Environmental Statement

Volume 2i: Scheme-wide Assessment

Chapter 20: Public open space

Contents

20. PUBLIC OPEN SPACE 20-3

Summary of principal findings 20-3

20.1 Introduction 20-4

20.2 Legislative and policy context 20-4

20.3 Assessment methodology 20-8

20.4 Baseline 20-13

20.5 Potential effects 20-19

20.6 Mitigation measures 20-44

20.7 Residual effects 20-45

Tables

Table 20-1 Environmental value (sensitivity) 20-10
Table 20-2 Criteria for assessing magnitude of impact 20-10
Table 20-3 Significance of effect matrix 20-12
Table 20-4 Types of open space 20-13
Table 20-5 Formally designated sites impacted by the Scheme 20-15
Table 20-6 Summary of open space impacted during construction and operation of the Scheme 20-16
Table 20-7 Summary of potential effects on POS sites during construction 20-26
Table 20-8 Section 19 Statutory Test for Site Ref OS2 20-27
Table 20-9 Section 19 Statutory Test for Site Ref OS5 20-29
Table 20-10 Section 19 Statutory Test for Site Ref OS7 20-33
Table 20-11 Section 19 Statutory Test for Site Ref OS8 20-35
Table 20-12 Section 19 Statutory Test for Site Ref OS9 20-37
Table 20-13 Section 19 Statutory Test for Site Ref OS10 20-40
Table 20-14 Section 19 Statutory Test for Site Ref OS12 20-42
Table 20-15 Summary of potential effects on public open space during operational phase 20-43

Inserts

Insert 20-1 Existing conditions at Site Ref OS7 – public open space within Deighton corridor (taken from current station access) 20-31
Insert 20-2 Existing conditions at Site Ref OS7 – public open space within Deighton corridor (taken from Greenway close to Whitacre Street looking west) 20-31

20. PUBLIC OPEN SPACE

Summary of principal findings

This chapter presents the assessment of public open space associated with the construction and operation of the Huddersfield to Westtown (Dewsbury) section of the Transpennine Route Upgrade (TRU) Programme. This chapter covers the assessment of the entirety of the Huddersfield to Westtown (Dewsbury) route (the Scheme).

For the purposes of this assessment public open space is defined as “land laid out as a public garden, or used for the purposes of public recreation, or land which is a disused burial ground”.

This is the statutory definition contained in the Acquisition of Land Act 1981.

The baseline review identified a total of 12 areas of public open space within the Scheme boundary that may be impacted during the construction and/or operational phases.

Temporary significant adverse effects are anticipated on 4 public open space areas in relation to recreational and visual amenity. However, these effects are temporary, and it is anticipated that there will be no long-term significant adverse effects as a result of the construction of the Scheme.

The Scheme would also result in the permanent loss of circa 26,261m^2 of public open space. As mitigation, 26,540m^2 of public open space will be provided as exchange land and there will be no significant long-term residual effects on open space. There will therefore be a slight net gain in public open space once the Scheme becomes operational.

20.1 Introduction

20.1.1 This chapter presents the assessment of public open space (PoS) effects associated with the construction and operation of the Huddersfield to Westtown (Dewsbury) section of the Transpennine Route Upgrade (TRU) Programme. This chapter covers the assessment of the entirety of the Huddersfield to Westtown (Dewsbury) Route (hereafter referred to as the 'Scheme').

20.1.2 This chapter is set out as follows:

- Legislative and policy context – relevant national and local policy requirements, legal requirements and guidance which have been used to define the assessment approach are outlined;
- Assessment methodology – the methodology the assessment follows is defined including the justification for the study area and the approach for determining significance of effects;
- Baseline – a summary of the public open space baseline within the study area is provided;
- Potential effects – the potential impacts and effects (both beneficial and adverse) during construction and operation are characterised;
- Mitigation measures – agreed avoidance, mitigation, compensation and enhancement measures are described; and
- Residual effects – the significance of residual effects (both beneficial and adverse) following the implementation of mitigation measures are assessed.

20.1.3 There are no Route Section Assessments (Volume 2ii) for PoS, given the Scheme-wide approach to providing exchange land an assessment at a Scheme-wide scale is considered more appropriate.

20.1.4 A detailed description of the Scheme is provided in Chapter 2 (Scheme description) in Volume 2i of the ES and all figures referred to in this chapter are provided in Volume 4 of this ES.

20.2 Legislative and policy context

20.2.1 The following legislation and policies govern the treatment of public open space and have been consulted in preparing this assessment.

Acquisition of Land Act 1981

20.2.2 Section 19(4) of the Acquisition of Land Act 1981 ("the 1981 Act") provides the following definition of open space "land laid out as a public garden, or used for the purposes of public recreation, or land which is a disused burial ground".

20.2.3 Pursuant to section 19 of the 1981 Act, where a compulsory purchase order (including a Transport and Works Act Order ("TWAO") made under the Transport and Works Act 1992) authorises the compulsory acquisition of open space, the order shall be subject to Special Parliamentary Procedure ("SPP") unless the Secretary of State is satisfied, and certifies that, that one of the exceptions prescribed by section 19(1) of the 1981 Act applies.

20.2.4 These exceptions are:

(i) that exchange land has been provided that is no less in area and is equally advantageous for use to the persons, if any, entitled to rights over such land, and to the public, and that the land given in exchange has been or will be vested subject to the rights attached to the land purchased; or

(ii) that the land is being purchased to secure its preservation or improve its management; or

(iii) that the land does not exceed 250 square yards (which converts to approximately 209 square metres (m^2)) in extent or is required for the widening or drainage of an existing highway and that the giving in exchange of other land is unnecessary, whether in the interests of the persons, if any, entitled to rights over such land or in the interests of the public.

National Planning Policy Framework (NPPF) 2019.

20.2.5 The National Planning Policy Framework (NPPF), states that open space should be taken into account in planning for new development and considering proposals that may affect existing open space.

20.2.6 Paragraph 96 of the NPPF recognises that 'access to a network of high-quality open spaces and opportunities for sport and physical activity is important for the health and well-being of communities.'

20.2.7 Paragraph 97 of the NPPF seeks to protect existing open space, recreation and leisure-time facilities. It states that 'Existing open space, sports and recreational buildings and land, including playing fields, should not be built on unless:-

- an assessment has been undertaken which has clearly shown the open space, buildings or land to be surplus to requirements; or
- the loss resulting from the proposed development would be replaced by equivalent or better provision in terms of quantity and quality in a suitable location; or
- the development is for alternative sports and recreational provision, the needs for which clearly outweigh the loss".'

National Networks National Policy Statement (December 2014)[1] (NPS);

20.2.8 In England, the NPS may also be a material consideration in decision making for applications that fall under the Town and Country Planning Act 1990 or any successor legislation. Whilst the Scheme is seeking consent under the Transport and Works Act, given the nature of the Scheme as rail infrastructure it is considered appropriate that weight should be given to the principles set out in the NPS.

20.2.9 Paragraph 5.162 of the NPS sets out that access to high quality open spaces and the countryside and opportunities for sport and recreation can be a means of providing necessary mitigation and/or compensation requirements.

20.2.10 Paragraph 5.180 states that where green infrastructure is affected, applicants should aim to ensure the functionality and connectivity of the green infrastructure network is maintained and any necessary works are undertaken, where possible, to mitigate any adverse impact and, where appropriate, to improve that network and other areas of open space, including appropriate access to new coastal access routes, National Trails and other Public Rights of Way (PRoW).

20.2.11 In terms of replacement land paragraph 5.166 outlines that existing open space, sports and recreational buildings and land should not be developed unless the land is surplus to requirements or the loss would be replaced by equivalent or better provision in terms of quantity and quality in a suitable location. It also goes on to state (Paragraph 5.181) that any exchange land should be at least as good in terms of size, usefulness, attractiveness, quality

[1] Department for Transport *National Networks National Policy Statement (December 2014)* (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/387222/npsnn-print.pdf)

and accessibility.

National Planning Practice Guidance (NPPG)[2] 2014

20.2.12 The document sets out that open space, includes all open space of public value and can take many forms, from formal sports pitches to open areas within a development, linear corridors and country parks. It can provide health and recreation benefits to people living and working nearby; have an ecological value and contribute to as well as being an important part of the landscape and setting of built development, and an important component in the achievement of sustainable development.

20.2.13 It sets out that local planning authorities should assess the need for open space and opportunities for new areas of public open space.

Local policy

Kirklees Local Plan (2019)

20.2.14 The Kirklees Local Plan,[3] adopted in 2019, seeks to protect existing open space, recreation and leisure-time facilities through the following policies:

- LP23 Core Walking and Cycling Network – the core cycling and walking network will be safeguarded and extended to provide opportunities to reduce the number of car journeys and link settlements, employment sites and transport hubs;
- LP31 Strategic Green Infrastructure Network – development should have regard to the status of these corridors to ensure the proximity to green infrastructure can be maximised through development;
- LP47 Healthy, Active and Safe Lifestyles – will be enabled by facilitating access to a range of high quality, well maintained and accessible open space and play, sports, leisure and cultural facilities, and increasing access to green spaces and green infrastructure to promote health and wellbeing;
- LP61 Urban Green Space – prohibits development proposals which would result in the loss of urban green space unless the open space is clearly no longer required to meet local needs for open space, sport or recreational facilities, replacement provision of equivalent or better size can be provided elsewhere or the proposal is for alternative open space, sport or recreation use that would help address identified deficiencies and clearly outweighs the loss of the existing open space;
- LP62 Local Green Space – development should have regard to the status of these corridors to ensure the proximity to green infrastructure can be maximised through development; and
- LP63 New Open Space – should be provided in accordance with the Council's local open space standards or national standards where relevant. New provision should complement existing facilities in the vicinity and enhance the natural landscape and environment.

20.2.15 Paragraph 19.1 states that the 'network of open spaces within and around the towns and villages of Kirklees make a significant contribution to the character and attractiveness of the district and people's quality of life'.

20.2.16 Paragraph 19.3 informs that, within the urban areas of Kirklees many open spaces, both public and private, provide opportunities for sport and recreation to encourage physical activity and a

[2] Ministry of Housing, Communities and Local Government *National Planning Practice Guidance* (https://www.gov.uk/guidance/open-space-sports-and-recreation-facilities-public-rights-of-way-and-local-green-space)
[3] Kirklees Council Local Plan 2019 https://www.kirklees.gov.uk/beta/planning-policy/pdf/local-plan-strategy-and-policies.pdf

healthy lifestyle.

20.2.17 Policy LP61 protects valuable open spaces of 0.4 hectares (ha) and above within built up areas of Kirklees[4]. In addition, it also extends protection to other valuable open spaces which are too small for urban green space designation. These are included in the Kirklees Open Space Study 2015[5] (revised 2016) as detailed further in the following section.

20.2.18 Within the urban areas of Kirklees many open spaces, both public and private, provide opportunities for sport and recreation to encourage physical activity and a healthy lifestyle. Green spaces of particular importance to local communities have been identified for special protection as local green space.

Other guidance

Kirklees Local Plan Open Space Study 2015 (revised 2016)

20.2.19 The Kirklees Local Plan Open Space Study 2015 (revised 2016) brings together Kirklees Council's audit of open space, sport and recreation sites with the findings of the Open Space Demand Assessment (2015). It includes sites allocated as Urban Green Space and open spaces smaller than 0.4ha in size.

20.2.20 Assessments of the supply and demand for open space, sport and recreation facilities across Kirklees have been undertaken as part of the Council's Open Space Study 2015 (revised 2016), including consideration of the following studies Open Space Demand Assessment, Playing Pitch Strategy and Built Leisure and Sport Facilities Framework. These studies identify existing and future deficiencies in terms of the quantity and quality of open space, sport and recreation facilities and provide the evidence which has informed the protection of sites as urban green space.

20.2.21 As part of the Open Space Study 2015 (Revised 2016) open space site assessments were carried out for parks and recreation grounds, natural and semi-natural greenspace (except woodlands), amenity greenspaces and allotments. Each open space assessment was given a high, medium or low rating based on the evaluation of their physical, social, environmental and visual qualities to determine their relative public value. The results of the assessments were considered in determining the allocation of sites as urban green space.

20.2.22 The Open Space Study's purpose is to assess and analyse the current supply of open space and recreation sites including the quantity, quality and accessibility of existing open space and recreation
facilities and the needs of local people.

20.2.23 A review of the Local Plan designations has confirmed that the sites allocated as Urban Green Space in the Open Space Study have retained their designation and so it is considered appropriate to consider the information set out in this document through this assessment.

[4] Kirklees Local Plan Examination (2018) Matter 29 Urban Green Space and Other Open Spaces https://www.kirklees.gov.uk/beta/planning-policy/pdf/examination/examination-documents/EX95-other-open-spaces-to-be-protected-under-PLP61.pdf
[5] Kirklees Local Plan Open Space Study 2015 (Revised 2016) https://www.kirklees.gov.uk/beta/planning-policy/pdf/supportingDocuments/greenbeltOpenspace/Kirklees-Open-space-study-2015-revised-2016.pdf

Open Space Demand Assessment (March 2015)

20.2.24 An Open Space Demand Assessment[6] was undertaken in March 2015. The assessment considered a number of factors including availability, quality and accessibility of the following:

- Parks, public gardens and recreation grounds;
- Nature areas;
- Footpaths, cycleways and canal towpaths;
- Provision for children and young people;
- Allotments; and
- Cemeteries and churchyards.

20.2.25 The provision of parks and nature areas were perceived very positively with high satisfaction levels noted in terms of availability and quality. The multifunctional offer and use of key popular sites are regularly recognised.

20.2.26 The provision of footpath, cycleways and towpaths are also highly regarded in terms of availability and quality. In keeping with a common view across different areas of Kirklees the potential for further improvement and greater use is highlighted.

20.2.27 Within Dewsbury and Mirfield, the provision of nature areas is perceived very positively with high satisfaction levels noted in terms of availability and quality. However, a higher proportion of respondents from Dewsbury and Mirfield cited a lack of public facilities as a reason preventing use of sites in comparison to other areas.

20.3 Assessment methodology

Study area

20.3.1 The study area for potential direct impacts on public open space resulting from the construction and operation of the Scheme comprises the Scheme area. Where any area of identified PoS extends beyond the Scheme boundary (but is in part within the Scheme boundary) this will be considered within the assessment.

20.3.2 Reference is made to the Route Sections within which the parcels of public open space lie. The six Route Sections are:

- Route Section 1 – Huddersfield;
- Route Section 2 – Hillhouse and Fartown;
- Route Section 3 – Deighton and Bradley;
- Route Section 4 – Colne Bridge and Battyeford;
- Route Section 5 – Mirfield and Lower Hopton; and
- Route Section 6 – Ravensthorpe and Westtown.

Approach

20.3.3 A review of publicly available information has been undertaken to assess any information related to public open space which could potentially be affected by the construction and operation of the Scheme.

[6] https://www.kirklees.gov.uk/beta/planning-policy/pdf/supportingDocuments/greenbeltOpenspace/Demand-Assessment-Report.pdf

20.3.4 The assessment considers the impacts on areas of identified PoS where temporary or permanent land acquisition is required.

20.3.5 This assessment considers the following aspects;

- Location and type of community land e.g. common land, village greens, open green space, allotments, sports pitches etc.;
- The amount of land which will be required or affected by the Scheme (during both the construction and operational phases);
- The wider benefits of the land e.g. sport and recreational use, biodiversity value and visual amenity;
- Quality of the land for use as public amenity; and
- Any current accessibility restrictions to the land.

20.3.6 No site walkovers have been undertaken in relation to this assessment. However site walkovers have been undertaken during the baseline surveys for the biodiversity and landscape and visual impact assessment topics and this data has been used to inform the assessment.

20.3.7 It is not considered that there will be any direct or indirect impacts on public open space beyond the Scheme boundary and this has therefore been scoped out of the assessment (excluding where detailed above i.e. in circumstances where the same public open space land lies partly within the Scheme area and partly outside).

20.3.8 This chapter of the ES does not assess the impacts of the Scheme on the PRoW network, this is dealt with in Chapter 14 (Traffic and transport) and Chapter 15 (Population and human health) of this ES. The chapter does highlight potential impacts on biodiversity and landscape and visual impact in respect of the public open space land only.

20.3.9 There are no direct or indirect impacts on allotment or cemeteries sites in terms of their use as public open space and therefore this has been scoped out of the assessment.

20.3.10 The method of assessment and reporting of significant effects will be predominantly qualitative based on the methodology set out in Chapter 4 (EIA methodology) of this ES. This will involve the following steps:

- Categorisation of importance (sensitivity) of receptor;
- Categorisation of magnitude of the impact; and
- Assessment of the significance of the effect based on the importance of the receptor and magnitude of the impact.

20.3.11 Estimation of importance of the receptor will be based on the data collected as part of the baseline study, taking into consideration publicly available data and consultation with stakeholders.

20.3.12 The Kirklees Open Space Demand assessment has also been used to consider level of existing accessibility restrictions/severance to public open space and the frequency of use of public open space within the Scheme boundary.

Assessment criteria

Assessment of sensitivity

20.3.13 Following the identification of the receptors, the sensitivity of the receptors has been determined using the criteria set out in Table 3.11 of Design Manual for Roads and Bridges

(DMRB) LA 112[7] for community land and assets.

20.3.14 Where the open space land may meet criteria from varying sensitivity levels, professional judgement has been used to assign the open space to the most appropriate level of sensitivity. Given these are local sites, consideration is mainly given to issues of severance and likely use of the sites, emphasised in bold in Table 20-1.

Table 20-1 Environmental value (sensitivity)

Receptor value	Description
Very high	Community land and assets where there is a combination of the following: 1) **complete severance between communities and their land/assets, with little/no accessibility provision;** 2) alternatives are only available outside the local planning authority area; 3) **the level of use is very frequent (daily)**; and 4) the land and assets are used by the majority (>=50%) of the community
High	Community land and assets where there is a combination of the following: 1) there is substantial severance between community and assets, with limited accessibility provision; 2) alternative facilities are only available in the wider local planning authority area; 3**) the level of use is frequent (weekly); and** 4) the land and assets are used by the majority (>=50%) of the community.
Medium	Community land and assets where there is a combination of the following: 1) **there is severance between communities and their land/assets but with existing accessibility provision;** 2) limited alternative facilities are available at a local level within adjacent communities; 3) **the level of use is reasonably frequent (monthly); and** 4) the land and assets are used by the majority (>=50%) of the community.
Low	Community land and assets where there is a combination of the following: 1) **limited existing severance between community and assets, with existing full Disability Discrimination Act (DDA) DDA 1995** 2) alternative facilities are available at a local level within the wider community; 3) **the level of use is infrequent (monthly or less frequent); and** 4) the land and assets are used by the minority (<=50%) of the community.
Negligible	Community land and assets where there is a combination of the following: 1) **no or limited severance or accessibility issues;** 2) alternative facilities are available within the same community; 3) **the level of use is very infrequent (a few occasions yearly); and** 4) the land and assets are used by the minority (<=50%) of the community.

Assessment of magnitude of impact

20.3.15 The criteria for assessing the magnitude of impact has been determined using the criteria set out in Table 20-2. These use the latest DMRB definitions, with some bespoke explanatory text in italics.

[7] https://www.standardsforhighways.co.uk/prod/attachments/1e13d6ac-755e-4d60-9735-f976bf64580a?inline=true

Table 20-2 Criteria for assessing magnitude of impact

Magnitude of impact	Typical description
Major	• Loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features or elements. e.g. direct acquisition and demolition of buildings and direct development of land to accommodate highway assets; and/or • Introduction (adverse) or removal (beneficial) of complete severance with no/full accessibility provision. ***Adverse*** *- The identified impacts are predicted to result in very significant adverse impacts to either biodiversity or visual amenity of a site or very significant loss of mixed amenity opportunities*[8] ***Beneficial -*** *Large scale or major improvement of biodiversity or visual amenity of a site or very significant improvement in mixed amenity opportunities.*
Moderate	• Partial loss of/damage to key characteristics, features or elements, e.g. partial removal or substantial amendment to access or acquisition of land compromising viability of property, businesses, community assets or agricultural holdings; and/or • Introduction (adverse) or removal (beneficial) of severe severance with limited/moderate accessibility provision. ***Adverse*** *- The identified impacts are predicted to result in significant adverse impacts to either biodiversity or visual amenity of a site or significant loss of mixed amenity opportunities* ***Beneficial –*** *Moderate Improvement of biodiversity or visual amenity of a site or significant improvement of mixed amenity opportunities.*
Minor	• A discernible change in attributes, quality or vulnerability; minor loss of, or alteration to, one (maybe more) key characteristics, features or elements, e.g. amendment to access or acquisition of land resulting in changes to operating conditions that do not compromise overall viability of property, businesses, community assets or agricultural holdings; and/or • Introduction (adverse) or removal (beneficial) of severance with adequate accessibility provision. ***Adverse*** *- The identified impacts are predicted to result in some adverse impact to either biodiversity or visual amenity of a site or some loss of mixed amenity opportunities* **Beneficial -** *Some improvement of biodiversity or visual amenity of a site or in mixed amenity opportunities.*
Negligible	• Very minor loss or detrimental alteration to one or more characteristics, features or elements. e.g. acquisition of non-operational land or buildings not directly affecting the viability of property, businesses, community assets or agricultural holdings; and/or • Very minor introduction (adverse) or removal (beneficial) of severance with ample accessibility provision The identified impacts are predicted to result in little change

Source: Table 3.12 of DMRB LA 112 Significance of effect

20.3.16 Once the sensitivity of receptors and magnitude of impacts have been established, the overall significance of effects will be assessed using the matrix in Table 20-3.

20.3.17 The significance of effects has been determined by using professional judgement.

20.3.18 Significance of effects can be neutral, beneficial or adverse and has been further informed by considering the following:

[8] Variety of uses provided by a site e.g. areas for walking, seating areas, information areas, areas of land used for picnicking etc.

- Permanence of effect (temporary or permanent);
- Type of effect (direct or indirect); and
- Duration of effect (short-term or long-term).

20.3.19 In general, temporary effects are for a limited period of time i.e. not permanent. This limited period can vary depending on the activity. Short-term effects are predicted to last for several months up to a few years and would generally apply for the duration of the construction period. Long-term effects are predicted to last beyond this, for several years. Further detail is contained in section 20.5 Potential Effects.

Table 20-3 Significance of effect matrix

		Magnitude of impact (degree of change)				
		No change	Negligible	Minor	Moderate	Major
Receptor sensitivity	Very high	Neutral	Slight	Moderate or Large	Large or Very Large	Very Large
	High	Neutral	Slight	Slight or Moderate	Moderate (or Large	Large or Very Large
	Medium	Neutral	Neutral or Slight	Slight	Moderate	Moderate or Large
	Low	Neutral	Neutral or Slight	Neutral or Slight	Slight	Slight or Moderate
	Negligible	Neutral	Neutral	Neutral or Slight	Neutral or Slight	Slight

Source: DMRB LA 104 - Environmental assessment and monitoring.

20.3.20 Where Table 20-3 identifies two potential outcomes e.g. Moderate (significant) or Large (significant), professional judgement has been applied in each instance to determine the appropriate level of significance.

20.3.21 Using the described significance of effect matrix classification (Table 20-4), effects of the Very Large, Large or Moderate category are deemed to be **significant** for the purposes of the EIA.

Consultation

20.3.22 Consultation with Kirklees Council has been undertaken in relation to Public Open Space within the study area. Comments raised by stakeholders have been considered in this assessment.

20.3.23 Meetings with the Council have taken place which has confirmed the areas of land affected by the Scheme which would be classed as PoS.

20.3.24 As stated above, if certain criteria are met, there is a statutory requirement to provide exchange land that is equally advantageous to the owner, those exercising rights over public open space land (if any) and those persons making use of public open space land, in circumstances where public open space land is to be compulsorily acquired.

20.3.25 Network Rail (as promoter of the TWAO) has entered into negotiations with Kirklees Council (as owner of the open space land to be compulsorily acquired) regarding the transfer of the areas of PoS required for the permanent works. These discussions are on-going. It is possible that an agreement for the acquisition of PoS land may be reached either prior to submission of or during the process of determination of the Order.

20.3.26 NR has also consulted Kirklees Council in respect of potential areas of exchange land to be

provided in accordance with the statutory requirement. If all PoS was to be acquired by private agreement then it would not be necessary to provide exchange land. The Scheme will however provide exchange land for any areas of permanent loss of public open space land as mitigation under the EIA regardless of whether agreement is reached in advance of the Order being determined.

20.4 Baseline

Data sources

20.4.1 Information for the baseline conditions was collected from a desk-based study and consultation with Kirklees Council.

20.4.2 The following sources of information have been used to inform the assessment:

- Kirklees Local Plan Allocations and Designations[9];
- Kirklees Local Plan Open Space Study 2015 (revised 2016);
- Kirklees Publication Draft Local Plan Technical Paper: Urban Green Space and Local Green Space (November 2016);[10] and
- Network Rail geo-RINM viewer which provides a map-based view of Network Rail's geographic data. Route view is part of this dataset which contains Networks Rail's photography archive. Route view data from July 2020 has been used to inform the assessment.

20.4.3 The data available to inform the assessment is up to 10 years old, however the data has been ratified through a cross check of the latest Local Plan Allocations and Designations (2019) and is therefore considered appropriate to use to inform the assessment as part of a suite of information.

Baseline

Definition of Open Space

20.4.4 The 1981 Act provides the following definition of open space "land laid out as a public garden, or used for the purposes of public recreation, or land which is a disused burial ground".

20.4.5 Open space is defined in Annex 2: Glossary to the NPPF as:- "All open space of public value, including not just land, but also areas of water (such as rivers, canals, lakes and reservoirs) which offer important opportunities for sport and recreation and can act as a visual amenity."

20.4.6 Given this chapter considers public open space impacts in terms of EIA and also the statutory requirements under the 1981 Act, it is considered appropriate that the definition set out in paragraph 20.5.3 should be the basis on which this assessment is undertaken.

Types of Open Space

20.4.7 Kirklees Council identified various types of open space in their Open Space Study Report. These are set out in Table 20-4.

[9] https://www.kirklees.gov.uk/beta/planning-policy/pdf/local-plan-allocations-and-designations.pdf

Table 20-4 Types of open space

Type of open space	Primary purpose
Parks and recreation areas	Accessible, high quality opportunities for informal recreation and community events. Includes country parks, urban parks, recreation grounds, formal gardens and pocket parks.
Natural and semi-natural greenspace	Wildlife conservation, biodiversity and environmental education and awareness. Includes woodlands, local nature reserves, scrubland, grassland, heath or moor, wetlands, wastelands and bare rock habitats, as well as unmanaged and unused sites.
Amenity greenspace	Opportunities for informal activities close to home or work or enhancement of the appearance of residential or other areas. Includes grassed areas in housing estates and village greens.
Allotments and community food growing	Opportunities for people to grow their own produce as part of the long term promotion of sustainability, health and social inclusion. Includes allotments, community gardens and community orchards.
Provision for children and young people	Areas designed primarily for play and social interaction involving young people, such as equipped play areas, ball courts, multi-use-games areas, skateboard areas and teen shelters.
Cemeteries and churchyards	Quiet contemplation and burial, often linked to wildlife conservation and biodiversity
Green corridors	Walking, cycling or horse riding, whether for leisure purposes or travel, and opportunities for wildlife migration. Includes greenways, cycleways and pedestrian routes, towpaths along canals and riverbanks, bridleways and rights of way.

Source: Table 4.1 in Kirklees Local Plan Open Space Study Report 2015 (revised 2016)

20.4.8 No areas of allotments, or cemeteries and churchyards are impacted by the Scheme.

20.4.9 Open space can provide health and recreation benefits to people living and working nearby; have an ecological value and contribute to green infrastructure, as well as being an important part of the landscape and setting of built development, and an important component in the achievement of sustainable development.[11]

20.4.10 Table 20-5 provides details of sites included within the Local Plan designation as urban green space or within the Kirklees Open Space Study (as set out in the guidance section of this Chapter) which may be directly impacted by the Scheme.

[11] https://www.gov.uk/guidance/open-space-sports-and-recreation-facilities-public-rights-of-way-and-local-green-space

Table 20-5 Formally designated sites impacted by the Scheme

Local Plan ID	Open space site ref	Open Space TWAO Land Plans Plot Ref	Description	Total Area (ha) of open space
UG102	OLS611	1-003 1-004, 2-001	Gledholt Woods Local Nature Reserve(LNR) & Branch Street Allotments, Huddersfield	11.52
UG48	OLS 642	7-030	New North Huddersfield Trust School, Fartown	31.83
UG39	OLS 631	8-022	Canalside Sports Complex, Leeds Road Huddersfield	12.63
UG196	OLS 524	22-031	Ravenshall School & Ravensthorpe Road Allotments (1.99)	1.99

20.4.11 Table 20-6 provides details of open space land within the Scheme boundary which is impacted during construction and operation of the Scheme. The table sets out the respective Route Section as well as providing a brief description of the land. The table also details the temporary land take i.e. land required during the construction phase (temporary possession) and any permanent land take required for operation of the Scheme.

20.4.12 This information has been used to inform the potential effects arising from the Scheme. Baseline conditions for each of the land plots is also included within site description section of the potential effects assessment (section 20.5).

Table 20-6 Summary of open space impacted during construction and operation of the Scheme

Route Section	ES Site Ref	Open Space TWAO Land Plans Plot Ref	Description of open space impacted	Sport Use	Wildlife Habitat Network/ Biodiversity value	Recreational use	Visual amenity	Temporary land take required (construction) m²	Permanent Land take required (operational) m²	Proposed Use of land
RS1 – Huddersfield	OS1	Temporary Possession Plots: • 1-003 • 1-004 • 2-001	Small area of open space to north of railway from Heaton Gardens to land to the west of Gledholt Bank. Site is part of the Gledholt Woods Local Wildlife Site (LWS). There are no public parks, playing fields or allotments .	x	✓	✓	✓	6,019	None	Temporary access for construction and laydown area to allow installation of lineside fencing to Network Rails boundary. Fencing on NR Property. Land will be returned to POS after construction has been completed
RS1 – Huddersfield	OS2	Permanent land Acquisition Plot: • 2-044	Small area of open space near Longroyd Lane compound required during operational phase to regularise maintainers access to the railway. The permanent land acquisition does not exceed 209 square metres (m2) (250 square yards)	x	x	✓	x	None	43	Permanent acquisition to allow Network Rail maintenance of the railway which will allow access to NR land in plot 2-048. Land will remain with a PROW through & continue to allow use as PoS
RS2 – Hillhouse and Fartown	OS3	Temporary Possession Plot: • 7-023	Area of open space at Red Doles Road. South of the land parcel is the Huddersfield Broad Canal. To the north is an operational business which benefits from access of Red Doles Road. The land parcel can be part accessed by Red Doles Road.	x	x	x	x	796	None	Temporary construction access and laydown are required for the replacement of Red Doles Road Underbridge (MVL/3/96). Land will be returned to PoS following completion of works.
RS2 – Hillhouse and Fartown	OS4	Temporary Possession Plot: • 7-030	Area of North Huddersfield Trust School land required during construction access to Field House Overbridge (MVL3/98). The area of land affected by the Scheme is predominantly woodland	✓	x	x	x	46	None	Temporary construction access and worksite for the replacement of Field House Overbridge (MVL3/98). Land will be returned to PoS following completion of works
RS2 – Hillhouse and Fartown	OS5	Temporary Possession Plots: • 7-032 • 7-043 • 7-046 • 7-047 • 7-048 Permanent Land Acquisition Plots: • 7-042 • 8-005	Area between the Huddersfield Broad Canal and the existing railway at Field House Overbridge (MVL3/98). The areas of land lie to the east and west of the existing Overbridge structure. Works are required to provide step-free access to the southern extent of the new bridge. The Permanent Land Acquisition does not exceed 209m2(250sqy)	x	x	✓	✓	6,107	98	Temporary possession for the construction of Field House Overbridge (MVL3/98). Permanent Acquisition to allow the construction of additional railway lines. All temporary land will be returned to PoS
RS2 – Hillhouse and Fartown	OS6	Temporary Possession Plot: • 8-022	Area of open space used for sports purposes at Canalside Sports Complex, Leeds Road, Huddersfield. Land is amenity grassland.	✓	x	x	x	2,285	None	Temporary possession for construction access and worksite for the replacement of Ridings Underbridge (MVL/3/99) and infill of Peels Pit Underbridge (MVL3/100). Land will be returned to PoS following completion of works
RS3 – Deighton and Bradley	OS7	Temporary Possession Plots: • 7-031 • 8-001 • 8-002 • 8-005 • 9-001 • 9-005 Permanent Land Acquisition Plots: • 7-039	The area runs from Fieldhouse Lane to land to the north of Deighton Station. The Birkby Bradley Greenway (NCN69) also runs through this area of PoS.	x	x	✓	✓	33,645	11,760	Temporary for access and worksite to allow reconstruction of Deighton Railway Station Permanent acquisition is for the reconstructed Deighton Railway Station including earthworks to support both the station and the railway. This will result in exchange land being offered for the permanent loss of PoS.

Route Section	ES Site Ref	Open Space TWAO Land Plans Plot Ref	Description of open space impacted	Sport Use	Wildlife Habitat Network/ Biodiversity value	Recreational use	Visual amenity	Temporary land take required (construction) m²	Permanent Land take required (operational) m²	Proposed Use of land
		• 8-003 • 8-011 • 8-013 • 8-026 • 8-028 • 8-030 • 9-002 • 9-003								The Greenway & NCN 69 will remain following completion of the works
RS3 - Deighton and Bradley	OS8	Temporary Possession Plot: 9-090 Permanent Land Acquisition Plot: 9-100	Area to the north-east of A62. The land parcel is located adjacent to the A62 (Leeds Road), public footpath access is from Leeds Road through the land parcel then onto Glen Field Avenue. The area of permanent land take contains scattered trees .	x	x	✓	✓	1,494	839	Temporary possession for construction access and compound for the realignment of the A62. Permanent acquisition for the reconstruction of the Leeds Road Overbridge (MVL3/102) highway realignment exchange land is offered
RS6 – Ravensthorpe and Westtown	OS09	Temporary Possession Plots: • 19-014 • 19-021 Permanent Land Acquisition Plots: • 19-013 • 19-017 • 19-018	The land parcel is located south of Hungerhill (MVN2/201) The land parcel is set amongst a rural landscape. The land parcel can be accessed by public footpath from Calder Road which is located to north-east of the land parcel. The area of permanent land take is predominantly woodland and includes an area of public footpath. The public footpath will be diverted	x	✓	✓	✓	2,270	728	Permanent acquisition is for the construction of the railway, Calder Road Bridge realignment (MVN2/202) and construction of the New Ravensthorpe Station
RS6 – Ravensthorpe rand Westtown	OS10	Temporary Possession Plots: • 19-023 • 19-028 Permanent Land Acquisition Plots • 19-020 • 19-027 • 21-006 • 21-026	The land parcel is located south of the River Calder and adjoins the operational railway. The land parcel can be accessed by a bridleway from Calder Road which is located to the land parcels north east. The area of permanent land take is woodland and arable grassland	x	✓	✓	✓	16,898	12,793	Temporary possession is to allow for construction worksites and access to deliver the above works Permanent acquisition is for the construction of the railway, Calder Road Bridge realignment (MVN2/202) and construction of the New Ravensthorpe Station
RS6 – Ravensthorpe and Westtown	OS11	Temporary Possession Plot: • 22-031	Ravenshall School & allotment area. Area of school land required for overhead power line work. The area of land affected by the Scheme is predominantly woodland.	✓	x	x	x	2,202	None	Temporary possession for construction to allow powerline diversion primary access to the pylon. The land will remain PoS and be returned as such
RS6 – Ravensthorpe and Westtown	OS12	Temporary Possession Plots: • 25-001 • 25-006 Permanent Land Acquisition Plots: • 25-012 • 25-017 • 25-021	Land parcel is located off Fall Lane and is required during construction for works to Thornhill Road.	x	x	✓	x	3,760	600	Temporary possession for construction compounds and access Permanent acquisition To allow the realignment of Fall land & Thornhill Road for the realignment of the railway and reconstruction of B6117 Fall Lane, Thornhill Road Underbridge (MDL1/9).

20.5 Potential effects

20.5.1 Potential effects are split into construction and operational impacts. For the purpose of this assessment, construction impacts are reported to be short-term temporary impacts. However, this could be for a period of up to 4 years for the sites to be used during construction at Ravensthorpe. Other areas are likely to be impacted for much shorter periods i.e. up to 1 year.

20.5.2 Operation impacts are long-term or permanent impacts affecting areas of PoS after the construction phase is complete.

Construction

20.5.3 Areas of PoS will be required to accommodate temporary construction activities. These are shown in Figure 20-1.

20.5.4 Land take during construction is only required temporarily, and therefore there is no requirement under the 1981 Act to consider the provision of exchange land. This section therefore assesses only the potential environmental impacts during the construction phase.

Route Section 1 – Huddersfield

Site Ref OS1

20.5.5 An area of PoS is required to provide temporary access and laydown for the installation of perimeter fencing along the Scheme boundary. Vegetation clearance will be necessary along the boundary.

20.5.6 The site is part of the Gledholt Woods Local Wildlife Site (LWS) (also LNR). The land (and adjacent allotments) is designated as open space within the Local Plan (Ref UG102) and the Kirklees open sites assessment (Ref OLS 611). The land required for construction of the scheme is 6,019m^2 which, when compared with the total open space allocation of the site of 11.52 hectares is less than 1%. The PoS affected does not form part of a Playing Field, Common land or Allotment.

20.5.7 The site has several informal paths throughout but there is no formal PRoW. The area of PoS directly affected by the Scheme is unlikely to be used on a regular basis i.e. monthly or less frequent due to its location along the boundary of the railway. The wider area of PoS will not be affected or acquired by the Scheme and will remain available to the public during the construction phase.

20.5.8 Chapter 9 (Biodiversity) of this ES states that the Scheme will result in a temporary, adverse effect to Gledholt Woods LNR/LWS that is significant at the local level in the short term (5-10 years) until replacement planting or natural regeneration becomes established. After this point, no significant residual effects are predicted. The loss of semi-improved neutral grassland and scrub will be mitigated via re-instatement and/or natural regeneration following construction. Compensatory planting will be undertaken in line with the Outline Environmental Mitigation Plan in Figure 2-3, with further details (including planting plans) included within the Landscape and Environmental Management Plan (LEMP) to be submitted pursuant to a condition attached to the deemed planning permission.[12]

20.5.9 Visual amenity for users of the PoS is unlikely to be significantly affected given the small area of vegetation removal required and only small-scale plant and equipment will be required to

[12] On making an order under the Transport and Works Act 1992, the Secretary of State may direct that planning permission shall be deemed to be granted, subject to such conditions (if any) as may be specified in the direction

install the fencing. Given the limited impact on visual and recreational amenity slight adverse effects are expected during the construction phase which are not significant.

20.5.10 The land will be returned to PoS following completion of the construction works.

Site Ref OS2

20.5.11 No land take is required during the construction phase.

Route Section 2 – Hillhouse and Fartown

Site Ref OS3

20.5.12 A small area of PoS (796m^2) located off Red Doles Road to the south of the Montgomery Engravers is required to provide temporary construction access and laydown for the replacement of Red Doles Road Underbridge (MVL/3/96).

20.5.13 This site is open land which can be accessed from the adjacent byway (Red Doles Road) but is unlikely to provide significant amenity value as PoS given its location and size. The site is heavily wooded and further constrained by the private land use to the north. No formal or informal paths can be seen within the site and based on the most recent aerial survey undertaken by Network Rail in 2020 the plot does not appear to be well used i.e. monthly or less frequently and its use is likely to be incidental to its proximity to the PRoW.

20.5.14 The habitat of the area is mainly semi-natural broadleaved woodland, this will be cleared to provide the construction laydown area. Plantation broad-leaved woodlands of similar age are well represented in the surrounding area. Following the construction phase the land broadleaved woodland will be replanted with compensatory planting undertaken in line with the Outline Environmental Mitigation Plan in Figure 2-3, with further details (including planting plans) included within the LEMP.

20.5.15 Visual amenity is unlikely to be affected given the small area of vegetation clearance on the POS and the location of the site i.e. next to an industrial unit. Given the limited impact neutral effects are expected during the construction phase which are not significant.

20.5.16 The issues of wider vegetation clearance in the surrounding area (i.e. outside of the PoS) for construction of the Scheme is considered within Chapters 9 and 10 (Biodiversity and Landscape and Visual Impact Assessment respectively).

20.5.17 The land will be returned to PoS following completion of the construction works.

Site Ref OS4

20.5.18 A small area of land owned by the North Huddersfield Trust School is required for construction access for the replacement of Fieldhouse Overbridge (MVL3/98).

20.5.19 The PoS is a heavily wooded area, the Birkby Bradley Greenway (NCN69) is located on the adjacent land and PRoW HUD/45/10 runs to the east. Access to the local PRoW and the Greenway is not directly impacted by the works to the PoS. Access to the site is constrained due to the dense woodland. The most recent aerial survey undertaken by Network Rail in 2020 did not indicate any formal or informal public use of the OS4 PoS .

20.5.20 The land is designated as open space within the Local Plan (Ref UG48) and the Kirklees open sites assessment (Ref OLS 642). The land required for construction of the scheme is 46m^2 which when compared with the total open space allocation of the New North Huddersfield Trust School site of 31.83 hectares, is less than 0.01%. The wider area of PoS will not be affected or acquired by the Scheme and will remain available to the public during the

construction phase.

20.5.21 The habitat of the area is mainly semi-natural broadleaved woodland and the area of PoS required for construction access will be cleared of vegetation. The sport use at the school fields will not be impacted by the works and the loss of woodland is not significant given the small area affected and plantation broad-leaved woodlands of similar age are well represented in the surrounding area. Following the construction phase the broadleaved woodland will be replanted. Compensatory planting will be undertaken in line with the Outline Environmental Mitigation Plan in Figure 2-3, with further details (including planting plans) included within the LEMP.

20.5.22 Visual amenity is again unlikely to be affected given the small area of land affected (less than 50m^2).

20.5.23 Given the limited impact on visual and recreational amenity neutral effects are expected during the construction phase which are not significant.

Site Ref OS5

20.5.24 An area of open space land located between the Huddersfield Broad Canal and the railway at Fieldhouse Lane is required for construction access for the replacement of Field House Overbridge (MVL3/98) and provision of step free access to the southern extent of the new footbridge, together with associated embankment works. An area of PoS of 6,110m^2 is required.

20.5.25 The PoS is accessed off PRoW HUD/42/10 which then continues over Field House Overbridge. The PROW is utilised by a variety of people, including dog walkers, ramblers and other members of the community. To the north of the railway PRoW HUD/42/10 connects into the Birkby Bradley Greenway, so is a well-used footpath providing links for the community. The area of PoS in difficult to access in places, particularly in proximity to the PRoW due to the dense vegetation cover. The wider area of PoS to the north-east of the PROW is formed by open grassland.

20.5.26 Vegetation clearance of the site including Semi-natural mixed woodlands and shrub mix and will be required. Visual amenity of the PoS will also be affected given the vegetation clearance requirements and the plant and equipment that will be employed during construction works to Fieldhouse Overbridge (MVL3/98).

20.5.27 The works will impact on the amenity value of the area, as well as restrictions on access to the PoS there will be a requirement for temporary closure of the PRoW HUD/42/10 and sections of the Birkby Bradley Greenway, the effects from the temporary closure of the PRoWs is considered further within Chapter 14 (Traffic and Transport) and Chapter 15 (Population and Human Health) of this ES.

20.5.28 Given the area of vegetation removal, visual amenity in the wider area will be impacted, however because use of the site as PoS will be restricted during construction the effects will be minimised. Recreational amenity will be affected but the site is not well used. Therefore slight adverse effects are expected during the construction phase which are not significant.

20.5.29 Compensatory planting will be undertaken in line with the Outline Environmental Mitigation Plan in Figure 2-3, with further details (including planting plans) included within the LEMP however there will be residual visual effects whilst the planting becomes established.

20.5.30 An area of 98m^2 will be subject to permanent acquisition as part of the Scheme and the impacts of this are set out in paragraphs 20.5.96 to 20.5.100.

20.5.31 The remaining area will be returned to PoS following completion of the construction work.

Site Ref OS6

20.5.32 An area of PoS currently used as sports pitches is required for construction access and laydown areas associated with the works to Ridings Underbridge (MVL3/99) and Peel's Pit Underbridge (MVL3/100) .

20.5.33 The land is located to the south of the canal and is designated as open space within the Local Plan (Ref UG39) and the Kirklees open sites assessment (Ref OLS 631). The land required for construction of the Scheme is 2,285m^2 which when compared with the total open space allocation of the site of 12.63 hectares is less than 1%. The land is currently used on a daily basis and the land will be temporarily unavailable during the construction works resulting in a loss of amenity space however this is a small parcel of a much larger area of PoS and so effects will be reduced.

20.5.34 The site is currently amenity grassland with scattered trees on the perimeter. Given the limited area of land take, the impact on recreational amenity is anticipated to result in slight adverse effects during the construction phase which are not significant.

20.5.35 Compensatory planting will be undertaken in line with the Outline Environmental Mitigation Plan in Figure 2-3, with further details (including planting plans) included within the LEMP.

20.5.36 The land will be returned to PoS following completion of the construction works.

Route Section 3 – Deighton and Bradley

Site Ref OS7

20.5.37 The site runs from Field House Overbridge (MVL3/99) to land to the north of Deighton Station. The Birkby Bradley Greenway (NCN69) also runs through this area. The land is to be acquired to allow the construction of two new railway lines, the construction of supporting embankments and reconstruction of Deighton Railway Station. An area of 33,645m^2 will be subject to temporary possession during the construction phase.

20.5.38 A cross section of the public use the PoS area, including dog walkers, cyclists and young people accessing the local school (North Huddersfield Trust School) as well as the surrounding residential areas. The Greenway is used daily by the local community and is considered to be an important community asset.

20.5.39 The majority of use of this PoS is restricted to the Greenway, as the surrounding land is of low value as it is predominately scrub land and is bordered by the railway to the South, with a steep gradient running down to the railway line, this limits the ability of the public to use it. The PoS subject to temporary possession does not form part of a Playing Field, Park, Common Land or Allotment.

20.5.40 The PoS subject to temporary possession forms part of a continuous area of PoS which extends to the North of site OS7. The remaining PoS available which can be used by the public is approximately 10ha (106,120m^2).

20.5.41 Vegetation removal will be required to enable the sites use as a construction worksite and due to the embankment works proposed. The works will also require temporary closure of the Greenway during construction. Where possible NCN69 will be temporarily diverted (within the Scheme boundary) during the works to allow access at times during the construction phase when the conflict between construction traffic and users of the right of way can be safely managed.

20.5.42 Given the high level of use and sensitivity of the site, the loss of access to the PoS and the loss of visual amenity due to vegetation clearance as well as the presence of construction plant and equipment, will result in large adverse effects being experienced by the PoS during the construction phase, which is significant.

20.5.43 Compensatory planting requirements will be undertaken in line with the Outline Environmental Mitigation Plan in Figure 2-3, with further details (including planting plans) included within the LEMP.

20.5.44 Areas of OS7 will be subject to permanent land take (11,760m^2) and the impacts on the site during the operational phase are set out in paragraphs 20.5.103 to 20.5.111.

20.5.45 The land not required in the permanent case will be returned to PoS following completion of the construction works.

Site Ref OS8

20.5.46 Temporary possession of 1,494m^2 of PoS is required on the area of greenspace between Glenfield Avenue and the A62 Leeds Road to provide construction access and compound for the works to the A62 Leeds Road Overbridge (MVL3/102).

20.5.47 The site is formed of a grassed area, footway, copse and PRoW HUD/51/10 to the east of Glenfield Avenue. The predominant use of the PoS is to allow access from Glenfield Avenue to the A62. Removal of the scattered trees and amenity grassland is required to allow the realignment of the A62 Leeds to Huddersfield Road.

20.5.48 The PRoW and informal path is frequently used by the community for dog walking, access to the businesses on the A62 as well as access to the wider areas of PoS to the North, including the Birkby Bradley Greenway.

20.5.49 Following the completion of the construction the PROW (HUD/51/10) will be subject to a minor diversion within the land which has been permanently acquired.

20.5.50 There will be a visual amenity impact from the clearance of the scattered trees and the presence of construction plant and equipment. Users of the site will be formally diverted however there will be loss of some amenity value and so there are anticipated to be moderate adverse effects during the construction phase, which are significant.

20.5.51 Compensatory planting requirements will be undertaken in line with the Outline Environmental Mitigation Plan in Figure 2-3, with further details (including planting plans) included within the LEMP.

20.5.52 Areas of OS8 will be subject to permanent land take and the impacts on the site during the operational phase are set out in paragraphs 20.5.113 to 20.5.116. The land not required in the permanent case will be returned to PoS following completion of the construction works.

Route Section 6 – Ravensthorpe and Westtown

Site Ref OS9

20.5.53 An area of open land (2,270m^2) is required to the south of the railway to allow construction access to Hunger Hill Overbridge (MVN2/201) and embankment works required in relation to realignment of the railway track. The land parcel is set within a rural landscape albeit it is located adjacent to the operational railway.

20.5.54 The area in question is formed of woodland and also contains a number of PRoW (DEW/1/10,

DEW/1a/10 and DEW/3/10) which allows access into the PoS. However, the PoS is a wooded area which is heavily overgrown, therefore offering limited opportunities for use of the wider PoS area within OS9.

20.5.55 The primary use of the PoS is therefore to access the PROW network and is used by walkers for recreational activities. The PoS at OS9 forms part of a larger area of PoS particularly to the South where the PRoW network diverges to different areas and different PoS.

20.5.56 Recent Network Rail aerial surveys do not indicate any informal footpaths into the PoS which will be subject to temporary possession, further supporting the premise that the main public use is limited to the formal PRoW network.

20.5.57 The works will also require temporary closure of the PRoWs during construction. This is dealt with in further detail in Chapter 14 (Traffic and Transport) and Chapter 15 (Population and human health) of this ES.

20.5.58 Construction works will result in the loss of semi-natural broadleaved woodland and semi-improved neutral grassland.

20.5.59 There will be a visual amenity impact from the clearance of the woodland and the presence of construction plant and equipment. There will also be some loss of some amenity value due to the restrictions on access to the PoS, it is anticipated that moderate adverse effects will be experienced during the construction phase, which are significant.

20.5.60 Compensatory planting requirements will be undertaken in line with the Outline Environmental Mitigation Plan in Figure 2-3, with further details (including planting plans) included within the LEMP.

20.5.61 Areas of OS9 will be subject to permanent land take and the impacts on the site during the operational phase are set out in paragraphs 20.5.118 to 20.5.123.

20.5.62 The land not required in the permanent case will be returned to PoS following completion of the construction works.

Site Ref OS10

20.5.63 An area of PoS is required to facilitate works to the new Ravensthorpe Station including access point and also the realignment of Calder Road and Ravensthorpe Road including provision of a new 3-arm roundabout. To facilitate the works temporary possession of 16,898m^2 of PoS is required.

20.5.64 The area of PoS is formed of Woodland and a Public Right of Way (PROW) DEW/3/10 Bridleway. Part of the area is a wooded area which is heavily overgrown and therefore offers limited opportunities to users. The primary use is to access the PROW which is used by walkers on a daily basis. There is an area of open grassland within the PoS of approximately 3,000m^2. However, there are no signs of public use into this area, the recent Network Rail aerial surveys (2020) do not indicate formal or informal footpaths into the PoS which will be acquired. This provides further evidence that the primary use by the public is to access the PRoW network.

20.5.65 The area benefits from being part of a wider PoS in the area which extends to the South, this will remain unaffected by the scheme.

20.5.66 No Playing fields, Parks, Common Land or Allotments will be acquired.

20.5.67 Construction works will result in the loss of semi-natural broadleaved woodland, poor semi-

improved grassland and arable land. There will be a visual amenity impact from the clearance of the woodland and the presence of construction plant and equipment. There will also be significant loss of amenity value due to the restricted access to the PoS, albeit users will be able to access the wider areas of PoS to the south. It is therefore anticipated that large adverse effects will be experienced during the construction phase, which are significant.

20.5.68 Compensatory planting requirements will be undertaken in line with the Outline Environmental Mitigation Plan in Figure 2-3, with further details (including planting plans) included within the LEMP.

20.5.69 Areas of OS10 will be subject to permanent land take and the impacts on the site during the operational phase are set out in paragraphs 20.5.125 to 20.5.130.

20.5.70 The land not required in the permanent case will be returned to PoS following completion of the construction works.

Site Ref OS11

20.5.71 A small area of public open space owned by Ravenshall School is required during construction works on the overhead power lines. The land is designated as open space within the Local Plan (Ref UG196) and the Kirklees open sites assessment (Ref OLS 524). The land required for construction of the Scheme is 2,202m^2 which when compared with the total open space allocation of the site of 1.99 hectares is less than 1%. The area of land affected by the Scheme is predominantly woodland, however a small area of land associated with sports use will be required for the works. This will amount to 15% of the available school fields and so is not anticipated to significantly affect the available land for sports use.

20.5.72 It is not anticipated that the temporary use of this site will result in significant impacts as it is likely to be infrequently used by dog walkers etc. Visual amenity is unlikely to be affected given the small area of land affected and following the works a benefit will be realised due to works to underground the overhead power lines in this area of the Scheme.

20.5.73 Compensatory planting will be undertaken in line with the Outline Environmental Mitigation Plan in Figure 2-3, with further details (including planting plans) included within the LEMP.

20.5.74 Given the limited impact on visual and recreational amenity (noting the small area of sports field that will be subject to temporary possession) neutral effects are expected during the construction phase which are not significant.

20.5.75 The land will be returned to PoS following completion of the construction works.

Site Ref OS12

20.5.76 An area of public open space (3,760m^2) located off Fall Lane will be required during construction for works at Thornhill Road. The area in question is formed of grassland to the West and East of Fearnley Street. There are no specific PROW across the PoS, with access to the area being from Fearnley Street. The primary purpose of the PoS is roadside verges with minimal public amenity.

20.5.77 Recent Network Rail aerial surveys (2020) do not indicate formal or informal footpaths into the PoS which will be acquired. Therefore, the primary use by the public is likely related to access to Fearnley Street and Brookes Yard.

20.5.78 There will be some loss amenity value due to the restricted access to the PoS. It is therefore anticipated that slight adverse effects will be experienced during the construction phase, which are not significant.

20.5.79 Compensatory planting requirements will be undertaken in line with the Outline Environmental Mitigation Plan in Figure 2-3, with further details (including planting plans) included within the LEMP.

20.5.80 Areas of OS12 will be subject to permanent land take and the impacts on the site during the operational phase are set out in paragraphs 20.5.133 to 20.5.136.

20.5.81 The land not required in the permanent case will be returned to PoS following completion of the construction works.

Summary of construction phase effects

20.5.82 Table 20-7 sets out the assessment of effects on public open space during the construction phase.

Table 20-7 Summary of potential effects on POS sites during construction

Route Section	Site ref.	Sensitivity of receptor	Magnitude of impact	Significance of effect
1 – Huddersfield	OS1	Medium	Minor	Slight
1 – Huddersfield	OS2	Not applicable – no temporary land take		
2 – Hillhouse and Fartown	OS3	Low	Minor	Neutral
2 – Hillhouse and Fartown	OS4	Medium	Negligible	Neutral
2 – Hillhouse and Fartown	OS5	Medium	Negligible	Slight
2 – Hillhouse and Fartown	OS6	Medium	Negligible	Neutral
3 – Deighton and Bradley	OS7	Very High	Moderate	Large
3 – Deighton and Bradley	OS8	High	Moderate	Moderate
6 – Ravensthorpe and Westtown	OS9	High	Minor	Moderate
6 – Ravensthorpe and Westtown	OS10	Very High	Moderate	Large
6 – Ravensthorpe and Westtown	OS11	Medium	Negligible	Neutral
6 – Ravensthorpe and Westtown	OS12	Medium	Minor	Slight

20.5.83 Significant adverse effects are anticipated on public open space refs OS7, OS8, OS9 and OS10 these will be temporary in nature.

Operation

20.5.84 Areas of public open space will also be acquired on a permanent basis to accommodate the operational activities of the Scheme. These are shown in Figure 20-1

20.5.85 The statutory requirements of the 1981 Act to provide replacement open space apply unless the exceptions in section 19(1) are applicable (as set out at paragraph 20.2.4 above). . This section assesses the potential environmental impacts of the permanent use of the PoS affected by the Scheme, as well as considering the statutory requirements of the 1981 Act and setting out if exchange land is to be provided, and where this exchange land will be located. It also describes the merits of the exchange land as considered against the criteria in section 19(1)(a) of the 1981 Act.

20.5.86 The 1981 Act (s19(1)(a) requires that in the provision of exchange land, the replacement open

space must be not less in area and must be equally advantageous to the public. Network Rail undertook a detailed analysis of the locality to inform the provision of replacement open space. Deighton is an urban area of residential, commercial and light industrial uses. In addition, there is extensive PoS in the area (approximately 12.8ha). For these reasons, there was no land in the Deighton area that was suitable for acquisition as replacement PoS. Two consolidated areas at Ravensthorpe were found as optimal for the provision of open space , and compliant with the requirements of s19(1)(a). The "Ravensthorpe Triangle" is an area of 15,266m^2 and is a former landfill site next to the Calder & Hebble Navigation. A further 11,274m^2 of exchange land will be provided at Ravensthorpe within the area of the new Ravensthorpe Station. The areas are shown in Figure 20-2. Both the land at Ravensthorpe and the Ravensthorpe Triangle will form part of the overall landscaping scheme with the aim to maximise public amenity. Both areas are accessible from the local PRoW network, as detailed in this section. The total area of 26,540m^2 provided as replacement open space, exceeds the area of public open space acquired. Due to the increased area of the exchange land, together with its connectivity and consolidated nature, the provision of replacement of public open space by the Scheme is advantageous as compared to the existing baseline. The design process has enabled the development of appropriate design adaptations, referred to as embedded mitigation. These remove the risk of impacts and, where this is not possible, they reduce these risks and minimise the associated consequences to acceptable levels. For the purposes of assessing the potential effects under the EIA the provision of exchange land (replacement PoS) for loss of PoS during the operational phase of the Scheme is considered embedded mitigation.

20.5.87 Appropriate additional mitigation measures to reduce and, wherever possible, avoid identified adverse effects will be explored and discussed in Section 20.6 (Mitigation measures).

Route Section 1 – Huddersfield

Site Ref OS1

20.5.88 No permanent land take required so site not assessed further in this section.

Site Ref OS2

20.5.89 An area of PoS is required to allow Network Rail maintenance access to the railway. The permanent land take requirement is 43m^2. The area is used by the public on a daily basis to access the PRoW however it has limited amenity value given the existing vegetation and extent of the footpath area which limits further use of the land.

20.5.90 The PROW will remain open to the public following the acquisition of the land.

20.5.91 The affected PoS area forms part of an adjoining area of PoS of approximately 14,200m^2 which will not be affected by the Scheme or acquired and will remain available to the public.

20.5.92 Given the limited impact on visual and recreational amenity neutral effects are expected during the operational phase which are not significant.

20.5.93 Table 20-8 sets out details of the provision of exchange land against the statutory test at s19(1)(a) of the of the 1981 Act for Site Ref OS2.

Table 20-8 Section 19 Statutory Test for Site Ref OS2

	Plots:	Area:
Land Plots to be permanently acquired	2-044	43m^2 **TOTAL - 43m^2**
Exchange land plot references	Not required	n/a

Current use of Public Open Space	PoS is formed by PRoW HUD/328/20 and a small wooded area. The area is used by the public on a daily basis to access the footpath network and other areas of PoS to the East and West. The primary use of the PoS is to access the PROW and this will remain open to the public following the acquisition of the land. The area to West is accessed via Springwood Pedestrian footbridge (PEH/1) over the railway. The PoS is bordered by the railway to the West and therefore, has limited amenity value given the vegetation and extent of the footpath which limits the use of the land. The affected PoS area of 43m^2 forms part of an adjoining area of PoS of approximately 14,200m^2 which will not be affected by the Scheme or acquired and will remain available to the public.
Consideration of the need for provision of exchange land	It is considered that the acquisition of this plot falls within the exceptions set out in s19(1) of the 1981 Act as it does not exceed the 209m^2 threshold and the public is not considered to suffer detriment from exchange land not being provided, for the following reason: • The acquisition of the public open space will not have detrimental effect given the extensive surrounding public open space which is available and can be accessed via the PROW network. • The land to be acquired forms part of a wider area of public open space totalling 1.42ha (14,200m^2) which is of greater amenity value • The small area of land being acquired is bordered by the railway, the primary use of the PoS is to access the PROW. • The land to be acquired includes a small wooded area and the PROW. The majority of the PoS land is occupied by the PRoW thereby limited the area of remaining land that can be considered open land, restricted the amenity value of it as such. • The PoS does not form part of a Playing field, Park, Common Land or Allotment • Access to the area by the public will be maintained following the acquisition of the land by Network Rail as the current PROW will remain unaffected and this is the main purpose for which the public use the land. • It is therefore not considered necessary to provide exchange land following the acquisition of this plot.

Route Section 2 – Hillhouse and Fartown

Site Ref OS3

20.5.94 No permanent land take required so site not assessed further in this section.

Site Ref OS4

20.5.95 No permanent land take required so site not assessed further in this section.

Site Ref OS5

20.5.96 An area of open space land located between the Huddersfield Broad Canal and the railway at Fieldhouse Lane is proposed to be acquired in relation to the replacement of Field House Overbridge (MVL3/98) and provision of step free access to the southern extent of the new footbridge, together with track realignment works. An area of PoS of 98m^2 is proposed to be permanently acquired.

20.5.97 The PoS is accessed off a PRoW HUD/42/10) which then continues over Field House Overbridge. The PRoW is utilised by a variety of people, including dog walkers, ramblers and other members of the community. To the north of the railway PRoW HUD/42/10 connects into the Birkby Bradley Greenway, so is a well-used footpath providing links for the community. The area of PoS to be acquired is difficult to access and forms part of a larger area of PoS of approximately 1.41Ha which will not be affected by the Scheme and remains available for public use.

20.5.98 Vegetation clearance of the site will be carried out to facilitate construction works. No further vegetation removal is required as part of the operational phase.

20.5.99 Given the small area of land take and the low recreational value of the site, neutral effects are expected during the operational phase which are not significant.

20.5.100 Compensatory planting will be undertaken in line with the Outline Environmental Mitigation Plan in Figure 2-3 however there will be visual impacts whilst the planting becomes established.

20.5.101 Table 20-9 sets out details of the provision of exchange land against the statutory test at s19(1)(a) of the of the 1981 Act for Site Ref OS5.

Table 20-9 Section 19 Statutory Test for Site Ref OS5

	Plots:	Area:
Land Plots to be permanently acquired	7-042 8-005	72m² 26m² **TOTAL – 98m²**
Exchange land plot references	Not required	n/a
Current use of Public Open Space	The two plots of PoS to be acquired are heavily wooded areas, with the railway forming a boundary to the North. The PoS is accessed off PRoW HUD/42/10 which then continues over Field House Overbridge. The PROW is utilised by a variety of people, including dog walkers, ramblers and other members of the community. The PROW leads to the Birkby Bradley Greenway, so is a well-used footpath providing links for the community. However, the PoS in question is difficult to access due to the dense scrub and use of land as a railway embankment. To the South of the plot is a larger area of PoS which is not overgrown and is formed by open grassland, this can be accessed from the PROW and a towpath to the South and is therefore more likely to be used by the public. This larger PoS is south of Plots 7-042 and 8-005 and ends at the Huddersfield Broad Canal and is approximately 1.41Ha and will not be affected by the Scheme and remains available for public use. The most recent aerial survey undertaken by Network Rail in 2020 did not indicate any formal or informal public use of the two plots which are to be acquired.	
Consideration of the need for provision of exchange land	It is considered that the acquisition of this plot falls within the exceptions set out at s19(1) of the 1981 Act and that it is not necessary to provide exchange land in respect of the acquisition. The area of the plots to be acquired do not exceed the 209m² threshold and the public is not considered to suffer detriment from exchange land not being provided for the following reason: • The land to be acquired forms part of a wider area of public open space totalling 1.41ha which is considered to have greater amenity value as well as being more accessible to the public • The small area of land being acquired is bordered by the railway and is heavily overgrown offering very limited access and ability to use it	

	by the public and based on the NR aerial survey the area does not seem to be routinely used (indicated by the lack of paths) The PROW and Canal towpath will not be affected by the Scheme and continue to be available to the public • The acquisition of the public open space will not have detrimental effect, because of the extensive surrounding public open space which is available and can be accessed via a PROW and Canal towpath to the South • The PoS does not form part of a Playing Field, Park, Common Land or Allotment

Site Ref OS6

20.5.102 No permanent land take so site is not assessed further in this section.

Route Section 3 – Deighton and Bradley

Site Ref OS7

20.5.103 The site (an area of 11,760m^2) runs from Field House Overbridge (MVL3/99) to land to the north of Deighton Station. The Birkby Bradley Greenway (NCN69) also runs through this area. The land is to be acquired for the reconstructed Deighton Railway Station, including earthworks to support both the station and the railway.

20.5.104 A cross section of the public use the area including dog walkers, cyclists and young people accessing the local school (North Huddersfield Trust School) as well as the surrounding residential areas. The Greenway is heavily used on a daily basis by the local community and is considered to be an important community asset.

20.5.105 The majority of use of this PoS is restricted to the Greenway, as the surrounding land is of low value as it is predominately scrub land and is bordered by the railway to the South, with a steep gradient running down to the railway line, this limits the ability of the public to use it as open space.

20.5.106 Inserts 20-1 and 20-2 show the existing conditions in the Deighton corridor and the areas of land which will be subject to works.

Insert 20-1 Existing conditions at Site Ref OS7 – public open space within Deighton corridor (taken from current station access)

Insert 20-2 Existing conditions at Site Ref OS7 – public open space within Deighton corridor (taken from Greenway close to Whitacre Street looking west)

20.5.107 The permanent works will not significantly alter the existing landform in this area of the Scheme, in that the railway line will lie in cutting and so the land slopes down from the Greenway to this point.

20.5.108 A minor permanent change to the alignment of Birkby Bradley Greenway (NCN69) is proposed due to the location of the new embankment. The new horizontal alignment will also result in a reduced vertical alignment in places i.e. the path will be less steep.

20.5.109 As stated, following the construction phase the land that is outside the new Network Rail boundary and therefore not subject to permanent acquisition will be returned to PoS. Access through the site will be maintained in the long term, ensuring the recreational amenity value of the greenway and its value as PoS is maintained. In the short-term visual amenity will be impacted due to the vegetation removal undertaken during the construction phase.

20.5.110 Land is proposed within the Ravensthorpe area to offset the loss of PoS through permanent acquisition of land. The exchange land will provide a high quality PoS area that has a greater degree of accessibility to the public and is not constrained by gradients or vegetation. The exchange land will be incorporated into the Scheme's landscape proposals, with the aim to maximise public amenity and enjoyment through the creation of informal footpaths, seating areas and landscaping. The exchange land is highly accessible from a PROW which mirrors access currently available from the Greenway (NCN69).

20.5.111 With the implementation of the exchange land OS7 is expected to experience moderate adverse effects during the operational phase which is not significant.

20.5.112 Table 20-10 sets out details of the provision of exchange land considered against the statutory test in s19(1)(a) for Site Ref OS7.

Table 20-10 Section 19 Statutory Test for Site Ref OS7

	Plots:	Area:
Land Plots to be permanently acquired	7-039 8-003 8-011 8-013 8-026 8-028 8-030 9-002 9-003	62m² 4600m² 88m² 1093m² 2381m² 767m² 541m² 54m² 2174m² **TOTAL – 11,760m²**
Exchange land plot references	19-025 19-026 19-030	**TOTAL - 11,274m²** (the shortfall of replacement open space is balanced by the consolidated area of exchange land provided within the Ravensthorpe Triangle)
Current use of Public Open Space	The PoS to be acquired forms part of the Birkby Bradley Greenway which is part of the wider National Cycle Network (NCN69). A cross section of the public use the area, including dog walkers, cyclists and young people accessing the local school (North Huddersfield Trust School) as well as the surrounding residential areas. The most recent aerial survey by Network Rail undertaken in 2020 did not indicate formal or informal use of the PoS (outside of the Greenway) with no distinct formal or informal tracks being visible. The PoS to be acquired forms part of a continuous area of PoS which expands to the North of the PoS to be acquired. The remaining PoS available is approximately 12.8 ha (128,000m²) which remain available for use by the public. The PoS which Network Rail is acquiring, is of limited amenity value in comparison to the wider area of PoS available to the public. While the Greenway (NCN69) is used daily and heavily by the local community, and is considered to be an important community asset, the acquisition of the PoS land does not affect the use of the Greenway during the operational phase and the public recreation activities will be able to continue following the acquisition of the land. The PoS being acquired is of low value as it is predominately scrub land and is bordered by the railway to the South, with a steep gradient running down to the railway line, this limits the ability of the public to use it particularly given the more favourable adjacent wider area of PoS. Further the acquisition of the PoS will allow the reconstruction of Deighton Station and delivery of the overall Scheme. Without the acquisition of this land the Scheme cannot be delivered and the significant benefits of the Scheme as set out in further detail in Chapter 21 (Socio-economic) of this ES will not be realised.	
Consideration of the need for provision of exchange land	Network Rail is offering exchange land to mitigate the loss of the PoS. The exchange land is considered to have equal if not greater value to the PoS being lost. The exchange land will be provided at Ravensthorpe and is 11,274m². The shortfall in the exchange land provided at Ravensthorpe is made up for in the additional area comprising 15,266m² of exchange land which will be provided at the Ravensthorpe Triangle. These consolidated areas offset the land acquired at OS7 (as explained in paragraph 20.5.86 above).	

	The exchange land is not being provided in the immediate locality for the following reasons. Firstly, due to the extensive PoS already available to the local community approximately 12.8ha and secondly, the extremely limited area within the locality to provide exchange land. The Deighton area is an urban area of residential, commercial and light industrial uses and therefore, due to its urban nature there is very limited land which could be acquired as PoS. Acquiring commercial or other private property to create PoS would be detrimental to the area. Also, there other areas of PoS within the immediate vicinity therefore, these areas could not be acquired to provide exchange land. The exchange land, as detailed above, will be provided at Ravensthorpe with the majority of the exchange land for Deighton in the vicinity of the new Ravensthorpe station with the balance provided at Ravensthorpe Triangle. While this is at a greater distance from Deighton, it still remains within the Kirklees Council boundary area, is highly accessible from a (PRoW) bridleway and the realigned Calder Road. Providing exchange land in this area offers the ability for Network Rail to provide a high-quality area that has a greater degree of accessibility to the public and is not constrained by gradients or vegetation. The exchange land will form part of the overall landscaping scheme, with the aim to maximise public amenity and enjoyment through the creation of informal footpaths, seating areas and landscaping which will be designed in consultation with Kirklees Council and the detailed landscaping scheme to be submitted as part of the LEMP. Opportunities for community benefit will form part of the landscape scheme. Further, the exchange land will benefit from a PRoW which mirrors access currently available from the Greenway (NCN69). The exchange land will be accessed by the diverted Bridleway DEW3/10 which will lead to the realigned Calder Road Overbridge (MVN2/202) and new Ravensthorpe Station, providing access to the PoS. Finally, the exchange land will have PoS adjacent to it, approximately 6.44Ha, thereby creating a matrix of PoS available to the general public.

Site Ref OS8

20.5.113 An area of the greenspace between Glenfield Avenue and the A62 Leeds Road will be required during the operational phase of the Scheme due to the realignment of the A62. This will comprise an area of 839m^2. The primary use of the PoS is the PROW and informal path and this is used by the community for dog walking, access to the businesses on the A62.The remainder of the land subject to temporary land take during the construction phase will be returned to public open space.

20.5.114 The PRoW through this area will also be reinstated (albeit on a diverted alignment) and so access through the site will be maintained during the operational phase.

20.5.115 Land is proposed within the Ravensthorpe area to offset the loss of PoS through permanent acquisition of land. The exchange land will provide a high quality PoS area that has a greater degree of accessibility to the public and is not constrained by gradients or vegetation. The exchange land will form part of the overall landscaping scheme, with the aim to maximise public amenity and enjoyment through the creation of informal footpaths, seating areas and landscaping. The exchange land is highly accessible from a PROW which mirrors access currently available.

20.5.116 With the implementation of the exchange land OS8 is expected to experience slight adverse effects during the operational phase which is not significant.

20.5.117 Table 20-11 sets out details of the provision of exchange land against the statutory test at s19(1)(a) of the of the 1981 Act for Site Ref OS8.

Table 20-11 Section 19 Statutory Test for Site Ref OS8

	Plots:	Area:
Land Plots to be permanently acquired	9-100	839m^2 **TOTAL – 839m^2**
Exchange land plot references	19-025 19-026 19-030	**TOTAL - 11,274m^2** (the shortfall of replacement open space is balanced by the consolidated area of exchange land provided within the Ravensthorpe Triangle)
Current use of Public Open Space	The PoS to be acquired is formed of a grassed area, footway, copse and public right of way (PROW) (HUD/51/10) to the east of Glenfield Avenue, Deighton. The predominate use of the PoS is to allow access from Glenfield Avenue to the A62. The permanent land acquisition will remove the scattered trees to allow the realignment of the A62 Leeds to Huddersfield Road. This realignment of the highway and offline reconstruction of the A62 Bridge, is critical to allow the delivery of the two new railway lines. The primary use of the PoS is the PROW and informal path and this is used by the community for dog walking, access to the businesses on the A62 and access to the wider PoS in the area. To the North West is an area of PoS of approximately 1.15Ha which is available to the public to use and has areas of green open space of a higher quality and amenity value than that being acquired. Further to the North, there is approximately 10Ha of PoS available which can be accessed from a number of PROW and the Greenway. This then leads to the Bradley Gate Wood. Therefore, there is an abundance of PoS that the local community has access to. Also, following the completion of the construction of A62 Leeds Road Overbridge, the PROW (HUD/51/10) will be subject to diversion in the land which has been acquired. Land that has not been used in the realignment for the A62 will be returned to Kirklees Council for use as of PoS.	
Consideration of the need for provision of exchange land	Network Rail is offering exchange land to mitigate the loss of the PoS. The exchange land is considered to have equal if not greater value to the PoS being lost. The exchange land will be provided at Ravensthorpe within the wider area of 11,274m^2 consolidated replacement open space, and is sufficient to fully mitigate the land to be acquired at OS8, taking into account the additional consolidated replacement open space at the Ravensthorpe Triangle (as explained in paragraph 20.5.86 above). The exchange land is not being provided in the immediate locality for the following reasons. Firstly, due to the extensive PoS already available to the local community approximately 12.8ha and secondly, the extremely limited area within the locality to provide exchange land. The Deighton area is an urban area of residential, commercial and light industrial uses and therefore, due to its urban nature there is very limited land which could be acquired as PoS. Acquiring commercial or other private property to create PoS would be detrimental to the area. Also, there other areas of PoS within the immediate vicinity therefore, these areas could not be acquired to provide exchange land. The exchange land as detailed above will be provided at Ravensthorpe in the vicinity of the new Ravensthorpe station. While this at a greater distance from Deighton, it still remains within the Kirklees Council	

	boundary area, is highly accessible from a bridleway and the realigned Calder Road. Providing exchange land in this area offers the ability for Network Rail to provide a high-quality area that has a greater degree of accessibility to the public and is not constrained by gradients or vegetation. The exchange land will form part of the overall landscaping scheme, with the aim to maximise public amenity and enjoyment through the creation of informal footpaths, seating areas and landscaping which will be designed in consultation with Kirklees Council and the detailed landscaping scheme to be submitted as part of the LEMP. Opportunities for community benefit will form part of the landscape scheme. Further, the exchange land will benefit from a PROW which mirrors access currently available. The exchange land will be accessed by the diverted Bridleway DEW3/10 which will lead to the realigned Calder Road Overbridge (MVN2/202) and new Ravensthorpe Station, providing access to the PoS. Finally, exchange land will have PoS adjacent to it, approximately 6.44Ha, thereby creating a matrix of PoS available to the general public.

Route Section 6 – Ravensthorpe and Westtown

Site Ref OS9

20.5.118 A small amount of PoS will be permanently acquired (728m^2) for construction of the railway, the Calder Road Bridge (MVN2/202) realignment and construction of the New Ravensthorpe Station. A larger land take was required during the construction phase, the land not required in the permanent case will be returned to PoS following completion of the construction works.

20.5.119 The land parcel is set within a rural landscape albeit it is located adjacent to the operational railway. The primary use is to access the PROW network and is used by walkers for recreational activities. The PoS forms part of a larger area of PoS particularly to the south where the PRoW network diverges to different areas and different PoS.

20.5.120 Vegetation clearance will be undertaken during the construction and so there will be an impact on visual amenity during the operational phase until the compensatory planting becomes established, anticipated these effects would be experienced until Year 15.

20.5.121 The PRoW through this area will be retained and so access through the site will be maintained during the operational phase.

20.5.122 Land is proposed within the Ravensthorpe area to offset the loss of PoS through permanent acquisition of land. The exchange land will provide a high quality PoS area that has a greater degree of accessibility to the public and is not constrained by gradients or vegetation. The exchange land highly accessible from a PRoW. The exchange land will form part of the overall landscaping scheme, with the aim to maximise public amenity and enjoyment through the creation of informal footpaths, seating areas and landscaping.

20.5.123 With the implementation of the exchange land OS9 is expected to experience slight adverse effects during the operational phase which is not significant.

20.5.124 Table 20-12 sets out details of the provision of exchange land against the statutory test at s19(1)(a) of the of the 1981 Act for Site Ref OS9.

Table 20-12 Section 19 Statutory Test for Site Ref OS9

	Plots:	Area:
Land Plots to be permanently acquired	19-013 19-017 19-018	565m² 67m² 96m² **TOTAL – 728m²**
Exchange land plot references	23-035a 23-065 24-004	**TOTAL - 15,266m²** (the replacement POS is provided within the consolidated exchange land provided at the Ravensthorpe Triangle)
Current use of Public Open Space	**Current Use of Public Open Space (PoS)** As detailed above the PoS to be acquired, for the 3 Plots highlighted, is 726m². The area in question is formed of Woodland and a number of Public Rights of Way (PROW) which allows access into the PoS. However, the PoS is a wooded area and is heavily overgrown therefore, offering limited opportunities to use the area. The primary use is to access the PROW network and is used by walkers for recreational activities. The PoS to be acquired forms part of a larger area of PoS particularly to the south where the PRoW (footpaths and bridleway) diverge to different areas and different PoS. In acquiring these plots no Playing fields, Parks, Common Land or Allotments will be acquired. Recent Network Rail aerial surveys (2020) do not indicate formal or informal footpaths into the PoS which will be acquired. This provides further evidence that the primary use by the public is to access the local footpath network. The PoS is required to deliver railway works, the construction of the new Ravensthorpe Station, diversion of utilities and realignment and reconstruction of the Calder Road. Without the acquisition of this land the Scheme cannot be delivered, and the significant benefits of the Scheme as set out in further detail in Chapter 21 (Socio-economic) of this ES will not be realised.	
Consideration of the need for provision of exchange land	Network Rail is offering exchange land to mitigate the loss of the PoS. The exchange land is considered to have equally if not greater value than the PoS being lost. The exchange land will be provided within the wider consolidated area of replacement PoS at Ravensthorpe Triangle which has a total area of 15,266m² and is therefore at least equal to the PoS to be acquired. The exchange land will be joined to a wider network of public open space with the Forge Lane Quarry site to be restored, by others, to public open space. The quarry site can be accessed via a PROW which then leads through the quarry site to the River Calder. Further, the proposed exchange land has a footpath running to the South as well as through it (DEW/117/20) which will remain and therefore, gives access to the public to the exchange land. The exchange land is not being provided in the immediate locality due to, firstly the PoS already available to the local community and secondly to acquire additional exchange land would require the acquisition of private land which are currently used for agricultural purposes (greenfield) whereas the exchange land site utilises an area of former landfill i.e. brownfield land. The exchange land as detailed above will be provided at Ravensthorpe Triangle next to the Calder & Hebble Navigation. This is a short	

	distance from the land to be acquired but it still remains within the Kirklees Council area and is highly accessible from a PROW. Providing exchange land in this area offers the ability for Network Rail to provide a higher quality area than that being acquired. The exchange land will form part of the overall landscaping scheme, with the aim to maximise public amenity and enjoyment through the creation of informal footpaths, seating areas and landscaping which will be designed in consultation with Kirklees Council and the detailed landscaping scheme to be submitted as part of the LEMP. Opportunities for community benefit will form part of the landscape scheme. Further the exchange land will benefit from a PRoW which mirrors access currently available from the PRoW network. The exchange land will be accessed from PRoW DEW/117/20 and Network Rail will work with Kirklees Council to maximise the connectivity benefits from the restored sand & gravel site. The Sand & Gravel site connectivity will provide access to an additional 11.73Ha of PoS.

Site Ref OS10

20.5.125 When the Scheme is operational, an area of permanent land take (12,793m^2) is required for the construction of the railway, Calder Road Bridge realignment and construction of the New Ravensthorpe Station The bridleway through this area will also be reinstated (albeit on a diverted alignment) and so access will be maintained during the operational phase.

20.5.126 The primary use of the PoS is to access the PROW network and is used by walkers on a daily basis. The area benefits from being part of a wider PoS in the area which extends to the South, this will remain unaffected by the Scheme.

20.5.127 As stated, following the construction phase the land that is outside the new Network Rail boundary and therefore not subject to permanent acquisition will be returned to PoS. Access through the site will be maintained in the long term, ensuring the recreational amenity value of the PRoW is maintained.

20.5.128 There will be a visual amenity impact from the clearance of the woodland during the construction phase. Due to the scale of works in this area and the permanent land take the opportunity for reinstatement of vegetation is limited on the PoS site, however opportunities for landscaping on adjacent land areas will be considered through the detailed landscape plan. Visual amenity effects are therefore likely to remain until the compensation planting becomes established (assumed Year 15).

20.5.129 Land is proposed within the Ravensthorpe area to offset the loss of PoS through permanent acquisition of land. The exchange land will provide a high quality PoS area that has a greater degree of accessibility to the public and is not constrained by gradients or vegetation. The exchange land will form part of the overall landscaping scheme, with the aim to maximise public amenity and enjoyment through the creation of informal footpaths, seating areas and landscaping. The exchange land is highly accessible from a PROW which mirrors access currently available from the bridleway.

20.5.130 With the implementation of the exchange land OS10 is expected to experience moderate adverse effects during the operational phase which is not significant.

20.5.131 Table 20-12 sets out details of the provision of exchange land against the statutory test at s19(1)(a) of the of the 1981 Act for Site Ref OS10.

Table 20-13 Section 19 Statutory Test for Site Ref OS10

	Plots:	Area:
Land Plots to be permanently acquired	19-020 19-027 21-006 21-026	10377m² 1678m² 256m² 482m² **TOTAL – 12,793m²**
Exchange land plot references	24-005 23-035a 23-065 24-004	**TOTAL - 15,266m²** (the replacement POS is provided within the consolidated exchange land provided at the Ravensthorpe Triangle)
Current use of Public Open Space	The PoS to be acquired, for the 4 Plots highlighted, is 12,793m². The area in question is formed of Woodland and a Public Right of Way (PROW) DEW/3/10 Bridleway. However, the PoS is a wooded area and heavily overgrown therefore, offering limited opportunities to use the area. The primary use is to access the PRoW network and is used by walkers on a daily basis. The largest PoS to be acquired is plot 19-020 this is a linear plot, constrained by the railway to the North with PoS to the South. The primary use of his plot, as with the others, is to use the Bridleway which provides access to Calder Road and to other PROW. There is an area of open grassland within this plot of approximately 3,000m². However, there are no signs of public use into this area as detailed below, recent Network Rail aerial surveys (2020) do not indicate formal or informal footpaths into the PoS which will be acquired. All plots benefit from being part of a wider PoS in the area which extends to the South, this will remain unaffected by the scheme. The PoS is required to deliver railway works, the construction of the new Ravensthorpe Station, diversion of utilities and realignment and reconstruction of the Calder Road. If this PoS could not be acquired, then there would not be sufficient land to deliver the Scheme and the benefits from the Scheme would not be realised (Socio Economic Chapter). Once complete land which is not required on a permanent basis will be returned to Kirklees as PoS and the Bridleway will be diverted allowing public recreation to continue. In acquiring these plots no Playing fields, Parks, Common Land or Allotments will be acquired	
Consideration of the need for provision of exchange land	Network Rail is offering exchange land to mitigate the loss of the PoS. The exchange land is considered to have equally if not greater value than the PoS being lost. The exchange land will be provided within the wider consolidated are of replacement PoS at Ravensthorpe Triangle with a total area 15,266m² and therefore is equal to the PoS to be acquired. The exchange land to be offered is a former landfill site next to the Calder & Hebble Navigation. The exchange land will be joined to a wider network of public open space with the Forge Lane Quarry site to be restored, by others, to public open space. The quarry site can be accessed via a PROW which then leads through the quarry site to the River Calder. Further, the proposed exchange land has a footpath running to the South as well as through it (DEW/117/20) which will remain and therefore, gives access to the public to the exchange land. The exchange land is not being provided in the immediate locality due to, firstly the PoS already available to the local community and secondly to acquire additional exchange land would require the acquisition of private land which are	

	currently used for agricultural purposes (greenfield) whereas the exchange land site utilises an area of former landfill i.e. brownfield land. The exchange land as detailed above will be provided at Ravensthorpe Triangle next to the Calder & Hebble Navigation. This is a short distance from the land to be acquired but it still remains within the Kirklees Council area and is highly accessible from a PROW. Providing exchange land in this area offers the ability for Network Rail to provide a higher quality area than that being acquired. The exchange land will form part of the overall landscaping scheme, with the aim to maximise public amenity and enjoyment through the creation of informal footpaths, seating areas and landscaping which will be designed in consultation with Kirklees Council and the detailed landscaping scheme to be submitted as part of the LEMP. Opportunities for community benefit will form part of the landscape scheme. Further, the Exchange land will benefit from a PROW which mirrors access currently available from the PROW. The exchange land will be accessed PROW DEW/117/20 and Network Rail will work with Kirklees Council to maximise the connectivity benefits from the restored sand & gravel site. The sand & gravel site connection will provide access to an additional 11.73Ha of PoS.

Site Ref O11

20.5.132 No permanent land take so site not assessed further.

Site Ref OS12

20.5.133 An area of public open space (600m^2) located off Fall Lane will be required to allow the realignment of Fall Lane and Thornhill Road for the realignment of the railway and reconstruction of Thornhill Road Bridge. The area is currently mainly amenity grassland although part of the site is used for vehicle parking for residents at Brooks Yard. There are no obvious paths from the most recent aerial survey in 2020. Therefore, this provides evidence that the primary use by the public is to access Fearnley Street and Brookes Yard.

20.5.134 Following the construction phase the land will be re-instated to open land (including reinstatement of resident parking areas).

20.5.135 Land is proposed within the Ravensthorpe area to offset the loss of PoS through permanent acquisition of land. The exchange land will provide a high quality PoS area that has a greater degree of accessibility to the public and is not constrained by gradients or vegetation. The exchange land highly accessible from a PRoW. The exchange land will form part of the overall landscaping scheme, with the aim to maximise public amenity and enjoyment through the creation of informal footpaths, seating areas and landscaping.

20.5.136 With the reinstatement of the majority of the area to PoS and with the implementation of the exchange land OS12 is expected to experience neutral effects during the operational phase which is not significant.

20.5.137 Table 20-14 sets out details of the provision of exchange land against the criteria of s19(1)(a) of the 1981 Act for Site Ref OS12.

Table 20-14 Section 19 Statutory Test for Site Ref OS12

	Plots:	Area:
Land Plots to be permanently acquired	25-012 25-017 25-021	125m² 272m² 203m² **TOTAL – 600m²**
Exchange land plot references	24-005 23-035a 23-065	**TOTAL - 15,266m²** (the replacement POS is provided within the consolidated exchange land provided at the Ravensthorpe Triangle)
Current use of Public Open Space	The PoS to be acquired, for the 3 Plots highlighted, is 600m². The area in question is formed of grassland to the West & East of Fearnley Street. There are no specific PROW across the PoS, with access to the area being from Fearnley Street. Plot 25-012 and 25-021 form roadside verges and embankment with the PoS being constrained by Fall Lane to the South. Plot 25-017 is next to Brookes Yard with an area of hard standing for residents parking. The primary purpose of the PoS is roadside verges with minimal public amenity. In acquiring these plots no Playing fields, Parks, Common Land or Allotments will be acquired. Recent Network Rail aerial surveys (2020) do not indicate formal or informal footpaths into the PoS which will be acquired. This provides evidence that the primary use by the public is to access Fearnley Street & Brookes Yard. The PoS is required to deliver railway works, to allow the realignment of Thornhill Road. If this PoS could not be acquired, then there would not be sufficient land to deliver the Scheme and the benefits from the Scheme would not be realised (Socio Economic Chapter). Once complete land which is not required will be returned to Kirklees and be available as PoS.	
Consideration of the need for provision of exchange land	Network Rail is offering exchange land to mitigate the loss of the PoS. The exchange land is considered to have equally if not greater value than the PoS being lost. The exchange land will be provided within the wider consolidated area of replacement PoS at Ravensthorpe Triangle with a total area 15,266m² and therefore no less in area to the PoS to be acquired. The exchange land to be offered is a former Landfill site next to the Calder & Hebble Navigation. The exchange Land will be joined to a wider network of PoS with the sand & gravel site to be restored to PoS. The Sand & Gravel site can be accessed via a PROW over the Calder & Hebble Navigation, which then leads through the Sand & Gravel site to the River Calder. The exchange land is not being provided in the immediate locality due to the dense urban environment, formed by residential, commercial and light industrial activities. Also, there is PoS available immediately to North, of Crow Nest Park, which is accessible from the PoS plots. Therefore, to acquire additional PoS in the locality would require the acquisition of the private business to re-provide the PoS at this location. The exchange land will be joined to a wider network of public open space with the Forge Lane Quarry site to be restored, by others, to public open space. The quarry site can be accessed via a PROW which then leads through the quarry site to the River Calder. Further, the proposed exchange land has a footpath running to the South as well as	

	through it (DEW/117/20) which will remain and therefore, gives access to the public to the exchange land. The exchange land is not being provided in the immediate locality due to, firstly the PoS already available to the local community and secondly to acquire additional exchange land would require the acquisition of private land which are currently used for agricultural purposes (greenfield) whereas the exchange land site utilises an area of former landfill i.e. brownfield land. The exchange land as detailed above will be provided at Ravensthorpe Triangle next to the Calder & Hebble Navigation. This is a short distance from the land to be acquired but it still remains within the Kirklees Council area and is highly accessible from a PROW. Providing exchange land in this area offers the ability for Network Rail to provide a higher quality area than that being acquired. The exchange land will form part of the overall landscaping scheme, with the aim to maximise public amenity and enjoyment through the creation of informal footpaths, seating areas and landscaping which will be designed in consultation with Kirklees Council and the detailed landscaping scheme to be submitted as part of the LEMP. Opportunities for community benefit will form part of the landscape scheme. Further, the exchange land will benefit from a PROW which mirrors access currently available from the PROW. The exchange land will be accessed PROW DEW/117/20 and Network Rail will work with Kirklees Council to maximise the connectivity benefits from the restored sand & gravel site.

Summary of operational effects

20.5.138 Table 20-15 details the assessment of effects on public open space during the operational phase.

Table 20-15 Summary of potential effects on public open space during operational phase

Route Section	Site Ref.	Sensitivity of receptor	Magnitude of impact	Significance of effect
1 – Huddersfield	OS1	Not applicable – no permanent land take		
1 – Huddersfield	OS2	Low	Minor	Neutral
2 - Hillhouse and Fartown	OS3	Not applicable – no permanent land take		
2 - Hillhouse and Fartown	OS4	Not applicable – no permanent land take		
2 - Hillhouse and Fartown	OS5	Medium	Negligible	Slight
2 - Hillhouse and Fartown	OS6	Not applicable – no permanent land take		
3 – Deighton and Bradley	OS7	Very High	Minor	Moderate
3 – Deighton and Bradley	OS8	High	Negligible	Slight
6 – Ravensthorpe and Westtown	OS9	High	Negligible	Slight
6 – Ravensthorpe and Westtown	OS10	Very High	Minor	Moderate
6 – Ravensthorpe and Westtown	OS11	Not applicable – no permanent land take		
6 – Ravensthorpe and Westtown	OS12	Medium	Negligible	Neutral

20.5.139 With the implementation of embedded mitigation significant adverse effects are anticipated on public open space refs OS7 and OS10 and mitigation measures will be implemented.

20.5.140 Exchange land is to be provided in accordance with the requirements of the 1981 Act for land to be permanently acquired by the Scheme. As explained in paragraph 20.5.86 above, so to ensure the criteria in s19(1)(a) of the 1981 are met, Network Rail has provided 2 consolidated areas of exchange land amounting to a combined area of 26,540m^2

20.5.141 The exchange land however will be used during the construction of the site as construction compounds or access sites, and therefore will not be immediately available as PoS in the opening year of the Scheme. As set out a landscaping scheme will be implemented on the two exchange land sites which will be developed in consultation with Kirklees Council, the Canal & River Trust and the operators of the Forge Lane Quarry site. There will be a period of implementation required for the agreed scheme including planting and installation of amenity facilities e.g. benches. It is therefore anticipated that the exchange land sites will become available for use 12-18 months after construction of the Scheme completes. The impacts of this land (sites OS7, OS8, OS9 and OS10) not being available is assessed during the construction phase and moderate adverse effects are anticipated. These effects are considered to extend into the operational phase until the exchange land is available i.e. Year 1 or 2. Following which the effects are assumed to reduce to those sets out in summary Table 20-15.

20.6 Mitigation measures

20.6.1 The following section sets out the mitigation measures to minimise the potential effects on public open space both during construction and operation.

Construction

20.6.2 Mitigation measures will be implemented to minimise effects on users of public open space during the construction phase.

20.6.3 The following measures are proposed and are also included in Part A of the Code of Construction Practice, see Appendix 2-1.

- Retention of access to public open space where reasonably practicable to do so, taking account of safety issues in terms of conflict between users and construction works; and
- Screening of construction structures through planting etc. to minimise disruption to public open space.

20.6.4 Where vegetation removal is proposed, replacement planting or measures to enable regeneration will be undertaken in line with the Outline Environmental Mitigation Plan in Figure 2-3, with further details (including planting plans) included within the LEMP.

Operation

20.6.5 The following mitigation measures will be implemented to minimise effects on users of public open space when the Scheme becomes operational.

- Replacement planting or measures to enable regeneration will be undertaken in line with the Outline Environmental Mitigation Plan in Figure 2-3, with further details (including planting plans) included within the LEMP; and
- Compensatory tree planting was considered throughout the open plan land i.e. along the Birkby Bradley Greenway to Fieldhouse (MVL3/98) however it was considered that this had the potential to create a tunnel effect on the right of way which may lead to a perception of safety concerns for users and so grassland was considered more appropriate.

20.7 Residual effects

Construction

20.7.1 Even with the implementation of mitigation measures, temporary significant adverse effects are anticipated on open space site refs OS7, OS8, OS9 and OS10.

20.7.2 However, these effects are temporary, and it is anticipated that there will be no long-term significant effects as a result of the construction of the Scheme.

Operation

20.7.3 Significant effects and the permanent loss of public open space is mitigated through the provision of exchange land and therefore there will be no significant residual effects on open space.

20.7.4 The Scheme will result in the permanent acquisition of circa 26,261m^2 of public open space. As mitigation 26,540m^2 of public open space will be provided as exchange land and so there will be no loss of area or quality of public open space as a result of the Scheme.

20.7.5 Visual amenity will be mitigated through the implementation of a landscape scheme, effects will still be noticeable in Year 1 whilst the planting becomes established, however no residual effects are anticipated by Year 15.