trans Pennine Trail (outside of the existing National Grid compound) for approximately 1700m. The full width of the Trans Pennine Trail and adjacent grassed areas (varies between 10.5m to 18m wide in parts) will be required to facilitate construction activities including a temporary haul road for construction traffic.

2.2.2 As such, the affected section of Trans Pennine Trail will be excluded from members of the public for safety; access will be restricted to construction staff for the duration of construction activities, which are anticipated to be approximately 1- 1.5 years.

2.2.3 Hence, a suitable Trans Pennine Trail diversion will be created, prior to the closure of the section, to provide users with an alternative route.

2.3 Proposed Trans Pennine Trail Diversion Route

2.3.1 During the construction of the Proposed Project, it is proposed that the Trans Pennine Trail will be diverted along a temporary route north of the River Don. The diversion will be approximately 1.6km in length and will be in place for approximately 1 – 1.5 years. The Trans Pennine Trail diversion route and its design will be agreed with Barnsley Council prior to commencement of works

2.3.2 The proposed diversion will leave the car park at Dunford Bridge and follow an existing private track which will be upgraded to allow use by all Trans Pennine Users, including equestrian use, and meet the requirements of the Equality Act 2010 as far as possible. The diversion will cross onto the northern side of the River Don across a new permanent bridge to replace an existing bridge, and will follow the course of the river across the fields. The diversion will cross a small ditch/ stream over a proposed new culvert that will replace the existing wooden bridge structure that is currently not suitable as a pedestrian bridge before crossing back to the southern bank of the River Don over a proposed new temporary bridge (see EAR Chapter 2 (Project Description) Figures 2.1-2.3 for further details).

Photo 2.1: Trans Pennine Trail Diversion Route - Northern Side of the River Don



2.3.3 After crossing bridge 2 back to the south bank the diversion will pass east of the proposed SEC, and in close proximity to the laydown area that will be used adjacent to Wogden foot, before re-joining the existing Trans Pennine Trail route.

2.3.4 Construction of proposed bridges and culverts will be completed ahead of the existing Trans Pennine Trail closure and opening of the temporary Trans Pennine Trail diversion.

2.3.5 Specifications for the construction of the Trans Pennine Trail diversion are outlined within section 3 of this plan and will ensure that the diversion is designed to be compliant with the relevant requirements of the Equality Act 2010 (formerly covered under the DDA Act) and other Trans Pennine Trail users including equestrian use.

2.3.6 Following completion of the works, the existing Trans Pennine Trail route will be reinstated, and the Trans Pennine Trail diversion will be decommissioned with the area brought back to a natural state, with the exception of the 410m of the diversion surface to be retained permanently along the existing farm track which provides private access to Yorkshire Water assets.

2.4 Alternative Routes Considered

2.4.1 A commitment has been made by National Grid to keep the Trans Pennine Trail open to its users during construction activities, which will involve a temporary diversion of the trail. Alternative options to divert this stretch of the Trans Pennine Trail during the construction works were considered, taking the following into account:

- The requirement to keep the Trans Pennine Trail fully open via a diversion rather than temporarily close this section;
- The requirement from the Trans Pennine Trail National Office and Barnsley Metropolitan Borough Council that the diversion should seek to be as compliant as possible with the relevant gradient requirements of the Equalities Act (2010) (formerly covered under the Disability Discrimination Act);
- The variety of different Trans Pennine Trail users along this section;

- The route of the Trans Pennine Trail which runs almost parallel to the River Don, in the base of a valley with the topography rising up on both sides;
- Ecological designations and associated constraints in moorland to the south of the Trans Pennine Trail; and
- The use of other existing trails in the area would require users to travel over a much greater distance, up much steeper gradients and/or along the local road network.

2.4.2 The Trans Pennine Trail diversion identified is:

- Close to the existing route;
- Allows access to continue directly from Dunford Bridge car park;
- Avoids the use of the local road network;
- Enables the majority of the route to comply with the relevant gradient requirements of the Equalities Act (2010), apart from two short stretches by the bridges;
- Seeks to ensures suitability for all users; and
- Provides open countryside views across the River Don that are not currently available to the public.

3 TRANS PENNINE TRAIL DIVERSION SPECIFICATION

3.1 Surface Specification

3.1.1 Construction of the Trans Pennine Trail diversion will initially require the excavation of a minimum 200mm of topsoil, which will be stored alongside the diversion to form a bund.

3.1.2 The excavated surface will be lined with a geotextile and filled with Type 1 granular sub-base and finished with a layer of hoggin to create a surface sitting above the surrounding land. The Principal Contractor shall ensure that the Hoggin does not contain too high a percentage of clay and shall consider the use of recycled aggregate as per advice from PRoW officer.

3.1.3 Hoggin is a compactable fill material that is composed of a mixture of clay, gravel, and sand or granite dust that produces a buff-coloured permeable surface. Hoggin provides good grip and a level firm surface for users.

3.1.4 The Trans Pennine Trail diversion will consist of a 5m wide compacted hard surface. It will be built on a 300mm embankment (approximate) above the existing surface, with the sides chamfered down to the existing ground level. A grass surface was considered but was not taken forward due to potential issues raised by the PRoW officer:

- Perception from walkers and cyclists that horse riders must use a grass strip if provided – that is not the case but can cause conflict;
- Grassed drainage routes can hold water which then deteriorates the surface etc forcing riders onto the narrower stone;
- Increased maintenance – grass surfaces would need to be cut regularly to ensure they are suitable for public use; and
- Potential to spook horses or put riders at risk if they shy away from other users as the grass surface would be close to the fencing.

3.1.5 Bridge approach ramps will be constructed by placing compacted imported fill and finished in Gravel on Hoggin on Type 1 in line with the pathway.

3.1.6 The Principal Contractor shall ensure the surface of proposed bridges is consistent with the above diversion surface specification and ensuring suitable for all anticipated users.

3.2 Fencing and Gates

3.2.1 It is anticipated that the Trans Pennine Trail diversion will be deer fenced along the north side where it would protect livestock from dogs. Otherwise, it would be stock-proof fencing would be used where appropriate on both sides. Drinking troughs may be provided for the duration of the diversion where access to drinking water has been severed.

3.2.2 Fencing would need to be at the top of the banks either side the 1:3 slope to prevent livestock jumping onto the trail from surrounding land and vice versa

3.2.3 A detailed fencing specification is subject to final agreement with landowners, but it is expected that timber post and Rylock netting would be used. The aim is to prevent access into adjacent fields with livestock. Barbed wire options if required would need to be safe for trail users.

3.2.4 Gates may be needed to allow landowner access between adjacent fields.

3.3 Signage

3.3.1 Adequate signage, to inform users, will be provided along the length of the Trans Pennine Trail diversion.

3.3.2 Signage will be required at both ends indicating diversion and where any shared use starts and finishes plus reminders about staying within fence boundaries

3.3.3 Additional signage will be provided at the SEC to warn Trans Pennine Trail users of potential construction traffic, and vice versa.

3.3.4 Principal Contractor shall consider if any additional signage will be required above that stipulated above.

3.4 Drainage

3.4.1 The Principal Contractor shall ensure cross-drainage of a suitable standard will be provided along the length of the Trans Pennine Trail diversion.

3.4.2 It is expected that field drainage systems may be disrupted by its construction and the Principal Contractor will be responsible for tying drains in and ensuring these field drains remain at least as effective as they were prior to construction during the period of diversion and following reinstatement.

3.4.3 The Principal Contractor shall consider advise from the PRoW officer that a narrow drainage ditch would be required alongside the surfaced section where the proposed route drops down from the tunnel arisings to the pylon (in the cattle field).

3.4.4 The Trans Pennine Trail diversion will have a slight camber or cross fall (depending on terrain) to encourage water to shed sideways.

3.5 Bridges and Culverts

3.5.1 The two bridges and the culvert which will be crossed by the Trans Pennine Trail diversion have been designed to be capable of supporting vehicular traffic for construction and for access to the Yorkshire Water facility and the farm track beyond, along with all Trans Pennine Trail users.

3.5.2 Bridges will have 1.8-2.0 metre solid fencing installed on either side of the bridge as per requirements for horse riders, with no gaps in the floor of the bridge, this restricts horses to only look forwards to prevent horses becoming spooked.

3.5.3 Consideration shall be given to guidance provided by the British Horse Society on suitable design specifications for equestrian usage:

- *Advice on Surfaces for Horses (12/2016), The British Horse Society, 2016*
- *Advice on Specification for Bridges, Fords, Gradients and Steps (11/2015), The British Horse Society, 2015*
- *BHS Advice on Dimensions of Width, Area and Height (11/2015), The British Horse Society, 2015*

3.5.4 Any drainage channels at either end of the bridge shall have some of the width covered (as opposed to being slotted) to allow sensitive horses to cross.

3.5.5 Construction/ installation methodology is included within the EAR.

3.6 Equality Act 2010

3.6.1 The Trans Pennine Trail is used by a variety of users and the diversion was designed with this in mind. Where possible the Trans Pennine Trail diversion is designed to be compliant with the relevant gradient requirements of the Equality Act

2010 (previously covered under the DDA Act); to be accessible to people with limited mobility, including wheelchair users, and to those with sensory impairments.

3.6.2 The following elements will be incorporated into the design:

Table 3.1: Design provisions to comply with the Equality Act 2010

Width of path	Greater than 2m to allow for 2 wheelchairs, or two people, side by side.
Gradient of path	Regrading to ensure maximum gradient of 1:20. (Note: there are two areas where compliance is not possible due to site/topography constraints)
Camber	Maximum camber of 1:100.
Surface finish	Hoggin – to provide a firm surface with good grip and drainage.

3.6.3 There is a short section at Wogden Foot where the maximum gradient of 1:20 is not achievable due to the steep topography the Don Valley. This section will be 1:10, therefore, a hard-surface resting point and a bench will be installed adjacent to the Trans Pennine Trail as mitigation in this location.

3.6.4 There is also a short section close to the Yorkshire Water facility, leading down towards the River Don, where the maximum gradient of 1:20 is not achievable due to the steep topography in the Don Valley. This section will be 1:5 for approximately 20m. Unfortunately, due to width constraints in this area, it is not possible to provide a resting point and bench. However, the section is already very short in length.

3.6.5 Handrails will be considered for steeper slopes than the 1:12/1:20 accessibility requirement. In particular, down to the bridges at both ends and from the pylon field to the top of the tunnel arisings as users do not have to deal with slopes on the current Trans Pennine Trail.

3.6.6 Bridges have been designed to meet the equality act 2010 compliance standard.

4 TRANS PENNINE TRAIL CONSTRUCTION ACCESS REQUIREMENTS

4.1 Construction Access to proposed SEC site at Wogden Foot

4.1.1 The A628, Goddard Lane, Windle Edge and Brook Hill Lane together will serve as the main access route to all Access Points.

4.1.2 Prior to the opening of the Trans Pennine Trail diversion access to the proposed SEC during construction will initially be via the Northern vehicle access road AP7 (shown on Figure 2.1 (EAR Chapter 2 (Project Description) utilising the proposed temporary bridge over the River Don at Wogden Foot which will also be used for the Trans Pennine Trail diversion. National Grid will seek any consents required for the PROW that crosses the northern access road, discussion with the PROW have indicated that a system of manged priority can be put in place during the construction works, with priority for construction traffic during working hours.

4.1.3 After opening of the Trans Pennine Trail diversion to members of the public, the existing Trans Pennine Trail route will be closed to the public and will be used as the main access track to access to the SEC.

4.2 Construction Access to Replacement Tension Pylon (Pylon 4ZO157)

4.2.1 The new Tension Pylon (known as Pylon 4ZO157R) will be constructed concurrently with the SEC using the northern access road followed by the existing Trans Pennine Trail route once closed to public. There will be a section of the Trans Pennine Trail diversion across temporary bridge 2 that will remain open to construction access and hence will have potential interactions between construction traffic and Trans Pennine Trail users.

4.2.2 Please see Figure 4.1 for further details.

4.3 Management of Trans Pennine Trail Users/Interactions with Construction Traffic

4.3.1 There are a few sections of the existing Trans Pennine Trail and Trans Pennine Trail diversion where there is potential for the Trans Pennine Trail users to interact with construction activity, these being:

- Goddard Lane/ Windle Edge
- Car park at Dunford Bridge;
- Temporary Bridge 2;
- SEC working area and laydown; and
- Project unrelated vehicles (e.g. Yorkshire water, Farmer).

4.3.2 A Construction Traffic Management Plan will be produced to manage and control movements of all construction vehicles associated with the site.

4.3.3 Where the Trans Pennine Trail follows Goddard Lane/ Windle Edge there will be a number of speed restrictions in place. A 20mph speed limit will be introduced along sections of Goddard Lane and Windle Edge/Brook Hill Lane between the access road entrance to Winscar reservoir (west of Access Point 2) and Access Point 7 for the duration of the works. Additionally, between the access road entrance to Winscar reservoir and the A628 a 40mph speed limit will be introduced.

4.3.4 The Trans Pennine Trail carpark will be adjacent to a construction working area. A construction fence will be in place to prevent public access to the working area and to divert public around to the Trans Pennine Trail diversion. In addition, the entry

and exit of HGVs from the car park will be directed by a banksman to ensure the safety of non-motorised users entering and leaving the car park.

4.3.5 Where the Trans Pennine Trail diversion crosses back to the southern bank of the River Don over a newly constructed temporary bridge there is potential for Trans Pennine Trail users to encounter construction traffic on the bridge and in a section of the Trans Pennine Trail diversion leading up to the SEC working area. Main access for construction will be along the existing Trans Pennine Trail route or Northern Access Route although there will still be occasional vehicle movement across the bridge (anticipated 10 per day during peak construction). Two pedestrian barriers will be installed at either end of this section to prevent potential conflict between Trans Pennine Trail users and the construction traffic that will move between the SEC and the north side of the River Don. These barriers will be in the open position at all times to allow the free movement of pedestrians and other users along the diversion. During periods of construction vehicle movements, which require the closure of the barriers, a site operative will be positioned at each gate to control the movements in a safe manner.

4.3.6 Following this traffic managed area, the Trans Pennine Trail diversion follows the proposed SEC working area around to the East. Here a construction fence will be in place to prevent interaction between users of the Trans Pennine Trail diversion and the construction activity.

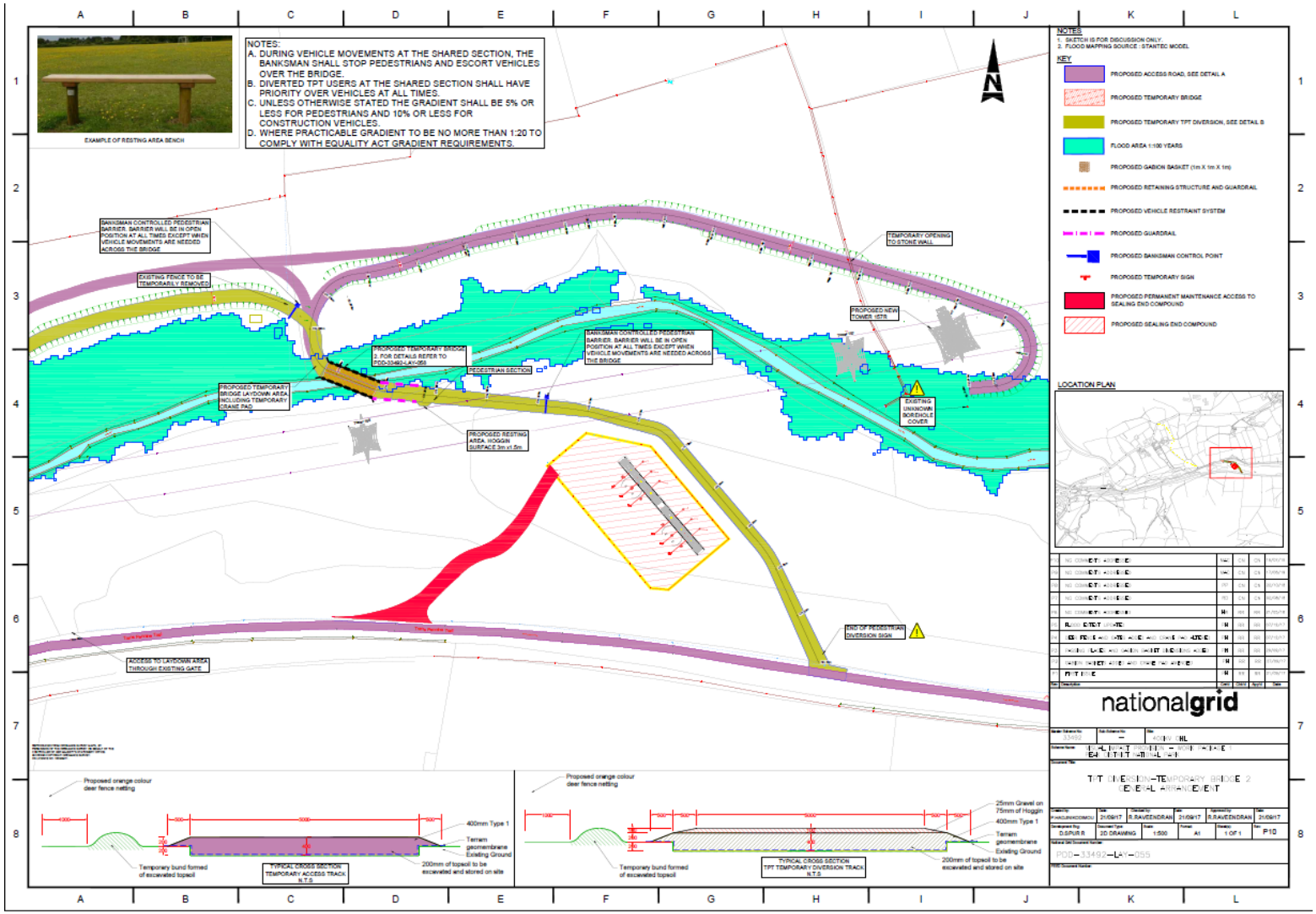
4.3.7 Warnings signs will be provided at the SEC to warn Trans Pennine Trail users of potential construction traffic, and vice versa.

4.3.8 Please see Figure 4.1 for further details.

4.3.9 The Trans Pennine Trail diversion will be regularly inspected and maintained during its use. The inspections will include monitoring of surfacing, route quality and signage.

4.3.10 There is also occasional non-project associated vehicle movement as the Trans Pennine Trail diversion will be used by farmers and Yorkshire Water in the course of their business. Signs will be in place to warn Trans Pennine Trail users of this potential risk.

Figure 4.1 – Access and Management of Users



5 ENVIRONMENTAL CONSIDERATIONS

5.1 Environmental Assessment Report

5.1.1 An environmental assessment has been carried out covering all elements of the proposed project which include those that arise as part of the Trans Pennine Trail diversion. These are detailed within the Environmental Assessment Report, a summary of environmental considerations pertinent with the Trans Pennine Trail have been included below:

5.2 Flood Risk

5.2.1 There are areas at risk of flooding within the vicinity of the Trans Pennine Trail diversion and the existing Trans Pennine Trail is subject to flooding in a number of areas along this section, particularly at Dunford Bridge which is within EA flood zones 2 and 3.

5.2.2 The alignment and design of the Trans Pennine Trail diversion has been informed by results of detailed flood risk modelling which was used to refine the alignment of the Trans Pennine Trail to avoid, where possible, areas at risk from a 1 in 100-year flood event and ensure that the design of the permanent bridge 1 and temporary bridge 2 are safe for users and do not increase flood risk elsewhere.

5.2.3 Best practice measures and any additional measures identified within the EAR to mitigate flood risk during construction are detailed within the CEMP and will be implemented by the Principal Contractor.

5.3 Ecology

5.3.1 There will be direct temporary loss of areas of habitat and potential temporary disturbance effects on species within the area. An ecological assessment has been carried out as detailed in the EAR. A Landscape and Ecological Management Plan (LEMP) has been prepared and describes the mitigation measures to be implemented during the construction of the Proposed Project to ensure that all protected ecological features are managed appropriately.

5.3.2 Best practice mitigation measures to address any potential construction effects from sediment runoff or accidental pollution are detailed within the CEMP and will be implemented by the Principal Contractor.

5.4 Geology, Soils and Contaminated Land

5.4.1 Trans Pennine Trail Diversion shall require the disturbance of ground including a degree of cut and fill work along its length and the works to install Permanent Bridge 1 and Temporary Bridge 2 as well as associated temporary works and laydown areas.

5.4.2 The ground investigation undertaken in 2016 and 2018 identified slight exceedances of the relevant assessment criteria for specified contaminants in both soils and groundwater, asbestos was also identified.

5.4.3 Best construction practices and specified mitigation measures identified within the EAR to mitigate risks to human health, soils or contaminated land during the construction, operation and decommissioning of the Trans Pennine Trail Diversion are detailed within the CEMP and will be implemented by the Principal Contractor.

6 REINSTATEMENT

6.1 Trans Pennine Trail Diversion

6.1.1 Prior to any construction works being undertaken, the Principal Contractor shall obtain, where available, plans from landowners that show drainage and private services, and shall take a full photographic record of condition of the affected land. This record will be shared with the relevant landowners and used as evidence over the state of the land prior to construction.

6.1.2 Following construction works the Trans Pennine Trail diversion will remain in place until the existing route is safe to use and has been reinstated as per the specification outlined below. It has been agreed with Barnsley MBC that the existing Trans Pennine Trail will remain open for a minimum four weeks in parallel with the opening of the diversion in case there are any issues.

6.1.3 Once the existing Trans Pennine Trail has been reinstated the Trans Pennine Trail diversion will be removed and the land reinstated, as close as is reasonably possible, to the condition that was recorded prior to construction, or otherwise as agreed with landowners.

6.1.4 Culvert 1 will remain in place as a permanent culvert.

6.1.5 It is expected that Bridge 1 will remain in place as a replacement for the existing 'jenga' bridge, which will be dismantled. However, it is possible that the landowners may require minor amendments as part of the reinstatement. There are currently Yorkshire Water service connections within/ under the 'jenga' bridge will need to be removed and placed within Bridge 1. Discussion are also required with NPG to allow for a duct to be installed in Bridge 1 to allow for a new 11kV cable that will need to be installed from Dunfrod Bridge to the Yorkshire Water control building which is approximately 200m to the East of Bridge 1.

6.1.6 Currently approximately 410m of the diversion surface will be retained permanently along the stretch that provides private access to Yorkshire Water assets, this is along the route of an existing farm track.

6.1.7 Bridge 2 will be temporary and hence will be removed following completion of construction and reinstatement of the existing Trans Pennine Trail.

6.2 Existing Trans Pennine Trail

6.2.1 Prior to any construction works being undertaken, the Principal Contractor shall obtain, where available, plans from landowners that show drainage and private services, and shall take a full photographic record of condition of the affected land. This record will be shared with the relevant landowners and used as evidence over the state of the land prior to construction.

6.2.2 Following the completion of all Cable Corridor construction works, the land within the working width will be re-graded to reflect the original profile (where possible), a replacement drainage scheme will be installed, where appropriate, following discussions with the landowner/occupier. The design of these drainage schemes will be agreed between National Grid and the landowners/occupiers and will pay particular attention to the need to ensure that the drains do not act as pathways to watercourses for sediment/contamination or cause flooding off-site.

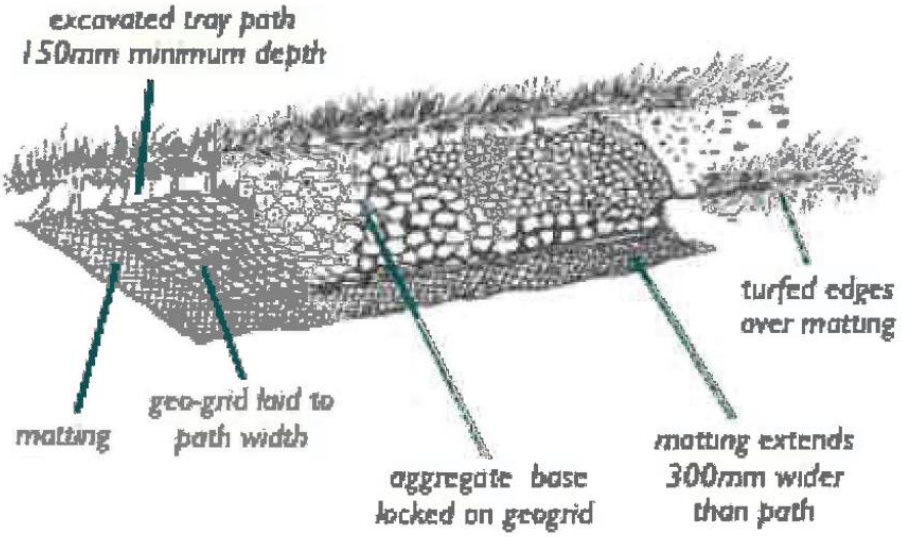
6.2.3 The existing Trans Pennine Trail will be reinstated to the required specification as discussed and agreed with stakeholders ensuring a durable surface to withstand anticipated usage, from: pedestrians, cyclists and horse riders. In addition, the Trans Pennine Trail will be required to allow occasional vehicular use for grazing

and access to the SEC for emergency works (if necessary) or for refurbishment works.

6.2.4 Barnsley MBC and the Stakeholder Reference Group have requested that the path surface is reinstated with Flexipave with gold stone chips (to ensure consistency with the Penistone to Bullhouse section). Given that vehicles that will utilise the reinstated Trans Pennine Trail for grazing and SEC access the Principal Contractor shall ensure that the design is suitable with consideration of suitable specifications such as stated in car park design guidance, this is expected to include, as a minimum, enhanced design specifications such as:

- Black rubber crump and coloured stone to a depth of 35mm;
- minimum of 225mm deep stone sub-base using natural aggregates in decreasing layers of stone size, replacing the existing layer removed during Cable Corridor construction;
- Width of the Trans Pennine Trail will be sized to ensure that vehicles can drive along the trail while avoiding the path edges which can be the most vulnerable to damage, potentially this could be greater than the required width to comply with the equality act 2010;
- The path will need to be free draining with drainage features incorporated where stated;
- The construction layers are to be compacted such that they form a free draining camber (cross fall) to allow surface water to run off;
- Where the path is on more open ground a camber should be applied whereas where the path is built into the hillside a slight cross fall together with water breaks should be applied;
- As much of the path is through wet areas a geotextile membrane will be used and in certain sections geotextile grids will be used to stabilise the path; and
- Consideration of a grassed strip for horses and wild flowers.

Figure 6.1 – Surface Reinstatement Construction Detail



6.2.5 The Trans Pennine Trail signs, along with any other furniture removed during works will be re-erected or replaced with new furniture on completion of the works.

6.2.6 Vehicular movements along the reinstated Trans Pennine Trail will be assessed within the Environmental Assessment Report. Due to the infrequency of vehicle movements on the Trans Pennine Trail following reinstatement the Trans Pennine Trail will remain open to the public with control measures such as speed, warning signs, banksmen etc. implemented as required. Should more frequent access be required for unforeseen maintenance or emergency works temporary closures and diversions could be required.

6.2.7 A Landscape and Ecological Management Plan (LEMP) will be prepared to detail restoration objectives in key sensitive areas such as Wogden Foot LWS.

6.2.8 Trees and other field boundaries which will have been removed during the construction period will be reinstated/ replanted or as required in the LEMP. Trees felled cannot be replanted on or within 3m of the edge of the Cable Corridor to avoid the risk of damage to the cable by tree roots, but would be replaced locally elsewhere or off site.

6.2.9 Trees removed will be replanted using a suitable mix of native species of local provenance, where available, to reflect the species removed. Replanting will be undertaken using container-grown stock. All plants will be protected with guards, supplemented by stock and rabbit-proof fencing as required to protect from damage by grazing domestic animals and wildlife.

6.2.10 Unless specified in the LEMP areas of habitat will be restored to equivalent habitat condition post-construction. Restoration will seek to replace vegetation with the same species identified in the extended Phase 1 habitat survey as far as is practicable, unless a specification is provided in the LEMP

6.2.11 See the Environmental Assessment Report for further details.

7 STAKEHOLDER ENGAGEMENT AND COMMUNICATIONS

7.1 Trans Pennine Trail

7.1.1 National Grid recognises the importance of the Trans Pennine Trail both to the local community and the many user groups it attracts from further afield. The Proposed Project has considered their needs, as well as the Trans Pennine Trail's strategic importance to Barnsley Metropolitan Borough Council and tourism of the wider area.

7.1.2 To facilitate this, National Grid have actively engaged stakeholders about proposals for the diversion and reinstatement of the Trans Pennine Trail throughout the project's development. The feedback we have received from technical stakeholders and local users has been integral to shaping the Proposed Project. The contractor will be required to agree the detailed specification for the diversion with Barnsley MBC and maintain dialogue with the PROW. It is anticipated that agreement of the detailed specification will form part of a planning condition.

7.2 Stakeholder Reference Group

7.2.1 Specifically, the Trans Pennine Trail has been actively raised by National Grid as an agenda item at every Stakeholder Reference Group meeting it has held over the past four years.

This Group includes representatives from Barnsley Metropolitan Borough Council (BMBC), Dunford Parish Council, Natural England, Peak District National Park Authority (PDNPA) and the National Trans Pennine Trail Office. In May 2018, the Yorkshire Wildlife Trust joined the Stakeholder Reference Group.

7.2.2 As a direct result of recommendations emerging from these sessions, National Grid has committed to:

- Upon reinstatement Resurface the Trans Pennine Trail with Flexipave, a surface that is suitable for pedestrians, cyclists and horse riders;
- Ensure that the diversion is as far as practical possible compatible with the Equalities Act; and
- Making the surface of the temporary diversion suitable for all users and confirming that any bridges are safe for horse riders.

7.3 Technical workshop and further meetings

7.3.1 A specialist meeting focusing on the mitigation of the project's impact on the Trans Pennine Trail and its subsequent restoration was held in January 2017.

7.3.2 This technical workshop was attended by a range of access groups and interested parties, including the Trans Pennine Trail Conservation Volunteers, the Barnsley Local Access Forum, British Cycling, the British Horse Society and the Ramblers. The valuable feedback received at the session has helped National Grid to refine the Proposed Project.

7.3.3 In addition, National Grid has actively sought opportunities to discuss the Trans Pennine Trail and other project considerations with stakeholders, including meetings with:

- Angela Smith, MP for Penistone and Stocksbridge, in April 2016 and October 2018;
- Elected representatives and senior officers of Barnsley Metropolitan Borough Council in October 2015, December 2015, October 2016, November 2016, a site visit in March 2017, and October 2018; and
- Barnsley Local Access Forum in March 2016 and June 2018.

7.4 Landowner engagement

7.4.1 The Trans Pennine Trail diversion runs through private land to the north of the River Don. National Grid, through its appointed agents Bruton Knowles (BK), has been in discussion with the landowners affected by the diversion since 2016.

7.4.2 BK continue to discuss access arrangements and agreements with all landowners to ensure that the temporary diversion is fully consented.

7.5 Community engagement

7.5.1 Recognising the importance of the Trans Pennine Trail to Dunford Bridge and the surrounding area, National Grid has engaged with the local community throughout the project's development. This ongoing process has not only allowed National Grid to gauge local opinions to the work and identify any challenges, but has also sought to give the local community a sense of ownership.

7.5.2 A series of public events ahead of formal consultation provided the opportunity to learn more and directly comment on the Proposed Project including our plans for the Trans Pennine Trail:

- In April 2015, an introductory public drop-in event was held at the Parish Community Centre in Crow Edge, Holmfirth, a venue close to the community of Dunford Bridge (attended by 19 people).
- In July 2016, information events were held at Penistone Town Hall, Dunford Parish Community Centre and a National Grid Mobile Unit in the Trans Pennine Trail car park at Dunford Bridge. Around 75 members of the public attended, including local councillors and representatives of Dunford Parish Council. Ten feedback forms were received, seven of which gave positive feedback on the Proposed Project, with a further three neutral or balanced.
- The VIP project also had a presence at local events where the project team was on hand to directly explain our proposals relating to the Trans Pennine Trail to a wider audience. This included stands at the Penistone Show in September 2016 and 2018.

7.5.3 National Grid have also regularly contacted the Dunford Bridge community through direct mail to update them on the project's progress and inform them when environmental surveys and investigative works have been taking place. Meetings have also been held with local business owners to discuss the impact of the Trans Pennine Trail's temporary diversion on their operations.

7.6 Consultation feedback

7.6.1 In December 2018, formal consultation events were held at accessible public venues in Dunford Bridge, Millhouse Green, Penistone and Crow Edge, attended by a total of 103 people including local residents and businesses.

7.6.2 Approximately 67 per cent of those who submitted feedback during the consultation were fully or broadly supportive of the project, with a further 10 per cent providing balanced or neutral feedback.

7.6.3 Three respondents commented positively on National Grid's plans for diverting the Trans Pennine Trail during the proposed construction phase:

7.6.4 Examples of their comments include:

- "The temporary path will be an attraction to visitors who would like to explore a new route."
- "As long as the Trans Pennine Trail is kept open throughout then we will have no issue with the proposed plan."

- "I have noted than an alternative trail route will be constructed before work starting and this will mean less disruption for trail users."

7.6.5 National Grid also received helpful feedback on its proposals that it was able to consider as it refined its plans ahead of the submission of a planning application:

- "Would be good if the proposed surface was more 'natural' to maintain the 'natural' look of the environment."
- "The furniture and carvings along the Trans Pennine Trail are important features and need looking after."
- "I would like the diversionary Trans Pennine Trail route to be retained (alongside main route) to create a circular walk."

7.7 During construction

7.7.1 National Grid and the contractor will continue to keep the local community and stakeholders informed about its activity.

7.7.2 This will include working with BMBC and the Trans Pennine Trail Office to publicise the diversion and ensure that users are kept fully updated about its status.

7.7.3 National Grid will also continue to ensure that relevant information is given out through a number of means, including via the Parish Council, on local notice boards, through local media and onsite signage and information boards. In addition, the project's dedicated website (peakdistrict.nationalgrid.co.uk) will be regularly updated with news and developments.

7.7.4 To ensure that the dialogue we have established remains open, National Grid would also create a Community Liaison Group for the project. Relevant stakeholders including representatives of the Trans Pennine Trail and its user groups would be invited to periodic meetings to find out more about the Proposed Project's progress and comment on activity.

8 PROGRAMME

8.1 Programme of Works

8.1.1 The current indicative programme is that, assuming planning consent, on site construction activities would commence June 2020 and last for a duration of 1.5-2.5 years until commissioning is complete.

8.1.2 It is anticipated that the construction works from first site access will take place over a 16-month period. Completion of pylon removal, reinstatement and demobilisation is estimated to take a further 8 months including a winter shut down period. Removal of the existing pylon infrastructure (the VIP subsection) will take place in the period from commencement of the outages to the commission of the new cables and construction of the new SEC. The Trans Pennine Trail diversion will be used to facilitate OHL removal and therefore will remain in situ until the completion of the OHL removal works.

8.1.3 The following working hours on this Proposed Project will be sought from Barnsley Metropolitan Borough Council:

- Monday to Friday 7.00am until 7.00pm
- Saturday and Sunday 8.00am until 5.00pm